Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

Geological, Geochemical, Geophysical, Trenching, Drilling

TITLE OF REPORT [type of survey(s)]	TOTAL COST
Assessment Report on the Frank Creek, Kangaroo, MAG and Peripheral Properties	$858,543.08

AUTHOR(S) Rein Turna, Louis Doyle SIGNATURE(S)

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) MX-10-155 MX-10-212 YEAR OF WORK 2006-2007

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S)
Event Nos. 4177576, 4177602, 4177603

PROPERTY NAME Frank Creek, Kangaroo, MAG and peripheral properties

CLAIM NAME(S) (on which work was done) See Figure No. 2 and Table No. 1 in Report

COMMODITIES SOUGHT Cu, Pb, Zn, Au, Pt

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 93A 152 (Frank Creek)

MINING DIVISION Cariboo NTS 93A11,12,13,14,93B16

LATITUDE 52.71º ' " LONGITUDE 121.63º ' " (at centre of work)

OWNER(S)

1) Barker Minerals Ltd. 2)

MAILING ADDRESS

8384 Toombs Drive, Prince George, BC, V2K 5A3

OPERATOR(S) [who paid for the work]

1) Barker Minerals Ltd. 2)

MAILING ADDRESS

8384 Toombs Drive, Prince George, BC, V2K 5A3

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Barkerville Terrane, Paleozoic, Mesozoic,
massive sulphide, porphyry, skarn, PGE's

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS

See Appendix L for relevant assessment reports

(OVER)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	scale=1:8,000 area=2.5 sqkm	Kangaroo	21,300.00
Photo interpretation			
GEOPHYSICAL (line-kilometres)	Geophysical work done after October 31, 2007. Costs will be apportioned in next assessment period.		
Ground			
Magnetic	8.9 km	MAG	0
Electromagnetic	4.5 km	MAG	0
Induced Polarization	32 km	Kangaroo, MAG	0
Radiometric			
Seismic			
Other	Titan24 IP 8 km	Kangaroo	0
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil	846	Frank Creek, Kangaroo	22,563.00
Silt	21	Kangaroo	1,254.00
Rock	195	Frank Creek, Kangaroo	7,430.00
Other	1,013 core	Frank Creek, Kangaroo	56,444.00
DRILLING (total metres; number of holes, size)			
Core	2,713m, 11 holes, NQ	Frank Creek, Kangaroo	581,534.08
Non-core			
RELATED TECHNICAL	soil collection & sample prep		
Sampling/assaying	56 samples assayed	Frank Creek	22,525.00
Petrographic	Report on 16 specimens	Frank Creek, Kangaroo	4,717.00
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)	scale=1:20,000 area=60sqkm	Frank Creek, Kangaroo	20,200.00
PREPARATORY/PHYSICAL			
Line/grid (kilometres)	46 km	Kangaroo, MAG	41,300.00
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail	2km brushing existing rds/trails	Frank Creek, Kangaroo	8,025.00
Trench (metres)	250m	Frank Creek	33,051.00
Underground dev. (metres)			
Other	for trenching - planning, supervision, swamper, sampling, report, 2km roads + trails.	Frank Creek	38,200.00
		TOTAL COST	858,543.08

BC Geological Survey
Assessment Report
29740

GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL, TRENCHING, DRILLING

ASSESSMENT REPORT
on the

FRANK CREEK, KANGAROO, MAG and Peripheral Properties

Cariboo Mining Division, British Columbia

for

Barker Minerals Ltd.
8384 Toombs Drive
Prince George, B.C.
V2K 5A3

Prepared by:

Rein Turna, P.Geo., and Louis Doyle

February 25, 2008



Plate No. 1 Frank Creek Property Rock Examples
Lower left: sulphide stringers, from Trench FC07-TR3, suggestive of 'Keiko ore'.
Upper left: massive chalcopyrite, from Discovery Trench, suggestive of 'yellow ore'.
Upper right: banded massive sphalerite & chalcopyrite, from Discovery Trench.
Lower right: massive sphalerite, from Trench FC07-TR4a, suggestive of 'black ore'.

1.0 SUMMARY

Work performed on Barker Minerals Ltd. mineral properties in 2006-2007 was concentrated in three areas; the Frank Creek, Kangaroo and MAG Properties.

On **Frank Creek Property** enzyme leach soil sampling proved very effective at outlining anomalous geochemical Trends where past conventional soil surveys were ineffective due to locally thick glacial overburden. Trenching on anomalous Trend 3 discovered several lenses of semi massive to massive sulphides including sphalerite, galena, chalcopyrite and pyrite occurring in hydrothermally altered and regionally metamorphosed rhyolitic volcaniclastics. Trenches FC07-TR1,2,4,5 at this location are coincident with a strong low resistivity (conductor) anomaly outlined in the 2004 Titan geophysical survey at approximately Line 53N 2500W (See Assessment Report 28248, Appendix I). The prospect here is for Kuroko-type massive sulphides.

On **Kangaroo Property** geological mapping outlined an intrusive stock or sill approximately 1 km x 1.8 km in size on the ground surface. The intrusive appears multimodal from gabbro to diorite to monzodiorite, containing rare monzonite xenoliths. The stock or sill intrudes siltstones and calcareous basalts, locally brecciated and extensively mineralized with pyrrhotite and pyrite. Titan 24 and pole-dipole induced polarization surveys outlined discrete chargeability and low resistivity 'fronts' and zones on the north side of the intrusive as targets for future drill testing. Preliminary diamond drilling of chargeability targets from a 2003 survey discovered gold mineralization associated with chalcopyrite and multiple pathfinder elements in hornfelsed and altered rocks displaying silicification, sericite and epidote. The mineral prospect here is considered mainly skarn similar to the nearby QR Mine but there are also the prospects for porphyry gold and mesothermal or intrusion-related Au-pyrrhotite veins.

On **MAG Property** a preliminary geophysical survey included magnetics, VLF electromagnetics and pole-dipole induced polarization in a selected area over a strong magnetic anomaly outlined in a government survey. Previous Barker Minerals Ltd. prospecting determined the presence of mafic and ultramafic rocks in the area. Unpublished studies reported the occurrences of platinum group elements (PGE's) near the MAG Property. Geophysical anomalies acquired in the small survey recommend drill testing and expanded exploration for PGE's.

Note: The Titan 24 and pole-dipole induced polarization surveys on Kangaroo and MAG Properties described above were done after October 31, 2007. The costs of these surveys are not included in the total cost of the present assessment. These costs will be addeded to the following assessment period. Early interpretations are nevertheless presented in this report, with further interpretation to come in the following assessment.

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2.0 INTRODUCTION

This report describes the geological, geochemical, geophysical, mapping, trenching and diamond drilling work performed on Barker Minerals Ltd. mineral properties between November 2006 and October 2007. The properties are located near Likely, British Columbia.

On Frank Creek Property enzyme leach soil sampling was done on the previously established 2004 Titan 24 geophysical grid. Two diamond drill holes tested geophysical targets. Mechanical trenching tested geophysical and geochemical targets.

On the Kangaroo Property geological mapping and reconnaissance geochemical sampling was done. Titan and pole-dipole induced polarization surveys were done. Nine diamond drill holes tested geophysical targets and geological contact zones.

On the MAG Property area a strong magnetic anomaly was indicated on government maps and past reconnaissance prospecting and geophysical work by Barker Minerals Ltd. confirmed the presence of mafic and ultramafic rocks in the area. Magnetometer, VLF-EM and pole-dipole induced polarization surveys were done over a selected area in 2007.

3.0 PROPERTY DESCRIPTION and LOCATION

The Property consists of contiguous claims listed in Table No. 1 – Barker Minerals Ltd. Mineral Claim Details. The Property is outlined in Figure No. 2 – Barker Minerals Ltd. Mineral Claims. Mineral claims comprising the Property are located generally in the area between Quesnel and Cariboo Lakes of the Cariboo Mining Division in British Columbia and are 100% owned by Barker Minerals Ltd. of Prince George, B.C.

The Property is approximately 10 km north of the settlement of Likely and 90 km northeast the City of Williams Lake. The City of Prince George is 155 km to the north.

The geographic coordinates of the Property are:
52.71° North Latitude and 121.63° West Longitude or
593000 E and 5842000 N UTM coordinates (NAD 83).
The relevant maps are:
N.T.S. Map No. 93A/11, 93A/12, 93A/13, 93A/14, 93B/16.

Barker Minerals Ltd. Property Location

British Columbia



SCALE 1 : 10,000,000

100 0 100 200 300

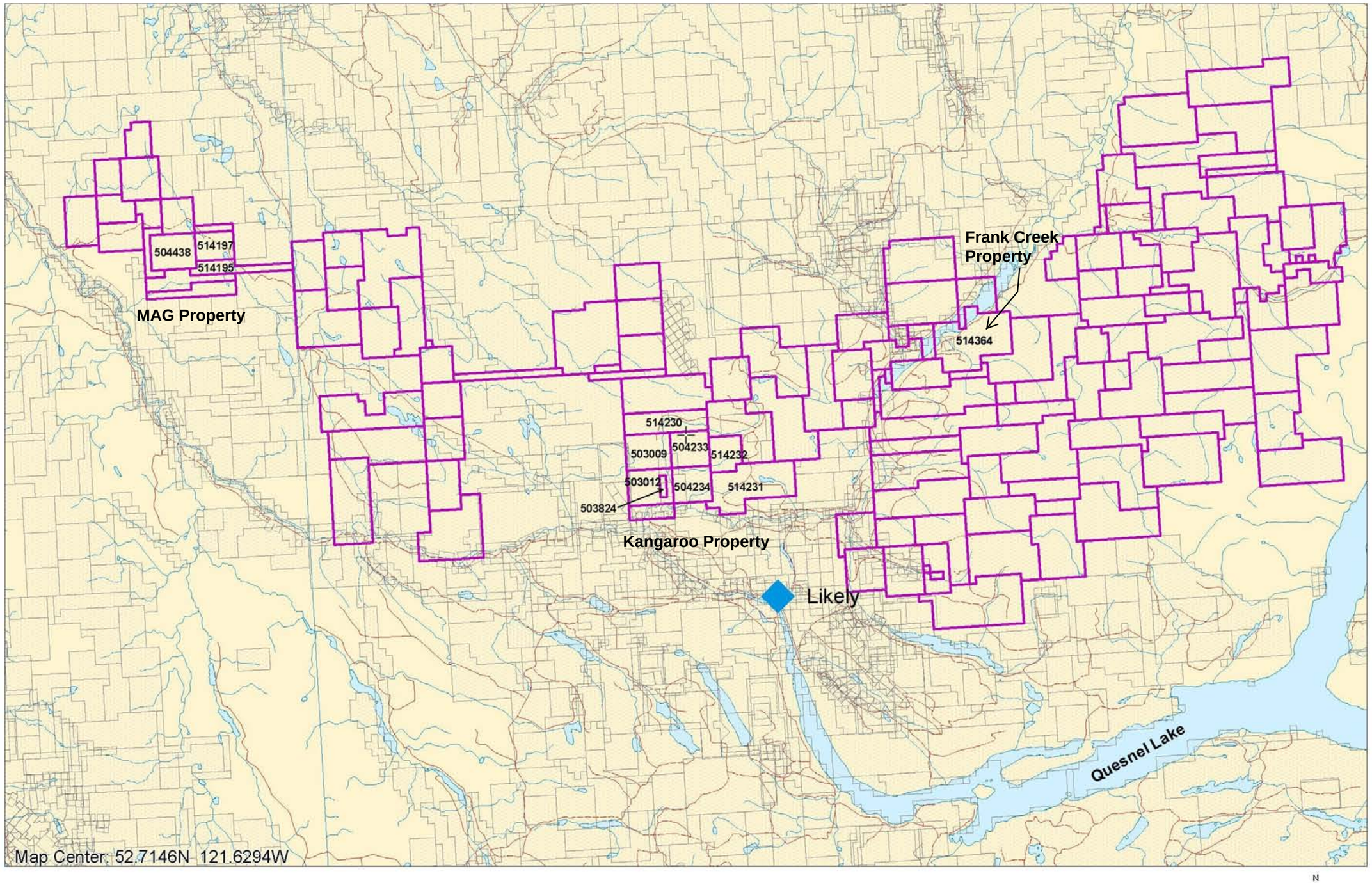
MILES

N

Figure No. 1

Barker Minerals Ltd. Mineral Claims

Cariboo Mining Division



SCALE 1 : 250,000

2 0 2 4 6

MILES

Note:
Claims identified with Tenure Numbers are those which have had assessment work done on them.
Assessment is applied to the entire contiguous claim block shown.

Figure No. 2

N

4.0 MINERAL CLAIMS

Table No. 1 – Property Mineral Claim Details

Note: 'Good To' dates are after assessment has been applied.

Tenure Number	Claim Name	Owner	Good To Date	Status	Area
503009		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	685.626
503012		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	627.162
503824	PG9-2	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	58.789
504233		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	587.627
504234		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	587.886
504409		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	469.653
504410		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	410.748
504412		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	78.238
504413		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	626.051
504414		Barker Minerals Ltd. 100%	2009/oct/31	GOOD	684.05
504415		Barker Minerals Ltd. 100%	2009/oct/31	GOOD	449.537
504416		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	508.36
504418		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	469.261
504419		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	824.233
504421		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	706.445
504422		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	490.616
504424		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	822.055
504425		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	665.615
504426		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	39.15
504427		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	508.734
504428		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	704.562
504429		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	684.353
504430		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	684.675
504431		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	685.864
504432		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	705.025
504433		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	587.205
504434		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	801.706
504435		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	625.334
504436		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	585.945
504437		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	683.739
504438		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	683.556
504439		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	702.38
505771		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	586.275
509589	grav01	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	488.021

Tenure Number	Claim Name	Owner	Good To Date	Status	Area
509590		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	429.398
509591		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	566.23
509592		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	214.832
509593	grav02	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	273.274
513452	AUBAR NEW	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	371.542
513453	CATH	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	488.056
513455	CATH 2	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	214.773
513456	AUBAR NEW2	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	19.551
513458	MADAM 6	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	313.278
513459	STEVEN 1	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	235.275
514097		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	370.509
514099		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	390.188
514100		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	683.217
514127		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1270.779
514129		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1562.892
514130		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	938.381
514134		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	19.558
514195		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	429.776
514197		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	468.696
514200		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	117.146
514202		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	488.449
514203		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	410.357
514207		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1370.296
514210		Barker Minerals Ltd. 100%	2007/sep/26	AMAL 2007/sep/19	1694.324
514214		Barker Minerals Ltd. 100%	2007/sep/26	AMAL 2007/sep/19	98.459
514215		Barker Minerals Ltd. 100%	2007/sep/26	AMAL 2007/sep/19	98.485
514223		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	684.031
514224		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	489.076
514225		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	332.635
514227		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1760.174
514228		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	234.812
514229		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1311.468
514230		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	763.672
514231		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1391.525
514232		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	470.147
514233		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	274.471

Tenure Number	Claim Name	Owner	Good To Date	Status	Area
514234		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1369.705
514235		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1135.443
514236		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1429.632
514237		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	391.678
514238		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1270.41
514239		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1290.676
514240		Barker Minerals Ltd. 100%	2007/oct/18	AMAL 2007/oct/12	1776.941
514241		Barker Minerals Ltd. 100%	2007/oct/18	AMAL 2007/oct/12	1481.993
514242		Barker Minerals Ltd. 100%	2007/oct/18	AMAL 2007/oct/12	454.76
514244		Barker Minerals Ltd. 100%	2007/oct/18	AMAL 2007/oct/12	1621.011
514252		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1411.095
514253		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1351.325
514254		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1372.595
514256		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	469.104
514262		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	547.007
514264		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	97.683
514265		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1521.196
514266		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1580.452
514268		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1287.853
514272		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1767.184
514279		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	19.551
514281		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	371.41
514282		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1056.385
514284		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1624.869
514285		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1038.421
514289		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1391.867
514293		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	860.004
514304		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1530.564
514305		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1412.171
514307		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	762.233
514319		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1622.873
514320		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	156.44
514322		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	901.541
514324		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1607.581
514325		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1114.305
514326		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	783.776
514327		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1054.944
514328		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1233.903
514329		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	842.054

Tenure Number	Claim Name	Owner	Good To Date	Status	Area
514330		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	821.519
514332		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1235.947
514333		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	859.226
514334		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1334.206
514335		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1039.233
514336		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	995.969
514337		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	568.406
514338		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	627.16
514339		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	975.976
514340		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1430.242
514341		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	959.909
514342		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1191.427
514343		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1488.23
514344		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1273.908
514345		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1293.961
514346		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1155.684
514347		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	548.603
514348		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	980.847
514356		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	608.022
514358		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1448.102
514361		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	606.74
514364		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1565.317
514366		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1096.521
514367		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1018.582
514368		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	586.645
514371		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	547.905
514372		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1389.437
514373		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	137.034
514374		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	1115.592
514375		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	607.071
514376		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	176.207
514377		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	137.044
514397		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	273.916
514415		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	117.359
514525		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	470.745
514531		Barker Minerals Ltd. 100%	2008/oct/31	GOOD	704.124
525812	BB EXT 1	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	39.254
525813	BB EXT 2	Barker Minerals Ltd. 100%	2008/oct/31	GOOD	19.625

Total area: 115,216.538 ha

5.0 PHYSIOGRAPHY and ACCESSIBILITY

The following description is after McKinley, 2004:

The property is situated in the central part of the Quesnel Highland between the eastern edge of the Interior Plateau and the western foothills of the Columbia Mountains. This area contains rounded mountains that are transitional between the rolling plateaus to the west and the rugged Cariboo Mountains to the east. Pleistocene and Recent ice sheets flowed away from the high mountains to the east over these plateaus and down to the southwest (Cariboo River), west (Little River) and northeast (Quesnel Lake), carving U-shaped valleys. The elevation ranges from 700-1650 m. Precipitation in the region is heavy, as rain in the summer and snow in the winter. Drainage is to the west via the Cariboo, Little and Quesnel Rivers to the Fraser River. Quesnel Lake, the main scenic and topographic feature in the region, is a deep, long, forked, glacier-carved lake with an outlet at 725 m elevation. Vegetation is old-growth spruce, fir, pine, hemlock and cedar forest in all but the alpine regions of the higher mountains (mainly above 1400 m elevation). Weldwood has been actively logging fir, spruce and pine in the area.

Access to the Frank Creek and Kangaroo areas is via gravel logging roads bearing northeast from Likely. Access to the MAG project is mainly via gravel logging roads southeast from Quesnel.

6.0 HISTORY

6.1 Frank Creek Property

The following description is after McKinley, 2004.

Frank Creek has hosted sporadic placer mining since the turn of the century, the latest periods being 1984 to 1986 and 2000 to 2001. During early placer mining, several massive sulphide boulders containing up to 9.3% Zn+Pb (Martin, 1989) were found in a thin, clay-rich layer situated near the base of the alluvial material where Frank Creek canyon opens onto a delta.

During 1988, Formosa Resources Corp. and Rio Algom Mines conducted grid-controlled soil sampling, VLF-EM geophysical surveys and limited geological mapping. As a result of this work, they identified several coincident geophysical and soil geochemical anomalies. A trench excavated on a coincident Cu-Zn-Ag soil anomaly encountered rusty soil and lenses of ferricrete containing pyrite-rich fragments that contain also minor chalcopyrite, galena and sphalerite. On the slope above the above-mentioned alluvial massive sulphide boulders, 22.4 km of grid lines were cut and soil sampling was conducted at 25-m intervals, yielding some anomalous Cu, Pb, Zn and Ag concentrations but no outcropping bedrock mineralization.

During 1991, helicopter-facilitated magnetic, electromagnetic (EM) and radiometric surveys by Rio Algom identified seven areas containing anomalous EM signatures in the Frank Creek area, F-1 to F-7 target areas.

During 1996, two, vertical, percussion holes were drilled along the D-Road switchback near the center of the F-1 target area by R. Yorston, a previous operator. They yielded poor recovery, mainly

of very fine particles and minor amounts of rock chips of black and green phyllite. Both holes returned anomalous Cu, Pb, Zn, Ag and Au concentrations in the upper 18.3 m, with the best interval being 3.04 m averaging 1770 ppm Cu, 750 ppm Pb, 2970 ppm Zn, 4.8 ppm Ag and 790 ppb Au. During 1999, after staking the immediate area of the F-1 showing, geological mapping and lithogeochemical sampling were conducted in the centre of the Frank Creek area. When numerous pyrite-rich samples were discovered by Barker Minerals personnel while prospecting above an old trench that contained abundant ferricrete, further exploration of this area was added to the program then underway. The prospecting examination in the near vicinity of the trench was extended. This resulted in the discovery of many boulders of massive sulphide located above a culvert situated 150 m east of the trench along side of the D-Road at 2.2 km up the D road. A trench that was excavated near the culvert exposed a 1.2-m-thick massive sulphide layer over a length of 10 m.

During 2001-2002, the Company conducted geological and geophysical exploration work, including trenching, rock sampling, localized detailed mapping at the Frank Creek massive sulphide discovery outcrop, diamond drilling and assaying.

The following description is after Doyle, 2007

During 2001 and 2002, Barker Minerals continued to prospect and sample the Frank Creek area, to excavate trenches and to conduct geophysical surveys. EM surveys extended previously located conductor axes. While the Frank Creek discovery outcrop was found to be unresponsive to both EM and IP geophysical techniques, an area of IP chargeability was observed just east of the showing. Preliminary gravity profiling was also done over the showing and the nearby EM conductors, but failed to detect any excess mass. [The gravity survey was deemed unreliable due to difficulty in interpreting data due to the coarseness of the topographic maps used for terrain corrections. – see Walcott, 2002, Assessment Report 26805]

A series of excavator trenches tested…the F-1 area…Five trenches, totaling 289 metres were dug within 70 metres of the discovery outcrop. These uncovered several very small lenses of massive sulphides…the mineralized zone was now defined over a strike length of 375 metres northwest and 50 metres southeast of the discovery outcrop. (Perry, 2002).

Six diamond drill holes (813 metres) were drilled at Frank Creek in 2002…The best assays were 1.1% Zn over 2.6m in FC-02-01, 0.14% Cu and 0.13% Zn over 10.7m in FC-02-05 and 0.15% Cu, 0.10% Pb and 0.23% Zn over 2.7m (including 2.08% Cu, 0.545 Pb and 0.98% Zn over 0.45 metres) in FC-02-06. (Perry, 2002).

Further trenching and sampling was completed in 2003, on geophysical conductors and soil geochemical anomalies close to the D road and to the discovery outcrop. A total of 530 metres were excavated in 10 trenches…An EM conductor immediately southwest of the discovery was trenched and …explained by disseminated sulphides…a grab sample assayed 3.15% Zn and 0.95% Pb. Three additional trenches…hit graphitic argillite. Barker also conducted a lithogeochemical sampling program on the Ace and Frank Creek properties.

In 2004, Quantec Geoscience Ltd. completed a Titan Distributed Array survey over 15.8 line km's, centred on the discovery outcrop. The survey included tensor magnetotelluric resistivity (MT) and DC resistivity and Induced Polarization (DCIP)…The survey identified 90 DCIP and MT anomalies, of which 18 were considered significant (Donohue et al, 2004).
[Three geophysical Trends A ,B, C were identified in 2004 and are shown in the Figure below.]

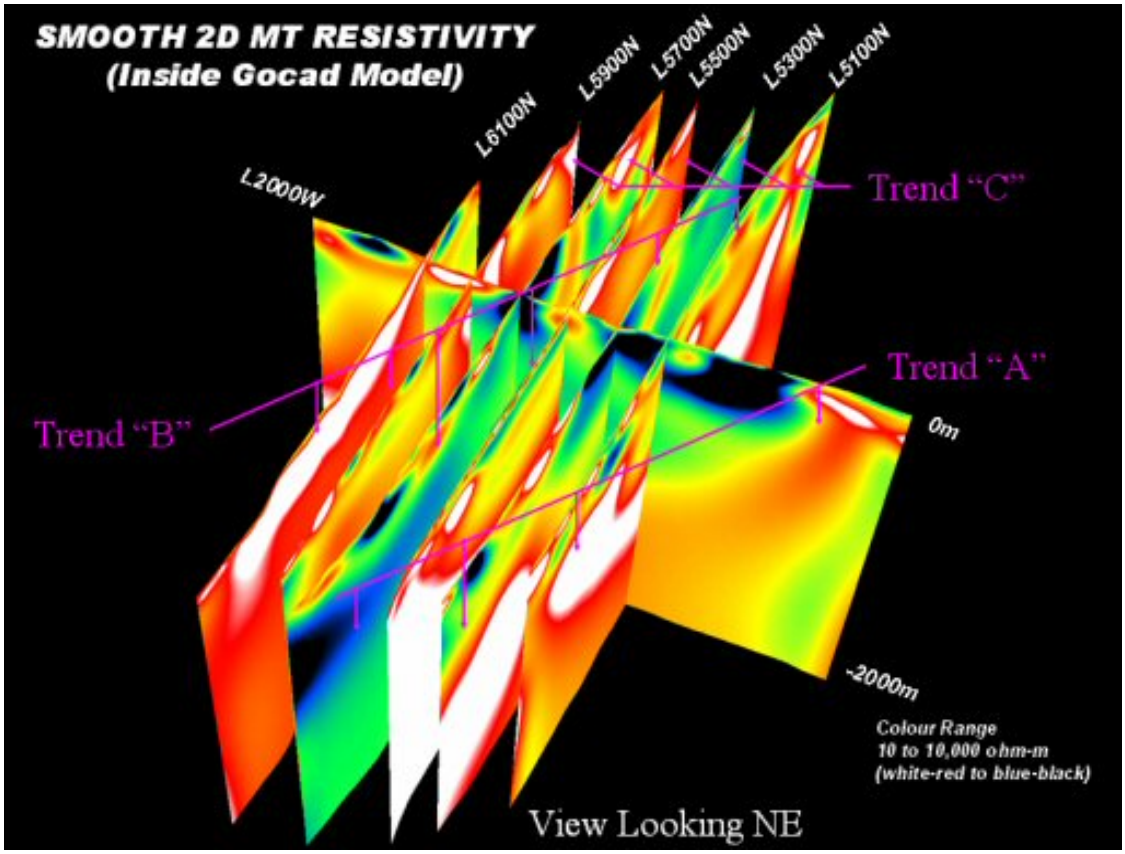


Figure No. ___ Geophysical Trends A, B, C resulting from the 2004, Quantec Geoscience Ltd. Titan 24 Distributed Array Survey. This Figure is from Barker Minerals Ltd. website, Company News, Aug. 24, 2004. See Doyle, 2005, Assessment Report 28248, Appendix II for the the relevant Quantec Geoscience Ltd. report.

The Titan 24 "Trend C" geophysical anomaly is located on the eastern ends of lines 61N, 59N, 57N, and 55N. This anomaly is a strong shallow near surface (within 50m) conductor, which extends at least 600 meters along strike and is approximately 50 – 150 meters wide. Previous HLEM geophysical surveys indicate the conductor extends a further 600m southward for a total of 1.2 kilometers in strike length. The southern portion of the anomaly coincides with the original massive sulphide Discovery Trench on line 54+50N. The northern end of the anomaly is cut off at the Frank Creek canyon directly up slope from historical placer gold mining activities and the location of numerous massive sulphide boulders found by the placer gold miners. Soil surveys from past operators in the 1980's show broad copper, lead, zinc and silver anomalies spatially related to the Trend "C" anomaly.

The Titan 24 "Trend A" is a large conductor which extends below the western portions of lines 55N, 53N and 51N and has a geophysical response consistent with massive sulphide mineralization. "Trend A" is related to large strong copper, lead and zinc soil anomalies. Massive sulphide boulders

had been found in this area in previous prospecting. Some of the trenching in 2007 was concentrated here (see Figure Nos. 7 & 8).

In 2004 Barker Minerals Ltd. drilled 7 holes (1,880 metres) around the F-7 target area targeting Titan geophysical targets or bedrock mineralization.

In 2005 Barker Minerals Ltd. drilled four holes (1,566 metres) following up the 2004 drilling. The drill programs intersected wide intervals up to in excess of 70 metres of disseminated and stringer sulphide mineralization in locally strongly altered phyllites and quartz-rich sandstones (Doyle, 2004, 2005).

During summer 2006 Barker Minerals Ltd. drilled 5 holes (2,037metres). Alteration and narrow zones of mineralization encountered were considered consistent with a feeder zone within a massive sulphide system.

In summer-fall 2006 several trenches and test holes were dug between the east ends of the Titan 24 grid lines L57N and L59N to acquire a better understanding of the geology and overburden depth. The trenching and test pitting on approximately 50 meter step outs on the Trend “C” conductor resulted in the discovery of an altered and oxidized zone over a length of 500 meters. The zone correlates with a broad copper/zinc/lead/silver soil anomaly. The oxidized zone is hosted in altered quartz-sericite schist, the favourable host rock for the massive sulphides discovered elsewhere on the Frank Creek project. This zone appears locally to be associated with quartz veins in a fault zone. These veins contain galena and attached oxidizing massively textured sulphides. Below this zone, in the Frank Creek canyon historical placer mining operations recovered gold associated with quartz vein material in an area strewn with numerous massive sulphide boulders.

Trend “C”, where exposed by trenching and test pitting, has many similarities to the upper zone of some volcanogenic massive sulphide deposits. The geological sequence has limestone overlying siliceous argillites with quartz stockwork veining as well as remobilized quartz veins with galena and minor sphalerite mineralization. The argillites occur with or without graphite. Underlying the argillites are highly altered limonitic volcanic rocks with disseminations of galena in the host rock as well as in stockwork quartz veins. Alteration within this rock unit consists of variable amounts and combinations of sericite, green chrome mica, chlorite, iron carbonates, pyrite and silica.

During winter 2006 two follow up holes were drilled (705 metres). During 2007 250 metres of trenching was done in 5 trenches and 24 test holes. The 2006 winter drilling and 2007 trenching make a part of this current assessment and are described in Section 9.0 below.

6.2 Kangaroo Property

The following description is after McKinley, 2004.

The company initiated a small reconnaissance exploration program on their Kangaroo Creek Project in November 2003. The goals of this work were to confirm the geological setting of the area and compare this with observations of previous workers and to assess if the geophysical anomalies identified on the Cross Lake claims to the west trend onto the Barker Minerals claims.

A small IP and magnetic geophysical survey was conducted … by Peter E. Walcott & Associates of Vancouver, B.C. Three parallel lines spaced 100 metres apart and totalling about 5500 metres in length were surveyed (see Figure No. 30 in this report)*. Two main IP chargeability anomalies were identified, both of which appear to increase in intensity to the east. The larger northernmost anomaly corresponds to a resistivity low and is along strike from the large Cu-Mo-Au soil geochemical anomaly identified by Cross Lake. The southern anomaly appears to be along strike of Cross Lake's anomalous Au-Cu-As-Sb geochemical trend as well as the ground that hosts the historical gold-mineralized interval intersected by Corona in 1989 in drillhole C89-6. The zones having high resistivity with coincidental magnetic highs likely represent the intrusive rocks identified in outcrop nearby.*

During 2007 Barker Minerals Ltd. did diamond drilling, soil sampling, geophysical and geological mapping on the Kangaroo Property. These make a part of this current assessment and are described in Section 10.0 below.

6.3 Mag Property (Quesnel Platinum Project)

The following description is after McKinley, 2004.

During 2000, Barker Minerals staked several areas of coincident airborne magnetic anomalies, chromium/nickel/cobalt/gold stream sediment anomalies and mafic to ultra-mafic rocks. The areas staked are near reported occurrences of PGMs in placer concentrates as known from previous unpublished studies and assay results from samples collected from local placer miners during 2000. Barker Minerals collected and assayed 97 rock samples to confirm the presence of the favourable mafic to ultra-mafic rock types, which are host to PGM deposits in other areas of the world (Payne, 2001; BC Assessment Report). Prospecting by Barker Minerals' personnel resulted in the discovery of a Cu-anomaly in the Geremi Creek area.

Reconnaissance geological mapping and sampling were conducted over portions of these claims in order to identify and confirm the occurrences of mafic and ultramafic rocks. Thin-section petrographic examinations were made on six samples. Geological mapping and rock geochemistry confirmed and characterized the presence of mafic and ultramafic rocks in the property. Several samples collected

from hematite-altered amygdaloidal mafic flow rocks are anomalous in Cu, Ag and Hg (Payne, 2001; BC Assessment Report).

During 2000, several reconnaissance ground magnetometer and VLF-EM surveys were conducted by Barker staff along roads, in order to confirm and locate more accurately the anomalies identified in previous airborne surveys. These geophysical survey traverses were conducted near the locations of stream samples that contained anomalous concentrations of PGE's per Rublee (1986). Several ground magnetic anomalies confirmed the results of the airborne survey. Several VLF-EM survey traverses show significant crossovers that should be followed up with more detailed geological and geophysical studies controlled by conventional cut grids. In several of the traverse profiles, magnetic anomalies coincide with VLF-EM crossovers.

During the period 2001 - 2002, the Company conducted GPS surveying of claim post locations in order to more accurately define mineral claims in this project area and to obtain required assessment work credits (Walcott, 2001).

During 2007 Barker Minerals Ltd. did VLF-EM, magnetic and IP geophysical surveys on the MAG Property. These make a part of this current assessment and are described in Section 11.0 below.

7.0 EXPLORATION PROGRAM 2006 - 2007

7.1 Economic Targets and Work Done

Frank Creek Property

A diamond drilling program was done on the Frank Creek property to test chargeability and resistivity anomalies and extensions of massive sulphide style alteration and copper/zinc/lead/silver/gold stringer mineralization discovered in previous exploration work. The economic target was Kuroko style volcanogenic massive sulphides. Core size used was NQ. Drilling began November 16, 2006 and finished December 11, 2006. 705 metres of NQ core were drilled in 2 holes. 98 core samples were collected, 138 rock samples, 800 soils were collected. The soil samples were collected over a pre-existing grid (2004 Titan 24 geophysical grid) after it had been brushed out and re-established, and over intermediate lines. Approximately 250 metres of trenching was done in 5 trenches and 24 test holes dug in 2007 with a mechanical hoe on tracks . Geological mapping consisted of describing sites where rock samples were collected and what could be seen in trenches and test holes. The onset of winter weather prevented more intensive sampling of the trenches. Till was prospected by digging test holes in the northeast and southwest parts of Figure No. 6 area. Till depth, matrix and colouration were noted and considered with topography, glaciation direction (from south) and soil geochemistry from soil surveys done in the area. It was subsequently deemed worthwhile to use an enzyme leach analysis on new soil sampling for its ability to detect extremely subtle geochemical

anomalies due to locally deep till occurring on the property (see Enzyme Leach Soil Survey, page 21).

Kangaroo Property

A diamond drilling program was done on the Kangaroo property to follow up previously discovered high chargeability and low resistivity anomalies. The economic target was skarn related gold and porphyry related gold-copper. The Hydrocore 2000 drill was moved with a John Deere 850B bulldozer. Drilling began May 4, 2007 and finished June 3. 2,008 metres of NQ2 core were drilled in 9 holes. 915 core samples were collected, 57 rock samples, 46 soils and 21 stream sediment samples were collected. Geological mapping was done over approximately 2.5 square kilometres in the drilling area. 40 km (nominal length) of grid lines were established on the property. Stations were placed every 25 metres on the grid lines. Quantec Geoscience Inc. did a pole-dipole induced polarization (IP) survey over 32.0 km on this grid and a Titan 24 IP survey over 8.0 km.

Mag Property

8.9 km (nominal length) of grid lines were established on the property. Stations were placed every 25 metres on the grid lines. A pole-dipole induced polarization survey was done over 1.4 km by Quantec Geoscience Inc. and magnetic and VLF-EM surveys were done by Barker Minerals Ltd. on the grid. The VLF-EM survey was not finished due to an instrument break down.

7.2 Sampling Method and Approach

Drill core was split with a table mounted diamond saw in the cutting trailer at camp. Half the core was returned to the core box while the other half was placed in a plastic bag, tied and stored prior to shipment to the analytical lab. Core recovery factors during drilling which could materially affect the accuracy of the results are described as core recovery percentages in the drill logs. Core recoveries were generally good, frequently close to 100% though sometimes broken due to high fracture intensity. Rock samples from surface sampling were bagged, tied and stored similar to core. Core and rocks were shipped in plastic rice bags to the analytical lab. Soil and stream sediment samples were allowed to air dry before being placed into a box for shipment. Samples were stored in the garage or cabin at the camp prior to shipment. After sampling the core boxes were neatly stacked in piles adjacent to the core cutting trailer.

Completed drill holes are located in the field by marked wood plugs inserted in the holes. Soil sample locations were marked by flagging and pickets on lines cleared in advance by chainsaw or machete. Soils were collected from the ‘B’ soil horizon, generally 300 gram weight, from about 30 cm depth.

Rock samples were representative grabs or chips over a certain distance as described for each sample in Appendix A - Sample Descriptions.

7.3 Laboratory Methods

7.3.1 Sample Preparation and Analysis

All samples were sent to ActLabs Laboratories Ltd. of Ancaster, Ontario. ActLabs code 1C (exploration), 1H ('Au+48') and 7 (enzyme leach) analytical methods were used. Method 1C used fire assay-ICP/MS, 1H used variously, INNA (neutron activation) or ICP (inductively coupled plasma) and code 7 used ICP/MS analytical methods. ActLabs' analytical methods are described in Appendix B.

All lab results are in Appendix C - Analytical Data.

7.3.2 Verification of Accuracy

Check samples from WCM Minerals of Burnaby, BC with certified known metals content were sent at intervals to ActLabs for analysis. ActLabs' values are compared to the certified values and compared in Appendix D – Geochemical Standards Comparison. The reliability of the ActLabs' values are considered acceptable. More detailed observations and discussion are in the Appendix.

8.0 REGIONAL GEOLOGY and MINERAL DEPOSITS

8.1 Regional Geology

The following description is after McKinley, 2004.

The regional geology was described by L.C. Struik (1988) and is shown updated in [Figure 3a] *(after Ferri and O'Brien, 2003). The Barkerville terrane is considered to be the northwest extension of the Kootenay terrane, which to the southeast overlies the Monashee metamorphic core complex, a large uplifted mass of high-grade paragneiss, quartzite and marble. The properties are on the flank of the northern, unexposed portion of this core complex. Northwest from the North Arm of Quesnel Lake the characteristic metamorphic minerals change from sillimanite through staurolite-kyanite, almandine garnet and biotite to chlorite northwest of the Ace claims. The garnet isograd runs northerly across the east-central part of the Ace group, while that of biotite is 30 km further northwest. Historic mines near Wells and Barkerville are in rocks of the greenschist facies. The age of both deformation and metamorphism is regarded as Mid-Jurassic, which is interpreted as the time of collision of the North American plate to the east with a group of island arcs to the west. In the Little River area, four geological terranes are represented, most of which are dominated by marine sedimentary or metasedimentary rocks.*

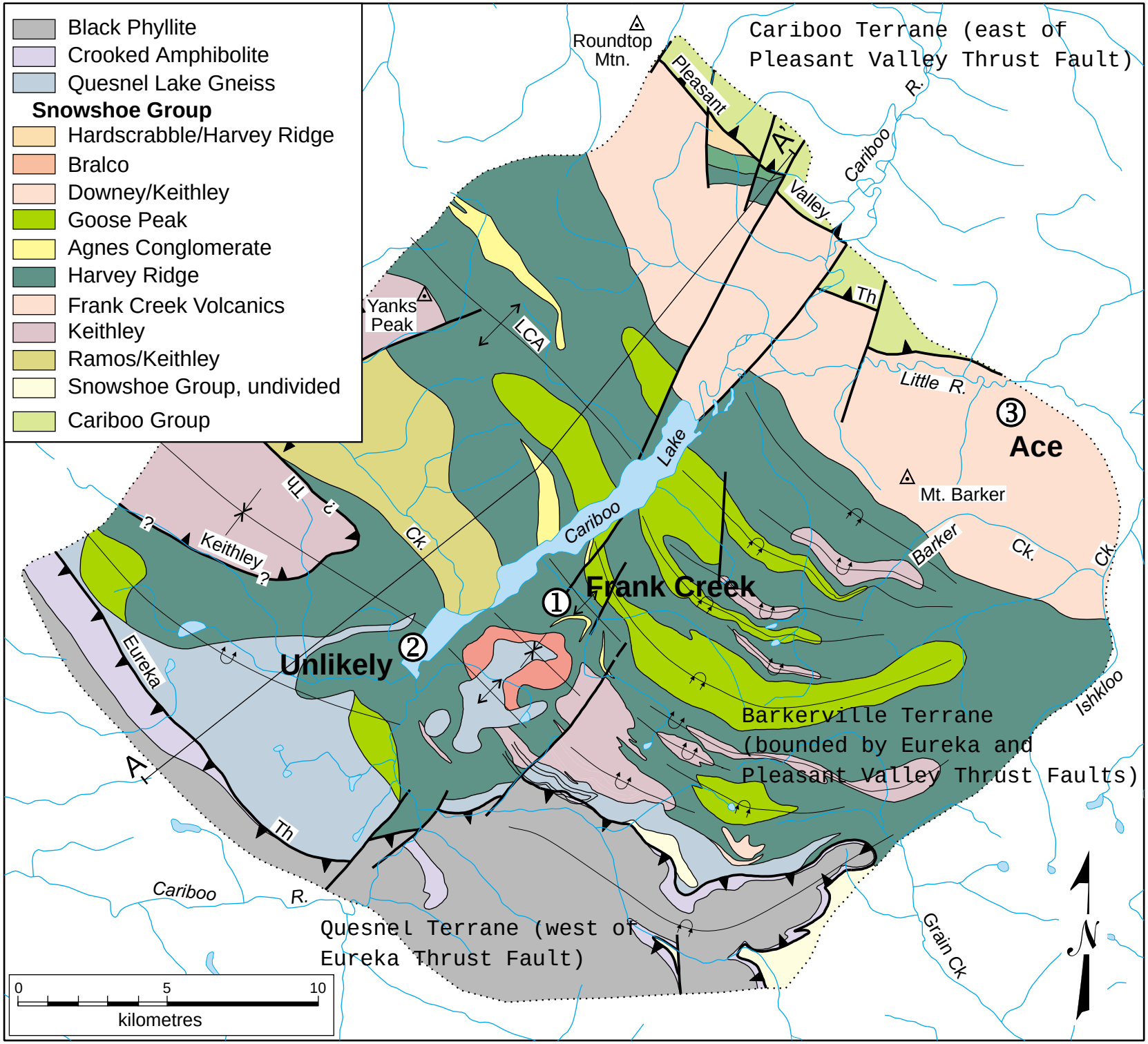
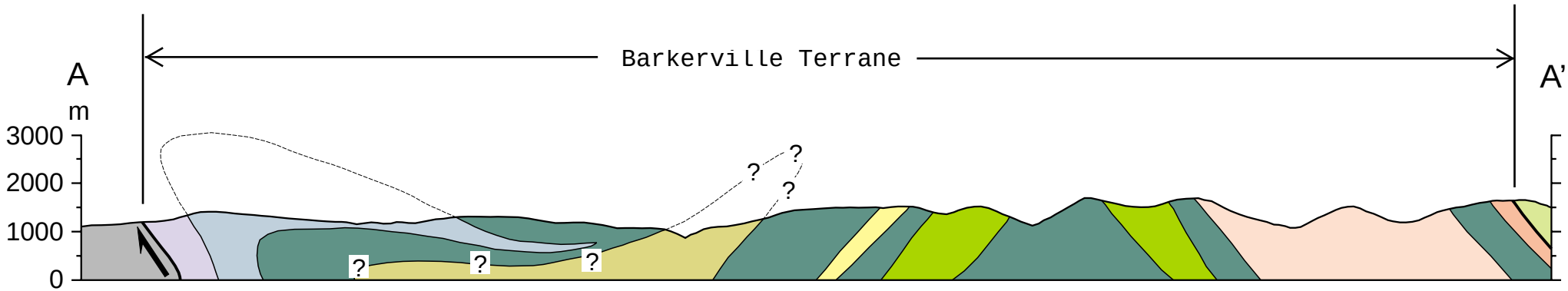


Figure No.3a Regional Geology (after Ferri, 2002)



Late Triassic

Black Phyllite

Upper Paleozoic

Crooked Amphibolite

Early Mississippian

Quesnel Lake Gneiss

Late Proterozoic to Early Paleozoic

Snowshoe Group

Hardscrabble /Harvey Ridge

Bralco

Downey/Keithley

Goose Peak

Agnes Conglomerate

Harvey Ridge

Badger Peak Volcanics

Frank Creek Volcanics

Keithley

Ramos/Keithley

Snowshoe Group, Undiv.

Early Paleozoic

Cariboo Group

① **Frank Creek**
② **Unlikely**
③ **Ace**

Thrust fault

Fault

F_3 syncline

F_3 anticline

F_2 syncline

F_2 anticline

LCA - Lightening Creek Anticlinorium

Figure No.3b Geological Section and Legend (after Ferri, 2002)

Barkerville Terrane

Most of the property area is underlain by marine strata of the Barkerville terrane, whose age is classified broadly as Late Proterozoic to Mid-Paleozoic. It is categorized by the Geological Survey of Canada as a subdivision of the Kootenay terrane. The region was deformed by intense, complex, in part isoclinal folding and overturning that produced an intimate interlensing of impure quartzite, siltstone, ankeritic dolomite, pelite and amphibolite. These rocks are cut by dikes and sills of metamorphosed diorite. Locally, stronger shear deformation produced mylonitic textures.

The northeastern third of this terrane is the main zone of economic interest in the Cariboo district. Struik described it as "gold-enriched", because it contains the historic Wells and Barkerville mines and the Cariboo Hudson deposit, 39 km and 18 km northwest of the Ace project area, respectively. This zone contains olive and grey micaceous quartzite and phyllite, amphibolite, marble, meta-tuff and meta-diorite sheets or sills. The Barkerville terrane is cut by the Mid-Devonian Quesnel Lake gneiss (350 Ma), a coarse grained, leucocratic, biotite granitic gneiss with megacrysts of potassium feldspar. The main body of gneiss is 30 km long by 3 km wide and is elongated parallel to the eastern border of the Intermontane belt. Its contacts are in part concordant with, and in part perpendicular to, metamorphic layering. The Barkerville terrane hosts folded, sill-like masses up to 300 m thick of gneissic meta-diorite (400 Ma) and contains post-metamorphic anatectic pegmatite (86 Ma), particularly in a high-grade metamorphic aureole northwest of the North Arm of Quesnel Lake.

Cariboo Terrane

The northeastern part of the Little River area is underlain by marine peri-cratonic sedimentary strata of the Cariboo terrane. The Cariboo terrane consists mainly of limestone and dolomite with lesser siliceous, clastic, sedimentary rocks and argillite. Some geologists believe that the Cariboo terrane is a shallow, near-shore facies and the Barkerville is a deeper, offshore facies of the same erosion-deposition system. No rifting is suspected between the Cariboo terrane and the North American continent, in contrast to that between the Barkerville terrane and the North American continent.

The Cariboo and Barkerville terranes are separated by the regional Pleasant Valley thrust fault, which dips northeast moderately to steeply. It is reported by Struik (1988) to have moved the Cariboo block from the east over the Barkerville block along a strike length of over 100 km. In the map area, the fault cannot be found, suggesting that much of the movement attributed to it may have occurred by shearing in a broad zone along the "contact" between the two terranes.

Some of the carbonate layers in the lowest part of the Cariboo terrane (or upper part of the Barkerville terrane) are enriched in zinc and lead. Since the 1970's, preliminary exploration on stratiform Zn-Pb targets has been conducted in this area over a strike length of 23 km from the vicinity of the head of the North Arm, via Maeford Lake to the Cariboo (Maybe) prospect.

The Cariboo terrane was cut by the Jurassic-Cretaceous Little River stock, a medium-grained granodiorite grading to quartz monzonite. A normal fault along its southwest side (Little River fault) dips east and extends southeasterly to Limestone Point, on the western side of the North Arm of Quesnel Lake. It intersects, and in some literature has been confused with, the Pleasant Valley thrust. It moved chlorite-biotite metamorphic grade strata of the Cariboo terrane eastward to rest against staurolite-kyanite metamorphic grade strata of the Barkerville terrane.

Quesnel Terrane

A small southwestern portion of the Little River area is underlain by the Late Triassic to Early Jurassic, allochthonous Quesnel terrane. It was accreted to the North American continent, in part by

subduction and in part by obduction. The Eureka thrust fault marks the boundary between the Quesnel and Barkerville terranes as well as that between the Intermontane and Omineca physiographic belts. The terrane is partly submarine and partly subaerial, consisting of volcanic and volcaniclastic rocks and co-magmatic intrusions, with minor carbonate lenses and related sedimentary rocks. Regionally, it hosts many important mineral deposits, mainly of Cu and Cu-Au, such as Highland Valley, Craigmont, Copper Mountain, QR and Mt. Polley. The Bullion Pit, from which 175,700 oz. of placer gold were produced, is near Likely just on the west side of the boundary between the Barkerville and Quesnel terranes.

Slide Mountain Terrane
Rocks of the allochthonous, Devonian to Late Triassic, Slide Mountain terrane underlie a very small part of the Little River area. Portions of these rocks were obducted, while others were subducted during collision of an oceanic plate with the continent. It is exposed east of Wells and Barkerville as the upper plate overlying the generally low-angle Pundata thrust fault. This fault it is nearly vertical where it crosses the southwestern part of the Little River area. Small slices of mainly mafic volcanic rocks and alpine-type ultramafic rocks of the Slide Mountain terrane occur in and parallel to the Eureka thrust. Minor lithologies include chert, meta-siltstone and argillite.

8.2 Mineral Prospects at Frank Creek, Kangaroo, MAG Properties

The following description is after McKinley, 2004.

Frank Creek Property - Massive Sulphide
Conformable, semi-massive to massive sulphide deposits of the Besshi type occur in the Kootenay terrane (e.g. the Goldstream deposit), in the Yukon-Tanana and Nisling terranes and in the Klondike schist. Recent BC Geological Survey work suggests that these may all be part of an elongate terrane that also includes the Barkerville terrane (Hoy and Preto, 1996). Host rocks are deformed complexly and metamorphosed to micaceous quartzite, phyllite and schist, commonly graphitic. Marble and meta-volcanic rock lenses are common. Besshi-type deposits contain pyrite, pyrrhotite, magnetite and chalcopyrite, local sphalerite and rarely galena. Host rocks are mainly sedimentary, commonly siltstone, quartzite and carbonaceous schist near amphibolite (metamorphosed mafic volcanic rocks).

McKinley believed the massive sulphide prospect at Frank Creek is Besshi-type, however these authors believe the above 'quartzites' are actually rhyolitic volcaniclastics and that the massive sulphide prospect is Kuroko-type due to the presence of felsic volcanics and characteristic Cu-Pb-Zn mineralization.

Kangaroo Property - Skarn/porphyry-related Au-Cu±Mo mineralization
The Company's Kangaroo Creek property has recently been identified as a prospective area for skarn or porphyry-related Au and/or Cu-Mo mineralization based on its proximity and similar geological characteristics to Cross Lake Minerals' QR Mine and Cariboo exploration project located to the west. Mineralization at the QR Mine consists of disseminated to massive bodies of pyrite and chalcopyrite and associated native gold within a package of basaltic lava flows and siltstones that have been intruded by monzodiorite stocks (B.C. Minfile Report 093A 121). These rocks comprise part of the Nicola Group within the Quesnel Terrane. Mineralization has a strong spatial association with the basalt-sediment contact and is associated with strong propylitic (epidote-carbonate-chlorite)

alteration. The ore grade mineralization generally occurs within 50 metres of the alteration front and 150-300 metres from the contact of the intrusive rocks. A preliminary geological assessment of the Kangaroo property in Nov. 2003 confirmed the presence of basalt lava flows and volcaniclastics, black siltstones/argillites and dioritic intrusive rocks, all similar lithologies to those at the QR Mine.

MAG Property - Quesnel Platinum Project

During 2000, Barker Minerals staked several areas of coincident airborne magnetic anomalies, chromium/nickel/cobalt/gold stream sediment anomalies and mafic to ultra-mafic rocks. The areas staked are near reported occurrences of PGMs in placer concentrates as known from previous unpublished studies and assay results from samples collected from local placer miners during 2000. Barker Minerals collected and assayed 97 rock samples to confirm the presence of the favourable mafic to ultra-mafic rock types, which are host to PGM deposits in other areas of the world (Payne, 2001; BC Assessment Report). Prospecting by Barker Minerals' personnel resulted in the discovery of a Cu-anomaly in the Geremi Creek area.

Reconnaissance geological mapping and sampling were conducted over portions of these claims in order to identify and confirm the occurrences of mafic and ultramafic rocks. Thin-section petrographic examinations were made on six samples. Geological mapping and rock geochemistry confirmed and characterized the presence of mafic and ultramafic rocks in the property. Several samples collected from hematite-altered amygdaloidal mafic flow rocks are anomalous in Cu, Ag and Hg (Payne, 2001; BC Assessment Report).

9.0 FRANK CREEK PROPERTY

9.1 General Discussion of Rocks Observed in Trenches

9.1.1 Lithologies

The most common rock type encountered in the 2006-2007 trenches and test holes was quartz muscovite schist. Original colour varies from light to dark grey, Locally the colour can be altered reddish, dark greenish or light grey due to secondary hematite, chlorite or sericite, respectively. Original texture is often pelitic, that is with quartz and less commonly, feldspar granules varying in size often up to approximately 2-5mm. Uncommonly, slump breccia clasts are locally evident, these are subrounded to fairly angular. Rounded bluish quartz 'pellets' usually make up at least 50% of the rock, muscovite most of the rest but hematite, chlorite or sulphides can be locally abundant. Regional metamorphism has generally obscured original compositions and textures and this rock has alternately been called 'quartzite' or 'quartz eye tuff', sedimentary or volcanic by past workers. These authors are of the opinion that this rock is a rhyolitic volcaniclastic (see also Sample Nos. 85342, 85343, 85344 in Appendix A – Sample Descriptions and in Appendix F - Frank Creek Property Petrographic Study of Rock & Core Thin Sections). Relatively minor amounts of chloritic andesites were identified in some trenches and test holes but these may actually be chloritized versions of the above rock. Minor graphitic schist was noted in the area of Test Holes FC07-TH13 and FC07-TH14.

9.1.2. Structure

The rocks are strongly foliated due to regional metamorphism, with crumpled cleavage surfaces often showing two lineations. In the vicinity of the 2006-2007 trenches and test holes the predominant foliation strikes NW-SE and dips SW. Rocks that have been locally strongly chloritized also appear more intensely foliated or sheared.

9.1.3 Veins

Quartz veins occur commonly, their orientations are often parallel or subparallel to the dominant foliation. The veins often include pyrite or other sulphides, the quartz is often light grey or bluish. Sulphide stringers with little quartz or other gangue are common, occurring as local stockworks, notably in Trenches FC07-TR3 and FC07-TR5. Minor quartz-carbonate veins occur locally, notably near the first bend in D Road at Test Holes FC07-TH13 and FC07-TH14 with graphitic schist.

9.1.4 Alteration

Regional metamorphism has strongly altered the original compositions and textures of the rocks, converting them to muscovite schists whose protoliths are difficult to identify. Local silicification and sericitization, often associated with quartz veining, are apparent in Trenches FC07-TR1,TR2,TR3 and

TR4 but the metamorphic overprint usually dominates the rocks' appearance. Strongly chloritized or hematized rocks in these trenches tend to be more intensely schistose, perhaps as a weaker rock these were more susceptible to develop foliation. On close examination the chloritized or hematized rocks contain quartz eyes or pellets suggesting these are hydrothermally altered versions of the rhyolitic volcaniclastic. The regional metamorphism is considered to have occurred later than the hydrothermal alteration.

It may be worth determining whether the hematite may be primary or syngenetic with hangingwall rocks and whether the strongly chloritized zones may be equivalent to 'chlorite' alteration zones that can occur in footwall rocks at roots of volcanic vents. These minerals may be used to determine the geometry of a Kuroko type massive sulphide deposit.

9.1.5 Mineralization

At Trench FC07-TR3 a stockwork of pyritic stringers containing chalcopyrite, sphalerite and galena occurs over at least 20 metres in a strongly sheared hematized and chloritized zone of, apparently the rhyolitic volcaniclastic. The sulphides also occur in small lenses or pods, whether they are oriented parallel to the general foliation is unclear. Small pyrite cubes occur disseminated and are rather ubiquitous, in the areas of the trenches these are often hematized and are angular to rounded in shape.

At Trench FC07-TR5 a similar stockwork of pyritic stringers occurs over approximate 50 metres. The adjacent Trenches FC07-TR1 and TR2 have a chloritic shear zone which contains small lenses and pods of massive sulphide mineralization. Trench FC07-TR5 contains a 2m x 5m pod of semi massive sulphide. The mineralization appears roughly oriented sub parallel to dominant foliation. Sulphides in these trenches were mainly pyrite and galena and sphalerite with less chalcopyrite.

At Trench FC07-TR4 a thin layer of 'black' sphalerite occurs, apparently also lensy or intermittently discontinuous and brecciated. Some mineralization here appears associated with a quartz vein breccia.

Green fuchsite was identified in the Trenches FC07-TR1,TR2 TR4 and TR5 in the more chloritic zones.

9.2 Diamond Drilling

Drill Holes FC-06-23 and FC-06-24 were drilled on Line 58+00N and 59+00N respectively to test the near-surface chargeability anomalies identified by the Titan 24 survey on the Frank Creek Property. See Assessment Report 28248 by Doyle, August 26 2005, Appendix I, for the report by Quantec Geoscience Inc. for this survey.

Both drill holes intersected several intensely altered horizons with anomalous base metal concentrations, contained within thick, fine to coarse, quartz-rich sandstones and minor conglomerates, interbedded with thick horizons of carbonaceous argillite.

DDH FC-06-23, intersected one horizon containing Cu-rich mineralization within an intense sericite±chlorite±silica±carbonate alteration, which may represent footwall stringer-style mineralization. This hole also intersected two horizons containing Zn±Pb-rich mineralization within an intensely carbonate altered unit, which may represent main horizon mineralization and/or hangingwall alteration and associated mineralization. Figure No. 4 shows the distribution of base and precious metals encountered in DDH FC-06-23.

DDH FC-06-24, intersected one horizon containing Zn-Pb-rich mineralization contained within carbonate-rich alteration zone. This unit contained stringer and disseminated mineralization including 1.5m of 0.5% Zn, >0.5% Pb (overlimit), and 3.4 g/t Ag. This hole also intersected one horizon containing Cu-rich mineralization contained within an intensely sericite altered unit, which may represent footwall stringer-style mineralization. Figure No. 5 shows the distribution of base and precious metals encountered in DDH FC-06-24.

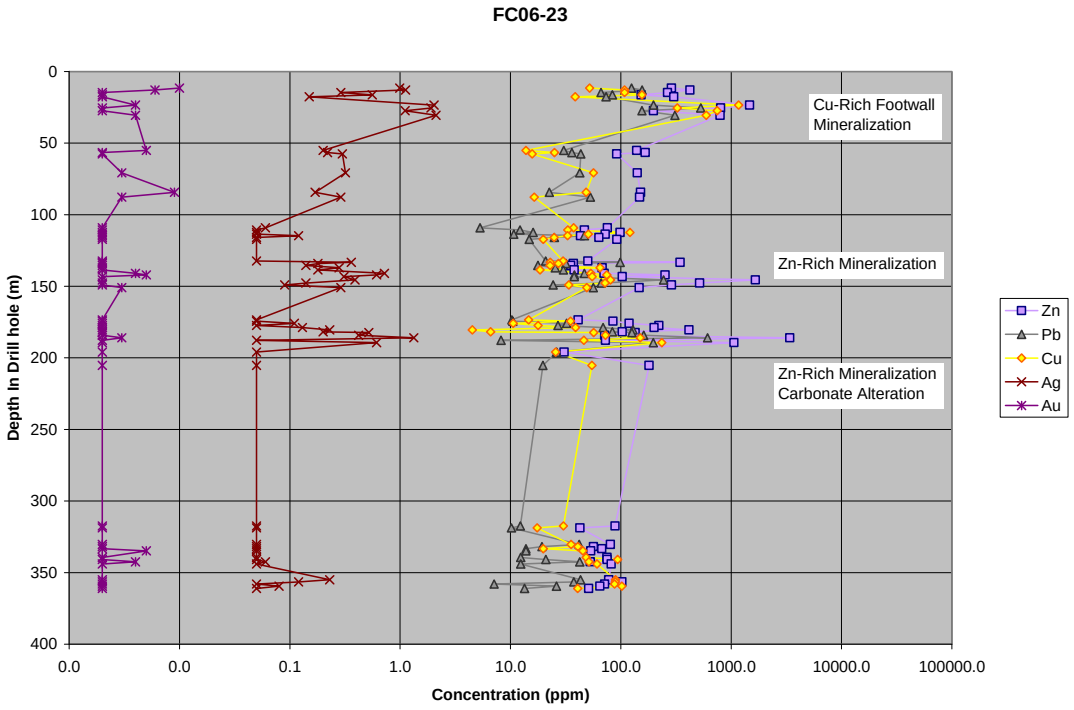


Figure No. 4. Base and precious metal distribution for FC-06-23 showing three mineralized horizons

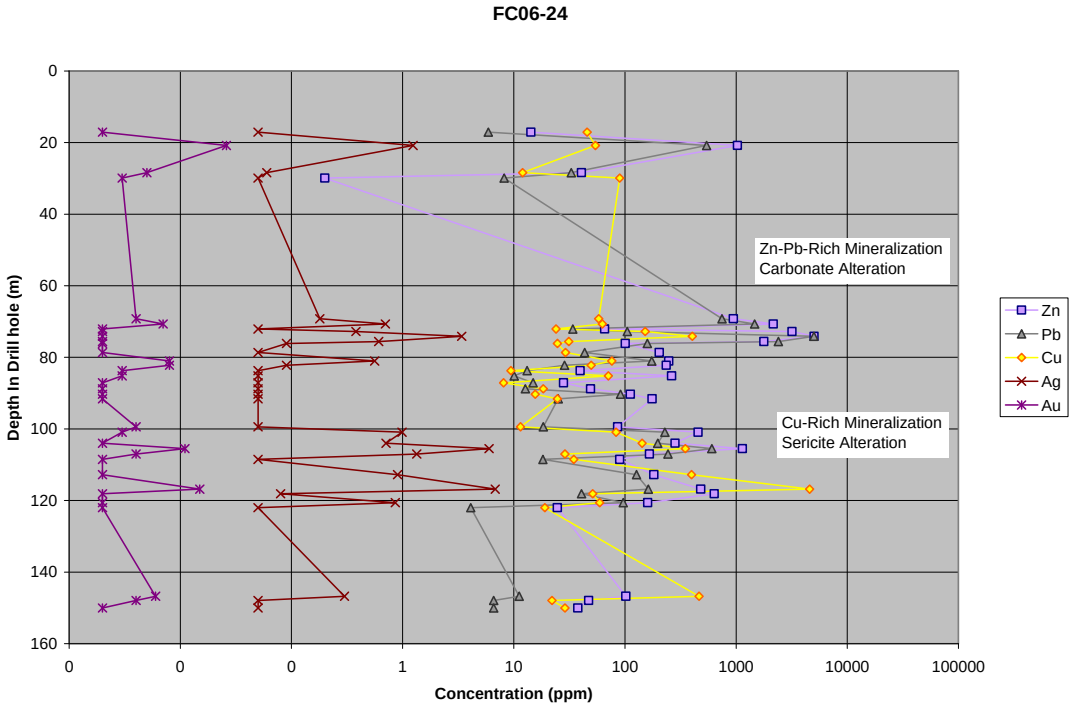
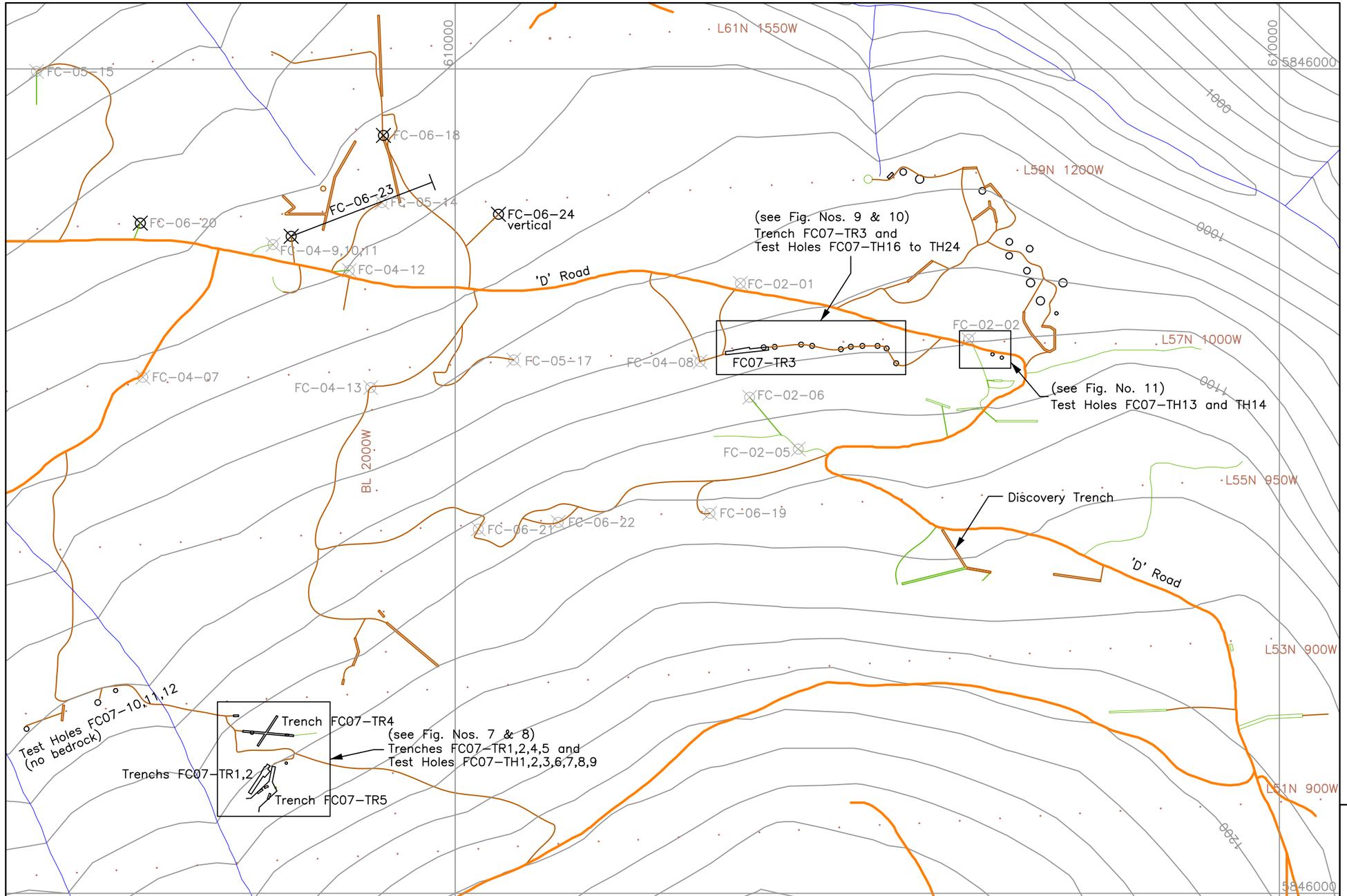


Figure No. 5. Base and precious metal distribution for FC-06-24 showing three mineralized horizons



Decreasing 0.05° annually

19.0°

True North

Magnetic North

2007

LEGEND

- 1000 — Topographic Contour & Elevation Contour interval 20 metres
- Creek
- Road
- Cat Trails unreclaimed, reclaimed
- FC-06-23 — Drillhole & Number
- Trench & Test Hole new, unreclaimed, reclaimed
- Grid station (2004 Titan)

Scale 1:5,000
metres

0 100 200 300

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

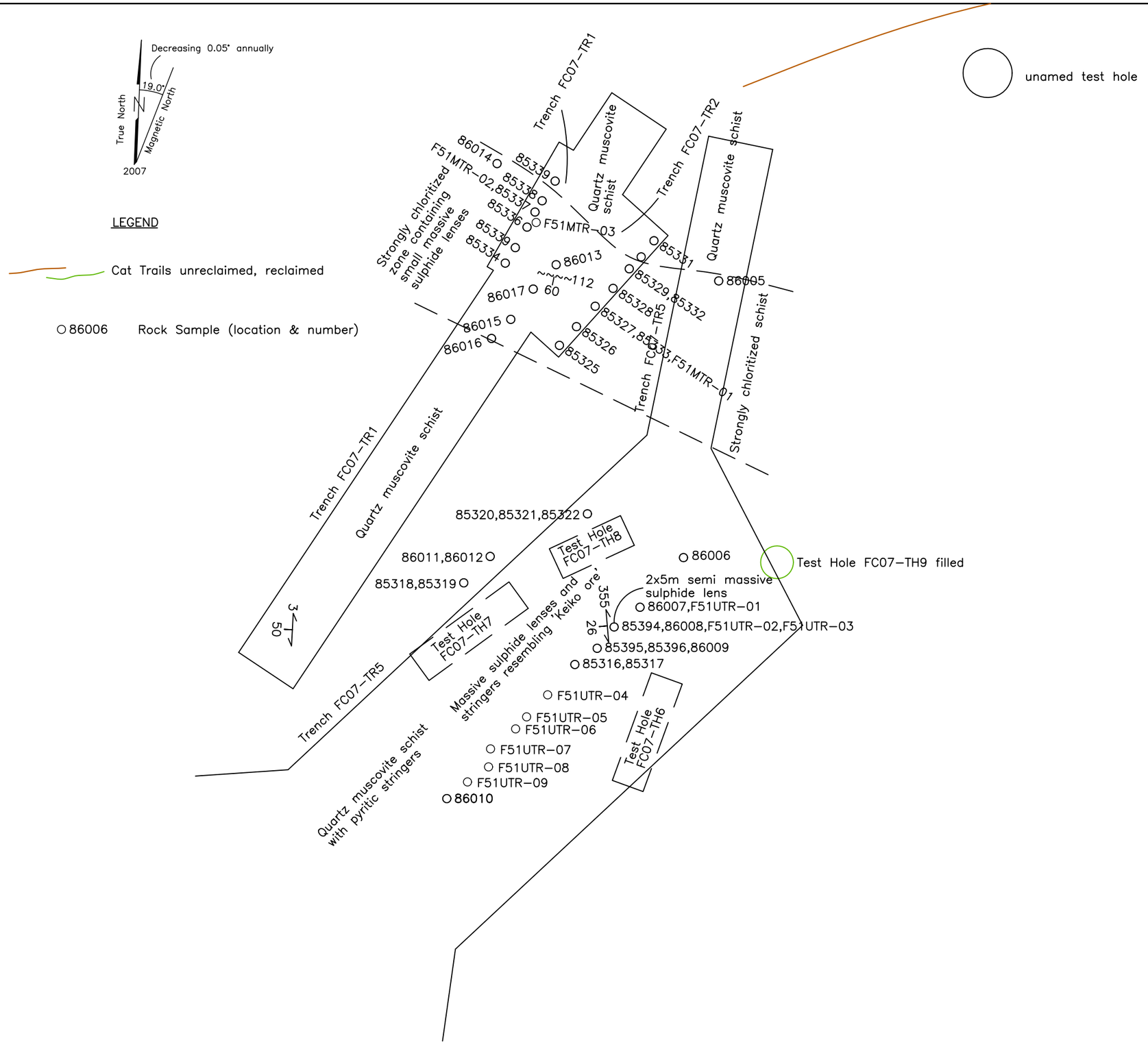
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FRANK CREEK PROPERTY

LOCATION MAP of
2006, 2007 DRILLING and TRENCHING

Cariboo Mining Division, B.C.

NTS Mapsheet: 93A/11, 93A/14	Date: Feb. 9, 2008
Drawn by: RT	Fig.No. 6



Rock Geochem (ppm) or Assay Results (%)

Sample No.	Width (m)	Cu	Pb	Zn
F51MTR-01	grab	2170	595	1140
F51MTR-02	grab	0.21%	0.20%	1.50%
F51MTR-03	grab	348	303	140
F51UTR-01	grab	0.28%	0.30%	0.35%
F51UTR-02	grab	0.40%	2.20%	1.20%
F51UTR-03	grab	0.51%	0.90%	0.74%
F51UTR-04	grab	1230	160	5150
F51UTR-05	grab	1980	384	1170
F51UTR-06	grab	2480	271	241
F51UTR-07	grab	1200	106	171
F51UTR-08	grab	1310	3180	4560
F51UTR-09	grab	667	61	80
85316	grab	1990	0.722%	2150
85317	grab	1740	0.959%	3180
85318	grab	1460	259	121
85319	grab	848	180	97
85320	grab	1440	0.853%	2860
85321	grab	34	193	155
85322	grab	83	54	851
85325	1.0	659	2050	2450
85326	1.0	0.11%	1.01%	0.936%
85327	1.0	706	1590	4170
85328	1.0	472	1110	3120
85329	1.1	358	819	2930
85330	1.1	166	194	1720
85331	0.18	435	330	1910
85332	0.32	5170	1250	3220
85333	0.1	1340	1520	2010
85334	1.5	285	192	755
85335	1.35	199	401	2190
85336	1.5	275	0.623%	2240
85337	1.1	1800	2480	8070
85338	1.0	694	1350	1150
85339	1.2	156	153	2410
85394	0.35	2070	3080	2760
85395	0.2	1440	109	207
85396	grab	594	20	94
86005	grab	593	438	1970
86006	grab	1540	2.68%	1.86%
86007	grab	889	2670	3370
86008	grab	889	3390	5350
86009	grab	2010	94	242
86010	grab	186	62	87
86011	grab	2360	3310	3360
86012	grab	951	705	474
86013	1.5	221	2540	6140
86014	grab	671	1570	2610
86015	1.0	251	216	1090
86016	1.6	252	169	1720
86017	0.35	833	0.548%	0.566%

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all assay and geochem results.

Scale 1:250
metres
0 5 10 15

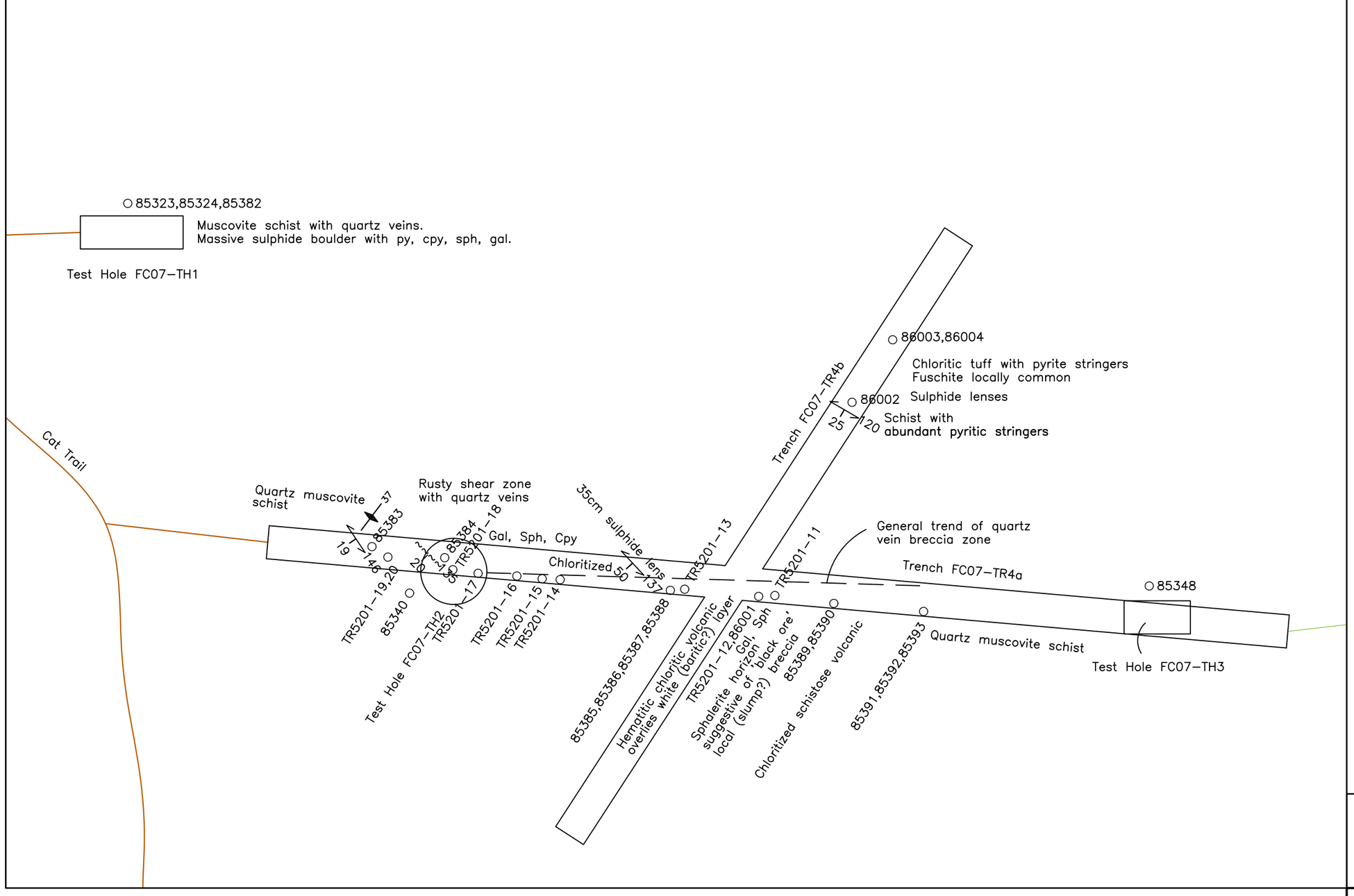
BARKER MINERALS LTD.

FRANK CREEK PROPERTY

TRENCHS FC07-TR1,2,5 and
TEST HOLES FC07-TH6,7,8,9
GEOLOGY, SAMPLE LOCATIONS and GEOCHEMISTRY

Cariboo Mining Division, B.C.

NTS Mapsheet: 93A/11, 93A/14	Date: Feb. 9, 2008
Drawn by: RT	Fig.No. 7



LEGEND

Cat Trails unreclaimed, reclaimed

○ 86002 Rock Sample (location & number)

Rock Geochem (ppm) or Assay Results (%)

Sample No.	Width (m)	Cu	Pb	Zn
TR5201-11	grab	3770	498	231
TR5201-12	grab	897	920	427
TR5201-13	grab	1460	757	343
TR5201-14	grab	1680	64	3220
TR5201-15	grab	857	30	7510
TR5201-16	grab	932	1270	4260
TR5201-17	grab	1.23%	2.90%	3.73%
TR5201-18	grab	699	2030	2080
TR5201-19	grab	0.10%	0.50%	2.82%
TR5201-20	grab	468	854	2310
85323	grab	37	31	971
85324	grab	1180	1770	3020
85340	grab	2240	347	13700
85348	grab	1430	387	1320
85382	grab	4000	1400	1670
85383	grab	58	34	286
85384	1.0	0.362%	0.743%	2.82%
85385	0.4	1340	243	3320
85386	grab	761	1720	567
85387	0.35	1760	937	526
85388	0.45	2160	1040	876
85389	1.1	714	369	528
85390	grab	1210	552	411
85391	0.18	1120	2180	6180
85392	0.5	1.63%	3.54%	3.78%
85393	grab	192	925	419
86001	0.2	551	55	576
86002	0.2	156	86	462
86003	0.22	2030	1390	1790
86004	grab	758	354	496

Scale 1:250
metres
0 5 10 15

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all assay and geochem results.

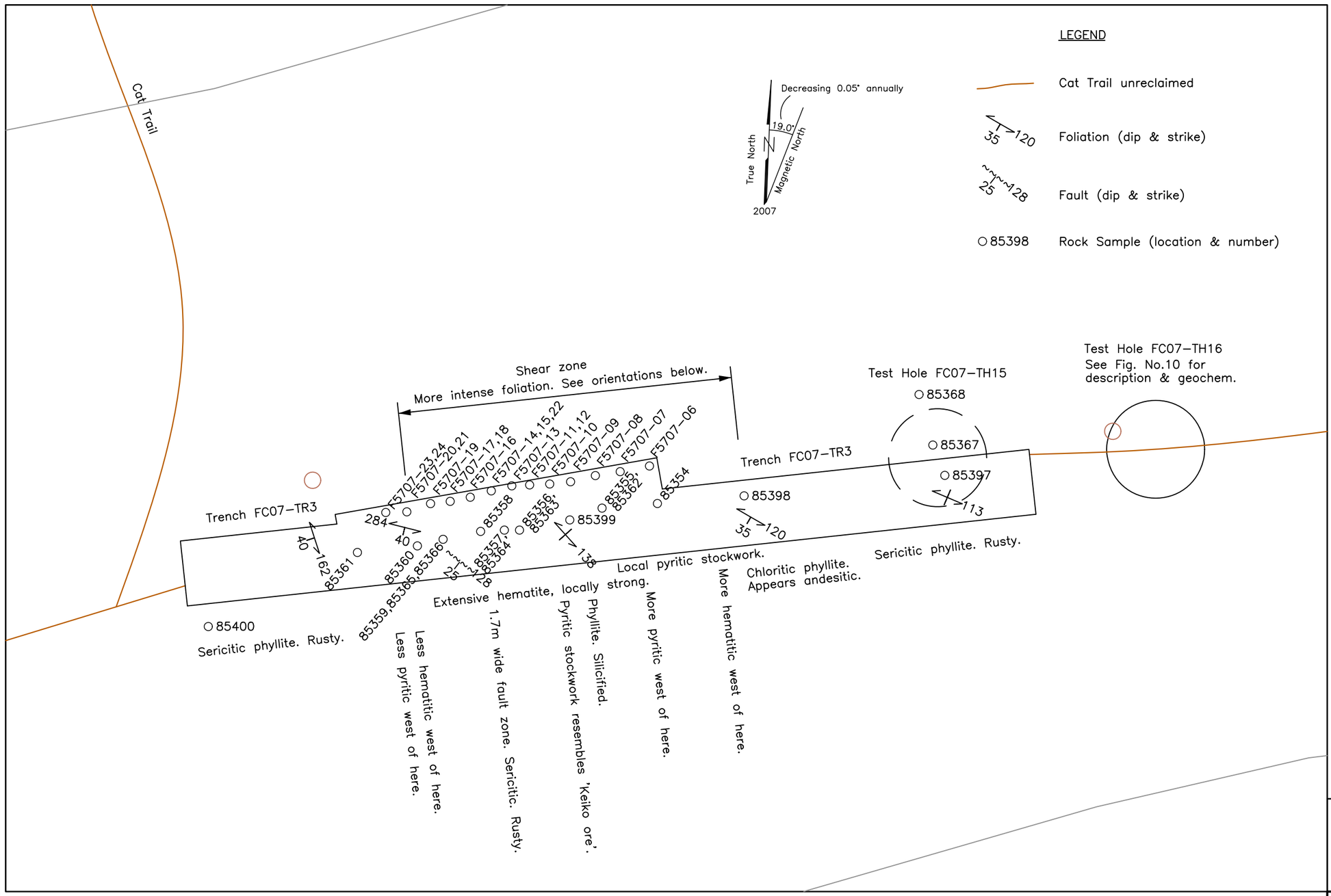
BARKER MINERALS LTD.

FRANK CREEK PROPERTY

TRENCH FC07-TR4 and TEST HOLE FC07-TH1
GEOLOGY, SAMPLE LOCATIONS and GEOCHEMISTRY

Cariboo Mining Division, B.C.

NTS Mapsheet: 93A/11, 93A/14	Date: Feb. 9, 2008
Drawn by: RT	Fig.No. 8



Rock Geochem (ppm) or Assay Results (%)

Sample No.	Width (m)	Cu	Pb	Zn
F5707-04	grab	0.52%	1.80%	0.89%
F5707-05	grab	0.54%	1.30%	1.21%
F5707-06	grab	0.23%	0.50%	0.44%
F5707-07	grab	0.18%	0.10%	1.53%
F5707-08	grab	4920	208	258
F5707-09	grab	1830	1650	1870
F5707-10	grab	2410	1040	4150
F5707-11	grab	1.58%	0.10%	0.22%
F5707-12	grab	8040	2440	3250
F5707-13	grab	2170	2220	2520
F5707-14	grab	3810	1790	2960
F5707-15	grab	2760	1240	2330
F5707-16	grab	4130	4770	4910
F5707-17	grab	4330	2240	3970
F5707-18	grab	2430	1140	2530
F5707-19	grab	0.13%	1.70%	1.07%
F5707-20	grab	0.69%	0.20%	0.27%
F5707-21	grab	0.05%	0.10%	2.75%
F5707-22	grab	0.38%	0.20%	0.47&
F5707-23	grab	0.06%	0.10%	3.19%
F5707-24	grab	0.21%	0.20%	1.50%
85354	1.0	451	897	1190
85355	1.0	1860	1100	1540
85356	1.0	1040	824	1590
85357	1.0	3880	1320	887
85358	1.1	289	812	1430
85359	1.0	2010	3270	4870
85360	0.7	183	331	1400
85361	0.6	63	169	819
85362	grab	3520	1520	1620
85363	grab	0.307%	1180	2640
85364	grab	>10000	3430	1050
85365	grab	37	214	252
85366	grab	2680	1200	4670
85367	grab	63	66	169
85368	grab	29	34	353
85397	grab	18	79	49
85398	1.5	1730	748	1060
85399	0.65	4920	1550	5310
85400	grab	2860	249	1200

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all assay and geochem results.

Scale 1:250
metres
0 5 10 15

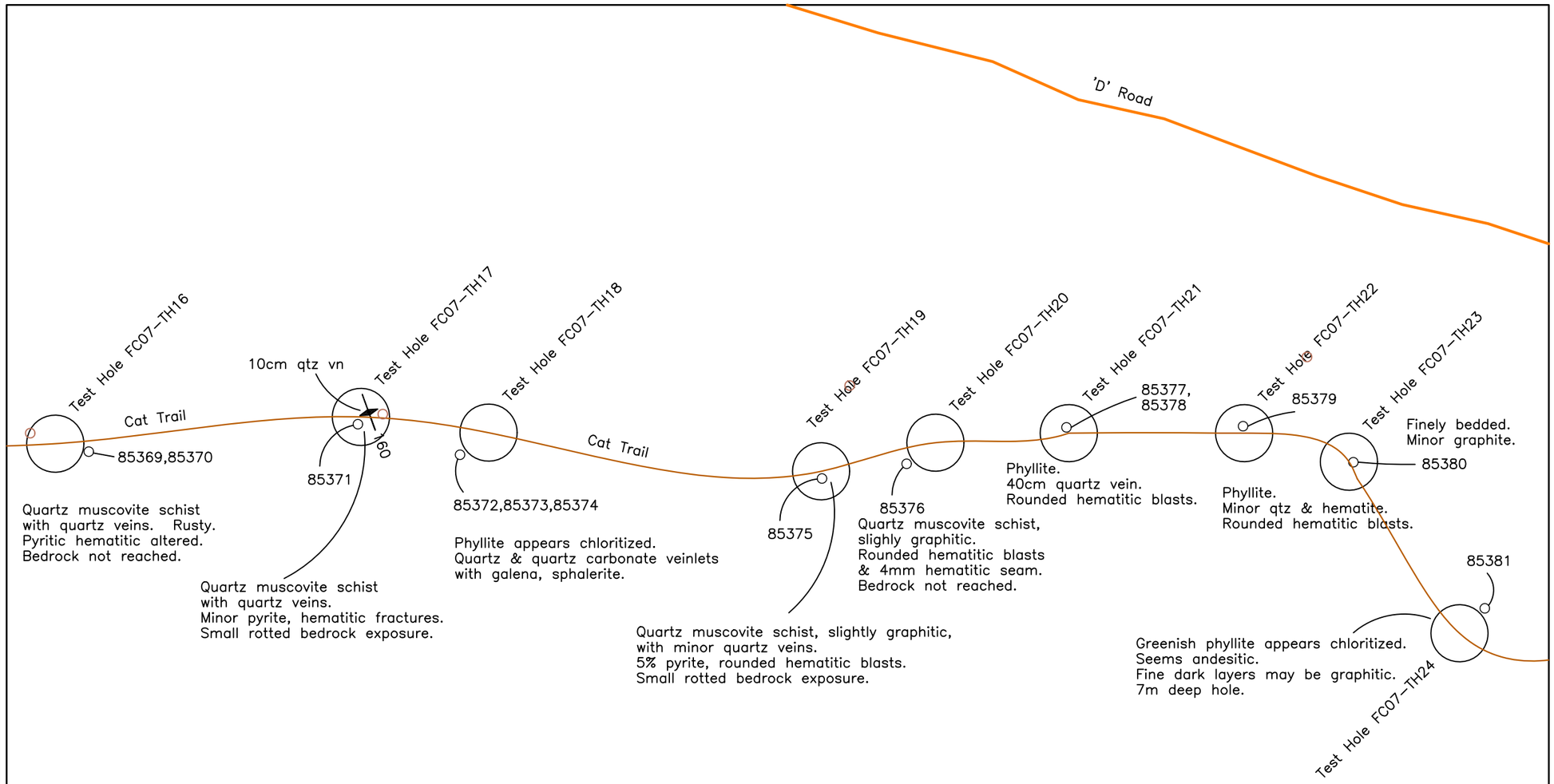
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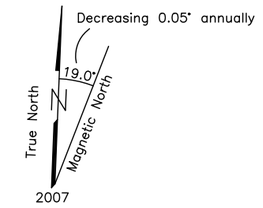
FRANK CREEK PROPERTY

TRENCH FC07-TR3
GEOLOGY, SAMPLE LOCATIONS and GEOCHEMISTRY

Cariboo Mining Division, B.C.

NTS Mapsheet: 93A/11, 93A/14	Date: Feb. 9, 2008
Drawn by: RT	Fig.No. 9





LEGEND

Cat Trails unreclaimed, reclaimed

160 Vein orientation (vertical & strike)

○ 85380 Rock Sample (location & number)

Rock Geochem (ppm) or Assay Results (%)

Sample No.	Width (m)	Cu	Pb	Zn
85369	grab	548	0.667%	1.07%
85370	grab	3820	0.804%	3440
85371	grab	79	327	281
85372	grab	3.07%	3590	5430
85373	grab	82	71	137
85374	grab	45	10	230
85375	grab	53	27	142
85376	grab	163	66	315
85377	grab	24	30	74
85378	grab	52	34	130
85379	grab	25	22	96
85380	grab	22	41	128
85381	grab	38	9	56

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all assay and geochem results.

Scale 1:500
metres
0 5 10 15 20 25

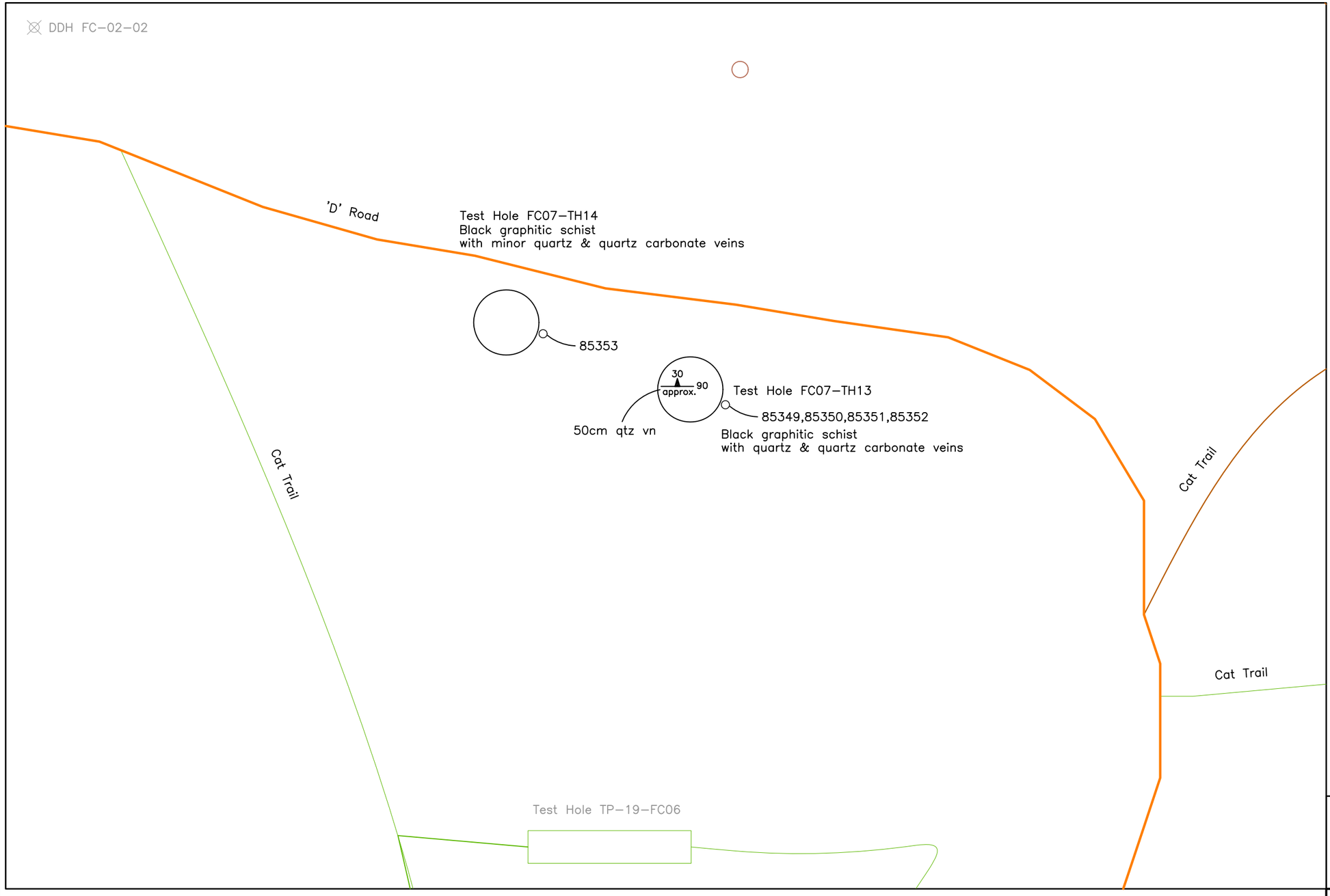
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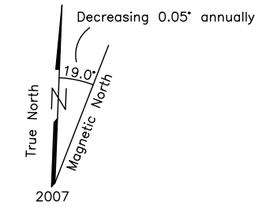
FRANK CREEK PROPERTY

TEST HOLES FC07-TH16,17,18,19,20,21,22,23,24
GEOLOGY, SAMPLE LOCATIONS and GEOCHEMISTRY

Cariboo Mining Division, B.C.

NTS Mapsheet: 93A/11, 93A/14	Date: Feb. 19 2008
Drawn by: RT	Fig.No. 10





LEGEND

Cat Trails unreclaimed, reclaimed

30/90 Vein orientation (dip & strike)

DDH Drill Hole

○ 85353 Rock Sample (location & number)

Rock Geochem (ppm) or Assay Results (%)

Sample No.	Width (m)	Cu	Pb	Zn
85349	grab	36	87	40
85350	grab	31	46	68
85351	grab	30	21	38
85352	grab	131	121	214
85353	grab	15	8	48

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all assay and geochem results.

Scale 1:250
metres
0 5 10 15

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

TEST HOLES FC07-TH13 and TH14
GEOLOGY, SAMPLE LOCATIONS and GEOCHEMISTRY

Cariboo Mining Division, B.C.

NTS Mapsheet: 93A/11, 93A/14	Date: Feb. 9, 2008
Drawn by: RT	Fig.No. 11

9.3 Enzyme Leach Soil Survey

Enzyme leach is a selective extraction analysis method suitable for areas of deep till overburden. It was deemed desirable to analyze soil samples collected in 2006-2007 with the enzyme leach method due to deep till in the area of interest on Frank Creek Property. Enzyme leach can also be used to discriminate between graphitic and sulphidic geophysical conductors.

Enzyme leach results for all elements are reported in ppb (parts per billion). Below is a description of the method from ActLabs' 2007 Services Guide.

Enzyme Leach™ is the most discriminating of the selective analytical extractions in use today. It is capable of detecting extremely subtle geochemical anomalies developed in B-horizon soils over and around blind deposits. Conventional partial leaches, like aqua regia extraction-ICP, extract metals from sulphides, oxides and silicates, providing a partial composition of the overburden. Enzyme Leach™ on the other hand, tends to detect the very subtle trace element signatures that have been added to the soil by elements migrating to the surface through a variety of mechanisms. Trace amounts of amorphous mixed-oxide coatings in soil act as an effective long-term integrating collector of this subtle flux of cations, anions and polar molecules passing through the soil. By selecting the amorphous manganese dioxide from these coatings, the mixed oxide coatings collapse, releasing trapped trace elements. Thus, Enzyme Leach™ provides an effective method detecting the most subtle signatures in blind deposits in the subsurface without swamping the signal by dissolving the major components of the overburden. At this time, the greatest depth of penetration for Enzyme Leach™ for a mineral deposit is greater than 800 metres…Pattern recognition is the key to proper interpretation of Enzyme Leach™.

9.3.1 Soil Geochemical Results for Selected Elements

In the following discussion chemical abbreviations are used for the elements discussed. The elements and abbreviations are:

Ag	Silver
As	Arsenic
Au	Gold
Ba	Barium
Bi	Bismuth
Cd	Cadmium
Co	Cobalt
Cu	Copper
Mn	Manganese
Mo	Molybdenum
Ni	Nickel
Pb	Lead
Sb	Antimony
Se	Selenium
Ti	Titanium
Zn	Zinc

Locations are discussed with reference to the 2004 Titan 24 geophysical grid stations. Though a total of 60 elements were analyzed for, the following discussion refers only to the above elements.

Results for Ag (Silver)

Figure No. 12 shows the highest values for Ag occur at the east end of Line 61N. High Ag also occurs at the west part of Line 57N (see Trend 6 below) and together with Mo at western parts of Line 61N . High Ag values appear concentrated somewhat within the first bend in D Road (see Trend 1 below). Other anomalous areas are just north of the road junctions near the east end of Line 52N (see Trend 2 below). Otherwise no particular trend or continuous anomaly is obvious.

Results for As (Arsenic)

Figure No.13 shows the highest values and largest anomaly occurs within the first bend in D Road and trends NW-SE (see Trend 1). A second strong anomaly occurs at the east end of Line 52N (see Trend 2). The third strong anomaly occurs at the intersection of Line 59N and the north-south Baseline (2000W). These anomalies are aligned along a length of at least 1,400m.

Three other NW-SE trends are evident west of the Baseline. The first, more intense trend, 500m long, extends from Line 51N 2100W northwestward to Line 53N 2300W (see Trend 3 below). The second trend, 350m long, extends from Line 54N 2600W northwestward to Line 57N 2650W (see Trend 4 below). The third trend extends 900m from Line 51N northwestward toward the east end of Line 57N, notwithstanding an intervening blank in the map due to a lack of data (see Trend 5 below).

Results for Au (Gold)

Figure No. 14 shows isolated Au anomalies at the east end of Line 57N (see Trend 6 below), and Line 59N 1750w, and Line 52N near the Baseline (see Trend 3). The first anomaly seems the largest, open to the NW, NE and SE. Due to a limited dissolution of native gold in the enzyme leach process, low level Au anomalies may be masked by this method.

Results for Ba (Barium)

Barite gangue commonly occurs near top of a Kuroko massive sulphide deposit. Barium geochemistry may have an important use here to define the hangingwall limit to massive sulphide mineralization and may also help to outline a strike trend of favourable lithology.

Figure No.15 shows a strong continuous Ba anomaly extending from Line 51N 2700W northwestward to Line 61N 2850W (see Trend 4 below). This anomaly is at least 1,000m long, correlates well with Cd and appears open to the north and south. A second anomalous trend, stronger at its north and south ends, weaker in its middle, extends from Line 51N Baseline area northwestward to where it

joins the above Ba anomaly on Line 59N. This second anomaly is strongest and widest at its south end and is open to the south (see Trend 3). It's length is at least 1,000m. A third Ba anomaly trends N-S from Line 51N to Line 56N approximately 1650W and does not correlate as well with other element anomalies as do the above two Ba trends.

Results for Bi (Bismuth)

Figure No. 16 shows a NW-SE alignment of strong Bi anomalies along the Trend 1 – Trend 2 alignment. The Bi trend is approximately 700m long. Spot anomalies occur at isolated locations over the grid.

Results for Cd (Cadmium)

Figure No. 17 shows a strong Cd anomaly within the first bend in D Road at Line 57N (see Trend 1). A strong Cd anomaly occurs on Lines 53N and 54N about 2200W (see Trend 3). A third Cd anomalous trend extends approximately 1,100m northwestward from Line 51N 2700W to Line 61N 2900W (see Trend 4). It appears open north and south. This trend correlates well with the westernmost Ba trend. A Cd anomaly also occurs near the east end of Line 53N (see Anomaly 2).

Results for Co (Cobalt)

Figure No. 18 shows a strong N-S Co anomaly extending 550m from Line 51N to Line 57N at its east end, then westward along Line 57N to the first bend in D Road. E-W oriented Co anomalies are occur along Lines 53N and 58N. A 250m N-S anomaly between Lines 55N and 57N at approximately 1400W does not appear associated with elements of Trend 1 here. Spot highs occur at Line 53N 2550W, Line 60N west end, and Line 61N east end. Co anomalies appear to coincide with mainly with Mn and Ni.

Results for Cu (Copper)

Figure No. 19 shows a strong Cu anomaly within the first bend in D Road at Line 57N (see Trend 1). This is in the area of trench FC07-TR3. Other anomalous areas are at the east end of Line 57N (see Trend 6), just north of the road junctions near the east end of Line 52N (see Trend 2), and with strong As and Cd anomalies at Lines 53N and 54N at 2200W (see Trend 3). This latter location is the area of the trenches FC07-TR1,2,4 and 5. The westernmost Cu anomaly extends from Line 51N northwestward to the east end of Line 54N but may trend toward the east end of Line 57N, a total of 900m; a lack of data intervenes. This Cu anomaly correlates well with several elements including As and Mo (see Trend 5).

Results for Eu (Europium)

Eu depletion may be useful in determining the most intensely altered and hotter portions of hydrothermal systems. Also, positive Eu anomalies may occur in massive sulphide ore or related exhalites (see Gale, G.H. et al, 1997).

Figure No. 20 shows Eu anomalies with short trends in various directions. A strong Eu corresponds with the strongest Au anomaly at the east end of Line 57N (see Trend 6). Other, apparently spot highs occur at the east ends of Line52N and 61N, Line 51N 2600W, the west ends of Lines 53N and 57N, and a NNW-SSE anomaly approximately 500m long from Line 55N to Line 60N about 2450W. Eu values are low over a wide area in the eastern part of the grid where many other metals are strongly anomalous. The low Eu values and intense alteration seen in rocks and core suggest the eastern area may include hydrothermal systems characteristic of 'Keiko' zones and fumarolic vents.

Results for Mn (Manganese)

Figure No. 21 shows the pattern of anomalous Mn as very similar to those for Co and Ni. A strong N-S Co anomaly extends 600m from Line 51N to Line 57N at its east end, then westward along Line 57N to the first bend in D Road. Other Mn anomalies are oriented E-W along Lines 53N and 58N. Spot highs occur at Line 53N 2550W, Line 60N west end, and Line 61N east end.

Results for Mo (Molybdenum)

Figure No. 22 shows the western edge of the grid as locally high in Mo. Anomalous centres occur at approximately Lines 52N and 58N west ends, and Line 61N 2750W. Other anomalous centres are at Line 59N 2200W and Line 57N east end. The eastern half of the grid tends to be weak in Mo.

Results for Ni (Nickel)

Figure No. 23 shows the pattern of anomalous Ni as very similar to those for Co and Mn. A strong N-S Ni anomaly extends 600m from Line 51N to Line 57N at its east end, then westward along Line 57N to the first bend in D Road. Other Ni anomalies are oriented E-W along Lines 53N and 58N. Spot highs occur at Line 53N 2550W, Line 60N west end, and Line 61N east end. Anomalous Ni between Lines 51N and 53N in the southwest corner of the grid is associated with Trend 5.

Results for Pb (Lead)

Figure No. 24 shows Pb widely anomalous over the southeastern part of the grid. A strong Pb anomaly occurs within the first bend in D Road at Line 57N (see Trend 1). At the east ends of Lines 53N, 54N, 55N a strong Pb anomaly appears to trend approximately N-S (see Trend 2). A Pb anomaly are centered on Lines 52N and 53N at 2100W (see Trend 3). An anomalous Pb area on Lines 51N to 54N at approximately 1400W coincides with anomalous Zn there and perhaps Cd (see

Trend 7). Though Pb is widely anomalous in the southeasten half of the grid linear trends are short and not obvious though Pb anomalies occur astride linear anomalies of other elements, notably Trends 1, 2 and 3.

Results for Sb (Antimony)

Figure No. 25 shows the strongest Sb occurring in the southwest corner of the grid on Lines 51N to 54N (see Trend 5). Anomalous centres occur at Line 52N 2100W (see Trend 3), Line 55N 2550 W, and Line 58N 2800W. These centres occur in a NW-SE line but may not represent a geochemical trend as Ba, Cd and perhaps As are better indicators of a multi element anomalous Trend in this area. A N-S anomaly occurs along the Baseline between 57N and 61N. Other Sb anomalies occur at Line 52N east end (see Trend 2), Line 53N 1500W (see Trend 7), and Line 57N east end (see Trend 6).

Results for Se (Selenium)

Figure No. 26 shows Se anomalies occurring mainly near the west end of the grid. Se anomalies are centered near the west ends of Lines 51N to 54N (see Trend 5), the west end of Line 57N, and Line 58N at 2900W. A 400m NW-SE trend extends from Line 51N 2200w to Line 54N 2300W and is open to the south It may have some association with Trend 3. The remainder of the grid generally has only minor random spot highs.

Results for Ti (Titanium)

Figure No. 27 shows an anomalous Ti trend along Line 54N from approximately 1100W to 1500W. Spot Ti anomalies occur apparently randomly over the grid. Some 'spots' may align with a real geochemical trend coincident with other elements but this is not obvious.

Results for Zn (Zinc)

Figure No. 28 shows strong Zn anomalies within the first bend in D Road at Line 57N, centered on Line 53N at 1550W (see Trend 1), and in the area of Lines 51N to 56N about 2200W (see Trend 3). The latter anomaly trends NW-SE for at least 500m and may be open to the south. A fourth anomalous trend extends northeastward from Line 54N 2400W to Line 58N 2900W, at least 500m long (see Trend 4). An anomalous Zn area on Lines 51N to 54N at approximately 1400W coincides with anomalous Pb there and perhaps Cd (see Trend 7).

9.3.2 Discussion of Multi-Element Anomaly Trends

To locate the Trends described below refer to the Figures for the relevant anomalous elements. Conductors mentioned in the discussion below are from a Max-min HLEM survey conducted in 2000 by Peter Walcott and Associates, Vancouver, B. C.

Trend 1 is evident in results for As, Bi, Cd, Cu, Pb, Zn. This Trend is at least 500m long for Cu and appears aligned with Trend 2 to the southeast and an As, Cu anomaly on Line 59N at the Baseline (2000W) to the northwest. Trend 1 is aligned with a strong NW-SE conductor to the northwest between Lines 55N and 57N. The above anomalies may indicate an important 1,400m structure locally conductive and mineralized. This structure remains open to the southeast. Ag is inconspicuously anomalous at the above geochem anomalies as well though not over the conductor. Bi highlights the apparent alignment between Trends 1 and 2 well. Sb is weakly anomalous at the NW and SE ends of this 1,400m alignment but is not anomalous in the middle area (Trend 1). The NW-SE overall orientation of Trend 1 is clear from the various element anomalies but Cd, Pb, Zn and perhaps As, Co and Cu appear to show in detail a N-S grain to the anomalies within Trend 1. This grain may be due to secondary or remobilized mineralization along N-S veins or shears. Short N-S conductors occurring on the north, south and east sides of Trend 1 area may be associated with (secondary?) mineralization here and at Trend 7 to the south and complicate the overall (primary) NW-SE mineralized alignments.

Trend 2 is an anomalous area evident in results for As, Bi, Cd, Cu, Eu, Pb, Sb. This 'Trend' has no clear orientation but for it's location on the above 1,400m alignment. The location of Trend 2 may be at an intersection of the NW-SE 1,400m alignment and a N-S geochem anomaly evident in Co, Mn, Ni (and Pb?). Several conductors in this area can be interpreted as having NW-SE and N-S orientations. Eu, Sb, Se and Zn have weak or inconspicuous anomalies at 'Trend' 2.

Trend 3 is evident in results for As, Ba, Cd, Cu, Pb, Sb, Zn. This NW-SE Trend appears at least 400m long in Zn but Ba suggests a continuance to Line 59N at approximately 2700W where it apparently merges with Trend 4. In such a case Trend 3 would be 1,100m long and open to the south. Au is spottily anomalous on Trend 3 where Line 52N crosses the Baseline. A metal zonation is evident on this Trend with Cd and Cu anomalies together at Lines 53N to 54N (location of Trenches FC07-TR1,2,4,5), Pb anomalous adjacent southeastward and Ba anomalous adjacent further southeastward. Zn is strongest at the Cd and Cu 'centre' but more widespread than these other two elements. Though the base metals appear to weaken near the south edge of the sampling area the pathfinders As, Ba and Sb continue south off the grid, Ba especially getting stronger southward toward a group of conductors approximately 500m south. Trend 3 appears an important line for future prospecting.

Trend 4 is evident in results for As, Ba, Cd, Zn. This NNW-SSE Trend appears approximately 1,000m long in Ba and Cd and possibly open in both directions. The Zn anomaly is 500m long. Ba suggests Trends 3 and 4 may merge near Line 59N, a pattern due possibly to folding. Cu, Pb and Sb are essentially absent on this Trend.

Trend 5 is evident in results for As, Cu, Mo, Ni, Sb, Se. The latter two elements and Mo have their strongest anomalies here. This Trend may continue northwest through an area of no data to the west end of Line 57N, which is also strongly anomalous in these elements. Ba, Pb and Zn have no significant presence along this Trend. Strong Mo, Ni and Se anomalies occur adjacent to each other in the northwest corner area of the grid where Pb is weakest. These are not considered to be part of any of the above Trends and together with Trend 5 suggest a geology different from the line of Trend 4 and areas eastward.

Trend 6 is evident in results for Au, Co, Cu, Eu, Mn, Mo, Ni, Sb. It is an anomalous area at the east end of Line 57N with no obvious orientation. The strongest Au anomaly occurs here. Eu and Mo also have strong spot anomalies here. As this anomalous 'spot' occurs at a corner in the sampling grid it can be considered open NW, NE and SE. Co, Mn and Ni anomalous trends from west and south converge at this point and may represent mineralized structures not related to Kuroko massive sulphides, probably oriented NW-SE, the main focus of exploration on the Frank Creek Property. This 'Trend' should be expanded and investigated for Au considering past placer Au mining operations done near the mouth of Frank Creek approximately 1.5km northwest of this location.

Trend 7 is an anomalous area evident from results for Pb and Zn. This mainly shapeless anomaly seems to have a N-S grain and is aligned with N-S conductors to the north toward Trend 1. The N-S grain appears to continue within Trend 1 for several elements (see discussion of Trend 1 above). Trend 7 may be associated with secondary or remobilized mineralization along N-S veins or shears.

9.4 Petrographic Study of Rock Thin Sections

Vancouver Petrographics Ltd. of Langley, BC did petrographic studies of 16 rock and core specimens. The results of this study are presented in Appendix F in a separate report by Vancouver Petrographics Ltd.

Samples 85242, 85243, 85244 from Frank Creek Property were identified as 'rhyolite crystal tuffs', tending to confirm the presence of felsic volcanism on Frank Creek Property.

Samples K07- etc. from Kangaroo Property tended to confirm the presence of basaltic rocks intruded by a multi modal intrusive consisting of gabbro, diorite, potassic diorite and monzonite.

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FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Ag

Figure No. 12

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L57N 16+00W
L59N 12+00W
L57N 10+00W
L53N 8+50W0
L53N 8+50WF
L51N 6+00W
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-01
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

Trend 1 area

Trend 2 area

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Ag (Silver)
values are ppb

- 0.738 - 15.4
- 0.6 - 0.738
- 0.5 - 0.6
- 0.3 - 0.5
- 0.3 - 0.3
- 0.2 - 0.3
- 0.0 - 0.2
- -0.2 - 0.0

N W E S

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TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - As

Figure No. 13

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L51N 15+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
L51N 8+00W
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-01
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

Trend 1
Trend 2 area
Trend 3
Trend 4
Trend 5

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

As (Arsenic) values are ppb

- 46.14 - 516
- 32 - 46.14
- 26.9 - 32
- 21 - 26.9
- 17 - 21
- 13 - 17
- 10 - 13
- 6 - 10
- 1 - 6

N W E S

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

Placer Au mining operations are currently ongoing near mouth of (this) Frank Creek canyon

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NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Au

Figure No. 14

Trend 6 area

BL20W 62+50N
L61N 15+00W
L59N 12+00W
L57N 10+00W
L55N 8+50W0
L53N 8+50WF
L51N 8+50W
TR-FC-03-09
TR-FC-03-02
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-01
TR-FC-03-06
FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06
BW-10
BW-09
BL20+00 49+00N

HLEM Conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Au - (Gold) values are ppb

- 0.114 - 0.46
- 0.10 - 0.114
- 0.09 - 0.10
- 0.08 - 0.09
- 0.07 - 0.08
- 0.06 - 0.07
- 0.05 - 0.06
- 0.00 - 0.05
- -0.05 - 0.00

N W E S

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TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Ba

Figure No. 15

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 15+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-01
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

Trend 4
Trend 3

HLEM conductors - see Doyle, L.E., 2003
(Assessment Report 27125, Appendix 4)

Ba (Barium)
values are ppb
- 1860 - 3830
- 1569.5 - 1860
- 1198 - 1569.5
- 911.6 - 1198
- 765 - 911.6
- 579 - 765
- 448.3 - 579
- 301 - 448.3
- 131 - 301

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NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Bi

Figure No. 16

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 35+00W
TR-FC-03-09
L59N 12+00W
FC_02_01
TR-FC-03-02
BW-10
FC_02_02
BW-18
TR-FC-03-03
FC_02_06
TR-FC-03-04
TR-FC-03-07
FC_02_05
FC_02_04
FC_02_03
TR-FC-03-01
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06
BL20+00 49+00N

Trend 1

Trend 2

HLEM conductors - see Doyle, L.E., 2003
(Assessment Report 27125, Appendix 4)

Bi (Bismuth)
values are ppb

- 2.7 - 142.0
- 2.0 - 2.7
- 1.5 - 2.0
- 1.3 - 1.5
- 1.1 - 1.3
- 1.0 - 1.1
- 0.8 - 1.0
- 0.0 - 0.8
- -0.8 - 0.0

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NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Cd

Figure No. 17

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 6+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
L51N 8+00W
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-01
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

Trend 1
Trend 2 area
Trend 3
Trend 4
Trend 7 area

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Cd (Cadmium values are ppb

- 21.652 - 204
- 13.695 - 21.652
- 10.7 - 13.695
- 7.9 - 10.7
- 6.6 - 7.9
- 4.6 - 6.6
- 3.2 - 4.6
- 1.8 - 3.2
- -0.2 - 1.8

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NORTH AMERICAN DATUM 1983

Enzyme Leach Soil survey - Co

Figure No. 18

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L59N 12+00W
TR-FC-03-09
FC_02_01
TR-FC-03-02
BW-10
FC_02_02
BW-09
L57N 10+00W
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
FC_02_06
FC_02_05
FC_02_04
FC_02_03
TR-FC-03-01
L55N 9+50W0
L53N 8+50WF
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06
L51N 6+00W
BL20+00 49+00N

Trend 6 area

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Co (Cobalt)
values are ppb

- 505.02 - 1900
- 351.75 - 505.02
- 227 - 351.75
- 150 - 227
- 116 - 150
- 74 - 116
- 52 - 74
- 30 - 52
- 4 - 30

N W E S

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0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Cu

Figure No. 19

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

Trend 1

Trend 2

Trend 3

Trend 5

Trend 6 area

TR-FC-03-09
TR-FC-03-02
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-04
TR-FC-03-07
TR-FC-03-01
TR-FC-03-06
BW-10
BW-09
FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BL20W 62+50N
L59N 12+00W
L57N 0+00W
L55N 9+50W0
L53N 8+50WF
L51N 6+00W
BL20+00 49+00N

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Cu (Copper)

values are ppb

- 309 - 1180
- 216.9 - 309
- 154 - 216.9
- 110 - 154
- 83 - 110
- 54.5 - 83
- 37 - 54.5
- 22 - 37
- -3 - 22

N W E S

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

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FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Eu

Figure No. 20

Trend 6 area

BL20W 62+50N

L59N 15+00W

L59N 12+00W

L57N 10+00W

L55N 9+50W0

L53N 8+50WF

L51N 6+00W

TR-FC-03-09

TR-FC-03-02

TR-FC-03-03

TR-FC-03-04

TR-FC-03-07

TR-FC-03-01

TR-FC-03-08A

TR-FC-03-08B

TR-FC-03-06

FC_02_01

FC_02_02

FC_02_03

FC_02_04

FC_02_05

FC_02_06

BW-10

BW-09

20-40

BL20+00 49+00N

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Eu (Europium)

values are ppb

- 1.6 - 3.1
- 1.2 - 1.6
- 1.0 - 1.2
- 0.8 - 1.0
- 0.6 - 0.8
- 0.5 - 0.6
- 0.4 - 0.5
- 0.2 - 0.4
- -0.1 - 0.2

N W E S

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FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Mn

Figure No. 21

Trend 6 area

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L60N 6+00W
L59N 12+00W
L59N 10+00W
L59N 9+50W0
L59N 8+50WF
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-01
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

HLEM conductors - see Doyle, L.E., 2003 (Assessment report 27125, Appendix 4)

Mn (Manganese)
values are ppb

- 42166 - 118000
- 24190 - 42166
- 18870 - 25190
- 12400 - 18870
- 9497 - 12400
- 6220 - 9497
- 3786 - 6220
- 1921 - 3786
- 218 - 1921

N W E S

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Mo

Figure No. 22

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L59N 15+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-03
TR-FC-03-04
TR-FC-03-01
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-07
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

Trend 6 area

Trend 5

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Mo (Molybdenum)
values are ppb

- 37.38 - 494
- 25 - 37.38
- 16 - 25
- 10 - 16
- 8 - 10
- 5 - 8
- 3 - 5
- 2 - 3
- -1 - 2

N W E S

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Ni

Figure No. 23

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L59N 12+00W
TR-FC-03-09
FC_02_01
TR-FC-03-02
BW-10
FC_02_02
BW-09
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
FC_02_06
FC_02_05
FC_02_04
FC_02_03
TR-FC-03-01
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06
L53N 8+50WF
BL20+00 49+00N

Trend 6 area

Trend 5

HLEM conductors - see Doyle, L.E., 2003 (Assessment report 27125, Appendix 4)

Ni (Nickel)
values are ppb

- 441.38 - 2460
- 321 - 441.38
- 217.9 - 321
- 145 - 217.9
- 105 - 145
- 69 - 105
- 49 - 69
- 31 - 49
- 8 - 31

N W E S

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Pb

Figure No. 24

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 15+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-01
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

Trend 1
Trend 2
Trend 3
Trend 7 area

HLEM conductors - see Doyle, L.e., 2003 (Assessment report 27125, Appendix 4)

Pb (Lead)
values are ppb

117 - 1320
80 - 117
51 - 80
37 - 51
29 - 37
20 - 29
14 - 20
9 - 14
2 - 9

N W E S

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Sb

Figure No. 25

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 15+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
BL20+00 49+00N
TR-FC-03-09
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06
TR-FC-03-07
TR-FC-03-04
TR-FC-03-03
TR-FC-03-02
TR-FC-03-01
FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06
BW-10
BW-09

Trend 6 area
Trend 2 area
Trend 7 area
Trend 3 area
Trend 5

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Sb (Antimony) values are ppb

- 7.438 - 13.1
- 5.695 - 7.438
- 4.4 - 5.695
- 3.0 - 4.4
- 2.3 - 3.0
- 1.5 - 2.3
- 0.9 - 1.5
- 0.5 - 0.9
- 0.1 - 0.5

N W E S

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Se

Figure 26

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 15+00W
L59N 12+00W
L57N 10+00W
L55N 8+50WF
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-01
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-08

Trend 5

HLEM conductors - see Doyle, L.E., 2003
(Assessment Report 27125, Appendix 4)

Se (Selenium)
values are ppb

- 17 - 96
- 12 - 17
- 10 - 12
- 9 - 10
- 7 - 9
- 6 - 7
- 5 - 6
- 0 - 5
- -5 - 0

N W E S

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Ti

Figure No. 27

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 15+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
L53N 6+00W
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-08A
TR-FC-03-08B
TR-FC-03-01
TR-FC-03-03
TR-FC-03-04
TR-FC-03-07
TR-FC-03-06

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Ti (Titanium)
values are ppb

- 800 - 1900
- 600 - 800
- 500 - 600
- 400 - 500
- 300 - 400
- 200 - 300
- 100 - 200
- 0 - 100
- -100 - 0

N W E S

BARKER MINERALS LTD.

FRANK CREEK PROPERTY

0 500 m

UTM ZONE 10
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM 1983

Enzyme Leach Soil Survey - Zn

Figure No. 28

608500 609000 609500 610000 610500 611000

5846500 5846000 5845500 5845000 5844500

BL20W 62+50N
L61N 15+00W
L59N 12+00W
L57N 10+00W
L55N 9+50W0
L53N 8+50WF
BL20+00 49+00N

TR-FC-03-09
TR-FC-03-02
TR-FC-03-03
TR-FC-03-04
TR-FC-03-01
TR-FC-03-07
TR-FC-03-06
TR-FC-03-08A
TR-FC-03-08B

FC_02_01
FC_02_02
FC_02_03
FC_02_04
FC_02_05
FC_02_06

BW-10
BW-09

Trend 1
Trend 3
Trend 4
Trend 7 area

HLEM conductors - see Doyle, L.E., 2003 (Assessment Report 27125, Appendix 4)

Zn (Zinc)
values are ppb

- 1370 - 12800
- 769.5 - 1370
- 500 - 769.5
- 348 - 500
- 260 - 348
- 180 - 260
- 110 - 180
- 51 - 110
- -10 - 51

N W E S

10.0 KANGAROO PROPERTY

10.1 General Discussion of Rocks Observed in Core and Outcrops

10.1.1 Lithologies

The most common rock type encountered in the drill holes was fine grained siltstone. Colour varies from light to dark grey, relatively rare graphitic versions are blackish. Fine bedding occurs commonly, with relatively uncommon fine sandstone interbeds. The siltstones are locally intensely fractured, weakly welded back together with chlorite. No significant graded bedding was observed. Andesitic volcaniclastics are often interbedded with the siltstones. These are mainly distinguished by a coarser texture and a somewhat lighter and greenish grey colour due to higher chlorite content.

Basalt occurred mostly in DDH holes K07-1 and K07-2 in the western area and DDH holes K07-8 and K07-9 eastward in the main area of the intrusive. The western basalts are more brecciated and sometimes amygdaloidal and are considered to be lavas or otherwise extrusives. The eastern basalts are more often difficult to characterize, some may be dikes and fine grained chilled intrusive rock.

Diorite or porphyritic gabbro intrusive rocks were encountered in most DDH holes. These are medium to fairly coarse grained in the case of the porphyritic rocks. Colour varies from light to dark grey, some of the coarser gabbro are rather leucocratic or light coloured. The larger phenocrysts are augite, sometimes up to approximately 10 mm. Monzodiorite was identified in thin sections of core specimens from DDH hole K07-6. Some of the monzodiorite contained pink coloured monzonite xenoliths.

10.1.2. Structure

Figure No. 29, Kangaroo Property – 2007 Drilling Area Geology, shows in the northeastern outcrops' siltstone bedding strikes NW-SE and dips fairly steeply SW. In the north central area bedding strikes N-S and dips E. In the south central area bedding strikes NE-SW and dips SE which may also be the attitude of the intrusive(s) if they are sills. These attitudes suggest the presence of a syncline who's NW-SE to N-S axis occurs in the vicinity of east end of the intrusive body. The manner in which the diorite and gabbro occur in core and outcrops in the western area suggests these may be sills. Also, the south dipping chargeability anomalies in the 2003 IP survey suggest these intrusives may be conformable to south dipping bedding (see Figure No. 30).

10.1.3 Veins

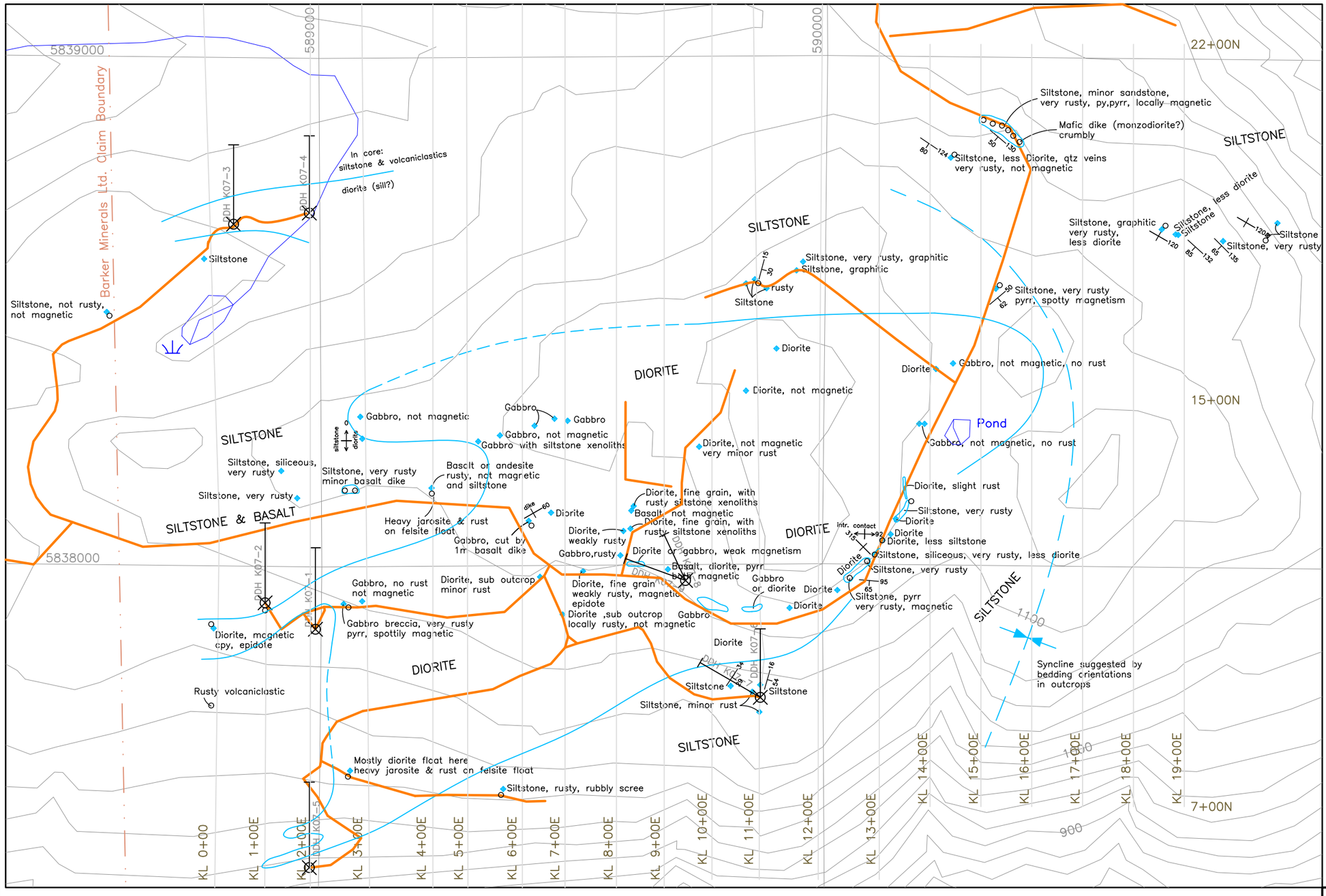
Calcite veins predominate over quartz veins in the DDH holes. Blebby pyrrhotite and pyrite occur with the veins, mainly at selvages. These sulphides and chalcopyrite also occur in narrow sulphide veins and irregularly disseminated in the siltstones and basalts.

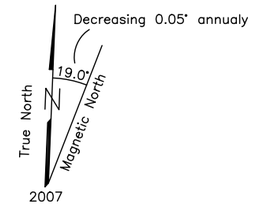
10.1.4 Alteration

Pervasive calcite occurs very commonly in the basalts, especially those considered extrusive in origin, and in the siltstones and volcaniclastics. Occasionally diorite fizzed with acid, this was mainly due to the presence of fine calcite veinlets. Pervasive sericite occurs commonly in the intruded rocks, more intensely in gougy zones. Chlorite alteration is common, usually concentrated in chloritic fractures in the siltstones. Epidote is patchily common but rarely more than in trace amounts. The siltstones are generally primarily siliceous. Secondary pervasive silica alteration occurs locally and can be confused with the primarily silica in siltstones. Very dark hornfelsic rock occurs with massive pyrrhotite in DDH holes K07-2 and K07-4.

10.1.5 Mineralization

Pyrite and pyrrhotite occur disseminated in all rocks and in blebs and irregular narrow sulphide veins in siltstone and basalt, less so in the intrusive rocks. The siltstones are usually rusty with brown and yellow gossan. Some fine sandy layers in the siltstones appear to be preferentially mineralized with sulphides ‘stratabound’ on a micro scale. Massive pyrrhotite with chalcopyrite and pyrite occur in dark hornfelsic rock near apparent intrusive contacts in DDH holes 2 and 4. Generally sulphides are greater near intrusive contacts, more abundant in the intruded rather than the intrusive rocks. Pyrrhotite is responsible for the magnetic quality of rocks commonly observed in core and outcrop. Magnetite was rarely identified.





GEOLOGY

DIORITE

Medium to fairly coarse grained diorite and less gabbro, usually fairly coarse grained. Minor monzodiorite. Pink medium grained monzonite occurs as xenoliths in DDH K07–6. 'Basalt' within the stock area may be fine grained 'chilled' gabbro or diorite.

Variably magnetic. Usually has significant disseminated pyrite or pyrrhotite. Locally altered to sericite, epidote, chlorite. Generally dark grey to black. Light grey leucocratic gabbro exists in core.

SILTSTONE

Very fine grained siltstone with less narrow fine grained sandstone and andesitic volcaniclastics interbeds. Siltstones are often siliceous, rarely graphitic. Usually magnetic due to pyrrhotite occuring disseminated, locally massive and in stringers. Pyrrhotite also occasionaly occurs stratabound on a micro scale. Locally altered by sericite, epidote, chlorite. Generally dark grey to black, outcrops usually have a brown and yellow gossan. Basalt is less common, occurs mostly in core in the southwest area. It is generally very calcareous, sometimes amygdaloidal.

LEGEND

- Topographic Contour & Elevation Contour interval 20 metres (1000)
- Creek, Pond, Swamp
- Road
- Outcrop (large, small)
- Geological contact (approximate, inferred)
- Drillhole Location & Number (DDH K07–9)
- cpy pyrr Chalcopyrite, pyrrhotite
- Orientation (bedding, contact) (65/95, 92)
- Sample Location (Rock or Soil)

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

Scale 1:8,000
metres
0 100 200 300 400 500

BARKER MINERALS LTD.

KANGAROO PROPERTY

2007 DRILLING AREA

GEOLOGY

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Feb. 9, 2008
Drawn by: RT	Fig.No. 29

10.2 Diamond Drilling

Notable gold, copper and arsenic geochemical values and geology are presented in Figure Nos. 32 to 40. All geochemical results are in Appendix C – Analytical Data. Results from the 2003 IP survey, used to guide drilling in 2007, are shown in Figure No. 30.

DDH's K07-1and **K07-2**

The targets here were chargeability anomalies from the 2003 IP survey at approximately 40m and 150m depth with a low resistivity anomaly between in hole 1 and a chargeability anomaly at approximately 70m depth in DDH hole K07-2. These dip moderately south.

DDH's K07-3 and **K07-4**

The target here was wide chargeability anomaly from the 2003 IP survey, strongest at approximately 120m depth in hole 3 and 170m depth in hole 4, with no preferred orientation but open downward. Also, the resistivity data suggested a geologic contact would be crossed with relatively high resistivity rocks to the south and low resistivity rocks north.

DDH K07-5

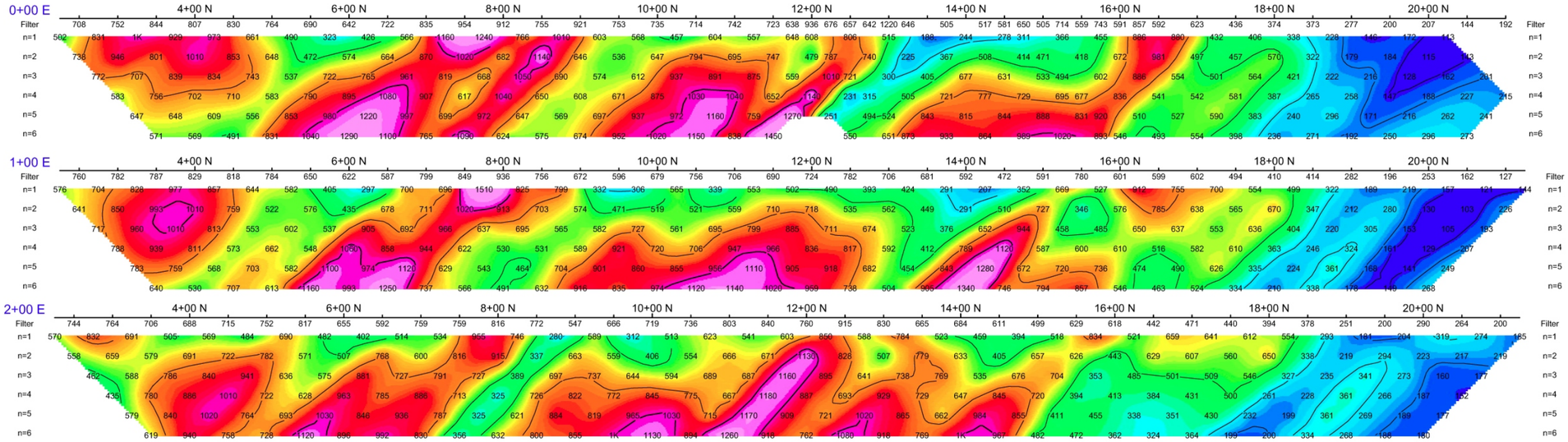
This was in the area of an As and Au soil anomaly from a reconnaissance soil line done in 2005. The highest Au (5,220 ppb) in soil was on the adjacent line west though without an associated geophysical anomaly. The drill target chosen was a chargeability anomaly strongest between 50m and 120m extending from surface, dipping moderately steeply south, near the highest Au.

DDH's K07-6 and **K07-7**

The target here was the contact zone between the recently mapped diorite intrusive and intruded pyritic volcaniclastics and siltstones. Soils from the 2005 soil sampling were anomalous in Cu, Mo, As and other pathfinder elements here where recon lines KTL3 and KTL4 crossed. Hole 6 was oriented to drill perpendicularly across the contact zone. Hole 7 was oriented to drill perpendicularly across layering in the sedimentary rocks.

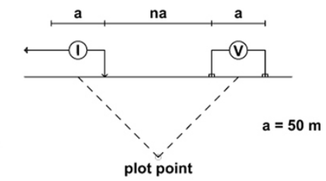
DDH K07-8 and **DDH K07-9**

The target here was an apparent contact zone between the recently mapped diorite intrusive and intruded pyrrhotitic basalts and siltstones. The rocks in the area were fairly strongly magnetic according to a reconnaissance magnetic survey done along the road and from examination of outcrops. Hole 8 was oriented to drill perpendicularly across the apparent strike direction of the intrusive body, considered possibly a sill. Hole 9 was oriented to drill through a pyrrhotitic basalt-diorite contact zone.



RESISTIVITY

Pole-Dipole Array



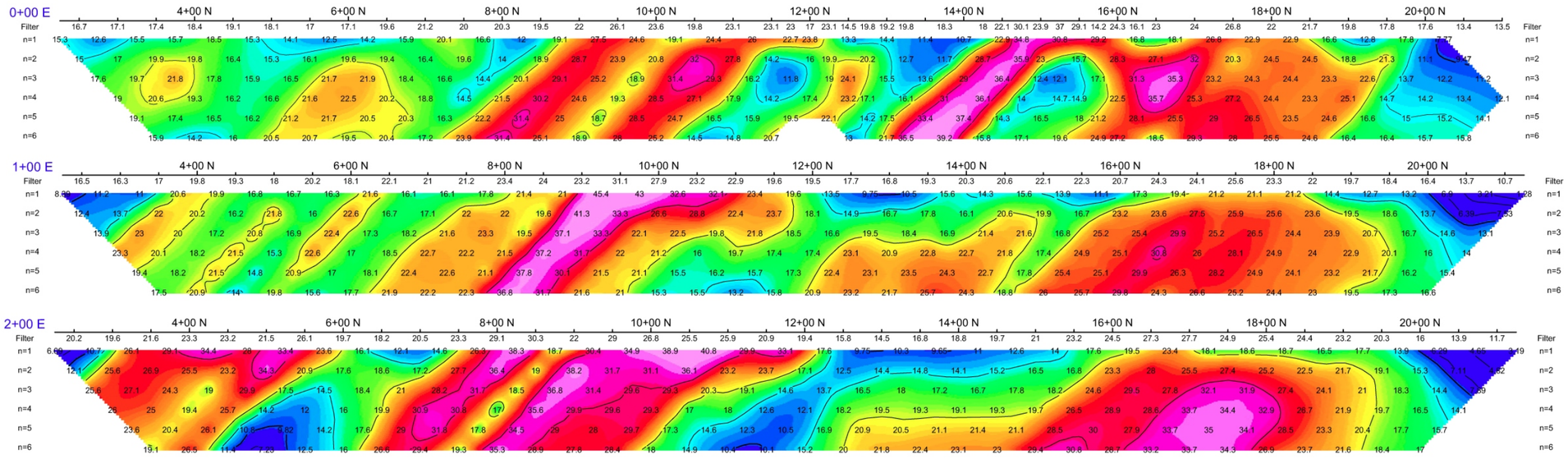
Filter

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* *
* * *
* * * *
* * * * *
* * * * * *

Scale 1:5000

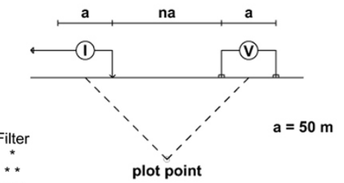
50 0 50 100 150 200 250 300

metres



CHARGEABILITY

Pole-Dipole Array



Filter

*
* *
* * *
* * * *
* * * * *
* * * * * *

Scale 1:5000

50 0 50 100 150 200 250 300

metres

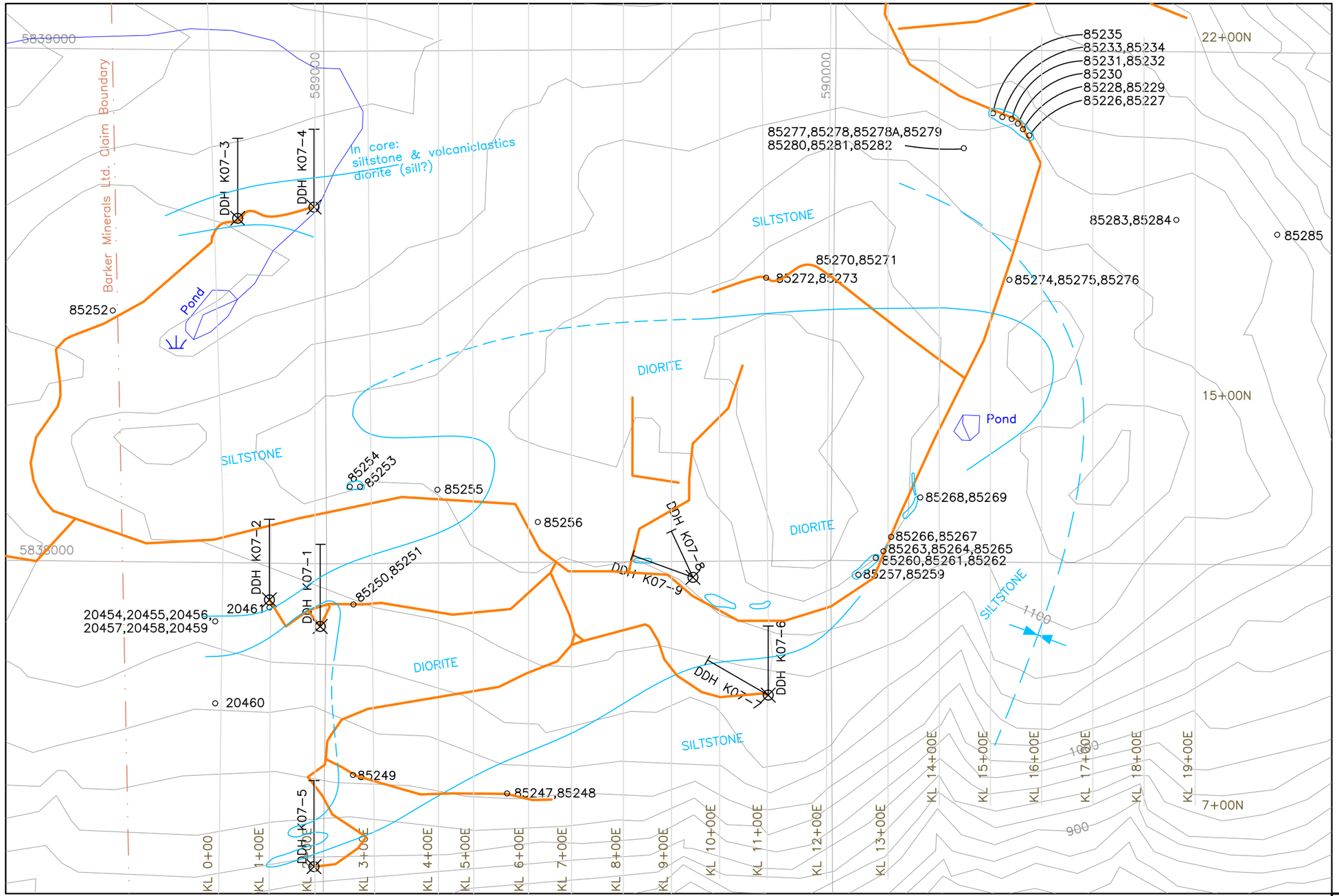
BARKER MINERALS LTD.

Kangaroo Gold Project
Test I.P. Survey

Compiled by: A. Doyle
January 2004

Note: This work done in 2003, not applied for assessment here.

Figure No. 30



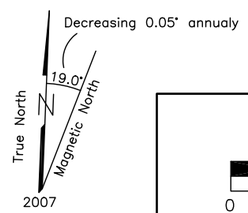
Geochem (Au=ppb, Cu, As=ppm)

Sample No.	Type	Au	Cu	As
85226	Rock	4	38	6.9
85227	Soil	<2	48	16.5
85228	Rock	<2	128	<0.5
85229	Soil	30	342	25
85230	Rock	<2	88	2.1
85231	Rock	<2	159	<0.5
85232	Soil	<2	298	31.1
85233	Rock	<2	144	4.2
85234	Soil	<2	351	15.9
85235	Soil	<2	119	27.1
85247	Rock	21	350	62.5
85248	Soil	47	1070	248
85249	Rock	36	105	588
85250	Rock	16	293	8.7
85251	Soil	20	446	49.4
85252	Rock	<2	8	644
85253	Rock	7	745	3.2
85254	Rock	348	212	1090
85255	Rock	20	166	61.6
85256	Rock	<2	504	5.2
85257	Rock	<2	101	5.3
85259	Soil	20	323	137
85260	Rock	<2	97	3.1
85261	Rock	<2	121	3.4
85262	Soil	<2	269	14
85263	Rock	5	150	<0.5
85264	Soil	9	210	16.1
85265	Rock	<2	270	<0.5
85266	Rock	<2	108	<0.5
85267	Soil	5	173	14.5
85268	Rock	<2	108	2.8
85269	Soil	70	371	18.6
85270	Rock	6	50	11.2
85271	Soil	70	159	17.4
85272	Rock	5	57	20.4
85273	Soil	<2	83	25.7
85274	Rock	36	75	<0.5
85275	Soil	32	160	29.4
85276	Rock	7	129	<0.5
85277	Rock	<2	93	8.8
85278	Rock	<2	97	<0.5
85278A	Rock	<2	66	2.6
85279	Rock	<2	90	6.6
85280	Rock	<2	100	6.2
85281	Soil	<2	425	6.1
85282	Rock	4	90	<0.5
85283	Rock	<2	75	14.6
85284	Soil	4	123	21.4
85285	Soil	<2	62	19.8
20454	Rock	<2	145	<0.5
20455	Rock	<2	175	<0.5
20456	Rock	23	1240	<0.5
20457	Rock	<2	298	4.4
20458	Rock	<2	7	12.6
20459	Rock	<2	6	2.4
20460	Rock	<2	24	339
20461	Rock	<2	29	8.4

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all geochem results.

LEGEND

- 1000 — Topographic Contour & Elevation Contour interval 20 metres
- Creek, Pond, Swamp
- Road
- Geological contact (approximate, inferred)
- 85256 — Sample Location & Number (Rock or Soil)
- DDH K07-9 — Drillhole Location & Number



UTM Coordinate System
Map Datum: NAD 83
Zone: 10

Scale 1:8,000
metres
0 100 200 300 400 500

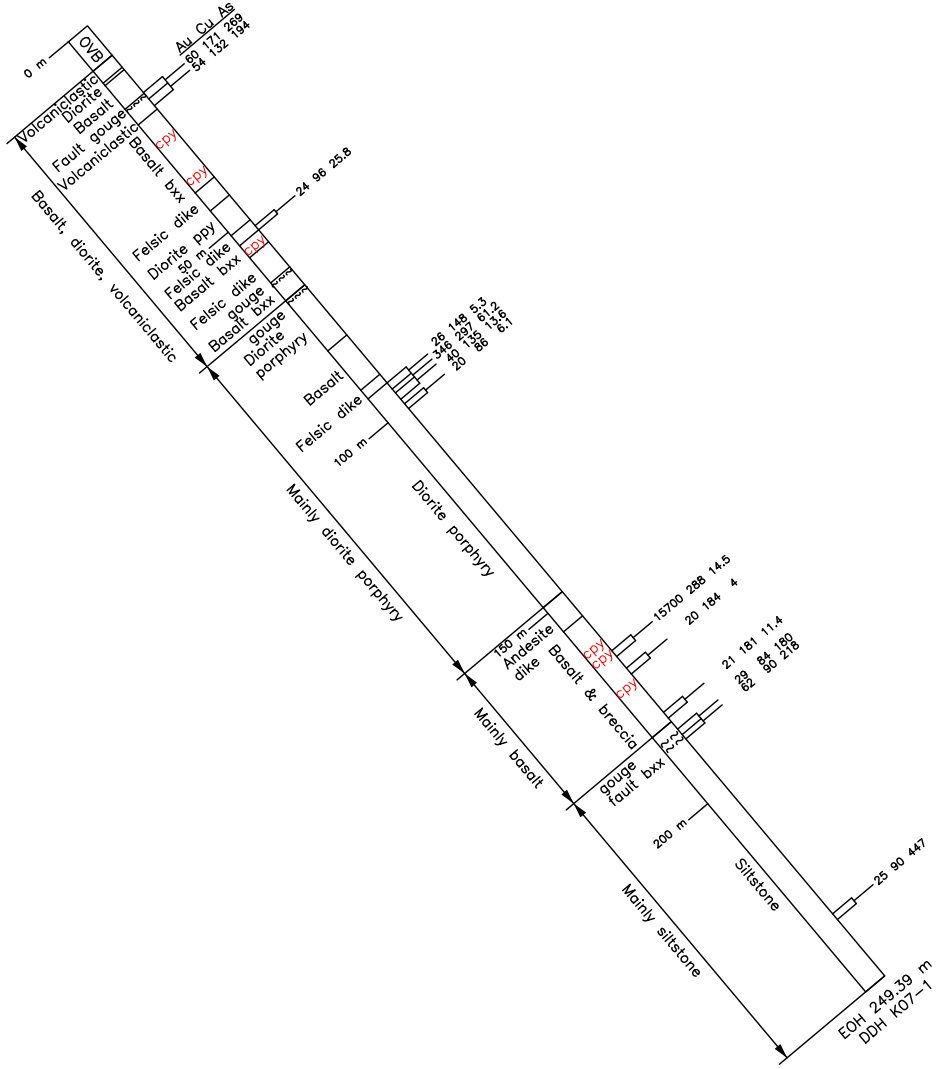
BARKER MINERALS LTD.

KANGAROO PROPERTY

2007 DRILLING AREA
and
GEOCHEMICAL SAMPLING

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Feb. 9, 2008
Drawn by: RT	Fig.No. 31



DDH K07-1

Easting (NAD 83): 589003
Northing (NAD 83): 5837871

Grid Location: 200E 800N

Hole Azimuth: 0°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000
metres
0 10 20 30 50

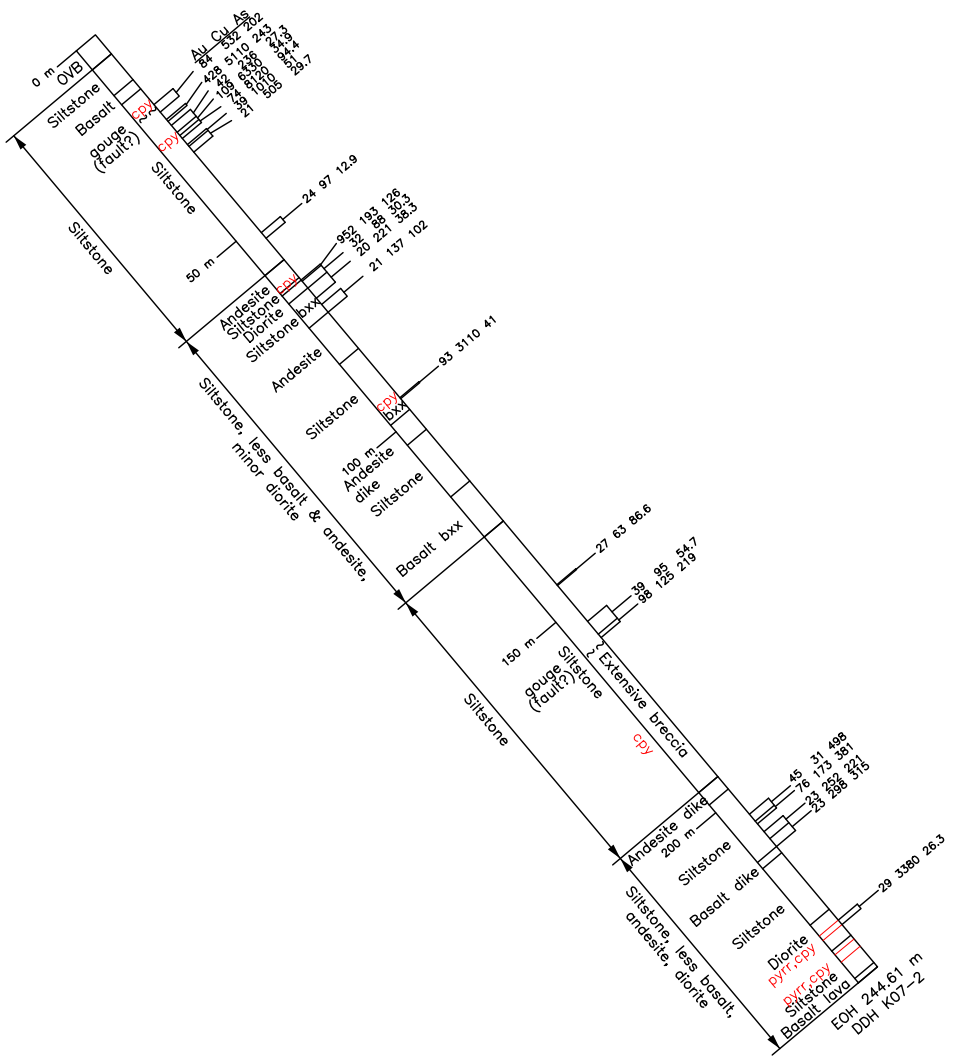
BARKER MINERALS LTD.

KANGAROO PROPERTY

DIAMOND DRILL HOLE PROFILE
DDH K07-1
Geology & Au,Cu,As Geochem

Cariboo Mining Division, B.C.

	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 32



DDH K07-2

Easting (NAD 83): 588904
Northing (NAD 83): 5837923

Grid Location: 100E 850N

Hole Azimuth: 0°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000
metres
0 10 20 30 50

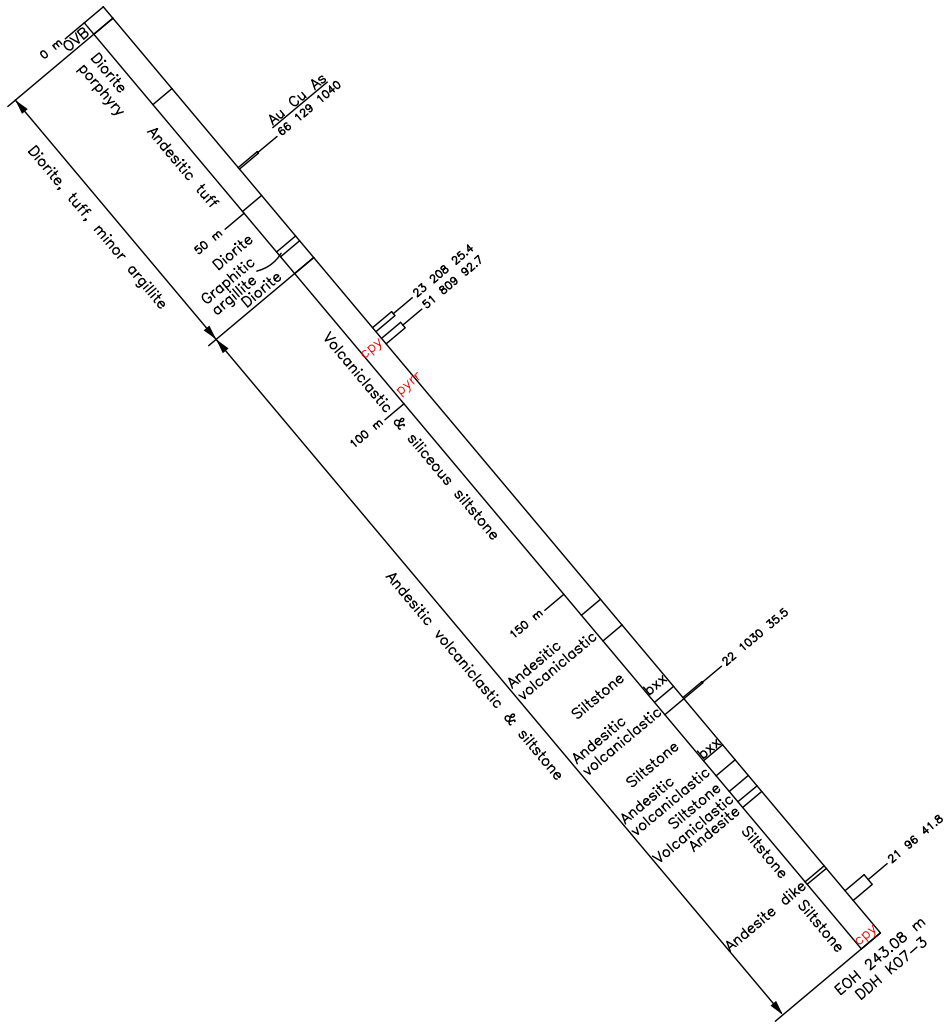
BARKER MINERALS LTD.

KANGAROO PROPERTY

DIAMOND DRILL HOLE PROFILE
DDH K07-2
Geology & Au,Cu,As Geochem

Cariboo Mining Division, B.C.

	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 33



DDH K07-3

Easting (NAD 83): 588842
Northing (NAD 83): 5838668

Grid Location: 100E 1650N

Hole Azimuth: 0°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

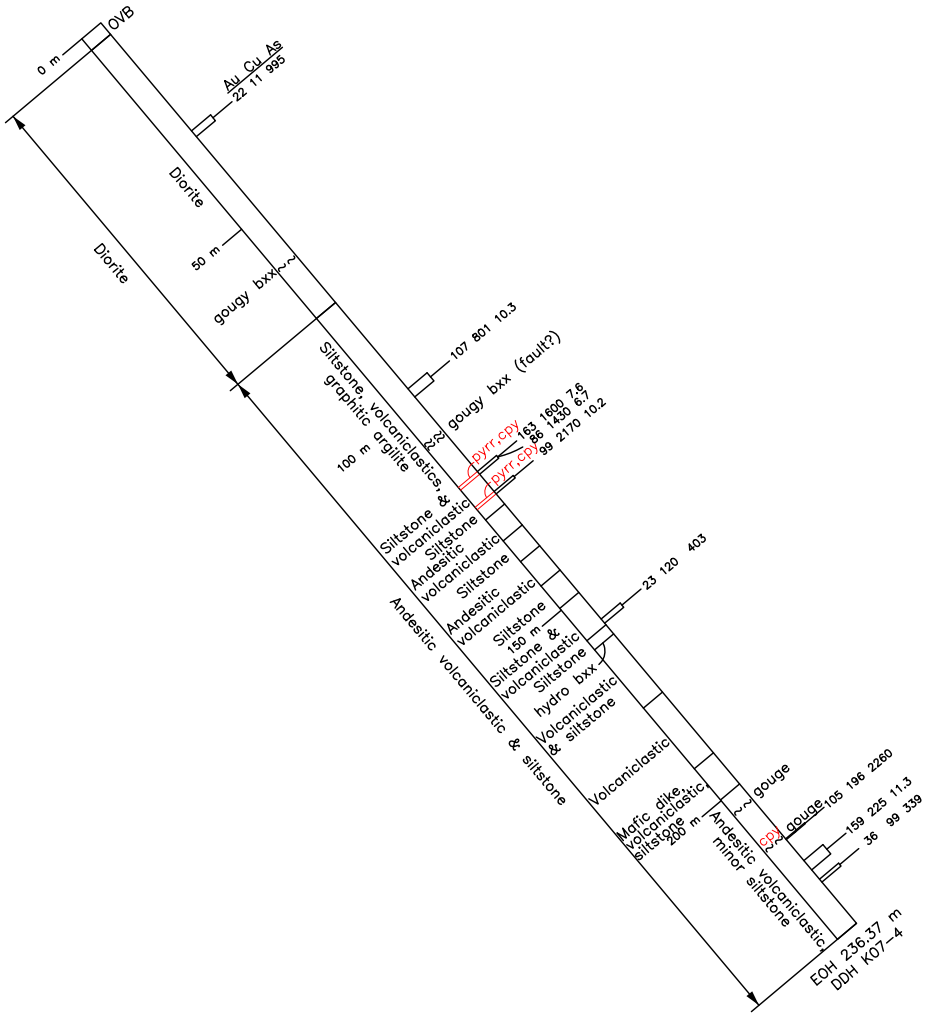
Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000
metres
0 10 20 30 50

BARKER MINERALS LTD.	
KANGAROO PROPERTY	
DIAMOND DRILL HOLE PROFILE DDH K07-3 Geology & Au,Cu,As Geochem	
Cariboo Mining Division, B.C.	
	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 34



DDH K07-4

Easting (NAD 83): 588993
Northing (NAD 83): 5838690

Grid Location: 200E 1600N

Hole Azimuth: 0°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000 metres

0 10 20 30 50

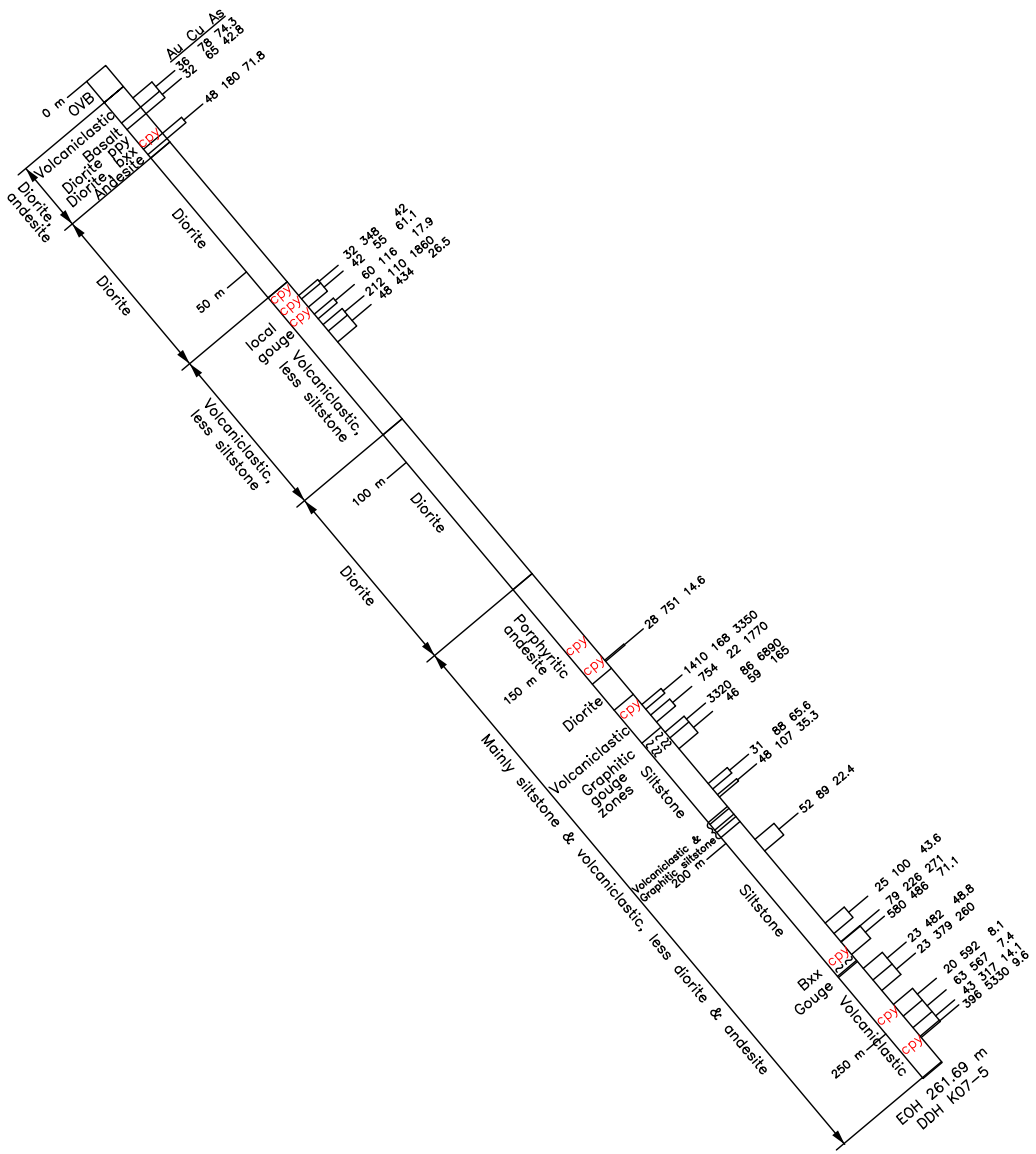
BARKER MINERALS LTD.

KANGAROO PROPERTY

DIAMOND DRILL HOLE PROFILE
DDH K07-4
Geology & Au,Cu,As Geochem

Cariboo Mining Division, B.C.

	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 35



DDH K07-5

Easting (NAD 83): 588993
Northing (NAD 83): 5837402

Grid Location: 200E 300N

Hole Azimuth: 0°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000 metres

0 10 20 30 50

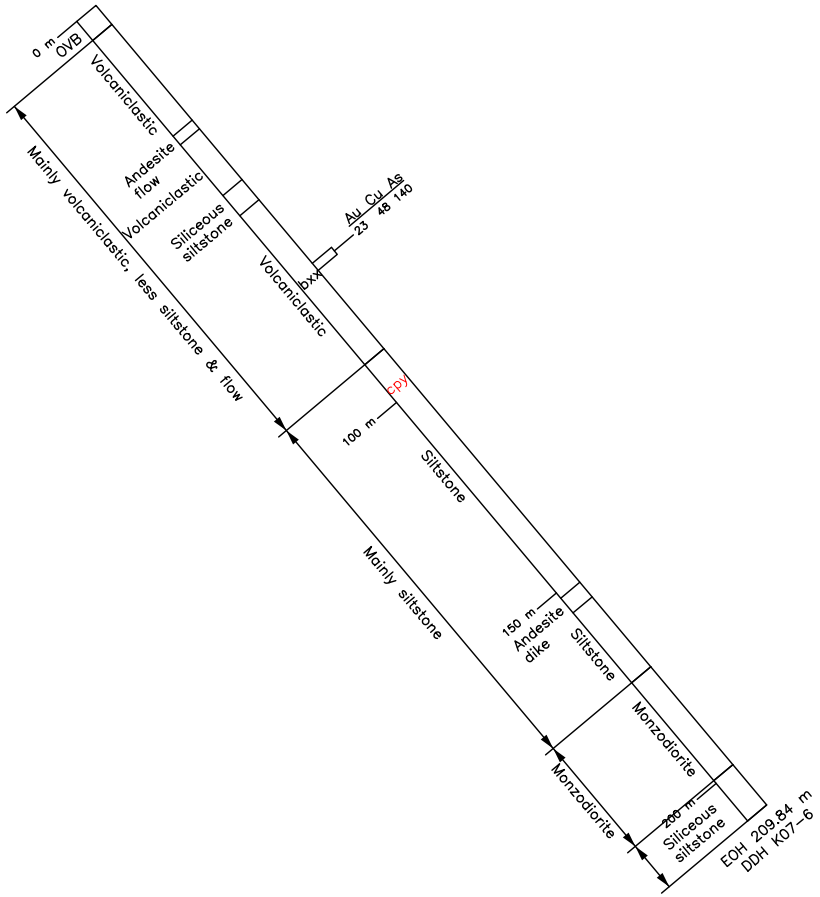
BARKER MINERALS LTD.

KANGAROO PROPERTY

DIAMOND DRILL HOLE PROFILE
DDH K07-5
Geology & Au,Cu,As Geochem

Cariboo Mining Division, B.C.

	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 36



DDH K07-6

Easting (NAD 83): 589878
Northing (NAD 83): 5837737

Grid Location: KTL3 125N

Hole Azimuth: 0°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000 metres

0 10 20 30 50

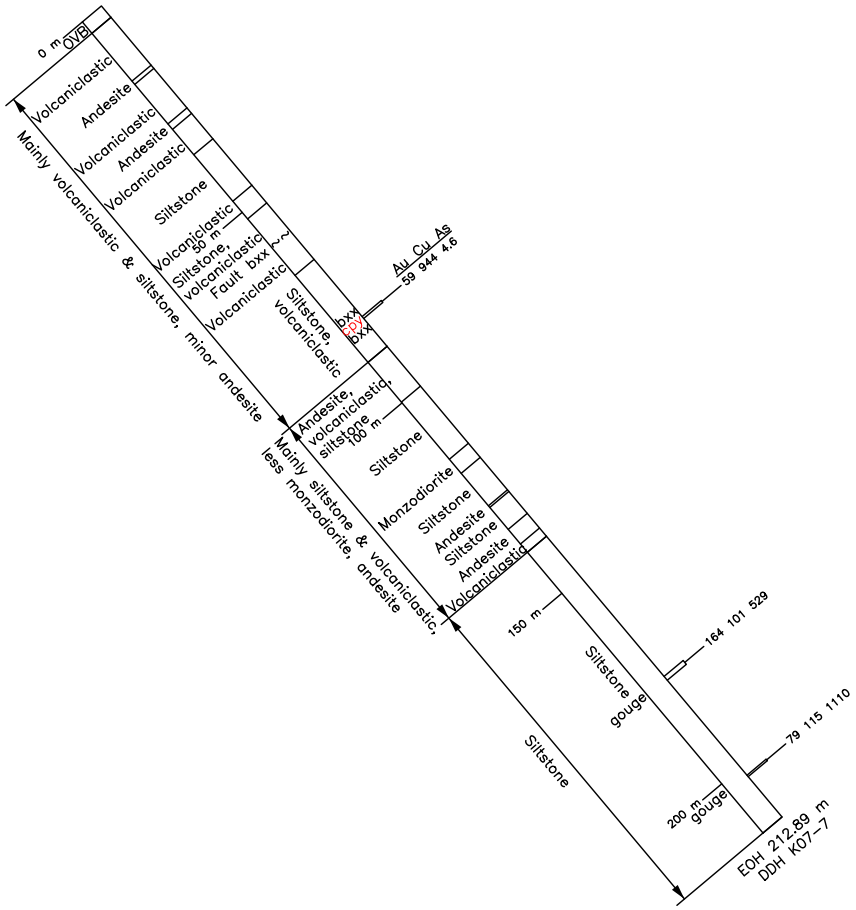
BARKER MINERALS LTD.

KANGAROO PROPERTY

DIAMOND DRILL HOLE PROFILE
DDH K07-6
Geology & Au,Cu,As Geochem

Cariboo Mining Division, B.C.

	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 37



DDH K07-7

Easting (NAD 83): 589878
Northing (NAD 83): 5837737

Grid Location: KTL3 125N

Hole Azimuth: 300°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

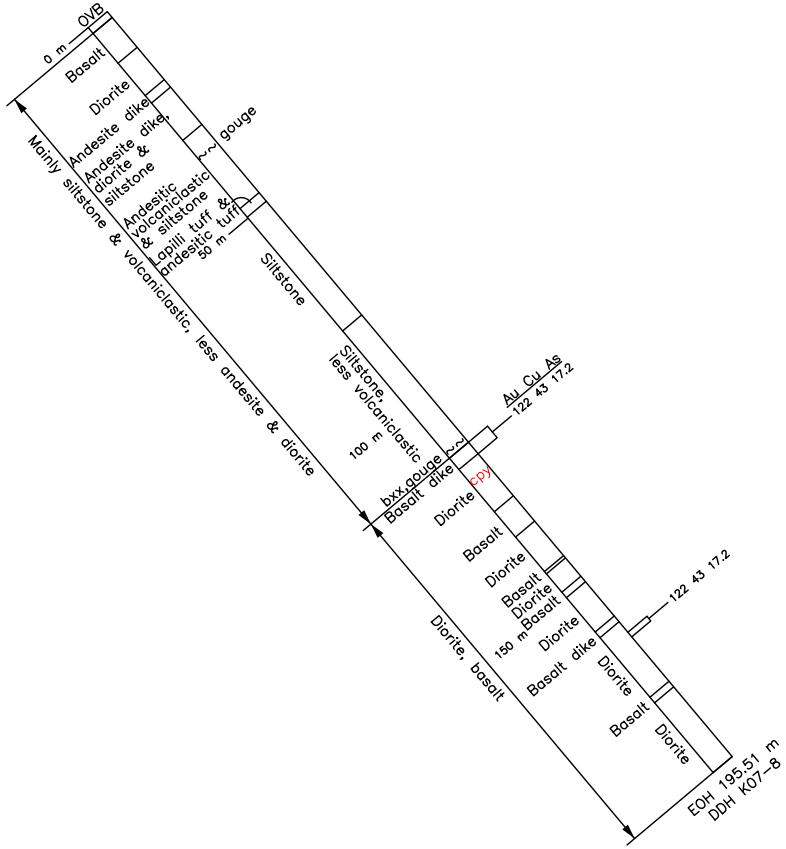
Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000
metres
0 10 20 30 50

BARKER MINERALS LTD.	
KANGAROO PROPERTY DIAMOND DRILL HOLE PROFILE DDH K07-7 Geology & Au,Cu,As Geochem Cariboo Mining Division, B.C.	
	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 38



DDH K07-8

Easting (NAD 83): 589731
Northing (NAD 83): 5837967

Grid Location: KTL3 125N

Hole Azimuth: 290°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

Note:
Au values are in ppb
Cu and As values are in ppm

See Appendix C for all Analytical Data.

Most or all of core was sampled.
Only samples with ≥ 20 ppb Au are shown here.

Scale: 2,000
metres

0 10 20 30 50

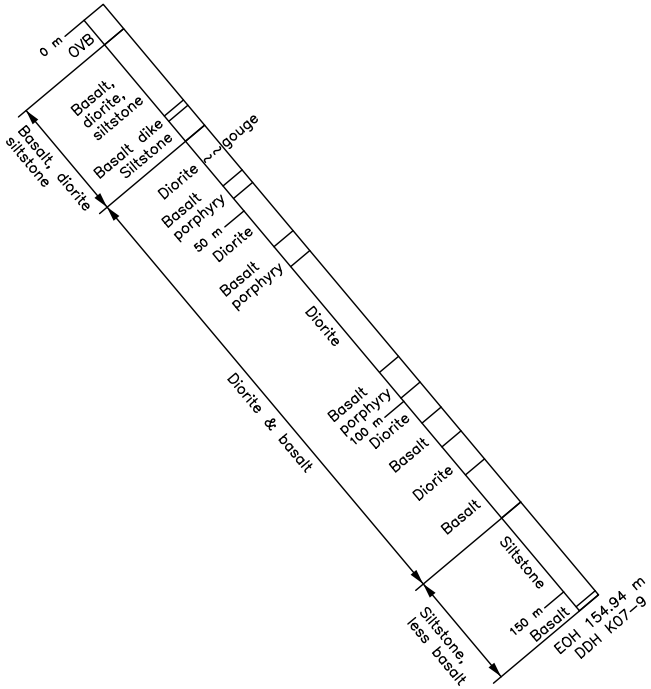
BARKER MINERALS LTD.

KANGAROO PROPERTY

DIAMOND DRILL HOLE PROFILE
DDH K07-8
Geology & Au,Cu,As Geochem

Cariboo Mining Division, B.C.

	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 39



DDH K07-9

Easting (NAD 83): 589731
Northing (NAD 83): 5837967

Grid Location: KTL3 125N

Hole Azimuth: 335°
Hole Angle: −50°

Core Size: NQ2

LEGEND

cpy, pyrr Mineralization (chalcopyrite, pyrrhotite)

Note:

See Appendix C for all Analytical Data.

Most or all of core was sampled.
No samples had ≥ 20 ppb Au.

Scale: 2,000
metres

0 10 20 30 50

BARKER MINERALS LTD.

KANGAROO PROPERTY

DIAMOND DRILL HOLE PROFILE
DDH K07-9
Geology

Cariboo Mining Division, B.C.

	Date: Jan. 17 2008
Drawn by: RT	Fig.No. 40

10.3 Regional Sampling Geochemical Results

Areas east and west of Kangaroo Creek were prospected with rocks, soils and stream silts collected. Figure Nos. 31 & 41 to 47 show the areas where this work was done.

In the 2007 Drilling Area (Figure No. 31) numerous rocks and soils were anomalous in Au and pathfinder elements. This area deserves intensive follow up exploration.

In Area 69 Creek (Figure No. 46) two rocks and a soil were weakly anomalous in Au. A BC Government Regional Geochemical Survey silt sample from this creek had 69 ppb Au.

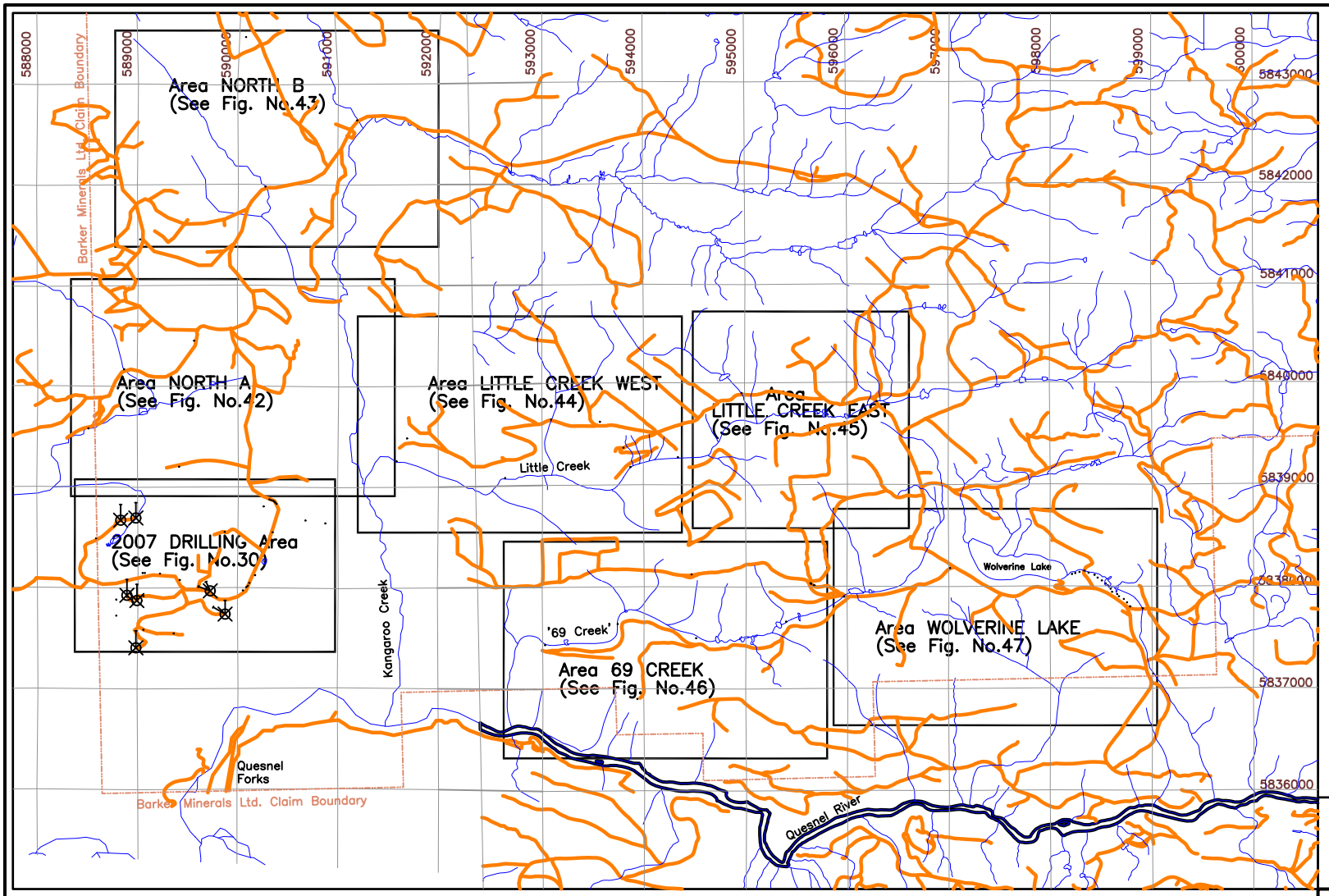
In Area Wolverine Lake (Figure No. 47) some soil samples were collected beside a creek flowing out of Wolverine lake in follow up of a local prospector's report of gold bearing rocks supposedly in the area. But for a couple of soils weakly anomalous in Au nothing significant was got.

In Area North A (Figure No. 42) a soil with 100 ppb Au was collected in an area covered by the 2007 Kangaroo grid.

In Area North B (Figure No. 43) scattered weak Au anomalies were got in rock, soils and silt.

In Area Little Creek West (Figure No. 44) a stream sampled at two locations was anomalous in Au at both locations.

In Area Little Creek East (Figure No. 45) three stream silts were collected. They were not anomalous in Au.



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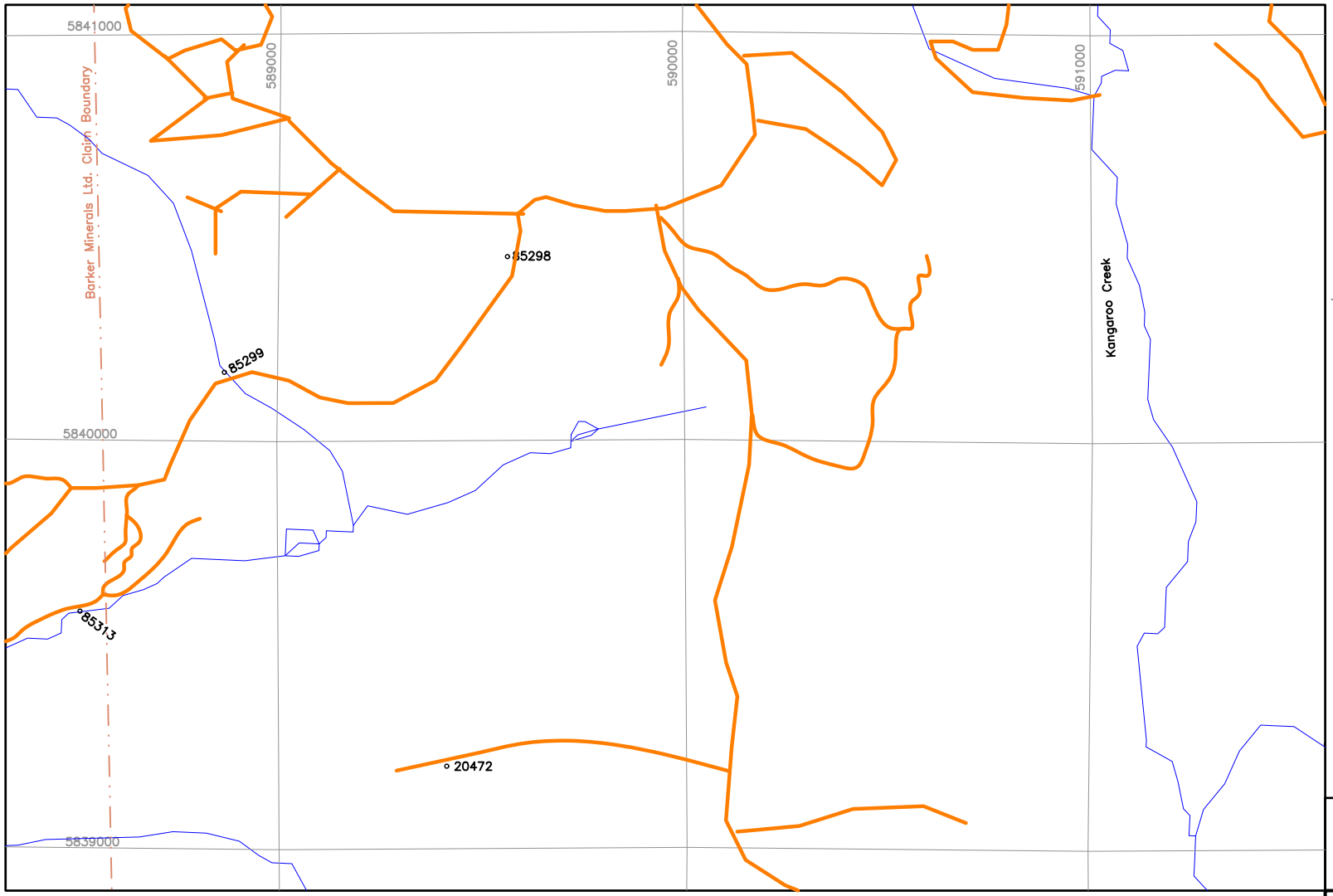
KANGAROO PROPERTY

2007 REGIONAL GEOCHEMICAL SAMPLING

KEY MAP for AREAS

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Jan. 17, 2008
Drawn by: RT	Fig.No. 41



Decreasing 0.05° annually

19.0°

True North

Magnetic North

2007

LEGEND

1000 — Topographic Contour & Elevation Contour interval 20 metres

Creek, Pond, Swamp

Road

○ 85313 — Sample Location & Number (Rock, Soil or Silt)

Geochem (Au=ppb, Zn, As=ppm)

Sample No.	Type	Au	Zn	As
20472	Soil	100	118	91.8
85298	Soil	11	89	15.2
85299	Silt	<2	68	11.4
85313	Silt	<2	74	8

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all geochem results.

Scale 1:20,000

metres

0 100 200 300 400 500

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

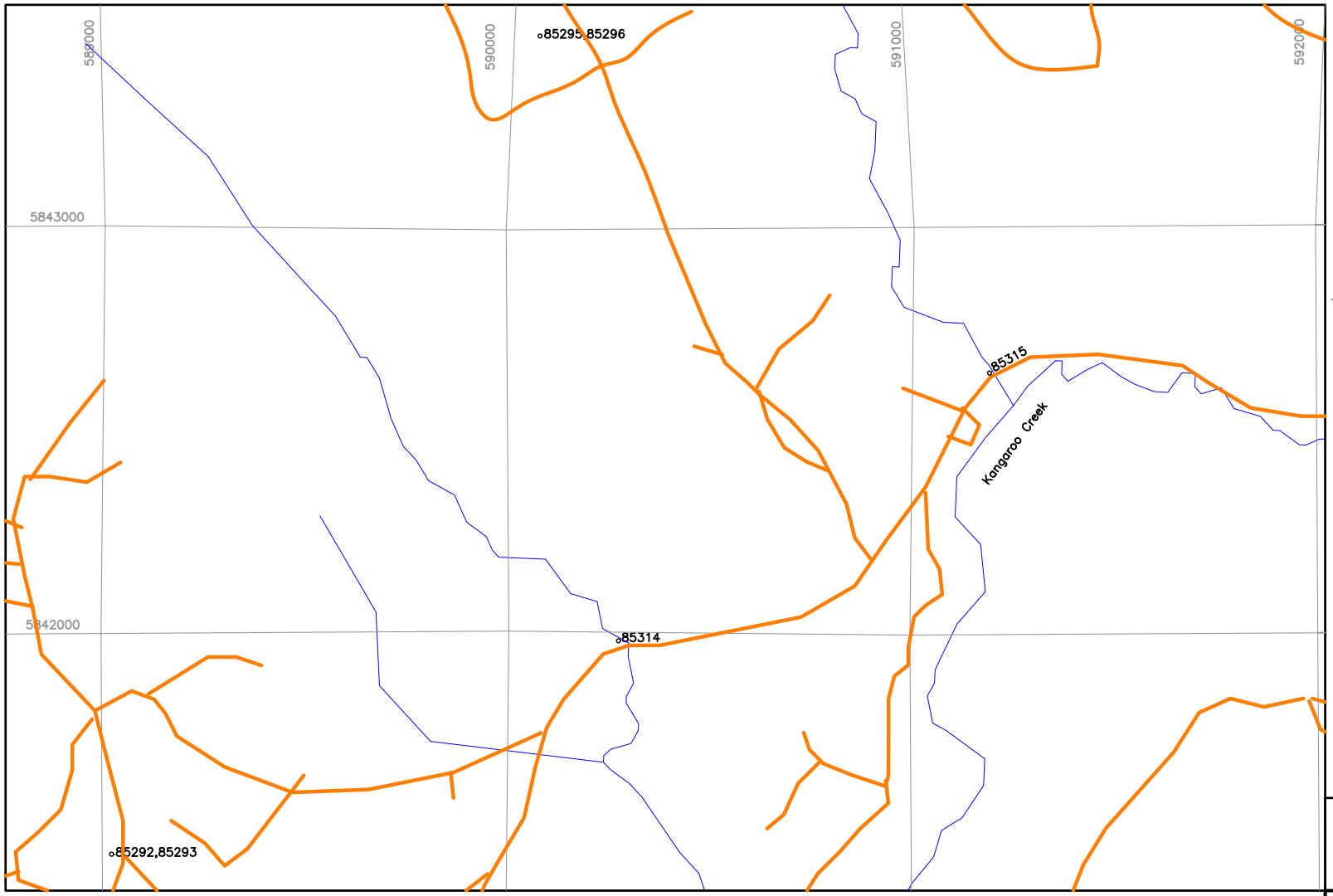
BARKER MINERALS LTD.

KANGAROO PROPERTY

2007 REGIONAL GEOCHEMICAL SAMPLING
in Area
NORTH A

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Jan. 17, 2008
Drawn by: RT	Fig.No. 42



Decreasing 0.05° annually

19.0°

True North

Magnetic North

2007

LEGEND

1000 — Topographic Contour & Elevation Contour interval 20 metres

Creek, Pond, Swamp

Road

85315 — Sample Location & Number (Rock, Soil or Silt)

Geochem (Au=ppb, Zn, As=ppm)

Sample No.	Type	Au	Zn	As
85292	Rock	28	112	6.5
85293	Soil	22	341	9.5
85295	Rock	<2	3	11.9
85296	Soil	20	93	209
85314	Silt	<2	87	39
85315	Silt	16	69	15.3

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all geochem results.

Scale 1:20,000
metres
0 100 200 300 400 500

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

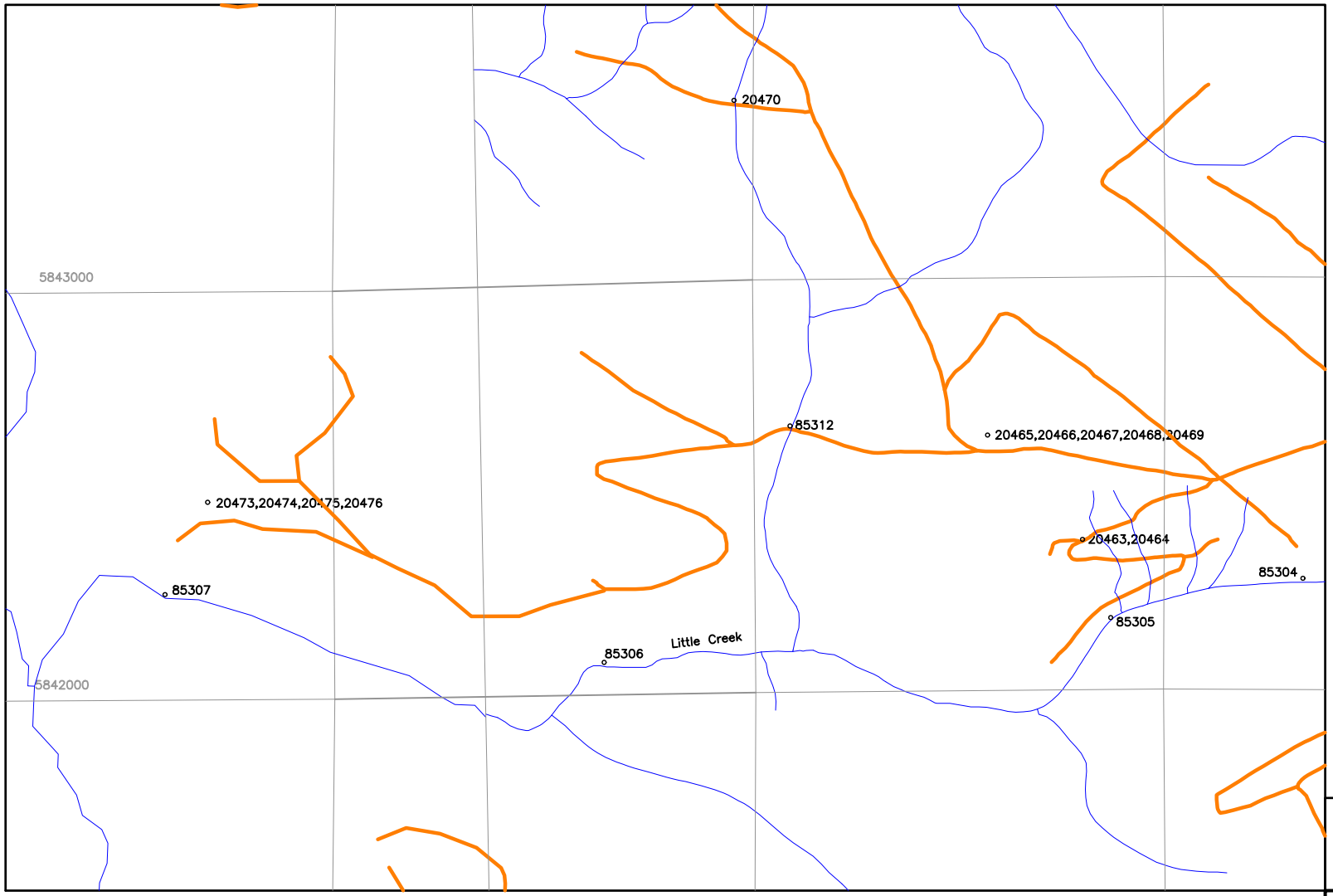
BARKER MINERALS LTD.

KANGAROO PROPERTY

2007 REGIONAL GEOCHEMICAL SAMPLING
in Area
NORTH B

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Jan. 17, 2008
Drawn by: RT	Fig.No. 43



Decreasing 0.05° annually

True North
19.0°
Magnetic North
2007

LEGEND

1000 Topographic Contour & Elevation Contour interval 20 metres

Creek, Pond, Swamp

Road

85256 Sample Location & Number (Rock, Soil or Silt)

Geochem (Au=ppb, Zn, As=ppm)

Sample No.	Type	Au	Zn	As
85304	Silt	2	40	9.6
85305	Silt	<2	60	11.2
85306	Silt	<2	76	15.2
85307	Silt	<2	68	17.8
85312	Silt	44	91	11.9
20463	Rock	<2	129	14.7
20464	Soil	<2	207	16.4
20465	Rock	<2	74	<0.5
20466	Rock	<2	124	2.7
20467	Rock	<2	82	31.4
20468	Rock	<2	4	1.9
20469	Soil	10	253	52.4
20470	Silt	74	62	22.8
20473	Rock	<2	130	14.5
20474	Soil	<2	199	93.6
20475	Rock	<2	117	11.8
20476	Rock	<2	2	19.8

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all geochem results.

Scale 1:20,000
metres
0 100 200 300 400 500

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

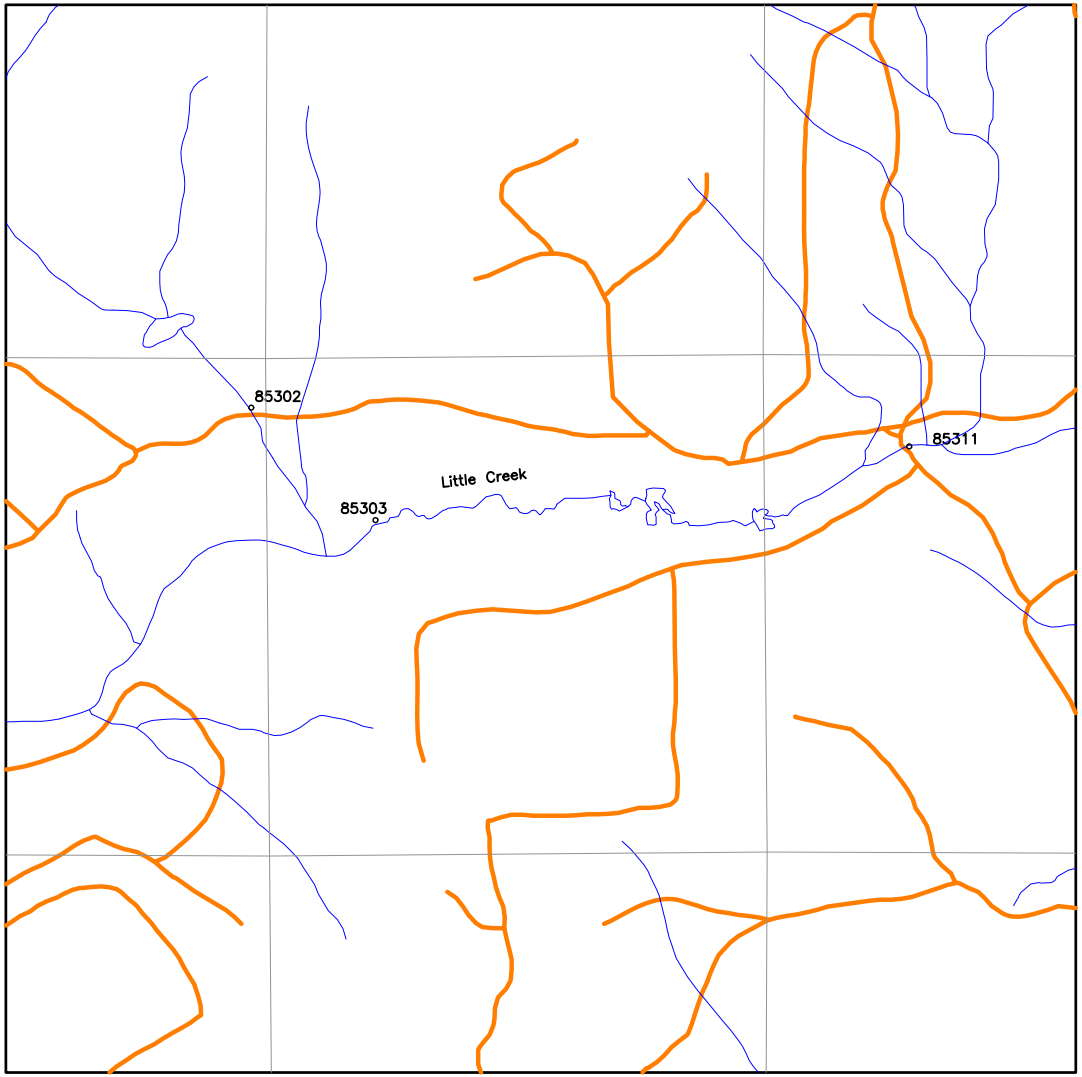
BARKER MINERALS LTD.

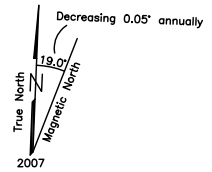
KANGAROO PROPERTY

2007 REGIONAL GEOCHEMICAL SAMPLING
in Area
LITTLE CREEK WEST

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Jan. 17, 2008
Drawn by: RT	Fig.No. 44





LEGEND

1000 Topographic Contour & Elevation
Contour interval 20 metres

Creek, Pond, Swamp

Road

85256 Sample Location & Number
(Rock, Soil or Silt)

Geochem (Au=ppb, Zn, As=ppm)

Sample No.	Type	Au	Zn	As
85302	Silt	10	98	9.8
85303	Silt	<2	131	8.6
85311	Silt	<2	58	16.7

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all geochem results.

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

Scale 1:20,000
metres
0 100 200 300 400 500

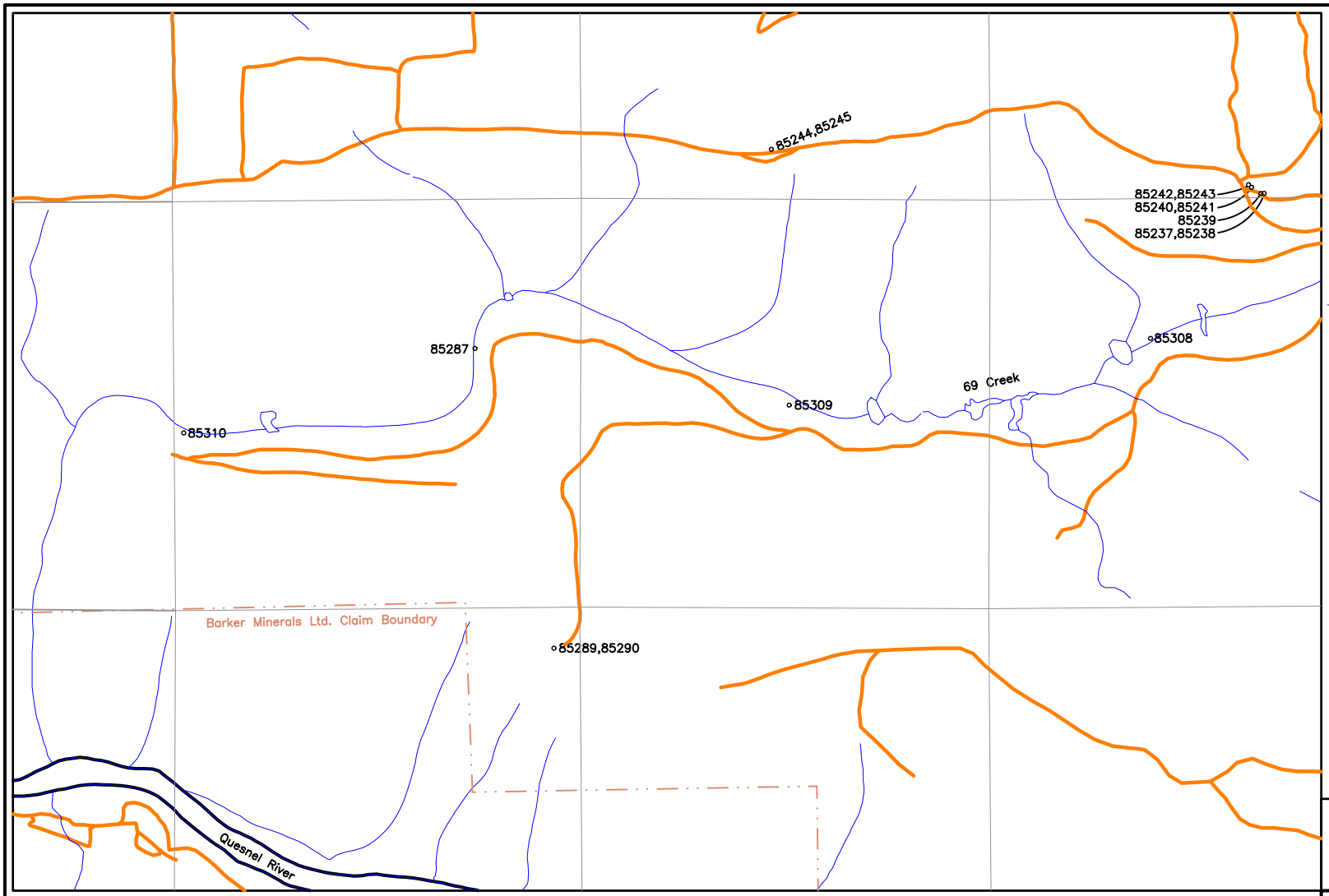
BARKER MINERALS LTD.

KANGAROO PROPERTY

2007 REGIONAL GEOCHEMICAL SAMPLING
in Area
LITTLE CREEK EAST

Cariboo Mining Division, B.C.

93 A/12	Date: Jan. 17, 2008
Drawn by: RT	Fig.No. 45



Decreasing 0.05° annually

19.0°

True North

Magnetic North

2007

LEGEND

1000 — Topographic Contour & Elevation Contour interval 20 metres

Creek, Pond, Swamp

Road

85308 — Sample Location & Number (Rock, Soil or Silt)

Geochem (Au=ppb, Zn, As=ppm)

Sample No.	Type	Au	Zn	As
85237	Rock	<2	85	4.8
85238	Soil	<2	147	30.2
85239	Rock	<2	73	<0.5
85240	Rock	2	62	2.3
85241	Soil	<6	106	<0.5
85242	Rock	<2	52	<0.5
85243	Soil	50	96	15.7
85244	Rock	<2	35	3.0
85245	Soil	<2	229	48.4
85287	Silt	<2	64	12.4
85289	Rock	16	274	4.9
85290	Soil	35	1950	44.8
85308	Silt	<2	94	16.1
85309	Silt	<2	93	32.3
85310	Silt	<2	58	16.7

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all geochem results.

Scale 1:20,000
metres
0 100 200 300 400 500

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

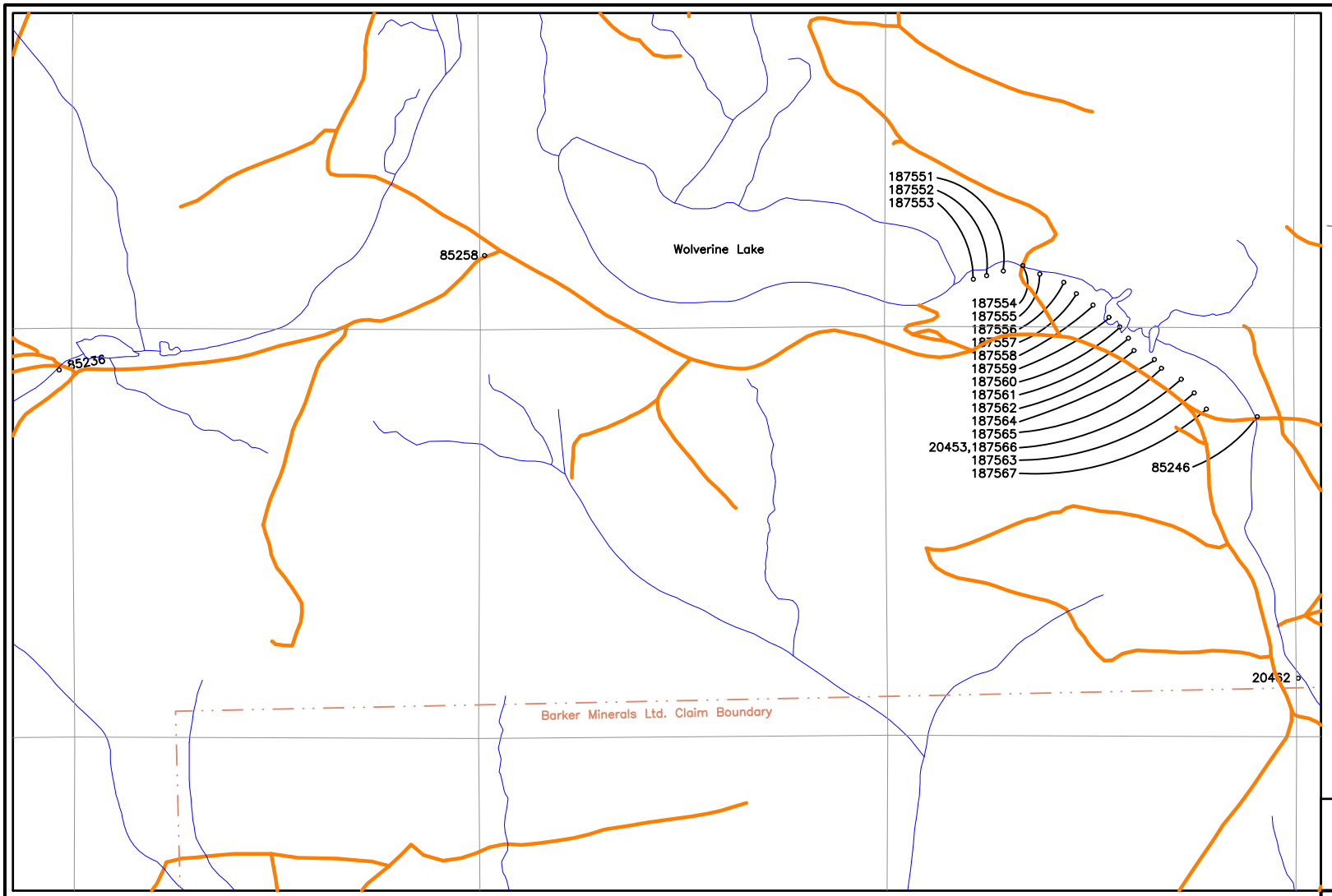
BARKER MINERALS LTD.

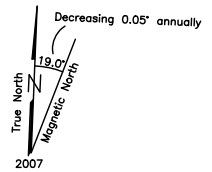
KANGAROO PROPERTY

2007 REGIONAL GEOCHEMICAL SAMPLING
in Area
69 CREEK

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Jan. 17, 2008
Drawn by: RT	Fig.No. 46





LEGEND

1000 — Topographic Contour & Elevation Contour interval 20 metres

Creek, Pond, Swamp

Road

○85256 — Sample Location & Number (Rock, Soil or Silt)

Geochem (Au=ppb, Zn, As=ppm)

Sample No.	Type	Au	Zn	As
85236	Silt	<2	93	15
85246	Silt	14	48	4.9
85258	Rock	<2	10	2.9
187551	Soil	<2	45	8.5
187552	Soil	20	46	7.6
187553	Soil	<2	56	8.1
187554	Silt	5	35	5.6
187555	Soil	<2	40	6.1
187556	Soil	40	47	11.8
187557	Soil	<2	41	6.5
187558	Soil	<2	36	7.4
187559	Soil	<2	39	8
187560	Soil	<2	68	5.5
187561	Soil	<2	38	4.4
187562	Soil	<2	58	7.2
187563	Soil	<2	50	7.1
187564	Soil	<2	60	8.4
187565	Soil	9	48	4.1
187566	Soil	<2	44	4.7
187567	Soil	<2	62	7.4
20453	Rock	5	58	2.6
20462	Silt	<2	47	5.3

Note:
1. See Appendix A for Sample Descriptions.
2. See Appendix C for all geochem results.

Scale 1:20,000
metres
0 100 200 300 400 500

UTM Coordinate System
Map Datum: NAD 83
Zone: 10

BARKER MINERALS LTD.

KANGAROO PROPERTY

2007 REGIONAL GEOCHEMICAL SAMPLING
in Area
WOLVERINE LAKE

Cariboo Mining Division, B.C.

NTS Mapsheet: 93 A/12	Date: Jan. 17, 2008
Drawn by: RT	Fig.No. 47

10.4 Geophysical Surveys

10.4.1 Titan Induced Polarization

Quantec Geoscience Inc. of Toronto, Ontario performed a Titan 24 Distributed Array survey on Lines KL2, KL4 and KL6 on the Kangaroo 2007 grid. The survey included magnetotelluric resistivity (MT) and DC resistivity & induced polarization (DCIP). MT benefits from deep penetration (<1.0 to 1.5 km) and high resolution. DCIP provides shallow to mid depth penetration (<500 to 750m) and is sensitive to disseminated and massive sulphides. The results of this survey are presented in Appendix H in a separate report by Quantec Geoscience Inc.

10.4.2 Pole-Dipole Induced Polarization

Quantec Geoscience Inc. of Toronto, Ontario performed a pole-dipole induced polarization survey on the Kangaroo 2007 grid, not including the lines on which the Titan survey was done. The results of this survey are presented in Appendix I in a separate report by Quantec Geoscience Inc.
Following are simple observations by these authors of early data without discussion with Quantec Geoscience Inc. These observations nevertheless refer to Figures in the Quantec Geoscience Inc. report (see Appendix I) and to the Kangaroo Property Geology map (Figure No. 29, this report). These observations are made as they also may be useful in guiding future work. Line 1100E section is discussed here as an example of what can be discerned on the other Lines' sections as well.

The Resistivity section appears to show the north side of the diorite intrusive at approximately 1600N. The sedimentary rocks north of 1600N are characterized by a strong low resistivity anomaly to 2100N to where it weakens abruptly at an apparent fault. A prominent east-west topographic linear (creek and valley) at 2200N trends across the IP survey at approximately this northing. A weaker low resistivity anomaly continues north where it ends at approximately 2500N, beyond which, resistivity is relatively high (metals depleted?) for a short distance.

The Chargeability section suggests the intrusive as generally chargeable though not uniformly. The sedimentary rocks north of the contact at 1600N are characterized by high chargeability to approximately 2100N where the chargeability anomaly ends abruptly. Sedimentary rocks to the north have uniformly low chargeability.

The resistivity and chargeability sections show a north-dipping grain to the data which may reflect a northward dip to geologic structures. Outcrops of strongly rusty sedimentary rocks containing sulphides occur at approximately 1800N. Sedimentary rocks containing sulphides occur in outcrop and drill core (DDH's K07-6 and K07-7) at approximately 1000N. Between these locations the

intrusive rock occurs. The Resistivity and Chargeability Sections recommend the north side of the intrusive body as more strongly mineralized than the south side.

It is suggested a chargeable diorite body occurs south of approximately 1600N where it is in intrusive contact with sedimentary rocks. The south boundary of the intrusive varies from Line to Line. The sedimentary rocks on the north side of the diorite are much affected by the intrusive. A strong low resistivity and relatively high chargeability anomaly occurs in the intruded rocks for approximately 500m from the contact with the diorite. A low resistivity anomaly continues farther north for approximately 400m. These chargeability and low resistivity 'fronts' are considered coincident with mineralization and alteration 'fronts' which should be drill tested for gold in particular. The north dipping grain to the geophysics and stronger mineralization on the north side may suggest the intrusive body is a north-dipping sill with hangingwall side to the north and footwall side to the south.

11.0 MAG PROPERTY

11.1 Geophysical Surveys

11.1.1 Pole-dipole Induced Polarization

Quantec Geoscience Inc. of Toronto, Ontario performed a pole-dipole induced polarization survey on the MAG 2007 grid. The results of this survey are presented in Appendix J in a separate report by Quantec Geoscience Inc.

Following are simple observations by these authors of early data without discussion with Quantec Geoscience Inc. These observations nevertheless refer to Figures in the Quantec Geoscience Inc. report (see Appendix J).

The 2-line IP survey done on the MAG property outlined a high chargeability/high resistivity zone, flanked east and west by low chargeability/low resistivity. This is best evident on Line 600S and is suggestive of an intrusive body containing disseminated metallic minerals surrounded by intruded volcanics or sediments. The chargeability anomaly does not coincide with the magnetic anomaly (see below) on its west flank, thus the chargeability is considered to be due to disseminated sulphides, not magnetite. The high chargeability zone is offset eastward somewhat from the high resistivity centre. The metal factor sections, indicate the best combination of high resistivity and low resistivity on Lines 600S and 800S. The zones of highest metal factor, like chargeability, appear not associated with magnetism (magnetite) and thus may be due to sulphides.

11.1.2 Magnetometer and VLF

Barker Minerals Ltd. personnel performed a magnetometer survey on the grid. A VLF electromagnetic survey was done on a portion of the grid before the VLF machine stopped working. The results of the magnetometer and VLF surveys are presented in Figure Nos. 48, 49, 50. The Survey data are presented in Appendix K.

The strongest magnetic anomaly (see Figure No. 48) is concentrated on the west flank of the chargeability anomaly when comparison is made with the IP sections in the Quantec Geoscience Inc. report (see appendix J). The magnetic anomaly appears associated with the high resistivity anomaly on the west side of the chargeability zone. It is uncertain whether the suggested intrusive body is best outlined by the high resistivity, chargeability or magnetic anomaly. The intrusive body appears more magnetic but not chargeable on its west side and more sulphidic and chargeable on its east side. As the VLF machine broke, its incomplete data set is considered inadequate to attempt an interpretation.

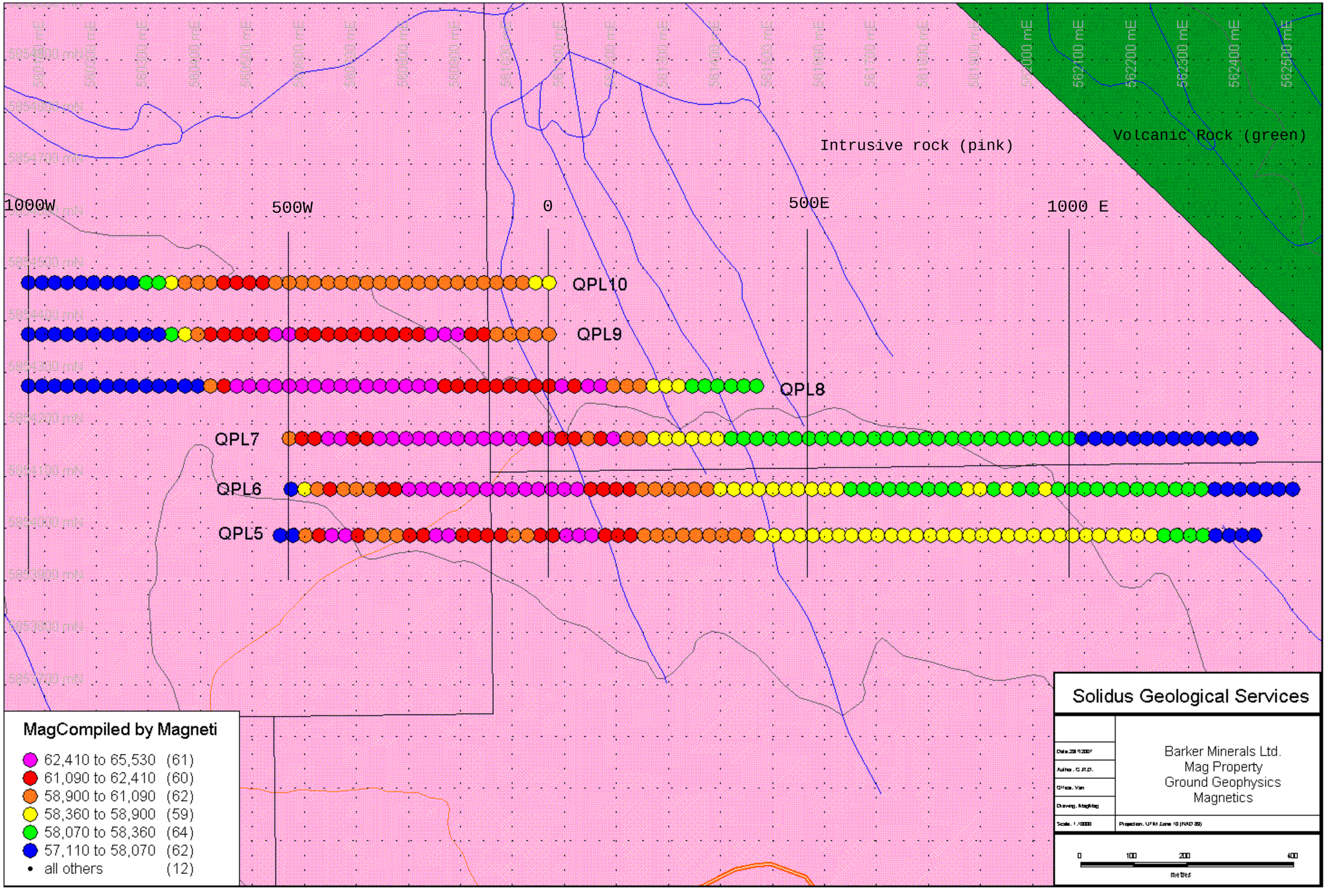

Intrusive rock (pink)
Volcanic Rock (green)
1000W
500W
0
500E
1000 E
QPL10
QPL9
QPL8
QPL7
QPL6
QPL5
MagCompiled by Magneti
62,410 to 65,530 (61)
61,090 to 62,410 (60)
58,900 to 61,090 (62)
58,360 to 58,900 (59)
58,070 to 58,360 (64)
57,110 to 58,070 (62)
all others (12)
Solidus Geological Services
Barker Minerals Ltd.
Mag Property
Ground Geophysics
Magnetics
metres

Figure No. 48

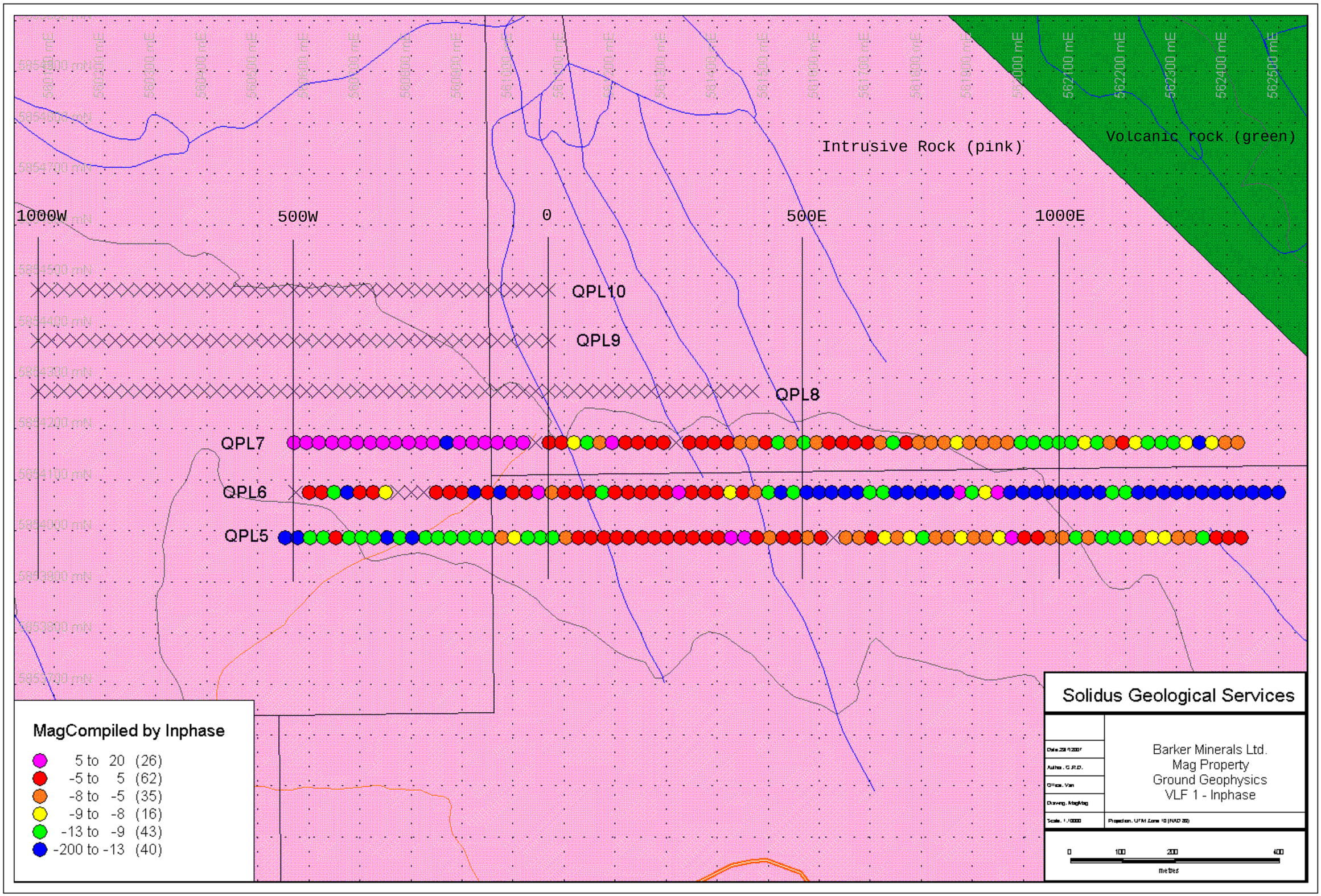

Intrusive Rock (pink)
Volcanic rock (green)
1000W
500W
0
500E
1000E
QPL10
QPL9
QPL8
QPL7
QPL6
QPL5
MagCompiled by Inphase
5 to 20 (26)
-5 to 5 (62)
-8 to -5 (35)
-9 to -8 (16)
-13 to -9 (43)
-200 to -13 (40)
Solidus Geological Services
Barker Minerals Ltd.
Mag Property
Ground Geophysics
VLF 1 - Inphase
0
100
200
400
metres

Figure No. 49

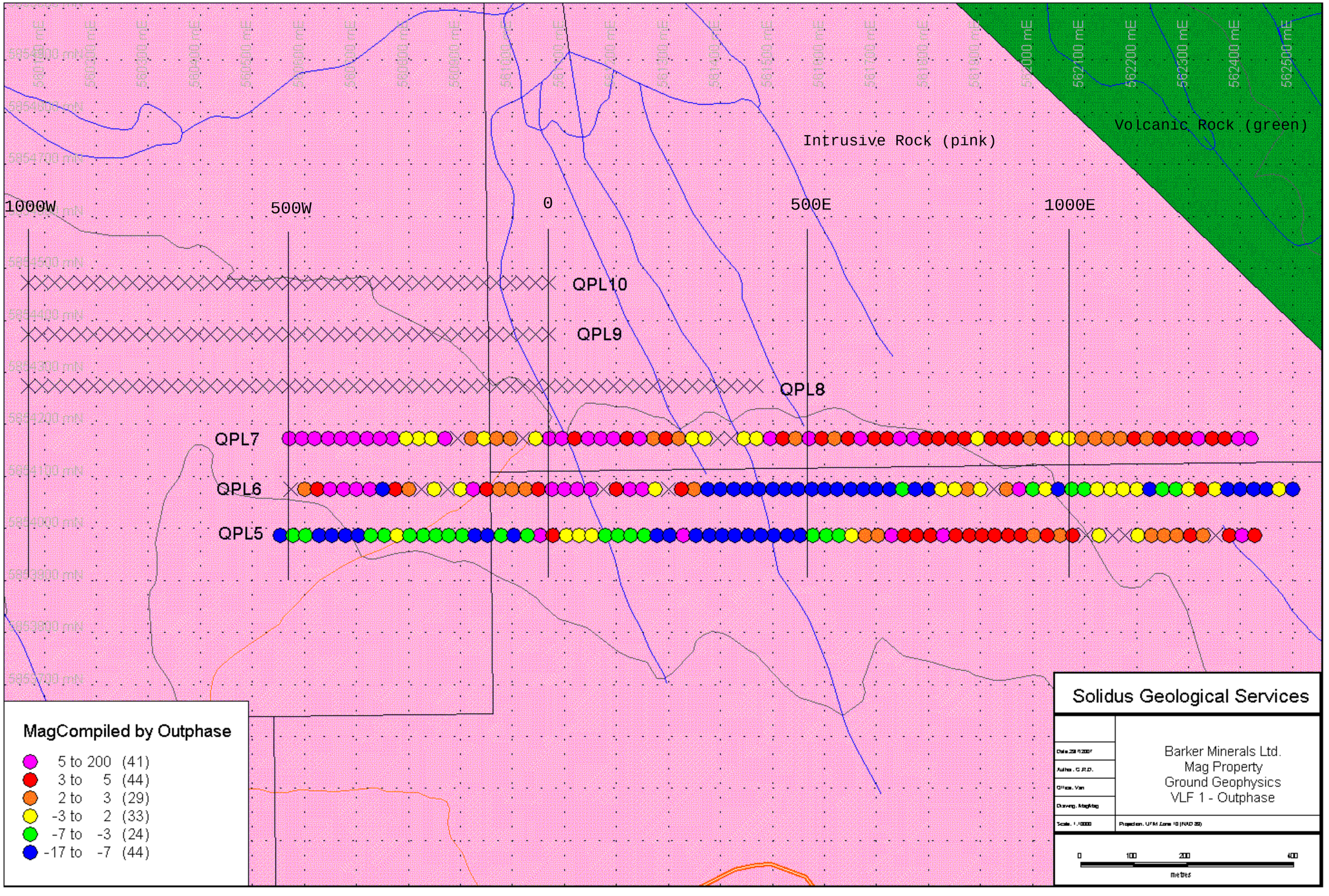

Intrusive Rock (pink)
Volcanic Rock (green)
1000W
500W
0
500E
1000E
QPL10
QPL9
QPL8
QPL7
QPL6
QPL5
MagCompiled by Outphase
5 to 200 (41)
3 to 5 (44)
2 to 3 (29)
-3 to 2 (33)
-7 to -3 (24)
-17 to -7 (44)
Solidus Geological Services
Barker Minerals Ltd.
Mag Property
Ground Geophysics
VLF 1 - Outphase
0
100
200
400
metres

Figure No. 50

12.0 CONCLUSIONS

12.1 Frank Creek Property

Bi-modal volcanism has occurred on the Frank Creek Property as evidenced by the presence of metamorphosed rhyolitic volcaniclastics and basaltic andesites, locally pillowed. The pillowed mafic outcrops were not examined this year but are described in previous reports (eg. McKinley, 2004, pp 14, 48). Metamorphism has altered the rhyolitic rocks such that identification of their protolith has been difficult and past controversy is likely to continue. Some previous writers have considered the rhyolitic rock to be quartz-rich sandstone, others have called the rock quartz-eye tuff. The most recent petrographic analyses and opinion weigh in favour of rhyolitic tuff or volcaniclastic.

The class of massive sulphide at Frank Creek has been controversial due to the problematic evidence of felsic volcanism. The presence of mafic volcanics on the property and the location of the original Discovery Showing near clastic sediments and limestone has in the past recommended the Frank Creek massive sulphide prospect as Besshi-type or even sedex. The present authors consider the Frank Creek prospect as Kuroko-type due to the presence of bi-modal rhyolitic-andesitic volcanism, the Cu-Pb-Zn style of mineralization and the occurrence of barium in the soil geochemistry indicating the possible location of a baritic lithologic horizon (see Figure No. 15). Barite gangue commonly occurs near the top of a Kuroko massive sulphide lens. Other Kuroko-style characteristics of the Frank Creek prospect are stockwork and vein sulphides (suggestive of Kuroko footwall or Keiko mineralization) occurring in Trenches FC07-TR3,4 and 5 (see Figure Nos. 7,8,9). Stringer ore is not commonly associated with Besshi-type deposits.

In 2007 Pb and Zn-Cu rich massive sulphide lenses were discovered in trenches FC07-TR1,4 and 5 associated with a northwest-trending multi-metal soil anomaly located approximately 800m southwest of the original Discovery Showing. The massive sulphide lenses in the new showing are small, the largest, in trench FC07-TR5, is a semi-massive lens approximately 2m x 5m in size. The showing occurs on a multi-element soil geochemical anomaly extending north and is open to the south. This and other multi-element anomaly Trends (see pg. 23) require comprehensive follow up involving drilling, trenching, geophysical and geochemical sampling.

Regional metamorphism and folding have complicated exploration on the Frank Creek Property but the abundant massive sulphide float, widespread occurrences of true Kuroko-style mineralization, textures and geophysical and geochemical signatures strongly recommend perseverance in exploration of this prospect.

12.2 Kangaroo Property

At the Kangaroo Property siltstones and lesser calcareous basalt flows are intruded by an apparently multimodal gabbro-diorite-monzodiorite intrusive containing monzonite xenoliths. The intruded rocks are locally brecciated and hornfelsed. The intrusive is approximately 1 km x 1.8 km on the ground surface. Induced polarization (IP) sections show a north-dipping grain to chargeability and resistivity, suggesting that dip direction for geologic structures, including sedimentary bedding and possibly the intrusive being a sill.

The geophysics suggests the north (hangingwall?) side of the intrusive is more strongly mineralized than the south (footwall?) side. The intruded rocks are strongly mineralized with sulphides as evidenced by outcrops and strong chargeability extending approximately 500m north from the intrusive contact. Locally massive pyrrhotite occurs in hornfelsed rocks close to the intrusive rock. A strong low resistivity anomaly in the intruded rocks extends approximately 400m further north. These chargeability and low resistivity 'fronts' may coincide with alteration fronts that should be drill-tested for gold mineralization.

The Kangaroo Property geology is similar to Cross Lake Minerals' QR Mine to the west where gold ore occurs within 50m of the alteration front around the stock at the mine.

Diamond drilling on the Kangaroo Property in 2007 targeted south-dipping IP anomalies determined in a 3-line test survey done at the west side of the property in 2003. The south side of the intrusive body was also targeted . The best result of the drilling was 15,700 ppb Au over 1.51m in DDH K07-01. This result was not duplicated in a subsequent re-analysis, apparently due to a nugget effect.

The geophysical or alteration 'fronts', especially on the north side of the intrusive should be drill-tested. Soil sampling should be done over the intrusive and outward from it to the perceived limits of the geophysical anomalies. Promising results from this work should lead to an expanded geophysical survey.

12.3 MAG Property

The chargeability anomaly in the survey area is considered sulphidic, not magnetic. A small drill program should test the high metal factor anomaly on Lines 600S and 800S.

13.0 RECOMMENDATIONS

13.1 Frank Creek Property

The cut line grid should be extended south and west from the present L51N to include Barker Minerals Ltd. SCR Property. Comprehensive geochemical and geophysical surveys over the enlarged grid should include enzyme leach soil sampling, prospecting and mapping along the lines and Titan 24 induced polarization surveys. Magnetometer and VLF-EM surveys should be done on the enlarged grid. A gravity survey should be done over selected parts of the existing 2004 Titan 24 grid and possibly over parts of the enlarged grid. Existing roads should be brushed out to ease access by crews to the new work areas.

10,000m diamond drilling should be done in fences in the areas of Trenches FC07-4 and 5 and the enzyme leach soil anomalous Trends 1 – 7. Specific drill locations and targets would be determined from detailed analysis of the extensive geological, geochemical, and geophysical database that now exists.

13.2 Kangaroo Property

The cut line grid, not finished in 2007 due to the onset of bad weather, should be completed and soil samples collected on it. Magnetometer and VLF-EM surveys should be done on the grid.

6,000m diamond drilling should be done concentrating on the north side of the intrusive body. The purpose would be to discover a QR Mine-like skarn gold ore body and to test the possibility for gold porphyry mineralization. The main targets would be the high chargeability and low resistivity 'fronts' but for completeness three 1,000m fences, each comprising about six 300m DDH holes are recommended to test the mineralized intruded rocks and into the intrusive rock as well, a certain distance from the contact. Drilling direction would be southward.

13.3 MAG Property

1,000m diamond drilling should be done, targeting the high metal factor anomalies on Lines 600S and 800S. The purpose would be to determine whether the geophysical anomalies here may be associated with platinum group elements (PGE's). Drilling direction would be southward across the grain of the IP anomalies. Continued prospecting for PGE's is also recommended.

The large size and potential of Barker Minerals Ltd. three properties discussed in this report and their peripheral properties recommend an airborne mag and EM survey be done over these with survey lines 100m apart. The cost of this airborne survey is estimated at $2,000,000.

APPENDIX A

SAMPLE DESCRIPTIONS

SAMPLE DESCRIPTIONS

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

187551 A07-3502 Soil
50m west upstream from start at where overgrown road crosses creek. Grey soil on north bank.

187552 A07-3502 Soil
93m west upstream. Good quality brown soil on south bank.

187553 A07-3502 Soil
127m west upstream. South bank, at edge of forest, near east end of Wolverine Lake. Grey sandy soil.

187554 A07-3502 598402 5838168 Silt
0m where overgrown road crosses creek. Good quality silt.

187555 A07-3502 Soil
50m east downstream from overgrown road. Clayey brown soil on south bank.

187556 A07-3502 Soil
109m east downstream. Good brown soil on south bank.

187557 A07-3502 Soil
158m east downstream. Good soil, greyish brown.

187558 A07-3502 Soil
200m east downstream. Brownish grey soil on south side of trail.

187559 A07-3502 Soil
249m east downstream. Soil on south side of cat trail. Black grey brown, very high in organics.

187560 A07-3502 Soil
300m east downstream. Brown sandy soil on south side of (trail?)

187561 A07-3502 598585 5837971 Soil
350m east downstream. More open at this place. South side of cat trail. Grey brown coarse sandy.

187562 A07-3502 598677 5837958 Soil
383m east downstream. This is 4m off north side of Kangaroo Road, somewhat west of '6km' sign on road. Clayey brown soil at this place.

187563 A07-3502 Soil
50m north along (cat trail?) from car park at junction with road to south. Grey brown sandy soil.

187564 A07-3502 Soil
200m north west along trench. Sandy grey soil in trench.

187565 A07-3502 598745 5837914 Soil
150m mark in trench. Soil in trench.

187566 A07-3502 Soil
114m mark in trench. Soil in trench is grey brown sandy.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

20453 A07-3502 Rock
114m mark in trench. 2cmx6cmx8cm quartz float in trench. Has greyish zones. Copper pyrite speck has blue (covelite) sheen in centre. Same location as Sample No. 187566.

187567 A07-3502 Soil
50m to south east along trench. Brown soil in trench.

85226 A07-3502 590388 5838830 Rock
On road to drillsites, on west side of Kangaroo Creek. Grab of 1m wide crumbly mafic dike.

85227 A07-3502 590388 5838830 Soil
Same location as Sample No. 85226. Just below crumbly dike. Soil is made of dike material.

85228 A07-3502 Rock
1m chip of rusty siltstone. 2% disseminated very fine pyrite. Adjacent to 5m diorite dike with epidote blebs. Not magnetic.

85229 A07-3502 Soil
Soil just below rock Sample No. 85228.

85230 A07-3502 Rock
Grab of rusty siltstone contains 2cm quartz vein parallel to beds. Vein contains quartz drusy vugs.

85231 A07-3502 Rock
Grab of pyritic siltstone. Heavy limorite.

85232 A07-3502 Soil
Soil just below rock Sample No. 85231.

85233 A07-3502 Rock
2m wide light grey felsite dike. Magnetic. Has 5% disseminated pyrrhotite. 1m grab. Dike strikes 55^{o}, dips 70^{o} SE.

85234 A07-3502 Soil
Soil just below Sample No. 85233.

85235 A07-3502 590317 5838873 Soil
At this place is the north west end of outcrop, downhill. Old pink flag at this place says '24+00.'

85236 A07-3502 596019 5837918 Silt
On Kangaroo Road at Wolverine Lake. '69 Au creek'. Silt at road crossing approx 1.2km west south west of west end of Wolverine Lake. Down stream side of road. Good quality silt.

85237 A07-3502 595725 5838021 Rock
1m chip of very rusty outcrop in quarry with abundant exposure. Dark grey black siltstone, not magnetic, has approx 5% disseminated pyrite. No significant veins at this place. Minor quartz.

85238 A07-3502 595725 5838021 Soil
Brown soil at this place. Same location as Sample No. 85327.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85239 A07-3502 Rock
Grab of rusty siltstone float. Approx 5% pyrite. Heavy limonite. This is approx 8m toward 270° from Sample Nos. 85237, 85238.

85240 A07-3502 595694 5838036 Rock
2m chip of rusty pyritic siltstone.

85241 A07-3502 Soil
Brown soil same location as Sample No. 85240.

85242 A07-3502 Rock
1m chip of black rusty siltstone with white crust (hydro-zincite?). This is approx 10m toward 310° from Sample Nos. 85240, 85241. Edge of quarry outcrop at this point, is adjacent to road.

85243 A07-3502 Soil
Brown soil at same location as Sample No. 85242.

85244 A07-3502 594506 5838117 Rock
Boulders at this place with 2cm drusy quartz vein attached to black 5% pyritic siltstone.

85245 A07-3502 594453 5838117 Soil
Brown soil at this place at west end of road cut.

85246 A07-3502 598982 5837794 Silt
Stream sediment at road crossing. Creek comes out at east end of Wolverine Lake.

85247 A07-3502 589368 5837545 Rock
Grab of scree along old road. Rock is rubbly rusty siltstone. Dark grey 2% pyrite. Some outcrop. Mostly Scree. No veins.

85248 A07-3502 589368 5837545 Soil
Brown soil at same location as Sample No. 85247.

85249 A07-3502 589067 5837581 Rock
Float. Mainly diorite float at this place No outcrop. Sample is of a 20cm by 20cm boulder. Yellow brown weathered surface. Heavy jarosite and limonite. 5% pyrite disseminated. Appears as felsite (intrusive?). Light grey. Along an old road.

85250 A07-3502 589068 5837914 Rock
1m chip of very rusty gabbro breccia. Minor quartz veins. Coarse grained 1 cm mafic crystals. This outcrop is approx 10m up road toward 100° from Sample No. 20452.

85251 A07-3502 589068 5837914 Soil
Rusty soil at same location as Sample No. 85250.

85252 A07-3502 588598 5838488 Rock
On road to Kangaroo drillholes K07-3,4. Sample taken of float of pyritic volcaniclastic. Very heavy orange rusty surface, 2% pyrite.

85253 A07-3502 Rock
In big brown quarry on main road, east side. Rusty silicious siltstone has 1m by 20 cm pyritic pocket. Chip from here is 1m parallel to (bedding?) fractures. Minor basaltic (dike?) at this place.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85254 A07-3502 589074 5838144 Rock
Kangaroo property. Siltstone at west side of quarry. 6 parallel fractures are rusty with small quartz veins. Composite grab from rusty fractures.

85255 A07-3502 589232 5838138 Rock
'4km' post, flag 'Kang 05605,' rusty sub outcrop and outcrop at this point. 5% pyrite is disseminated. Not magnetic. Orange 45cm fragile angular felsite boulder here is light grey, rusty.

85256 A07-3502 589428 5838075 Rock
Outcrop is on both sides of road at this place. Old pink flag '6+00' at this place. Representative grab of gabbro, coarse grtained, black. Cut by 1m basaltic dike. Dike strikes 50°, dips vertical.
Weakly rusty outcrop.

85257 A07-3502 590054 5837972 Rock
Pink flag '13+25' at this place. Siltstone, very rusty. Magnetic with pyrrhotite. 20cm sample taken of very rusty siltstone between fractures. This is a small outcrop approx 10m to west of larger, continuous diorite outcrop, less rusty. Siltstone bedding strikes 95°, dips 65° south. Fracture set strikes 24°, dips vertical.

85258 A07-3502 597070 5838193 Rock
At Wolverine Lake. At start of branch road to south west. Several quartz vein boulders at this place. 60cm by 30cm boulder, slight rust. Grab of quartz float taken. This is near km 8 on Kangaroo Road.

85259 A07-3502 590057 5837985 Soil
Same location as Sample No. 85257.

85260 A07-3502 590088 5838005 Rock
1m chip of dark grey black siliceous siltstone. Very rusty. 2% disseminated pyrite.

85261 A07-3502 590088 5838005 Rock
1m chip of green grey diorite. Very rusty. 1% pyrite. Same location as Sample No. 85260.

85262 A07-3502 590088 5838005 Soil
Same location as Sample No. 85261. Brown soil.

85263 A07-3502 590103 5838018 Rock
2m chip parallel to diorite-siltstone contact. Siltstone is dark grey, siliceous, very rusty, 2% disseminated pyrite. Bedding strikes 135°, dips vertical.

85264 A07-3502 590103 5838018 Soil
Same location as Sample No. 85263. Brown soil.

85265 A07-3502 590103 5838018 Rock
Grab of very pyritic rusty siliceous siltstone. 5% pyritic.

85266 A07-3502 590118 5838046 Rock
1m chip parallel to diorite-siltstone contact. Very rusty pyritic siltstone.

85267 A07-3502 590118 5838046 Soil
Same location as Sample No. 85266. Brown soil.

85268 A07-3502 590175 5838123 Rock
Grab of rusty siltstone includes 2cm jarasitic fracture. Fracture strikes 83°, dips vertical.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85269 A07-3502 590175 5838123 Soil
Same location as Sample No. 85268. Brown soil.

85270 A07-3502 589957 5838587 Rock
50cm chip of black, graphitic, very rusty siltstone.

85271 A07-3502 589957 5838587 Soil
Same location as Sample No. 85271. Brown soil.

85272 A07-3502 589874 5838542 Rock
40cm x 2m outcrop. Good bedding. Bedding strikes 15°, dips 30° east. 40cm chip across bedding.

85273 A07-3502 589874 5838542 Soil
Same location as Sample No. 85273. Brown soil.

85274 A07-3502 590349 5838548 Rock
5m x 10m outcrop. Very rusty siltstone. 5% pyritic. 1.1m chip across bedding includes 4mm thick concordant layer of 60% pyrite. Fair bedding. Bedding strikes 50°, dips 62° SE.

85275 A07-3502 590349 5838548 Soil
Same location as Sample No. 85274. Brown soil.

85276 A07-3502 590349 5838548 Rock
10% pyritic float. Weakly magnetic. Contains pyrrhotite. Pyrite occurs disseminated, mostly in stringers. Same location as Sample No. 85274.

85277 A07-3502 590260 5838805 Rock
Very rusty 30m outcrop at this place. 5m thick non-magnetic diorite with dark grey well bedded siltstone either side. 1m chip of siltstone perpendicular to beds, from top of outcrop toward road.

85278 A07-3502 590260 5838805 Rock
1m chip of siltstone perpendicular to beds, toward road from Sample No. 85277.

85278A A07-3502 590260 5838805 Rock
3cm vuggy quartz vein parallel to bedding, occurs within Sample No. 85278 interval.

85279 A07-3502 590260 5838805 Rock
1m chip of siltstone perpendicular to beds, toward road from Sample No. 85278.

85280 A07-3502 590260 5838805 Rock
1m chip of siltstone perpendicular to beds, toward road from Sample No. 85279.

85281 A07-3502 590260 5838805 Soil
Same location as Sample No. 85277. Brown soil.

85282 A07-3502 590260 5838805 Rock
10cm quartz float has blue quartz and vugs. Similar small quartz veins cut the diorite near SE end of the adjacent outcrop.

85283 A07-3502 590675 5838665 Rock
3m x 10m outcrop of black very rusty graphitic siltstone with small diorite body in contact.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type
85284	A07-3502	590675	5838665	Soil
Same location as Sample No. 85283. Brown soil.				
85285	A07-3502	590872	5838636	Soil
85287	A07-3502	593732	5837639	Silt
'69 Au creek'. Muddy with good silt.				
85289	A07-3502	593968	5836895	Rock
Very rusty dark grey black siltstone in quarry. Locally shaley, friable. Representative grab of siltstone. Bedding strikes 152°, dips 67° SW. Diorite outcrop is nearby.				
85290	A07-3502	593968	5836895	Soil
Same location as Sample No. 85289. Brown soil.				
85292	A07-3502	589035	5841454	Rock
Moderately rusty dark grey siltstone in quarry. Bedding strikes 162°, dips vertical.				
85293	A07-3502	589035	5841454	Soil
Same location as Sample No. 85292. Brown soil.				
85295	A07-3502	590086	5843461	Rock
Grab from 9cm wide white quartz vein in sandstone. Some diorite in quarry here but dominant rock is sandstone. Abundant quartz float at this place. Little rust. Vein strikes 190°, dips 80° west.				
85296	A07-3502	590086	5843461	Soil
Same location as Sample No. 85295. Brown soil.				
85298	A07-3502	5895570	5840449	Soil
Brown soil taken atop diorite outcrop. No rust, not magnetic.				
85299	A07-3502	588863	5840161	Silt
Muddy, sandy.				
85302	A07-3502			Silt
Organicy silt. Little Creek.				
85303	A07-3502			Silt
Clayey grey silt. Little Creek.				
85304	A07-3502			Silt
Sandy grey silt. Little Creek.				
85305	A07-3502			Silt
Clayey grey silt. Little Creek.				
85306	A07-3502			Silt
Sandy brown silt. Little Creek.				
85307	A07-3502			Silt
Brown muddy, sandy silt. Little Creek.				

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

20454 A07-3502 588798 5837881 Rock
Kangaroo grid 'L0 810N'. Outcrop cleared by bulldozer near 5,000 ppb Au anomaly. Medium grained, medium greenish grey diorite with epidote veinlets. Strongly magnetic apparently due to magnetite. 1m representative grab. Epidote veins strike 140°, dip 35° NE and 25°, dip 65° SE.

20455 A07-3502 588798 5837881 Rock
Float of diorite or andesite on north side of outcrop, slightly finer grained, lighter. Is likely localy derived. Sericitized, 5% blebby pyrite, not magnetic. Same location as Sample No. 20454.

20456 A07-3502 588798 5837881 Rock
Grab of angular andesite or diorite float on north side of outcrop. 5% blebby pyrite, not magnetic. Epidote occures blebby and in veinlets. Has small patches of malachite (or fuschite?). Minor chalcopyrite. Same location as Sample No. 20454.

20457 A07-3502 588798 5837881 Rock
Float. 1cm blue quartz vein attached to diorite. Small angular piece. Same location as Sample No. 20454.

20458 A07-3502 588798 5837881 Rock
12cm quartz vein float. White quartz has 13mm bluish quartz vein cutting it and siltstone. Very angular clasts. Quartz vein breccia. Drusy vugs with blackish (M_nO_2?) coatings. The blue quartz vein has limonite attached. Same location as Sample No. 20454.

20459 A07-3502 588798 5837881 Rock
10cm quartz vein float. Very bluish quartz. Rounded stone. Drusy vugs, minor rust. Same location as Sample No. 20454.

20460 A07-3502 Rock
Kangaroo grid 'L0 750N'. Rusty volcaniclastic with heavy red hematite.

20461 A07-3502 Rock
15m south of Kangaroo drillhole K07-2. 60cm quartz vein boulder. White quartz with red hematite stain.

20462 A07-3502 Silt
Silt with some sand and gravel. This is 25m toward 60° from 599037E 5837143N.

20463 A07-3502 593829 5839388 Rock
Grab from 1m x 1m outcrop of moderately rusty andesitic volcaniclastic.

20464 A07-3502 593829 5839388 Soil
Same location as Sample No. 85263. Brown soil.

20465 A07-3502 593829 5839388 Rock
Grab from outcrop. Very rusty siltstone with 5% pyrite. Quarry on Little Creek Road has 6 ft deep pond.

20466 A07-3502 593829 5839388 Rock
1m chip from middle outcrop. Bedded, very rusty siltstone with 5% pyrite, trace chalcopyrite. No veins, some hematite. Same location as Sample No. 20465.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

20467 A07-3502 593829 5839388 Rock
Grab from lower outcrop. Volcaniclastic adjacent to crystaline black basalt dike or sill. Basalt is not magnetic, 1m wide, contains rounded xenoliths of sandstone. Basalt strikes 145^{o}, dip vertical. Same location as Sample No. 20465.

20468 A07-3502 593829 5839388 Rock
Grab from 40cm quartz boulder. Minor hematite. Same location as Sample No. 20465.

20469 A07-3502 593829 5839388 Soil
Orangey brown soil from atop outcrop in quarry. Same location as Sample No. 20465.

20470 A07-3502 592974 5840465 Silt
Small spring with fair flow. Higher up on same stream as Sample No. 85312.

20472 A07-3502 589421 5839199 Soil
Orangey brown soil atop pile of andesitic rubble.

20473 A07-3502 591683 5839479 Rock
Representative grab over 2m of rusty bluish grey volcaniclastic. No bedding. 5% pyrite. Malachite. West end of Little Creek Road at this place.

20474 A07-3502 591683 5839479 Soil
Same location as Sample No. 20473. Brown soil.

20475 A07-3502 591683 5839479 Rock
Grab of rusty volcaniclastic. Minor chalcopyrite. Same location as Sample No. 20473.

20476 A07-3502 591683 5839479 Rock
Grab of hematitic quartz float up to 30cm. Same location as Sample No. 20473.

85308 A07-4245 595444 5837662 Silt
'69 Au creek'. Organicy mud. Good water flow.

85309 A07-4245 594550 5837497 Silt
'69 Au creek'. Muddy with good silt. Not boggy.

85310 A07-4245 593052 5837428 Silt
'69 Au creek'. Gravelly, muddy silt.

85311 A07-4245 Silt
Muddy brown silt at where Kangaroo Road crosses Little Creek.

85312 A07-4245 593081 5839672 Silt
Grey clayey silt. Lower down on same stream as Sample No. 20470.

85313 A07-4245 588549 5839557 Silt
Muddy, brown silt.

85314 A07-4245 590238 5841975 Silt
Orangey brown silt.

85315 A07-4245 591166 5842635 Silt
Gravelly, clayey, light brown grey silt.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85316 A07-4245 609775 5845096 Rock
Grab from massive sulphide boulder adjacent to Frank Creek test hole FC07-TH6, now trench FC07-TR5. Massive pyrite with galena, sphalerite in foliated, bluish, very siliceous, altered, silicified, non-magnetic rock.

85317 A07-4245 609775 5845096 Rock
Grab from float, same location as Sample No. 85316. Sulphide rich rock contains galena and sphalerite.

85318 A07-4245 Rock
Grab from pile adjacent to Frank Creek test hole FC07-TH7, now trench FC07-TR5, near same location as Sample No. 85316. Rusty bedrock in test hole bottom could not be reached. Semi massive pyrite and 2cm stringers in quartz vein breccia. Bluish silicified rock is foliated.

85319 A07-4245 Rock
Grab from pile, same location as Sample No. 85318. 2cm quartz vein contains pyrite, minor chalcopyrite.

85320 A07-4245 Rock
Grab from pile adjacent to Frank Creek test hole FC07-TH8, now trench FC07-TR5. Rusty bedrock in test hole bottom could not be reached. Specks of fuschite and 1cm pyrite stringers in greenish volcaniclastic.

85321 A07-4245 Rock
Grab from pile same location as Sample No. 85320. Very rusty, hematitic, deeply weathered boulder has galena with bluish quartz veinlets.

85322 A07-4245 Rock
Grab from same location as Sample No. 85321. Sample of the hematitic rust.

85323 A07-4245 609727 5845215 Rock
Grab from pile adjacent to Frank Creek test hole FC07-TH1. Bedrock in test hole bottom could not be reached. Bluish quartz vein attached to schist has pyrite, galena. Not very rusty.

85324 A07-4245 609727 5845215 Rock
Grab from pile same location as Sample No. 85323. Very rusty silicified rock with many pyrite stringers and minor galena blebs.

85325 A07-4245 Rock
1.0m chip from Frank Creek trench FC07-TR2, downhill side of trench FC07-TR5. Heavily weathered, punky, greenish grey, silicified volcanic. Contains 20cm of semi massive pyrite. 20% sulphide overall. Hematite is abundant in weathered rock here. Foliation strikes 175^{o}, dips 30^{o} west.

85326 A07-4245 Rock
1.0m chip from Frank Creek trench FC07-TR2. Contains disseminated and 1cm stringers of pyrite. 10% sulphide overall. Galena, sphalerite. Local 5cm blebs of pyrite strung out parallel to schistosity. Punky, greenish grey, silicified rock. Very rusty. Hematitic.

85327 A07-4245 Rock
1.0m chip from Frank Creek trench FC07-TR2. Contains disseminated and stringers of pyrite. 5% sulphide overall. Sphalerite. Contains 10cm of semi massive pyrite. Foliation strikes 164^{o}, dips 55^{o} west.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85328 A07-4245 Rock
1.0m chip from Frank Creek trench FC07-TR2. Contains 20cm massive siliceous layer. Bluish schist at this place has 3mm white and bluish quartz eyes or pebbles and 10% pyrite in stringers and disseminated. Hangingwall is intensely fractured parallel to schistosity (bedding?). Strong hematite alteration, wisps parallel to rock fabric.

85329 A07-4245 Rock
1.1m chip from Frank Creek trench FC07-TR2. Strongly hematitic and limonitic. 5% pyrite in small stringers and disseminated. Contains 32cm massive sulphide layer, fine grained, weakly banded parallel to schistosity. Mostly fine granular pyrite. Very minor chalcopyrite associated with 2cm quartz veinlets parallel to schistosity. Foliation and contact with rock in Sample No. 85330 strikes 166^{o}, dips 40^{o} west.

85330 A07-4245 Rock
1.1m chip from Frank Creek trench FC07-TR2. Grey quartz mica schist, more massive, blocky, less chloritic than above rocks. Contains numerous red hematized pyrite cubes. 2-5% pyrite in cubes and stringers.

85331 A07-4245 Rock
0.5m chip from Frank Creek trench FC07-TR2. Same rock type as in Sample No. 85330. 2-5% pyrite in cubes and stringers.

85332 A07-4245 Rock
32cm chip from Frank Creek trench FC07-TR2 of massive pyrite layer with some chalcopyrite within Sample No. 85329.

85333 A07-4245 Rock
10cm chip from Frank Creek trench FC07-TR2 of semi massive pyrite layer within Sample No. 85327.

85334 A07-4245 Rock
1.5m chip from Frank Creek trench FC07-TR1, downhill side of trench FC07-TR2. Strongly foliated, fractured rock. Volcanic. Rusty weathering, hematitic. 5% pyrite mainly in stringers.

85335 A07-4245 Rock
1.35m chip from Frank Creek trench FC07-TR1. Foliated grey volcanic. Crossed by 1-3cm quartz veins. 5% pyrite mainly in stringers. Foliation strikes 160^{o}, dips 40^{o} west.

85336 A07-4245 Rock
1.5m chip from Frank Creek trench FC07-1. Punky foliated volcanic. Quartz veins more common, 1% of rock at this place, often parallel to foliation, a weak stockwork. Sphalerite?

85337 A07-4245 Rock
1.1m chip from Frank Creek trench FC07-TR1. Semi to massive sulphide. Mostly pyrite. Not magnetic. Has left 3” deep scar as if digging in ice cream.

85338 A07-4245 Rock
1.0m chip from Frank Creek trench FC07-TR1. Semi to massive sulphide. Mostly pyrite, minor chalcopyrite. Blocky, competent rock. Hematitic.

85339 A07-4245 Rock
1.2m chip from Frank Creek trench FC07-TR1. Shattered, weathered (volcanic?).

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85340 A07-4245 609672 5845200 Rock
Grab of pyritic quartz vein from pile adjacent to Frank Creek test hole FC07-TH2, now trench FC07-TR4a. Main rock here is hematitic incompetent volcanic. Sphalerite. Rusty.

85342 609778 5845143 Rock
Representative example of 'quartz eye tuff ' schist at north end of trench FC07-TR5, adacent to 'lone poplar'. Dominant rock type at this location. Sample for thin section study, see Appendix F.

85343 609774 5845098 Rock
Float collected from wide area of trench FC07-TR5. Appears to be 'quartz eye tuff ' schist with massive pyrite vein attached. Sample for thin section study, see Appendix F.

85344 Rock
From trench FC07-TR2. A finer grained more strongly sheared version of Sample No. 85330. Sample for thin section study, see Appendix F.

85345 Rock
From trench FC07-TR1. Greenish chloritized version of 'quartz eye tuff' schist associated with massive sulphide at Sample No. 85337. Can perhaps be a 'chloritite' alteration associated with a root zone to a massive sulphide? Sample for thin section study, see Appendix F.

85347 Rock
From between trenchs FC07-TR1 and FC07-TR2 before these were joined. Chloritized 'quartz eye tuff' with massive sulphide attached. Sample for thin section study. Sample for thin section study, see Appendix F.

85348 A07-4674 609803 5845198 Rock
Representative grab from Frank Creek test hole FC07-TH3, now trench FC07-TR4a. Semi massive pyrite stringers in hematitic, rusty rock.

85349 A07-4674 610622 5845642 Rock
Grab of white quartz vein from pile beside Frank Creek test hole FC07-TH13. 50cm vein in black graphitic schist visible in test hole, striking approximately 90^{o}, dipping 30^{o} north. Bedrock in test hole bottom could not be reached.

85350 A07-4674 610622 5845642 Rock
Same location as Sample No. 85349. Grab of quartz-Fe carbonate vein breccia. Small grey specks in the vein may be sphalerite.

85351 A07-4674 610622 5845642 Rock
Same location as Sample No. 85349. Grab. Contact between quartz vein and very limonitic schist.

85352 A07-4674 610622 5845642 Rock
Same location as Sample No. 85349. Grab of rusty schist containing specks of dark green fuschite.

85353 A07-4674 Rock
Representative grab of dark grey schist with minor Fe carbonate veins in Frank Creek test hole FC07-TH14, near FC07-TH13.

85354 A07-4674 Rock
1.0m chip from Frank Creek trench FC07-TR3. Grey sericitic phyllite. Contains narrow seams of dark reddish hematite. Hematite also appears as an alteration of blebby and cube pyrite. No veins. Pervasive sericitization. Punky, very friable parallel to foliation. Very little rust.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85355 A07-4674 Rock
1.0m chip from Frank Creek trench FC07-TR3. Grey sericitic phyllite. Half of interval is hematitic. No veins. Punky.

85356 A07-4674 Rock
1.0m chip from Frank Creek trench FC07-TR3. Grey phyllite. Spottily hematitic. No veins. Punky, very friable. Minor pyrite cubes.

85357 A07-4674 Rock
1.0m chip from Frank Creek trench FC07-TR3. Light grey phyllite. Locally very hematitic. No veins. Punky. Sample is adjacent to a fault or shear.

85358 A07-4674 Rock
1.1m chip from Frank Creek trench FC07-TR3. Grey phyllite. Somewhat hematitic. No veins. Sericitic. Yellowish limonite at a few fractures. Sample is adjacent to a fault or shear.

85359 A07-4674 Rock
1.0m chip from Frank Creek trench FC07-TR3. Silicified light bluish grey phyllite. Blocky rock. Locally very punky, hematitic, limonitic along shears. Fault or shear zone appears slightly more east-west orientation than the foliation (see orientations in Sample No. 85360). Several 5-10mm pyrite stringers are parallel to foliation. Sericitic. 5% quartz veinlets.

85360 A07-4674 Rock
70cm chip from Frank Creek trench FC07-TR3. Silicified light blue grey phyllite. More massive, blocky, more pyritic than Sample No. 85359. Less quartz veinlets. Local hematite and limonite. Pyrite is in cubes and stringers parallel to foliation. Fault or shear zone strikes 128^{o}, dips 25^{o} SW. Foliation strikes 162^{o}, dips 40^{o} SW.

85361 A07-4674 Rock
60cm chip from Frank Creek trench FC07-TR3. Grey sericitic phyllite. Punky. Less hematitic. 3% quartz veins. Some vein breccia. Some green clasts in breccia may be fuschite.

85362 A07-4674 Rock
Grab of hematitic portion within Sample No. 85355 interval.

85363 A07-4674 Rock
Grab of hematitic portion within Sample No. 85356 interval.

85364 A07-4674 Rock
Grab of hematitic portion within Sample No. 85357 interval.

85365 A07-4674 Rock
Grab of silicified, limonitic, sericitic shear zone within sample No. 85359.

85366 A07-4674 Rock
Grab of silicified quartz vein float from Frank Creek trench FC07-TR3.

85367 A07-4674 610383 5845660 Rock
Grab from bedrock in Frank Creek test hole FC07-TH15, now trench FC07-TR3. Silvery grey siliceous schist. Minor pyrite and limonite on fractures. Minor quartz veins.

85368 A07-4674 610383 5845660 Rock
Grab of blue quartz vein on pile adjacent to test hole FC07- TH15, now trench FC07-TR3.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85369 A07-4674 610404 5845669 Rock
Grab from pile adjacent to Frank Creek test hole FC07-TH16, now trench FC07-TR3. Blue quartz vein with 5% pyrite and rusty hematitic wallrock attached. No significant hematite.

85370 A07-4674 610404 5845669 Rock
Grab from pile, same location as Sample No. 85369. Hematitic quartz vein breccia.

85371 A07-4674 610428 5845668 Rock
Grab from bedrock in Frank Creek test hole FC07-TH17. Bluish quartz vein with minor pyrite and hematitic fractures.

85372 A07-4674 610450 5845668 Rock
Grab from pile adjacent to Frank Creek test hole FC07-TH18. Quartz carbonate vein with 5% pyrite.

85373 A07-4674 610450 5845668 Rock
Grab from pile, same location as Sample No. 85372. Bluish quartz vein with specs of galena or sphalerite.

85374 A07-4674 610450 5845668 Rock
Representative grab from pile adjacent to Frank Creek test hole FC07-TH18. Siliceous silvery phyllite. No significant veining.

85375 A07-4674 610468 5845659 Rock
Representative grab from Frank Creek test hole FC07-TH19. Dark grey schist. Red hematitic cubes are from pyrite. Rounded red hematitic blasts may not be pyrite?

85376 A07-4674 610483 5845665 Rock
Grab of dark grey (graphitic?) phyllite from Frank Creek test hole FC07-TH20. Contains 4mm hematite seam and 3mm quartz veinlet. Contains rounded red hematitic blasts similar to Sample No. 85375.

85377 A07-4674 610501 5845665 Rock
Grab of bluish pyritic quartz vein from Frank Creek test hole FC07-TH21.

85378 A07-4674 610501 5845665 Rock
Grab of rusty grey phyllite from Frank Creek test hole FC07-TH21. Contains many rounded red hematitic blasts similar to Sample No. 85375.

85379 A07-4674 610515 5845650 Rock
Grab of silvery medium grey phyllite from Frank Creek test hole FC07-TH22. Contains minor quartz veins. Very minor hematite, less red blasts.

85380 A07-4674 610524 5845662 Rock
Grab of dark grey (graphitic?) phyllite from Frank Creek test hole FC07-TH23. Finely bedded. Some fine layers seem black, graphitic. Reddish hematite is spotty, common. Very little quartz veining.

85381 A07-4674 610540 5845659 Rock
Grab from pile adjacent to Frank Creek test hole FC07-TH24. Greenish grey phyllite. No significant pyrite or red blasts. Contains 1mm dark grey ‘braids’ of (graphite?).

85382 A07-4674 609727 5845215 Rock
Grab from pile adjacent to Frank Creek test hole FC07-TH1. Pyrite, chalcopyrite, sphalerite in chloritic altered silicified rock. Same location as Sample No. 85323.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85383 A07-5490 609672 5845200 Rock
Grab of 4cm quartz vein in Frank Creek trench FC07-TR4a. Vein occurs in mainly non-rusty quartz muscovite schist. Vein strikes 37°, dips vertical. Foliation strikes 146°, dips 19° SW.

85384 A07-5490 609672 5845200 Rock
1.0m chip from Frank Creek trench FC07-TR4a. Very rusty sheared rock contains 1cm blue grey quartz veins. Rock is a greenish chloritized schist. A fault or shear zone is semi-parallel to the tren trend. Shear zone strikes 135°, dips 21° SW. Contains galena, sphalerite, lesser chalcopyrite. Pyrite occurs as blebs and stringers parallel to shearing.

85385 A07-5490 Rock
40cm chip from Frank Creek trench FC07-TR4a of chloritic, siliceous volcanic. Some pyrite in fractures.

85386 A07-5490 Rock
Grab from Frank Creek trench FC07-TR4a, same place as Sample No. 85385. 10cm of hangingwall to shear zone. Quartz vein breccia mixed with pyritic wall rock.

85387 A07-5490 Rock
35cm chip from Frank Creek trench FC07-TR4a, same place as Sample No. 85385. 35cm massive pyrite lens with minor galena.

85388 A07-5490 Rock
45cm chip from Frank Creek trench FC07-TR4a, same place as Sample No. 85385. 45cm of footwall to shear zone. Rusty volcanic has pyrite stringers in fractures with minor quartz veinlets.

85389 A07-5490 Rock
1.1m chip from Frank Creek trench FC07-TR4a. Quartz veined shear zone in chloritic volcanic schist. Rusty. Has discontinuous 2-10cm lenses of pyrite.

85390 A07-5490 Rock
Grab of massive pyrite from within Sample No. 85389. Shear zone at this place strikes 80°, dips 25° south.

85391 A07-5490 Rock
18cm chip from Frank Creek trench FC07-TR4a. Pyritic quartz vein breccia in shear. Contains galena. Vein strikes 93°, dips 80° south.

85392 A07-5490 Rock
50cm chip from same location as Sample No. 85391. Hangingwall to shear zone. Very pyritic, with quartz veins. Quartz mica schist.

85393 A07-5490 Rock
Grab from 25cm x 45cm quartz boulder from near same location as Sample No. 85391. Blue grey quartz with minor pyrite on selvage and hematite in fractures.

85394 A07-5490 609774 5845098 Rock
35cm grab over 2.2m x 5m semi massive pyrite lens in Frank Creek trench FC07-TR5. This massive outcrop is too difficult to sample without a saw. Schistosity strikes 115°, dips 32° SW.

85395 A07-5490 Rock
20cm chip in Frank Creek trench FC07-TR5. Abundant pyrite stringers with blue grey quartz veins in greenish schist. Rock saw needed here.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

85396 A07-5490 Rock
Grab from Frank Creek trench FC07-TR5 at same location as Sample No. 85395. 6cm quartz vein with pyrite, hematite, and (galena?). Vein is parallel to schistosity. Schistosity strikes 151°, dips 30° SW.

85397 A07-5197 610343 5845661 Rock
Grab from pile adjacent to Frank Creek trench FC07-TR3 7m from east end. 6cm quartz vein in light green sericitic phyllite. Rusty.

85398 A07-5197 610365 5845661 Rock
1.5m chip in Frank Creek trench FC07-TR3. Weakly hematitic phyllite with small pyrite stringers.

85399 A07-5197 Rock
65cm chip in Frank Creek trench FC07-TR3. Silicified 'pod' in phyllite. Rusty, pyritic. Stockwork of 5-10mm coarse pyrite stringers with galena and sphalerite.

85400 A07-5197 Rock
Grab from 40cm boulder adjacent to Frank Creek trench FC07-TR3 near west end of trench. Heavily pyritic stringer with much hematite. Chloritized and sericitised green volcaniclastic rock.

86001 A07-5786 609769 5845192 Rock
20cm chip from Frank Creek trench FC07-TR4a. This is at crossing with trench FC07-TR4b. Massive volcanic rock containing white (barite?) layer. Minor pyrite stringer. Thin section study does not indicate the presence of barite, see Appendix A.

86002 A07-5786 Rock
20cm chip from Frank Creek trench FC07-TR4b. Appears a baritic layer. Sugary, white texture. Contains some pyrie stringers. Light greenish rock above and below. Schistosity (bedding?) strikes 120°, dips 25° SW. Thin section study does not indicate the presence of barite, see Appendix A.

86003 A07-5786 Rock
22cm chip from Frank Creek trench FC07-TR4b. Rock appears an intermediate tuff. Pyritic stringers parallel to schistosity. Relatively abundant fuschite.

86004 A07-5786 Rock
15cm grab from Frank Creek trench FC07-TR4b, same location as Sample No. 86003. 15cm wide silicified fracture zone with fuschite, pyrite.

86005 A07-5786 609785 5845130 Rock
Grab over 90cm in Frank Creek trench FC07-TR5 near north end of trench. Chloritic quartz eye tuff with pyrite stringers parallel to foliation. Minor fuschite.

86006 A07-5786 Rock
30cm grab from Frank Creek trench FC07-TR5. Pyritic greenish volcanic with minor sphalerite. This is near sawcut semi-massive pyritic lens.

86007 A07-5786 Rock
30cm grab from Frank Creek trench FC07-TR5. Pyritic greenish volcanic with minor sphalerite. Near Sample No. 86006 location.

86008 A07-5786 Rock
Grab from Frank Creek trench FC07-TR5. At base of 2m x 5m semi-massive pyrite lens. Pyritic stringers, locally massive lenses in schist.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type

86009 A07-5786 Rock
Representative grab over 2.0m from Frank Creek trench FC07-TR5 at same location as Sample No. 86008. Pyrite stringers, locally massive lenses in quartz muscovite schist.

86010 A07-5786 Rock
Representative grab over 1.0m from Frank Creek trench FC07-TR5. Pyritic schist. Near west end of trench.

86011 A07-5786 Rock
Grab from 90cm boulder on pile adjacent to Frank Creek trench FC07-TR5, near Sample No. 86008. Massive pyrite occurs with minor sphalerite and galena in very limonitic rock.

86012 A07-5786 Rock
Grab from 40cm boulder at same location as Sample No. 86011. Massive pyrite occurs with minor sphalerite and chalcopyrite and quartz in limonitic rock.

86013 A07-5786 Rock
1.5m representative chip in Frank Creek trench FC07-TR1. Dark green chloritized quartz eye tuff.

86014 A07-5786 Rock
Grab from 40cm boulder on pile adjacent to Frank Creek trench FC07-TR1. Very rusty, limonitic with massive pyrite. Somewhat hematitic.

86015 A07-5786 Rock
1.0m chip in Frank Creek trench FC07-TR1. Sheared chloritic quartz eye tuff.

86016 A07-5786 Rock
1.6m chip in Frank Creek trench FC07-TR1. Sheared chloritic quartz eye tuff.

86017 A07-5786 609743 5845160 Rock
35cm chip in Frank Creek trench FC07-TR1. Pyritic chloritite. Sheared. Hematitic.

F5707-04 A07-5684 Rock
Grab from trench FC07-TR3.

F5707-05 A07-5684 Rock
Grab from trench FC07-TR3.

F5707-06 A07-5684 Rock
Grab from trench FC07-TR3.

F5707-07 A07-5684 Rock
Grab from trench FC07-TR3.

F5707-08 A07-5684 Rock
Grab from trench FC07-TR3.

F5707-09 A07-5684 Rock
Grab from trench FC07-TR3.

F5707-10 A07-5684 Rock
Grab from trench FC07-TR3.

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type
F5707-11	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-12	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-13	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-14	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-15	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-16	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-17	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-18	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-19	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-20	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-21	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-22	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-23	A07-5684			Rock
Grab from trench FC07-TR3.				
F5707-24	A07-5684			Rock
Grab from trench FC07-TR3.				
F51MTR-01	A07-5684			Rock
Grab from trench FC07-TR2.				
F51MTR-02	A07-5684			Rock
Grab from trench FC07-TR2.				
F51MTR-03	A07-5684			Rock
Grab from trench FC07-TR2.				
F51UTR-01	A07-5684			Rock
Grab from trench FC07-TR5.				

Sample No.	ActLabs Certificate	Location (NAD83) Easting	Northing	Sample Type
F51UTR-02	A07-5684			Rock
Grab from trench FC07-TR5.				
F51UTR-03	A07-5684			Rock
Grab from trench FC07-TR5.				
F51UTR-04	A07-5684			Rock
Grab from trench FC07-TR5.				
F51UTR-05	A07-5684			Rock
Grab from trench FC07-TR5.				
F51UTR-06	A07-5684			Rock
Grab from trench FC07-TR5.				
F51UTR-07	A07-5684			Rock
Grab from trench FC07-TR5.				
F51UTR-08	A07-5684			Rock
Grab from trench FC07-TR5.				
F51UTR-09	A07-5684			Rock
Grab from trench FC07-TR5.				
TR5201-11	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-12	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-13	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-14	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-15	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-16	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-17	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-18	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-19	A07-5684			Rock
Grab from trench FC07-TR4A.				
TR5201-20	A07-5684			Rock
Grab from trench FC07-TR4A.				

APPENDIX B

ANALYTICAL METHODS

Code 1C-Exploration

A 30 g sample is weighed, mixed with fire assay fluxes and fused at 1050°C for 1 hour. After cooling the lead button is separated from the slag and cupelled at 1000°C to recover the Ag (doré bead) + Au, Pt, Pd. The Ag doré bead is digested in hot (95°C) HNO_3 + HCl. After cooling for 2 hours the sample solution is analyzed for Au, Pt, Pd by ICP-OES. Smaller sample splits are used for high chromite or sulphide samples to ensure proper fluxing and metal recoveries.

Note: If values exceed upper limits, reanalysis by fire assay Au, Pt, Pd (Code 8) is recommended.

Code 1C-Exploration Elements and Detection Limits (ppb)

Element	Detection Limit	Upper Limit
Au	2	10,000
Pt	5	10,000
Pd	4	10,000

References:

Hoffman, Eric L. and Dunn, Bernie. Sample Preparation and Bulk Analytical Methods for PGE.

Hoffman, Eric L., Clark, John R. and Yeager, James R., 1998. Gold Analysis – Fire Assaying and Alternative Methods. *Explor. Mining Geology*, Volume 7, Nos. 1 and 2, pp. 155-160.

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Code 1H – Au + 48

INAA Portion

An approximately 30 g aliquot, if available, is encapsulated and weighed in a polyethylene vial and irradiated with flux wires and an internal standard (1 for 11 samples) at a thermal neutron flux of 7 x 10^{12} n cm^{-2} s^{-1}. After a seven day decay to allow Na-24 to decay the samples are counted on a high purity Ge detector with a resolution of better than 1.7 KeV for the 1332 KeV Co-60. Using the flux wires the decay corrected activities are compared to a calibration developed from multiple certified international reference materials. The standard present is only a check on accuracy of the analysis and is not used for calibration purposes. From 10-30% of samples are rechecked by re-measurement.

Further details are available on isotopes and gamma-ray energies used in Hoffman, E.L., 1992. Instrumental Neutron Activation in Geoanalysis. Journal of Geochemical Exploration, volume 44, pp. 297-319.

Total Digestion - ICP Portion

A 0.25 g sample is digested at 260°C with four acids beginning with hydrofluoric, followed by a mixture of nitric and perchloric acids, heated using precise programmer controlled heating in several ramping and holding cycles which takes the samples to dryness. After dryness is attained, samples are brought back into solution using aqua regia. With this digestion certain phases may be only partially solubilized. This leach is partial for magnetite, chromite, barite, spinels, zircon and massive sulphides. The solutions are analyzed using either a Varian VISTA PRO, Varian 735-ES or Perkin Elmer OPTIMA 3000 Radial ICP.

Code 1H (Au + 48) Elements and Detection Limits (ppm)

Element	Detection Limit	Upper Limit
Au	2 ppb	30,000 ppb
Ag†	0.3	100,000
Al*	0.01%	
As	0.5	10,000
Ba†	1	
Be	1	
Bi	2	
Br	0.5	
Ca	0.01%	
Cd	0.3	2,000
Ce	3	10,000
Co	1	5,000
Cr	2	100,000
Cs	1	
Cu	1	1,000
Eu	0.2	10,000
Fe	0.01%	
Hf	1	
Hg	1	
Ir	5 ppb	10,000 ppb
K	0.01%	
La	0.5	10,000

Lu	0.05	10,000
Mg	0.01%	
Mn	1	100,000
Mo†	1	10,000
Na	0.01%	
Nd	5	10,000
Ni†	1	100,000
P	0.001%	
Pb*	3	5,000
Rb	15	
S	0.01%	20%
Sb	0.1	10,000
Sc	0.1	
Se	3	
Sm	0.1	10,000
Sn	0.01%	
Sr	1	
Ta	0.5	10,000
Tb	0.5	10,000
Th	0.2	10,000
Ti	0.01%	
U	0.5	10,000
V	2	10,000
W	1	10,000
Y*	1	1,000
Yb	0.2	10,000
Zn†	1	100,000

Notes: * Element may only be partially extracted.

† Element reported by multiple techniques if one or more techniques may not be total.

Assays are recommended for values which exceed the upper limits.

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Code 7 Enzyme Leach[SM]

A 1 g sample of -60 mesh B soil horizon material is leached in a glucose oxidaze solution which contains an enzyme. The enzyme reacts with amorphous MnO_2 dissolving it. The metals are complexed with the gluconic acid present. The solutions are analyzed on a Perkin Elmer ELAN 6100 or 9000 ICP/MS. The analytical package consists of a suite of 60 elements at sub-ppb to ppm levels. Selected anomalous samples are checked by repeating the process. Duplicate samples are run one for every 15 samples.

Code 7 MAJ add-on is available for obtaining data on major elements and S in the leach solution.

Oxidation Suite

Element	Detection Limit (ppb)	Element	Detection Limit (ppb)	Element	Detection Limit (ppb)
S.Q. Cl	2,000	Se	5	Re	0.01
Br	5	Mo	1	Au	0.05
I	2	Sb	0.1	S.Q. Hg	1
V	1	Te	1	Th	0.1
As	1	W	1	U	0.1

Base Metals *Base Metals: Chalcophile Associated Indicators*

Element	Detection Limit (ppb)	Element	Detection Limit (ppb)	Element	Detection Limit (ppb)
Co	1	Ga	1	In	0.1
Ni	3	Ge	0.5	Sn	0.8
Cu	3	Ag	0.2	Tl	0.1
Zn	10	Cd	0.2	Bi	0.8
Pb	1				

High Field Strength Elements *Rare Earth Elements*

Element	Detection Limit (ppb)	Element	Detection Limit (ppb)	Element	Detection Limit (ppb)
S.Q. Ti	100	La	0.1	Tb	0.1
S.Q. Cr	20	Ce	0.1	Dy	0.1
Y	0.5	Pr	0.1	Ho	0.1
Zr	1	Nd	0.1	Er	0.1
Nb	1	Sm	0.1	Tm	0.1
Hf	0.1	Eu	0.1	Yb	0.1
Ta	0.1	Gd	0.1	Lu	0.1

Platinum Group Elements *Lithophile Elements*

Element	Detection Limit (ppb)		Element	Detection Limit (ppb)		Element	Detection Limit (ppb)
Ru	1		S.Q. Li	2		Rb	1
Pd	1		Be	2		Sr	1
Os	1		S.Q. Sc	100		Cs	0.1
Pt	1		Mn	1		Ba	1

Code 7 MAJ

Element	Detection Limit (ppm)
Fe	1
Ca	0.5
Na	5
Mg	2
K	15
S	10
Al	0.5

Code 7 Add-Ons
pH of leach solution
Conductivity of leach solution
pH + Conductivity

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APPENDIX C

ANALYTICAL DATA

Frank Creek 2006 Drilling

Frank Creek 2007 Trench Sampling

Frank Creek 2007 Soil Sampling (Enzyme Leach)

Kangaroo 2007 Drilling

Kangaroo 2007 Regional Sampling (Rock, Soil, Silt)

Analytical Data
for
Frank Creek 2006 Drilling

Analytical Data for DDH's FC06-23 and FC06-24 from ActLabs Laboratories Ltd. file A07-0066

Drill Hole Number: FC-06-23

Sample Number	From (m)	To (m)	Interval (m)	Zn ppm	Pb ppm	Cu ppm	Ag ppm	Au ppm
40151	11.58	12.92	1.34	287.00	125.00	52.20	0.99	0.010
40152	12.92	14.63	1.71	423.00	156.00	108.00	1.12	0.006
40153	14.63	16.37	1.74	265.00	66.20	108.00	0.29	0.002
40154	16.37	17.68	1.31	153.00	83.80	155.00	0.56	0.002
40155	17.68	23.47	5.79	302.00	73.40	38.60	0.15	0.002
40156	**23.47**	**25.50**	**2.03**	**1470.00**	**198.00**	**1170.00**	**2.03**	**0.004**
40157	**25.50**	**27.41**	**1.91**	**802.00**	**530.00**	**324.00**	**1.90**	**0.002**
40158	**27.41**	**29.57**	**2.16**	**198.00**	**155.00**	**748.00**	**1.11**	**0.002**
40159	**30.64**	**32.26**	**1.62**	**792.00**	**309.00**	**594.00**	**2.11**	**0.004**
40161	55.10	56.60	1.50	139.00	30.40	13.80	0.20	0.005
40162	56.60	57.58	0.98	166.00	36.00	25.00	0.22	0.002
40163	57.58	60.37	2.79	91.70	43.40	15.70	0.30	0.002
40164	70.80	72.10	1.30	141.00	42.40	56.40	0.32	0.003
40165	84.30	87.80	3.50	151.00	22.50	48.40	0.17	0.009
40166	87.80	90.40	2.60	148.00	52.90	16.40	0.29	0.003
40167	109.15	110.65	1.50	75.40	5.30	37.30	0.06	0.002
40168	110.65	112.40	1.75	46.70	12.20	33.10	0.05	0.002
40169	112.40	113.60	1.20	98.40	16.00	121.00	0.05	0.002
40170	113.60	114.64	1.04	72.30	10.70	50.60	0.05	0.002
40171	114.64	115.94	1.30	43.20	46.70	33.00	0.12	0.002
40172	115.94	117.29	1.35	63.30	24.90	24.80	0.05	0.002
40173	117.29	118.29	1.00	91.80	14.80	19.80	0.05	0.002
40174	132.40	133.26	0.86	50.20	20.80	29.90	0.05	0.002
40175	133.26	134.10	0.84	344.00	98.40	22.90	0.36	0.002
40176	134.10	135.50	1.40	37.10	31.80	27.20	0.18	0.002
40177	135.50	137.00	1.50	35.10	17.70	22.80	0.14	0.002
40178	137.00	138.50	1.50	67.60	25.50	64.80	0.28	0.002
40179	138.50	141.00	2.50	37.70	30.10	18.50	0.18	0.002
40180	141.00	142.10	1.10	70.50	46.80	53.50	0.72	0.004
40181	142.10	143.20	1.10	252.00	38.00	74.70	0.61	0.005
40182	143.20	145.60	2.40	103.00	37.80	55.00	0.31	0.002
40183	**145.60**	**147.76**	**2.16**	**1660.00**	**244.00**	**80.50**	**0.39**	**0.002**
40184	**147.76**	**149.00**	**1.24**	**517.00**	**66.30**	**71.90**	**0.14**	**0.002**
40185	**149.00**	**151.00**	**2.00**	**288.00**	**24.40**	**33.80**	**0.09**	**0.002**
40186	151.00	152.40	1.40	147.00	56.30	49.00	0.29	0.003
40226	173.50	174.40	0.90	41.10	10.30	14.60	0.05	0.002
40227	174.40	175.90	1.50	84.90	10.50	35.00	0.05	0.002
40228	175.90	177.40	1.50	119.00	32.30	10.60	0.11	0.002
40229	**177.40**	**178.90**	**1.50**	**221.00**	**26.90**	**17.80**	**0.05**	**0.002**
40230	**178.90**	**180.40**	**1.50**	**200.00**	**69.00**	**38.80**	**0.13**	**0.002**
40231	**180.40**	**181.80**	**1.40**	**414.00**	**129.00**	**4.50**	**0.23**	**0.002**
40232	**181.80**	**182.34**	**0.54**	**103.00**	**83.70**	**6.60**	**0.20**	**0.002**
40234	**182.34**	**184.24**	**1.90**	**135.00**	**126.00**	**56.80**	**0.52**	**0.002**
40235	**184.24**	**185.94**	**1.70**	**71.40**	**161.00**	**72.50**	**0.42**	**0.002**

40236	**185.94**	**187.80**	**1.86**	**3400.00**	**611.00**	**150.00**	**1.33**	**0.003**
40237	**187.80**	**189.42**	**1.62**	**72.50**	**8.20**	**46.20**	**0.05**	**0.002**
40238	**189.42**	**191.60**	**2.18**	**1060.00**	**197.00**	**235.00**	**0.61**	**0.002**
40239	195.95	196.95	1.00	30.60	26.20	25.70	0.05	0.002
40240	205.30	206.71	1.41	180.00	19.70	54.70	0.05	0.002
40241	317.40	318.70	1.30	88.80	12.30	30.10	0.05	0.002
40242	318.70	320.20	1.50	42.60	10.20	17.40	0.05	0.002
40243	330.30	331.80	1.50	80.60	41.90	35.40	0.05	0.002
40244	331.80	333.30	1.50	56.50	19.30	40.80	0.05	0.002
40245	333.30	334.80	1.50	67.30	13.80	19.80	0.05	0.002
40246	334.80	339.40	4.60	53.40	13.80	45.30	0.05	0.005
40247	339.40	340.90	1.50	75.00	12.40	48.50	0.05	0.002
40248	340.90	342.40	1.50	75.20	20.90	93.40	0.05	0.002
40249	342.40	343.90	1.50	52.90	42.40	51.30	0.06	0.004
40250	343.90	345.40	1.50	81.90	12.40	60.70	0.05	0.002
40129	355.00	356.50	1.50	77.70	43.10	89.40	0.23	0.002
40130	356.50	358.00	1.50	102.00	37.40	89.10	0.12	0.002
40131	358.00	359.50	1.50	71.40	7.10	87.60	0.05	0.002
40132	359.50	361.00	1.50	64.60	26.10	102.00	0.08	0.002
40133	361.00	364.50	3.50	51.10	13.40	40.60	0.05	0.002

Drill Hole Number: FC-06-24

Sample Number	From (m)	To (m)	Interval (m)	Zn ppm	Pb ppm	Cu ppm	Ag ppm	Au ppm
39732	17.11	18.61	1.5	14.3	5.9	45.7	0.05	0.002
39733	**20.8**	**22.3**	**1.5**	**1030.0**	**543.0**	**54.3**	**1.24**	**0.026**
39734	28.4	29.9	1.5	40.6	32.9	12.0	0.06	0.005
39735	29.9	32	2.1	0.2	8.2	89.9	0.05	0.003
39736	69.20	70.70	1.5	944.0	746.0	58.0	0.18	0.004
39737	**70.70**	**72.10**	**1.4**	**2160.0**	**1470.0**	**62.6**	**0.70**	**0.007**
39738	72.10	72.80	0.7	65.8	34.0	24.0	0.05	0.002
39739	**72.80**	**74.10**	**1.3**	**3190.0**	**105.0**	**152.0**	**0.38**	**0.002**
39740	**74.10**	**75.60**	**1.5**	**5030.0**	**5000.0**	**404.0**	**3.40**	**0.002**
39742	**75.60**	**76.10**	**0.5**	**1780.0**	**2400.0**	**31.3**	**0.61**	**0.002**
39743	76.10	78.20	2.1	101.0	159.0	24.7	0.09	0.002
39744	78.65	81.00	2.35	204.0	43.4	29.2	0.05	0.002
39745	81.00	82.20	1.2	248.0	174.0	76.2	0.56	0.008
39746	82.20	83.70	1.5	235.0	28.6	49.7	0.09	0.008
39747	83.70	85.20	1.5	39.5	13.2	9.4	0.05	0.003
39748	85.20	87.10	1.9	263.0	10.1	70.9	0.05	0.003
39749	87.10	88.80	1.7	28.1	14.9	8.1	0.05	0.002
39750	88.80	90.30	1.5	49.0	12.7	18.4	0.05	0.002
40136	90.30	91.60	1.3	112.0	91.1	15.6	0.05	0.002
40137	91.60	93.10	1.5	176.0	25.1	24.7	0.05	0.002
40138	99.40	100.90	1.5	85.8	18.4	11.5	0.05	0.004
40139	**100.90**	**104.00**	**3.1**	**455.0**	**229.0**	**83.3**	**0.99**	**0.003**
40140	**104.00**	**105.50**	**1.5**	**283.0**	**197.0**	**143.0**	**0.71**	**0.002**
40141	**105.50**	**107.00**	**1.5**	**1140.0**	**605.0**	**349.0**	**5.99**	**0.011**
40142	107.00	108.50	1.5	166.0	244.0	28.8	1.34	0.004
40143	108.50	112.80	4.3	89.7	18.3	34.7	0.05	0.002
40144	**112.80**	**116.80**	**4**	**182.0**	**127.0**	**397.0**	**0.90**	**0.002**
40145	**116.80**	**118.10**	**1.3**	**481.0**	**162.0**	**4590.0**	**6.81**	**0.015**
40146	**118.10**	**120.57**	**2.47**	**637.0**	**40.7**	**51.2**	**0.08**	**0.002**
40147	**120.57**	**122.00**	**1.43**	**160.0**	**96.3**	**59.3**	**0.86**	**0.002**
40148	122.00	123.30	1.3	24.7	4.1	19.0	0.05	0.002
40149	146.74	147.90	1.16	102.0	11.2	464.0	0.30	0.006
40150	147.90	150.00	2.1	47.1	6.6	22.1	0.05	0.004
20451	150.00	151.80	1.8	37.7	6.6	28.9	0.05	0.002

Analytical Data
for
Frank Creek 2007 Trench Sampling

Frank Creek 2007 Trenching Geochem Results

		Detection Limit	4	5	2	2	0.3	1	0.3	1	3	1	1	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	0.01	1	1	5	0.01	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5	3	5	0.1	0.01	0.5	0.2	0.05
		Analysis Method	FA-MS	FA-MS	FA-MS	INAA	INAA / TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA / TD-ICP	INAA / TD-ICP	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
Certificate	Sample	Sample	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	Type	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A07-4245	85316	Rock	grab	< 3	< 3	155	136	9.5	1990	4.5	3	> 5000	78	2150	> 20.0	2.15	3280	< 50	< 1	12	< 0.5	0.03	72	36	< 1	< 0.2	18	3	< 1	< 5	0.22	0.67	220	0.19	0.01	73	9	3.5	< 3	13	< 0.5	0.1	4.1	28.5	32	< 1	7	9.5	21	15	1.3	< 0.01	< 0.5	0.9	< 0.05
A07-4245	85317	Rock	grab	< 3	< 3	241	209	17.6	1740	5.1	< 1	> 5000	81	3180	> 20.0	2.18	6160	< 50	< 1	33	< 0.5	0.03	86	30	< 1	< 0.2	19.7	1	< 1	< 5	0.34	0.35	133	0.28	0.01	58	8	3.2	< 3	17	< 0.5	0.09	4.8	9	30	< 1	6	9.7	26	< 5	1.4	< 0.01	< 0.5	< 0.2	< 0.05
A07-4245	85318	Rock	grab	< 3	< 3	56	67	2.2	1460	2.3	< 1	259	11	121	7.91	2.84	3910	< 50	< 1	5	< 0.5	0.02	22	35	< 1	< 0.2	8.23	3	< 1	< 5	0.71	0.86	107	0.14	0.01	< 15	< 0.1	2.2	< 3	13	< 0.5	0.12	6.8	3.5	23	< 1	6	16.3	43	< 5	2.1	< 0.01	< 0.5	< 0.2	< 0.05
A07-4245	85319	Rock	grab	< 3	< 3	106	106	2.6	848	2.7	< 1	180	27	97	17.00	4.42	7250	1050	< 1	15	< 0.5	0.03	29	43	< 1	< 0.2	20	6	< 1	< 5	1.11	0.52	445	0.47	0.02	77	< 0.1	4.1	< 3	47	< 0.5	0.1	6.6	15	39	< 1	10	42	95	< 5	4.8	< 0.01	< 0.5	1.3	0.29
A07-4245	85320	Rock	grab	< 3	< 3	229	201	15.0	1440	4.6	< 1	> 5000	263	2860	> 20.0	3.37	1290	430	< 1	26	< 0.5	0.06	74	629	< 1	0.7	21.5	2	< 1	< 5	0.34	1.3	95	0.14	0.07	< 15	19.1	17.8	18	11	1	0.4	1.5	< 0.5	131	< 1	9	9.6	23	< 5	2	< 0.01	< 0.5	1.6	0.3
A07-4245	85321	Rock	grab	< 3	< 3	< 6	< 2	< 0.3	34	0.9	< 1	193	19	155	0.28	1.05	46.1	< 50	< 1	< 2	0.9	2.06	6	37	< 1	0.5	2.82	< 1	< 1	< 5	0.18	1.08	963	0.04	0.01	< 15	0.6	2.8	< 3	41	< 0.5	0.04	< 0.2	21.7	27	< 1	5	2	6	< 5	0.5	< 0.01	< 0.5	0.4	< 0.05
A07-4245	85322	Rock	grab	< 3	< 3	< 6	< 2	< 0.3	83	6	< 1	54	116	851	0.06	3.71	75.9	730	< 1	< 2	3.5	0.43	24	35	< 1	2	11.4	2	< 1	< 5	0.45	1.71	5060	0.1	0.09	< 15	0.2	10.3	< 3	70	< 0.5	0.12	5.4	9.8	80	< 1	29	15.2	47	23	3.7	< 0.01	1.1	3.8	0.61
A07-4245	85323	Rock	grab	< 3	< 3	< 6	< 2	< 0.3	37	3.6	< 1	31	51	971	0.09	2.35	35.9	570	< 1	< 2	< 0.5	0.24	7	45	< 1	0.7	5.6	2	< 1	< 5	0.91	0.39	1390	0.09	0.12	< 15	0.4	5.5	< 3	22	< 0.5	0.12	4	7.9	53	< 1	8	7.4	25	< 5	1.9	< 0.01	< 0.5	0.9	0.2
A07-4245	85324	Rock	grab	< 3	< 3	19	27	16.9	1180	9.4	< 1	1770	15	3020	7.37	3.24	98.8	490	< 1	26	< 0.5	0.03	14	48	2	< 0.2	11.3	5	< 1	< 5	0.99	0.22	284	0.33	0.02	48	1.1	3.5	< 3	46	< 0.5	0.09	6.3	4.9	27	10	9	17.6	46	< 5	2.7	< 0.01	< 0.5	0.9	0.17
A07-4245	85325	Rock	1.0	5	4	39	42	4.6	659	8.5	< 1	2050	768	2450	1.43	5.32	781	< 50	< 1	7	1.7	0.17	82	1460	< 1	1.6	14.6	3	< 1	< 5	0.68	2.13	4090	0.13	0.06	43	8.1	20.5	< 3	26	< 0.5	0.18	4.2	9.8	142	14	12	15.2	37	20	2.7	< 0.01	< 0.5	1	0.24
A07-4245	85326	Rock	1.0	5	4	49	48	14.1	1250	19.1	< 1	> 5000	500	7920	> 20.0	4.24	486	< 50	< 1	14	< 0.5	0.07	77	1410	< 1	< 0.2	24.7	2	< 1	< 5	0.16	1.77	583	0.06	0.07	< 15	9.5	20.6	< 3	11	< 0.5	0.16	2.4	4.9	148	2	7	12.1	30	< 5	2	< 0.01	0.6	1.1	0.25
A07-4245	85327	Rock	1.0	< 3	< 3	20	27	3.3	706	6.9	< 1	1590	69	4170	4.59	7.90	157	3520	2	< 2	< 0.5	0.07	29	109	2	< 0.2	15.1	5	< 1	< 5	2.02	1.56	953	0.48	0.04	74	3.2	12.6	< 3	45	< 0.5	0.18	12.8	5.6	84	< 1	11	37.1	102	40	4.8	< 0.01	< 0.5	2	0.47
A07-4245	85328	Rock	1.0	< 3	< 3	170	262	2.8	472	7.7	< 1	1110	55	3120	2.29	5.68	179	1430	2	< 2	< 0.5	0.07	20	127	< 1	0.8	10.7	6	< 1	< 5	1.41	1.01	765	0.55	0.06	68	2	10.2	< 3	58	< 0.5	0.26	8.3	8.3	92	< 1	9	23.9	64	10	2.9	< 0.01	0.6	1.9	0.22
A07-4245	85329	Rock	1.1	< 3	< 3	28	< 2	2.2	358	7	< 1	819	96	2930	0.13	10.50	503	2000	3	< 2	< 0.5	0.09	26	278	< 1	1.4	9.44	7	< 1	< 5	3.01	1.52	1810	0.51	0.07	72	0.6	16.1	< 3	76	< 0.5	0.52	14.5	4.3	125	6	16	34.6	101	35	4.8	< 0.01	< 0.5	2.5	0.45
A07-4245	85330	Rock	1.1	< 3	< 3	7	< 2	0.4	166	4.7	< 1	194	48	1720	0.09	5.90	243	950	2	< 2	< 0.5	0.04	14	121	< 1	1.2	5.25	12	< 1	< 5	2.04	0.95	823	0.47	0.03	< 15	0.2	9.7	< 3	50	< 0.5	0.28	25.6	7.5	62	3	13	35.7	107	51	4.7	< 0.01	0.9	2.3	0.42
A07-4245	85331	Rock	0.5	< 3	< 3	6	< 2	0.9	435	4.7	< 1	330	48	1910	0.21	7.55	201	930	2	< 2	< 0.5	0.04	15	87	1	0.9	6.36	9	< 1	< 5	2.52	1.1	1060	0.54	0.04	152	< 0.1	10.7	< 3	67	< 0.5	0.38	19.3	5	84	< 1	12	27.2	85	31	4.1	< 0.01	< 0.5	2	0.47
A07-4245	85332	Rock	0.32	4	< 3	369	361	15.3	5170	4.9	< 1	1250	191	3220	> 20.0	2.55	556	< 50	< 1	11	< 0.5	0.02	90	373	< 1	< 0.2	27.7	< 1	< 1	< 5	0.67	0.11	233	0.29	0.02	< 15	9.6	8.4	< 3	28	< 0.5	0.08	< 0.2	< 0.5	65	< 1	5	6.5	13	< 5	1.1	< 0.01	< 0.5	0.7	0.15
A07-4245	85333	Rock	0.1	< 3	< 3	62	62	7.6	1340	3.3	< 1	1520	111	2010	> 20.0	2.02	386	290	< 1	13	< 0.5	0.02	152	54	< 1	< 0.2	23.8	2	< 1	< 5	0.13	1.1	109	0.06	0.03	46	6.2	4.7	< 3	7	< 0.5	0.08	6	< 0.5	31	< 1	11	12.9	33	< 5	1.9	< 0.01	< 0.5	0.9	0.12
A07-4245	85334	Rock	1.5	< 3	< 3	53	< 2	1.0	285	2.7	< 1	192	71	755	0.67	6.97	32.3	690	2	< 2	< 0.5	0.07	12	81	2	0.9	7.06	9	< 1	< 5	1.94	1.81	1210	0.28	0.04	< 15	0.5	9.3	< 3	33	< 0.5	0.37	17.8	3.6	80	< 1	12	24.7	77	39	3.6	< 0.01	< 0.5	2.4	0.39
A07-4245	85335	Rock	1.35	< 3	< 3	< 6	< 2	0.8	199	8.4	< 1	401	440	2190	0.28	5.35	262	< 50	< 1	< 2	< 0.5	0.12	59	535	< 1	1.4	9.35	3	< 1	< 5	0.32	2.3	4330	0.09	0.07	< 15	0.4	15.3	< 3	14	< 0.5	0.36	8.5	< 0.5	124	11	13	22.1	67	27	4	< 0.01	< 0.5	1.7	0.36
A07-4245	85336	Rock	1.5	5	< 3	54	51	10.8	275	4	< 1	> 5000	840	2240	12.80	3.46	425	480	< 1	11	< 0.5	0.11	72	998	< 1	0.9	15.1	< 1	< 1	< 5	0.84	1.51	1360	0.08	0.08	< 15	7.3	12.6	< 3	14	< 0.5	0.12	5.5	2.8	88	< 1	8	13.6	31	< 5	2.4	< 0.01	< 0.5	< 0.2	0.14
A07-4245	85337	Rock	1.1	11	5	127	106	7.3	1800	14.8	< 1	2480	1200	8070	> 20.0	1.68	698	290	< 1	5	< 0.5	< 0.01	137	1110	< 1	0.7	30.3	< 1	< 1	< 5	0.05	1.33	116	0.02	0.04	< 15	9.6	15.2	< 3	2	< 0.5	0.07	< 0.2	< 0.5	79	3	6	8.8	25	< 5	2.5	< 0.01	< 0.5	0.6	0.06
A07-4245	85338	Rock	1.0	9	4	168	142	8.2	694	3.8	< 1	1350	859	1150	> 20.0	1.62	663	< 50	< 1	41	< 0.5	0.09	241	1360	< 1	0.9	27.7	< 1	< 1	< 5	0.03	1.24	724	< 0.01	0.03	< 15	8.7	14.6	30	4	< 0.5	0.07	< 0.2	< 0.5	74	10	9	12.6	32	11	2	< 0.01	< 0.5	0.9	< 0.05
A07-4245	85339	Rock	1.2	< 3	< 3	10	< 2	0.4	156	5.3	< 1	153	59	2410	0.17	6.88	222	1330	2	< 2	< 0.5	0.05	12	88	1	1	6.66	6	< 1	< 5	2.38	1.65	1290	0.31	0.03	127	0.2	9.7	< 3	38	< 0.5	0.3	14	4.1	68	< 1	10	28	78	18	3.6	< 0.01	< 0.5	2.1	0.31
A07-4245	85340	Rock	grab	< 3	< 3	43	40	3.8	2240	52.9	< 1	347	78	13700	6.91	2.12	273	340	< 1	4	< 0.5	0.06	37	87	< 1	< 0.2	8.63	2	< 1	< 5	0.35	0.94	520	0.25	0.03	< 15	0.2	6.4	< 3	24	< 0.5	0.23	2.5	2.7	64	< 1	6	7.3	22	< 5	1.4	< 0.01	< 0.5	0.7	0.13
A07-4674	85348	Rock	grab	1	< 1	72	86	3.6	1430	3.1	< 1	387	318	1320	4.22	3.85	333	250	< 1	< 2	< 0.5	0.07	34	1080	< 1	0.6	17.2	1	< 1	< 5	0.54	1.74	330	0.14	0.04	< 15	4.1	24.1	< 3	19	< 0.5	0.28	< 0.2	< 0.5	173	10	4	7.6	18	10	1.7	< 0.01	0.7	0.8	0.15
A07-4674	85349	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	36	< 0.3	< 1	87	21	40	0.03	0.54	12.8	60	< 1	< 2	< 0.5	0.07	3	22	< 1	< 0.2	0.47	< 1	< 1	< 5	0.06	0.07	82	0.03	0.01	< 15	0.2	0.9	< 3	9	< 0.5	0.05	< 0.2	< 0.5	13	< 1	< 1	1.4	< 3	< 5	0.2	< 0.01	< 0.5	< 0.2	< 0.05
A07-4674	85350	Rock	grab	< 1	2	< 2	< 2	< 0.3	31	0.6	1	46	164	68	0.01	2.50	98.8	420	< 1	< 2	< 0.5	5.75	28	136	< 1	0.7	2.82	< 1	< 1	< 5	0.22	0.56	475	0.21	0.04	< 15	0.2	8.8	< 3	91	1.2	0.19	1.5	< 0.5	52	3	6	8.8	16	7	1.6	< 0.01	< 0.5	0.6	0.11
A07-4674	85351	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	30	0.6	< 1	21	52	38	< 0.01	4.39	69.3	380	< 1	< 2	< 0.5	8.36	14	176	< 1	0.8	3.63	1	< 1	< 5	0.34	0.96	749	0.41	0.07	< 15	< 0.1	12.7	< 3	147	0.9	0.22	2	< 0.5	59	4	9	14.3	26	10	2.4	< 0.01	< 0.5	0.9	0.14
A07-4674	85352	Rock	grab	< 1	< 1	< 2	7	< 0.3	131	1.4	2	121	155	214	0.03	5.01	115	470	< 1	< 2	< 0.5	12.2	35	340	< 1	1.1	5.07	2	< 1	< 5	0.4	0.79	1070	0.79	0.09	< 15	0.9	18.9	< 3	240	< 0.5	0.19	2.4	2.1	75	10	10	18.9	33	10	3.2	< 0.01	< 0.5	1.4	0.27
A07-4674	85353	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	15	< 0.3	< 1	8	19	48	< 0.01	5.77	4.2	420	1	< 2	< 0.5	0.18	5	25	< 1	0.8	1.53	5	< 1	< 5	1.01	0.19	174	0.08	0.02	67	0.2	4.3	< 3	22	< 0.5	0.13	10.7	2.8	25	1	8	24.2	44	15	2.9	< 0.01	< 0.5	1.1	0.23
A07-4674	85354	Rock	1.0	< 1	< 1	5	7	2.1	451	3.8	< 1	897	41	1190	0.07	6.93	289	790	< 1	< 2	1.2	0.19	15	68	< 1	0.9	11.4	3	< 1	< 5	1.71	1.34	2280	0.15	0.05	< 15	3.5	10.3	< 3	49	< 0.5	0.26	15.4	4	67	18	11	49.1	82	28	5.3	< 0.01	< 0.5	2.2	0.41
A07-4674	85355	Rock	1.0	< 1	< 1	10	11	5.8	1860	4.9	< 1	1100	41	1540	0.18	4.86	352	340	< 1	11	< 0.5	0.15	57	51	< 1	< 0.2	15.7	2	< 1	< 5	0.77	1.23	2710	0.06	0.05	< 15	4.1	8.1	< 3	26	< 0.5	0.19	9.8	5.8	61	18	9	35.2	58	15	4.2	< 0.01	< 0.5	2	0.29
A07-4674	85356	Rock	1.0	< 1	< 1	6	< 2	4.4	1040	3.9	< 1	824	45	1590	0.11	5.70	212	460	< 1	5	< 0.5	0.17	29	79	< 1	0.8	12.7	3	< 1	< 5	1.1	1.44	2220	0.09	0.05	57	2.1	9	< 3	33	1.8	0.29	12.9	4.5	63	3	10	40.7	67	23	4.9	< 0.01	< 0.5	1.8	0.33
A07-4674	85357	Rock	1.0	< 1	< 1	25	29	12.0	3880	3.1	< 1	1320	34	887	0.89	7.25	268	780	< 1	29	< 0.5	0.14	37	65	< 1	0.9	15	3	< 1	< 5	1.97	1.37	1440	0.16	0.06	< 15	3.8	10.4	< 3	47	< 0.5	0.31	16.7	4.4	75	5	10	58.4	97	30	6.7	< 0.01	1.4	2.2	0.47
A07-4674	85358	Rock	1.1	< 1	< 1	2	< 2	2.8	289	3.5	< 1	812	48	1430	0.16	7.65	86.5	560	< 1	3	< 0.5	0.18	26	75	1	0.8	13.3	4	< 1	< 5	1.52	1.67	2310	0.11	0.06	72	1.2	10.5	< 3	42	2.6	0.35	15.3	4.8	83	4	12	51.4	80	36	5.9	< 0.01	< 0.5	2.4	0.42
A07-4674	85359	Rock	1.0	< 1	< 1	31	37	19.0	2010	9.8	< 1	3270	60	4870	6.87	6.88	196	930	1	42	< 0.5	0.16	60	70	1	0.9	13.4	4	< 1	< 5	2.3	1.38	1230	0.14	0.06	85	2.3	9.9	< 3	37	1.5	0.31	13.3	3.1	74	4	11	47	70	28	5.1	< 0.01	0.8	2	0.3
A07-4674	85360	Rock	0.7	< 1	< 1	3	5	1.9	183	2.5	< 1	331	72	1400	0.17	9.81	95.8	1270	2	< 2	< 0.5	0.2	29	87	2	1.4	9.14	5	< 1	< 5	2.97	1.54	2450	0.21	0.07	125	0.7	12	< 3	51	1.4	0.39	16.4	6.2	94	4	15	59.9	98	36	7	< 0.01	< 0.5	3.1	0.47
A07-4674	85361	Rock	0.6	< 1	< 1	< 2	< 2	0.6	63	3	< 1	169	44	819	0.02	7.88	447	1180	2	< 2	< 0.5	0.18	14	66	2	1.3	5.96	3	< 1	< 5	2.16	1.29	1900	0.17	0.06	113	< 0.1	10	< 3	53	1.6	0.34	13.1	3.1	77	4	11	50.8	82	28	6	< 0.01	< 0.5	2.3	0.31
A07-4674	85362	Rock	grab	< 1	< 1	19	< 2	9.9	3520	5.3	< 1	1520	34	1620	0.63	2.91	531	< 50	< 1	13	2.5	0.13	82	38	< 1	0.5	18.7	2	< 1	< 5	0.35	0.86	2860	0.03	0.04	< 15	6.4	5.8	< 3	18	< 0.5	0.1	4.9	5.7	44	15	7	23.4	39	15	3	< 0.01	< 0.5	1.1	0.17
A07-4674	85363	Rock	grab	< 1	< 1	12	< 2	8.1	3210	5.4	< 1	1180	37	2640	0.18	3.48	254	310	< 1	11	2.1	0.13	43	53	< 1	0.5	14.8	2	< 1	< 5	0.5	1.11	3270	0.04	0.03	< 15	3.1	6	< 3	20	< 0.5	0.12	7.3	6.8	43	3	8	28.4	48	16	3.7	< 0.01	< 0.5	1.6	0.21
A07-4674	85364	Rock	grab	1	< 1	57	60	35.1	> 10000	4.4	< 1	3430	27	1050	1.90	3.48	568	< 50	< 1	74	< 0.5	0.09	59	29	< 1	0.3	22.8	2	< 1	< 5	0.64	1.21	2310	0.05	0.03	< 15	9.9	5.8	< 3	19	< 0.5	0.11	5.7	3.8	38	5	6	24.5	37	15	3	< 0.01	< 0.5	0.8	0.18
A07-4674	85365	Rock	grab	< 1	< 1	< 2	< 2	1.0	37	0.9	< 1	214	34	252	0.32	13.40	23.3	1180	2	< 2	< 0.5	0.2	11	55	2	0.9	4.66	4	< 1	< 5	3.93	1.63	893	0.19	0.07	107	0.8	10.7	< 3	79	< 0.5	0.5	16.6	3	90	< 1	22	49.9	83	30	5.7	< 0.01	< 0.5	2.6	0.37
A07-4674	85366	Rock	grab	< 1	< 1	21	31	8.3	2680	6.8	< 1	1200	35	4670	9.27	2.60	1620	< 50	< 1	9	< 0.5	0.12	63	29	< 1	0.3	16	1	< 1	< 5	0.46	1.32	1790	0.04	0.03	< 15	11	4.6	< 3	15	< 0.5	0.14	4.8	1.8	36	14	6	21.2	36	14	2.6	< 0.01	< 0.5	1.1	0.13
A07-4674	85367	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	63	1	< 1	66	24	169	0.07	9.34	94.9	1270	2	< 2	< 0.5	4.22	8	74	2	1.6	4.55	4	< 1	< 5	2.8	1.57	2050	0.37	0.07	148	0.8	12.4	< 3	164	2.4	0.13	16.8	2.2	29	4	21	64.5	102	32	7.3	< 0.01	< 0.5	3.2	0.46
A07-4674	85368	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	29	1.6	1	34	35	353	0.01	4.76	62.9	650	1	< 2	< 0.5	1.64	8	37	2	1.4	6.75	2	< 1	< 5	1.7	0.69	3900	0.18	0.09	41	0.6	11.9	< 3	92	< 0.5	0.19	6.7	2.1	51	2	33	25	47	20	4.9	< 0.01	1.2	3.7	0.5
A07-4674	85369	Rock	grab	< 1	< 1	11	11	6.4	548	16.5	< 1	> 5000	41	10000	4.62	1.92	172	170	< 1	< 2	< 0.5	1.86	23	17	< 1	0.6	9.8	< 1	< 1	< 5	0.73	1.56	4470	0.09	0.03	18	3.7	4.2	< 3	62	< 0.5	0.07	3.4	< 0.5	26	3	9	15.7	28	9	2.7	< 0.01	< 0.5	1.4	0.12
A07-4674	85370	Rock	grab	< 1	< 1	371	328	78.8	3820	< 0.3	< 1	> 5000	55	3440	7.03	1.53	4910	300	< 1	151	< 0.5	0.05	85	16	< 1	< 0.2	28.5	< 1	< 1	< 5	0.53	0.1	964	0.16	0.07	< 15	30.9	4.1	< 3	34	< 0.5	0.05	2.5	< 0.5	29	< 1	5	18.8	31	< 5	3.2	< 0.01	< 0.5	1.1	< 0.05
A07-4674	85371	Rock	grab	< 1	< 1	3	< 2	2.6	79	1	< 1	327	22	281	0.12	1.78	34	< 50	< 1	2	< 0.5	0.07	5	18	< 1	0.2	2.41	< 1	< 1	< 5	0.47	0.2	723	0.05	0.02	< 15	0.6	2.7	< 3	20	< 0.5	0.07	2.3	< 0.5	18	< 1	4	7	14	< 5	0.9	< 0.01	< 0.5	0.4	0.1
A07-4674	85372	Rock	grab	< 1	< 1	846	734	70.1	> 10000	4.1	< 1	3590	98	5430	8.89	2.37	1500	< 50	< 1	45	< 0.5	0.04	91	23	< 1	0.6	18.9	< 1	< 1	< 5	0.85	0.13	1450	0.16	0.06	< 15	9.6	4.7	8	29	< 0.5	0.06	4.3	2.6	33	8	8	21.4	38	17	3.3	< 0.01	< 0.5	1.9	0.21
A07-4674	85373	Rock	grab	< 1	< 1	3	< 2	0.6	82	0.3	< 1	71	8	137	0.05	0.79	22.6	< 50	< 1	< 2	< 0.5

Frank Creek 2007 Trenching GEOCHEM RESULTS

Certificate Number	Sample Number	Sample Type	Width (m)	Pd ppb	Pt ppb	Au ppb	Au ppb	Ag ppm	Cu ppm	Cd ppm	Mo ppm	Pb ppm	Ni ppm	Zn ppm	S %	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Eu ppm	Fe %	Hf ppm	Hg ppm	Ir ppb	K %	Mg %	Mn ppm	Na %	P %	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sr ppm	Ta ppm	Ti %	Th ppm	U ppm	V ppm	W ppm	Y ppm	La ppm	Ce ppm	Nd ppm	Sm ppm	Sn %	Tb ppm	Yb ppm	Lu ppm
A07-4674	85378	Rock	grab	2	1	< 2	< 2	< 0.3	52	0.9	3	34	184	130	0.22	10.4	63.7	1000	3	< 2	< 0.5	0.38	29	366	3	1.3	5.53	4	< 1	< 5	3.6	0.58	1540	0.61	0.08	135	0.6	21.8	< 3	99	1.5	0.68	16.8	< 0.5	175	4	16	48.3	92	29	6.8	< 0.01	1.3	2.6	0.38
A07-4674	85379	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	25	0.5	1	22	41	96	0.62	6.26	16.9	510	2	< 2	< 0.5	0.14	11	66	2	0.9	3.84	5	< 1	< 5	1.62	0.5	1120	1.18	0.03	63	< 0.1	9.7	< 3	85	< 0.5	0.28	13.8	3.6	66	< 1	10	30.1	64	18	4.5	< 0.01	0.8	2	0.26
A07-4674	85380	Rock	grab	< 1	< 1	< 2	< 2	0.4	22	0.7	< 1	41	23	128	0.03	6.13	7.4	400	1	< 2	< 0.5	0.03	8	45	2	0.6	2.52	6	< 1	< 5	2.22	0.3	655	0.41	0.02	68	0.3	6.1	< 3	22	< 0.5	0.22	13.9	3.7	52	< 1	9	27.3	52	15	3.2	< 0.01	< 0.5	1.6	0.24
A07-4674	85381	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	38	0.4	< 1	9	33	56	0.10	5.37	8.5	280	1	< 2	< 0.5	3.5	14	56	1	0.9	3.64	5	< 1	< 5	0.92	1.57	2040	0.57	0.02	27	< 0.1	9.4	< 3	159	< 0.5	0.26	10.6	1.8	65	< 1	8	24	44	17	3.4	< 0.01	< 0.5	1.6	0.29
A07-4674	85382	Rock	grab	< 1	< 1	192	513	23	4000	6	< 1	1400	23	1670	> 20.0	1.07	249	< 50	< 1	43	< 0.5	1.41	70	21	< 1	< 0.2	33	< 1	1	< 5	0.29	0.31	467	0.13	0	< 15	6.3	2	28	28	< 0.5	0.03	1.6	< 0.5	21	< 1	8	6	14	< 5	1.3	< 0.01	< 0.5	0.7	0.07
A07-5490	85383	Rock	grab	< 1	< 1	9	14	< 0.3	58	1	1	34	23	286	0.02	1.28	12.8	270	< 1	< 2	< 0.5	0.06	6	37	< 1	0.3	3.23	< 1	< 1	< 5	0.49	0.18	605	0.09	0.02	< 15	0.5	3.6	< 3	10	< 0.5	0.06	2.9	1	17	< 1	5	7.9	15	< 5	1.1	< 0.01	< 0.5	0.7	0.12
A07-5490	85384	Rock	1.0	1	< 1	187	173	10.2	3320	44.6	< 1	> 5000	301	14800	12.70	3.16	9680	150	< 1	7	< 0.5	1.65	64	886	< 1	0.9	19.2	< 1	< 1	< 5	0.15	3.98	1300	0.05	0.03	< 15	12.2	27.1	< 3	58	< 0.5	0.26	< 0.2	< 0.5	129	< 1	9	9.8	18	6	1.9	< 0.01	< 0.5	1.2	0.2
A07-5490	85385	Rock	0.4	< 1	< 1	29	27	3.5	1340	7.4	1	243	29	3320	0.13	4.83	668	790	1	8	1.8	0.04	5	29	2	0.4	12.2	3	< 1	< 5	1.16	0.13	1020	0.43	0.02	25	1.3	3.7	< 3	54	< 0.5	0.08	8.5	< 0.5	37	< 1	7	25.7	42	14	2.6	< 0.01	< 0.5	0.9	0.17
A07-5490	85386	Rock	grab	< 1	< 1	74	61	9.6	761	2.7	< 1	1720	10	567	4.09	2.7	328	310	1	30	< 0.5	0.02	6	24	< 1	0.3	15.2	3	< 1	< 5	0.49	0.06	102	0.33	0.01	19	3.5	2.4	12	33	< 0.5	0.09	5.2	< 0.5	30	< 1	5	13.5	26	12	1.6	< 0.01	< 0.5	0.8	0.16
A07-5490	85387	Rock	0.35	< 3	< 3	35	37	16.5	1760	2.7	< 1	937	30	526	> 20.0	2.05	343	140	< 1	40	< 0.5	0.01	26	21	< 1	0.3	25.6	2	< 1	< 5	0.26	0.02	172	0.25	0.01	18	0.3	1.9	16	23	< 0.5	0.05	3.5	< 0.5	23	< 1	5	10.4	19	< 5	1.2	< 0.01	< 0.5	0.4	0.09
A07-5490	85388	Rock	0.45	< 3	< 3	48	34	11.6	2160	3.8	1	1040	23	876	17.80	3.86	456	260	< 1	32	< 0.5	0.02	17	40	< 1	0.4	21.3	2	< 1	< 5	0.43	0.19	174	0.41	0.02	< 15	0.6	3.5	10	38	< 0.5	0.09	9.6	1.7	38	< 1	8	22.6	39	12	2.3	< 0.01	< 0.5	0.9	0.15
A07-5490	85389	Rock	1.1	< 1	< 1	30	23	3.5	714	1.9	< 1	369	57	528	9.33	4.79	103	80	1	5	< 0.5	0.16	17	371	< 1	0.5	14.8	2	< 1	< 5	1	1.75	929	0.74	0.04	32	1	12	5	65	0.8	0.29	5.5	< 0.5	123	23	8	14.3	27	10	1.9	< 0.01	< 0.5	1.3	0.22
A07-5490	85390	Rock	grab	< 1	< 1	42	91	7.1	1210	2.1	2	552	32	411	> 20.0	1.84	265	< 50	< 1	19	< 0.5	0.01	48	27	< 1	< 0.2	29.3	2	< 1	< 5	0.28	0.02	445	0.38	0.01	< 15	4.8	3.1	19	28	< 0.5	0.11	4.5	< 0.5	29	< 1	4	6	10	7	0.8	< 0.01	< 0.5	0.6	0.09
A07-5490	85391	Rock	0.18	< 3	< 3	< 6	89	7.6	1120	18.5	1	2180	15	6180	17.70	1.3	178	260	< 1	14	< 0.5	0.15	26	28	< 1	< 0.2	18.6	< 1	< 1	< 5	0.32	0.65	817	0.24	0.01	< 15	4.6	2.2	11	17	< 0.5	0.04	2.4	< 0.5	16	< 1	4	4.9	10	< 5	0.7	< 0.01	< 0.5	0.5	0.07
A07-5490	85392	Rock	0.50	< 3	< 3	735	213	71	> 10000	108	1	> 5000	37	28500	> 20.0	0.94	230	< 50	< 1	77	< 0.5	0.02	43	16	< 1	< 0.2	26.1	< 1	4	< 5	0.23	0.19	290	0.13	0.01	30	17.8	1.9	29	11	< 0.5	0.03	1.8	< 0.5	19	< 1	4	4.8	7	< 5	0.4	< 0.01	< 0.5	0.3	< 0.05
A07-5490	85393	Rock	grab	< 1	< 1	7	9	1.4	192	1.1	1	925	7	419	0.94	0.63	13.5	160	< 1	< 2	< 0.5	0.17	2	20	< 1	0.3	1.48	< 1	< 1	< 5	0.26	0.07	341	0.06	0.01	< 15	0.7	1	< 3	7	< 0.5	0.03	2.2	< 0.5	9	< 1	4	7.7	14	9	1.1	< 0.01	< 0.5	0.3	0.08
A07-5490	85394	Rock	0.35	3	< 3	122	71	11.5	2070	0.3	< 1	3080	161	2760	> 20.0	2.48	2450	250	< 1	34	< 0.5	0.03	74	129	< 1	0.4	19.6	2	< 1	< 5	0.32	0.67	327	0.15	0.01	< 15	1	3.6	< 3	13	< 0.5	0.09	3.4	< 0.5	38	< 1	8	15.6	21	12	1.5	< 0.01	< 0.5	0.4	< 0.05
A07-5490	85395	Rock	0.20	< 1	< 1	44	29	1.1	1440	3.8	< 1	109	57	207	8.67	4.17	2580	420	1	25	< 0.5	0.05	32	39	< 1	0.4	12.8	3	< 1	< 5	0.8	1.32	329	0.15	0.01	40	< 0.1	4.6	< 3	12	< 0.5	0.16	7.3	2.8	39	< 1	8	19.2	30	14	1.9	< 0.01	< 0.5	1.1	0.22
A07-5490	85396	Rock	grab	< 1	< 1	4	< 2	< 0.3	594	0.8	< 1	20	10	94	0.38	1.24	126	170	< 1	2	< 0.5	0.11	< 1	25	< 1	< 0.2	2.99	< 1	< 1	< 5	0.25	0.5	320	0.06	0.03	< 15	< 0.1	1.4	< 3	9	< 0.5	0.03	1.6	0.6	11	< 1	4	3.4	5	< 5	0.6	< 0.01	< 0.5	0.4	< 0.05
A07-5197	85397	Rock	grab	1	< 1	6	< 2	< 0.3	18	0.5	< 1	79	18	49	0.03	2.83	29.4	380	< 1	< 2	< 0.5	1.62	5	31	< 1	0.7	2.55	1	< 1	< 5	1.12	0.42	1530	0.12	0.05	54	0.5	5.5	< 3	64	< 0.5	0.13	5.2	1.7	28	< 1	9	14	30	14	2.1	< 0.01	< 0.5	1.4	0.18
A07-5197	85398	Rock	1.5	< 1	< 1	23	32	6.8	1730	3.7	< 1	748	38	1060	14.20	2.01	445	< 50	< 1	12	< 0.5	0.05	77	39	< 1	0.3	19.1	< 1	< 1	< 5	0.17	0.91	1030	0.03	0.02	< 15	4.9	3.8	< 3	8	< 0.5	0.09	4	< 0.5	28	11	12	18.1	35	14	2.6	< 0.01	< 0.5	0.8	0.21
A07-5197	85399	Rock	0.65	< 1	< 1	40	25	11.8	4920	12	1	1550	43	5310	3.44	5.22	432	550	< 1	7	< 0.5	0.17	30	106	< 1	0.9	13.9	4	< 1	< 5	1.18	1.65	2040	0.14	0.06	68	5.3	9.4	< 3	29	1.4	0.2	11.4	4	68	18	11	41.1	77	23	5.2	< 0.01	< 0.5	2	0.32
A07-5197	85400	Rock	grab	< 1	< 1	58	70	5.2	2860	3	< 1	249	44	1200	7.83	3.51	210	440	< 1	19	< 0.5	0.03	71	99	2	0.9	23.3	3	< 1	< 5	0.92	0.63	1120	0.28	0.09	53	5.9	9.4	< 3	29	1.5	0.18	12.9	5.5	67	17	7	44.3	87	33	5.8	< 0.01	< 0.5	2.5	0.33
A07-5786	86001	Rock	0.20	< 1	< 1	4	< 2	1.1	551	2.7	< 1	55	47	576	0.88	7.03	88.5	840	1	< 2	< 0.5	0.33	9	97	< 1	0.9	11	8	< 1	< 5	1.41	1.77	2700	0.8	0.03	< 15	0.6	12.3	< 3	61	< 0.5	0.27	18.4	< 0.5	87	< 1	13	33.3	72	26	4.3	< 0.01	< 0.5	2.7	0.49
A07-5786	86002	Rock	0.20	< 1	< 1	33	34	1.5	156	1.5	< 1	86	42	462	2.49	3.41	58.1	430	1	< 2	< 0.5	1.4	15	91	< 1	< 0.2	8.92	4	< 1	< 5	1.15	1.46	882	0.58	0.02	< 15	0.6	7	< 3	74	< 0.5	0.17	10.8	< 0.5	45	< 1	7	14.1	30	15	2	< 0.01	< 0.5	1.5	0.26
A07-5786	86003	Rock	0.22	< 3	< 3	81	125	25.5	2030	5.9	< 1	1390	387	1790	19.60	2.88	481	< 50	< 1	50	< 0.5	0.08	103	1090	< 1	< 0.2	25.3	1	< 1	< 5	0.45	0.97	785	0.24	0.03	< 15	5.6	22	26	17	< 0.5	0.19	1.9	< 0.5	134	< 1	5	6.7	11	< 5	1.2	< 0.01	< 0.5	0.9	< 0.05
A07-5786	86004	Rock	0.15	4	3	12	< 2	4	758	2.2	< 1	354	399	496	7.82	3.48	364	320	< 1	9	< 0.5	0.05	38	1730	< 1	< 0.2	14.8	< 1	< 1	< 5	0.99	0.51	542	0.25	0.03	< 15	3.9	26	< 3	20	< 0.5	0.13	< 0.2	< 0.5	167	9	5	6.3	9	< 5	1.3	< 0.01	< 0.5	1.2	0.06
A07-5786	86005	Rock	grab	2	2	37	65	1.4	593	5.2	< 1	438	1020	1970	7.62	4.2	739	< 50	< 1	< 2	< 0.5	0.18	105	1750	< 1	0.7	16.4	3	< 1	< 5	0.31	2.98	1380	0.09	0.07	< 15	7.2	25.1	< 3	14	1	0.36	3.3	< 0.5	172	< 1	7	13.4	32	18	2.6	< 0.01	< 0.5	1.3	0.1
A07-5786	86006	Rock	0.30	< 3	< 3	31	42	56.6	1540	6.5	< 1	> 5000	56	15500	9.22	5.72	2830	1430	2	109	< 0.5	0.05	30	126	< 1	1	22.1	3	< 1	< 5	1.31	1.3	1120	0.56	0.02	< 15	1.2	11.8	42	24	1.6	0.17	14	< 0.5	73	< 1	9	57.6	107	29	5.5	< 0.01	< 0.5	2.2	0.3
A07-5786	86007	Rock	0.30	< 3	< 3	26	48	9.7	889	7.1	< 1	2670	207	3370	> 20.0	2.31	288	< 50	< 1	18	< 0.5	0.04	124	566	< 1	< 0.2	26	1	< 1	< 5	0.06	0.9	377	0.06	0.02	< 15	5.6	10.4	7	4	< 0.5	0.09	< 0.2	< 0.5	76	< 1	5	3.8	10	< 5	0.7	< 0.01	< 0.5	0.7	0.14
A07-5786	86008	Rock	grab	< 3	< 3	29	36	8.5	889	8.2	< 1	3390	76	5350	11.80	4	2180	400	< 1	15	< 0.5	0.06	46	99	< 1	< 0.2	16.6	3	< 1	< 5	0.94	1.18	886	0.44	0.02	76	2.4	7.9	< 3	32	< 0.5	0.13	6.6	< 0.5	66	< 1	6	15.1	33	12	2	< 0.01	< 0.5	1.4	< 0.05
A07-5786	86009	Rock	grab	< 1	< 1	49	90	1.3	2010	2.8	1	94	40	242	12.90	3.77	1890	700	< 1	6	< 0.5	0.02	15	54	< 1	0.4	15.4	3	< 1	< 5	0.87	0.96	257	0.19	0.01	< 15	0.7	6.7	< 3	9	< 0.5	0.14	9.9	< 0.5	43	< 1	10	23.8	54	19	2.4	< 0.01	< 0.5	1.4	0.24
A07-5786	86010	Rock	grab	< 1	< 1	12	< 2	1	186	0.9	< 1	62	24	87	2.09	3.55	82.1	440	< 1	< 2	< 0.5	0.06	16	53	< 1	0.6	6.92	5	< 1	< 5	0.78	1.11	624	0.58	0.01	< 15	0.1	4.2	< 3	44	< 0.5	0.19	9.3	2.2	36	< 1	7	18.4	40	9	2.3	< 0.01	1.6	1.3	0.24
A07-5786	86011	Rock	grab	< 6	< 6	110	147	17.6	2360	< 0.3	< 1	3310	172	3360	> 20.0	0.94	4910	380	< 1	44	< 0.5	< 0.01	164	80	< 1	< 0.2	31.1	< 1	< 1	< 5	0.14	0.13	132	0.1	0.01	< 15	3.2	3	36	5	< 0.5	0.03	2.6	< 0.5	26	< 1	3	6.2	12	< 5	0.7	< 0.01	< 0.5	< 0.2	< 0.05
A07-5786	86012	Rock	grab	< 6	< 6	140	175	4.5	951	3	< 1	705	50	474	> 20.0	0.99	509	< 50	< 1	33	< 0.5	0.01	252	20	< 1	< 0.2	31.1	< 1	< 1	< 5	0.1	0.11	133	0.13	0.01	< 15	6.7	2.2	22	5	< 0.5	0.04	2.5	< 0.5	23	< 1	3	5.8	16	9	0.7	0.11	< 0.5	< 0.2	< 0.05
A07-5786	86013	Rock	1.5	< 1	< 1	8	< 2	4.2	221	14	< 1	2540	78	6140	1.79	6.74	182	990	2	4	< 0.5	0.04	23	104	< 1	1	11.2	4	< 1	< 5	1.38	2.96	3780	0.37	0.02	< 15	1.8	13.7	< 3	31	< 0.5	0.31	14.7	< 0.5	74	< 1	9	43.8	93	39	5.5	< 0.01	< 0.5	2.5	0.5
A07-5786	86014	Rock	grab	< 6	25	80	109	5.1	671	4	< 1	1570	607	2610	> 20.0	0.4	882	< 50	< 1	< 2	< 0.5	0.01	119	355	< 1	< 0.2	30.6	< 1	< 1	< 5	0.04	0.19	151	0.03	0.01	< 15	13	5.3	< 3	2	< 0.5	0.03	< 0.2	< 0.5	35	< 1	3	2.4	< 3	< 5	0.4	< 0.01	< 0.5	0.4	< 0.05
A07-5786	86015	Rock	1.0	< 1	< 1	8	< 2	1.5	251	4	< 1	216	117	1090	3.08	8.36	346	1170	3	< 2	< 0.5	0.31	32	127	6	1.5	6.95	5	< 1	< 5	3.86	0.38	1240	0.5	0.14	185	1.5	12.9	< 3	52	< 0.5	0.43	17.4	6.1	99	< 1	17	48.3	104	36	8.3	< 0.01	< 0.5	3.2	0.64
A07-5786	86016	Rock	1.6	< 1	< 1	5	< 2	1.1	252	5.6	< 1	169	70	1720	0.12	11.1	401	1890	4	< 2	< 0.5	0.08	52	130	< 1	< 0.2	6.63	6	< 1	< 5	4.7	0.41	2290	0.64	0.05	207	0.3	17.6	< 3	61	< 0.5	0.51	27	6.9	120	< 1	11	61.2	132	50	7.8	< 0.01	< 0.5	3.5	0.51
A07-5786	86017	Rock	0.35	8	5	66	82	6.5	833	1.3	< 1	> 5000	976	4730	7.12	3.78	1620	< 50	< 1	3	< 0.5	0.03	88	2850	< 1	1	23.1	< 1	< 1	< 5	0.18	2.99	1230	0.06	0.05	< 15	16.8	26.4	< 3	6	1.3	0.1	< 0.2	< 0.5	165	16	5	7.8	20	< 5	1.4	< 0.01	< 0.5	1.2	< 0.05

				>9	>9	20-100		1-5	150-300	2-10	10-50	20-100	100-200	100-200	2.0-4.0		20-100	1000-2000		>2		>10.0		400-1000							>2.00						5-10																								
						101-200		5.1-10	301-500	>10	>50	101-500	>200	201-500	4.1-5.0		101-200	>2000						>1000														11-50																								
						>200		>10	>500			>500		>500	>5.0		>200																			>50																								

Frank Creek 2007 Trenching
GEOCHEM RESULTS

Frank Creek 2007 Trenching Geochem Results

		Detection Limit	1	1	2	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.001	0.001	0.003
		Analysis Method	FA-MS	FA-MS	FA-MS	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES	ICP-OES	ICP-OES
Certificate	Sample	Sample	Width	Pd	Pt	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	Cu	Zn	Pb
Number	Number	Type	(m)	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
A07-5684	F5707-24	Rock	grab	< 3	< 3	6	3.8	13.2	1560	2840	< 1	59	275	3920	1.3	320	24	60	< 0.5	4	0.5	38	28	14.7	10	< 1	0.13	< 10	1.8	0	0.06	1.83	6	4	22	0.01	2	< 2	< 10	29	< 10	3	13	0.15	0.5	0
A07-5684	F5707-04	Rock	grab	< 3	< 3	18	25.9	21.4	5230	514	< 1	23	> 5000	8020	1.11	170	26	21	< 0.5	7	0.04	23	30	14	10	< 1	0.04	< 10	1	0	0.03	7.34	15	2	4	0.01	3	< 2	< 10	16	< 10	1	15	0.52	0.89	1.8
A07-5684	F5707-05	Rock	grab	< 3	< 3	16	21.1	27.9	5250	713	< 1	18	> 5000	> 10000	0.86	118	26	21	< 0.5	7	0.04	22	23	12.9	10	< 1	0.04	< 10	1	0	0.03	6.52	11	2	4	0.01	3	< 2	< 10	13	< 10	1	13	0.54	1.21	1.3
A07-5684	F5707-06	Rock	grab	< 3	< 3	49	18	11.5	2410	622	< 1	29	4290	3490	1.08	984	26	< 10	< 0.5	50	0.03	166	29	21	< 10	< 1	0.01	< 10	1	0	0.03	10.3	13	3	5	0.01	3	< 2	< 10	20	< 10	1	15	0.23	0.44	0.5
A07-5684	F5707-07	Rock	grab	< 3	< 3	11	8.5	31.3	1790	2140	< 1	26	1080	> 10000	1.34	1170	22	32	< 0.5	19	0.11	32	28	14.5	10	< 1	0.06	< 10	1.4	0	0.04	5.23	8	3	6	0.01	5	< 2	< 10	18	< 10	2	16	0.18	1.53	0.1
A07-5684	F5707-08	Rock	grab	< 3	12	184	3.3	0.9	4920	373	< 1	44	208	258	0.22	12900	25	< 10	< 0.5	24	< 0.01	55	3	26.6	< 10	< 1	0.05	< 10	0.2	0	0.01	14.7	16	1	8	0.01	5	< 2	< 10	9	< 10	< 1	12	0.49	0.04	0
A07-5684	F5707-09	Rock	grab	< 3	< 3	30	4.8	6.4	1830	1790	< 1	20	1650	1870	1.2	721	25	13	< 0.5	14	0.05	72	21	17.3	10	< 1	0.03	< 10	1.3	0	0.02	6.92	10	3	3	0.01	3	< 2	< 10	18	16	2	16	0.17	0.23	0.2
A07-5684	F5707-10	Rock	grab	< 3	9	28	7.4	9.8	2410	1070	< 1	23	1040	4150	1.14	1030	26	10	< 0.5	20	0.06	64	17	18.8	10	< 1	0.03	< 10	1.1	0	0.03	10.4	9	2	4	0.01	1	< 2	< 10	17	< 10	1	16	0.23	0.49	0.1
A07-5684	F5707-11	Rock	grab	< 3	< 3	35	14.7	7.0	> 10000	776	< 1	25	1290	2010	1.34	551	27	35	< 0.5	14	0.05	39	15	12.8	10	< 1	0.07	< 10	1	0	0.05	3.39	9	2	6	0.01	2	< 2	< 10	18	< 10	2	12	1.58	0.22	0.1
A07-5684	F5707-12	Rock	grab	< 3	< 3	30	12.5	7.4	8040	640	< 1	40	2440	3250	1.4	163	26	24	< 0.5	18	0.06	69	41	17.2	10	< 1	0.05	< 10	1.1	0	0.04	6.61	7	3	6	0.01	5	< 2	< 10	22	< 10	2	19	0.81	0.38	0.3
A07-5684	F5707-13	Rock	grab	< 3	3	14	5.5	6.1	2170	1050	< 1	39	2220	2520	2.39	176	25	24	< 0.5	11	0.15	40	83	14	10	< 1	0.05	< 10	1.4	0	0.07	3.99	7	4	10	0.01	2	< 2	< 10	33	< 10	3	26	0.2	0.31	0.3
A07-5684	F5707-14	Rock	grab	< 3	< 3	15	6.4	7.6	3810	477	< 1	36	1790	2960	2.01	189	25	35	< 0.5	8	0.14	45	68	13.6	10	< 1	0.07	< 10	1.3	0	0.07	5	7	3	11	0.01	< 1	< 2	< 10	29	< 10	3	26	0.39	0.36	0.2
A07-5684	F5707-15	Rock	grab	< 3	17	16	4.3	6.4	2760	604	< 1	36	1240	2330	2.31	298	25	23	< 0.5	9	0.13	50	69	15.3	10	< 1	0.05	< 10	1.4	0	0.07	5.8	7	3	9	0.01	2	< 2	< 10	32	< 10	3	26	0.28	0.29	0.2
A07-5684	F5707-16	Rock	grab	< 3	3	42	30.6	15.7	4130	528	1	25	4770	4910	1.31	404	25	28	< 0.5	87	0.07	59	54	12.7	10	< 1	0.06	< 10	1	0	0.04	5.25	7	3	7	0.01	2	< 2	< 10	19	< 10	2	26	0.43	0.57	0.5
A07-5684	F5707-17	Rock	grab	< 3	< 3	25	8.9	10.0	4330	414	< 1	37	2240	3970	1.67	280	25	20	< 0.5	18	0.08	70	55	18	10	< 1	0.04	< 10	1.2	0	0.05	7.88	9	3	7	0.01	2	< 2	< 10	28	< 10	2	25	0.45	0.51	0.3
A07-5684	F5707-18	Rock	grab	3	10	14	4.7	6.3	2430	1280	< 1	30	1140	2530	2.17	133	24	24	< 0.5	8	0.13	37	68	14.5	10	< 1	0.05	< 10	1.5	0	0.06	4.16	7	4	8	0.01	2	< 2	< 10	31	< 10	2	24	0.26	0.33	0.1
A07-5684	F5707-19	Rock	grab	< 3	< 3	50	28.9	16.6	1330	591	< 1	35	> 5000	7650	2.06	185	23	< 10	< 0.5	52	0.03	61	36	27.3	< 10	2	0.1	< 10	1.1	0	0.02	7.63	13	5	6	0.01	4	< 2	< 10	31	< 10	2	28	0.13	1.07	1.7
A07-5684	F5707-20	Rock	grab	< 3	12	82	18.6	7.0	6830	1350	< 1	37	1630	1930	1.82	621	24	17	< 0.5	52	0.05	95	54	21.4	< 10	< 1	0.03	< 10	1.4	0	0.03	6.68	10	4	4	0.01	2	< 2	< 10	29	16	2	23	0.69	0.27	0.2
A07-5684	F5707-21	Rock	grab	< 3	< 3	17	2.4	84.2	517	811	< 1	13	532	> 10000	0.9	121	25	25	< 0.5	5	0.09	31	14	10.8	10	2	0.05	< 10	1.1	0	0.04	6.08	5	2	5	0.01	2	< 2	< 10	13	< 10	1	11	0.05	2.75	0.1
A07-5684	F5707-22	Rock	grab	< 3	< 3	44	20.5	7.3	3830	649	< 1	19	1670	3750	0.95	1120	25	< 10	< 0.5	49	0.02	72	16	20.6	< 10	< 1	0.05	< 10	0.9	0	0.01	11.3	10	2	3	0.01	3	< 2	< 10	17	< 10	1	14	0.38	0.47	0.2
A07-5684	F5707-23	Rock	grab	< 3	< 3	13	3.3	91.2	561	789	< 1	15	842	> 10000	0.9	133	25	19	< 0.5	5	0.09	34	12	11	10	2	0.04	< 10	1	0	0.04	5.88	6	2	5	0.01	2	< 2	< 10	13	< 10	1	11	0.06	3.19	0.1
A07-5684	F51MTR-02	Rock	grab	4	< 3	52	5.8	28.5	2120	111	< 1	951	1350	> 10000	0.94	375	25	< 10	< 0.5	15	< 0.01	91	806	29.5	< 10	< 1	< 0.01	< 10	1	0	0.02	15	16	11	< 1	0.01	6	< 2	< 10	51	15	< 1	7	0.21	1.5	0.2
A07-5684	F51MTR-01	Rock	grab	4	< 3	54	4.5	5.3	2170	91	< 1	752	595	1140	1.97	926	24	< 10	< 0.5	14	0.01	107	1200	26.1	< 10	< 1	< 0.01	< 10	1.3	0	0.03	14.3	15	18	2	0.01	5	< 2	< 10	93	< 10	< 1	7	0.21	0.17	0.1
A07-5684	F51MTR-03	Rock	grab	4	4	81	3.3	2.2	348	474	< 1	755	303	140	0.23	589	25	< 10	< 0.5	38	< 0.01	200	387	29	< 10	< 1	< 0.01	< 10	0.3	0	0.03	15.6	14	9	< 1	0.01	5	< 2	< 10	28	< 10	< 1	8	0.03	0.02	0
A07-5684	TR5201-11	Rock	grab	< 3	< 3	64	8.6	1.5	3770	250	< 1	25	498	231	0.26	435	25	< 10	< 0.5	28	< 0.01	42	9	29.1	< 10	< 1	0.02	< 10	0.2	0	0.01	16.5	8	1	2	0.01	5	< 2	< 10	9	< 10	< 1	11	0.41	0.03	0.1
A07-5684	TR5201-12	Rock	grab	< 3	< 3	51	11.6	1.4	897	196	< 1	18	920	427	0.25	369	22	< 10	< 0.5	36	< 0.01	41	8	25.1	< 10	< 1	0.03	< 10	0.1	0	0.01	15.1	8	1	3	0.01	4	< 2	< 10	12	< 10	< 1	14	0.09	0.06	0.1
A07-5684	TR5201-13	Rock	grab	< 3	< 3	31	11.3	0.8	1460	127	< 1	17	757	343	0.14	311	22	< 10	< 0.5	33	< 0.01	29	4	25.9	< 10	< 1	0.02	< 10	0	0	0.01	14.7	10	1	3	0.01	4	< 2	< 10	9	< 10	< 1	14	0.15	0.04	0.1
A07-5684	TR5201-14	Rock	grab	< 3	< 3	76	2.1	11.5	1680	541	< 1	8	64	3220	0.31	1840	25	80	< 0.5	23	0.03	10	10	12.8	< 10	< 1	0.07	13	0.1	0	0.01	0.72	7	1	7	0.01	4	< 2	< 10	6	< 10	3	9	0.16	0.33	0
A07-5684	TR5201-15	Rock	grab	< 3	< 3	7	0.5	31.9	857	893	< 1	10	30	7510	0.92	23	23	31	< 0.5	< 2	0.36	5	15	7.05	< 10	< 1	0.05	< 10	1.6	0.1	0.01	1	4	3	11	0.01	1	< 2	< 10	11	< 10	2	11	0.09	0.8	0
A07-5684	TR5201-16	Rock	grab	< 3	< 3	19	4.4	15.3	932	1140	< 1	239	1270	4260	2.78	286	27	37	< 0.5	5	0.24	42	601	13.8	10	< 1	0.03	< 10	1.9	0	0.06	0.33	6	20	9	0.01	< 1	< 2	< 10	118	< 10	4	4	0.09	0.53	0.2
A07-5684	TR5201-17	Rock	grab	< 3	< 3	105	27.4	< 0.5	> 10000	238	< 1	241	> 5000	> 10000	0.38	10800	26	< 10	< 0.5	25	0.02	59	91	30.6	< 10	1	0.01	< 10	0.7	0	0.01	16.2	28	7	11	0.01	7	< 2	< 10	20	13	2	7	1.23	3.73	2.9
A07-5684	TR5201-18	Rock	grab	< 3	< 3	11	2.5	15.6	699	122	< 1	9	2030	2080	4.3	894	40	< 10	< 0.5	< 2	0.17	3	10	2.07	10	< 1	1.17	< 10	0.2	2.8	0	1.08	< 2	< 1	12	0.01	< 1	2	< 10	2	< 10	3	3	0.07	0.22	0.2
A07-5684	TR5201-19	Rock	grab	< 3	< 3	33	4.8	87.8	999	1000	< 1	291	3580	> 10000	2.88	425	24	11	< 0.5	5	0.67	39	659	15.5	10	< 1	0.02	< 10	1.9	0	0.03	6.13	9	19	17	0.01	2	< 2	< 10	102	< 10	2	6	0.1	2.82	0.5
A07-5684	TR5201-20	Rock	grab	< 3	3	26	2	12.1	468	1260	< 1	287	854	2310	4.22	361	25	< 10	< 0.5	4	1.77	41	1010	16	20	< 1	< 0.01	< 10	1.9	0	0.05	2.27	10	28	46	0.01	< 1	< 2	< 10	174	< 10	3	5	0.04	0.35	0.1
A07-5684	F51UTR-01	Rock	grab	< 3	< 3	133	11	< 0.5	2440	93	< 1	69	1960	2340	0.71	2590	25	< 10	< 0.5	41	0.02	168	13	28.3	< 10	< 1	0.01	< 10	0.6	0	0	16.2	13	2	1	0.01	4	< 2	< 10	16	14	< 1	9	0.28	0.35	0.3
A07-5684	F51UTR-02	Rock	grab	< 3	< 3	82	36.3	< 0.5	3760	843	< 1	57	> 5000	7860	0.58	1410	26	< 10	< 0.5	86	0.03	69	34	30	< 10	< 1	0.03	< 10	1.1	0	0.01	15.7	15	2	1	0.01	4	< 2	< 10	15	15	< 1	12	0.4	1.2	2.2
A07-5684	F51UTR-03	Rock	grab	< 3	< 3	312	16.7	1.7	4560	191	< 1	30	> 5000	5220	0.26	12000	23	< 10	< 0.5	44	< 0.01	81	9	26.8	< 10	< 1	0.04	< 10	0.4	0	0.01	15.6	34	1	2	0.01	5	< 2	< 10	10	12	< 1	10	0.51	0.74	0.9
A07-5684	F51UTR-04	Rock	grab	< 3	< 3	19	1.4	19.5	1230	583	< 1	45	160	5150	1.12	362	21	< 10	< 0.5	9	0.07	30	16	18.9	10	< 1	0.1	< 10	1.3	0	0.02	10.1	6	2	4	0.01	2	< 2	< 10	12	< 10	2	29	0.12	0.66	0
A07-5684	F51UTR-05	Rock	grab	< 3	< 3	47	3.7	5.3	1980	787	< 1	44	384	1170	1.7	1410	23	< 10	< 0.5	21	0.16	30	52	18.7	10	< 1	0.13	< 10	1.3	0	0.02	10.2	8	3	6	0.01	4	< 2	< 10	17	< 10	3	34	0.19	0.15	0.1
A07-5684	F51UTR-06	Rock	grab	< 3	< 3	109	2.8	< 0.5	2480	438	< 1	35	271	241	1.19	2660	23	< 10	< 0.5	35	0.02	53	12	26.8	< 10	< 1	0.03	< 10	1	0	0.01	14.8	11	1	3	0.01	5	< 2	< 10	14	< 10	< 1	15	0.24	0.04	0
A07-5684	F51UTR-07	Rock	grab	< 3	8	42	1.2	5.0	1200	161	< 1	23	106	171	0.63	982	23	< 10	< 0.5	11	0.01	14	11	13.2	10	< 1	0.12	< 10	0.5	0	0.01	8.06	6	1	3	0.01	4	< 2	< 10	9	< 10	2	21	0.11	0.02	0
A07-5684	F51UTR-08	Rock	grab	< 3	< 3	78	6	10.0	1310	162	< 1	32	3180	4560	1.21	2390	24	16	< 0.5	13	0.04	102	37	18.4	10	< 1	0.06	11	0.9	0	0.04	10.6	29	2	6	0.01	4	< 2	< 10	18	< 10	2	22	0.13	0.56	0.4
A07-5684	F51UTR-09	Rock	grab	< 3	< 3	123	0.6	3.9	667	154	2	42	61	80	1.29	2370	24	< 10	< 0.5	23	0.02	20	18	16.9	10	< 1	0.1	< 10	1	0	0.01	11.1	13	2	2	0.01	2	< 2	< 10	15	< 10	1	23	0.07	0.02	0

Report: A07-4245 Final2 Rev, 2
Report Date: 21/12/2007

Final Report
Activation Laboratories

Analyte Symbol	Cu	Zn	Pb
Unit Symbol	%	%	%
Detection Limit	0.001	0.001	0.003
Analysis Method	ICP-OES	ICP-OES	ICP-OES
A85316	--	--	0.722
A85317	--	--	0.959
A85320	--	--	0.853
A85326	0.11	0.936	1.01
A85336	--	--	0.623

Report: A07-4674 Final2 Rev, 2
Report Date: 21/12/2007

Final Report
Activation Laboratories

Analyte Symbol	Cu	Zn	Pb
Unit Symbol	%	%	%
Detection Limit	0.001	0.001	0.003
Analysis Method	ICP-OES	ICP-OES	ICP-OES
85363	0.307	--	--
85369	--	1.07	0.667
85370	--	--	0.804
85372	3.07	--	--

Report: A07-5490 Final2 Rev, 2
Report Date: 21/12/2007

Final Report
Activation Laboratories

Analyte Symbol	Cu	Zn	Pb
Unit Symbol	%	%	%
Detection Limit	0.001	0.001	0.003
Analysis Method	ICP-OES	ICP-OES	ICP-OES
85384	0.362	2.82	0.743
85392	1.63	3.78	3.54

Report: A07-5786 (i) rev 1 Rev, 1
Report Date: 28/12/2007

Final Report
Activation Laboratories

Analyte Symbol	Zn	Pb
Unit Symbol	%	%
Detection Limit	0.001	0.003
Analysis Method	ICP-OES	ICP-OES
86006	1.86	2.68
86017	0.566	0.548

Analytical Data
for
Frank Creek 2007 Soil Sampling (Enzyme Leach)

Report: A06-3563

Final Report
Activation Laboratories

Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

Report: A06-3563

Final Report
Activation Laboratories

Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

Report: A06-3563

Final Report
Activation Laboratories

Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

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Final Report
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Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

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Final Report
Activation Laboratories

Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

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Final Report
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Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

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Final Report
Activation Laboratories

Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

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Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	0.1	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS

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Element			Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	6000	81	656	12	13	< 5	5	1.9	< 1	< 1	< 0.01	< 0.05	< 1	8.7	3	702	1280	561	580	45	8	< 0.5	0.3	19	< 0.1	< 0.8	1.1	1.5	200	< 20	40.7	47	< 1	1.4	< 0.1	40.6	34.1	11.6	47.2	10.5	2.8
FC	L54	22+25	11000	104	599	30	21	< 5	3	1	< 1	< 1	0.01	< 0.05	< 1	4.1	3.2	149	95	80	460	47	3	< 0.5	0.2	9.4	< 0.1	< 0.8	0.1	< 0.8	400	< 20	8.4	27	2	0.9	< 0.1	5.1	6.9	1.5	6.6	1.6	0.6
FC	L54	22+50	32000	234	1020	75	35	7	12	1.4	< 1	2	0.09	< 0.05	< 1	3.4	2.6	102	186	186	3200	21	4	< 0.5	0.6	25.8	< 0.1	< 0.8	0.5	0.9	400	< 20	7.8	40	< 1	0.9	< 0.1	4.5	5.9	1.2	5.4	1.2	0.8
FC	L54	22+75	19000	222	897	36	27	11	6	2.4	< 1	< 1	0.08	< 0.05	< 1	4.9	3.5	117	337	373	8180	22	2	< 0.5	0.3	73.1	< 0.1	< 0.8	0.4	< 0.8	300	< 20	17.3	35	< 1	1.1	< 0.1	9.1	13.9	2.5	11	2.7	0.9
FC	L54	23+00	31000	560	2620	30	16	14	5	1.3	< 1	< 1	0.2	< 0.05	< 1	4.6	5.4	75	259	313	2580	20	2	< 0.5	0.3	23.2	< 0.1	< 0.8	0.3	< 0.8	200	< 20	27.7	36	< 1	1.2	< 0.1	11.8	9.4	3.2	14.2	3.2	1.1
FC	L54	23+25	7000	69	253	55	29	9	4	2.3	< 1	< 1	0.02	< 0.05	< 1	3.7	2.3	183	429	179	2320	23	2	< 0.5	0.3	24.8	< 0.1	< 0.8	< 0.1	< 0.8	800	< 20	6	37	1	1	< 0.1	3	6.7	0.9	3.7	0.9	0.4
FC	L54	23+50	8000	186	771	17	23	8	6	1.6	< 1	< 1	0.17	< 0.05	< 1	2.2	2.9	249	227	225	1560	37	2	< 0.5	0.3	15.4	< 0.1	< 0.8	0.3	< 0.8	300	< 20	8.6	22	< 1	0.6	< 0.1	5.2	14.2	1.5	6.4	1.5	0.5
FC	L54	23+75	31000	344	1330	22	21	12	6	1.2	< 1	< 1	0.77	< 0.05	< 1	1.9	5.4	164	273	266	330	17	2	< 0.5	0.3	5.5	< 0.1	< 0.8	0.3	< 0.8	100	< 20	14	22	< 1	0.6	< 0.1	6.8	10.6	1.9	8.4	2	0.8
FC	L54	24+00	16000	316	1710	17	18	9	10	1.9	< 1	< 1	0.15	< 0.05	< 1	1.5	5.1	125	201	154	110	20	2	< 0.5	< 0.2	2	< 0.1	< 0.8	0.3	< 0.8	< 100	< 20	6	18	< 1	0.5	< 0.1	4	7.8	1.1	4.7	1.1	0.4
FC	L54	24+25	13000	212	862	19	15	7	9	2.2	< 1	< 1	0.15	< 0.05	< 1	2.2	5.1	122	160	79	60	20	2	< 0.5	0.2	2.1	< 0.1	< 0.8	0.2	< 0.8	100	< 20	5.2	18	< 1	0.6	< 0.1	3.1	5.1	0.9	4.2	1.1	0.4
FC	L54	24+50	34000	264	776	60	61	12	15	3.1	1	1	0.14	< 0.05	< 1	3	6.8	77	114	114	270	29	4	< 0.5	0.5	4.3	< 0.1	< 0.8	0.3	1.3	200	< 20	4.9	19	< 1	0.6	< 0.1	2.8	5.7	0.8	3.4	0.8	0.3
FC	L54	24+75	17000	105	436	30	15	< 5	5	0.8	< 1	< 1	0.04	< 0.05	< 1	2.6	3.1	57	70	34	150	21	3	< 0.5	< 0.2	2.6	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	3.9	11	2	0.4	< 0.1	2.7	5.6	0.8	3.3	0.8	0.3
FC	L54	25+00	5000	67	307	36	12	5	5	1.1	< 1	< 1	0.02	< 0.05	< 1	5.1	3	117	59	106	120	21	3	< 0.5	< 0.2	1.8	< 0.1	< 0.8	0.2	1.6	200	< 20	7.4	31	< 1	0.5	< 0.1	4	25	1.5	6.4	1.9	0.6
FC	L54	25+25	11000	135	603	52	15	6	6	1.8	< 1	< 1	0.03	< 0.05	< 1	3	3.2	82	85	68	180	14	3	< 0.5	< 0.2	4.2	< 0.1	< 0.8	0.1	< 0.8	300	< 20	6.4	17	< 1	0.6	< 0.1	4	11.2	1.2	5.5	1.3	0.5
FC	L54	25+50	10000	162	624	32	12	7	2	0.4	< 1	< 1	< 0.01	< 0.05	< 1	3.3	3.1	38	66	72	130	20	3	< 0.5	0.3	0.9	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	8.8	14	1	0.5	< 0.1	5.6	11.1	1.6	7.2	1.7	0.5
FC	L54	25+75	23000	220	934	46	17	9	14	2.5	< 1	< 1	0.49	< 0.05	< 1	2.3	5.3	191	147	129	130	11	2	< 0.5	0.2	3.6	< 0.1	< 0.8	0.4	< 0.8	200	< 20	12.9	18	< 1	0.5	< 0.1	4.1	6.9	1.3	5.8	1.6	0.7
FC	L54	26+00	22000	213	900	66	16	7	15	1	2	< 1	0.06	< 0.05	< 1	1.1	2.2	122	71	34	180	9	3	< 0.5	0.5	3.5	< 0.1	< 0.8	0.3	< 0.8	300	< 20	3.7	20	< 1	0.4	< 0.1	1.3	2.9	0.4	2.3	0.6	0.3
FC	L54	26+25	9000	68	301	60	25	< 5	12	1.2	< 1	< 1	0.01	< 0.05	< 1	1.6	1.5	85	53	39	450	53	2	< 0.5	0.3	19.9	< 0.1	< 0.8	0.1	< 0.8	300	< 20	2.9	13	< 1	0.5	0.1	0.6	2.2	0.3	1.6	0.4	0.2
FC	L54	26+50	15000	95	424	82	36	8	24	2	< 1	< 1	0.01	< 0.05	< 1	3	6.8	23	41	46	2130	19	3	< 0.5	0.6	11.5	< 0.1	< 0.8	0.1	1.6	800	< 20	3.8	17	< 1	0.9	< 0.1	7.5	6.4	0.5	2.3	0.6	0.4
FC	L54	26+75	17000	159	840	96	35	8	10	3.3	< 1	< 1	< 0.01	< 0.05	< 1	4.3	2.5	40	85	74	540	47	3	< 0.5	< 0.2	29.4	< 0.1	< 0.8	0.2	0.9	500	< 20	4.3	24	1	0.4	0.1	1.7	5.2	0.7	3	1	0.9
FC	L54	27+00	16000	80	497	59	25	< 5	8	1.4	< 1	< 1	0.01	< 0.05	< 1	2	1.6	107	58	44	50	13	2	< 0.5	0.3	9.5	< 0.1	< 0.8	0.2	< 0.8	100	< 20	4.6	29	1	0.8	< 0.1	6.3	6.5	0.6	2.9	0.8	0.5
FC	L54	27+25	24000	314	1760	27	15	6	7	3.4	< 1	< 1	0.02	< 0.05	< 1	2	8.4	104	83	126	190	8	< 1	< 0.5	0.3	3.3	< 0.1	< 0.8	0.2	1	500	< 20	16.4	23	< 1	0.5	< 0.1	2	5.6	1.9	8.8	2.3	0.9
FC	L54	27+50	40000	180	679	105	13	7	12	0.9	< 1	< 1	0.01	< 0.05	< 1	2	2.7	11	30	25	90	8	4	< 0.5	0.6	4.8	< 0.1	< 0.8	0.1	1.1	200	< 20	4	11	1	0.4	< 0.1	4.1	4.1	0.7	3.1	0.8	0.4
FC	L54	27+75	24000	138	654	54	12	7	7	0.8	< 1	< 1	0.03	< 0.05	< 1	2.4	1.7	23	35	27	40	6	< 1	< 0.5	0.3	1.5	< 0.1	< 0.8	0.1	0.9	400	< 20	4.2	11	1	0.4	0.1	7.1	5.2	1.1	4.8	1	0.4
FC	L54	28+00	24000	202	900	32	16	7	3	0.9	< 1	< 1	0.04	< 0.05	< 1	2.3	2.9	22	66	51	50	9	2	< 0.5	< 0.2	2.1	< 0.1	< 0.8	0.1	0.8	400	< 20	12	13	2	0.6	0.1	8.9	6.9	2	7.8	1.9	0.7
FC	L54	28+25	18000	123	565	16	7	< 5	4	1.1	< 1	< 1	0.01	< 0.05	< 1	4.3	3.6	69	50	33	570	13	< 1	< 0.5	< 0.2	1.7	< 0.1	< 0.8	< 0.1	1	300	< 20	11.4	17	< 1	0.3	< 0.1	2.7	9.3	2.6	10.5	2.3	0.7
FC	L54	28+50	19000	110	554	22	17	< 5	14	3.1	< 1	< 1	< 0.01	< 0.05	< 1	2.8	1.4	67	38	23	290	15	2	< 0.5	< 0.2	5.3	< 0.1	< 0.8	0.1	1.1	400	< 20	3.3	8	< 1	0.3	< 0.1	3.5	15.4	0.8	3	0.7	0.3
FC	L54	28+75	17000	107	569	64	21	6	9	2.9	< 1	< 1	0.07	< 0.05	< 1	2.2	9.7	49	64	39	170	14	3	< 0.5	< 0.2	6.6	< 0.1	< 0.8	0.2	1	300	< 20	3.8	10	1	0.4	0.1	4.7	8.9	0.9	3.7	0.8	0.3
FC	L54	29+00	15000	198	748	42	18	8	2	2.3	< 1	< 1	0.12	< 0.05	< 1	3.7	10.1	86	55	64	130	19	< 1	< 0.5	< 0.2	3.1	< 0.1	< 0.8	0.2	0.9	400	< 20	5.8	14	1	0.4	0.1	7.1	17.4	1.5	7.2	1.3	0.4
FC	L54	29+25	11000	121	452	21	9	< 5	10	0.7	< 1	< 1	0.01	< 0.05	< 1	4	4.5	57	66	53	140	18	2	< 0.5	< 0.2	4.9	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	5.1	16	2	0.4	0.1	6.3	13.5	1.8	7.3	1.5	0.5
FC	L54	29+50	30000	260	864	31	30	14	11	5.1	< 1	< 1	0.32	< 0.05	< 1	2.5	8.7	108	151	115	140	18	2	< 0.5	0.4	5.4	< 0.1	< 0.8	0.4	1	< 100	< 20	6.8	39	1	0.5	< 0.1	6.5	12	1.6	6.2	1.4	0.5
FC	L54	29+75	24000	205	1410	20	21	16	3	5	< 1	< 1	0.06	< 0.05	< 1	2.8	10	65	233	186	60	11	2	< 0.5	0.3	4.1	< 0.1	< 0.8	0.3	0.8	200	< 20	6.8	41	< 1	0.6	< 0.1	13.9	7.2	1.8	6.9	1.5	0.5
FC	BL	55+25	5000	242	1330	17	7	8	3	1.5	1	1	0.02	< 0.05	< 1	3.2	5.7	36	20	41	140	13	2	< 0.5	0.3	0.7	< 0.1	< 0.8	0.1	1.2	200	< 20	10.9	16	< 1	0.9	< 0.1	15	17.4	3.3	13.6	2.6	0.7
FC	BL	55+50	13000	378	2010	19	12	7	< 1	1.7	< 1	1	0.04	< 0.05	< 1	6.5	5.8	42	57	68	190	36	3	< 0.5	0.2	3.1	< 0.1	< 0.8	0.2	1.1	100	< 20	17.2	25	< 1	0.6	< 0.1	12.8	13.5	4.3	17.6	3.9	1.1
FC	BL	55+75	6000	290	1510	16	11	< 5	13	2.2	< 1	< 1	0.03	< 0.05	< 1	3.8	4.5	51	69	66	50	25	2	< 0.5	0.7	2.8	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	12.7	21	< 1	0.7	< 0.1	17.8	10.4	3.4	14.5	2.8	0.8
FC	BL	56+25	34000	672	3190	21	13	16	14	4.9	< 1	2	0.03	< 0.05	< 1	2.8	6.5	48	92	163	50	5	1	< 0.5	0.8	2	< 0.1	< 0.8	0.3	< 0.8	< 100	< 20	24.3	25	< 1	0.7	< 0.1	17.5	9.3	4.2	18.2	3.8	1.3
FC	BL	56+50	9000	173	613	28	15	< 5	5	0.9	< 1	1	< 0.01	< 0.05	< 1	2.1	1.8	27	39	28	230	10	3	< 0.5	0.2	3.2	< 0.1	< 0.8	< 0.1	< 0.8	500	< 20	1.5	8	1	0.5	< 0.1	2	2.4	0.4	1.6	0.3	0.2
FC	BL	56+75	6000	67	307	21	29	< 5	5	8.4	< 1	1	< 0.01	< 0.05	< 1	3.5	1.1	129	183	86	50	15	4	< 0.5	< 0.2	1.8	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	8.6	14	< 1	0.4	< 0.1	11.3	33.2	3	11.9	2.2	0.6
FC	BL	57+25	7000	76	416	20	24	< 5	9	3.2	< 1	2	< 0.01	< 0.05	< 1	9.7	3	192	215	166	70	44	3	< 0.5	0.3	2.1	< 0.1	< 0.8	0.1	1.3	< 100	< 20	32.8	36	< 1	0.9	< 0.1	47.1	139	11.4	47.2	8.5	2.1
FC	BL	57+50	4000	262	969	21	11	< 5	6	1.7	< 1	< 1	< 0.01	< 0.05	< 1	3.6	2.1	64	26	40	50	15	1	< 0.5	< 0.2	2.1	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	9.4	13	< 1	0.4	< 0.1	11.2	14	2.8	11.7	2.3	0.6
FC	BL	57+75	16000	129	445	5	4	< 5	1	0.4	< 1	< 1	< 0.01	< 0.05	< 1	5.2	1.7	21	38	34	80	23	1	< 0.5	< 0.2	4.6	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	2.2	23	< 1	0.5	< 0.1	4.1	7.9	1	3.9	0.9	0.3
FC	BL	58+25	5000	107	602	19	12	< 5	4	2	< 1	< 1	0.01	< 0.05	< 1	3.6	4.9	46	69	31	60	18	3	< 0.5	< 0.2	3.7	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	4.8	13	< 1	0.4	< 0.1	5	7.4	5.2	5.3	1.1	0.3
FC	BL	58+50	13000	159	506	8	15	< 5	5	8.6	< 1	< 1	0.03	< 0.05	< 1	1.1	1.6	159	135	71	540	20	< 1	< 0.5	< 0.2	3.3	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	3.7	6	< 1	0.2	< 0.1	3.8	11	0.9	4.1	0.9	0.2
FC	BL	58+75	7000	147	621	29	9	< 5	6	3.4	< 1	2	< 0.01	< 0.05	< 1	1.6	1.5	30	36	36	40	13	2	< 0.5	< 0.2	0.7	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	1.8	9	< 1	0.2	< 0.1	2	4.6	0.5	2.1	1.2	0.1
FC	BL	59+25	20000	155	753	9	19	< 5	8	2.4	< 1	1	0.01	< 0.05	< 1	4.1	5	101	72	359	250	84	< 1	< 0.5	0.3	5.5	< 0.1	< 0.8	0.5	< 0.8	< 100	< 20	29.8	15	< 1	0.5	< 0.1	22.1	9.3	5.7	24.8	5.3	1.5
FC	BL	59+50	4000	177	539	27	30	< 5	6	4.7	< 1	< 1	0.01	< 0.05	< 1	3.3	4.8	110	143	147	240	49	2	< 0.5	< 0.2	6.6	< 0.1	< 0.8	0.2	< 0.8	300	< 20	7.9	22	< 1	0.6	< 0.1	7.1	16	1.6	6.8	1.5	0.5
FC	BL	59+75	9000	420	1850	17	19	10	15	7.8	< 1	14	0.01	< 0.05	< 1	1.9	8.1	56	101	103	100	16	< 1	< 0.5	0.3	4.5	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	7.2	15	< 1	0.4	< 0.1	7.5	11.1	1.8	7.9	1.6	0.4
FC	BL	60+25	16000	413	2140	16	10	8	12	5.9	< 1	2	0.03	< 0.05	< 1	1.5	9.4	55	74	88	60	11	< 1	< 0.5	< 0.2	3	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	5.7	16	< 1	0.4	< 0.1	10	6	1.5	6.1	1.2	0.3
FC	BL	60+50	10000	127	699	15	17	< 5	8	4.1	< 1	25	< 0.01	< 0.05	< 1	1.8	5.9	70	67	62	130	16	< 1	< 0.5	< 0.2	3.5	< 0.1	< 0.8	0.1	< 0.8	100	< 20	4.6	14	< 1	0.4	< 0.1	3.4	6.8	0.9	4.2	0.9	0.3
FC	BL	60+75	< 2000	115	669	16	6	< 5	3	0.5	< 1	< 1	< 0.01	< 0.05	< 1	5.7	15.6	37	25	39	30	17	3	< 0.5	< 0.2	0.7	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	8	17	< 1	0.7	< 0.1	7.1	9.7	2	9	2.1	0.5

Final Report
Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L61	15+75	3.1	0.6	3.3	0.6	1.8	0.3	2	0.3	15	< 2	< 100	3880	40	235	0.5	569	< 1	< 1	< 1	< 1
FC	L61	16+00	3.8	0.7	3.6	0.6	1.6	0.2	1.6	0.2	17	3	< 100	3800	27	165	0.5	575	< 1	< 1	< 1	< 1
FC	L61	16+25	1	0.2	1	0.2	0.4	< 0.1	0.4	< 0.1	17	2	< 100	697	20	251	0.3	821	< 1	< 1	< 1	< 1
FC	L61	16+50	7.1	1.3	6.9	1.3	3.8	0.5	3.6	0.6	6	< 2	< 100	3860	62	201	0.5	1130	< 1	< 1	< 1	< 1
FC	L61	16+75	0.7	0.1	0.8	0.1	0.3	< 0.1	0.3	< 0.1	16	< 2	< 100	7820	32	348	0.6	570	< 1	< 1	< 1	< 1
FC	L61	17+00	2.3	0.4	2.1	0.4	1.1	0.1	1	0.1	15	< 2	< 100	3080	20	269	0.3	452	< 1	< 1	< 1	< 1
FC	L61	17+25	0.8	0.2	0.9	0.1	0.3	< 0.1	0.3	< 0.1	20	< 2	< 100	3720	22	278	0.6	279	< 1	< 1	< 1	< 1
FC	L61	17+50	0.9	0.2	0.8	0.2	0.5	< 0.1	0.5	0.1	17	< 2	< 100	13000	27	701	0.6	523	< 1	< 1	< 1	< 1
FC	L61	17+75	1	0.2	1	0.2	0.5	< 0.1	0.5	< 0.1	9	< 2	< 100	8250	23	301	0.3	552	< 1	< 1	< 1	< 1
FC	L61	18+00	1.4	0.2	1.1	0.2	0.6	< 0.1	0.5	< 0.1	5	< 2	< 100	8430	20	289	0.2	229	< 1	< 1	< 1	< 1
FC	L61	18+25	0.5	< 0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	7	< 2	< 100	3020	43	156	0.3	376	< 1	< 1	< 1	< 1
FC	L61	18+50	0.9	0.2	0.8	0.2	0.4	< 0.1	0.3	< 0.1	3	< 2	< 100	1180	14	392	0.2	131	< 1	< 1	< 1	< 1
FC	L61	18+75	0.7	0.1	0.6	0.1	0.4	< 0.1	0.3	< 0.1	9	< 2	< 100	2210	13	226	0.2	547	< 1	< 1	< 1	< 1
FC	L61	19+00	0.6	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	5	< 2	< 100	643	29	285	0.3	194	< 1	< 1	< 1	< 1
FC	L61	19+25	1.4	0.2	1.2	0.2	0.7	0.1	0.7	0.1	8	< 2	< 100	10200	28	414	0.4	304	< 1	< 1	< 1	< 1
FC	L61	19+50	1.8	0.4	1.6	0.3	1	0.1	1	0.2	11	< 2	< 100	6910	19	773	0.3	320	< 1	< 1	< 1	< 1
FC	L61	19+75	0.8	0.2	0.9	0.2	0.6	< 0.1	0.7	0.1	21	< 2	< 100	11400	18	550	0.9	261	< 1	< 1	< 1	< 1
FC	L61	20+25	2.5	0.4	2.4	0.5	1.4	0.2	1.5	0.2	4	< 2	< 100	3390	18	433	0.5	236	< 1	< 1	< 1	< 1
FC	L61	20+50	1.3	0.2	1.1	0.2	0.7	0.1	0.8	0.1	10	< 2	< 100	5760	14	454	0.4	163	< 1	< 1	< 1	< 1
FC	L61	20+75	0.8	0.1	0.8	0.1	0.4	< 0.1	0.5	< 0.1	6	< 2	< 100	6460	17	433	0.3	207	< 1	< 1	< 1	< 1
FC	L61	21+00	1.6	0.3	1.4	0.3	0.8	0.1	0.9	0.2	9	< 2	< 100	5340	15	357	0.3	280	< 1	< 1	< 1	< 1
FC	L61	21+75	1.2	0.2	1.1	0.2	0.6	< 0.1	0.6	0.1	5	< 2	< 100	18200	15	475	0.2	394	< 1	< 1	< 1	< 1
FC	L61	22+00	2	0.3	1.7	0.3	1	0.4	1.1	0.2	6	< 2	< 100	1030	37	257	0.5	466	< 1	< 1	< 1	< 1
FC	L61	22+25	1.5	0.3	1.4	0.3	0.7	0.1	0.8	0.1	6	< 2	< 100	6610	14	403	0.2	300	< 1	< 1	< 1	< 1
FC	L61	22+50	1.7	0.3	1.5	0.3	1	0.1	0.9	0.2	6	< 2	< 100	2910	12	296	0.2	295	< 1	< 1	< 1	< 1
FC	L61	22+75	1.5	0.3	1.3	0.3	0.9	0.1	0.9	0.2	6	< 2	< 100	6560	10	334	0.1	301	< 1	< 1	< 1	< 1
FC	L61	23+00	1.3	0.2	1.2	0.2	0.7	< 0.1	0.7	0.1	10	< 2	< 100	10400	12	581	0.2	333	< 1	< 1	< 1	< 1
FC	L61	23+25	1.4	0.2	1.2	0.2	0.7	< 0.1	0.7	0.1	9	< 2	< 100	6750	9	722	0.2	417	< 1	< 1	< 1	< 1
FC	L61	23+50	2.5	0.4	2.7	0.5	1.5	0.2	1.4	0.2	8	< 2	< 100	2310	13	633	0.2	709	< 1	< 1	< 1	< 1
FC	L61	23+75	3.7	0.7	3.4	0.7	2	0.3	2.1	0.3	5	< 2	< 100	3650	23	436	0.5	354	< 1	< 1	< 1	< 1
FC	L61	24+00	2.8	0.5	2.5	0.5	1.5	0.2	1.7	0.3	7	< 2	< 100	2860	14	439	0.2	307	< 1	< 1	< 1	< 1
FC	L61	24+25	1.2	0.2	1.2	0.2	0.7	0.1	0.7	0.1	6	< 2	< 100	13600	13	550	0.2	361	< 1	< 1	< 1	< 1
FC	L61	24+50	1.5	0.2	1.2	0.3	0.7	0.1	0.9	0.1	9	< 2	< 100	9980	21	535	0.4	368	< 1	< 1	< 1	< 1
FC	L61	24+75	2.3	0.2	1.4	0.2	0.6	< 0.1	0.6	< 0.1	5	< 2	< 100	6060	16	685	0.3	440	< 1	< 1	< 1	< 1
FC	L61	25+00	1.2	0.2	1.1	0.2	0.6	< 0.1	0.7	0.1	10	< 2	< 100	11300	11	636	0.1	462	< 1	< 1	< 1	< 1
FC	L61	25+25	0.8	0.1	0.7	0.1	0.3	< 0.1	0.3	< 0.1	6	< 2	< 100	3560	13	479	0.2	344	< 1	< 1	< 1	< 1
FC	L61	25+50	1	0.2	1	0.2	0.5	< 0.1	0.6	< 0.1	5	< 2	< 100	3560	15	516	0.5	495	< 1	< 1	< 1	< 1
FC	L61	25+75	3.6	0.6	3.2	0.6	1.8	0.3	1.9	0.3	8	< 2	< 100	14000	21	586	0.4	653	< 1	< 1	< 1	< 1
FC	L61	26+00	2.8	0.5	2.3	0.4	1.3	0.2	1.3	0.2	8	< 2	< 100	14800	25	1540	0.4	1140	< 1	< 1	< 1	< 1
FC	L61	26+25	1.8	0.3	1.6	0.3	0.9	0.1	1	0.2	6	< 2	< 100	12400	16	692	0.3	472	< 1	< 1	< 1	< 1
FC	L61	26+50	0.9	0.1	0.7	0.2	0.4	< 0.1	0.5	< 0.1	10	< 2	< 100	12100	16	504	0.2	539	< 1	< 1	< 1	< 1
FC	L61	26+75	2.2	0.4	1.9	0.4	1.1	0.2	1.2	0.2	13	< 2	< 100	10100	19	466	0.4	601	< 1	< 1	< 1	< 1
FC	L61	27+00	3.8	0.6	3.3	0.6	2	0.3	2	0.3	8	< 2	< 100	8940	23	530	0.5	737	< 1	< 1	< 1	< 1
FC	L61	27+75	1.6	0.3	1.6	0.3	0.8	0.1	1.5	0.1	5	< 2	< 100	2680	18	935	0.3	505	< 1	< 1	< 1	< 1
FC	L61	28+00	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	23	< 2	< 100	11000	24	668	0.6	550	< 1	< 1	< 1	< 1
FC	L61	28+25	2.6	0.5	2.4	0.4	1.2	0.2	1.1	0.2	3	< 2	< 100	3690	43	352	0.3	606	< 1	< 1	< 1	< 1
FC	L61	28+50	1.4	0.3	1.4	0.3	0.8	0.1	0.7	0.1	40	< 2	< 100	13000	22	497	0.4	1610	< 1	< 1	< 1	< 1
FC	L61	28+75	1.3	0.2	1.3	0.2	0.6	< 0.1	0.5	< 0.1	11	< 2	< 100	2930	46	416	0.5	926	< 1	< 1	< 1	< 1
FC	L61	29+00	2.3	0.4	2.2	0.4	1.3	0.2	1.5	0.2	13	< 2	< 100	29800	26	654	0.7	679	< 1	< 1	< 1	< 1
FC	L61	29+25	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	12	< 2	< 100	3950	23	506	0.5	527	< 1	< 1	< 1	< 1
FC	L61	29+50	1.3	0.2	1.1	0.2	0.5	< 0.1	0.4	< 0.1	5	< 2	< 100	9380	27	438	0.3	554	< 1	< 1	< 1	< 1
FC	L61	29+75	2.5	0.4	2.2	0.4	1.1	0.2	1.1	0.2	6	< 2	< 100	1660	29	442	0.5	453	< 1	< 1	< 1	< 1
FC	L61	30+00	1.3	0.2	1.1	0.2	0.7	< 0.1	0.7	0.1	9	< 2	< 100	5320	27	403	0.4	308	< 1	< 1	< 1	< 1
FC	L61	30+25	0.4	< 0.1	0.6	< 0.1	0.3	< 0.1	0.2	< 0.1	9	< 2	< 100	12400	22	539	0.6	1360	< 1	< 1	< 1	< 1
FC	L61	30+50	0.6	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	32	< 2	< 100	2460	18	407	0.5	640	< 1	< 1	< 1	< 1
FC	L61	30+75	0.8	0.1	0.8	< 0.1	0.4	< 0.1	0.4	< 0.1	62	4	< 100	885	18	262	0.3	745	< 1	< 1	< 1	< 1
FC	L61	31+00	2.3	0.4	2.5	0.5	1.6	0.3	1.9	0.3	11	< 2	< 100	1920	19	739	0.4	302	< 1	< 1	< 1	< 1
FC	L60	15+00	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.2	< 0.1	20	< 2	< 100	3410	14	340	0.4	745	< 1	< 1	< 1	< 1
FC	L60	15+25	1.5	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	9	< 2	< 100	8710	17	479	0.6	1320	< 1	< 1	< 1	< 1
FC	L60	15+50	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	15	< 2	< 100	4610	42	266	0.5	1230	< 1	< 1	< 1	< 1
FC	L60	15+75	1.1	0.2	1.2	0.2	0.7	0.1	0.7	0.1	19	< 2	< 100	3690	15	535	0.3	841	< 1	< 1	< 1	< 1
FC	L60	16+00	2.5	0.4	2.2	0.4	1.4	0.2	1.6	0.3	12	< 2	< 100	19500	21	425	0.5	504	< 1	< 1	< 1	< 1
FC	L60	16+25	1.6	0.3	1.5	0.3	0.9	0.1	1.1	0.2	9	< 2	< 100	10600	19	345	0.3	535	< 1	< 1	< 1	< 1
FC	L60	16+50	1.3	0.2	1.4	0.2	0.7	0.1	0.7	0.1	10	< 2	< 100	25000	38	1380	0.6	710	< 1	< 1	< 1	< 1
FC	L60	16+75	2.4	0.4	2.2	0.4	1.1	0.2	1.1	0.2	6	< 2	< 100	9020	45	419	0.5	516	< 1	< 1	< 1	< 1
FC	L60	17+00	1.1	0.2	1.1	0.2	0.5	< 0.1	0.5	< 0.1	14	< 2	< 100	4080	29	437	0.4	384	< 1	< 1	< 1	< 1
FC	L60	17+25	1.8	0.3	1.5	0.3	0.9	0.1	1.1	0.1	11	< 2	< 100	6440	28	371	0.5	335	< 1	< 1	< 1	< 1

Final Report
Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L60	17+50	1	0.2	0.8	0.2	0.5	< 0.1	0.5	< 0.1	12	< 2	< 100	3860	23	533	0.6	319	< 1	< 1	< 1	< 1
FC	L60	17+75	0.8	0.1	0.7	0.1	0.5	< 0.1	0.5	< 0.1	10	< 2	< 100	7830	18	481	0.3	265	< 1	< 1	< 1	< 1
FC	L60	18+00	1.1	0.2	1	0.2	0.6	< 0.1	0.5	< 0.1	7	< 2	< 100	2690	13	547	0.2	209	< 1	< 1	< 1	< 1
FC	L60	18+25	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	7	< 2	< 100	3550	15	610	0.2	176	< 1	< 1	< 1	< 1
FC	L60	18+50	1.4	0.2	1.2	0.3	0.8	0.1	0.8	0.1	11	< 2	< 100	3260	16	614	0.5	258	< 1	< 1	< 1	< 1
FC	L60	18+75	0.9	0.1	0.9	0.1	0.4	< 0.1	0.4	< 0.1	11	< 2	< 100	4250	15	1010	0.4	386	< 1	< 1	< 1	< 1
FC	L60	19+00	1.1	0.2	0.9	0.2	0.6	< 0.1	0.7	0.1	4	< 2	< 100	2000	11	369	0.2	229	< 1	< 1	< 1	< 1
FC	L60	19+25	1	0.2	0.9	0.2	0.5	< 0.1	0.4	< 0.1	8	< 2	< 100	2890	23	346	0.3	625	< 1	< 1	< 1	< 1
FC	L60	19+50	2.7	0.6	2.4	0.5	1.4	0.2	1.6	0.3	6	< 2	< 100	3600	36	379	0.7	357	< 1	< 1	< 1	< 1
FC	L60	19+75	1.9	0.3	1.5	0.9	0.9	0.1	0.9	0.2	11	< 2	< 100	17800	14	732	0.2	293	< 1	< 1	< 1	< 1
FC	L60	20+00	1.5	0.2	1.2	0.2	0.8	0.1	0.8	0.1	12	< 2	< 100	9160	12	568	0.3	236	< 1	< 1	< 1	< 1
FC	L60	20+25	1	0.2	0.9	0.2	0.5	< 0.1	0.5	< 0.1	16	< 2	< 100	3970	23	799	0.3	277	< 1	< 1	< 1	< 1
FC	L60	20+50	1.7	0.3	1.3	0.3	0.8	< 0.1	0.7	0.1	8	< 2	< 100	6860	21	562	0.4	280	< 1	< 1	< 1	< 1
FC	L60	20+75	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	10	< 2	< 100	3480	21	574	0.4	299	< 1	< 1	< 1	< 1
FC	L60	21+00	2	0.3	1.7	0.4	1.1	0.1	1	0.2	14	< 2	< 100	12300	17	882	0.4	397	< 1	< 1	< 1	< 1
FC	L60	21+25	1.7	0.3	1.5	0.3	0.9	0.1	0.9	0.1	7	< 2	< 100	4220	23	426	0.4	425	< 1	< 1	< 1	< 1
FC	L60	21+50	2.7	0.4	2.3	0.5	1.4	0.2	1.5	0.2	17	< 2	< 100	7330	24	507	0.8	383	< 1	< 1	< 1	< 1
FC	L60	21+75	1.8	0.3	1.5	0.3	0.8	0.1	0.8	0.1	9	< 2	< 100	7950	26	1440	0.3	470	< 1	< 1	< 1	< 1
FC	L60	22+00	1.3	0.2	1.2	0.2	0.6	< 0.1	0.7	0.1	6	< 2	< 100	8690	12	502	0.3	316	< 1	< 1	< 1	< 1
FC	L60	22+25	1.2	0.2	1	0.2	0.6	< 0.1	0.6	0.1	8	< 2	< 100	10100	15	478	0.3	360	< 1	< 1	< 1	< 1
FC	L60	22+50	2.3	0.4	2.1	0.4	1.3	0.2	1.5	0.2	15	< 2	< 100	15200	21	504	0.6	529	< 1	< 1	< 1	< 1
FC	L60	22+75	2.3	0.4	2.1	0.4	1.1	0.2	1.2	0.2	27	< 2	< 100	7830	17	471	0.4	245	< 1	< 1	< 1	< 1
FC	L60	23+00	1.7	0.3	1.5	0.3	0.9	0.1	1	0.2	16	< 2	< 100	16600	13	391	0.4	281	< 1	< 1	< 1	< 1
FC	L60	23+25	2.8	0.3	1.6	0.3	0.9	0.1	1	0.2	6	< 2	< 100	1700	23	342	0.5	250	< 1	< 1	< 1	< 1
FC	L60	23+50	1.5	0.3	2	0.3	0.7	0.1	0.8	0.1	8	< 2	< 100	2540	23	586	0.4	210	< 1	< 1	< 1	< 1
FC	L60	23+75	1	0.2	1	0.2	0.5	< 0.1	0.6	0.1	7	< 2	< 100	4550	22	486	0.6	263	< 1	< 1	< 1	< 1
FC	L60	24+00	1.2	0.2	1	0.2	0.6	< 0.1	0.6	0.1	6	< 2	< 100	4150	15	398	0.3	231	< 1	< 1	< 1	< 1
FC	L60	24+25	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	10	< 2	< 100	473	11	265	0.2	458	< 1	< 1	< 1	< 1
FC	L60	24+50	1.3	0.2	1.1	0.2	0.7	< 0.1	0.7	0.1	8	< 2	< 100	4010	19	520	0.3	354	< 1	< 1	< 1	< 1
FC	L60	24+75	1	0.2	0.8	0.1	0.4	< 0.1	0.4	< 0.1	12	< 2	< 100	2330	19	266	0.3	399	< 1	< 1	< 1	< 1
FC	L60	25+00	3.5	0.5	2.8	0.5	1.6	0.2	1.7	0.3	10	< 2	< 100	3830	30	493	0.7	654	< 1	< 1	< 1	< 1
FC	L60	25+25	2.8	0.4	2	0.4	1.1	0.2	1.3	0.2	9	< 2	< 100	5700	28	634	0.4	585	< 1	< 1	< 1	< 1
FC	L60	25+50	1.9	0.3	1.5	0.3	0.9	0.1	0.9	0.1	7	< 2	< 100	3730	20	400	0.5	457	< 1	< 1	< 1	< 1
FC	L60	25+75	1.4	0.2	1.1	0.2	0.6	< 0.1	0.6	0.1	7	< 2	< 100	2290	14	352	0.5	302	< 1	< 1	< 1	< 1
FC	L60	26+00	1.3	0.2	1.1	0.2	0.6	< 0.1	0.6	< 0.1	4	< 2	< 100	2160	10	535	0.1	374	< 1	< 1	< 1	< 1
FC	L60	26+25	2.5	0.4	2.2	0.4	1.3	0.2	1.2	0.2	9	< 2	< 100	8330	16	1100	0.5	814	< 1	< 1	< 1	< 1
FC	L60	26+50	3.6	0.6	2.9	0.6	1.6	0.2	1.6	0.3	7	< 2	< 100	13600	16	617	0.2	416	< 1	< 1	< 1	< 1
FC	L60	26+75	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	10	< 2	< 100	9450	15	337	0.4	958	< 1	< 1	< 1	< 1
FC	L60	27+00	1.4	0.2	1.2	0.3	0.6	< 0.1	0.7	< 0.1	14	< 2	< 100	8390	15	402	0.4	563	< 1	< 1	< 1	< 1
FC	L60	27+25	3.4	0.6	3	0.6	1.8	0.3	1.8	0.3	21	< 2	< 100	2070	22	195	0.4	599	< 1	< 1	< 1	< 1
FC	L60	27+50	0.6	< 0.1	0.5	0.1	0.3	< 0.1	0.2	< 0.1	8	< 2	< 100	1590	14	318	0.3	904	< 1	< 1	< 1	< 1
FC	L60	27+75	0.6	0.1	0.6	0.1	0.3	< 0.1	0.2	< 0.1	8	< 2	< 100	4610	22	343	0.5	959	< 1	< 1	< 1	< 1
FC	L60	28+00	2.3	0.4	2.5	0.5	1.4	0.2	1.4	0.2	10	< 2	< 100	81700	20	163	0.3	1760	< 1	< 1	< 1	< 1
FC	L60	28+25	1.5	0.3	3.8	0.3	0.8	0.1	0.7	0.1	6	< 2	< 100	5300	24	338	0.4	1260	< 1	< 1	< 1	< 1
FC	L60	28+50	1.3	0.2	1.3	0.3	0.6	< 0.1	0.6	< 0.1	18	< 2	< 100	20600	15	381	0.4	1120	< 1	< 1	< 1	< 1
FC	L60	28+75	1.2	0.2	1.3	0.3	0.9	0.1	1	0.2	12	< 2	< 100	12100	14	489	0.5	375	< 1	< 1	< 1	< 1
FC	L59	12+25	0.8	0.2	0.9	0.2	0.5	< 0.1	0.5	< 0.1	17	< 2	< 100	3590	17	220	0.4	595	< 1	< 1	< 1	< 1
FC	L59	12+75	3.4	0.7	3.5	0.6	1.6	0.2	1.5	0.2	9	< 2	< 100	5820	33	339	0.8	636	< 1	< 1	< 1	< 1
FC	L59	13+00	1.3	0.2	1.2	0.2	0.5	< 0.1	0.4	< 0.1	15	< 2	< 100	2550	24	388	0.4	671	< 1	< 1	< 1	< 1
FC	L59	13+25	1.1	0.2	1	0.2	0.5	< 0.1	0.5	< 0.1	13	< 2	< 100	4380	24	305	0.4	460	< 1	< 1	< 1	< 1
FC	L59	13+50	0.4	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	17	< 2	< 100	1970	20	183	0.4	545	< 1	< 1	< 1	< 1
FC	L59	14+00	1.3	0.2	1.2	0.2	0.7	< 0.1	0.7	0.1	4	< 2	< 100	4100	36	242	0.5	276	< 1	< 1	< 1	< 1
FC	L59	14+25	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	9	< 2	< 100	2440	11	329	0.2	985	< 1	< 1	< 1	< 1
FC	L59	14+50	0.7	0.1	0.7	0.1	0.3	< 0.1	0.2	< 0.1	14	2	< 100	5940	30	194	0.3	1080	< 1	< 1	< 1	< 1
FC	L59	14+75	0.3	< 0.1	0.4	< 0.1	0.1	< 0.1	0.1	< 0.1	11	< 2	< 100	4310	14	154	0.3	483	< 1	< 1	< 1	< 1
FC	L59	15+00	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	5	< 2	< 100	906	19	239	0.4	225	< 1	< 1	< 1	< 1
FC	L59	15+25	0.5	< 0.1	0.4	< 0.1	0.1	< 0.1	0.2	< 0.1	18	< 2	< 100	2700	19	94	0.2	442	< 1	< 1	< 1	< 1
FC	L59	15+50	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	14	< 2	< 100	1510	13	265	0.3	304	< 1	< 1	< 1	< 1
FC	L59	15+75	0.6	0.3	0.7	0.1	0.3	< 0.1	0.7	< 0.1	12	< 2	< 100	775	14	269	0.7	438	< 1	< 1	< 1	< 1
FC	L59	16+00	0.5	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	19	< 2	< 100	3010	29	346	0.6	327	< 1	< 1	< 1	< 1
FC	L59	16+25	0.3	< 0.1	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	33	< 2	< 100	7110	13	256	0.5	462	< 1	< 1	< 1	< 1
FC	L59	16+50	0.5	0.2	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	11	< 2	< 100	563	14	304	0.5	568	< 1	< 1	< 1	< 1
FC	L59	16+75	0.5	< 0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	29	< 2	< 100	1800	29	258	0.5	966	< 1	< 1	< 1	< 1
FC	L59	17+00	4.1	0.7	3.9	0.8	2.2	0.3	2.3	0.4	8	< 2	< 100	8860	35	481	0.6	312	< 1	< 1	< 1	< 1
FC	L59	17+25	2.3	0.4	2.3	0.4	1	0.2	1.1	0.2	7	< 2	< 100	659	29	447	0.5	224	< 1	< 1	< 1	< 1
FC	L59	17+50	2.9	0.5	2.4	0.5	1.6	0.2	1.6	0.3	25	< 2	< 100	6740	12	646	0.2	228	< 1	< 1	< 1	< 1
FC	L59	17+75	2.3	0.4	1.9	0.4	1.2	0.2	1.3	0.2	4	< 2	< 100	15200	20	372	0.3	444	< 1	< 1	< 1	< 1

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Final Report
Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L59	18+00	1	0.2	0.9	0.2	0.5	< 0.1	0.6	< 0.1	11	< 2	< 100	3930	12	483	0.2	155	< 1	< 1	< 1	< 1
FC	L59	18+25	2.5	0.4	2.1	0.4	1.3	0.2	1.4	0.2	4	< 2	< 100	4320	25	521	0.2	446	< 1	< 1	< 1	< 1
FC	L59	18+50	1.4	0.3	1.2	0.2	0.7	0.1	0.7	0.1	10	< 2	< 100	10700	21	883	0.2	336	< 1	< 1	< 1	< 1
FC	L59	18+75	2.8	0.4	2.2	0.4	1.4	0.2	1.5	0.3	13	< 2	< 100	1640	16	415	0.3	257	< 1	< 1	< 1	< 1
FC	L59	19+00	2.4	0.4	2.1	0.4	1.2	0.2	1.2	0.3	20	< 2	< 100	4050	17	506	0.4	562	< 1	< 1	< 1	< 1
FC	L59	19+25	1.2	0.2	1.1	0.2	0.5	< 0.1	0.4	< 0.1	10	3	< 100	2080	7	232	0.1	545	< 1	< 1	< 1	< 1
FC	L59	19+50	3.2	0.6	3	0.6	1.7	0.3	1.8	0.3	7	< 2	< 100	3960	16	417	0.3	312	< 1	< 1	< 1	< 1
FC	L59	19+75	0.6	0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	< 2	< 2	< 100	218	8	278	0.2	186	< 1	< 1	< 1	< 1
FC	L59	20+00	2	0.3	1.5	0.3	0.8	0.1	0.6	< 0.1	< 2	< 2	< 100	5540	29	296	0.2	463	< 1	< 1	< 1	< 1
FC	L59	20+25	1.8	0.3	1.4	0.3	0.8	0.1	0.8	0.1	10	< 2	< 100	13300	23	1300	0.3	504	< 1	< 1	< 1	< 1
FC	L59	20+50	1.1	0.2	0.9	0.2	0.5	< 0.1	0.5	< 0.1	7	< 2	< 100	2840	20	904	0.1	239	< 1	< 1	< 1	< 1
FC	L59	21+25	2	0.3	1.8	0.4	1.1	0.2	1.2	0.2	8	< 2	< 100	7650	13	442	0.3	309	< 1	< 1	< 1	< 1
FC	L59	21+50	1.5	0.3	1.3	0.2	0.8	0.1	0.8	0.1	5	< 2	< 100	3350	18	350	0.2	334	< 1	< 1	< 1	< 1
FC	L59	21+75	1.1	0.2	1.3	0.2	0.7	0.1	0.7	0.1	10	< 2	< 100	2510	9	493	0.1	448	< 1	< 1	< 1	< 1
FC	L59	22+00	1.5	0.3	1.5	0.3	0.8	0.1	0.9	0.1	27	< 2	< 100	1820	20	796	0.2	356	< 1	< 1	< 1	< 1
FC	L59	22+25	2	0.3	1.8	0.4	1.2	0.2	1.2	0.2	19	< 2	< 100	3250	12	549	0.3	449	< 1	< 1	< 1	< 1
FC	L59	22+50	3	0.5	2.6	0.5	1.7	0.2	1.8	0.3	6	< 2	< 100	5230	16	541	0.2	349	< 1	< 1	< 1	< 1
FC	L59	22+75	1.6	0.3	1.4	0.3	0.9	0.1	1	0.1	7	< 2	< 100	8760	10	455	0.2	380	< 1	< 1	< 1	< 1
FC	L59	23+00	1.1	0.2	1.1	0.2	0.6	< 0.1	0.6	0.1	9	< 2	< 100	9350	11	820	0.2	269	< 1	< 1	< 1	< 1
FC	L59	23+25	3.4	0.5	2.8	0.6	1.7	0.2	1.8	0.3	6	< 2	< 100	5940	14	1090	0.2	353	< 1	< 1	< 1	< 1
FC	L59	23+50	2.2	0.4	2	0.4	1.2	0.2	1.2	0.2	7	< 2	< 100	10900	13	796	0.2	400	< 1	< 1	< 1	< 1
FC	L59	23+75	2.5	0.4	2.3	0.4	1.3	0.2	1.3	0.2	9	< 2	< 100	9640	12	889	0.1	619	< 1	< 1	< 1	< 1
FC	L59	24+00	2.5	0.4	2.1	0.4	1.2	0.2	1.3	0.2	8	< 2	< 100	28300	19	524	0.3	520	< 1	< 1	< 1	< 1
FC	L59	24+25	2.6	0.4	2.2	0.4	1.4	0.2	1.5	0.3	6	< 2	< 100	22100	11	518	0.2	765	< 1	< 1	< 1	< 1
FC	L59	24+50	2.2	0.4	2	0.4	1.1	0.2	1.3	0.2	7	< 2	< 100	11200	13	688	0.2	781	< 1	< 1	< 1	< 1
FC	L59	24+75	3.6	0.6	3.4	0.7	2.1	0.3	2.2	0.4	12	< 2	< 100	10800	18	866	0.1	887	< 1	< 1	< 1	< 1
FC	L59	25+00	2.4	0.3	1.7	0.4	1	0.1	1.1	0.2	8	< 2	< 100	15400	16	681	0.3	647	< 1	< 1	< 1	< 1
FC	L59	25+25	4	0.7	3.8	0.8	2.4	0.4	2.9	0.4	5	< 2	< 100	10600	15	673	0.2	595	< 1	< 1	< 1	< 1
FC	L59	25+50	2.2	0.4	1.9	0.4	1.2	0.2	1.3	0.2	5	< 2	< 100	7130	11	466	0.2	618	< 1	< 1	< 1	< 1
FC	L59	25+75	2.6	0.4	2.4	0.5	1.4	0.2	1.4	0.2	9	< 2	< 100	7240	19	550	0.2	860	< 1	< 1	< 1	< 1
FC	L59	26+00	2.7	0.5	2.4	0.5	1.6	0.2	1.7	0.3	7	< 2	< 100	12100	17	920	0.2	884	< 1	< 1	< 1	< 1
FC	L59	26+25	2.3	0.4	2.3	0.5	1.4	0.2	1.6	0.3	9	< 2	< 100	8020	17	713	0.3	773	< 1	< 1	< 1	< 1
FC	L59	26+50	2.8	0.5	2.8	0.6	1.6	0.2	1.7	0.3	10	< 2	< 100	8540	18	881	0.3	1210	< 1	< 1	< 1	< 1
FC	L59	26+75	1.1	0.2	1	0.2	0.6	< 0.1	0.6	< 0.1	3	< 2	< 100	5050	13	718	0.3	557	< 1	< 1	< 1	< 1
FC	L59	27+00	1.8	0.3	1.9	0.4	1	0.1	1	0.1	9	< 2	< 100	4800	19	276	0.3	1800	< 1	< 1	< 1	< 1
FC	L59	27+25	1.4	0.3	1.4	0.3	0.7	0.1	0.6	< 0.1	9	< 2	< 100	5580	8	372	0.3	1700	< 1	< 1	< 1	< 1
FC	L59	27+50	0.7	0.1	0.8	0.1	0.5	< 0.1	0.6	< 0.1	12	< 2	< 100	9290	10	1080	0.3	560	< 1	< 1	< 1	< 1
FC	L59	27+75	1.3	0.4	1.3	0.2	0.7	< 0.1	0.6	< 0.1	17	< 2	< 100	4480	20	469	0.3	1040	< 1	< 1	< 1	< 1
FC	L59	28+00	3	0.6	3	0.6	1.6	0.2	1.5	0.2	5	< 2	< 100	2420	39	526	0.5	523	< 1	< 1	< 1	< 1
FC	L59	28+50	1	0.2	1	0.2	0.5	< 0.1	0.4	< 0.1	21	< 2	< 100	1730	16	481	0.4	2180	< 1	< 1	< 1	< 1
FC	L59	28+75	0.8	0.2	0.8	0.1	0.4	< 0.1	0.3	< 0.1	7	< 2	< 100	4930	22	747	0.4	1130	< 1	< 1	< 1	< 1
FC	L59	29+00	2.1	0.4	2	0.4	1.1	0.2	1.3	0.2	9	< 2	< 100	21900	15	680	0.2	782	< 1	< 1	< 1	< 1
FC	L59	29+25	1.9	0.4	1.7	0.5	1.1	0.2	1.1	0.2	6	< 2	< 100	12700	12	394	0.1	439	< 1	< 1	< 1	< 1
FC	L59	29+50	1.1	0.2	1	0.2	0.6	< 0.1	0.7	0.1	12	< 2	< 100	23000	16	994	0.3	786	< 1	< 1	< 1	< 1
FC	L59	29+75	1.1	0.2	1	0.2	0.6	0.1	0.7	0.1	14	< 2	< 100	8970	20	823	0.5	495	< 1	< 1	< 1	< 1
FC	L59	30+25	1	0.2	0.9	0.1	0.4	< 0.1	0.4	< 0.1	8	< 2	< 100	2330	15	536	0.2	665	< 1	< 1	< 1	< 1
FC	L59	30+50	1.2	0.2	1.1	0.2	0.6	< 0.1	0.5	< 0.1	8	< 2	< 100	2030	29	333	0.3	417	< 1	< 1	< 1	< 1
FC	L59	30+75	0.4	< 0.1	1.3	< 0.1	0.2	< 0.1	0.2	< 0.1	24	< 2	< 100	1590	39	430	0.5	799	< 1	< 1	< 1	< 1
FC	L59	31+00	2.4	0.5	2.3	0.4	1.1	0.2	1	0.2	8	< 2	< 100	2430	26	593	0.4	646	< 1	< 1	< 1	< 1
FC	L59	31+25	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	14	< 2	< 100	1350	17	422	0.3	1090	< 1	< 1	< 1	< 1
FC	L59	31+50	1.8	0.3	1.6	0.3	1	0.2	1.1	0.2	16	< 2	< 100	13200	11	823	0.4	667	< 1	< 1	< 1	< 1
FC	L59	31+75	1.2	0.2	1.2	0.2	0.6	< 0.1	0.6	< 0.1	7	< 2	< 100	6610	14	379	0.2	542	< 1	< 1	< 1	< 1
FC	L59	32+00	0.8	0.2	0.7	0.1	0.4	< 0.1	0.3	< 0.1	9	3	< 100	1090	16	288	0.2	882	< 1	< 1	< 1	< 1
FC	L59	32+25	4	0.7	3.3	0.6	1.7	0.2	1.5	0.2	5	< 2	< 100	5170	37	374	0.4	742	< 1	< 1	< 1	< 1
FC	L59	32+50	2.6	0.4	2.1	0.4	1.2	0.2	1	0.2	3	< 2	< 100	6580	21	430	0.2	623	< 1	< 1	< 1	< 1
FC	L59	32+75	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	11	< 2	< 100	2110	19	579	0.3	992	< 1	< 1	< 1	< 1
FC	L59	33+00	0.9	0.2	0.8	0.1	0.4	< 0.1	0.4	< 0.1	22	< 2	< 100	4570	12	278	0.1	756	< 1	< 1	< 1	< 1
FC	L59	33+25	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	21	< 2	< 100	1120	9	374	0.1	1050	< 1	< 1	< 1	< 1
FC	L58	13+50	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.2	< 0.1	17	< 2	< 100	964	11	358	0.2	507	< 1	< 1	< 1	< 1
FC	L58	13+75	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	9	< 2	< 100	772	17	160	0.1	611	< 1	< 1	< 1	< 1
FC	L58	14+00	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	4	< 2	< 100	8400	12	449	0.2	292	< 1	< 1	< 1	< 1
FC	L58	14+25	0.9	0.2	0.8	0.1	0.4	< 0.1	0.3	< 0.1	8	< 2	< 100	5970	20	249	0.2	601	< 1	< 1	< 1	< 1
FC	L58	14+50	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	6	< 2	< 100	930	25	145	0.1	396	< 1	< 1	< 1	< 1
FC	L58	14+75	1.9	0.3	1.5	0.3	0.7	0.1	0.7	0.1	6	< 2	< 100	5680	27	288	0.3	493	< 1	< 1	< 1	< 1
FC	L58	15+00	0.9	0.2	0.8	0.2	0.5	< 0.1	0.7	< 0.1	14	< 2	< 100	16000	14	409	0.2	597	< 1	< 1	< 1	< 1
FC	L58	15+25	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.3	< 0.1	19	< 2	< 100	4220	17	247	0.2	402	< 1	< 1	< 1	< 1
FC	L58	15+50	1.5	0.3	1.3	0.3	0.8	0.1	0.8	0.1	9	< 2	< 100	9850	19	390	0.2	885	< 1	< 1	< 1	< 1

Final Report
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Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L58	15+75	1.8	0.3	1.5	0.3	0.7	< 0.1	0.6	< 0.1	10	< 2	< 100	4230	43	373	0.3	315	< 1	< 1	< 1	< 1
FC	L58	16+00	1.7	0.3	1.4	0.3	0.9	0.1	0.8	0.1	8	< 2	< 100	13100	15	516	0.2	334	< 1	< 1	< 1	< 1
FC	L58	16+25	1.6	0.3	1.3	0.3	0.9	0.1	0.9	0.2	5	< 2	< 100	22600	9	373	0.1	509	< 1	< 1	< 1	< 1
FC	L58	16+50	1.3	0.2	1.2	0.2	0.7	< 0.1	0.7	0.1	4	< 2	< 100	2260	20	443	0.2	286	< 1	< 1	< 1	< 1
FC	L58	16+75	1.4	0.2	1.2	0.2	0.8	0.1	0.8	0.2	9	< 2	< 100	24400	24	563	0.2	777	< 1	< 1	< 1	< 1
FC	L58	17+00	4.9	0.9	4.7	1	3	0.5	3.3	0.6	9	< 2	< 100	38600	17	356	0.4	783	< 1	< 1	< 1	< 1
FC	L58	17+25	3	0.5	2.8	0.6	1.8	0.3	2.2	0.3	13	< 2	< 100	16300	17	472	0.4	658	< 1	< 1	< 1	< 1
FC	L58	17+50	1.3	0.2	1	0.2	0.6	< 0.1	0.5	< 0.1	9	< 2	< 100	5010	19	216	0.1	748	< 1	< 1	< 1	< 1
FC	L58	17+75	1.2	0.2	3	0.2	0.5	< 0.1	0.5	< 0.1	5	< 2	< 100	10300	18	400	0.2	814	< 1	< 1	< 1	< 1
FC	L58	18+00	1.4	0.3	1.2	0.2	0.7	< 0.1	0.7	0.1	5	< 2	< 100	13500	15	409	0.3	585	< 1	< 1	< 1	< 1
FC	L58	18+25	2.9	0.3	1.4	0.3	0.8	0.1	0.8	0.1	5	< 2	< 100	15800	16	432	0.3	497	< 1	< 1	< 1	< 1
FC	L58	18+50	2.1	0.4	1.9	0.4	1.1	0.2	1.2	0.2	5	< 2	< 100	19900	11	403	0.3	538	< 1	< 1	< 1	< 1
FC	L58	18+75	1.6	0.3	1.4	0.2	0.8	0.1	0.8	0.1	7	< 2	< 100	11100	12	526	0.2	652	< 1	< 1	< 1	< 1
FC	L58	19+00	4.7	0.8	3.8	0.8	2.2	0.3	2.6	0.4	7	< 2	< 100	13800	17	481	0.2	803	< 1	< 1	< 1	< 1
FC	L58	19+25	1.8	0.3	1.5	0.3	0.8	0.1	0.8	0.1	4	< 2	< 100	15100	11	630	0.1	841	< 1	< 1	< 1	< 1
FC	L58	19+50	2.2	0.4	1.9	0.3	1.1	0.2	1.3	0.2	14	< 2	< 100	45700	16	656	0.3	632	< 1	< 1	< 1	< 1
FC	L58	19+75	2	0.3	1.6	0.3	1	0.1	1	0.2	16	< 2	< 100	18900	18	616	0.6	368	< 1	< 1	< 1	< 1
FC	L58	20+00	2.9	0.5	2.3	0.5	1.4	0.2	1.5	0.2	11	< 2	< 100	2600	19	448	0.3	614	< 1	< 1	< 1	< 1
FC	L58	20+25	2.1	0.4	1.9	0.4	1.1	0.2	1.1	0.2	7	< 2	< 100	9180	12	475	0.1	497	< 1	< 1	< 1	< 1
FC	L58	20+50	2	0.3	2	0.4	1	0.1	1	0.2	4	< 2	< 100	2290	10	521	0.1	438	< 1	< 1	< 1	< 1
FC	L58	20+75	2.1	0.4	2.1	0.4	1.2	0.2	1.2	0.2	3	< 2	< 100	5330	11	389	0.2	328	< 1	< 1	< 1	< 1
FC	L58	21+00	2.1	0.4	1.8	0.3	1	0.1	0.9	0.1	5	< 2	< 100	41900	13	631	< 0.1	514	< 1	< 1	< 1	< 1
FC	L58	21+25	0.7	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	11	< 2	< 100	5390	18	1380	0.1	396	< 1	< 1	< 1	< 1
FC	L58	21+50	2	0.3	1.6	0.3	1	0.2	1.1	0.2	5	< 2	< 100	12800	20	843	0.2	683	< 1	< 1	< 1	< 1
FC	L58	21+75	1.5	0.2	1.3	0.2	0.7	< 0.1	0.7	0.1	6	< 2	< 100	1210	15	516	0.2	500	< 1	< 1	< 1	< 1
FC	L58	22+00	3.6	0.6	3.1	0.6	1.8	0.3	1.7	0.3	4	< 2	< 100	3500	19	452	0.1	371	< 1	< 1	< 1	< 1
FC	L58	22+25	2	0.3	1.7	0.3	0.9	0.1	0.9	0.1	6	< 2	< 100	5990	11	547	0.2	499	< 1	< 1	< 1	< 1
FC	L58	22+50	0.6	< 0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	4	< 2	< 100	1550	11	419	0.2	499	< 1	< 1	< 1	< 1
FC	L58	22+75	1.9	0.3	1.8	0.3	0.9	0.1	0.9	0.1	7	< 2	< 100	2550	10	541	0.2	500	< 1	< 1	< 1	< 1
FC	L58	23+00	2.2	0.4	2.1	0.4	1.2	0.2	1.2	0.2	10	< 2	< 100	8250	27	631	0.2	400	< 1	< 1	< 1	< 1
FC	L58	23+25	2	0.3	1.8	0.3	0.9	0.1	0.7	0.1	5	< 2	< 100	5940	8	646	< 0.1	415	< 1	< 1	< 1	< 1
FC	L58	23+50	1.6	0.3	1.5	0.3	0.9	0.1	0.9	0.2	12	< 2	< 100	17000	10	913	< 0.1	437	< 1	< 1	< 1	< 1
FC	L58	23+75	1.7	0.3	1.6	0.3	0.7	< 0.1	0.6	< 0.1	16	< 2	< 100	4180	17	338	0.1	878	< 1	< 1	< 1	< 1
FC	L58	24+00	2.3	0.4	2.2	0.5	1.4	0.2	1.5	0.3	5	< 2	< 100	9820	14	590	0.2	1080	< 1	< 1	< 1	< 1
FC	L58	24+25	2.5	0.4	2.3	0.5	1.5	0.2	1.4	0.3	5	< 2	< 100	8380	11	876	0.1	1140	< 1	< 1	< 1	< 1
FC	L58	24+50	4.3	0.7	3.8	0.8	2.2	0.3	2.2	0.4	8	< 2	< 100	7730	18	854	0.2	505	< 1	< 1	< 1	< 1
FC	L58	24+75	3.1	0.5	2.8	0.6	1.7	0.3	1.7	0.3	10	< 2	< 100	5760	18	677	0.3	976	< 1	< 1	< 1	< 1
FC	L58	25+00	3.6	0.6	3.3	0.7	2	0.3	2	0.4	6	< 2	< 100	4420	19	526	0.2	630	< 1	< 1	< 1	< 1
FC	L58	25+25	3.2	0.6	2.9	0.6	1.7	0.2	1.7	0.3	7	< 2	< 100	8520	12	728	0.2	798	< 1	< 1	< 1	< 1
FC	L58	25+50	1.6	0.3	1.4	0.3	0.8	0.1	1	0.2	13	< 2	< 100	8300	13	553	0.2	777	< 1	< 1	< 1	< 1
FC	L58	25+75	0.6	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	8	< 2	< 100	12200	14	612	0.1	1820	< 1	< 1	< 1	< 1
FC	L58	26+00	0.7	0.1	0.8	0.1	0.3	< 0.1	0.4	< 0.1	8	< 2	< 100	2880	15	445	0.3	1330	< 1	< 1	< 1	< 1
FC	L58	26+25	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	< 0.1	< 0.1	6	< 2	< 100	1430	6	610	0.2	1120	< 1	< 1	< 1	< 1
FC	L58	26+50	0.7	0.1	0.7	0.1	0.4	< 0.1	0.3	< 0.1	11	< 2	< 100	3590	8	690	0.2	1090	< 1	< 1	< 1	< 1
FC	L58	26+75	0.5	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	15	< 2	< 100	10700	5	447	0.1	2060	< 1	< 1	< 1	< 1
FC	L58	27+00	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	10	< 2	< 100	12300	5	510	0.1	2390	< 1	< 1	< 1	< 1
FC	L58	27+25	1	0.2	2.3	0.2	0.6	< 0.1	0.6	0.1	7	< 2	< 100	13000	15	686	0.2	1110	< 1	< 1	< 1	< 1
FC	L58	27+50	1.3	0.3	1.4	0.2	0.7	< 0.1	0.6	< 0.1	14	< 2	< 100	11400	11	471	0.1	1860	< 1	< 1	< 1	< 1
FC	L58	27+75	0.5	0.1	0.7	< 0.1	0.3	< 0.1	0.3	< 0.1	11	< 2	< 100	5130	6	558	0.2	1640	< 1	< 1	< 1	< 1
FC	L58	28+00	0.9	0.2	0.9	0.2	0.5	< 0.1	0.6	0.1	8	< 2	< 100	7480	10	643	0.2	586	< 1	< 1	< 1	< 1
FC	L58	28+25	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.3	< 0.1	21	< 2	< 100	19000	20	839	0.6	987	< 1	< 1	< 1	< 1
FC	L58	28+50	1.5	0.3	1.4	0.3	0.9	0.1	0.9	0.2	26	< 2	< 100	10600	25	1060	0.5	1020	< 1	< 1	< 1	< 1
FC	L58	28+75	0.6	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	13	< 2	< 100	3820	8	576	0.2	806	< 1	< 1	< 1	< 1
FC	L58	29+00	1.4	0.3	1.4	0.2	0.8	< 0.1	0.8	0.1	18	< 2	< 100	16100	31	1230	0.6	1220	< 1	< 1	< 1	< 1
FC	L58	29+25	0.6	0.1	0.6	0.1	0.3	< 0.1	0.4	< 0.1	11	< 2	< 100	7660	21	1670	0.3	906	< 1	< 1	< 1	< 1
FC	L58	29+50	0.9	0.2	0.8	0.2	0.5	< 0.1	0.6	0.1	20	< 2	< 100	24900	12	1250	0.2	542	< 1	< 1	< 1	< 1
FC	L58	29+75	1.5	0.3	1.5	0.3	0.9	0.1	0.9	0.2	6	< 2	< 100	10500	10	873	0.1	515	< 1	< 1	< 1	< 1
FC	L58	30+00	1.6	0.3	1.4	0.3	0.9	0.1	0.9	0.2	5	< 2	< 100	15900	12	680	0.2	683	< 1	< 1	< 1	< 1
FC	L58	30+25	1.9	0.3	1.7	0.3	1	0.2	1.1	0.2	8	< 2	< 100	49900	13	661	0.2	792	< 1	< 1	< 1	< 1
FC	L57	10+00	5.1	1	5.4	1.1	3.1	0.5	3.3	0.5	5	< 2	< 100	46900	13	878	0.1	714	< 1	< 1	< 1	< 1
FC	L57	10+25	5.5	1	5.3	1	2.8	0.4	3	0.5	5	< 2	< 100	51000	13	805	0.3	803	< 1	< 1	< 1	< 1
FC	L57	10+50	3.7	0.7	3.9	0.8	2.3	0.3	2.3	0.4	9	< 2	< 100	41100	13	776	0.3	644	< 1	< 1	< 1	< 1
FC	L57	10+75	1	0.2	1.2	0.2	0.5	< 0.1	0.5	< 0.1	17	< 2	< 100	6410	17	437	0.3	1610	< 1	< 1	< 1	< 1
FC	L57	11+00	4.8	0.9	4.7	1	2.8	0.4	3	0.5	5	< 2	< 100	26300	16	1060	0.3	750	< 1	< 1	< 1	< 1
FC	L57	11+25	3.6	0.6	3.6	0.7	2	0.3	1.9	0.3	10	< 2	< 100	14000	26	716	0.5	411	< 1	< 1	< 1	< 1
FC	L57	11+50	0.6	0.1	0.6	< 0.1	0.3	< 0.1	0.2	< 0.1	20	< 2	< 100	1160	20	243	0.3	422	< 1	< 1	< 1	< 1
FC	L57	11+75	3	0.5	3	0.5	1.5	0.2	1.5	0.2	4	< 2	< 100	22600	25	715	0.6	373	< 1	< 1	< 1	< 1

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Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L57	12+00	0.7	0.2	0.7	0.1	0.3	< 0.1	0.3	< 0.1	14	< 2	< 100	1920	20	234	0.3	528	< 1	< 1	< 1	< 1
FC	L57	12+25	2.5	0.5	2.5	0.5	1.4	0.2	1.6	0.2	9	< 2	< 100	56600	11	500	0.2	481	< 1	< 1	< 1	< 1
FC	L57	12+50	0.9	0.2	0.9	0.2	0.5	< 0.1	0.5	< 0.1	10	< 2	< 100	21400	17	448	0.4	377	< 1	< 1	< 1	< 1
FC	L57	12+75	1	0.2	1.2	0.2	0.7	< 0.1	0.7	0.1	8	< 2	< 100	24600	19	359	0.4	291	< 1	< 1	< 1	< 1
FC	L57	13+00	1.6	0.2	1.4	0.2	0.7	< 0.1	0.7	0.1	11	< 2	< 100	21500	18	418	0.4	401	< 1	< 1	< 1	< 1
FC	L57	13+25	0.7	0.5	0.5	< 0.1	0.2	< 0.1	0.3	< 0.1	23	< 2	< 100	1120	28	253	0.6	420	< 1	< 1	< 1	< 1
FC	L57	13+50	1.1	0.2	1	0.2	0.6	< 0.1	0.6	0.1	12	< 2	< 100	3540	19	326	0.3	329	< 1	< 1	< 1	< 1
FC	L57	13+75	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	15	< 2	< 100	2190	25	200	0.6	346	< 1	< 1	< 1	< 1
FC	L57	14+00	1.9	0.4	1.9	0.3	0.9	0.1	1	0.2	12	< 2	< 100	40700	38	337	0.7	611	< 1	< 1	< 1	< 1
FC	L57	14+25	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	32	< 2	< 100	12800	22	76	0.2	681	< 1	< 1	< 1	< 1
FC	L57	14+50	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	30	< 2	< 100	4190	24	147	0.3	537	< 1	< 1	< 1	< 1
FC	L57	14+75	0.3	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	28	< 2	< 100	17000	21	229	0.4	778	< 1	< 1	< 1	< 1
FC	L57	15+00	0.5	< 0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	16	< 2	< 100	921	25	208	0.2	929	< 1	< 1	< 1	< 1
FC	L57	15+25	0.4	< 0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	21	< 2	< 100	1990	19	222	0.4	871	< 1	< 1	< 1	< 1
FC	L57	15+50	1.2	0.2	1.2	0.2	0.6	0.1	0.7	0.1	21	< 2	< 100	80700	64	897	1.2	910	< 1	< 1	< 1	< 1
FC	L57	15+75	2.1	0.4	2	0.4	1.1	0.2	1.1	0.2	23	< 2	< 100	1900	29	387	0.6	380	< 1	< 1	< 1	< 1
FC	L57	16+50	1.5	0.3	1.5	0.3	0.9	0.1	1	0.2	13	< 2	< 100	1930	34	570	0.5	340	< 1	< 1	< 1	< 1
FC	L57	16+75	0.6	0.1	0.6	< 0.1	0.3	< 0.1	0.2	< 0.1	21	< 2	< 100	2870	13	380	0.3	348	< 1	< 1	< 1	< 1
FC	L57	17+00	2.3	0.4	2	0.4	1.1	0.2	1.2	0.2	11	< 2	< 100	5720	25	491	0.4	465	< 1	< 1	< 1	< 1
FC	L57	17+25	1	0.2	0.8	0.2	0.4	< 0.1	0.4	< 0.1	12	< 2	< 100	2800	20	581	0.4	409	< 1	< 1	< 1	< 1
FC	L57	17+50	3	0.5	2.6	0.5	1.5	0.2	1.6	0.2	7	< 2	< 100	4970	28	781	0.4	370	< 1	< 1	< 1	< 1
FC	L57	17+75	3.4	0.3	3.3	0.3	0.7	< 0.1	0.7	< 0.1	8	< 2	< 100	1950	21	398	0.3	366	< 1	< 1	< 1	< 1
FC	L57	18+00	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.2	< 0.1	17	< 2	< 100	2260	20	316	0.2	914	< 1	< 1	< 1	< 1
FC	L57	18+25	0.8	0.2	0.9	0.1	0.3	< 0.1	0.2	< 0.1	17	2	< 100	2720	17	339	0.2	587	< 1	< 1	< 1	< 1
FC	L57	18+50	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	19	< 2	< 100	1590	12	205	0.3	596	< 1	< 1	< 1	< 1
FC	L57	18+75	0.8	0.1	0.7	0.2	0.4	0.1	0.4	< 0.1	23	< 2	< 100	9550	21	293	0.2	992	< 1	< 1	< 1	< 1
FC	L57	19+00	0.6	0.1	0.5	0.1	0.3	< 0.1	0.3	< 0.1	25	< 2	< 100	3180	28	516	0.5	996	< 1	< 1	< 1	< 1
FC	L57	19+75	4.1	0.7	3.4	0.7	2.1	0.3	2.2	0.4	12	< 2	< 100	12400	18	404	0.3	645	< 1	< 1	< 1	< 1
FC	L57	20+00	1.6	0.3	1.3	0.3	0.8	0.1	0.7	0.1	26	< 2	< 100	11600	24	889	1	195	< 1	< 1	< 1	< 1
FC	L57	20+25	4.8	0.8	3.9	0.8	2.2	0.3	2.5	0.4	22	< 2	< 100	26300	17	468	0.4	486	< 1	< 1	< 1	< 1
FC	L57	20+50	3.3	0.6	3.3	0.6	1.9	0.3	1.9	0.3	4	< 2	< 100	6380	19	449	0.3	557	< 1	< 1	< 1	< 1
FC	L57	20+75	1.5	0.3	1.4	0.2	0.9	0.1	0.8	0.1	14	< 2	< 100	9970	10	557	0.1	288	< 1	< 1	< 1	< 1
FC	L57	21+00	3	0.5	2.9	0.6	1.9	0.3	1.9	0.4	7	< 2	< 100	4060	15	415	0.3	402	< 1	< 1	< 1	< 1
FC	L57	21+25	0.6	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	14	< 2	< 100	42600	23	327	0.2	1770	< 1	< 1	< 1	< 1
FC	L57	21+50	1.2	0.2	1.4	0.3	0.7	0.1	0.6	< 0.1	13	< 2	< 100	6290	17	242	0.3	1290	< 1	< 1	< 1	< 1
FC	L57	21+75	0.8	0.1	0.8	0.1	0.4	< 0.1	0.3	< 0.1	10	2	< 100	2560	29	228	0.1	724	< 1	< 1	< 1	< 1
FC	L57	22+00	1.8	0.3	1.5	0.3	0.8	0.1	0.8	0.1	13	< 2	< 100	6760	31	936	0.6	560	< 1	< 1	< 1	< 1
FC	L57	22+25	0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	8	< 2	< 100	1850	4	282	< 0.1	706	< 1	< 1	< 1	< 1
FC	L57	22+50	1.3	0.2	1.1	0.2	0.6	< 0.1	0.6	< 0.1	5	< 2	< 100	5170	17	613	0.2	369	< 1	< 1	< 1	< 1
FC	L57	22+75	2.2	0.3	1.8	0.3	1	0.1	1	0.2	12	< 2	< 100	5260	18	406	0.5	314	< 1	< 1	< 1	< 1
FC	L57	23+00	5.8	0.9	6	1	3	0.4	3.1	0.6	6	< 2	< 100	9140	25	848	0.5	467	< 1	< 1	< 1	< 1
FC	L57	23+25	2.2	0.4	1.9	0.4	1.1	0.2	1.1	0.2	11	< 2	< 100	3920	33	208	0.5	1040	< 1	< 1	< 1	< 1
FC	L57	23+50	3.9	0.2	0.9	0.2	0.5	< 0.1	0.5	< 0.1	9	< 2	< 100	7250	20	386	0.5	544	< 1	< 1	< 1	< 1
FC	L57	23+75	3.1	0.5	2.4	0.5	1.4	0.2	1.4	0.2	13	< 2	< 100	5420	25	345	0.5	605	< 1	< 1	< 1	< 1
FC	L57	24+00	1.3	0.2	1	0.2	0.5	< 0.1	0.4	< 0.1	7	< 2	< 100	1120	16	425	0.2	351	< 1	< 1	< 1	< 1
FC	L57	24+25	3	0.5	2.4	0.5	1.4	0.2	1.3	0.2	8	< 2	< 100	6870	18	546	0.2	474	< 1	< 1	< 1	< 1
FC	L57	24+50	3.1	0.6	3.1	0.6	1.7	0.2	1.4	0.2	7	< 2	< 100	3540	24	332	0.3	1110	< 1	< 1	< 1	< 1
FC	L57	24+75	3.5	0.6	3.2	0.7	2	0.3	2	0.3	7	< 2	< 100	3110	22	557	0.8	758	< 1	< 1	< 1	< 1
FC	L57	25+00	3.3	0.6	3.2	0.7	1.9	0.3	1.9	0.3	5	< 2	< 100	5270	21	782	0.1	892	< 1	< 1	< 1	< 1
FC	L57	25+25	2.6	0.5	2.7	0.5	1.4	0.2	1.2	0.2	< 2	< 2	< 100	3290	17	867	0.2	3360	< 1	< 1	< 1	< 1
FC	L57	25+50	2.2	0.5	2.2	0.4	1.1	0.1	0.9	0.1	8	< 2	< 100	2880	19	554	0.4	868	< 1	< 1	< 1	< 1
FC	L57	25+75	0.6	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	12	< 2	< 100	4740	10	492	0.2	890	< 1	< 1	< 1	< 1
FC	L57	26+00	1	0.1	0.8	0.2	0.5	< 0.1	0.6	< 0.1	9	< 2	< 100	5290	18	583	0.3	372	< 1	< 1	< 1	< 1
FC	L57	26+25	1	0.2	1.1	0.2	0.6	< 0.1	0.7	< 0.1	6	< 2	< 100	1990	17	486	0.2	626	< 1	< 1	< 1	< 1
FC	L57	26+50	1.5	0.3	1.5	0.3	0.8	0.1	0.9	0.1	13	< 2	< 100	3910	19	402	0.4	919	< 1	< 1	< 1	< 1
FC	L57	26+75	1.5	0.3	1.5	0.3	0.9	0.1	0.9	0.2	6	< 2	< 100	2090	26	349	0.6	1110	< 1	< 1	< 1	< 1
FC	L57	27+00	0.8	0.1	0.7	0.1	0.5	< 0.1	0.4	< 0.1	6	< 2	< 100	3390	16	476	0.4	718	< 1	< 1	< 1	< 1
FC	L57	27+25	0.6	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	8	< 2	< 100	8250	16	689	0.3	539	< 1	< 1	< 1	< 1
FC	L57	27+50	2	0.4	1.9	0.4	1.1	0.2	1	0.2	14	< 2	< 100	2180	43	383	0.6	610	< 1	< 1	< 1	< 1
FC	L57	27+75	1.6	0.3	1.7	0.4	1.1	0.2	1.1	0.2	11	< 2	< 100	6990	29	495	0.2	770	< 1	< 1	< 1	< 1
FC	L57	28+00	0.3	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	4	< 2	< 100	5510	13	456	0.4	1040	< 1	< 1	< 1	< 1
FC	L57	28+25	1.7	0.3	1.7	0.4	1.1	0.1	1	0.2	4	< 2	< 100	8100	9	355	0.1	1720	< 1	< 1	< 1	< 1
FC	L57	28+50	1.3	0.2	1.2	0.2	0.6	0.1	0.6	< 0.1	7	< 2	< 100	4670	33	425	0.4	1170	< 1	< 1	< 1	< 1
FC	L57	28+75	1.4	0.3	1.4	0.2	0.8	0.1	0.6	< 0.1	8	< 2	< 100	2580	21	474	0.4	719	< 1	< 1	< 1	< 1
FC	L57	29+00	0.9	0.1	0.9	0.2	0.6	< 0.1	0.6	0.1	5	< 2	< 100	9690	12	656	0.2	369	< 1	< 1	< 1	< 1
FC	L57	29+25	1.1	0.2	1.1	0.2	0.7	0.1	0.9	0.1	7	< 2	< 100	4820	26	682	0.5	447	< 1	< 1	< 1	< 1
FC	L57	29+50	1.1	0.2	1	0.2	0.7	< 0.1	0.6	< 0.1	10	< 2	< 100	7740	15	780	0.3	486	< 1	< 1	< 1	< 1

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Final Report
Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L57	29+75	1.6	0.3	1.4	0.3	0.9	0.1	1	0.2	5	< 2	< 100	4020	23	428	0.3	455	< 1	< 1	< 1	< 1
FC	L57	30+00	1.4	0.2	1	0.2	0.7	< 0.1	0.8	0.1	19	< 2	< 100	3370	16	590	< 0.1	317	< 1	< 1	< 1	< 1
FC	L57	30+25	1.2	0.2	1.3	0.3	0.8	0.1	0.9	0.1	3	< 2	< 100	4810	10	367	0.2	329	< 1	< 1	< 1	< 1
FC	L57	30+50	1.4	0.2	1.3	0.3	0.8	0.1	0.8	0.1	8	< 2	< 100	3780	18	559	0.4	427	< 1	< 1	< 1	< 1
FC	L57	30+75	0.9	0.2	0.8	0.1	0.5	< 0.1	0.5	< 0.1	3	< 2	< 100	1490	17	516	0.3	438	< 1	< 1	< 1	< 1
FC	L57	31+00	0.6	< 0.1	0.5	0.1	0.3	< 0.1	0.4	< 0.1	5	< 2	< 100	686	14	608	0.1	245	< 1	< 1	< 1	< 1
FC	L57	31+50	1.9	0.3	1.6	0.4	1.1	0.2	1.1	0.2	5	< 2	< 100	12200	14	551	0.3	657	< 1	< 1	< 1	< 1
FC	L57	31+75	5.2	0.7	3.7	0.8	2.5	0.4	2.9	0.5	11	< 2	< 100	19000	16	403	0.3	742	< 1	< 1	< 1	< 1
FC	L57	32+00	2.5	0.4	2.2	0.4	1.5	0.2	1.6	0.3	16	< 2	< 100	9510	20	608	0.7	678	< 1	< 1	< 1	< 1
FC	L57	32+25	3.7	0.8	3.4	0.7	2.3	0.3	2.5	0.4	14	< 2	< 100	10800	16	1440	0.6	634	< 1	< 1	< 1	< 1
FC	L57	32+50	0.6	0.1	0.6	0.1	0.3	< 0.1	0.4	< 0.1	5	< 2	< 100	6920	12	513	0.3	866	< 1	< 1	< 1	< 1
FC	L57	32+75	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	14	< 2	< 100	1800	26	369	0.6	1330	< 1	< 1	< 1	< 1
FC	L57	33+00	1.5	0.2	1.1	0.2	0.7	< 0.1	0.7	0.1	3	< 2	< 100	2440	17	460	0.2	452	< 1	< 1	< 1	< 1
FC	L57	33+25	1.2	0.2	1.1	0.2	0.7	< 0.1	0.7	0.1	6	< 2	< 100	6230	19	680	0.2	388	< 1	< 1	< 1	< 1
FC	L57	33+50	0.8	0.1	0.8	0.2	0.4	< 0.1	0.4	< 0.1	18	< 2	< 100	1430	36	315	0.6	1180	< 1	< 1	< 1	< 1
FC	L57	33+75	1.8	0.3	2	0.3	0.8	< 0.1	0.7	< 0.1	11	< 2	< 100	19300	24	362	0.3	892	< 1	< 1	< 1	< 1
FC	L57	34+00	10.8	1.7	9.2	1.9	5.8	0.8	5.9	1	21	< 2	< 100	25200	67	4870	0.3	1650	< 1	< 1	< 1	< 1
FC	L57	34+25	0.6	0.1	0.5	< 0.1	0.3	< 0.1	0.2	< 0.1	7	< 2	< 100	5790	19	536	0.2	389	< 1	< 1	< 1	< 1
FC	L56	10+75	3.6	0.7	4	0.8	2.6	0.4	2.4	0.4	< 2	< 2	< 100	8970	22	3030	0.3	310	< 1	< 1	< 1	< 1
FC	L56	11+00	0.5	< 0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	49	< 2	< 100	4940	8	286	0.2	339	< 1	< 1	< 1	< 1
FC	L56	11+25	1.3	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	13	< 2	< 100	6090	7	207	0.1	777	< 1	< 1	< 1	< 1
FC	L56	11+50	0.9	0.2	0.8	0.2	0.5	< 0.1	0.5	0.1	11	< 2	< 100	6800	20	702	0.4	310	< 1	< 1	< 1	< 1
FC	L56	11+75	1.1	0.2	0.9	0.2	0.4	< 0.1	0.6	< 0.1	7	< 2	< 100	2720	11	328	0.3	517	< 1	< 1	< 1	< 1
FC	L56	12+00	0.8	0.2	0.9	0.1	0.4	< 0.1	0.5	< 0.1	9	< 2	< 100	9800	9	393	0.2	525	< 1	< 1	< 1	< 1
FC	L56	12+25	2.8	0.5	2.9	0.6	1.7	0.3	1.9	0.3	8	< 2	< 100	15000	17	705	0.1	536	< 1	< 1	< 1	< 1
FC	L56	12+50	0.7	0.2	0.8	0.2	0.5	< 0.1	0.6	0.1	9	< 2	< 100	10100	13	534	0.2	558	< 1	< 1	< 1	< 1
FC	L56	13+00	1.1	0.2	1.1	0.2	0.7	0.1	0.8	0.1	9	< 2	< 100	28700	12	388	0.2	495	< 1	< 1	< 1	< 1
FC	L56	13+25	1.8	0.3	1.7	0.3	1	0.2	1.1	0.2	9	< 2	< 100	24900	12	597	0.3	573	< 1	< 1	< 1	< 1
FC	L56	13+50	0.7	0.2	0.8	0.1	0.5	< 0.1	0.5	< 0.1	11	< 2	< 100	15900	15	648	0.3	419	< 1	< 1	< 1	< 1
FC	L56	13+75	0.8	0.1	0.7	0.1	0.4	< 0.1	0.5	< 0.1	5	< 2	< 100	9630	14	513	0.2	303	< 1	< 1	< 1	< 1
FC	L56	14+00	1.2	0.2	1.2	0.2	0.7	0.1	0.7	0.1	8	< 2	< 100	17000	19	444	0.2	621	< 1	< 1	< 1	< 1
FC	L56	14+25	1.1	0.2	1.1	0.2	0.6	< 0.1	0.5	< 0.1	54	< 2	< 100	26200	9	169	0.1	1310	< 1	< 1	< 1	< 1
FC	L56	14+50	2.4	0.5	2.5	0.4	1.1	0.2	1	0.2	22	< 2	< 100	19200	16	214	0.2	1470	< 1	< 1	< 1	< 1
FC	L56	14+75	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.1	23	< 2	< 100	7040	13	158	0.2	693	< 1	< 1	< 1	< 1
FC	L56	15+00	0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	24	< 2	< 100	3720	7	121	0.1	174	< 1	< 1	< 1	< 1
FC	L56	15+25	0.5	0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	49	< 2	< 100	5560	14	263	0.3	1120	< 1	< 1	< 1	< 1
FC	L56	15+50	0.2	< 0.1	0.3	< 0.1	0.2	< 0.1	0.3	< 0.1	16	< 2	< 100	9470	11	303	0.2	548	< 1	< 1	< 1	< 1
FC	L56	15+75	1.3	0.2	1.3	0.3	0.8	0.1	0.9	0.1	10	< 2	< 100	35400	24	1060	0.2	589	< 1	< 1	< 1	< 1
FC	L56	16+00	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.2	< 0.1	8	< 2	< 100	1800	13	304	0.4	796	< 1	< 1	< 1	< 1
FC	L56	16+25	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	32	< 2	< 100	1090	18	188	0.4	1300	< 1	< 1	< 1	< 1
FC	L56	16+50	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	19	< 2	< 100	7370	17	285	0.4	907	< 1	< 1	< 1	< 1
FC	L56	16+75	0.5	0.1	0.6	< 0.1	0.3	< 0.1	0.2	< 0.1	14	< 2	< 100	6550	15	240	0.2	939	< 1	< 1	< 1	< 1
FC	L56	17+00	1	0.2	0.9	0.2	0.4	< 0.1	0.4	< 0.1	19	2	< 100	1540	35	174	0.6	873	< 1	< 1	< 1	< 1
FC	L56	17+25	0.8	0.2	0.9	0.2	0.4	< 0.1	0.5	< 0.1	12	< 2	< 100	7410	13	286	0.2	1430	< 1	< 1	< 1	< 1
FC	L56	17+50	3.9	0.8	4.1	0.8	2.2	0.3	2.3	0.4	5	< 2	< 100	22400	19	371	0.2	1010	< 1	< 1	< 1	< 1
FC	L56	17+75	0.8	0.2	0.9	0.1	0.4	< 0.1	0.3	< 0.1	15	< 2	< 100	921	33	164	0.2	1320	< 1	< 1	< 1	< 1
FC	L56	18+00	2.8	0.5	2.8	0.5	1.4	0.2	1.4	0.2	3	< 2	< 100	1860	28	635	0.4	383	< 1	< 1	< 1	< 1
FC	L56	18+25	1.3	0.3	1.4	0.3	0.6	< 0.1	0.5	< 0.1	25	3	< 100	3180	18	209	0.2	1350	< 1	< 1	< 1	< 1
FC	L56	18+50	2.6	0.4	2.4	0.5	1.5	0.2	1.5	0.3	3	< 2	< 100	12400	26	343	0.2	454	< 1	< 1	< 1	< 1
FC	L56	18+75	4.9	0.9	4.8	1	3.2	0.5	3.9	0.7	10	< 2	< 100	3930	17	389	0.3	195	< 1	< 1	< 1	< 1
FC	L56	19+00	7.6	1.3	7.2	1.5	5.3	0.8	6.6	1.2	8	< 2	< 100	6410	21	269	0.2	269	< 1	< 1	< 1	< 1
FC	L56	19+50	1.3	0.3	1.4	0.2	0.7	0.1	0.8	0.1	12	< 2	< 100	2180	16	220	0.2	497	< 1	< 1	< 1	< 1
FC	L56	19+75	2.5	0.4	2	0.4	1.2	0.2	1.2	0.2	6	< 2	< 100	2410	14	549	0.2	287	< 1	< 1	< 1	< 1
FC	L56	20+00	1.1	0.2	0.9	0.2	0.5	< 0.1	0.5	< 0.1	6	< 2	< 100	8660	13	962	0.1	340	< 1	< 1	< 1	< 1
FC	L56	20+25	0.5	0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	4	< 2	< 100	5990	10	560	0.1	393	< 1	< 1	< 1	< 1
FC	L56	20+50	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	25	< 2	< 100	5200	6	434	0.2	974	< 1	< 1	< 1	< 1
FC	L56	20+75	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	14	< 2	< 100	6560	8	405	0.1	556	< 1	< 1	< 1	< 1
FC	L56	21+00	1.3	0.2	1.1	0.2	0.7	0.1	0.6	0.1	9	< 2	< 100	18200	16	1120	0.2	614	< 1	< 1	< 1	< 1
FC	L56	21+25	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	15	< 2	< 100	7380	5	334	0.1	708	< 1	< 1	< 1	< 1
FC	L56	21+50	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	6	< 2	< 100	8690	8	544	0.1	611	< 1	< 1	< 1	< 1
FC	L56	21+75	0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	7	< 2	< 100	16100	17	1020	0.4	1080	< 1	< 1	< 1	< 1
FC	L56	22+00	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	12	< 2	< 100	7370	6	631	0.2	507	< 1	< 1	< 1	< 1
FC	L56	22+25	1.9	0.3	1.6	0.3	1	0.1	1	0.2	8	< 2	< 100	9070	11	636	0.1	487	< 1	< 1	< 1	< 1
FC	L56	22+50	3	0.4	2.3	0.5	1.6	0.2	1.7	0.3	4	< 2	< 100	1090	5	280	0.2	812	< 1	< 1	< 1	< 1
FC	L56	22+75	2.5	0.4	2.4	0.4	1.4	0.2	1.4	0.3	12	< 2	< 100	6240	21	295	0.2	597	< 1	< 1	< 1	< 1
FC	L56	23+00	4	0.7	3.8	0.8	2.3	0.4	2.7	0.4	4	< 2	< 100	12800	18	848	0.1	920	< 1	< 1	< 1	< 1
FC	L56	23+25	2.4	0.4	2.4	0.5	1.5	0.2	1.6	0.3	3	< 2	< 100	7390	9	720	< 0.1	696	< 1	< 1	< 1	< 1

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Final Report
Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L56	23+50	1.8	0.3	1.6	0.3	1	0.1	1	0.2	3	< 2	< 100	54800	14	801	< 0.1	1110	< 1	< 1	< 1	< 1
FC	L56	23+75	0.6	< 0.1	0.4	0.2	0.2	< 0.1	0.2	< 0.1	10	< 2	< 100	8200	9	237	0.1	808	< 1	< 1	< 1	< 1
FC	L56	24+00	2.5	0.2	1	0.2	0.5	< 0.1	0.5	< 0.1	8	< 2	< 100	2690	10	262	0.1	719	< 1	< 1	< 1	< 1
FC	L56	24+25	3.1	0.5	2.3	0.5	1.5	0.2	1.4	0.2	32	< 2	< 100	21200	9	522	0.3	334	< 1	< 1	< 1	< 1
FC	L56	24+50	3.8	0.6	3	0.5	1.8	0.3	1.6	0.3	13	< 2	< 100	14000	6	497	0.2	350	< 1	< 1	< 1	< 1
FC	L56	24+75	5.6	1	4.5	0.8	2.6	0.4	2.3	0.4	18	< 2	< 100	18600	15	604	0.4	522	< 1	< 1	< 1	< 1
FC	L56	25+00	1.1	0.2	1	0.2	0.6	< 0.1	0.6	0.1	5	< 2	< 100	32300	9	797	0.2	827	< 1	< 1	< 1	< 1
FC	L56	25+25	0.6	< 0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	11	< 2	< 100	1760	5	366	0.2	1040	< 1	< 1	< 1	< 1
FC	L56	25+50	2.3	0.4	2	0.4	1.2	0.2	1.4	0.2	6	< 2	< 100	8560	15	536	0.3	451	< 1	< 1	< 1	< 1
FC	L56	25+75	1	0.2	0.9	0.2	0.6	< 0.1	0.6	< 0.1	6	< 2	< 100	6280	11	807	0.2	430	< 1	< 1	< 1	< 1
FC	L56	26+00	1.3	0.2	1.3	0.2	0.6	< 0.1	0.4	< 0.1	3	< 2	< 100	1150	26	411	0.3	235	< 1	< 1	< 1	< 1
FC	L56	26+25	2.4	0.5	2.6	0.6	1.8	0.3	2	0.4	4	< 2	< 100	4200	16	729	0.2	529	< 1	< 1	< 1	< 1
FC	L56	26+50	0.7	0.2	0.8	0.2	0.5	< 0.1	0.4	< 0.1	8	< 2	< 100	3810	19	856	< 0.1	547	< 1	< 1	< 1	< 1
FC	L56	26+75	0.2	< 0.1	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	8	< 2	< 100	3060	7	338	0.2	1430	< 1	< 1	< 1	< 1
FC	L56	27+00	1.3	0.3	1.4	0.3	0.7	< 0.1	0.5	< 0.1	7	< 2	< 100	8620	10	482	0.3	1470	< 1	< 1	< 1	< 1
FC	L56	27+25	0.5	< 0.1	0.5	< 0.1	0.2	< 0.1	0.4	< 0.1	7	< 2	< 100	6210	8	447	0.2	2340	< 1	< 1	< 1	< 1
FC	L56	27+50	0.5	0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	7	< 2	< 100	2800	10	666	0.2	2240	< 1	< 1	< 1	< 1
FC	L56	27+75	2.4	0.4	2.4	0.5	1.5	0.2	1.5	0.3	8	< 2	< 100	12300	12	770	0.2	862	< 1	< 1	< 1	< 1
FC	L56	28+00	1.5	0.3	1.6	0.3	0.9	0.1	0.8	0.1	17	< 2	< 100	4460	20	435	0.4	1180	< 1	< 1	< 1	< 1
FC	L56	28+25	2.2	0.4	2.2	0.4	1.1	0.2	1.2	0.2	7	< 2	< 100	5260	19	665	0.1	538	< 1	< 1	< 1	< 1
FC	L56	28+50	1.4	0.3	1.3	0.2	0.7	0.1	0.8	0.1	6	< 2	< 100	15400	9	662	< 0.1	527	< 1	< 1	< 1	< 1
FC	L56	28+75	1.3	0.3	1.2	0.2	0.7	0.1	0.8	0.1	6	< 2	< 100	4750	10	545	0.1	255	< 1	< 1	< 1	< 1
FC	L56	29+00	1.8	0.3	1.4	0.3	0.9	0.1	1	0.2	4	< 2	< 100	9860	12	608	< 0.1	445	< 1	< 1	< 1	< 1
FC	L56	29+25	1	0.2	1	0.2	0.6	< 0.1	0.7	< 0.1	14	< 2	< 100	3280	15	416	< 0.1	275	< 1	< 1	< 1	< 1
FC	L56	29+50	2.1	0.4	1.9	0.4	1.1	0.2	1.3	0.2	7	< 2	< 100	8370	9	589	< 0.1	410	< 1	< 1	< 1	< 1
FC	L56	29+75	1.8	0.3	1.6	0.3	0.9	0.1	1.1	0.2	4	< 2	< 100	3920	12	444	0.1	355	< 1	< 1	< 1	< 1
FC	L56	30+00	0.9	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	7	< 2	< 100	7680	18	928	< 0.1	519	< 1	< 1	< 1	< 1
FC	L55	9+50	0.6	0.1	0.6	0.1	0.3	< 0.1	0.4	< 0.1	12	< 2	< 100	8650	9	233	0.2	433	< 1	< 1	< 1	< 1
FC	L55	9+75	2	0.4	2.3	0.5	1.4	0.2	1.4	0.2	3	< 2	< 100	21300	12	461	0.3	455	< 1	< 1	< 1	< 1
FC	L55	10+00	1.5	0.3	1.6	0.3	1	0.2	1	0.2	8	< 2	< 100	55700	22	662	0.3	455	< 1	< 1	< 1	< 1
FC	L55	10+25	3.8	0.8	4.2	0.7	1.8	0.2	1.7	0.2	13	< 2	< 100	9720	15	193	0.1	740	< 1	< 1	< 1	< 1
FC	L55	10+50	0.8	0.2	0.7	0.1	0.4	< 0.1	0.4	< 0.1	3	< 2	< 100	4570	20	623	0.2	244	< 1	< 1	< 1	< 1
FC	L55	10+75	0.6	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	6	< 2	< 100	1040	12	256	0.1	444	< 1	< 1	< 1	< 1
FC	L55	11+00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC	L55	11+25	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	22	< 2	< 100	12300	8	391	0.2	1350	< 1	< 1	< 1	< 1
FC	L55	11+50	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	0.1	< 0.1	9	< 2	< 100	4270	17	96	0.1	908	< 1	< 1	< 1	< 1
FC	L55	11+75	0.3	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	14	< 2	< 100	5450	43	106	0.2	1680	< 1	< 1	< 1	< 1
FC	L55	12+00	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	4	< 2	< 100	6060	9	427	0.1	614	< 1	< 1	< 1	< 1
FC	L55	12+25	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	5	< 2	< 100	1180	31	153	0.1	562	< 1	< 1	< 1	< 1
FC	L55	12+50	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	9	< 2	< 100	8080	6	294	0.1	468	< 1	< 1	< 1	< 1
FC	L55	12+75	0.9	0.2	0.7	0.2	0.5	< 0.1	0.4	< 0.1	5	< 2	< 100	1030	18	421	0.1	208	< 1	< 1	< 1	< 1
FC	L55	13+00	1	0.2	0.8	0.2	0.4	< 0.1	0.3	< 0.1	3	< 2	< 100	568	14	351	0.1	567	< 1	< 1	< 1	< 1
FC	L55	13+25	0.5	< 0.1	0.4	< 0.1	0.3	< 0.1	0.3	< 0.1	9	< 2	< 100	10300	11	665	0.2	251	< 1	< 1	< 1	< 1
FC	L55	13+50	0.7	0.1	0.7	0.1	0.4	< 0.1	0.5	< 0.1	6	< 2	< 100	22900	9	436	0.2	484	< 1	< 1	< 1	< 1
FC	L55	13+75	0.8	0.2	0.8	0.2	0.5	< 0.1	0.6	0.1	8	< 2	< 100	22000	9	407	0.3	320	< 1	< 1	< 1	< 1
FC	L55	14+00	0.7	0.1	0.7	0.1	0.4	< 0.1	0.3	< 0.1	11	< 2	< 100	2290	14	261	0.1	967	< 1	< 1	< 1	< 1
FC	L55	14+25	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	9	< 2	< 100	1610	5	200	< 0.1	909	< 1	< 1	< 1	< 1
FC	L55	14+50	1.5	0.3	1.5	0.3	0.9	0.1	1	0.2	5	< 2	< 100	4670	22	267	0.2	357	< 1	< 1	< 1	< 1
FC	L55	14+75	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	7	< 2	< 100	386	20	40	0.4	256	< 1	< 1	< 1	< 1
FC	L55	15+00	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	10	3	< 100	1120	53	92	0.2	1480	< 1	< 1	< 1	< 1
FC	L55	15+25	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	7	< 2	< 100	2750	17	386	0.1	576	< 1	< 1	< 1	< 1
FC	L55	15+50	0.7	0.1	0.7	0.1	0.4	< 0.1	0.4	< 0.1	8	< 2	< 100	6840	12	694	0.1	257	< 1	< 1	< 1	< 1
FC	L55	15+75	0.9	0.2	0.9	0.2	0.5	< 0.1	0.6	< 0.1	8	< 2	< 100	2660	16	447	0.3	332	< 1	< 1	< 1	< 1
FC	L55	16+00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC	L55	16+25	1	0.2	0.9	0.2	0.5	< 0.1	0.6	< 0.1	8	< 2	< 100	7550	17	536	0.2	405	< 1	< 1	< 1	< 1
FC	L55	16+50	0.6	0.1	0.5	< 0.1	0.3	< 0.1	0.4	< 0.1	3	< 2	< 100	3030	15	330	0.2	541	< 1	< 1	< 1	< 1
FC	L55	16+75	2.3	0.4	2.1	0.4	1.3	0.2	1.4	0.2	7	< 2	< 100	3000	14	341	0.2	432	< 1	< 1	< 1	< 1
FC	L55	17+00	2.4	0.4	2.4	0.5	1.4	0.2	1.4	0.2	4	< 2	< 100	5250	20	430	0.1	542	< 1	< 1	< 1	< 1
FC	L55	17+25	1.6	0.3	1.4	0.2	0.7	< 0.1	0.6	0.1	4	< 2	< 100	1710	19	363	0.3	452	< 1	< 1	< 1	< 1
FC	L55	17+50	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.1	8	< 2	< 100	12900	5	274	< 0.1	762	< 1	< 1	< 1	< 1
FC	L55	17+75	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	14	< 2	< 100	1310	6	229	0.1	1050	< 1	< 1	< 1	< 1
FC	L55	18+00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC	L55	18+25	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	17	< 2	< 100	3170	21	156	< 0.1	792	< 1	< 1	< 1	< 1
FC	L55	18+50	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	4	< 2	< 100	1490	26	235	0.1	498	< 1	< 1	< 1	< 1
FC	L55	18+75	0.5	< 0.1	0.5	< 0.1	0.2	< 0.1	0.3	< 0.1	12	< 2	< 100	2350	14	222	0.2	1020	< 1	< 1	< 1	< 1
FC	L55	19+00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC	L55	19+25	1.5	0.2	1	0.2	0.6	< 0.1	0.9	0.1	11	< 2	< 100	6080	8	337	0.2	167	< 1	< 1	< 1	< 1

Final Report
Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L55	19+50	1.6	0.2	0.9	0.2	0.6	< 0.1	0.5	< 0.1	9	< 2	< 100	3600	17	489	0.5	243	< 1	< 1	< 1	< 1
FC	L55	19+75	1.1	0.2	0.8	0.1	0.5	< 0.1	0.5	< 0.1	6	< 2	< 100	2380	18	289	0.4	254	< 1	< 1	< 1	< 1
FC	L55	20+00	2.1	0.3	1.5	0.3	0.9	0.1	0.9	0.1	12	< 2	< 100	6640	17	411	0.3	273	< 1	< 1	< 1	< 1
FC	L55	20+25	3.1	0.5	2.2	0.4	1.2	0.2	1.4	0.2	17	< 2	< 100	10700	29	460	0.7	527	< 1	< 1	< 1	< 1
FC	L55	20+50	0.6	0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	13	< 2	< 100	15700	24	339	0.4	624	< 1	< 1	< 1	< 1
FC	L55	20+75	0.6	0.1	0.6	< 0.1	0.3	< 0.1	0.3	< 0.1	20	< 2	< 100	4380	8	371	0.2	1330	< 1	< 1	< 1	< 1
FC	L55	21+00	1	0.2	0.8	0.1	0.4	< 0.1	0.4	< 0.1	3	< 2	< 100	2470	11	583	0.2	342	< 1	< 1	< 1	< 1
FC	L55	21+25	1.7	0.3	1.3	0.3	0.8	0.1	0.8	0.1	11	< 2	< 100	5410	22	713	0.5	294	< 1	< 1	< 1	< 1
FC	L55	21+50	2.2	0.3	1.7	0.3	1	0.2	1.1	0.2	5	< 2	< 100	8080	24	313	0.2	525	< 1	< 1	< 1	< 1
FC	L55	21+75	4.1	0.7	3.5	0.7	1.9	0.3	1.8	0.3	8	< 2	< 100	3680	38	395	0.6	434	< 1	< 1	< 1	< 1
FC	L55	22+00	3.4	0.6	2.7	0.6	1.7	0.2	1.8	0.3	7	< 2	< 100	12200	29	379	0.3	599	< 1	< 1	< 1	< 1
FC	L55	22+25	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.2	< 0.1	18	< 2	< 100	2120	7	347	0.3	811	< 1	< 1	< 1	< 1
FC	L55	22+50	1	0.2	0.8	0.2	0.6	< 0.1	0.7	0.1	6	< 2	< 100	11100	28	344	0.3	569	< 1	< 1	< 1	< 1
FC	L55	22+75	0.6	0.1	0.6	0.1	0.4	< 0.1	0.3	< 0.1	18	< 2	< 100	3800	12	300	0.3	1060	< 1	< 1	< 1	< 1
FC	L55	23+00	1.5	0.2	1.4	0.3	0.9	0.1	1	0.1	10	< 2	< 100	7730	20	439	0.4	445	< 1	< 1	< 1	< 1
FC	L55	23+25	2.1	0.3	1.7	0.3	1.2	0.2	1.3	0.2	12	< 2	< 100	6920	18	625	0.3	839	< 1	< 1	< 1	< 1
FC	L55	23+50	0.7	0.1	0.7	0.1	0.4	< 0.1	0.4	< 0.1	13	< 2	< 100	4070	7	390	0.2	511	< 1	< 1	< 1	< 1
FC	L55	23+75	1.6	0.3	1.5	0.3	1	0.1	1	0.2	6	< 2	< 100	8300	16	706	0.3	606	< 1	< 1	< 1	< 1
FC	L55	24+00	3.5	0.6	2.8	0.6	1.8	0.2	1.7	0.3	10	< 2	< 100	2960	18	536	0.5	576	< 1	< 1	< 1	< 1
FC	L55	24+25	1.8	0.3	1.6	0.3	0.9	0.1	0.7	0.1	7	< 2	< 100	1130	14	535	0.3	644	< 1	< 1	< 1	< 1
FC	L55	24+50	1.9	0.3	1.7	0.3	0.8	0.1	0.7	0.1	5	< 2	< 100	2690	22	673	0.4	504	< 1	< 1	< 1	< 1
FC	L55	25+00	1.2	0.2	1.1	0.2	0.7	< 0.1	0.6	< 0.1	7	< 2	< 100	2530	10	770	0.2	564	< 1	< 1	< 1	< 1
FC	L54	9+50	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	33	< 2	< 100	16300	17	153	0.6	677	< 1	< 1	< 1	< 1
FC	L54	9+75	0.8	0.8	0.7	0.1	0.4	< 0.1	0.4	< 0.1	16	< 2	< 100	20900	12	387	0.4	1090	< 1	< 1	< 1	< 1
FC	L54	10+00	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	27	< 2	< 100	26700	29	374	0.4	1280	< 1	< 1	< 1	< 1
FC	L54	10+25	0.9	0.2	0.8	0.1	0.4	< 0.1	0.4	< 0.1	14	< 2	< 100	10500	19	323	0.4	899	< 1	< 1	< 1	< 1
FC	L54	10+50	0.4	< 0.1	0.5	< 0.1	0.2	< 0.1	0.4	< 0.1	18	< 2	< 100	2030	16	215	0.4	510	< 1	< 1	< 1	< 1
FC	L54	10+75	2.1	0.4	2	0.4	1.2	0.2	1.4	0.2	11	< 2	< 100	20000	19	530	0.5	386	< 1	< 1	< 1	< 1
FC	L54	11+00	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	26	< 2	< 100	6630	13	347	0.3	649	< 1	< 1	< 1	< 1
FC	L54	11+25	1.7	0.3	1.7	0.4	1.2	0.2	1.4	0.3	9	< 2	< 100	40700	16	692	0.2	529	< 1	< 1	< 1	< 1
FC	L54	11+50	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	19	< 2	< 100	3120	15	225	0.5	822	< 1	< 1	< 1	< 1
FC	L54	11+75	0.2	< 0.1	0.2	< 0.1	0.2	< 0.1	0.2	< 0.1	28	< 2	< 100	2760	15	226	0.4	418	< 1	< 1	< 1	< 1
FC	L54	12+00	0.6	< 0.1	0.4	0.1	0.3	< 0.1	0.3	< 0.1	23	< 2	< 100	22800	39	687	0.5	756	< 1	< 1	< 1	< 1
FC	L54	12+25	0.7	0.1	0.6	0.1	0.5	< 0.1	0.4	< 0.1	11	< 2	< 100	4340	17	801	0.4	329	< 1	< 1	< 1	< 1
FC	L54	12+50	0.9	0.2	0.9	0.2	0.6	< 0.1	0.7	0.1	16	< 2	< 100	6380	32	788	0.4	204	< 1	< 1	< 1	< 1
FC	L54	13+50	0.8	0.1	0.7	0.1	0.4	< 0.1	0.4	< 0.1	25	< 2	< 100	6780	10	288	0.2	436	< 1	< 1	< 1	< 1
FC	L54	13+75	0.5	< 0.1	0.5	0.1	0.3	< 0.1	0.3	< 0.1	23	< 2	< 100	19100	21	589	0.4	1440	< 1	< 1	< 1	< 1
FC	L54	14+00	2.5	0.3	1.3	0.3	0.7	0.1	0.8	0.1	16	< 2	< 100	17400	34	787	0.5	683	< 1	< 1	< 1	< 1
FC	L54	14+25	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	19	< 2	< 100	10500	14	530	0.3	693	< 1	< 1	< 1	< 1
FC	L54	14+50	1.1	0.2	1	0.2	0.5	< 0.1	0.6	< 0.1	18	< 2	< 100	14600	29	265	0.3	732	< 1	< 1	< 1	< 1
FC	L54	14+75	0.6	0.1	0.5	0.1	0.3	< 0.1	0.3	< 0.1	5	< 2	< 100	15200	16	614	0.2	1490	< 1	< 1	< 1	< 1
FC	L54	15+00	1	0.2	1	0.2	0.6	< 0.1	0.5	< 0.1	4	< 2	< 100	5620	9	700	< 0.1	611	< 1	< 1	< 1	< 1
FC	L54	15+25	1.2	0.2	1.1	0.2	0.6	< 0.1	0.7	0.1	21	< 2	< 100	14900	23	479	0.6	873	< 1	< 1	< 1	< 1
FC	L54	15+50	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.2	< 0.1	14	< 2	< 100	2660	13	257	0.3	451	< 1	< 1	< 1	< 1
FC	L54	15+75	1	0.2	1	0.2	0.6	< 0.1	0.7	0.1	18	< 2	< 100	23300	17	670	0.2	1570	< 1	< 1	< 1	< 1
FC	L54	16+00	0.7	0.1	0.7	0.1	0.3	< 0.1	0.4	< 0.1	5	< 2	< 100	1920	18	317	0.3	456	< 1	< 1	< 1	< 1
FC	L54	16+25	1.5	0.3	1.5	0.3	0.9	0.2	1.1	0.2	8	< 2	< 100	16100	17	517	0.1	649	< 1	< 1	< 1	< 1
FC	L54	16+50	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	0.2	< 0.1	50	< 2	< 100	12500	11	106	0.1	792	< 1	< 1	< 1	< 1
FC	L54	16+75	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	39	< 2	< 100	8980	21	159	0.2	1380	< 1	< 1	< 1	< 1
FC	L54	17+00	0.6	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	16	< 2	< 100	27500	11	317	0.2	1600	< 1	< 1	< 1	< 1
FC	L54	17+25	0.5	< 0.1	0.4	0.1	0.2	< 0.1	0.2	< 0.1	40	2	< 100	6030	9	156	0.2	1690	< 1	< 1	< 1	< 1
FC	L54	17+50	1	0.2	0.8	0.3	0.4	< 0.1	0.3	< 0.1	25	2	< 100	3760	32	113	0.3	1620	< 1	< 1	< 1	< 1
FC	L54	17+75	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	14	< 2	< 100	10500	9	299	0.1	1090	< 1	< 1	< 1	< 1
FC	L54	18+00	2.5	0.5	2.5	0.5	1.5	0.2	1.7	0.3	7	< 2	< 100	17800	38	549	0.2	567	< 1	< 1	< 1	< 1
FC	L54	18+25	1.6	0.3	1.5	0.3	0.8	0.1	0.9	0.1	18	< 2	< 100	6810	10	332	0.1	695	< 1	< 1	< 1	< 1
FC	L54	18+50	1.7	0.3	1.6	0.3	0.9	0.1	0.9	0.1	6	< 2	< 100	9090	18	664	0.2	558	< 1	< 1	< 1	< 1
FC	L54	18+75	2	0.4	2	0.4	1.2	0.2	1.3	0.2	19	< 2	< 100	34600	21	920	0.3	269	< 1	< 1	< 1	< 1
FC	L54	19+00	2.1	0.4	2	0.4	1.1	0.2	1.2	0.2	20	< 2	< 100	9300	17	509	0.3	279	< 1	< 1	< 1	< 1
FC	L54	19+25	1.3	0.2	1.1	0.2	0.6	< 0.1	0.7	0.1	10	< 2	< 100	4200	15	522	< 0.1	306	< 1	< 1	< 1	< 1
FC	L54	19+50	1.2	0.2	1.1	0.2	0.7	0.1	0.8	0.1	11	< 2	< 100	13900	13	562	< 0.1	459	< 1	< 1	< 1	< 1
FC	L54	19+75	1.6	0.3	1.3	0.3	0.8	0.1	0.8	0.1	27	< 2	< 100	9500	13	548	0.3	367	< 1	< 1	< 1	< 1
FC	L54	20+50	1.1	0.2	0.9	0.2	0.6	< 0.1	0.5	< 0.1	4	< 2	< 100	2390	14	358	0.2	375	< 1	< 1	< 1	< 1
FC	L54	21+00	1.3	0.2	1	0.2	0.7	0.1	0.7	0.1	18	< 2	< 100	16300	15	768	0.1	449	< 1	< 1	< 1	< 1
FC	L54	21+25	1.8	0.3	1.7	0.3	0.9	0.1	0.7	0.1	7	< 2	< 100	4460	19	254	0.1	741	< 1	< 1	< 1	< 1
FC	L54	21+50	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.2	< 0.1	25	< 2	< 100	3350	13	410	0.2	427	< 1	< 1	< 1	< 1
FC	L54	21+75	2.1	0.3	1.9	0.4	1	0.2	1	0.2	10	< 2	< 100	4200	20	436	0.2	636	< 1	< 1	< 1	< 1
FC	L54	22+00	2.7	0.5	2.5	0.5	1.5	0.2	1.7	0.3	5	< 2	< 100	7480	11	470	0.1	444	< 1	< 1	< 1	< 1

Final Report
Activation Laboratories

Element			Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Units			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detect Limit			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method			ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC	L61	15+50	9.7	1.7	8.6	1.6	4.4	0.6	4.2	0.6	25	< 2	< 100	68100	46	293	0.7	1170	< 1	< 1	< 1	< 1
FC	L54	22+25	1.5	0.3	1.4	0.3	0.8	0.1	1	0.2	11	< 2	< 100	7940	19	555	0.2	1030	< 1	< 1	< 1	< 1
FC	L54	22+50	1.3	0.2	1.2	0.2	0.7	0.1	0.9	0.1	14	< 2	< 100	16700	45	1480	0.4	2360	< 1	< 1	< 1	< 1
FC	L54	22+75	2.6	0.5	2.7	0.6	1.6	0.3	1.8	0.3	8	< 2	< 100	9440	37	752	0.2	834	< 1	< 1	< 1	< 1
FC	L54	23+00	3.4	0.6	3.7	0.8	2.4	0.4	2.8	0.5	11	< 2	< 100	5240	16	780	0.2	601	< 1	< 1	< 1	< 1
FC	L54	23+25	0.9	0.2	0.9	0.2	0.7	0.1	0.7	0.1	9	< 2	< 100	8600	8	539	0.1	1050	< 1	< 1	< 1	< 1
FC	L54	23+50	1.6	0.3	1.5	0.3	0.8	0.1	1	0.2	6	< 2	< 100	14500	15	601	0.2	659	< 1	< 1	< 1	< 1
FC	L54	23+75	2.1	0.3	1.9	0.4	1.2	0.2	1.3	0.2	9	< 2	< 100	10000	12	748	0.2	627	< 1	< 1	< 1	< 1
FC	L54	24+00	1.1	0.2	1	0.2	0.6	< 0.1	0.7	0.1	9	< 2	< 100	9840	10	651	< 0.1	469	< 1	< 1	< 1	< 1
FC	L54	24+25	1.1	0.2	0.9	0.2	0.5	< 0.1	0.6	0.1	6	< 2	< 100	7930	11	728	0.1	461	< 1	< 1	< 1	< 1
FC	L54	24+50	0.9	0.2	0.8	0.2	0.5	< 0.1	0.5	< 0.1	9	< 2	< 100	5710	18	1330	0.4	544	< 1	< 1	< 1	< 1
FC	L54	24+75	0.8	0.1	0.8	0.2	0.4	< 0.1	0.5	< 0.1	11	< 2	< 100	2570	5	631	< 0.1	505	< 1	< 1	< 1	< 1
FC	L54	25+00	1.5	0.3	1.7	0.3	0.8	0.1	0.8	0.1	4	< 2	< 100	3160	23	348	0.3	671	< 1	< 1	< 1	< 1
FC	L54	25+25	1.2	0.2	1.2	0.2	0.6	0.1	0.6	< 0.1	7	< 2	< 100	6520	14	512	0.2	645	< 1	< 1	< 1	< 1
FC	L54	25+50	1.6	0.3	1.4	0.3	0.8	0.1	0.8	0.1	11	< 2	< 100	2590	10	193	0.3	321	< 1	< 1	< 1	< 1
FC	L54	25+75	1.7	0.3	1.8	0.4	1.1	0.2	1.3	0.2	7	< 2	< 100	9560	12	688	0.3	657	< 1	< 1	< 1	< 1
FC	L54	26+00	0.7	0.1	0.7	0.1	0.4	< 0.1	0.4	< 0.1	13	< 2	< 100	11700	16	590	0.1	444	< 1	< 1	< 1	< 1
FC	L54	26+25	0.5	< 0.1	0.5	0.1	0.3	< 0.1	0.2	< 0.1	15	< 2	< 100	9690	9	441	0.2	697	< 1	< 1	< 1	< 1
FC	L54	26+50	0.7	0.1	0.7	0.1	0.4	< 0.1	0.4	< 0.1	11	< 2	< 100	1910	10	219	0.3	1060	< 1	< 1	< 1	< 1
FC	L54	26+75	1.1	0.2	1	0.2	0.8	< 0.1	0.4	< 0.1	9	< 2	< 100	20800	13	885	0.3	3830	< 1	< 1	< 1	< 1
FC	L54	27+00	0.8	0.2	0.9	0.2	0.4	< 0.1	0.4	< 0.1	7	< 2	< 100	7420	24	351	0.4	1270	< 1	< 1	< 1	< 1
FC	L54	27+25	2.4	0.5	2.7	0.6	1.7	0.3	1.8	0.3	5	< 2	< 100	4600	6	401	0.2	540	< 1	< 1	< 1	< 1
FC	L54	27+50	0.8	0.2	0.8	0.1	0.5	< 0.1	0.4	< 0.1	10	< 2	< 100	2200	8	599	0.1	765	< 1	< 1	< 1	< 1
FC	L54	27+75	1.1	0.2	0.8	0.2	0.5	< 0.1	0.5	< 0.1	3	< 2	< 100	1820	12	748	0.3	621	< 1	< 1	< 1	< 1
FC	L54	28+00	1.9	0.3	1.7	0.4	1.1	0.2	1.2	0.2	3	< 2	< 100	956	12	479	0.2	416	< 1	< 1	< 1	< 1
FC	L54	28+25	2.2	0.4	2	0.4	1.2	0.2	1.2	0.2	5	< 2	< 100	3190	16	289	0.1	324	< 1	< 1	< 1	< 1
FC	L54	28+50	0.6	0.1	0.6	0.1	0.3	< 0.1	0.2	< 0.1	13	< 2	< 100	12600	11	503	0.2	708	< 1	< 1	< 1	< 1
FC	L54	28+75	0.9	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	7	< 2	< 100	7730	16	1140	0.3	563	< 1	< 1	< 1	< 1
FC	L54	29+00	1.2	0.2	1.1	0.2	0.6	< 0.1	0.6	< 0.1	3	< 2	< 100	6480	17	1120	0.2	645	< 1	< 1	< 1	< 1
FC	L54	29+25	1.4	0.2	1.2	0.2	0.6	< 0.1	0.6	< 0.1	7	< 2	< 100	2080	6	386	0.1	750	< 1	< 1	< 1	< 1
FC	L54	29+50	1.4	0.2	1.1	0.3	0.7	0.1	0.8	0.1	10	< 2	< 100	9320	14	1070	0.2	607	< 1	< 1	< 1	< 1
FC	L54	29+75	1.3	0.2	1.1	0.2	0.7	0.1	0.8	0.1	4	< 2	< 100	8300	12	1050	0.1	509	< 1	< 1	< 1	< 1
FC	BL	55+25	2.4	0.4	1.8	0.4	1.1	0.2	1	0.2	6	< 2	< 100	2910	21	333	0.4	226	< 1	< 1	< 1	< 1
FC	BL	55+50	3.8	0.6	3.2	0.6	1.8	0.3	1.8	0.3	8	< 2	< 100	5420	16	402	0.3	325	< 1	< 1	< 1	< 1
FC	BL	55+75	2.6	0.4	2.1	0.4	1.3	0.2	1.3	0.2	8	< 2	< 100	5100	17	356	0.4	372	< 1	< 1	< 1	< 1
FC	BL	56+25	3.7	0.7	3.6	0.7	2.1	0.3	2.4	0.4	5	< 2	< 100	8440	16	571	0.3	464	< 1	< 1	< 1	< 1
FC	BL	56+50	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.2	< 0.1	19	< 2	< 100	2560	18	342	0.2	807	< 1	< 1	< 1	< 1
FC	BL	56+75	2	0.3	1.5	0.3	0.9	0.1	1	0.1	16	< 2	< 100	10100	21	482	0.6	273	< 1	< 1	< 1	< 1
FC	BL	57+25	7.6	1.2	5.7	1.1	3.3	0.5	3.2	0.5	20	< 2	< 100	13500	19	577	0.6	316	< 1	< 1	< 1	< 1
FC	BL	57+50	1.8	0.3	1.7	0.3	0.9	0.1	0.8	0.1	2	< 2	< 100	3030	13	419	0.2	276	< 1	< 1	< 1	< 1
FC	BL	57+75	0.7	0.1	0.6	< 0.1	0.3	< 0.1	0.4	< 0.1	11	2	< 100	603	31	198	0.2	435	< 1	< 1	< 1	< 1
FC	BL	58+25	1	0.2	0.8	0.2	0.5	< 0.1	0.5	< 0.1	7	< 2	< 100	5410	15	470	0.2	269	< 1	< 1	< 1	< 1
FC	BL	58+50	0.7	0.2	0.6	0.1	0.4	< 0.1	0.4	< 0.1	5	< 2	< 100	16500	8	337	0.2	288	< 1	< 1	< 1	< 1
FC	BL	58+75	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	3	< 2	< 100	4390	13	370	0.1	313	< 1	< 1	< 1	< 1
FC	BL	59+25	5	0.8	4.3	0.9	2.6	0.3	2.4	0.4	4	< 2	< 100	5200	48	362	0.4	554	< 1	< 1	< 1	< 1
FC	BL	59+50	1.4	0.3	1.3	0.2	0.7	0.1	0.8	0.1	4	< 2	< 100	9150	18	637	0.2	607	< 1	< 1	< 1	< 1
FC	BL	59+75	1.5	0.2	1.1	0.2	0.7	0.1	0.7	0.1	6	< 2	< 100	10600	10	736	< 0.1	311	< 1	< 1	< 1	< 1
FC	BL	60+25	1.1	0.2	0.9	0.2	0.6	< 0.1	0.7	0.1	8	< 2	< 100	7360	9	545	0.1	217	< 1	< 1	< 1	< 1
FC	BL	60+50	0.9	0.1	0.7	0.2	0.5	< 0.1	0.5	< 0.1	5	< 2	< 100	4750	9	622	0.1	245	< 1	< 1	< 1	< 1
FC	BL	60+75	1.7	0.3	1.5	0.3	0.9	0.1	0.9	0.2	3	< 2	< 100	812	16	359	0.3	253	< 1	< 1	< 1	< 1

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Final Report
Activation Laboratories

Analyte Symbol	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	34000	132	826	18	2	< 5	2	1.1	< 1	< 1	0.01	< 0.05	< 1	8.2	2.4	60	47	13	200	12	2	< 0.5	0.3	1.1	< 0.1	< 0.8	0.2	< 0.8	300	< 20	7.2	47
FC L51 5+50	28000	142	783	16	3	< 5	2	0.5	< 1	< 1	0.01	< 0.05	< 1	8.2	2.8	76	36	19	90	12	3	< 0.5	0.3	3.2	< 0.1	< 0.8	0.1	1.3	100	< 20	4.2	53
FC L51 5+75	28000	202	872	8	2	5	2	0.5	< 1	< 1	0.01	< 0.05	< 1	4.6	1.8	45	25	16	130	6	< 1	< 0.5	0.3	6.6	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	3.8	31
FC L51 6+00	20000	175	882	11	3	5	4	1.1	< 1	< 1	0.02	< 0.05	< 1	4.4	2.1	54	29	15	20	9	2	< 0.5	0.4	1.9	< 0.1	< 0.8	0.1	1	200	< 20	9.4	27
FC L51 6+25	29000	176	803	19	4	< 5	2	0.8	< 1	< 1	< 0.01	< 0.05	< 1	4.1	1.9	21	42	23	80	13	2	< 0.5	0.4	3.8	< 0.1	< 0.8	0.1	< 0.8	200	< 20	3.6	37
FC L51 6+50	19000	96	596	7	4	< 5	2	0.6	< 1	< 1	0.01	< 0.05	< 1	5.6	1.8	68	57	32	240	18	2	< 0.5	0.6	5.7	< 0.1	< 0.8	0.1	< 0.8	100	< 20	3.9	33
FC L51 6+75	20000	103	596	15	6	< 5	3	1.1	< 1	< 1	0.01	< 0.05	< 1	1.6	1.4	21	34	20	220	9	2	< 0.5	< 0.2	5.3	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	0.8	26
FC L51 7+00	23000	113	560	9	9	< 5	3	1.8	< 1	< 1	< 0.01	< 0.05	< 1	2.1	1.5	125	91	17	230	12	< 1	< 0.5	0.2	4	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	1	32
FC L51 7+25	33000	616	3850	13	5	11	6	2.2	< 1	< 1	0.1	< 0.05	< 1	3.5	3.6	27	45	56	20	9	< 1	< 0.5	0.4	1.1	< 0.1	< 0.8	0.1	0.8	< 100	< 20	16.1	56
FC L51 7+50	50000	714	2730	10	14	12	6	6.7	< 1	1	0.29	< 0.05	< 1	1.3	1.4	289	416	78	90	11	< 1	< 0.5	0.4	3.3	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	10.7	36
FC L51 7+75	16000	213	1030	20	8	5	6	2.9	< 1	< 1	0.03	< 0.05	< 1	2.1	2.4	49	54	39	50	11	3	< 0.5	0.3	1.4	< 0.1	< 0.8	0.1	< 0.8	200	< 20	10	23
FC L51 8+00	24000	67	106	15	4	< 5	3	0.9	< 1	< 1	< 0.01	< 0.05	< 1	1.4	0.6	57	32	25	150	12	5	< 0.5	< 0.2	2.6	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	< 0.5	38
FC L51 8+25	25000	161	983	12	4	< 5	2	1.1	< 1	< 1	0.02	< 0.05	< 1	1.9	1.1	67	18	38	90	15	3	< 0.5	< 0.2	0.9	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	3.2	36
FC L51 8+50	23000	82	396	15	7	< 5	3	1.6	< 1	< 1	0.02	< 0.05	< 1	1.6	1.2	96	46	28	370	22	2	< 0.5	< 0.2	2.7	< 0.1	< 0.8	< 0.1	0.8	< 100	< 20	0.8	51
FC L51 8+75	14000	88	518	18	5	< 5	4	0.5	< 1	< 1	0.02	< 0.05	< 1	1.9	0.8	35	31	24	70	11	2	< 0.5	< 0.2	1.7	< 0.1	< 0.8	< 0.1	< 0.8	600	< 20	0.8	28
FC L51 9+00	29000	212	810	12	7	< 5	7	1.1	< 1	< 1	0.02	< 0.05	< 1	2.5	1.9	162	42	52	170	18	2	< 0.5	< 0.2	4.4	< 0.1	< 0.8	0.1	< 0.8	500	< 20	0.9	26
FC L51 9+25	20000	108	530	21	9	< 5	5	2.6	< 1	< 1	0.01	< 0.05	< 1	2	1.2	67	50	35	100	20	< 1	< 0.5	< 0.2	1.8	< 0.1	< 0.8	< 0.1	0.8	400	< 20	1.8	28
FC L51 9+50	25000	105	684	6	10	< 5	1	5.6	< 1	< 1	< 0.01	< 0.05	< 1	1	0.6	1900	2460	128	70	12	3	< 0.5	< 0.2	5.5	< 0.1	< 0.8	0.3	< 0.8	< 100	< 20	10.4	17
FC L51 9+75	11000	123	613	10	8	< 5	1	1	< 1	< 1	0.01	< 0.05	< 1	3.4	1.7	179	82	50	150	32	< 1	< 0.5	< 0.2	6.3	< 0.1	< 0.8	0.1	< 0.8	100	< 20	5.3	35
FC L51 10+00	12000	209	845	11	9	< 5	3	1.2	< 1	< 1	0.02	< 0.05	< 1	5.5	3.6	45	32	33	50	31	1	< 0.5	0.3	2	< 0.1	< 0.8	0.1	2.5	300	< 20	5.4	43
FC L51 10+25	16000	239	1160	22	7	< 5	5	1.6	< 1	< 1	0.02	< 0.05	< 1	3	2.1	57	47	53	100	26	2	< 0.5	< 0.2	2.4	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	5.5	28
FC L51 10+50	16000	149	740	11	8	< 5	1	2.2	< 1	< 1	0.01	< 0.05	< 1	3.7	1.7	274	98	46	200	35	< 1	< 0.5	< 0.2	4.4	< 0.1	< 0.8	0.1	< 0.8	200	< 20	2.4	55
FC L51 10+75	26000	100	583	20	11	< 5	5	1.1	< 1	< 1	0.02	< 0.05	< 1	2.2	1.3	34	24	42	170	29	3	< 0.5	0.2	1	< 0.1	< 0.8	0.1	1.2	100	< 20	1.5	35
FC L51 11+00	35000	99	453	35	23	< 5	7	5.1	< 1	< 1	0.02	< 0.05	< 1	2.1	1.3	130	99	177	290	27	4	< 0.5	0.2	3.2	< 0.1	1.3	0.2	1.5	300	80	2.6	48
FC L51 11+25	12000	83	425	11	4	< 5	< 1	1	< 1	< 1	< 0.01	< 0.05	< 1	0.3	0.3	94	46	25	210	173	1	< 0.5	< 0.2	2.1	< 0.1	< 0.8	< 0.1	1.5	< 100	< 20	< 0.5	11
FC L51 11+50	9000	105	561	14	8	< 5	2	0.6	< 1	< 1	< 0.01	< 0.05	< 1	3.2	2.1	112	45	24	280	90	4	< 0.5	< 0.2	9.7	< 0.1	< 0.8	< 0.1	1.2	300	< 20	1.3	33
FC L51 11+75	17000	219	949	9	4	< 5	< 1	0.5	< 1	< 1	< 0.01	< 0.05	< 1	2.9	1.9	51	52	29	150	51	2	< 0.5	< 0.2	5.6	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	2	35
FC L51 12+00	19000	67	346	31	15	< 5	4	2.2	< 1	< 1	< 0.01	< 0.05	< 1	1.3	1	41	24	21	220	33	3	< 0.5	< 0.2	3.4	< 0.1	1.7	< 0.1	1.1	400	< 20	0.7	27
FC L51 12+25	46000	227	1030	29	31	< 5	8	7.3	< 1	< 1	0.02	< 0.05	< 1	1.9	3.5	642	1430	94	350	18	2	< 0.5	0.4	6.1	< 0.1	< 0.8	0.1	< 0.8	300	< 20	6.2	65
FC L51 12+50	16000	95	473	22	11	< 5	3	1.7	< 1	< 1	0.01	< 0.05	< 1	1	1.2	494	129	17	390	9	2	< 0.5	< 0.2	7.1	< 0.1	< 0.8	0.2	< 0.8	200	< 20	2.9	30
FC L51 12+75	24000	97	420	30	8	< 5	5	1.2	< 1	< 1	0.01	< 0.05	< 1	3.3	2.2	69	44	42	260	22	6	< 0.5	0.3	3.4	< 0.1	1	0.2	1.8	400	< 20	2.5	75
FC L51 13+00	34000	66	243	30	13	< 5	8	1.6	< 1	< 1	< 0.01	< 0.05	< 1	2.1	1.2	18	23	15	210	18	6	< 0.5	0.3	2	< 0.1	1.1	0.3	1.1	300	< 20	1.9	85
FC L51 13+25	29000	252	1320	16	13	6	5	2.1	< 1	< 1	0.02	< 0.05	< 1	6.1	3.6	53	38	41	50	27	2	< 0.5	0.4	0.8	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	12.6	60
FC L51 13+50	21000	108	657	20	13	< 5	4	0.8	< 1	< 1	0.01	< 0.05	< 1	8.1	3.5	74	27	15	120	26	2	< 0.5	< 0.2	0.5	< 0.1	< 0.8	< 0.1	1.4	200	< 20	4.6	54
FC L51 13+75	43000	249	947	47	21	< 5	10	6.9	< 1	1	0.03	< 0.05	< 1	4.3	3.9	81	69	36	80	13	< 1	< 0.5	0.5	2.1	< 0.1	< 0.8	0.2	0.8	200	< 20	7.2	61
FC L51 14+00	13000	98	513	16	13	< 5	4	2.7	< 1	< 1	0.01	< 0.05	< 1	4.2	2.4	108	121	90	160	22	1	< 0.5	< 0.2	3.4	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	5.3	40
FC L51 14+25	28000	104	613	12	16	< 5	6	4.4	< 1	< 1	< 0.01	< 0.05	< 1	2.8	1.8	318	243	34	40	21	1	< 0.5	< 0.2	2.1	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	4.8	38
FC L51 14+50	14000	87	500	34	14	< 5	4	0.9	< 1	< 1	0.01	< 0.05	< 1	1.9	1.2	39	33	23	170	20	4	< 0.5	< 0.2	2.1	< 0.1	< 0.8	0.1	< 0.8	400	< 20	0.7	28
FC L51 14+75	19000	89	535	16	9	< 5	2	1.6	< 1	< 1	0.01	< 0.05	< 1	3.8	1.8	133	87	29	200	62	1	< 0.5	0.2	3.3	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	5	46
FC L51 15+00	18000	51	318	26	14	< 5	4	1.5	< 1	< 1	0.01	< 0.05	< 1	1.9	1	76	23	8	80	35	< 1	< 0.5	< 0.2	2.1	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	2.2	26
FC L51 15+25	14000	68	329	18	9	< 5	2	0.5	< 1	< 1	0.01	< 0.05	< 1	3	1.7	127	106	56	250	59	3	< 0.5	< 0.2	5.2	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	2.4	30
FC L51 15+50	12000	105	591	13	10	< 5	2	0.8	< 1	< 1	0.01	< 0.05	< 1	4.5	2.2	107	77	54	510	70	2	< 0.5	< 0.2	10.2	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	3.7	39
FC L51 15+75	15000	78	394	18	14	< 5	3	1.5	< 1	< 1	< 0.01	< 0.05	< 1	3.8	2	74	16	24	150	71	2	< 0.5	< 0.2	3.5	< 0.1	< 0.8	< 0.1	1.9	200	< 20	1.9	35
FC L51 16+00	22000	55	209	17	9	< 5	2	1.9	< 1	< 1	0.01	< 0.05	< 1	1.9	1.1	148	41	12	190	40	3	< 0.5	0.3	4.7	< 0.1	0.9	0.1	< 0.8	700	< 20	1	40
FC L51 16+25	14000	71	373	15	9	< 5	2	0.9	< 1	< 1	< 0.01	< 0.05	< 1	5.2	2	128	32	28	250	43	2	< 0.5	< 0.2	5.2	< 0.1	1	< 0.1	< 0.8	300	< 20	3.7	35
FC L51 16+50	24000	102	540	28	11	< 5	2	2.4	< 1	< 1	< 0.01	< 0.05	< 1	5.1	2.8	119	29	23	350	57	2	< 0.5	0.3	4.9	< 0.1	< 0.8	0.1	1.1	500	< 20	3.6	38
FC L51 16+75	28000	203	1040	17	13	6	6	2.2	< 1	< 1	0.03	< 0.05	< 1	7.4	9.3	55	48	50	90	30	2	< 0.5	0.3	4.4	< 0.1	< 0.8	0.1	2.8	100	< 20	22.7	55
FC L51 17+00	17000	84	446	23	16	5	4	2.5	< 1	< 1	< 0.01	< 0.05	< 1	4.7	3.6	140	83	70	220	52	2	< 0.5	< 0.2	4.4	< 0.1	< 0.8	0.1	1.2	300	< 20	4.2	33
FC L51 17+25	19000	110	562	18	9	< 5	3	0.7	< 1	< 1	< 0.01	< 0.05	< 1	1.9	1.9	62	33	37	250	26	1	< 0.5	< 0.2	9.9	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	2.5	37
FC L51 17+50	29000	163	536	103	78	7	30	5.5	< 1	4	0.02	< 0.05	< 1	11.3	3.5	145	139	85	1160	52	5	0.5	0.7	15.4	< 0.1	2.9	0.4	6.8	1900	< 20	4.5	41
FC L51 17+75	24000	133	671	13	9	6	4	0.5	< 1	< 1	< 0.01	< 0.05	< 1	1.7	1.7	69	44	27	270	93	2	< 0.5	< 0.2	6	< 0.1	< 0.8	0.1	1.4	100	< 20	3.2	22
FC L51 18+00	27000	114	693	20	19	< 5	5	2.7	< 1	< 1	< 0.01	< 0.05	< 1	4.9	3.6	167	80	70	120	43	1	< 0.5	0.3	3.5	< 0.1	< 0.8	0.2	2.4	200	< 20	7.9	46
FC L51 18+25	27000	118	601	27	35	11	4	3.5	< 1	< 1	0.03	< 0.05	< 1	5.3	3.1	136	149	142	300	55	3	< 0.5	0.4	4.8	< 0.1	< 0.8	0.3	1.2	300	< 20	8.4	63
FC L51 18+50	14000	169	760	19	10	5	2	0.7	< 1	< 1	0.02	< 0.05	< 1	3.1	2.6	162	118	67	220	40	< 1	< 0.5	< 0.2	8.9	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	4.8	30
FC L51 18+75	26000	196	661	10	5	< 5	1	0.5	< 1	< 1	< 0.01	< 0.05	< 1	1.4	1.4	112	61	37	180	38	< 1	< 0.5	< 0.2	7.7	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	3.5	31
FC L51 19+00	18000	201	788	31	14	< 5	3	0.7	< 1	< 1	0.01	< 0.05	< 1	3.4	2.3	157	43	29	230	32	< 1	< 0.5	< 0.2	9.9	< 0.1	< 0.8	0.1	< 0.8	200	< 20	2.3	29
FC L51 19+25	23000	90	518	30	20	6	5	1.5	< 1	< 1	0.02	< 0.05	< 1	3.2	1.8	130	152	65	770	27	2	< 0.5	< 0.2	15	< 0.1	< 0.8	0.1	< 0.8	700	< 20	3	38
FC L51 19+50	17000	119	501	26	12	< 5	3	0.5	< 1	< 1	0.01	< 0.05	< 1	1.8	1.6	44	58	23	190	10	2	< 0.5	< 0.2	7.7	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	2	22
FC L51 19+75	14000	127	716	17	9	< 5	2	1.3	< 1	< 1	< 0.01	< 0.05	< 1	2.8	2.2	145	99	53	310	28	1	< 0.5	< 0.2	7.9	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	5.8	34
FC L51 20+00	15000	104	571	24	13	< 5	3	1	< 1	< 1	< 0.01	< 0.05	< 1	2.5	1.6	68	99	33	410	20	2	< 0.5	< 0.2	11.6	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	2.5	29
FC L51 20+25	12000	158	521	19	7	< 5	2	0.7	< 1	< 1	0.02	< 0.05	< 1	1.8	1.8	72	47	27	280	21	1	< 0.5	< 0.2	10.1	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	4.2	16
FC L51 20+50	16000	251	798	18	10	< 5	2	0.6	< 1	< 1	< 0.01	< 0.05	< 1	3	2.6	138	82	65	260	34	1	< 0.5	< 0.2	11.1	< 0.1	< 0.8	0.1	< 0.8	200	< 20	8.1	24
FC L51 20+75	25000	175	584	22	8	< 5	3	1.1	< 1	< 1	0.02	< 0.05	< 1	2	2.3	71	71	31	390	30	1	< 0.5	< 0.2	13.6	< 0.1	< 0.8	0.1	< 0.8	300	< 20	3.1	23
FC L51 21+00	20000	108	451	30	12	< 5	3	1	< 1	< 1	< 0.01	< 0.05	< 1	1.4	1.5	78	68	33	440	19	1	< 0.5	< 0.2	8.2	< 0.1	< 0.8	< 0.1	< 0.8	600	< 20	1.9	20
FC L51 21+25	21000	140	536	20	86	5	5	1.3	< 1	< 1	0.02	< 0.05	< 1	2.4	2.3	44	36	51	680	38	3	< 0.5	< 0.2	7	< 0.1	< 0.8	< 0.1	1.7	200	< 20	1.7	28
FC L51 21+50	33000	331	1240	22	18	14	10	4.7	< 1	1	0.1	< 0.05	< 1	1.7	4.2	59	134	114	80	23	1	< 0.5	0.7	3	< 0.1	< 0.8	0.1	0.9	100	< 20	9.6	36
FC L51 21+75	28000	188	894	23	21	11	10	3	< 1	< 1	0.14	< 0.05	< 1	2.6	3.9	61	111	88	120	29	2	< 0.5	0.5	3.2	< 0.1	< 0.8	0.2	0.8	100	< 20	8.2	38
FC L51 22+00	44000	260	1300	25	25	11	10	5.5	< 1	1	0.18	< 0.05	< 1	3.3	8.4	217	264	138	360	39	2	< 0.5	0.5	9.3	< 0.1	< 0.8	0.2	1.1	400	< 20	12.6	74
FC L51 22+25	27000	138	656	24	20	6	10	3.3	< 1	< 1	0.07	< 0.05	< 1	3.3	5.2	63	74	65	200	27	< 1	< 0.5	0.3	5.5	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	9.6	30
FC L51 22+50	27000	147	638	27	14	7	6	1.3	< 1	< 1	0.04	< 0.05	< 1	4.1	4.4	65	60	59	90	33	2	< 0.5	0.4	2.6	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	9.3	47
FC L51 22+75	22000	167	619	19	28	8	9	4.9	< 1	< 1	0.13	< 0.05	< 1	2.4	3.5	156	232	118	180	30	2	< 0.5	0.4	4.6	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	7.6	34
FC L51 23+00	28000	278	896	29	21	13	12	4.4	< 1	< 1	0.24	< 0.05	< 1	2.3	5	65	87	119	80	29	1	< 0.5	0.6	3.1	< 0.1	< 0.8	0.2	1.1	100	< 20	8.9	32
FC L51 23+25	13000	155	635	26	15	9	4	1.4	< 1	< 1	0.04	< 0.05	< 1	9.8	5.1	68	72	72	190	58	< 1	< 0.5	< 0.2	4.3	< 0.1	< 0.8	< 0.1	1.4	400	< 20	7.1	37

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Final Report
Activation Laboratories

Analyte Symbol	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	34000	132	826	18	2	< 5	2	1.1	< 1	< 1	0.01	< 0.05	< 1	8.2	2.4	60	47	13	200	12	2	< 0.5	0.3	1.1	< 0.1	< 0.8	0.2	< 0.8	300	< 20	7.2	47
FC L51 23+50	20000	214	1510	26	15	9	4	3.7	< 1	< 1	0.05	< 0.05	< 1	4.7	11.1	113	134	103	180	33	2	< 0.5	0.4	6.2	< 0.1	< 0.8	< 0.1	1	200	< 20	11.1	56
FC L51 23+75	12000	185	1200	21	16	7	7	1.9	< 1	1	0.04	< 0.05	< 1	4.4	5.9	57	56	68	90	24	1	< 0.5	0.2	3.4	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	9.8	34
FC L51 24+00	22000	120	495	29	13	< 5	5	0.6	< 1	< 1	0.03	< 0.05	< 1	4.5	5.3	66	43	42	350	38	2	< 0.5	< 0.2	3.5	< 0.1	< 0.8	< 0.1	1.2	400	< 20	7	54
FC L51 24+25	28000	245	952	21	18	13	10	4	< 1	1	0.42	< 0.05	< 1	2.9	10.4	76	266	172	870	29	2	< 0.5	0.3	8.3	< 0.1	< 0.8	0.1	0.9	100	< 20	7.7	33
FC L51 24+50	21000	117	430	22	21	9	7	2.6	< 1	< 1	0.16	< 0.05	< 1	6.2	4.8	81	67	97	90	39	< 1	< 0.5	< 0.2	2.6	< 0.1	< 0.8	< 0.1	1.2	100	< 20	8.4	37
FC L51 24+75	16000	98	378	34	15	< 5	5	1	< 1	< 1	0.01	< 0.05	< 1	4.7	2.6	45	36	40	270	36	2	< 0.5	< 0.2	4.8	< 0.1	< 0.8	< 0.1	1.1	400	< 20	2.8	29
FC L51 25+00	9000	111	535	24	24	7	5	2.6	< 1	< 1	0.05	< 0.05	< 1	6.1	4.9	163	130	114	300	49	1	< 0.5	0.3	7.4	< 0.1	< 0.8	< 0.1	1.3	300	< 20	13.6	29
FC L51 25+25	32000	146	512	24	21	7	10	3.5	< 1	< 1	0.04	< 0.05	< 1	4.8	5.8	97	55	82	210	50	< 1	< 0.5	0.2	4.8	< 0.1	< 0.8	0.2	0.9	200	< 20	7.4	28
FC L51 25+50	17000	200	992	20	12	9	7	1.1	< 1	1	0.03	< 0.05	< 1	8.8	14	64	55	68	90	37	1	< 0.5	0.4	2.3	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	19.6	42
FC L51 25+75	22000	123	529	20	13	< 5	6	1.5	< 1	< 1	0.01	< 0.05	< 1	5.3	11.8	68	55	52	100	22	1	< 0.5	< 0.2	2.1	< 0.1	< 0.8	0.1	< 0.8	200	< 20	16.8	37
FC L51 26+00	20000	170	432	45	20	10	9	2.4	< 1	< 1	0.08	< 0.05	< 1	4	7.6	143	55	170	60	19	2	< 0.5	0.3	3.1	< 0.1	< 0.8	0.3	0.9	200	< 20	19.9	29
FC L51 26+25	21000	129	613	17	9	< 5	5	2	< 1	< 1	0.03	< 0.05	< 1	5.5	8.5	97	98	154	80	15	1	< 0.5	0.2	6	< 0.1	< 0.8	0.4	< 0.8	< 100	< 20	42.4	41
FC L51 26+50	9000	97	553	32	13	< 5	6	2.3	< 1	< 1	0.04	< 0.05	< 1	6.5	8.5	252	103	225	350	33	2	< 0.5	0.3	12.5	< 0.1	< 0.8	0.3	< 0.8	300	< 20	43.3	52
FC L51 26+75	13000	126	517	17	10	< 5	2	0.9	< 1	< 1	0.01	< 0.05	< 1	7	7.3	99	53	56	190	34	1	< 0.5	< 0.2	7.6	< 0.1	< 0.8	0.2	< 0.8	400	< 20	16.9	43
FC L51 27+00	18000	69	649	24	15	< 5	3	3.6	< 1	< 1	0.02	< 0.05	< 1	2.1	4.6	299	58	75	160	46	1	< 0.5	< 0.2	3	< 0.1	< 0.8	0.2	< 0.8	200	< 20	16	43
FC L51 27+25	30000	140	379	97	21	< 5	16	3	< 1	< 1	0.01	< 0.05	< 1	2.7	2.9	29	69	54	530	8	1	< 0.5	0.3	5.8	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	6.4	19
FC L51 27+50	20000	174	735	35	18	5	8	1.4	< 1	< 1	0.04	< 0.05	< 1	3.1	3	62	48	32	70	36	2	< 0.5	< 0.2	2.3	< 0.1	< 0.8	< 0.1	1.2	400	< 20	9.8	37
FC L51 27+75	20000	98	406	53	16	< 5	8	1.5	< 1	< 1	< 0.01	< 0.05	< 1	1.5	1.8	29	52	29	240	11	2	< 0.5	< 0.2	4.1	< 0.1	< 0.8	< 0.1	1.2	600	< 20	2	21
FC L51 28+00	23000	183	477	36	17	< 5	5	0.9	< 1	< 1	0.01	< 0.05	< 1	2.3	2.5	21	37	25	180	16	2	< 0.5	< 0.2	5.2	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	1.8	27
FC L51 28+25	42000	125	506	87	39	9	25	3.9	< 1	< 1	0.02	< 0.05	< 1	1.4	2	48	76	48	920	13	2	< 0.5	0.3	13.1	< 0.1	< 0.8	0.2	1.8	400	< 20	3.3	28
FC L51 28+50	46000	468	1940	43	20	11	44	8.9	< 1	1	0.26	< 0.05	< 1	1.2	2.8	293	390	145	160	7	< 1	< 0.5	0.6	6.3	< 0.1	< 0.8	0.4	1.1	< 100	< 20	8	16
FC L51 28+75	38000	212	873	39	33	7	34	7.1	< 1	< 1	0.08	< 0.05	< 1	5.6	6	186	181	166	200	33	2	< 0.5	0.3	8.2	< 0.1	< 0.8	0.5	2.5	200	< 20	32.3	41
FC L51 29+00	20000	202	643	22	20	13	13	3.4	< 1	< 1	0.28	< 0.05	< 1	2.3	5.4	76	153	137	90	29	1	< 0.5	0.2	4.8	< 0.1	< 0.8	0.2	1.9	< 100	< 20	9.9	13
FC L51 29+25	56000	397	1470	48	18	17	18	2.7	< 1	< 1	0.24	< 0.05	< 1	2.7	11.2	43	67	40	30	12	2	< 0.5	0.5	1.4	< 0.1	< 0.8	0.3	1.3	200	< 20	7.8	48
FC L51 29+50	38000	284	1290	39	14	16	56	7.1	< 1	< 1	0.26	< 0.05	< 1	1.1	2.3	110	195	81	130	10	2	< 0.5	0.2	3.1	< 0.1	< 0.8	0.3	1	< 100	< 20	4.4	9
FC L51 29+75	15000	63	311	49	11	< 5	22	3	< 1	< 1	0.03	< 0.05	< 1	0.8	0.5	36	28	12	580	7	2	< 0.5	0.2	7.7	< 0.1	< 0.8	< 0.1	< 0.8	600	< 20	0.8	13
FC L51 30+00	25000	93	492	58	17	< 5	8	1	< 1	< 1	0.01	< 0.05	< 1	2.2	1.4	26	30	37	90	14	2	< 0.5	0.4	2.5	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	1.4	28
FC L52 8+25	33000	226	1320	12	8	7	14	1.2	< 1	< 1	0.03	< 0.05	< 1	4.3	4.4	85	52	43	50	36	< 1	< 0.5	0.2	2.9	< 0.1	< 0.8	< 0.1	1.3	100	< 20	8.9	32
FC L52 8+50	18000	81	295	26	11	< 5	5	3	< 1	< 1	0.02	< 0.05	< 1	2	0.7	21	29	19	370	14	2	< 0.5	< 0.2	5.7	< 0.1	< 0.8	0.2	< 0.8	200	< 20	0.6	18
FC L52 8+75	18000	52	354	82	516	26	40	12.4	< 1	3	< 0.01	< 0.05	< 1	2.2	1.9	51	51	120	210	13	1	0.6	0.6	2.5	< 0.1	2.2	0.3	< 0.8	100	< 20	8	17
FC L52 9+00	13000	42	692	13	7	8	6	3.7	< 1	< 1	< 0.01	< 0.05	< 1	1.4	1.5	729	294	37	360	38	1	< 0.5	< 0.2	9.7	< 0.1	< 0.8	0.6	< 0.8	< 100	< 20	42.2	23
FC L52 9+75	8000	99	468	24	24	7	3	0.7	< 1	< 1	0.01	< 0.05	< 1	3.5	1.3	36	36	47	210	37	2	< 0.5	< 0.2	4.9	< 0.1	< 0.8	< 0.1	3.4	200	20	5.3	24
FC L52 10+00	30000	451	2030	14	13	12	2	0.6	< 1	< 1	0.03	< 0.05	< 1	9.6	9.5	246	241	94	310	41	1	< 0.5	0.6	12.3	< 0.1	< 0.8	0.2	2.1	200	< 20	41.8	90
FC L52 10+25	15000	130	613	8	9	< 5	< 1	0.3	< 1	< 1	0.01	< 0.05	< 1	2.5	2.1	80	51	30	100	53	1	< 0.5	0.3	3.4	< 0.1	< 0.8	< 0.1	1.4	< 100	< 20	3.3	26
FC L52 10+50	14000	129	780	32	89	7	12	5.1	< 1	1	< 0.01	< 0.05	< 1	5	1.9	206	133	122	260	30	1	< 0.5	0.4	3	< 0.1	1.5	0.2	2.1	300	< 20	6.4	43
FC L52 10+75	14000	53	455	13	26	< 5	4	8.3	< 1	< 1	0.01	< 0.05	< 1	8.2	4.1	369	368	1180	770	52	3	< 0.5	0.6	6.9	< 0.1	< 0.8	0.2	5.6	200	< 20	15.8	91
FC L52 11+00	13000	84	484	21	55	< 5	4	3.5	< 1	< 1	< 0.01	< 0.05	< 1	5.6	3.3	229	137	214	370	59	2	< 0.5	0.5	4.7	< 0.1	< 0.8	0.2	1.9	100	< 20	10	66
FC L52 11+25	20000	107	653	5	4	6	1	2.8	< 1	< 1	< 0.01	< 0.05	< 1	3.3	2.1	195	115	53	130	80	2	< 0.5	0.3	4.4	< 0.1	< 0.8	0.2	1.1	< 100	< 20	12.8	49
FC L52 11+50	22000	96	367	22	21	5	4	5	< 1	< 1	< 0.01	< 0.05	< 1	2.5	1.5	170	111	103	230	28	1	< 0.5	0.7	4.2	< 0.1	< 0.8	0.1	1.3	600	< 20	3.6	41
FC L52 11+75	16000	163	1300	9	9	< 5	5	3.9	< 1	< 1	0.01	< 0.05	< 1	3.1	2.8	208	116	104	80	22	2	< 0.5	0.4	2.5	< 0.1	< 0.8	0.2	1.3	< 100	< 20	10.3	47
FC L52 12+00	13000	124	822	17	10	< 5	2	3	< 1	< 1	< 0.01	< 0.05	< 1	3.3	2.1	159	160	52	200	17	1	< 0.5	0.4	3.2	< 0.1	< 0.8	0.2	0.9	200	< 20	7.7	70
FC L52 12+25	14000	118	818	8	8	< 5	2	2.3	< 1	< 1	0.01	< 0.05	< 1	4	2.2	179	105	68	150	25	2	< 0.5	0.5	3.2	< 0.1	< 0.8	< 0.1	0.9	200	< 20	4.5	54
FC L52 12+50	15000	88	556	10	7	< 5	2	1.1	< 1	< 1	0.01	< 0.05	< 1	2.1	1.6	104	48	37	130	26	2	< 0.5	< 0.2	2.2	< 0.1	< 0.8	< 0.1	1	100	< 20	2.3	26
FC L52 12+75	33000	139	580	29	20	< 5	8	4.5	< 1	< 1	0.01	< 0.05	< 1	1.5	1.2	56	38	33	240	19	1	< 0.5	0.3	2	< 0.1	< 0.8	0.2	1.3	200	< 20	2.2	40
FC L52 13+00	23000	254	1150	14	10	6	10	2.3	< 1	< 1	0.01	< 0.05	< 1	3.4	3.8	33	41	111	50	23	1	< 0.5	0.4	1.6	< 0.1	< 0.8	0.1	1	< 100	< 20	15.2	51
FC L52 13+25	12000	150	538	9	8	< 5	2	0.6	< 1	< 1	0.03	< 0.05	< 1	3.3	1.8	47	45	39	330	33	2	< 0.5	0.3	7.5	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	2	26
FC L52 13+50	13000	103	809	11	14	< 5	2	0.8	< 1	< 1	0.01	< 0.05	< 1	5.2	2.9	135	100	40	430	96	1	< 0.5	0.4	8.7	< 0.1	< 0.8	0.1	2.3	200	< 20	4.3	52
FC L52 13+75	18000	136	537	10	8	< 5	1	1.1	< 1	< 1	< 0.01	< 0.05	< 1	2.3	1.6	85	33	25	220	107	2	< 0.5	0.3	7	< 0.1	< 0.8	< 0.1	1.4	100	< 20	1.7	33
FC L52 14+00	14000	88	543	20	20	< 5	3	1.8	< 1	< 1	< 0.01	< 0.05	< 1	2.3	1.5	31	31	37	300	33	2	< 0.5	0.3	6.3	< 0.1	< 0.8	< 0.1	1.9	500	< 20	1	32
FC L52 14+25	12000	89	1120	8	11	< 5	2	1.4	< 1	< 1	< 0.01	< 0.05	< 1	6.3	4.7	227	165	58	1370	270	2	< 0.5	0.5	15.2	< 0.1	< 0.8	0.2	1.3	< 100	< 20	13.1	61
FC L52 14+50	16000	115	663	16	26	< 5	3	2.1	< 1	< 1	0.01	< 0.05	< 1	2.4	1.5	40	26	22	210	42	2	< 0.5	0.2	4	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	2	55
FC L52 14+75	15000	152	774	14	13	< 5	2	0.9	< 1	< 1	< 0.01	< 0.05	< 1	5.8	2.7	97	44	47	360	75	2	< 0.5	< 0.2	5.6	< 0.1	< 0.8	< 0.1	1.3	200	< 20	3.1	45
FC L52 15+00	22000	85	253	57	36	< 5	8	2.5	< 1	< 1	0.01	< 0.05	< 1	2.5	1.2	21	34	19	340	16	3	< 0.5	0.2	5.5	< 0.1	< 0.8	0.2	< 0.8	600	< 20	1.6	28
FC L52 15+25	25000	128	562	44	18	< 5	5	1	< 1	< 1	0.01	< 0.05	< 1	4	3	25	26	34	220	15	3	< 0.5	0.4	3.3	< 0.1	< 0.8	0.2	1.8	300	< 20	9.1	38
FC L52 15+75	12000	122	624	9	8	< 5	1	0.4	< 1	< 1	0.02	< 0.05	< 1	7.7	2.8	118	56	47	390	112	1	< 0.5	< 0.2	7.3	0.1	< 0.8	0.1	< 0.8	300	< 20	4.5	29
FC L52 16+00	14000	99	720	14	6	6	1	0.6	< 1	< 1	0.01	< 0.05	< 1	2.5	1.1	93	46	21	190	30	2	< 0.5	< 0.2	5.8	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	2.3	36
FC L52 16+25	14000	90	503	27	12	< 5	3	1.5	< 1	< 1	0.02	< 0.05	< 1	2.5	0.9	13	32	12	190	13	2	< 0.5	0.4	3	< 0.1	< 0.8	0.1	< 0.8	400	< 20	1	25
FC L52 16+50	16000	124	719	18	19	< 5	1	0.6	< 1	< 1	0.01	< 0.05	< 1	3.5	1.8	196	72	39	260	38	2	< 0.5	0.3	3.9	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	1.6	32
FC L52 16+75	17000	62	367	26	26	< 5	6	9.6	< 1	< 1	0.02	< 0.05	< 1	4.8	1.4	357	245	26	240	80	2	< 0.5	0.5	5.2	< 0.1	< 0.8	0.2	1.1	300	< 20	4.1	33
FC L52 17+00	14000	100	668	27	18	7	3	1.7	< 1	< 1	0.01	< 0.05	< 1	4.6	2.4	297	509	87	340	40	2	< 0.5	0.3	6.7	< 0.1	< 0.8	< 0.1	0.9	400	< 20	6	43
FC L52 17+25	17000	157	955	19	11	< 5	2	0.9	< 1	< 1	0.01	< 0.05	< 1	3.8	3.4	114	67	55	230	47	2	< 0.5	0.4	7.1	< 0.1	< 0.8	0.1	< 0.8	300	< 20	3.7	27
FC L52 17+50	13000	208	957	28	15	6	2	1	< 1	< 1	0.01	< 0.05	< 1	3.7	2.5	85	119	49	450	36	3	< 0.5	0.2	7.8	< 0.1	< 0.8	< 0.1	1.5	600	< 20	3	50
FC L52 17+75	14000	154	772	22	10	< 5	3	1	< 1	< 1	0.01	< 0.05	< 1	3.2	2.1	60	44	38	220	35	1	< 0.5	< 0.2	3.8	< 0.1	< 0.8	< 0.1	0.9	200	< 20	2.6	27
FC L52 18+00	21000	102	535	22	19	< 5	3	2.7	< 1	< 1	0.01	< 0.05	< 1	4.7	4.5	277	138	29	230	46	1	< 0.5	0.3	5.6	< 0.1	< 0.8	0.2	< 0.8	300	< 20	9	36
FC L52 18+25	19000	149	845	12	11	< 5	4	1.5	< 1	< 1	0.02	< 0.05	< 1	2.5	3.6	115	32	27	70	30	1	< 0.5	0.3	3.4	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	5.2	39
FC L52 18+50	19000	119	482	21	23	< 5	4	3.4	< 1	< 1	< 0.01	< 0.05	< 1	2.1	1.2	139	56	41	430	42	2	< 0.5	0.2	6.5	< 0.1	< 0.8	0.1	1.2	300	< 20	3.7	21
FC L52 18+75	14000	221	1080	12	11	< 5	4	3.5	< 1	< 1	< 0.01	< 0.05	< 1	3.1	4.9	120	61	50	70	38	2	< 0.5	0.3	4.9	< 0.1	< 0.8	0.2	1.4	< 100	< 20	7.2	31
FC L52 19+00	25000	171	801	17	8	< 5	2	0.9	< 1	< 1	< 0.01	< 0.05	< 1	2.4	1.9	38	36	40	160	21	1	< 0.5	0.2	4.8	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	2.3	34
FC L52 19+25	14000	82	499	45	18	< 5	3	1.2	< 1	< 1	< 0.01	< 0.05	< 1	1.3	0.8	40	52	26	190	14	3	< 0.5	< 0.2	6.6	< 0.1	< 0.8	0.1	< 0.8	600	< 20	1.3	30
FC L52 19+50	17000	126	631	30	11	< 5	2	0.6	< 1	< 1	< 0.01	< 0.05	< 1	2.5	1.7	72	56	46	490	24	3	< 0.5	0.2	12.2	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	2.7	38
FC L52 19+75	19000	277	1350	11	11	6	6	3.4	< 1	1	0.02	0.13	< 1	2.1	2.8	58	38	90	180	38	< 1	< 0.5	0.3	5.2	< 0.1	< 0.8	< 0.1	0.9	< 100	< 20	12.1	20
FC L52 20+00	26000	140	720	16	15	5	3	3.7	< 1	< 1	< 0.01	< 0.05	< 1	7.1	4.5	195	128	94	800	154	2	< 0.5	0.3	12	< 0.1	< 0.8	0.2	1.8	200	< 20	14.2	42

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Final Report
Activation Laboratories

Analyte Symbol	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	34000	132	826	18	2	< 5	2	1.1	< 1	< 1	0.01	< 0.05	< 1	8.2	2.4	60	47	13	200	12	2	< 0.5	0.3	1.1	< 0.1	< 0.8	0.2	< 0.8	300	< 20	7.2	47
FC L52 20+25	11000	112	647	17	13	< 5	2	2.6	< 1	< 1	< 0.01	< 0.05	< 1	3.2	1.9	166	83	50	220	45	< 1	< 0.5	0.5	5.6	< 0.1	< 0.8	0.1	0.9	200	< 20	6.5	23
FC L52 20+50	14000	133	789	14	18	6	3	3.9	< 1	< 1	0.01	0.4	< 1	4.9	4	201	219	135	360	64	1	< 0.5	0.4	10.5	< 0.1	< 0.8	0.2	1.4	200	< 20	17.1	42
FC L52 20+75	22000	154	907	28	19	6	5	2.4	< 1	< 1	0.04	< 0.05	< 1	5.1	3.7	72	71	124	380	37	3	< 0.5	0.3	11.9	< 0.1	< 0.8	0.1	1.2	200	< 20	15.6	42
FC L52 21+00	15000	155	685	20	13	6	3	1.4	< 1	< 1	< 0.01	< 0.05	< 1	3.6	2.3	99	54	59	120	28	2	< 0.5	0.3	3.8	< 0.1	< 0.8	< 0.1	1.2	300	< 20	5	34
FC L52 21+25	11000	69	676	9	10	< 5	2	7.3	< 1	< 1	< 0.01	0.19	< 1	2.2	1.6	444	218	95	120	359	3	< 0.5	< 0.2	4.1	< 0.1	< 0.8	< 0.1	1.5	< 100	< 20	6.9	34
FC L52 21+50	21000	150	676	9	32	9	6	5.2	< 1	< 1	0.15	0.17	< 1	2.2	3.2	131	198	265	1060	92	3	< 0.5	0.4	9.1	< 0.1	< 0.8	0.2	1	< 100	< 20	9.4	26
FC L52 21+75	23000	329	1400	15	56	11	9	10.2	< 1	< 1	0.1	0.07	< 1	2.5	2.5	72	194	212	1500	47	2	< 0.5	0.5	23.3	< 0.1	< 0.8	0.3	1.1	< 100	< 20	14	31
FC L52 22+00	18000	117	656	38	23	< 5	5	1.7	< 1	< 1	< 0.01	< 0.05	< 1	2.5	1.7	34	32	39	830	22	2	< 0.5	0.3	10	< 0.1	< 0.8	0.1	1	400	< 20	3	29
FC L52 22+25	19000	110	607	19	18	6	4	1.3	< 1	< 1	0.04	< 0.05	< 1	6.2	4.7	60	78	112	510	31	3	< 0.5	0.4	6.3	< 0.1	< 0.8	0.1	0.8	200	< 20	13.5	46
FC L52 22+50	32000	302	1210	18	22	15	7	4.5	< 1	< 1	0.17	< 0.05	< 1	1.4	2.8	51	98	134	200	25	< 1	< 0.5	0.4	3.5	< 0.1	< 0.8	0.2	0.9	< 100	< 20	6.4	29
FC L52 22+75	18000	141	770	18	17	6	4	2.5	< 1	< 1	0.03	< 0.05	< 1	4.3	3.8	64	92	101	310	38	2	< 0.5	0.3	7	< 0.1	< 0.8	0.1	1.1	200	< 20	8	31
FC L52 23+00	11000	143	940	11	19	5	4	3.9	< 1	< 1	0.03	< 0.05	< 1	4.9	7.7	191	161	97	140	27	< 1	< 0.5	0.4	6.9	< 0.1	< 0.8	0.2	< 0.8	100	< 20	15.1	34
FC L52 23+25	21000	159	638	40	17	12	10	3.9	< 1	< 1	0.14	< 0.05	< 1	1.2	4.3	23	58	51	90	16	2	< 0.5	0.3	3	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	4	10
FC L52 23+50	14000	195	716	25	22	9	11	5.2	< 1	< 1	0.29	< 0.05	< 1	1.1	2.1	74	121	93	80	22	1	< 0.5	< 0.2	3.3	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	4.9	14
FC L52 23+75	17000	94	477	41	27	< 5	9	1.9	< 1	< 1	< 0.01	< 0.05	< 1	2.9	2.2	64	31	46	510	33	1	< 0.5	< 0.2	3.4	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	3.2	14
FC L52 24+00	15000	82	379	19	11	< 5	3	1.4	< 1	< 1	0.01	< 0.05	< 1	3.5	1.3	120	34	33	150	29	6	< 0.5	0.2	6	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	2.9	17
FC L52 24+25	14000	114	433	14	16	< 5	3	2.3	< 1	< 1	0.01	< 0.05	< 1	5.1	2.5	69	89	54	330	29	2	< 0.5	0.4	4.9	< 0.1	< 0.8	< 0.1	0.9	100	< 20	1.6	30
FC L52 24+50	18000	224	1330	12	20	< 5	4	2.7	< 1	1	0.03	< 0.05	< 1	5.9	5.8	80	159	123	180	25	4	< 0.5	0.6	4.7	< 0.1	< 0.8	0.2	1.2	100	< 20	15.2	52
FC L52 24+75	25000	121	400	30	27	12	8	2.8	< 1	< 1	0.03	< 0.05	< 1	5.4	3.5	82	145	171	520	28	1	< 0.5	0.4	6	< 0.1	< 0.8	0.3	1.5	400	< 20	8	33
FC L52 25+00	38000	106	337	25	34	7	10	3.6	< 1	< 1	0.12	< 0.05	< 1	2.8	3.7	63	113	207	390	39	< 1	< 0.5	< 0.2	5.2	< 0.1	< 0.8	0.2	1.9	200	< 20	10.2	24
FC L52 25+25	13000	50	217	40	10	< 5	4	0.7	< 1	< 1	< 0.01	< 0.05	< 1	2	0.8	14	33	23	190	13	2	< 0.5	0.2	4.3	< 0.1	< 0.8	< 0.1	1.2	500	< 20	1	15
FC L52 25+50	19000	247	1230	22	28	7	6	3.8	< 1	< 1	0.03	< 0.05	< 1	6.8	16	60	168	222	180	32	< 1	< 0.5	0.4	5.1	< 0.1	< 0.8	0.1	1.8	300	< 20	18.3	50
FC L52 25+75	25000	283	1350	22	18	6	17	9.3	< 1	< 1	0.27	< 0.05	< 1	2.1	8.9	126	209	130	230	27	3	< 0.5	0.3	7.4	< 0.1	0.8	0.2	1.5	100	< 20	7.8	19
FC L52 26+00	34000	165	590	26	15	< 5	9	1.9	< 1	< 1	0.02	< 0.05	< 1	3.2	4.1	34	54	74	230	28	2	< 0.5	0.4	7.9	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	13.4	30
FC L52 26+25	20000	112	550	29	13	< 5	6	1.3	< 1	< 1	< 0.01	< 0.05	< 1	3.2	3.4	60	65	64	250	9	4	< 0.5	0.3	6.1	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	10.3	25
FC L52 26+50	17000	215	716	25	7	< 5	4	1.1	< 1	< 1	< 0.01	< 0.05	< 1	3.8	2.3	63	66	59	110	3	3	< 0.5	0.4	5.7	< 0.1	< 0.8	0.2	< 0.8	100	< 20	11.3	26
FC L52 26+75	15000	125	588	67	13	< 5	7	2.5	< 1	< 1	< 0.01	< 0.05	< 1	1.5	1.9	70	83	34	420	3	3	< 0.5	0.3	10.7	< 0.1	< 0.8	< 0.1	< 0.8	700	< 20	3.2	31
FC L52 27+00	10000	115	554	26	15	< 5	3	2.4	< 1	< 1	< 0.01	< 0.05	< 1	4.5	4.1	67	52	83	230	44	2	< 0.5	0.6	7.1	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	12.2	29
FC L52 27+25	9000	114	524	44	32	5	10	2.3	< 1	< 1	< 0.01	< 0.05	< 1	3.8	3.1	76	50	92	390	46	3	< 0.5	< 0.2	7.5	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	3.6	33
FC L52 27+50	14000	126	534	59	9	< 5	7	1.7	< 1	< 1	< 0.01	< 0.05	< 1	1.3	1.4	125	65	33	140	6	4	< 0.5	0.3	5.4	< 0.1	< 0.8	0.1	< 0.8	300	< 20	2.4	62
FC L52 27+75	30000	104	388	87	16	< 5	12	3.2	< 1	< 1	< 0.01	< 0.05	< 1	1.6	1.4	80	74	42	450	6	5	< 0.5	0.7	16.3	< 0.1	< 0.8	< 0.1	< 0.8	800	< 20	2.2	25
FC L52 28+00	22000	119	557	57	16	< 5	8	1.8	< 1	< 1	< 0.01	< 0.05	< 1	3.5	1.9	58	61	49	360	10	2	< 0.5	< 0.2	4.5	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	11.7	17
FC L52 28+25	29000	351	1720	46	31	12	18	7	< 1	< 1	0.19	< 0.05	< 1	3.7	10.8	71	86	107	280	19	3	< 0.5	0.4	4.8	< 0.1	< 0.8	0.3	< 0.8	100	< 20	14.3	33
FC L52 28+50	39000	690	3190	45	32	34	27	8.3	< 1	1	0.51	< 0.05	< 1	2.1	10	48	193	350	410	27	1	0.5	0.7	9.8	< 0.1	< 0.8	0.4	1	100	< 20	8.6	25
FC L52 28+75	21000	207	1070	26	19	7	32	9.1	< 1	1	0.26	< 0.05	< 1	2.4	6.8	78	129	147	90	20	3	< 0.5	0.3	5	< 0.1	< 0.8	0.2	0.9	200	< 20	6.9	22
FC L52 29+00	31000	448	1200	21	21	18	30	6.2	< 1	< 1	0.9	< 0.05	< 1	0.6	2.1	63	172	165	240	11	2	< 0.5	< 0.2	6.4	< 0.1	< 0.8	0.3	< 0.8	< 100	< 20	2.5	6
FC L52 29+25	59000	454	731	49	30	30	49	5.7	< 1	< 1	2.52	< 0.05	< 1	1.2	5.4	33	92	102	140	15	< 1	< 0.5	< 0.2	4.2	< 0.1	< 0.8	0.1	< 0.8	100	< 20	3.3	13
FC L52 29+50	7000	139	806	14	8	< 5	6	1.3	< 1	1	0.02	< 0.05	< 1	7.8	14.8	45	18	34	100	15	< 1	< 0.5	0.3	2	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	12.6	36
FC L52 29+75	11000	160	787	29	19	9	52	3.5	< 1	1	0.06	< 0.05	< 1	2.6	15.3	91	98	74	180	17	3	< 0.5	0.3	7.5	< 0.1	< 0.8	0.2	< 0.8	100	< 20	6.6	16
FC L53 8+50	16000	120	414	23	19	< 5	6	1.1	< 1	< 1	0.01	< 0.05	< 1	3.1	1.1	67	91	27	380	26	3	< 0.5	< 0.2	7.3	< 0.1	< 0.8	< 0.1	2.2	300	< 20	2.4	14
FC L53 8+75	12000	163	626	12	5	5	4	0.6	< 1	< 1	0.02	< 0.05	< 1	4.2	1.7	55	36	15	60	19	2	< 0.5	< 0.2	2.2	< 0.1	< 0.8	< 0.1	1.3	300	< 20	8.6	23
FC L53 9+00	13000	147	533	17	6	< 5	5	0.9	< 1	< 1	< 0.01	< 0.05	< 1	3.3	1.3	42	38	16	180	13	4	< 0.5	< 0.2	5.6	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	1.8	17
FC L53 9+75	13000	106	611	16	12	6	8	6.1	< 1	< 1	0.02	< 0.05	< 1	3.7	2	889	577	93	270	1320	3	< 0.5	0.2	57.6	< 0.1	< 0.8	0.2	1.3	100	< 20	13	47
FC L53 10+00	14000	114	501	23	14	< 5	7	3.4	< 1	< 1	< 0.01	< 0.05	< 1	2.2	1.2	58	72	30	240	67	4	< 0.5	< 0.2	8.2	< 0.1	< 0.8	< 0.1	1.6	600	< 20	1.7	19
FC L53 10+25	13000	148	451	15	19	10	10	2	< 1	< 1	0.02	< 0.05	< 1	6.5	3.4	525	338	307	810	75	3	< 0.5	0.3	10.2	< 0.1	< 0.8	0.1	2.5	100	< 20	6.4	63
FC L53 10+50	17000	381	1110	28	9	8	5	1.1	< 1	< 1	0.02	< 0.05	< 1	4.4	2.4	83	75	35	130	17	2	< 0.5	0.3	2.6	< 0.1	< 0.8	< 0.1	1.2	300	< 20	10.3	39
FC L53 10+75	16000	608	2110	14	7	10	8	3.8	< 1	< 1	0.2	< 0.05	< 1	3	3.2	56	111	52	90	9	3	< 0.5	0.7	3.3	< 0.1	< 0.8	0.3	< 0.8	200	< 20	19.1	54
FC L53 11+00	15000	295	960	14	12	5	5	0.7	< 1	< 1	0.02	< 0.05	< 1	5.3	4	155	63	38	200	49	< 1	< 0.5	< 0.2	2.9	< 0.1	< 0.8	0.1	1.6	100	< 20	8.6	30
FC L53 11+25	18000	337	1290	22	10	6	9	3	< 1	< 1	0.03	< 0.05	< 1	2.3	3.2	55	81	47	70	18	4	< 0.5	0.2	2.7	< 0.1	< 0.8	0.1	0.9	< 100	< 20	9.5	24
FC L53 11+50	14000	138	562	26	16	< 5	7	1.9	< 1	< 1	0.01	< 0.05	< 1	2.6	1.9	140	55	33	390	35	3	< 0.5	< 0.2	5.3	< 0.1	< 0.8	< 0.1	1.3	300	< 20	3	27
FC L53 11+75	11000	228	998	9	6	< 5	3	1.5	< 1	< 1	0.01	< 0.05	< 1	3.3	3.3	317	91	54	330	110	1	< 0.5	0.2	6.7	< 0.1	< 0.8	0.2	0.9	< 100	< 20	6.7	36
FC L53 12+00	15000	184	747	11	10	< 5	6	2.7	< 1	< 1	< 0.01	< 0.05	< 1	4.2	3.6	97	70	52	470	88	2	< 0.5	0.3	8.7	< 0.1	< 0.8	0.1	1.4	< 100	< 20	6.1	52
FC L53 12+25	17000	241	807	21	10	< 5	8	2.5	< 1	< 1	0.02	< 0.05	< 1	2.5	2.1	145	56	55	170	98	< 1	< 0.5	0.2	4.8	< 0.1	< 0.8	0.1	1.6	200	< 20	7.4	27
FC L53 12+50	33000	291	1300	14	7	5	9	4.5	< 1	< 1	0.06	< 0.05	< 1	1.8	2.2	247	201	75	110	21	2	< 0.5	0.3	4.7	< 0.1	< 0.8	0.1	1.8	< 100	< 20	6.6	23
FC L53 12+75	14000	212	913	19	11	< 5	9	1.9	< 1	< 1	< 0.01	< 0.05	< 1	5.4	3.2	109	82	83	430	59	2	< 0.5	0.3	7.9	< 0.1	< 0.8	< 0.1	1.5	200	< 20	8.4	44
FC L53 13+00	13000	289	951	17	10	< 5	3	0.9	< 1	< 1	0.01	< 0.05	< 1	3.5	2.9	182	102	63	560	84	2	< 0.5	< 0.2	9.2	< 0.1	< 0.8	< 0.1	0.9	200	< 20	6.3	32
FC L53 13+25	33000	289	1210	20	9	6	10	2.2	< 1	< 1	0.02	< 0.05	< 1	1.8	4.1	45	32	51	100	20	2	< 0.5	< 0.2	1.6	< 0.1	< 0.8	< 0.1	1.3	< 100	< 20	9.6	24
FC L53 13+50	11000	199	756	11	8	< 5	4	0.9	< 1	< 1	0.01	< 0.05	< 1	3.2	3.3	81	71	42	290	34	2	< 0.5	0.2	4.8	< 0.1	< 0.8	< 0.1	1.1	100	< 20	3.6	35
FC L53 13+75	13000	176	680	16	28	< 5	6	3.6	< 1	< 1	0.01	< 0.05	< 1	6.8	3.5	193	105	54	960	93	3	< 0.5	0.2	7.5	< 0.1	< 0.8	0.1	1.3	200	< 20	9.7	44
FC L53 14+00	14000	136	689	14	11	< 5	3	1.4	< 1	< 1	< 0.01	< 0.05	< 1	1.4	1.7	237	228	22	600	49	2	< 0.5	< 0.2	11.3	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	2.7	20
FC L53 14+25	12000	189	756	7	8	< 5	2	0.8	< 1	< 1	0.02	< 0.05	< 1	6.3	4.3	266	91	44	450	386	2	< 0.5	0.2	20	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	4.4	54
FC L53 14+50	12000	178	768	14	11	< 5	6	1.7	< 1	< 1	< 0.01	< 0.05	< 1	4.6	3.7	163	96	43	250	74	3	< 0.5	0.2	4.3	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	5.2	61
FC L53 14+75	14000	130	439	43	35	< 5	12	13.1	< 1	< 1	< 0.01	< 0.05	< 1	1.6	1.2	12	29	12	520	18	4	< 0.5	< 0.2	5.6	< 0.1	< 0.8	0.1	< 0.8	600	< 20	0.7	17
FC L53 15+00	12000	158	841	19	16	< 5	5	3.3	< 1	< 1	0.01	< 0.05	< 1	3.2	2.7	84	67	30	380	48	3	< 0.5	< 0.2	3.3	< 0.1	< 0.8	0.1	0.8	200	< 20	9.2	28
FC L53 15+25	18000	96	576	12	9	< 5	3	2.4	< 1	< 1	< 0.01	< 0.05	< 1	5.8	3.3	170	47	50	180	59	2	< 0.5	0.3	3.4	< 0.1	< 0.8	< 0.1	0.9	200	< 20	3.6	53
FC L53 15+75	13000	226	843	12	14	< 5	3	1.1	< 1	< 1	0.02	< 0.05	< 1	4.3	4.2	178	75	44	3070	31	1	< 0.5	0.4	15.3	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	6.2	35
FC L53 16+00	22000	312	803	19	17	7	6	6.1	< 1	< 1	0.01	< 0.05	< 1	2.3	6.6	485	344	129	1030	53	4	< 0.5	0.3	11.3	< 0.1	< 0.8	0.2	1.4	200	< 20	8.5	55
FC L53 16+25	24000	159	672	14	5	5	3	0.8	< 1	< 1	< 0.01	< 0.05	< 1	2	4.6	156	74	31	380	20	4	< 0.5	< 0.2	10.1	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	4.4	28
FC L53 16+50	16000	102	464	35	33	9	4	3.5	< 1	< 1	0.01	< 0.05	< 1	9.1	5.9	444	258	217	760	98	3	< 0.5	0.6	6.6	< 0.1	< 0.8	< 0.1	2.5	400	< 20	5.3	120
FC L53 16+75	13000	173	850	16	5	6	2	0.8	< 1	< 1	0.02	< 0.05	< 1	2.3	1.9	116	69	21	450	46	2	< 0.5	< 0.2	7.5	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	1.9	23
FC L53 17+00	11000	108	426	47	20	< 5	3	0.7	< 1	< 1	< 0.01	< 0.05	< 1	1.3	1.3	136	77	15	250	14	3	< 0.5	< 0.2	3.8	< 0.1	< 0.8	< 0.1	< 0.8	500	< 20	1.2	10
FC L53 17+25	14000	198	656	19	18	< 5	3	2.2	< 1	< 1	0.01	< 0.05	< 1	5.2	4.5	412	244	117	550	80	3	< 0.5	0.3	8.5	< 0.1	< 0.8	0.1	10.2	200	< 20	7.7	46

Report: A06-4172

Final Report
Activation Laboratories

Analyte Symbol	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	34000	132	826	18	2	< 5	2	1.1	< 1	< 1	0.01	< 0.05	< 1	8.2	2.4	60	47	13	200	12	2	< 0.5	0.3	1.1	< 0.1	< 0.8	0.2	< 0.8	300	< 20	7.2	47
FC L53 17+50 rec'd empty	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC L53 17+75	14000	134	503	49	33	7	4	3	< 1	< 1	< 0.01	< 0.05	< 1	5.1	4	303	233	164	600	48	5	< 0.5	0.4	6.1	< 0.1	< 0.8	0.1	2.8	600	< 20	5.1	71
FC L53 18+00	15000	252	981	27	13	< 5	6	8.8	< 1	< 1	0.01	< 0.05	< 1	3.3	4.9	258	260	69	50	25	3	< 0.5	< 0.2	1.4	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	10.7	42
FC L53 18+25	12000	164	741	11	6	< 5	5	3	< 1	< 1	0.01	< 0.05	< 1	2.5	2.6	485	221	44	310	22	3	< 0.5	< 0.2	6.9	< 0.1	< 0.8	0.1	< 0.8	200	< 20	12.5	21
FC L53 18+50	14000	187	856	14	7	5	4	1	< 1	< 1	0.01	< 0.05	< 1	7.7	3.2	130	68	88	360	80	1	< 0.5	< 0.2	8.7	< 0.1	< 0.8	< 0.1	1.3	200	< 20	3.5	26
FC L53 18+75	12000	190	713	27	9	< 5	9	1	< 1	< 1	0.02	< 0.05	< 1	4.1	2.3	63	26	24	50	22	2	< 0.5	< 0.2	1.8	< 0.1	< 0.8	0.2	< 0.8	100	< 20	5.3	18
FC L53 19+00	17000	312	1340	20	13	8	7	5.6	< 1	< 1	0.03	< 0.05	< 1	2.1	3.7	165	96	42	130	31	< 1	< 0.5	0.2	4.3	< 0.1	< 0.8	0.1	< 0.8	200	< 20	7.7	27
FC L53 19+25	19000	269	682	67	20	< 5	9	5	< 1	< 1	0.02	< 0.05	< 1	2.9	3.6	135	64	61	110	25	2	< 0.5	0.2	3	< 0.1	< 0.8	0.1	0.9	200	< 20	6.5	30
FC L53 19+50	15000	223	866	64	14	< 5	10	1.5	< 1	< 1	0.02	< 0.05	< 1	3.2	4.2	82	43	37	130	22	2	< 0.5	< 0.2	3.6	< 0.1	< 0.8	0.1	< 0.8	300	< 20	7.6	26
FC L53 19+75 rec'd empty	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC L53 20+00	15000	200	1440	11	6	< 5	4	1.6	< 1	< 1	0.04	< 0.05	< 1	6.1	3.8	185	170	81	210	34	3	< 0.5	0.3	9.7	< 0.1	< 0.8	0.2	< 0.8	100	< 20	14.9	57
FC L53 20+25	33000	246	907	36	6	< 5	3	2.6	< 1	< 1	0.01	< 0.05	< 1	6.7	2.7	140	20	52	70	15	2	< 0.5	< 0.2	2.3	< 0.1	< 0.8	0.2	< 0.8	100	< 20	17.9	18
FC L53 20+50	34000	259	1290	48	21	7	15	5.1	< 1	1	0.17	< 0.05	< 1	8.3	3.5	175	173	98	210	21	4	< 0.5	0.3	6.5	< 0.1	< 0.8	0.2	1.8	200	< 20	14.8	32
FC L53 20+75	17000	162	727	14	8	< 5	3	0.7	< 1	< 1	0.01	< 0.05	< 1	5.1	2.5	53	61	62	340	90	3	< 0.5	< 0.2	8.6	< 0.1	< 0.8	< 0.1	1.6	300	< 20	8.8	16
FC L53 21+00	25000	186	927	20	10	5	4	2	< 1	< 1	0.01	< 0.05	< 1	5.2	3.3	129	49	59	110	52	3	< 0.5	0.3	3	< 0.1	< 0.8	< 0.1	1.4	100	< 20	8.6	33
FC L53 21+25	13000	130	797	12	13	< 5	3	0.8	< 1	< 1	0.02	< 0.05	< 1	12.8	5.3	109	61	44	360	61	3	< 0.5	0.3	4.1	< 0.1	< 0.8	< 0.1	1.8	200	< 20	14.6	36
FC L53 21+50	38000	351	1920	21	23	9	5	2.9	< 1	< 1	0.04	< 0.05	< 1	6.9	6.6	96	99	161	730	70	3	< 0.5	0.4	14.9	< 0.1	< 0.8	0.2	2	200	< 20	18.3	55
FC L53 21+75	13000	113	545	33	15	< 5	5	1.3	< 1	< 1	0.02	< 0.05	< 1	2.2	1.6	25	24	43	180	20	4	< 0.5	< 0.2	5	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	5.2	14
FC L53 22+00	11000	119	672	8	9	< 5	3	1.1	< 1	< 1	0.02	< 0.05	< 1	5.1	3	127	49	71	460	58	2	< 0.5	0.3	8.9	< 0.1	< 0.8	0.3	< 0.8	100	< 20	7.2	27
FC L53 22+25	29000	109	421	22	61	12	3	7	< 1	< 1	0.05	0.07	< 1	2.1	2.7	438	461	1030	12800	88	3	< 0.5	0.4	204	< 0.1	< 0.8	1.3	1	< 100	< 20	13.1	29
FC L53 22+50	17000	131	574	35	30	8	5	1.6	< 1	< 1	0.03	< 0.05	< 1	5.4	2.7	116	148	146	5050	68	3	< 0.5	0.3	41.8	< 0.1	< 0.8	< 0.1	2.2	400	< 20	7.8	26
FC L53 22+75	47000	560	1640	14	35	17	5	3.9	< 1	< 1	0.31	0.19	< 1	2	3.4	90	280	465	4020	43	3	< 0.5	0.3	21	< 0.1	< 0.8	< 0.1	1.3	< 100	< 20	12.9	33
FC L53 23+00	31000	227	984	43	25	9	7	3.3	< 1	< 1	0.34	< 0.05	< 1	3	4.1	86	103	118	640	32	3	< 0.5	< 0.2	10.8	< 0.1	< 0.8	< 0.1	1.8	300	< 20	6.6	28
FC L53 23+25	17000	180	685	20	23	7	8	3.8	< 1	1	0.38	< 0.05	< 1	1.6	2.9	131	186	133	190	22	3	< 0.5	0.2	3.1	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	7.6	24
FC L53 23+50	15000	185	803	16	13	< 5	4	3.5	< 1	< 1	0.11	0.09	< 1	1.9	2.7	375	225	99	150	16	3	< 0.5	< 0.2	3.1	< 0.1	< 0.8	0.1	< 0.8	100	< 20	10	35
FC L53 23+75	16000	173	814	29	15	6	8	2.9	< 1	< 1	0.09	< 0.05	< 1	4	4.1	200	131	101	50	13	2	< 0.5	< 0.2	1.9	< 0.1	< 0.8	0.2	< 0.8	200	< 20	19.7	24
FC L53 24+00	27000	431	1420	56	12	14	8	1.9	< 1	< 1	0.14	< 0.05	< 1	1.1	3.4	29	100	70	90	7	1	< 0.5	0.2	1.3	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	5.8	16
FC L53 24+25	17000	168	554	23	25	11	10	5.9	< 1	< 1	0.63	< 0.05	< 1	1.2	1.3	65	106	58	190	13	< 1	< 0.5	< 0.2	1.9	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	2.7	11
FC L53 24+50	32000	414	1880	27	14	11	9	4	< 1	1	0.28	< 0.05	< 1	2.6	3.4	70	124	124	150	16	1	< 0.5	0.3	2.6	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	8.5	23
FC L53 24+75	16000	263	1520	16	14	6	5	3.4	< 1	< 1	0.22	< 0.05	< 1	3.8	6.6	84	141	139	220	26	2	< 0.5	0.2	3.5	< 0.1	< 0.8	< 0.1	0.9	< 100	< 20	11.9	32
FC L53 25+00	9000	71	319	18	11	< 5	4	0.5	< 1	< 1	< 0.01	< 0.05	< 1	2.3	1.6	21	32	37	210	21	3	< 0.5	< 0.2	2.5	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	2.6	6
FC L53 25+25	9000	55	107	28	35	< 5	4	1.7	< 1	< 1	0.06	< 0.05	< 1	2	1.3	286	200	76	130	19	3	< 0.5	< 0.2	4.5	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	8.8	20
FC L53 25+50	28000	253	1130	16	9	< 5	8	7.2	< 1	< 1	0.1	0.19	< 1	4.7	8.3	980	875	221	130	9	3	< 0.5	0.4	10.4	< 0.1	< 0.8	0.6	< 0.8	< 100	< 20	44.7	43
FC L53 25+75	11000	96	549	18	12	< 5	9	3.8	< 1	< 1	0.03	< 0.05	< 1	2.1	3.8	440	442	125	150	11	2	< 0.5	0.2	8.6	< 0.1	< 0.8	0.2	< 0.8	100	< 20	16.3	23
FC L53 26+00	15000	104	478	46	17	8	7	2.6	< 1	< 1	0.03	< 0.05	< 1	2.6	2.8	132	149	204	340	10	3	< 0.5	0.3	7.9	< 0.1	< 0.8	0.2	< 0.8	400	< 20	8.9	21
FC L53 26+25	25000	163	572	21	7	< 5	3	0.8	< 1	< 1	0.01	< 0.05	< 1	3.2	1.6	35	68	26	290	12	2	< 0.5	< 0.2	5.5	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	3	11
FC L53 26+50 rec'd empty	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC L53 26+75	26000	397	1510	48	9	< 5	6	1.7	< 1	< 1	0.03	< 0.05	< 1	3.2	4.5	121	144	116	220	4	2	< 0.5	0.3	6.1	< 0.1	< 0.8	0.4	< 0.8	400	< 20	21.2	21
FC L53 27+00	20000	154	500	22	17	< 5	5	1.3	< 1	< 1	0.01	< 0.05	< 1	1.9	1.8	42	72	51	280	19	2	< 0.5	< 0.2	9.1	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	3.8	16
FC L53 27+25	11000	124	624	33	24	6	7	3.2	< 1	< 1	< 0.01	< 0.05	< 1	3	2.3	56	109	63	410	16	2	< 0.5	0.3	11.7	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	4.5	25
FC L53 27+50	24000	126	326	96	15	< 5	16	1.5	< 1	< 1	0.01	< 0.05	< 1	0.7	0.7	94	34	19	250	2	2	< 0.5	< 0.2	6.8	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	1.9	11
FC L53 27+75	39000	411	2450	25	13	10	9	2.8	< 1	< 1	0.11	< 0.05	< 1	3.2	9.6	131	180	158	260	15	2	< 0.5	0.2	10.2	< 0.1	< 0.8	0.2	< 0.8	200	< 20	12.1	39
FC L53 28+00	22000	226	877	33	13	< 5	8	2.1	< 1	< 1	0.04	< 0.05	< 1	3.6	3.8	93	79	63	190	11	3	< 0.5	< 0.2	4.1	< 0.1	< 0.8	0.1	< 0.8	300	< 20	16	23
FC L53 28+25	18000	117	473	25	13	< 5	5	1.5	< 1	< 1	< 0.01	< 0.05	< 1	4.2	2.8	92	86	65	180	20	2	< 0.5	< 0.2	2.7	< 0.1	< 0.8	0.1	< 0.8	300	< 20	7.8	23
FC L53 28+50	8000	160	828	20	11	< 5	5	2.7	< 1	< 1	0.02	< 0.05	< 1	4.2	3.7	159	121	54	280	14	1	< 0.5	< 0.2	4.7	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	11	28
FC L53 28+75	40000	554	1620	28	27	14	31	7.4	< 1	< 1	0.61	< 0.05	< 1	1.2	4.1	171	321	235	350	18	2	< 0.5	0.2	8.3	< 0.1	< 0.8	0.4	< 0.8	100	< 20	7.3	15
FC L53 29+00	63000	434	1240	55	37	17	24	6.8	< 1	< 1	0.56	< 0.05	< 1	1.9	10.6	56	165	352	370	44	< 1	< 0.5	< 0.2	5.5	< 0.1	< 0.8	0.3	2.5	200	< 20	8	25
FC L53 29+25	19000	423	2270	24	19	11	26	7.5	< 1	< 1	0.26	< 0.05	< 1	1.2	7.8	59	139	237	90	12	2	< 0.5	< 0.2	2.6	< 0.1	< 0.8	0.1	< 0.8	< 100	< 20	4.7	20
FC L53 29+50	18000	363	1700	22	31	23	18	6.2	< 1	< 1	0.4	0.06	< 1	2.8	12	91	291	332	230	16	1	< 0.5	0.2	4.9	< 0.1	< 0.8	0.2	< 0.8	100	< 20	10	35
FC L53 29+75	18000	373	2870	23	24	23	10	4.5	< 1	< 1	0.03	0.11	< 1	6.3	32.4	68	413	298	70	15	4	< 0.5	0.4	3.7	< 0.1	< 0.8	0.2	< 0.8	300	< 20	20.4	78
FC L53 30+00	10000	337	1310	18	13	6	66	4.9	< 1	< 1	0.12	< 0.05	< 1	2.6	11	233	362	91	140	11	2	< 0.5	0.2	5.9	< 0.1	< 0.8	0.4	< 0.8	100	< 20	8.9	31
FC L53 30+25	24000	206	547	54	30	14	29	10.4	< 1	< 1	0.46	< 0.05	< 1	2.5	5.1	157	199	142	350	24	2	< 0.5	< 0.2	5.8	< 0.1	< 0.8	0.2	1.2	100	< 20	7.7	28
FC L53 30+50	9000	119	678	22	19	6	7	3.8	< 1	< 1	0.02	< 0.05	< 1	6.8	4.7	135	120	123	210	26	2	< 0.5	< 0.2	4.1	< 0.1	< 0.8	< 0.1	< 0.8	300	< 20	16.1	36
FC L53 30+75	11000	129	494	56	31	< 5	16	3.8	< 1	< 1	< 0.01	< 0.05	< 1	1.9	1.6	58	46	32	310	20	3	< 0.5	< 0.2	2.8	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	2.9	9
FC L53 31+00	10000	151	636	26	31	6	12	1.8	< 1	< 1	0.02	< 0.05	< 1	4.3	2	106	23	20	390	27	2	< 0.5	< 0.2	6.6	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	7.1	9
FC L53 31+25	16000	245	1580	16	8	< 5	4	2.7	< 1	< 1	0.03	< 0.05	< 1	5.9	8.2	87	100	104	90	18	< 1	< 0.5	0.5	5.7	< 0.1	< 0.8	0.2	< 0.8	200	< 20	32	59
FC L53 31+50	11000	181	1250	17	11	8	7	2.2	< 1	< 1	0.04	< 0.05	< 1	18.7	21.6	117	58	85	120	31	3	< 0.5	0.4	3.2	< 0.1	< 0.8	0.2	1	200	< 20	53.4	58
FC L53 31+75	23000	206	1590	17	9	8	7	1.8	< 1	< 1	0.09	< 0.05	< 1	10.8	17.6	50	81	79	130	17	1	< 0.5	0.3	3.7	< 0.1	< 0.8	0.2	< 0.8	200	< 20	26	51
FC L53 32+00	20000	389	1610	25	14	14	39	6.3	< 1	< 1	0.3	< 0.05	< 1	2.8	8.9	89	101	66	100	14	3	< 0.5	< 0.2	1.7	< 0.1	< 0.8	0.1	< 0.8	100	< 20	8.5	23
FC L53 32+25	31000	153	678	19	10	7	6	1	< 1	< 1	0.03	< 0.05	< 1	4.1	2.8	29	21	19	70	10	3	< 0.5	< 0.2	1.1	< 0.1	< 0.8	< 0.1	2.2	300	< 20	4.6	12
FC L53 32+50	24000	119	547	24	10	< 5	9	0.9	< 1	< 1	0.02	< 0.05	< 1	6.2	2.5	24	20	19	80	19	2	< 0.5	< 0.2	2	< 0.1	< 0.8	< 0.1	1.5	500	< 20	6.9	13
FC L53 32+75	27000	348	2310	24	18	10	6	1.7	< 1	< 1	0.06	< 0.05	< 1	12.3	12.6	48	63	92	50	20	1	< 0.5	0.3	1.7	< 0.1	< 0.8	< 0.1	1	300	< 20	31.2	38
FC L53 33+00	23000	211	1190	28	14	8	5	1.4	< 1	< 1	0.03	< 0.05	< 1	5.3	17	64	65	71	110	22	< 1	< 0.5	< 0.2	1.9	< 0.1	< 0.8	< 0.1	1	400	< 20	11.6	23
FC L55 25+25	24000	185	847	54	17	6	11	5.2	< 1	< 1	0.15	0.14	< 1	1.4	5.1	215	149	142	80	7	< 1	< 0.5	0.3	2.6	< 0.1	< 0.8	0.2	< 0.8	100	< 20	10.1	16
FC L55 25+50	24000	101	572	28	14	6	12	5.4	< 1	< 1	0.17	< 0.05	< 1	0.9	3.4	164	359	73	180	4	< 1	< 0.5	< 0.2	10.4	< 0.1	< 0.8	0.2	< 0.8	100	< 20	6.1	20
FC L55 25+75	37000	173	654	40	30	11	14	8.3	< 1	< 1	1.67	< 0.05	< 1	2.3	5.1	87	158	215	250	22	< 1	< 0.5	0.2	6.9	< 0.1	< 0.8	0.2	1.2	< 100	< 20	7.3	21
FC L55 26+00	16000	151	851	55	14	< 5	10	3.5	< 1	< 1	0.05	< 0.05	< 1	0.8	4.3	227	150	65	130	6	3	< 0.5	0.4	3.8	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	5.3	25
FC L55 26+25	22000	306	1400	38	18	7	8	3.3	< 1	< 1	0.02	< 0.05	< 1	3.3	5.5	155	166	169	350	22	2	< 0.5	0.5	9.2	< 0.1	< 0.8	0.2	< 0.8	100	< 20	19	30
FC L55 26+50	7000	129	453	71	14	6	10	2.6	< 1	1	0.01	< 0.05	< 1	2.7	2.7	102	71	102	660	8	5	< 0.5	0.3	21.9	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	6.6	29
FC L55 26+75	5000	102	326	26	29	< 5	7	3.9	< 1	< 1	0.02	< 0.05	< 1	2.4	2.9	264	143	132	610	28	1	< 0.5	< 0.2	9.3	< 0.1	< 0.8	0.1	< 0.8	100	< 20	5.8	22
FC L55 27+00	5000	139	436	30	23	5	5	1.5	< 1	< 1	0.02	< 0.05	< 1	2.3	2.4	64	68	65	350	49	1	< 0.5	< 0.2	7.4	< 0.1	< 0.8	< 0.1	< 0.8	400	< 20	3.2	12
FC L55 27+25	25000	302	1540	27	11	6	12	4.3	< 1	< 1	0.06	< 0.05	< 1	2	3.9	105	110	58	60	10	2	< 0.5	0.3	2.4	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	7.3	17

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Analyte Symbol	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	34000	132	826	18	2	< 5	2	1.1	< 1	< 1	0.01	< 0.05	< 1	8.2	2.4	60	47	13	200	12	2	< 0.5	0.3	1.1	< 0.1	< 0.8	0.2	< 0.8	300	< 20	7.2	47
FC L55 27+50	7000	220	796	23	9	< 5	8	2.2	< 1	< 1	0.02	< 0.05	< 1	4.7	5	81	55	42	140	10	2	< 0.5	< 0.2	6.7	< 0.1	< 0.8	0.1	< 0.8	200	< 20	12.1	23
FC L55 27+75	6000	160	711	10	7	< 5	4	2.3	< 1	< 1	0.01	< 0.05	< 1	7.1	5.3	158	59	36	50	17	2	< 0.5	< 0.2	3.6	< 0.1	< 0.8	0.1	< 0.8	100	< 20	13.9	28
FC L55 28+00	14000	500	2420	28	10	15	13	6	< 1	< 1	0.36	< 0.05	< 1	2	5.1	46	104	78	60	6	< 1	< 0.5	0.3	3	< 0.1	< 0.8	0.2	< 0.8	100	< 20	9.4	22
FC L55 28+25	12000	221	601	75	16	10	7	5.5	< 1	2	0.15	< 0.05	< 1	3.5	4.2	55	86	68	140	35	< 1	< 0.5	0.3	1.7	< 0.1	< 0.8	< 0.1	2.1	200	< 20	8.1	36
FC L55 28+50	11000	406	1590	16	12	8	5	1.7	< 1	1	0.03	< 0.05	< 1	5.7	6.4	73	77	67	70	22	3	< 0.5	0.2	3	< 0.1	< 0.8	0.1	< 0.8	200	< 20	14.7	27
FC L55 28+75	9000	214	706	49	10	< 5	6	0.9	< 1	< 1	< 0.01	< 0.05	< 1	3.2	2.1	34	52	37	70	13	1	< 0.5	< 0.2	1.6	< 0.1	< 0.8	< 0.1	< 0.8	200	< 20	8.2	12
FC L55 29+00	6000	177	628	16	12	< 5	5	1.1	< 1	< 1	0.01	< 0.05	< 1	7.8	3.9	68	46	46	110	18	1	< 0.5	< 0.2	1.8	< 0.1	< 0.8	< 0.1	< 0.8	100	< 20	11.3	25
FC L55 29+25	9000	515	1780	18	11	7	7	4.1	< 1	1	0.12	< 0.05	< 1	4.3	4.8	76	83	86	70	12	2	< 0.5	0.2	2.5	< 0.1	< 0.8	0.2	< 0.8	< 100	< 20	18.8	25
FC L55 29+50	11000	207	574	49	22	6	19	4.6	< 1	< 1	0.03	< 0.05	< 1	4	7.5	92	82	58	280	18	2	< 0.5	< 0.2	5.8	< 0.1	< 0.8	0.3	< 0.8	400	< 20	7.6	32
FC L55 29+75	5000	368	1400	22	14	9	9	2	< 1	< 1	0.08	< 0.05	< 1	3.2	7.8	51	93	139	70	18	2	< 0.5	< 0.2	1.5	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	10.3	21
FC L55 30+00	11000	364	1190	40	18	10	10	3.8	< 1	< 1	0.11	< 0.05	< 1	3	5	98	141	118	70	27	2	< 0.5	< 0.2	2.5	< 0.1	< 0.8	0.1	< 0.8	300	< 20	13	13
FC L53 9+25	7000	134	396	25	13	< 5	6	2.5	< 1	< 1	< 0.01	< 0.05	< 1	1.7	1.4	55	51	29	380	29	3	< 0.5	< 0.2	6.5	< 0.1	< 0.8	< 0.1	< 0.8	600	< 20	1.9	10
FC L53 9+50	11000	105	476	12	7	< 5	3	1.6	< 1	< 1	< 0.01	< 0.05	< 1	4.6	1.9	147	100	51	330	89	2	< 0.5	< 0.2	8.3	< 0.1	< 0.8	< 0.1	1.4	200	< 20	2.7	29
FC L53 15+50	15000	633	1900	11	6	8	7	12.1	< 1	< 1	0.16	< 0.05	< 1	2.4	4.5	169	234	100	5510	143	2	< 0.5	0.4	25.9	< 0.1	< 0.8	0.2	1.7	< 100	< 20	9.8	33

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Analyte Symbol	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	< 1	1.8	< 0.1	10.4	18.8	2.7	11	2.5	0.7	2.2	0.4	2	0.3	0.9	0.1	0.7	0.1	13	< 2	< 100	3030	29	331	0.4	490	< 1	< 1	< 1	< 1
FC L51 5+50	< 1	2.3	< 0.1	10.7	12.8	1.6	6.2	1.5	0.4	1.2	0.2	1	0.2	0.5	< 0.1	0.5	< 0.1	32	< 2	< 100	3040	36	352	0.3	498	< 1	< 1	< 1	< 1
FC L51 5+75	< 1	1.2	< 0.1	5.1	9.2	1.2	4.8	1.1	0.3	1	0.2	0.9	0.2	0.4	< 0.1	0.3	< 0.1	9	< 2	< 100	1860	27	230	0.2	262	< 1	< 1	< 1	< 1
FC L51 6+00	< 1	1	< 0.1	8.4	6.2	2.4	9.8	2.4	0.7	2.2	0.4	1.9	0.3	1	0.2	1	0.2	6	< 2	< 100	4350	33	356	0.3	307	< 1	< 1	< 1	< 1
FC L51 6+25	< 1	1.7	< 0.1	5.2	7.5	1.1	4.5	1	0.4	0.9	0.2	0.9	0.1	0.4	< 0.1	0.3	< 0.1	9	< 2	< 100	3560	45	382	0.4	476	< 1	< 1	< 1	< 1
FC L51 6+50	< 1	1.4	< 0.1	4.8	12.3	1.2	5.1	1.3	0.5	1.6	0.3	1.3	0.2	0.6	< 0.1	0.4	< 0.1	17	< 2	< 100	3540	34	196	0.5	426	< 1	< 1	< 1	< 1
FC L51 6+75	< 1	0.9	< 0.1	0.8	1.7	0.2	0.8	0.2	0.1	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	11	< 2	< 100	3340	14	210	0.3	403	< 1	< 1	< 1	< 1
FC L51 7+00	2	1.4	< 0.1	0.6	2.1	0.2	0.9	2.6	0.1	0.2	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	15	< 2	< 100	6420	9	246	0.2	299	< 1	< 1	< 1	< 1
FC L51 7+25	< 1	2.2	< 0.1	5.6	5.2	1.7	8	2.3	0.7	2.4	0.4	2.5	0.5	1.6	0.3	1.7	0.3	10	< 2	< 100	3840	23	475	0.4	203	< 1	< 1	< 1	< 1
FC L51 7+50	< 1	1.1	< 0.1	3.4	4.5	3.4	4.7	1.5	0.6	1.6	0.3	1.7	0.3	1	0.2	1	0.2	14	< 2	< 100	26700	15	814	0.1	535	< 1	< 1	< 1	< 1
FC L51 7+75	< 1	0.8	< 0.1	4.1	2.9	1.3	5.5	1.5	0.6	1.6	0.3	1.6	0.3	0.9	0.2	1	0.2	6	< 2	< 100	7600	21	462	0.4	422	< 1	< 1	< 1	< 1
FC L51 8+00	< 1	1.7	< 0.1	1	2.3	0.2	0.9	0.2	< 0.1	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	0.1	< 0.1	14	< 2	< 100	2500	9	260	0.1	297	< 1	< 1	< 1	< 1
FC L51 8+25	< 1	1.4	< 0.1	1.8	2.5	1.2	2.5	0.8	0.3	0.7	0.1	0.7	0.1	0.3	< 0.1	0.4	< 0.1	7	< 2	< 100	3500	14	349	0.2	616	< 1	< 1	< 1	< 1
FC L51 8+50	< 1	1.6	< 0.1	0.5	1.6	6.2	0.8	0.2	0.2	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	20	< 2	< 100	9210	11	180	0.3	547	< 1	< 1	< 1	< 1
FC L51 8+75	< 1	1	< 0.1	5	1.4	0.1	0.9	0.2	0.1	0.2	< 0.1	0.2	< 0.1	0.2	< 0.1	0.3	< 0.1	5	< 2	< 100	1120	13	145	0.2	307	< 1	< 1	< 1	< 1
FC L51 9+00	< 1	1.2	< 0.1	0.8	2.4	0.2	0.9	0.3	0.2	0.3	< 0.1	0.4	< 0.1	0.2	< 0.1	0.1	< 0.1	16	< 2	< 100	7080	14	251	0.2	346	< 1	< 1	< 1	< 1
FC L51 9+25	< 1	1.1	< 0.1	1.4	2.8	0.2	1.3	0.4	0.2	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	4	< 2	< 100	6960	9	516	0.2	337	< 1	< 1	< 1	< 1
FC L51 9+50	< 1	0.7	< 0.1	2.2	5.8	0.9	5	2.1	1	2.3	0.4	2.2	0.4	1.1	0.2	1.1	0.2	9	< 2	< 100	118000	11	277	0.2	583	< 1	< 1	< 1	< 1
FC L51 9+75	< 1	1.6	< 0.1	2.2	7.5	0.8	3.7	1.2	0.6	1.3	0.3	1.3	0.2	0.6	0.1	0.5	< 0.1	21	< 2	< 100	6430	19	192	0.4	592	< 1	< 1	< 1	< 1
FC L51 10+00	< 1	1.5	< 0.1	2.7	4.2	1	4.4	1.3	0.5	1.3	0.3	1.4	0.2	0.7	0.1	0.8	0.1	9	< 2	< 100	2150	27	349	0.4	333	< 1	< 1	< 1	< 1
FC L51 10+25	< 1	1.1	< 0.1	2.2	3.3	0.7	3.2	1	0.4	1	0.2	1	0.2	0.6	0.1	0.6	0.1	11	< 2	< 100	2940	17	450	0.3	261	< 1	< 1	< 1	< 1
FC L51 10+50	1	1.5	< 0.1	1.5	3.9	0.4	1.9	0.5	0.3	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	11	< 2	< 100	13900	24	245	0.3	667	< 1	< 1	< 1	< 1
FC L51 10+75	< 1	1.5	< 0.1	0.8	9.8	0.3	1.2	0.4	0.2	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.3	< 0.1	9	< 2	< 100	3860	19	352	0.4	308	< 1	< 1	< 1	< 1
FC L51 11+00	< 1	1.9	< 0.1	1.1	7.6	0.3	1.5	0.5	0.2	0.7	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	10	< 2	< 100	16600	17	614	0.3	266	< 1	< 1	< 1	< 1
FC L51 11+25	< 1	0.5	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	20	< 2	< 100	10900	13	158	0.3	404	< 1	< 1	< 1	< 1
FC L51 11+50	2	1.3	< 0.1	1.2	1.9	0.3	1.2	0.4	0.2	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	30	< 2	< 100	6610	22	95	0.3	577	< 1	< 1	< 1	< 1
FC L51 11+75	< 1	1.2	< 0.1	1.8	3.7	0.5	2.3	0.6	0.3	0.6	< 0.1	0.5	< 0.1	0.2	< 0.1	0.3	< 0.1	25	< 2	< 100	3350	18	112	0.3	695	< 1	< 1	< 1	< 1
FC L51 12+00	1	1.1	< 0.1	0.3	0.8	0.1	0.4	0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	< 0.1	29	< 2	< 100	11500	14	166	0.3	319	< 1	< 1	< 1	< 1
FC L51 12+25	< 1	2.1	< 0.1	1.7	4.6	0.6	3.4	1.2	0.7	1.3	0.3	1.4	0.3	0.7	0.1	0.7	0.1	14	< 2	< 100	56800	15	557	0.2	554	< 1	< 1	< 1	< 1
FC L51 12+50	< 1	1.4	< 0.1	0.9	5.7	0.3	1.7	0.6	0.4	0.7	0.1	0.7	0.1	0.3	< 0.1	0.4	< 0.1	16	< 2	< 100	44900	23	247	0.3	809	< 1	< 1	< 1	< 1
FC L51 12+75	1	2.8	< 0.1	2.8	5.5	0.5	3.1	1.9	0.3	0.6	< 0.1	0.5	0.1	0.2	< 0.1	0.5	< 0.1	39	< 2	< 100	5010	35	106	1.2	629	< 1	< 1	< 1	< 1
FC L51 13+00	< 1	3	< 0.1	0.5	1.1	0.2	0.4	0.2	0.1	0.2	< 0.1	0.2	< 0.1	0.2	< 0.1	0.3	< 0.1	24	< 2	< 100	1870	36	151	1	357	< 1	< 1	< 1	< 1
FC L51 13+25	< 1	2.2	< 0.1	3	5.5	1	5.3	1.7	0.6	1.9	0.4	2.1	0.5	1.4	0.3	1.7	0.3	4	< 2	< 100	5690	22	503	0.2	295	< 1	< 1	< 1	< 1
FC L51 13+50	< 1	2	< 0.1	2.6	4.6	0.7	3.1	0.9	0.3	0.9	0.2	1	0.2	0.6	0.1	0.6	0.1	14	< 2	< 100	2480	17	484	0.3	398	< 1	< 1	< 1	< 1
FC L51 13+75	< 1	2.1	< 0.1	2.1	4.4	0.7	3.2	1	0.4	1.1	0.2	1.3	0.2	0.8	0.1	0.9	0.2	5	< 2	< 100	13000	23	1030	0.2	458	< 1	< 1	< 1	< 1
FC L51 14+00	< 1	1.3	< 0.1	1.8	15	0.7	3.3	1.1	0.8	1.1	0.2	1	0.2	0.6	0.1	0.7	0.1	4	< 2	< 100	8660	11	385	0.2	550	< 1	< 1	< 1	< 1
FC L51 14+25	< 1	1.4	< 0.1	1.8	8.2	1.1	3.3	1	0.5	1	0.2	1.1	0.2	0.6	0.1	0.6	0.1	5	< 2	< 100	14700	24	338	0.5	717	< 1	< 1	< 1	< 1
FC L51 14+50	2	1	0.1	0.4	1.6	0.4	0.4	0.1	0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	20	< 2	< 100	3160	24	126	0.8	549	< 1	< 1	< 1	< 1
FC L51 14+75	< 1	1.7	< 0.1	2.1	6.7	0.7	3.6	1.2	0.5	1.7	0.2	1.2	0.2	0.6	0.1	0.6	0.1	15	< 2	< 100	7380	15	186	0.5	783	< 1	< 1	< 1	< 1
FC L51 15+00	< 1	1.1	< 0.1	1.2	2.1	0.3	1.4	0.6	0.3	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.2	< 0.1	6	< 2	< 100	4100	12	287	0.3	537	< 1	< 1	< 1	< 1
FC L51 15+25	1	0.9	< 0.1	1.4	3.1	0.6	1.7	0.6	0.3	0.6	0.1	0.6	< 0.1	0.4	< 0.1	0.3	< 0.1	23	2	< 100	4740	16	139	0.3	1290	< 1	< 1	< 1	< 1
FC L51 15+50	< 1	1.3	< 0.1	2.4	5.7	0.7	3	1	0.4	1.9	0.2	1	0.2	0.4	< 0.1	0.4	< 0.1	34	< 2	< 100	12900	20	93	0.4	1010	< 1	< 1	< 1	< 1
FC L51 15+75	2	1.2	< 0.1	0.5	8	0.2	1	0.2	0.1	0.3	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	44	< 2	< 100	12600	23	59	0.6	408	< 1	< 1	< 1	< 1
FC L51 16+00	1	1.5	< 0.1	0.3	0.7	0.3	0.4	0.1	0.2	1.5	< 0.1	0.2	< 0.1	0.1	< 0.1	0.1	< 0.1	23	< 2	< 100	7270	19	76	0.7	719	< 1	< 1	< 1	< 1
FC L51 16+25	1	1.2	< 0.1	1.2	3.3	0.4	1.9	0.7	0.4	0.7	0.1	0.9	0.2	0.5	< 0.1	0.6	< 0.1	37	2	< 100	8860	23	77	0.5	841	< 1	< 1	< 1	< 1
FC L51 16+50	2	1.5	0.2	2.4	11.1	0.6	2.6	0.8	0.4	0.8	0.2	0.8	0.1	0.5	< 0.1	0.4	< 0.1	43	< 2	< 100	24200	18	301	0.7	978	< 1	< 1	< 1	< 1
FC L51 16+75	< 1	2	< 0.1	8.2	13.3	2.8	12.5	3.5	1.1	3.5	0.7	3.9	0.8	2.3	0.4	2.7	0.5	5	< 2	< 100	4490	27	360	0.5	288	< 1	< 1	< 1	< 1
FC L51 17+00	< 1	1	0.1	2.1	14.4	0.7	2.9	0.8	0.4	0.8	0.2	1	0.2	0.5	< 0.1	0.5	< 0.1	9	< 2	< 100	7330	22	243	0.5	908	< 1	< 1	< 1	< 1
FC L51 17+25	< 1	1	< 0.1	1.4	3.3	0.4	1.9	0.5	0.3	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	25	< 2	< 100	2820	15	183	0.2	1410	< 1	< 1	< 1	< 1
FC L51 17+50	5	1.5	0.4	12.2	5.8	0.6	2.8	0.8	0.8	0.9	0.2	1	0.2	0.5	< 0.1	0.6	< 0.1	61	2	< 100	20300	48	631	1.3	3220	< 1	< 1	< 1	< 1
FC L51 17+75	1	1	< 0.1	1.9	4.3	4.6	2.3	0.7	0.3	0.7	0.1	0.7	0.1	0.4	< 0.1	0.3	< 0.1	23	< 2	< 100	1630	25	153	0.2	898	< 1	< 1	< 1	< 1
FC L51 18+00	< 1	1.6	< 0.1	3.9	15.7	1.4	5.8	2	0.6	1.6	0.3	1.6	0.3	0.9	0.5	0.9	0.1	5	< 2	< 100	8930	23	311	0.4	1050	< 1	< 1	< 1	< 1
FC L51 18+25	< 1	2.2	< 0.1	4.2	14.7	1.4	6.7	1.6	0.6	1.7	0.3	1.7	0.4	1	0.2	1.1	0.2	9	< 2	< 100	11300	32	177	0.6	993	< 1	< 1	< 1	< 1
FC L51 18+50	< 1	1.1	< 0.1	3	8.8	0.9	4.1	1.1	0.5	1.1	0.2	1	0.2	0.5	< 0.1	0.8	< 0.1	12	< 2	< 100	9030	13	156	0.2	1000	< 1	< 1	< 1	< 1
FC L51 18+75	< 1	1.4	< 0.1	2.6	6.4	0.6	4.1	0.7	0.9	0.7	0.1	0.7	0.1	0.4	< 0.1	0.4	< 0.1	7	< 2	< 100	4660	34	97	0.3	1760	< 1	< 1	< 1	< 1
FC L51 19+00	< 1	1	< 0.1	1.6	4.7	0.5	2.1	0.6	0.3	0.6	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	40	< 2	< 100	7160	17	85	0.2	900	< 1	< 1	< 1	< 1
FC L51 19+25	2	1.5	< 0.1	1.4	5	0.5	2.3	0.6	0.5	0.6	0.1	0.7	0.1	0.3	< 0.1	0.5	< 0.1	14	< 2	< 100	8510	16	243	0.3	1420	< 1	< 1	< 1	< 1
FC L51 19+50	< 1	0.7	0.1	11.2	3.4	0.4	1.8	0.5	0.4	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.4	< 0.1	12	< 2	< 100	2160	32	142	0.3	1680	< 1	< 1	< 1	< 1
FC L51 19+75	< 1	1.2	< 0.1	3.2	10.1	1.1	4.9	1.3	0.6	1.3	0.2	1.3	0.2	0.6	< 0.1	0.7	< 0.1	9	< 2	< 100	6620	16	189	0.2	1580	< 1	< 1	< 1	< 1
FC L51 20+00	< 1	1.1	< 0.1	1.5	4.5	0.4	2.1	0.6	0.4	0.6	0.1	0.7	0.1	0.3	< 0.1	0.3	< 0.1	8	< 2	< 100	4420	17	252	0.3	1290	< 1	< 1	< 1	< 1
FC L51 20+25	< 1	0.6	< 0.1	2.9	7	0.9	4.1	1	0.6	1	0.2	0.9	0.2	0.4	< 0.1	0.4	0.1	15	< 2	< 100	3390	15	145	0.3	1890	< 1	< 1	< 1	< 1
FC L51 20+50	< 1	0.8	< 0.1	5.2	17.9	1.6	7.2	1.9	0.9	1.9	0.4	1.9	0.3	0.9	0.1	0.8	0.1	12	2	< 100	3980	35	120	0.3	1770	< 1	< 1	< 1	< 1
FC L51 20+75	< 1	1	< 0.1	2.8	8.6	0.8	3.4	1.4	1	0.9	0.2	0.8	0.1	1.4	< 0.1	0.3	< 0.1	15	< 2	< 100	5810	19	260	0.1	2630	< 1	< 1	< 1	< 1
FC L51 21+00	< 1	0.7	< 0.1	1.1	3.1	0.4	1.5	0.5	0.4	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	13	< 2	< 100	7780	15	210	0.3	1860	< 1	< 1	< 1	< 1
FC L51 21+25	< 1	1.1	< 0.1	1.5	4	0.4	1.7	0.5	0.4	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	7	< 2	< 100	3590	16	477	0.3	1560	< 1	< 1	< 1	< 1
FC L51 21+50	< 1	1.1	< 0.1	8.5	6.2	1.1	5.3	1.4	0.5	1.5	0.3	1.6	0.4	1.1	0.2	1.5	0.3	9	< 2	< 100	5000	21	767	0.3	603	< 1	< 1	< 1	< 1
FC L51 21+75	< 1	1.3	< 0.1	4.2	6.2	1.2	5.3	1.3	0.5	1.3	0.3	1.4	0.2	0.8	0.1	0.9	0.1	8	< 2	< 100	4140	19	957	0.3	646	< 1	< 1	< 1	< 1
FC L51 22+00	1	2.5	< 0.1	6.3	11.5	1.8	8.3	2.3	0.9	2.2	0.4	2.1	0.4	1.4	0.2	1.6	0.3	11	< 2	< 100	14900	18	709	0.5	921	< 1	< 1	< 1	< 1
FC L51 22+25	< 1	1.1	< 0.1	6.2	9.8	1.6	7.2	1.8	0.6	1.9	0.3	1.8	0.3	1	0.2	1	0.2	5	< 2	< 100	5130	19	840	0.2	481	< 1	< 1	< 1	< 1
FC L51 22+50	< 1	1.8	< 0.1	5.8	10.6	1.8	8.3	2.2	0.9	2.2	0.4	2	0.4	1	0.2	1	0.1	4	< 2	< 100	1800	21	433	0.5	681	< 1	< 1	< 1	< 1
FC L51 22+75	1	1	< 0.1	11.8	11.7	1.4	6.1	1.4	0.5	1.5	0.3	2.1	0.3	0.8	0.1	0.8	0.2	8	< 2	< 100	10000	20	741	0.3	537	< 1	< 1	< 1	< 1
FC L51 23+00	< 1	1	< 0.1	5.2	8.9	1.5	6.5	1.6	0.5	1.6	0.3	1.5	0.3	1	0.2	1	0.2	4	< 2	< 100	3840	25	881	0.3	302	< 1	< 1	< 1	< 1
FC L51 23+25	1	1.4	0.1	6	14.9	1.8	7.8	2	0.6	1.9	0.3	1.5	0.3	0.7	0.2	0.8	0.1	14	< 2	< 100	3250	18	645	0.2	435	< 1	< 1	< 1	< 1

Report: A06-4172

Final Report
Activation Laboratories

Analyte Symbol	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	< 1	1.8	< 0.1	10.4	18.8	2.7	11	2.5	0.7	2.2	0.4	2	0.3	0.9	0.1	0.7	0.1	13	< 2	< 100	3030	29	331	0.4	490	< 1	< 1	< 1	< 1
FC L51 23+50	< 1	1.8	< 0.1	9	16.8	2.5	11.1	2.5	0.8	2.2	0.4	2	0.4	1.1	0.2	1.2	0.2	15	< 2	< 100	7230	30	755	0.6	682	< 1	< 1	< 1	< 1
FC L51 23+75	2	1.1	< 0.1	9.5	11.6	2.8	9.8	2.2	0.7	2	0.3	1.7	0.3	1.1	0.1	1.1	0.2	6	< 2	< 100	4430	20	515	0.4	496	< 1	< 1	< 1	< 1
FC L51 24+00	1	2.3	0.1	6.9	9.8	2	8.2	2	0.7	1.7	0.3	1.5	0.3	0.8	0.1	0.7	0.1	10	< 2	< 100	1960	28	495	0.5	820	< 1	< 1	< 1	< 1
FC L51 24+25	< 1	1	< 0.1	7.2	13.3	1.9	8	1.8	0.5	1.6	0.3	1.4	0.3	0.8	0.1	0.8	0.1	14	< 2	< 100	6780	22	835	0.4	524	< 1	< 1	< 1	< 1
FC L51 24+50	< 1	1.3	< 0.1	8.5	23.4	2.4	10.1	2.3	0.6	1.9	0.4	1.7	0.3	0.9	0.1	0.9	0.1	6	< 2	< 100	3920	22	398	0.3	418	< 1	< 1	< 1	< 1
FC L51 24+75	1	1.2	0.1	5.7	10.2	1.1	4.6	1	0.3	0.9	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	16	< 2	< 100	2920	19	384	0.3	776	< 1	< 1	< 1	< 1
FC L51 25+00	< 1	0.9	< 0.1	13.9	26.8	3.8	15.9	3.5	1.1	3.1	0.5	2.7	0.5	1.4	0.2	1.4	0.2	9	< 2	< 100	9290	25	588	0.4	1120	< 1	< 1	< 1	< 1
FC L51 25+25	< 1	0.9	< 0.1	7	21.3	2	8	1.9	0.5	1.7	0.3	1.3	0.3	0.7	0.1	0.7	0.1	4	< 2	< 100	6080	32	566	0.3	606	< 1	< 1	< 1	< 1
FC L51 25+50	1	1.6	< 0.1	16.4	17.9	5.1	21.4	5	1.3	4.3	0.8	3.7	0.8	2.1	0.3	2.3	0.3	8	< 2	< 100	1290	33	424	0.4	479	< 1	< 1	< 1	< 1
FC L51 25+75	1	1.4	0.1	15.1	21.7	5.1	20.4	5.3	1.3	3.6	0.6	3	0.6	1.8	0.2	1.6	0.3	27	< 2	< 100	3740	30	340	0.6	624	< 1	< 1	< 1	< 1
FC L51 26+00	< 1	1	< 0.1	13.2	21.4	3.9	17.3	4.1	1.3	3.8	0.7	3.6	0.7	2.1	0.3	2.1	0.3	4	< 2	< 100	2080	16	370	0.4	465	< 1	< 1	< 1	< 1
FC L51 26+25	< 1	1.4	< 0.1	19.7	12	7	29.2	7.3	2.4	6.9	1.3	7.3	1.5	4.3	0.7	4.6	0.7	4	< 2	< 100	4610	32	329	0.6	735	< 1	< 1	< 1	< 1
FC L51 26+50	1	2.1	0.1	22.9	30.2	7.2	32.3	7.7	2.3	7.2	1.2	6.6	1.4	4.1	0.6	4.4	0.7	7	< 2	< 100	7800	45	292	0.6	1250	< 1	< 1	< 1	< 1
FC L51 26+75	2	1.6	< 0.1	12.5	26.4	4.3	17.1	4.7	1.1	4.2	0.6	3.3	0.6	1.7	0.2	1.5	0.2	12	< 2	< 100	3480	56	168	0.6	809	< 1	< 1	< 1	< 1
FC L51 27+00	< 1	1.8	< 0.1	9.9	23.6	3.6	16	3.8	1.2	3.5	0.6	3	0.6	1.8	0.3	2	0.3	6	< 2	< 100	10900	41	275	0.5	1380	< 1	< 1	< 1	< 1
FC L51 27+25	< 1	0.9	< 0.1	6.1	7.6	1.6	6.4	1.4	0.6	1.3	0.2	1.2	0.2	0.8	< 0.1	0.6	< 0.1	8	< 2	< 100	8200	29	703	0.3	869	< 1	< 1	< 1	< 1
FC L51 27+50	< 1	1.4	< 0.1	5.6	10.3	1.8	8.1	2.2	0.6	1.9	0.3	1.6	0.3	1	0.1	1.2	0.2	8	< 2	< 100	2860	19	334	0.6	518	< 1	< 1	< 1	< 1
FC L51 27+75	2	0.9	0.1	1.8	10.5	0.5	1.8	0.4	0.3	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	13	< 2	< 100	2900	16	356	0.3	1330	< 1	< 1	< 1	< 1
FC L51 28+00	1	1.2	0.1	1.8	3.5	0.4	2	0.4	0.3	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	13	< 2	< 100	1300	22	350	0.5	901	< 1	< 1	< 1	< 1
FC L51 28+25	< 1	1.1	< 0.1	2.7	5.8	0.6	2.7	0.7	0.3	0.7	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	5	< 2	< 100	7130	13	1570	0.1	1060	< 1	< 1	< 1	< 1
FC L51 28+50	< 1	0.4	< 0.1	2.7	5.1	0.7	3.2	5.6	0.5	1	0.2	1.3	0.3	0.8	0.1	0.9	0.2	11	< 2	< 100	14200	12	882	0.4	658	< 1	< 1	< 1	< 1
FC L51 28+75	< 1	1.2	< 0.1	20.1	44.7	5.7	24.6	5.7	1.7	5.8	1	5.6	1.1	3.4	0.5	3.6	0.6	14	< 2	< 100	7360	29	748	0.8	825	< 1	< 1	< 1	< 1
FC L51 29+00	< 1	0.4	< 0.1	5.8	15.5	1.5	6.6	1.6	0.5	1.6	0.3	1.7	0.3	0.9	0.1	0.8	0.2	9	< 2	< 100	5070	14	546	0.2	329	< 1	< 1	< 1	< 1
FC L51 29+25	1	2.3	< 0.1	8.6	14	2	8.3	1.8	0.6	1.6	0.3	1.5	0.3	0.7	0.1	0.8	0.1	21	< 2	< 100	1410	16	873	0.3	663	< 1	< 1	< 1	< 1
FC L51 29+50	< 1	0.3	< 0.1	3.2	6.5	0.8	3.5	0.7	0.4	0.9	0.1	0.8	0.1	0.4	< 0.1	0.5	< 0.1	11	< 2	< 100	8760	16	944	0.5	624	< 1	< 1	< 1	< 1
FC L51 29+75	2	0.6	< 0.1	0.6	1.1	0.2	0.6	0.1	0.3	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	10	< 2	< 100	14000	13	386	0.4	1260	< 1	< 1	< 1	< 1
FC L51 30+00	< 1	1.1	< 0.1	2.1	4.4	0.5	2	0.7	0.2	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	8	< 2	< 100	1300	17	350	0.3	674	< 1	< 1	< 1	< 1
FC L52 8+25	< 1	1.2	< 0.1	3.1	5.4	1	4.8	1.5	0.6	1.5	0.3	1.7	0.3	0.9	0.2	1.1	0.2	12	< 2	< 100	2720	17	513	0.2	427	< 1	< 1	< 1	< 1
FC L52 8+50	< 1	0.8	< 0.1	0.5	0.5	< 0.1	22.9	< 0.1	0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	30	< 2	< 100	6670	11	299	0.2	548	< 1	< 1	< 1	< 1
FC L52 8+75	< 1	0.5	< 0.1	3.5	7.6	1.1	5.4	1.5	0.6	1.6	0.3	1.7	0.3	0.8	0.1	0.9	0.2	68	< 2	< 100	11900	74	636	0.5	976	< 1	< 1	< 1	< 1
FC L52 9+00	< 1	1.1	< 0.1	12.8	20.6	5	25.9	7.9	2.2	8.8	1.5	7.6	1.4	3.8	0.6	4.4	0.7	13	< 2	< 100	18600	20	146	0.4	756	< 1	< 1	< 1	< 1
FC L52 9+75	< 1	0.9	< 0.1	2.7	4.6	5.5	4.1	1.2	0.4	1.3	0.2	1.1	0.2	0.5	< 0.1	0.5	< 0.1	43	< 2	< 100	2360	16	171	0.3	321	< 1	< 1	< 1	< 1
FC L52 10+00	1	3.8	< 0.1	13.6	28	4.9	24.2	8	2.8	9	1.9	10.1	1.7	4.5	0.6	4.6	0.6	25	4	< 100	5370	27	228	0.5	465	< 1	< 1	< 1	< 1
FC L52 10+25	< 1	1.1	< 0.1	2.2	4.9	0.6	3	1	0.3	0.8	0.2	0.8	0.1	0.4	< 0.1	0.3	< 0.1	24	< 2	< 100	1670	17	161	0.3	443	< 1	< 1	< 1	< 1
FC L52 10+50	< 1	1.5	< 0.1	3.2	8.2	0.9	4.4	1.3	0.5	1.4	0.3	1.6	0.3	0.7	0.1	0.9	0.2	52	< 2	< 100	21800	34	441	0.4	702	< 1	< 1	< 1	< 1
FC L52 10+75	< 1	3.2	< 0.1	6.3	15.9	2	9.5	2.8	0.9	3.1	0.6	3.1	0.6	1.8	0.3	2.3	0.4	34	< 2	< 100	37500	26	277	0.5	635	< 1	< 1	< 1	< 1
FC L52 11+00	< 1	2.4	< 0.1	5.4	16.5	1.6	7.1	2	0.8	2.2	0.4	2.3	0.4	1.3	0.2	1.6	0.3	65	< 2	< 100	17700	36	288	0.3	813	< 1	< 1	< 1	< 1
FC L52 11+25	< 1	2	< 0.1	5.6	8.8	1.6	8.1	2.3	0.8	2.3	0.5	2.5	0.4	1.4	0.2	1.6	0.2	10	< 2	< 100	11700	32	179	0.3	579	< 1	< 1	< 1	< 1
FC L52 11+50	< 1	1.5	< 0.1	1.6	4.1	0.8	2	0.7	0.3	0.6	0.1	0.8	0.1	0.4	< 0.1	1	< 0.1	8	< 2	< 100	19700	13	457	0.2	554	< 1	< 1	< 1	< 1
FC L52 11+75	< 1	1.8	< 0.1	3.8	8.7	1.2	5.4	1.6	0.5	1.7	0.3	1.9	0.3	1.1	0.2	1.3	0.2	7	< 2	< 100	13000	24	426	0.3	360	< 1	< 1	< 1	< 1
FC L52 12+00	< 1	2	< 0.1	3.2	7.9	1.3	5.1	1.7	0.6	1.7	0.3	2	0.4	1	0.2	1	0.2	10	< 2	< 100	10700	28	349	0.4	698	< 1	< 1	< 1	< 1
FC L52 12+25	< 1	2	< 0.1	2.6	8.2	0.9	3.9	1.2	0.4	1.1	0.2	1.2	0.2	0.6	0.1	0.7	0.1	12	< 2	< 100	10200	15	209	0.3	601	< 1	< 1	< 1	< 1
FC L52 12+50	< 1	1.1	< 0.1	1.4	2.7	0.4	2	0.6	0.2	0.6	< 0.1	0.6	0.1	0.3	< 0.1	0.4	< 0.1	12	< 2	< 100	3780	18	183	0.4	354	< 1	< 1	< 1	< 1
FC L52 12+75	< 1	1.7	< 0.1	1.1	1.7	0.6	1.6	0.4	0.2	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	7	< 2	< 100	10900	17	426	0.3	458	< 1	< 1	< 1	< 1
FC L52 13+00	< 1	2	< 0.1	5	3.9	1.5	6.8	1.9	0.6	2.1	0.4	2.4	0.5	1.5	0.3	1.9	0.3	4	< 2	< 100	2920	41	375	0.3	210	< 1	< 1	< 1	< 1
FC L52 13+25	< 1	1	< 0.1	1.5	2.6	0.9	1.9	0.5	0.2	0.4	< 0.1	0.5	< 0.1	0.2	< 0.1	0.3	< 0.1	18	< 2	< 100	2780	21	171	0.2	848	< 1	< 1	< 1	< 1
FC L52 13+50	< 1	2.1	< 0.1	2	5.7	0.7	3.1	1	0.4	1.1	0.2	1.2	0.3	0.6	< 0.1	0.7	< 0.1	34	< 2	< 100	4170	37	181	0.5	572	< 1	< 1	< 1	< 1
FC L52 13+75	< 1	1.7	< 0.1	0.9	2	0.8	1.2	0.4	0.2	1.7	< 0.1	0.4	< 0.1	0.2	< 0.1	0.3	< 0.1	15	< 2	< 100	6790	26	224	0.4	444	< 1	< 1	< 1	< 1
FC L52 14+00	< 1	1.2	< 0.1	6.3	1.4	0.2	0.6	0.2	0.2	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.2	< 0.1	18	< 2	< 100	6870	16	194	0.5	771	< 1	< 1	< 1	< 1
FC L52 14+25	< 1	2.3	< 0.1	3.8	16.3	1.4	6.8	2.2	0.9	2.5	0.6	2.9	0.5	1.5	0.3	1.8	0.3	43	3	< 100	9080	58	217	0.5	606	< 1	< 1	< 1	< 1
FC L52 14+50	< 1	0.9	< 0.1	7.6	3.4	0.3	1.3	0.5	0.2	0.6	< 0.1	0.6	< 0.1	0.2	< 0.1	0.3	< 0.1	10	< 2	< 100	7930	13	141	0.2	358	< 1	< 1	< 1	< 1
FC L52 14+75	< 1	1.4	< 0.1	2.3	6.8	0.7	3.1	0.9	0.4	0.8	0.2	1	0.1	0.4	< 0.1	0.4	< 0.1	29	< 2	< 100	4590	15	167	0.3	825	< 1	< 1	< 1	< 1
FC L52 15+00	2	1.4	0.1	0.5	1.9	0.1	1.5	0.2	0.1	0.2	< 0.1	0.2	< 0.1	0.2	< 0.1	0.3	< 0.1	30	< 2	< 100	6150	24	222	0.5	371	< 1	< 1	< 1	< 1
FC L52 15+25	2	1.7	< 0.1	3	2.7	0.8	5.1	1.1	0.4	2.6	0.2	1.3	0.3	1	0.2	1.1	0.2	17	< 2	< 100	1490	22	514	0.5	301	< 1	< 1	< 1	< 1
FC L52 15+75	< 1	1	< 0.1	3	8.3	0.9	3.8	1.1	0.4	1	0.2	1.1	0.2	0.6	< 0.1	0.5	< 0.1	30	3	< 100	3000	23	170	0.2	833	< 1	< 1	< 1	< 1
FC L52 16+00	< 1	1.3	< 0.1	1.4	3.5	0.5	1.9	0.5	0.3	0.5	< 0.1	0.6	< 0.1	0.3	< 0.1	0.4	< 0.1	49	< 2	< 100	1940	19	188	0.2	1100	< 1	< 1	< 1	< 1
FC L52 16+25	1	0.8	0.1	0.8	1.6	0.2	2.3	0.3	0.2	0.2	< 0.1	0.3	< 0.1	0.1	< 0.1	0.1	< 0.1	38	< 2	< 100	1670	26	123	0.4	648	< 1	< 1	< 1	< 1
FC L52 16+50	< 1	1.3	< 0.1	1.2	3.3	0.3	1.4	0.5	0.3	0.4	< 0.1	0.4	0.1	0.3	< 0.1	0.2	< 0.1	54	3	< 100	5190	27	90	0.3	1040	< 1	< 1	< 1	< 1
FC L52 16+75	< 1	1.4	0.1	1.4	4.5	0.4	2.2	0.9	0.5	1	0.2	1.2	0.2	0.5	< 0.1	0.5	< 0.1	33	< 2	< 100	21200	21	206	0.7	691	< 1	< 1	< 1	< 1
FC L52 17+00	< 1	1.4	< 0.1	2.4	6.4	0.8	3.8	1.3	0.8	1.3	0.2	1.5	0.2	0.8	0.1	0.7	0.1	19	2	< 100	12000	24	219	0.2	1850	< 1	< 1	< 1	< 1
FC L52 17+25	1	0.9	< 0.1	5	10.8	1.3	5.2	1.3	0.7	1.2	0.2	1.1	0.2	0.4	< 0.1	0.4	< 0.1	26	3	< 100	4310	15	200	0.3	1860	< 1	< 1	< 1	< 1
FC L52 17+50	< 1	1.4	< 0.1	2.9	5.6	0.7	2.8	0.8	0.5	0.9	0.1	0.8	0.1	0.4	< 0.1	0.4	< 0.1	23	< 2	< 100	4570	19	203	0.2	1600	< 1	< 1	< 1	< 1
FC L52 17+75	< 1	1	< 0.1	1.3	3.7	0.4	1.6	0.6	0.3	0.4	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	16	< 2	< 100	2980	16	247	0.2	893	< 1	< 1	< 1	< 1
FC L52 18+00	< 1	1.4	< 0.1	3.9	14.2	1.6	7.5	2.3	1	2.5	0.4	2.3	0.4	1.1	0.2	1.1	0.2	33	< 2	< 100	17000	18	229	0.6	754	< 1	< 1	< 1	< 1
FC L52 18+25	< 1	1.3	< 0.1	2.7	9.6	0.9	4.3	1.2	0.5	1.2	0.3	1.3	0.2	0.6	< 0.1	0.7	< 0.1	4	< 2	< 100	3620	23	372	0.3	608	< 1	< 1	< 1	< 1
FC L52 18+50	< 1	0.7	0.1	2.6	6.2	0.7	3.3	0.9	0.7	0.8	0.1	0.7	0.1	0.3	< 0.1	0.4	< 0.1	17	< 2	< 100	13700	18	227	0.3	895	< 1	< 1	< 1	< 1
FC L52 18+75	< 1	1.1	< 0.1	3.6	9.8	1.1	5.2	1.4	0.6	1.6	0.3	1.4	0.3	0.9	0.1	0.8	0.1	4	< 2	< 100	8260	28	341	0.2	693	< 1	< 1	< 1	< 1
FC L52 19+00	< 1	1.2	< 0.1	1.7	3.8	0.4	2.3	0.6	0.3	0.6	0.1	0.5	0.1	0.3	< 0.1	0.3	< 0.1	10	< 2	< 100	3180	13	159	0.2	1010	< 1	< 1	< 1	< 1
FC L52 19+25	1	0.9	< 0.1	0.8	2	0.2	1.1	0.3	0.3	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	0.5	< 0.1	15	< 2	< 100	2460	21	245	0.3	1680	< 1	< 1	< 1	< 1
FC L52 19+50	1	1.2	< 0.1	1.7	4.2	0.5	2.4	0.7	0.5	0.7	0.1	0.7	0.1	0.3	< 0.1	0.4	< 0.1	20	< 2	< 100	4010	14	204	0.2	1990	< 1	< 1	< 1	< 1
FC L52 19+75	< 1	0.7	< 0.1	4.4	5.7	1.3	5.9	1.6	0.5	1.7	0.3	1.6	0.4	1.1	0.2	1.2	0.2	12	< 2	< 100	3740	16	423	0.1	197	< 1	< 1	< 1	< 1
FC L52 20+00	< 1	1.8	< 0.1	9.8	16.6	3.3	14.2	4	1.6	4.3	0.8	3.6	0.6	1.6	0.2	1.3	0.2	31	< 2	< 100	19200	22	348	0.3	1530	< 1	< 1	< 1	< 1

Report: A06-4172

Final Report
Activation Laboratories

Analyte Symbol	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	< 1	1.8	< 0.1	10.4	18.8	2.7	11	2.5	0.7	2.2	0.4	2	0.3	0.9	0.1	0.7	0.1	13	< 2	< 100	3030	29	331	0.4	490	< 1	< 1	< 1	< 1
FC L52 20+25	< 1	0.9	< 0.1	4.1	10.3	1.2	5.3	1.4	0.7	1.5	0.3	1.4	0.3	0.8	0.1	0.7	0.1	5	< 2	< 100	8570	11	295	0.2	1680	< 1	< 1	< 1	< 1
FC L52 20+50	< 1	1.5	< 0.1	7	14.6	2.2	9.9	2.6	1.1	3	0.6	2.9	0.6	1.9	0.3	1.9	0.3	6	< 2	< 100	14800	18	394	0.3	1170	< 1	< 1	< 1	< 1
FC L52 20+75	< 1	1.8	< 0.1	7.5	6.8	2.1	9.6	2.5	0.9	2.7	0.5	2.5	0.5	1.5	0.2	1.7	0.3	6	< 2	< 100	7170	17	636	0.1	955	< 1	< 1	< 1	< 1
FC L52 21+00	< 1	1.2	< 0.1	2.8	6.1	6.4	3.8	0.9	0.4	0.9	0.2	0.9	0.2	0.5	< 0.1	0.6	< 0.1	5	< 2	< 100	4250	16	325	0.2	967	< 1	< 1	< 1	< 1
FC L52 21+25	< 1	1.3	< 0.1	2.6	11.3	0.8	4	1.2	0.6	1.3	0.3	1.3	0.3	0.9	0.1	1.2	0.2	18	< 2	< 100	18300	19	374	0.6	1260	< 1	< 1	< 1	< 1
FC L52 21+50	< 1	0.8	< 0.1	5.3	11.1	1.3	5.7	1.5	0.5	1.7	0.3	1.5	0.3	0.9	0.1	1.1	0.2	6	< 2	< 100	7520	15	706	0.1	575	< 1	< 1	< 1	< 1
FC L52 21+75	< 1	1	< 0.1	6.3	8.5	1.7	7.8	2	0.7	2.3	0.4	2	0.4	1.4	0.2	1.6	0.3	4	< 2	< 100	17500	30	931	0.3	656	< 1	< 1	< 1	< 1
FC L52 22+00	1	1.1	< 0.1	1.1	2	0.3	2.9	0.3	0.3	0.3	< 0.1	0.3	< 0.1	0.2	< 0.1	0.3	< 0.1	16	< 2	< 100	3940	10	564	0.4	1340	< 1	< 1	< 1	< 1
FC L52 22+25	< 1	1.9	< 0.1	7.4	9.7	2.1	9.3	2.5	0.9	2.8	0.5	2.5	0.5	1.5	0.2	1.4	0.2	5	< 2	< 100	3370	14	674	0.2	944	< 1	< 1	< 1	< 1
FC L52 22+50	< 1	1.1	< 0.1	3.5	4.3	0.9	3.8	1	0.4	1.1	0.2	1	0.2	0.6	< 0.1	0.6	0.1	7	< 2	< 100	4780	16	854	< 0.1	485	< 1	< 1	< 1	< 1
FC L52 22+75	< 1	1.3	< 0.1	4.7	7.9	1.3	5.5	1.5	0.6	1.6	0.3	1.5	0.3	0.8	0.1	1.1	0.1	5	< 2	< 100	5500	16	731	0.1	737	< 1	< 1	< 1	< 1
FC L52 23+00	< 1	1.3	< 0.1	9.1	20.8	2.6	11	2.8	1	2.9	0.5	2.6	0.5	1.6	0.2	1.7	0.3	4	< 2	< 100	8900	15	476	0.2	763	< 1	< 1	< 1	< 1
FC L52 23+25	< 1	0.3	< 0.1	3	2.3	0.7	3	0.7	0.3	0.7	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	5	< 2	< 100	1430	17	940	< 0.1	376	< 1	< 1	< 1	< 1
FC L52 23+50	< 1	0.4	< 0.1	3.7	6.7	0.9	3.9	0.9	0.3	1	0.2	0.8	0.2	0.6	< 0.1	0.6	< 0.1	5	< 2	< 100	4710	15	900	< 0.1	391	< 1	< 1	< 1	< 1
FC L52 23+75	< 1	0.6	< 0.1	6.6	8.6	1	4.5	1	0.4	1	0.2	0.8	0.1	0.4	< 0.1	0.4	< 0.1	3	< 2	< 100	3580	44	1210	< 0.1	747	< 1	< 1	< 1	< 1
FC L52 24+00	1	1.6	< 0.1	3.5	16.4	1	4.5	1.2	0.4	1	0.2	0.8	0.1	0.3	< 0.1	0.4	< 0.1	6	< 2	< 100	2990	27	338	0.3	945	< 1	< 1	< 1	< 1
FC L52 24+25	< 1	1.1	< 0.1	1.7	4.8	0.5	1.8	0.7	0.2	0.5	< 0.1	0.4	< 0.1	0.2	0.1	0.3	< 0.1	27	< 2	< 100	5140	22	299	0.3	623	< 1	< 1	< 1	< 1
FC L52 24+50	1	1.7	< 0.1	14.3	16	4.2	14.9	3.3	0.9	3.2	0.5	2.5	0.5	1.7	0.2	1.7	0.3	17	< 2	< 100	5230	31	542	0.4	407	< 1	< 1	< 1	< 1
FC L52 24+75	< 1	1.1	< 0.1	6.3	14.6	1.6	6.8	1.6	0.6	1.7	0.3	1.6	0.3	0.9	0.1	0.8	0.1	7	< 2	< 100	5020	24	509	0.2	601	< 1	< 1	< 1	< 1
FC L52 25+00	< 1	0.6	< 0.1	8.8	17.2	2.3	9.5	2	0.7	2	0.4	1.6	0.4	1.1	0.1	1.2	0.2	4	< 2	< 100	4000	27	630	0.2	575	< 1	< 1	< 1	< 1
FC L52 25+25	2	0.6	0.1	1.2	2.2	0.3	1	0.2	0.2	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.2	< 0.1	10	< 2	< 100	359	21	374	0.7	629	< 1	< 1	< 1	< 1
FC L52 25+50	1	1.5	< 0.1	15.4	25.3	3.8	16.2	3.8	1	3.7	0.6	3	0.6	1.9	0.2	2.1	0.4	6	< 2	< 100	4290	21	647	0.2	529	< 1	< 1	< 1	< 1
FC L52 25+75	1	0.7	< 0.1	7.5	13.9	1.8	7.5	1.7	0.6	1.5	0.3	1.2	0.3	0.8	0.1	1.1	0.2	17	< 2	< 100	18500	27	524	0.7	734	< 1	< 1	< 1	< 1
FC L52 26+00	< 1	1.6	< 0.1	11.6	8.9	2.9	12.3	3	1	3	0.5	2.7	0.5	1.4	0.2	1.3	0.2	8	< 2	< 100	1970	26	367	0.4	699	< 1	< 1	< 1	< 1
FC L52 26+25	1	1.1	< 0.1	6.6	7.6	1.5	6.8	1.7	0.7	1.7	0.3	1.6	0.3	1	0.1	1	0.1	12	< 2	< 100	3340	16	279	0.2	838	< 1	< 1	< 1	< 1
FC L52 26+50	< 1	1.2	< 0.1	9.3	29.8	2.7	11.8	2.9	1.2	2.8	0.5	2.7	0.5	1.3	0.2	1.6	0.2	6	< 2	< 100	2090	28	334	0.4	1220	< 1	< 1	< 1	< 1
FC L52 26+75	2	1.1	< 0.1	1.9	5.6	0.8	2.2	0.7	0.7	0.8	0.1	0.7	0.1	0.4	< 0.1	0.4	< 0.1	13	< 2	< 100	6140	8	384	0.2	3120	< 1	< 1	< 1	< 1
FC L52 27+00	1	1.2	0.1	5.6	16.5	2	8.4	2.4	1	2.3	0.5	2.5	0.5	1.3	0.2	1.1	0.1	7	< 2	< 100	2030	29	181	0.5	1560	< 1	< 1	< 1	< 1
FC L52 27+25	1	1	< 0.1	1.7	4.1	0.5	2.5	0.7	0.5	0.8	0.1	0.8	0.2	0.3	< 0.1	0.5	< 0.1	14	< 2	< 100	3040	15	436	0.3	2080	< 1	< 1	< 1	< 1
FC L52 27+50	1	1.3	0.2	9.8	3.5	0.4	2	0.5	0.4	0.5	< 0.1	0.5	< 0.1	0.3	< 0.1	0.4	< 0.1	9	< 2	< 100	7390	19	314	0.2	1530	< 1	< 1	< 1	< 1
FC L52 27+75	3	1	< 0.1	1.3	2.8	0.5	1.4	0.4	0.7	0.4	< 0.1	0.5	< 0.1	0.2	< 0.1	0.3	< 0.1	15	< 2	< 100	8830	15	648	0.3	3680	< 1	< 1	< 1	< 1
FC L52 28+00	1	0.8	< 0.1	3.1	10.3	0.8	3.1	0.8	0.6	0.8	0.1	0.7	0.1	0.3	< 0.1	0.3	< 0.1	15	< 2	< 100	4440	25	612	0.2	2120	< 1	< 1	< 1	< 1
FC L52 28+25	< 1	1.2	< 0.1	12.2	7.3	2.9	12.1	2.7	0.9	2.6	0.4	2.2	0.5	1.5	0.2	1.5	0.3	7	< 2	< 100	10200	36	1180	0.3	921	< 1	< 1	< 1	< 1
FC L52 28+50	< 1	0.7	< 0.1	4.7	5.8	1.1	4.9	1.4	0.5	1.3	0.2	1.3	0.3	0.9	0.2	1	0.2	11	< 2	< 100	7610	18	1900	0.2	782	< 1	< 1	< 1	< 1
FC L52 28+75	< 1	0.6	< 0.1	6.2	12.6	1.4	6.9	1.4	0.4	1.3	0.2	1.2	0.2	0.7	0.1	0.9	0.1	10	< 2	< 100	5570	19	681	0.5	433	< 1	< 1	< 1	< 1
FC L52 29+00	< 1	0.2	< 0.1	1.9	4.1	0.4	1.9	0.4	0.2	0.5	< 0.1	0.4	< 0.1	0.2	< 0.1	0.3	< 0.1	11	< 2	< 100	5120	12	890	0.2	406	< 1	< 1	< 1	< 1
FC L52 29+25	< 1	0.4	< 0.1	3.1	6.8	7.3	2.8	0.6	0.2	0.6	< 0.1	0.5	0.1	0.3	< 0.1	0.4	< 0.1	11	< 2	< 100	3470	34	1440	0.2	513	< 1	< 1	< 1	< 1
FC L52 29+50	< 1	1.2	< 0.1	9.5	10.8	2.7	11.2	4.4	0.7	2.6	0.5	2.3	0.5	1.4	0.2	1.4	0.2	2	< 2	< 100	1060	23	486	0.3	554	< 1	< 1	< 1	< 1
FC L52 29+75	< 1	0.4	< 0.1	7	11.8	1.7	6.9	1.5	0.5	1.5	0.2	1.2	0.3	0.7	0.1	0.7	0.1	3	< 2	< 100	8620	22	1240	< 0.1	870	< 1	< 1	< 1	< 1
FC L53 8+50	< 1	0.5	< 0.1	2.1	4.9	0.6	2.5	0.7	0.3	0.6	0.1	0.6	< 0.1	0.2	< 0.1	0.2	< 0.1	33	< 2	< 100	2600	12	440	< 0.1	621	< 1	< 1	< 1	< 1
FC L53 8+75	< 1	0.8	< 0.1	4.7	4.1	1.2	5.8	1.5	0.7	1.5	0.3	1.7	0.3	0.9	0.2	0.9	0.1	6	< 2	< 100	1830	34	407	0.2	1060	< 1	< 1	< 1	< 1
FC L53 9+00	< 1	0.6	< 0.1	1.4	3.2	0.4	1.8	0.5	0.2	0.6	< 0.1	0.5	< 0.1	0.2	< 0.1	0.2	< 0.1	9	< 2	< 100	3120	9	353	0.1	610	< 1	< 1	< 1	< 1
FC L53 9+75	< 1	1.4	< 0.1	4.2	15.6	1.3	6.1	1.9	0.8	2.2	0.4	2.4	0.5	1.3	0.2	1.4	0.3	5	< 2	< 100	48000	11	387	0.2	672	< 1	< 1	< 1	< 1
FC L53 10+00	1	0.6	< 0.1	1	2.5	0.5	1.2	0.3	0.2	0.3	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	14	< 2	< 100	16600	7	487	0.1	752	< 1	< 1	< 1	< 1
FC L53 10+25	< 1	2.1	< 0.1	3.6	14.8	1.1	4.8	1.3	0.5	1.4	0.3	1.5	0.3	0.8	0.1	1.1	0.2	20	< 2	< 100	29900	14	299	< 0.1	776	< 1	< 1	< 1	< 1
FC L53 10+50	< 1	1.3	< 0.1	3.7	4.9	1.2	5.9	1.7	0.6	1.8	0.3	1.9	0.3	1.1	0.2	1.3	0.2	11	< 2	< 100	3950	22	556	0.3	413	< 1	< 1	< 1	< 1
FC L53 10+75	< 1	1.8	< 0.1	6.8	4.1	2.1	10	2.9	1	3.1	0.6	3.2	0.6	1.7	0.3	2	0.4	4	< 2	< 100	22500	39	536	0.6	419	< 1	< 1	< 1	< 1
FC L53 11+00	< 1	1.2	< 0.1	4.7	11.2	1.4	6.4	1.7	0.6	1.6	0.3	1.9	0.3	0.9	0.1	1	0.2	16	< 2	< 100	5920	23	386	0.1	481	< 1	< 1	< 1	< 1
FC L53 11+25	< 1	0.8	< 0.1	3.6	3.5	1	5	1.4	0.5	1.5	0.3	1.6	0.3	0.9	0.1	1	0.2	5	< 2	< 100	7860	25	548	0.1	341	< 1	< 1	< 1	< 1
FC L53 11+50	< 1	0.9	< 0.1	1.5	3.5	0.5	2.2	0.6	0.3	0.7	0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	12	< 2	< 100	6790	9	420	0.1	737	< 1	< 1	< 1	< 1
FC L53 11+75	< 1	1.3	< 0.1	3.6	6.6	1	5	1.4	0.5	1.5	0.3	1.3	0.3	0.8	0.1	0.8	0.1	8	< 2	< 100	14900	13	221	< 0.1	600	< 1	< 1	< 1	< 1
FC L53 12+00	< 1	1.9	< 0.1	2.5	5.3	0.8	3.9	1.2	0.5	1.2	0.2	1.4	0.3	0.7	0.1	0.8	0.1	5	< 2	< 100	8840	12	365	0.2	403	< 1	< 1	< 1	< 1
FC L53 12+25	< 1	1	< 0.1	3.3	3.8	1	4.8	1.5	0.5	1.5	0.3	1.5	0.3	0.8	0.1	0.8	0.1	5	< 2	< 100	5000	24	608	0.1	323	< 1	< 1	< 1	< 1
FC L53 12+50	< 1	0.8	< 0.1	2.5	3.7	0.8	3.9	1.2	0.4	1.2	0.2	1.3	0.2	0.7	0.1	0.9	0.2	6	< 2	< 100	18900	16	438	0.1	238	< 1	< 1	< 1	< 1
FC L53 12+75	< 1	1.6	< 0.1	4	9	1.2	5.8	1.7	0.6	1.6	0.3	1.8	0.3	0.9	0.1	1	0.2	7	< 2	< 100	8660	7	536	< 0.1	576	< 1	< 1	< 1	< 1
FC L53 13+00	< 1	1.1	< 0.1	3.7	11.4	1.1	5.3	1.6	0.7	1.5	0.3	1.5	0.3	0.8	0.1	0.7	< 0.1	24	< 2	< 100	5840	16	215	0.2	1170	< 1	< 1	< 1	< 1
FC L53 13+25	< 1	0.9	< 0.1	3.8	3	1.2	5.4	1.6	0.5	1.7	0.3	1.6	0.3	0.9	0.1	1	0.2	4	< 2	< 100	6080	12	603	0.1	301	< 1	< 1	< 1	< 1
FC L53 13+50	< 1	1.2	< 0.1	1.6	4.4	0.5	2.5	0.9	0.3	0.9	0.2	0.9	0.2	0.5	< 0.1	0.5	< 0.1	24	< 2	< 100	4620	24	441	0.2	539	< 1	< 1	< 1	< 1
FC L53 13+75	< 1	1.6	< 0.1	3.8	14.1	1.9	6.8	2.2	0.8	2.3	0.4	2.3	0.4	1.1	0.2	1.2	0.2	31	< 2	< 100	20600	11	255	0.1	630	< 1	< 1	< 1	< 1
FC L53 14+00	< 1	0.6	< 0.1	1	3.1	0.3	1.4	0.5	0.3	0.6	0.1	0.7	0.1	0.3	< 0.1	0.3	< 0.1	21	< 2	< 100	12600	10	144	< 0.1	679	< 1	< 1	< 1	< 1
FC L53 14+25	< 1	1.8	< 0.1	11.7	14.7	0.9	4.4	1.3	0.5	1.3	0.3	1.5	0.2	0.6	< 0.1	0.6	< 0.1	28	3	< 100	17600	21	163	0.1	953	< 1	< 1	< 1	< 1
FC L53 14+50	< 1	1.9	< 0.1	2.1	7.6	0.6	3	1	0.5	1.1	0.2	1.4	0.2	0.6	< 0.1	0.7	0.1	7	< 2	< 100	19500	16	356	0.2	705	< 1	< 1	< 1	< 1
FC L53 14+75	< 1	0.5	< 0.1	0.4	1.2	0.1	0.6	0.1	0.1	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	0.2	< 0.1	16	< 2	< 100	48500	11	254	0.2	439	< 1	< 1	< 1	< 1
FC L53 15+00	< 1	1	< 0.1	2.5	4.5	0.9	4.3	1.5	0.7	1.6	0.3	1.7	0.3	0.9	0.1	1	0.2	5	< 2	< 100	22800	18	398	0.2	928	< 1	< 1	< 1	< 1
FC L53 15+25	< 1	1.9	< 0.1	1.9	9.5	0.7	3.3	1.1	0.5	1.1	0.2	1.1	0.2	0.5	< 0.1	0.5	< 0.1	6	< 2	< 100	12700	24	300	0.2	802	< 1	< 1	< 1	< 1
FC L53 15+75	< 1	1.1	< 0.1	1.6	5.7	0.7	3	1	0.5	1	0.2	1.4	0.3	0.7	0.1	0.9	0.1	16	< 2	< 100	10800	27	330	0.2	492	< 1	< 1	< 1	< 1
FC L53 16+00	< 1	1.9	< 0.1	2.7	7.8	0.8	4.5	1.5	0.5	1.6	0.3	1.8	0.3	1	0.2	1.2	0.2	13	< 2	< 100	36600	31	455	0.2	618	< 1	< 1	< 1	< 1
FC L53 16+25	< 1	1	< 0.1	2.1	8.1	0.7	3.1	0.9	0.4	1	0.2	1.1	0.2	0.6	< 0.1	0.6	< 0.1	30	3	< 100	18200	16	151	0.1	1130	< 1	< 1	< 1	< 1
FC L53 16+50	< 1	3.6	< 0.1	2.4	8.9	0.7	3.3	1	0.5	1	0.2	1.2	0.2	0.7	0.1	0.9	0.2	16	3	< 100	25500	12	345	0.1	1510	< 1	< 1	< 1	< 1
FC L53 16+75	< 1	0.7	< 0.1	1.1	3.1	0.3	1.2	0.4	0.3	0.4	< 0.1	0.5	< 0.1	0.3	< 0.1	0.3	< 0.1	26	2	< 100	5540	16	127	< 0.1	1480	< 1	< 1	< 1	< 1
FC L53 17+00	< 1	0.3	< 0.1	0.9	3.1	0.3	1.2	0.4	0.2	0.4	< 0.1	0.3	< 0.1	0.2	< 0.1	0.1	< 0.1	24	< 2	< 100	6000	12	151	0.1	659	< 1	< 1	< 1	< 1
FC L53 17+25	< 1	1.5	< 0.1	4.4	11.6	1.2	5.8	1.5	0.6	1.6	0.3	1.7	0.3	0.8	0.1	1	0.2	22	< 2	< 100	33100	18	194	0.2	1160	< 1	< 1	< 1	< 1

Report: A06-4172

Final Report
Activation Laboratories

Analyte Symbol	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	< 1	1.8	< 0.1	10.4	18.8	2.7	11	2.5	0.7	2.2	0.4	2	0.3	0.9	0.1	0.7	0.1	13	< 2	< 100	3030	29	331	0.4	490	< 1	< 1	< 1	< 1
FC L53 17+50 rec'd empty	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC L53 17+75	1	2.4	< 0.1	2.5	8.1	0.7	3.5	1	0.6	1	0.2	1.2	0.2	0.6	0.1	0.8	0.1	10	< 2	< 100	21800	13	369	0.2	1770	< 1	< 1	< 1	< 1
FC L53 18+00	< 1	1.3	< 0.1	6.9	19.6	1.9	7.9	2	0.6	2	0.4	2.1	0.4	1.3	0.2	1.5	0.3	14	< 2	< 100	22200	17	594	0.6	219	< 1	< 1	< 1	< 1
FC L53 18+25	< 1	0.7	< 0.1	4.5	13.9	1.4	7	2.4	1.1	2.6	0.5	2.8	0.5	1.3	0.2	1.2	0.2	11	< 2	< 100	50700	14	318	0.1	941	< 1	< 1	< 1	< 1
FC L53 18+50	< 1	0.8	< 0.1	3.9	11.4	1	4.4	1.1	0.5	1	0.2	1	0.2	0.4	< 0.1	0.4	< 0.1	26	< 2	< 100	4330	13	239	< 0.1	933	< 1	< 1	< 1	< 1
FC L53 18+75	< 1	0.7	< 0.1	5.9	6.4	1.5	6.4	1.5	0.5	1.3	0.2	1.1	0.2	0.5	< 0.1	0.6	< 0.1	3	< 2	< 100	2630	26	328	0.3	640	< 1	< 1	< 1	< 1
FC L53 19+00	< 1	1	< 0.1	5.1	12	1.4	5.8	1.6	0.5	1.5	0.3	1.4	0.3	0.7	0.1	0.9	0.1	10	< 2	< 100	11600	14	519	0.1	280	< 1	< 1	< 1	< 1
FC L53 19+25	< 1	1	< 0.1	5.7	10.7	1.4	6	1.4	0.5	1.6	0.2	1.2	0.2	0.6	0.1	0.7	0.1	4	< 2	< 100	10400	13	758	0.1	517	< 1	< 1	< 1	< 1
FC L53 19+50	1	0.8	< 0.1	5.1	6.5	1.4	6.2	1.6	0.6	1.5	0.3	1.5	0.3	0.8	0.1	0.8	0.1	3	< 2	< 100	3850	17	679	0.1	688	< 1	< 1	< 1	< 1
FC L53 19+75 rec'd empty	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC L53 20+00	< 1	1.8	< 0.1	12.4	18.3	3.1	13.3	3	0.9	2.9	0.5	2.6	0.5	1.6	0.2	1.8	0.3	10	< 2	< 100	14900	24	326	0.3	641	< 1	< 1	< 1	< 1
FC L53 20+25	< 1	0.5	< 0.1	40.7	58.1	9.3	36.5	6.6	1.5	5.3	0.8	3.5	0.7	1.9	0.3	1.7	0.3	4	2	< 100	5390	27	584	0.2	533	< 1	< 1	< 1	< 1
FC L53 20+50	< 1	0.9	< 0.1	20.4	39.7	5.2	21.1	4.4	1	3.7	0.6	3	0.6	1.8	0.3	1.9	0.3	19	< 2	< 100	15600	24	856	0.7	524	< 1	< 1	< 1	< 1
FC L53 20+75	< 1	0.6	< 0.1	12.5	12.4	3.2	13.7	2.7	0.8	2.4	0.4	1.8	0.3	0.9	0.1	0.8	0.1	15	< 2	< 100	3290	21	313	0.2	991	< 1	< 1	< 1	< 1
FC L53 21+00	< 1	1.1	< 0.1	9.3	7.8	2.4	10.2	2.3	0.6	1.9	0.3	1.6	0.3	0.9	0.1	1	0.2	4	< 2	< 100	7130	22	388	0.2	534	< 1	< 1	< 1	< 1
FC L53 21+25	< 1	1.3	< 0.1	14	19.7	4.1	17.8	3.8	1	3.4	0.5	2.7	0.5	1.6	0.2	1.6	0.3	33	< 2	< 100	5160	10	226	0.1	581	< 1	< 1	< 1	< 1
FC L53 21+50	< 1	1.9	< 0.1	13.1	12.9	3.8	15.5	3.6	1	3.2	0.6	2.8	0.6	1.9	0.3	2	0.4	7	< 2	< 100	11400	30	444	0.2	765	< 1	< 1	< 1	< 1
FC L53 21+75	2	0.4	< 0.1	4.7	4.4	1.3	5.5	1.3	0.5	1.2	0.2	1	0.2	0.5	< 0.1	0.5	< 0.1	2	< 2	< 100	3110	10	248	< 0.1	922	< 1	< 1	< 1	< 1
FC L53 22+00	< 1	1.1	< 0.1	4.1	10.4	1.4	6.4	1.7	0.6	1.7	0.3	1.6	0.3	0.8	< 0.1	0.6	0.1	5	< 2	< 100	5550	20	170	0.1	747	< 1	< 1	< 1	< 1
FC L53 22+25	< 1	0.9	< 0.1	5.2	10.7	1.5	7.1	1.7	0.7	1.8	0.3	1.7	0.4	1.2	0.2	1.5	0.2	10	< 2	< 100	26500	39	291	0.5	831	< 1	< 1	< 1	< 1
FC L53 22+50	1	0.9	0.1	3.6	7.8	1.2	10.3	1.5	0.6	1.4	0.3	1.5	0.3	1.1	0.1	0.7	0.1	15	< 2	< 100	6580	24	455	0.4	1200	< 1	< 1	< 1	< 1
FC L53 22+75	< 1	1	< 0.1	5	5.5	1.5	6.8	1.8	0.6	1.9	0.3	1.8	0.4	1.2	0.2	1.3	0.2	8	< 2	< 100	4980	17	509	0.2	500	< 1	< 1	< 1	< 1
FC L53 23+00	< 1	1.1	< 0.1	3.4	5.6	1.5	4.6	1.2	0.4	1.2	0.2	1	0.2	0.7	< 0.1	0.7	0.1	15	< 2	< 100	7050	13	761	0.2	727	< 1	< 1	< 1	< 1
FC L53 23+25	< 1	0.9	< 0.1	4.2	8	1.2	5.3	1.2	0.5	1.3	0.2	1.2	0.2	0.8	0.1	0.8	0.2	6	< 2	< 100	8670	12	506	0.2	525	< 1	< 1	< 1	< 1
FC L53 23+50	< 1	0.8	< 0.1	6	11.8	1.6	7.3	1.8	0.6	1.8	0.3	1.6	0.3	1	0.1	1.2	0.2	9	< 2	< 100	11800	14	408	0.2	452	< 1	< 1	< 1	< 1
FC L53 23+75	< 1	0.9	< 0.1	12	13.4	3.7	16.5	4	1.3	3.8	0.6	3.5	0.8	2.2	0.3	2.1	0.4	3	< 2	< 100	8480	12	510	0.2	514	< 1	< 1	< 1	< 1
FC L53 24+00	< 1	0.5	< 0.1	3.5	4.3	1	4.3	0.9	0.3	1.2	0.2	0.9	0.2	0.6	< 0.1	0.5	< 0.1	7	< 2	< 100	2550	14	619	< 0.1	287	< 1	< 1	< 1	< 1
FC L53 24+25	< 1	0.3	< 0.1	1.7	4.6	0.5	2.1	0.5	0.2	0.5	< 0.1	0.4	< 0.1	0.3	< 0.1	0.3	< 0.1	5	< 2	< 100	7820	8	666	< 0.1	384	< 1	< 1	< 1	< 1
FC L53 24+50	< 1	0.8	< 0.1	7.4	8.5	2	8.5	1.8	0.5	1.7	0.3	1.3	0.3	0.9	0.1	0.9	0.2	11	< 2	< 100	6930	23	668	0.2	357	< 1	< 1	< 1	< 1
FC L53 24+75	< 1	0.9	< 0.1	11.8	14.9	4	13.7	2.8	0.7	2.5	0.4	2	0.4	1.3	0.2	1.3	0.2	15	< 2	< 100	7220	26	516	0.3	425	< 1	< 1	< 1	< 1
FC L53 25+00	< 1	0.2	< 0.1	2	4.5	0.5	2.3	0.6	0.2	0.5	< 0.1	0.5	0.1	0.3	< 0.1	0.3	< 0.1	6	< 2	< 100	1560	13	310	0.2	400	< 1	< 1	< 1	< 1
FC L53 25+25	< 1	0.6	< 0.1	5	12.6	1.5	6.9	1.6	0.6	1.6	0.3	1.4	0.3	1	0.1	1.2	0.2	11	< 2	< 100	3680	15	392	0.4	989	< 1	< 1	< 1	< 1
FC L53 25+50	< 1	1.5	< 0.1	13.8	20.1	4.1	19.4	5.5	2.1	6	1.2	7	1.5	4.6	0.7	5	0.9	7	< 2	< 100	65400	13	581	0.3	1020	< 1	< 1	< 1	< 1
FC L53 25+75	< 1	0.7	< 0.1	7.8	16.9	2.3	10.3	2.5	1	2.5	0.5	2.5	0.5	1.6	0.2	1.8	0.3	9	< 2	< 100	26500	12	389	0.2	978	< 1	< 1	< 1	< 1
FC L53 26+00	< 1	0.6	< 0.1	4.6	17.7	1.4	6.7	1.7	0.7	1.6	0.3	1.6	0.3	1.7	0.1	0.9	0.1	5	< 2	< 100	9730	15	368	0.2	1170	< 1	< 1	< 1	< 1
FC L53 26+25	< 1	0.4	< 0.1	2.8	8.1	0.8	3.6	0.8	0.4	0.8	0.1	0.8	0.1	0.3	< 0.1	0.2	< 0.1	12	< 2	< 100	990	14	278	0.2	1140	< 1	< 1	< 1	< 1
FC L53 26+50 rec'd empty	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FC L53 26+75	< 1	0.8	< 0.1	8.2	8.4	2.5	15	3.3	1.3	3.5	0.6	3.6	0.7	2.3	0.3	2.2	0.4	19	< 2	< 100	4800	24	338	0.3	848	< 1	< 1	< 1	< 1
FC L53 27+00	< 1	0.6	< 0.1	2	4.8	0.5	2.4	0.7	0.3	0.7	0.1	0.7	0.1	0.4	< 0.1	0.3	< 0.1	4	< 2	< 100	1900	17	302	0.2	657	< 1	< 1	< 1	< 1
FC L53 27+25	< 1	1	< 0.1	2.9	6.1	0.7	3.1	0.8	0.4	0.9	0.2	0.9	0.2	0.5	< 0.1	0.4	< 0.1	4	< 2	< 100	10200	13	465	0.1	1130	< 1	< 1	< 1	< 1
FC L53 27+50	< 1	0.3	< 0.1	0.9	2.1	0.3	1.3	0.4	0.3	0.4	< 0.1	0.4	< 0.1	0.2	< 0.1	0.2	< 0.1	5	< 2	< 100	7690	17	501	0.1	912	< 1	< 1	< 1	< 1
FC L53 27+75	< 1	0.9	< 0.1	4.9	13.1	1.5	7.2	1.8	0.7	1.9	0.3	1.9	0.4	1.2	0.2	1.3	0.2	12	< 2	< 100	7270	18	543	< 0.1	762	< 1	< 1	< 1	< 1
FC L53 28+00	< 1	0.9	< 0.1	8.4	9.2	2.4	10.7	2.7	1	2.7	0.5	2.5	0.5	1.6	0.2	1.5	0.2	3	< 2	< 100	9490	15	592	< 0.1	1050	< 1	< 1	< 1	< 1
FC L53 28+25	< 1	1	< 0.1	5.3	13.9	1.6	6.8	1.6	0.6	1.5	0.3	1.4	0.3	0.8	0.1	0.8	0.1	4	< 2	< 100	7190	15	358	0.1	656	< 1	< 1	< 1	< 1
FC L53 28+50	< 1	1	< 0.1	6.2	8.8	1.9	8.3	2	0.7	2	0.4	1.9	0.4	1.1	0.2	1.1	0.2	4	< 2	< 100	11500	12	468	0.1	876	< 1	< 1	< 1	< 1
FC L53 28+75	< 1	0.4	< 0.1	3.4	5.8	0.9	4.2	1.2	0.5	1.2	0.2	1.1	0.2	0.8	0.1	1	0.2	11	< 2	< 100	17500	17	904	0.1	649	< 1	< 1	< 1	< 1
FC L53 29+00	< 1	0.7	< 0.1	4	6.3	1.1	4.9	1.1	0.4	1.2	0.2	1.2	0.3	0.9	0.1	1	0.2	11	< 2	< 100	3700	29	1080	0.2	471	< 1	< 1	< 1	< 1
FC L53 29+25	< 1	0.5	< 0.1	3.6	5.6	0.9	4.2	0.9	0.3	0.8	0.1	0.7	0.1	0.5	< 0.1	0.6	< 0.1	13	< 2	< 100	5040	8	670	< 0.1	419	< 1	< 1	< 1	< 1
FC L53 29+50	< 1	0.9	< 0.1	6.6	13.8	1.8	7.7	1.7	0.6	1.6	0.3	1.5	0.3	0.9	0.1	1.1	0.2	10	< 2	< 100	12400	11	928	< 0.1	554	< 1	< 1	< 1	< 1
FC L53 29+75	1	2.1	0.1	13.9	29.5	3.8	16.4	3.6	1	3.5	0.6	3	0.6	2	0.3	2.1	0.4	2	< 2	< 100	3900	14	920	< 0.1	621	< 1	< 1	< 1	< 1
FC L53 30+00	< 1	0.9	< 0.1	6.1	16	1.8	7.4	1.7	0.6	1.5	0.3	1.4	0.3	0.9	0.1	1	0.2	12	< 2	< 100	35400	13	653	0.1	886	< 1	< 1	< 1	< 1
FC L53 30+25	< 1	0.7	< 0.1	6.4	14	1.7	7	1.4	0.5	1.5	0.2	1.2	0.3	0.8	0.1	1	0.2	8	< 2	< 100	14100	15	798	0.2	684	< 1	< 1	< 1	< 1
FC L53 30+50	< 1	1.1	< 0.1	15.9	34	4.5	18.7	4	1	3.6	0.6	2.9	0.6	1.7	0.2	1.7	0.3	4	< 2	< 100	8510	12	406	0.1	771	< 1	< 1	< 1	< 1
FC L53 30+75	< 1	0.3	< 0.1	3.6	7.4	0.9	3.5	0.7	0.3	0.7	0.1	0.6	< 0.1	0.3	< 0.1	0.3	< 0.1	5	< 2	< 100	14100	11	549	< 0.1	631	< 1	< 1	< 1	< 1
FC L53 31+00	< 1	0.4	< 0.1	6.6	19.6	2	8.6	2.3	0.5	1.8	0.3	1.6	0.3	0.8	0.1	0.7	< 0.1	3	< 2	< 100	4540	33	503	0.1	632	< 1	< 1	< 1	< 1
FC L53 31+25	< 1	1.8	< 0.1	24.1	13.9	6.8	29.1	6	1.5	5.3	0.9	4.4	0.9	3.1	0.4	3.6	0.7	3	< 2	< 100	9350	21	361	0.2	877	< 1	< 1	< 1	< 1
FC L53 31+50	< 1	2	< 0.1	44.9	30.9	12.1	51.3	10.9	2.8	9.9	1.7	8.4	1.7	5	0.7	4.9	0.8	5	< 2	< 100	7390	35	476	0.3	729	< 1	< 1	< 1	< 1
FC L53 31+75	< 1	1.7	< 0.1	18.7	10.2	4.9	24.2	4.6	1.2	4.3	0.7	3.9	0.9	2.5	0.4	2.8	0.5	7	< 2	< 100	5040	29	549	0.2	795	< 1	< 1	< 1	< 1
FC L53 32+00	< 1	0.7	< 0.1	14	11.6	1.9	8.2	1.9	0.6	1.6	0.3	1.4	0.3	0.9	0.1	1	0.2	15	< 2	< 100	10000	11	746	0.1	727	< 1	< 1	< 1	< 1
FC L53 32+25	2	0.4	< 0.1	3.6	7.3	1	4.1	1.2	0.2	1.1	0.2	1	0.2	0.5	< 0.1	0.4	< 0.1	3	< 2	< 100	1980	35	366	0.3	227	< 1	< 1	< 1	< 1
FC L53 32+50	2	0.6	0.1	6.1	8.7	1.8	7.4	1.7	0.5	1.6	0.3	1.4	0.2	0.7	< 0.1	0.6	< 0.1	4	< 2	< 100	1320	31	437	0.3	784	< 1	< 1	< 1	< 1
FC L53 32+75	1	1.2	< 0.1	27.2	19.2	7.1	29.3	5.9	1.6	5.3	0.9	4.7	0.9	2.9	0.4	3.1	0.5	6	< 2	< 100	1860	18	485	0.2	579	< 1	< 1	< 1	< 1
FC L53 33+00	< 1	0.8	< 0.1	8.9	9.7	2.5	10.9	2.6	0.7	2.2	0.4	2	0.4	1.1	0.2	1.2	0.2	6	< 2	< 100	3130	16	487	0.2	526	< 1	< 1	< 1	< 1
FC L55 25+25	< 1	0.5	< 0.1	3.6	7.4	1.1	4.6	1.4	0.6	1.4	0.3	1.6	0.3	1	0.2	1.3	0.2	15	< 2	< 100	4290	14	424	0.5	296	< 1	< 1	< 1	< 1
FC L55 25+50	< 1	0.1	< 0.1	3.8	13.9	0.9	3.7	0.9	0.4	1	0.2	1	0.2	0.6	< 0.1	0.9	0.2	8	< 2	< 100	10400	11	344	0.3	283	< 1	< 1	< 1	< 1
FC L55 25+75	< 1	0.6	< 0.1	4.8	10.7	1.4	5.8	1.3	0.5	1.3	0.2	1.1	0.2	0.8	0.1	1	0.2	11	< 2	< 100	9650	18	545	0.3	485	< 1	< 1	< 1	< 1
FC L55 26+00	< 1	0.4	< 0.1	1.4	3.7	0.5	2.1	0.8	0.4	0.9	0.2	1	0.2	0.6	< 0.1	0.6	< 0.1	8	< 2	< 100	8780	11	332	0.4	494	< 1	< 1	< 1	< 1
FC L55 26+25	< 1	1.1	< 0.1	4.9	4.2	1.6	7.5	2.1	0.9	2.3	0.5	2.5	0.5	1.8	0.3	1.9	0.3	9	< 2	< 100	5500	22	503	0.3	764	< 1	< 1	< 1	< 1
FC L55 26+50	2	0.4	< 0.1	3	9.4	0.9	4.2	1.1	0.7	1.2	0.2	1.3	0.2	0.7	< 0.1	0.7	< 0.1	17	< 2	< 100	13400	10	325	0.3	1810	< 1	< 1	< 1	< 1
FC L55 26+75	< 1	1.1	< 0.1	1.9	5.9	0.8	3.3	1	0.7	1	0.2	1	0.2	0.6	< 0.1	0.5	< 0.1	13	< 2	< 100	12100	16	277	0.3	2070	< 1	< 1	< 1	< 1
FC L55 27+00	< 1	0.5	< 0.1	1.4	4.1	0.4	2.1	0.6	0.4	0.7	0.1	0.6	0.1	0.4	< 0.1	0.3	< 0.1	15	< 2	< 100	2030	9	293	0.2	1340	< 1	< 1	< 1	< 1
FC L55 27+25	< 1	0.5	< 0.1	3.9	6.9	1.1	4.9	1.3	0.4	1.3	0.2	1.2	0.2	2.4	0.1	0.8	0.1	10	< 2	< 100	7790	9	434	0.3	606	< 1	< 1	< 1	< 1

Final Report
Activation Laboratories

Analyte Symbol	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Analysis Method	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS	ENZ-MS
FC L51 5+25	< 1	1.8	< 0.1	10.4	18.8	2.7	11	2.5	0.7	2.2	0.4	2	0.3	0.9	0.1	0.7	0.1	13	< 2	< 100	3030	29	331	0.4	490	< 1	< 1	< 1	< 1
FC L55 27+50	< 1	0.8	< 0.1	8.4	13.1	2.5	11.1	2.7	0.9	2.4	0.4	2.3	0.4	1.3	0.2	1.3	0.2	6	< 2	< 100	9300	31	385	0.3	765	< 1	< 1	< 1	< 1
FC L55 27+75	< 1	0.9	< 0.1	12.3	10.3	3.4	14.4	3.1	0.9	2.8	0.5	2.3	0.5	1.4	0.2	1.4	0.2	3	< 2	< 100	7180	24	266	0.2	677	< 1	< 1	< 1	< 1
FC L55 28+00	< 1	0.7	< 0.1	7.8	4.7	1.9	8.2	1.8	0.6	1.7	0.2	1.4	0.3	1	0.1	0.8	0.2	6	< 2	< 100	9070	20	600	< 0.1	496	< 1	< 1	< 1	< 1
FC L55 28+25	< 1	0.7	< 0.1	6.4	12.1	1.8	7.2	1.5	0.5	1.4	0.3	1.2	0.2	0.8	0.1	1	0.2	5	< 2	< 100	2980	14	456	0.2	489	< 1	< 1	< 1	< 1
FC L55 28+50	< 1	0.7	< 0.1	12.3	11.5	3.4	13.6	3.1	0.9	2.6	0.4	2.4	0.5	1.3	0.2	1.5	0.2	9	< 2	< 100	3430	28	407	0.3	513	< 1	< 1	< 1	< 1
FC L55 28+75	< 1	0.4	< 0.1	7.7	3.1	2	8.4	1.8	0.5	1.5	0.2	1.2	0.2	0.8	0.1	0.8	0.1	7	< 2	< 100	1870	16	498	< 0.1	430	< 1	< 1	< 1	< 1
FC L55 29+00	< 1	0.8	< 0.1	12.2	12.4	3.4	13.6	3	0.8	5.2	0.4	2.2	0.4	1.2	0.2	1.2	0.2	5	< 2	< 100	3370	24	378	0.2	453	< 1	< 1	< 1	< 1
FC L55 29+25	< 1	0.7	< 0.1	16.7	11.5	4.2	17.4	3.7	1	3.3	0.5	2.7	0.6	1.8	0.2	1.8	0.3	6	< 2	< 100	6170	24	484	0.2	491	< 1	< 1	< 1	< 1
FC L55 29+50	2	0.4	< 0.1	8	12.7	2	8.6	1.8	0.6	1.7	0.6	1.5	0.3	0.7	< 0.1	0.7	0.1	6	< 2	< 100	10700	27	1560	0.2	853	< 1	< 1	< 1	< 1
FC L55 29+75	< 1	0.6	< 0.1	7.8	10.4	2.3	9.3	2.2	0.6	2	0.3	1.7	0.4	1	0.1	1	0.2	6	< 2	< 100	2560	14	595	0.2	505	< 1	< 1	< 1	< 1
FC L55 30+00	< 1	0.4	< 0.1	8.2	11.1	2.2	9.2	2.1	0.7	2	0.4	1.8	0.4	1.1	0.2	1.2	0.2	4	< 2	< 100	7540	10	758	< 0.1	607	< 1	< 1	< 1	< 1
FC L53 9+25	< 1	0.4	< 0.1	1.4	2.5	0.5	1.9	0.3	0.2	0.3	< 0.1	0.3	< 0.1	0.2	< 0.1	0.2	< 0.1	18	< 2	< 100	11200	8	375	0.2	703	< 1	< 1	< 1	< 1
FC L53 9+50	< 1	1.2	< 0.1	1.2	10	0.8	2	0.6	0.3	0.7	0.1	0.5	0.1	0.3	< 0.1	0.4	< 0.1	17	< 2	< 100	11800	13	377	0.3	579	< 1	< 1	< 1	< 1
FC L53 15+50	< 1	1	< 0.1	2.2	7.1	0.7	3.6	1.2	0.6	1.5	0.3	1.8	0.3	1	0.1	1.2	0.2	14	< 2	< 100	36300	60	498	0.4	427	< 1	< 1	< 1	< 1

Analytical Data
for
Kangaroo 2007 Drilling

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-1

| DDH K07 - 1 | | |

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-1

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2295	187440	124.39	126.82	2.43	5	6	< 2	< 2	< 0.3	118	0.4	< 1	< 3	62	33	1.48	4.21	< 0.5	430	< 1	< 2	< 0.5	11.9	35	409	< 1	0.4	5.51	< 1	< 1	< 5	0.56	6.07	1260	0.95	0.041	< 15	< 0.1	65.6	< 3	355	< 0.5	0.4	< 0.2	< 0.5	258	< 1	13	2.9	< 3	< 5	1.4	< 0.01	< 0.5	1.1	0.24
A07-2295	187441	129.57	131.40	1.83	< 4	< 5	< 2	< 2	0.5	136	< 0.3	< 1	< 3	61	30	1.54	4.47	1.5	340	< 1	< 2	< 0.5	11.8	32	305	< 1	0.5	4.8	< 1	< 1	< 5	0.55	5.41	1170	0.81	0.045	< 15	0.7	56.8	< 3	290	< 0.5	0.38	< 0.2	< 0.5	252	< 1	14	2.7	6	< 5	1.2	< 0.01	< 0.5	0.9	0.13
A07-2295	187443	142.02	142.45	0.43	54	9	9	< 2	0.5	410	< 0.3	2	12	65	52	4.7	3.96	< 0.5	< 50	< 1	< 2	< 0.5	8.08	82	304	< 1	< 0.2	8.37	< 1	< 1	< 5	0.36	4.97	1310	0.91	0.032	< 15	< 0.1	58.8	< 3	303	< 0.5	0.38	< 0.2	< 0.5	270	< 1	13	< 0.5	< 3	< 5	1.2	< 0.01	< 0.5	0.8	< 0.05
A07-2295	187444	148.78	150.33	1.55	8	8	10	< 2	0.4	214	6.4	5	4	31	443	7.06	5.53	3.1	< 50	< 1	< 2	< 0.5	7.88	35	55	3	0.6	8.06	< 1	< 1	< 5	0.83	2.59	773	1.66	0.093	< 15	0.7	20.4	< 3	1380	< 0.5	0.5	0.7	< 0.5	255	< 1	18	7	10	< 5	1.8	< 0.01	< 0.5	1.1	0.21
A07-2295	187445	150.33	151.82	1.49	10	6	4	< 2	0.6	255	< 0.3	8	< 3	65	48	4.43	5.35	2.3	730	< 1	< 2	< 0.5	8.22	37	219	< 1	< 0.2	6.75	< 1	< 1	< 5	0.63	3.16	896	1.42	0.085	< 15	< 0.1	26.1	< 3	925	< 0.5	0.48	< 0.2	< 0.5	266	< 1	18	6.3	10	< 5	1.9	< 0.01	< 0.5	1.3	0.17
A07-2295	187446	151.82	154.87	3.05	9	6	2	< 2	0.4	183	2	2	< 3	94	70	3.19	5.45	2.6	< 50	< 1	< 2	< 0.5	10.5	34	353	2	0.6	6.11	< 1	< 1	< 5	0.68	5.52	1350	1.11	0.071	< 15	< 0.1	43.5	< 3	594	< 0.5	0.5	0.9	< 0.5	305	< 1	18	4.5	9	7	1.7	< 0.01	< 0.5	1.2	0.17
A07-3760	85568	154.87	156.82	1.95	3	8	< 2	< 2	< 0.3	100	0.7	4	< 3	51	30	1.44	5.88	< 0.5	270	< 1	3	< 0.5	10.9	47	236	3	0.7	8.13	< 1	< 1	< 5	0.34	6.85	1280	0.84	0.029	< 15	0.3	76.4	< 3	355	< 0.5	0.31	< 0.2	< 0.5	285	< 1	13	4	10	14	1.9	< 0.01	< 0.5	1.2	0.21
A07-3760	85569	156.82	159.50	2.68	10	12	4	< 2	< 0.3	257	0.7	4	9	59	42	2.01	6.71	5.1	260	< 1	3	< 0.5	7.26	48	322	4	1	8.29	2	< 1	< 5	0.35	5.58	1290	2.2	0.078	< 15	< 0.1	53.3	< 3	318	< 0.5	0.35	1.5	< 0.5	270	4	14	6.8	16	11	2.2	< 0.01	< 0.5	1.6	0.28
A07-2295	187447	159.50	160.97	1.47	6	7	5	< 2	0.5	297	< 0.3	< 1	3	72	41	2.67	5.64	< 0.5	300	< 1	< 2	< 0.5	7.76	23	206	< 1	< 0.2	6.15	< 1	< 1	< 5	0.6	4.52	1470	1.53	0.062	< 15	0.6	41.2	< 3	304	< 0.5	0.46	0.9	< 0.5	291	< 1	18	4.6	7	6	1.4	< 0.01	< 0.5	1	0.18
A07-2295	187448	160.97	162.37	1.40	7	8	3	< 2	< 0.3	329	< 0.3	< 1	4	80	49	3.52	4.58	3	< 50	< 1	< 2	< 0.5	8.13	40	366	2	0.5	7.41	1	< 1	< 5	0.41	5.01	1700	0.92	0.046	31	0.4	53.5	< 3	266	< 0.5	0.39	< 0.2	< 0.5	251	< 1	14	4.1	< 3	< 5	1.4	< 0.01	< 0.5	0.9	0.17
A07-2295	187449	162.37	164.02	1.65	7	9	6	< 2	< 0.3	428	< 0.3	1	8	84	51	4.85	3.62	11.5	< 50	< 1	2	< 0.5	8.37	36	444	< 1	0.6	9.04	1	< 1	< 5	0.22	6.23	1810	0.52	0.029	< 15	0.8	60.6	< 3	171	< 0.5	0.34	< 0.2	1.4	251	< 1	11	2.7	4	6	1.2	< 0.01	< 0.5	1	0.15
A07-2295	187450	164.02	165.53	1.51	< 4	< 5	< 2	15700	4.9	288	1.5	< 1	70	77	249	3.71	3.67	14.5	< 50	< 1	< 2	< 0.5	8.72	37	373	< 1	< 0.2	7.43	< 1	< 1	< 5	0.34	5.72	1640	0.82	0.027	< 15	0.8	56.9	< 3	193	< 0.5	0.32	< 0.2	< 0.5	226	< 1	10	3.2	< 3	< 5	1.2	< 0.01	< 0.5	< 0.2	< 0.05
A07-2295	187451	165.53	167.07	1.54	< 4	< 5	11	16	0.3	103	< 0.3	2	< 3	7	26	1.27	5.96	< 0.5	500	< 1	< 2	< 0.5	4.41	12	< 2	2	0.6	3.21	< 1	< 1	< 5	0.98	2.09	895	3.19	0.121	< 15	< 0.1	9.4	< 3	494	< 0.5	0.4	1.5	< 0.5	194	< 1	20	8.2	10	< 5	1.7	< 0.01	< 0.5	< 0.2	0.18
A07-2295	187452	167.07	168.60	1.53	< 4	< 5	20	< 2	0.6	160	0.4	2	< 3	25	37	2.09	5.85	< 0.5	550	< 1	< 2	< 0.5	4.37	20	63	2	0.7	3.86	< 1	< 1	< 5	1.24	2.83	969	2.99	0.103	< 15	0.8	13.4	< 3	430	< 0.5	0.42	1.1	< 0.5	203	< 1	19	8.1	13	< 5	1.8	< 0.01	< 0.5	1.3	0.17
A07-2295	187453	168.60	170.12	1.52	< 4	< 5	7	20	0.4	184	0.3	< 1	< 3	44	77	2.17	4.96	4	< 50	< 1	< 2	< 0.5	8.46	28	183	2	0.5	4.79	< 1	< 1	< 5	0.49	2.56	1120	1.68	0.063	< 15	1.6	33.5	< 3	288	< 0.5	0.34	1.3	< 0.5	205	< 1	14	6	10	< 5	1.6	< 0.01	< 0.5	0.9	0.16
A07-3760	85571	170.12	171.32	1.20	3	7	5	10	< 0.3	164	0.3	5	28	58	76	1.61	6.91	7	520	< 1	< 2	< 0.5	9.8	38	200	3	0.6	6.16	2	< 1	< 5	0.6	3.64	1350	2.04	0.075	< 15	2.8	37	< 3	437	< 0.5	0.3	0.7	< 0.5	221	6	11	6.6	12	13	1.8	< 0.01	< 0.5	1.2	0.19
A07-3760	85572	171.32	173.17	1.85	6	9	4	< 2	< 0.3	134	0.6	2	4	68	42	1.45	5.78	< 0.5	< 50	< 1	2	< 0.5	11.6	43	495	< 1	0.6	7.43	< 1	< 1	< 5	0.14	6.58	1330	0.43	0.037	< 15	3.4	74.8	< 3	269	< 0.5	0.3	< 0.2	< 0.5	259	< 1	10	4.9	5	< 5	1.9	< 0.01	< 0.5	1.2	0.16
A07-3760	85573	173.17	175.00	1.83	6	8	5	< 2	< 0.3	129	0.5	3	6	72	29	1.9	5.24	< 0.5	< 50	< 1	5	< 0.5	12.1	41	496	2	0.5	6.51	1	< 1	< 5	0.11	6.65	1290	0.51	0.038	28	3.1	73.4	< 3	196	< 0.5	0.29	< 0.2	< 0.5	246	< 1	10	4.2	11	< 5	1.5	< 0.01	< 0.5	1	0.15
A07-3760	85574	175.00	176.21	1.21	4	4	6	< 2	< 0.3	193	0.3	2	11	47	52	1.88	7.93	5.3	620	< 1	< 2	< 0.5	6.01	39	172	< 1	0.8	6.19	1	< 1	< 5	0.95	4.42	1100	2.88	0.11	< 15	4.9	22.7	< 3	453	< 0.5	0.27	2.5	2.6	189	< 1	14	10.5	18	15	2.3	< 0.01	< 0.5	1.5	0.23
A07-3760	85575	176.21	178.65	2.44	< 1	3	9	14	0.4	206	0.6	4	9	49	101	1.74	7.67	5.7	320	< 1	< 2	< 0.5	6.83	34	238	< 1	0.8	6.74	1	< 1	< 5	0.69	4.38	1310	2.97	0.104	< 15	3.4	32.9	< 3	383	< 0.5	0.25	3.1	3	184	< 1	14	11.7	22	19	2.4	< 0.01	< 0.5	1.6	0.24
A07-2295	187454	178.65	180.20	1.55	< 4	7	12	< 2	< 0.3	176	< 0.3	1	< 3	56	51	1.67	4.3	7.7	< 50	< 1	< 2	< 0.5	7.41	29	312	< 1	0.4	5.96	< 1	< 1	< 5	0.62	5.73	1580	1.22	0.04	< 15	2.3	58.1	< 3	270	< 0.5	0.37	0.8	< 0.5	249	< 1	12	3.5	< 3	< 5	1.2	< 0.01	< 0.5	1	0.14
A07-2295	187455	180.20	181.70	1.50	6	7	16	21	< 0.3	181	0.3	< 1	< 3	76	55	2.47	4.04	11.4	< 50	< 1	< 2	< 0.5	10.6	32	332	< 1	0.4	5.89	< 1	< 1	< 5	0.46	5.38	1740	0.79	0.041	< 15	4	51	< 3	239	< 0.5	0.38	< 0.2	< 0.5	248	< 1	11	2.8	< 3	< 5	1.2	< 0.01	< 0.5	0.7	< 0.05
A07-2295	187456	181.70	182.65	0.95	< 4	< 5	< 2	13	0.4	141	< 0.3	< 1	< 3	76	44	2.29	4.92	8.1	1000	< 1	< 2	< 0.5	9.89	35	334	2	0.7	5.68	1	< 1	< 5	1	4.5	1490	0.97	0.049	< 15	4.9	48.4	< 3	330	< 0.5	0.41	0.8	< 0.5	263	< 1	13	3.6	6	10	1.6	< 0.01	< 0.5	0.9	0.18
A07-2295	187457	182.65	184.60	1.95	6	7	8	< 2	0.3	71	< 0.3	< 1	4	105	71	2.2	3.89	71.5	270	< 1	< 2	< 0.5	10.3	36	404	< 1	0.5	5.56	< 1	< 1	< 5	0.33	4.2	1620	0.16	0.038	< 15	13.3	48.1	< 3	307	< 0.5	0.36	0.4	< 0.5	231	5	12	3.1	6	< 5	1.3	< 0.01	< 0.5	0.9	0.13
A07-2295	187458	184.60	186.05	1.45	< 4	< 5	20	29	0.6	84	< 0.3	< 1	< 3	41	61	1.06	4.78	180	390	< 1	< 2	< 0.5	8.68	18	136	4	0.7	4.01	2	< 1	< 5	2.27	2.76	970	0.1	0.08	56	13.5	17.2	< 3	406	< 0.5	0.33	1.2	< 0.5	183	8	16	7.5	16	9	2.3	< 0.01	< 0.5	1.5	0.28
A07-2295	187459	186.05	187.19	1.14	< 4	< 5	46	62	0.5	90	< 0.3	2	< 3	27	54	0.61	4.76	218	460	< 1	< 2	< 0.5	6.09	16	65	5	< 0.2	3.7	2	< 1	< 5	1.73	2.29	751	0.93	0.057	28	10	11.4	< 3	315	< 0.5	0.31	2.8	< 0.5	138	7	16	10.5	18	< 5	2.2	< 0.01	< 0.5	1.7	0.25
A07-3760	85576	187.19	188.41	1.22	4	6	< 2	< 2	< 0.3	323	0.4	4	< 3	156	68	1.83	6.8	14.4	960	1	< 2	< 0.5	6.59	74	527	4	0.9	9.67	2	< 1	< 5	1.1	5.31	1290	1.18	0.106	67	12.4	32.7	20	253	< 0.5	0.31	2.9	< 0.5	213	< 1	17	10.5	20	7	2.6	< 0.01	0.5	1.7	0.26
A07-3760	85577	188.41	189.63	1.22	< 1	< 1	< 2	8	0.5	35	< 0.3	3	< 3	22	29	0.31	7.34	3.4	1310	1	< 2	< 0.5	1.83	11	40	2	0.8	2.97	4	< 1	< 5	1.04	1.39	364	3.83	0.053	44	1.7	9.2	< 3	298	< 0.5	0.22	4.6	3.7	89	< 1	16	16.9	32	19	2.5	< 0.01	0.6	2	0.24
A07-3760	85578	189.63	190.54	0.91	7	11	< 2	< 2	< 0.3	168	< 0.3	3	6	86	60	0.41	5.22	11.8	1100	< 1	< 2	< 0.5	5.78	43	356	2	1	7.75	2	< 1	< 5	0.97	4.62	1320	1.81	0.105	50	2.3	41.3	< 3	306	< 0.5	0.36	1.9	4.3	266	< 1	11	10.2	19	21	2.6	< 0.01	< 0.5	2.1	0.32
A07-2295	187460	190.54	192.37	1.83	7	8	2	< 2	< 0.3	171	< 0.3	< 1	< 3	73	61	0.6	6.26	3.3	790	< 1	< 2	< 0.5	6.05	29	255	< 1	0.7	6	< 1	< 1	< 5	1.75	4.76	1320	1.54	0.1	45	0.9	30.8	< 3	302	< 0.5	0.51	1.2	1.5	295	< 1	21	7.2	14	< 5	2	< 0.01	< 0.5	1.5	0.31
A07-3760	85579	192.37	193.90	1.53	1	5	< 2	< 2	0.7	146	< 0.3	6	5	53	60	0.76	7.29	5	860	1	< 2	< 0.5	5.29	32	156	1	1	7	3	< 1	< 5	0.76	3.65	1080	3.07	0.115	40	2.1	27.7	< 3	333	< 0.5	0.39	3.3	< 0.5	264	< 1	17	13.3	23	10	3.1	< 0.01	< 0.5	2.2	0.28
A07-3760	85580	193.90	196.50	2.60	5	8	< 2	< 2	< 0.3	144	0.4	2	4	49	63	0.76	7.33	15.1	1060	< 1	< 2	< 0.5	6.53	44	190	2	0.9	8	1	< 1	< 5	1.38	4.22	1270	2.1	0.106	91	1.3	37	< 3	363	< 0.5	0.42	2	< 0.5	292	< 1	17	10.8	21	9	2.9	< 0.01	< 0.5	2	0.29
A07-3760	85581	196.50	197.56	1.06	8	8	< 2	< 2	< 0.3	161	0.6	3	7	28	65	0.77	7.94	22.2	810	< 1	< 2	< 0.5	7.25	39	67	1	1	7.37	2	< 1	< 5	1.44	3.69	1290	2.38	0.108	< 15	2.2	30.6	< 3	356	< 0.5	0.43	2	< 0.5	291	< 1	17	11.8	20	11	2.9	< 0.01	< 0.5	1.7	0.28
A07-2295	187461	197.56	199.25	1.69	8	6	2	< 2	0.3	145	< 0.3	2	< 3	26	58	1.28	5.72	7	1100	< 1	< 2	< 0.5	6.09	29	65	< 1	0.7	6.2	< 1	< 1	< 5	1.93	3.07	1130	2.15	0.085	< 15	2.4	25.7	< 3	340	< 0.5	0.55	1.6	< 0.5	302	< 1	21	9.5	14	11	2.5	< 0.01	< 0.5	1.5	0.27
A07-3760	85582	199.25	202.13	2.88	4	5	2	4	< 0.3	290	< 0.3	4	10	28	59	1.79	8.46	19.2	1260	< 1	< 2	< 0.5	6.17	45	68	< 1	1.2	7.54	2	< 1	< 5	1.38	3.35	1080	2.69	0.125	< 15	1.5	26.8	11	459	< 0.5	0.44	2.9	< 0.5	298	< 1	19	12.9	23	18	3.1	< 0.01	< 0.5	1.9	0.31
A07-3760	85583	202.13	204.26	2.13	3	5	3	< 2	< 0.3	278	< 0.3	4	< 3	31	55	1.44	7.89	26	1310	< 1	< 2	< 0.5	4.86	40	93	2	1.1	7.55	2	< 1	< 5	1.12	3.23	933	2.6	0.107	40	1.7	26.4	< 3	354	< 0.5	0.38	3.3	3	250	3	19	13.7	23	< 5	2.9	< 0.01	< 0.5	2.3	0.29
A07-3760	85584	204.26	205.50	1.24	2	3	< 2	< 2	0.4	220	< 0.3	3	4	33	60	1.4	9.02	10.5	2130	1	< 2	< 0.5	4.91	37	86	3	1.2	7.01	2	< 1	< 5	2.21	3.4	819	2.57	0.131	133	1.2	21.9	< 3	518	< 0.5	0.47	2.6	2.2	303	< 1	23	13.2	27	24	3.5	< 0.01	< 0.5	2.6	0.36
A07-3760	85585	205.50	207.13	1.63	1	3	23	< 2	< 0.3	242	0.4	4	6	40	60	1.63	9.11	24.6	1800	1	< 2	< 0.5	4.72	44	90	4	1.1	8	2	< 1	< 5	1.8	3.25	807	2.25	0.121	73	1.6	22.9	< 3	446	< 0.5	0.44	2.9	2	277	< 1	22	13.4	24	8	3.2	< 0.01	0.6	2.3	0.39
A07-2295	187462	207.13	208.23	1.10	5	< 5	6	9	0.4	274	< 0.3	2	< 3	66	67	1.74	5.48	12.4	1300	< 1	< 2	< 0.5	4.18	39	237	3	0.7	7.64	< 1	< 1	< 5	2.34	3.41	1090	0.93	0.067	54	1.5	25.9	< 3	246	< 0.5	0.5	1.5	< 0.5	257	< 1	20	8.1	17	< 5	2.4	< 0.01	< 0.5	1.8	0.33
A07-3760	85587	208.23	210.81	2.58	4	4	4	< 2	< 0.3	132	0.3	6	6	64	68	0.55	8.24	16.1	1190	< 1	< 2	< 0.5	6.77	32	226	4	0.9	7.2	2	< 1	< 5	1.69	4.23	1250	1.52	0.085	54	2.1	28.8	< 3	398	< 0.5	0.39	2.5	< 0.5	253	< 1	20	11.8	21	< 5	2.7	< 0.01	< 0.5	1.8	0.33
A07-3760	85588	210.81	212.70	1.89	2	1	< 2	< 2	0.4	11	< 0.3	4	8	37	61	0.06	6.54	10.2	2330	1	< 2	< 0.5	2.56	9	62	3	0.9	3.83	5	< 1	< 5	1.68	2.17	610	1.48	0.072	< 15	1.1	12.7	< 3	276	< 0.5	0.23	6.7	3.6	99	4	28	23.2	39	24	3.9	< 0.01	< 0.5	2.9	0.49
A07-3760	85589	212.70	214.02	1.32	2	< 1	< 2	< 2	0.5	7	< 0.3	< 1	6	26	57	0.02	4.09	8.3	2070	1	< 2	< 0.5	2.19	11	61	2	1	4.57	5	< 1	< 5	1.25	2.17	661	1.27	0.073	81	1.4	13.6	< 3	209	< 0.5	0.26	7.2	< 0.5	88	< 1	17	24.1	41	18	4.3	< 0.01	0.8	3.3	0.5
A07-3760	85590	214.02	215.85	1.83	2	1	2	3	< 0.3	69	< 0.3	3	5	29	64	0.39	6.88	15.8	3050	1	< 2	< 0.5	3.13	19	63	2	0.9	5.2	5	< 1	< 5	1.89	2.46	637	1.43	0.089	57	4.8	14.9	< 3	306	< 0.5	0.31	5.7	3.3	135	< 1	25	20.4	33	17	3.8	< 0.01	0.7	2.7	0.42
A07-3760	85591	215.85	217.98	2.13	1	1	< 2	< 2	0.4	22	< 0.3	2	6	44	77	0.12	5.58	9	1810	1	< 2	< 0.5	2.24	14	111	3	0.9	5.3	5	< 1	< 5	1.24	2.94	615	0.93	0.065	< 15	2.7	15.3	< 3	199	< 0.5	0.28	7.2	3.7	115	< 1	27	21.8	40	12	3.9	< 0.01	0.8	3.2	0.45
A07-3760	85592	217.98	219.20	1.22	1	1	< 2	< 2	< 0.3	62	< 0.3	1	6	29	62	0.36	6.32	10.6	2480	1	< 2	< 0.5	3.43	16	60	2	1	4.75	4	< 1	< 5	1.54	2.26	530	1.52	0.06	79	7	14.3	< 3	298	< 0.5	0.28	7	3.1	118	< 1	25	23.5	42	24	3.9	< 0.01	0.6	3	0.43
A07-3760	85593	219.20	221.64	2.44	< 1	< 1	< 2	< 2	0.3	25	< 0.3	1	7	23	51	0.04	5.91	6	1400	1	< 2	< 0.5	3.76	9	53	2	1	3.53	4	< 1	< 5	1.34	2.36	585	1.44	0.051	56	1.7	11.6	< 3	262	< 0.5	0.16	6.5	2.5	69	< 1	24	21.1	38	17	3.5	< 0.01	< 0.5	2.6	0.41
A07-3760	85594	221.64	223.84	2.20	2	2	< 2	< 2	0.4	151	0.3	3	< 3	76	66	0.9	6.82	22.7	1290	1	< 2	< 0.5	4.25	36	225	< 1	0.8	6.37	2	< 1	< 5	1.15	4.19	825	1.58	0.078	< 15	15.3	20.8	< 3	351	< 0.5	0.29	4.2	< 0.5	159	< 1	18	14.3	27	16	2.8	< 0.01	< 0.5	2	0.33
A07-3760	85595	223.84	225.70	1.86	5	4	< 2	< 2	< 0.3	134	0.3	4	3	43	62	0.73	7.47	11.5	1090	1	< 2	< 0.5	5.24	29	111	2	0.9	6.39	3	< 1	< 5	1.36	3.6	918	1.55	0.102	< 15	3	24.6	< 3	348	< 0.5	0.37	3.8	< 0.5	237	< 1	19	14.5	26	18	3	< 0.01	< 0.5	2.1	0.27
A07-3760	85596	225.70	228.04	2.34	5	4	3	< 2	< 0.3	243	0.5	4	7	40	84	1.52	9.05	14.8	1400	1	< 2	< 0.5	6	45	100	3	1.1	8.71	2	< 1	< 5	1.85	3.89	1200	2.05	0.118	102	5.3	29.9	< 3	436	< 0.5	0.43	2.8	< 0.5	277	< 1	20	12.8	26	< 5	3.2	< 0.01	< 0.5	2	0.32
A07-3760	85597	228.04	231.09	3.05	3	3	9	< 2	< 0.3	202	0.4	4	< 3	33	62	1.27	8.68	15.1	1710	1	< 2	< 0.5	6.23	34	59	< 1	1.1	6.47	2	< 1	< 5	1.71	3.35	984	2.02	0.114	82	6.1	25.7	< 3	508	< 0.5	0.41	3.3	< 0.5	280	< 1	20	14.6	30	13	3.2	< 0.01	0.6	2.2	0.37
A07-3760	85598	231.09	233.08	1.99	6	7	3	< 2	< 0.3	147	0.6	4	< 3	127	67	0.96	7.51	9.1	1470	1	< 2	< 0.5	7.27	48	404	2	0.9	7.99	1	< 1	< 5	1.38	6.25	1350	1.23	0

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-2

| DDH K07 - 2 | | |

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-2

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2300	187494	95.50	96.95	1.45	< 4	< 5	5	< 2	0.4	211	< 0.3	5	19	58	64	1.56	5.55	5.3	720	< 1	< 2	< 0.5	3.92	22	87	2	1.3	4.77	2	< 1	< 5	1.54	1.91	667	1.87	0.037	< 15	0.9	15.9	< 3	486	< 0.5	0.47	3	2.7	180	< 1	29	20.3	30	10	3.5	< 0.01	0.7	2.4	0.42
A07-3767	85654	96.95	98.30	1.35	1	1	5	< 2	0.4	77	< 0.3	2	3	42	40	1.1	7.97	< 0.5	1710	1	< 2	< 0.5	3.06	14	76	2	1.2	4.42	3	< 1	< 5	1.7	1.73	822	1.93	0.065	< 15	0.5	15.6	< 3	380	< 0.5	0.38	4.8	2.6	153	< 1	27	19.1	37	16	3.9	< 0.01	< 0.5	3.1	0.58
A07-2300	187495	98.30	100.00	1.70	6	< 5	9	10	< 0.3	171	< 0.3	4	5	27	38	3.04	7.1	6.5	350	< 1	< 2	< 0.5	7.84	22	38	2	0.7	5.29	< 1	< 1	< 5	1.23	2.65	1100	2.25	0.102	< 15	0.8	14.6	< 3	1010	< 0.5	0.54	1.3	< 0.5	267	< 1	22	8.3	14	< 5	1.9	< 0.01	< 0.5	1.4	0.06
A07-2300	187496	100.00	101.50	1.50	6	< 5	3	< 2	< 0.3	180	< 0.3	4	6	28	28	2.39	7.04	7.8	600	< 1	< 2	< 0.5	9.26	28	58	< 1	0.8	5.9	2	< 1	< 5	0.83	2.26	1080	2.66	0.095	< 15	1.6	17.6	< 3	1130	< 0.5	0.52	1.8	< 0.5	264	< 1	22	10.5	18	< 5	2.5	< 0.01	< 0.5	1.8	0.12
A07-3767	85655	101.50	103.53	2.03	2	3	5	10	< 0.3	215	< 0.3	2	7	27	32	2.16	7.43	4	1240	< 1	< 2	< 0.5	6.96	30	48	2	1	6.17	2	< 1	< 5	0.87	2.55	1090	2.35	0.109	< 15	0.3	19.4	< 3	806	< 0.5	0.39	2.6	< 0.5	254	< 1	17	9.8	23	15	2.7	< 0.01	< 0.5	2.2	0.33
A07-3767	85656	103.53	106.07	2.54	1	2	5	< 2	< 0.3	248	< 0.3	3	6	33	35	2.06	8.51	1.9	2190	< 1	< 2	< 0.5	5.56	35	47	3	1.5	5.49	2	< 1	< 5	1.78	2.8	945	2.18	0.083	63	1.3	23	< 3	546	2.5	0.44	3.1	< 0.5	293	< 1	19	11.5	24	< 5	3	< 0.01	1.3	2.4	0.45
A07-2300	187497	106.07	109.15	3.08	4	< 5	11	15	< 0.3	197	< 0.3	3	4	55	32	1.55	6.38	10.6	960	< 1	< 2	< 0.5	6.66	24	135	5	0.7	5.35	2	< 1	< 5	1.8	3.17	874	1.75	0.054	54	2.6	19.4	< 3	470	< 0.5	0.46	1.8	< 0.5	223	< 1	25	13.2	19	< 5	2.5	< 0.01	< 0.5	1.8	0.32
A07-3767	85657	109.15	112.19	3.04	< 1	1	8	< 2	< 0.3	97	< 0.3	2	7	26	50	0.42	8.7	3	3330	< 1	< 2	< 0.5	2.39	19	40	3	0.6	3.97	3	< 1	< 5	1.73	2.07	425	2	0.047	< 15	0.4	15.9	< 3	401	< 0.5	0.31	4.3	2.6	151	< 1	18	13.9	31	12	2.8	< 0.01	< 0.5	2.3	0.41
A07-3767	85658	112.19	115.24	3.05	2	3	6	4	< 0.3	132	< 0.3	3	6	63	57	0.74	7.95	3.6	2850	< 1	< 2	< 0.5	2.83	28	135	3	1.2	5.22	3	< 1	< 5	1.64	3.07	571	1.41	0.088	< 15	0.5	21.1	< 3	394	< 0.5	0.4	1.9	1.9	222	< 1	26	13.1	27	14	3.7	< 0.01	< 0.5	2.9	0.41
A07-2300	187498	115.24	117.10	1.86	4	< 5	4	< 2	< 0.3	144	< 0.3	6	4	78	56	0.7	5.94	7.4	1200	< 1	< 2	< 0.5	3.87	22	167	2	0.6	4.43	2	< 1	< 5	1.74	3.26	815	1.67	0.036	< 15	0.3	17.3	< 3	311	< 0.5	0.43	1.7	1	225	< 1	17	8.6	14	< 5	1.9	< 0.01	< 0.5	1.4	0.21
A07-2300	187499	117.10	118.60	1.50	5	< 5	< 2	< 2	< 0.3	111	< 0.3	3	< 3	38	70	0.42	6.02	3.5	1520	< 1	< 2	< 0.5	3.28	22	86	2	0.6	6.08	2	< 1	< 5	1.37	3.39	955	1.49	0.044	< 15	< 0.1	24	< 3	420	< 0.5	0.54	1.3	< 0.5	278	< 1	17	9.6	16	6	2.2	< 0.01	< 0.5	1.6	0.25
A07-2300	187500	118.60	120.00	1.40	6	< 5	< 2	< 2	< 0.3	76	< 0.3	3	< 3	39	55	0.6	6.42	3.4	590	< 1	< 2	< 0.5	7.07	24	109	2	0.8	5.53	2	< 1	< 5	1.43	3.76	1380	1.74	0.058	< 15	0.5	27.2	< 3	581	< 0.5	0.58	1	< 0.5	307	< 1	22	9.4	16	10	2.4	< 0.01	< 0.5	1.6	0.11
A07-2300	187751	120.00	121.34	1.34	5	< 5	5	< 2	< 0.3	254	< 0.3	4	4	43	51	1.83	6.35	3.9	690	< 1	< 2	< 0.5	5.55	34	77	2	0.8	6.25	< 1	< 1	< 5	1.21	3.31	1050	1.71	0.07	51	0.6	22.3	< 3	594	< 0.5	0.57	1.1	< 0.5	311	< 1	22	8.7	14	6	2.3	< 0.01	< 0.5	1.7	0.29
A07-2300	187752	121.34	124.39	3.05	6	< 5	3	3	< 0.3	140	< 0.3	3	4	34	45	1.32	6.28	3.3	350	< 1	< 2	< 0.5	8.31	25	77	< 1	0.9	5.85	< 1	< 1	< 5	0.98	3.19	1600	2.16	0.1	< 15	0.9	24.3	< 3	483	0.8	0.56	1	< 0.5	303	< 1	26	10.1	18	8	2.6	< 0.01	< 0.5	2	0.15
A07-2300	187753	124.39	127.60	3.21	6	< 5	5	8	< 0.3	217	< 0.3	2	< 3	27	35	2.04	6.5	18.1	520	< 1	< 2	< 0.5	6.66	27	58	2	0.7	5.47	2	< 1	< 5	1.89	2.51	1170	2.38	0.091	74	7.3	17.9	< 3	533	< 0.5	0.52	1.4	< 0.5	261	< 1	20	9.3	15	6	2.2	< 0.01	< 0.5	1.6	0.24
A07-3767	85659	127.60	130.48	2.88	3	5	4	< 2	< 0.3	96	< 0.3	2	< 3	32	75	0.74	7.06	< 0.5	1240	< 1	< 2	< 0.5	2.17	24	93	3	1.2	5.56	2	< 1	< 5	1.55	3.3	1030	1.9	0.048	< 15	0.8	23.6	< 3	275	< 0.5	0.37	2.5	< 0.5	234	< 1	14	10.9	29	< 5	3.3	< 0.01	< 0.5	2.2	0.4
A07-3767	85660	130.48	133.51	3.03	4	4	3	< 2	< 0.3	139	< 0.3	1	6	39	69	0.61	8.6	2.9	2000	< 1	< 2	< 0.5	3.72	28	124	< 1	1.5	6	2	< 1	< 5	1.81	4.05	1430	1.36	0.103	43	< 0.1	24.7	< 3	448	< 0.5	0.45	2.1	2.5	303	< 1	21	12.8	31	15	3.2	< 0.01	< 0.5	2.7	0.41
A07-3767	85661	133.51	134.75	1.24	5	6	3	< 2	< 0.3	132	< 0.3	3	6	47	74	0.68	8.23	< 0.5	950	< 1	< 2	< 0.5	2.23	31	119	< 1	1.2	6.27	2	< 1	< 5	1.17	3.99	1140	2.07	0.076	< 15	< 0.1	27.5	< 3	339	< 0.5	0.39	1.9	< 0.5	263	< 1	18	12.4	30	23	3.7	< 0.01	< 0.5	2	0.28
A07-3767	85662	134.75	138.47	3.72	1	3	< 2	< 2	< 0.3	126	< 0.3	3	9	33	62	1.19	9.49	3.7	1050	< 1	< 2	< 0.5	3.38	26	68	< 1	1.2	5.61	2	< 1	< 5	1.54	3.41	1350	2.71	0.132	< 15	0.8	23.5	< 3	449	< 0.5	0.45	2.1	2.9	286	< 1	22	12.4	30	14	3.3	< 0.01	< 0.5	2.6	0.48
A07-3767	85663	138.47	140.85	2.38	2	4	< 2	< 2	< 0.3	97	< 0.3	4	4	33	62	0.75	9.06	< 0.5	920	< 1	< 2	< 0.5	3.03	26	85	< 1	1.5	5.39	3	< 1	< 5	1.1	3.41	1360	3.18	0.085	< 15	0.7	22.6	< 3	377	< 0.5	0.41	3.3	2.9	232	< 1	22	11.2	26	11	3	< 0.01	< 0.5	2.7	0.47
A07-3767	85664	140.85	143.70	2.85	2	5	3	< 2	< 0.3	103	< 0.3	3	5	32	61	0.58	9.08	2.6	780	< 1	< 2	< 0.5	2.21	24	78	< 1	1.1	5.34	2	< 1	< 5	0.81	3.14	1180	3.67	0.105	< 15	1.1	22.5	< 3	385	< 0.5	0.42	1.8	< 0.5	260	< 1	20	10.7	28	14	3	< 0.01	< 0.5	2.2	0.37
A07-3767	85665	143.70	144.35	0.65	< 1	3	2	< 2	0.3	139	< 0.3	2	3	28	54	1.29	8.29	13.1	480	< 1	< 2	< 0.5	3.21	27	51	7	1.3	4.85	2	< 1	< 5	1.02	2.12	1010	3.12	0.125	< 15	5.8	18.7	< 3	264	< 0.5	0.4	1.6	< 0.5	244	2	17	12	31	16	3.2	< 0.01	< 0.5	2.2	0.39
A07-3767	85666	144.35	144.55	0.20	2	4	18	27	< 0.3	63	< 0.3	< 1	5	35	66	0.72	5.85	86.6	4090	< 1	< 2	< 0.5	7.33	18	108	10	0.8	3.82	2	< 1	< 5	1.56	3.33	1000	0.53	0.045	55	15.9	16.9	< 3	495	< 0.5	0.31	1.9	2.3	163	11	14	8	23	16	2.7	< 0.01	0.6	2.4	0.34
A07-3767	85667	144.55	147.86	3.31	3	4	5	< 2	< 0.3	67	< 0.3	2	5	43	58	0.56	7.76	30.3	750	< 1	< 2	< 0.5	3.25	24	143	6	1	4.99	2	< 1	< 5	1.41	3.15	1020	1.8	0.081	44	10	23.7	< 3	302	< 0.5	0.39	1.7	< 0.5	243	4	16	10.3	26	18	3	< 0.01	< 0.5	2.2	0.32
A07-2300	187754	147.86	150.91	3.05	6	< 5	4	< 2	< 0.3	70	< 0.3	3	3	52	52	0.64	5.66	11.4	580	< 1	< 2	< 0.5	4.63	26	176	6	0.7	5.51	< 1	< 1	< 5	1.2	3.99	1380	1.99	0.063	< 15	3.4	26.9	< 3	254	< 0.5	0.48	1	< 0.5	265	< 1	15	8.2	15	< 5	2.1	< 0.01	< 0.5	1.4	0.11
A07-2300	187755	150.91	153.96	3.05	< 4	< 5	< 2	< 2	< 0.3	53	< 0.3	2	< 3	28	46	0.14	6.05	11.3	530	< 1	< 2	< 0.5	4.17	14	73	6	0.6	4.59	2	< 1	< 5	0.98	3.42	1170	2.92	0.07	< 15	2.7	21.5	< 3	274	< 0.5	0.55	0.9	< 0.5	307	< 1	18	10.2	20	7	2.6	< 0.01	< 0.5	1.6	0.24
A07-2300	187756	153.96	157.31	3.35	6	< 5	38	39	< 0.3	95	< 0.3	3	< 3	44	66	0.36	5.64	54.7	270	< 1	< 2	< 0.5	5.28	24	166	5	0.6	5.86	< 1	< 1	< 5	2.32	3.68	1310	0.43	0.038	62	5.8	22.1	< 3	209	< 0.5	0.5	1	< 0.5	282	< 1	13	6.9	14	8	2.2	< 0.01	< 0.5	1.3	0.2
A07-3767	85667	144.55	147.86	3.31	3	4	5	< 2	< 0.3	67	< 0.3	2	5	43	58	0.56	7.76	30.3	750	< 1	< 2	< 0.5	3.25	24	143	6	1	4.99	2	< 1	< 5	1.41	3.15	1020	1.8	0.081	44	10	23.7	< 3	302	< 0.5	0.39	1.7	< 0.5	243	4	16	10.3	26	18	3	< 0.01	< 0.5	2.2	0.32
A07-2300	187757	157.31	158.20	0.89	4	< 5	81	98	0.4	125	< 0.3	6	3	31	34	0.73	4.73	219	510	< 1	< 2	< 0.5	5.68	14	89	8	0.6	3.33	2	< 1	< 5	2.98	2.25	712	0.09	0.058	69	55.8	13.4	< 3	241	< 0.5	0.34	2.2	1.8	202	7	16	12.5	24	10	2.5	< 0.01	< 0.5	1.9	0.32
A07-2300	187758	158.20	159.56	1.36	< 4	< 5	3	< 2	< 0.3	86	< 0.3	5	3	29	36	0.66	5.62	48.2	580	< 1	< 2	< 0.5	6.03	13	97	6	0.8	4.97	2	< 1	< 5	2.51	2.48	773	0.86	0.073	60	24.2	17.4	< 3	243	< 0.5	0.43	2.2	1.4	259	< 1	17	10.8	19	9	2.3	< 0.01	< 0.5	1.8	0.28
A07-3767	85669	159.56	162.70	3.14	1	3	< 2	< 2	< 0.3	82	< 0.3	4	< 3	32	36	0.66	4.81	24.9	950	< 1	< 2	< 0.5	3.74	16	113	5	0.9	4.2	2	< 1	< 5	1.55	1.65	623	1.12	0.085	48	8.6	17.7	< 3	177	< 0.5	0.3	2.3	2.7	218	< 1	10	12.1	28	< 5	2.5	< 0.01	< 0.5	2.4	0.29
A07-3767	85670	162.70	164.70	2.00	1	3	< 2	< 2	< 0.3	124	< 0.3	7	< 3	34	28	0.82	6.77	19.8	1000	< 1	< 2	< 0.5	3.63	19	69	4	1.2	3.67	2	< 1	< 5	1.64	1.6	611	1.86	0.064	85	5.8	14.4	< 3	197	< 0.5	0.26	4	3.2	273	< 1	15	12.6	25	8	2.4	< 0.01	< 0.5	2.3	0.29
A07-2300	187759	164.70	167.07	2.37	5	< 5	3	6	< 0.3	242	< 0.3	4	4	32	33	1.41	5.82	12.2	1200	< 1	< 2	< 0.5	5.67	22	68	2	0.7	4.61	2	1	< 5	1.91	2.33	806	2.19	0.069	50	1.8	14	8	282	< 0.5	0.4	1.9	2.2	241	< 1	18	9.6	14	< 5	2	< 0.01	< 0.5	1.5	0.17
A07-2300	187760	167.07	170.12	3.05	7	8	5	< 2	< 0.3	191	1.1	4	6	69	104	1.07	6.08	58.7	720	< 1	< 2	< 0.5	6.22	31	252	3	0.8	5.69	< 1	< 1	< 5	1.86	3.97	1270	1.9	0.083	40	3.3	28.3	< 3	289	< 0.5	0.47	2	1.1	281	< 1	18	8.3	14	< 5	2	< 0.01	< 0.5	1.4	0.13
A07-2300	187761	170.12	171.95	1.83	8	9	2	< 2	< 0.3	236	< 0.3	3	5	80	63	0.92	5.4	22	590	< 1	< 2	< 0.5	7.36	30	267	3	0.7	6.34	< 1	< 1	< 5	1.26	3.69	1270	1.35	0.086	< 15	3.8	29.1	9	302	1.3	0.45	1.5	< 0.5	295	< 1	15	8.7	16	< 5	2	< 0.01	< 0.5	1.4	0.2
A07-2300	187762	171.95	175.00	3.05	7	7	< 2	< 2	< 0.3	204	< 0.3	4	< 3	78	53	0.86	5.66	7.2	630	< 1	< 2	< 0.5	7.41	31	263	3	0.5	6.42	< 1	< 1	< 5	1.18	4.41	1250	1.65	0.071	< 15	2.6	30.2	< 3	295	< 0.5	0.46	1.1	< 0.5	299	< 1	17	7.5	10	7	1.9	< 0.01	< 0.5	1.3	0.07
A07-2300	187763	175.00	176.10	1.10	9	7	3	< 2	< 0.3	186	< 0.3	4	< 3	54	47	2.2	5.14	37.3	480	< 1	< 2	< 0.5	9.29	27	162	5	1.1	5.83	< 1	< 1	< 5	1.11	2.54	1150	1.64	0.064	< 15	6.2	27.4	14	265	< 0.5	0.43	1.2	1.4	261	< 1	24	10.6	18	9	2.5	< 0.01	0.6	1.9	0.07
A07-3767	84671	176.10	178.04	1.94	3	6	2	< 2	< 0.3	164	< 0.3	13	< 3	75	40	1.03	7.4	11.1	1300	1	< 2	< 0.5	4.35	25	203	< 1	1.3	4.73	3	< 1	< 5	1.32	2.7	663	2.04	0.085	64	3.3	20.2	< 3	263	< 0.5	0.27	5.8	3.2	345	< 1	23	17.6	39	10	3.6	< 0.01	< 0.5	2.7	0.5
A07-3767	85672	178.04	180.56	2.52	3	10	9	< 2	< 0.3	171	< 0.3	5	6	84	58	1.61	7.24	7.7	1500	1	< 2	< 0.5	5.64	30	328	2	1.3	5.71	2	< 1	< 5	1.48	4	809	1.45	0.101	< 15	2.3	31.4	22	256	< 0.5	0.32	4.4	< 0.5	290	< 1	17	12.1	24	14	2.8	< 0.01	< 0.5	1.7	0.2
A07-3767	85673	180.56	182.30	1.74	2	4	2	< 2	< 0.3	216	< 0.3	12	< 3	66	57	1	5.48	50.7	910	1	< 2	< 0.5	8.95	23	151	2	1.4	5.09	2	< 1	< 5	1.12	3.59	1120	1.37	0.159	< 15	4.8	13.6	< 3	169	< 0.5	0.25	7.1	4.3	319	< 1	26	28	53	26	3.5	< 0.01	< 0.5	2.7	0.25
A07-3767	85674	182.30	186.25	3.95	8	9	4	< 2	< 0.3	302	< 0.3	3	7	93	57	1.59	6.82	6.9	1300	< 1	2	< 0.5	7.72	38	347	< 1	1.4	6.51	< 1	< 1	< 5	1.28	4.46	1060	1.48	0.12	< 15	1.5	32.5	< 3	188	< 0.5	0.35	3.1	2.5	267	< 1	18	13.4	29	12	3.2	< 0.01	< 0.5	2.5	0.06
A07-3767	85675	186.25	189.32	3.07	< 1	1	3	< 2	< 0.3	105	< 0.3	25	6	55	41	1.05	7.27	10.2	1700	1	< 2	< 0.5	5.83	14	90	1	1.4	3.8	3	< 1	< 5	2.34	2.35	691	1.94	0.102	< 15	1	15.6	< 3	165	< 0.5	0.34	9.4	7.2	310	< 1	30	26.5	51	30	4	< 0.01	< 0.5	3	0.4
A07-3767	85676	189.32	191.76	2.44	2	7	< 2	< 2	< 0.3	117	< 0.3	2	5	98	51	0.56	6.23	14.5	600	< 1	4	< 0.5	8.01	37	407	3	0.7	6.17	2	< 1	< 5	0.85	4.98	1340	1.23	0.07	< 15	1.7	37.7	< 3	274	< 0.5	0.32	2	< 0.5	232	< 1	13	7.1	19	< 5	2.2	< 0.01	< 0.5	1.9	< 0.05
A07-3767	85677	191.76	194.70	2.94	2	4	6	< 2	< 0.3	248	< 0.3	13	7	67	64	1.12	7.41	33.9	1500	< 1	< 2	< 0.5	6.44	31	221	3	1.3	5.45	2	< 1	< 5	1.36	3.42	1150	1.77	0.092	< 15	3.2	26	< 3	262	< 0.5	0.35	4.1	< 0.5	290	< 1	21	13.2	31	17	2.8	< 0.01	< 0.5	2	0.14
A07-2300	187764	194.70	196.25	1.55	7	7	3	< 2	< 0.3	154	< 0.3	3	< 3	71	78	1.15	4.84	12.9	740	< 1	< 2	< 0.5	8.5	33	288	2	0.7	6.67	< 1	< 1	< 5	1.06	5.29	1580	1.34	0.05	< 15	2.5	33.5	< 3	319	< 0.5	0.41	0.9	< 0.5	247	< 1	16	7.3	14	5	2	< 0.01	< 0.5	1.3	0.08
A07-2300	187765	196.25	197.96	1.71	7	6	< 2	< 2	< 0.3	121	< 0.3	4	< 3	116	50	0.53	5.1	8.7	480	< 1	< 2	< 0.5	8.18	31	411	< 1	0.5	6.55	< 1	< 1	< 5	0.77	6.08	1420	1.63	0.057	< 15	1.4	36.5	< 3	276	1.8	0.41	0.5	< 0.5	259	< 1	14	5.2	10	5	1.5	< 0.01	< 0.5	1.1	< 0.05
A07-3767	85678	197.96	200.94	2.98	2	3	3	< 2	< 0.3	163	< 0.3	41	4	84	40	0.94	3.6	38	620	< 1	< 2	< 0.5	4.35	25	167	3	1.4	3.78	3	< 1	< 5	0.68	1.78	689	1.95	0.076	< 15	6.8	18.5	< 3	214	< 0.5	0.29	6.7	4.5	500	< 1	15	20.6	42	20	3.7	< 0.01	< 0.5	2.9	0.34
A07-2300	187766	200.94	201.60	0.66	< 4	< 5	< 2	< 2	< 0.3	143	0.4	74	3	92	41	1.09	4.99	57.6	430	< 1	< 2	< 0.5	5.63	11	102	3	0.8	2.71	3	< 1	< 5	1.9	2.09	562	0.73	0.077	< 15	6.1	9.7	7	227	1	0.35	5.6	5.9	720	3	29	22.4	35	14	3.2	< 0.01	0.8	2.3	0.38
A07-2300	187767	201.60	203.74	2.14	7	5	4	6	< 0.3	212	< 0.3	74	< 3	85	37	1.64	4.87	85.8	310	< 1	< 2	< 0.5	7.5	18	116	4	0.9	3.77	2	< 1	< 5	2.16	2.46	717	0.13	0.057	41	10.8	17.1	14	284	< 0.5	0.4	2.8	5.3	729	6	21	14.7	23	9	2.8	< 0.01	< 0.5	2.1	0.33
A07-2300	187768	203.74	204.57	0.83	6	6	5	< 2	< 0.3	163	< 0.3	4	< 3	80	53	1.04	4.2	96.9	170	< 1	< 2	< 0.5	9.83	30	351	5	0.6	5.55	< 1	< 1	< 5	1.03	3.07	1280	0.22	0.044	31	11.3	30.4	3	393	< 0.5	0.34	0.9	< 0.5	227	< 1	12	5.4	9	< 5	1.6	< 0.01	< 0.5	1	0.21
A07-2300	187769	204.57	206.40	1.83	6	6	37	45	< 0.3	31	< 0.3	13	3	95	49	0.45	4.24	498	370	< 1	< 2	< 0.5	9.03	21	440	5	0.5	5.3	< 1	< 1	< 5	1.36	3.78	1250	0.18	0.048	30	7.7	34.4	< 3	412	< 0.5	0.34

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-2

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2300	187779	222.80	224.08	1.28	< 4	< 5	9	< 2	0.3	260	0.6	31	6	47	62	1.07	6.26	226	630	1	< 2	< 0.5	3.12	16	60	5	0.8	3.69	3	< 1	< 5	2.43	1.52	429	2.39	0.068	96	13.1	15.8	< 3	352	< 0.5	0.41	4.5	5	210	< 1	23	18.7	30	10	3	< 0.01	< 0.5	2.3	0.26
A07-2300	187780	224.08	225.91	1.83	< 4	< 5	< 2	< 2	< 0.3	148	< 0.3	7	< 3	87	31	1.05	5.82	21.7	580	< 1	< 2	< 0.5	5.71	21	269	2	0.7	4.44	2	< 1	< 5	1.65	3.33	697	2.08	0.08	38	1.7	20.8	< 3	342	< 0.5	0.38	3.1	< 0.5	198	< 1	22	13.9	23	9	2.6	< 0.01	< 0.5	1.9	0.22
A07-2300	187782	225.91	228.04	2.13	7	13	< 2	< 2	< 0.3	256	< 0.3	6	4	38	34	1.15	5.67	10.4	890	1	< 2	< 0.5	4.78	18	58	2	0.9	3.58	3	< 1	< 5	1.49	2.02	680	2.3	0.088	< 15	0.8	13.9	< 3	271	< 0.5	0.45	4.1	< 0.5	238	< 1	24	13.8	24	< 5	2.5	< 0.01	< 0.5	2.1	0.36
A07-2300	187783	228.04	229.50	1.46	6	9	< 2	< 2	< 0.3	254	< 0.3	8	< 3	45	36	1.04	5.28	8.4	720	< 1	< 2	< 0.5	4.35	16	84	< 1	1	3.55	3	< 1	< 5	1.74	1.99	673	2.13	0.086	< 15	1.2	13.1	< 3	238	< 0.5	0.41	4.6	2.8	227	< 1	28	16.4	26	< 5	2.7	< 0.01	0.6	2.4	0.44
A07-2300	187784	229.50	231.09	1.59	11	10	< 2	< 2	< 0.3	142	< 0.3	4	< 3	95	46	0.53	5.28	7.1	1140	< 1	2	< 0.5	8.06	33	352	3	0.9	5.79	< 1	< 1	< 5	1.67	5.6	1360	1.13	0.078	49	0.6	34.4	< 3	315	< 0.5	0.44	1.9	< 0.5	287	< 1	16	7	17	< 5	2	< 0.01	< 0.5	1.5	0.25
A07-2300	187785	231.09	232.38	1.29	8	9	< 2	< 2	< 0.3	181	< 0.3	5	< 3	78	45	0.72	5.41	6.8	530	< 1	< 2	< 0.5	8.3	27	276	3	0.8	5.55	< 1	< 1	< 5	1.12	4.72	1340	1.33	0.084	< 15	1.1	27.7	< 3	280	< 0.5	0.44	1.3	< 0.5	282	< 1	16	7.3	15	< 5	1.8	< 0.01	0.6	1.3	0.22
A07-2300	187786	232.38	233.54	1.16	4	< 5	28	29	0.5	3380	< 0.3	4	8	57	41	13.00	2.10	26.3	390	< 1	< 2	< 0.5	6.15	193	86	< 1	0.6	18.6	< 1	< 1	< 5	0.35	1.85	1040	0.79	0.084	< 15	3.3	7.5	40	141	< 0.5	0.19	3.1	1.7	191	< 1	14	10.8	17	< 5	1.3	< 0.01	< 0.5	1.2	0.21
A07-2300	187787	233.54	236.39	2.85	11	12	3	< 2	< 0.3	206	< 0.3	4	< 3	77	42	1.18	5.08	10.5	620	< 1	< 2	< 0.5	8.47	41	346	3	0.5	6.34	< 1	< 1	< 5	1.07	4.96	1340	1.41	0.071	< 15	1.5	32.4	< 3	309	< 0.5	0.46	1.2	< 0.5	274	< 1	16	7.4	14	6	1.9	< 0.01	0.8	1.5	0.26
A07-2300	187788	236.39	237.94	1.55	< 4	< 5	< 2	< 2	< 0.3	75	< 0.3	3	< 3	19	27	0.44	4.71	4.8	1330	< 1	< 2	< 0.5	5.23	6	51	< 1	0.9	1.95	6	< 1	< 5	1.62	1.23	726	2.78	0.084	44	0.9	9.9	< 3	275	< 0.5	0.35	4	2.4	120	< 1	26	16.3	24	11	2.7	< 0.01	0.8	2.6	0.49
A07-2300	187789	237.94	239.04	1.10	< 4	< 5	10	< 2	0.4	2500	< 0.3	6	< 3	32	36	11.20	2.58	17	< 50	< 1	< 2	< 0.5	5.09	100	40	< 1	0.6	18.5	3	2	< 5	0.21	1.32	1070	1.71	0.064	< 15	1.4	5.8	22	229	< 0.5	0.2	2.5	< 0.5	75	< 1	15	9.5	15	12	1.4	< 0.01	< 0.5	1.9	0.34
A07-2300	187790	239.04	240.54	1.50	< 4	< 5	< 2	< 2	< 0.3	86	< 0.3	4	3	19	26	0.38	3.78	6.1	1140	< 1	< 2	< 0.5	1.4	8	38	< 1	0.5	2.28	3	< 1	< 5	2.03	1.11	300	2.2	0.054	< 15	0.6	9.8	< 3	334	2.9	0.27	6.1	3	87	< 1	16	18.2	29	10	2.4	< 0.01	0.9	2.2	0.38
A07-2300	187791	240.54	241.46	0.92	< 4	< 5	< 2	< 2	< 0.3	38	< 0.3	5	< 3	29	15	0.18	4.55	5.6	2090	1	< 2	< 0.5	1.54	9	79	< 1	0.7	1.95	3	< 1	< 5	2.62	1.12	235	2.07	0.055	48	1.2	11.4	< 3	392	< 0.5	0.3	5.1	2.3	106	< 1	19	17.4	32	< 5	2.5	< 0.01	0.8	1.9	0.42
A07-2300	187792	241.46	243.50	2.04	< 4	< 5	4	< 2	< 0.3	247	< 0.3	5	4	37	30	1.27	6.12	40.4	1140	1	< 2	< 0.5	3.33	22	69	2	< 0.2	3.26	2	< 1	< 5	2.13	1.91	553	2.14	0.067	< 15	1.6	13.2	< 3	389	< 0.5	0.34	4.3	< 0.5	144	3	22	13.4	24	10	2.1	< 0.01	< 0.5	1.6	0.26
A07-2300	187793	243.50	244.61	1.11	12	11	< 2	< 2	< 0.3	106	< 0.3	4	< 3	83	58	0.44	4.86	< 0.5	640	< 1	2	< 0.5	8.29	30	500	2	0.7	6.58	< 1	< 1	< 5	1.05	6.1	1660	1.35	0.081	< 15	1.1	38	< 3	337	< 0.5	0.42	2.6	1.9	283	< 1	14	9.4	26	10	2.4	< 0.01	< 0.5	1.3	0.25
					>9	>9	20-100		1-5	150-300		10-50	20-100	100-200	100-200	2.0-4.0		20-100	1000-2000	>2		>10.0		400-1000				>2.00								5-10																					
							101-200		5.1-10	301-500		>50	101-500	>200	201-500	4.1-5.0		101-200	>2000					>1000												11-50																					
							>200		>10	>500			>500		>500	>5.0		>200																		>50																					

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-3

| DDH K07 - 3 | | |

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-3

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2302	187734	119.80	121.34	1.54	4	< 5	< 2	< 2	0.4	148	0.6	3	3	30	74	1.19	6.17	20	460	< 1	< 2	< 0.5	7.39	30	65	4	0.7	6.43	< 1	< 1	< 5	1.73	2.95	1090	1.62	0.07	78	3.7	19.1	< 3	412	< 0.5	0.42	1.2	< 0.5	248	< 1	13	6.5	14	< 5	1.8	< 0.01	< 0.5	1.1	0.20
A07-2302	187735	121.34	124.25	2.91	5	< 5	< 2	< 2	< 0.3	134	0.4	9	< 3	52	59	0.75	4.14	7.9	440	< 1	< 2	< 0.5	3.35	20	118	4	0.7	4.35	2	< 1	< 5	1.42	2.46	653	1.47	0.04	< 15	0.9	14.4	< 3	253	< 0.5	0.31	2.8	2.5	153	< 1	15	12.5	22	9	2.4	< 0.01	< 0.5	1.7	0.25
A07-2302	187736	124.25	124.95	0.70	< 4	< 5	2	12	0.4	81	0.4	3	3	244	65	0.26	5.11	9.6	1360	< 1	< 2	< 0.5	6.30	37	583	3	1.4	5.82	3	< 1	< 5	1.42	6.84	896	1.89	0.14	< 15	0.9	19.5	< 3	1030	< 0.5	0.46	3.7	< 0.5	184	< 1	14	40.3	70	28	5.4	< 0.01	< 0.5	1.3	0.20
A07-3893	85718	124.95	127.49	2.54	5	2	5	< 2	0.4	108	2.8	16	9	133	216	0.94	5.07	21.1	650	1	< 2	< 0.5	2.51	10	97	< 1	0.8	2.40	3	< 1	< 5	1.70	1.37	471	1.03	0.05	41	1.4	8.9	20	201	< 0.5	0.32	6.3	6.5	242	< 1	28	20.1	39	13	3.8	< 0.01	< 0.5	2.6	0.42
A07-3893	85719	127.49	129.62	2.13	3	2	5	< 2	0.4	192	< 0.3	13	4	83	98	1.70	6.81	22	610	1	< 2	< 0.5	4.03	25	57	3	0.6	4.33	2	< 1	< 5	1.87	1.60	854	1.18	0.08	72	2	14.1	14	276	< 0.5	0.38	4.4	8.5	274	< 1	24	12.1	26	10	3	< 0.01	< 0.5	2.2	0.38
A07-3893	85720	129.62	132.37	2.75	3	2	3	< 2	< 0.3	95	< 0.3	2	< 3	71	77	0.53	7.04	6.5	680	1	< 2	< 0.5	4.88	17	64	< 1	0.7	3.23	2	< 1	< 5	1.89	1.50	822	1.36	0.07	57	0.6	14.3	< 3	290	< 0.5	0.41	3.8	1.4	179	< 1	21	13.3	23	10	2.9	< 0.01	< 0.5	2.2	0.34
A07-3893	85721	132.37	134.81	2.44	3	1	< 2	< 2	< 0.3	109	< 0.3	< 1	< 3	63	86	0.40	6.31	7.2	790	1	< 2	< 0.5	2.44	15	60	< 1	0.7	2.88	3	< 1	< 5	2.19	1.38	599	1.17	0.05	78	0.7	11.5	< 3	210	< 0.5	0.39	5.4	1.5	126	5	22	16.8	33	13	3.5	< 0.01	< 0.5	2	0.35
A07-3893	85722	134.81	137.25	2.44	2	< 1	< 2	< 2	0.5	61	< 0.3	< 1	< 3	60	75	0.42	5.74	1.9	790	1	< 2	< 0.5	0.70	8	63	< 1	0.7	1.94	3	< 1	< 5	2.97	1.21	289	0.78	0.03	64	0.6	9.5	7	133	< 0.5	0.37	6.2	2.3	87	< 1	22	18.2	33	7	3.3	< 0.01	< 0.5	2.1	0.30
A07-3893	85723	137.25	139.38	2.13	3	1	3	< 2	0.5	91	< 0.3	3	4	136	122	0.90	5.20	8.3	260	1	< 2	< 0.5	1.25	10	69	2	0.5	2.07	3	< 1	< 5	2.14	1.14	299	0.56	0.03	< 15	2.2	8.5	14	80	< 0.5	0.33	5.7	2.5	126	< 1	20	16.1	30	10	3.1	< 0.01	0.9	2.1	0.31
A07-3893	85724	139.38	141.52	2.14	2	1	3	< 2	0.5	136	< 0.3	< 1	3	89	114	0.73	6.11	11.9	360	1	< 2	< 0.5	1.86	12	54	2	0.6	2.21	3	< 1	< 5	1.88	1.19	377	0.91	0.05	< 15	2.5	9.5	< 3	169	< 0.5	0.37	5.2	< 0.5	127	< 1	21	16.9	37	14	3.3	< 0.01	< 0.5	2.1	0.31
A07-3893	85725	141.52	143.96	2.44	3	1	3	< 2	0.4	140	< 0.3	< 1	< 3	65	78	0.62	5.22	35.6	430	1	< 2	< 0.5	5.74	12	55	4	0.6	2.57	2	< 1	< 5	1.54	1.35	895	0.56	0.05	36	5.4	9.1	< 3	285	< 0.5	0.31	5.1	2.1	115	< 1	22	14.3	28	7	2.8	< 0.01	< 0.5	2.1	0.41
A07-3893	85726	143.96	146.40	2.44	4	3	4	< 2	0.3	85	< 0.3	21	< 3	99	82	0.43	7.12	112	660	1	< 2	< 0.5	4.44	21	132	5	0.7	4.10	< 1	< 1	< 5	2.64	1.51	890	0.94	0.08	83	15.4	13.4	< 3	310	< 0.5	0.35	4	3.6	371	< 1	13	13.9	25	9	2.9	< 0.01	< 0.5	1.6	0.24
A07-3893	85727	146.40	148.84	2.44	7	3	2	< 2	0.4	156	2.4	4	18	161	333	0.79	5.99	39.1	350	1	< 2	< 0.5	4.52	29	293	4	0.7	4.36	2	< 1	< 5	1.45	1.64	1120	0.77	0.09	< 15	31.8	16.3	12	166	0.7	0.32	4.2	3.5	178	< 1	19	14.7	29	14	3	< 0.01	< 0.5	1.9	0.32
A07-3893	85728	148.84	151.89	3.05	6	4	3	< 2	< 0.3	129	1.6	36	< 3	108	152	1.01	6.60	13	770	1	< 2	< 0.5	5.21	26	226	3	0.7	4.05	2	< 1	< 5	1.92	1.57	901	1.07	0.07	69	3.4	19.4	13	204	< 0.5	0.37	4.7	5.3	530	< 1	22	13.9	24	6	3.1	< 0.01	< 0.5	2.1	0.36
A07-3893	85729	151.89	153.72	1.83	4	1	3	< 2	0.3	91	< 0.3	4	6	63	55	0.73	5.68	10.8	520	2	< 2	< 0.5	1.02	9	79	3	0.7	2.10	3	< 1	< 5	2.29	1.24	279	0.93	0.03	< 15	3.4	10.6	15	128	1.2	0.35	7.8	4.6	109	< 1	23	19.9	34	12	3.8	< 0.01	< 0.5	2.3	0.39
A07-2302	187737	153.72	155.55	1.83	7	< 5	10	21	0.6	115	0.8	14	7	111	131	0.92	3.75	62.4	530	< 1	< 2	< 0.5	1.40	12	110	< 1	0.6	2.72	3	< 1	< 5	1.75	1.78	315	1.21	0.02	61	8.2	9.9	25	137	< 0.5	0.30	4.7	2.4	173	< 1	19	16.7	27	9	2.7	< 0.01	< 0.5	2.2	0.40
A07-2302	187738	155.55	157.99	2.44	10	6	4	< 2	< 0.3	142	1.2	6	< 3	71	151	0.65	5.22	27	250	< 1	< 2	< 0.5	6.56	29	249	< 1	0.6	5.62	2	< 1	< 5	1.17	4.89	1180	1.38	0.07	< 15	3.3	27.5	< 3	325	< 0.5	0.40	1.5	2.2	267	< 1	14	8.1	14	7	1.9	< 0.01	< 0.5	1.4	0.23
A07-3893	85730	157.99	161.04	3.05	4	5	< 2	< 2	0.4	118	2.7	< 1	< 3	115	318	0.36	6.90	60.6	630	< 1	< 2	< 0.5	7.57	35	398	4	0.5	5.00	2	< 1	< 5	1.45	1.78	1340	1.12	0.10	< 15	9.6	27.6	< 3	349	< 0.5	0.40	2.7	< 0.5	232	< 1	16	8.2	19	11	2.5	< 0.01	< 0.5	1.5	0.25
A07-3893	85731	161.04	162.25	1.21	5	5	< 2	< 2	< 0.3	184	< 0.3	< 1	4	75	97	0.66	7.30	10.4	470	< 1	< 2	< 0.5	7.73	36	305	< 1	0.6	5.45	< 1	< 1	< 5	1.28	1.76	1410	1.38	0.10	< 15	1.6	31.9	< 3	393	< 0.5	0.42	2.5	< 0.5	246	< 1	16	8.5	19	< 5	2.6	< 0.01	< 0.5	1.4	0.24
A07-3893	85732	162.25	165.31	3.06	4	3	< 2	< 2	< 0.3	91	1.6	12	10	101	244	0.43	5.99	9.5	400	1	< 2	< 0.5	4.48	18	193	4	0.6	3.41	3	< 1	< 5	1.73	1.58	999	0.55	0.07	49	4.9	15.2	< 3	148	< 0.5	0.36	5.5	2.5	245	< 1	22	15.7	31	9	3.3	< 0.01	0.5	2.2	0.34
A07-2302	187739	165.31	167.14	1.83	< 4	< 5	46	11	0.3	245	1.2	47	12	84	187	0.79	4.20	21.4	370	< 1	< 2	< 0.5	4.72	18	146	2	0.7	4.00	4	< 1	< 5	1.45	2.98	1130	0.82	0.05	47	7.8	11.8	6	185	0.9	0.34	4.9	6.5	359	3	22	19.1	33	11	3.1	< 0.01	0.6	2.4	0.39
A07-2302	187741	167.14	168.66	1.52	6	< 5	6	11	< 0.3	121	2	116	91	103	279	0.43	3.99	52.2	500	1	< 2	< 0.5	4.01	18	229	4	0.8	3.73	4	< 1	< 5	2.16	2.00	958	0.20	0.04	82	10.5	12.8	8	128	1.3	0.35	6.2	10.9	913	< 1	24	23	40	15	4.1	< 0.01	< 0.5	3.3	0.56
A07-3893	85733	168.66	171.44	2.78	3	2	2	< 2	0.5	238	1.6	4	36	74	269	0.99	6.55	41.5	550	2	< 2	< 0.5	3.95	22	163	4	0.8	3.83	4	< 1	< 5	2.05	1.51	1150	0.79	0.07	< 15	5.1	14.6	< 3	191	< 0.5	0.41	7.5	4.5	148	2	25	20.1	40	11	3.8	< 0.01	< 0.5	2.8	0.44
A07-3893	85734	171.44	173.24	1.80	3	2	2	< 2	< 0.3	166	< 0.3	6	16	61	129	1.23	8.35	52.7	420	1	< 2	< 0.5	4.02	28	68	4	0.9	4.55	3	3	< 5	1.67	1.44	993	2.22	0.07	< 15	6.2	18.2	< 3	348	< 0.5	0.45	5.5	< 0.5	231	< 1	21	14.8	28	12	3.3	< 0.01	< 0.5	1.8	0.31
A07-2302	187742	175.72	177.20	1.48	4	< 5	4	11	0.4	85	0.6	10	4	73	109	0.61	3.95	67.8	280	< 1	< 2	< 0.5	2.69	14	103	< 1	0.7	2.98	2	< 1	< 5	1.53	2.03	583	0.99	0.04	50	5.9	10.3	< 3	232	< 0.5	0.32	3.3	3.5	188	< 1	18	14.5	23	6	2.5	< 0.01	< 0.5	1.6	0.31
A07-2302	187743	177.20	178.35	1.15	< 4	< 5	< 2	7	< 0.3	55	0.3	4	< 3	52	62	0.32	4.24	43.2	360	< 1	< 2	< 0.5	3.44	9	77	< 1	0.5	2.68	3	< 1	< 5	1.46	2.22	541	1.23	0.03	45	2.4	11.3	< 3	216	< 0.5	0.31	4	2.3	128	< 1	18	14.9	26	9	2.6	< 0.01	< 0.5	1.9	0.33
A07-3893	85735	178.35	181.30	2.95	7	8	< 2	< 2	< 0.3	105	< 0.3	< 1	< 3	90	119	0.50	7.61	8.2	400	< 1	< 2	< 0.5	7.19	42	395	3	0.7	5.99	< 1	< 1	< 5	1.91	1.78	1350	1.05	0.09	60	1.1	32.2	< 3	269	< 0.5	0.38	1.4	< 0.5	230	< 1	14	7	12	< 5	2.3	< 0.01	< 0.5	1.4	0.16
A07-2302	187744	181.30	181.60	0.30	< 4	< 5	32	22	1.4	1030	0.5	3	35	104	124	3.83	3.68	35.5	< 50	< 1	< 2	< 0.5	4.54	86	123	2	0.6	8.10	2	< 1	< 5	1.03	3.15	991	0.51	0.02	< 15	3.2	12.8	25	140	< 0.5	0.22	2	< 0.5	105	< 1	22	17.8	27	7	2.5	< 0.01	< 0.5	1.6	0.31
A07-3893	85736	181.60	184.37	2.77	2	< 1	< 2	< 2	< 0.3	56	< 0.3	2	< 3	51	76	0.39	4.90	3.7	510	1	< 2	< 0.5	3.18	9	66	< 1	0.6	2.17	3	< 1	< 5	3.31	1.36	525	0.74	0.03	54	2.3	9.6	< 3	135	< 0.5	0.30	7	3.6	93	< 1	22	16.9	35	11	3.3	< 0.01	< 0.5	2.3	0.41
A07-3893	85737	184.37	186.66	2.29	2	< 1	< 2	5	0.3	113	< 0.3	16	< 3	91	154	1.02	6.28	6.8	460	2	< 2	< 0.5	1.84	14	77	2	0.7	3.02	3	< 1	< 5	3.35	1.30	483	1.29	0.05	39	1.8	11.1	< 3	190	< 0.5	0.39	7.4	3.9	243	< 1	25	19.7	38	13	3.9	< 0.01	1.2	2.6	0.36
A07-3893	85738	186.66	188.49	1.83	3	3	< 2	< 2	< 0.3	130	< 0.3	4	12	67	106	0.77	7.86	10.7	550	1	< 2	< 0.5	5.79	30	117	3	0.6	5.40	2	< 1	< 5	1.97	1.57	1170	1.58	0.08	< 15	2.3	20.3	< 3	297	< 0.5	0.45	3.6	3.1	244	< 1	18	10	17	< 5	2.6	< 0.01	< 0.5	1.6	0.29
A07-3893	85739	188.49	191.54	3.05	< 4	< 5	25	< 2	0.3	118	1.7	5	7	44	250	0.65	4.83	33.1	350	1	< 2	< 0.5	4.05	15	56	3	0.6	3.69	2	< 1	< 5	1.84	2.35	816	1.07	0.04	67	2.8	10.8	< 3	241	< 0.5	0.36	3.8	< 0.5	134	< 1	19	14	23	8	2.5	< 0.01	< 0.5	2	0.32
A07-2302	187746	191.54	192.70	1.16	< 4	< 5	4	9	< 0.3	81	< 0.3	5	< 3	73	49	0.22	3.22	11.5	720	< 1	< 2	< 0.5	1.51	11	81	< 1	0.5	2.00	3	< 1	< 5	1.14	1.52	343	1.22	0.02	< 15	3.1	8.2	< 3	137	< 0.5	0.27	4	2.1	96	< 1	16	15.7	25	7	2.6	< 0.01	< 0.5	2.1	0.30
A07-3893	85740	192.70	193.70	1.00	5	4	2	< 2	0.3	173	8.2	< 1	< 3	60	1250	0.80	13.60	10.4	310	1	< 2	< 0.5	7.03	24	153	< 1	0.7	4.26	2	< 1	< 5	0.91	1.57	1030	1.97	0.13	< 15	1.4	16.8	< 3	327	< 0.5	0.42	3.6	3.3	182	< 1	20	11	19	7	2.5	< 0.01	< 0.5	1.4	0.23
A07-3893	85741	193.70	196.11	2.41	3	4	< 2	< 2	< 0.3	120	< 0.3	< 1	3	70	99	0.42	8.08	6.6	570	< 1	< 2	< 0.5	6.97	35	203	< 1	0.7	5.42	2	< 1	< 5	1.98	1.71	1470	1.15	0.09	46	0.8	24.8	< 3	297	< 0.5	0.48	2.1	2.4	244	< 1	16	7.6	14	< 5	2.3	< 0.01	< 0.5	1.3	0.24
A07-3893	85742	196.11	197.64	1.53	6	8	< 2	< 2	< 0.3	70	< 0.3	< 1	< 3	77	87	0.25	6.95	3.9	< 50	< 1	< 2	< 0.5	8.57	39	437	< 1	0.7	6.71	< 1	< 1	< 5	1.32	1.82	1520	1.22	0.12	< 15	0.6	38.9	< 3	350	< 0.5	0.51	1.6	1.8	270	< 1	17	7.9	17	6	2.6	< 0.01	< 0.5	1.4	0.25
A07-3893	85743	197.64	200.10	2.46	3	2	< 2	< 2	< 0.3	51	< 0.3	< 1	< 3	73	84	0.24	6.70	6.3	330	1	< 2	< 0.5	5.01	22	151	3	0.7	3.81	2	< 1	< 5	1.42	1.59	1020	1.43	0.07	< 15	1.8	18.3	< 3	277	< 0.5	0.37	5.1	2.5	159	< 1	21	13.8	24	14	3.2	< 0.01	0.5	2.1	0.31
A07-3893	85744	200.10	201.74	1.64	3	2	< 2	< 2	< 0.3	13	< 0.3	< 1	< 3	45	64	0.16	4.94	10.5	170	< 1	< 2	< 0.5	6.42	17	122	3	0.6	3.81	2	< 1	< 5	1.76	1.56	1360	0.86	0.07	60	0.8	18.7	< 3	239	< 0.5	0.37	3.6	1.7	165	< 1	12	10.7	19	5	2.7	< 0.01	< 0.5	1.7	0.31
A07-3893	85745	201.74	202.40	0.66	7	6	< 2	< 2	< 0.3	56	< 0.3	< 1	7	48	79	2.03	5.60	13.7	500	< 1	< 2	< 0.5	12.30	32	246	< 1	0.9	4.82	< 1	< 1	< 5	1.35	1.55	2200	0.43	0.11	48	3.1	27.7	< 3	322	< 0.5	0.36	2.1	2.6	215	< 1	15	9.4	19	7	2.7	< 0.01	< 0.5	1.2	0.16
A07-2302	187747	202.40	202.90	0.50	< 4	< 5	3	15	< 0.3	14	< 0.3	4	4	26	44	2.29	2.83	15.6	400	< 1	< 2	< 0.5	12.90	10	54	2	0.7	3.11	< 1	< 1	< 5	1.57	1.58	1220	0.04	0.03	65	3.6	8.9	< 3	444	< 0.5	0.21	1.8	1.3	94	< 1	11	7.8	14	5	1.8	< 0.01	< 0.5	1.2	0.22
A07-3893	85746	202.90	205.95	3.05	5	3	< 2	< 2	< 0.3	60	< 0.3	< 1	< 3	50	73	0.43	6.43	2.4	400	1	< 2	< 0.5	6.06	23	148	2	0.5	3.74	3	< 1	< 5	1.33	1.56	1120	1.58	0.09	< 15	0.9	21.4	< 3	319	< 0.5	0.39	6	2.2	171	< 1	21	15.7	28	8	3.3	< 0.01	< 0.5	2	0.39
A07-3893	85747	205.95	208.00	2.05	3	< 1	< 2	5	< 0.3	62	< 0.3	< 1	< 3	60	70	0.27	4.95	2.9	450	1	< 2	< 0.5	4.61	10	59	< 1	0.5	2.26	3	< 1	< 5	1.10	1.29	782	1.02	0.05	29	0.5	9	< 3	154	< 0.5	0.30	6.4	2.5	82	< 1	27	18.2	34	13	3.7	< 0.01	0.8	2.3	0.43
A07-3893	85748	208.00	209.84	1.84	4	1	6	14	0.4	101	< 0.3	2	12	75	96	0.68	5.31	6.2	380	2	< 2	< 0.5	6.29	13	75	< 1	0.8	2.51	3	< 1	< 5	1.38	1.17	1060	0.81	0.12	< 15	0.7	9	< 3	123	< 0.5	0.33	5.9	8.1	120	< 1	31	20.3	32	14	3.7	< 0.01	0.5	2.8	0.48
A07-3893	85749	209.84	212.89	3.05	3	< 1	3	< 2	< 0.3	79	< 0.3	< 1	< 3	57	99	0.52	6.10	6.3	820	2	< 2	< 0.5	1.90	9	67	2	0.8	2.62	3	< 1	< 5	2.96	1.17	415	1.07	0.04	58	0.5	11.3	< 3	185	< 0.5	0.36	6.1	3.3	106	< 1	26	19.5	35	7	3.9	< 0.01	< 0.5	2.3	0.42
A07-3893	85750	212.89	215.02	2.13	3	< 1	6	< 2	< 0.3	70	< 0.3	< 1	< 3	73	66	0.83	6.19	10.4	580	2	< 2	< 0.5	1.60	13	73	3	0.7	2.84	3	< 1	< 5	1.95	1.20	371	1.16	0.04	61	1.1	11.5	< 3	175	< 0.5	0.37	6.6	2.8	109	< 1	26	20.6	36	21	4.2	< 0.01	< 0.5	2.7	0.31
A07-3893	85751	215.02	218.38	3.36	3	< 1	< 2	< 2	0.4	78	< 0.3	< 1	< 3	64	76	0.48	5.46	2.5	690	2	< 2	< 0.5	4.12	10	59	< 1	0.9	2.43	3	< 1	< 5	1.55	1.24	857	0.98	0.06	34	0.4	9.3	< 3	189	1.4	0.33	5.9	< 0.5	92	5	30	19.6	37	12	4.1	< 0.01	< 0.5	2.8	0.41
A07-3893	85752	218.38	220.21	1.83	3	1	< 2	< 2	0.3	72	< 0.3	2	< 3	66	67	0.24	6.43	1.9	< 50	2	< 2	< 0.5	3.74	11	71	2	0.7	2.57	4	< 1	< 5	1.13	1.33	855	1.52	0.06	< 15	< 0.1	11.8	< 3	207	< 0.5	0.38	7	< 0.5	113	5	25	17.5	34	14	3.8	< 0.01	< 0.5	2.1	0.37
A07-3893	85753	220.21	221.73	1.52	2	< 1	< 2	< 2	< 0.3	75	< 0.3	< 1	< 3	49	57	0.86	5.54	2.3	500	2	< 2	< 0.5	4.23	9	66	2	0.8	2.64	3	< 1	< 5	1.35	1.18	784	0.95	0.08	32	0.6	9.9	< 3	164	< 0.5	0.33	6.5	4.3	74	< 1	29	20.2	36	15	3.9	< 0.01	< 0.5	2.5	0.43
A07-2302	187748	221.73	223.75	2.02	< 4	< 5	< 2	< 2	0.3	92	< 0.3	2	< 3	51	82	0.50	3.71	20.7	480	< 1	< 2	< 0.5	2.25	9	71	2	0.7	2.71	3	< 1	< 5	1.23	1.56	512	1.24	0.03	< 15	1.7	9	< 3	180	< 0.5	0.30	4.7	2.5	88	< 1	22	18.2	34	12	3	< 0.01	< 0.5	2.3	0.34
A07-2302	187749	223.75	225.47	1.72	4	< 5	5	4	< 0.3	109	0.3	6	< 3	73	69	0.78	3.58	60.6	350	< 1	< 2	< 0.5	4.26	14	67	2	0.6	2.71	3	< 1	< 5	0.92	1.19	599	0.94	0.03	< 15	4	8.8	< 3	171	< 0.5	0.28	3.7	2.4	107	< 1	19	14.4	24	8	2.5	< 0.01	< 0.5	1.9	0.31
A07-3893	85754	225.47	226.13	0.66	4	6	< 2	5	< 0.3	146	< 0.3	< 1	4	181	106	0.23	6.60	12.2	410	< 1	< 2	< 0.5	7.05	48	579	3	0.4	5.59	< 1	< 1	< 5	0.50	1.84	1330	0.48	0.09	< 15	4.2	26.2	< 3	257	< 0.5	0.34	1.6	< 0.5	185	< 1	11	6.1	15	< 5	2

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-4

| DDH K07 - 4 | | |

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-4

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2305	187626	141.21	142.74	1.53	5	< 5	5	< 2	< 0.3	180	< 0.3	52	12	130	66	2.28	5.08	4.1	590	< 1	< 2	< 0.5	5.33	30	200	< 1	0.7	5.90	2	< 1	< 5	1.09	3.14	907	1.43	0.07	< 15	1.3	20.2	< 3	292	2.4	0.44	3.1	4	473	< 1	21	10.6	14	< 5	2.1	< 0.01	< 0.5	1.8	0.36
A07-2305	187627	142.74	143.65	0.91	8	9	< 2	< 2	< 0.3	208	0.5	37	< 3	167	83	1.89	4.69	3.7	< 50	< 1	< 2	< 0.5	5.72	36	455	< 1	0.5	6.73	< 1	< 5	0.87	6.18	1250	1.36	0.07	49	1.1	30.1	< 3	302	< 0.5	0.39	2.7	1.6	392	< 1	18	8.5	14	11	1.8	< 0.01	< 0.5	1.6	0.22
A07-2305	187628	143.65	146.70	3.05	5	< 5	4	< 2	< 0.3	206	1.9	93	6	191	134	4.08	5.91	3.9	640	1	< 2	< 0.5	4.50	23	93	< 1	0.9	6.95	2	< 1	< 5	1.55	3.1	735	1.82	0.08	< 15	0.9	16	16	389	2	0.54	3.3	4.2	767	< 1	29	11.8	17	< 5	2.2	< 0.01	< 0.5	2.1	0.32
A07-3977	85809	146.70	148.84	2.14	6	5	5	< 2	0.5	149	2.9	109	5	229	225	3.25	7.06	10.5	990	1	< 2	< 0.5	3.82	23	131	3	1	6.43	2	< 1	< 5	2.03	1.49	625	1.33	0.11	55	1.2	20.1	26	224	< 0.5	0.71	5.7	8.9	636	< 1	31	16.7	39	26	3.2	< 0.01	< 0.5	3.1	0.5
A07-3977	85810	148.84	149.50	0.66	4	3	36	12	0.5	220	< 0.3	134	9	262	45	3.59	6.98	28	1080	1	< 2	< 0.5	2.63	16	63	3	0.9	6.43	4	< 1	< 5	2.36	1.2	383	1.29	0.08	46	1.2	11.7	23	198	< 0.5	0.63	6.9	14.3	412	< 1	39	22.2	48	28	3.2	< 0.01	1	3.7	0.58
A07-3977	85811	149.50	151.89	2.39	3	5	4	11	0.4	241	< 0.3	21	3	91	62	2.53	5.68	41.8	400	< 1	< 2	< 0.5	8.93	30	201	< 1	0.8	6.16	4	< 1	< 5	0.75	1.62	1510	1.02	0.08	< 15	3	20.7	< 3	265	< 0.5	0.53	2.6	2.5	207	< 1	15	10.1	23	< 5	2.3	< 0.01	< 0.5	1.5	0.3
A07-3977	85812	151.89	154.05	2.16	4	3	2	< 2	0.3	206	< 0.3	7	< 3	69	68	1.10	6.33	38.9	280	< 1	< 2	< 0.5	10.90	26	84	2	0.7	4.33	2	< 1	< 5	0.85	1.59	1140	1.01	0.09	< 15	3	16.3	< 3	324	< 0.5	0.52	2.4	3.6	155	< 1	17	8.8	21	14	1.9	< 0.01	< 0.5	1.7	0.3
A07-3977	85813	154.05	154.94	0.89	5	2	6	14	1.0	140	< 0.3	1	5	145	119	1.25	5.69	44.7	550	1	< 2	< 0.5	3.10	12	66	3	0.7	2.30	2	< 1	< 5	2.38	1.02	368	0.22	0.03	71	9.2	12.8	< 3	206	< 0.5	0.51	5.4	3.1	116	< 1	24	15.8	36	< 5	2.5	< 0.01	< 0.5	2.3	0.4
A07-2305	187629	154.94	156.48	1.54	5	< 5	9	9	1.1	134	0.4	3	8	115	170	1.34	3.96	43.6	580	1	< 2	< 0.5	2.19	9	59	3	0.6	2.38	3	< 1	< 5	2.47	1.03	321	0.10	0.02	48	4.8	9.9	< 3	142	< 0.5	0.32	4.9	1.8	112	< 1	20	14	27	< 5	2.3	< 0.01	< 0.5	2.3	0.36
A07-3977	85814	156.48	157.60	1.12	5	3	15	< 2	0.5	149	2.9	109	5	229	225	3.25	7.06	10.5	990	1	< 2	< 0.5	3.82	23	131	3	1	6.43	2	< 1	< 5	2.03	1.49	625	1.33	0.11	55	1.2	20.1	26	224	< 0.5	0.71	5.7	8.9	636	< 1	31	16.7	39	26	3.2	< 0.01	< 0.5	3.1	0.5
A07-2305	187630	157.60	159.00	1.40	6	< 5	5	< 2	0.5	100	< 0.3	2	6	76	84	0.75	4.33	1530	570	< 1	< 2	< 0.5	6.25	20	121	4	0.7	3.81	< 1	< 1	< 5	1.43	2.84	791	0.30	0.04	31	13.8	14.4	< 3	538	< 0.5	0.34	< 0.2	2.3	153	< 1	17	10.9	20	< 5	2	< 0.01	< 0.5	1.7	0.29
A07-2305	187631	159.00	160.00	1.00	< 4	< 5	3	< 2	0.5	53	0.8	2	4	47	364	0.20	2.23	612	460	< 1	< 2	< 0.5	7.43	8	70	2	0.6	3.34	< 1	< 1	< 5	0.89	3.66	816	0.18	0.02	< 15	2.2	7.3	< 3	467	< 0.5	0.18	2.3	< 0.5	67	< 1	13	7.8	17	6	1.5	< 0.01	< 0.5	1.4	< 0.05
A07-3977	85815	161.00	164.09	3.09	9	16	6	12	0.5	220	< 0.3	134	9	262	45	3.59	6.98	28	1080	1	< 2	< 0.5	2.63	16	63	3	0.9	6.43	4	< 1	< 5	2.36	1.2	383	1.29	0.08	46	1.2	11.7	23	198	< 0.5	0.63	6.9	14.3	412	< 1	39	22.2	48	28	3.2	< 0.01	1	3.7	0.58
A07-3977	85816	164.09	165.92	1.83	2	1	5	11	0.4	241	< 0.3	21	3	91	62	2.53	5.68	41.8	400	< 1	< 2	< 0.5	8.93	30	201	< 1	0.8	6.16	4	< 1	< 5	0.75	1.62	1510	1.02	0.08	< 15	3	20.7	< 3	265	< 0.5	0.53	2.6	2.5	207	< 1	15	10.1	23	< 5	2.3	< 0.01	< 0.5	1.5	0.3
A07-3977	85817	165.92	168.05	2.13	2	1	3	< 2	0.3	206	< 0.3	7	< 3	69	68	1.10	6.33	38.9	280	< 1	< 2	< 0.5	10.90	26	84	2	0.7	4.33	2	< 1	< 5	0.85	1.59	1140	1.01	0.09	< 15	3	16.3	< 3	324	< 0.5	0.52	2.4	3.6	155	< 1	17	8.8	21	14	1.9	< 0.01	< 0.5	1.7	0.3
A07-2305	187632	168.05	170.80	2.75	< 4	< 5	4	< 2	< 0.3	85	< 0.3	2	< 3	58	74	0.09	2.83	73.2	580	< 1	< 2	< 0.5	1.31	9	73	2	0.6	1.77	3	< 1	< 5	1.11	0.88	239	0.15	0.02	23	1.9	7.2	< 3	174	< 0.5	0.22	4	1.4	63	< 1	15	12.1	23	11	1.9	< 0.01	< 0.5	2	0.3
A07-3977	85818	170.80	172.32	1.52	3	2	2	14	1.0	140	< 0.3	1	5	145	119	1.25	5.69	44.7	550	1	< 2	< 0.5	3.10	12	66	3	0.7	2.30	2	< 1	< 5	2.38	1.02	368	0.22	0.03	71	9.2	12.8	< 3	206	< 0.5	0.51	5.4	3.1	116	< 1	24	15.8	36	< 5	2.5	< 0.01	< 0.5	2.3	0.4
A07-3977	85819	172.32	174.76	2.44	3	2	< 2	< 2	< 0.3	22	0.4	< 1	< 3	65	52	0.07	5.58	106	410	1	< 2	< 0.5	2.93	12	75	5	0.9	2.73	3	< 1	< 5	1.35	1.11	640	0.55	0.06	< 15	2.1	13.3	< 3	235	< 0.5	0.55	5.8	3.2	124	< 1	19	14.5	38	22	2.3	< 0.01	0.6	2.3	0.42
A07-2305	187633	174.76	175.68	0.92	8	7	< 2	< 2	< 0.3	140	< 0.3	1	< 3	44	101	0.06	5.86	29.2	1170	1	< 2	< 0.5	2.86	34	141	5	1.1	8.48	2	< 1	< 5	2.55	3.42	1390	0.90	0.12	77	1.9	25.7	< 3	305	< 0.5	0.66	1.6	< 0.5	342	< 1	19	10.3	21	8	2.6	< 0.01	< 0.5	2	0.32
A07-2305	187634	175.68	176.90	1.22	6	6	< 2	7	< 0.3	230	< 0.3	2	< 3	41	107	0.25	6.02	109	1530	< 1	< 2	< 0.5	3.15	41	143	3	1.1	8.21	2	< 1	< 5	3.03	3.32	1260	0.76	0.12	130	3	26.2	< 3	372	< 0.5	0.66	2.1	< 0.5	342	< 1	18	10.3	16	< 5	2.6	< 0.01	< 0.5	1.8	0.36
A07-3977	85821	176.90	178.12	1.22	5	7	< 2	< 2	< 0.3	40	1.9	< 1	< 3	53	102	0.10	9.63	455	880	1	< 2	< 0.5	5.28	32	191	5	1.4	4.32	3	< 1	< 5	2.28	1.38	1080	0.43	0.15	63	4.3	28.6	< 3	337	< 0.5	0.73	1.9	2.8	278	< 1	19	11.1	27	15	3.9	< 0.01	< 0.5	1.9	0.31
A07-3977	85822	178.12	180.56	2.44	2	4	< 2	< 2	< 0.3	113	0.8	< 1	< 3	39	73	0.45	9.22	246	700	1	< 2	< 0.5	5.62	31	111	7	1	4.79	2	< 1	< 5	2.07	1.39	981	0.54	0.14	52	3.4	21.5	< 3	360	< 0.5	0.77	2.5	< 0.5	253	< 1	17	9.2	22	17	2.4	< 0.01	0.6	1.9	0.31
A07-3977	85823	180.56	182.69	2.13	4	6	< 2	< 2	< 0.3	129	< 0.3	< 1	< 3	54	77	0.37	8.63	8.6	790	< 1	< 2	< 0.5	5.81	34	167	3	1.1	6.74	2	< 1	< 5	1.74	1.64	1250	1.34	0.13	58	1.8	27.2	< 3	378	< 0.5	0.79	2.2	< 0.5	265	< 1	18	8.7	27	< 5	3.4	< 0.01	< 0.5	1.5	0.31
A07-2305	187635	182.69	184.22	1.53	7	8	< 2	< 2	< 0.3	38	< 0.3	1	< 3	59	82	0.11	5.9	7.6	900	< 1	2	< 0.5	5.35	32	248	4	0.9	7.60	2	< 1	< 5	2.01	3.96	1440	1.06	0.11	75	1.2	30.2	< 3	382	< 0.5	0.60	2.1	< 0.5	307	< 1	16	8.8	15	14	2.4	< 0.01	< 0.5	1.7	0.36
A07-3977	85824	184.22	187.27	3.05	7	7	< 2	< 2	< 0.3	115	< 0.3	< 1	< 3	43	73	0.21	10.7	7	840	< 1	< 2	< 0.5	6.18	29	111	3	0.9	5.42	< 1	< 1	< 5	2.08	1.58	1250	1.59	0.14	44	1.1	23.2	< 3	485	< 0.5	0.82	2	< 0.5	270	< 1	18	8.6	24	18	2.4	< 0.01	< 0.5	1.7	0.26
A07-3977	85825	187.27	190.32	3.05	5	5	< 2	< 2	< 0.3	20	< 0.3	< 1	4	74	57	0.06	6.87	63.7	340	< 1	< 2	< 0.5	5.30	25	159	4	0.7	3.83	< 1	< 1	< 5	1.49	1.49	895	1.10	0.07	57	1.9	19.3	< 3	274	< 0.5	0.42	3.3	< 0.5	149	< 1	15	10	25	9	2.2	< 0.01	< 0.5	1.8	0.3
A07-2305	187636	190.32	191.60	1.28	7	< 5	< 2	< 2	< 0.3	24	< 0.3	9	6	56	67	0.27	7.03	954	850	< 1	< 2	< 0.5	6.86	21	136	4	0.7	4.74	< 1	< 1	< 5	2.08	3.25	1260	1.37	0.07	< 15	0.6	17.9	< 3	498	< 0.5	0.44	1.2	< 0.5	342	< 1	16	7.2	10	< 5	1.6	< 0.01	< 0.5	1.4	0.25
A07-2305	187637	191.60	193.37	1.77	7	< 5	< 2	< 2	< 0.3	75	< 0.3	< 1	6	38	53	0.58	6.27	170	630	< 1	< 2	< 0.5	7.89	26	95	6	0.7	5.24	< 1	< 1	< 5	1.59	2.72	1250	0.43	0.08	< 15	3.8	17.9	< 3	373	< 0.5	0.40	1.7	< 0.5	225	< 1	13	5.6	10	9	1.6	< 0.01	< 0.5	1.1	< 0.05
A07-2305	187638	193.37	195.56	2.19	6	< 5	< 2	< 2	< 0.3	85	< 0.3	2	3	89	60	0.20	5.28	94.5	480	< 1	< 2	< 0.5	4.79	26	205	5	0.7	4.37	2	< 1	< 5	1.96	2.33	901	0.67	0.05	< 15	7.8	17.9	< 3	281	< 0.5	0.32	2.9	1.6	165	< 1	14	10.3	18	16	2	< 0.01	< 0.5	1.4	0.11
A07-2305	187639	195.56	196.42	0.86	5	< 5	< 2	< 2	< 0.3	111	< 0.3	2	4	110	72	0.30	4.99	16.6	640	< 1	< 2	< 0.5	5.26	29	262	4	0.5	5.03	< 1	< 1	< 5	1.46	3.53	1020	1.11	0.07	< 15	1.3	20.8	< 3	301	< 0.5	0.36	2.4	< 0.5	183	< 1	15	9.9	20	< 5	2	< 0.01	< 0.5	1.5	0.24
A07-2305	187640	196.42	197.77	1.35	5	< 5	< 2	< 2	< 0.3	50	< 0.3	< 1	< 3	68	70	0.18	5.45	75.4	700	< 1	< 2	< 0.5	5.92	19	99	4	0.8	3.84	2	< 1	< 5	2.08	2.53	962	1.07	0.05	51	2.8	15.4	< 3	379	< 0.5	0.36	3.2	2.3	174	< 1	18	11.4	21	< 5	2.2	< 0.01	< 0.5	1.9	0.15
A07-2305	187641	197.77	199.80	2.03	< 4	< 5	2	< 2	< 0.3	197	< 0.3	2	8	42	79	1.06	3.98	43.5	500	1	< 2	< 0.5	3.06	11	66	4	0.7	3.08	3	< 1	< 5	1.42	1.53	564	0.74	0.03	41	3.7	8.8	5	199	< 0.5	0.33	5.4	1.9	85	< 1	19	15.9	32	11	2.5	< 0.01	< 0.5	2.2	0.3
A07-3977	85826	199.80	201.30	1.50	5	3	< 2	< 2	< 0.3	81	< 0.3	2	5	95	52	0.28	6.62	14.2	490	1	< 2	< 0.5	3.58	21	124	3	1	3.78	2	< 1	< 5	1.01	1.46	694	1.56	0.07	32	2.1	16	< 3	261	1.7	0.51	5.1	2	183	< 1	20	14.8	37	< 5	2.7	< 0.01	< 0.5	2.2	0.39
A07-2305	187642	201.30	202.52	1.22	6	< 5	4	< 2	< 0.3	138	< 0.3	3	6	58	43	0.53	5.14	375	470	< 1	< 2	< 0.5	5.45	22	112	4	0.6	5.37	2	< 1	< 5	1.15	2.49	913	1.52	0.06	< 15	6.7	16.8	< 3	311	< 0.5	0.38	2.1	1.6	207	< 1	15	10.5	17	< 5	2	< 0.01	< 0.5	1.7	0.27
A07-3977	85827	202.52	203.65	1.13	4	2	2	< 2	< 0.3	65	< 0.3	15	< 3	58	57	0.53	6.08	10.4	240	< 1	< 2	< 0.5	4.06	14	59	3	0.9	2.79	4	< 1	< 5	0.91	1.22	618	1.33	0.05	< 15	0.9	12	7	249	< 0.5	0.40	3.8	3.4	223	5	18	12.2	28	< 5	2.2	< 0.01	< 0.5	1.8	0.35
A07-3977	85828	203.65	203.85	0.20	11	5	< 2	< 2	< 0.3	22	< 0.3	< 1	< 3	37	60	1.05	9.04	8.9	570	< 1	< 2	< 0.5	4.31	26	72	5	0.7	4.18	2	< 1	< 5	0.99	1.4	744	2.19	0.12	50	1.2	24.7	< 3	466	< 0.5	0.71	2.8	< 0.5	258	< 1	10	8.1	17	< 5	1.9	< 0.01	< 0.5	1.3	0.2
A07-3977	85829	203.85	204.51	0.66	7	5	< 2	< 2	< 0.3	173	< 0.3	< 1	< 3	39	55	0.67	8.19	7.9	750	< 1	< 2	< 0.5	6.78	35	94	5	0.8	5.45	2	< 1	< 5	1.98	1.46	1120	1.44	0.09	32	1.2	20.7	< 3	398	< 0.5	0.50	2	< 0.5	198	< 1	11	6.9	17	20	2.5	< 0.01	< 0.5	1.3	0.19
A07-3977	85830	204.51	206.18	1.67	10	7	< 2	< 2	< 0.3	91	< 0.3	< 1	6	63	51	0.17	8.59	6.2	720	< 1	< 2	< 0.5	5.65	30	126	2	0.8	4.67	< 1	< 1	< 5	1.77	1.54	969	1.32	0.09	56	0.8	19.4	< 3	380	< 0.5	0.52	2.4	< 0.5	189	< 1	14	8.4	19	7	2.6	< 0.01	< 0.5	1.5	0.28
A07-2305	187643	206.18	207.70	1.52	7	< 5	< 2	5	0.3	122	< 0.3	3	6	58	36	0.62	4.6	6.1	660	< 1	< 2	< 0.5	3.18	17	67	3	0.8	4.05	2	< 1	< 5	1.33	2.05	633	1.64	0.05	< 15	1.3	13.8	4	231	1.2	0.35	4	< 0.5	166	< 1	17	13	26	< 5	2.3	< 0.01	< 0.5	1.6	0.32
A07-3977	85831	207.70	209.84	2.14	6	6	< 2	< 2	< 0.3	25	< 0.3	< 1	3	82	84	0.08	8.04	24.4	1170	1	< 2	< 0.5	4.14	29	195	2	0.9	6.02	2	< 1	< 5	2.19	1.7	1040	0.82	0.12	56	1.3	27.5	< 3	421	< 0.5	0.54	3.7	< 0.5	217	< 1	19	11.7	28	26	3.8	< 0.01	< 0.5	2.1	0.34
A07-3977	85832	209.84	212.28	2.44	5	5	< 2	< 2	0.7	513	2.6	< 1	4	76	243	0.88	6.6	18.5	250	< 1	< 2	< 0.5	8.88	34	157	< 1	0.9	5.36	2	< 1	< 5	1.01	1.59	1560	0.81	0.09	35	1.8	25.6	< 3	324	< 0.5	0.56	2.1	< 0.5	193	< 1	15	7.7	21	< 5	2.7	< 0.01	< 0.5	1.6	0.32
A07-3977	85833	212.28	214.20	1.92	7	4	2	< 2	< 0.3	144	0.5	< 1	< 3	72	59	0.56	7.02	109	450	1	< 2	< 0.5	3.77	21	88	3	0.9	4.24	< 1	< 1	< 5	0.91	1.42	798	1.46	0.06	29	2.9	19.1	< 3	275	< 0.5	0.60	3.8	< 0.5	184	< 1	19	12.5	28	13	2.3	< 0.01	< 0.5	2.3	0.37
A07-2305	187647	214.20	214.41	0.21	6	< 5	97	105	< 0.3	196	< 0.3	4	4	26	69	1.12	5.11	2260	< 50	1	< 2	< 0.5	3.88	24	57	< 1	< 0.2	5.63	< 1	< 1	< 5	1.93	2.12	690	0.31	0.07	56	49.7	14.5	13	259	< 0.5	0.37	1.7	< 0.5	237	< 1	11	8.6	12	< 5	1.8	< 0.01	< 0.5	1.5	0.11
A07-3977	85834	214.41	215.50	1.09	8	4	6	< 2	0.4	222	0.9	< 1	5	54	138	0.66	7.52	97.2	390	1	< 2	< 0.5	6.21	27	59	3	0.9	4.88	2	< 1	< 5	1.72	1.55	1160	0.47	0.09	31	2.1	17.8	< 3	318	< 0.5	0.63	2.8	< 0.5	220	< 1	17	9.3	23	< 5	3	< 0.01	< 0.5	1.6	0.31
A07-3977	85835	215.50	216.64	1.14	8	3	< 2	< 2	< 0.3	60	0.9	< 1	< 3	27	62	0.55	10.4	75.2	570	1	< 2	< 0.5	5.07	35	27	5	1.2	6.82	2	< 1	< 5	1.77	1.42	990	1.11	0.14	43	1.2	23.9	< 3	363	< 0.5	0.84	2.6	< 0.5	301	< 1	17	10.8	25	13	2.5	< 0.01	< 0.5	1.6	0.3
A07-3977	85836	216.64	218.07	1.43	2	1	< 2	< 2	< 0.3	28	0.4	1	< 3	35	54	0.26	10.5	71.5	480	1	< 2	< 0.5	6.30	21	18	5	1	4.56	2	< 1	< 5	1.40	1.41	868	0.80	0.13	< 15	1	15.2	< 3	387	0.5	0.80	2.6	< 0.5	249	< 1	19	10.5	25	< 5	3.6	< 0.01	1.3	2	0.45
A07-2305	187644	218.07	219.90	1.83	5	< 5	7	8	0.5	83	< 0.3	3	5	61	80	0.55	5.04	201	630	< 1	< 2	< 0.5	6.13	16	138	5	0.7	3.92	2	< 1	< 5	2.02	2.31	920	0.31	0.04	< 15	4.1	13.9	< 3	326	< 0.5	0.33	2.4	< 0.5	159	< 1	17	11.1	25	10	2.3	< 0.01	< 0.5	1.7	0.31
A07-3977	85838	219.90	222.34	2.44	4	2	177	159	1.0	225	< 0.3	< 1	10	77	103	0.87	6.28	11.3	540	1	< 2	< 0.5	2.84	22	76	3	0.8	3.32	2	< 1	< 5	1.62	1.26	526	1.16	0.05	62	1.4	13.2	< 3	231	< 0.5	0.50	4.3	3.3	130	< 1	21	13.1	28	21	2.3	< 0.01	< 0.5	2.3	0.43
A07-3977	85839	222.34	223.56	1.22	5	2	7	10	1.2	90	< 0.3	< 1	4	140	175	1.47	6.49	5.6	380	2	< 2	< 0.5	2.46	14	79	3	0.9	2.60	3	< 1	< 5	2.23	1.12	395	0.73	0.03	53	2.4	11	< 3	126	< 0.5	0.58	6.8	2.3	118	< 1	30	18	41	18	2.9	< 0.01	< 0.5	3.2	0.52
A07-2305	187645	223.56	224.78	1.22	5	< 5	13	< 2	1.2	87	0.3	2	9	149	197	1.85	4.96	13.9	550	1	< 2	< 0.5	4.12	10	77	3	0.9	3.31	3	< 1	< 5	2.33	1.46	684	0.75	0.02	77	3.8	10.7	< 3	150	< 0.5	0.34	4.6	< 0.5	106	< 1	29	17.5	32	16	3.1	< 0.01	< 0.5	2.7	0.36
A07-3977	85840	224.78	225.53	0.75	5	1	27	36	0.8	99	1.6	< 1	< 3	87	36	0.89	5.2	339	380	1	< 2	< 0.5	4.00	10	73	< 1	1	2.15	4	< 1	< 5	1.78	1.01	406	0.59	0.02	34	10.1	10	< 3	248	< 0.5	0.44	5.5	1.9	84	< 1	25	16.1	38	20	2.6	< 0.01	< 0.5	3.2	0.45
A07

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-5

| DDH K07 - 5 | | |

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-5

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-3503	85438	125.60	126.23	0.63	2	6	< 2	< 2	0.7	21	< 0.3	3	5	78	41	0.16	8.5	18.2	440	< 1	< 2	< 0.5	8.13	35	187	< 1	0.7	5.57	< 1	< 1	< 5	1.77	3.87	1040	1.67	0.065	< 15	4.1	24.8	< 3	456	< 0.5	0.33	2.6	3.3	257	< 1	12	7.3	12	< 5	1.5	< 0.01	< 0.5	1.5	0.16
A07-2306	85021	129.65	132.67	3.02	< 4	9	< 2	< 2	< 0.3	13	0.6	5	< 3	142	71	0.09	4.32	8.6	470	< 1	< 2	< 0.5	8.75	40	448	3	0.6	6.8	< 1	< 1	< 5	1.03	6.84	1540	1.08	0.002	< 15	2.3	38.4	< 3	315	< 0.5	0.27	1	< 0.5	220	< 1	8	4.8	9	< 5	0.9	< 0.01	< 0.5	1.1	0.13
A07-3503	85439	132.67	133.40	0.73	3	11	3	< 2	0.8	11	< 0.3	23	4	97	41	0.12	5.08	8.4	440	< 1	3	< 0.5	7.9	45	402	< 1	0.5	6.98	< 1	< 1	< 5	1.67	4.73	1140	1.13	0.021	< 15	4.5	38	< 3	265	< 0.5	0.2	2.2	3.2	200	< 1	8	9	12	< 5	1.2	< 0.01	< 0.5	1.1	0.17
A07-3503	85440	133.40	135.72	2.32	2	6	< 2	< 2	0.9	16	0.3	18	3	103	47	0.08	6.32	3.6	590	< 1	< 2	< 0.5	8.28	46	320	2	0.4	7.53	< 1	< 1	< 5	1.14	5.35	1170	0.8	0.071	< 15	1.1	35.8	< 3	217	< 0.5	0.35	2.2	2.7	225	< 1	11	8.9	14	7	1.3	< 0.01	< 0.5	1.2	0.24
A07-3503	85441	135.72	139.70	3.98	3	6	< 2	8	1.0	8	< 0.3	7	3	99	48	0.06	5.91	4.1	380	< 1	< 2	< 0.5	8.18	42	347	< 1	< 0.2	6.7	< 1	< 1	< 5	1.69	5.14	1110	0.75	0.065	32	1	36	< 3	296	< 0.5	0.32	1.5	2.1	218	< 1	11	8.2	9	5	1.4	< 0.01	< 0.5	1.2	0.18
A07-3503	85442	139.70	142.74	3.04	3	6	< 2	< 2	1.0	4	< 0.3	2	< 3	78	35	0.03	7.29	5.6	810	< 1	< 2	< 0.5	7.88	41	255	< 1	0.5	6.92	< 1	< 1	< 5	3.96	4.63	1060	1.3	0.086	< 15	1	33.7	< 3	388	< 0.5	0.38	1.9	2.7	242	< 1	13	7.6	11	< 5	1.6	< 0.01	< 0.5	1.4	0.19
A07-3503	85443	142.74	144.90	2.16	3	6	< 2	< 2	1.2	4	< 0.3	4	< 3	70	31	0.03	7.27	6.4	730	< 1	< 2	< 0.5	8.05	36	246	< 1	0.5	6.22	< 1	< 1	< 5	3.73	4.17	988	1.17	0.099	36	0.9	30.7	< 3	322	< 0.5	0.33	2.4	2.7	221	< 1	13	7.4	13	< 5	1.7	< 0.01	< 0.5	1.2	0.21
A07-3503	85444	144.90	146.70	1.80	2	7	< 2	< 2	1.0	5	< 0.3	1	< 3	92	34	0.03	4.44	7.6	700	< 1	< 2	< 0.5	7.3	46	335	< 1	< 0.2	7.07	2	< 1	< 5	1.18	4.5	1070	0.87	0.057	< 15	0.9	39.2	< 3	205	< 0.5	0.34	1.5	< 0.5	232	< 1	8	6.2	8	< 5	1.6	< 0.01	< 0.5	1.2	0.21
A07-3503	85445	146.70	149.65	2.95	1	5	< 2	< 2	0.9	8	0.3	< 1	< 3	78	80	0.11	6.06	14.8	500	< 1	< 2	< 0.5	7.84	41	305	3	0.6	6.85	< 1	< 1	< 5	1.34	4.35	1180	0.82	0.066	34	4.4	34.5	< 3	261	< 0.5	0.32	1	< 0.5	217	2	11	7.1	8	6	1.5	< 0.01	< 0.5	1.2	< 0.05
A07-2306	85022	149.65	150.03	0.38	< 4	5	7	< 2	0.5	400	9.4	2	3	55	1360	1.68	6.15	5.5	< 50	< 1	< 2	< 0.5	6.59	27	180	2	0.5	8.13	< 1	< 1	< 5	1.01	4.44	1590	1.62	0.076	< 15	4.3	24.3	< 3	209	< 0.5	0.48	0.9	< 0.5	219	< 1	15	9.1	12	8	2	< 0.01	< 0.5	1.6	0.29
A07-3503	85446	150.03	150.50	0.47	3	6	< 2	< 2	0.9	34	< 0.3	2	< 3	77	55	0.09	6.53	5.8	340	< 1	< 2	< 0.5	8.33	35	305	< 1	0.7	6.01	< 1	< 1	< 5	0.59	3.75	1090	1.37	0.078	23	1.4	31.5	< 3	162	< 0.5	0.27	2.6	2.7	224	< 1	13	7.5	13	7	2.1	< 0.01	0.7	1.3	< 0.05
A07-3503	85448	150.50	152.80	2.30	4	8	10	< 2	0.8	23	0.4	< 1	6	102	84	0.09	5.45	6	460	< 1	< 2	< 0.5	7.94	44	365	3	0.4	6.57	< 1	< 1	< 5	0.9	5.44	1330	0.82	0.042	< 15	1	39.1	< 3	212	< 0.5	0.3	1.5	2	252	< 1	10	4.9	9	< 5	1.4	< 0.01	< 0.5	1	< 0.05
A07-3503	85449	152.80	154.50	1.70	5	9	< 2	< 2	0.9	14	< 0.3	1	< 3	108	47	0.06	5.48	4.5	360	< 1	< 2	< 0.5	7.93	47	372	2	0.6	6.72	< 1	< 1	8	0.93	5.57	1290	1.05	0.053	39	0.5	41.7	< 3	224	< 0.5	0.33	1.1	2.2	275	< 1	10	4.7	8	< 5	1.4	< 0.01	< 0.5	1.1	< 0.05
A07-3503	85450	154.50	156.10	1.60	3	10	5	< 2	1.0	172	21.7	4	6	96	2800	1.43	6.23	6.9	420	< 1	< 2	< 0.5	6.16	52	426	< 1	0.4	9.28	< 1	< 1	< 5	0.66	4.99	1610	0.88	0.079	< 15	2.4	35.1	< 3	199	< 0.5	0.28	1.7	< 0.5	209	< 1	8	5.4	10	< 5	1.3	< 0.01	< 0.5	0.9	0.06
A07-2306	85023	156.10	156.40	0.30	< 4	6	26	28	1.2	751	93.2	6	< 3	86	13300	4.88	3.72	14.6	< 50	< 1	< 2	< 0.5	10.1	41	405	< 1	0.6	10.7	< 1	< 1	< 5	0.04	4.93	2430	0.04	0.03	< 15	6.8	28.8	< 3	252	< 0.5	0.27	1	< 0.5	176	< 1	6	4	5	< 5	0.8	< 0.01	< 0.5	0.8	< 0.05
A07-3503	85451	156.40	158.20	1.80	2	6	8	< 2	1.2	433	23.1	4	< 3	97	2900	0.99	5.65	38.7	160	< 1	< 2	< 0.5	7.5	44	385	< 1	< 0.2	7.57	< 1	< 1	< 5	0.52	4.63	1410	0.67	0.067	25	7.6	31.1	< 3	253	< 0.5	0.25	1.2	2.1	194	< 1	7	5.4	8	< 5	1	< 0.01	< 0.5	0.9	< 0.05
A07-3503	85452	158.20	160.00	1.80	4	8	< 2	< 2	0.6	24	< 0.3	1	< 3	93	61	0.07	6.28	8.6	470	< 1	< 2	< 0.5	7.29	43	318	2	0.7	6.48	< 1	< 1	< 5	1.04	5.03	1220	1.37	0.065	< 15	5.6	37	< 3	335	< 0.5	0.34	2	< 0.5	272	< 1	12	6.3	9	< 5	1.7	< 0.01	< 0.5	1.1	< 0.05
A07-3503	85453	163.48	165.05	1.57	4	9	< 2	< 2	0.8	40	< 0.3	2	< 3	71	44	0.16	3.84	4.1	550	< 1	< 2	< 0.5	6.54	51	263	2	0.7	7.75	< 1	< 1	< 5	0.97	3.81	1260	1.15	0.029	43	2	44	< 3	211	< 0.5	0.33	1.8	< 0.5	303	< 1	6	5.4	8	< 5	1.6	< 0.01	< 0.5	1.2	< 0.05
A07-2306	85024	165.05	166.53	1.48	4	7	< 2	< 2	< 0.3	27	1.4	4	< 3	75	194	0.24	5.66	21.3	470	< 1	< 2	< 0.5	7.59	32	193	3	0.6	6.17	< 1	< 1	< 5	1.04	4.16	1450	1.66	0.048	26	7.4	25.2	< 3	407	< 0.5	0.43	1.1	1.3	269	< 1	10	6	8	< 5	1.2	< 0.01	< 0.5	0.9	0.16
A07-2306	85025	166.53	167.75	1.22	< 4	13	11	15	< 0.3	130	11.9	5	< 3	87	1710	1.29	5.38	35	430	< 1	2	< 0.5	5.71	34	263	3	0.5	8.59	< 1	< 1	< 5	0.92	5.11	2160	0.92	0.029	< 15	14.9	31.5	< 3	338	< 0.5	0.44	< 0.2	< 0.5	305	< 1	9	5.4	8	< 5	1.2	< 0.01	< 0.5	1	0.24
A07-2306	85026	167.75	168.97	1.22	5	16	1420	1410	0.5	168	8.5	2	16	68	1240	0.82	4.76	3350	< 50	< 1	< 2	< 0.5	8.28	24	184	< 1	0.8	6.84	< 1	< 1	< 5	2.03	4.35	2360	0.19	0.013	31	67.4	25.6	< 3	474	< 0.5	0.39	< 0.2	< 0.5	269	< 1	9	3.7	< 3	11	0.9	< 0.01	< 0.5	1	< 0.05
A07-3503	85027	168.97	170.49	1.52	< 4	11	7	14	< 0.3	79	8.1	3	< 3	79	1110	0.78	6	43.2	< 50	< 1	< 2	< 0.5	6.46	34	216	4	0.5	7.6	< 1	< 1	< 5	1.7	4.76	2020	0.94	0.016	53	15.3	29.4	< 3	289	< 0.5	0.46	0.8	1.5	313	< 1	10	4.6	10	6	1.4	< 0.01	< 0.5	1.4	0.18
A07-2306	85028	170.49	172.32	1.83	< 4	< 5	719	754	< 0.3	22	2.9	3	3	61	427	0.42	5.38	1770	< 50	< 1	< 2	< 0.5	7.09	28	163	3	0.5	6.46	< 1	< 1	< 5	1.85	3.95	1440	0.92	0.044	< 15	22.6	24.4	< 3	364	< 0.5	0.43	0.9	< 0.5	232	< 1	13	9.1	19	< 5	1.6	< 0.01	< 0.5	1.3	0.23
A07-3503	85454	172.32	173.70	1.38	7	10	5	< 2	1.1	40	3.1	5	< 3	63	452	0.22	5.97	10.3	720	< 1	< 2	< 0.5	5.67	40	178	3	0.7	6.84	< 1	< 1	< 5	1.26	2.95	1270	1.77	0.07	27	3.3	28.1	< 3	370	< 0.5	0.36	1.8	< 0.5	278	2	8	7.3	11	< 5	1.8	< 0.01	0.9	1.3	< 0.05
A07-3503	85455	173.70	175.00	1.30	2	5	< 2	8	0.7	24	< 0.3	1	< 3	38	58	0.19	8.06	32.1	240	< 1	< 2	< 0.5	5.65	29	106	4	0.7	5.5	1	< 1	< 5	1.25	3.14	1130	1.36	0.089	29	5.1	25.9	< 3	231	< 0.5	0.24	1.7	< 0.5	219	< 1	17	8.2	13	< 5	2.2	< 0.01	< 0.5	1.6	0.1
A07-2306	85029	175.00	176.50	1.50	< 4	< 5	3610	3320	1.9	86	5.2	9	209	42	638	2.15	2.32	6890	< 50	< 1	< 2	< 0.5	5.74	10	45	< 1	< 0.2	3.96	< 1	< 1	< 5	1.01	2.14	802	0.05	0.026	< 15	59.1	7.9	< 3	157	< 0.5	0.16	1.4	< 0.5	143	28	8	3.3	11	< 5	0.7	< 0.01	< 0.5	0.9	< 0.05
A07-3503	85456	176.50	179.34	2.84	< 1	< 1	32	46	0.6	59	< 0.3	2	18	35	59	0.44	4.37	165	320	< 1	< 2	< 0.5	2.84	9	56	2	0.5	2.22	2	< 1	< 5	1.36	1.32	386	0.11	0.028	65	8.8	8.7	< 3	100	< 0.5	0.21	5.2	3.2	76	< 1	14	15	29	12	2.7	< 0.01	< 0.5	1.9	0.28
A07-3503	85457	179.34	182.39	3.05	2	2	6	< 2	1.2	71	3.2	12	6	61	158	0.56	4.26	55.8	360	1	< 2	< 0.5	1.77	10	103	2	0.7	2.26	3	< 1	< 5	1.26	1.27	425	0.71	0.031	67	7.4	8.8	13	117	< 0.5	0.22	5.8	4.3	194	< 1	18	18	31	8	3	< 0.01	< 0.5	2.3	0.37
A07-3503	85458	182.39	185.44	3.05	3	3	10	16	0.6	100	7	59	7	118	378	0.7	5.06	60.9	460	1	< 2	< 0.5	2.51	11	114	3	0.8	2.49	3	< 1	< 5	1.4	1.96	580	0.55	0.035	59	5.2	9.5	14	133	< 0.5	0.25	7	7.8	751	< 1	26	19.4	35	13	3.4	< 0.01	< 0.5	2.8	0.43
A07-2306	85030	185.44	188.49	3.05	< 4	< 5	17	15	0.5	180	0.3	3	< 3	65	80	0.86	4.96	28	760	1	< 2	< 0.5	2.94	22	50	2	0.8	4.21	2	< 1	< 5	1.86	1.97	646	1.18	0.044	46	5.2	14.5	7	216	< 0.5	0.37	4	< 0.5	187	4	15	13.4	26	10	2.4	< 0.01	< 0.5	2.1	0.35
A07-3503	85459	188.49	189.90	1.41	< 1	1	16	31	1.5	88	0.8	8	13	93	180	0.76	5.3	65.6	490	1	< 2	< 0.5	1.94	11	77	2	0.9	2.42	3	< 1	< 5	1.57	1.54	435	0.87	0.037	66	3.1	9.2	9	139	< 0.5	0.27	7.7	3.6	141	< 1	25	18.8	33	13	3.3	< 0.01	< 0.5	2.5	0.37
A07-3503	85460	189.90	191.40	1.50	< 1	< 1	6	< 2	1.4	68	< 0.3	4	11	62	92	0.57	5.46	56.4	590	1	< 2	< 0.5	2.07	9	72	< 1	0.8	2.38	3	< 1	< 5	1.68	1.46	601	1.21	0.031	51	3.3	9.5	< 3	145	0.6	0.25	7.2	< 0.5	91	< 1	23	17.3	32	9	3	< 0.01	1	2.2	0.32
A07-2306	85031	191.40	192.00	0.60	< 4	< 5	56	48	2.3	107	1.5	16	23	108	214	2.17	3.28	35.3	680	1	< 2	< 0.5	1.04	10	93	2	0.9	3.67	4	< 1	< 5	1.71	1.41	340	1.12	0.131	52	5.9	9	25	93	< 0.5	0.31	6.2	2.4	240	< 1	27	20.4	40	14	3.8	< 0.01	< 0.5	3	0.58
A07-3503	85461	192.00	194.49	2.49	< 1	2	2	< 2	1.2	109	< 0.3	3	7	57	65	0.49	6.14	4.4	610	1	< 2	< 0.5	2.87	14	68	< 1	0.7	2.93	3	< 1	< 5	1.43	2.12	562	1.71	0.045	32	1.1	13.5	< 3	204	0.9	0.33	6.8	2.2	140	< 1	24	16.9	30	13	3.1	< 0.01	< 0.5	2.4	0.33
A07-3503	85462	194.49	195.00	0.51	4	14	< 2	< 2	1.2	403	< 0.3	< 1	< 3	62	45	0.84	6.12	3.2	680	< 1	< 2	< 0.5	7.7	46	146	< 1	0.9	6.18	< 1	< 1	< 5	1.41	4.25	1040	1.64	0.077	< 15	0.3	36.3	< 3	337	< 0.5	0.43	2.2	< 0.5	297	< 1	15	9.6	17	9	2.5	< 0.01	0.6	1.6	0.17
A07-3503	85463	195.00	197.15	2.15	2	13	< 2	< 2	0.7	77	< 0.3	1	< 3	82	38	0.34	4.28	8.1	320	< 1	3	< 0.5	8.49	31	344	< 1	0.5	5	< 1	< 1	< 5	0.9	5.33	930	0.47	0.036	< 15	2.1	42.2	< 3	123	< 0.5	0.27	3.1	< 0.5	178	< 1	11	8.7	16	8	1.9	< 0.01	< 0.5	1.3	0.12
A07-2306	85033	197.15	198.45	1.30	< 4	< 5	8	16	1.2	94	7.9	40	37	113	462	1.33	4.28	21.8	430	1	< 2	< 0.5	1.6	9	107	3	1	3.02	4	< 1	< 5	2.52	1.68	405	0.37	0.027	79	8.6	10.7	18	85	1.2	0.37	6.7	3.7	434	< 1	19	22.7	43	12	3.6	< 0.01	0.6	3.3	0.6
A07-2306	85034	198.45	200.08	1.63	< 4	< 5	8	10	0.5	51	1.9	48	14	67	171	0.74	3.96	50	410	1	< 2	< 0.5	2.72	8	74	2	1.1	2.45	5	< 1	< 5	2.4	1.76	594	0.4	0.026	52	4.4	9.3	5	139	< 0.5	0.38	5.9	2.9	353	< 1	20	19.8	40	20	4.8	< 0.01	0.6	2.9	0.47
A07-2306	85035	200.08	203.13	3.05	< 4	< 5	10	9	0.4	85	1.1	21	6	58	119	0.74	3.89	58.5	350	1	< 2	< 0.5	3.81	10	60	2	1	2.74	4	< 1	< 5	2.21	1.72	612	0.23	0.102	56	5	9	5	135	0.6	0.32	5	2.4	207	2	23	19.2	37	21	4.9	< 0.01	0.7	2.7	0.31
A07-3503	85036	203.13	206.18	3.05	< 4	< 5	24	52	< 0.3	89	0.4	3	5	70	106	0.54	3.88	22.4	440	1	< 2	< 0.5	1.9	10	68	3	1.2	2.71	4	< 1	< 5	2.28	1.44	358	0.6	0.026	60	6.4	10.3	< 3	117	0.6	0.35	5.2	1.5	128	< 1	21	18.8	37	16	4.8	< 0.01	0.6	2.8	0.42
A07-3503	85037	206.18	209.23	3.05	< 4	< 5	7	8	< 0.3	46	0.4	2	3	51	62	0.18	4.6	6.8	400	1	< 2	< 0.5	2.39	10	50	2	0.9	3.08	3	< 1	< 5	1.5	1.68	558	1.33	0.031	32	0.9	11.1	< 3	229	< 0.5	0.37	3.9	0.9	125	< 1	21	14.7	29	15	3.8	< 0.01	< 0.5	2.1	0.36
A07-3503	85038	209.23	211.97	2.74	< 4	< 5	5	7	0.3	89	0.3	2	4	39	59	0.29	5.08	9.3	440	< 1	< 2	< 0.5	3.38	17	46	3	0.9	3.94	2	< 1	< 5	1.98	1.89	766	1.3	0.036	53	1.2	14.9	< 3	205	< 0.5	0.43	2.8	0.9	178	< 1	17	11.6	24	15	3.6	< 0.01	< 0.5	1.9	0.29
A07-3503	85039	211.97	214.72	2.75	< 4	< 5	5	< 2	< 0.3	245	< 0.3	2	< 3	42	38	0.28	4.58	22	420	< 1	< 2	< 0.5	3.56	15	50	2	1.3	3.52	2	< 1	< 5	1.51	1.58	570	1.58	0.081	35	2.3	13.6	< 3	228	< 0.5	0.38	3.3	1.7	158	< 1	25	17.4	29	16	4.7	< 0.01	< 0.5	2.9	0.46
A07-3503	85040	214.72	217.46	2.74	< 4	< 5	2	6	< 0.3	58	0.3	3	4	46	38	0.41	5.17	19.1	410	< 1	< 2	< 0.5	4.32	14	47	3	1	4.35	2	< 1	< 5	1.53	2.01	713	1.63	0.059	32	6.3	14.9	3	273	< 0.5	0.47	3	1.2	223	< 1	19	11.6	24	15	3.6	< 0.01	< 0.5	2.1	0.29
A07-3503	85041	217.46	219.90	2.44	< 4	< 5	11	6	< 0.3	149	< 0.3	4	< 3	66	43	0.94	4.99	23.5	550	1	< 2	< 0.5	4.35	19	88	2	1	4.32	2	< 1	< 5	1.83	1.99	737	1.25	0.057	35	3.3	15.5	4	237	< 0.5	0.42	3	1.3	189	< 1	22	13.2	26	17	3.9	< 0.01	< 0.5	2.5	0.34
A07-3503	85042	219.90	222.04	2.14	< 4	6	10	10	< 0.3	82	3.5	2	< 3	40	429	0.29	5.4	3	590	< 1	< 2	< 0.5	7.31	22	110	2	1	5.76	2	< 1	< 5	0.91	2.54	1520	2.28	0.05	< 15	0.8	21.8	< 3	335	< 0.5	0.49	1.4	< 0.5	255	< 1	15	8.7	18	13	3.2	< 0.01	< 0.5	1.4	0.22
A07-3503	85043	222.04	225.09	3.05	< 4	< 5	4	< 2	< 0.3	92	< 0.3	4	< 3	24	71	0.58	5.41	3.2	650	< 1	< 2	< 0.5	7.12	24	54	3	1.1	6.51	2	< 1	< 5	1.36	2.63	1360	1.74	0.057	26	1.1	18.2	< 3	370	< 0.5	0.48	1.3	< 0.5	229	< 1	24	12.5	25	10	3.8	< 0.01	< 0.5	2.6	0.37
A07-3503	85044	225.09	227.83	2.74	< 4	6	24	25	< 0.3	100	3.3	9	30	56	525	0.9	5.39	43.6	500	< 1	< 2	< 0.5	6.39	24	150	3	1	5.88	< 1	< 1	< 5	2.33	3.24	2030	0.32	0.064	50	4.3	21.1	< 3	203	< 0.5	0.45	2.3	1.2	239	< 1	16	13.3	26	16	3.6	< 0.01	< 0.5	1.7	0.26
A07-3503	85045	227.83	229.97	2.14	< 4	< 5	9	5	< 0.3	365	0.4	3	< 3	52	55	1.11	6.29	21.4	370	< 1	< 2	< 0.5	6.68	52	100	3	1.2	6.94	2	< 1	< 5	1.63	3.22	1660	1.65	0.082	33	3.1	20.9	< 3	477	< 0.5	0.58	1.6	< 0.5	304	< 1	18	20.3	26	14	3.4	< 0.01	< 0.5	1.7	0.24
A07-3503	85046	229.97	230.08	0.11	< 4	5	96	79	1.8	226	23.5	3	31	56	3290	1.67	5.05	271	210	< 1	< 2	< 0.5	6.68	28	150	2	0.9	5.82	< 1	< 1	< 5	1.92	2.76	1630	0.11	0.062	40	5.3	20.7	< 3	321	< 0.5	0.43	1.1	1	239	6	13	6.7	14	9	2.6	< 0.01	< 0.5	1.2	0.19
A07-3503	85047	230.08	233.32	3.24	< 4	< 5	685	580	2.2	486	49.7	2	76	50	6980	3.57	3.63	71.1	200	< 1	< 2	< 0.5	4.73	31	130	2	0.5	6.13	< 1	2	< 5	1.19	2.02	1450	0.09	0.045	20	6	16.8	< 3	128	< 0.5	0.3	1.2	< 0.5	182	< 1	7	4.2	10	9	1.5	< 0.01	< 0.5

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-5

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2306	85057	249.49	252.54	3.05	< 4	5	65	63	< 0.3	567	1	3	< 3	74	208	1.33	5.69	7.4	370	< 1	< 2	< 0.5	6.47	57	82	3	0.9	9.54	2	< 1	< 5	1.06	2.83	1340	1.96	0.066	< 15	1.3	25.9	< 3	390	< 0.5	0.54	1.6	< 0.5	294	< 1	16	6.9	18	< 5	2.2	< 0.01	< 0.5	1.7	0.29
A07-2306	85058	252.54	254.80	2.26	< 4	10	32	43	< 0.3	317	1.7	4	< 3	67	306	0.26	4.97	14.1	330	< 1	< 2	< 0.5	8.37	32	261	< 1	0.9	7.1	< 1	< 1	< 5	0.91	4	1440	1.47	0.049	< 15	1.4	31.9	< 3	309	< 0.5	0.44	< 0.2	< 0.5	259	< 1	13	5.9	14	10	1.8	< 0.01	< 0.5	1.2	0.23
A07-2306	85059	254.80	255.13	0.33	< 4	10	446	396	2.3	5330	0.7	4	< 3	105	67	1.14	5.01	9.6	390	< 1	< 2	< 0.5	7.95	60	275	< 1	0.8	7.7	< 1	< 1	< 5	0.91	4.4	1310	1.15	0.046	< 15	1	30.9	6	214	< 0.5	0.48	1.3	< 0.5	264	< 1	13	9	14	< 5	1.6	< 0.01	< 0.5	1.3	0.25
A07-2306	85060	255.13	258.64	3.51	< 4	7	14	17	< 0.3	181	1.6	10	< 3	96	274	0.59	5.08	12.2	370	< 1	< 2	< 0.5	7.67	40	300	2	0.8	6.98	2	< 1	< 5	1.12	4.43	1350	1.37	0.048	< 15	1.2	30.1	< 3	313	< 0.5	0.43	1.2	< 0.5	258	< 1	12	5.8	11	< 5	1.7	< 0.01	< 0.5	1.3	0.19
A07-2306	85061	258.64	261.69	3.05	< 4	13	5	< 2	< 0.3	70	0.3	5	< 3	258	59	0.29	4.06	48.5	270	< 1	< 2	< 0.5	7.83	36	580	4	0.6	6.55	< 1	< 1	< 5	1.07	5.35	1240	0.5	0.034	< 15	6.7	30.6	< 3	284	< 0.5	0.35	0.9	< 0.5	217	< 1	9	5.2	13	< 5	1.4	< 0.01	< 0.5	1.1	0.2

					>9	>9	20-100	1-5	150-300		10-50	20-100	100-200	100-200	2.0-4.0		20-100	1000-2000		>2		>10.0		400-1000						>2.00									5-10																					
							101-200	5.1-10	301-500		>50	101-500	>200	201-500	4.1-5.0		101-200	>2000						>1000																	11-50																					
							>200	>10	>500			>500		>500	>5.0		>200																							>50																					

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-6

| DDH K07 - 6 | | |

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-6

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2308	85081	115.90	117.73	1.83	< 4	< 5	< 2	11	0.5	40	< 0.3	1	3	35	58	0.69	6.25	3.3	950	1	< 2	< 0.5	3.51	17	82	2	0.9	3.62	4	< 1	< 5	1.53	2.55	646	1.8	0.09	< 15	0.9	13.5	< 3	360	< 0.5	0.4	4.5	2.3	153	< 1	19	18	38	14	3	< 0.01	< 0.5	2.3	0.43
A07-2308	85082	117.73	118.65	0.92	8	6	5	< 2	< 0.3	30	< 0.3	2	5	58	70	0.72	5.58	2.7	500	< 1	< 2	< 0.5	4.19	20	139	< 1	0.8	4.45	3	< 1	< 5	0.99	3.46	870	1.77	0.06	31	< 0.1	19	< 3	183	< 0.5	0.38	3.1	< 0.5	182	< 1	14	12.4	29	8	2.4	< 0.01	< 0.5	1.7	0.24
A07-3505	85514	118.65	120.80	2.15	2	2	2	< 2	< 0.3	90	< 0.3	2	< 3	36	60	0.5	8.21	3.9	1080	< 1	< 2	< 0.5	3.44	17	57	< 1	1.2	3.65	3	< 1	< 5	1.53	1.99	649	2.26	0.093	59	0.4	16.5	< 3	221	< 0.5	0.3	4.6	4.4	176	< 1	21	16.5	29	20	2.1	< 0.01	< 0.5	2.5	0.41
A07-3505	85515	120.80	121.70	0.90	1	1	3	< 2	0.3	95	< 0.3	3	< 3	36	66	0.51	7.99	2.1	1800	< 1	< 2	< 0.5	1.84	16	46	< 1	1	3.62	3	< 1	< 5	2.45	1.54	604	1.96	0.108	81	< 0.1	14	< 3	367	< 0.5	0.3	4.7	4.2	167	< 1	27	17.2	25	23	2.2	< 0.01	< 0.5	2.9	0.48
A07-2308	85083	121.70	124.44	2.74	< 4	< 5	< 2	16	0.4	77	< 0.3	1	3	35	47	0.53	4.58	29.5	1240	1	< 2	< 0.5	2.32	13	63	< 1	1	3.13	4	< 1	< 5	1.96	1.26	635	2.1	0.065	30	0.7	10.8	< 3	220	< 0.5	0.35	4.3	2.2	142	< 1	19	17.1	36	14	3.2	< 0.01	0.7	2.8	0.45
A07-2308	85084	124.44	126.58	2.14	< 4	< 5	< 2	< 2	0.5	106	< 0.3	3	4	29	67	0.68	7.62	< 0.5	1140	1	< 2	< 0.5	3.05	15	46	< 1	0.9	4.24	2	< 1	< 5	2.19	2.1	796	2.76	0.104	< 15	< 0.1	12.8	< 3	439	< 0.5	0.44	2.6	2	196	< 1	23	12.4	23	10	2.2	< 0.01	< 0.5	2.4	0.38
A07-3505	85516	126.58	129.32	2.74	< 1	1	< 2	< 2	0.3	77	< 0.3	3	< 3	36	56	0.48	7.4	3.5	1440	1	< 2	< 0.5	2.1	11	45	< 1	0.7	2.87	3	< 1	< 5	1.96	1.35	452	1.91	0.095	< 15	< 0.1	12.3	< 3	396	1.3	0.29	5.1	< 0.5	139	< 1	30	17.2	32	26	2.5	< 0.01	< 0.5	3	0.51
A07-2308	85085	129.32	132.37	3.05	< 4	< 5	< 2	< 2	< 0.3	84	< 0.3	3	< 3	39	56	0.66	7.02	12.9	1520	1	< 2	< 0.5	3.79	18	64	< 1	1	4.1	3	< 1	< 5	2.94	2.25	832	2.08	0.103	71	2.6	15.3	< 3	535	< 0.5	0.46	3.5	< 0.5	199	< 1	25	14	26	15	2.8	< 0.01	< 0.5	2.7	0.42
A07-2308	85086	132.37	133.59	1.22	< 4	< 5	< 2	< 2	0.3	65	0.3	2	< 3	41	61	0.36	6.91	< 0.5	1810	1	< 2	< 0.5	2.25	12	54	2	0.8	3.41	3	< 1	< 5	2.48	2.1	607	2.16	0.092	66	0.4	12.7	< 3	523	< 0.5	0.41	4.5	2.3	163	< 1	25	16	30	7	2.7	< 0.01	< 0.5	2.3	0.45
A07-2308	85087	133.59	135.15	1.56	< 4	< 5	< 2	< 2	0.4	120	< 0.3	4	< 3	44	58	0.92	5.41	6.1	1050	1	< 2	< 0.5	2.61	20	78	2	0.9	4.23	3	< 1	< 5	1.46	2.36	749	1.82	0.104	34	< 0.1	12.4	< 3	388	< 0.5	0.35	5	3.7	134	< 1	25	18.8	29	14	2.7	< 0.01	< 0.5	2.6	0.4
A07-3505	85517	135.15	136.65	1.50	< 1	< 1	< 2	< 2	0.4	92	< 0.3	1	< 3	36	67	0.71	8.06	4.8	990	< 1	< 2	< 0.5	5.1	26	41	3	1.1	4.97	3	< 1	< 5	2.24	2.53	1100	1.39	0.08	89	0.4	16.9	< 3	401	< 0.5	0.37	4.4	< 0.5	217	< 1	20	12.1	21	23	2	< 0.01	< 0.5	2.1	0.35
A07-3505	85518	136.65	138.16	1.51	< 1	2	< 2	< 2	< 0.3	77	< 0.3	2	< 3	30	56	0.68	9.42	1.7	660	< 1	< 2	< 0.5	7.2	30	52	2	1.2	4.8	2	< 1	< 5	1.52	2.53	1170	2.27	0.088	< 15	< 0.1	20.4	< 3	614	< 0.5	0.4	2	3.1	253	< 1	17	7.5	14	7	1.7	< 0.01	< 0.5	1.7	0.34
A07-3505	85519	138.16	140.12	1.96	2	3	< 2	< 2	< 0.3	29	< 0.3	< 1	< 3	44	56	0.19	8.61	4.7	990	< 1	< 2	< 0.5	7.5	19	127	< 1	1.1	4.15	< 1	< 1	< 5	1.95	3.06	1210	1.78	0.093	< 15	0.4	22	< 3	605	< 0.5	0.36	2.5	< 0.5	240	< 1	15	6.5	14	< 5	2.2	0.02	1.2	1.4	0.23
A07-3505	85520	140.12	141.67	1.55	2	6	< 2	< 2	< 0.3	45	< 0.3	< 1	< 3	95	94	0.25	7.92	3	690	< 1	< 2	< 0.5	7.51	37	372	< 1	1	6.83	< 1	< 1	< 5	1.58	5.06	1470	0.96	0.088	57	0.5	34	< 3	336	< 0.5	0.33	2.1	< 0.5	247	< 1	14	6.9	14	27	2	< 0.01	< 0.5	1.7	0.28
A07-3505	85521	141.67	144.27	2.60	1	4	< 2	< 2	< 0.3	91	< 0.3	3	< 3	63	62	0.63	7.75	2.5	1330	< 1	< 2	< 0.5	5.61	28	185	3	1.1	4.84	4	< 1	< 5	1.69	2.85	922	1.72	0.084	71	0.5	22.7	< 3	351	< 0.5	0.34	4.1	3.5	199	< 1	25	15.1	25	14	2.2	< 0.01	< 0.5	2.8	0.51
A07-3505	85522	144.27	147.32	3.05	< 1	1	< 2	< 2	0.5	63	< 0.3	2	3	48	62	0.75	5.61	5.6	1620	1	< 2	< 0.5	3.64	14	77	< 1	1.5	3.66	5	< 1	< 5	1.69	1.46	759	1.83	0.071	44	< 0.1	16.5	< 3	295	< 0.5	0.28	5.6	3.1	116	< 1	28	19.8	31	29	2.7	< 0.01	< 0.5	4.1	0.61
A07-3505	85523	147.32	148.54	1.22	< 1	< 1	< 2	< 2	0.4	66	< 0.3	4	< 3	36	54	0.72	6.36	< 0.5	1710	1	< 2	< 0.5	2.68	9	57	< 1	1.4	3.05	6	< 1	< 5	1.82	1.35	699	2.22	0.086	73	< 0.1	13.5	< 3	329	< 0.5	0.28	5.5	2.2	94	< 1	39	20.3	29	29	2.8	< 0.01	0.8	4.6	0.75
A07-2308	85089	148.54	151.38	2.84	< 4	< 5	< 2	< 2	0.4	60	< 0.3	3	22	36	68	0.34	5.96	< 0.5	1900	1	< 2	< 0.5	3.31	11	52	< 1	1.1	2.81	3	< 1	< 5	2.48	1.74	640	2.3	0.072	77	< 0.1	10.8	< 3	401	< 0.5	0.4	5	1.5	121	< 1	30	19.1	32	18	3.2	< 0.01	< 0.5	3.3	0.61
A07-2308	85090	151.38	154.64	3.26	7	6	4	< 2	< 0.3	151	< 0.3	1	6	31	65	0.6	6.88	7.2	3040	< 1	< 2	< 0.5	6.01	21	41	< 1	0.9	5.01	2	< 1	< 5	3.32	3.03	1170	1.63	0.095	47	0.6	17.8	< 3	489	< 0.5	0.48	2.1	< 0.5	258	< 1	14	10.4	20	8	2.2	< 0.01	< 0.5	1.4	0.25
A07-3505	85524	154.64	155.24	0.60	3	6	< 2	< 2	0.4	138	< 0.3	< 1	< 3	41	64	0.88	8.76	4.3	1710	1	< 2	< 0.5	8.35	24	116	< 1	1	4.9	2	< 1	< 5	2.24	2.86	1060	1.42	0.101	59	0.7	21.3	< 3	325	< 0.5	0.36	2	< 0.5	261	< 1	13	9.7	16	< 5	1.8	< 0.01	< 0.5	1.2	0.19
A07-3505	85525	155.24	157.69	2.45	< 1	< 1	< 2	< 2	< 0.3	40	< 0.3	2	< 3	27	42	0.24	6.62	2.5	2760	< 1	< 2	< 0.5	2.07	8	51	< 1	1	2.81	6	< 1	< 5	1.64	1.55	560	2.29	0.07	< 15	0.4	14.2	< 3	377	< 0.5	0.26	5.5	4.3	82	< 1	37	18.4	31	< 5	2.7	< 0.01	< 0.5	4.1	0.73
A07-2308	85091	157.69	160.74	3.05	6	6	3	< 2	< 0.3	90	< 0.3	1	3	167	78	0.29	4.75	11.9	660	< 1	3	< 0.5	6.75	43	635	4	0.8	6.83	< 1	< 1	< 5	0.97	6.58	1570	0.9	0.069	< 15	2.6	31.7	< 3	297	< 0.5	0.39	1.2	2.1	215	< 1	12	7.2	11	< 5	1.8	< 0.01	< 0.5	1.6	0.32
A07-2308	85092	160.74	163.79	3.05	< 4	< 5	< 2	< 2	< 0.3	136	< 0.3	2	5	39	69	0.77	7.59	< 0.5	1240	1	2	< 0.5	6.58	19	45	< 1	0.7	4.85	3	< 1	< 5	1.93	3.42	1380	2.15	0.086	< 15	0.5	19.4	< 3	515	< 0.5	0.55	2.5	< 0.5	220	< 1	29	12.5	21	10	2.6	< 0.01	< 0.5	2.6	0.45
A07-2308	85093	163.79	165.31	1.52	< 4	< 5	< 2	< 2	0.4	23	< 0.3	1	< 3	40	48	0.14	5.51	4.6	1520	1	< 2	< 0.5	3.85	6	61	< 1	0.9	2.36	4	< 1	< 5	2.18	1.84	847	1.93	0.065	47	< 0.1	12.4	< 3	375	< 0.5	0.41	5.2	3.2	112	< 1	34	20.1	36	12	2.9	< 0.01	< 0.5	2.8	0.59
A07-2308	85094	165.31	167.45	2.14	< 4	< 5	< 2	< 2	0.4	44	< 0.3	4	< 3	41	53	0.13	5.54	3.1	2090	1	< 2	< 0.5	3	10	61	2	0.9	2.71	5	< 1	< 5	2.68	1.95	770	1.62	0.073	62	0.4	10.5	< 3	404	< 0.5	0.4	5.4	1.7	113	< 1	32	19.3	35	15	3.1	< 0.01	< 0.5	3.1	0.59
A07-2308	85095	167.45	169.89	2.44	< 4	< 5	3	< 2	< 0.3	38	< 0.3	1	< 3	47	41	0.15	5.55	3.5	1710	1	< 2	< 0.5	1.93	10	56	< 1	0.8	2.35	5	< 1	< 5	1.89	1.96	455	2.23	0.05	42	0.4	8.8	< 3	441	< 0.5	0.43	6.3	2.1	97	< 1	29	20.3	40	15	3	< 0.01	0.8	2.7	0.4
A07-2308	85096	169.89	173.56	3.67	5	< 5	12	< 2	< 0.3	35	< 0.3	1	5	51	85	0.19	6.71	5.1	990	1	< 2	< 0.5	4.18	19	194	2	0.7	4.89	2	< 1	< 5	1.46	4.15	1230	1.69	0.072	< 15	1.4	23.8	< 3	660	< 0.5	0.5	1.9	< 0.5	231	< 1	19	9	20	7	1.9	< 0.01	< 0.5	1.5	0.26
A07-2308	85097	173.56	175.68	2.12	< 4	< 5	< 2	< 2	< 0.3	57	< 0.3	2	15	199	74	0.12	6.36	3.2	2520	< 1	< 2	< 0.5	5.62	33	372	2	1.7	4.86	3	< 1	< 5	2.31	5.08	1040	2.3	0.149	< 15	< 0.1	18.4	< 3	1730	< 0.5	0.51	6.9	4.1	183	< 1	15	51.9	88	23	5.1	< 0.01	< 0.5	1.5	0.22
A07-3505	85526	175.68	177.21	1.53	< 1	2	13	< 2	0.7	52	< 0.3	1	11	190	72	0.14	7.83	3.1	2570	< 1	< 2	< 0.5	5.61	34	344	< 1	2.2	4.83	3	< 1	< 5	2.25	4.97	943	2	0.185	< 15	0.5	19.1	< 3	1550	< 0.5	0.38	9.3	8	175	< 1	15	52.6	81	68	3.9	< 0.01	< 0.5	1.7	0.21
A07-3505	85527	177.21	179.34	2.13	< 1	1	< 2	7	0.6	54	< 0.3	1	< 3	234	66	0.09	7.89	3.7	1430	< 1	< 2	< 0.5	5.49	35	372	< 1	2.2	5.15	3	< 1	< 5	1.63	5.71	945	2.15	0.2	< 15	< 0.1	20	< 3	1520	< 0.5	0.4	6.4	< 0.5	186	< 1	16	51.9	75	36	4.1	< 0.01	< 0.5	1.6	0.21
A07-3505	85528	179.34	182.39	3.05	< 1	1	< 2	< 2	0.5	54	< 0.3	< 1	8	223	83	0.08	7.5	3	870	< 1	< 2	< 0.5	5.08	35	362	< 1	2.4	4.91	3	< 1	< 5	0.89	5.22	858	2.85	0.188	< 15	0.7	20	< 3	1410	< 0.5	0.38	7.2	< 0.5	168	< 1	16	53.6	76	40	4.1	< 0.01	< 0.5	1.3	0.28
A07-3505	85529	182.39	184.53	2.14	1	2	2	< 2	0.6	60	0.5	< 1	8	246	76	0.06	7.63	3.5	1710	< 1	< 2	< 0.5	6.08	37	412	< 1	2	5.23	3	< 1	< 5	0.94	5.5	905	2.59	0.184	< 15	0.8	21.5	< 3	1420	< 0.5	0.4	7.5	< 0.5	182	< 1	16	53.1	81	62	4.3	< 0.01	< 0.5	1.6	0.29
A07-2308	85098	184.53	187.30	2.77	< 4	< 5	3	< 2	0.5	52	0.4	1	15	226	83	0.09	5.87	< 0.5	1080	< 1	< 2	< 0.5	6.04	31	378	3	1.6	4.66	2	< 1	< 5	1.09	4.97	979	2.52	0.144	< 15	< 0.1	17.9	< 3	1390	< 0.5	0.5	4.9	1.8	174	< 1	16	45.1	79	22	4.6	< 0.01	< 0.5	1.3	0.17
A07-2308	85099	187.30	188.10	0.80	< 4	< 5	< 2	< 2	0.3	63	< 0.3	< 1	17	180	73	0.18	5.42	38.7	550	< 1	< 2	< 0.5	10.1	29	321	3	1.5	4.29	2	< 1	< 5	0.68	3.08	1150	1.06	0.127	< 15	1.8	14.6	< 3	913	< 0.5	0.4	4.4	1.9	143	6	14	41.4	73	24	4.2	< 0.01	< 0.5	1.4	0.22
A07-3505	85530	188.10	190.63	2.53	< 1	2	3	< 2	0.7	47	< 0.3	< 1	6	243	69	0.16	8.65	10.3	1900	< 1	< 2	< 0.5	7.42	36	386	3	2.4	5.05	3	< 1	< 5	1.24	3.91	865	1.86	0.191	< 15	1.6	20.4	< 3	1460	< 0.5	0.41	6.4	4	183	< 1	17	51.8	80	42	4.1	< 0.01	< 0.5	1.3	0.26
A07-3505	85531	196.42	199.25	2.83	< 1	2	< 2	< 2	0.3	59	< 0.3	1	12	208	70	0.19	8.04	< 0.5	2430	< 1	< 2	< 0.5	5.48	37	361	< 1	2.6	5.05	3	< 1	< 5	1.8	5.24	944	2.33	0.18	< 15	< 0.1	20.3	< 3	5480	4.1	0.38	8.5	< 0.5	186	< 1	16	55.2	87	54	4.8	< 0.01	< 0.5	1.7	0.31
A07-2308	85100	199.25	200.69	1.44	< 4	< 5	< 2	8	0.5	66	0.4	2	< 3	28	53	0.05	4.38	2.6	1710	1	< 2	< 0.5	1.1	9	47	< 1	0.7	2.48	5	< 1	< 5	1.17	2.13	479	2.48	0.059	< 15	< 0.1	9.5	< 3	553	< 0.5	0.36	5.3	2.6	84	< 1	21	19.9	34	12	2.7	< 0.01	< 0.5	2.3	0.41
A07-3505	85532	200.69	203.74	3.05	< 1	1	2	5	0.4	145	< 0.3	1	< 3	9	50	0.73	6.31	2.6	1980	< 1	< 2	< 0.5	3.2	19	25	< 1	1.1	4.08	3	< 1	< 5	2.11	1.3	588	2.6	0.133	98	< 0.1	7.7	< 3	503	< 0.5	0.24	3.3	4.4	117	< 1	16	13.2	22	< 5	2.1	< 0.01	< 0.5	2.6	0.38
A07-3505	85534	203.74	206.79	3.05	< 1	< 1	2	< 2	0.4	64	< 0.3	3	11	25	58	0.21	6.85	3.8	1710	1	< 2	< 0.5	2.49	13	38	< 1	1.1	2.81	4	< 1	< 5	2.19	1.73	537	1.83	0.086	< 15	< 0.1	9.9	< 3	424	< 0.5	0.24	5.5	3.6	98	< 1	24	17.7	32	25	2.2	< 0.01	< 0.5	2.4	0.44
A07-3505	85535	206.79	209.84	3.05	< 1	< 1	< 2	< 2	< 0.3	40	< 0.3	2	5	29	53	0.12	5.86	7.1	1800	1	< 2	< 0.5	2.35	11	50	< 1	0.8	2.3	5	< 1	< 5	1.85	1.87	434	1.62	0.054	74	< 0.1	9.4	< 3	304	< 0.5	0.19	5.3	< 0.5	79	< 1	23	17.5	27	< 5	2.2	< 0.01	< 0.5	2.3	0.39
					>9	>9	20-100		1-5	150-300		10-50	20-100	100-200	100-200	2.0-4.0		20-100	1000-2000	>2		>10.0		400-1000						>2.00					5-10																				
							101-200		5.1-10	301-500		>50	101-500	>200	201-500	4.1-5.0		101-200	>2000					>1000											11-50																				
							>200		>10	>500			>500		>500	>5.0		>200																	>50																				

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-7

| DDH K07 - 7 | | |

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-7

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2309	85123	118.48	121.39	2.91	< 4	< 5	7	< 2	< 0.3	139	0.4	3	3	55	76	1.12	4.6	12.4	1110	1	< 2	< 0.5	3.49	20	65	2	0.9	5.48	3	< 1	< 5	2.24	1.8	1270	2.43	0.064	< 15	0.8	12.8	5	382	< 0.5	0.38	4.5	2.6	138	< 1	27	19.4	38	8	2.9	< 0.01	0.6	3.2	0.49
A07-4113	85885	121.39	124.44	3.05	2	< 1	2	< 2	0.5	87	< 0.3	1	3	59	75	0.66	6.38	3.7	1400	2	< 2	< 0.5	2.98	12	81	2	1.1	3.17	4	< 1	< 5	2.95	1.19	729	1.66	0.079	71	< 0.1	13.9	< 3	296	< 0.5	0.36	7.9	3.6	131	< 1	36	23.5	44	18	3.8	< 0.01	< 0.5	4.4	0.53
A07-4113	85886	124.44	127.02	2.58	1	< 1	< 2	< 2	0.4	72	< 0.3	1	< 3	46	72	0.59	6.35	< 0.5	1550	2	< 2	< 0.5	3.54	11	68	1	1.3	3.13	4	< 1	< 5	2.68	1.19	861	1.98	0.085	56	0.3	13.9	< 3	349	< 0.5	0.37	7.4	5.4	107	< 1	44	22.1	41	10	4.1	< 0.01	0.6	4.9	0.67
A07-4113	85887	127.02	127.44	0.42	5	6	< 2	< 2	0.4	11	< 0.3	< 1	3	169	71	0.02	4.66	10.3	390	1	< 2	< 0.5	8.68	46	822	2	0.6	5.78	< 1	< 1	< 5	1.39	2.14	1400	0.3	0.056	47	4.3	39.7	< 3	298	< 0.5	0.33	1.4	< 0.5	188	< 1	12	6.4	12	< 5	1.8	< 0.01	< 0.5	1.7	< 0.05
A07-4113	85888	127.44	129.95	2.51	3	4	< 2	< 2	0.4	75	< 0.3	1	3	63	55	0.37	3.68	< 0.5	1220	1	< 2	< 0.5	5.16	31	244	1	1	5.13	2	< 1	< 5	1.72	1.52	913	1.46	0.082	52	< 0.1	23	< 3	406	1	0.34	4.1	< 0.5	156	< 1	10	13.8	31	< 5	2.8	< 0.01	< 0.5	2.7	0.16
A07-2309	85124	129.95	131.55	1.60	< 4	< 5	3	< 2	< 0.3	15	< 0.3	8	< 3	34	108	0.15	3.85	2.9	290	1	< 2	< 0.5	9.74	8	88	< 1	0.8	4.09	3	< 1	< 5	0.39	2.47	2800	2.07	0.099	< 15	0.4	7.9	< 3	222	< 0.5	0.29	4	1.8	80	< 1	29	17.4	29	11	2.5	< 0.01	< 0.5	2.5	0.44
A07-4113	85890	131.55	133.20	1.65	1	< 1	< 2	< 2	0.8	132	0.4	2	137	41	158	0.5	7.18	< 0.5	2750	2	< 2	< 0.5	2.96	13	50	1	1.1	3.38	5	< 1	< 5	1.59	1.26	673	1.7	0.093	43	0.5	11.7	< 3	522	1.1	0.37	6.7	3.1	118	< 1	34	20.8	46	14	3.5	< 0.01	< 0.5	3.6	0.49
A07-4113	85891	133.20	135.10	1.90	3	8	2	< 2	0.8	120	< 0.3	1	< 3	36	75	0.4	7.65	< 0.5	1550	1	< 2	< 0.5	6.32	31	74	< 1	0.9	6.06	2	< 1	< 5	2.87	1.54	1230	1.87	0.131	52	< 0.1	21.9	< 3	503	< 0.5	0.44	3	< 0.5	242	< 1	17	10.9	22	11	2.7	< 0.01	< 0.5	2.4	0.12
A07-4113	85892	135.10	137.03	1.93	6	6	< 2	< 2	0.4	109	< 0.3	< 1	< 3	82	81	0.18	6.25	< 0.5	1150	1	< 2	< 0.5	8.73	40	312	3	0.9	6.8	1	< 1	< 5	1.75	1.86	1420	0.98	0.108	66	0.7	37.1	< 3	443	< 0.5	0.37	2.2	< 0.5	244	< 1	13	7.8	16	< 5	2.3	< 0.01	< 0.5	1.3	< 0.05
A07-4113	85893	137.03	139.20	2.17	< 1	< 1	< 2	< 2	0.6	143	< 0.3	1	< 3	15	69	0.55	6.96	< 0.5	750	1	< 2	< 0.5	8.31	21	49	2	1.1	5.48	2	< 1	< 5	1.22	1.42	1390	2.25	0.107	40	< 0.1	16.8	< 3	460	< 0.5	0.47	3	2	232	< 1	20	10.6	25	13	3	< 0.01	< 0.5	2.7	0.15
A07-4113	85894	139.20	142.13	2.93	1	< 1	< 2	< 2	0.4	58	< 0.3	< 1	5	42	50	0.27	6.03	1.6	2900	2	< 2	< 0.5	3.63	12	65	< 1	1.1	3.12	5	< 1	< 5	2.63	1.21	1130	1.75	0.075	58	0.4	12.9	< 3	429	< 0.5	0.24	7.7	3.6	69	< 1	32	21.5	48	11	3.5	< 0.01	0.6	3.7	0.5
A07-4113	85895	142.13	144.88	2.75	1	< 1	< 2	< 2	0.5	46	< 0.3	1	3	45	66	0.13	6.25	3.9	2700	2	< 2	< 0.5	2.42	13	73	2	1.2	2.82	6	< 1	< 5	3.29	1.31	663	1.53	0.069	64	0.5	12.4	< 3	469	< 0.5	0.25	8.7	4.8	77	< 1	30	25.5	58	13	4	< 0.01	< 0.5	3.9	0.53
A07-4113	85896	144.88	147.32	2.44	< 1	< 1	< 2	< 2	0.7	34	< 0.3	< 1	3	27	53	0.03	7.38	< 0.5	2600	2	< 2	< 0.5	2.02	12	47	1	0.9	2.76	5	< 1	< 5	3.07	1.1	844	2.2	0.078	61	< 0.1	11.9	< 3	606	< 0.5	0.32	6.8	3.6	84	< 1	23	21.1	41	13	3	< 0.01	0.6	2.7	0.41
A07-4113	85897	147.32	149.45	2.13	1	< 1	2	< 2	0.5	63	< 0.3	1	6	32	60	0.07	6.95	2.4	2500	2	< 2	< 0.5	1.74	11	51	2	0.8	2.81	4	< 1	< 5	2.13	1.08	354	2.11	0.069	44	0.3	11.2	< 3	487	1.4	0.27	5.6	2.6	97	< 1	23	17.2	35	10	2.8	< 0.01	0.6	2.9	0.33
A07-4113	85898	149.45	151.89	2.44	2	< 1	< 2	< 2	0.5	73	< 0.3	< 1	< 3	44	46	0.14	3.79	3.1	2300	1	< 2	< 0.5	1.56	16	56	2	1.1	3.31	4	< 1	< 5	1.7	1.11	428	1.85	0.08	72	< 0.1	14.7	< 3	391	< 0.5	0.39	7.2	4.6	121	< 1	13	21.4	48	16	3.5	< 0.01	0.5	3.2	0.41
A07-4113	85899	151.89	153.72	1.83	2	1	6	13	0.5	111	< 0.3	2	4	42	54	0.63	6.92	< 0.5	1600	2	< 2	< 0.5	3.72	19	59	< 1	0.9	3.91	4	< 1	< 5	1.65	1.3	684	1.95	0.085	51	0.4	13	< 3	429	1.1	0.34	6.6	3.9	144	< 1	23	18.5	43	8	3	< 0.01	0.6	2.5	0.27
A07-4113	85900	153.72	156.77	3.05	4	4	< 2	< 2	< 0.3	42	< 0.3	1	< 3	84	65	0.21	6.08	< 0.5	1400	1	< 2	< 0.5	7.41	37	294	2	0.8	5.89	2	< 1	< 5	1.55	1.82	1230	0.9	0.075	85	< 0.1	31.6	< 3	340	< 0.5	0.39	2.8	< 0.5	214	< 1	17	10.4	20	9	2.3	< 0.01	< 0.5	2	0.14
A07-4113	85901	156.77	157.84	1.07	2	< 1	< 2	< 2	0.4	10	< 0.3	< 1	< 3	28	36	0.01	6.13	2.6	2700	1	< 2	< 0.5	1.37	7	48	2	0.8	2.15	3	< 1	< 5	1.62	1.15	365	2.24	0.055	36	0.6	9.6	< 3	452	< 0.5	0.18	7.7	5.1	47	< 1	18	21	40	13	2.5	< 0.01	< 0.5	2.4	0.25
A07-2309	85125	157.84	159.82	1.98	< 4	< 5	< 2	< 2	0.7	44	< 0.3	2	4	29	51	0.03	4.5	5.7	1530	1	< 2	< 0.5	1.83	9	37	< 1	0.6	2.72	3	< 1	< 5	2.39	1.49	426	2.02	0.057	54	0.3	8.7	< 3	420	< 0.5	0.32	3.1	1	100	< 1	15	15.6	28	9	2.2	< 0.01	< 0.5	1.8	0.29
A07-2309	85126	159.82	161.65	1.83	< 4	< 5	4	< 2	< 0.3	48	0.3	2	3	33	68	0.02	4.23	3.5	1960	1	< 2	< 0.5	1.24	9	55	< 1	0.8	3.18	3	< 1	< 5	2.81	1.69	422	1.85	0.05	< 15	< 0.1	9.7	< 3	539	< 0.5	0.33	4.8	1.5	103	< 1	15	15.6	28	9	2.3	< 0.01	< 0.5	2	0.31
A07-4113	85902	161.65	164.09	2.44	2	2	< 2	< 2	< 0.3	41	< 0.3	< 1	4	70	66	0.03	6.17	2.2	2000	1	< 2	< 0.5	4.58	22	229	2	1	4.41	3	< 1	< 5	2.45	1.79	1030	1.32	0.071	68	0.8	22.9	< 3	356	< 0.5	0.14	5.6	2.6	74	< 1	21	15.9	38	7	3.1	< 0.01	< 0.5	2.7	0.22
A07-2309	85132	164.09	164.70	0.61	< 4	< 5	6	< 2	0.4	114	< 0.3	4	< 3	28	75	0.21	4.09	18.6	1020	1	< 2	< 0.5	3.39	8	56	< 1	0.9	3.19	3	< 1	< 5	1.92	1.92	929	1.37	0.048	51	1.6	9.1	< 3	348	< 0.5	0.33	4.8	1.3	81	3	22	17.3	31	9	2.6	< 0.01	< 0.5	2.3	0.38
A07-4113	85903	164.70	166.84	2.14	1	< 1	2	12	0.6	84	0.7	< 1	3	41	85	0.23	5.85	4.7	2700	2	< 2	< 0.5	2.18	15	73	1	1.1	2.99	5	< 1	< 5	2.57	1.33	514	1.61	0.073	57	0.6	12.5	< 3	311	< 0.5	0.24	7.9	2.2	87	< 1	25	22.7	49	18	3.7	< 0.01	0.6	3.3	0.37
A07-4113	85904	166.84	171.13	4.29	1	< 1	< 2	< 2	0.4	60	< 0.3	< 1	4	29	64	0.04	5.58	12	2400	2	< 2	< 0.5	2.87	12	64	1	1.2	2.88	5	< 1	< 5	2.53	1.44	614	1.34	0.07	37	1.3	12.7	< 3	315	1.1	0.27	7.8	< 0.5	74	< 1	26	23.1	51	18	3.7	< 0.01	0.5	3.4	0.45
A07-4113	85905	171.13	172.94	1.81	1	1	3	12	< 0.3	90	< 0.3	< 1	< 3	23	62	0.23	6.15	2.7	1200	1	< 2	< 0.5	4.72	16	44	2	0.9	4.03	4	< 1	< 5	1.34	1.39	848	1.73	0.072	< 15	0.6	12.8	< 3	247	1.1	0.26	5	2.5	101	< 1	19	18.9	36	13	3	< 0.01	0.6	2.5	0.22
A07-2309	85127	172.94	175.99	3.05	< 4	< 5	< 2	< 2	< 0.3	59	< 0.3	2	< 3	85	76	0.46	5.04	6.5	340	< 1	< 2	< 0.5	6.87	21	241	< 1	0.7	5.35	2	< 1	< 5	1.2	4.07	1410	1.74	0.051	< 15	1.3	18.4	< 3	291	< 0.5	0.35	1.9	1.4	178	< 1	16	8.8	15	8	1.8	< 0.01	< 0.5	1.8	0.31
A07-2309	85128	175.99	177.00	1.01	< 4	< 5	191	164	0.7	101	1.1	5	4	21	173	2.74	4.29	529	320	< 1	< 2	< 0.5	7.94	16	34	3	0.4	4.82	2	< 1	< 5	3.6	1.74	1290	0.15	0.059	108	20.2	9.8	< 3	449	< 0.5	0.32	2.1	1	173	3	10	7.5	12	< 5	1.4	< 0.01	< 0.5	1.2	0.2
A07-2309	85129	177.00	177.20	0.20	< 4	< 5	24	19	< 0.3	63	0.7	5	10	16	158	2.72	4.45	73.6	460	< 1	< 2	< 0.5	11.9	17	9	4	0.3	5.14	< 1	< 1	< 5	3.61	1.75	2050	0.06	0.073	90	7.7	12.2	< 3	499	< 0.5	0.39	1.7	1.4	248	< 1	10	5.7	15	< 5	1.3	< 0.01	< 0.5	1	0.2
A07-2309	85130	177.20	179.00	1.80	< 4	< 5	5	11	< 0.3	97	1.1	17	< 3	123	236	1.17	4.53	32.8	260	< 1	< 2	< 0.5	8.94	26	280	3	0.5	5.88	2	< 1	< 5	1.75	4.08	2230	0.09	0.049	50	3	16.7	< 3	251	< 0.5	0.36	3	2.1	188	< 1	15	11.6	24	11	1.9	< 0.01	< 0.5	1.4	0.25
A07-2309	85131	179.00	180.00	1.00	< 4	< 5	6	< 2	< 0.3	26	0.4	60	< 3	45	71	0.9	5.36	24.8	310	< 1	< 2	< 0.5	7.91	16	44	3	0.7	4.45	2	< 1	< 5	2.82	2.44	1690	0.22	0.049	66	2	13.3	< 3	264	< 0.5	0.37	3.5	4.3	261	< 1	19	12	25	< 5	2.1	< 0.01	< 0.5	1.7	0.26
A07-4113	85906	180.00	182.39	2.39	1	< 1	< 2	< 2	< 0.3	29	< 0.3	52	< 3	54	51	0.25	5.63	5.9	340	1	< 2	< 0.5	3.06	15	53	4	0.9	2.86	3	< 1	< 5	2.07	1.38	820	0.87	0.056	88	1.3	9.6	< 3	184	< 0.5	0.34	8.3	8.2	167	< 1	22	20.9	42	12	3	< 0.01	< 0.5	2.5	0.38
A07-4113	85907	182.39	185.28	2.89	3	2	2	< 2	< 0.3	50	< 0.3	< 1	4	46	65	0.33	4.27	44.5	550	1	< 2	< 0.5	4.23	18	130	3	0.9	3.51	3	< 1	< 5	1.89	1.49	928	0.86	0.063	74	1.9	13.4	< 3	224	< 0.5	0.31	6	2.5	109	< 1	16	17.5	39	13	2.8	< 0.01	0.6	2.5	0.32
A07-4113	85908	185.28	187.27	1.99	2	< 1	< 2	< 2	< 0.3	55	< 0.3	< 1	5	46	73	0.03	4.96	1.7	720	2	< 2	< 0.5	2.33	13	71	4	1.1	3.07	5	< 1	< 5	1.99	1.44	842	0.64	0.041	73	1.8	11	< 3	165	< 0.5	0.15	9.8	4.2	35	< 1	23	23.3	51	16	3.5	< 0.01	< 0.5	3.1	0.41
A07-2309	85133	187.27	189.71	2.44	< 4	< 5	5	8	< 0.3	37	0.3	< 1	4	46	70	0.47	3.93	9.4	340	1	< 2	< 0.5	5.57	9	43	2	0.8	3.07	3	< 1	< 5	1.93	2.08	1360	0.38	0.027	60	0.3	10	< 3	152	< 0.5	0.31	5	1.6	71	< 1	27	18.2	37	11	2.8	< 0.01	< 0.5	2.4	0.39
A07-4113	85909	189.71	192.46	2.75	2	< 1	3	< 2	< 0.3	66	< 0.3	< 1	4	44	61	0.19	3.98	3.5	500	1	< 2	< 0.5	1.99	12	63	2	1	2.67	4	< 1	< 5	1.6	1.23	617	0.54	0.048	72	0.6	12.2	< 3	105	0.9	0.3	7.5	4	81	< 1	27	21	40	14	3.3	< 0.01	0.8	3.3	0.47
A07-2309	85134	192.46	194.59	2.13	< 4	< 5	3	< 2	0.3	94	0.5	3	< 3	56	78	0.39	4.25	6.3	680	1	< 2	< 0.5	3.87	12	63	2	0.8	3.5	3	< 1	< 5	1.85	1.99	811	1.16	0.032	52	< 0.1	12.3	< 3	222	< 0.5	0.36	4.3	3	122	< 1	21	14	25	9	2.1	< 0.01	< 0.5	2.2	0.31
A07-4113	85910	194.59	196.73	2.14	3	< 1	3	< 2	< 0.3	121	< 0.3	< 1	4	66	58	0.14	4.09	5.3	1000	1	< 2	< 0.5	1.39	16	70	3	0.9	2.82	4	< 1	< 5	1.15	1.2	402	0.71	0.03	69	0.2	12.9	< 3	126	< 0.5	0.27	7.5	< 0.5	86	< 1	22	17.4	37	12	2.9	< 0.01	0.9	3	0.38
A07-2309	85135	196.73	199.17	2.44	< 4	< 5	4	< 2	< 0.3	116	< 0.3	1	< 3	64	74	0.67	3.78	5.8	610	< 1	< 2	0.6	3.4	17	71	< 1	0.8	4.39	3	< 1	< 5	1.23	1.54	1420	1.27	0.054	< 15	0.4	12	< 3	198	< 0.5	0.3	4	1.5	100	< 1	22	13.2	24	7	2.1	< 0.01	< 0.5	2.1	0.37
A07-4113	85911	199.17	201.91	2.74	3	< 1	4	8	0.4	108	< 0.3	3	6	78	68	0.59	4.34	8	1100	1	< 2	< 0.5	1.14	14	67	3	0.9	2.99	4	< 1	< 5	1.57	1.18	364	0.74	0.031	64	1.7	11.9	< 3	148	< 0.5	0.31	6.3	3.1	98	< 1	24	16.5	34	13	2.8	< 0.01	0.6	3	0.45
A07-2309	85136	201.91	202.30	0.39	5	< 5	102	79	< 0.3	115	0.8	4	3	54	99	2.1	4.43	1110	430	< 1	< 2	< 0.5	6.64	22	70	3	1	6.4	2	< 1	< 5	2.49	2.77	972	0.23	0.036	67	30.8	13.4	< 3	696	< 0.5	0.28	3.7	1.9	165	5	15	9.7	21	< 5	2	< 0.01	< 0.5	1.4	0.3
A07-4113	85913	202.30	204.96	2.66	4	2	5	11	0.7	176	0.3	2	61	75	111	0.56	5.66	70.8	700	2	< 2	< 0.5	3.09	25	84	3	0.9	3.62	4	< 1	< 5	1.96	1.26	457	1.24	0.058	63	10.8	15.6	< 3	300	< 0.5	0.35	6.2	5	160	< 1	21	17.4	37	8	3	< 0.01	< 0.5	2.9	0.36
A07-4113	85914	204.96	206.79	1.83	3	< 1	6	< 2	0.5	121	< 0.3	< 1	8	76	86	0.2	4.35	8.4	1000	1	< 2	< 0.5	0.96	16	69	2	0.8	2.6	4	< 1	< 5	1.86	1.24	288	0.81	0.036	66	1.5	13.4	< 3	171	< 0.5	0.32	6.9	3	90	< 1	25	18.1	38	11	2.8	< 0.01	< 0.5	3.2	0.46
A07-4113	85915	206.79	209.84	3.05	2	< 1	4	< 2	0.4	65	< 0.3	< 1	5	55	63	0.09	3.91	5.9	730	1	< 2	< 0.5	1.86	12	81	2	0.8	2.57	3	< 1	< 5	1.48	1.14	592	0.92	0.051	47	0.6	12.4	< 3	170	< 0.5	0.27	5.5	3	86	< 1	22	15.7	32	10	2.6	< 0.01	0.6	2.8	0.4
A07-4113	85916	209.84	212.89	3.05	4	2	6	< 2	0.6	111	< 0.3	3	5	121	82	0.55	4.43	5.1	1020	1	< 2	< 0.5	2.18	22	219	< 1	0.8	3.45	3	< 1	< 5	1.78	1.6	472	0.76	0.033	58	0.7	16.1	< 3	138	< 0.5	0.31	4.9	< 0.5	111	< 1	22	15.9	33	11	2.8	< 0.01	1	2.4	0.4
					>9	>9	20-100		1-5	150-300		10-50	20-100	100-200	100-200	2.0-4.0		20-100	1000-2000	>2		>10.0		400-1000						>2.00					5-10																				
							101-200		5.1-10	301-500		>50	101-500	>200	201-500	4.1-5.0		101-200	>2000					>1000											11-50																				
							>200		>10	>500			>500		>500	>5.0		>200																	>50																				

KANGAROO DRILLING GEOCHEM RESULTS
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KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-8

Certificate	Sample	From	To	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	(m)	(m)	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-2310	85168	116.00	118.36	2.36	7	7	< 2	< 2	< 0.3	73	< 0.3	3	< 3	107	43	0.34	5.31	8.5	530	< 1	< 2	< 0.5	9.19	31	356	< 1	0.7	5.7	< 1	< 1	< 5	1.1	5.48	1180	1.31	0.068	< 15	0.6	37.3	< 3	537	< 0.5	0.39	1.9	< 0.5	230	< 1	14	12.4	23	12	2.3	< 0.01	< 0.5	1.3	< 0.05
A07-4247	85952	118.36	120.17	1.81	11	9	< 2	< 2	0.4	62	< 0.3	< 1	< 3	89	43	0.28	7.15	< 0.5	< 50	< 1	< 2	< 0.5	10.3	34	335	< 1	0.8	5.84	< 1	< 1	< 5	1.06	2.45	1250	1.17	0.085	< 15	0.5	38.2	< 3	416	< 0.5	0.41	1.5	< 0.5	257	< 1	13	5.6	11	6	2.1	< 0.01	< 0.5	0.9	0.18
A07-4247	85953	120.17	122.60	2.43	18	33	3	< 2	< 0.3	73	< 0.3	< 1	< 3	85	39	0.46	6.27	46.4	390	< 1	< 2	< 0.5	9.93	37	248	1	0.7	6.16	< 1	< 1	< 5	0.93	2.29	1090	0.7	0.056	39	2.3	32.5	< 3	339	< 0.5	0.33	1.2	< 0.5	227	< 1	10	4.6	8	< 5	1.6	< 0.01	< 0.5	0.9	0.17
A07-2310	85169	126.27	127.05	0.78	6	6	2	< 2	< 0.3	265	0.3	3	< 3	99	93	1.38	5.83	5.4	340	< 1	< 2	< 0.5	7.4	43	274	3	0.5	7.08	< 1	< 1	< 5	0.79	4.3	1280	1.76	0.066	< 15	0.7	28.4	< 3	447	< 0.5	0.4	0.8	< 0.5	255	< 1	14	6.1	13	10	1.7	< 0.01	0.5	1.2	< 0.05
A07-2310	85170	127.05	128.50	1.45	< 4	< 5	< 2	10	< 0.3	189	0.3	4	6	166	58	0.98	5.99	11.5	350	< 1	< 2	< 0.5	5.84	35	373	< 1	1.1	5.23	2	< 1	< 5	1.2	5.4	1050	2.42	0.093	< 15	0.7	20.3	< 3	708	< 0.5	0.47	4	2.5	207	< 1	16	32.5	51	16	3.5	< 0.01	< 0.5	1.1	0.08
A07-4247	85954	128.50	130.54	2.04	< 1	< 1	< 2	< 2	1.1	36	< 0.3	2	7	290	58	0.13	7	4.7	860	1	< 2	< 0.5	5.3	39	597	< 1	2	4.82	2	< 1	< 5	1.75	2.48	854	2.41	0.152	37	0.5	15.1	< 3	888	< 0.5	0.45	8.7	3.1	151	< 1	16	48.1	84	39	5.4	< 0.01	< 0.5	1.3	0.26
A07-4247	85955	130.54	132.67	2.13	5	4	3	< 2	0.7	84	< 0.3	< 1	< 3	129	60	1.22	7.01	9.4	450	< 1	< 2	< 0.5	8.61	33	341	1	1.1	5.23	2	< 1	< 5	0.81	2.3	1100	2.06	0.101	< 15	0.8	22.2	< 3	673	< 0.5	0.4	3.6	< 0.5	196	< 1	15	20.2	39	22	3.2	< 0.01	< 0.5	1.2	0.23
A07-4247	85956	132.67	133.70	1.03	1	1	< 2	< 2	1.9	44	< 0.3	2	7	265	66	0.13	7.64	3.2	1220	1	< 2	< 0.5	6.19	33	537	< 1	1.9	4.49	2	< 1	< 5	1.47	2.49	814	2.09	0.156	< 15	0.4	14	< 3	1390	< 0.5	0.45	8.2	3.8	151	< 1	16	44.1	75	35	5.1	< 0.01	< 0.5	1.1	0.22
A07-4247	85957	133.70	134.90	1.20	15	14	< 2	< 2	0.4	34	< 0.3	< 1	< 3	132	40	0.16	8.18	5.6	390	< 1	< 2	< 0.5	9.15	40	242	2	0.5	5.27	< 1	< 1	< 5	1.45	2.45	1100	0.73	0.028	28	0.8	29.4	< 3	412	< 0.5	0.22	1.2	< 0.5	164	< 1	7	5.2	9	5	1.3	< 0.01	< 0.5	0.5	0.1
A07-2310	85171	139.69	142.74	3.05	5	8	< 2	< 2	< 0.3	37	< 0.3	2	< 3	101	32	0.16	5.53	3.4	< 50	< 1	< 2	< 0.5	10.4	40	226	< 1	0.4	5.22	< 1	< 1	< 5	0.69	6.12	1130	0.81	0.027	< 15	0.5	40.7	< 3	566	< 0.5	0.26	< 0.2	< 0.5	186	< 1	9	2.6	5	< 5	1	< 0.01	< 0.5	0.6	< 0.05
A07-2310	85172	149.60	151.80	2.20	5	9	< 2	< 2	< 0.3	123	< 0.3	2	5	93	44	0.38	7.29	3.8	410	< 1	< 2	< 0.5	9.5	36	167	4	0.4	5.37	< 1	< 1	< 5	1.4	4.69	1270	1.13	0.021	< 15	1.2	24.8	< 3	494	< 0.5	0.29	< 0.2	< 0.5	229	< 1	7	2.7	5	5	0.8	< 0.01	< 0.5	0.7	0.12
A07-4247	85959	157.07	158.60	1.53	21	13	4	< 2	0.8	205	0.4	< 1	4	62	49	0.44	10.1	6.4	410	< 1	< 2	< 0.5	9.51	41	97	3	0.6	7.43	< 1	< 1	< 5	1.13	2.19	1260	0.98	0.023	57	0.8	25.5	< 3	557	< 0.5	0.45	0.6	0.8	379	< 1	7	2.5	5	< 5	1.1	< 0.01	< 0.5	0.7	0.13
A07-4247	85960	158.60	160.12	1.52	12	8	< 2	< 2	0.6	55	< 0.3	< 1	< 3	54	49	0.17	7.85	4.9	390	< 1	< 2	< 0.5	9.72	30	203	2	0.6	5.82	< 1	< 1	< 5	0.79	2.16	1280	1.56	0.078	< 15	0.3	26.4	< 3	683	< 0.5	0.33	1	0.9	222	< 1	11	6.2	9	< 5	1.8	< 0.01	< 0.5	0.9	0.18
A07-2310	85173	160.12	162.87	2.75	9	8	7	13	< 0.3	214	1.1	4	4	44	222	0.53	7.62	19.1	470	< 1	< 2	< 0.5	9.45	37	32	4	0.4	6.22	< 1	< 1	< 5	1.71	2.65	1040	1.26	0.02	46	1.5	20.6	< 3	525	< 0.5	0.41	< 0.2	< 0.5	356	< 1	6	3	4	< 5	0.8	< 0.01	< 0.5	0.7	0.1
A07-4247	85961	162.87	164.09	1.22	21	12	26	25	0.8	188	0.4	< 1	< 3	58	79	1.68	8.01	39.5	640	< 1	< 2	< 0.5	6.86	46	57	1	0.3	7.5	< 1	< 1	< 5	1.91	1.94	1100	1.06	0.02	60	4.7	24.4	< 3	543	< 0.5	0.37	0.9	< 0.5	322	< 1	6	2.6	5	< 5	1	< 0.01	< 0.5	0.6	0.11
A07-4247	85962	166.00	167.50	1.50	6	6	< 2	5	0.5	28	< 0.3	< 1	< 3	61	32	0.2	9.28	3	360	< 1	< 2	< 0.5	10.4	32	64	1	< 0.2	5.36	< 1	< 1	< 5	1.08	1.96	846	0.99	0.028	22	0.6	22.2	< 3	544	< 0.5	0.29	0.7	< 0.5	239	< 1	6	3	4	8	1	< 0.01	< 0.5	0.7	0.12
A07-4247	85963	172.32	174.46	2.14	5	7	< 2	11	0.3	26	< 0.3	< 1	< 3	104	43	0.04	7.14	< 0.5	170	< 1	< 2	< 0.5	10.7	50	274	< 1	0.4	7.01	< 1	< 1	< 5	0.42	2.51	1220	0.69	0.032	< 15	0.4	46.9	< 3	466	< 0.5	0.33	1.1	< 0.5	273	< 1	9	1.6	4	< 5	1.2	< 0.01	< 0.5	0.7	0.16
A07-2310	85174	174.46	175.75	1.29	< 4	< 5	< 2	< 2	< 0.3	41	< 0.3	3	< 3	118	42	0.06	5.5	< 0.5	< 50	< 1	2	< 0.5	11.7	50	244	< 1	0.4	7.2	< 1	< 1	< 5	0.41	6.43	1420	0.56	0.017	< 15	0.3	47.6	< 3	509	< 0.5	0.43	< 0.2	< 0.5	372	< 1	9	2.3	< 3	< 5	0.9	< 0.01	< 0.5	0.6	< 0.05
A07-2310	85175	175.75	177.20	1.45	6	6	< 2	< 2	< 0.3	119	< 0.3	3	< 3	71	46	0.18	5.68	< 0.5	< 50	< 1	< 2	< 0.5	10.1	35	239	< 1	0.5	6.34	< 1	< 1	< 5	0.21	3.68	1500	1.56	0.071	< 15	< 0.1	35.5	< 3	338	< 0.5	0.44	1.2	< 0.5	292	< 1	14	6.8	11	< 5	1.8	< 0.01	< 0.5	1.1	0.17
A07-4247	85964	177.20	178.42	1.22	3	7	< 2	< 2	< 0.3	40	< 0.3	< 1	< 3	87	39	0.15	9.68	3.6	500	< 1	< 2	< 0.5	8.79	34	123	< 1	< 0.2	5.56	< 1	< 1	< 5	1.82	2.27	1210	1.06	0.022	41	< 0.1	28.3	< 3	384	< 0.5	0.31	0.8	< 0.5	241	< 1	7	2.5	6	< 5	1	< 0.01	< 0.5	0.5	0.12
A07-4247	85965	178.42	179.95	1.53	8	11	< 2	< 2	< 0.3	34	< 0.3	< 1	< 3	94	44	0.17	7.86	2.6	320	< 1	< 2	< 0.5	10	44	207	2	0.5	6.87	< 1	< 1	< 5	0.83	2.39	1290	0.9	0.024	< 15	0.4	41.2	< 3	408	0.8	0.39	< 0.2	< 0.5	310	< 1	10	2.5	6	8	1.4	< 0.01	< 0.5	0.9	0.16
A07-4247	85966	182.80	184.52	1.72	5	9	2	< 2	0.6	79	< 0.3	< 1	< 3	90	49	0.06	8.45	3.6	< 50	< 1	< 2	< 0.5	11	45	177	< 1	0.4	7.38	< 1	< 1	< 5	0.43	2.41	1210	0.72	0.019	< 15	0.3	41.8	< 3	634	< 0.5	0.35	< 0.2	< 0.5	319	< 1	8	2.4	5	< 5	1.2	< 0.01	< 0.5	0.6	0.11
A07-4247	85967	188.23	190.62	2.39	4	6	< 2	9	0.8	42	< 0.3	< 1	< 3	57	34	0.04	12.8	4.3	380	< 1	< 2	< 0.5	10.1	28	128	< 1	0.5	4.66	< 1	< 1	< 5	1.04	2.1	1090	1.27	0.039	22	0.4	24.8	< 3	759	< 0.5	0.31	< 0.2	< 0.5	188	< 1	10	3.7	7	7	1.3	< 0.01	< 0.5	0.8	0.16
A07-4247	85968	193.67	195.50	1.83	6	7	< 2	< 2	0.6	59	0.4	< 1	< 3	86	39	0.02	8.64	3.3	240	< 1	< 2	< 0.5	10.6	39	236	< 1	0.4	5.82	< 1	< 1	< 5	0.72	2.39	1200	0.96	0.033	< 15	0.5	38.8	< 3	666	< 0.5	0.32	0.7	< 0.5	204	< 1	10	3	6	< 5	1.4	< 0.01	< 0.5	1	0.17

					>9	>9	20-100	1-5	150-300		10-50	20-100	100-200	100-200	2.0-4.0		20-100	1000-2000		>2		>10.0		400-1000					>2.00																														5-10										
							101-200	5.1-10	301-500		>50	101-500	>200	201-500	4.1-5.0		101-200	>2000						>1000																																							11-50										
							>200	>10	>500			>500		>500	>5.0		>200																																									>50										

KANGAROO DRILLING GEOCHEM RESULTS
Drill Hole K07-9

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Analytical Data
for
Kangaroo 2007 Regional Sampling (Rock, Soil, Silt)

| Kangaroo 2007 Regional Geochem Results | | |

Kangaroo 2007 Regional GEOCHEM RESULTS

Certificate	Sample	Sample	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	Type	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-3502	85263	Rock	2.0	5	4	< 2	5	< 0.3	150	1.3	16	9	42	112	0.98	10.5	< 0.5	950	1	< 2	< 0.5	3.59	17	83	< 1	1	4.47	2	< 1	< 5	1.52	1.76	519	2.89	0.18	< 15	0.4	16.7	< 3	426	< 0.5	0.44	4.2	6.6	456	< 1	26	15.4	28	13	3.1	< 0.01	< 0.5	2	0.35
A07-3502	85264	Soil		< 6	< 6	< 10	9	< 0.3	210	1	5	12	96	208	0.08	7.88	16.1	630	1	< 2	< 0.5	2.06	36	155	3	0.6	6.8	2	< 1	< 5	0.95	1.79	833	1.11	0.12	93	1.6	14.7	< 3	215	< 0.5	0.44	4.2	2.6	246	< 1	13	13	29	7	2.5	< 0.01	< 0.5	1.4	0.28
A07-3502	85265	Rock	grab	5	3	< 2	< 2	< 0.3	270	0.3	3	7	32	45	1.31	9.13	< 0.5	370	2	< 2	< 0.5	6.43	14	113	< 1	1	6.37	2	< 1	< 5	0.45	1.04	462	2.29	0.28	66	0.8	14.9	< 3	231	< 0.5	0.39	3.6	2.3	262	< 1	22	14	26	8	3	< 0.01	< 0.5	2	0.34
A07-3502	85266	Rock	1.0	3	2	3	< 2	< 0.3	108	0.8	21	11	24	87	0.15	9.16	< 0.5	450	< 1	< 2	< 0.5	1	5	101	< 1	1	5.1	2	< 1	< 5	1.25	1.6	496	3.08	0.11	< 15	0.5	16.5	< 3	396	< 0.5	0.46	4.9	7.4	445	< 1	22	18.2	30	13	3.3	< 0.01	0.6	2.1	0.37
A07-3502	85267	Soil		< 6	< 6	< 10	5	< 0.3	173	2.6	2	8	99	267	0.01	8.43	14.5	500	< 1	< 2	2.7	2.24	36	201	2	0.6	5.44	2	< 1	< 5	1.23	2.54	963	1.08	0.07	50	1.3	17.6	< 3	269	< 0.5	0.37	3.4	< 0.5	212	< 1	15	13.7	28	< 5	2.6	< 0.01	< 0.5	1.4	0.24
A07-3502	85268	Rock	grab	2	2	< 2	< 2	0.3	108	2.8	6	6	22	435	0.77	9.7	2.8	700	1	< 2	< 0.5	3.76	13	85	< 1	0.8	6.42	2	< 1	< 5	1.32	1.68	1060	3.8	0.14	78	1.2	18	< 3	393	< 0.5	0.42	3.8	< 0.5	248	< 1	19	12.6	20	< 5	2.8	< 0.01	0.6	1.8	0.36
A07-3502	85269	Soil		< 6	< 6	70	< 2	< 0.3	371	1.9	12	14	61	463	0.24	8.01	18.6	340	2	< 2	5.4	1.84	22	80	< 1	0.6	12.6	2	< 1	< 5	0.84	1.08	848	1.01	0.3	52	2.2	11.6	< 3	176	< 0.5	0.29	3	< 0.5	230	< 1	13	9.7	22	< 5	2.1	< 0.01	< 0.5	1.3	0.18
A07-3502	85270	Rock	0.5	6	3	6	< 2	1.3	50	2.6	14	8	27	57	1.14	4.82	11.2	1100	< 1	< 2	< 0.5	0.6	9	150	3	0.9	2.51	3	< 1	< 5	1.73	0.78	235	1.25	0.05	90	5.1	13.8	27	149	< 0.5	0.3	6.4	7.1	394	< 1	20	23.1	35	13	3.6	< 0.01	< 0.5	3.1	0.45
A07-3502	85271	Soil		< 6	< 6	70	30	1.1	159	3.9	17	13	113	388	0.05	8.31	17.4	540	1	< 2	3.8	2.21	29	168	2	0.8	6.24	2	< 1	< 5	1.1	2.34	887	1.1	0.13	40	4.1	16.8	< 3	220	< 0.5	0.46	4.9	3.4	242	< 1	19	17.7	33	12	2.9	< 0.01	< 0.5	1.9	0.34
A07-3502	85272	Rock	0.4	2	1	5	< 2	1.4	57	3.8	13	13	37	149	0.48	7.02	20.4	1800	1	< 2	< 0.5	0.75	10	87	< 1	0.7	2.5	3	2	< 5	1.84	0.9	300	1.54	0.05	120	5.9	12	10	259	< 0.5	0.27	5.7	6.8	319	< 1	18	17	30	< 5	2.6	< 0.01	< 0.5	2.1	0.35
A07-3502	85273	Soil		< 6	< 6	< 10	< 2	0.4	83	10.1	4	11	69	326	0.02	6.99	25.7	370	< 1	< 2	2.9	1.75	25	142	2	0.7	4.46	2	< 1	< 5	1.13	1.71	779	1.12	0.13	< 15	1.5	13.8	< 3	212	< 0.5	0.53	4.7	2.2	196	< 1	14	17.8	33	12	3	< 0.01	< 0.5	1.8	0.32
A07-3502	85274	Rock	1.1	2	2	20	36	< 0.3	75	< 0.3	4	11	27	64	0.99	9.5	< 0.5	950	1	< 2	< 0.5	1.87	14	75	< 1	0.9	4.77	2	< 1	< 5	1.66	1.84	643	3	0.13	< 15	0.7	16.4	< 3	389	2.4	0.41	4.3	3.9	236	< 1	22	16	27	15	3.2	< 0.01	< 0.5	2.1	0.34
A07-3502	85275	Soil		< 6	< 6	< 10	32	< 0.3	160	1.5	4	10	77	196	0.02	7.25	29.4	420	1	< 2	5.7	1.48	26	156	2	0.7	5.46	2	< 1	< 5	1.09	1.82	624	1.07	0.12	68	1.6	14.5	< 3	198	< 0.5	0.47	5.5	3.1	201	< 1	12	18.8	35	16	3	< 0.01	< 0.5	1.7	0.3
A07-3502	85276	Rock	grab	2	2	5	7	< 0.3	129	1.6	9	9	28	221	1.8	9.72	< 0.5	920	1	< 2	< 0.5	1.76	13	72	2	0.8	5.08	2	< 1	< 5	2.52	1.97	738	1.65	0.16	115	1	15.7	< 3	234	< 0.5	0.42	3.6	5.6	263	< 1	24	15.4	36	12	3	< 0.01	< 0.5	2.8	0.4
A07-3502	85277	Rock	1.0	3	2	< 2	< 2	< 0.3	93	0.5	2	7	22	91	0.42	8.71	8.8	1140	< 1	< 2	< 0.5	0.93	14	74	< 1	0.9	4.56	2	< 1	< 5	1.71	1.82	559	2.73	0.13	67	0.9	16.9	< 3	361	< 0.5	0.37	3	< 0.5	207	< 1	19	15.7	27	15	3.3	< 0.01	0.7	2.3	0.36
A07-3502	85278	Rock	1.0	2	2	2	< 2	< 0.3	97	2	4	20	30	186	0.58	10	< 0.5	950	< 1	< 2	< 0.5	1.43	16	61	< 1	0.8	4.72	2	< 1	< 5	1.74	2.06	707	3.07	0.14	< 15	1.2	15.5	< 3	432	< 0.5	0.42	4.3	3.4	293	5	21	14.4	27	11	2.9	< 0.01	0.8	1.9	0.31
A07-3502	85278A	Rock	grab	< 1	1	3	< 2	< 0.3	66	2	4	11	37	310	0.06	6.13	2.6	580	< 1	< 2	< 0.5	0.77	13	48	< 1	0.5	2.63	< 1	< 1	< 5	1.39	0.72	576	1.45	0.08	36	1.3	8.3	< 3	145	< 0.5	0.23	2.8	1.9	247	5	10	8	15	< 5	1.5	< 0.01	< 0.5	0.8	0.18
A07-3502	85279	Rock	1.0	3	2	< 2	< 2	< 0.3	90	1	5	18	32	137	0.8	10.6	6.6	1240	1	< 2	< 0.5	1.19	15	74	< 1	0.9	4.67	3	< 1	< 5	2.63	2	617	2.81	0.15	< 15	0.9	17.2	< 3	432	< 0.5	0.45	4.2	3.5	278	< 1	21	14.2	26	12	3.1	< 0.01	< 0.5	1.7	0.3
A07-3502	85280	Rock	1.0	5	3	3	< 2	< 0.3	100	1.5	3	8	28	171	0.81	7.81	6.2	1520	1	< 2	< 0.5	1.1	16	62	4	0.9	5.02	2	< 1	< 5	2.75	1.91	697	2.31	0.15	95	1.1	17.5	< 3	373	< 0.5	0.43	4	3.7	283	< 1	15	15.5	29	16	3.1	< 0.01	< 0.5	2.2	0.34
A07-3502	85281	Soil		< 6	< 6	< 10	< 2	< 0.3	425	1.8	4	26	63	333	0.27	9.65	6.1	490	1	< 2	6.1	0.99	48	61	< 1	1.4	8.56	< 1	< 1	< 5	0.56	1.33	1950	3.1	0.22	< 15	6.2	17.7	< 3	267	< 0.5	0.34	3.5	< 0.5	219	< 1	35	21.2	40	14	5.2	< 0.01	< 0.5	3	0.47
A07-3502	85282	Rock	grab	3	3	< 2	4	< 0.3	90	< 0.3	< 1	14	25	65	0.15	6.17	< 0.5	270	< 1	< 2	< 0.5	6.48	21	136	< 1	0.5	4.49	< 1	< 1	< 5	0.07	2.12	989	0.28	0.08	< 15	0.8	18	< 3	97	0.8	0.33	1.2	< 0.5	198	< 1	12	6.9	14	< 5	2.1	< 0.01	< 0.5	1	0.18
A07-3502	85283	Rock	grab	2	2	3	< 2	< 0.3	75	0.6	< 1	9	22	95	0.31	9.76	14.6	1050	< 1	< 2	< 0.5	1.28	15	68	< 1	0.9	5.11	2	< 1	< 5	1.7	1.86	662	3.21	0.13	44	0.8	17.4	< 3	502	< 0.5	0.36	3.3	3.3	193	< 1	20	12.8	26	8	2.8	< 0.01	< 0.5	1.9	0.32
A07-3502	85284	Soil		< 6	< 6	< 10	4	0.4	123	1.7	2	9	87	328	0.01	7.46	21.4	730	1	< 2	6	1.44	38	172	5	1	7.22	3	< 1	< 5	1.02	1.77	692	1.37	0.12	67	1.8	16.8	< 3	199	< 0.5	0.35	6	3.1	170	< 1	12	18	41	11	3.2	< 0.01	< 0.5	1.8	0.3
A07-3502	85285	Soil		< 6	< 6	< 10	< 2	< 0.3	62	1.8	4	8	42	246	0.03	7.32	19.8	560	< 1	< 2	6.2	1.09	18	113	3	0.8	5.58	3	< 1	< 5	0.97	0.94	481	1.2	0.13	111	1.5	11.9	< 3	181	< 0.5	0.43	5.8	2.5	192	< 1	11	19.4	38	10	3.1	< 0.01	0.6	1.8	0.34
A07-3502	85287	Stream Silt		< 6	< 6	< 10	< 2	1.5	38	< 0.3	< 1	16	38	64	0.04	6.32	12.4	670	< 1	< 2	5	1.54	17	106	2	1	3.38	3	< 1	< 5	1.15	1.12	847	1.38	0.07	< 15	1.4	14.8	< 3	174	1.4	0.25	7.2	3.1	85	< 1	18	25.6	43	15	4.3	< 0.01	0.7	2.6	0.38
A07-3502	85289	Rock	grab	3	3	11	16	0.7	96	6.2	13	20	29	274	0.53	8	4.9	1140	1	< 2	< 0.5	0.78	12	104	2	0.8	4.29	2	< 1	< 5	1.43	1.36	383	2.43	0.11	100	4.5	16.9	< 3	254	< 0.5	0.38	4.6	7.1	416	< 1	18	16.7	29	10	3	< 0.01	0.7	2.2	0.36
A07-3502	85290	Soil		< 6	< 6	30	35	0.9	510	27.1	36	35	269	1950	0.28	7.82	44.8	750	2	< 2	3.4	2.2	105	95	< 1	1.7	14.1	2	< 1	< 5	1.63	1.24	2060	0.76	0.18	63	18.3	18.4	< 3	187	< 0.5	0.33	6.6	7	342	< 1	40	31.4	61	20	6.2	< 0.01	< 0.5	3.2	0.52
A07-3502	85292	Rock	grab	2	< 1	15	28	< 0.3	85	< 0.3	< 1	11	48	112	0.02	4.98	6.5	670	1	< 2	< 0.5	0.02	5	82	4	0.7	2.68	3	< 1	< 5	1.45	0.73	92	0.07	0.03	84	1.3	10.8	< 3	14	< 0.5	0.22	6.2	3.4	65	< 1	15	17.5	37	10	2.8	< 0.01	< 0.5	2.2	0.39
A07-3502	85293	Soil		< 6	< 6	20	22	3.6	181	0.5	3	14	264	341	0.02	8.07	9.5	800	2	< 2	5.3	0.13	13	104	9	1.4	5.57	5	< 1	< 5	2.1	0.88	123	0.15	0.16	102	3.2	11.3	< 3	28	< 0.5	0.27	9.4	6.1	84	< 1	20	17.7	41	12	5.3	< 0.01	1	3.2	0.49
A07-3502	85295	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	4	< 0.3	< 1	< 3	2	3	< 0.01	0.28	11.9	< 50	< 1	< 2	< 0.5	0.04	< 1	7	< 1	< 0.2	0.43	< 1	< 1	< 5	0.07	0.03	60	0.07	0	< 15	< 0.1	0.5	< 3	7	< 0.5	< 0.01	< 0.2	< 0.5	4	< 1	< 1	0.6	< 3	< 5	< 0.1	< 0.01	< 0.5	< 0.2	< 0.05
A07-3502	85296	Soil		< 6	9	20	< 2	< 0.3	301	0.4	14	22	79	93	0.01	9.62	209	680	1	< 2	< 0.5	1.11	60	95	6	1	6.04	3	< 1	< 5	2.42	1.47	2870	0.67	0.13	113	5.1	21.5	< 3	206	< 0.5	0.44	4.8	2.8	214	< 1	26	15.7	45	11	3.6	< 0.01	< 0.5	2.3	0.4
A07-3502	85298	Soil		< 6	< 6	< 10	11	< 0.3	42	< 0.3	2	12	42	89	0.01	7.85	15.2	720	< 1	< 2	< 0.5	1.56	16	119	5	0.9	5.56	4	< 1	< 5	1.21	1.21	534	1.3	0.19	95	1.1	15	< 3	188	< 0.5	0.45	6.4	2.5	164	< 1	14	23	46	14	3.8	< 0.01	< 0.5	2.4	0.39
A07-3502	85299	Stream Silt		< 6	< 6	< 10	< 2	0.4	37	0.4	< 1	16	52	68	0.02	6.32	11.4	540	< 1	< 2	3.5	1.53	14	125	2	0.8	2.56	3	< 1	< 5	1.34	1.1	888	1.03	0.08	45	0.7	10.6	< 3	176	< 0.5	0.21	5.4	3.6	68	< 1	20	20.6	36	9	3.4	< 0.01	< 0.5	1.8	0.32
A07-3502	85302	Stream Silt		< 6	< 6	10	< 2	< 0.3	27	0.5	1	25	53	98	0.01	6.35	9.8	480	1	< 2	< 0.5	0.7	15	106	2	0.7	2.28	4	< 1	< 5	1.7	0.75	1150	1.01	0.08	96	0.6	7.6	< 3	101	< 0.5	0.31	8.6	3.1	72	< 1	17	26	55	18	4	< 0.01	< 0.5	1.9	0.38
A07-3502	85303	Stream Silt		< 6	< 6	< 10	< 2	0.6	34	2.3	4	30	71	131	0.06	6.92	8.6	650	1	< 2	4.2	0.77	9	97	2	1	1.82	4	< 1	< 5	1.51	0.83	592	1.04	0.1	86	0.8	9.4	< 3	104	1.4	0.36	9.4	8.7	84	< 1	22	29.2	51	16	5.2	< 0.01	< 0.5	2.6	0.4
A07-3502	85304	Stream Silt		< 6	< 6	< 10	2	< 0.3	15	< 0.3	1	14	34	40	< 0.01	5.17	9.6	510	< 1	< 2	2.5	0.88	7	70	2	0.6	1.8	3	< 1	< 5	1.28	0.58	497	1.2	0.07	46	0.5	7.1	< 3	111	< 0.5	0.3	6.4	4.4	61	< 1	14	21.8	43	14	3.3	< 0.01	0.6	2	0.3
A07-3502	85305	Stream Silt		< 6	< 6	< 10	< 2	< 0.3	19	0.4	3	16	45	60	0.01	5.45	11.2	420	< 1	< 2	< 0.5	0.89	9	89	2	0.7	2.1	3	< 1	< 5	1.32	0.69	792	1.02	0.07	< 15	0.5	7.5	< 3	108	1.2	0.29	6.4	2.9	64	< 1	17	23.4	44	15	3.8	< 0.01	< 0.5	2	0.27
A07-3502	85306	Stream Silt		< 6	< 6	< 10	< 2	< 0.3	25	0.7	3	15	56	76	0.04	5.92	15.2	650	< 1	< 2	4.3	0.97	12	100	2	1	2.78	4	< 1	< 5	1.32	0.77	1250	1.1	0.08	94	0.7	9.6	< 3	113	< 0.5	0.35	8.4	6.3	81	< 1	20	29.4	55	15	4.8	< 0.01	< 0.5	2.6	0.36
A07-3502	85307	Stream Silt		< 6	< 6	< 10	< 2	< 0.3	33	0.5	< 1	18	46	68	0.03	5.88	17.8	740	< 1	< 2	3.7	1.24	17	113	2	0.9	3.29	4	< 1	< 5	1.22	0.9	970	1.29	0.08	75	1.2	11.5	< 3	140	< 0.5	0.35	9.1	4.8	80	< 1	19	32	56	19	5.1	< 0.01	< 0.5	2.8	0.37
A07-3502	20454	Rock	1.0	6	8	2	< 2	< 0.3	145	< 0.3	< 1	< 3	33	53	0.05	9.43	< 0.5	500	< 1	< 2	< 0.5	6.41	29	64	3	1	7.23	< 1	< 1	< 5	1.74	3.6	1260	1.72	0.16	72	< 0.1	26.4	< 3	677	< 0.5	0.66	1.1	< 0.5	386	< 1	23	8.1	19	5	3	< 0.01	< 0.5	1.8	0.27
A07-3502	20455	Rock	grab	5	5	5	< 2	< 0.3	175	< 0.3	< 1	< 3	61	53	2.48	7.78	< 0.5	540	< 1	< 2	< 0.5	5.57	39	125	< 1	0.7	6.07	< 1	< 1	< 5	0.58	3.64	1090	2.47	0.1	< 15	1.3	20.8	4	1200	< 0.5	0.42	1.7	< 0.5	262	< 1	14	8.9	18	8	2.2	< 0.01	< 0.5	1.3	0.17
A07-3502	20456	Rock	grab	101	29	23	23	0.7	1240	0.6	< 1	7	72	69	0.28	10.5	< 0.5	670	< 1	< 2	< 0.5	6.15	33	57	< 1	0.5	5.61	< 1	< 1	< 5	1	2.89	992	2.11	0.08	< 15	3.7	10.2	< 3	2490	1.2	0.31	0.6	< 0.5	183	< 1	9	5.7	14	6	1.3	< 0.01	< 0.5	0.8	0.15
A07-3502	20457	Rock	grab	11	8	2	< 2	0.4	298	0.4	< 1	6	33	62	0.17	12.3	4.4	1110	< 1	< 2	< 0.5	4.29	22	55	< 1	0.4	5.06	2	< 1	< 5	2.21	3.02	974	2.01	0.07	< 15	0.3	16.1	< 3	602	< 0.5	0.37	2.2	< 0.5	204	< 1	16	6.7	12	9	1.9	< 0.01	< 0.5	1.4	0.21
A07-3502	20458	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	7	< 0.3	< 1	< 3	4	9	0.01	0.44	12.6	< 50	< 1	< 2	< 0.5	0.34	2	17	< 1	< 0.2	0.55	< 1	< 1	< 5	0.09	0.07	144	0.09	0.01	< 15	19	0.8	< 3	12	< 0.5	0.01	< 0.2	< 0.5	8	< 1	1	1.4	< 3	< 5	0.2	< 0.01	< 0.5	< 0.2	< 0.05
A07-3502	20459	Rock	grab	< 1	< 1	< 2	< 2	0.3	6	< 0.3	< 1	< 3	3	4	< 0.01	0.1	2.4	< 50	< 1	< 2	< 0.5	0.09	2	23	< 1	< 0.2	0.33	< 1	< 1	< 5	0.02	0.03	40	0.06	0.01	< 15	0.3	0.4	< 3	4	< 0.5	< 0.01	< 0.2	< 0.5	7	< 1	< 1	0.8	< 3	< 5	< 0.1	< 0.01	< 0.5	< 0.2	< 0.05
A07-3502	20460	Rock	grab	3	9	< 2	< 2	< 0.3	24	1.2	2	8	380	194	< 0.01	6.39	339	840	1	< 2	< 0.5	2.63	64	1270	3	0.5	8.13	< 1	< 1	< 5	1.74	3.69	2180	0.14	0.19	101	0.4	28.8	< 3	271	< 0.5	0.08	2.3	< 0.5	262	< 1	13	7.7	14	6	2	< 0.01	< 0.5	1.1	0.14
A07-3502	20461	Rock	grab	< 1	< 1	< 2	15	0.4	29	0.5	< 1	11	9	70	0.02	8.06	8.4	360	< 1	< 2	< 0.5	2.88	9	27	< 1	0.7	3.3	2	< 1	< 5	0.64	1.05	856	2.6	0.05	< 15	1.1	13.6	< 3	186	< 0.5	0.37	3.2	1.5	135	< 1	21	12.8	22	10	2.7	< 0.01	< 0.5	2.5	0.4
A07-3502	20462	Stream Silt		< 6	< 6	< 10	< 2	< 0.3	15	0.3	< 1	13	20	47	0.02	4.45	5.3	440	< 1	< 2	< 0.5	0.79	8	63	2	1	2.07	6	< 1	< 5	1.19	0.42	729	1.07	0.08	56	0.4	6.6	< 3	97	2.2	0.45	12.3	5.1	42	< 1	16	37.8	70	17	5.2	< 0.01	0.7	2.6	0.43
A07-3502	20463	Rock	grab	1	2	< 2	< 2	< 0.3	119	0.6	2	4	14	129	0.45	11.1	14.7	< 50	< 1	< 2	< 0.5	1.44	21	31	< 1	0.7	6.37	2	< 1	< 5	1.19	2.44	1100	2.54	0.06	< 15	1.6	24.8	< 3	226	< 0.5	0.57	1.8	< 0.5	332	< 1	20	8.8	18	11	2.6	< 0.01	< 0.5	2	0.31
A07-3502	20464	Soil		< 6	< 6	< 10	< 2	0.5	61	2.1	7	14	42	207	0.03	7.08	16.4	530	< 1	< 2	< 0.5	0.96	16	61	3	1	4.03	4	< 1	< 5	1.05	0.76	728	1.31	0.08	< 15	1.5	13.3	< 3	113	< 0.5	0.32	4.7	3	143	< 1	18	21.7	44	11	3.8	< 0.01	< 0.5	2.3	0.41
A07-3502	20465	Rock	grab	1	2	< 2	< 2	< 0.3	99	< 0.3	2	5	13	74	1.31	7.87	< 0.5	620	< 1	< 2	< 0.5	1.08	16	42	< 1	0.4	4.83	2	< 1	< 5	1.42	1.5	780	3.97	0.05	< 15	1	25.1	< 3	215	< 0.5	0.55	3.6	< 0.5	311	< 1	8	9.4	19	< 5	2.2	< 0.01	< 0.5	2	0.27
A07-3502	20466	Rock	1.0	2	2	< 2	< 2	< 0.3	125	< 0.3	5	9	21	124	0.62	9.27	2.7	520	< 1	< 2	< 0.5	1.66	17	51	< 1	1	5.45	2	< 1	< 5	0.99	1.86	886	3.56	0.06	45	1.2	23.2	< 3	266	< 0.5	0.53	2.8	< 0.5	291	< 1	18	12.1	25	13	3.3	< 0.01	0.5	2.1	0.29
A07-3502	20467	Rock	grab	3	4	< 2	< 2	0.4	126	< 0.3	< 1	9	21	82	0.08	11.1	31.4	600	< 1	< 2	< 0.5	4.38	23	81	< 1	1.3	6.79	2	< 1	< 5	1.27	2.61	1420	1.45	0.1	< 15	2.3	27.9	< 3	346	< 0.5	0.64	2.5	2.9	318	< 1	27	13.9	25	14	3.6	<

Kangaroo 2007 Regional GEOCHEM RESULTS

Certificate	Sample	Sample	Width	Pd	Pt	Au	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir	K	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm	Sn	Tb	Yb	Lu
Number	Number	Type	(m)	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	%	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
A07-3502	20474	Soil		< 6	< 6	< 10	< 2	< 0.3	247	1.8	11	13	52	199	0.01	7.40	93.6	640	< 1	< 2	< 0.5	0.65	41	57	5	1.6	7.52	3	< 1	< 5	1.22	1.2	1020	1.13	0.07	85	4.4	21.4	< 3	104	< 0.5	0.26	5.3	< 0.5	198	< 1	27	30.2	65	25	6	< 0.01	< 0.5	3.2	0.44
A07-3502	20475	Rock	grab	3	2	< 2	< 2	2.0	149	< 0.3	4	8	15	117	0.36	12.60	11.8	600	< 1	< 2	< 0.5	1.91	24	24	< 1	1	6.35	< 1	< 1	< 5	1.34	2.43	1010	2.28	0.07	< 15	2.3	27.4	< 3	243	< 0.5	0.61	2	< 0.5	339	< 1	28	9.8	21	9	2.8	< 0.01	< 0.5	2.1	0.36
A07-3502	20476	Rock	grab	< 1	< 1	< 2	< 2	< 0.3	13	< 0.3	< 1	< 3	1	2	0.03	1.01	19.8	< 50	< 1	< 2	< 0.5	14.7	4	6	< 1	0.4	0.78	< 1	< 1	< 5	0.1	0.2	764	0.21	0.01	< 15	0.4	3.1	< 3	800	< 0.5	0.04	< 0.2	< 0.5	28	< 1	12	2.3	7	< 5	0.8	< 0.01	< 0.5	0.7	0.13
A07-4245	85308	Stream Silt		< 3	< 3	6	< 2	0.5	48	0.9	4	48	55	94	0.42	5.20	16.1	1140	1	< 2	7.5	2.01	20	70	3	3.3	2.83	3	< 1	< 5	1.52	1.07	459	0.77	0.11	103	0.9	10.1	< 3	136	< 0.5	0.27	8.8	154	85	< 1	31	30.8	75	54	5.1	< 0.01	< 0.5	2.6	< 0.05
A07-4245	85309	Stream Silt		< 3	< 3	< 6	< 2	< 0.3	50	0.7	2	18	58	93	0.16	7.23	32.3	1140	< 1	< 2	8.2	2.7	28	96	< 1	1.4	6.43	3	< 1	< 5	1.55	1.69	7180	1.42	0.13	< 15	4.7	18.3	< 3	281	< 0.5	0.35	4.6	28.8	161	< 1	24	18.9	47	< 5	4.1	< 0.01	< 0.5	2.4	0.41
A07-4245	85310	Stream Silt		< 3	< 3	< 6	< 2	< 0.3	52	0.5	< 1	13	49	87	0.07	6.43	19.5	840	1	< 2	5.4	2.2	22	103	2	1.3	4.3	4	< 1	< 5	1.66	1.68	1100	1.51	0.1	< 15	1.4	16.1	< 3	255	< 0.5	0.18	5.2	10	109	< 1	22	19	43	< 5	3.1	< 0.01	< 0.5	2.8	0.38
A07-4245	85311	Stream Silt		< 3	< 3	< 6	< 2	< 0.3	26	0.4	< 1	26	61	58	0.02	5.62	16.7	910	1	< 2	< 0.5	0.61	15	71	1	0.6	2.94	2	< 1	< 5	1.88	1.13	929	1.44	0.08	< 15	0.8	7.4	< 3	118	2.5	0.24	4.8	5	70	3	14	16.6	42	< 5	2.7	< 0.01	< 0.5	1.7	0.29
A07-4245	85312	Stream Silt		< 3	< 3	< 6	44	< 0.3	46	0.9	2	13	62	91	0.09	5.74	11.9	800	1	< 2	6.4	1.41	20	72	< 1	1.1	3.16	4	< 1	< 5	1.73	1.19	1400	1.01	0.14	< 15	0.8	10.2	< 3	131	< 0.5	0.33	5.4	14.2	100	< 1	24	20.1	64	< 5	3.6	< 0.01	< 0.5	2.1	0.46
A07-4245	85313	Stream Silt		< 3	< 3	< 6	< 2	< 0.3	30	0.3	< 1	8	53	74	0.06	6.65	8	790	1	< 2	1.5	1.81	17	92	3	1.2	3.24	3	< 1	< 5	1.66	1.54	867	1.3	0.09	< 15	0.8	13.1	< 3	218	< 0.5	0.2	4.2	5.6	93	< 1	20	17.5	41	< 5	3.1	< 0.01	< 0.5	2.3	0.38
A07-4245	85314	Stream Silt		< 3	< 3	< 6	< 2	< 0.3	40	0.7	5	13	65	87	0.05	6.25	39	730	1	< 2	4.9	1.83	33	73	< 1	0.7	5.02	2	< 1	< 5	2.1	1.34	6330	1.04	0.1	< 15	1	11.5	< 3	172	< 0.5	0.35	4.1	7.7	131	< 1	21	16.6	47	18	2.9	< 0.01	< 0.5	2.2	0.39
A07-4245	85315	Stream Silt		< 3	< 3	16	< 2	< 0.3	30	< 0.3	< 1	13	72	69	0.01	6.61	15.3	790	1	< 2	< 0.5	1.77	30	147	3	< 0.2	3.98	4	< 1	< 5	2.2	1.58	1930	1.49	0.09	68	0.6	11.2	< 3	178	< 0.5	0.27	4	3.4	86	3	17	15.5	38	< 5	2.8	< 0.01	< 0.5	2.1	0.43

				>9	>9	20-100	1-5	150-300	2-10	10-50	20-100	100-200	100-200	2.0-4.0		20-100	1000-2000	>2		>10.0	400-1000				>2.00				5-10																															
						101-200	5.1-10	301-500	>10	>50	101-500	>200	201-500	4.1-5.0		101-200	>2000				>1000								11-50																																	
						>200	>10	>500			>500		>500	>5.0		>200													>50																															

APPENDIX D

GEOCHEMICAL STANDARDS COMPARISON

BARKER MINERALS
GEOCHEMICAL STANDARDS COMPARISON 2007

			WCM Certified Values					ActLabs Values					% Diff. ActLabs vs WCM			
Certificate No.	Sample No.	Standard No.	Pb %	Zn %	Cu %	Ag g/t		Pb ppm	Zn ppm	Cu ppm	Ag ppm		Pb ppm	Zn ppm	Cu ppm	Ag ppm
A07-2295	187442a	PB113	1.11	1.40	0.47	22		> 5000	12700	4720	19.2			91	100	87
A07-3760	85605a	PB113	1.11	1.40	0.47	22		> 5000	13000	4760	20.6			93	101	94
A07-2300	187781a	PB113	1.11	1.40	0.47	22		> 5000	14800	4340	20.0			106	92	91
A07-3893	85717a	PB113	1.11	1.40	0.47	22		> 5000	14100	4450	21.7			101	95	99
A07-3893	85739a	PB113	1.11	1.40	0.47	22		> 5000	14100	4570	22.3			101	97	101
A07-2305	187625a	PB113	1.11	1.40	0.47	22		> 5000	14400	4230	19.5			103	90	89
A07-2306	85050a	PB113	1.11	1.40	0.47	22		> 5000	14200	4170	23.3			101	89	106
A07-3505	85504a	PB113	1.11	1.40	0.47	22		> 5000	14000	4280	18.0			100	91	82
A07-2309	85112a	PB113	1.11	1.40	0.47	22		> 5000	14100	4830	24.6			101	103	112
A07-2310	85153a	PB113	1.11	1.40	0.47	22		> 5000	14300	4320	21.6			102	92	98
A07-4248	85999a	PB113	1.11	1.40	0.47	22		> 5000	> 10000	4700	22.3				100	101
A07-3760	85551a	PB114	2.00	1.12	0.33	26		> 5000	10400	3450	26.6			93	105	102
A07-3760	85570a	PB114	2.00	1.12	0.33	26		> 5000	10500	3460	25.6			94	105	98
A07-3767	85640a	PB114	2.00	1.12	0.33	26		> 5000	11800	3310	23.4			105	100	90
A07-3767	85668a	PB114	2.00	1.12	0.33	26		> 5000	11900	3360	24.3			106	102	93
A07-3767	85679a	PB114	2.00	1.12	0.33	26		> 5000	12100	3350	27.0			108	102	104
A07-3893	85716a	PB114	2.00	1.12	0.33	26		> 5000	11300	2700	23.0			101	82	88
A07-3893	85761a	PB114	2.00	1.12	0.33	26		> 5000	11100	3250	27.1			99	98	104
A07-3977	85776a	PB114	2.00	1.12	0.33	26		> 5000	10700	3140	27.9			96	95	107
A07-3977	85820a	PB114	2.00	1.12	0.33	26		> 5000	10800	3070	26.7			96	93	103
A07-3503	85404a	PB114	2.00	1.12	0.33	26		> 5000	10800	3140	27.5			96	95	106
A07-3503	85424a	PB114	2.00	1.12	0.33	26		> 5000	13300	4340	21.8			119	132	84
A07-3503	85447a	PB114	2.00	1.12	0.33	26		> 5000	10800	2970	22.3			96	90	86
A07-3505	85493a	PB114	2.00	1.12	0.33	26		> 5000	11300	3180	22.9			101	96	88
A07-3505	85533a	PB114	2.00	1.12	0.33	26		> 5000	11100	3070	22.1			99	93	85
A07-4113	85852a	PB114	2.00	1.12	0.33	26		> 5000	10200	3690	30.6			91	112	118
A07-4113	85912a	PB114	2.00	1.12	0.33	26		> 5000	10200	3240	28.2			91	98	108
A07-4247	85933a	PB114	2.00	1.12	0.33	26		> 5000	10100	3230	27.1			90	98	104

BARKER MINERALS
GEOCHEMICAL STANDARDS COMPARISON 2007

			WCM Certified Values					ActLabs Values					% Diff. ActLabs vs WCM			
Certificate No.	Sample No.	Standard No.	Pb %	Zn %	Cu %	Ag g/t		Pb ppm	Zn ppm	Cu ppm	Ag ppm		Pb ppm	Zn ppm	Cu ppm	Ag ppm
A07-3760	85586a	PB115	2.61	1.65	0.53	17		> 5000	15000	5820	17.3			91	110	102
A07-2300	187493a	PB115	2.61	1.65	0.53	17		> 5000	17400	5530	17.4			105	104	102
A07-2302	187740a	PB115	2.61	1.65	0.53	17		> 5000	15300	4980	16.3			93	94	96
A07-3977	85797a	PB115	2.61	1.65	0.53	17		> 5000	16000	5010	19.2			97	95	113
A07-3977	85837a	PB115	2.61	1.65	0.53	17		> 5000	16100	4950	18.8			98	93	111
A07-2306	85032a	PB115	2.61	1.65	0.53	17		> 5000	14200	5150	17.8			86	97	105
A07-2308	85088a	PB115	2.61	1.65	0.53	17		> 5000	15500	5130	15.9			94	97	94
A07-4113	85889a	PB115	2.61	1.65	0.53	17		> 5000	14700	5570	23.5			89	105	138
A07-4247	85958a	PB115	2.61	1.65	0.53	17		> 5000	14200	4940	18.6			86	93	109
A07-2311	85191a	PB115	2.61	1.65	0.53	17		> 5000	16000	5390	17.9			97	102	105

Observations & Discussion:
The above samples were submitted to ActLabs at random intervals during the Kangaroo drill program.
Regarding Standard Nos. PB113, PB114, PB 115: ActLabs's values for Zn, Cu and Ag were usually within 5% of the WCM standards, after conversions were made between % results and ppm results.
Pb could not be compared due to the >5000 ppm result, above the upper detection limit, always acquired by ActLabs.

Relatively greater discrepancies can be explained by the different analysis methods used by WCM and ActLabs. WCM's method was by fire assay. ActLabs used a less accurate ICP (inductively coupled plasma) method. The discrepancies are considered acceptable considering the different analysis methods used by WCM and ActLabs. A more scientific comparison would have required using fire assay in all analyses, not necessary in a very early stage of an exploration program.

WCM refers to WCM Minerals, Burnaby, British Columbia.
ActLabs ferers to Activation Laboratories Ltd., Ancaster, Ontario.

APPENDIX E

FRANK CREEK PROPERTY
DIAMOND DRILL HOLE LOGS

Barker Minerals Inc. 2006

HOLE #	FC-06-23	**BEARING**	69	**HOLE #**	**FC-06-23**
PROPERTY	Frank Creek	**DIP**	-62.9	**START DATE**	16-Nov-06
NORTHING	5,800	**LENGTH**	402.5	**END DATE**	07-Dec-06
EASTING	2,100	**Change N**	0.3567	**DRILL CO.**	Radius Drilling
ELEVATION	1,050	**Change E**	0.934	**LOGGED BY**	J. Steel MBA P.Geo.
		Change V	0.934		(ON) Reg. 0487

OBJECTIVE To drill a shallow EM anomaly and deeper Titan anomaly.

SURVEY

DEPTH	BEARING	DIP
169.2073171	69	-62.9

SUMMARY LOG

HOLE#	FROM	TO	DESCRIPTION	Northing	Easting	Elevation
FC-06-23	0.0	6.1	Overburden	5,802.2	2,105.7	1,044.3
	6.1	11.5	Graphitic Argillite	5,804.1	2,110.7	1,039.3
	11.5	12.9	Conglomeratic Debris Flow - in light of alteration pattern, check textures to see if this would be a precursor to a hyaloclastic breccia.	5,804.6	2,112.1	1,037.9
	12.9	27.4	Graphitic Argillite	5,809.8	2,125.6	1,024.4
	27.4	29.6	Phyllite	5,810.5	2,127.6	1,022.4
	29.6	30.6	Washout	5,810.9	2,128.6	1,021.4
	30.6	109.2	Graphitic Argillite	5,838.9	2,201.9	948.1
	109.2	112.4	Sericite Alt Phyllite	5,840.1	2,205.0	945.0
	112.4	119.8	Limestone/Dolostone	5,842.7	2,211.9	938.1
	119.8	121.3	Sericite Alt Phyllite	5,843.3	2,213.3	936.7
	121.3	132.4	Graphitic Argillite	5,847.2	2,223.7	926.3
	132.4	133.3	Sericite Alt Phyllite	5,847.5	2,224.5	925.5
	133.3	137.0	DogsBreakfastite	5,848.9	2,228.0	922.0
	137.0	141.0	Sericite Alt Phyllite	5,850.3	2,231.7	918.3
	141.0	151.4	Graphitic Argillite	5,854.0	2,241.4	908.6
	151.4	159.2	Sericite Alt Phyllite	5,856.8	2,248.6	901.4
	159.2	167.1	Graphitic Arg	5,859.6	2,256.1	893.9
	167.1	171.2	Sericite Alt Phyllite	5,861.1	2,259.9	890.1
	171.2	209.5	Transition Zone	5,874.7	2,295.7	854.3
	209.5	228.1	Argillite/Greywacke	5,881.4	2,313.0	837.0
	228.1	257.4	Gabbro/Diabase Dyke	5,891.8	2,340.4	809.6
	257.4	261.4	Argillite/Greywacke	5,893.2	2,344.1	805.9
	261.4	284.3	Gabbro/Diabase Dyke	5,901.4	2,365.5	784.5
	284.3	289.1	Sericite Alt Phyllite	5,903.1	2,370.0	780.0
	289.1	298.0	Gabbro/Diabase Dyke	5,906.3	2,378.3	771.7
	298.0	402.5	Argillite/Greywacke	5,943.6	2,475.9	674.1

HOLE #	FC06-23							
Major Unit		Minor Unit						Sample
FROM	TO			ROCK TYPE		from	to	Number
0.00	6.10			ovb				
				Graphitic				
6.10	11.58			Argillite	Black, S1 foliation at 60 taca.			
					crosscutting foliation with quartz-carbonate eyes elongate in plane of S2			
			8.90		foliation, with trace py.			
				Conglomeratic	homogenous clasts of slightly foliated quartz-rich rock, not nearly as well			
11.58	12.92			Debris Flow	pyritized as matrix with lesser po;			
					Arg, mdst (fg geosynclinal clastic) with bimodal py - fg, aphanitic vs cse,			
					cubic and lamellar xtalline development. Small band of mafic clasts;			
		13.00	13.25		coarse euhedral fsps with some altn to ser - chl.			
					Eagle-eyed Louis found a fg mafic clast, seemingly gabbroic with a			
			13.25		potential chromite grain altering a transcendent shade of greenish-blue.	11.58	12.92	40151
				Graphitic				
12.92	27.41			Argillite	As above.	12.92	14.63	40152
					Transition out of debris flow into foliated arg with py in foliation planes per			
		12.92	14.63		perpendicular tca. Also zones of cc veinlets parallel to S1, barren of sx's.			
		14.63	16.37		Fg, foliated, hydrothermally alt S1.	14.63	16.37	40153
					Str with banded py, po, cp over 3 cm at 16.4. HW of flt at 40 tca; intense			
					py on rounded frags. Can make a case for S0 with slump folding of int Qtz-			
		16.37	17.68		cb alt layers and vfg sediments; fining upward/downward not clear.	16.37	17.68	40154
					50% rec in large flt zone; angular frags, bkn blocky ground. Continues on			
					in transition to felsic phyllitic marker unit. Not mineralized and flattening of			
		17.68	23.47		S1 tca on wrench flt at 23.90. Lge flt on HW of next unit at 25.91-26.3	17.68	23.47	40155
					Marker felsic unit, foliated phyllitic rock with stretched, elongate py in plane			
27.41	29.57			Phyllite	of foliation; no sulphides as previous unit; hard to see primary texture.	23.47	25.5	40156
29.57	30.64			Washout	no core	25.5	27.41	40157
				Graphitic				
30.64	109.15			Argillite	As described	27.41	29.57	40158

FROM	TO			ROCK TYPE		from	to	Number
					On immed FW of phyllite, intercalated bands of arg and phyllite. First appearance of cp and metallic black spot (not resolvable at highest handlens magnification) at 31.10. Followed by foliated argillite with cose			
		30.64	32.26		euhedral py blebs.	29.57	30.64	nil
			32.62		Flt, fine gouge with clay	30.64	32.26	40159
		32.62	44.51		Flt zone with lost core, fine fragmentation, int clay alt.	Blank		40160
		44.51	51.22		Decreasing intensity of foliation with appearance of S0 in arg/mdst. Trace py. Some graphite, conductive; is this a cap obscuring geop response of units below?	55.1	56.6	40161
		51.22	53.66		Previous interval continues	56.6	57.58	40162
		53.66	71.30		Graphite along foliation becomes more noticeable giving strong conductive responses at low intensities; ie if the graphitic horizon above wasn't the upper conductor, this section certainly is. Starting to get intercalations of coarse clastics plus evidence of slump folding and formational turbidity in variety of foliation angles. Samples of this interval are taken to determine if change in basinal clastics has brought geochemical changes. Mark values in Eu, Mn, especially. Flts at 65.20,66.6 with find gouge. To 68.8, bkn and blocky.	57.58	60.37	40163
		71.30	71.80		intercalated limy seds in flt at low angle tca. Not HCl reactive. Also change in foliation; are we moving out of the geosyncline into near-shore facies?	70.8	72.1	40164
			78.67		Starting to see scattered qtz eyes with light alt; included porphyritic clast?			
		78.67	83.23		Rock getting fresher with decr in amt of qtz-cb in foliation as well as py content. Very graphitic in sections, moderately conductive. Sandy beds.	84.3	87.8	40165
		83.23	80.40		Arenaceous character to arg on HW of limy bed. 87.8-90.4 bken, cumbly dolostone band, framented in flt, limy transition to base of sample.	87.8	90.4	40166
		80.40	92.99		Back to fg mdst.			
		92.99	109.15		Fltd, weakly conductive and graphitic.			
109.15	112.40			Sericite Alt Phyllite	What we've been calling a phyllite, but with no slaty cleavage. Greenish tinged, but presence of quartz eyes presupposes porphyry; slight alteration; possible chl.	109.15	110.65	40167
112.40	119.79			Limestone/Dolostone	mg, massively to modeately bedded, grey green, int chl in matrix stingers; int ser.	110.65	112.4	40168

FROM	TO			ROCK TYPE		from	to	Number
					increasing intercalations of fg mdst/arg and slightly coarser arenaceious seds. Qtz-cb vnlts parallel tca. Very spottily mineralized with py and cpy;			
		114.64	118.69		samples to quantify geochem response	112.4	113.6	40169
		118.69	119.79		transition out of unit.	113.6	114.64	40170
				Sericite Alt	as described; finer grained, laminated, with quartz eyes and fsps altering to			
119.79	121.34			Phyllite	clay; chl and ser in matrix, not mineralized (phyllitic porphyry here).	114.64	115.94	40171
				Graphitic				
121.34	132.40			Argillite	As described; with extensive foliated frags of previous unit. Unmineralized.	115.94	117.29	40172
			124.74		Flt; int foliated, intercalated dolostone bands.	117.29	118.29	40173
		128.05	130.50		Flt zone in arg.			
				Sericite Alt				
132.40	133.26			Phyllite	HW ct lost in bkn core; grey, green, lightly foliated, sericitzed.			
					A texturally impressive melange of finely laminated graphitic arg with limy			
				DogsBreakfasti	bands and recemented limy breccias (< 10 cm) with intercalated zones of			
133.26	137.00			te	previous unit.			
		132.40	133.26		sericitized phyllite, no sx's.	132.4	133.26	40174
		133.26	134.10		tr py fg in foliated arg; cse eudral py in limy bands	133.26	134.1	40175
		134.10	135.50		fg py in arg; concentrated at ct with phyllite; incr to 1% at FW ct.	134.1	135.5	40176
		135.50	137.00		arg and limy layers not mineralized	135.5	137	40177
				Sericite Alt				
137.00	141.00			Phyllite	As previously described; but for sample descriptions that follow:	137	138.5	40178
					juicy stuff, with 1% py and tr cp. In weird unknown mineral category, tremolite? As soft bladed grn/white mineral seen in recessive bands in this			
		137.00	138.50		unit.	138.5	141	40179
					larger sample ot trace py (mostly bassen) fg msv greywacke with limy and			
		138.50	141.00		qtz-cb bands. FW zone of altered phyllite.			
				Graphitic	Very sharp ct between this foliated unit and prvious msv unit. Foliation			
141.00	151.40			Argillite	near perp tca, loaded with py and higher density cp than seen previously.			
		141.00	142.10		as described	141	142.1	40180
		142.10	143.20		1% py, tr-1% cp, coarser in qtz-cb vnlts & diss in mx.	142.1	143.2	40181
		143.20	145.60		cont, grain size of py increasing; distribution decreasing	143.2	145.6	40182
					HW flt contact, limy, brecciated bands in lightly foliated, slightly more msv			
		145.60	147.76		arg. Much less py than prev. sample.	145.6	147.76	40183

FROM	TO			ROCK TYPE		from	to	Number
					SUPPLEMENTARY NOTES			
					Sam 178,180,181 should be passively interesting geochemically for the same amt of oy & cpy is seen in both units. High hopes for 182, since the py content is huge compared to any other sam, plus, 180-182 form a discrete mappable unit with sx content increasing to FW ct of limy argillite. Note no limy bands in this foliated unit.			
					BACK TO THE SAGA OF DISCOVERY			
		147.76	149.00		lightly alt phyllitic texture over agr. No sx's.	147.76	149	40184
		149.00	151.00		idem	149	151	40185
		151.00	152.40		Mucho juiced foliated arg with 1-2% py, perhaps 1% cp. FW of interval contains 7 cm qtz-cb bnad that brecciated foliated arg and cuts py content down considerably. Also graphite present in FW and not to HW of limy qtz-cb band.	151	152.4	40186
152.40	159.15			Sericite Alt Phyllite	transition into unit with incr in alt. Traces of py and first sight of larger concentrations of py. Not sampled.			
					LIBRARY SAMPLES 119.8 Fine grained sericitic phyllite 131.2 Slight ser alt; grn bands with qtz-cb brecciation; primary foliation still visible. Good example of transition rock.			
		152.40	156.30		Coninued with alt. sericitized phyllite. Starting to see qtz-cb bxn of ser alt groundmass - an explosive event from some bands with clear qtz and white aphanitic qtz. Regretfully, this type of qtz has nothing to do with primary base metal discovery.			
		156.30	159.15		Int bx'd and hydrothermally alt'd zone of basic ser, chl, and phyllite. Very well indurated through introduced silica, but decreases to FW. Somewhere in here is a transition out of phyllite into unalt arg, but with continued episodic bx bands. No sx's.			
159.15	167.00			Graphitic Arg	arg-siltsone; some clastic, textures destroyed by int silicification and bx's in bands 5-8 cm wide at foliation perpendicular tca. A speck of py here and there; otherwise barren.			
					POWER OUTAGE - POSTPONE FURTHER LOGGING.			

FROM	TO			ROCK TYPE		from	to	Number
167.00	171.16			Sericite Alt Phyllite	HW marked by flt, lost in bkn core, but transition out of unmineralized graphitic arg very shar. Alt rock with sericitized bands marking S0 (maybe) of S1 (definitely). Variabley mineralized with cse euhedral aggregates of py in mx of qtz-cb vens and breccia zones. Alt incr downhole to 171.16 where alt is most intense			
			170.60		One clast of iner grained sed in phyllite mineralized with py grains, obviously not part of ubiquitous fg py seen in this altered interval. Evidence of debris flow?			
					LIBRARY SAMPLES 170.7-171.16			
171.10	209.76			Transition Zone	Out of Sericite Altered Phyllite and Into (eventually) Graphitic Argillite. Ser-chl alt is post silicic phase and subsequent bx'n. This phase qtz-cb not mineralized, but increasing in intensity and pervasiveness downhole.			
		173.50	174.40		moderately bx'd at flt but 1-2% py at ct wrapping clasts.	173.5	174.4	40226
		174.40	175.90		Not so alt arg, but int qtz-cb bx'n with active flt/slickensides in clay alt fx's suggesting downhole side is UP relative to uphole side.	174.4	175.9	40227
		176.22	182.54		another zone of int alt phyllite with ser alt in linear bands overprinting fg arg groundmass. Following samples taken for geochemical nature of prevasive alteration; hence no differentiation on other grounds.	175.9	177.4	40228
						177.4	178.9	40229
						178.9	180.4	40230
						180.4	181.8	40231
						181.8	182.34	40232
					40233 is STANDARD PB 113			40233
		182.54	184.24		Intermixed layer of lightly altered gwacke/arg. Intermediate sample, not expected to run (but won't leave sampling orphan).	182.34	184.24	40234
		184.24	185.94		Flt on HW, light bx'n tr diss py.	184.24	185.94	40235
		185.94	187.80		Covers 1 zone of intensely altered argillite. Foliated bands perpendicular tca; important for downhole comparison. Contains one 10 cm band of massive py and po - very highly magnetic wherever po is found in this and subsequent samples. Also black, crystalline sp conformable to foliation with a secondary phase of qtz-cb.	185.94	187.8	40236
		187.80	189.42		interstitial alt arg; spotty diss py + py >> sp; magnetic	187.8	189.42	40237

FROM	TO			ROCK TYPE		from	to	Number
		189.42	191.60		Big long sample to isolate combination of lighly brecciaed and altered argillite. Red sp seen throughout the sample in bx'd qtz-cb altered parts; 1-2% on HW contact (well spotted, Louis!) cse euhedral py on FW ct.	189.42	191.6	40238
		191.60	194.51		Mixed alt ser phyllite at hi angles tca, and qtz-cb bx zones. Not magnetic; some structure and few sulphides; we're out of mineralized zone with tr py.			
		194.51	196.95		Slump feature in basin? Foliation changes to near parallel tca; continues to end of interval. Sample shows tr-1% py and tr sp in qtz-cb overprint.	195.95	196.95	40239
		196.95	205.30		50/50 foliated ser alt phyllite + qtz-cb overprint and bxn of unalt arg. Flt at 197.7 - clay altered, obvious movement. No magnetic response.			
		205.30	209.76		po in fl alt ser phyllite; a type section, as it were, or rather transition from prev unit in HW . Observe that py> py came in on phase associated with mmism of arg to phyllite texture? And Zn came in on secondary qtz-cb phase that obliterates everything? Which would suggest that we are getting further away from the vent, which from the hole so far would suggest is closer to the first target than down this far.	205.3	206.71	40240
209.76	228.10			Argillite/Greywacke	Base unit is lighlty qtz-cb alt in net textured infillings; scatt zones of ser alt and phyllitic texture seen and described individually (if interest merits). Clast, fg, rounded, obviously not part of foliated slightly alt arg; a classic geosynclinal oddity. Py + sp contained within, as masses along FW ct with ser alt phyllite; diss in mx espc sp. Marked in box 35 with yellow arrows for reference. Not sampled; better as reference.			
		220.41	222.31		alt phyllitic bands			
			225.70		Flt on HW, light bx'n tr diss py.			
		226.30	226.60		Flt, clay alt ground frags.			
		226.83	228.10		Flt zone in band of ser alt phyllite, then transition to unalt gwacke.			
227.10	257.42			Gabbro/Diabase Dyke	fine to mg slightly silicified grey groundmass laded with ehuderal fsp'x. Lightly foliated with tr py diss in groundmass			
			237.20		Flt zone in band of ser alt phyllite, then transition to unalt gwacke.			
			244.23		Massive, very competent			
			257.42		Cse, blocky, faulted, clay on flt gouge.			

FROM	TO			ROCK TYPE		from	to	Number
257.42	261.70			Argillite/Greywacke	Fresh, unaltered.			
261.70	284.28			Gabbro/Diabase Dyke	With intercalated stringers of chl alt phyllitic rock.			
284.28	289.10			Sericite Alt Phyllite	bits of chromite in groundass, int ser alt rock, foliated perpendicular tca; traces of vfg - fg py in groundmass; appears to have entered on qtz-cb overprint.			
289.10	298.30			Gabbro/Diabase Dyke	At 295.0, two grains of oxidizing cp in groundmass. In places this rock looks like a lithic tuff. Louis noted 'blue qtz eyes' - a felsic? I see qtz eyes are partially resorbed in groundmass and reflect the bluish colour. So not likely felsic, but still end of cycle volcanic. Not mineralized (other than the cp).			
		296.20			cser grained, 2 generations qtz-cb veinlets; low and parallel tca, two at 90 tca.			
298.30	402.50			Argillite/Greywacke	Completely devoid of mineralization; overall fresh rock.			
		302.80	304.00		sericite alt, overprint fabric cts at 90 tca, lightly faulted.			
		310.80	311.00		ankerite alt at low angles tca. No sulphides in ank alt; but cse py scatted in fresh argillite throughout interval. Not meaningful in deposit generation terms.			
		313.50	314.00		ankerite overprint as described.			
		317.40	318.70		Geochem study: ankerite alt over sericitized argillite, lightly foliated with cse py cubes. FW of interval, graphite occurs, also some bx'n by qtz-cc veinlets.	317.4	318.7	40241
		318.70	320.20		idem. Below this interal, the rocks continue but for decreasing alteration; some zones of schistose fabric with biotite.	318.7	320.2	40242
		320.20	324.40		Cse euhedral py in mx.			
			326.50		Graphitic banding starts; hi angle structures in zone of int core perturbation with qtz-cb, graphite.			
		330.30	336.30		Geochemical study suite lightly altered sediment with cse euhedral py scatt in matrix and in graphitic bands crossing core.	330.3	331.8	40243
		331.80	333.30		includes 20 cm qtz-cb vn on FW of interval.	331.8	333.3	40244
		333.30	334.80			333.3	334.8	40245
		334.80	339.40		py decreases downhole without change in rock type or alteration frequency.	334.8	339.4	40246

FROM	TO			ROCK TYPE		from	to	Number
		339.40	340.90		2% cse py.	339.4	340.9	40247
		340.90	342.40		2% cse py.	340.9	342.4	40248
		342.40	343.90		3-4% cse py.	342.4	343.9	40249
		343.90	345.40		Another magnetic interval as previously described, with cse py grains and masses and po diss in groundmass	343.9	345.4	40250
					The Saga of Sample Tags			
					New book, although finding books is getting difficult; so 40129-40150 from a partially used trench sampling book.			
					Kevin was interested in the lustrous granular mineral of native copper colour, which we would describe as 'rod grease'. This in zone of large-flake graphite is seen on some fractures, generally where py > 1-2% in fine			
		345.40			aggregate masses.			
					Another Geochem Box - not because I expect to be designing a stope, but because it is on the HW of a graphitic package in a major vein.			
		355.00	356.50		FW has graphitic zone with 2% py, 1% cp, and 2% po.	355	356.5	40129
		356.50	358.00		Very graphitic, very pyrrhotitic; a pyrrhic victory in the search for a vent of substance.	356.5	358	40130
		358.00	359.50		Py>po in lightly ser alt foliated argillite.	358	359.5	40131
		359.50	361.00		idem with higher %age qtz-cb veining.	359.5	361	40132
					This sulphidic, graphitic zone is at the target depth for crossing the 'basketball' anomaly. The presence of all primary elements suggests we're close to a vent, although cp in the groundmass without qtz-cb stringers would be very good to find as well.			
					Graphitic flt zone; 30% recovery. No base metal sulphides and no, pyrrhotite doesn't count. Check response of mobile and non-mobile			
		361.00	364.50		elements in this sample.	361	364.5	40133
		364.50	366.40		Graphitic flt zone;			
		366.40	367.92		idem, qtz-cb veining			
		370.70	370.90		Flt, green ser alt clay frags.			
		373.00	380.60		Graphitic, pyritic seds/			
		380.60	382.20		Graphitic flt, mush, rod-binding goop glistening with the metallic lustre of large flake graphite.			
		382.20	385.70		Graphitic pyritized argillite. FW ank alt in thin bands.			
		385.70	394.60		Decreasing graphitic content, slight qtz-cb alt.			

FROM	TO			ROCK TYPE		from	to	Number
	407.50	394.60	407.50		Graphite present in flts and fx.s Fresh arg dominates downhole. EOH.			

Barker Minerals Ltd. 2006

HOLE #	FC-06-24	**BEARING**	0	**HOLE #**	**FC-06-24**
PROPERTY	Frank Creek	**DIP**	-90	**START DATE**	07-Dec-06
NORTHING	5,900	**LENGTH**	302.5	**END DATE**	11-Dec-06
EASTING	1,850	**Change N**	0	**DRILL CO.**	Radius Drilling
ELEVATION	1,020	**Change E**	0	**LOGGED BY**	J. Steel MBA P.Geo.
		Change V	1		(ON) Reg. 0487

OBJECTIVE To test a shallow EM anomaly and correspond it with trenches and FC0623.

SURVEY

DEPTH	BEARING	DIP
302.5	0	-90

SUMMARY LOG

HOLE#	FROM	TO	DESCRIPTION	Northing	Easting	Elevation
FC-06-24	0.0	4.6	Overburden	5,900.0	1,850.0	1,015.4
	4.6	29.9	Argillite	5,900.0	1,850.0	990.1
	29.9	34.5	Phyllite	5,900.0	1,850.0	985.5
	34.5	97.1	Argillite	5,900.0	1,850.0	922.9
	97.1	122.0	Sandstone	5,900.0	1,850.0	898.0
	122.0	138.1	Argillite	5,900.0	1,850.0	881.9
	138.1	157.9	Volcanic Flow	5,900.0	1,850.0	862.2
	157.9	158.8	?ite - Sorry, Never Seen Before. Maybe Rein Knows.	5,900.0	1,850.0	861.2
	158.8	171.5	Argillite	5,900.0	1,850.0	848.5
	171.5	172.8	Volcanic Porphyry	5,900.0	1,850.0	847.2
	172.8	302.5	Argillite/ Phyllite	5,900.0	1,850.0	717.5

HOLE #	FC06-24							
Major Unit		Minor Unit						Sample
FROM	TO			ROCK TYPE		from	to	Number
0.00	4.58			ovb				
4.58	29.90			Argillite	Moderately qtz-cb alt in xcutting vnlts, zones and str. Scattered cse euhedral py in foliation. Not magnetic			
			11.40		starts zone of low recovery, int fractured, minor faulting with clay alt gouge, to 16.78.			
			17.11		First appearance of graphite with py. Graphitic layers in argillite distended, folded; foliation more intense, esp where graphite occurs with secondary qtz-cb stringers.	17.11	18.61	39732
		20.80	22.30		Bkn zone, hi graphite, hi qtz-cb bx'n, 1-2% py with graphite in qtz-cb.	20.8	22.3	39733
		23.79	26.84		Flt; still graphitic, minor qtz-cc veining; try py in S0			
		28.40	29.90		Int silica; in HW transition to phyllite	28.4	29.9	39734
29.90	34.50			Sericite Altered Phyllite	Light grey green, foliated, chl seen, some ser; py scatt in groundmass.	29.9	32	39735
		33.78	33.98		qtz-cb in 50 tca vein; barren			
34.50	97.10			Argillite	qtz-cb veinlets in HW at 50 tca. Can see fabrics of both rock units beneath qtz-cb. Uniformly not mineralized, as previous unit; scatt zones of slight silicification.			
		42.10	42.50		Hi qtz-cb			
		43.40	48.10		Intercalation of cse grained sst with qtz-cb overprint with graphite bands in foliation, weakly conductive.			
		48.10	51.70		argillite, tr py in matrix			
		51.70	52.90		light green clastic interbed, qtz-cb, silica, chl, graphite, weakly conductive			
		52.90	57.90		mixed arg and sst layers, with weak qtz-cb, not mineralized			
		57.90	58.70		interbed of cse grained sst, light greeen, lightly graphitic			
		58.7	62.24		a long stretch of rock, as described to start of mineralized zone.			
		69.20	70.70		HW to first appearance of trace gn, sp, py.	69.20	70.70	39736
		70.70	72.10		Flt marks tr-1% sp, gn, py in qtz-cb veinlets after argillite	70.70	72.10	39737
		72.10	72.80		argillite, qtz-cb alt with tr-1% sp, gn, cp, 1-2% py. Also graphite, but not apparently the same qtz-cb phase - blockier. Can't see phase relationships with any surety.	72.10	72.80	39738
		72.80	74.10		qtz-cb argillite; 1-2% sp, 1-2% cp; 2-3% py; tr-1% gn	72.80	74.10	39739
		74.10	75.60		qtz-cb alt increases;	74.10	75.60	39740

FROM	TO			ROCK TYPE		from	to	Number
					Blank sample inserted into geochem stream	0.00	0.00	39741
		75.60	76.10		int qtz-cb with net textured sx's in 43-cm vein.	75.60	76.10	39742
		76.10	78.20		transition out of mineralized zone on FW of vn.	76.10	78.20	39743
		78.20	78.65		missing interval to make rock length (corrected for RQD) match box lengths			
		78.65	81.00		tr-1% cp, py. 60% recovery.	78.65	81.00	39744
		81.00	82.20		argillite bx'd by silica and interbed of greenish sst; tr-1% eacp, py, sp.	81.00	82.20	39745
		82.20	83.70		out of bx'd unit tr-1% ea py, py, sp.	82.20	83.70	39746
		83.70	85.20		idem	83.70	85.20	39747
		85.20	87.10		75% recovery; arg; qtz-cb in mmoderation, fltd.	85.20	87.10	39748
		87.10	88.80		idem + hydrothermally altered band with tr-1% py, tr po, tr graphite.	87.10	88.80	39749
		88.80	90.30		continued greenish arg with ser alt, fltd, tr py, tr sp.	88.80	90.30	39750
		90.30	91.60		FW unit, sil arg, tr py.	90.30	91.60	40136
		91.60	93.10		qtz-cb alt , ser alt arg with few noted sx's.	91.60	93.10	40137
		93.90	94.10		And that shall be the end of assays for a moment. Louis is a few boxes ahead noting typical exhalative mineralization, so that should be fun! intercalated bed of sst.			
		96.20	97.10		arg, bx'd by qtz-cb and second phase of qtz-cb in veins at low angle tca. No sulphides.			
97.10	122.00			Sandstone	light green, msv to lightly foliated, though S0 or S1 is not clear. Light py in groundmass. As close to fresh (barring light mmic fabric) as seen thus far. background geochem sample for this rock unit. Further downhole we get py, cp, sp in lamellar bands exactly as one would expect with a VMS			
		99.40	100.90		target. So broad samples will be taken.	99.40	100.90	40138
		100.90	104.00		1.5m lost core with py tr-1%	100.90	104.00	40139
		104.00	105.50		py, cp, sp all trace amts.	104.00	105.50	40140
		105.50	107.00		idem	105.50	107.00	40141
		107.00	108.50		and you can guess what this sample is!	107.00	108.50	40142
		108.50	112.80		Flt zone, 50% recovery, idem mineralization	108.50	112.80	40143
		112.80	116.80		Flt zone, 50% recovery, idem mineralization	112.80	116.80	40144
		116.80	118.10		Out of fault zone into near fresh fg clastic with lamellar cp + po; py + cp; Py+cp +/- po; 1-2% each. PLUS LIBRARY SAMPLE	116.80	118.10	40145
		118.10	120.57		Big flt zone, int caly alt of ground frags.	118.10	120.57	40146

FROM	TO			ROCK TYPE		from	to	Number
		120.57	122.00		Last sample in unit; py, cp>>sp.	120.57	122.00	40147
		122.00	123.30		argillite, unmineralized protection sample of FW of mineralized unit. This is a test sample to relate geochem response to EM test response. Py gives -100 to -300 on tester; base rock gives 1000-2000 on 2000k ohms setting.	122.00	123.30	40148
		123.30	129.20		coarser clastic texture to this arg unit, interbedded sand layers			
		132.00	132.80		Flt zone with bull qtz str			
		134.30	134.60		Bull qtz str 80 tca			
		134.60	135.30		small interbed of chl alt sst, some green mica seen in groundmass			
		135.30	138.10		small percentage of chl alt sst in arg with bull qtz vn in HW.			
138.10	157.85			Porphyry	indurated bluish-grey, massive groundmass with fsp and blue qtz eyes. Trace py.			
		138.10	139.50		30 cm qtz vn in HW scattered tr-1% py in cubes.			
		139.63	139.84		LIBRARY SAMPLE OF PORPHYRY			
			139.94		THIN SECTION OF PORPHYRY			
		140.40	140.42		WHOLE ROCK SAMPLE OF PORPHYRY			
		140.42	145.73		Zot. Same rock type, devoid of sulphides. Massive.			
		146.74	147.90		10 cm qtz vn with py, cp at 80 tca in sample with matrix showing foliation of vfg ms? Bi? Chl? With cp, sp	146.74	147.90	40149
		147.90	150.00		Caved, core lost. Too bad, because 1% cp, 1% sp.	147.90	150.00	40150
		150.00	151.80		FW sample, lightly mineralized	150.00	151.80	20451
157.85	158.84			Strange Porphyry Phase?	Light green, slightly foliated, loaded with deep green specks, looks like another phase of the volcanic (fuchsite?). Fsp porphyroblasts strongly alt to ser.			
		157.31	157.70		LIBRARY SAMPLE OF STRANGE PORPHYRY PHASE			
		157.31	158.84		Fltd, blocky, clayey core.			
158.84	171.50			Argillite	strongly foliated, interbeds of cser, finer clastics; fining upward sequence holds, rocks not overturned.			
		161.48	161.96		intebedded cse/fine layers, gives tops uphole.			
		161.96	163.10		low angle flt zone with qtz-cb str (barren). FW 25 degrees; HW lost in bkn core.			
		163.10	164.94		heavier ser alt lends greenish colour to rock.			
			169.50		falut in arg. From this point, increase in ser alt to ct with next unit.			
171.50	172.78			Altered Porphyry	with qtz eyes and ser alt fsp's.			
172.78	302.25			Argillite/Sericite Altered Phyllite	Argillite, lightly ser alt to foliated phyllitic texture but not as altered as phyllite units in other holes.			

FROM	TO			ROCK TYPE		from	to	Number
					Back from lunch. No samplers, no core moved. No sign of Kevin, who is doing RQD today. Core shack stinks of diesel from new heater that doesn't work; Aaron playing silly buggers with his truck with exhaust pipe precisely at core shack door.			
		176.51	177.32		graphitic interval with tr cp and py in qtz str at 25 tca; graphite selvage.			
		178.40	179.26		intercalated band of porphyry, coarse, megacrystic HW ct at 30 tca; FW ct lost in bkn core of flt zone.			
		180.20	180.70		qtz vn, low angle, tr py selvage HW ct 20 tca.			
		183.31	184.31		qtz vn zone in silicified, foliated argillite. No sulphides.			
			185.20		qtz flood			
			188.00		2 shards of euhedral pyrite in graphitic layer in otherwise fresh rock.			
			194.20		intercalated fine grained muddy layers			
			195.90		qtz vn 60 tca			
			197.75		2 cm qtz str, barren.			
		198.20	198.90		qtz flooding with fg muddy layers, not the least bit conductive			
			203.30		qtz str at 50 tca. Barren.			
					A panoply of sedimentary depositional textures with argillite, mudstone and fg ankerite altered something between 204.20 and 204.63. HW ct			
			204.70		perpendicular tca FW ct gradational. Barren.			
		206.60	207.10		intercalated mdst with cse py blebs.			
		208.65	209.02		idem			
		210.47	210.75		qtz str zone at 50 tca. Barren.			
		212.40	212.60		qtz flood with muddy layes with granular py.			
		214.48	214.80		slight graphitic layering; v. weak conductor.			
			215.90		2 cm str of coarse grained intrusive?			
		217.60	217.65		graphitic band with cse py - strong conductor			
		217.80	222.00		graphitic bands, strong conductors, tr-1% py in weakly conductive groundmass.			
		221.30	226.70		sericitized greenish band, gradational back into fg py mdst.			
		226.70	229.70		Flt			

FROM	TO			ROCK TYPE		from	to	Number
					alternating fine and mg mudstone/argillite. Mudstone slightly graphitic and conductive with cse euhedral py and anhedral py clumps. Some py has grown insitu into interconnected crystals. So, a depositional basin with a perhaps small vent pushing out sulphur as a last gasp after main vent (wherever it is) deposition had finished, or as penecontemporaneous			
		229.70	238.00		deposition with main vent (wherever it is).			
					fg pyritised mudstone. Muddy, clayey faulted blocks with one flt in middle of interval. Moderately conductive with values going negative in a couple of			
		238.80	244.10		places.			
		244.17	249.00		idem			
					silicified fine clastic with py. Coarseness increases back to argillite, with, at			
		246.30	247.60		249.3, an amazing sequence of intercalated units, almost varved in nature.			
		247.60	256.81		massive argillite, with sections of qtz flooding; scattered traces of py.			
		261.00	261.40		low angle qtz str, barren.			
			262.40		alternating fine/cse layering tr-1% y in muddy layers.			
			265.00		Flt			
					fine and mg seds with the fine sediments lacking the coarse py. We're getting away from the minor vent, although the presence of graphite			
		265.40	270.53		suggests the vent stratigraphy might be nearby.			
		270.53	275.82		idem			
					"plus ca change, plus ca ne change plus" to ruin a perfectly good French			
		275.82	281.50		expression. However, relevant to this interval.			
		281.50	287.00		Yawn-inducing rock continued.			
		287.00	292.70		Flt			
					To end of hole, cse grained argillite with fine py in groundmass. Some			
		292.70	302.50		barren qtz flooding and veinlets at a variety of angles tca.			
	302.50				End of Hole. Fin de Trou. Fin del Pozo.			

APPENDIX F

FRANK CREEK PROPERTY

PETROGRAPHIC STUDY OF ROCK & CORE THIN SECTIONS

Reports by Vancouver Petrographics Ltd.

Report 070768_FC for:
Louis Doyle, Rein Turna,
Barker Minerals Ltd.,
8384 Toombs Drive,
Prince George, BC, V2K 5A3 **October 2007**

Project: Frank Creek

Samples: 85342, 85343, 85344, 85345, 85347

Summary:

Sample 85342 is a metamorphosed rhyolite crystal tuff that contains abundant phenocrysts of quartz (some of which were recrystallized) in a moderately foliated groundmass of quartz and lesser sericite/muscovite, with much less abundant disseminated grains and lenses of ankerite and of pyrite, and minor Ti-oxide/leucoxene/sphene and sphalerite.

Sample 85343 contains patches with coarser quartz grains in a finer grained groundmass of quartz with disseminated flakes of muscovite and minor patches of Ti-oxide. The texture is similar to that of Sample 85432, suggesting that this sample is a replacement of a rhyolite crystal tuff. Other parts of the section consist of coarser grained vein quartz intergrown with patches of pyrite (altered strongly to porous hematite), with less abundant sphalerite, chalcopyrite, and muscovite.

Sample 85344 is a metamorphosed rhyolite crystal tuff that contains coarser quartz grains, interpreted as original phenocrysts, in a well foliated groundmass of quartz and muscovite with disseminated porphyroblasts of ankerite (altered strongly to limonite). Many quartz phenocrysts were elongated parallel to foliation during metamorphism. This is a more-strongly foliated equivalent to Sample 85342.

Sample 85345 is a metamorphosed chloritic quartzite that is dominated by quartz with abundant broad seams of chlorite. Replacement patches are of pyrite (altered moderately to strongly to limonite) and quartz (slightly coarser grained than that in the host rock).

Sample 85347 is a replacement dominated by quartz and lesser pyrite, with much less abundant muscovite, minor chalcopyrite, and trace pyrrhotite, sphalerite, and galena. The rock was fractured moderately and sulphides were replaced moderately to strongly by limonite and scattered patches of covellite. Some mainly large pyrite grains were fractured strongly along concentric fractures near their margins and altered to limonite on fractures.

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Sample 85342 Metamorphosed Rhyolite Crystal Tuff

Abundant phenocrysts of quartz (some of which were recrystallized) are set in a moderately foliated groundmass of quartz and lesser sericite/muscovite, with much less abundant disseminated grains and lenses of ankerite and of pyrite, and minor Ti-oxide/leucoxene/sphene and sphalerite.

mineral	**percentage**	**main grain size range (mm)**	
phenocrysts			
quartz	15-17%	1-2.5	(a few up to 4 mm across)
groundmass			
quartz	50-55	0.03-0.05	(a few up to 0.1 mm)
sericite/muscovite	17-20	0.03-0.2	
ankerite	3- 4	0.07-0.15	
pyrite	1- 2	0.05-0.1	
Ti-oxide/leucoxene/sphene	0.5	cryptocrystalline-0.05	
sphalerite	0.2	0.07-0.15	

Quartz forms anhedral single grains that are interpreted as reworked original phenocrysts from a felsic volcanic rock. Some large ones were recrystallized moderately to locally strongly to finer subgrain aggregates. The fact that most are single grains favours an origin as phenocrysts rather than detrital grains of sedimentary origin.

In the groundmass, quartz forms anhedral, equant grains. This may include some untwinned plagioclase grains, which are indistinguishable optically from quartz.

Sericite/muscovite forms disseminated flakes and is concentrated moderately in wispy seams parallel to foliation. Seams are contorted slightly and some are warped around quartz phenocrysts.

Ankerite forms disseminated anhedral grains and lenses, the latter commonly elongate parallel to foliation.

Opaque (pyrite) forms disseminated grains and lenses parallel to foliation.

Ti-oxide/leucoxene forms disseminated patches up to 0.1 mm in size. Sphene forms a few anhedral grains.

Sphalerite is concentrated in one band parallel to foliation as anhedral grains intergrown with pyrite.

Sample 85343 **Rhyolite Crystal Tuff (?)**
Replacement: Quartz-Pyrite-(Sphalerite-Muscovite-Chalcopyrite)
Weathering: Hematite

The sample contains patches with coarser quartz grains in a finer grained groundmass of quartz with disseminated flakes of muscovite and minor patches of Ti-oxide. The texture is similar to that of Sample 85432, suggesting that this sample is a replacement of a rhyolite crystal tuff. Other parts of the section consist of coarser grained vein quartz intergrown with patches of pyrite (altered strongly to porous hematite), with less abundant sphalerite, chalcopyrite, and muscovite.

mineral	percentage	main grain size range (mm)
phenocrysts		
quartz	3- 4%	0.5-2
groundmass		
quartz	20-25	0.03-0.1
muscovite	2- 3	0.07-0.15
hematite	2- 3	cryptocrystalline-0.01
Ti-oxide	0.2	0.005-0.01
replacement		
quartz	20-25	0.3-1
hematite	25-30	cryptocrystalline-0.01
pyrite	7- 8	0.05-0.2 (a few from 1-2 mm)
sphalerite	1- 2	0.1-0.3
muscovite	1	0.07-0.15
chalcopyrite	0.5	0.05-0.15
covellite	minor	0.005-0.01
galena	trace	0.05-0.15
pyrrhotite	trace	0.03-0.05

Part of the sample contains abundant subrounded quartz phenocrysts in a matrix of much finer grained quartz, minor disseminated flakes of muscovite, and patches of hematite.

Muscovite is concentrated moderately in a few seams up to 0.3 mm wide in which it is intergrown with hematite. It also forms disseminated flakes and clusters of a few flakes in quartz and along quartz-hematite margins.

Irregular replacement patches of pyrite and hematite up to 1 mm in size are scattered in the host rock.

One patch 0.6 mm across contains abundant Ti-oxide that is intergrown intimately with much less abundant quartz and minor muscovite.

In the main replacement zone, quartz forms aggregates of anhedral grains some of which have moderately sutured grain borders.

Pyrite is concentrated along one side of the section as anhedral to subhedral grains that are surrounded by patches of massive porous hematite (formed by weathering of pyrite). Some patches of pyrite contain 2-5% irregular inclusions of chalcopyrite (0.01-0.05 mm) and much less abundant ones of sphalerite and of galena. One coarse pyrite grain contains a few inclusions of pyrrhotite.

(continued)

Sphalerite is concentrated in a few patches of anhedral grains along the border of the main replacement zone and the host rock; sphalerite patches contain a few inclusions of subhedral to euhedral pyrite. Sphalerite is light orange in colour.

Chalcopyrite occurs as irregular grains included in pyrite and also in some patches of hematite; it is uncertain whether the hematite surrounding chalcopyrite was formed from pyrite or chalcopyrite.

Muscovite forms disseminated clusters of a few to several unoriented grains.

Galena forms scattered grains in quartz that were replaced strongly inwards from their margins by a secondary Pb mineral that is colourless, soft, isotropic, and has a high relief.

Covellite forms scattered patches intergrown intimately with hematite.

Sample 85344 Metamorphosed Rhyolite Crystal Tuff

The sample contains coarser quartz grains, interpreted as original phenocrysts, in a well foliated groundmass of quartz and muscovite with disseminated porphyroblasts of ankerite (altered strongly to limonite). Many quartz phenocrysts were elongated parallel to foliation during metamorphism. This is a more-strongly foliated equivalent to Sample 85342.

mineral	percentage	main grain size range (mm)	
phenocrysts			
quartz	8-10%	0.3-0.7	(a few up to 1 mm)
groundmass			
quartz	60-65	0.02-0.05	
muscovite	15-17	0.05-0.1	(a few flakes up to 0.5 mm long)
ankerite/limonite	8-10	0.3-0.7	(a few up to 1.5 mm long)
chlorite	0.3	0.03-0.07	(porphyroblasts 0.2-0.25 mm)
apatite	trace	0.05-0.07	
zircon	trace	0.03-0.05	

Quartz forms anhedral phenocrysts, many of which were flattened moderately parallel to foliation.

In the groundmass, quartz forms anhedral, equant grains that are intergrown with minor to abundant interstitial flakes of muscovite.

Muscovite is concentrated moderately to strongly in seams parallel to foliation. In many seams it is stained light orange by limonite.

Ankerite forms equant to moderately elongate porphyroblasts that were altered strongly to limonite. Elongation is parallel to foliation. Many porphyroblasts are intergrown with minor to locally moderately abundant muscovite and/or quartz.

Chlorite is concentrated moderately in a few quartz-rich layers as interstitial grains between quartz grains. It forms a few porphyroblasts that are oriented subperpendicular to foliation; pleochroism is from pale to light green.

Apatite forms a few equant anhedral grains.

Zircon forms a few ragged equant grains.

Sample 85345 **Metamorphosed Impure Quartzite**
Replacement: Pyrite-Quartz
Weathering: Limonite

The host rock is a metamorphosed impure quartzite dominated by quartz with abundant seams of chlorite. Replacement patches are of pyrite (altered moderately to strongly to limonite) and quartz (slightly coarser grained than that in the host rock).

mineral	**percentage**	**main grain size range (mm)**	
quartz	55-60%	0.03-0.07	(a few from 0.1-0.2 mm)
chlorite	10-12	0.03-0.1	
ankerite	1- 2	0.05-0.08	
sphene	0.3	0.2-0.4	
Ti-oxide	0.2	0.01-0.02	
magnetite	0.2	0.05-0.15	
replacement			
pyrite/limonite	17-20	0.05-0.2	
quartz	10-12	0.07-0.2	
chalcopyrite	0.1	0.03-0.07	(a few up to 0.1 mm)

Quartz forms aggregates of equant grains with a submosaic texture. Grain size varies moderately from band to band from 0.02-0.03 mm in finer grained bands to 0.05-0.07 mm in coarser grained bands.

Chlorite is concentrated strongly in seams from 0.1-0.5 mm wide parallel to foliation. It also forms disseminated flakes and smaller lenses in quartz-rich zones. It is pale to light green in colour with weak pleochroism, and in places was stained light orange by limonite.

Ankerite formed subhedral to euhedral rhombic grains intergrown with quartz; these were either leached from the rock or replaced by limonite which was either leached from the rock or lost during section preparation.

Sphene forms a few subhedral grains that were replaced completely by Ti-oxide and minor quartz.

Ti-oxide forms disseminated grains intergrown with chlorite.

Magnetite forms a few clusters of angular grains included in chlorite-rich lenses and a few subhedral, equant grains in quartz-rich patches.

Pyrite forms patches up to several mm across of anhedral to subhedral grains. Alteration is moderate to complete to reddish orange limonite, especially along one side of the section.

Quartz forms patches of anhedral grains, in part elongated parallel to foliation. Locally it forms comb-textured aggregates bordering patches of pyrite.

Chalcopyrite forms disseminated grains, in part associated with pyrite and in part with quartz. Many grains have a thin rim of secondary covellite/digenite. It also forms irregular disseminated grains in a few large grains of pyrite.

Limonite forms wispy interstitial seams between quartz grains

Sample 85347 **Replacement: Quartz-Pyrite-(Muscovite-Chalcopyrite)**
Weathering: Limonite-(Covellite)

The sample is a replacement dominated by quartz and lesser pyrite, with much less abundant muscovite, minor chalcopyrite, and trace pyrrhotite, sphalerite, and galena. The rock was fractured moderately and sulphides were replaced moderately to strongly by limonite and scattered patches of covellite. Some mainly large pyrite grains were fractured strongly along concentric fractures near their margins and altered to limonite on fractures.

mineral	**percentage**	**main grain size range (mm)**	
quartz	45-50%	0.1-0.5	(a few up to 1 mm)
pyrite	25-30	0.05-0.5	(a few up to 2 mm)
muscovite	5- 7	0.05-0.15	
chalcopyrite	0.2	0.03-0.1	
pyrrhotite	trace	0.03-0.05	
sphalerite	trace	0.07-0.1	
galena	trace	0.03-0.05	
secondary			
limonite	15-17	cryptocrystalline	
covellite	0.1	0.005-0.01	

Quartz forms anhedral grains, many of which show a slightly to moderately preferred orientation parallel to a weak foliation.

Pyrite forms anhedral to subhedral grains that were fractured moderately and replaced along fractures and grain borders by limonite. Some large grains were fractured strongly in crudely concentric fractures that are concentrated along the margins of the grains. Several large grains contain one to several inclusions of pyrrhotite, and a few others contain similar inclusions of chalcopyrite.

Muscovite is concentrated in patches and lenses mainly from 0.2-0.5 mm in size and locally up to 1 mm wide, commonly as fan-textured aggregates. The largest of these contains moderately abundant interstitial patches of chalcopyrite.

Chalcopyrite also forms a few interstitial patches up to 0.1 mm in size between pyrite grains. A few patches of chalcopyrite up to 0.05 mm in size are included in limonite. A few grains were replaced completely by covellite.

Sphalerite forms a few equant grains bordering patches of limonite. It is light orange in colour.

Galena forms a few inclusions in pyrite, in part adjacent to inclusions of chalcopyrite.

Limonite forms interstitial patches between pyrite grains and less commonly is intergrown with muscovite. In part of the sample it forms abundant braided veinlets; where these cut pyrite grains, the grains were altered to limonite along the veinlets and fresh in between the veinlets. Elsewhere, limonite is concentrated on crudely concentric fractures near the margins of large pyrite grains. In zones of intense alteration, pyrite was replaced completely by limonite.

Covellite forms scatter patches up to 0.1 mm in size within patches of limonite.

Photographic Notes:

The scanned sections show the gross textural features of the sections; these features are seen much better on the digital image than on the printed image. Sample numbers are shown in or near the top left of the photos and photo numbers at or near the lower left. The letter in the lower right-hand corner indicates the lighting conditions: P = plane light, X = plane light in crossed nicols, R = reflected light, RP = reflected light and transmitted plane light, and RX is reflected light and plane light with partly crossed nicols. Locations of digital photographs (by photo number) are shown on the scanned section.

List of Photographs

Photo	Section	Description
01	85342	quartz phenocrysts (the large one recrystallized moderately to a subgrain aggregate with sutured grain borders) in a groundmass of equant plagioclase with lenses of muscovite and wispy seams of sericite, and disseminated patches of ankerite and of leucoxene.
02	85343	pyrite with interstitial chalcopyrite and scattered patches of sphalerite intergrown more coarsely with quartz containing seams and patches of secondary hematite.
03	85344	flattened phenocrysts of quartz and a porphyroblast of ankerite (altered strongly to limonite) in a well foliated groundmass of quartz and muscovite, with muscovite-rich seams and a few coarser flakes of muscovite.
04	85345	intergrowth of quartz with lenses of chlorite, the largest of which contains disseminated grains of Ti-oxide and a cluster of broken magnetite grains; sulphide patches in quartz near the margin of the large chlorite-rich lens are of pyrite and lesser chalcopyrite.
05	85347	large pyrite grain with inclusions of chalcopyrite and minor ones of quartz and trace of pyrrhotite; fractured strongly near its margin and altered to limonite, in large part along concentric fractures; minor quartz at right of photo.

Report 070768 for:
Louis Doyle, Rein Turna,
Barker Minerals Ltd.,
8384 Toombs Drive,
Prince George, BC, V2K 5A3 **October 2007**

Project: Kangaroo

Samples: **K07-1: 28.0 m, 95.55 m, 163.0 m, 164.7 m**
K07-2: 13.2 m, 120.1 m, 233.65 m, 244.1 m
K07-3: 9.8 m, 24.5 m
K07-4: 193.65 m
K07-5: 11.2 m, 47.7 m, 129.85 m
K07-6: 195.8 m
K07-7: 115.65 m
K07-8: 3.0 m, 10.8 m, 119.45 m, 190.2 m
K07-9: 8.7 m, 14.86 m, 21.05 m, 84.45 m, 124.35 m

Summary:

The samples are from a mafic volcanic and plutonic suite, and consist of flows, hypabyssal rocks, and intrusions. Several samples contain inclusions of other rock types. Many of the samples were metamorphosed slightly and many were altered slightly to moderately, especially clinopyroxene phenocrysts (to actinolite-carbonate-chlorite) and plagioclase (to sericite), probably as part of the metamorphic event. A few contains minor seams of cataclastic deformation. They are grouped as follows:

Basalt Flow

Sample K07-2 233.65 m is a metamorphosed porphyritic basalt that contains phenocrysts of clinopyroxene (altered strongly to completely to tremolite/actinolite) and minor ones of plagioclase (altered strongly to completely to sericite) in a groundmass of plagioclase (altered completely to sericite) and lesser tremolite/actinolite. Numerous early veinlets are of tremolite/actinolite with minor calcite. A veinlet is of calcite-(quartz). Numerous late veinlets of calcite-limonite cut and offset slightly the other two types.

Sample K-07 2 244.1 m is a metamorphosed basalt that contains minor phenocrysts of clinopyroxene (altered slightly to completely to tremolite/actinolite) in a groundmass consisting of an unoriented intergrowth of plagioclase (altered completely to sericite) and tremolite/actinolite (possibly after clinopyroxene). A few replacement patches/amygdules up to several mm across are of calcite, calcsilicate (possibly tremolite), pyrite, lesser chlorite, and minor quartz; some have a rim of plagioclase-rich rock altered moderately to dusty clinozoisite(?). Several veinlets are of calcsilicate. A veinlet is of calcite-quartz.

Sample K07-4 193.65 is a porphyritic basalt that contains phenocrysts of clinopyroxene (altered completely to ankerite and minor sericite and leucoxene) and minor ones of plagioclase (altered completely to pseudomorphic muscovite) in a groundmass of interlocking plagioclase (altered completely to sericite) and mafic minerals (altered completely to ankerite). A band up to 2 mm across consists of coarser fresher prismatic plagioclase with interstitial ankerite. A large vein is of quartz and ankerite. A few later veinlets are of calcite.

Sample K07-8 3.0 m is a metamorphosed porphyritic mafic basalt that contains phenocrysts of clinopyroxene (altered completely to aggregates or pseudomorphs of actinolite or aggregates of actinolite-calcite) and minor ones of plagioclase (altered slightly to strongly to sericite) in a groundmass dominated by actinolite and chlorite, with much less abundant plagioclase and interstitial patches of calcite. A vein is of tremolite and much less abundant calcite.

Sample K07-9 21.05 m is a basalt flow that contains minor phenocrysts of plagioclase and clinopyroxene in a groundmass dominated by lathy and equant plagioclase with much less abundant interstitial calcite, chlorite, and disseminated pyrite grains. Lathy plagioclase is oriented strongly producing a flow-foliation. A fragment of porphyritic basalt contains large phenocrysts of plagioclase (altered moderately to sericite) and lesser clinopyroxene (altered completely to tremolite-calcite) in a groundmass containing fine lathy plagioclase grains; it was recrystallized slightly to moderately. A vein is of calcite and much less abundant quartz. Several veinlets are of calcite.

Sample K07-9 124.35 m is a porphyritic basalt that contains phenocrysts of clinopyroxene (altered moderately to completely to tremolite/actinolite and/or ankerite) in a groundmass of lathy plagioclase (altered strongly to sericite) and slightly prismatic tremolite/actinolite, with disseminated grains/patches of pyrite. An early veinlet is of tremolite/actinolite. Several later wispy subparallel veinlets are of calcite.

Hypabyssal Basalt

Sample K07-1 28.0 m is a hypabyssal basalt that consists of lathy plagioclase (altered slightly to sericite) with interstitial patches of chlorite, calcite, and epidote. A few large replacement patches and several smaller ones are of massive epidote. A few veinlets are of calcite. One veinlet is of calcite with minor epidote.

Sample K07-2 13.2 m is a metamorphosed hypabyssal porphyritic basalt that contains **p**henocrysts of clinopyroxene (altered slightly to moderately to tremolite/actinolite) in a very fine grained groundmass of plagioclase (altered completely to sericite) and tremolite/actinolite, with minor chlorite. A diffuse vein is of epidote, tremolite/actinolite, and lesser pyrite. A veinlet is of calcite.

Gabbro (mainly porphyritic)

Sample K07-1 95.55 m is a metamorphosed porphyritic mafic gabbro that contains large phenocrysts of clinopyroxene (altered partly to tremolite/actinolite and hornblende) in a groundmass of plagioclase (altered strongly to sericite and minor epidote), tremolite/actinolite, and hornblende, with lesser patches of epidote and of sulphide, and scattered grains of sphene and apatite. A few veinlets are of calcite and one is of calcite-quartz.

Sample K07-3 9.8 m is a slightly porphyritic gabbro that contains euhedral to subhedral grains of clinopyroxene and euhedral to anhedral grains of plagioclase in a groundmass of finer grained plagioclase with abundant interstitial skeletal grains of hornblende and minor disseminated calcite, ilmenite/leucoxene, pyrite, and apatite. A veinlet is of epidote-calcite. A few discontinuous veinlets are of biotite(?). The rock contains a few seams of weak to moderate cataclastic deformation.

Sample K07-3 24.5 m is a slightly porphyritic gabbro that contains phenocrysts of clinopyroxene (commonly rimmed by hornblende and in part altered to hornblende/tremolite/actinolite or calcite-chlorite-pyrite), a few phenocrysts of plagioclase (altered strongly to sericite), and a few grains of hornblende and tremolite/actinolite in a groundmass of plagioclase (altered moderately to strongly to sericite) and hornblende, with much less abundant tremolite/actinolite, pyrite, and ilmenite, and patches of chlorite. A vein and a few veinlets are of calcite with minor chlorite. A vein is of calcite- and lesser epidote.

Sample K07-5 129.85 m is a porphyritic gabbro that contains phenocrysts of clinopyroxene (altered moderately to strongly to tremolite/actinolite) and lesser ones of plagioclase (altered slightly to moderately to sericite); these are intergrown with finer grained plagioclase and actinolite/ hornblende, with much less abundant tremolite/actinolite and chlorite. An irregular veinlet is of chlorite-calcite. Numerous smaller veinlets are of calcite with minor chlorite.

Sample K07-8 119.45 m is a gabbro that is dominated by clinopyroxene and plagioclase with lesser hornblende (in part skeletal) and biotite, and accessory tremolite/actinolite, pyrite, sphene (altered partly to chlorite-leucoxene), and minor apatite and epidote. Interstitial patches are of chlorite and much less abundant calcite and K-feldspar.

Sample K07-9 8.7 m is a gabbro that consists of an intergrowth of plagioclase (altered slightly to moderately to sericite) and clinopyroxene (altered slightly to completely to tremolite/actinolite or to patches of chlorite, pyrite, and calcite), with lesser biotite (altered partly to muscovite) and tremolite/actinolite and minor interstitial quartz, K-feldspar, and apatite. An interstitial patch is of calcite-quartz-tremolite/actinolite and pyrite. A veinlet is of calcsilicate and minor tremolite/actinolite. A late wispy veinlet is of calcite.

Sample K07-9 84.45 m is an alkali gabbro that contains plagioclase (altered moderately to strongly to sericite), clinopyroxene (commonly rimmed by actinolite; in part replaced by one or more of actinolite, tremolite, chlorite, and pyrite), actinolite, lesser biotite (commonly with lenses of muscovite), hornblende (commonly interstitial to plagioclase), accessory apatite, and minor K-feldspar, pyrite, and sphene. Tremolite is concentrated in irregular interstitial patches with minor actinolite, pyrite, and apatite; it may, in part at least, be secondary after clinopyroxene. A discontinuous veinlet up to 0.05 mm wide is of tremolite and opaque.

Amphibolite

Sample K07-1 163.0 m is mainly amphibolite dominated by tremolite/actinolite (in part after clinopyroxene) with lesser plagioclase and hornblende and minor epidote, sphene, and pyrite. Interstitial patches, probably in part of replacement origin, are of calcite, quartz, pyrite, epidote, and chlorite. Two main fragments (B on scanned section, the larger seven mm across) are of slightly porphyritic basalt with minor phenocrysts of plagioclase and actinolite in a groundmass of clinopyroxene-plagioclase with disseminated grains of pyrite. Two small fragments are of metamorphosed diorite.

Sample K07-1 164.7 m is a medium grained amphibolite dominated by tremolite/actinolite with lesser plagioclase, with much less abundant interstitial patches of calcite, quartz, chlorite, and much less abundant pyrite and epidote. A large inclusion is of metamorphosed porphyritic diorite containing phenocrysts of plagioclase and tremolite/actinolite in a groundmass of plagioclase and lesser tremolite/actinolite. In places, especially along the contact of the two rock types, the amphibolite has a slightly to moderately to locally strongly granulated texture. A few veinlets are of calcite.

Andesite

Sample K07-2 120.1 m is a metamorphosed slightly porphyritic andesite breccia that contains fragments up to several mm across of a few types of porphyritic andesite that consist of scattered plagioclase phenocrysts in a groundmass of lathy to equant plagioclase and interstitial chlorite. Most fragments are of volcanic origin and a few are of hypabyssal origin. The patchy breccia matrix is dominated by quartz with lesser calcite and chlorite. A few veins are of calcsilicate with lesser pyrite and calcite. One veinlet is of pyrite-quartz-chlorite-(epidote), a few veinlets are of calcite, and one is of chlorite-(epidote).

Sample K07-5 11.2 m is a slightly porphyritic andesite that contains minor phenocrysts of clinopyroxene (altered completely to chlorite-calcite) and plagioclase (altered completely to sericite) in a groundmass of chlorite with disseminated grains and clusters of quartz, disseminated sericite flakes, and scattered patches of each of ankerite/calcite, pyrite, and leucoxene. Several ovoid amygdules are of quartz and/or calcite with locally moderately abundant pyrite. A large replacement patch is of coarser grained quartz with much less abundant calcite and pyrite. A few late veinlets are of calcite.

Diorite

Sample K07-1 164.7 m contains a large inclusion of metamorphosed porphyritic diorite with phenocrysts of plagioclase and tremolite/actinolite in a groundmass of plagioclase and lesser tremolite/actinolite. In places, especially along the contact with amphibolite, the latter has a slightly to moderately to locally strongly granulated texture. A few veinlets are of calcite.

Sample K07-5 47.7 m is a medium grained potassic diorite composed of prismatic plagioclase grains and prismatic to interstitial hornblende grains (some grains altered moderately to strongly to tremolite/actinolite or calcite-chlorite), with interstitial patches of K-feldspar, and lesser calcite and

chlorite, and disseminated acicular grains of apatite. A few veinlets are of calcite and much less abundant quartz; one also contains minor chlorite.

Sample K07-6 195.80 m is a metamorphosed diorite that consists mainly of anhedral plagioclase grains and much less abundant disseminated equant to prismatic actinolite grains and minor clinopyroxene grains, with interstitial patches of chlorite and minor disseminated pyrite. A large vein is of calcite with minor quartz along its margins; it contains a few inclusions of host rock. An inclusion of monzonite is present in the drill core but not in this section. It will be described later when a second section is made of this sample that contains it.

Sample K07-7 115.65 m is a microdiorite that contains subhedral to euhedral grains of actinolite and apatite and minor ones of clinopyroxene surrounded by anhedral to subhedral plagioclase (altered moderately to K-feldspar-hematite) with interstitial patches of chlorite, quartz, and calcite, and minor epidote. The drill core contains a fragment up to 15 mm across of more leucocratic diorite dominated by plagioclase with 5% prismatic hornblende/actinolite grains and 5% interstitial patches of calcite; this fragment is not present in the thin section.

Sample K07-8 10.8 m contains two phases, A and B. Phase A is a medium grained hornblende diorite dominated by plagioclase (altered moderately to sericite-clinozoisite) and lesser hornblende with patches of calcite and disseminated grains of pyrite, sphene, and apatite. Phase B is a very fine grained diorite, also dominated by plagioclase and hornblende. A vein is of pyrite.

Photographic Notes:

The scanned sections show the gross textural features of the sections; these features are seen much better on the digital image than on the printed image. Sample numbers are shown in or near the top left of the photos and photo numbers at or near the lower left. The letter in the lower right-hand corner indicates the lighting conditions: P = plane light, X = plane light in crossed nicols, R = reflected light. Locations of digital photographs (by photo number) are shown on the scanned section.

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Sample K07-1 28.0 m **Hypabyssal Basalt**
Replacement: Epidote-Calcite
Veinlets: Calcite; Calcite-(Epidote)

The sample consists of lathy plagioclase (altered slightly to sericite) with interstitial patches of chlorite, calcite, and epidote. A few large replacement patches and several smaller ones are of massive epidote. A few veinlets are of calcite. One veinlet is of calcite with minor epidote.

mineral	**percentage**	**main grain size range (mm)**	
plagioclase	30-35%	0.1-0.15	
calcite	17-20	0.02-0.05	
chlorite	12-15	0.02-0.03	
epidote	4- 5	0.02-0.05	
quartz	0.3	0.03-0.08	(a few up to 0.15 mm)
sulphide	0.2	0.02-0.05	
replacement			
epidote	20-25	0.02-0.2	
calcite	3- 4	0.03-0.1	
chlorite	1	0.03-0.05	
sulphide	0.2	0.05-0.15	
veinlets			
1) calcite	2- 3	0.1-0.7	
2) calcite-(epidote)	0.3	0.03-0.05	

Plagioclase forms unoriented lathy grains that were altered slightly to sericite and possibly replaced by patches of calcite.

Interstitial to plagioclase are patches of chlorite and of calcite, and much less abundant ones of epidote, mainly less than 0.2 mm in size. A few chlorite patches are up to 0.7 mm long.

Opaque (sulphide) forms disseminated, equant grains.

Quartz forms disseminated anhedral grains interstitial to plagioclase.

Replacement patches up to 15 mm in size are of epidote with locally abundant calcite, disseminated chlorite, and several clusters of sulphide. The largest patch grades into a vein of epidote-calcite from 0.5-1 mm wide.

A few veinlets from 0.2-0.5 mm wide are of calcite; some of these are bordered by groundmass that contains more calcite than normal. Some patches adjacent to the vein are in optical continuity with calcite grains in the vein.

A later veinlet 0.05-0.1 mm wide of calcite with a discontinuous thin outer zone of epidote offsets an earlier calcite vein by 0.7 mm. In part it runs along the edge of the large replacement patch.

Sample K07-1 95.55 m **Metamorphosed Porphyritic Mafic Gabbro**
Alteration: Epidote-Sulphide
Veinlets: Calcite-(Quartz)

Large phenocrysts of clinopyroxene (altered partly to tremolite/actinolite and hornblende) are set in a groundmass of plagioclase (altered strongly to sericite and minor epidote), tremolite/actinolite, and hornblende, with lesser patches of epidote and of sulphide, and scattered grains of sphene and apatite. A few veinlets are of calcite and a few are of calcite-quartz.

mineral	percentage	main grain size range (mm)	
phenocrysts			
clinopyroxene	35-40%	5-15 mm	
groundmass, overgrowths			
plagioclase	25-30	0.3-1.5	
tremolite/actinolite	10-12	0.5-1.5	
hornblende	7- 8	0.7-2	
epidote	2- 3	0.1-0.7	
sulphide	2- 3	0.07-0.5	
sphene	0.2	0.1-0.3	(one 0.5 mm long)
apatite	0.2	0.1-0.3	(one grain 0.8 mm long)
veins, veinlets			
1) calcite	0.5	0.5-1	

Clinopyroxene forms euhedral to subhedral phenocrysts. Some were replaced slightly to locally strongly by irregular patches of pale brownish green tremolite/actinolite and others were replaced or overgrown by patches of medium brown hornblende. A few grains were altered very strongly to tremolite/actinolite and contain ragged clinopyroxene cores within tremolite/actinolite grains. Many grains were altered along their margins to tremolite/actinolite or hornblende.

Plagioclase forms subhedral prismatic to anhedral equant grains that are intergrown coarsely with tremolite/actinolite and hornblende in patches that are interstitial to clinopyroxene. Plagioclase was mainly altered strongly to completely to sericite and locally to irregular patches of epidote and locally is relatively fresh.

Tremolite/actinolite forms anhedral prismatic to equant grains, in part interstitial to clinopyroxene and in part replacing clinopyroxene. Pleochroism is from pale to light green.

Hornblende forms anhedral equant to prismatic grains interstitial to clinopyroxene phenocrysts and in part interstitial to plagioclase. Pleochroism is from light to medium brownish green to greenish brown.

Epidote forms a few patches up to 2 mm in size of equant to prismatic grains intergrown with tremolite/actinolite, hornblende, and sulphides. In part at least it is a replacement of plagioclase.

Sulphides (probably mainly pyrite) forms anhedral equant patches up to 0.5 mm in size in both actinolite and plagioclase. A few patches of sulphide in epidote may be chalcopyrite. A discontinuous lens 1.2 x 0.05 mm of sulphide is included in a grain of hornblende.

Apatite forms anhedral grains and clusters of a few equant grains intergrown with amphiboles and plagioclase.

Sphene forms anhedral equant to irregular grains, commonly associated with sulphides and/hornblende.

A vein up to 1 mm wide is of calcite. A few veinlets up to 0.1 mm wide are of calcite and quartz. A few wispy veinlets from 0.01-0.03 mm wide are of calcite.

Sample K07-1 163.0 m **Amphibolite**
Replacement: Quartz-Calcite-Pyrite-Epidote-Chlorite
Inclusions: Slightly Porphyritic Basalt; Metamorphosed Diorite

The sample is mainly amphibolite dominated by tremolite/actinolite (in part after clinopyroxene) with lesser plagioclase and hornblende and minor epidote, sphene, and pyrite. Interstitial patches, probably in part of replacement origin, are of calcite, quartz, pyrite, epidote, and chlorite. Two main inclusions (B on scanned section, the larger seven mm across) are of slightly porphyritic basalt with minor phenocrysts of plagioclase and actinolite in a groundmass of clinopyroxene-plagioclase with disseminated grains of pyrite. Two small inclusions are of metamorphosed diorite.

mineral	**percentage**	**main grain size range (mm)**	
amphibolite			
tremolite/actinolite	55-60%	0.7-2	
plagioclase	12-15	0.5-1.5	(a few up to 2.5 mm long)
hornblende	8-10	0.5-2	
clinopyroxene	7- 8	1-2	
calcite	2- 3	0.03-0.1	
quartz	2- 3	0.03-0.1	
pyrite	1- 2	0.05-0.2	
chlorite	0.3	0.02-0.05	
apatite	0.2	0.1-0.5	
sphene	0.2	0.07-0.2	
inclusions			
basalt	5- 7	0.5-0.8 (phenos); 0.05-0.15 (gm)	
diorite	1	0.1-0.3	

Tremolite/actinolite forms anhedral to subhedral prismatic grains, some of which were warped slightly. Pleochroism is from colourless to pale green. Some grains were replaced partly by calcite.

Clinopyroxene forms anhedral equant grains that were replaced moderately to strongly by pseudomorphic tremolite/actinolite (mainly along margins) and patches of calcite (mainly in cores), leaving ragged relic clinopyroxene cores. Some grains contain moderately abundant disseminated euhedral cubic grains of pyrite.

Plagioclase forms subhedral prismatic grains that were altered slightly to moderately to disseminated flakes of sericite and slightly to patches of calcite.

Hornblende forms anhedral, in part skeletal grains interstitial to clinopyroxene and plagioclase; pleochroism is from light to medium dark brownish green to greenish brown.

Apatite forms anhedral, equant to slightly elongate grains

Sphene forms disseminated anhedral grains.

Irregular interstitial patches (probably in part of replacement origin) up to 2.5 mm across are of quartz and calcite with minor to abundant chlorite, scattered grains and clusters of grains of pyrite and scattered patches of epidote and of chlorite. A few patches also contain acicular tremolite/actinolite grains.

(continued)

Basalt inclusions contain scattered phenocrysts of plagioclase (0.5-0.7 mm; altered slightly to sericite) and actinolite (0.5-1 mm; pleochroic from pale to light/medium green) in a matrix of equant plagioclase and slightly less abundant prismatic tremolite/actinolite. Pyrite forms disseminated subhedral to euhedral grains. A wispy replacement seam up to 0.2 mm wide contains abundant interstitial chlorite.

One inclusion 3.5 mm across consists of anhedral plagioclase (0.1-0.25 mm) with 10-20% disseminated, unoriented acicular tremolite/actinolite and a patch of calcite up to 2 mm across.

One inclusion 2 mm across is of a very fine grained metamorphosed diorite consisting of anhedral plagioclase and tremolite/actinolite. (0.1-0.3 mm).

Sample K07-1 164.7 m **Amphibolite**
Inclusion: Metamorphosed Porphyritic Diorite
Veinlets: Calcite-(Chlorite)

The sample is a medium grained amphibolite dominated by tremolite/actinolite with lesser plagioclase, with much less abundant interstitial patches of calcite, quartz, chlorite, and much less abundant pyrite and epidote. A large inclusion is of metamorphosed porphyritic diorite containing phenocrysts of plagioclase and tremolite/actinolite in a groundmass of plagioclase and lesser tremolite/actinolite. In places, especially along the contact of the two rock types, the amphibolite has a slightly to moderately to locally strongly granulated texture. A few veinlets are of calcite and lesser chlorite.

mineral	**percentage**	**main grain size range (mm)**	
amphibolite			
tremolite/actinolite	30-35%	0.7-1.5	
plagioclase	8-10	0.7-1.5	
sphene	0.2	0.1-0.3	
replacement			
calcite	3- 4	0.1-0.2	(a few up to 1.5 mm)
quartz	1- 2	0.1-0.2	(a few up to 0.5 mm)
chlorite	1- 2	0.02-0.05	
pyrite	0.2	0.1-0.2	(a few up to 0.7 mm)
epidote	0.1	0.1-0.2	
diorite			
phenocrysts			
plagioclase	4- 5	0.8-1.5	
tremolite/actinolite	2- 3	0.7-2	
groundmass			
plagioclase	30-35	0.1-0.3	(a few up to 1 mm)
tremolite/actinolite	5- 7	0.1-0.3	(a few up to 2 mm)
veinlets			
2) calcite-(chlorite)	1- 2	0.05-0.2	

Tremolite/actinolite forms anhedral equant to prismatic grains with pleochroism from pale to light/medium brownish green. A few grains were replaced moderately by patches of calcite up to 1 mm across.

Plagioclase forms anhedral grains that were altered slightly to moderately to sericite and slightly to patches of K-feldspar.

Interstitial (in part replacement) patches up to 3 mm in size are of calcite, quartz, with locally abundant chlorite and much less abundant pyrite and epidote. Pyrite also forms disseminated subhedral to euhedral cubic grains.

Sphene forms disseminated anhedral grains and ragged clusters up to 0.5 mm in size.

In patches up to a few mm across, amphibolite was granulated moderately to strongly; chlorite forms scattered patches in the matrix of the brecciated rock.

The metamorphosed diorite contains scattered anhedral to subhedral phenocrysts of plagioclase and tremolite/actinolite in a groundmass of equant to slightly elongate plagioclase with less abundant tremolite/actinolite. Plagioclase was altered slightly to calcite-sericite.

Several veinlets up to 0.1 mm wide are of calcite and lesser chlorite.

Sample K07-2 13.2 m **Metamorphosed Hypabyssal Porphyritic Basalt**
Veins, Veinlets: Epidote-Tremolite/Actinolite-(Pyrite); Calcite

Phenocrysts of clinopyroxene (altered slightly to moderately to tremolite/actinolite) are set in a very fine grained groundmass of plagioclase (altered completely to sericite) and tremolite/actinolite, with minor chlorite. A diffuse vein is of epidote, tremolite/actinolite, and lesser chlorite and pyrite. A veinlet is of calcite.

mineral	percentage	main grain size range (mm)
phenocrysts		
clinopyroxene	25-30%	1.5-4
groundmass		
plagioclase	30-35	0.1-0.3
tremolite/actinolite	30-35	0.1-0.3
chlorite	1- 2	0.02-0.05
pyrite	minor	0.03-0.07
veinlets		
1) tremolite/actinolite-epidote-(chlorite-pyrite)	2- 3	0.03-0.07
2) calcite	1	0.02-0.05

Clinopyroxene forms euhedral to subhedral, equant phenocrysts that were altered slightly to moderately in irregular patches to pseudomorphic tremolite/actinolite. Some have thin overgrowths of tremolite/actinolite with pleochroism from pale to light/medium green.

In the groundmass, plagioclase forms anhedral to subhedral, equant to prismatic grains that were altered completely to sericite.

Tremolite/actinolite forms prismatic to equant grains with pleochroism from pale to light green.

A few patches of the groundmass contain euhedral tremolite/actinolite grains and prismatic plagioclase grains with interstitial patches of chlorite.

Several patches up to 2.5 mm in size are dominated by unoriented acicular to prismatic tremolite/actinolite.

A diffuse vein up to 0.7 mm wide is dominated by epidote and tremolite/actinolite, with patches of chlorite and clusters of opaque (pyrite). Textures of tremolite/actinolite are similar to those of the tremolite/actinolite patches in the host rock, namely unoriented prismatic to acicular grains.

A veinlet up to 0.4 mm wide and a few much smaller veinlets are of calcite.

Sample K07-2 120.1 m **Metamorphosed Slightly Porphyritic Andesite Breccia**
Matrix: Quartz-(Calcite-Chlorite)
Veins: Calcsilicate-(Quartz-Pyrite-Calcite);
Pyrite-Quartz-Chlorite-(Epidote); Calcite; Chlorite-(Epidote)

Fragments up to several mm across are of a few types of porphyritic andesite containing scattered plagioclase phenocrysts in a groundmass of lathy to equant plagioclase and interstitial chlorite. Most fragments are of volcanic origin and a few are of hypabyssal origin. The patchy breccia matrix is dominated by quartz with lesser calcite and chlorite. A few veins are of calcsilicate with lesser pyrite and calcite. One veinlet is of pyrite-quartz-chlorite-(epidote), a few veinlets are of calcite, and one is of chlorite-(epidote).

mineral	percentage	main grain size range (mm)	
phenocrysts			
plagioclase	5- 7%	0.3-0.5	(a few up to 1.2 mm long)
clinopyroxene	0.5	1.5-3	
quartz	0.1	1.2	
groundmass			
plagioclase	60-65	0.005-0.02	
chlorite	17-20	0.01-0.02	
breccia matrix			
quartz	5- 7	0.02-0.07	(some grains from 0.1-0.15 mm)
plagioclase	1- 2	0.02-0.04	
biotite	0.5	0.05-0.1	
veins, veinlets			
1) calcsilicate-(quartz-pyrite-calcite)	5- 7	0.05-0.5 (cs); 0.05-0.1 (py, ct)	
2) pyrite-quartz-chlorite-epidote	1- 2	0.05-0.15 (py); 0.02-0.03 (cl)	
3) calcite	0.1	0.03-0.07	
4) chlorite-(epidote)	0.1	0.02-0.05	

Plagioclase forms subhedral to euhedral prismatic phenocrysts that were altered strongly to sericite. They are present in many fragments from 5-30%; and a few fragments are non-porphyritic. One fragment is of hypabyssal andesite; it contains 30% prismatic plagioclase grains 0.1-0.2 mm long in a much finer grained matrix.

One fragment 3 mm across is of a phenocryst of clinopyroxene that was replaced strongly inwards from its margin by pale to light green tremolite/actinolite. The outer part of the phenocryst was in turn replaced by chlorite. A few fragments are of tremolite/actinolite that probably is secondary after clinopyroxene.

One quartz grain 1.2 mm across may be a phenocryst. It has a partial rim up to 0.12 mm wide of quartz in optical continuity with the core; the rim contains 1-2% disseminated dusty to extremely fine inclusions.

The groundmass is variable between fragments. Some fragments contain 10-30% lathy plagioclase grains (0.05-0.12 mm; altered slightly to moderately to sericite) in a matrix of much finer grained equant plagioclase and chlorite. Others are of extremely fine grained unoriented plagioclase and chlorite (0.005-0.02 mm). A few fragments have a groundmass dominated by plagioclase grains from 0.1-0.15 mm in size.

Ti-oxide forms ragged disseminated patches, mainly less than 0.05 mm in size and locally up to 0.5 mm across.

(continued)

The breccia matrix is dominated by equant, granular quartz with much less abundant interstitial plagioclase (altered slightly to sericite). Biotite forms scattered anhedral flakes with pleochroism from light to medium/dark brown.

A few subparallel veins up to 1.5 mm wide are of calcsilicate and much less abundant quartz, pyrite, and calcite. The calcsilicate forms stubby prismatic grains with parallel extinction and length-fast character. It has moderate birefringence (0.015-0.020) and moderate relief (R.I. about 1.60). It is similar in appearance to epidote but has lower relief and birefringence.

A diffuse veinlet 0.2-0.3 mm wide is of pyrite with lesser quartz and minor epidote and chlorite.

A veinlet 0.01-0.02 mm wide is of calcite.

A veinlet 0.2 mm wide is of chlorite with minor epidote along its margins.

Sample K07-2 233.65 m **Metamorphosed Porphyritic Basalt**
Veinlets: Tremolite/Actinolite-(Calcite);
Calcite-(Quartz); Calcite-Limonite

Phenocrysts of clinopyroxene (altered strongly to completely to tremolite/actinolite) and minor ones of plagioclase (altered strongly to completely to sericite) are set in a groundmass of plagioclase (altered completely to sericite) and lesser tremolite/actinolite. Numerous early veinlets are of tremolite/actinolite with minor calcite. A veinlet is of calcite-(quartz). Numerous late veinlets of calcite-limonite cut and offset slightly the other two types.

mineral	**percentage**	**main grain size range (mm)**
phenocrysts		
clinopyroxene	12-15%	1- 3
plagioclase	1	0.5-0.7
groundmass		
plagioclase	65-70	0.03-0.1
tremolite/actinolite	10-12	0.07-0.15
sphene	0.1	0.05-0.1
veinlets		
1) tremolite/actinolite-(calcite)	2- 3	0.03-0.07
2) calcite-(quartz)	0.3	0.02-0.05
2) calcite-limonite	1- 2	0.02-0.05

Clinopyroxene forms euhedral to subhedral phenocrysts and clusters of phenocrysts. They were altered strongly to completely inwards from their margins to pseudomorphic tremolite/actinolite. A few phenocrysts were replaced completely by unoriented aggregates of prismatic to equant tremolite/actinolite.

Plagioclase forms scattered subhedral prismatic phenocryst that wee altered moderately to strongly to sericite.

The groundmass contains lathy to equant plagioclase (altered completely to sericite) and disseminated grains of tremolite/actinolite.

Sphene forms disseminated ragged grains.

A few veinlets up to 0.15 mm wide are of tremolite/actinolite; some of these also contain patches of calcite.

A few veinlets are of calcite and minor quartz.

A few veinlets up to 0.07 mm wide are of calcite and lesser limonite/hematite; one of these cuts one of the tremolite/actinolite veinlets, one cuts a calcite-(quartz) veinlet, and some formed along earlier tremolite/actinolite veinlets.

Sample K-07 2 244.10 m **Metamorphosed Basalt**
Replacement/Amygdules: Calcite- Calcsilicate-Pyrite-Chlorite
Inclusions: Andesite
Veinlets: Calcsilicate; Calcite-Quartz

Minor phenocrysts of clinopyroxene (altered slightly to completely to tremolite/actinolite) are set in a groundmass consisting of an unoriented intergrowth of plagioclase (altered completely to sericite) and tremolite/actinolite (possibly after clinopyroxene). A few replacement patches/amygdules up to several mm across are of calcite, calcsilicate (possibly tremolite), pyrite, lesser chlorite, and minor quartz; some have a rim of plagioclase-rich rock altered moderately to dusty clinozoisite(?). Several veinlets are of calcsilicate. A veinlet is of calcite-quartz.

mineral	percentage	main grain size range (mm)	
phenocrysts			
clinopyroxene	2- 3%	0.5-0.8	(one 3 mm across)
groundmass			
plagioclase	40-45	0.05-0.1	
tremolite/actinolite	35-40	0.07-0.2	
amygdules/replacement			
calcite	2- 3	0.2-0.5	
tremolite/actinolite	2- 3	0.03-0.3	
pyrite	2- 3	0.02-1.5	
chlorite	0.5	0.02-0.05	
quartz	minor	0.07-0.2	
inclusion			
porphyritic andesite	2- 3	0.05-0.5	
veinlets			
1) calcsilicate	2- 3	0.02-0.1	
2) calcite-quartz	0.3	0.05-0.2	

Clinopyroxene forms a few large subhedral to euhedral phenocrysts and clusters of up to several grains; they were replaced moderately to completely by aggregates of tremolite/actinolite or by single grains of tremolite/actinolite with pleochroism from pale to light/medium green.

The groundmass is dominated by an unoriented intergrowth of slightly prismatic plagioclase (altered completely to sericite) and tremolite/actinolite (probably after clinopyroxene).

A seam up to 0.3 mm wide contains very abundant disseminated grains of sphene/Ti-oxide.

Pyrite forms disseminated patches from 0.05-0.2 mm in size.

A replacement patch (possibly amygdule) up to several mm across is of calcite, chlorite, and pyrite with scattered acicular grains of tremolite/actinolite and patches of quartz. It is rimmed by an irregular zone up to 2 mm wide of prismatic to equant plagioclase (0.05-0.5 mm) that was altered moderately to semi-opaque clinozoisite(?), giving the plagioclase grains a turbid appearance; this zone contains only minor tremolite/actinolite. Nearby is an elongate patch 4.5 mm long of similar plagioclase altered to clinozoisite(?) that contains two patches in its core of coarser grained plagioclase intergrown with patches of calcite and chlorite and with minor acicular tremolite/actinolite. This probably represents the edge of a replacement patch/amygdule similar to the one described above.

(continued)

A replacement patch (amygdule) several mm across is dominated by calcsilicate (possibly tremolite) and calcite, with a few coarse grains and patches of pyrite and minor quartz.

In one corner of the section is a patch a few mm across of slightly porphyritic andesite dominated by plagioclase (0.1-0.5 mm; altered slightly to moderately to clinozoisite and sericite) and much less abundant tremolite/actinolite.

Several veinlets from 0.02-0.2 mm wide are of ; grain size generally is coarser in the wider veinlets. Some contain minor patches of calcite.

A veinlet 0.1-0.2 mm wide is of calcite and much less abundant quartz.

Sample K07-3 9.8 m **Slightly Porphyritic Gabbro**
Veinlets: Epidote-Calcite; Biotite(?)

Euhedral to subhedral grains of clinopyroxene and euhedral to anhedral grains of plagioclase are set in a groundmass of finer grained plagioclase with abundant interstitial skeletal grains of hornblende and minor disseminated calcite, ilmenite/leucoxene, pyrite, and apatite. A veinlet is of epidote-calcite. A few discontinuous veinlets are of biotite(?). The rock contains a few seams of weak to moderate cataclastic deformation.

mineral	percentage	main grain size range (mm)
phenocrysts		
clinopyroxene	17-20%	1.5-3
groundmass		
plagioclase	45-50	0.3-0.7
hornblende	17-20	0.5-2.5
calcite	1	0.02-0.05
ilmenite/leucoxene	1	0.1-0.3
pyrite	0.5	0.05-0.2
chlorite	0.2	0.03-0.05
apatite	minor	0.1-0.15
veinlets		
1) epidote-calcite	1- 2	0.1-0.3
2) biotite	minor	0.01-0.02

Clinopyroxene forms subhedral to euhedral phenocrysts, some of which were fractured moderately to strongly. Many are rimmed by skeletal grains of hornblende.

Plagioclase forms euhedral to subhedral phenocrysts that were altered slightly to strongly to sericite and dusty clinozoisite. Some grains show compositional growth zoning, with broad cores of more-calcic plagioclase (altered to sericite) surrounded by thin rims of relatively fresh more-sodic plagioclase. It also forms fresh grains in interstitial patches, in part associated with chlorite.

Hornblende forms interstitial, in large part skeletal grains that surround and include grains of clinopyroxene and of plagioclase. Pleochroism is from light to medium brown.

Opaque (ilmenite altered to leucoxene) forms disseminated anhedral grains, mainly included in hornblende.

Chlorite forms interstitial patches up to 0.3 mm in size.

Pyrite forms disseminated subhedral to anhedral grains include din hornblende and in calcite.

Calcite forms a few patches up to 1.3 mm across, in part with disseminated grains of pyrite. Most of these are surrounded by hornblende, suggesting that they were formed by replacement of clinopyroxene.

In a few seams up to 0.1 mm wide, the rock was brecciated moderately to strongly.

Two irregular, subparallel veinlets up to 0.3 mm wide are of epidote and moderately less abundant calcite.

A few discontinuous veinlets up to 0.05 m wide are of biotite(?)

Sample K07-3 24.5 m **Slightly Porphyritic Gabbro**
Veins, Veinlets: Calcite-(Chlorite); Calcite--Epidote

Phenocrysts of clinopyroxene (commonly rimmed by hornblende and in part altered to hornblende/tremolite/actinolite or calcite-chlorite-pyrite), a few phenocrysts of plagioclase (altered strongly to sericite), and a few grains of hornblende and tremolite/actinolite are set in a groundmass of plagioclase (altered moderately to strongly to sericite) and hornblende, with much less abundant tremolite/actinolite, pyrite, and ilmenite, and patches of chlorite. A vein and a few veinlets are of calcite with minor chlorite. A vein is of calcite- and lesser epidote.

mineral	**percentage**	**main grain size range (mm)**			
phenocrysts					
clinopyroxene	12-15%	0.7-2	(a few up to 3 mm across)		
plagioclase	2- 3	0.5-1.2			
groundmass				**percentage**	**grain size**
plagioclase	35-40	0.1-0.3	ilmenite	0.7	0.05-0.1
hornblende	25-30	0.1-0.5	epidote	0.3	0.05-0.1
tremolite/actinolite	5- 7	0.1-0.5	chlorite	0.3	0.02-0.05
pyrite	1- 2	0.05-0.5	apatite	0.1	0.2-0.5
replacement patches					
calcite	1- 2	0.2-0.5			
chlorite	1- 2	0.02-0.05			
pyrite	0.2	0.1-0.3			
veinlets					
1) calcite-(chlorite)	2- 3	0.1-2			
2) calcite--epidote	1	0.1-0.5			

Clinopyroxene forms anhedral to subhedral, equant phenocrysts, most of which are rimmed by hornblende. Many clinopyroxene grains are fresh; some were altered along fractures to tremolite/actinolite and hornblende. Several grains were replaced completely by intergrowths of calcite with one or more of chlorite, patches of acicular tremolite, and minor disseminated grains of pyrite.

Plagioclase forms subhedral to anhedral phenocrysts that were altered moderately to completely to sericite.

In the groundmass, plagioclase forms anhedral to subhedral, equant to prismatic grains that were altered moderately to strongly to sericite; these are intergrown with hornblende of similar size.

Hornblende and lesser tremolite/actinolite form scattered coarser, in part skeletal grains interstitial to clinopyroxene and plagioclase. Hornblende is pleochroic from light to medium brown, whereas tremolite/actinolite is pleochroic from pale or light green to light/medium green.

Pyrite forms disseminated anhedral grains.

Ilmenite forms disseminated patches up to 0.2 mm in size, in part altered to leucoxene.

Epidote forms irregular interstitial patches intergrown mainly with hornblende and plagioclase.

Apatite forms elongate prismatic grains.

A slightly braided veinlet up to 0.5 mm wide is of calcite with lesser and epidote.

A vein up to 0.7 mm wide is of calcite and minor chlorite, mainly alone vein margins; it contains a few calcite crystals up to 2.5 mm long. A few veinlets up to 0.1 mm wide are of calcite.

Sample K07-4 193.65 **Porphyritic Basalt**
Alteration: (strong) Ankerite-Sericite
Vein, Veinlets: Quartz-Ankerite; Calcite

Phenocrysts of clinopyroxene (altered completely to ankerite and minor sericite and leucoxene) and minor ones of plagioclase (altered completely to pseudomorphic muscovite) are set in a groundmass of interlocking plagioclase (altered completely to sericite) and mafic minerals (altered completely to ankerite). A band up to 2 mm across consists of coarser fresher prismatic plagioclase with interstitial ankerite. A large vein is of quartz and ankerite. A few later veinlets are of calcite.

mineral	percentage	main grain size range (mm)	
phenocrysts			
clinopyroxene	12-15%	1-3	
groundmass			
plagioclase	55-60	0.05-0.15	(a few grains up to 0.3 mm)
mafic	17-20	0.1-0.2	
leucoxene	0.7	cryptocrystalline	
opaque	minor	0.05-0.1	
band			
plagioclase	3- 4	0.3-0.5	
ankerite	1- 2	0.1-0.3	
opaque	0.1	cryptocrystalline	
veins, veinlets			
1) quartz-ankerite	4- 5	0.2-1.5 (qz); 0.05-0.15 (ak)	
2) calcite	0.5	0.05-0.2	

Clinopyroxene forms subhedral to euhedral phenocrysts and clusters of a few phenocrysts that were altered completely to ankerite and much less abundant disseminated sericite.

The groundmass is dominated by plagioclase (altered completely to sericite) with disseminated prismatic mafic grains (probably actinolite) that were altered completely to ankerite and minor sericite. Coarser plagioclase grains (0-.2-0.3 mm) commonly are rectangular in outline. A few flakes of muscovite up to 0.5 mm across may be secondary after plagioclase phenocrysts.

Leucoxene forms disseminated ragged patches up to 0.1 mm in size.

Opaque forms disseminated, anhedral patches up to 0.1 mm in size.

No fuschite or mariposite were recognized.

Two fragments 2.5 mm across consists of interlocking, equant, relatively fresh plagioclase grains intergrown coarsely with a few patches of ankerite.

A band up to 2 mm wide of uncertain origin is dominated by coarser grained, prismatic plagioclase that was altered moderately to sericite and to dusty opaque, with interstitial patches of ankerite.

A vein up to a few mm wide is of quartz and ankerite.

A few veinlets from 0.05-0.4 mm wide are of calcite. One braided veinlet was formed along the quartz-ankerite vein. One veinlet cuts the quartz-ankerite vein. Another vein widens locally to include a replacement patch 1 mm wide.

Sample K07-5 11.2 m **Slightly Porphyritic Andesite**
Alteration: Quartz-Chlorite-Calcite-Sericite
Amygdules: Quartz-Calcite-(Pyrite)
Replacement: Quartz-Calcite-Pyrite
Veinlets: Calcite

Minor phenocrysts of plagioclase (altered completely to sericite) and clinopyroxene (altered completely to chlorite-calcite) are set in a groundmass of chlorite with disseminated grains and clusters of quartz, disseminated sericite flakes, and scattered patches of each of ankerite/calcite, pyrite, and leucoxene. Several ovoid amygdules are of quartz and/or calcite with locally moderately abundant pyrite. A large replacement patch is of coarser grained quartz with much less abundant calcite and pyrite. A few late veinlets are of calcite.

mineral	percentage	main grain size range (mm)	
phenocrysts			
plagioclase	0.3%	0.3-0.8	
clinopyroxene	0.2	0.5-0.8	
groundmass			
quartz	30-35	0.1-0.3	
chlorite	30-35	0.01-0.03	
sericite	2- 3	0.01-0.03	
ankerite/calcite	1- 2	0.05-0.2	
leucoxene	0.7	cryptocrystalline	
pyrite	0.3	0.05-0.1	
replacement			
quartz	17-20	0.2-1	
calcite	3- 4	0.1-1	(a few grains up to 3 mm across)
pyrite	0.3	0.05-0.1	
veinlets			
calcite	minor	0.02-0.05	

Plagioclase forms a few subhedral to euhedral prismatic phenocrysts that were altered completely to sericite.

Clinopyroxene(?) forms one subhedral prismatic phenocryst that was altered completely to chlorite and patches of calcite.

In the groundmass, quartz forms equant grains and clusters of up to a few grains surrounded by chlorite-(sericite).

Chlorite forms unoriented flakes.

Calcite forms equant, anhedral grains and clusters of a few grains mainly intergrown coarsely with chlorite.

Sericite forms disseminated flakes intergrown with chlorite. A few patches up to 0.7 mm in size are of intergrowths of quartz and lesser sericite.

Pyrite forms disseminated anhedral to subhedral grains.

Leucoxene forms disseminated ragged patches up to 0.1 mm in size.

(continued)

An irregular replacement patch covers about 25% of the section. It is dominated by quartz that contains abundant dusty opaque inclusions, giving the patch its dark colour. Quartz grains enclosed in ankerite commonly are euhedral.

Several ovoid replacement patches or amygdules are of one or more of quartz, calcite, and much less abundant chlorite. A few of these also contain clusters of pyrite and one contains a patch of sericite/muscovite.

A few discontinuous wispy veinlets up to 0.04 mm wide are of calcite.

Sample K07-5 47.7 m **Potassic Hornblende Diorite**
Veinlets: Calcite-(Quartz)

The sample is a medium grained diorite composed of prismatic plagioclase grains and prismatic to interstitial hornblende grains (some grains altered moderately to strongly to tremolite/actinolite or calcite-chlorite), with interstitial patches of K-feldspar, and lesser calcite and chlorite, and disseminated acicular grains of apatite. A few veinlets are of calcite and much less abundant quartz; one also contains minor chlorite.

mineral	**percentage**	**main grain size range (mm)**	
plagioclase	50-55%	0.5-1.5	
hornblende	30-35	0.5-1	
K-feldspar	5- 7	0.05-0.15	
calcite	2- 3	0.1-0.5	
chlorite	1- 2	0.03-0.1	
biotite	0.3	0.5-1	
apatite	0.3	0.2-0.8	(a few from 1-1.5 mm long)
pyrite	minor	0.07-0.15	
veinlets			
calcite-(quartz)	1- 2	0.5-1.5	

Plagioclase forms subhedral to euhedral prismatic grains and anhedral interstitial grains that were altered moderately to sericite.

Hornblende forms subhedral prismatic grains and anhedral interstitial grains that are moderately more abundant in one side of the section than in the other. Pleochroism is from light to medium green to brownish green. Some were replaced partly by patches of calcite and chlorite, and some of these also contain disseminated patches of Ti-oxide/leucoxene. Some were partly replaced by patches up to 2.5 mm across of extremely fine grained unoriented equant tremolite/actinolite.

K-feldspar forms patches of anhedral grains interstitial to plagioclase.

Calcite forms interstitial patches up to 1.5 mm in size.

Chlorite forms a few interstitial patches up to 1.5 mm in size.

Biotite forms disseminated flakes with pleochroism from light to medium brown. Most grains were replaced inwards from their margins by pseudomorphic pale to light green chlorite and minor lenses of Ti-oxide.

Apatite forms acicular grains, some of which were segmented and separated along a basal parting.

Pyrite forms disseminated anhedral to subhedral grains.

Two irregular veinlets up to 0.4 mm wide are of calcite with local patches of quartz. A veinlet up to 0.1 mm wide is of calcite with minor chlorite. A veinlet up to 0.05 mm wide is of calcite and lesser quartz.

Sample K07-5 129.85 m **Porphyritic Gabbro**
Veinlets: Chlorite-Calcite; Calcite

Phenocrysts of clinopyroxene (altered moderately to strongly to tremolite/actinolite) and lesser ones of plagioclase (altered slightly to moderately to sericite) are intergrown with finer grained plagioclase and actinolite/hornblende, with much less abundant tremolite/actinolite and chlorite. An irregular veinlet is of chlorite-calcite. Numerous smaller veinlets are of calcite with minor chlorite.

mineral	percentage	main grain size range (mm)	
phenocrysts			
clinopyroxene	17-20%	1-5	
plagioclase	2- 3	1-1.7	
groundmass			
plagioclase	45-50	0.2-0.7	
actinolite	12-15	0.3-1	
tremolite/actinolite	4- 5	0.15-0.5	
chlorite	4- 5	0.02-0.05	
biotite	0.2	0.2-0.5	
pyrite	0.1	0.02-0.15	(a few up to 0.3 mm)
ilmenite/leucoxene	0.1	0.05-0.15	(a few up to 0.3 mm)
sphene	minor	0.05-0.1	
apatite	minor	0.2-0.5	
veinlets			
1) chlorite-calcite	1- 2	0.2-0.5	
2) calcite	0.1	0.02-0.05	

Clinopyroxene forms equant subhedral to euhedral phenocrysts that were altered slightly to strongly to actinolite, with alteration being mainly along the margins. Alteration on fractures is moderate to dusty semi-opaque.

Plagioclase forms subhedral prismatic phenocrysts that were altered slightly to disseminated flakes of sericite and wispy irregular seams of chlorite. Plagioclase grains were stained light yellow by sodium cobaltinitrite; however, no K-feldspar was identified in the section, and the colour might be due to sericite.

In the groundmass, plagioclase forms equant to prismatic grains that were altered slightly to moderately to sericite as in the phenocrysts.

Actinolite/hornblende forms anhedral, in part interstitial grains intergrown with clinopyroxene and plagioclase. Pleochroism varies in the range from light to medium green in some to light to medium brown in others.

A few patches up to 3 mm in size consists of prismatic to acicular grains of tremolite/actinolite with interstitial patches of chlorite. Some of these also contain 1-3% disseminated anhedral pyrite (0.02-0.05 mm) and a few contain minor calcite in their core.

Chlorite forms disseminated patches from 0.5-1.5 mm in size with pleochroism from pale to light green. Some of these contain clusters of pyrite. It also forms disseminated interstitial patches up to 1 mm in size with a pale brown colour.

(continued)

Biotite forms scattered flakes with pleochroism from pale to light brown; it probably was altered towards chlorite.

Ilmenite (altered to leucoxene) forms disseminated patches.

Sphene forms disseminated ragged grains, mainly enclosed in amphiboles.

Apatite forms scattered acicular grains.

An irregular veinlet up to 0.5 mm wide is of chlorite and lesser calcite. Several veinlets from 0.01-0.05 mm wide are of calcite with minor chlorite.

Sample K07-6 195.80 m Metamorphosed Diorite; Fragment of Monzonite
Vein: Calcite-(Quartz-Pyrite)

The sample consists mainly of anhedral plagioclase grains and much less abundant disseminated equant to prismatic actinolite grains and minor clinopyroxene grains, with interstitial patches of chlorite and minor disseminated pyrite. A large vein is of calcite with minor quartz along its margins and scattered patches of pyrite; it contains a few inclusions of host rock. A second section of the rock contains an inclusion of monzonite that is dominated by plagioclase with disseminated patches of calcite and of epidote and minor disseminated grains of magnetite, hematite, and rutile/ilmenite. The monzonite contains inclusions of a finer grained monzonite dominated by plagioclase with minor disseminated grains of rutile/ilmenite and chalcopyrite-pyrite.

mineral	**percentage**	**main grain size range (mm)**	
plagioclase	60-65%	0.3-0.7	
actinolite	20-25	0.1-0.7	(a few up to 1.3 mm long)
chlorite	5- 7	0.02-0.03	
calcite	3- 4	0.1-0.4	(a few up to 0.7 mm)
clinopyroxene	0.4	0.3-1	
pyrite	0.2	0.01-0.03	
epidote	0.2	0.05-0.15	
apatite	0.1	0.4-0.8	
vein			
1) calcite-(quartz-pyrite)	8-10	0.5-1.5 (ct); 0.03-0.07 (qz: a few up to 0.25 mm); 0.05-0.1 (py)	

Plagioclase forms anhedral, equant to slightly elongate grains that are altered slightly to dusty hematite and disseminated flakes of sericite.

Actinolite forms unoriented, disseminated, subhedral, equant to elongate prismatic grains with pleochroism from pale to light green.

Chlorite forms disseminated interstitial patches mainly from 0.3-0.5 mm in size of unoriented colourless to pale green flakes. At least some of the numerous cavities in the section represent chlorite that was lost from the section during preparation.

Calcite forms irregular interstitial grains, in part intergrown with chlorite. Some of the cavities in the section may represent leached calcite.

Clinopyroxene forms two proximal grains, one prismatic and the other equant that were altered slightly to epidote and actinolite, respectively.

Opaque (pyrite) forms disseminated, anhedral to subhedral grains and clusters of a few grains.

Epidote forms scattered irregular grains in part intergrown with chlorite.

Apatite forms disseminated acicular grains.

A vein 4-5 mm wide is of calcite with minor quartz, mainly along margins of the vein. It contains a few inclusions of host rock up to 1 mm in size. Pyrite forms a few patches up to 0.1 mm in size.

(continued)

Sample K07-6 195.80 m (Second Section)

The monzonite fragment is dominated by equant to locally prismatic plagioclase (altered slightly to sericite) with much less abundant patches of calcite and epidote, and minor disseminated chlorite, quartz, magnetite, hematite, rutile/ilmenite, sphalerite, chalcopyrite, and apatite. Several fragments within the monzonite fragment up to 1.7 mm in size are of finer grained monzonite.

The diorite is similar to that in the first section.

mineral	**percentage**	**main grain size range (mm)**	
plagioclase	80-85%	0.3-0.7	(a few up to 1 mm long)
calcite	7- 8	0.2-0.5	(a few up to 0.8 mm)
epidote	2- 3	0.1-0.2	
chlorite	1	0.05-0.3	
quartz	0.3	0.07-0.15	
magnetite	0.2	0.03-0.07	
hematite	0.2	0.05-0.15	
rutile/ilmenite	0.2	0.05-0.1	
pyrite	0.1	0.03-0.05	
sphalerite	0.1	0.05-0.2	
chalcopyrite	0.1	0.02-0.05	
apatite	0.1	0.05-0.1	
fragments	7- 8	0.05-0.1	

Plagioclase forms equant to prismatic grains that were altered slightly to sericite. Prismatic grains are most common near the contact with diorite.

Calcite forms disseminated patches up to 1 mm in size of anhedral grains.

Epidote forms disseminated patches up to 0.25 mm in size of equant to prismatic grains.

Chlorite forms disseminated flakes and clusters of flakes in patches up to 0.3 mm in size, commonly associated with those of epidote. Chlorite may be secondary after biotite.

Quartz forms scattered grains interstitial to plagioclase.

Magnetite forms disseminated, equant, subhedral to euhedral grains.

Specular hematite forms disseminated platy grains and clusters of a few grains.

Rutile forms anhedral grains that are rimmed by narrow zones of ilmenite.

Pyrite forms disseminated anhedral grains.

Sphalerite forms a few patches up to 0.1 mm in size. It is colourless.

Chalcopyrite forms disseminated anhedral patches up to 0.05 mm in size.

Apatite forms anhedral, equant grains.

A few equant fragment from 1-1.7 mm across are of unoriented slightly interlocking plagioclase (0.05-0.1 mm) with disseminated patches of ilmenite (0.05-0.1 mm) and minor ones of chalcopyrite (0.02-0.05 mm).

Photo 33: to the left: monzonite dominated by plagioclase with interstitial patches of calcite and minor patches of epidote and a patch of rutile rimmed by ilmenite; to the right: inclusion of finer grained monzonite dominated by plagioclase with a patch of ilmenite (rimming rutile which is present just beyond the limit of the photo) and one of chalcopyrite rimming pyrite.

Sample K07-7 115.65 m Microdiorite

Subhedral to euhedral grains of actinolite and apatite and minor ones of clinopyroxene are surrounded by anhedral to subhedral plagioclase (altered moderately to K-feldspar-hematite) with interstitial patches of chlorite, quartz, and calcite, and minor epidote. The drill core contains a fragment up to 15 mm across of more leucocratic diorite dominated by plagioclase with 5% prismatic hornblende/actinolite grains and 5% interstitial patches of calcite; this fragment is not present in the thin section.

mineral	**percentage**	**main grain size range (mm)**	
plagioclase	55-60%	0.2-0.5	(a few up to 0.8 mm long)
actinolite	30-35	0.2-0.5	(a few up to 0.8 mm long)
clinopyroxene	0.7	0.2-0.5	(one grain 1.2 mm across)
apatite	0.7	0.1-0.3	
calcite	2- 3	0.2-0.5	
chlorite	2- 3	0.02-0.05	
quartz	1- 2	0.05-0.15	
pyrite	0.2	0.01-0.03	(a few up to 0.05 mm)
epidote	trace	0.02-0.05	

Actinolite forms subhedral to euhedral, equant to slightly elongate grains with pleochroism from light to medium, slightly brownish green.

Plagioclase forms equant to stubby prismatic, subhedral to anhedral grains, in part interstitial to actinolite. Alteration is slight to moderate to K-feldspar and dusty hematite and slight to sericite.

Clinopyroxene forms scattered equant to slightly prismatic grains, some of which were fractured moderately to strongly and a few of which were altered partly to chlorite.

Apatite forms elongate prismatic grains that are disseminated in plagioclase.

Calcite forms interstitial patches up to 0.7 mm in size.

Chlorite forms interstitial patches up to 0.7 mm in size.

Quartz forms interstitial patches mainly less than 0.2 mm in size. In some patches, chlorite and quartz occur together and in others calcite and quartz occur together. One spheroidal quartz grain is 0.5 mm across.

Pyrite forms disseminated euhedral to subhedral grains.

Epidote forms anhedral, irregular grains.

Sample K07-8 3.0 m **Metamorphosed Porphyritic Mafic Basalt**
Vein: Tremolite-(Calcite)

Phenocrysts of clinopyroxene (altered completely to aggregates or pseudomorphs of actinolite or aggregates of actinolite-calcite) and minor ones of plagioclase (altered slightly to strongly to sericite) are set in a groundmass dominated by actinolite and chlorite, with much less abundant plagioclase and interstitial patches of calcite. A vein is of tremolite and much less abundant calcite.

mineral	**percentage**	**main grain size range (mm)**	
phenocrysts			
clinopyroxene	20-25%	0.5-2	(a few up to 4 mm)
plagioclase	2- 3	0.3-0.7	(a few up to 1.2 mm long)
groundmass			
actinolite	30-35	0.1-0.2	
chlorite	25-30	0.05-0.1	
plagioclase	7- 8	0.07-0.15	
calcite	2- 3	0.3-1	
opaque	0.3	0.02-0.1	
vein			
1) tremolite-(calcite)	3- 4	0.02-0.2 (tr); 0.3-0.7 (ct)	

Clinopyroxene forms euhedral, equant phenocrysts, many of which were altered completely to pseudomorphs of tremolite/actinolite, in part intergrown intimately with patches of chlorite, and many others of which were altered to unoriented intergrowths of prismatic tremolite/actinolite and patches of chlorite and/or calcite. A few phenocrysts contain ragged patches of fractured clinopyroxene enclosed in replacement patches of actinolite-calcite-chlorite. One phenocryst contains a core of fresh clinopyroxene surrounded by a rim of pseudomorphic tremolite/actinolite. A few altered phenocrysts contain disseminated grains of opaque/leucoxene.

Plagioclase forms anhedral equant to prismatic phenocrysts and clusters of a few phenocrysts that were altered slightly to strongly to sericite and locally slightly to disseminated grains of chlorite.

In the groundmass, actinolite forms subhedral to euhedral equant to prismatic grains.

Chlorite forms disseminated flakes interstitial to actinolite.

Calcite forms scattered interstitial patches.

Plagioclase forms disseminated, commonly prismatic grains.

Opaque (probably ilmenite/leucoxene) forms disseminated equant patches with irregular to locally subhedral outlines.

A vein up to 2 mm wide is dominated by feathery to radiating aggregates of tremolite with scattered patches of coarser grained calcite.

Sample K07-8 10.8 m **Hornblende Diorite (Two Phases)**
Vein, Veinlets: ; Pyrite; Calcite-(-Pyrite)

The rock contains two phases, A and B. Phase A is a medium grained hornblende diorite dominated by plagioclase (altered moderately to sericite-clinozoisite) and lesser hornblende with patches of calcite and disseminated grains of pyrite, sphene, and apatite. Phase B is a very fine grained diorite, also dominated by plagioclase and hornblende. A veinlet is of calcsilicate. A vein is of pyrite. A veinlet is of calcite and minor pyrite.

mineral	**percentage**	**main grain size range (mm)**	
Phase A	(55-60% of section)		
plagioclase	35-40	0.5-1.5	
hornblende	15-17	0.3-1.5	(one grain 5 mm across)
biotite	1	0.3-0.5	
sulphide (pyrite)	1	0.1-0.5	
calcite	0.5	0.3-1	
sphene	0.1	0.1-0.2	
apatite	minor	0.3-0.5	
Phase B	(35-40% of section)		
plagioclase	20-25	0.2-0.5	
tremolite/actinolite	5- 7	0.1-0.5	
sulphide (pyrite)	2- 3	0.05-0.3	
hornblende	2- 3	0.1-0.3	
biotite	0.2	0.3-0.5	
sphene	minor	0.07-0.15	
apatite	minor	0.1-0.25	
vein, veinlets			
1) calcsilicate	0.3	0.02-0.05	
2) pyrite	1- 2	0.1-0.3	
3) calcite-(-pyrite)	1	0.1-0.3	

In Phase A, plagioclase forms subhedral prismatic grains that show compositional growth zoning, with a broad core of more-calcic plagioclase (altered moderately to strongly to sericite) surrounded by a thin rim of more-sodic plagioclase (relatively fresh). Locally plagioclase was replaced by irregular patches of K-feldspar.

Hornblende forms one megacryst 5 mm across and anhedral to subhedral grains, some of which were replaced slightly to moderately by calcite and lesser chlorite.

Biotite forms scattered equant to slightly elongate flakes that were altered completely to pseudomorphic chlorite and lenses of Ti-oxide.

Chlorite forms a few interstitial patches up to 1.5 mm in size.

Calcite forms disseminated patches up to 0.3 mm in size.

Opaque sulphide (probably mainly or entirely pyrite) forms disseminated grains and clusters of a few grains, mainly associated with hornblende and biotite.

Sphene forms disseminated anhedral grains associated with mafic minerals and with chlorite.

Apatite forms disseminated equant to prismatic grains.

(continued)

In Phase B, plagioclase forms anhedral to subhedral, equant to prismatic grains that were altered as in Phase A to sericite and minor clinozoisite.

Tremolite/actinolite forms anhedral equant to slightly prismatic grains with pleochroism from pale to light green.

A few patches up to 3 mm across consist of subhedral prismatic grains of plagioclase (altered moderately to strongly to sericite) with interstitial skeletal grains of hornblende with pleochroism from light to medium brown.

Sulphide (pyrite) forms disseminated patches, in part rimmed by quartz or .

Biotite forms scattered flakes that were replaced completely by pseudomorphic chlorite and minor Ti-oxide.

Sphene forms disseminated anhedral equant grains

Apatite forms disseminated, subhedral prismatic grains.

A slightly braided vein 0.3-0.4 mm wide is of massive pyrite.

A vein 0.25-0.3 mm wide is of calcite with much less abundant calcsilicate and pyrite.

A few veinlets veinlet up to 0.1 mm wide are of calcsilicate; where these cut tremolite/actinolite grains, the latter were replaced completely by calcsilicate.

Sample K07-8 119.45 m Gabbro
Replacement: Chlorite-(Calcite-K-feldspar)

The sample is dominated by clinopyroxene and plagioclase with lesser hornblende (in part skeletal) and biotite and accessory tremolite/actinolite, pyrite, sphene (altered to chlorite-Ti-oxide), and minor apatite and epidote. Interstitial patches are of chlorite and much less abundant calcite and K-feldspar.

mineral	**percentage**	**main grain size range (mm)**	
clinopyroxene	45-50%	2-3 (phenos); 0.3-1 (groundmass)	
plagioclase	35-40	0.5-1.2	
hornblende	3- 4	0.5-1.5	
biotite	3- 4	0.5-1	
tremolite/actinolite	1- 2	0.3-0.7	
pyrite	0.3	0.05-0.5	
sphene	0.3	0.1-0.15	(one grain 0.3 mm long)
apatite	0.1	0.07-0.3	
epidote	0.1	0.1-0.2	
chalcopyrite	trace	0.02-0.05	
replacement			
chlorite	1- 2	0.02-0.03	
calcite	0.2	0.2-0.5	
K-feldspar	0.2	0.05-0.1	

Clinopyroxene forms prismatic phenocrysts that were replaced slightly to moderately by irregular patches of tremolite/actinolite. It also forms patches up to a few mm across of anhedral, slightly interlocking grains (0.3-0.7 mm).

Plagioclase forms subhedral prismatic grains that were altered moderately to disseminate flakes of sericite and lesser patches of chlorite.

Hornblende forms anhedral, in part skeletal grains intergrown with plagioclase and clinopyroxene; pleochroism is from light to medium brown to greenish brown.

Biotite forms scattered flakes with pleochroism from pale to medium brown; many were altered to pseudomorphic muscovite or chlorite with lenses of Ti-oxide. A few contain abundant lenses of quartz along cleavage planes and others contain lenses of muscovite along cleavage planes.

Tremolite/actinolite forms scattered interstitial grains with pleochroism from colourless to pale or light green.

Sphene forms anhedral to subhedral disseminated grains. Some are fresh and some were altered completely to chlorite with a network of ribs of leucoxene along two or three major crystallographic directions.

Pyrite forms disseminate patches.

Apatite forms subhedral to euhedral prismatic grains, mainly included in hornblende.

Epidote forms a few irregular grains.

Chalcopyrite forms disseminated grains and clusters of a few grains, in part with pyrite and in as extremely fine grains disseminated in epidote.

A few interstitial replacement patches up to 2 mm in size are of unoriented chlorite flakes with scattered irregular grains of calcite. Smaller interstitial patches are mainly of chlorite. K-feldspar occurs in some interstitial patches adjacent to plagioclase grains, and in places may replace plagioclase grains near their margins.

Sample K07-9 8.7 m **Gabbro**
Veinlets: Calcsilicate-(Calcite-Tremolite/Actinolite); Calcite

The rock consists of an intergrowth of plagioclase (altered slightly to moderately to sericite) and clinopyroxene (altered slightly to completely to tremolite/actinolite or to patches of chlorite, pyrite, and calcite), with lesser biotite (altered partly to muscovite) and tremolite/actinolite and minor interstitial quartz, K-feldspar, and apatite. An interstitial patch is of calcite-quartz-tremolite/actinolite and pyrite. A veinlet is of calcsilicate and minor tremolite/actinolite. A late wispy veinlet is of calcite.

mineral	**percentage**	**main grain size range (mm)**
plagioclase	40-45%	0.5-1.5
clinopyroxene	35-40	0.5-2
biotite	3- 4	0.5-1
tremolite/actinolite	3- 4	0.3-0.7
chlorite	1- 2	0.02-0.05
quartz	1- 2	0.05-0.1
calcite	1	0.2-0.5
K-feldspar	1	0.05-0.1
apatite	0.2	0.1-0.5
pyrite	0.1	0.05-0.1
interstitial patches		
calcite-quartz-tremolite/actinolite-pyrite	0.5	
		0.5-0.7 (ct); 0.1-0.15 (qz), 0.2-0.3 (ta), 0.02-0.05 (py)
veinlet		
1) calcsilicate-(calcite-tremolite/actinolite)	2- 3	0.1-0.3
2) calcite	minor	0.02-0.03

Plagioclase forms subhedral to euhedral prismatic grains that show strong compositional growth zoning from more-calcic cores (altered strongly to sericite) to more-sodic rims (relatively fresh).

Clinopyroxene forms equant anhedral to subhedral grains and clusters of somewhat smaller anhedral grains. Some grains were altered slightly to tremolite/actinolite. Some grains were replaced completely by unoriented aggregates of prismatic tremolite/actinolite. Several patches up to 2.5 mm across with outlines suggestive of original clinopyroxene crystals consist of unoriented intergrowths of chlorite with abundant disseminated pyrite, and in some, ragged grains of calcite.

Biotite forms disseminated flakes with pleochroism from pale to medium brown.

Tremolite/actinolite forms anhedral grains with pleochroism from pale to light green.

Interstitial patches up to 0.5 mm in size are of quartz, chlorite, and K-feldspar. K-feldspar is concentrated moderately to strongly in a diffuse zone that crosses the centre of the section. A few larger interstitial patches up to 1.5 mm across are of chlorite and lesser quartz. An interstitial patch 1.5 mm across is of anhedral calcite and subhedral quartz with disseminated prismatic grains of tremolite/actinolite and a patch of pyrite 0.5 mm across. An interstitial patch 1.2 mm across is of calcite, chlorite, and tremolite/actinolite.

Apatite forms disseminated prismatic to acicular grains, mainly associate with plagioclase and quartz.

Pyrite forms disseminated anhedral grains and clusters of a few grains.

A veinlet 0.2-0.3 mm wide is dominated by calcsilicate (with dusty semi-opaque inclusions) and scattered grains of calcite and of tremolite/actinolite.

A veinlet 0.01-0.02 mm wide of calcite cuts the earlier calcsilicate veinlet.

Sample K07-9 21.05 m **Basalt Flow**
Fragment: Porphyritic Basalt
Vein: Calcite-Quartz; Quartz; Veinlets: Calcite

Minor phenocrysts of plagioclase and clinopyroxene are set in a groundmass dominated by lathy and equant plagioclase with much less abundant interstitial calcite, chlorite, and disseminated pyrite grains. Lathy plagioclase is oriented strongly producing a flow-foliation. A fragment of porphyritic basalt contains large phenocrysts of plagioclase (altered moderately to sericite) and lesser clinopyroxene (altered completely to tremolite-calcite) in a groundmass containing fine lathy plagioclase grains; it was recrystallized slightly to moderately. A vein is of calcite and much less abundant quartz. Several veinlets are of calcite.

mineral	percentage	main grain size range (mm)	
phenocrysts			
plagioclase	2- 3%	0.3-0.5	(a few from 0.7-1.2 mm)
groundmass			
plagioclase	50-55	0.05-0.15	(a few up to 0.2 mm long)
K-feldspar	15-17	0.02-0.05	
calcite	7- 8	0.02-0.03	
chlorite	7- 8	0.01-0.03	
pyrite	2- 3	0.2-0.5	
leucoxene	0.3	cryptocrystalline-0.01	
fragment			
porphyritic basalt	4- 5	0.5-2.5 (phenos); 0.01-0.03 (groundmass)	
vein, veinlets			
1) quartz	0.1	0.03-0.07	
2) calcite-quartz	5- 7	0.5-1.5 (ct; a few up to 2.5 mm); 0.05-0.5 (qz)	

Plagioclase forms subhedral, equant to slightly elongate phenocrysts, some of which were altered moderately to strongly to patches of calcite.

In the groundmass, plagioclase forms abundant lathy grains, many of which are in subparallel orientation. Interstitial to these is equant plagioclase and K-feldspar (0.02-0.05 mm). In numerous diffuse patches, mainly from 0.2-0.5 mm in size, groundmass plagioclase was altered moderately to strongly to sericite with lesser calcite and chlorite; some of these patches contain one to a few lathy grains of plagioclase that are fresh.

Calcite and chlorite form disseminated grains interstitial to plagioclase.

Pyrite forms disseminated anhedral to subhedral equant grains that are concentrated moderately in part of the section.

Leucoxene forms disseminated spots up to 0.02 mm in size. Especially near one end of the section it is concentrated in a few wispy seams parallel to the flow-foliation.

A fragment several mm across of porphyritic hypabyssal basalt contains abundant phenocrysts of plagioclase (altered moderately to sericite) and hornblende (altered completely to chlorite-leucoxene or locally to plagioclase-calcite), and acicular ones of apatite (up to 1.7 mm long) in a sparse groundmass containing lathy plagioclase (0.03-0.05 mm) in a matrix of plagioclase and chlorite with much less abundant apatite and leucoxene, and a few patches up to 1 mm in size of pyrite.

(continued)

A few discontinuous early veinlets up to 0.05 mm wide are of quartz.

A vein 3.5 mm wide is of calcite with much less abundant patches of quartz, mainly along borders of the vein. Where a plagioclase phenocryst borders the vein, the vein contains an extension of the phenocryst 0.15 mm long; the part of the phenocryst in the basalt is altered slightly to moderately to sericite whereas that part in the vein is fresh. Chlorite forms a patch 0.3 mm long in quartz. Several veinlets from 0.05-0.3 mm wide are of calcite.

Bordering the vein in an envelope up to several mm wide, the groundmass of the rock contains much less K-feldspar than normal (based on variation in yellow stain of offcut block).

Sample K07-9 84.45 m Alkali Gabbro
Veinlet: Tremolite-Opaque

The sample consists of plagioclase (altered moderately to strongly to sericite), clinopyroxene (commonly rimmed by actinolite; in part replaced by one or more of actinolite, tremolite, chlorite, and pyrite), actinolite, lesser biotite (commonly with lenses of muscovite), hornblende (commonly interstitial to plagioclase), accessory apatite, and minor K-feldspar, pyrite, and sphene. Tremolite is concentrated in irregular interstitial patches with minor actinolite, pyrite, and apatite; it may, in part at least, be secondary after clinopyroxene. A discontinuous veinlet up to 0.05 mm wide is of tremolite and opaque.

mineral	**percentage**	**grain size (mm)**		**percentage**	**grain size**
plagioclase	55-60%	0.3-1.5	apatite	1- 2	0.1-0.5
clinopyroxene	10-12	1-3	ilmenite	0.3	0.1-0.3
actinolite	7- 8	0.05-1.5	K-feldspar	0.3	0.05-0.15
biotite	7- 8	0.5-1.5	pyrite	0.3	0.05-0.15
hornblende	7- 8	1-2	sphene	0.2	0.1-0.25
tremolite	3- 4	0.02-0.1	epidote	minor	0.1-0.3
veinlet					
1) tremolite-opaque	minor	0.03-0.05			

Plagioclase forms subhedral prismatic to anhedral equant grains, some of which show moderate compositional growth zoning from more-calcic cores (altered moderately to strongly to sericite and dusty clinozoisite) and thin more-sodic rims (relatively fresh). Associated with rims of plagioclase are minor interstitial patches of K-feldspar. A few grains are up to 3 mm long.

Clinopyroxene forms subhedral equant to prismatic grains that range from fresh to altered slightly to moderately to actinolite. Many grains are rimmed by irregular aggregates of actinolite. Some grains were replaced completely by aggregates of chlorite with disseminated pyrite.

Actinolite forms prismatic grains intergrown coarsely with plagioclase and clinopyroxene and much finer clusters of grains rimming clinopyroxene. Pleochroism is from light to medium emerald green.

Biotite forms disseminated flakes with pleochroism from light to medium brown. Most grains contains lenses of muscovite parallel to cleavage. One grain is 3.5 mm long.

Hornblende forms scattered, commonly skeletal grains interstitial to prismatic plagioclase grains; pleochroism of hornblende is from light to medium brown.

Tremolite forms interstitial patches up to a few mm in size of feathery to radiating grains, in part intergrown with much less abundant clusters of actinolite, clusters of pyrite, and disseminated subhedral to euhedral grains of apatite.

Apatite forms disseminated anhedral to subhedral prismatic grains, and is common as subhedral to euhedral grains included in biotite and hornblende. A few elongate grains are from 0.8-1.5 mm long.

Ilmenite (altered to leucoxene) forms disseminated grains and clusters of a few grains.

Pyrite forms disseminated grains intergrown mainly with actinolite.

Sphene forms disseminated subhedral equant grains that were replaced completely by chlorite and a network of ribs of leucoxene. A few grains are up to 0.5 mm long.

Epidote forms disseminated irregular patches up to 0.5 mm in size.

A discontinuous veinlet up to 0.05 mm wide is of tremolite and opaque.

Sample K07-9 124.35 m **Porphyritic Basalt**
Veinlets: Tremolite/Actinolite; Calcite

Phenocrysts of clinopyroxene (altered moderately to completely to tremolite/actinolite and/or ankerite) are set in a groundmass of lathy plagioclase (altered strongly to sericite) and slightly prismatic tremolite/actinolite, with disseminated grains/patches of pyrite. An early veinlet is of tremolite/actinolite. Several later wispy subparallel veinlets are of calcite.

mineral	percentage	main grain size range (mm)
phenocrysts		
clinopyroxene	10-12%	0.5-1.2
hornblende	0.1	0.5
groundmass		
plagioclase	55-60	0.02-0.05
tremolite/actinolite	20-25	0.03-0.07
ankerite	1- 2	0.03-0.05
pyrite	1- 2	0.1-0.5
leucoxene	1- 2	0.005-0.01
veinlets		
1) tremolite/actinolite	0.3	0.01-0.02
2) calcite	0.2	0.02-0.05

Clinopyroxene forms subhedral, equant phenocrysts that were replaced moderately to completely by pseudomorphic tremolite//actinolite and/or patches of ankerite. Some grains have cores of clinopyroxene and rims of tremolite/actinolite; the latter is pleochroic from pale/light to light/medium green.

Hornblende forms one anhedral phenocryst with pleochroism from light to medium brown; it may be secondary after clinopyroxene.

In the groundmass, plagioclase forms unoriented lathy to equant grains that were altered strongly to sericite.

Tremolite/actinolite forms disseminated, anhedral grains interstitial to plagioclase.

Ankerite is concentrated moderately in irregular patches replacing the groundmass moderately to strongly.

Pyrite forms disseminated anhedral grains and clusters of grains, commonly bordering or included in clinopyroxene phenocrysts.

Leucoxene forms disseminated spots from 0.02-0.05 mm in size.

A few subparallel veinlets 0.05-0.08 mm wide are of dense tremolite/actinolite.

A few subparallel discontinuous veinlets up to 0.05 mm wide are of calcite. One of these offsets two of the tremolite/actinolite veinlets and three of the clinopyroxene phenocrysts by 0.2-0.3 mm.

List of Photographs

Photo	Section	Description
K-01	K07-1 28.0 m	to the left: replacement patch of epidote with zones of calcite and a few patches of sulphide; to the right: hypabyssal basalt: lathy plagioclase with interstitial patches of calcite and chlorite and a small, ragged replacement patch of epidote.
02	K07-1 95.55 m	lower right and left: clinopyroxene replaced moderately by tremolite/actinolite and rimmed by tremolite/actinolite; centre: plagioclase (locally fresh and mainly altered strongly to sericite and locally to an irregular patch of epidote); upper left: hornblende, tremolite/actinolite and an irregular patch of sphene with minor sulphide; upper right: patch of epidote-sulphide and minor prismatic tremolite/actinolite.
03	K07-1 163.0 m	to the left: basalt fragment: plagioclase phenocrysts (altered slightly to sericite and tremolite/actinolite) in a matrix of plagioclase-tremolite/actinolite; to the right: amphibolite dominated by tremolite/actinolite with lesser plagioclase and minor chlorite and pyrite.
04	K07-1 164.7 m	metamorphosed porphyritic diorite: plagioclase phenocrysts and ragged tremolite/actinolite phenocrysts in a groundmass of plagioclase and tremolite/actinolite.
05	K07-1 164.7 m	amphibolite: tremolite/actinolite and plagioclase (altered moderately to strongly to calcite-[sericite]) with patches of pyrite; zone of strong granulation of tremolite/plagioclase and plagioclase with interstitial patches of chlorite.
06	K07-2 13.2 m	phenocrysts of clinopyroxene (rimmed by and replaced slightly by tremolite/actinolite enclosed in a groundmass of plagioclase (altered completely to sericite) and tremolite/actinolite.
07	K07-2 13.2 m	clinopyroxene phenocryst with overgrowth of tremolite/actinolite in a groundmass dominated by tremolite/actinolite, in part as prismatic to equant grains (0.05-0.15 mm) and in part as patches of unoriented acicular grains (0.02-0.07 mm); cut by vein of epidote, tremolite/ actinolite (mainly with texture similar to that of acicular tremolite/ actinolite patches in the host rock), and a patch of pyrite.
08	K07-2 120.1 m	porphyritic andesite: phenocrysts of plagioclase in a groundmass of lathy to equant plagioclase and chlorite with minor Ti-oxide; vein of calc-silicate and pyrite.

List of Photographs

Photo	Section	Description
09	K07-2 120.1 m	to the left: fragments of andesite groundmass dominated by plagioclase with lesser chlorite and minor Ti-oxide; in centre: breccia matrix of quartz with much less plagioclase; to the right: clinopyroxene phenocryst with reaction/alteration rim of pseudomorphic tremolite/actinolite and minor groundmass of plagioclase-(chlorite).
10	K07-2 233.65 m	phenocrysts of clinopyroxene (one replaced strongly along fractures by pseudomorphic tremolite/actinolite, the other replaced completely by pseudomorphic tremolite/actinolite) in a groundmass of plagioclase (altered completely to sericite) and much less abundant disseminated tremolite/actinolite; early veinlet of calcite-(quartz – not in photo) offset slightly by later veinlet of calcite-limonite.
11	K07-2 244.1 m	to the left: metamorphosed basalt composed of equant to prismatic plagioclase (altered completely to sericite) and prismatic to equant tremolite/actinolite; to the right: replacement patch/amygdule of calcsilicate (possibly tremolite) and calcite with patches of subhedral to euhedral pyrite.
12	K07-3 9.8 m	subhedral to euhedral clinopyroxene and pyrite (altered strongly to sericite-clinozoisite and containing minor pyrite) and a few patches of calcite (one with pyrite) included in a skeletal grain of hornblende that also contains a few patches of ilmenite/leucoxene.
13	K07-3 24.5 m	clinopyroxene phenocrysts (rimmed by hornblende; one grain altered on fractures to tremolite/actinolite and hornblende) and a few grains of tremolite/actinolite in a groundmass of hornblende and plagioclase (altered strongly to sericite-[chlorite]) with locally abundant disseminated pyrite grains; at the top: edge of calcite vein.
14	K07-4 193.65 m	phenocrysts of clinopyroxene (altered completely to ankerite and minor sericite and leucoxene) and one of plagioclase (altered to pseudomorphic muscovite) in a groundmass of plagioclase (altered completely to sericite) and mafic grains (altered completely to ankerite and minor leucoxene; veinlet of ankerite.
15	K07-4 193.65 m	band of coarser plagioclase (altered slightly to sericite and dusty opaque) with interstitial patches of ankerite; bordered by groundmass of host rock: plagioclase (altered completely to sericite) and mafic minerals (altered completely to ankerite); late veinlet of calcite.

List of Photographs

Photo	Section	Description
16	K07-5 11.2 m	lower right: euhedral phenocryst of clinopyroxene (altered completely to chlorite-calcite and minor quartz); upper centre: amygdule of quartz; remainder is groundmass consisting of chlorite-sericite with disseminated, single grains of quartz and minor ones of calcite, and disseminated patches of leucoxene..
17	K07-5 47.7 m	prismatic plagioclase (altered slightly to moderately to sericite) with anhedral, in part interstitial hornblende; minor interstitial K-feldspar and chlorite, and several acicular to prismatic apatite grains; veinlet of calcite.
18	K07-5 129.85 m	clinopyroxene phenocrysts (altered to dusty semi-opaque along fractures and rimmed by actinolite and tremolite/actinolite; plagioclase (altered slightly to sericite and wispy veinlets of chlorite), tremolite/actinolite, and biotite; irregular veinlets of chlorite-(calcite); irregular patches of ilmenite/leucoxene, in part along the smaller chlorite-rich veinlet.
19	K07-6 195.8 m	large clinopyroxene grain, anhedral plagioclase with disseminated actinolite and interstitial patches of calcite, chlorite, and minor epidote, and minor disseminated pyrite.
20	K07-7 115.65 m	euhedral, equant actinolite and minor subhedral clinopyroxene enclosed in anhedral plagioclase (altered moderately to K-feldspar-hematite) with an interstitial patch of calcite and minor quartz; apatite forms scattered prismatic grains in plagioclase, some of which cannot be seen in the photo.
21	K07-8 3.0 m	phenocrysts of clinopyroxene (one replaced by pseudomorphic tremolite/actinolite with much less abundant chlorite; others replaced by aggregates of tremolite/actinolite and minor chlorite); phenocryst of plagioclase (replaced slightly to moderately by patches of sericite) in a groundmass of tremolite/actinolite-chlorite and lesser plagioclase.
22	K07-8 10.8 m	Phase A: plagioclase (altered moderately to sericite) intergrown with anhedral tremolite/actinolite with minor sphene; vein of pyrite; discontinuous veinlet of calcite and brown semi-opaque (=hematite?).
23	K07-8 10.8 m	Phase B: plagioclase (altered moderately to sericite) and tremolite/actinolite with disseminated patches of pyrite; a veinlet of calc-silicate all these minerals; tremolite/actinolite grains cut by the veinlet were altered completely to calcsilicate.

List of Photographs

Photo	Section	Description
24	K07-8 119.45 m	clinopyroxene (altered slightly to moderately to tremolite/actinolite), plagioclase (altered moderately to sericite), interstitial skeletal hornblende, biotite (with lenses of secondary muscovite parallel to cleavage), grains of tremolite/actinolite, and interstitial patch of chlorite.
25	K07-9 8.7 m	intergrowth of plagioclase (zoned with more-calcic cores altered to strongly to sericite and more-sodic rims relatively fresh) and clinopyroxene (altered slightly to tremolite/actinolite), with lesser tremolite/actinolite and minor apatite, and interstitial patches of quartz, chlorite, and K-feldspar.
26	K07-9 8.7 m	intergrowth of clinopyroxene, plagioclase (compositionally growth-zoned with more-calcic cores altered strongly to sericite and more-sodic rims relatively fresh), biotite (altered partly to pseudomorphic chlorite and lenses of muscovite) and tremolite/actinolite; patch of chlorite-pyrite-(calcite), probably after clinopyroxene, and minor interstitial plagioclase and chlorite.
28	K07-9 21.05 m	two small plagioclase phenocrysts (altered slightly to sericite-calcite) in a groundmass dominated by lathy plagioclase with interstitial plagioclase, calcite, chlorite, and leucoxene; one patch in which the groundmass was altered strongly to sericite-(calcite-chlorite); patch of pyrite.
29	K07-9 21.05 m	fragment: cluster of phenocrysts of plagioclase (altered slightly to sericite) and hornblende (altered completely to chlorite-calcite-leucoxene) with interstitial patches of groundmass dominated by lathy to equant plagioclase with less abundant chlorite, and minor leucoxene and apatite; one interstitial patch dominated by chlorite.
30	K07-9 84.45 m	clinopyroxene (one fresh grain, one altered completely to chlorite with minor pyrite) surrounded by hornblende, with a large flake of biotite (replaced moderately along cleavage by muscovite), and interstitial plagioclase and minor apatite.
31	K07-9 84.45 m	replacement patch of tremolite containing euhedral grains of apatite, disseminated patches of actinolite, and an irregular grain of biotite (altered partly to muscovite); bordered by an aggregate actinolite.
32	K07-9 124.35 m	phenocrysts of clinopyroxene (altered completely to pseudomorphic tremolite and irregular patches of calcite) in a groundmass of lathy plagioclase (altered strongly to sericite) with interstitial tremolite/actinolite and patches of leucoxene; two clusters of pyrite, one in a clinopyroxene phenocryst and one in the groundmass; discontinuous veinlet of calcite.

Report 070951 for:
Louis Doyle, Rein Turna,
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8384 Toombs Drive,
Prince George, BC, V2K 5A3 **November 2007**

Samples: 86001, 86002

Summary

Sample 86001 is a metamorphosed porphyritic rhyolite tuff that contains phenocrysts or crystal fragments of quartz and porphyroblasts of ankerite in a groundmass of quartz and sericite with lesser ankerite, patches of pyrite with lesser chalcopyrite and sphalerite, and disseminated leucoxene/Ti-oxide. A vein is of quartz, ankerite, and chlorite. A smaller vein is of quartz.

Sample 86002 is a metamorphosed, weakly to locally moderately foliated rhyolite flow(?) that is dominated by quartz with much less abundant sericite and porphyroblasts of ankerite. Pyrite forms minor disseminated patches. An early deformed vein is of quartz. Later veins (also slightly deformed) are of quartz with lesser ankerite and patches of pyrite with minor sphalerite. (Note: thin section only)

Photographic Notes:

The scanned sections show the gross textural features of the sections; these features are seen much better on the digital image than on the printed image. Sample numbers are shown in or near the top left of the photos and photo numbers at or near the lower left. The letter in the lower right-hand corner indicates the lighting conditions: P = plane light, X = plane light in crossed nicols, R = reflected light, RX = reflected light and plane light with nicols nearly crossed. Locations of digital photographs (by photo number) are shown on the scanned section.

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Sample 86001 **Metamorphosed Porphyritic Rhyolite Tuff**
Porphyroblasts: Ankerite
Veinlets: Quartz

Phenocrysts or crystal fragments of quartz and porphyroblasts of ankerite are set in a groundmass of quartz and sericite with lesser ankerite, patches of pyrite with lesser chalcopyrite and sphalerite, and disseminated leucoxene/Ti-oxide. A vein is of quartz, ankerite, and chlorite. A smaller vein is of quartz.

mineral	percentage	main grain size range (mm)	
phenocrysts/crystal fragments			
quartz	8-10%	0.3-0.7	(a few from 1- 2 mm)
porphyroblasts			
ankerite	7- 8	1-2	
groundmass			
quartz	30-35	0.02-0.05	
sericite	30-35	0.03-0.1	
ankerite	2- 3	0.03-0.1	
pyrite	2- 3	0.05-0.3	(a few up to 1 mm)
muscovite	1- 2	0.2-0.3	(one flake 0.7 mm)
chalcopyrite	0.2	0.03-0.05	
sphalerite	0.1	0.05-0.15	
leucoxene/Ti-oxide	0.1	cryptocrystalline-0.03	
galena	trace	0.01-0.03	
zircon	trace	0.05-0.08	
veins			
1) quartz-ankerite-chlorite	4- 5	0.05-0.08 (qz), 0.1-0.5 (ak), 0.02-0.05 (cl)	
2) quartz	1- 2	0.2-0.5	

Quartz forms subrounded to subangular grains, most of which appear to be reworked phenocrysts. Most are of single grains, a few are of two grains, and a few are of submosaic aggregates of several grains. Most single grains show uniform extinction, and a few show moderately strained extinction.

Ankerite forms ragged equant porphyroblasts that contain subparallel, wispy seams of leucoxene/Ti-oxide; the orientation of these seams commonly is at a moderate angle to the overall foliation of the rock. .

The groundmass consists of an intergrowth of equant quartz and slightly to locally moderately oriented flakes of sericite in moderately varying proportions. A few seams up to 0.2 mm wide contain sericite with scattered grains of ankerite.

Muscovite forms scattered elongate flakes associated with sericite. One muscovite porphyroblast

Ankerite forms scattered anhedral grains.

Pyrite forms disseminated grains and clusters of grains, commonly associated with ankerite porphyroblasts.

Chalcopyrite forms patches up to 0.5 mm across associated with pyrite and with ankerite porphyroblasts.

(continued)

Sphalerite forms a few patches interstitial to pyrite and associated with chalcopyrite, pyrite, and ankerite porphyroblasts. Sphalerite is pale orange in colour.

Leucoxene/ Ti-oxide forms disseminated patches up to 0.05 mm in size.

Galena forms several angular inclusions in a few grains of pyrite.

Zircon forms disseminated, anhedral to subhedral grains.

A vein up to 2.5 mm wide is of quartz with lesser patches of ankerite and interstitial patches of chlorite. It also contains minor patches of chalcopyrite (0.03-0.07 mm) and minor ones of sphalerite (0.02-0.04 mm).

A vein up to 0.8 mm wide is of quartz with minor ankerite.

Along one side of the section in a weathered zone, ankerite was altered moderately to completely to limonite and sericite is stained orange by limonite. A few patches of pyrite in this zone were fractured moderately and altered strongly along fractures to hematite.

Sample 86002 **Metamorphosed Rhyolite Flow(?)**
Veins: Quartz; Quartz-Ankerite-Pyrite-(Sphalerite)

The sample is weakly to locally moderately foliated and dominated by quartz with much less abundant sericite and porphyroblasts of ankerite. Pyrite forms minor disseminated patches. An early deformed vein is of quartz. Later veins (also slightly deformed) are of quartz with lesser ankerite and patches of pyrite with minor sphalerite. (Note: thin section only)

mineral	**percentage**	**main grain size range (mm)**	
quartz	70-75%	0.03-0.1	
sericite	12-15	0.02-0.05	(a few from 0.1-0.3 mm)
ankerite	7- 8	0.5-1.5	
pyrite	0.5	0.1-0.3	
leucoxene/Ti-oxide	minor	cryptocrystalline-0.01	
sphalerite	trace	0.02-0.03	
veins, veinlets			
1) quartz	1- 2	0.05-0.15	
2) quartz-ankerite-pyrite-(sphalerite)	5- 7	0.05-0.3 (qz, ak); 0.05-0.5 (py), 0.05-0.15 (sl)	

Quartz forms anhedral, submosaic grains (0.03-0.1 mm) and scattered equant grains from 0.15-0.2 mm in size; the latter may be reworked and recrystallized porphyroblasts.

Sericite forms disseminated flakes and is concentrated in wispy seams parallel to foliation. Some of these seams also contain a few flakes of muscovite elongated parallel to the foliation. At one end of the section is a band up to 1.5 mm wide dominated by sericite with lesser ankerite porphyroblasts and minor quartz.

Ankerite forms anhedral equant porphyroblasts and disseminated grains. Porphyroblasts are somewhat skeletal and contains moderately abundant inclusions of quartz and lesser ones of sericite.

Pyrite forms disseminated grains and clusters of a few subhedral to euhedral grains.

Leucoxene/Ti-oxide forms disseminated patches up to 0.05 mm in size.

Sphalerite forms a few grains included in pyrite.

An early, slightly deformed veinlet 0.2-0.3 mm wide of quartz cuts across the foliation.

A vein up to 3 mm wide is of quartz with lesser ankerite and with patches up to 1 mm across of pyrite and much less abundant sphalerite.

List of Photographs

Photo	Sample	Description
01	86001	Reworked phenocrysts of quartz and a ragged porphyroblast of ankerite (partly surrounded by quartz) in a slightly foliated groundmass of sericite and quartz with local concentrations of ankerite in seams with sericite; the ankerite porphyroblast contains patches of pyrite, lesser chalcopyrite and minor sphalerite; the large pyrite grain contains a few inclusions of galena.
02	86001	Replacement patch of pyrite and chalcopyrite with minor sphalerite (in chalcopyrite) and galena (in pyrite) associated with an ankerite porphyroblast and replacement quartz; host rock contains a reworked quartz phenocryst in a groundmass of sericite and quartz with minor ankerite and leucoxene/Ti-oxide.
03	86002	slightly foliated groundmass of quartz with wispy seams of sericite; ragged porphyroblast of ankerite; warped and recrystallized veinlet of quartz; minor patch of leucoxene.
04	86002	host rock: quartz with much less abundant sericite and ankerite; vein: quartz and ankerite with patches of pyrite, minor muscovite, and two grains of sphalerite.

APPENDIX G

KANGAROO PROPERTY
DIAMOND DRILL HOLE LOGS

BARKER MINERALS LTD.

DRILL HOLE NO. K07 - 1

Dip & Azmth Tests			DDH K07-1	Easting (NAD 83): 589003	Core Size: NQ2	Started: May 4, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83): 5837871**	**Hole Azimuth**: 0°	**Finished:** May 6, 2007
9.11	-50.0	342.6	Temp=12.2, Mag=56390, Roll=219.7	**Grid Location:** 200E 800N	**Hole Angle:** -50°	**Logged by:** RT
123.40	-52.2	342.9	Temp=10.8, Mag=56430, Roll=198.6	**Elevation:**	**Total Depth:** 249.39m	**Analysis by:** ActLabs
244.84	-53.4	345.2	Temp=10.9, Mag=57240, Roll=280			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	**To**	**Code**	**Description**	**Py**	**Cpy**	**Pyrr**		**Ep**	**Seri-cite**	**2nd Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	7.75		CASING - Overburden. Mostly rounded rubble. Basalt and diorite. Longest piece is 25cm at 4.5m depth. This appears a good example of a mesocratic diorite with black amphibole phenocrysts in a whitish feldspar matrix. 40% 2-4mm black phenocrysts. 3% disseminated pyrite in the diorite. Spotty sericitic alteration. Calcareous fractures.						1	2			Not magnetic. Weak spotty fizzing.
7.75	10.87		Basaltic volcaniclastic or tuff. Highly fractured. Some rubble. Dark greenish grey. Has light and dark 1mm phenocrysts and clasts. Light feldspar phenocrysts are weakly sericitized. Minor calcite veinlets. Disseminated pyrite. Lower contact is fairly sharp, approximately 20 degrees to core axis (CA).	1					1	2			Weakly magnetic. Weak spotty fizzing.
10.87	11.50		Diorite as in overburden piece above. Black phenocrysts are smaller and fewer - 10%. Minor calcite veinlets. Pyrite is disseminated and blebby alongside fractures. Lower contact is fairly sharp but irregular, approx 30 deg to CA.	2					1				Does not appear magnetic. Fizzing only at calcite veinlets.
11.50	17.52		Basalt. Crystalline rock with 2-3mm mafic phenocrysts. Matrix supported. Fairly highly fractured. Dark to medium greenish grey. 1% calcite veinlets are 10-25 deg to CA. Pyrite is disseminated. Lower contact is in rubble, unclear.	1				1		1			Weak spotty magnetism. Fizzes moderately.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
17.52	20.95		Fault zone. Gouge, breccia and highly altered rock. Strong shearing is not evident notwithstanding the gouge. Light grey. Soft clayey rock. Pervasive sericite is strong. 5% calcite veins, generally 2mm, up to 20mm wide, generally 0-25 deg to CA. Some calcite veins are brownish suggesting Fe carbonate. From 17.68m to 19.2m breccia clasts and gouge lines are semi parallel to core. Heavy gouge from 17.68m - 18.4m. The fault zone appears approx 10 deg to CA. Pyrite occurs disseminated and blebby. Lower contact is 35 deg to CA, marked by parallel stringers of calcite and pyrite.	3						4				Not magnetic. Fizzes very strongly in gouge and calcareous rock.
20.95	21.83		Volcaniclastic. Variable texture, fine to medium grained. Light grey. Pervasive calcite and sericite alteration. 2% calcite veinlets are 30-60 deg to CA. Spotty minor locally pervasive epidote. Disseminated pyrite. Lower contact is sharp, 55 deg to CA.	3				1	2	3			Not magnetic. Fizzes strongly.
21.83	39.68		Basalt. Augite breccia. Hexagonal augite crystals are generally 1cm, up to 2cm. Clast and phynocryst supported matrix. Medium greenish grey. Epidote occurs patchily and with pyritic stringers. Pyrite is disseminated with concentrations in stringers. Pyrite is 5% in stringers between 30-33m, some stringers parallel core here. Minor blebs of chalcopyrite noted at 27.6m and 37.2m. Minor calcite stringers. Minor basalt dikes occur at 27.50-28.43m, 33.10-33.80m, 37.30-37.80m. These are fairly fine textured, uniform, with spotty sericite and epidote. **Specimen taken at 28.00m for thin section,** shows extensive epidote alteration. Lower contact is sharp, 35 deg to CA.	3	tr			1	2	3			Weak spotty magnetism. Weak to moderate fizzing is common.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
39.68	44.40		Felsic dike. Contains several 5-10mm dark xenoliths of rock above. Light grey. Siliceous and hard. Uniform fine grained. Disseminated pyrite. Has small fractures with minor chlorite pervading into rock a few mm. At 43.40m is a 6cm basalt xenolith. No significant quartz or calcite veinlets. Lower contact is 35 deg to CA. Small xenoliths of the rock below occur just above the contact.	2				1	2	1	2		No apparent magnetism. Very weak spotty fizzing, occurs at calcite veinlets.
44.40	50.90		Coarse crowded porphyry. Diorite. Apparently a coarse dike or sill. 90% augite phenocrysts are generally 1cm, up to 2.5cm. Calcareous matrix. Minor calcite veining. Minor disseminated pyrite. This intrusive rock probably post dates the brecciated augite porphyritic basalt of above. It predates the felsite of immediately above and below. Lower contact is clear, 30 deg to CA.	0.1				1		1			No apparent magnetism. Very weak spotty fizzing occurs mainly at calcite veinlets. White matrix between augite phenocrysts sometimes fizzes weakly.
50.90	53.56		Felsic dike. Light grey. Uniform fine grained. Siliceous and hard. Contains ingested xenoliths and augite phenocrysts from intruded rocks above and below. Pyrite is mainly in stringers associated with calcite veinlets this mainly at 52.65m where a 2cm vein is 10 deg to CA. Lower contact is irregular approximately 70 deg to CA.	3				tr	2	1		1	No apparent magnetism. Fizzes very readily, not apparently confined to calcite veinlets.
53.56	56.68		Basalt. Brecciated. Augite phenocrysts are weakly sericitized with a chloritic rhind. These phenocrysts are generally 6-8mm. Minor calcite veinlets. Pyrite is mainly in fractures. At 56.45m a 1cm pyrite stringer, 30 deg to CA has minor chalcopyrite. Lower contact is 40 deg to CA.	2	tr			1	2	2		1	Weakly magnetic near lower contact. Spotty moderate fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
56.68	63.30		Felsic dike. Light grey. Fine grained. Locally brecciated. Siliceous and hard. At 56.8m a pyrite stringer has minor chalcopyrite. Pyrite is disseminated and in fractures. At 57.9m contains a 6cm xenolith of augite basalt. At 60.75m a 6cm quartz vein has drusy vugs and pyritic selvages. Below this vein pyritic gouge extends to 61.00m. Lower contact is 85 deg to CA, marked by 2cm gouge.	1	tr				2	2			No apparent magnetism. Fizzes very readily, not apparently confined to calcite veinlets.
63.30	66.15		Brecciated augite porphyritic basalt as at 54-56m. Calcareous. Disseminated and blebby pyrite also occurs as stringers. Minor quartz and quartz carbonate veinlets are generally 30 deg to CA. 10cm carbonate veinlet at 64.3m is 25 deg to CA, has pyritic selvages. 30cm of gouge and rubble occurs at 64.3m. Minor gouge at 65.25m. Lower contact is unclear, apparently lost in gougy rubble.	5				1	3	2			No apparent magnetism. Spotty moderate fizzing.
66.15	67.98		Brecciated augite porphyritic basalt as above. Calcareous. Is less pyritic, sericitic and calcareous than above. But for weaker overall alteration this rock is essentially the same as that above. There may be a gradation into the diorite crowded porphyry below.	2					1	1		1	Weak spotty magnetism. Spotty weak fizzing.
67.98	81.13		Coarse crowdwed porphyry. Diorite. Similar to that at 45-50m. Apparently a coarse dike. 90% augite phenocrysts are generally 6mm, up to 2cm. Calcareous matrix. Minor calcite veining. Minor disseminated pyrite. At 68.53m Spotty minor epidote.	0.1				tr	1	1			No apparent magnetism. Rare fizzing, apparently only at calcite veinlets.

Depth (m)								Alteration Scale: 1 - 5					
From	To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
81.13	91.48		Basalt. 10% augite phenocrysts up to 5mm, these are sericitized to a light greenish grey colour. Dark grey rock is mainly altered to a medium grey. Minor calcite veinlets. Pyrite is disseminated but most occurs as veinlets with calcite. Minor patchy epidote. 87.50-91.15m has poor recovery. Fractured rock and rubble here. Lower contact appears 60 deg to CA.	2				1	2	2	1		No apparent magnetism. Rare fizzing, apparently only at calcite veinlets.
91.48	93.73		Felsite dike. Similar to those above. Hard and siliceous. Contains some xenoliths of augite basalt. Calcareous. Pyrite is disseminated and in fractures. Minor calcite veinles. Lower contact is 75 deg to CA.	1					2	1			Not magnetic. No fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
93.73	148.53		Crowded augite porphyritic diorite. Dark greenish grey. 90% 1-2cm dark augite phenocrysts. Pervasively calcareous. Minor calcite veinlets generally 45 deg to CA. At **95.55m a specimen taken for thin section,** shows locally brecciated crowded porphyry. 95.35-96.35 has several 1cm pyrite stringers at 20 deg to CA. Pyrite is disseminated and concentrated in fractures and closely associated with minor epidote in groundmass between phenocrysts. Massive homogenous texture. Pervasive alteration is generally weak. Local breccia at 99.2-100.45m, with 3cm quartz calcite vein 80 deg to CA. 101.82-103.55m has several 1cm calcite veins and minor vein breccia, 2% pyritic here. 107.92-109.50m has slightly more epidote, associated with 2% pyrite in small disseminated blebs. 114.02-115.53m has several larger epidote blebs, to 5mm size. 119.81-121.34 has some breccia in upper half with more irregular calcite veinlets, pyrite is disseminated 1%. 124.39-126.82 has an average type section, disseminated 1% pyrite with minor epidote between 90% 1cm augite phenocrysts.	1				1	1	1			Below approx. 130m magnetism increases imperceptably from absent to very weak, spotty. Very weak spotty fizzing occurs mainly at calcite veinlets. White matrix between augite phenocrysts sometimes fizzes weakly.
Continued from above.			129.57-131.40m has 3mm pyrite stringer 20 deg to CA. Pyrite decreases slowly downward from 1% to 0.1%. 142.02-142.45m has 4mm pyrite stinger 25 deg to CA. Lower contact is lost in broken rock, appears approx 70 deg to CA.										

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
148.53	154.87		Andesite dike. Dark to medium grey. Fine grained. Locally brecciated. Contains xenoliths of augite porphyry. Minor calcite veinlets, increasing downward from 151.50m to lower contact. Pyrite is blebby, concentrated in small stringers. 148.78-151.82m has several small pyrite stringers at 10 deg and 30-60 deg to CA. Lower contact is 50 deg to CA.	5					1	1			No apparent magnetism. Rare fizzing, apparently only at calcite veinlets.
154.87	182.65		Basalt. Commonly brecciated. Dark grey to blackish. Augite phenocrysts to 1cm are commonly evident in dark rock, these make 5-50% of the rock, varies. Small blebs of epidote occur with pyrite blebs. Sericitic alteration is local to carbonate veinlets. Calcite veinlets make 1% of rock and are generally 40-60 deg to CA. A stockwork of calcite veinlets occurs from the upper contact to approx 156m. Quartz veinlets are less. Pyrite is blebby and in stringers, not uniformly disseminated. Small blebs of chalcopyrite occur with pyrite stringers at 161.4m, 164.5m 171.7m. Spots of copper drillers paste is smeared on core at 169-174m. **At 163.00m a specimen taken for thin section,** shows coarse crowded phenocrysts. **At 164.70m a specimen taken for thin section**, shows vein & sulphides in crowded porphyry. 178.35-178.65m has gouge. Lower 10m appears pervasively silicified. Lower contact appears intrusive, is irregular but clear, 75 deg to CA.	5	tr	tr		tr	1	1	2	3	Spotty weak to moderate magnetism appears related to spotty pyrrhotite. Spotty inconsistent fizzing, locally strong, locally weak. Calcite veinlets always fizz.

								Alteration Scale: 1 - 5					
Depth (m)		Litho-		%	%	%			Seri-	2nd	2nd	2nd	
From	To	Code	Description	Py	Cpy	Pyrr		Ep	cite	Carb	Sil	Chl	Reactions to Magnet & Acid.
182.65	187.19		Silicified siltstone. Can resemble a 'felsite'. Very fine grained. Hard, siliceous. Tan coloured but extensive hairline chloritic fracturing darkens the rock. Pyrite is irregularly disseminated, and spotty blebs and patches occur. 1% carbonate veinlets are generally 40-60 deg to CA. Local incipient breccias appear sometimes related to calcite veins. At 183.32m is a finely banded 3cm vein at 45 deg to CA, quartz, calcite with 5mm chalcopyrite interior. Similar quartz calcite veins of this orientation occur at approx 1 per metre between 162.6m above and 184m. 183.75-184.60m is moderately sheared 55 deg to CA. 184.60-187.19m is soft, gougy, intensely brecciated, apparently a fault zone.	1				tr	1	2	2	3	No apparent magnetism. Spotty weak fizzing.
187.19	234.60		Tan hard very fine grained silicified siltstone as above. Same extensive dendritic hairline chloritic fractures as above. Imperceptibly becoming lighter colour downward. In places the original dark grey to black colour of the rock is evident. At fractures and veins the rock is altered by pervasive silicification to a tan colour. Pyrite is less but upper part of interval has locally 2-5%. Lower contact is unclear, may be gradational, appears lost in 30cm gougy fracture zone.	0.5					1	1	3	2	Fairly weak spotty magnetism occurs mainly near 188m, 203m, 230-232m. Fizzes only at calcite veinlets. At approximately 226-230m volcaniclastic interbeds fizz moderately.
234.60	249.39		Dark (graphitic?) siltstone. Dark grey to black. Uniform fine grained. Fine wispy bedding in a 2cm layer is 45 deg to CA at 248.0m. Patchily silicified. Disseminated pyrite. **End of Hole at 249.39m.**	0.5						1	1		Spotty magnetism. Fizzes only at calcite veinlets.

Lithology: DDH K07 - 1

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	7.75	**CASING - Overburden.**						1	2		
7.75	10.87	**Basaltic volcaniclastic or tuff.**	1					1	2		
10.87	11.50	**Diorite**	2					1			
11.50	17.72	**Basalt**	1				1		1		
17.72	20.95	**Fault zone. Gouge**	3						4		
20.95	21.83	**Volcaniclastic.**	3				1	2	3		
21.83	39.68	**Basalt. Augite breccia.**	3	tr			1	2	3		
39.68	44.40	**Felsic dike.**	2				1	2	1	2	
44.40	50.90	**Coarse crowded porphyry. Diorite.**	0.1				1		1		
50.90	53.56	**Felsic dike.**	3				tr	2	1		1
53.36	56.68	**Basalt. Brecciated.**	2	tr			1	2	2		1
56.68	63.30	**Felsic dike.**	1	tr				2	2		
63.30	66.15	**Basalt. Brecciated.**	5				1	3	2		
66.15	67.98	**Basalt. Augite breccia.**	2					1	1		1
67.98	81.13	**Coarse crowded porphyry. Diorite.**	0.1				tr	1	1		
81.13	91.48	**Basalt**	2				1	2	2	1	
91.48	93.73	**Felsic dike.**	1					2	1		
93.73	148.53	**Coarse crowded porphyry. Diorite.**	1				1	1	1		
148.53	154.87	**Andesite dike.**	5					1	1		
154.87	182.65	**Basalt**	5	tr	tr		tr	1	1	2	3
182.65	187.19	**Siltstone.**	1				tr	1	2	2	3
187.19	234.60	**Siltstone.**	0.5					1	1	3	2
234.60	249.39	**Siltstone.**	0.5						1	1	
		End of Hole.									

BARKER MINERALS LTD.

DRILL HOLE No. K07-1

Sample Intervals: DDH K07 - 1													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2295	187401	8.81	10.87	2.06	< 2	0.4	39	60	0.47	< 0.5	< 2	< 1	0.9
A07-2295	187402	10.87	14.32	3.45	< 2	< 0.3	107	52	1.82	2.1	< 2	< 1	1.4
A07-2295	187403	14.32	16.15	1.83	< 2	< 0.3	64	58	0.87	4.6	< 2	< 1	1.9
A07-2295	187404	16.15	17.52	1.37	< 2	< 0.3	42	92	0.82	4.7	< 2	< 1	3.3
A07-2295	187405	17.52	19.20	1.68	60	0.5	171	403	1.82	269	< 2	< 1	76.9
A07-2295	187406	19.20	20.95	1.75	54	0.4	132	110	2.75	194	< 2	< 1	49.6
A07-2295	187407	20.95	21.83	0.88	< 2	< 0.3	132	60	3.68	39.4	< 2	< 1	31.5
A07-2295	187408	21.83	24.79	2.96	< 2	< 0.3	54	25	0.7	< 0.5	< 2	< 1	0.9
A07-2295	187409	24.79	26.82	2.03	< 2	0.3	40	27	0.73	< 0.5	< 2	< 1	1.2
A07-2295	187410	26.82	27.55	0.73	< 2	< 0.3	103	33	2.94	< 0.5	< 2	< 1	1
A07-2295	187411	27.55	28.35	0.80	< 2	< 0.3	226	51	0.45	< 0.5	< 2	< 1	1.1
A07-2295	187412	28.35	29.87	1.52	< 2	< 0.3	48	29	0.87	< 0.5	4	< 1	0.9
A07-2295	187413	29.87	31.41	1.54	< 2	0.4	28	32	2.2	< 0.5	< 2	< 1	< 0.1
A07-2295	187414	31.41	33.00	1.59	< 2	0.4	95	75	3.81	13.6	< 2	< 1	0.7
A07-2295	187415	33.00	34.75	1.75	< 2	< 0.3	166	36	3.24	3.2	< 2	< 1	< 0.1
A07-2295	187416	34.75	35.97	1.22	< 2	< 0.3	55	30	1.24	< 0.5	< 2	< 1	0.7
A07-2295	187417	35.97	37.80	1.83	< 2	< 0.3	45	30	1.46	2.1	< 2	< 1	0.6
A07-2295	187418	37.80	39.68	1.88	< 2	< 0.3	83	31	2.79	2.9	< 2	< 1	< 0.1
A07-3760	85551a	WCM Minerals Standard PB114			808	26.6	3450	10400	1.79	24.4	3	< 1	63.5
A07-3760	85552	39.68	41.15	1.47	< 2	0.5	112	29	0.8	8.8	< 2	< 1	0.5
A07-2295	187419	41.15	42.30	1.15	< 2	< 0.3	527	24	0.94	2.3	< 2	< 1	< 0.1
A07-2295	187420	42.30	44.40	2.10	< 2	< 0.3	265	21	2.23	< 0.5	< 2	< 1	< 0.1
A07-2295	187421	44.40	46.01	1.61	< 2	0.4	111	34	1.31	< 0.5	< 2	< 1	< 0.1
A07-3760	85553	46.01	49.00	2.99	< 2	< 0.3	137	38	1.41	< 0.5	4	< 1	0.5
A07-2295	187422	49.00	50.90	1.90	< 2	< 0.3	179	59	3.77	< 0.5	< 2	< 1	1
A07-3760	85554	50.90	52.45	1.55	< 2	< 0.3	96	66	1.34	6.6	7	< 1	1.1
A07-2295	187423	52.45	53.56	1.11	24	0.7	96	45	8.59	25.8	< 2	< 1	13.8
A07-2295	187424	53.56	55.25	1.69	< 2	0.4	140	40	2.63	4.9	< 2	< 1	1.4
A07-2295	187425	55.25	56.68	1.43	< 2	0.7	111	39	2.11	< 0.5	< 2	< 1	0.9
A07-2295	187426	56.68	59.45	2.77	10	< 0.3	174	33	4.85	< 0.5	< 2	< 1	1.9
A07-2295	187427	59.45	61.00	1.55	< 2	0.4	154	60	4.84	71.6	< 2	< 1	5.2
A07-2295	187428	61.00	63.30	2.30	5	0.3	136	48	2.7	15.9	< 2	< 1	5.7
A07-2295	187429	63.30	66.15	2.85	< 2	< 0.3	119	37	2.87	13.3	< 2	< 1	5.5

BARKER MINERALS LTD.

DRILL HOLE No. K07-1

Sample Intervals: DDH K07 - 1													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2295	187430	66.15	67.98	1.83	< 2	< 0.3	132	45	1.57	2.1	< 2	< 1	1.6
A07-2295	187431	67.98	69.51	1.53	< 2	< 0.3	139	37	2.57	< 0.5	3	< 1	1.1
A07-3760	85555	69.51	70.42	0.91	< 2	< 0.3	214	32	1.7	< 0.5	3	< 1	1.6
A07-3760	85556	70.42	73.34	2.92	< 2	0.3	340	31	1.94	< 0.5	5	< 1	2.1
A07-3760	85557	73.34	75.00	1.66	< 2	0.4	329	32	1.33	< 0.5	5	< 1	1.3
A07-3760	85558	75.00	78.04	3.04	17	< 0.3	303	29	1.41	< 0.5	3	< 1	1.3
A07-2295	187432	78.04	81.13	3.09	< 2	0.4	167	35	1.99	< 0.5	< 2	< 1	0.6
A07-2295	187433	81.13	82.10	0.97	14	< 0.3	313	35	5.1	2.1	< 2	< 1	1
A07-3760	85559	82.10	84.75	2.65	13	< 0.3	150	52	2.11	12.1	< 2	< 1	1
A07-3760	85560	84.75	86.89	2.14	< 2	< 0.3	204	41	2.49	< 0.5	3	< 1	0.9
A07-3760	85561	86.89	91.48	4.59	< 2	< 0.3	202	45	2.23	8	3	< 1	2.8
A07-3760	85562	91.48	92.68	1.20	< 2	< 0.3	435	38	3.64	7	2	< 1	1.6
A07-3760	85563	92.68	93.73	1.05	< 2	< 0.3	126	53	0.78	3.3	< 2	< 1	2.4
A07-3760	85564	93.73	95.35	1.62	26	< 0.3	148	97	1.49	5.3	3	< 1	1.4
A07-2295	187434	95.35	96.35	1.00	346	0.7	297	530	8.7	61.2	< 2	< 1	3.1
A07-3760	85565	96.35	98.00	1.65	40	0.4	135	925	2.96	13.6	3	< 1	2.8
A07-3760	85566	98.00	99.20	1.20	< 2	0.3	113	41	1.46	< 0.5	< 2	< 1	1.5
A07-2295	187435	99.20	100.45	1.25	20	< 0.3	86	49	1.3	6.1	< 2	< 1	2.5
A07-3760	85567	100.45	101.82	1.37	< 2	< 0.3	120	55	1.32	5.8	4	< 1	2.2
A07-2295	187436	101.82	103.55	1.73	< 2	< 0.3	112	42	1.29	< 0.5	< 2	< 1	1.6
			Sampling gap - 4.37m										
A07-2295	187437	107.92	109.50	1.58	< 2	< 0.3	140	414	1.28	< 0.5	< 2	< 1	0.5
			Sampling gap - 4.52m										
A07-2295	187438	114.02	115.53	1.51	< 2	0.5	80	41	1.31	< 0.5	2	< 1	< 0.1
			Sampling gap - 4.28m										
A07-2295	187439	119.81	121.34	1.53	< 2	< 0.3	104	36	1.01	< 0.5	< 2	< 1	< 0.1
			Sampling gap - 3.05m										
A07-2295	187440	124.39	126.82	2.43	< 2	< 0.3	118	33	1.48	< 0.5	< 2	< 1	< 0.1
			Sampling gap - 2.75m										
A07-2295	187441	129.57	131.40	1.83	< 2	0.5	136	30	1.54	1.5	< 2	< 1	0.7
A07-2295	187442a	WCM Minerals Standard PB113			1240	19.2	4720	12700	2.45	127	< 2	< 1	28.7
			Sampling gap - 10.62m										
A07-2295	187443	142.02	142.45	0.43	< 2	0.5	410	52	4.7	< 0.5	< 2	< 1	< 0.1

BARKER MINERALS LTD.

DRILL HOLE No. K07-1

Sample Intervals: DDH K07 - 1													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
			Sampling gap - 6.33m										
A07-2295	187444	148.78	150.33	1.55	< 2	0.4	214	443	7.06	3.1	< 2	< 1	0.7
A07-2295	187445	150.33	151.82	1.49	< 2	0.6	255	48	4.43	2.3	< 2	< 1	< 0.1
A07-2295	187446	151.82	154.87	3.05	< 2	0.4	183	70	3.19	2.6	< 2	< 1	< 0.1
A07-3760	85568	154.87	156.82	1.95	< 2	< 0.3	100	30	1.44	< 0.5	3	< 1	0.3
A07-3760	85569	156.82	159.50	2.68	< 2	< 0.3	257	42	2.01	5.1	3	< 1	< 0.1
A07-2295	187447	159.50	160.97	1.47	< 2	0.5	297	41	2.67	< 0.5	< 2	< 1	0.6
A07-2295	187448	160.97	162.37	1.40	< 2	< 0.3	329	49	3.52	3	< 2	< 1	0.4
A07-2295	187449	162.37	164.02	1.65	< 2	< 0.3	428	51	4.85	11.5	2	< 1	0.8
A07-2295	187450	164.02	165.53	1.51	15700	4.9	288	249	3.71	14.5	< 2	< 1	0.8
A07-2295	187451	165.53	167.07	1.54	16	0.3	103	26	1.27	< 0.5	< 2	< 1	< 0.1
A07-2295	187452	167.07	168.60	1.53	< 2	0.6	160	37	2.09	< 0.5	< 2	< 1	0.8
A07-2295	187453	168.60	170.12	1.52	20	0.4	184	77	2.17	4	< 2	< 1	1.6
A07-3760	85570a	WCM Minerals Standard PB114			836	25.6	3460	10500	1.77	22.3	< 2	5	63.3
A07-3760	85571	170.12	171.32	1.20	10	< 0.3	164	76	1.61	7	< 2	< 1	2.8
A07-3760	85572	171.32	173.17	1.85	< 2	< 0.3	134	42	1.45	< 0.5	2	< 1	3.4
A07-3760	85573	173.17	175.00	1.83	< 2	< 0.3	129	29	1.9	< 0.5	5	< 1	3.1
A07-3760	85574	175.00	176.21	1.21	< 2	< 0.3	193	52	1.88	5.3	< 2	< 1	4.9
A07-3760	85575	176.21	178.65	2.44	14	0.4	206	101	1.74	5.7	< 2	< 1	3.4
A07-2295	187454	178.65	180.20	1.55	< 2	< 0.3	176	51	1.67	7.7	< 2	< 1	2.3
A07-2295	187455	180.20	181.70	1.50	21	< 0.3	181	55	2.47	11.4	< 2	< 1	4
A07-2295	187456	181.70	182.65	0.95	13	0.4	141	44	2.29	8.1	< 2	< 1	4.9
A07-2295	187457	182.65	184.60	1.95	< 2	0.3	71	71	2.2	71.5	< 2	< 1	13.3
A07-2295	187458	184.60	186.05	1.45	29	0.6	84	61	1.06	180	< 2	< 1	13.5
A07-2295	187459	186.05	187.19	1.14	62	0.5	90	54	0.61	218	< 2	< 1	10
A07-3760	85576	187.19	188.41	1.22	< 2	< 0.3	323	68	1.83	14.4	< 2	< 1	12.4
A07-3760	85577	188.41	189.63	1.22	8	0.5	35	29	0.31	3.4	< 2	< 1	1.7
A07-3760	85578	189.63	190.54	0.91	< 2	< 0.3	168	60	0.41	11.8	< 2	< 1	2.3
A07-2295	187460	190.54	192.37	1.83	< 2	< 0.3	171	61	0.6	3.3	< 2	< 1	0.9
A07-3760	85579	192.37	193.90	1.53	< 2	0.7	146	60	0.76	5	< 2	< 1	2.1
A07-3760	85580	193.90	196.50	2.60	< 2	< 0.3	144	63	0.76	15.1	< 2	< 1	1.3
A07-3760	85581	196.50	197.56	1.06	< 2	< 0.3	161	65	0.77	22.2	< 2	< 1	2.2
A07-2295	187461	197.56	199.25	1.69	< 2	0.3	145	58	1.28	7	< 2	< 1	2.4

BARKER MINERALS LTD.

DRILL HOLE No. K07-1

Sample Intervals: DDH K07 - 1													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3760	85582	199.25	202.13	2.88	4	< 0.3	290	59	1.79	19.2	< 2	< 1	1.5
A07-3760	85583	202.13	204.26	2.13	< 2	< 0.3	278	55	1.44	26	< 2	< 1	1.7
A07-3760	85584	204.26	205.50	1.24	< 2	0.4	220	60	1.4	10.5	< 2	< 1	1.2
A07-3760	85585	205.50	207.13	1.63	< 2	< 0.3	242	60	1.63	24.6	< 2	< 1	1.6
A07-2295	187462	207.13	208.23	1.10	< 2	0.3	145	67	1.74	12.4	< 2	< 1	1.5
A07-3760	85586a	WCM Minerals Standard PB115			47	17.3	5820	15000	2.15	28.1	4	< 1	40.2
A07-3760	85587	208.23	210.81	2.58	< 2	< 0.3	132	68	0.55	16.1	< 2	< 1	2.1
A07-3760	85588	210.81	212.70	1.89	< 2	0.4	11	61	0.06	10.2	< 2	< 1	1.1
A07-3760	85589	212.70	214.02	1.32	< 2	0.5	7	57	0.02	8.3	< 2	< 1	1.4
A07-3760	85590	214.02	215.85	1.83	3	< 0.3	69	64	0.39	15.8	< 2	< 1	4.8
A07-3760	85591	215.85	217.98	2.13	< 2	0.4	22	77	0.12	9	< 2	< 1	2.7
A07-3760	85592	217.98	219.20	1.22	< 2	< 0.3	62	62	0.36	10.6	< 2	< 1	7
A07-3760	85593	219.20	221.64	2.44	< 2	0.3	25	51	0.04	6	< 2	< 1	1.7
A07-3760	85594	221.64	223.84	2.20	< 2	0.4	151	66	0.9	22.7	< 2	< 1	15.3
A07-3760	85595	223.84	225.70	1.86	< 2	< 0.3	134	62	0.73	11.5	< 2	< 1	3
A07-3760	85596	225.70	228.04	2.34	< 2	< 0.3	243	84	1.52	14.8	< 2	< 1	5.3
A07-3760	85597	228.04	231.09	3.05	< 2	< 0.3	202	62	1.27	15.1	< 2	< 1	6.1
A07-3760	85598	231.09	233.08	1.99	< 2	< 0.3	147	67	0.96	9.1	< 2	< 1	4.4
A07-3760	85599	233.08	234.60	1.52	25	0.7	90	81	0.49	447	3	< 1	7.5
A07-3760	85600	234.60	235.93	1.33	5	0.5	109	65	0.56	43.6	< 2	< 1	3.7
A07-2295	187463	235.93	237.00	1.07	18	0.8	72	78	0.81	238	< 2	< 1	20.7
A07-2295	187464	237.00	238.65	1.65	< 2	< 0.3	112	93	1.49	17	< 2	< 1	4.5
A07-3760	85601	238.65	241.45	2.80	19	< 0.3	156	72	1.07	17.6	< 2	< 1	2.6
A07-3760	85602	241.45	243.71	2.26	< 2	0.4	123	68	0.49	9.2	3	< 1	2
A07-3760	85603	243.71	246.44	2.73	< 2	0.3	149	75	0.65	8.5	< 2	< 1	1.6
A07-3760	85604	246.44	249.39	2.95	16	0.5	159	94	1.01	11.9	< 2	< 1	2
A07-3760	85605a	WCM Minerals Standard PB113			3740	20.6	4760	13000	2.13	128	< 2	< 1	26.5
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 1

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
3.04	4.57	1.53	**0**
4.57	5.48	0.91	**0**
5.48	7.62	2.14	**0**
7.62	8.81	1.19	**0**
8.81	9.45	0.64	**0**
9.45	10.97	1.52	**3**
10.97	14.23	3.26	**13**
14.23	16.15	1.92	**11**
16.15	17.68	1.53	**9**
17.68	19.20	1.52	**0**
19.20	20.73	1.53	**0**
20.73	23.78	3.05	**23**
23.78	26.82	3.04	**24**
26.82	29.87	3.05	**36**
29.87	32.92	3.05	**25**
32.92	35.97	3.05	**17**
35.97	37.80	1.83	**16**
37.80	39.02	1.22	**4**
39.02	41.15	2.13	**21**
41.15	41.76	0.61	**2**
41.76	44.81	3.05	**33**
44.81	47.86	3.05	**16**
47.86	50.30	2.44	**13**
50.30	53.35	3.05	**34**
53.35	56.09	2.74	**26**
56.09	58.23	2.14	**19**
58.23	59.45	1.22	**7**
59.45	62.50	3.05	**21**
62.50	64.63	2.13	**9**
64.63	66.15	1.52	**7**
66.15	67.07	0.92	**8**
67.07	67.98	0.91	**9**
67.98	69.51	1.53	**32**
69.51	70.42	0.91	**16**
70.42	72.56	2.14	**2**
72.56	75.00	2.44	**16**
75.00	78.04	3.04	**20**
78.04	81.09	3.05	**20**
81.09	81.70	0.61	**8**
81.70	84.75	3.05	**25**
84.75	86.89	2.14	**31**
86.89	87.50	0.61	**5**
87.50	91.15	3.65	**3**
91.15	92.68	1.53	**21**
92.68	93.59	0.91	**3**
93.59	96.64	3.05	**33**
96.64	96.95	0.31	**3**
96.95	100.00	3.05	**24**
100.00	101.82	1.82	**14**
101.82	104.87	3.05	**21**
104.87	107.92	3.05	**20**
107.92	110.97	3.05	**34**
110.97	114.02	3.05	**38**
114.02	117.07	3.05	**17**
117.07	119.81	2.74	**17**
119.81	121.34	1.53	**11**
121.34	124.39	3.05	**15**
124.39	126.82	2.43	**28**
126.82	129.57	2.75	**24**
129.57	131.40	1.83	**19**
131.40	134.45	3.05	**50**
134.45	136.28	1.83	**28**
136.28	138.41	2.13	**28**
138.41	139.63	1.22	**6**
139.63	142.68	3.05	**32**
142.68	145.73	3.05	**37**
145.73	148.78	3.05	**37**
148.78	151.82	3.04	**32**
151.82	154.87	3.05	**50**
154.87	157.92	3.05	**26**
157.92	160.97	3.05	**16**
160.97	164.02	3.05	**14**
164.02	167.07	3.05	**25**
167.07	170.12	3.05	**26**
170.12	173.17	3.05	**19**
173.17	176.21	3.04	**10**
176.21	178.65	2.44	**11**
178.65	181.70	3.05	**12**
181.70	184.75	3.05	**12**
184.75	187.19	2.44	**4**
187.19	188.41	1.22	**4**
188.41	189.63	1.22	**8**
189.63	190.54	0.91	**7**
190.54	192.37	1.83	**2**
192.37	193.90	1.53	**16**
193.90	194.20	0.30	**6**
194.20	196.95	2.75	**10**
196.95	197.56	0.61	**10**
197.56	200.30	2.74	**8**
200.30	202.13	1.83	**20**
202.13	204.26	2.13	**5**
204.26	206.40	2.14	**10**
206.40	208.23	1.83	**4**
208.23	211.28	3.05	**2**
211.28	214.02	2.74	**3**
214.02	215.85	1.83	**5**
215.85	217.07	1.22	**0**
217.07	217.98	0.91	**2**
217.98	219.20	1.22	**3**
219.20	221.64	2.44	**6**
221.64	224.69	3.05	**8**
224.69	227.74	3.05	**14**
227.74	228.04	0.30	**9**
228.04	231.09	3.05	**5**
231.09	234.14	3.05	**13**
234.14	236.58	2.44	**11**
236.58	240.24	3.66	**15**
240.24	243.29	3.05	**25**
243.29	246.34	3.05	**6**
246.34	249.39	3.05	**5**
End of Hole			

Core Recovery: DDH K07 - 1														
					Recovered								**Recovered**	
Box No.	From	To	Distance		(metres)	**%**		Box No.	From	To	Distance		(metres)	**%**
1	3.04	11.77	8.73		5.0	**57**		33	178.66	184.43	5.77		5.8	**101**
2	11.77	17.43	5.66		5.0	**88**		34	184.43	189.96	5.53		4.8	**87**
3	17.43	21.53	4.10		3.8	**93**		35	189.96	194.59	4.63		4.6	**99**
4	21.53	28.01	6.48		5.8	**90**		36	194.59	200.22	5.63		5.6	**99**
5	28.01	33.22	5.21		5.2	**100**		37	200.22	205.38	5.16		5.1	**99**
6	33.22	37.86	4.64		4.6	**99**		38	205.38	210.81	5.43		5.4	**99**
7	37.86	43.30	5.44		5.4	**99**		39	210.81	215.76	4.95		4.9	**99**
8	43.30	48.39	5.09		5.1	**100**		40	215.76	219.20	3.44		3.2	**93**
9	48.39	53.49	5.10		5.1	**100**		41	219.20	223.84	4.64		4.5	**97**
10	53.49	58.23	4.74		4.7	**99**		42	223.84	228.10	4.26		4.3	**101**
11	58.23	63.09	4.86		4.8	**99**		43	228.10	233.08	4.98		5.0	**100**
12	63.09	67.83	4.74		4.6	**97**		44	233.08	237.77	4.69		4.6	**98**
13	67.83	73.74	5.91		5.8	**98**		45	237.77	243.71	5.94		5.8	**98**
14	73.74	78.74	5.00		5.0	**100**		46	243.71	249.11	5.40		5.4	**100**
15	78.74	83.77	5.03		5.0	**99**		47	249.11	249.31	0.20		0.2	**100**
16	83.77	91.84	8.07		5.6	**69**		End of Hole						
17	91.84	96.64	4.80		4.7	**98**								
18	96.64	101.82	5.18		5.0	**97**								
19	101.82	107.21	5.39		5.4	**100**								
20	107.21	112.72	5.51		5.5	**100**								
21	112.72	117.90	5.18		5.2	**100**								
22	117.90	123.67	5.77		5.6	**97**								
23	123.67	129.37	5.70		5.7	**100**								
24	129.37	134.79	5.42		5.4	**100**								
25	134.79	140.22	5.43		5.4	**99**								
26	140.22	145.73	5.51		5.5	**100**								
27	145.73	151.30	5.57		5.5	**99**								
28	151.30	156.82	5.52		5.5	**100**								
29	156.82	162.22	5.40		5.4	**100**								
30	162.22	167.79	5.57		5.5	**99**								
31	167.79	173.41	5.62		5.6	**100**								
32	173.41	178.66	5.25		5.2	**99**								

PROPERTY: KANGAROO

BARKER MINERALS LTD.

DRILL HOLE NO. K07 - 2

Dip & Azmth Tests			DDH K07-2	**Easting (NAD 83):** 588904	**Core Size:** NQ2	**Started:** May 7, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5837923	**Hole Azimuth**: 0°	**Finished:** May 10, 2007
9.15	-48.4	340.5	Temp=15.1, Mag=56690, Roll=338.9	**Grid Location:** 100E 850N	**Hole Angle:** -50°	**Logged by:** RT
122.00	-48.4	344.1	Temp=14.5, Mag=56520, Roll=296.3	**Elevation:**	**Total Depth:** 244.61m	**Analysis by:** ActLabs
240.03	344.1	348.8	Temp=16.3, Mag=56630, Roll=303.6			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

							Alteration Scale: 1 - 5						
Depth (m)		**Litho-**		**%**	**%**	**%**	**Cr**		**Seri-**	**2nd**	**2nd**	**2nd**	
From	**To**	**Code**	**Description**	**Py**	**Cpy**	**Pyrr**	**mica**	**Ep**	**cite**	**Carb**	**Sil**	**Chl**	**Reactions to Magnet & Acid.**
0.00	5.00		CASING - Overburden. Broken rock and some rubble. Dark greenish grey basaltic breccia. Augite phenocrysts to 1cm are sericitized light grey. Minor spotty pyrite.	0.1					1				No apparent magnetism. Fizzing only at calcite veinlets.
5.00	5.10		Basalt. As above. Lower contact is irregular jagged and appears that the basalt intrudes the siliceous rock below. This section is too short to describe much.	0.1					1		1		
5.10	11.78		Siltstone. Apparently primarily siliceous but further silicified locally. Dark to light grey, light where locally silicified. Pyrite is spotty in small blebs and fractures. Siliceous, very hard. Very fine grained. Minor calcite and quartz veinlets 10-60 degrees to core axis (CA), mostly 40-60 deg to CA. Lower contact appears approx 60 deg to CA, somewhat confused by quartz veinlets and pervasive silicification.	0.1						1	2		Not magnetic. Weak, rare fizzing.
11.78	14.18		Basalt. Dark greenish grey basaltic breccia. Augite phenocrysts to 1cm are sericitized light grey. Minor spotty pyrite. **At 13.20m a specimen taken for thin section,** shows basalt breccia. Lower contact is 60 deg to CA	0.5				tr	1	1		tr	Not magnetic. No fizzing.
14.18	18.33		Siliceous siltstone. Silicified further locally. Dark to light grey. Very hard. Very fine grained. Pyrite is spotty, in fractures, fine stringers. Lower contact is lost in broken rock.	0.5				tr	1	tr	1	1	Does not appear magnetic. No fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr	Alteration Scale: 1 - 5 Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
18.33	22.71		Brecciated, veined gougy siliceous siltstone. Locally brecciated, gougy, veined, altered, bleached. Appears a veined fault zone. Pyrite and chalcopyrite occur in blebs in calcite quartz veins,and isolated blebs and fractures. Chalcopyrite bleb at 19.70m. At 20.28-21.32.0m a gougy fractured (fault?) zone. Bottom 50cm has patchy chalcopyrite throughout (10% with pyrite). Lower contact is 55 deg to CA, marked by calcite veinlet and edge of gouge.	1	0.5			tr	4	4	3		Not magnetic. Very weak fizzing.
22.71	59.00		Siliceous siltstone as at 15-18m. Very hard, very fine grained rock. Medium greenish grey. Pyrite is spotty but fairly abundant in small blebs and fractures and in quartz calcite veinlets. Calcite veinlets make 1% of rock, quartz much less. Veinlet attitudes are 10-60 deg to CA, mainly 40 deg. Chalcopyrite is prominent in a quartz calcite vein at 25.59-26.42m, this 5cm ragged irregular vein is approx 10 deg to CA. Pyrite and chalcopyrite make approx 5% of the rock atabout 25m-27m. At 27.2m a 6cm quartz calcite pyrite with chalcopyrite vein is 25 deg to CA. Lower contact is approximate, unclear in a zone of bleached silicified siltsone above and volcanic below.	3	0.5				1	1	1	1	Not magnetic. Moderate, spotty fizzing occurs.
59.00	63.70		Andesite. Massive. Uniform medium grained. Lower contact is irregular, bleached. Disseminated pyrite. Approx 0.1% calcite veining, generally 50 deg to CA.	0.5				tr		1			Not magnetic. Moderate fizzing occurs regualrly throughout.
63.70	64.36		Siliceous siltstone as at 22-59m. Light grey, bleached. Very hard, very fine grained rock. Silicification is weak to moderate, local patches occur extensively but are not ubiquitous. Lower contact is brecciated with quartz veinlets.	0.5					1	1	1		Not magnetic. Very weak fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr	Alteration Scale: 1 - 5 Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
64.36	66.45		Diorite dike. The intrusive nature of this rock is clear at the upper and lower contacts where small pieces of the siliceous siltstone occur as small xenoliths in this rock. The diroite is dark greenish grey where not bleached. Pyrite is blebby spotty, concentrated at the upper contact with trace chalcopyrite. Calcite quartz veins are 2% occuring at the contacts and internal breccia with pyrite. Upper 30cm has coarse blebby pyrite with quartz veinlets.	1	tr				2	2	2		No magnetism. No fizzing.
66.45	72.80		Siliceous siltstone as above. Dark grey rock is mostly silicified and bleaced light grey, bleached. Very hard, very fine grained rock. Silicification is moderate to fairly strong, Locally brecciated. Pyrite is spotty, in quartz veinlets. Brecciated from 69.1m to 70.7m. 15cm pyritic gouge zone just above 70.7m. Lower contact is sharp, 45 deg to CA.	3						1	2		No magnetism. Fizzing is moderate and spotty.
72.80	82.30		Andesite dike. Medium green. Fairly fine uniform texture. 15cm xenolith of silicified siltstone occurs at 81.2m. Epidote is minor but fairly evenly distributed in fractues with calcite and pyrite. At 74.80m is 20cm gouge. 76-77m has somewhat more epidote. Pyrite is spotty. Lower contact is unclear, approx 65 deg to CA.	1				1		1			No magnetism. Fizzes very strongly and readily.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr	Alteration Scale: 1 - 5 Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
82.30	98.30		Siliceous siltstone as above. Dark grey rock is mostly silicified and bleaced light grey, bleached. Very hard, very fine grained rock. Silicification is moderate to fairly strong, Epidote is locally fairly strong but mainly confined to andesitic dikelets at 90.2m, 93.05-93.65m. Local ten patches may be related to Fe carbonate. Locally brecciated. Pyrite is spotty, locally 10% in breccia and irregular calcite quartz veins with trace chalcopyrite. Cave in occured at 86.3m. Intensity of pyritization increases below 86.3m, generally 5% here to lower contact. At 87.5-88.7m is gouge and rubble. At 95.25-95.50m is 10% pyrite, 0.5% chalcopyrite in an irregular quartz vein at indeterminable attitude. Lower contact is lost in breccia and intensely fractured rock.	2	tr	tr		2		1	2	1	Magnetism is not apparent. Strong magnetism is apparent only at approx. 95m. Fizzing is moderate and spotty.
98.30	103.53		Andesite dike as at 68-82m. Fairly fine uniform texture. 1% augite phenocrysts 2-4mm. Minor pyrite is disseminated and in fractures. No significant veining. Lower contact is sharp, 55 deg to CA. No significant contact metasomatic effect in either rock at contact.	0.1				1		1			Not magnetic. Weak, spotty fizzing.
103.53	117.10		Siliceous siltstone as above. Mainly dark grey, not silicified or bleached as above. Fairly fine uniform texture and sparse small phenocrysts as before. Pyrite is spotty, concentrated in fractures. Cave in below 109.15m. Lower contact is uncler in fractured rock.	2					1	1			Not magnetic. Very weak fizzing.

Depth (m)		Litho-					Alteration Scale: 1 - 5						
From	To	Code	Description	% Py	% Cpy	% Pyrr	Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
117.10	127.60		Augite basalt breccia. Dark greenish grey. 10% 2-4mm augite phenocrysts. Pyrite is disseminated mainly, also in fractures with calcite and epidote. Local minor silicification and bleaching. Patchy weak epidote occurs with pyrite in calcite veinlets. Contains some diorite xenoliths, perhaps a flow breccia. **At 120.10m a specimen taken for thin section,** shows dark breccia.	3				1	1	1	1		Not magnetic. Weak spotty fizzing occurs.
127.60	148.40		Siliceous siltstone. Dark to medium grey. Very fine and hard as above. Locally, intensely fractured and brecciated. Minor calcite and quartz veinlets. Pyrite is mainly in fractures. At 128-140m occur several 10-15cm sericitized andesite dikelets. At 139.6-141.1m and 144-145 occur 50% rubble. Lower 8m is more intensely fractured and more bleached (silicified). Lower contact is indistinct, gradational.	0.1					1	1	2		Not magnetic. Weak spotty fizzing occurs.
148.40	176.10		Intensely fractured and brecciated siliceous siltstone. This appears an incipient tectonic breccia with clasts not rotated rotated with respect to one another. Chlorite fills abundant hairline fractures. Minor calcite and quartz veinlets. At 158.8-160.4m is 50% rubble with gouge. Cave in occured at 159.5m. Pyrite and rare chalcopyrite specks concentrate in minor patches mainly below 164m where the rock is darker and more chloritic. Tiny green specks (fuschite?) noticed at 155.2m, 158.1m, 176.0m. Lower contact is lost in fractured rock.	0.5	tr		tr		1	1	2	2	Not magnetic. Very weak fizzing up to 170m. Very strong fizzing from 171m-174m.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr	Alteration Scale: 1 - 5 Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
176.10	194.70		Intensely fractured and brecciated siliceous siltstone. Similar to that above. Brecciation is less. Pervasive chlorite is more. Rock is dark to medium greenish grey. Pyrite occurs irregularly, patchy. Minor calcite and quartz veinlets. At 191.76-192.15m is muddy seam where a cave in occured. Lower contact is 20 deg to CA, marked by chloritic fracture.	0.5		0.1		1		1		3	Moderate magnetic reaction up to 186m, however no magnetism at 180m. Moderate fizzing. At 185m, fizzing is very strong.
194.70	197.96		Chloritized andesite dike mixed with chloritized siltstone. Pyrite is patchy. Veinlets are minor. Lower contact appears 30 deg to CA, is unclear in chloritic alteration.	0.5		0.1		1				4	Magnetism is weak and spotty. Fizzing is moderate to strong and spotty.
197.96	213.06		Siliceous siltstone. Very fine and hard. Fairly intensely fractured. Upper 2m is greenish due to pervasive and fracture chlorite, this diminished downward away from andesit dike above. Pyrite is spotty, more below 201m. Minor calcite veinlets are 20-70 deg to CA. Dark green specks appear to be fuschite at 203.7m. Fracture intensity is very high below 201m with much rubble and gouge. 203-212.2m is mostly rubble. Pyritic gouge section occurs at 206.4-207.1m. Lower contact is sharp, marked by calcite veinlet and intense chloritic fracturing for 1m above contact.	2			tr			1	1	2	No magnetism is apparent. Fizzing only occurs in veinlets and gouge.
213.06	214.67		Basaltic dike. Dark greenish grey, slight pervasive tan may be due to iron carbonate. Variable texture is due to xenoliths. Minor quartz and calcite veinlets. Pyrite occus irregularly, as patchy disseminations, small stringers and as 1mm crystals in one location. Lower contact is very jagged, orientation is unclear.	0.5					1	1		3	Not magnetic. Weak, spotty fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr	Alteration Scale: 1 - 5 Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
214.67	217.40		Siliceous siltstone. Very fine and hard. Very intense chloritic fracturing. Lower contact is lost in rubble.	1					4	3	3	3	No magnetism. Weak, spotty fizzing.
217.40	218.55		Basaltic dike. Dark greenish grey. Small feldspar phenocrysts are sericitized. Small augite phenocrysts have sericitic-pyritic rhinds. Minor calcite quartz veinlets. Pyrite is mostly disseminated. Lower contact is irregular, indistinct.	1					2	2		4	Not magnetic. Fizzing is moderate throughout.
218.55	229.50		Siliceous siltstone. Very hard, very fine grained rock. Medium greenish grey, with pervasive tan, possibly due to iron carbonate. Pyrite occurs irregularly, patchily disseminated, local blebs and in chloritic fractures, locally cubes are 1-2mm. Pyrite is up to 5% in some local spots. Minor spotty disseminated pyrrhotite. Veining remains minor, calcite-quartz at 30-80 deg to CA. Lower contact is fairly sharp, 30 deg to CA. **At 229.00-229.25m has library piece removed**, showing hydrothermally altered silsone with spotty pyrite and pyrrhotite.	2		tr			2	3	2	2	Weak magnetism only near 228m. Very weak fizzing.
229.50	232.38		Diorite. Dark greenish grey. Uniform fine to medium grained texture, crowded porphyry. 2-5mm feldspar phenocrysts and 2-3mm augite phenocrysts make 80% of rock. Pyrite is mainly disseminated. Minor calcite and quartz veinlets. Lower contact is fairly sharp, 30 deg to CA. **At 230.64m a 10cm library piece removed**, showing diorite character.	0.5		tr				1		3	Very weak, spotty magnetism. Fizzing only at calcite veinlets.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr	Alteration Scale: 1 - 5 Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
232.38	233.54		Semi-massive pyrrhotite. 70% sulphide. Coppery metallic colour in a black chloritic groundmass. Pyrite is locally strong in blebs and stringers associated with calcite and small blebs of chalcopyrite. Lower contact is fairly sharp, 30 deg to CA. **At 232.33-232.68m has two 17cm adjacent pieces removed for library**, showing contact with diorite above, semi-massive pyrrhotite below. **At 233.44-233.64m has two 10cm adjacent pieces taken for library**, showing contact with diorite intruding the semi-massive pyrrhotite with pyrrhotite xenolith in diorite.	1	0.1	70				1		4	Strongly magnetic. Fizzing only at calcite veinlets.
233.54	236.39		Diorite. Same as above. Dark greenish grey. Uniform fine to medium grained texture, crowded porphyry. 2-5mm feldspar phenocrysts and 2-3mm augite phenocrysts make 80% of rock. Pyrite is mainly in fractures. No significant veining. Lower contact is fairly sharp, 30 deg to CA; diorite appears bleached, metasomatized by contact with the rock below. **At 233.65m a specimen taken for thin section,** shows pervasive alteration. **At 234.90-235.20m has 30cm library piece removed** showing diorite character. **At 236.36-236.42m has 6cm library piece removed** showing contact.	1		0.1				1		3	Weak, spotty magnetism. No fizzing.
236.39	237.94		Siliceous siltstone. Typically very fine and hard. Light greenish grey. Has chloritic fractires with minor pyrite. Lower contact is sharp, 45 deg to CA. **At 237.80-238.18m has two adjacent (13cm, 25cm) pieces removed for library**, showing siltstone-pyrrhotite contact.	0.5		0.1						1	Very weak, spotty magnetism. No fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr	Alteration Scale: 1 - 5 Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
237.94	239.04		Semi-massive pyrrhotite. 70% sulphide. Coppery metallic colour in a black chloritic groundmass. Pyrite is locally strong in blebs and stringers associated with calcite and small blebs of chalcopyrite. Lower contact is confused in chloritic fractures, perhaps 45 deg to CA. **At 238.81-239.13m has two adjacent (25cm, 7cm) pieces removed for library**, showing pyrrhotite-siltstone contact.	1	tr	70						4	Strongly magnetic. No fizzing.
239.04	243.50		Siliceous siltstone. Typically very fine and hard. Light greenish grey with pervasive tan. Has chloritic fractires with minor pyrite. Lower contact is sharp, 35 deg to CA. **At 243.43-243.57m has a 14cm piece removed for library removed**, showing contact.	0.5		tr						1	Very weak, spotty magnetism. No fizzing.
243.50	244.61		Basaltic lava. Dark greenish grey. Fairly uniform texture. Pyrite and augite crystals have alteration rhinds around them. The pyrite ones may be amygdules. They have pyrite interiors, with quartz around making a smooth edged round or ovoid 3-4mm diameter, this in turn has a greenish sericitic alteration rhind around that has a jagged exterior side. **At 244.10m a specimen taken for thin section,** showing amygdules(?). **End of Hole at 244.61m**	0.1								2	Weakly magnetic. No apparent fizzing.

Lithology: DDH K07 - 2

Depth (metres)		Summary Description	%	%	%	Alteration Scale: 1 - 5					
From	To		Py	Cpy	Pyrr	Cr mica	Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	5.00	**CASING - Overburden.**	0.1					1			
5.00	5.10	**Basalt.**	0.1					1		1	
5.10	11.78	**Siltstone.**	0.1						1	2	
11.78	14.18	**Basalt.**	0.5				tr	1	1		tr
14.18	18.33	**Siltstone.**	0.5				tr	1	tr	1	1
18.33	22.71	**Siltstone, brecciated.**	1	0.5			tr	4	4	3	
22.71	59.00	**Siltstone.**	3	0.5				1	1	1	1
59.00	63.70	**Andesite.**	0.5				tr		1		
63.70	64.38	**Siltstone.**	0.5					1	1	1	
64.38	66.45	**Diorite.**	1	tr				2	2	2	
66.45	72.80	**Siltstone.**	3						1	2	
72.80	82.30	**Andesite.**	1				1		1		
82.30	98.30	**Siltstone.**	2	tr	tr		2		1	2	1
98.30	103.53	**Andesite dike.**	0.1				1		1		
103.53	117.10	**Siltstone.**	2					1	1		
117.10	127.60	**Basalt. Augite breccia.**	3				1	1	1	1	
127.60	148.40	**Siltstone.**	0.1					1	1	2	
148.40	176.10	**Siltstone, brecciated.**	0.5	tr		tr		1	1	2	2
176.10	194.70	**Siltstone.**	0.5		0.1		1		1		3
194.70	197.96	**Andesite dike.**	0.5		0.1		1				4
197.96	213.06	**Siltstone.**	2			tr			1	1	2
213.06	214.67	**Basaltic dike.**	0.5					1	1		3
214.67	217.40	**Siltstone.**	1					4	3	3	3
217.40	218.55	**Basaltic dike.**	1					2	2		4
218.55	229.50	**Siltstone.**	2		tr			2	3	2	2
229.50	232.38	**Diorite**	0.5		tr				1		3
232.38	233.54	**Semi-massive pyrrhotite.**	1	0.1	70				1		4
233.54	236.30	**Diorite**	1		0.1				1		3
236.30	237.79	**Siltstone.**	0.5		0.1						1
237.30	239.21	**Semi-massive pyrrhotite.**	1	tr	70						4
239.21	243.50	**Siltstone.**	0.5		tr						1
243.50	244.61	**Basaltic lava.**	0.1								2
		End of Hole.									

BARKER MINERALS LTD.

DRILL HOLE No. K07-2

Sample Intervals: DDH K07 - 2													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3767	85626	4.18	5.10	0.92	11	< 0.3	136	82	0.95	2.7	2	< 1	0.8
A07-3767	85627	5.10	8.23	3.13	10	< 0.3	166	236	0.97	5.6	< 2	< 1	1.2
A07-3767	85628	8.23	11.78	3.55	< 2	< 0.3	261	130	1.71	< 0.5	< 2	< 1	0.8
A07-3767	85629	11.78	14.18	2.40	< 2	< 0.3	116	68	0.63	< 0.5	9	< 1	0.5
A07-3767	85630	14.18	16.47	2.29	< 2	< 0.3	156	353	1.09	2.4	< 2	< 1	1.1
A07-2300	187465	16.47	18.33	1.86	< 2	< 0.3	229	31	2.05	10.9	< 2	< 1	1
A07-2300	187466	18.33	20.28	1.95	84	0.9	532	187	2.47	202	< 2	< 1	25.4
A07-2300	187467	20.28	21.32	1.04	10	< 0.3	159	42	1.42	112	< 2	< 1	20.2
A07-2300	187468	21.32	22.21	0.89	10	< 0.3	337	531	2.79	31.8	< 2	< 1	5.6
A07-2300	187469	22.21	22.71	0.50	428	10.1	5110	29900	9.89	243	2	10	21.8
A07-2300	187470	22.71	23.78	1.07	< 2	< 0.3	295	132	1.77	13	< 2	< 1	2.9
A07-2300	187471	23.78	25.59	1.81	42	1.2	236	248	2.04	27.3	< 2	< 1	2.3
A07-2300	187472	25.59	26.42	0.83	109	16.7	6330	531	3.56	34.9	4	< 1	6
A07-2300	187473	26.42	27.20	0.78	74	7	8120	307	6.22	94.4	< 2	< 1	29.8
A07-2300	187474	27.20	28.80	1.60	< 2	0.4	409	81	1.88	15.8	< 2	< 1	3
A07-2300	187475	28.80	29.26	0.46	39	1.4	1010	172	2.07	51	2	< 1	4.2
A07-2300	187476	29.26	30.79	1.53	21	0.5	505	185	3.09	29.7	< 2	< 1	4.3
A07-2300	187477	30.79	32.31	1.52	8	< 0.3	288	171	3.36	44.8	< 2	< 1	4.5
A07-3767	85631	32.31	35.36	3.05	14	0.9	306	89	2.61	54.2	< 2	< 1	4.5
A07-3767	85632	35.36	37.17	1.81	< 2	< 0.3	100	89	0.52	40.2	< 2	< 1	2.6
A07-3767	85633	37.17	40.24	3.07	< 2	0.5	118	50	0.77	39.9	< 2	< 1	1.4
A07-3767	85634	40.24	42.07	1.83	12	0.5	125	48	0.35	18.8	< 2	< 1	1.1
A07-3767	85635	42.07	43.00	0.93	6	0.6	85	49	0.2	3.8	< 2	< 1	1.3
A07-3767	85636	43.00	46.00	3.00	< 2	0.3	32	78	0.34	7.4	< 2	< 1	1.2
A07-3767	85637	46.00	48.17	2.17	< 2	0.3	72	39	1.05	3.2	< 2	< 1	1
A07-3767	85638	48.17	50.00	1.83	< 2	< 0.3	11	45	0.94	3.4	< 2	< 1	1.6
A07-3767	85639	50.00	51.90	1.90	< 2	0.7	1070	55	2.88	10.4	< 2	< 1	3.1
A07-3767	85640a	WCM Minerals Standard PB114			728	23.4	3310	11800	1.83	21.8	6	3	58.5
A07-2300	187478	51.90	53.40	1.50	24	< 0.3	97	132	1.62	12.9	< 2	< 1	1.6
A07-3767	85641	53.40	55.00	1.60	< 2	< 0.3	56	37	1.36	10.3	< 2	< 1	3.5
A07-3767	85642	55.00	57.31	2.31	18	< 0.3	75	46	0.71	10.3	< 2	< 1	2.8

BARKER MINERALS LTD.

DRILL HOLE No. K07-2

Sample Intervals: DDH K07 - 2													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2300	187479	57.31	59.00	1.69	5	< 0.3	22	45	0.61	8.8	< 2	< 1	3.8
A07-2300	187480	59.00	60.36	1.36	7	< 0.3	97	48	1.51	5	< 2	< 1	2
A07-3767	85643	60.36	62.36	2.00	< 2	< 0.3	121	53	1.59	6.2	< 2	< 1	1.8
A07-3767	85644	62.36	64.36	2.00	< 2	< 0.3	74	67	1.31	42.3	< 2	< 1	3.6
A07-2300	187481	64.36	64.66	0.30	952	1.2	193	6560	7.88	126	< 2	10	8
A07-2300	187482	64.66	66.48	1.82	32	< 0.3	88	87	2.44	30.3	< 2	< 1	3.1
A07-3767	85645	66.48	69.12	2.64	20	< 0.3	221	84	1.03	38.3	< 2	< 1	8
A07-2300	187483	69.12	70.77	1.65	15	0.3	76	67	0.69	81	< 2	< 1	20.1
A07-2300	187484	70.77	72.80	2.03	21	< 0.3	137	41	1.99	102	< 2	< 1	46.4
A07-3767	85646	72.80	74.70	1.90	< 2	< 0.3	52	43	1.13	3.3	< 2	< 1	1.3
A07-3767	85647	74.70	74.90	0.20	< 2	< 0.3	41	33	1.21	8.1	< 2	< 1	5.5
A07-3767	85648	74.90	76.00	1.10	< 2	< 0.3	38	49	0.77	< 0.5	< 2	< 1	1
A07-2300	187485	76.00	77.13	1.13	< 2	< 0.3	292	47	2.66	13.6	< 2	< 1	1.5
A07-3767	85649	77.13	80.00	2.87	< 2	< 0.3	102	48	0.68	8.6	< 2	< 1	2.4
A07-3767	85650	80.00	82.30	2.30	17	< 0.3	127	118	0.95	29.7	< 2	< 1	12.6
A07-3767	85651	82.30	83.84	1.54	< 2	0.4	164	37	1.32	4.2	< 2	< 1	1
A07-3767	85652	83.84	86.26	2.42	< 2	< 0.3	73	32	0.86	< 0.5	< 2	< 1	0.9
A07-2300	187486	86.26	87.80	1.54	< 2	< 0.3	56	44	0.69	5.4	< 2	< 1	1
A07-2300	187487	87.80	88.71	0.91	8	< 0.3	65	24	0.52	8.8	< 2	< 1	0.9
A07-2300	187488	88.71	89.93	1.22	8	< 0.3	109	23	1.04	5.4	< 2	< 1	1
A07-2300	187489	89.93	91.50	1.57	< 2	< 0.3	439	25	3.74	5	< 2	< 1	1
A07-2300	187490	91.50	93.05	1.55	< 2	< 0.3	129	42	1.57	4.3	< 2	< 1	0.7
A07-2300	187491	93.05	93.65	0.60	< 2	< 0.3	364	1	3.72	5.3	< 2	< 1	1.1
A07-3767	85653	93.65	95.25	1.60	< 2	< 0.3	122	47	1.04	2.8	< 2	< 1	0.7
A07-2300	187492	95.25	95.50	0.25	93	0.5	3110	49	17.7	41	< 2	< 1	1.8
A07-2300	187493a	WCM Minerals Standard PB115			137	17.4	5530	17400	2.28	29.4	2	< 1	39.2
A07-2300	187494	95.50	96.95	1.45	< 2	0.4	211	64	1.56	5.3	< 2	< 1	0.9
A07-3767	85654	96.95	98.30	1.35	< 2	0.4	77	40	1.1	< 0.5	< 2	< 1	0.5
A07-2300	187495	98.30	100.00	1.70	10	< 0.3	171	38	3.04	6.5	< 2	< 1	0.8
A07-2300	187496	100.00	101.50	1.50	< 2	< 0.3	180	28	2.39	7.8	< 2	< 1	1.6
A07-3767	85655	101.50	103.53	2.03	10	< 0.3	215	32	2.16	4	< 2	< 1	0.3
A07-3767	85656	103.53	106.07	2.54	< 2	< 0.3	248	35	2.06	1.9	< 2	< 1	1.3

BARKER MINERALS LTD.

DRILL HOLE No. K07-2

Sample Intervals: DDH K07 - 2													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2300	187497	106.07	109.15	3.08	15	< 0.3	197	32	1.55	10.6	< 2	< 1	2.6
A07-3767	85657	109.15	112.19	3.04	< 2	< 0.3	97	50	0.42	3	< 2	< 1	0.4
A07-3767	85658	112.19	115.24	3.05	4	< 0.3	132	57	0.74	3.6	< 2	< 1	0.5
A07-2300	187498	115.24	117.10	1.86	< 2	< 0.3	144	56	0.7	7.4	< 2	< 1	0.3
A07-2300	187499	117.10	118.60	1.50	< 2	< 0.3	111	70	0.42	3.5	< 2	< 1	< 0.1
A07-2300	187500	118.60	120.00	1.40	< 2	< 0.3	76	55	0.6	3.4	< 2	< 1	0.5
A07-2300	187751	120.00	121.34	1.34	< 2	< 0.3	254	51	1.83	3.9	< 2	< 1	0.6
A07-2300	187752	121.34	124.39	3.05	3	< 0.3	140	45	1.32	3.3	< 2	< 1	0.9
A07-2300	187753	124.39	127.60	3.21	8	< 0.3	217	35	2.04	18.1	< 2	< 1	7.3
A07-3767	85659	127.60	130.48	2.88	< 2	< 0.3	96	75	0.74	< 0.5	< 2	< 1	0.8
A07-3767	85660	130.48	133.51	3.03	< 2	< 0.3	139	69	0.61	2.9	< 2	< 1	< 0.1
A07-3767	85661	133.51	134.75	1.24	< 2	< 0.3	132	74	0.68	< 0.5	< 2	< 1	< 0.1
A07-3767	85662	134.75	138.47	3.72	< 2	< 0.3	126	62	1.19	3.7	< 2	< 1	0.8
A07-3767	85663	138.47	140.85	2.38	< 2	< 0.3	97	62	0.75	< 0.5	< 2	< 1	0.7
A07-3767	85664	140.85	143.70	2.85	< 2	< 0.3	103	61	0.58	2.6	< 2	< 1	1.1
A07-3767	85665	143.70	144.35	0.65	< 2	0.3	139	54	1.29	13.1	< 2	< 1	5.8
A07-3767	85666	144.35	144.55	0.20	27	< 0.3	63	66	0.72	86.6	< 2	< 1	15.9
A07-3767	85667	144.55	147.86	3.31	< 2	< 0.3	67	58	0.56	30.3	< 2	< 1	10
A07-3767	85668a	WCM Minerals Standard PB114			738	24.3	3360	11900	1.86	23	5	< 1	58.2
A07-2300	187754	147.86	150.91	3.05	< 2	< 0.3	70	52	0.64	11.4	< 2	< 1	3.4
A07-2300	187755	150.91	153.96	3.05	< 2	< 0.3	53	46	0.14	11.3	< 2	< 1	2.7
A07-2300	187756	153.96	157.31	3.35	39	< 0.3	95	66	0.36	54.7	< 2	< 1	5.8
A07-2300	187757	157.31	158.20	0.89	98	0.4	125	34	0.73	219	< 2	< 1	55.8
A07-2300	187758	158.20	159.56	1.36	< 2	< 0.3	86	36	0.66	48.2	< 2	< 1	24.2
A07-3767	85669	159.56	162.70	3.14	< 2	< 0.3	82	36	0.66	24.9	< 2	< 1	8.6
A07-3767	85670	162.70	164.70	2.00	< 2	< 0.3	124	28	0.82	19.8	< 2	< 1	5.8
A07-2300	187759	164.70	167.07	2.37	6	< 0.3	242	33	1.41	12.2	< 2	1	1.8
A07-2300	187760	167.07	170.12	3.05	< 2	< 0.3	191	104	1.07	58.7	< 2	< 1	3.3
A07-2300	187761	170.12	171.95	1.83	< 2	< 0.3	236	63	0.92	22	< 2	< 1	3.8
A07-2300	187762	171.95	175.00	3.05	< 2	< 0.3	204	53	0.86	7.2	< 2	< 1	2.6
A07-2300	187763	175.00	176.10	1.10	< 2	< 0.3	186	47	2.2	37.3	< 2	< 1	6.2
A07-3767	84671	176.10	178.04	1.94	< 2	< 0.3	164	40	1.03	11.1	< 2	< 1	3.3

BARKER MINERALS LTD.

DRILL HOLE No. K07-2

Sample Intervals: DDH K07 - 2													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3767	85672	178.04	180.56	2.52	< 2	< 0.3	171	58	1.61	7.7	2	< 1	2.3
A07-3767	85673	180.56	182.30	1.74	< 2	< 0.3	216	57	1	50.7	< 2	< 1	4.8
A07-3767	85674	182.30	186.25	3.95	< 2	< 0.3	302	57	1.59	6.9	2	< 1	1.5
A07-3767	85675	186.25	189.32	3.07	< 2	< 0.3	105	41	1.05	10.2	< 2	< 1	1
A07-3767	85676	189.32	191.76	2.44	< 2	< 0.3	117	51	0.56	14.5	4	< 1	1.7
A07-3767	85677	191.76	194.70	2.94	< 2	< 0.3	248	64	1.12	33.9	< 2	< 1	3.2
A07-2300	187764	194.70	196.25	1.55	< 2	< 0.3	154	78	1.15	12.9	< 2	< 1	2.5
A07-2300	187765	196.25	197.96	1.71	< 2	< 0.3	121	50	0.53	8.7	< 2	< 1	1.4
A07-3767	85678	197.96	200.94	2.98	< 2	< 0.3	163	40	0.94	38	< 2	< 1	6.8
A07-3767	85679a	WCM Minerals Standard PB114			732	27	3350	12100	1.87	20.8	3	5	57.5
A07-2300	187766	200.94	201.60	0.66	< 2	< 0.3	143	41	1.09	57.6	< 2	< 1	6.1
A07-2300	187767	201.60	203.74	2.14	6	< 0.3	212	37	1.64	85.8	< 2	< 1	10.8
A07-2300	187768	203.74	204.57	0.83	< 2	< 0.3	163	53	1.04	96.9	< 2	< 1	11.3
A07-2300	187769	204.57	206.40	1.83	45	< 0.3	31	49	0.45	498	< 2	< 1	7.7
A07-2300	187770	206.40	207.10	0.70	76	1.3	173	35	1.02	381	< 2	< 1	24.8
A07-2300	187771	207.10	209.14	2.04	15	< 0.3	67	13	0.87	104	< 2	< 1	15.4
A07-2300	187772	209.14	210.97	1.83	23	1.2	252	32	1.89	221	< 2	< 1	12.8
A07-2300	187773	210.97	213.06	2.09	23	0.5	298	38	1.15	315	< 2	< 1	18.2
A07-2300	187774	213.06	214.67	1.61	< 2	< 0.3	268	35	1.1	9.3	< 2	< 1	2.7
A07-2300	187775	214.67	217.40	2.73	< 2	< 0.3	304	65	1.15	88.7	< 2	< 1	8.6
A07-2300	187776	217.40	218.55	1.15	< 2	0.7	227	48	0.65	82.8	< 2	< 1	4.9
A07-2300	187777	218.55	220.42	1.87	5	0.6	458	48	1.9	75	< 2	< 1	3.9
A07-2300	187778	220.42	222.80	2.38	< 2	< 0.3	282	142	1.74	47.7	< 2	< 1	5
A07-2300	187779	222.80	224.08	1.28	< 2	0.3	260	62	1.07	226	< 2	< 1	13.1
A07-2300	187780	224.08	225.91	1.83	< 2	< 0.3	148	31	1.05	21.7	< 2	< 1	1.7
A07-2300	187781a	WCM Minerals Standard PB113			2850	20	4340	14800	2.14	120	< 2	< 1	26.5
A07-2300	187782	225.91	228.04	2.13	< 2	< 0.3	256	34	1.15	10.4	< 2	< 1	0.8
A07-2300	187783	228.04	229.50	1.46	< 2	< 0.3	254	36	1.04	8.4	< 2	< 1	1.2
A07-2300	187784	229.50	231.09	1.59	< 2	< 0.3	142	46	0.53	7.1	2	< 1	0.6
A07-2300	187785	231.09	232.38	1.29	< 2	< 0.3	181	45	0.72	6.8	< 2	< 1	1.1
A07-2300	187786	232.38	233.54	1.16	29	0.5	3380	41	13	26.3	< 2	< 1	3.3
A07-2300	187787	233.54	236.39	2.85	< 2	< 0.3	206	42	1.18	10.5	< 2	< 1	1.5

BARKER MINERALS LTD.

DRILL HOLE No. K07-2

Sample Intervals: DDH K07 - 2													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2300	187788	236.39	237.94	1.55	< 2	< 0.3	75	27	0.44	4.8	< 2	< 1	0.9
A07-2300	187789	237.94	239.04	1.10	< 2	0.4	2500	36	11.2	17	< 2	2	1.4
A07-2300	187790	239.04	240.54	1.50	< 2	< 0.3	86	26	0.38	6.1	< 2	< 1	0.6
A07-2300	187791	240.54	241.46	0.92	< 2	< 0.3	38	15	0.18	5.6	< 2	< 1	1.2
A07-2300	187792	241.46	243.50	2.04	< 2	< 0.3	247	30	1.27	40.4	< 2	< 1	1.6
A07-2300	187793	243.50	244.61	1.11	< 2	< 0.3	106	58	0.44	< 0.5	2	< 1	1.1
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 2

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
4.18	4.57	0.39	**7**
4.57	5.48	0.91	**6**
5.48	8.23	2.75	**15**
8.23	11.28	3.05	**34**
11.28	14.32	3.04	**23**
14.32	17.37	3.05	**36**
17.37	20.42	3.05	**41**
20.42	22.25	1.83	**10**
22.25	23.78	1.53	**35**
23.78	26.82	3.04	**24**
26.82	29.16	2.34	**14**
29.16	32.31	3.15	**16**
32.31	35.36	3.05	**11**
35.36	35.97	0.61	**3**
35.97	40.24	4.27	**15**
40.24	42.07	1.83	**12**
42.07	45.12	3.05	**24**
45.12	48.17	3.05	**14**
48.17	51.21	3.04	**32**
51.21	54.26	3.05	**45**
54.26	57.31	3.05	**26**
57.31	60.36	3.05	**23**
60.36	63.41	3.05	**38**
63.41	66.48	3.07	**15**
66.48	69.51	3.03	**19**
69.51	72.25	2.74	**12**
72.25	75.30	3.05	**61**
75.30	77.13	1.83	**52**
77.13	79.26	2.13	**13**
79.26	80.48	1.22	**16**
80.48	82.30	1.82	**25**
82.30	83.23	0.93	**2**
83.23	83.84	0.61	**1**
83.84	86.26	2.42	**3**
86.26	87.80	1.54	**9**
87.80	88.71	0.91	**0**
88.71	89.92	1.21	**1**
89.92	90.85	0.93	**10**
90.85	92.07	1.22	**8**
92.07	92.68	0.61	**7**
92.68	92.98	0.30	**1**
92.98	95.12	2.14	**27**
95.12	95.73	0.61	**8**
95.73	96.95	1.22	**3**
96.95	98.47	1.52	**11**
98.47	101.52	3.05	**25**
101.52	104.59	3.07	**31**
104.59	106.09	1.50	**15**
106.09	109.14	3.05	**16**
109.14	110.67	1.53	**6**
110.67	112.19	1.52	**6**
112.19	115.24	3.05	**21**
115.24	118.29	3.05	**23**
118.29	121.34	3.05	**19**
121.34	124.39	3.05	**42**
124.39	125.00	0.61	**15**
125.00	125.91	0.91	**7**
125.91	128.96	3.05	**38**
128.96	130.48	1.52	**30**
130.48	133.53	3.05	**55**
133.53	134.75	1.22	**9**
134.75	136.58	1.83	**23**
136.58	138.41	1.83	**17**
138.41	139.62	1.21	**12**
139.62	140.85	1.23	**7**
140.85	143.90	3.05	**19**
143.90	144.81	0.91	**8**
144.81	147.86	3.05	**32**
147.86	150.91	3.05	**64**
150.91	153.96	3.05	**33**
153.96	157.31	3.35	**32**
157.31	159.45	2.14	**4**
159.45	160.36	0.91	**2**
160.36	164.63	4.27	**47**
164.63	167.67	3.04	**24**
167.67	170.12	2.45	**61**
170.12	171.95	1.83	**38**
171.95	175.00	3.05	**45**
175.00	178.00	3.00	**29**
178.00	181.09	3.09	**37**
181.09	184.14	3.05	**32**
184.14	187.19	3.05	**43**
187.19	189.32	2.13	**32**
189.32	191.46	2.14	**50**
191.46	191.76	0.30	**6**
191.76	194.51	2.75	**28**
194.51	197.56	3.05	**42**
197.56	200.60	3.04	**36**
200.60	203.65	3.05	**49**
203.65	204.57	0.92	**0**
204.57	205.18	0.61	**4**
205.18	206.40	1.22	**0**
206.40	209.14	2.74	**10**
209.14	210.97	1.83	**8**
210.97	214.02	3.05	**34**
214.02	214.63	0.61	**12**
214.63	215.85	1.22	**22**
215.85	217.39	1.54	**32**
217.39	220.42	3.03	**65**
220.42	222.86	2.44	**32**
222.86	224.08	1.22	**14**
224.08	225.91	1.83	**36**
225.91	228.04	2.13	**44**
228.04	231.09	3.05	**58**
231.09	234.14	3.05	**32**
234.14	237.19	3.05	**37**
237.19	239.63	2.44	**22**
239.63	240.54	0.91	**6**
240.54	241.46	0.92	**5**
241.46	244.61	3.15	**39**
End of Hole			

Core Recovery: DDH K07 - 2														
					Recovered								**Recovered**	
Box No.	From	To	Distance		(metres)	**%**		Box No.	From	To	Distance		(metres)	**%**
1	4.18	7.75	3.57		3.4	**95**		33	165.26	170.26	5.00		5.0	**100**
2	7.75	12.97	5.22		5.1	**98**		34	170.26	175.22	4.96		4.9	**99**
3	12.97	18.33	5.36		5.3	**99**		35	175.22	180.56	5.34		5.3	**99**
4	18.33	23.66	5.33		4.5	**84**		36	180.56	186.25	5.69		5.7	**100**
5	23.66	28.80	5.14		4.8	**93**		37	186.25	191.33	5.08		5.1	**100**
6	28.80	33.25	4.45		4.4	**99**		38	191.33	195.91	4.58		4.5	**98**
7	33.25	37.17	3.92		3.0	**77**		39	195.91	200.94	5.03		5.0	**99**
8	37.17	43.00	5.83		5.8	**99**		40	200.94	206.40	5.46		4.2	**77**
9	43.00	48.59	5.59		5.6	**100**		41	206.40	213.31	6.91		4.3	**62**
10	48.59	53.91	5.32		5.3	**100**		42	213.31	218.16	4.85		4.8	**99**
11	53.91	59.21	5.30		5.3	**100**		43	218.16	223.88	5.72		5.5	**96**
12	59.21	64.06	4.85		4.9	**101**		44	223.88	228.62	4.74		4.7	**99**
13	64.06	69.27	5.21		5.2	**100**		45	228.62	234.37	5.75		5.8	**101**
14	69.27	74.57	5.30		5.1	**96**		46	234.37	240.24	5.87		5.9	**101**
15	74.57	80.26	5.69		5.6	**98**		47	240.24	244.61	4.37		4.4	**101**
16	80.26	86.13	5.87		5.8	**99**		End of Hole						
17	86.13	92.86	6.73		4.4	**65**								
18	92.86	98.30	5.44		5.1	**94**								
19	98.30	103.13	4.83		4.7	**97**								
20	103.13	108.56	5.43		5.3	**98**								
21	108.56	112.62	4.06		4.0	**99**								
22	112.62	118.29	5.67		5.5	**97**								
23	118.29	123.64	5.35		5.3	**99**								
24	123.64	128.92	5.28		5.3	**100**								
25	128.92	134.03	5.11		5.1	**100**								
26	134.03	138.60	4.57		4.5	**98**								
27	138.60	143.70	5.10		5.0	**98**								
28	143.70	147.74	4.04		4.0	**99**								
29	147.74	152.95	5.21		5.2	**100**								
30	152.95	157.53	4.58		4.5	**98**								
31	157.53	160.36	2.83		2.7	**95**								
32	160.36	165.26	4.90		4.9	**100**								

PROPERTY: KANGAROO

BARKER MINERALS LTD.

DRILL HOLE NO. K07 - 3

Dip & Azmth Tests			DDH K07-3	**Easting (NAD 83):** 588842	**Core Size:** NQ2	**Started:** May 10, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5838668	**Hole Azimuth**: 0°	**Finished:** May 13, 2007
13.72	-49.6	335.4	Temp=12.5, Mag=57150, Roll=231.4	**Grid Location:** 100E 1650N	**Hole Angle:** -50°	**Logged by:** RT
113.46	-48.9	338.9	Temp=12.1, Mag=55620, Roll=238.1	**Elevation:**	**Total Depth:** 243.08m	**Analysis by:** ActLabs
239.51	-50.1	340.1	Temp=15.2, Mag=56290, Roll=212.6			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		**Litho-**		**%**	**%**	**%**		**Alteration Scale: 1 - 5**					
From	**To**	**Code**	**Description**	**Py**	**Cpy**	**Pyrr**		**Ep**	**Seri-cite**	**2nd Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	3.00		CASING - No recovery.										
3.00	21.45		Coarse crowded porphyry. Diorite. 90% augite phenocrysts are generally 1cm or smaller. Calcareous matrix. No significant veining but for a 8cm barren calcite vein at 35 deg to CA at 11.0m. Minor disseminated pyrite. Lower half of interval is progressively more chloritic. Diorite dike at 21-21.45m has slightly more disseminated pyrite. Lower contact is clear, 40 deg to CA. Relative ages of rocks at contact are unclear but the upper rock is evidently older as it appears fractured & chloritized and bleached by contact with the rock below. **At 9.80m a specimen taken for thin section**, shows crowded porphyry.	0.1		tr		tr	1	1		1	Weakly magnetic near beginning. Very weak to no magnetism for the remaining rock. Fizzing only occurs at calcite veinlets.
21.45	32.53		Diorite-gabbro. Medium grained, Dark greenish grey. Contains xenoliths of the leucrocratic rock of above. No significant contact metasomatic effect between this and the above rock, either at the contact or around xenoliths. Very minor calcite veining. Pyrite is fine, evenly disseminated. The lower contact is irregular, characterized by 7cm of quartz vein breccia whose upper contact with diorite is 35 degrees to core axis (CA) and lower contact with siltstone is 75 deg to CA. The rock below is obviously the intruded rock, xenoliths of which exist in the contact breccia.	3		tr		tr		tr	1	2	Very weak spotty magnetism. Moderate magnetism between approx. 31m-32.5m. Fizzing is very weak and spotty.

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	To	Code	Description	Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
32.53	49.50		Andesitic crystal & lithic tuff. Light to medium greenish. Locally weakly tan. Locally pervasively silicified. Chloritic fractures are common and increase below 43m. Very fine grained matrix with 5% feldspar and mafic phenocrysts and dark clasts. No significant veining. Spotty pyrite is mainly disseminated. Rubble at 34.4-35.2m, 36.1m, 30.0m, 41-42m. Gouge at 42.2-42.6m, with somewhat more pyrite. Lower contact is irregular, brecciated.	1						1	1	2	Not magnetic. Moderate, spotty fizzing.
49.50	60.15		Diorite-gabbro. Similar to that at 22-32m. At 51.40m is 20cm xenolith of siliceous tuff. No significant veining. Pyrite is fine, disseminated with very minor concentration at fractures.	2		tr		tr		1		2	Very weak, spotty magentism. Weak, spotty fizzing.
60.15	61.40		Graphitic argillite. Very fine grained. No phenocrysts, uniform texture. Very dark, blackish, altered light greenish by minor silicification adjacent to small fractures. Not magnetic. Sparse insignificant veinlets. Lower contact is 25 deg to CA.	tr					tr	tr	tr	1	Not magnetic. Very weak fizzing.
61.40	65.80		Diorite as at 50-60m. At 63.5-65.8m is 5% calcite veins, generally 5-10mm, 20, 40, 65 deg to CA. Lower contact is characterized by fractured calcite veind rock with veins concentrated near contact and also occurring below. No significant sulphides associated with these veins. Pyrite is disseminated. **At 24.50m a specimen taken for thin section**, shows medium grained diorite. Lower contact is sharp, 30 deg to CA.	3				tr		tr		2	Not magnetic. Fizzing occurs very strongly.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
65.80	119.80		Volcaniclastic suite contains relatively minor interbeds of very fine siliceous siltstone. Generally medium green, locally bleached for short distances, dark gren black where chloritic fractures are numerous. Epidote occurance is weak, mainly in mafic phenocrysts. Minor calcite veinlets, less quartz. At 64.96m a narrow silstone interbed within volcanic is 20 deg to CA suggesting lithologic bedding may dip steeply north, contrary to the south dipping chargeability anomalies south of here. At 65.80-69.75m is mostly siltstone. At 77.4m is a minor contact between silstone above and volcaniclastic below, the volcaniclastic has 5% disseminated pyrite to 15cm below contact. At 80.5, 80.6, 81.4m are small patches of pyrite with minor chalcopyrite. At 84.20-85.27m apparently a black graphitic argilite, very fine grained. At 86.75-88.45m occur gouge and rubble, calcite veining in this zone is 5 deg to CA, this zone is pyritic with very minor chalcopyrite associated with quartz veinlets.	2	tr	0.1		tr	4	4	1	1	Magnetism is moderate from beginning then dies at approx. 72.28m, it stays very weak until 79.87m, then it becomes moderate again from 80-87m. No apparent magnetism for the rest of the length. Very weak spotty fizzing, other than at veins.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
Continued from above			At 97.55-97.65m occurs massive sulphide containing pyrrhotite interior and with lesser pyrite and very minor chalcopyrite at selvages and into wallrock along fractures, strongly magnetic upper and lower contacts are sharp, 55 deg to CA. At 110-111.65m is gouge and rubble. Very minor veining overall, 90% calcite 10% quartz, with no preferred orientation, 30-70 deg to CA. Pyrite is irregular, mostly disseminated, concentrated in fractures, local patches and blebs. Pyrrhotite is spotty. Pyrite occurs inconsistantly, locally <1%, locally 5%. Lower contact at 119.80m occurs in a minor calcite vein breccia, Volcaniclastic suite above, siltstone below.										
119.80	155.55		Same volcaniclastic suite as above, this zone is mainly siltstone but with mixed in volcaniclastic component. Light greenish grey with pervasive tan, possibly pervasive Fe carbonate. The siltstone tends to be extremely fractured with chlorite in the fractures. Pyrite occurs mainly in fractures, increases downward. Minor calcite veinlets, less quartz. At 124.25-124.95m is a greenish andesitic dike, upper and lower contacts are unclear in highly fractured rock, with apparent graphite in fractures. Contact at 155.55m is approximate, lost in rubble.	0.5		0.1		tr	4	4	1	1	Magnetism is very weak and spotty, other than at 121.74m, magnetism is strong. Fizzing is weak, spotty.
155.55	162.25		Andesitic volcaniclastic. Uniformly medium grained granular. Medium greenish. Minor calcite veinlets.	0.1				tr	3	3	1	1	No apparent magnetism. Fizzing occurs strongly throughout.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
162.25	178.35		Siltstone. Highly fractured. Fractures have a black shiny mineral that resembles graphite. Pyrite is very fine, apparently concentrated in fractures. Minor calcite , lesser quartz veinlets. At 165.50m is a 5cm patch of coppery coloured pyrrhotite, strongly magnetic. At 167.14-168.7m graphite occurs in fractures. At 174.72-177.20m pyritic tectonic breccia is common. Lower contact is sharp, 45 deg to CA.	0.1		tr			1	1		1	No magnetism except for very strong magnetism at 165.5m and weak magnetism at approx. 172.8m. Spotty, moderate fizzing.
178.35	181.60		Andesitic volcaniclastic. Uniformly medium grained granular. Medium greenish. Minor calcite veinlets. Lower contact is approximete, lost in local gouge and rubble.	0.5				tr	2	2		1	Not magnetic. Fizzing is weak.
181.60	193.70		Siltstone. Highly fractured. Siliceous, very fine, hard. Fractures contain chlorite, sometimes a grey mineral (graphite & calcite?). Pyrite is spottily disseminated with some in fractures. Minor calcite veinlets are generally 60 deg to CA. At 191-192.7m has rubble. 192.7-193.7m has breccia, 3% pyrite and calcite veining. Lower contact is sharp, 45 deg to CA.	0.1						2		1	Not magnetic. Moderate spotty fizzing.
193.70	197.64		Andesitic volcaniclastic. Uniformly medium grained granular. Medium greenish. Minor calcite veinlets. Pyrite is fine, spotty, disseminated with small blebs in calcite veinlets. Lower contact is sharp, 50 deg to CA.	0.5				tr	2	2		1	Not magnetic. Fizzing only occurs at calcite veinlets.
197.64	201.74		Siltstone. Similar to previous. Light greyish green. Highly fractured. Siliceous, very fine, hard. Fractures contain chlorite. Lower contact appears gradational over about 2cm, approximately 50 deg to CA.	0.1					2	1		1	Not magentic. Very strong fizzing occurs.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
201.74	204.46		Volcaniclastic suite. Upper half is mainly andesitic, lower half is highly fractured to brecciated siltstone. A minor hydrothermal quartz breccia occurs at 202.4-202.9m. Consists of siltstone clasts in a pyritic quartz vein breccia. Lower contact is unclear at fracture. Rare pyrrhotite.	0.1		tr		2	2	2	1	1	Very faint magnetism detected only at 203.84m. Strong spotty fizzing.
204.46	205.95		Andesite. Apparently a dike. Uniform medium texture. Medium greenish grey. Pyrite is disseminated, crystals 1-3mm. Lower contact is fairly sharp, 60 deg to CA. No significant contact metasomatic effect.	1				1		1		1	Not magnetic. Strong fizzing.
205.95	225.47		Siltstone. Highly fractured. Dark greenish grey where chloritic fractures are more, medium greenish grey, locally light greenish grey where minor bleached zones occur. Siliceous, very fine, hard. Fractures contain chlorite. Pyrite is spottily disseminated with some in fractures. Minor calcite veinlets, lesser quartz. Locally highly to very highly fractured. Pervasive and fracture fill chlorite seems to be stronger below 216m with fracture intensity apparently also increasing imperceptably downward. 224.4-225.2m has intense chloritic fractures, with no significant increase in pyrite. Strong fracturing continues to 225.47m. Much less fractuing near contact. Lower contact is indistinct, irregular.	0.1		tr				1	1	3	Weak, spotty magnetism. No fizzing, however, very strong fizzing detected at 207.8m.
225.47	226.13		Augite porphyritic andesite dike. Medium greenish. No significant pyrite. 5% augites are 2-5mm. Lower contact occurs with a 8cm calcite vein breccia, veins apparently 40 deg to CA.						1	1		1	Not magnetic. Moderate fizzing.
226.13	243.08		Siltstone, as above. Intense chloritic fracturing. Mostly rubble below 234m. **End of hole at 243.08m.**	tr	tr							4	Spotty, very weak magnetism. Fizzing is locally strong and locally weak.

Lithology: DDH K07 - 3

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	3.00	**CASING - No recovery.**									
3.00	21.45	**Coarse crowded porphyry. Diorite.**	0.1		tr		tr	1	1		1
21.45	32.53	**Diorite-gabbro.**	3		tr		tr		tr	1	2
32.53	49.50	**Andesitic crystal & lithic tuff.**	1						1	1	2
49.50	60.15	**Diorite-gabbro.**	2		tr		tr		1		2
60.15	61.40	**Graphitic argillite.**	tr					tr	tr	tr	1
61.40	65.80	**Diorite.**	3				tr		tr		2
65.80	119.80	**Volcaniclastic and siliceous siltstone.**	2	tr	0.1		tr	4	4	1	1
119.80	155.55	**Siliceous siltstone and volcaniclastic.**	0.5		0.1		tr	4	4	1	1
155.55	162.25	**Andesitic volcaniclastic.**	0.1				tr	3	3	1	1
162.25	178.35	**Siltstone.**	0.1		tr			1	1		1
178.35	181.60	**Andesitic volcaniclastic.**	0.5				tr	2	2		1
181.60	193.70	**Siltstone.**	0.1						2		1
193.70	197.64	**Andesitic volcaniclastic.**	0.5				tr	2	2		1
197.64	201.74	**Siltstone.**	0.1					2	1		1
201.74	204.46	**Volcaniclastic and siltstone.**	0.1		tr		2	2	2	1	1
204.46	205.95	**Andesite.**	1				1		1		1
205.95	225.47	**Siltstone.**	0.1		tr				1	1	3
225.47	226.13	**Augite porphyritic andesite dike.**						1	1		1
226.13	243.08	**Siltstone.**	tr	tr							4
		End of hole									

BARKER MINERALS LTD.

DRILL HOLE No. K07-3

Sample Intervals: DDH K07 - 3													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2302	187794	9.39	11.00	1.61	< 2	< 0.3	168	55	0.21	5	< 2	< 1	< 0.1
A07-2302	187795	11.00	11.28	0.28	< 2	< 0.3	142	46	0.34	5.1	< 2	< 1	0.6
		Sampling gap - 2.89m											
A07-3893	85701	14.17	17.23	3.06	< 2	< 0.3	217	54	0.19	3.6	< 2	< 1	0.4
		Sampling gap - 1.92m											
A07-2302	187796	19.15	20.77	1.62	< 2	< 0.3	94	57	0.2	5.5	< 2	< 1	< 0.1
A07-2302	187797	20.77	20.97	0.20	< 2	< 0.3	135	36	0.35	3.7	< 2	< 1	0.3
A07-2302	187798	20.97	21.45	0.48	< 2	< 0.3	309	64	1.63	3.6	< 2	< 1	0.5
		Sampling gap - 2.33m											
A07-3893	85702	23.78	26.82	3.04	< 2	< 0.3	182	75	1.09	4.4	< 2	< 1	< 0.1
		Sampling gap - 4.18m											
A07-2302	187799	31.00	32.53	1.53	< 2	< 0.3	119	71	0.54	5.3	< 2	< 1	< 0.1
A07-2302	187800	32.53	34.00	1.47	14	0.9	583	399	0.4	7.5	< 2	< 1	2
A07-3893	85703	34.00	35.68	1.68	< 2	0.3	105	76	0.47	10.3	< 2	< 1	1
A07-3893	85704	35.68	37.19	1.51	< 2	< 0.3	66	60	0.55	6.8	< 2	< 1	1.2
A07-3893	85705	37.19	38.43	1.24	< 2	0.4	62	59	0.43	13.2	< 2	< 1	2.4
A07-3893	85706	38.43	40.20	1.77	< 2	0.3	60	61	0.42	14.9	< 2	< 1	2.6
A07-3893	85707	40.20	42.20	2.00	< 2	< 0.3	88	65	0.47	44.9	< 2	< 1	3.5
A07-3893	85708	42.20	42.60	0.40	66	< 0.3	129	61	0.7	1040	< 2	< 1	18
A07-3893	85709	42.60	43.90	1.30	< 2	0.7	555	90	0.63	67.8	< 2	< 1	3.7
A07-3893	85710	43.90	46.66	2.76	< 2	< 0.3	106	93	0.3	13.3	< 2	< 1	3.1
A07-3893	85711	46.66	48.41	1.75	< 2	< 0.3	71	67	0.25	6.7	< 2	< 1	0.7
A07-2302	187701	48.41	49.50	1.09	< 2	< 0.3	109	72	0.46	7.6	< 2	< 1	0.9
A07-2302	187702	49.50	50.65	1.15	5	< 0.3	96	61	0.37	12	< 2	< 1	0.5
A07-3893	85712	50.65	52.74	2.09	< 2	< 0.3	88	53	0.23	3.2	< 2	< 1	< 0.1
		Sampling gap - 6.10m											
A07-3893	85713	58.84	59.00	0.16	< 2	< 0.3	104	57	0.48	11.5	< 2	< 1	1.1
A07-3893	85714	59.00	61.45	2.45	< 2	0.3	127	100	0.62	28.1	< 2	< 1	1
A07-3893	85715	61.45	62.82	1.37	< 2	< 0.3	151	243	0.56	10.2	< 2	< 1	0.7
A07-3893	85716a	WCM Minerals Standard PB114			796	23	2700	11300	1.47	22	< 2	4	57.2
A07-2302	187703	62.82	65.80	2.98	< 2	< 0.3	115	176	0.65	194	< 2	< 1	2.6
A07-2302	187704	65.80	67.68	1.88	9	< 0.3	72	96	0.43	41.3	< 2	< 1	0.9
A07-2302	187705	67.68	69.75	2.07	< 2	< 0.3	168	430	1.13	42.4	< 2	< 1	1.1

BARKER MINERALS LTD.

DRILL HOLE No. K07-3

Sample Intervals: DDH K07 - 3													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2302	187706	69.75	72.25	2.50	< 2	< 0.3	239	99	2.28	22.6	< 2	< 1	1.3
A07-2302	187707	72.25	74.40	2.15	< 2	< 0.3	222	220	2.02	15.7	< 2	< 1	1
A07-2302	187708	74.40	75.60	1.20	5	< 0.3	177	266	1.46	8	< 2	< 1	0.8
A07-2302	187709	75.60	77.40	1.80	6	< 0.3	153	889	1.79	12.5	< 2	< 1	0.9
A07-2302	187710	77.40	78.35	0.95	< 2	< 0.3	163	422	2.93	9.8	< 2	< 1	1
A07-2302	187711	78.35	80.29	1.94	< 2	< 0.3	169	300	2.13	7.6	< 2	1	0.6
A07-2302	187712	80.29	80.70	0.41	10	< 0.3	256	351	2.84	21.1	< 2	< 1	1.4
A07-2302	187713	80.70	81.48	0.78	5	< 0.3	267	117	3.14	18.3	< 2	< 1	1.5
A07-2302	187714	81.48	84.20	2.72	< 2	< 0.3	158	682	0.99	20.7	< 2	< 1	1.4
A07-2302	187715	84.20	85.27	1.07	23	< 0.3	208	600	2.46	25.4	< 2	< 1	3.2
A07-2302	187716	85.27	87.00	1.73	< 2	0.3	333	1130	1.8	11.6	< 2	< 1	1.1
A07-2302	187717	87.00	88.45	1.45	51	2.1	809	4530	2.59	92.7	< 2	< 1	3.1
A07-2302	187718	88.45	90.89	2.44	< 2	< 0.3	262	530	1.21	283	< 2	1	6.6
A07-2302	187719	90.89	93.90	3.01	11	< 0.3	200	311	1.35	145	< 2	< 1	4
A07-2302	187720	93.90	95.70	1.80	< 2	< 0.3	137	63	1.5	32.8	< 2	< 1	1.6
A07-2302	187721	95.70	96.95	1.25	< 2	< 0.3	79	63	0.85	10.9	< 2	< 1	0.8
A07-2302	187722	96.95	97.55	0.60	< 2	< 0.3	236	262	1.73	15.5	< 2	< 1	0.7
A07-2302	187723	97.55	97.65	0.10	17	< 0.3	2070	98	18.3	17.8	< 2	2	1.4
A07-2302	187724	97.65	99.08	1.43	7	< 0.3	211	183	1.76	7.9	< 2	< 1	1.2
A07-2302	187725	99.08	101.30	2.22	< 2	< 0.3	231	187	2.79	10.5	< 2	< 1	1.2
A07-2302	187726	101.30	103.25	1.95	< 2	< 0.3	116	38	1.27	16.9	< 2	< 1	0.8
A07-2302	187727	103.25	104.26	1.01	< 2	< 0.3	137	64	1.23	17.5	< 2	< 1	0.9
A07-2302	187728	104.26	106.40	2.14	< 2	< 0.3	143	46	1.28	54.2	< 2	< 1	1.1
A07-2302	187729	106.40	109.54	3.14	< 2	< 0.3	133	48	1.62	21.6	< 2	< 1	0.9
A07-2302	187730	109.54	111.65	2.11	< 2	< 0.3	126	52	1.3	63	< 2	< 1	2.8
A07-2302	187731	111.65	113.40	1.75	< 2	0.4	208	159	1.46	28.7	< 2	< 1	2.4
A07-2302	187732	113.40	116.46	3.06	16	0.5	74	42	0.67	332	< 2	< 1	10.8
A07-2302	187733	116.46	119.80	3.34	< 2	< 0.3	151	106	0.81	11.5	< 2	< 1	3.7
A07-2302	187734	119.80	121.34	1.54	< 2	0.4	148	74	1.19	20	< 2	< 1	3.7
A07-2302	187735	121.34	124.25	2.91	< 2	< 0.3	134	59	0.75	7.9	< 2	< 1	0.9
A07-2302	187736	124.25	124.95	0.70	12	0.4	81	65	0.26	9.6	< 2	< 1	0.9
A07-3893	85717a	WCM Minerals Standard PB113			1030	21.7	4450	14100	2.15	129	< 2	< 1	25.1
A07-3893	85718	124.95	127.49	2.54	< 2	0.4	108	216	0.94	21.1	< 2	< 1	1.4

BARKER MINERALS LTD.

DRILL HOLE No. K07-3

Sample Intervals: DDH K07 - 3													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3893	85719	127.49	129.62	2.13	< 2	0.4	192	98	1.7	22	< 2	< 1	2
A07-3893	85720	129.62	132.37	2.75	< 2	< 0.3	95	77	0.53	6.5	< 2	< 1	0.6
A07-3893	85721	132.37	134.81	2.44	< 2	< 0.3	109	86	0.4	7.2	< 2	< 1	0.7
A07-3893	85722	134.81	137.25	2.44	< 2	0.5	61	75	0.42	1.9	< 2	< 1	0.6
A07-3893	85723	137.25	139.38	2.13	< 2	0.5	91	122	0.9	8.3	< 2	< 1	2.2
A07-3893	85724	139.38	141.52	2.14	< 2	0.5	136	114	0.73	11.9	< 2	< 1	2.5
A07-3893	85725	141.52	143.96	2.44	< 2	0.4	140	78	0.62	35.6	< 2	< 1	5.4
A07-3893	85726	143.96	146.40	2.44	< 2	0.3	85	82	0.43	112	< 2	< 1	15.4
A07-3893	85727	146.40	148.84	2.44	< 2	0.4	156	333	0.79	39.1	< 2	< 1	31.8
A07-3893	85728	148.84	151.89	3.05	< 2	< 0.3	129	152	1.01	13	< 2	< 1	3.4
A07-3893	85729	151.89	153.72	1.83	< 2	0.3	91	55	0.73	10.8	< 2	< 1	3.4
A07-2302	187737	153.72	155.55	1.83	21	0.6	115	131	0.92	62.4	< 2	< 1	8.2
A07-2302	187738	155.55	157.99	2.44	< 2	< 0.3	142	151	0.65	27	< 2	< 1	3.3
A07-3893	85730	157.99	161.04	3.05	< 2	0.4	118	318	0.36	60.6	< 2	< 1	9.6
A07-3893	85731	161.04	162.25	1.21	< 2	< 0.3	184	97	0.66	10.4	< 2	< 1	1.6
A07-3893	85732	162.25	165.31	3.06	< 2	< 0.3	91	244	0.43	9.5	< 2	< 1	4.9
A07-2302	187739	165.31	167.14	1.83	11	0.3	245	187	0.79	21.4	< 2	< 1	7.8
A07-2302	187740a	WCM Minerals Standard PB115			28	16.3	4980	15300	1.91	26.8	4	< 1	38.8
A07-2302	187741	167.14	168.66	1.52	11	< 0.3	121	279	0.43	52.2	< 2	< 1	10.5
A07-3893	85733	168.66	171.44	2.78	< 2	0.5	238	269	0.99	41.5	< 2	< 1	5.1
A07-3893	85734	171.44	173.24	1.80	< 2	< 0.3	166	129	1.23	52.7	< 2	3	6.2
A07-2302	187742	175.72	177.20	1.48	11	0.4	85	109	0.61	67.8	< 2	< 1	5.9
A07-2302	187743	177.20	178.35	1.15	7	< 0.3	55	62	0.32	43.2	< 2	< 1	2.4
A07-3893	85735	178.35	181.30	2.95	< 2	< 0.3	105	119	0.5	8.2	< 2	< 1	1.1
A07-2302	187744	181.30	181.60	0.30	22	1.4	1030	124	3.83	35.5	< 2	< 1	3.2
A07-3893	85736	181.60	184.37	2.77	< 2	< 0.3	56	76	0.39	3.7	< 2	< 1	2.3
A07-3893	85737	184.37	186.66	2.29	5	0.3	113	154	1.02	6.8	< 2	< 1	1.8
A07-3893	85738	186.66	188.49	1.83	< 2	< 0.3	130	106	0.77	10.7	< 2	< 1	2.3
A07-2302	187745	188.49	191.54	3.05	< 2	0.3	118	250	0.65	33.1	< 2	< 1	2.8
A07-2302	187746	191.54	192.70	1.16	9	< 0.3	81	49	0.22	11.5	< 2	< 1	3.1
A07-3893	85739a	WCM Minerals Standard PB113			1920	22.3	4570	14100	2.23	127	< 2	< 1	24.8
A07-3893	85740	192.70	193.70	1.00	< 2	0.3	173	1250	0.8	10.4	< 2	< 1	1.4
A07-3893	85741	193.70	196.11	2.41	< 2	< 0.3	120	99	0.42	6.6	< 2	< 1	0.8

BARKER MINERALS LTD.

DRILL HOLE No. K07-3

Sample Intervals: DDH K07 - 3													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3893	85742	196.11	197.64	1.53	< 2	< 0.3	70	87	0.25	3.9	< 2	< 1	0.6
A07-3893	85743	197.64	200.10	2.46	< 2	< 0.3	51	84	0.24	6.3	< 2	< 1	1.8
A07-3893	85744	200.10	201.74	1.64	< 2	< 0.3	13	64	0.16	10.5	< 2	< 1	0.8
A07-3893	85745	201.74	202.40	0.66	< 2	< 0.3	56	79	2.03	13.7	< 2	< 1	3.1
A07-2302	187747	202.40	202.90	0.50	15	< 0.3	14	44	2.29	15.6	< 2	< 1	3.6
A07-3893	85746	202.90	205.95	3.05	< 2	< 0.3	60	73	0.43	2.4	< 2	< 1	0.9
A07-3893	85747	205.95	208.00	2.05	5	< 0.3	62	70	0.27	2.9	< 2	< 1	0.5
A07-3893	85748	208.00	209.84	1.84	14	0.4	101	96	0.68	6.2	< 2	< 1	0.7
A07-3893	85749	209.84	212.89	3.05	< 2	< 0.3	79	99	0.52	6.3	< 2	< 1	0.5
A07-3893	85750	212.89	215.02	2.13	< 2	< 0.3	70	66	0.83	10.4	< 2	< 1	1.1
A07-3893	85751	215.02	218.38	3.36	< 2	0.4	78	76	0.48	2.5	< 2	< 1	0.4
A07-3893	85752	218.38	220.21	1.83	< 2	0.3	72	67	0.24	1.9	< 2	< 1	< 0.1
A07-3893	85753	220.21	221.73	1.52	< 2	< 0.3	75	57	0.86	2.3	< 2	< 1	0.6
A07-2302	187748	221.73	223.75	2.02	< 2	0.3	92	82	0.5	20.7	< 2	< 1	1.7
A07-2302	187749	223.75	225.47	1.72	4	< 0.3	109	69	0.78	60.6	< 2	< 1	4
A07-3893	85754	225.47	226.13	0.66	5	< 0.3	146	106	0.23	12.2	< 2	< 1	4.2
A07-3893	85755	226.13	227.75	1.62	< 2	< 0.3	94	250	0.51	12.8	< 2	< 1	1.9
A07-3893	85756	227.75	229.97	2.22	5	0.3	97	94	0.36	20.2	< 2	< 1	5.8
A07-3893	85757	229.97	232.00	2.03	< 2	< 0.3	96	69	0.5	23.5	< 2	< 1	4.7
A07-3893	85758	232.00	234.54	2.54	21	0.4	96	84	1.34	41.8	< 2	< 1	12.9
A07-2302	187750	234.54	237.29	2.75	< 2	< 0.3	39	69	0.11	30.1	< 2	< 1	1.8
A07-3893	85759	237.29	238.51	1.22	3	< 0.3	115	79	0.06	13.9	< 2	< 1	1
A07-3893	85760	238.51	243.08	4.57	< 2	< 0.3	161	87	0.16	2.1	< 2	< 1	0.6
A07-3893	85761a	WCM Minerals Standard PB114			767	27.1	3250	11100	1.77	21.4	< 2	5	54.9
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 3

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
3.04	5.18	2.14	**0**
5.18	8.23	3.05	**8**
8.23	11.28	3.05	**9**
11.28	12.80	1.52	**4**
12.80	14.17	1.37	**10**
14.17	17.22	3.05	**7**
17.22	20.27	3.05	**15**
20.27	21.03	0.76	**7**
21.03	22.56	1.53	**13**
22.56	23.78	1.22	**11**
23.78	26.82	3.04	**21**
26.82	29.87	3.05	**18**
29.87	31.85	1.98	**14**
31.85	33.23	1.38	**7**
33.23	36.28	3.05	**16**
36.28	37.19	0.91	**15**
37.19	38.41	1.22	**20**
38.41	39.02	0.61	**8**
39.02	42.02	3.00	**28**
42.02	43.59	1.57	**0**
43.59	46.64	3.05	**17**
46.64	48.47	1.83	**22**
48.47	50.00	1.53	**25**
50.00	51.21	1.21	**11**
51.21	52.74	1.53	**8**
52.74	55.79	3.05	**27**
55.79	57.62	1.83	**20**
57.62	58.84	1.22	**11**
58.84	61.89	3.05	**27**
61.89	64.93	3.04	**42**
64.93	67.68	2.75	**31**
67.68	69.20	1.52	**9**
69.20	72.25	3.05	**21**
72.25	74.69	2.44	**16**
74.69	75.60	0.91	**2**
75.60	78.35	2.75	**11**
78.35	79.87	1.52	**5**
79.87	81.70	1.83	**11**
81.70	82.92	1.22	**13**
82.92	85.97	3.05	**18**
85.97	88.41	2.44	**12**
88.41	90.85	2.44	**16**
90.85	91.76	0.91	**13**
91.76	93.90	2.14	**16**
93.90	96.95	3.05	**20**
96.95	99.08	2.13	**7**
99.08	102.13	3.05	**26**
102.13	104.26	2.13	**20**
104.26	105.79	1.53	**7**
105.79	106.40	0.61	**4**
106.40	109.54	3.14	**24**
109.54	110.67	1.13	**18**
110.67	112.80	2.13	**22**
112.80	114.78	1.98	**10**
114.78	116.46	1.68	**2**
116.46	119.20	2.74	**32**
119.20	121.34	2.14	38
121.34	122.61	1.27	22
122.61	123.83	1.22	2
123.83	124.44	0.61	13
124.44	125.35	0.91	25
125.35	126.27	0.92	7
126.27	127.49	1.22	10
127.49	128.40	0.91	3
128.40	128.71	0.31	1
128.71	129.01	0.30	8
129.01	129.62	0.61	12
129.62	130.54	0.92	20
130.54	132.37	1.83	18
132.37	133.59	1.22	5
133.59	134.81	1.22	6
134.81	137.25	2.44	7
137.25	138.16	0.91	12
138.16	138.47	0.31	8
138.47	139.38	0.91	7
139.38	139.69	0.31	22
139.69	141.52	1.83	16
141.52	143.96	2.44	7
143.96	146.40	2.44	14
146.40	148.84	2.44	15
148.84	151.89	3.05	11
151.89	153.72	1.83	4
153.72	155.55	1.83	7
155.55	157.99	2.44	16
157.99	161.04	3.05	**19**
161.04	163.17	2.13	**15**
163.17	165.31	2.14	**7**
165.31	167.14	1.83	**6**
167.14	168.66	1.52	**5**
168.66	169.88	1.22	**2**
169.88	171.41	1.53	**6**
171.41	173.24	1.83	**7**
173.24	176.29	3.05	**9**
176.29	179.34	3.05	**8**
179.34	182.39	3.05	**8**
182.39	183.91	1.52	**3**
183.91	184.37	0.46	**4**
184.37	185.74	1.37	**5**
185.74	186.66	0.92	**3**
186.66	188.49	1.83	**15**
188.49	191.54	3.05	**13**
191.54	192.15	0.61	**6**
192.15	194.28	2.13	**9**
194.28	196.11	1.83	**12**
196.11	199.16	3.05	**6**
199.16	200.69	1.53	**16**
200.69	203.74	3.05	**7**
203.74	204.35	0.61	**10**
204.35	206.79	2.44	**15**
206.79	209.84	3.05	**8**
209.84	212.89	3.05	**4**
212.89	215.02	2.13	**7**

Vein Counts: DDH K07 - 3

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
215.02	215.94	0.92	**5**
215.94	218.38	2.44	**12**
218.38	220.21	1.83	**13**
220.21	221.73	1.52	**15**
221.73	222.95	1.22	**8**
222.95	225.09	2.14	**6**
225.09	227.53	2.44	**12**
227.53	229.36	1.83	**7**
229.36	229.97	0.61	**6**
229.97	234.54	4.57	**3**
234.54	236.37	1.83	**3**
236.37	237.29	0.92	**4**
237.29	237.90	0.61	**5**
237.90	238.51	0.61	**2**
238.51	242.47	3.96	**7**
242.47	242.78	0.31	**3**
242.78	243.08	0.30	**5**
End of Hole			

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

Core Recovery: DDH K07 - 3														
					Recovered								**Recovered**	
Box No.	From	To	Distance		(metres)	**%**		Box No.	From	To	Distance		(metres)	**%**
1	3.04	9.39	6.35		5.0	**79**		33	167.25	172.35	5.10		4.8	**94**
2	9.39	14.17	4.78		4.7	**98**		34	172.35	177.40	5.05		4.8	**95**
3	14.17	19.15	4.98		5.0	**100**		35	177.40	182.50	5.10		5.1	**100**
4	19.15	23.46	4.31		4.3	**100**		36	182.50	187.79	5.29		5.3	**100**
5	23.46	28.40	4.94		4.9	**99**		37	187.79	194.28	6.49		4.6	**71**
6	28.40	33.21	4.81		4.2	**87**		38	194.28	199.36	5.08		5.1	**100**
7	33.21	38.04	4.83		4.8	**99**		39	199.36	204.45	5.09		5.1	**100**
8	38.04	43.59	5.55		5.3	**95**		40	204.45	209.79	5.34		5.1	**96**
9	43.59	48.41	4.82		4.8	**100**		41	209.79	214.60	4.81		4.8	**100**
10	48.41	52.99	4.58		4.6	**100**		42	214.60	219.78	5.18		5.1	**98**
11	52.99	57.76	4.77		4.8	**101**		43	219.78	224.64	4.86		4.8	**99**
12	57.76	62.82	5.06		5.1	**101**		44	224.64	229.97	5.33		5.3	**99**
13	62.82	69.07	6.25		4.5	**72**		45	229.97	238.51	8.54		4.8	**56**
14	69.07	74.40	5.33		4.8	**90**		46	238.51	243.08	4.57		1.5	**33**
15	74.40	80.29	5.89		5.7	**97**			End of Hole					
16	80.29	85.67	5.38		4.5	**84**								
17	85.67	90.32	4.65		4.2	**90**								
18	90.32	94.20	3.88		3.8	**98**								
19	94.20	98.96	4.76		4.6	**97**								
20	98.96	103.74	4.78		4.4	**92**								
21	103.74	107.50	3.76		3.7	**98**								
22	107.50	112.25	4.75		4.4	**93**								
23	112.25	117.10	4.85		4.0	**82**								
24	117.10	122.60	5.50		5.1	**93**								
25	122.60	129.74	7.14		4.1	**57**								
26	129.74	134.75	5.01		4.8	**96**								
27	134.75	142.40	7.65		4.8	**63**								
28	142.40	147.75	5.35		5.2	**97**								
29	147.75	153.50	5.75		5.5	**96**								
30	153.50	158.32	4.82		3.5	**73**								
31	158.32	163.65	5.33		5.3	**99**								
32	163.65	167.25	3.60		3.5	**97**								

PROPERTY: KANGAROO

BARKER MINERALS LTD.

DRILL HOLE NO. K07 - 4

Dip & Azmth Tests			DDH K07-4	Easting (NAD 83): 588993	Core Size: NQ2	Started: May 14, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5838690	**Hole Azimuth**: 0°	**Finished:** May 17, 2007
9.15	-50.8	343.7	Temp=12.8, Mag=57380, Roll=233.8	**Grid Location:** 200E 1600N	**Hole Angle:** -50°	**Logged by:** RT
122.00	-51.3	347.4	Temp=12.5, Mag=56140, Roll=141.4	**Elevation:**	**Total Depth:** 236.37	**Analysis by:** ActLabs
228.75	-50.6	348.5	Temp=13.4, Mag=58540, Roll=247.6			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	**To**	**Code**	**Description**	**Py**	**Cpy**	**Pyrr**		**Ep**	**Seri-cite**	**2nd Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	3.05		CASING - Overburden. No core recovery.										
3.05	24.00		Diorite. Fairly uniform medium grained. Salt and pepper black and white, generally a medium grey rock. Weak patchy greenish due to chlorite. Open fractures are somewhat rusty to approximately 11m. No significant veining, minor calcite veinlets generally oriented 45-75 deg to CA. Pyrite is mainly disseminated with some concentration in chhloritic fractures. Lower contact is approximately 30 degrees to core axis (CA) obscured by locak chloritic fracturing and minor breccia.	3								1	Spotty weak magnetism. No fizzing.
24.00	24.80		Andesite dike. Uniform fairly fine texture. Medium greenish. Contains a few small dioritic xenoliths and quartz porphyroblasts.. Very minor disseminated pyrite. No significant veins. Lower contact is approximately 30 deg to CA.	tr					1	1			Weak magnetism. Strong fizzing.

Depth (m)								Alteration Scale: 1 - 5					
From	To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
24.80	73.40		Diorite, characterized by pervasive chloritic alteration. Massive homogenous texture. Somewhat finer grained than the diorite at the top of the hole. No significant veining, the few calcite veinlets are 20-60 deg to CA. Calcite-quartz veinlets are relatively rare. Pyrite is disseminated with very minor concentration in some chloritic fractures. At 61.2m is 15cm of pyritic gougy breccia with 4cm calcite vein parralel to weak shearing at 60 deg to CA. Last 2.5metres appear to contain chloritized siltstone xenoliths. Lower contact is 30 deg to CA, no significant contact metasomatic effect apparent.	1								3	Weakly magnetic throughout. No fizzing.
73.40	117.78		Siliceous siltstone with relatively minor andesitic volcaniclastics annd less graphitic argilite. Siltstone is very fine grained and hard. No significant veining, few calcite veinlets, less calcite-quartz. Chloritic fractures are common, increasing downward. Pyrite occurs mainly in fractures. Spotty blebs of pyrrhotite and pyrite noted at 89.2m and 116.5m, the pyrrhotite is magnetic. Below 91.5m is strong, locally intense chloritic fracturing, 91.5-108m is dominated by rubble. At 103.45m a 25cm section has 10% sulphides including pyrrhotite and pyrite. Strongly magnetic here. At 107m and 108m occur 30cm zones of pyritic gougy breccia which might be fault zones. Below this rubble zone calcite veinlets are up to 0.5% of the rock, generally 55 deg to CA, still not significant. At 108-110m sulphides are locally 5%. At 110m sedimentary layering is evident, 75 deg to CA.	1		0.5						2	Very weak spotty magnetism, with the exception of moderate magnetism from 80-81.82m. and strong magnetism from 81.82-86.46m, 89.86-90.48m, and 103.02-103.70m. No apparent fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
Continued from above.			Below approximately 111m the dark grey (slightly graphitic?) argillites occur in narrow beds of several cm between greenish siltstones. Lower contact appears ragged but fairly sharp, approximately 70 deg to CA. Sulphides occur spottily, disseminated and concentrated in fractures, locally less than 1%, locally 5%.										
117.78	118.48		Semi-massive pyrrhotite. Occurs in a sericitized and silicified volcaniclastic rock. Rough, discontinuous, undulatory semi-parralel sulphide and chlorite banding is 80 deg to CA, perhaps parralel to and alteration or zoning front. There appears no obvious structural mineral trap here. Pyrite and chalcopyrite seem later than pyrrhotite, occring in cross cutting fractures, though some pyrite blebs also parralel the pyrrhotite 'bands'. Lower contact is fairly sharp, approximately 75 deg to CA. **At 118.15-118.39 a library example taken,** shows coarsly banded sulphides. Sample No. 187613 from 117.78-118.48m left out the portion from 117.90-118.15m. This portion was later sampled as No. 85805.	1	tr	30			1		1	1	Strongly magnetic. Fizzes strongly.
118.48	123.00		Mixed siltstone and volcaniclastic. Siltstone is less siliceous that at 74-117m. Narrow dark graphitic horizons occur. Blebs of pyrite, pyrrhotite, rare chalcopyrite occur randomly. Strongly fractured rock between 121-123m. At 122.9m sedimantary layering is evident, 45 deg to CA. Lower contact is sharp, 40 deg to CA.	1	tr	tr					1	2	Not magnetic. Fizzes strongly.
123.00	123.65		Semi-massive pyrrhotite, similar to that above. Rough banding is 45 deg to CA. Lower contact is sharp, 45 deg to CA. **At 123.20-123.38m a library example was taken,** shows coarsely banded sulphides.	0.5		40			1		1	1	Very strongly magnetic. Fizzes very strongly

Depth (m)								Alteration Scale: 1 - 5					
From	To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
123.65	126.30		Siltstone, not siliceous. Greenish. Highly fractured. Just below upper contact, sedimentary layering is 45 deg to CA. Lower contact is approximate, lost in highly fractured rock and rubble. Pyrite is spotty, locally disseminated.	0.5		0.5						1	Strong, spotty magnetism Fizzing is strong and spotty.
126.30	131.80		Andesitic volcaniclastic with minor siltstone. Medium greenish. Local small feldspar phenocrysts, generally fairly fine grained. Pyrite is mainly disseminated, also occurs in fractures. Lower contact is approximate, lost in highly fractured rock.	0.5		0.5		1	1	tr		1	Moderate, spotty magnetism. No fizzing.
131.80	137.25		Siltstone as at 124-126m, not siliceous. Greenish. Highly fractured. 132.98-137.25m is chloritic rubble with very poor core recovery. Lower contact is approximate. lost in rubble.	tr								3	Not magnetic. Strong, spotty fizzing.
137.25	143.65		Andesitic volcaniclastic. Medium greenish. Local small feldspar phenocrysts, generally fairly fine grained. Pyrite is disseminated.	0.1		0.1			1			1	Moderate, spotty magnetism. No fizzing.
143.65	149.50		Siltstone. Generally not siliceous. Locally greenish grey, often dark to medium grey. A faint pervasive tan colour may be due to Fe carbonate. No significant veining but for very minor calcite veinlets. Pyrite is spotty, mainly in fractures or local wisps or blebs. Lower contact is sharp, 55 deg to CA.	2		0.1				tr			Moderate, spotty magnetism. No fizzing.

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	To	Code	Description	Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
149.50	157.99		Andesitic volcaniclastic with large siltstone component. 50% volcanic, 50% siltstone. The volcaniclastic is greenish, has 1% blebby pyrite occuring spottily. The siltstone is greenish in the upper half of the interval but dark grey (graphitic?) lower. Calcite veinlets make up 1% of the zone, generally 45 deg to CA. Pyrite occurs in the siltstone mainly in fractures. At 151.89-152.10m and 152.74-153.10m is grey chert, with no increase in sulphides. These two zones have upper and lower contacts and fine banding within at 45 deg to CA. At 151.89-154.05 calcite veins have tan ankerite alteration adjacent. At 154.2-157.0m is dark grey to blackish graphitic soft siltstone. Lower contact appears 15 deg to CA, characterized by minor calcite vein breccia. Rock above contact is greenish volcanic, rock below is blackish siltstone.	2		tr			tr	1		tr	Weak, spotty magnetism. Weak, spotty fizzing.
157.99	160.00		Hydrothermal breccia. Dark grey to blackish siltstone is brecciated by calcite veining. Some veins have narrow drusy vugs. No significant pyrite associated with the veins. The breccia is clast supported. 20% of the rock is calcite veins in veins. Lower contact is unclear in breccia.	tr						3			No magnetism. No fizzing.

Depth (m)								Alteration Scale: 1 - 5					
From	To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
160.00	175.68		Volcaniclastic interbedded with lesser siltstone. Volcaniclastic is medium greenish, siltstone is dark grey to blackish. This interval is mostly rubble, the core is mostly shattered due to very intense chloritic fracturing. No significant veining. The few veinlets are calcite. Pyrite is very fine, mainly disseminated. No real lower contact, this is mainly an arbitrary approximate boundary where dark grey silstone essentially ends.	0.1					1	1		4	No magnetism. Weak, spotty fizzing.
175.68	181.17		Volcaniclastic. Medium greenish. Light colour suggests the volcaniclastic as andesitic. Fracture intensity remains fairly high but much less than before and rubble has ended at around upper contact. . No significant veining. The few veinlets are calcite. Lower contact is approximate, rather arbitrary, marks further lessening of broken core due to chloritic fractures.	tr						tr		3	Weak, spotty magnetism. No fizzing.
181.17	191.60		Volcaniclastic. Light to medium greenish. Texture is somewhat variable between finer and coarser clastic rock. Local small sericitic zones occur mainly as selvages around veinlets and fractures, bleaching the rock a lighter greenish, these zones are weakly silicified. Patchy weak tan tinge suggests local weak pervasive Fe carbonate. Lower contact is approximate, marking a 40cm highly fractured and gouge zone. No intense shearing evident, this is not likely a significant fault zone.	tr					1	1	1	2	Not magnetic. No fizzing is apparent.

Depth (m)								Alteration Scale: 1 - 5					
From	To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
191.60	199.80		Mafic intrusive (dike) mixed with siliceous volcaniclastic or siltstone. The different rocks and their contacts are difficult to separate due to strong alteration and fracturing. Pervasive alteration tends to be strong and extensive. All rocks are fairly intensely fractured, fractures containing chlorite and minor pyrite. Calcite veining is somewhat more, 1%. Fine pyrite occurs irregularly disseminated with minor concentration in some fractures. At 193.65m and 197.5m occur clasts and apparent augite phenocrysts that have dark green alteration (fuschite?) rhinds around them. The rock is locally bleached very light green here. **At 193.65m a specimen taken for thin section**, shows sericitic alteration & fuschite (?). Lower contact is sharp, 40 deg to CA with 10cm gouge above it.	0.5				1	4	2	1	1	No magnetism. No fizzing.

Depth (m)		Litho-						Alteration Scale: 1 - 5					
From	To	Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
199.80	236.37		Volcaniclastic interbedded with lesser siltstone. Volcaniclastic is dark to medium greenish, siltstone is dark grey to blackish. Rubble is common, the core is extensively shattered due to very intense chloritic fracturing. No significant veining. Minor calcite veining, much less quartz. The veinlets tend mainly to be 40-70 deg to CA. Pyrite is very fine, erratic, mainly disseminated. Pyrite contant may be higher than apparent. At 203.75m is 20cm crumbly pyritic gouge. Small blebs of pyrrhotite observed at 227.5m. At 214.41m is 30cm of gouge with 5cm calcite associated, and small bleb chalcopyrite. Between this and 225m occur minor gouge and extensive rubble due to intense chloritic fractures. At 218-220m, 222-225m, 235.35-236.37m occur dark grey to blackish (graphitic) siltstone. At 229.55-235.35m is a massive andesitic dike with upper contact 40 deg to CA. **End of hole at 236.37m**, occurs in siltstone rubble.	2	tr	tr			1	1	1	2	Magnetism is very weak, until 230-232.5m, where magnetism is moderate. Fizzes strongly and spottily.

Lithology: DDH K07 - 4

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	3.05	**CASING - Overburden.**									
3.05	24.00	**Diorite.**	3								1
24.00	24.80	**Andesite dike.**	tr					1	1		
24.80	73.40	**Diorite.**	1								3
73.40	117.78	**Siliceous siltstone, minor andesitic volcaniclastics, graphitic argilite.**	1		0.5						2
117.78	118.48	**Semi-massive pyrrhotite.**	1	tr	30			1		1	1
118.48	123.00	**Siltstone and volcaniclastic.**	1	tr	tr					1	2
123.00	123.65	**Semi-massive pyrrhotite.**	0.5		40			1		1	1
123.65	126.30	**Siltstone**	0.5		0.5						1
126.30	131.80	**Andesitic volcaniclastic, minor siltstone.**	0.5		0.5		1	1	tr		1
131.80	137.25	**Siltstone.**	tr								3
137.25	143.65	**Andesitic volcaniclastic.**	0.1		0.1			1			1
143.65	149.50	**Siltstone.**	2		0.1				tr		
149.50	157.99	**Andesitic volcaniclastic, siltstone**	2		tr			tr	1		tr
157.99	160.40	**Hydrothermal breccia, siltstone.**	tr						3		
160.40	175.68	**Volcaniclastic, minor siltstone.**	0.1					1	1		4
175.68	181.17	**Volcaniclastic.**	tr						tr		3
181.17	191.60	**Volcaniclastic.**	tr					1	1	1	2
191.60	199.80	**Mafic intrusive (dike) mixed with siliceous volcaniclastic or siltstone.**	0.5				1	4	2	1	1
199.80	236.37	**Andesitic volcaniclastic, minor siltstone.**	2	tr	tr			1	1	1	2
		End of hole.									

BARKER MINERALS LTD.

DRILL HOLE No. K07-4

Sample Intervals: DDH K07 - 4													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3977	85776a	WCM Minerals Standard PB114			1050	27.9	3140	10700	1.72	20.1	< 2	4	64.9
A07-3977	85777	6.10	7.93	1.83	< 2	< 0.3	30	71	0.33	6.8	< 2	< 1	3.4
			Sampling gap - 2.44m										
A07-3977	85778	10.37	12.50	2.13	< 2	< 0.3	196	63	1.37	4.3	< 2	< 1	0.8
			Sampling gap - 2.14m										
A07-3977	85779	14.64	17.08	2.44	< 2	< 0.3	184	49	1.17	7.2	< 2	< 1	0.9
			Sampling gap - 2.44m										
A07-3977	85780	19.52	20.74	1.22	< 2	< 0.3	196	52	1.54	7.1	< 2	< 1	1
A07-2305	187601	20.74	23.00	2.26	< 2	< 0.3	233	68	1.59	< 0.5	< 2	< 1	0.8
			Sampling gap - 2.92m										
A07-2305	187602	25.92	28.36	2.44	< 2	< 0.3	43	62	0.26	< 0.5	< 2	< 1	< 0.1
A07-3977	85781	28.36	29.89	1.53	22	0.4	11	89	0.29	995	< 2	< 1	7.6
			Sampling gap - 3.66m										
A07-3977	85782	33.55	36.60	3.05	< 2	< 0.3	14	61	0.15	5	< 2	< 1	0.7
			Sampling gap - 4.57m										
A07-3977	85783	41.17	43.00	1.83	< 2	< 0.3	11	68	0.1	4.2	< 2	< 1	0.4
			Sampling gap - 2.14m										
A07-3977	85784	45.14	48.19	3.05	< 2	< 0.3	49	52	0.24	4.7	< 2	< 1	0.6
			Sampling gap - 6.10m										
A07-3977	85785	54.29	57.34	3.05	< 2	< 0.3	116	52	0.16	5	< 2	< 1	0.8
A07-3977	85786	57.34	60.39	3.05	19	< 0.3	104	53	0.13	< 0.5	< 2	< 1	< 0.1
A07-2305	187603	60.39	62.22	1.83	16	< 0.3	109	54	0.23	155	< 2	< 1	1.7
A07-3977	85787	62.22	64.66	2.44	< 2	< 0.3	110	59	0.22	< 0.5	< 2	< 1	2.4
A07-3977	85788	64.66	67.39	2.73	< 2	< 0.3	78	55	0.27	< 0.5	< 2	< 1	0.3
A07-3977	85789	67.39	68.93	1.54	< 2	< 0.3	102	62	0.31	< 0.5	< 2	< 1	< 0.1
A07-2305	187604	68.93	71.97	3.04	11	0.4	66	61	0.15	< 0.5	< 2	< 1	< 0.1
A07-2305	187605	71.97	73.40	1.43	< 2	< 0.3	105	88	0.63	5.8	< 2	< 1	0.6
A07-3977	85790	73.40	75.94	2.54	< 2	< 0.3	37	51	0.19	2.5	< 2	< 1	< 0.1
A07-3977	85791	75.94	78.08	2.14	< 2	< 0.3	19	72	0.05	2.5	< 2	< 1	0.4
A07-3977	85792	78.08	80.00	1.92	< 2	< 0.3	108	68	0.73	2.8	< 2	< 1	< 0.1
A07-3977	85793	80.00	81.82	1.82	< 2	< 0.3	211	73	1.62	3	< 2	< 1	0.6
A07-3977	85794	81.82	84.33	2.51	< 2	< 0.3	194	70	1.91	4.7	< 2	< 1	0.5
A07-3977	85795	84.33	86.31	1.98	< 2	< 0.3	365	83	1.98	4.5	< 2	< 1	< 0.1

BARKER MINERALS LTD.

DRILL HOLE No. K07-4

Sample Intervals: DDH K07 - 4													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3977	85796	86.31	89.06	2.75	< 2	< 0.3	104	61	0.77	4.3	< 2	< 1	0.4
A07-2305	187606	89.06	90.28	1.22	13	< 0.3	174	73	1.88	1.4	< 2	< 1	< 0.1
A07-2305	187607	90.28	91.80	1.52	13	< 0.3	109	51	0.84	5.9	< 2	< 1	0.6
A07-3977	85797a	WCM Minerals Standard PB115			36	19.2	5010	16000	2.08	26.3	11	2	40.7
A07-3977	85798	91.80	93.94	2.14	18	0.7	87	105	0.68	205	< 2	< 1	52.7
A07-3977	85799	93.94	96.07	2.13	< 2	< 0.3	90	59	0.73	5.7	< 2	< 1	0.9
A07-2305	187608	96.07	98.21	2.14	107	0.5	801	183	4.5	10.3	< 2	< 1	1.8
A07-3977	85800	98.21	100.65	2.44	< 2	0.3	106	109	0.79	6.7	< 2	< 1	0.7
A07-3977	85801	100.65	103.09	2.44	< 2	0.4	128	153	1.03	16.8	< 2	< 1	0.5
A07-3977	85802	103.09	105.53	2.44	9	0.4	541	157	3.03	20.5	< 2	< 1	1.5
A07-2305	187609	105.53	107.36	1.83	< 2	0.4	130	92	1.82	34.7	< 2	< 1	2.3
A07-3977	85803	107.36	110.50	3.14	< 2	0.4	175	493	1.3	76.9	< 2	< 1	4
A07-3977	85804	110.50	113.76	3.26	< 2	0.3	196	1130	1.54	83.3	< 2	< 1	4.6
A07-2305	187610	113.76	115.27	1.51	< 2	< 0.3	308	91	1.88	7.8	< 2	< 1	2.3
A07-2305	187611	115.27	116.81	1.54	16	< 0.3	247	1400	2.1	15.2	< 2	< 1	2.5
A07-2305	187612	116.81	117.78	0.97	< 2	< 0.3	116	90	0.69	9	< 2	< 1	6.3
A07-2305	187613	117.78	118.48	0.70	163	0.8	1600	134	9.88	7.6	< 2	< 1	3
A07-3977	85805	117.90	118.15	0.25	86	0.8	1430	135	5.86	6.7	< 2	< 1	1.6
A07-2305	187614	118.48	120.00	1.52	< 2	< 0.3	195	104	1.79	21	< 2	< 1	4.4
A07-2305	187615	120.00	121.50	1.50	13	< 0.3	163	165	1.11	34.7	< 2	< 1	55.8
A07-2305	187616	121.50	123.00	1.50	< 2	< 0.3	128	158	0.79	24.9	< 2	< 1	2.3
A07-2305	187617	123.00	123.65	0.65	99	0.9	2170	148	11.1	10.2	< 2	< 1	1.4
A07-2305	187618	123.65	125.05	1.40	< 2	< 0.3	121	146	0.88	19.8	< 2	< 1	0.9
A07-2305	187619	125.05	126.30	1.25	16	< 0.3	455	609	2.6	11.7	< 2	< 1	1.4
A07-2305	187620	126.30	128.00	1.70	< 2	< 0.3	141	98	0.82	13.1	2	< 1	3.5
A07-2305	187621	128.00	130.54	2.54	< 2	< 0.3	163	82	1.02	3.6	3	< 1	1.2
A07-2305	187622	130.54	131.80	1.26	< 2	< 0.3	159	87	1.19	3.9	< 2	< 1	1.4
A07-2305	187623	131.80	132.98	1.18	< 2	< 0.3	181	62	1.99	13.7	< 2	< 1	1.5
A07-3977	85806	132.98	137.25	4.27	< 2	< 0.3	313	103	2.54	17.7	< 2	< 1	2.1
A07-2305	187624	137.25	138.25	1.00	< 2	< 0.3	182	65	1.92	4.8	< 2	< 1	0.9
A07-3977	85807	138.25	139.69	1.44	< 2	0.3	119	65	2.11	15.7	< 2	< 1	1.1
A07-3977	85808	139.69	141.21	1.52	< 2	< 0.3	84	82	0.7	10.4	< 2	< 1	0.8
A07-2305	187625a	WCM Minerals Standard PB113			2830	19.5	4230	14400	2.14	127	< 2	< 1	25.3

BARKER MINERALS LTD.

DRILL HOLE No. K07-4

Sample Intervals: DDH K07 - 4													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2305	187626	141.21	142.74	1.53	< 2	< 0.3	180	66	2.28	4.1	< 2	< 1	1.3
A07-2305	187627	142.74	143.65	0.91	< 2	< 0.3	208	83	1.89	3.7	< 2	< 1	1.1
A07-2305	187628	143.65	146.70	3.05	< 2	< 0.3	206	134	4.08	3.9	< 2	< 1	0.9
A07-3977	85809	146.70	148.84	2.14	< 2	0.5	149	225	3.25	10.5	< 2	< 1	1.2
A07-3977	85810	148.84	149.50	0.66	12	0.5	220	45	3.59	28	< 2	< 1	1.2
A07-3977	85811	149.50	151.89	2.39	11	0.4	241	62	2.53	41.8	< 2	< 1	3
A07-3977	85812	151.89	154.05	2.16	< 2	0.3	206	68	1.1	38.9	< 2	< 1	3
A07-3977	85813	154.05	154.94	0.89	14	1	140	119	1.25	44.7	< 2	< 1	9.2
A07-2305	187629	154.94	156.48	1.54	9	1.1	134	170	1.34	43.6	< 2	< 1	4.8
A07-3977	85814	156.48	157.60	1.12	23	0.9	120	98	1.48	403	< 2	< 1	5.5
A07-2305	187630	157.60	159.00	1.40	< 2	0.5	100	84	0.75	1530	< 2	< 1	13.8
A07-2305	187631	159.00	160.00	1.00	< 2	0.5	53	364	0.2	612	< 2	< 1	2.2
A07-2305	187648	160.00	161.00	1.00	< 2	0.4	54	52	0.53	1620	< 2	< 1	9.9
A07-3977	85815	161.00	164.09	3.09	< 2	0.4	205	77	1.01	8360	< 2	< 1	52.9
A07-3977	85816	164.09	165.92	1.83	7	< 0.3	53	76	0.62	738	< 2	< 1	6.4
A07-3977	85817	165.92	168.05	2.13	7	< 0.3	88	83	0.56	158	< 2	< 1	1.9
A07-2305	187632	168.05	170.80	2.75	< 2	< 0.3	85	74	0.09	73.2	< 2	< 1	1.9
A07-3977	85818	170.80	172.32	1.52	< 2	< 0.3	54	56	0.12	70.2	< 2	< 1	3.1
A07-3977	85819	172.32	174.76	2.44	< 2	< 0.3	22	52	0.07	106	< 2	< 1	2.1
A07-2305	187633	174.76	175.68	0.92	< 2	< 0.3	140	101	0.06	29.2	< 2	< 1	1.9
A07-2305	187634	175.68	176.90	1.22	7	< 0.3	230	107	0.25	109	< 2	< 1	3
A07-3977	85820a	WCM Minerals Standard PB114			791	26.7	3070	10800	1.66	22.2	< 2	3	64.8
A07-3977	85821	176.90	178.12	1.22	< 2	< 0.3	40	102	0.1	455	< 2	< 1	4.3
A07-3977	85822	178.12	180.56	2.44	< 2	< 0.3	113	73	0.45	246	< 2	< 1	3.4
A07-3977	85823	180.56	182.69	2.13	< 2	< 0.3	129	77	0.37	8.6	< 2	< 1	1.8
A07-2305	187635	182.69	184.22	1.53	< 2	< 0.3	38	82	0.11	7.6	2	< 1	1.2
A07-3977	85824	184.22	187.27	3.05	< 2	< 0.3	115	73	0.21	7	< 2	< 1	1.1
A07-3977	85825	187.27	190.32	3.05	< 2	< 0.3	20	57	0.06	63.7	< 2	< 1	1.9
A07-2305	187636	190.32	191.60	1.28	< 2	< 0.3	24	67	0.27	954	< 2	< 1	0.6
A07-2305	187637	191.60	193.37	1.77	< 2	< 0.3	75	53	0.58	170	< 2	< 1	3.8
A07-2305	187638	193.37	195.56	2.19	< 2	< 0.3	85	60	0.2	94.5	< 2	< 1	7.8
A07-2305	187639	195.56	196.42	0.86	< 2	< 0.3	111	72	0.3	16.6	< 2	< 1	1.3
A07-2305	187640	196.42	197.77	1.35	< 2	< 0.3	50	70	0.18	75.4	< 2	< 1	2.8

BARKER MINERALS LTD.

DRILL HOLE No. K07-4

Sample Intervals: DDH K07 - 4													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2305	187641	197.77	199.80	2.03	< 2	< 0.3	197	79	1.06	43.5	< 2	< 1	3.7
A07-3977	85826	199.80	201.30	1.50	< 2	< 0.3	81	52	0.28	14.2	< 2	< 1	2.1
A07-2305	187642	201.30	202.52	1.22	< 2	< 0.3	138	43	0.53	375	< 2	< 1	6.7
A07-3977	85827	202.52	203.65	1.13	< 2	< 0.3	65	57	0.53	10.4	< 2	< 1	0.9
A07-3977	85828	203.65	203.85	0.20	< 2	< 0.3	22	60	1.05	8.9	< 2	< 1	1.2
A07-3977	85829	203.85	204.51	0.66	< 2	< 0.3	173	55	0.67	7.9	< 2	< 1	1.2
A07-3977	85830	204.51	206.18	1.67	< 2	< 0.3	91	51	0.17	6.2	< 2	< 1	0.8
A07-2305	187643	206.18	207.70	1.52	5	0.3	122	36	0.62	6.1	< 2	< 1	1.3
A07-3977	85831	207.70	209.84	2.14	< 2	< 0.3	25	84	0.08	24.4	< 2	< 1	1.3
A07-3977	85832	209.84	212.28	2.44	< 2	0.7	513	243	0.88	18.5	< 2	< 1	1.8
A07-3977	85833	212.28	214.20	1.92	< 2	< 0.3	144	59	0.56	109	< 2	< 1	2.9
A07-2305	187647	214.20	214.41	0.21	105	< 0.3	196	69	1.12	2260	< 2	< 1	49.7
A07-3977	85834	214.41	215.50	1.09	< 2	0.4	222	138	0.66	97.2	< 2	< 1	2.1
A07-3977	85835	215.50	216.64	1.14	< 2	< 0.3	60	62	0.55	75.2	< 2	< 1	1.2
A07-3977	85836	216.64	218.07	1.43	< 2	< 0.3	28	54	0.26	71.5	< 2	< 1	1
A07-3977	85837a	WCM Minerals Standard PB115			25	18.8	4950	16100	2.05	23.1	< 2	3	41.4
A07-2305	187644	218.07	219.90	1.83	8	0.5	83	80	0.55	201	< 2	< 1	4.1
A07-3977	85838	219.90	222.34	2.44	159	1	225	103	0.87	11.3	< 2	< 1	1.4
A07-3977	85839	222.34	223.56	1.22	10	1.2	90	175	1.47	5.6	< 2	< 1	2.4
A07-2305	187645	223.56	224.78	1.22	< 2	1.2	87	197	1.85	13.9	< 2	< 1	3.8
A07-3977	85840	224.78	225.53	0.75	36	0.8	99	36	0.89	339	< 2	< 1	10.1
A07-2305	187646	225.53	227.83	2.30	< 2	< 0.3	249	56	1.4	22.8	2	< 1	3.8
A07-3977	85841	227.83	229.55	1.72	< 2	0.3	118	84	0.66	16.7	< 2	< 1	1.3
A07-3977	85842	229.55	232.10	2.55	< 2	0.4	301	69	1.32	7.6	< 2	< 1	0.9
A07-3977	85843	232.10	235.35	3.25	< 2	< 0.3	119	71	0.35	< 0.5	< 2	< 1	< 0.1
A07-3977	85844	235.35	236.33	0.98	< 2	< 0.3	78	70	0.45	5.3	< 2	< 1	0.6
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 4

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
3.05	3.66	0.61	**5**
3.66	3.96	0.30	**7**
3.96	6.10	2.14	**5**
6.10	7.01	0.91	**5**
7.01	7.93	0.92	**6**
7.93	8.54	0.61	**8**
8.54	10.37	1.83	**9**
10.37	11.59	1.22	**13**
11.59	13.72	2.13	**11**
13.72	14.64	0.92	**11**
14.64	17.08	2.44	**8**
17.08	17.69	0.61	**6**
17.69	19.52	1.83	**9**
19.52	20.74	1.22	**10**
20.74	22.87	2.13	**13**
22.87	25.92	3.05	**10**
25.92	28.36	2.44	**8**
28.36	29.89	1.53	**12**
29.89	31.72	1.83	**10**
31.72	33.55	1.83	**8**
33.55	34.77	1.22	**6**
34.77	36.60	1.83	**8**
36.60	37.51	0.91	**3**
37.51	38.12	0.61	**3**
38.12	41.17	3.05	**10**
41.17	43.00	1.83	**6**
43.00	45.14	2.14	**8**
45.14	48.19	3.05	**6**
48.19	51.24	3.05	**4**
51.24	54.29	3.05	**6**
54.29	57.34	3.05	**11**
57.34	60.39	3.05	**6**
60.39	62.22	1.83	**10**
62.22	64.66	2.44	**8**
64.66	66.49	1.83	**3**
66.49	68.93	2.44	**6**
68.93	71.98	3.05	**7**
71.98	72.59	0.61	**8**
72.59	75.94	3.35	**6**
75.94	78.38	2.44	**5**
78.38	78.69	0.31	**3**
78.69	81.74	3.05	**7**
81.74	84.33	2.59	**6**
84.33	86.31	1.98	**9**
86.31	87.53	1.22	**6**
87.53	89.06	1.53	**5**
89.06	90.28	1.22	**4**
90.28	90.89	0.61	**3**
90.89	91.80	0.91	**3**
91.80	93.63	1.83	**4**
93.63	93.94	0.31	**1**
93.94	94.85	0.91	**2**
94.85	95.16	0.31	**1**
95.16	96.07	0.91	**4**
96.07	97.90	1.83	**3**
97.90	98.21	0.31	**0**
98.21	98.51	0.30	**2**
98.51	100.65	2.14	**0**
100.65	101.87	1.22	**3**
101.87	102.17	0.30	**2**
102.17	103.09	0.92	**3**
103.09	103.70	0.61	**11**
103.70	105.53	1.83	**9**
105.53	107.36	1.83	**7**
107.36	108.27	0.91	**4**
108.27	111.32	3.05	**15**
111.32	113.76	2.44	**10**
113.76	116.81	3.05	**9**
116.81	119.86	3.05	**7**
119.86	122.61	2.75	**11**
122.61	125.05	2.44	**9**
125.05	127.49	2.44	**4**
127.49	130.54	3.05	**6**
130.54	132.98	2.44	**5**
132.98	137.25	4.27	**2**
137.25	139.69	2.44	**5**
139.69	141.21	1.52	**7**
141.21	142.74	1.53	**5**
142.74	143.65	0.91	**5**
143.65	144.57	0.92	**7**
144.57	146.70	2.13	**6**
146.70	148.84	2.14	**12**
148.84	150.36	1.52	**10**
150.36	151.89	1.53	**23**
151.89	154.94	3.05	**19**
154.94	157.99	3.05	**17**
157.99	161.04	3.05	**34**
161.04	164.09	3.05	**3**
164.09	164.70	0.61	**2**
164.70	165.92	1.22	**2**
165.92	166.83	0.91	**3**
166.83	167.14	0.31	**0**
167.14	168.05	0.91	**1**
168.05	169.58	1.53	**3**
169.58	170.80	1.22	**4**
170.80	171.41	0.61	**4**
171.41	171.71	0.30	**0**
171.71	172.32	0.61	**5**
172.32	173.24	0.92	**3**
173.24	173.54	0.30	**5**
173.54	174.15	0.61	**5**
174.15	174.76	0.61	**3**
174.76	175.68	0.92	**7**
175.68	176.90	1.22	**7**
176.90	177.20	0.30	**6**
177.20	178.12	0.92	**2**
178.12	179.18	1.06	**4**
179.18	180.56	1.38	**2**
180.56	181.17	0.61	**3**
181.17	182.69	1.52	**11**
182.69	183.30	0.61	**7**
183.30	184.22	0.92	**9**

Vein Counts: DDH K07 - 4

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
184.22	187.27	3.05	**18**
187.27	188.18	0.91	**8**
188.18	190.32	2.14	**8**
190.32	193.37	3.05	**13**
193.37	196.42	3.05	**13**
196.42	199.47	3.05	**9**
199.47	201.30	1.83	**12**
201.30	202.52	1.22	**17**
202.52	204.65	2.13	**7**
204.65	206.18	1.53	**11**
206.18	207.70	1.52	**3**
207.70	208.31	0.61	**2**
208.31	209.84	1.53	**6**
209.84	212.89	3.05	**21**
212.89	214.41	1.52	**7**
214.41	215.33	0.92	**2**
215.33	218.07	2.74	**5**
218.07	219.90	1.83	**15**
219.90	220.51	0.61	**3**
220.51	222.34	1.83	**6**
222.34	223.56	1.22	**4**
223.56	224.78	1.22	**2**
224.78	227.83	3.05	**13**
227.83	229.51	1.68	**13**
229.51	232.10	2.59	**14**
232.10	235.76	3.66	**9**
235.76	236.07	0.31	**4**

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
236.07	236.37	0.30	**0**
End of Hole			

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

Core Recovery: DDH K07 - 4																	
					Recovered									**Recovered**			
Box No.	From	To	Distance		(metres)	**%**		Box No.	From	To	Distance		(metres)	**%**			
1	3.05	7.93	4.88		4.3	**88**		33	161.00	168.25	7.25		5.2	**72**			
2	7.93	12.50	4.57		4.6	**101**		34	168.25	173.39	5.14		4.0	**78**			
3	12.50	17.69	5.19		5.2	**100**		35	173.39	177.11	3.72		3.7	**99**			
4	17.69	22.80	5.11		5.1	**100**		36	177.11	181.17	4.06		4.1	**101**			
5	22.80	28.64	5.84		5.8	**99**		37	181.17	185.37	4.20		5.0	**119**			
6	28.64	33.10	4.46		4.5	**101**		38	185.37	190.22	4.85		4.9	**101**			
7	33.10	37.80	4.70		4.7	**100**		39	190.22	195.56	5.34		5.3	**99**			
8	37.80	43.00	5.20		5.2	**100**		40	195.56	200.00	4.44		4.2	**95**			
9	43.00	47.90	4.90		4.9	**100**		41	200.00	204.51	4.51		4.5	**100**			
10	47.90	52.85	4.95		5.0	**101**		42	204.51	208.46	3.95		4.0	**101**			
11	52.85	57.34	4.49		4.5	**100**		43	208.46	212.58	4.12		4.1	**100**			
12	57.34	62.20	4.86		4.9	**101**		44	212.58	216.64	4.06		4.1	**101**			
13	62.20	67.39	5.19		5.2	**100**		45	216.64	221.00	4.36		4.3	**99**			
14	67.39	72.25	4.86		4.9	**101**		46	221.00	225.52	4.52		4.4	**97**			
15	72.25	77.05	4.80		4.8	**100**		47	225.52	231.25	5.73		5.6	**98**			
16	77.05	81.82	4.77		4.8	**101**		48	231.25	236.37	5.12		5.1	**100**			
17	81.82	86.46	4.64		4.6	**99**		End of Hole									
18	86.46	91.12	4.66		4.6	**99**											
19	91.12	95.49	4.37		4.2	**96**		Note:	Blocks don't appear placed accurately in boxes 5,6,7,8,32,33,36,37.								
20	95.49	103.02	7.53		4.5	**60**			90-113.3m. Rock is extremely broken, rubbly.								
21	103.02	108.16	5.14		4.5	**88**			121-128m. Rock is extremely broken, rubbly.								
22	108.16	113.32	5.16		5.1	**99**			131.5-137.3m. Rock is extremely broken, rubbly.								
23	113.32	117.78	4.46		4.4	**99**			139.7-146.3m. Rock is extremely broken, rubbly.								
24	117.78	122.56	4.78		4.3	**90**			157-181m. Rock is extremely broken, rubbly.								
25	122.56	127.28	4.72		4.0	**85**			191.5-196m. Rock is highly fractured, broken								
26	127.28	131.64	4.36		4.3	**99**			198-200m. Rock is extremely broken, rubbly.								
27	131.64	139.30	7.66		4.2	**55**			201-203m. Rock is extremely broken, rubbly.								
28	139.30	143.85	4.55		4.5	**99**			206-208.8m. Rock is extremely broken, rubbly.								
29	143.85	148.32	4.47		4.3	**96**			209-210.5m. Rock is extremely broken, rubbly.								
30	148.32	152.92	4.60		4.6	**100**			214-215m. Rock is extremely broken, rubbly.								
31	152.92	158.30	5.38		5.4	**100**			216.6-225.6m. Rock is extremely broken, rubbly.								
32	158.30	161.00	2.70		2.7	**100**			235.35-236.37m. Rock is extremely broken, rubbly.								

PROPERTY: KANGAROO

BARKER MINERALS LTD.

DRILL HOLE NO. K07 - 5

Dip & Azmth Tests			DDH K07-5	**Easting (NAD 83):** 588993	**Core Size:** NQ2	**Started:** May 18, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5837402	**Hole Azimuth**: 0°	**Finished:** May 21, 2007
9.15	-50.4	341.0	Temp=14.9, Mag=56330, Roll=-293.4	**Grid Location:** 200E 300N	**Hole Angle:** -50°	**Logged by:** RT
131.15	-50.4	343.3	Temp=15.8, Mag=56360, Roll=274.4	**Elevation:**	**Total Depth:** 261.69m	**Analysis by:** ActLabs
253.15	-48.2	346.7	Temp=14.6, Mag=56330, Roll=100.6			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		**Litho-**						**Alteration Scale: 1 - 5**					
From	**To**	**Code**	**Description**	**% Py**	**% Cpy**	**% Pyrr**		**Ep**	**Seri-cite**	**2nd Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	5.55		CASING - Overburden. Stones are andesitic volcaniclastic. Medium greenish. Uniform fine grained. Intensely fractured, chloritic fractures, core is very broken up. Heavy limonite stain in most fractures.										
5.55	10.95		Andesitic volcaniclastic. Medium greenish. Uniform fine grained. Intensely fractured with chlorite in the fractures. Rock breaks very easily along the fractures. Minor calcite veinlets, oriented mainly 0-60 deg to CA, some veinlets are 10 and 80 deg to CA. Pyrite is irregularly disseminated in small blebs and in minor concentrations in chloritic fractures and less as rhinds around feldspar clasts. **At 11.20m a specimen taken for thin section**, shows basalt with (amygdules?) & xenolith. Lower contact is 20 degrees to core axis (CA). The rock above the contact is locally brecciated here with heavier pervasive chlorite.	0.5					2			3	Not magnetic. Spotty fizzing.
10.95	12.65		Basalt (dike?). Dark greyish black. Fine grained. 2% white ovoids (amygdules?) make 1% of the rock. Granular pyrite occurs in thin stringers 35 deg to CA and parallel to lower contact. Less pyrite occurs irregularly disseminated as small blebs. Contains small chloritized xenoliths of wall rock. Lower contact is 25 deg to CA, characterized by contact brecciation and stronger pervasive chlorite.	0.5								4	Not magnetic. Spotty fizzing.

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	To	Code	Description	Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
12.65	17.80		Diorite coarse porphyry. Coarse grained, superficially resembling a breccia due to crowded phenocrysts and smaller crystals.. Coarser pyroxene crystals are 10mm. No significant veining, very minor calcite veinlets. Not magnetic. Pyrite is very fine and disseminated with less in small blebs. Dark greenish black. Some siltstone xenoliths occur at 15m. Lower contact is unclear, appears gradational into chloritized rock below.	0.1								3	Fizzes only at calcite veinlets.
17.80	19.21		Breccia of mixed rock, coarse diorite containing xenoliths of andesite. Contacts with these xenoliths (or dike) are 10 deg to CA. Blebs of pyrite and very minor chalcopyrite occur in a strongly chloritic groundmass. Just above lower contact a sulphide stringer follows a dike contact parallel to core axis for 45cm. Lower contact is unclear in broken rock.	1	tr				1			4	Spotty fizzing.
19.21	20.10		Andesite dike. Uniform fine texture. Small white feldspar phenocrysts are matrix supported and easily visible against the groundmass. Medium greyish green. Pyrite is evenly disseminated and in small stringers. Relatively minor chloritic fractures. Calcite veining is very minor. Lower contact is irregular, approx 15 deg to CA, accompanied by pyritic quartz carbonate veinlets.	0.5				tr				1	Fizzes at calcite veinlets.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
20.10	56.80		Coarse diorite. Similar to that above. Below approx 34m the rock is progressively more chloritic and patchily sericitic with short bleached zones. Pyrite and calcite veinlets remain the same, minor. At 29.68-30.50m is fine grained non porphyritic andesite dike, with upper and lower contacts sharp, 60 deg to CA. The dike is approx 1% disseminated pyrite. At 35.68-37.8m is mixed diorite and andesite, with no increase in pyrite or veining. At 37.8-40.75m is fine grained andesite dike with epidote blebs, similar to dikes just above, with upper and lower contacts 50 and 45 deg to CA respectively, the lower contact is crumbly, sericitic. More of these andesitic dikes occur at 44.32-46.45m, 46.68-46.80m. 20cm crumbly gouge zones occur at 41m, and 50.8m; 10cm crumbly gouge at 52.5m. The dike have no significantly greater pyrite or hydrothermal alteration or contact metasomatism associated with them. Below approx 49m the diorite tends to be sericitized. Lower contact of the main zone is unclear in broken sericitic and chloritic rock.	0.1				1	2			3	Not magnetic. Fizzes only at calcite veinlets.
Continued from above.			**At 47.70m a specimen taken for thin section**, shows average coarse diorite.										

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
56.80	92.75		Volcaniclastic with lesser siltstone component. Both rock types are light to medium greenish grey. The siltstone is fine grained and the volcaniclastic is usually coarser. Texures are often obscured by extensive moderate sericitization. The volcaniclastic is sometines difficult to distinguish from the siltstone; the siltstone is finer, more siliceous, the volcaniclastic is coarser and contains black or white phencrysts, matrix supported. Local minor silicification is evident near sericitic gouge zones. Pyrite occurs irregularly disseminated with some concentration in chloritic fractures and calcite quartz veinlets. Small blebs of chalcopyrite noted at 58, 61, 64m, these appear associated with small quartz calcite veinlets. Calcite veinlets are very minor overall. Crumbly gouge zones occur at 64.2m, 66.6m, 67m, only the latter with an apparent slight increase in pyrite. Sericite is strongest at 59-68m approximately. 68-69.7m has an andesite dike, sericitized, bleached, with contacts obscure in altered and broken rock. 83.4-83.6m is crumbly gouge, not significantly more pyritic.	1	tr			tr	3		1	2	Moderate fizzing
			Continued from above.91-93m has much shattered rock and some accompanying gouge, with no veins and no significant increase in pyrite. Lower contact of main interval is unclear in local minor gouge,. Gouge edge is 45 deg to CA.										

Depth (m)		Litho-						Alteration Scale: 1 - 5					
From	To	Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
92.75	133.40		Diorite or gabbro. Coarse grained. Crowded pyroxene and feldspar phenocrysts. Coarser pyroxene crystals are 5mm. No significant veining, very minor calcite veinlets. Pyrite is disseminated with less in small blebs and along fractures with very minor quartz. Dark greenish black. Hairline chloritic stingers and fractures are ubiquitous. Contains a few narrow uniformly fine grained andesitic dikelets. **At 129.85m a specimen taken for thin section**, shows average diorite (later identified as gabbro). Lower contact is irregular, orientation unclear.	3		tr			1			3	Not generally magnetic though weak spotty magnetism noted at 99m. Generally not fizzy in acid but at calcite veinlets.
133.40	158.20		Fine grained augite porphyritic andesite, matrix supported, and coarse grained feldspar porphyritic andesite, phenocryst supported. These appear alternately interbedded and may be crystal tuffs or flows. Contacts are difficult to separate due to shattered rock and obscuration by locally strong pervasive chlorite. No significant veining, at 98.0m is a 4cm calcite vein, 20 deg to CA, with no significant sulphides associated. Generally medium greenish grey. Pyrite occurs irregularly, mainly in coarse stringers or blebs in chloritic fractures and in selvages adjacent to some calcite quartz veinlets. At 149.75m and 156.16m occur coarse pyrite blebs and very minor chalcopyrite in a local chloritic breccia with minor calcite quartz veinlets. At 151-154.5m is approx 50% diorite intrusion. Chloritic fractures occur extensively throughout. Lower contact of main interval is unclear in shattered rock.	1	tr			tr	1			3	Generally not fizzy in acid but at calcite veinlets.

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	To	Code	Description	Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
158.20	165.05		Diorite. Same as above. Crowded pyroxene and feldspar phenocrysts. No significant veining, very minor calcite veinlets; at 161.7m a calcite vein, probably several cm wide parallels core axis for 30 cm, it has no significant sulphides associated. Pyrite is disseminated with less in small blebs and along fractures with very minor quartz. Dark greenish black. Contains a few narrow uniformly fine grained andesitic dikelets. Lower contact is irregular, orientation unclear. Lower contact is sharp, with no apparent contact metasomatic effects.	0.5					1			3	Not magnetic. Fizzes only at calcite veinlets.
165.05	173.70		Volcaniclastic. Medium greenish grey. Textures vary, mainly fine grained. Moderate intensity chloritic fracturing is ubiquitous. Calcite and calcite quartz veining is very minor despite some larger ones at places noted below. Pyrite is spotty, in blebs and small stringers, less very fine pyrite is irregularly disseminated. At 166.15m occurs 30cm of coarse grained feldspar porphyritic andesite, phenocryst supported, similar to that 138m, contacts are unclear in broken rock. At 167.5-167.6m coarse blebs of pyrite and less chalcopyrite occur in a minor local chloritic breccia, cut across by calcite quartz veinlets 30 and 65 deg to CA. At 166-171m occur calcite veins approx 20 deg to CA, with no significant associated sulphides. At 168.1-168.5m a 1cm quartz calcite vein is parallel to CA. It has a thin selvage of grey sulphide and cream coloured (Fe carbonate?). Adjacent breccia clasts have faint emerald interiors (fuschite?). A similar vein occurs at 171.0m, parallel to CA for 10cm. Lower contact orientation is unclear in broken rock.	0.5	tr				2	tr	tr	3	Fizzes in acid.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
			Library example of vein at 168.4m taken, showing vein with cream and sulphide selvages.										
173.70	194.49		Siltstone. Light greenish getting more greyish downward. Very fine grained. Weak primary siliceous content. Intense fine chloritic fracturing is ubiquitous, some of these fractures contain most of the pyrite seen. 175-176.5m has much broken rock, rubble, some pyritic gouge. Narrow graphitic gouge zones occur at 175m, 176.5m, 177.4m. At 174.80-176.60m is rubble and gouge. At 188.9-190m and 191.4-192m the siltstone is soft graphitic, dark grey to blackish, with 3% spotty pyrite blebs and stringers. Lower contact is slightly gradational, unclear in broken rock.	1				tr	2		tr	2	Not magnetic. No fizz.
194.49	195.00		Greenish volcaniclastic as at 165-173m. Less pyritic than the silstones. Lower contact appears gradational, orientation unclear.	0.1					2	tr		2	Fizzes in acid.
195.00	196.50		Coarse grained feldspar porphyritic andesite, phenocryst supported, similar to that 138m and 166m. Lower contact appears gradational, orientation unclear.	tr					2	tr	tr	1	No fizz.
196.50	197.15		Very fine grained siltstone, as at 174-194m. A 3cm graphitic horizon shows compositional layering (bedding?) oriented 65 deg to CA.	tr								1	Weak fizzing, generally just the veinlets.
197.15	198.45		Graphitic siltstone. Dark grey to blackish. Relatively soft. Pyrite occurs as narrow discontinuous stringers and blebs. Lower contact is gradational, orientation unclear.	3							tr	tr	Weak fizzing, generally just the veinlets.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
198.45	234.90		Siltstone. Light to medium greenish gray. Below approx 198m patchy weak tan zones (pervasive Fe carbonate) become imperceptibly more prevalent. Generally very fine grained, in contrast to volcaniclastics, which are somewhat coarser, above and below this interval. Fine chloritic fractures occur extensively and are usually intense, causing local chloritic breccia, which have more veinlets, pyrite and trace chalcopyrite. Minor calcite, much less calcite quartz veinlets make less than 1% of the rock. The veinlets are genarally oriented 20-70 deg to CA, mainly 60 deg to CA. Pyrite is spotty, blebby, with minor concentration in chloritic fractures and less in calcite quartz veinlets. At 221.65m bedding is evident, 45 deg to CA. At 230.08-232.32m is chloritic breccia with 5% pyrite in coarse stringers 20-40 deg to CA, associated with blebs of chalcopyrite. At 234.6-234.9m parallel calcite veinlets are 50 deg to CA. At lower contact siltstone terminates in local breccia of siltstone and pyrite clasts. The breccia boundary is 85 deg to CA.	2	tr				2	2	1	2	Not magnetic. Spotty fizzing.
234.90	235.20		Crumbly gouge. Light grey. Loose particles and small clasts of pyrite in siltstone crumble.	5					4	3	1		Fizzy.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
235.20	261.69		Volcaniclastic. Somewhat greener and coarser generally than the siltstones above. Locally weakly tan. Fine chloritic fractures are ubiquitous as usual, though this rock tends to be less fractured than the siltstones. Small specks of epidote appear to occur spottily, where chlorite and pyrite are greater. Calcite veinlets make 1% of the rock, generally oriented 40-70 deg to CA. Calcite quartz veinlets are rarer but are more usually pyritic. Chalcopyrite occurs infrequently with coarser pyrite in calcite quartz veinlets in chloritic zones. At 251.5m and 252.85m trace chalcopyrite occurs with pyrite blebs in minor chloritic calcite quartz vein breccias. A 1cm x 4cm wisp of chalcopyrite occurs in a chloritic mass at 255.0m with tiny quartz veinlets. Hole ends in a not unusual local bleached sericitic chloritic vein breccia. **End of Hole at 261.69m.**	0.5	tr			tr	2	2		3	Fizzy.

Lithology: DDH K07 - 5

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	5.55	**CASING - Overburden.**									
5.55	10.95	**Andesitic volcaniclastic.**	0.5					2			3
10.95	12.65	**Basalt (dike?).**	0.5								4
12.65	17.80	**Diorite coarse porphyry.**	0.1								3
17.80	19.21	**Breccia of mixed rock, diorite containing xenoliths of andesite.**	1	tr				1			4
19.21	20.10	**Andesite.**	0.5				tr				1
20.10	56.80	**Diorite**	0.1				1	2			3
56.80	92.75	**Volcaniclastic with lesser siltstone.**	1	tr			tr	3		1	2
92.75	133.40	**Diorite or gabbro.**	3		tr			1			3
133.40	158.20	**Augite porphyritic andesite and feldspar porphyritic andesite.**	1	tr			tr	1			3
158.20	165.05	**Diorite.**	0.5					1			3
165.05	173.70	**Volcaniclastic.**	0.5	tr				2	tr	tr	3
173.70	194.49	**Siltstone.**	1				tr	2		tr	2
194.49	195.00	**Volcaniclastic.**	0.1					2	tr		2
195.00	196.50	**Feldspar porphyritic andesite.**	tr					2	tr	tr	1
196.50	197.15	**Siltstone.**	tr								1
197.15	198.45	**Graphitic siltstone.**	3							tr	tr
198.45	234.90	**Siltstone.**	2	tr				2	2	1	2
234.90	235.20	**Gouge.**	5					4	3	1	
235.20	261.69	**Volcaniclastic.**	0.5	tr			tr	2	2		3
		End of Hole.									

BARKER MINERALS LTD.

DRILL HOLE No. K07-5

Sample Intervals: DDH K07 - 5													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3503	85401	5.55	8.54	2.99	14	0.9	66	86	1.03	33.6	< 2	< 1	3.8
A07-3503	85402	8.54	10.95	2.41	36	0.8	78	107	0.74	74.3	< 2	< 1	7.3
A07-3503	85403	10.95	12.65	1.70	32	1.5	65	460	1.4	42.8	< 2	< 1	5.2
A07-3503	85404a	WCM Minerals Standard PB114			810	27.5	3140	10800	1.71	22.2	< 2	< 1	53
A07-3503	85405	12.65	14.64	1.99	< 2	1.1	72	685	0.9	30.8	< 2	< 1	5.2
A07-3503	85406	14.64	17.80	3.16	12	0.7	28	55	0.2	9.9	< 2	< 1	1.5
A07-3503	85407	17.80	19.21	1.41	48	1.6	180	842	2.14	71.8	< 2	< 1	4.6
A07-2306	85001	19.21	20.10	0.89	10	< 0.3	87	132	0.51	11.8	< 2	< 1	1.3
A07-2306	85002	20.10	22.26	2.16	< 2	< 0.3	21	83	1	41	< 2	< 1	2.6
A07-3503	85408	22.26	24.40	2.14	< 2	0.9	24	73	0.98	18.4	< 2	3	1.4
A07-3503	85409	24.40	29.68	5.28	< 2	0.7	19	48	0.08	5.4	< 2	< 1	< 0.1
A07-3503	85410	29.68	30.50	0.82	10	1.4	769	59	1.25	14.2	< 2	< 1	1.7
A07-3503	85411	30.50	31.46	0.96	< 2	1.1	109	78	0.27	12.3	< 2	< 1	0.9
A07-3503	85412	31.46	33.55	2.09	< 2	1	34	55	0.2	15.1	< 2	< 1	0.6
A07-3503	85413	33.55	35.68	2.13	< 2	0.9	69	52	0.15	8.4	< 2	< 1	1.2
A07-3503	85414	35.68	38.73	3.05	< 2	0.8	64	54	0.31	8.6	< 2	< 1	0.9
A07-2306	85003	38.73	40.75	2.02	< 2	< 0.3	98	68	0.3	5.9	< 2	< 1	1.3
A07-2306	85004	40.75	42.09	1.34	< 2	< 0.3	28	61	0.1	8.4	< 2	< 1	1.5
A07-3503	85415	42.09	44.32	2.23	6	1	18	58	0.09	7.6	< 2	< 1	0.7
A07-2306	85005	44.32	46.45	2.13	< 2	< 0.3	103	51	0.16	4.2	< 2	< 1	0.8
A07-3503	85416	46.45	49.41	2.96	< 2	1	20	54	0.05	4.7	< 2	< 1	0.5
A07-3503	85417	49.41	50.70	1.29	< 2	0.4	11	50	0.1	27.6	< 2	< 1	2.2
A07-2306	85006	50.70	50.90	0.20	< 2	< 0.3	15	79	0.24	10.1	< 2	< 1	2.6
A07-3503	85418	50.90	52.45	1.55	< 2	0.5	12	46	0.09	6.3	< 2	< 1	0.9
A07-3503	85419	52.45	52.55	0.10	< 2	0.6	10	47	0.15	4.8	< 2	< 1	1.7
A07-3503	85420	52.55	53.68	1.13	< 2	0.7	12	46	0.08	6.7	< 2	< 1	1.1
A07-2306	85007	53.68	56.80	3.12	< 2	< 0.3	67	62	0.07	5.1	< 2	< 1	1.1
A07-2306	85008	56.80	58.56	1.76	< 2	< 0.3	53	81	0.14	5.2	< 2	< 1	1.5
A07-2306	85009	58.56	60.39	1.83	< 2	0.5	702	109	0.39	21	< 2	< 1	2.3
A07-2306	85010	60.39	61.30	0.91	32	0.3	348	189	1.14	42	< 2	< 1	3.4
A07-2306	85011	61.30	63.44	2.14	42	< 0.3	55	466	1.72	61.1	< 2	< 1	6.7
A07-2306	85012	63.44	65.27	1.83	< 2	< 0.3	38	185	2.09	104	< 2	< 1	18.7
A07-2306	85013	65.27	66.49	1.22	60	< 0.3	116	483	0.53	17.9	< 2	< 1	3.4

BARKER MINERALS LTD.

DRILL HOLE No. K07-5

Sample Intervals: DDH K07 - 5													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2306	85014	66.49	68.01	1.52	15	< 0.3	86	144	0.81	7.6	< 2	< 1	4.8
A07-3503	85421	68.01	69.70	1.69	212	1.2	110	71	0.89	1860	< 2	< 1	16.1
A07-3503	85422	69.70	72.59	2.89	22	1.2	499	159	2.21	16.9	< 2	< 1	4.6
A07-3503	85423	72.59	73.50	0.91	12	0.7	135	277	0.63	8.9	< 2	< 1	1.6
A07-3503	85424a	WCM Minerals Standard PB114			1320	21.8	4340	13300	2.01	121	< 2	< 1	23.8
A07-3503	85425	73.50	76.10	2.60	48	1.2	434	153	1.79	26.5	< 2	< 1	2.9
A07-3503	85426	76.10	78.69	2.59	< 2	1.2	405	61	1.2	6.8	< 2	< 1	1.5
A07-3503	85427	78.69	80.21	1.52	< 2	< 0.3	169	84	0.38	4.6	< 2	< 1	0.9
A07-3503	85428	80.21	83.26	3.05	< 2	0.7	21	57	0.2	3.9	< 2	2	0.5
A07-2306	85015	83.26	86.31	3.05	< 2	< 0.3	25	58	0.2	3.7	< 2	< 1	1.2
A07-2306	85016	86.31	87.84	1.53	10	< 0.3	37	50	0.19	< 0.5	< 2	< 1	0.7
A07-2306	85017	87.84	90.89	3.05	5	< 0.3	45	47	0.26	5.4	< 2	< 1	1.4
A07-2306	85018	90.89	92.11	1.22	< 2	< 0.3	234	78	1.53	31.1	< 2	< 1	8
A07-2306	85019	92.11	92.75	0.64	< 2	< 0.3	105	53	0.48	4.8	< 2	< 1	1.3
A07-2306	85020	92.75	94.85	2.10	10	< 0.3	103	92	0.35	2.4	< 2	< 1	0.4
		Sampling gap - 3.97 m											
A07-3503	85429	98.82	100.34	1.52	< 2	0.8	96	71	0.33	8.8	< 2	< 1	0.9
A07-3503	85430	100.34	101.26	0.92	< 2	0.7	98	103	0.53	40.2	< 2	< 1	4.1
A07-3503	85431	101.26	102.13	0.87	< 2	1	80	62	0.52	11.1	< 2	< 1	2.5
A07-3503	85432	102.13	102.78	0.65	< 2	0.8	86	35	0.47	33.9	< 2	< 1	3.6
		Sampling gap - 7.93 m											
A07-3503	85433	110.71	112.24	1.53	< 2	1.2	107	57	0.32	5.2	< 2	< 1	0.8
A07-3503	85434	112.24	115.25	3.01	< 2	1.1	15	49	0.07	3.3	< 2	< 1	0.5
A07-3503	85435	115.25	116.30	1.05	< 2	1.1	61	58	0.19	4.5	< 2	< 1	0.8
		Sampling gap - 2.04 m											
A07-3503	85436	118.34	120.17	1.83	< 2	0.9	77	57	0.22	4.2	< 2	5	0.7
		Sampling gap - 2.23 m											
A07-3503	85437	122.40	124.44	2.04	< 2	0.5	79	38	0.24	5.4	< 2	< 1	1.3
		Sampling gap - 1.16 m											
A07-3503	85438	125.60	126.23	0.63	< 2	0.7	21	41	0.16	18.2	< 2	< 1	4.1
		Sampling gap - 3.42 m											
A07-2306	85021	129.65	132.67	3.02	< 2	< 0.3	13	71	0.09	8.6	< 2	< 1	2.3
A07-3503	85439	132.67	133.40	0.73	< 2	0.8	11	41	0.12	8.4	3	< 1	4.5

BARKER MINERALS LTD.

DRILL HOLE No. K07-5

Sample Intervals: DDH K07 - 5													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3503	85440	133.40	135.72	2.32	< 2	0.9	16	47	0.08	3.6	< 2	< 1	1.1
A07-3503	85441	135.72	139.70	3.98	8	1	8	48	0.06	4.1	< 2	< 1	1
A07-3503	85442	139.70	142.74	3.04	< 2	1	4	35	0.03	5.6	< 2	< 1	1
A07-3503	85443	142.74	144.90	2.16	< 2	1.2	4	31	0.03	6.4	< 2	< 1	0.9
A07-3503	85444	144.90	146.70	1.80	< 2	1	5	34	0.03	7.6	< 2	< 1	0.9
A07-3503	85445	146.70	149.65	2.95	< 2	0.9	8	80	0.11	14.8	< 2	< 1	4.4
A07-2306	85022	149.65	150.03	0.38	< 2	0.5	400	1360	1.68	5.5	< 2	< 1	4.3
A07-3503	85446	150.03	150.50	0.47	< 2	0.9	34	55	0.09	5.8	< 2	< 1	1.4
A07-3503	85447a	WCM Minerals Standard PB114			842	22.3	2970	10800	1.6	23	< 2	3	54.5
A07-3503	85448	150.50	152.80	2.30	< 2	0.8	23	84	0.09	6	< 2	< 1	1
A07-3503	85449	152.80	154.50	1.70	< 2	0.9	14	47	0.06	4.5	< 2	< 1	0.5
A07-3503	85450	154.50	156.10	1.60	< 2	1	172	2800	1.43	6.9	< 2	< 1	2.4
A07-2306	85023	156.10	156.40	0.30	28	1.2	751	13200	4.88	14.6	< 2	< 1	6.8
A07-3503	85451	156.40	158.20	1.80	< 2	1.2	433	2900	0.99	38.7	< 2	< 1	7.6
A07-3503	85452	158.20	160.00	1.80	< 2	0.6	24	61	0.07	8.6	< 2	< 1	5.6
		Sampling gap - 3.48 m											
A07-3503	85453	163.48	165.05	1.57	< 2	0.8	40	44	0.16	4.1	< 2	< 1	2
A07-2306	85024	165.05	166.53	1.48	< 2	< 0.3	27	194	0.24	21.3	< 2	< 1	7.4
A07-2306	85025	166.53	167.75	1.22	15	< 0.3	130	1710	1.29	35	2	< 1	14.9
A07-2306	85026	167.75	168.97	1.22	1410	0.5	168	1240	0.82	3350	< 2	< 1	67.4
A07-2306	85027	168.97	170.49	1.52	14	< 0.3	79	1110	0.78	43.2	< 2	< 1	15.3
A07-2306	85028	170.49	172.32	1.83	754	< 0.3	22	427	0.42	1770	< 2	< 1	22.6
A07-3503	85454	172.32	173.70	1.38	< 2	1.1	40	452	0.22	10.3	< 2	< 1	3.3
A07-3503	85455	173.70	175.00	1.30	8	0.7	24	58	0.19	32.1	< 2	< 1	5.1
A07-2306	85029	175.00	176.50	1.50	3320	1.9	86	638	2.15	6890	< 2	< 1	59.1
A07-3503	85456	176.50	179.34	2.84	46	0.6	59	59	0.44	165	< 2	< 1	8.8
A07-3503	85457	179.34	182.39	3.05	< 2	1.2	71	158	0.56	55.8	< 2	< 1	7.4
A07-3503	85458	182.39	185.44	3.05	16	0.6	100	378	0.7	60.9	< 2	< 1	5.2
A07-2306	85030	185.44	188.49	3.05	15	0.5	180	80	0.86	28	< 2	< 1	5.2
A07-3503	85459	188.49	189.90	1.41	31	1.5	88	180	0.76	65.6	< 2	< 1	3.1
A07-3503	85460	189.90	191.40	1.50	< 2	1.4	68	92	0.57	56.4	< 2	< 1	3.3
A07-2306	85031	191.40	192.00	0.60	48	2.3	107	214	2.17	35.3	< 2	< 1	5.9
A07-2306	85032a	WCM Minerals Standard PB115			34	17.8	5150	14200	2	25.8	3	< 1	36.6

BARKER MINERALS LTD.

DRILL HOLE No. K07-5

Sample Intervals: DDH K07 - 5													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3503	85461	192.00	194.49	2.49	< 2	1.2	109	65	0.49	4.4	< 2	< 1	1.1
A07-3503	85462	194.49	195.00	0.51	< 2	1.2	403	45	0.84	3.2	< 2	< 1	0.3
A07-3503	85463	195.00	197.15	2.15	< 2	0.7	77	38	0.34	8.1	3	< 1	2.1
A07-2306	85033	197.15	198.45	1.30	16	1.2	94	462	1.33	21.8	< 2	< 1	8.6
A07-2306	85034	198.45	200.08	1.63	10	0.5	51	171	0.74	50	< 2	< 1	4.4
A07-2306	85035	200.08	203.13	3.05	9	0.4	85	119	0.74	58.5	< 2	< 1	5
A07-2306	85036	203.13	206.18	3.05	52	< 0.3	89	106	0.54	22.4	< 2	< 1	6.4
A07-2306	85037	206.18	209.23	3.05	8	< 0.3	46	62	0.18	6.8	< 2	< 1	0.9
A07-2306	85038	209.23	211.97	2.74	7	0.3	89	59	0.29	9.3	< 2	< 1	1.2
A07-2306	85039	211.97	214.72	2.75	< 2	< 0.3	245	38	0.28	22	< 2	< 1	2.3
A07-2306	85040	214.72	217.46	2.74	6	< 0.3	58	38	0.41	19.1	< 2	< 1	6.3
A07-2306	85041	217.46	219.90	2.44	6	< 0.3	149	43	0.94	23.5	< 2	< 1	3.3
A07-2306	85042	219.90	222.04	2.14	10	< 0.3	82	429	0.29	3	< 2	< 1	0.8
A07-2306	85043	222.04	225.09	3.05	< 2	< 0.3	92	71	0.58	3.2	< 2	< 1	1.1
A07-2306	85044	225.09	227.83	2.74	25	< 0.3	100	525	0.9	43.6	< 2	< 1	4.3
A07-2306	85045	227.83	229.97	2.14	5	< 0.3	365	55	1.11	21.4	< 2	< 1	3.1
A07-2306	85046	229.97	230.08	0.11	79	1.8	226	3290	1.67	271	< 2	< 1	5.3
A07-2306	85047	230.08	233.32	3.24	580	2.2	486	6980	3.57	71.1	< 2	2	6
A07-2306	85048	233.32	234.90	1.58	< 2	< 0.3	116	65	0.26	10	< 2	< 1	4.1
A07-2306	85049	234.90	235.20	0.30	< 2	< 0.3	62	45	6.61	11.3	< 2	< 1	10.8
A07-2306	85050a	WCM Minerals Standard PB113			1680	23.3	4170	14200	1.96	116	< 2	< 1	22.3
A07-2306	85051	235.20	236.98	1.78	8	< 0.3	105	65	0.2	9.3	< 2	< 1	2.1
A07-2306	85052	236.98	240.03	3.05	23	< 0.3	482	48	0.64	48.8	< 2	< 1	2.6
A07-2306	85053	240.03	242.78	2.75	23	< 0.3	379	45	0.68	260	< 2	< 1	4.9
A07-2306	85054	242.78	244.61	1.83	< 2	< 0.3	355	48	0.48	102	< 2	< 1	3.5
A07-2306	85055	244.61	246.44	1.83	< 2	< 0.3	116	44	0.16	4.5	< 2	< 1	0.6
A07-2306	85056	246.44	249.49	3.05	20	< 0.3	592	49	0.34	8.1	< 2	< 1	1.1
A07-2306	85057	249.49	252.54	3.05	63	< 0.3	567	208	1.33	7.4	< 2	< 1	1.3
A07-2306	85058	252.54	254.80	2.26	43	< 0.3	317	306	0.26	14.1	< 2	< 1	1.4
A07-2306	85059	254.80	255.13	0.33	396	2.3	5330	67	1.14	9.6	< 2	< 1	1
A07-2306	85060	255.13	258.64	3.51	17	< 0.3	181	274	0.59	12.2	< 2	< 1	1.2
A07-2306	85061	258.64	261.69	3.05	< 2	< 0.3	70	59	0.29	48.5	< 2	< 1	6.7

		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 5

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
3.05	5.49	2.44	**6**
5.49	8.54	3.05	**13**
8.54	10.67	2.13	**13**
10.67	11.59	0.92	**6**
11.59	12.81	1.22	**5**
12.81	13.42	0.61	**7**
13.42	14.64	1.22	**15**
14.64	17.69	3.05	**9**
17.69	19.21	1.52	**14**
19.21	22.26	3.05	**13**
22.26	24.40	2.14	**11**
24.40	26.84	2.44	**10**
26.84	29.28	2.44	**8**
29.28	31.41	2.13	**10**
31.41	33.55	2.14	**9**
33.55	35.68	2.13	**8**
35.68	38.73	3.05	**9**
38.73	40.56	1.83	**19**
40.56	42.09	1.53	**15**
42.09	43.00	0.91	**13**
43.00	43.92	0.92	**12**
43.92	45.44	1.52	**11**
45.44	47.88	2.44	**10**
47.88	49.41	1.53	**10**
49.41	51.24	1.83	**7**
51.24	53.68	2.44	**4**
53.68	56.73	3.05	**11**
56.73	58.56	1.83	**8**
58.56	60.39	1.83	**8**
60.39	61.00	0.61	**6**
61.00	61.30	0.30	**2**
61.30	63.44	2.14	**2**
63.44	65.27	1.83	**10**
65.27	66.49	1.22	**6**
66.49	68.01	1.52	**8**
68.01	69.54	1.53	**11**
69.54	72.59	3.05	**8**
72.59	73.50	0.91	**3**
73.50	78.69	5.19	**6**
78.69	80.21	1.52	**8**
80.21	83.26	3.05	**9**
83.26	86.31	3.05	**10**
86.31	87.84	1.53	**14**
87.84	90.81	2.97	**30**
90.81	92.11	1.30	**18**
92.11	92.72	0.61	**3**
92.72	94.85	2.13	**8**
94.85	96.99	2.14	**18**
96.99	98.82	1.83	**14**
98.82	100.34	1.52	**33**
100.34	101.26	0.92	**7**
101.26	102.13	0.87	**5**
102.13	102.78	0.65	**7**
102.78	105.83	3.05	**28**
105.83	107.05	1.22	**4**
107.05	108.88	1.83	**25**
108.88	110.71	1.83	**30**
110.71	112.24	1.53	**35**
112.24	114.07	1.83	**15**
114.07	115.25	1.18	**17**
115.25	118.34	3.09	**15**
118.34	120.17	1.83	**16**
120.17	121.39	1.22	**5**
121.39	124.44	3.05	**17**
124.44	126.57	2.13	**9**
126.57	127.79	1.22	**9**
127.79	129.62	1.83	**15**
129.62	132.67	3.05	**21**
132.67	135.72	3.05	**19**
135.72	138.77	3.05	**13**
138.77	140.30	1.53	**17**
140.30	142.74	2.44	**12**
142.74	144.87	2.13	**7**
144.87	146.70	1.83	**18**
146.70	148.84	2.14	**23**
148.84	151.28	2.44	**29**
151.28	152.80	1.52	**11**
152.80	153.72	0.92	**3**
153.72	156.46	2.74	**14**
156.46	157.99	1.53	**8**
157.99	160.43	2.44	**12**
160.43	163.48	3.05	**15**
163.48	166.53	3.05	**8**
166.53	167.75	1.22	**8**
167.75	168.97	1.22	**6**
168.97	170.45	1.48	**9**
170.45	172.32	1.87	**8**
172.32	175.07	2.75	**6**
175.07	176.29	1.22	**4**
176.29	177.51	1.22	**0**
177.51	179.34	1.83	**4**
179.34	182.39	3.05	**6**
182.39	185.48	3.09	**3**
185.48	188.49	3.01	**8**
188.49	191.54	3.05	**11**
191.54	194.59	3.05	**10**
194.59	197.64	3.05	**21**
197.64	200.08	2.44	**5**
200.08	203.13	3.05	**1**
203.13	206.78	3.65	**9**
206.78	209.23	2.45	**8**
209.23	211.97	2.74	**11**
211.97	214.72	2.75	**9**
214.72	215.33	0.61	**5**
215.33	215.63	0.30	**1**
215.63	217.48	1.85	**4**
217.48	219.90	2.42	**15**
219.90	222.04	2.14	**15**
222.04	225.09	3.05	**14**
225.09	227.83	2.74	**10**
227.83	229.87	2.04	**18**
229.87	230.08	0.21	**4**

Vein Counts: DDH K07 - 5

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
230.08	233.23	3.15	**15**
233.23	234.24	1.01	**3**
234.24	236.98	2.74	**26**
236.98	240.03	3.05	**28**
240.03	242.78	2.75	**27**
242.78	244.61	1.83	**14**
244.61	246.44	1.83	**10**
246.44	249.49	3.05	**17**
249.49	252.54	3.05	**26**
252.54	255.59	3.05	**41**
255.59	258.64	3.05	**38**
258.64	261.69	3.05	**38**
End of Hole			

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

Core Recovery: DDH K07 - 5					Recovered			Core Recovery: DDH K07 - 5					Recovered	
Box No.	From	To	Distance		(metres)	%		Box No.	From	To	Distance		(metres)	%
1	2.83	9.14	6.31		4.3	**68**		34	172.84	178.66	5.82		4.3	**74**
2	9.14	14.18	5.04		5.0	**99**		35	178.66	183.75	5.09		5.1	**100**
3	14.18	19.21	5.03		5.0	**99**		36	183.75	188.70	4.95		5.0	**101**
4	19.21	24.31	5.10		5.0	**98**		37	188.70	193.60	4.90		4.7	**96**
5	24.31	29.76	5.45		5.3	**97**		38	193.60	198.40	4.80		4.8	**100**
6	29.76	35.14	5.38		5.0	**93**		39	198.40	203.13	4.73		4.4	**93**
7	35.14	40.52	5.38		5.0	**93**		40	203.13	208.86	5.73		5.7	**99**
8	40.52	45.44	4.92		4.8	**98**		41	208.86	214.61	5.75		5.7	**99**
9	45.44	50.50	5.06		5.1	**101**		42	214.61	218.75	4.14		4.1	**99**
10	50.50	54.02	3.52		3.5	**99**		43	218.75	224.45	5.70		5.7	**100**
11	54.02	60.22	6.20		5.9	**95**		44	224.45	229.25	4.80		4.8	**100**
12	60.22	64.66	4.44		4.0	**90**		45	229.25	234.60	5.35		5.2	**97**
13	64.66	69.16	4.50		4.3	**96**		46	234.60	239.92	5.32		4.8	**90**
14	69.16	73.64	4.48		4.5	**100**		47	239.92	244.78	4.86		4.8	**99**
15	73.64	81.50	7.86		5.4	**69**		48	244.78	249.80	5.02		5.0	**100**
16	81.50	86.50	5.00		5.0	**100**		49	249.80	254.80	5.00		5.0	**100**
17	86.50	90.28	3.78		3.7	**98**		50	254.80	260.00	5.20		5.1	**98**
18	90.28	95.46	5.18		3.5	**68**		51	260.00	261.69	1.69		1.4	**83**
19	95.46	100.48	5.02		5.0	**100**		End of Hole						
20	100.48	105.54	5.06		4.8	**95**								
21	105.54	110.95	5.41		5.3	**98**								
22	110.95	115.40	4.45		4.4	**99**		Note: In interval 73.64-81.50 blocks may be mislabled						
23	115.40	120.59	5.19		5.2	**100**		or core recovery was poor in broken rock.						
24	120.59	126.23	5.64		5.6	**99**								
25	126.23	131.15	4.92		4.8	**98**								
26	131.15	136.55	5.40		5.4	**100**								
27	136.55	141.73	5.18		5.1	**98**								
28	141.73	147.35	5.62		5.5	**98**								
29	147.35	152.55	5.20		5.2	**100**								
30	152.55	157.87	5.32		5.3	**100**								
31	157.87	163.02	5.15		5.2	**101**								
32	163.02	168.03	5.01		5.0	**100**								
33	168.03	172.84	4.81		4.8	**100**								

PROPERTY: KANGAROO

BARKER MINERALS LTD.

DRILL HOLE NO. K07 - 6

Dip & Azmth Tests			DDH K07-6	**Easting (NAD 83):** 589878	**Core Size:** NQ2	**Started:** May 22, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5837737	**Hole Azimuth**: 0°	**Finished:** May 26, 2007
9.15	-50.1	187 (?)	Temp=15.2, Mag=56790, Roll=305.0	**Grid Location:** KTL3 125N	**Hole Angle:** -50°	**Logged by:** RT
109.80	-50.6	347.4	Temp=15.6, Mag=56410, Roll=189.3	**Elevation:**	**Total Depth:** 209.84	**Analysis by:** ActLabs
201.30	-50.1	345.7	Temp=17.2, Mag=55710, Roll=98.4			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		**Litho-**		**%**	**%**	**%**		**Alteration Scale: 1 - 5**					
From	**To**	**Code**	**Description**	**Py**	**Cpy**	**Pyrr**		**Ep**	**Seri-cite**	**2nd Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	5.00		CASING - Overburden. Rounded pebbles in rubble, some boulders. Green fine grained andesitic volcaninclastics. Minor calcite veonlets. Minor disseminated pyrite. Weakly rusty fracture surfaces.										
5.00	30.10		Andesitic volcaniclastic. Dark to medium green. Variable clastic texture. Fairly low fracture intensity. No significant veining, minor calcite veinlets. Pyrite is mainly disseminated but has minor concentration in chloritic fractures. At 6.6m a cave in occured in the hole. At approx 23-27m is grey, very fine grained siliceous siltstone, no more pyritic, contacts are unclear in broken rock, but at 23.9m fine sedimentary layering is evident, 45 degrees to core axis (CA). Lower contact is gradational over a few cm, orientation is unclear.	2				tr	tr			3	Fizzes spottily but for black siltstone interbeds which do not fizz.
30.10	32.38		Andesite flow. Matrix supported porphyry. 2-4mm augite and feldspar phenocrysts. Medium green. Low fracture intensity. No significant veining, minor calcite veinlets. Pyrite is fine, disseminated.	tr				tr	tr			2	Generally does not fizz but at calcite veinlets.
32.38	45.70		Andesitic volcaniclastic. Dark to medium green. Variable clastic texture. Fairly low fracture intensity. No significant veining, minor calcite veinlets. Pyrite is mainly in chloritic fractures.	2				tr	tr	tr		2	Fizzes spottily but for black siltstone interbeds which do not fizz.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
45.70	51.00		Siliceous siltstone. Uniformly very fine grained. Medium grey to greenish grey. Fairly low fracture intensity. No significant veining. Extremely fine disseminated pyrite with minor concentration in fractures. Lower contact is approximate, unclear in shattered rock.	2					1		1	1	Generally does not fizz but at calcite veinlets.
51.00	64.00		Andesitic volcaniclastic. Light greenish grey. Variable clastic texture. Fairly high fracture intensity and minor local breccias. This interval is notably more altered and crumbly. Minor calcite veinlets, no preferred orientation. Pyrite is mainly in chloritic fractures but some occurs finely disseminated. Lower contact does not mark change in lithologies; it marks a sericite alteration front, more pyrite and sericite below.	2				1	3	1	tr	tr	Generally does not fizz but at calcite veinlets and near lower contact.
64.00	70.46		Volcaniclastic as above. Protolith is obscure due to fairly strong extensive sericite alteration. Grey. Relatively soft incompetent rock. Chloritic fractures are more intense. Pyrite is spottily disseminated and in chloritic fractures, more coarse than in intervals avove. Local minor gouge and shattered rock is more common. At 69.5m a cave in occurred in the hole, below this to end of interval is tectonic breccia. At 68.9-69.6m is rubble containing 4cm calcite stones, otherwise veining is very minor, not significant. Lower 'contact' merely indicates end of shattererd rock and lessening of alteration intensity.	2				tr	4	2	tr		Fizzes in acid.
70.46	75.56		Volcaniclastic as above. Andesitic. Medium green. Fairly iniform medium texture. Less fractured. No significant veining.	1				tr	2	1		2	Fizzes spottily in acid.
76.56	77.26		Grey very fine mud. This is sediment that fell down the hole during 2 days of idleness due to machine break down.										Very fizzy in acid.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
77.26	90.10		Volcaniclastic as above. Andesitic. Medium green. Fairly iniform medium texture. Less fractured. No significant veining. Lower contact is gradational and approximate.	1		1		tr	2	1		2	Locally magnetic. Fizzes spottily in acid, especially at calcite veinlets.
90.10	91.20		Siltstone. Finer grained than volcaniclastic above. Upper 2m is greenish grey and coarser, rock gradually gets finer and greyer downward. 90.2-90.9m has pyritic calcite quartz stringer parallel to core axis. Lower contact is gradational, approximate. unclear in shattered rock.	0.5		tr			1			1	Spottily magnetic. Fizzes fairly well.
91.20	151.38		Siltstone. Very fine grained. Medium grey. Somewhat siliceous. High fracture intensity. Fractures tend to be lined by chlorite. Pyrite is very finely disseminated, with some concentration in chloritic fractures. Trace pyrrhotite occurs similarly. No significant veining. Very minor calcite veinlets occur generally 45 deg to CA. At 131.4m a couple of calcite quartz veins, 1cm and 3cm are 45 deg to CA. Adjacent vein breccia has spotty tan or cream colour (Fe carbonate?). Fine bedding is frequently evident. Bedding attitude is 45-55 deg to CA at 94.5m, 99.5m, 102.5m, 121.35m, 130m, 132.5m. Below approx 133m bedding is less evident, rock is greener. Lower contact is ragged, rock below intrudes rock of this interval. **At 97.65m a 14cm piece taken for library**, shows pyrite and very minor chalcopyrite infiltrating along bedding planes in a narrow 3cm zone, bedding is 55 deg to CA, later pyrite occurs in narrow cross cutting fractures. At 122.9m 10% disseminated pyrite exists in a 1cm sedimentary bedding layer, 55 deg to CA.	0.5	tr	tr			tr		1	2	Spottily magnetic. Weak spotty fizzing in acid occurs infrequently.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
151.38	155.24		Andesite dike. Matrix supported porphyritic. Augite and feldspar phenocrysts are 2-3mm, make 10% of the rock. Fine chloritic fractures are common. Minor calcite quartz veinlets, generally 30-60 deg to CA. Pyrite is disseminated, slightly coarser than in the siltstones. Lower contact is 30 deg to CA, marked by narrow pervasive chlorite zone.	1				tr	1			2	Fizzes weakly in acid.
155.24	172.15		Siltstone. Very fine grained. Medium green. Generally intensely fractured, chlorite lining the fractures. Chlorite is patchily pervasive. Subtle pervasive silicification. A few tan coloured patches suggest pervasive Fe carbonate alteration, mainly near 163m. Calcite quartz veinlets are minor, generally 30-60 deg to CA. Pyrite is very fine, spottily disseminated, with some concentration in chloritic fractures. Pyrrhotite occurs similarly. At 158-161m small ragged blebs of pyrrhotite noted, these are somewhat coppery in colour and magnetic. 165m to lower contact area is intensely fractured, chlorite lining fractures.	0.5		tr			1	1	2	3	Spottily magnetic. Generally fizzes in acid.
172.15	173.56		Mostly siltstone as above. Within this interval some diorite is in contact parallel to core axis. Some more calcite veining here, some veinlets parallel core axis. Lower contact is at box end where diorite begins next box, below this contact.	0.5					2	1		3	Fizzes in acid.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
173.56	199.25		Monzodiorite? Medium green. Reddish matrix appears to be K feldspar. Pinkish monzonite xenoliths occur. Uniform medium grained texture. Massive, homogenous. Fairly strong pervasive chlorite. No significant veining. Trace fine disseminated pyrite. Soft, competent rock with very little fracturing. The monzodiorite appears unaffected at the upper and lower contact with the siltstones, displaying no contact metasomatism - in contrast to the siltstones which are chloritized and highly fractured near the contact. At 186.0m a brightgreen xenolith may contain fuschite. At 187.3-188.1m is a bleached weakly silicified zone, in the centre of which are three calcite quartz veins, 1cm, 3cm, 6cm wide, all 70 deg to CA. Lower contact is obscure adjacent to shattered siltstone below. **At 195.8m a 10cm Library piece and a thin section specimen taken,** showing monzonite xenolith in (monzodiorite? - thin section later identified as diorite).	tr						3		3	Usually fizzes readily in acid, suggesting pervasive calcite alteration.
199.25	209.84		Siliceous siltstone. Light to medium grey. Occasional fine compositional layering appears to be bedding, 65 deg to CA. Chloritic fracturing is extensive but not as intense as in the siltstones above. No significant veining. Pyrite occurs mainly in chloritic fractures. **End of Hole at 209.84m.**	tr								2	Weak spotty fizzing in acid.

Lithology: DDH K07 - 6

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	5.00	**CASING - Overburden.**									
5.00	30.10	**Volcaniclastic.**	2				tr	tr			3
30.10	32.38	**Andesite flow.**	tr				tr	tr			2
32.38	45.70	**Volcaniclastic.**	2				tr	tr			2
45.70	51.00	**Siliceous siltstone.**	2					1		1	1
51.00	64.00	**Volcaniclastic.**	2				1	3	1	tr	tr
64.00	70.46	**Volcaniclastic.**	2				tr	4	2	tr	
70.46	75.56	**Volcaniclastic.**	1				tr	2	1		2
76.56	77.26	**Mud.**									
77.26	90.10	**Volcaniclastic.**	1		1		tr	2	1		2
90.10	91.20	**Siltstone.**	0.5		tr			1			1
91.20	151.38	**Siltstone.**	0.5	tr	tr			tr		1	2
151.38	155.24	**Andesite dike.**	1				tr	1			2
155.24	172.15	**Siltstone.**	0.5		tr			1	1	2	3
172.15	173.56	**Siltstone.**	0.5					2	1		3
173.56	199.25	**Monzodiorite?**	tr						3		3
199.25	209.84	**Siliceous siltstone.**	tr								2
		End of Hole.									

BARKER MINERALS LTD.

DRILL HOLE No. K07-6

Sample Intervals: DDH K07 - 6													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3505	85476	5.00	6.60	1.60	< 2	< 0.3	188	89	0.92	3.5	< 2	< 1	0.3
A07-3505	85477	6.60	9.10	2.50	< 2	0.5	67	61	1.07	63.9	< 2	< 1	2.3
A07-3505	85478	9.10	10.37	1.27	< 2	0.3	50	67	0.32	35.4	< 2	< 1	1.4
A07-3505	85479	10.37	13.42	3.05	< 2	0.7	173	72	1	< 0.5	< 2	< 1	0.3
A07-3505	85480	13.42	14.64	1.22	< 2	0.7	168	63	1.1	1.5	< 2	< 1	0.4
A07-3505	85481	14.64	16.00	1.36	< 2	0.5	158	75	1.11	< 0.5	< 2	< 1	< 0.1
A07-3505	85482	16.00	17.69	1.69	< 2	0.4	57	91	0.46	2.3	< 2	< 1	< 0.1
A07-3505	85483	17.69	20.74	3.05	< 2	< 0.3	32	68	0.29	< 0.5	< 2	< 1	0.4
A07-3505	85484	20.74	23.00	2.26	< 2	< 0.3	48	67	0.22	2.3	< 2	< 1	0.6
A07-3505	85485	23.00	25.00	2.00	< 2	0.3	104	58	0.47	1.9	< 2	< 1	< 0.1
A07-3505	85486	25.00	27.00	2.00	< 2	< 0.3	162	61	1.16	2.5	< 2	< 1	< 0.1
A07-3505	85487	27.00	28.71	1.71	< 2	0.4	256	56	1.68	1.6	< 2	< 1	< 0.1
A07-3505	85488	28.71	30.10	1.39	< 2	0.4	107	57	0.74	< 0.5	< 2	< 1	< 0.1
A07-3505	85489	30.10	32.38	2.28	3	< 0.3	108	79	0.23	1.7	< 2	< 1	0.4
A07-3505	85490	32.38	34.46	2.08	< 2	0.4	173	50	1.14	4.3	< 2	2	0.5
A07-3505	85491	34.46	36.60	2.14	< 2	0.7	69	69	0.42	2.9	< 2	< 1	0.4
A07-3505	85492	36.60	39.04	2.44	< 2	0.6	74	54	0.53	< 0.5	< 2	< 1	0.4
A07-3505	85493a	WCM Minerals Standard PB114			802	22.9	3180	11300	1.71	24.1	< 2	4	57.2
A07-3505	85494	39.04	42.09	3.05	< 2	< 0.3	132	50	1.14	1.9	< 2	< 1	0.6
A07-3505	85495	42.09	43.92	1.83	< 2	0.6	150	50	1.32	2.6	< 2	< 1	0.5
A07-2308	85062	43.92	45.70	1.78	3	< 0.3	120	72	0.92	3.8	4	< 1	0.9
A07-2308	85063	45.70	46.97	1.27	< 2	< 0.3	115	209	0.95	< 0.5	< 2	< 1	0.5
A07-3505	85496	46.97	48.19	1.22	< 2	< 0.3	81	80	0.56	3.6	< 2	< 1	0.9
A07-2308	85064	48.19	51.00	2.81	< 2	< 0.3	134	57	1.21	< 0.5	< 2	< 1	1.5
A07-2308	85065	51.00	52.46	1.46	< 2	< 0.3	156	72	1.4	6.9	< 2	< 1	0.9
A07-3505	85497	52.46	53.68	1.22	< 2	0.5	90	89	0.69	4.4	< 2	< 1	1
A07-3505	85498	53.68	55.81	2.13	< 2	< 0.3	58	86	0.24	< 0.5	< 2	< 1	0.8
A07-3505	85499	55.81	57.64	1.83	< 2	< 0.3	81	83	0.32	4.5	< 2	< 1	0.7
A07-3505	85500	57.64	60.19	2.55	< 2	0.6	77	109	0.31	< 0.5	< 2	< 1	0.7
A07-3505	85501	60.19	62.22	2.03	< 2	0.4	73	91	0.36	3.3	< 2	< 1	0.7
A07-3505	85502	62.22	64.00	1.78	< 2	< 0.3	92	187	0.65	4.6	< 2	< 1	0.8
A07-2308	85066	64.00	65.27	1.27	< 2	< 0.3	361	1860	1.75	14	< 2	< 1	3.7
A07-2308	85067	65.27	67.71	2.44	< 2	< 0.3	64	151	0.93	44	< 2	< 1	12

BARKER MINERALS LTD.

DRILL HOLE No. K07-6

Sample Intervals: DDH K07 - 6													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2308	85068	67.71	69.54	1.83	23	< 0.3	48	111	1.3	140	< 2	< 1	4.3
A07-2308	85069	69.54	70.46	0.92	< 2	< 0.3	93	62	0.76	54	< 2	< 1	3.8
A07-2308	85070	70.46	71.68	1.22	< 2	< 0.3	120	62	0.74	6.5	< 2	< 1	1.1
A07-2308	85071	71.68	74.73	3.05	< 2	< 0.3	102	56	0.89	14	< 2	< 1	0.9
A07-2308	85072	74.73	76.56	1.83	< 2	< 0.3	142	60	0.57	< 0.5	< 2	< 1	< 0.1
A07-3505	85503	76.56	77.26	0.70	< 2	4.8	178	155	0.83	17.8	< 2	< 1	1.2
A07-3505	85504a	WCM Minerals Standard PB113			2350	18	4280	14000	2.08	122	< 2	< 1	24.6
A07-3505	85505	77.26	78.69	1.43	< 2	< 0.3	141	66	0.79	3.1	< 2	< 1	0.3
A07-3505	85506	78.69	80.83	2.14	5	< 0.3	163	81	0.75	3.1	< 2	< 1	< 0.1
A07-3505	85507	80.83	82.96	2.13	< 2	0.4	78	72	0.63	3.2	< 2	< 1	0.9
A07-3505	85508	82.96	85.00	2.04	< 2	0.4	66	72	0.37	2.9	< 2	< 1	0.6
A07-3505	85509	85.00	87.84	2.84	< 2	0.6	83	77	0.72	< 0.5	< 2	< 1	0.5
A07-2308	85073	87.84	90.10	2.26	10	< 0.3	106	71	0.84	< 0.5	< 2	< 1	0.5
A07-2308	85074	90.10	92.72	2.62	< 2	0.4	92	47	0.56	< 0.5	< 2	< 1	0.4
A07-2308	85075	92.72	95.16	2.44	< 2	< 0.3	70	45	0.68	2.8	< 2	< 1	< 0.1
A07-2308	85076	95.16	96.99	1.83	< 2	< 0.3	58	62	0.39	9.1	< 2	< 1	0.4
A07-2308	85077	96.99	98.21	1.22	< 2	0.3	96	47	0.92	6.7	< 2	< 1	0.2
A07-2308	85078	98.21	100.04	1.83	< 2	0.6	76	66	0.17	< 0.5	< 2	< 1	< 0.1
A07-2308	85079	100.04	103.09	3.05	< 2	0.5	79	60	0.45	3.1	< 2	< 1	< 0.1
A07-3505	85510	103.09	105.84	2.75	< 2	0.4	75	59	0.44	1.6	< 2	< 1	< 0.1
A07-2308	85080	105.84	108.89	3.05	< 2	< 0.3	110	59	0.62	2.8	< 2	< 1	0.5
A07-3505	85511	108.89	111.02	2.13	5	0.4	95	47	0.83	< 0.5	< 2	< 1	< 0.1
A07-3505	85512	111.02	114.00	2.98	< 2	0.7	57	50	0.21	1.8	< 2	< 1	< 0.1
A07-3505	85513	114.00	115.90	1.90	< 2	0.6	155	64	0.52	3.3	< 2	1	< 0.1
A07-2308	85081	115.90	117.73	1.83	11	0.5	40	58	0.69	3.3	< 2	< 1	0.9
A07-2308	85082	117.73	118.65	0.92	< 2	< 0.3	30	70	0.72	2.7	< 2	< 1	< 0.1
A07-3505	85514	118.65	120.80	2.15	< 2	< 0.3	90	60	0.5	3.9	< 2	< 1	0.4
A07-3505	85515	120.80	121.70	0.90	< 2	0.3	95	66	0.51	2.1	< 2	< 1	< 0.1
A07-2308	85083	121.70	124.44	2.74	16	0.4	77	47	0.53	29.5	< 2	< 1	0.7
A07-2308	85084	124.44	126.58	2.14	< 2	0.5	106	67	0.68	< 0.5	< 2	< 1	< 0.1
A07-3505	85516	126.58	129.32	2.74	< 2	0.3	77	56	0.48	3.5	< 2	< 1	< 0.1
A07-2308	85085	129.32	132.37	3.05	< 2	< 0.3	84	56	0.66	12.9	< 2	< 1	2.6
A07-2308	85086	132.37	133.59	1.22	< 2	0.3	65	61	0.36	< 0.5	< 2	< 1	0.4

BARKER MINERALS LTD.

DRILL HOLE No. K07-6

Sample Intervals: DDH K07 - 6													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2308	85087	133.59	135.15	1.56	< 2	0.4	120	58	0.92	6.1	< 2	< 1	< 0.1
A07-2308	85088a	WCM Minerals Standard PB115			36	15.9	5130	15500	2.02	25.9	5	< 1	37.5
A07-3505	85517	135.15	136.65	1.50	< 2	0.4	92	67	0.71	4.8	< 2	< 1	0.4
A07-3505	85518	136.65	138.16	1.51	< 2	< 0.3	77	56	0.68	1.7	< 2	< 1	< 0.1
A07-3505	85519	138.16	140.12	1.96	< 2	< 0.3	29	56	0.19	4.7	< 2	< 1	0.4
A07-3505	85520	140.12	141.67	1.55	< 2	< 0.3	45	94	0.25	3	< 2	< 1	0.5
A07-3505	85521	141.67	144.27	2.60	< 2	< 0.3	91	62	0.63	2.5	< 2	< 1	0.5
A07-3505	85522	144.27	147.32	3.05	< 2	0.5	63	62	0.75	5.6	< 2	< 1	< 0.1
A07-3505	85523	147.32	148.54	1.22	< 2	0.4	66	54	0.72	< 0.5	< 2	< 1	< 0.1
A07-2308	85089	148.54	151.38	2.84	< 2	0.4	60	68	0.34	< 0.5	< 2	< 1	< 0.1
A07-2308	85090	151.38	154.64	3.26	< 2	< 0.3	151	65	0.6	7.2	< 2	< 1	0.6
A07-3505	85524	154.64	155.24	0.60	< 2	0.4	138	64	0.88	4.3	< 2	< 1	0.7
A07-3505	85525	155.24	157.69	2.45	< 2	< 0.3	40	42	0.24	2.5	< 2	< 1	0.4
A07-2308	85091	157.69	160.74	3.05	< 2	< 0.3	90	78	0.29	11.9	3	< 1	2.6
A07-2308	85092	160.74	163.79	3.05	< 2	< 0.3	136	69	0.77	< 0.5	2	< 1	0.5
A07-2308	85093	163.79	165.31	1.52	< 2	0.4	23	48	0.14	4.6	< 2	< 1	< 0.1
A07-2308	85094	165.31	167.45	2.14	< 2	0.4	44	53	0.13	3.1	< 2	< 1	0.4
A07-2308	85095	167.45	169.89	2.44	< 2	< 0.3	38	41	0.15	3.5	< 2	< 1	0.4
A07-2308	85096	169.89	173.56	3.67	< 2	< 0.3	35	85	0.19	5.1	< 2	< 1	1.4
A07-2308	85097	173.56	175.68	2.12	< 2	< 0.3	57	74	0.12	3.2	< 2	< 1	< 0.1
A07-3505	85526	175.68	177.21	1.53	< 2	0.7	52	72	0.14	3.1	< 2	< 1	0.5
A07-3505	85527	177.21	179.34	2.13	7	0.6	54	66	0.09	3.7	< 2	< 1	< 0.1
A07-3505	85528	179.34	182.39	3.05	< 2	0.5	54	83	0.08	3	< 2	< 1	0.7
A07-3505	85529	182.39	184.53	2.14	< 2	0.6	60	76	0.06	3.5	< 2	< 1	0.8
A07-2308	85098	184.53	187.30	2.77	< 2	0.5	52	83	0.09	< 0.5	< 2	< 1	< 0.1
A07-2308	85099	187.30	188.10	0.80	< 2	0.3	63	73	0.18	38.7	< 2	< 1	1.8
A07-3505	85530	188.10	190.63	2.53	< 2	0.7	47	69	0.16	10.3	< 2	< 1	1.6
A07-3505		Sampling gap - 5.79m											
A07-3505	85531	196.42	199.25		< 2	0.3	59	70	0.19	< 0.5	< 2	< 1	< 0.1
A07-2308	85100	199.25	200.69	1.44	8	0.5	66	53	0.05	2.6	< 2	< 1	< 0.1
A07-3505	85532	200.69	203.74		5	0.4	145	50	0.73	2.6	< 2	< 1	< 0.1
A07-3505	85533a	WCM Minerals Standard PB114			765	22.1	3070	11100	1.63	23.2	2	4	57.7
A07-3505	85534	203.74	206.79	3.05	< 2	0.4	64	58	0.21	3.8	< 2	< 1	< 0.1

BARKER MINERALS LTD.

DRILL HOLE No. K07-6

Sample Intervals: DDH K07 - 6													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-3505	85535	206.79	209.84	3.05	< 2	< 0.3	40	53	0.12	7.1	< 2	< 1	< 0.1
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 6

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
1.52	2.74	1.22	**0**
2.74	4.88	2.14	**5**
4.88	5.18	0.30	**6**
5.18	6.40	1.22	**7**
6.40	8.23	1.83	**12**
8.23	10.37	2.14	**13**
10.37	13.42	3.05	**12**
13.42	14.64	1.22	**7**
14.64	17.69	3.05	**5**
17.69	20.74	3.05	**11**
20.74	22.57	1.83	**7**
22.57	23.79	1.22	**5**
23.79	26.84	3.05	**6**
26.84	29.89	3.05	**4**
29.89	31.11	1.22	**7**
31.11	32.33	1.22	**7**
32.33	34.46	2.13	**5**
34.46	36.60	2.14	**6**
36.60	39.04	2.44	**8**
39.04	42.09	3.05	**9**
42.09	43.92	1.83	**8**
43.92	46.97	3.05	**6**
46.97	48.19	1.22	**5**
48.19	50.02	1.83	**18**
50.02	50.93	0.91	**3**
50.93	51.54	0.61	**3**
51.54	52.46	0.92	**0**
52.46	53.68	1.22	**2**

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
53.68	54.29	0.61	**1**
54.29	55.81	1.52	**2**
55.81	57.64	1.83	**4**
57.64	60.69	3.05	**3**
60.69	62.22	1.53	**8**
62.22	64.35	2.13	**8**
64.35	65.27	0.92	**7**
65.27	67.71	2.44	**9**
67.71	68.93	1.22	**10**
68.93	69.54	0.61	**4**
69.54	70.46	0.92	**7**
70.46	71.68	1.22	**9**
71.68	74.73	3.05	**15**
74.73	76.56	1.83	**5**
76.56	78.69	2.13	**3**
78.69	80.83	2.14	**8**
80.83	82.96	2.13	**6**
82.96	85.40	2.44	**5**
85.40	87.84	2.44	**4**
87.84	90.89	3.05	**3**
90.89	92.72	1.83	**4**
92.72	93.94	1.22	**9**
93.94	95.16	1.22	**4**
95.16	96.99	1.83	**4**
96.99	98.21	1.22	**2**
98.21	100.04	1.83	**3**
100.04	103.09	3.05	**5**
103.09	103.70	0.61	**8**

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
103.70	105.23	1.53	**9**
105.23	105.84	0.61	**4**
105.84	108.89	3.05	**7**
108.89	111.02	2.13	**3**
111.02	115.29	4.27	**5**
115.29	115.90	0.61	**4**
115.90	117.73	1.83	**6**
117.73	118.65	0.92	**3**
118.65	121.39	2.74	**7**
121.39	121.70	0.31	**6**
121.70	124.44	2.74	**6**
124.44	126.58	2.14	**11**
126.58	129.32	2.74	**4**
129.32	132.37	3.05	**6**
132.37	133.59	1.22	**7**
133.59	135.12	1.53	**7**
135.12	138.16	3.04	**8**
138.16	140.00	1.84	**5**
140.00	141.67	1.67	**4**
141.67	144.27	2.60	**5**
144.27	147.32	3.05	**4**
147.32	148.54	1.22	**3**
148.54	151.59	3.05	**2**
151.59	154.64	3.05	**7**
154.64	157.69	3.05	**11**
157.69	160.74	3.05	**9**
160.74	163.79	3.05	**13**
163.79	165.31	1.52	**15**

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
165.31	166.99	1.68	**11**
166.99	167.45	0.46	**2**
167.45	168.67	1.22	**8**
168.67	169.89	1.22	**3**
169.89	172.63	2.74	**12**
172.63	174.46	1.83	**4**
174.46	175.68	1.22	**1**
175.68	177.21	1.53	**4**
177.21	179.34	2.13	**1**
179.34	182.39	3.05	**3**
182.39	184.53	2.14	**3**
184.53	187.58	3.05	**3**
187.58	190.63	3.05	**9**
190.63	193.68	3.05	**4**
193.68	196.42	2.74	**8**
196.42	199.47	3.05	**3**
199.47	200.69	1.22	**6**
200.69	203.74	3.05	**5**
203.74	206.79	3.05	**7**
206.79	207.40	0.61	**4**
207.40	209.84	2.44	**6**
End of Hole			

Core Recovery: DDH K07 - 6					**Recovered**			Core Recovery: DDH K07 - 6					**Recovered**			
Box No.	From	To	Distance		(metres)	**%**		Box No.	From	To	Distance		(metres)	**%**		
1	1.45	8.41	6.96		4.0	**57**		34	164.90	167.78	2.88		2.9	**101**		
2	8.41	13.62	5.21		5.2	**100**		35	167.78	173.56	5.78		4.5	**78**		
3	13.62	18.49	4.87		4.9	**101**		36	173.56	178.51	4.95		5.0	**101**		
4	18.49	22.70	4.21		4.2	**100**		37	178.51	183.28	4.77		4.8	**101**		
5	22.70	28.71	6.01		5.0	**83**		38	183.28	188.71	5.43		5.4	**99**		
6	28.71	32.33	3.62		4.4	**122**		39	188.71	194.21	5.50		5.5	**100**		
7	32.33	37.25	4.92		4.8	**98**		40	194.21	199.56	5.35		5.3	**99**		
8	37.25	42.49	5.24		5.1	**97**		41	199.56	203.95	4.39		4.4	**100**		
9	42.49	46.97	4.48		4.3	**96**		42	203.95	208.10	4.15		4.2	**101**		
10	46.97	52.46	5.49		4.2	**77**		43	208.10	209.84	1.74		1.7	**98**		
11	52.46	56.21	3.75		3.7	**99**		End of Hole								
12	56.21	61.39	5.18		5.0	**97**										
13	61.39	65.67	4.28		4.2	**98**										
14	65.67	70.11	4.44		3.7	**83**										
15	70.11	75.03	4.92		4.8	**98**		Note: In interval 22.70-28.71 blocks are apparently at wrong locations.								
16	75.03	79.09	4.06		4.0	**99**										
17	79.09	84.30	5.21		5.2	**100**										
18	84.30	89.30	5.00		5.0	**100**										
19	89.30	94.26	4.96		4.5	**91**										
20	94.26	99.24	4.98		4.8	**96**										
21	99.24	103.28	4.04		4.0	**99**										
22	103.28	108.40	5.12		5.0	**98**										
23	108.40	115.83	7.43		4.4	**59**	Poor recovery in broken rock here.									
24	115.83	120.80	4.97		4.5	**91**										
25	120.80	126.05	5.25		5.2	**99**										
26	126.05	131.11	5.06		5.1	**101**										
27	131.11	135.22	4.11		3.7	**90**										
28	135.22	140.12	4.90		4.9	**100**										
29	140.12	145.17	5.05		5.0	**99**										
30	145.17	149.67	4.50		4.5	**100**										
31	149.67	154.75	5.08		5.1	**100**										
32	154.75	160.13	5.38		5.4	**100**										
33	160.13	164.90	4.77		4.6	**96**										

BARKER MINERALS LTD.

PROPERTY: KANGAROO

DRILL HOLE NO. K07 - 7

Dip & Azmth Tests			DDH K07-7	**Easting (NAD 83):** 589878	**Core Size:** NQ2	**Started:** May 26, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5837737	**Hole Azimuth**: 300°	**Finished:** May 29, 2007
9.15	-47.2	282.8	Temp=20.1, Mag=58040, Roll=175.4	**Grid Location:** KTL3 125N	**Hole Angle:** -50°	**Logged by:** RT
103.70	-46.5	288.4	Temp=19.4, Mag=56450, Roll=29.0	**Elevation:**	**Total Depth:** 212.89m	**Analysis by:** ActLabs
204.35	-45.2	292.2	Temp=22.8, Mag=56100, Roll=341.7			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		**Litho-**		**%**	**%**	**%**		**Alteration Scale: 1 - 5**					
From	**To**	**Code**	**Description**	**Py**	**Cpy**	**Pyrr**		**Ep**	**Seri-cite**	**2nd Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	2.14		CASING - Overburden. No recovery.										
2.14	3.00		Overburden. Rubble, rounded stones, mainly grey siltstone. Fracture surfaces are rusty.										Not magnetic. No fizzing.
3.00	15.53		Andesitic volcaniclastic. Medium greyish green. Variable mixed texture. Minor siltstone. Minor contacts are gradational. Insignificant calcite and calcite quartz veining. At 7.55m a 2cm calcite quartz vein, 20 degrees to core axis (CA) has pyritic stringer in adjacent chloritic fracture. Pyrite is very fine, disseminated with minor concentration in chloritic fractures.	0.1		tr		tr				2	Weak, spotty magnetism. No fizzing.
15.53	16.40		Andesite. Medium green. Not fractured much. Insignificant veins and disseminated pyrite. 10% augite and feldspar phenocrysts. May be a flow. Rounded 3mm 'clasts' may be amygdules. Upper and lower contacts are gradational, orientations unclear.	tr				tr				1	Weak, spotty magnetism. Weak, spotty fizzing.
16.40	26.75		Andesitic volcaniclastic, similar to that above. Medium greyish with slight green. Variable mixed texture. Low chloritic fracture intensity. No significant veining. Very fine disseminated pyrite with slight concentration in chloritic fractures. Bottom 5cm is slightly tan colour (Fe carbonate altered?). Lower contact is sharp but undulatory, orientation is approximately 80 deg to CA.	0.1					1	tr			Moderate, spotty magnetism. No fizzing, except in calcite veinlets.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
26.75	28.20		Andesite. Medium green. Not fractured much. Insignificant veins and disseminated pyrite. Rather crowded with augite and feldspar phenocrysts. Apparently a dike. Lower contact is lost in broken rock, orientation unclear.	tr				1	1			1	Weakly magnetic. No fizzing.
28.20	34.85		Andesitic volcaniclastic, similar to that above. Medium greyish with slight green. Variable mixed texture. Low chloritic fracture intensity. No significant veining. Pyrite is very fine and apparently rare, apparently mainly in chloritic fractures. Lower contact is gradational.	tr					1			1	Weak, spotty magnetism. Weak, spotty fizzing.
34.85	47.06		Siltstone. Medium grey with slight green. Very fine grained. Intensity of chloritic fractures seems to be increasing. Core is more broken up below approx 35m. No significant veining. Pyrite and pyrrhotite are mainly visible in chloritic fractures. Lower contact appears approx 60 deg to CA, characterized by a fracture.	tr		tr			1			1	Very weak, spotty magnetism. Moderate, spotty fizzing.
47.06	51.70		Volcaniclastic. Medium grained sandy texture. Medium greenish grey. Upper 2m is somewhat brecciated and more chloritic, with small blebs of pyrrhotite. No significant veining. Pyrite and pyrrhotite are mainly visible in chloritic fractures. Lower contact is approximate, lost in calcareous and chloritic rubble.	0.1		tr		tr	1	1		3	Weak, spotty magnetism. Moderate, spotty fizzing.
51.70	58.55		Siltstone and volcaniclastic. Grey grading to greenish grey downward. Variable textures. High fracture intensity, mainly chloritic. Rock is generally soft, incompetent, altered, commonly broken, shattered, locally crumbly. Pyrite is spotty, mostly in chloritic fractures. Lower contact appears 60 deg to CA, marked by 2cm calcite vein and minor local breccia.	0.5					2	1	1	2	Weak, spotty magnetism. Very weak, spotty fizzing

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	To	Code	Description	Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
58.55	59.45		Brecciated sheared altered porphyry. Apparently a dike intruded in a fault zone, then further tectonized. Protolith appears to have been an andesite porphyry with fairly crowded augite and feldspar phenocrysts. 5cm pyritic gouge occurs at 59m, apparently oriented 70 deg to CA.	1					3	2	1	1	Not magnetic. Fizzes weakly.
59.45	66.52		Andesitic volcaniclastic. Medium greyish green. Variable mixed texture. 10% interbedded greyish siltstones. Low chloritic fracture intensity. No significant veining. Very fine disseminated pyrite with slight concentration in chloritic fractures. Random small blebs of pyrrhotite. 59.84-60.29m is silicified, sericitized, bleached below a 3cm pyritic calcite quartz vein, 70 deg to CA. At 62.15-63.35m is an andesitic porphyry dike, upper and lower contacts are 60 deg and 30 deg respectively. Lower contact of interval is gradational, orientation unclear.	0.5		tr			1	1		2	Moderate magnetism from 60.39-66.55m. Fizzes weakly and spottily.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
66.52	89.35		Siltstone and less volcaniclastic. Dark to medium grey to greenish grey. Variable textures. Chloritic fracturing is fairly intense. Rock tends to be broken and locally shattered. No significant veining, calcite quartz veinlets appear mainly 60 deg to CA. Pyrite is very fine and difficult to quantify, occurs disseminated and slightly concentrated in chloritic fractures. Pyrrhotite occurs in random spotty small blebs. At 68.7m a cave in of the hole occured. At 70.12-71.50m has 1% calcite veinlets, more than normal. At 81.54-82.04m is a minor chloritic breccia with 30% sulphides, mostly pyrite and pyrrhotite with very minor chalcopyrite in a brecciated siltstone, clast supported. The pyrrhotite is easy to distinguish from the pyrite, and seems more abundant than the weak local magnetism suggests, could be a less magnetic version of pyrrhotite. The sulphides here are ragged wisps and dendrites witin quartz calcite veinlets and in ragged selvages to the veins, and in ragged patched between breccia clasts.	0.5	tr	0.5		tr	2	tr		3	Very weak, spotty magnetism. No fizzing, except for strong fizzing at approx. 86.60m. and at calcite veinlets of course.
			Continued from above. **Library example from 81.74-82.04m taken.** Fine bedding is evident at 78.23m @ 75 deg to CA, 86.5m @ 80 deg to CA. Lower contact is gradational, orientation unclear.										

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
89.35	99.80		Andesite, mixed volcaniclastic with less porphyritic (flow?), and relatively less grey siltstone. Medium greyish green. Fairly low fracture intensity. Minor calcite veinlets, 10-50 deg to CA. Pyrite is spotty, finely disseminated with minor concentrations in chloritic fractures. Random small blebs of pyrrhotite. At 97.8m a small stringer of pyrrhotite is weakly magnetic. Lower contact appears gradational, orientation is unclear in broken rock.	0.1		0.1		tr	2	1		2	Very weak, spotty magnetism. Moderate fizzing, spotty.
99.80	114.80		Siltstone. Grey. Very fine grained. Contains 5% coarser volcaniclastics. Fine bedding is commonly evident. Bedding attitudes are consistent, at 104m, 109m, 112m bedding is 70-75 deg to CA. Intensity of chloritic fractures is moderate, rock breaks into pieces readily nevertheless. At 103.09-103.66m a cave in of the borehole occurred. Only a few rounded stones recovered here. No significant veining. Pyrite and less pyrrhotite occur in fractures, pyrrhotite is weakly magnetic. At 111.0m pyrrhotite bands are clearly stratiform, apparently preferring to deposit in darker (basalticlastics?) sediments. **At 110.9-111.15m library example (2 pieces) taken**, shows pyrrhotite stratiform and in cross cutting fractures, this with associated patchy pervasive silicification, sericite and bleaching. Lower contact is fairly sharp but orientation is unclear. No significant contact metasomatic effects here.	0.1		0.1			1			1	Weak, spotty magnetism. Strong magnetism at approx. 108.10m, disseminated pyrrhotite for 10cm is 5%. Spotty, strong fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
114.80	118.48		Monzodiorite? Medium green. Reddish brown k spar occurs in small monzonite xenoliths but not pervasively or in stringers as in Hole K07-6. Rock fizzes readily in acid, suggesting pervasive calcite alteration. Uniform medium grained texture. Massive, homogenous. Fairly strong pervasive chlorite. No significant veining. Trace fine disseminated pyrite. Soft, competent rock with very little fracturing. Appears unaffected at the upper and lower contact with the siltstones, displaying no contact metasomatism. **At 115.65m a specimen taken for thin section** shows monzonite xenolith in (monzodiorite? - later identified as microdiorite). Lower contact is sharp but orientation is obscure.	tr					2	2		3	Moderate to strong magnetism. No fizzing.
118.48	127.02		Siltstone. Grey with weak green. Very fine grained. Fairly low fracture intensity, chloritic. Pervasive calcite occurs spottily. Insignificant veining is calcite. Pyrite is mainly in the fractures. Disseminated is too fine to see. Lower contact is sharp but unclear in broken rock.	0.1						1		1	Very weak, spotty magnetism. No fizzing.
127.02	127.44		Andesite. 10% porphyritic with augites and feldspars. May be a dike. Light green. Sandy texture. Fizzes readily in acid. Has 1cm calcite vein in centre, 65 deg to CA, with a chloritic or graphitic envelope.	tr				tr	1	2		1	No magnetism. Moderate fizzing.
127.44	128.20		Siltstone as at 119-127m. Lower contact is unclear in broken rock.	0.1						1		1	Very weak, spotty magnetism. No fizzing.

Depth (m)								Alteration Scale: 1 - 5					
From	To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
128.20	133.20		Siltstone. Originally dark grey but extensive pervasive silicification makes the rock bleached light green. At 129.95-131.55m occurs bleached silicified zone with chloritic fractures. Moderately fractured, chlorite in fractures. Pyrite is mainly in fractures. Disseminated very fine pyrite may be significant but is difficult to quantify. Borehole caved in at about 132.5m Some rubble here. Lower contact is intrusive, sharp, undulatory, orientation unclear.	0.1					3		4	1	No magnetism. No fizzing.
133.20	137.03		Andesite as at 127m. Lower contact is fairly sharp, 45 deg to CA.	0.5				tr	2	1		1	Very weak magnetism, spotty. Weak, spotty fizzing.
137.03	139.20		Volcaniclastic. Finer grained than usual. Light greyish green. At 137.65m several small clasts of pyrrhotite, up to 1cm, are magnetic. Pyrite and pyrrhotite are concentrated at fractures, pyrite also occurs disseminated.	0.5		tr		tr	2	1		1	Weak, spotty magnetism. No fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
139.20	212.89		Siltstone. Generally very fine grained, slightly coarser where more greenish. At 141-143m and 198-212m fine bedding is 75 deg to CA.Light to dark greenish grey to grey. Fracture intensity varies, generally moderate. No significant veining. At 176.35m a 10cm calcite vein is 55 deg to CA. Pyrite is mainly in fractures, fine disseminated portion is difficult to quantify. Spotty minor small clasts of pyrrhotite occur randomly. At 164.2m occurs pyrrhotite in chloritic fractures and stratiform, preferrentialy in a more mafic siltstone layer 1cm thick. **10cm library piece taken** here to show mode of occurrence of pyrrhotite. At 194.0m blebby and stringer pyrrhotite shows its occurence with the ubiquitous fine chloritic fractures. At 197.6m stringer and blebby pyrrhotite occurs in minor volcaniclastic layer. At 177.1m and 202m occur crumbly gouge zones, 20cm and 40 cm wide respectively. At 157-162m, 181-184m, 195-196m, 201-209m occur shattered core due to high fracture intensity. **End of Hole at 212.89m.**	0.5		tr		tr	1	1		3	No magnetism, except at approx. 197.5m. Weak, spotty fizzing occurs.

Lithology: DDH K07 - 7

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	2.14	**CASING - Overburden.**									
2.14	3.00	**Overburden.**									
3.00	15.53	**Volcaniclastic.**	0.1		tr		tr				2
15.53	16.40	**Andesite.**	tr				tr				1
16.40	26.75	**Volcaniclastic.**	0.1					1	tr		
26.75	28.20	**Andesite.**	tr				1	1			1
28.20	34.85	**Volcaniclastic.**	tr					1			1
34.85	47.06	**Siltstone.**	tr		tr			1			1
47.06	51.70	**Volcaniclastic.**	0.1		tr		tr	1	1		3
51.70	58.55	**Siltstone and volcaniclastic.**	0.5					2	1	1	2
58.55	59.45	**Brecciated sheared altered porphyry.**	1					3	2	1	1
59.45	66.52	**Volcaniclastic.**	0.5		tr			1	1		2
66.52	89.35	**Siltstone and volcaniclastic.**	0.5	tr	0.5		tr	2	tr		3
89.35	99.80	**Andesite, mixed volcaniclastic, porphyritic (flow?), siltstone.**	0.1		0.1		tr	2	1		2
99.80	114.80	**Siltstone.**	0.1		0.1			1			1
114.80	118.48	**Monzodiorite?**	tr					2	2		3
118.48	127.02	**Siltstone.**	0.1						1		1
127.02	127.44	**Andesite.**	tr				tr	1	2		1
127.44	128.20	**Siltstone.**	0.1						1		1
128.20	133.20	**Siltstone.**	0.1					3		4	1
133.20	137.03	**Andesite.**	0.5				tr	2	1		1
137.03	139.20	**Volcaniclastic.**	0.5		tr		tr	2	1		1
139.20	212.89	**Siltstone.**	0.5		tr		tr	1	1		3
		End of Hole.									

BARKER MINERALS LTD.

DRILL HOLE No. K07-7

Sample Intervals: DDH K07 - 7													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-4113	85851	4.60	7.02	2.42	< 2	0.5	75	59	0.5	< 0.5	< 2	< 1	0.5
A07-4113	85852a	WCM Minerals Standard PB114			738	30.6	3690	10200	1.81	20.5	3	< 1	61.6
A07-2309	85101	7.02	9.76	2.74	< 2	< 0.3	75	82	0.38	1.6	< 2	< 1	0.5
A07-4113	85853	9.76	12.81	3.05	< 2	0.8	84	109	0.31	21.1	< 2	< 1	0.4
A07-4113	85854	12.81	15.56	2.75	< 2	0.7	126	59	0.66	2.5	< 2	< 1	< 0.1
A07-2309	85102	15.56	17.69	2.13	< 2	< 0.3	182	70	1.15	< 0.5	< 2	< 1	0.7
A07-2309	85103	17.69	19.52	1.83	< 2	< 0.3	83	75	0.49	2.4	< 2	< 1	0.4
A07-4113	85855	19.52	21.80	2.28	< 2	0.7	158	60	0.97	< 0.5	< 2	< 1	< 0.1
A07-4113	85856	21.80	23.79	1.99	< 2	0.5	49	71	0.19	< 0.5	< 2	< 1	0.7
A07-4113	85857	23.79	26.75	2.96	< 2	< 0.3	93	75	0.27	2.6	< 2	< 1	0.8
A07-4113	85858	26.75	28.20	1.45	< 2	0.5	93	62	0.38	< 0.5	< 2	< 1	0.4
A07-4113	85859	28.20	31.50	3.30	< 2	0.5	130	72	0.52	2.5	< 2	< 1	0.5
A07-4113	85860	31.50	33.86	2.36	< 2	0.4	170	77	0.35	< 0.5	< 2	< 1	0.7
A07-2309	85104	33.86	34.85	0.99	< 2	< 0.3	120	89	0.59	< 0.5	< 2	< 1	0.5
A07-2309	85105	34.85	35.99	1.14	< 2	< 0.3	117	64	0.97	< 0.5	< 2	< 1	0.8
A07-4113	85861	35.99	39.04	3.05	14	0.4	108	297	0.95	< 0.5	< 2	< 1	< 0.1
A07-4113	85862	39.04	42.40	3.36	7	0.4	193	62	0.78	< 0.5	< 2	< 1	0.7
A07-4113	85863	42.40	45.14	2.74	8	0.4	148	96	0.8	< 0.5	< 2	< 1	0.6
A07-2309	85106	45.14	47.06	1.92	< 2	< 0.3	188	71	1.36	1.8	< 2	< 1	0.3
A07-2309	85107	47.06	50.25	3.19	5	< 0.3	89	117	0.31	21.9	< 2	< 1	4.6
A07-4113	85864	50.25	53.07	2.82	< 2	0.5	147	67	0.81	6.9	< 2	< 1	1
A07-4113	85917	53.07	54.61	1.54	< 2	0.4	119	46	1.82	2.4	< 2	< 1	1
A07-2309	85108	54.61	56.12	1.51	< 2	0.3	55	33	0.39	< 0.5	< 2	< 1	0.5
A07-2309	85109	56.12	58.55	2.43	< 2	< 0.3	92	58	0.74	8.2	< 2	< 1	3.3
A07-2309	85110	58.55	59.45	0.90	< 2	< 0.3	45	80	1.06	105	< 2	< 1	25.2
A07-2309	85111	59.84	60.29	0.45	< 2	< 0.3	53	90	0.36	64.9	3	< 1	22.1
A07-4113	85865	60.29	62.15	1.86	< 2	0.6	157	56	0.79	3.6	< 2	< 1	0.7
A07-4113	86866	62.15	63.35	1.20	< 2	0.7	217	58	1.01	< 0.5	< 2	< 1	< 0.1
A07-4113	85867	63.35	66.52	3.17	< 2	0.6	204	66	1.01	4.5	< 2	< 1	< 0.1
A07-4113	85868	66.52	68.63	2.11	< 2	0.5	88	53	0.42	4.4	< 2	< 1	0.3
A07-4113	85869	68.63	70.12	1.49	< 2	0.6	105	46	0.58	2.5	< 2	< 1	< 0.1
A07-2309	85112a	WCM Minerals Standard PB113			955	24.6	4830	14100	2.3	119	< 2	< 1	25
A07-2309	85113	70.12	71.50	1.38	< 2	< 0.3	86	47	1.01	5.9	< 2	< 1	0.8
A07-4113	85870	71.50	75.03	3.53	< 2	0.6	161	58	0.81	< 0.5	< 2	< 1	0.8
A07-4113	85871	75.03	78.08	3.05	< 2	< 0.3	59	75	0.2	2.4	< 2	< 1	0.7
A07-2309	85114	78.08	79.61	1.53	< 2	< 0.3	62	62	0.29	2.3	< 2	< 1	0.3
A07-2309	85115	79.61	81.54	1.93	< 2	< 0.3	71	57	0.34	1.7	< 2	< 1	< 0.1

BARKER MINERALS LTD.

DRILL HOLE No. K07-7

Sample Intervals: DDH K07 - 7													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2309	85116	81.54	82.04	0.50	59	0.7	944	50	10.1	4.6	< 2	< 1	5.4
A07-2309	85117	82.04	83.88	1.84	< 2	< 0.3	38	39	0.17	3.2	< 2	< 1	0.3
A07-4113	85872	83.88	86.00	2.12	< 2	0.4	87	74	0.24	< 0.5	< 2	< 1	< 0.1
A07-4113	85873	86.00	88.45	2.45	< 2	0.6	59	46	0.19	< 0.5	< 2	< 1	< 0.1
A07-4113	85874	88.45	89.35	0.90	< 2	0.5	41	53	0.08	2.3	< 2	< 1	0.3
A07-4113	85875	89.35	91.60	2.25	< 2	0.7	80	63	0.25	< 0.5	< 2	< 1	0.3
A07-4113	85876	91.60	93.33	1.73	< 2	0.6	56	59	0.33	63.1	< 2	< 1	3.2
A07-2309	85118	93.33	94.55	1.22	< 2	< 0.3	61	60	0.82	18.9	< 2	< 1	1.6
A07-2309	85119	94.55	96.99	2.44	< 2	< 0.3	161	74	1.3	13.8	< 2	< 1	2
A07-2309	85120	96.99	98.82	1.83	< 2	< 0.3	68	108	0.48	4.9	< 2	< 1	0.7
A07-4113	85877	98.82	99.80	0.98	< 2	0.6	106	82	0.71	6.9	< 2	< 1	0.6
A07-4113	85878	99.80	101.57	1.77	19	0.8	75	69	0.37	82.2	< 2	< 1	1.9
A07-4113	85879	101.57	103.09	1.52	< 2	0.7	81	63	0.38	< 0.5	< 2	< 1	< 0.1
			Sampling gap - 0.57m										
A07-4113	85880	103.66	106.45	2.79	9	0.8	97	70	0.5	6.6	< 2	< 1	0.5
A07-4113	85881	106.45	108.28	1.83	< 2	0.7	173	58	1.01	35.5	< 2	< 1	0.9
A07-4113	85882	108.28	109.80	1.52	< 2	0.7	109	56	0.88	5.4	< 2	< 1	0.7
A07-2309	85121	109.80	111.33	1.53	< 2	< 0.3	108	91	1.27	9.4	< 2	< 1	0.8
A07-4113	85883	111.33	113.00	1.67	< 2	0.8	81	89	0.37	16.5	< 2	< 1	0.8
A07-4113	85884	113.00	114.80	1.80	< 2	0.8	69	58	0.36	6.3	< 2	< 1	0.6
			Sampling gap - 0.49m										
A07-2309	85122	115.29	116.29	1.00	< 2	< 0.3	65	84	0.06	5.1	< 2	< 1	0.8
			Sampling gap - 2.19m										
A07-2309	85123	118.48	121.39	2.91	< 2	< 0.3	139	76	1.12	12.4	< 2	< 1	0.8
A07-4113	85885	121.39	124.44	3.05	< 2	0.5	87	75	0.66	3.7	< 2	< 1	< 0.1
A07-4113	85886	124.44	127.02	2.58	< 2	0.4	72	72	0.59	< 0.5	< 2	< 1	0.3
A07-4113	85887	127.02	127.44	0.42	< 2	0.4	11	71	0.02	10.3	< 2	< 1	4.3
A07-4113	85888	127.44	129.95	2.51	< 2	0.4	75	55	0.37	< 0.5	< 2	< 1	< 0.1
A07-2309	85124	129.95	131.55	1.60	< 2	< 0.3	15	108	0.15	2.9	< 2	< 1	0.4
A07-4113	85889a	WCM Minerals Standard PB115			126	23.5	5570	14700	2.01	21.8	< 2	< 1	36.4
A07-4113	85890	131.55	133.20	1.65	< 2	0.8	132	158	0.5	< 0.5	< 2	< 1	0.5
A07-4113	85891	133.20	135.10	1.90	< 2	0.8	120	75	0.4	< 0.5	< 2	< 1	< 0.1
A07-4113	85892	135.10	137.03	1.93	< 2	0.4	109	81	0.18	< 0.5	< 2	< 1	0.7
A07-4113	85893	137.03	139.20	2.17	< 2	0.6	143	69	0.55	< 0.5	< 2	< 1	< 0.1
A07-4113	85894	139.20	142.13	2.93	< 2	0.4	58	50	0.27	1.6	< 2	< 1	0.4
A07-4113	85895	142.13	144.88	2.75	< 2	0.5	46	66	0.13	3.9	< 2	< 1	0.5
A07-4113	85896	144.88	147.32	2.44	< 2	0.7	34	53	0.03	< 0.5	< 2	< 1	< 0.1

BARKER MINERALS LTD.

DRILL HOLE No. K07-7

Sample Intervals: DDH K07 - 7													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-4113	85897	147.32	149.45	2.13	< 2	0.5	63	60	0.07	2.4	< 2	< 1	0.3
A07-4113	85898	149.45	151.89	2.44	< 2	0.5	73	46	0.14	3.1	< 2	< 1	< 0.1
A07-4113	85899	151.89	153.72	1.83	13	0.5	111	54	0.63	< 0.5	< 2	< 1	0.4
A07-4113	85900	153.72	156.77	3.05	< 2	< 0.3	42	65	0.21	< 0.5	< 2	< 1	< 0.1
A07-4113	85901	156.77	157.84	1.07	< 2	0.4	10	36	0.01	2.6	< 2	< 1	0.6
A07-2309	85125	157.84	159.82	1.98	< 2	0.7	44	51	0.03	5.7	< 2	< 1	0.3
A07-2309	85126	159.82	161.65	1.83	< 2	< 0.3	48	68	0.02	3.5	< 2	< 1	< 0.1
A07-4113	85902	161.65	164.09	2.44	< 2	< 0.3	41	66	0.03	2.2	< 2	< 1	0.8
A07-2309	85132	164.09	164.70	0.61	< 2	0.4	114	75	0.21	18.6	< 2	< 1	1.6
A07-4113	85903	164.70	166.84	2.14	12	0.6	84	85	0.23	4.7	< 2	< 1	0.6
A07-4113	85904	166.84	171.13	4.29	< 2	0.4	60	64	0.04	12	< 2	< 1	1.3
A07-4113	85905	171.13	172.94	1.81	12	< 0.3	90	62	0.23	2.7	< 2	< 1	0.6
A07-2309	85127	172.94	175.99	3.05	< 2	< 0.3	59	76	0.46	6.5	< 2	< 1	1.3
A07-2309	85128	175.99	177.00	1.01	164	0.7	101	173	2.74	529	< 2	< 1	20.2
A07-2309	85129	177.00	177.20	0.20	19	< 0.3	63	158	2.72	73.6	< 2	< 1	7.7
A07-2309	85130	177.20	179.00	1.80	11	< 0.3	97	236	1.17	32.8	< 2	< 1	3
A07-2309	85131	179.00	180.00	1.00	< 2	< 0.3	26	71	0.9	24.8	< 2	< 1	2
A07-4113	85906	180.00	182.39	2.39	< 2	< 0.3	29	51	0.25	5.9	< 2	< 1	1.3
A07-4113	85907	182.39	185.28	2.89	< 2	< 0.3	50	65	0.33	44.5	< 2	< 1	1.9
A07-4113	85908	185.28	187.27	1.99	< 2	< 0.3	55	73	0.03	1.7	< 2	< 1	1.8
A07-2309	85133	187.27	189.71	2.44	8	< 0.3	37	70	0.47	9.4	< 2	< 1	0.3
A07-4113	85909	189.71	192.46	2.75	< 2	< 0.3	66	61	0.19	3.5	< 2	< 1	0.6
A07-2309	85134	192.46	194.59	2.13	< 2	0.3	94	78	0.39	6.3	< 2	< 1	< 0.1
A07-4113	85910	194.59	196.73	2.14	< 2	< 0.3	121	58	0.14	5.3	< 2	< 1	0.2
A07-2309	85135	196.73	199.17	2.44	< 2	< 0.3	116	74	0.67	5.8	< 2	< 1	0.4
A07-4113	85911	199.17	201.91	2.74	8	0.4	108	68	0.59	8	< 2	< 1	1.7
A07-2309	85136	201.91	202.30	0.39	79	< 0.3	115	99	2.1	1110	< 2	< 1	30.8
A07-4113	85912a	WCM Minerals Standard PB114			774	28.2	3240	10200	1.59	20	< 2	4	61
A07-4113	85913	202.30	204.96	2.66	11	0.7	176	111	0.56	70.8	< 2	< 1	10.8
A07-4113	85914	204.96	206.79	1.83	< 2	0.5	121	86	0.2	8.4	< 2	< 1	1.5
A07-4113	85915	206.79	209.84	3.05	< 2	0.4	65	63	0.09	5.9	< 2	< 1	0.6
A07-4113	85916	209.84	212.89	3.05	< 2	0.6	111	82	0.55	5.1	< 2	< 1	0.7
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 7

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
2.14	2.75	0.61	**1**
2.75	4.27	1.52	**3**
4.27	7.02	2.75	**6**
7.02	9.76	2.74	**3**
9.76	12.81	3.05	**2**
12.81	15.56	2.75	**5**
15.56	17.69	2.13	**3**
17.69	19.52	1.83	**2**
19.52	22.57	3.05	**5**
22.57	23.79	1.22	**6**
23.79	26.23	2.44	**4**
26.23	28.67	2.44	**3**
28.67	31.72	3.05	**5**
31.72	33.86	2.14	**6**
33.86	35.99	2.13	**6**
35.99	36.60	0.61	**2**
36.60	39.04	2.44	**4**
39.04	42.40	3.36	**3**
42.40	45.14	2.74	**5**
45.14	46.97	1.83	**3**
46.97	48.19	1.22	**5**
48.19	53.07	4.88	**6**
53.07	56.12	3.05	**9**
56.12	57.04	0.92	**4**
57.04	58.26	1.22	**11**
58.26	60.39	2.13	**8**
60.39	63.44	3.05	**6**
63.44	66.49	3.05	**6**

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
66.49	68.32	1.83	**5**
68.32	68.63	0.31	**4**
68.63	69.54	0.91	**6**
69.54	70.12	0.58	**3**
70.12	72.59	2.47	**7**
72.59	75.03	2.44	**6**
75.03	78.08	3.05	**9**
78.08	79.61	1.53	**4**
79.61	81.74	2.13	**10**
81.74	83.88	2.14	**12**
83.88	84.79	0.91	**8**
84.79	87.54	2.75	**7**
87.54	87.84	0.30	**2**
87.84	88.45	0.61	**3**
88.45	88.76	0.31	**3**
88.76	90.89	2.13	**7**
90.89	93.33	2.44	**7**
93.33	94.25	0.92	**11**
94.25	94.55	0.30	**4**
94.55	96.99	2.44	**7**
96.99	98.82	1.83	**12**
98.82	100.96	2.14	**10**
100.96	101.57	0.61	**3**
101.57	103.09	1.52	**5**
103.09	104.01	0.92	**1**
104.01	105.84	1.83	**2**
105.84	106.45	0.61	**2**
106.45	107.06	0.61	**3**

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
107.06	107.67	0.61	**1**
107.67	108.28	0.61	**3**
108.28	109.80	1.52	**5**
109.80	111.33	1.53	**4**
111.33	112.24	0.91	**7**
112.24	115.29	3.05	**6**
115.29	118.34	3.05	**1**
118.34	121.39	3.05	**6**
121.39	124.44	3.05	**1**
124.44	127.49	3.05	**8**
127.49	129.63	2.14	**3**
129.63	130.85	1.22	**6**
130.85	132.07	1.22	**7**
132.07	133.59	1.52	**3**
133.59	136.64	3.05	**3**
136.64	139.69	3.05	**2**
139.69	141.52	1.83	**3**
141.52	142.13	0.61	**3**
142.13	142.74	0.61	**4**
142.74	144.27	1.53	**2**
144.27	144.88	0.61	**2**
144.88	146.10	1.22	**4**
146.10	146.40	0.30	**1**
146.40	147.32	0.92	**3**
147.32	149.45	2.13	**5**
149.45	151.89	2.44	**5**
151.89	153.72	1.83	**7**
153.72	156.77	3.05	**9**

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
156.77	157.38	0.61	**5**
157.38	157.84	0.46	**3**
157.84	158.60	0.76	**2**
158.60	159.82	1.22	**4**
159.82	161.04	1.22	**2**
161.04	161.35	0.31	**3**
161.35	161.65	0.30	**1**
161.65	164.09	2.44	**12**
164.09	164.70	0.61	**4**
164.70	166.84	2.14	**4**
166.84	169.89	3.05	**6**
169.89	172.94	3.05	**5**
172.94	175.99	3.05	**5**
175.99	177.21	1.22	**8**
177.21	179.34	2.13	**7**
179.34	182.39	3.05	**3**
182.39	184.22	1.83	**5**
184.22	187.27	3.05	**10**
187.27	189.71	2.44	**6**
189.71	191.23	1.52	**3**
191.23	192.46	1.23	**2**
192.46	194.59	2.13	**3**
194.59	196.73	2.14	**4**
196.73	199.17	2.44	**5**
199.17	200.08	0.91	**0**
200.08	201.91	1.83	**3**
201.91	204.96	3.05	**8**
204.96	206.79	1.83	**3**

Vein Counts: DDH K07 - 7

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
206.79	208.32	1.53	**2**
208.32	209.84	1.52	**4**
209.84	211.98	2.14	**3**
211.98	212.89	0.91	**2**
End of Hole			

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm

Core Recovery: DDH K07 - 7					**Recovered**								**Recovered**	
Box No.	From	To	Distance		(metres)	**%**		Box No.	From	To	Distance		(metres)	**%**
1	2.14	7.38	5.24		5.0	**95**		35	171.13	176.16	5.03		5.0	**99**
2	7.38	12.09	4.71		4.7	**100**		36	176.16	180.98	4.82		4.7	**98**
3	12.09	17.03	4.94		4.9	**99**		37	180.98	185.28	4.30		4.3	**100**
4	17.03	21.80	4.77		4.8	**101**		38	185.28	189.96	4.68		4.7	**100**
5	21.80	26.63	4.83		4.8	**99**		39	189.96	194.99	5.03		5.0	**99**
6	26.63	31.82	5.19		5.2	**100**		40	194.99	199.96	4.97		5.0	**101**
7	31.82	36.77	4.95		4.8	**97**		41	199.96	205.79	5.83		4.7	**81**
8	36.77	44.72	7.95		5.0	**63**		42	205.79	210.03	4.24		4.2	**99**
9	44.72	50.25	5.53		5.2	**94**		43	210.03	212.89	2.86		2.9	**101**
10	50.25	54.61	4.36		4.2	**96**			End of Hole					
11	54.61	59.69	5.08		4.2	**83**								
12	59.69	64.74	5.05		5.0	**99**								
13	64.74	69.55	4.81		4.8	**100**								
14	69.55	75.03	5.48		5.3	**97**								
15	75.03	79.95	4.92		4.7	**96**								
16	79.95	84.97	5.02		4.5	**90**								
17	84.97	89.64	4.67		4.7	**101**								
18	89.64	94.12	4.48		4.5	**100**								
19	94.12	98.88	4.76		4.7	**99**								
20	98.88	103.66	4.78		4.6	**96**								
21	103.66	107.77	4.11		4.1	**100**								
22	107.77	112.24	4.47		4.5	**101**								
23	112.24	117.59	5.35		5.4	**101**								
24	117.59	122.84	5.25		5.2	**99**								
25	122.84	127.93	5.09		5.1	**100**								
26	127.93	132.61	4.68		4.6	**98**								
27	132.61	137.51	4.90		4.9	**100**								
28	137.51	142.91	5.40		5.4	**100**								
29	142.91	147.43	4.52		4.4	**97**								
30	147.43	152.15	4.72		4.7	**100**								
31	152.15	157.57	5.42		5.5	**101**								
32	157.57	161.65	4.08		3.7	**91**								
33	161.65	166.54	4.89		4.9	**100**								
34	166.54	171.13	4.59		4.6	**100**								

PROPERTY: KANGAROO

BARKER MINERALS LTD.

DRILL HOLE NO. K07 - 8

Dip & Azmth Tests			DDH K07-8	**Easting (NAD 83):** 589731	**Core Size:** NQ2	**Started:** May 29, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5837967	**Hole Azimuth**: 290°	**Finished:** June 1 , 2007
9.15	-48.9	267.1	Temp=21.7, Mag=56460, Roll=118	**Grid Location:** '9+50' on road	**Hole Angle:** -50°	**Logged by:** RT
97.60	-47.4	270.1	Temp=21.6, Mag=56330, Roll=75.4	**Elevation:**	**Total Depth:** 195.51m	**Analysis by:** ActLabs
189.1	-46.4	272.5	Temp=23.3, Mag=56250, Roll=235.7			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		**Litho-**						**Alteration Scale: 1 - 5**					
From	**To**	**Code**	**Description**	**% Py**	**% Cpy**	**% Pyrr**		**Ep**	**Seri-cite**	**Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	1.53		CASING - Overburden. No core recovery.										
1.53	9.35		Basalt. Rusty fractures to 24m. Broken core to 29m. Dark to medium greenish grey. Variable texture. Locally brecciated or xenolithic. Minor calcite veinlets, 30-40 degrees to core axis (CA). Pyrite is spotty, occurs in blebs, dissaminated with minor concentration in chloritic fractures. Pyrrhotite is less common, occurs same way. **At 3.00m a specimen taken for thin section**, shows average basalt. Lower contact is unclear in broken rock, appears more chloritic with coarser blebs of pyrite. Rocks get coarner grained below, 'contact' may mearly be a change in texture.	0.5		tr			2	1		3	Spotty weak magnetism appears related to random blebs of pyrrhotite. Fizzing only occurs in calcite veins.
9.35	17.84		Diorite. Black and white salt pepper colour. Massive, homogenous. Coarse grained crowded porphyry. 10mm long hornblende phenocrysts make 50% of the rock. No significant veining. Minor pyrite in fractures. Soft, competent rock with very little fracturing. Cave in of hole occurred at 16.5m, 20 cm of rubble. No significant alteration. Diorite appears anaffected at the upper and lower contacts, displaying no contact metasomatism. **At 10.80m a specimen taken for thin section**, shows average diorite. At 11.5-12.2m a green andesite dike contains a xenolith of the diorite near the upper contact. Lower contact is unclear in broken rock.	0.5								1	Moderate, spotty magnetism, apparently mainly due to magnetite. No fizzing, only at calcite veinlets.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
17.84	19.80		Andesite dike, similar to the dike in the interval above. Light green. Very minor pyrite, mainly in fractures. Very low fracture intensity. No significant veining. Contains some diorite xenoliths. No contact metasomatism at contacts with diorite. Lower contact orientation is unclear in broken rock.	tr		tr			2	1		1	Weak, spotty magnetism. Weak fizzing.
19.80	29.60		50% andesite (dike), 40% diorite, 10% siltstone. The diorite is the same black white porphyry as above but somewhat finer grained, contains some grey siltstone xenoliths. The andesite is similar to that above and contains some diorite xenoliths. No significant veining, sulphides, contact effects or alteration. Lower contact is lost in shattered rock.	0.5		tr			1	1		1	Weak, spotty magnetism. Fizzing only occurs at veins.
29.60	47.50		Andesitic volcaniclastic with 30% siltstone, alternately interbedded. Volcanic is fairly coarse grained, medium green. Contains black basaltic clasts and sericitic feldspar phenocrysts and spotty epidote. Siltstone is grey, siliceous, very fine, hard, occurs in narrow interbeds. Pyrite is mainly in fractures. Medium fracture intensity, rock is often broken up. At 34.6-34.9m is crumbly gouge. Lower contact is a gradational sedimentary interface, siltstone above lapilli tuff below, approx 40 deg to CA. Box No. 7 (29.97-34.82m) was dropped. Blocks and some core may have become displaced. Took only one sample from this box (30.50-33.55m). At 34.90-35.70m is porphyritic andesite (dike?). At 35.70-37.20m is siliceous siltstone.	0.5		tr		1	2	1		1	Very weak, spotty magnetism. Weak, spotty fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
47.50	48.20		Lapilli tuff. Andesitic. Light yellowish green. Crowded with rounded clasts, many black, most greenish fine grained silty and feldspar phenocrysts. No significant pyrite. A narrow distinctive unit suitable as a marker horizon though skinny. Lower contact is made unclear by calcite quartz veining.					1	3		1		No magnetism. Strong fizzing.
48.20	49.77		Andesitic tuff. Light yellowish green. Uniform medium grained, finer than lapilli tuff above. Generaly same composition. Spotty fine pyrite. Much of this interval consists of several zones of crumbly gouge occupied by calcite quartz pyrite veins. Lower contact appears a fairly abrupt sedimentary interface, 40 deg to CA.	0.5				1	3	1	1		No magnetism. Moderate fizzing.
49.77	79.60		Siltstone. Mostly grey, some greenish grey. Not generally siliceous. Minor andesitic volcaniclastics interbedded. Uncommon, somewhat subtle fine bedding is 55 deg to CA at 55.0m, 66.5m, 76.3m. At 56.4m a cave in of the hole occured, 30 cm of rubble. Minor calcite veining, no preferred orientation. Pyrite is mainly in fractures. Spotty pyrrhotite occurs in blebs adjacent to fractures. At 69.9-71.2m is bleached silicified zone with chloritic fractures, no apparent increase in sulphides. At 78.69-79.10m. is an andesite dike. Lower contact is 25 deg to CA.	0.5		tr			1			1	Weak, spotty magnetism. No fizzing, only in veins.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
79.60	113.00		Interbedded greyish siltstone and lesser greenish volcaniclastic. Characterized by higher fracture intensity and chloritization. Veining remains minor as always, less than 1%, but occurs at a constant intensity throughout with no preferred zones. Pyrite is mainly in fractures, as is very spotty small pyrrhotite blebs, no single occurrence important. At 85.6-86.6m is greenish relatively fine grained basalt dike. No contact effects. At 103.0m pyrrhotite appears to preferrentially alter clasts in a local volcaniclastic. Lower contact appears intrusive, approx 25 deg to CA, characterized by minor breccia, gouge and calcite veinlets parallel to contact.	0.5		tr		tr	1	1		3	Weak to moderate, spotty magnetism. No fizzing.
113.00	116.00		Basalt dike. Dark greenish grey. Massive, homogenous, fairly fine grained. 5% feldspar phenocrysts in a dark fine matrix. Pyrite is disseminated, very fine. Lower contact is 45 deg to CA.	0.5						2		2	Fairly strongly magnetic apparently due to magnetite. Weak fizzing.

Depth (m) From	To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
116.00	127.05		Diorite, as at 10-17m. Black and white salt pepper colour. Massive, homogenous. Hornblende phenocrysts are up to 5mm, somewhat a crowded porphyry. Minor calcite veinlets. At 120.30-122.60m has 1cm calcite vein parallel to CA lasting 35cm. Two other 5mm veins are 50 deg to CA. At 127.05-132.25 a basalt dike, massive, 0.5% pyrite disseminated, fine grained, dark greenish grey, homogenous. At 132.25-132.67 is doirite, perhaps a xenolith in a large basalt dike. Chloritic fractures are ubiquitous as usual but not as common as in siltstones and volvaniclastics above. Very minor disseminated pyrite, occurs also in chloritic fractures, mainly near the lower contact. . Spotty pyrrhotite appears to occur in siltstone xenoliths. Trace disseminated chalcopyrite at 119.45m. Lower contact is approx 25 deg to CA.	tr	tr	tr						1	Moderate, spotty magnetism. Moderate, spotty fizzing.
132.67	133.70		Basalt dike. Dark greenish grey. Massive, homogenous, fairly fine grained. Similar to that at 127.05-132.25m. Sandy texture here appears similar to that in monzodiorite of hole K07-6. Pyrite is disseminated, very fine. 5% pyritic within 30cm of upper contact. Lower contact is approx 70 deg to CA.	0.5					1	2		2	Weak magnetism. No fizzing.
133.70	142.75		Diorite, as above. At 134.80-134.90 has 3cm of calcite veins at 30-80 deg to CA.	0.1					1			2	No magnetism. Fizzes only at veins.
142.75	143.35		Basalt. Possibly a xenolith. Is finer and more inhomogenous than dikes above. Appears alterd by contact with the diorite. Has fine chloritic fractures. Pyrite is mainly disseminated but occurs irregularly.	0.5					1	1		2	No magnetism. Fizzes only at veins.
143.35	148.17		Diorite, as above.	tr								2	Very weak, spotty magnetism. No fizzing.

Depth (m)		Litho-		%	%	%		Alteration Scale: 1 - 5					
From	To	Code	Description	Py	Cpy	Pyrr		Ep	Seri-cite	Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
148.17	149.60		Basalt, as at 143m. Possibly a xenolith. Is finer and more inhomogenous than dikes above. Appears alterd by contact with the diorite. Has fine chloritic fractures. Pyrite is mainly disseminated but occurs irregularly.	0.5					1	1		2	No magnetism. Fizzing only in veins.
149.60	158.60		Diorite, as above. 1% calcite veins from 157m.	0.1								1	No magnetism. Fizzing only in veins.
158.60	160.12		Basalt dike. Dark greenish grey. Massive, homogenous, fairly fine grained. Pyrite is disseminated, very fine. 2% calcite veins.	0.5					1	1		2	No magnetism. Weak, spotty fizzing.
160.12	175.75		Diorite, as above. 161-162m has 2% calcite veins.	0.1								1	No magnetism. Moderate, spotty fizzing.
175.75	177.20		Basalt dike, as above. Upper and lower contacts are approx 30 deg to CA, unclear in broken rock.	0.1					1	2		1	No magnetism. Fizzes only in veins.
177.95	195.51		Diorite, as above. **18cm long library piece taken at 190.95m.** At 190.20m i**s** unaltered diorite with aligned plagioclase phenocrysts (trachytic texture?). **End of hole at 195.51m.**	0.1								1	No magnetism. Fizzing only in veins.

Lithology: DDH K07 - 8

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	1.53	**CASING - Overburden.**									
1.53	9.35	**Basalt.**	0.5		tr			2	1		3
9.35	17.84	**Diorite.**	0.1								1
17.84	19.80	**Andesite dike.**	tr		tr			2	1		1
19.80	29.60	**Andesite (dike), diorite, siltstone.**	0.5		tr			1	1		1
29.60	47.50	**Andesitic volcaniclastic, siltstone**	0.5		tr		1	2	1		1
47.50	48.20	**Lapilli tuff. Andesitic.**					1	3		1	
48.20	49.77	**Andesitic tuff.**	0.5				1	3	1	1	
49.77	79.60	**Siltstone.**	0.5		tr			1			1
79.60	113.00	**Siltstone and lesser volcaniclastic.**	0.5		tr		tr	1	1		3
113.00	116.00	**Basalt dike.**	0.5						2		2
116.00	127.05	**Diorite.**	tr		tr						1
132.67	133.70	**Basalt dike.**	0.5					1	2		2
133.70	142.75	**Diorite.**	0.1					1			2
142.75	143.35	**Basalt.**	0.5					1	1		2
143.35	148.17	**Diorite.**	tr								2
148.17	149.60	**Basalt.**	0.5					1	1		2
149.60	158.60	**Diorite.**	0.1								1
158.60	160.12	**Basalt dike.**	0.5					1	1		2
160.12	175.75	**Diorite.**	0.1								1
175.75	177.20	**Basalt dike.**	0.1					1	2		1
177.95	195.51	**Diorite.**	0.1								1
		End of Hole.									

BARKER MINERALS LTD.

DRILL HOLE K07-8

Sample Intervals: DDH K07 - 8													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-4247	85926	2.44	5.19	2.75	< 2	0.7	177	51	0.61	6.6	< 2	< 1	< 0.1
			Sampling gap - 1.83m										
A07-2310	85137	7.02	8.85	1.83	8	< 0.3	142	56	1	2.3	< 2	< 1	< 0.1
A07-4247	85927	8.85	11.59	2.74	< 2	0.7	355	55	2.25	25.7	< 2	< 1	0.5
			Sampling gap - 3.05m										
A07-2310	85138	14.64	16.47	1.83	6	< 0.3	260	39	1.63	31.5	< 2	< 1	1
			Sampling gap - 1.37m										
A07-4247	85928	17.84	19.80	1.96	< 2	0.5	19	52	0.09	4.9	< 2	< 1	< 0.1
A07-4247	85929	19.80	21.66	1.86	< 2	0.5	252	49	1.12	8.6	< 2	< 1	0.2
A07-2310	85139	21.66	23.79	2.13	< 2	0.3	379	50	2.38	7.1	< 2	< 1	< 0.1
A07-4247	85930	23.79	26.84	3.05	< 2	0.5	767	42	4.21	14	< 2	< 1	0.4
A07-2310	85140	26.84	28.37	1.53	< 2	< 0.3	160	48	0.76	7.2	< 2	< 1	0.2
A07-2310	85141	28.37	29.89	1.52	< 2	< 0.3	185	43	0.87	9.9	< 2	< 1	< 0.1
A07-4247	85931	29.89	30.50	0.61	< 2	0.7	171	36	0.83	9.5	< 2	< 1	< 0.1
A07-4247	85932	30.50	33.55	3.05	< 2	0.5	269	49	1.26	14.2	< 2	< 1	< 0.1
			Sampling gap - 1.05m										
A07-2310	85142	34.60	34.90	0.30	17	< 0.3	63	53	1.6	25.8	< 2	< 1	1.5
A07-4247	85933a	WCM Minerals Standard PB114			904	27.1	3230	10100	1.8	28.5	< 2	< 1	59.5
A07-4247	85934	34.90	35.70	0.80	31	0.5	212	70	2.81	24.7	< 2	< 1	1.5
A07-4247	85935	35.70	37.20	1.50	9	0.6	60	40	0.47	6.7	< 2	< 1	0.4
A07-4247	85936	37.20	39.10	1.90	< 2	0.6	95	54	0.94	8.5	< 2	< 1	0.6
A07-4247	85937	39.10	40.06	0.96	< 2	< 0.3	81	48	0.18	6.2	< 2	< 1	< 0.1
A07-4247	85938	40.06	42.09	2.03	< 2	0.5	83	47	0.29	5.1	< 2	< 1	0.2
A07-2310	85143	42.09	45.14	3.05	< 2	< 0.3	102	48	0.7	7.2	< 2	< 1	0.8
A07-2310	85144	45.14	47.50	2.36	< 2	< 0.3	160	58	1.25	21.4	< 2	< 1	1.1
A07-4247	85939	47.50	48.20	0.70	< 2	< 0.3	70	45	0.24	82.1	< 2	< 1	30.8
A07-2310	85145	48.20	49.77	1.57	14	< 0.3	72	19	0.99	457	< 2	< 1	34.2
A07-4247	85940	49.77	51.55	1.78	< 2	0.4	206	78	1.1	29.5	< 2	< 1	1.9
A07-4247	85941	51.55	53.68	2.13	< 2	0.6	395	57	2.35	8.9	< 2	< 1	0.7
A07-2310	85146	53.68	56.12	2.44	< 2	< 0.3	148	41	1.05	7.4	< 2	< 1	0.4
A07-2310	85147	56.12	57.34	1.22	< 2	< 0.3	103	42	1.17	7.4	< 2	< 1	< 0.1
A07-4247	85942	57.34	60.39	3.05	< 2	0.4	123	45	0.75	7.2	< 2	< 1	< 0.1
A07-4247	85943	60.39	63.14	2.75	< 2	0.4	161	45	0.88	5.2	< 2	< 1	0.3

BARKER MINERALS LTD.

DRILL HOLE K07-8

Sample Intervals: DDH K07 - 8													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-4247	85944	63.14	66.49	3.35	< 2	0.6	156	39	0.66	8.6	< 2	< 1	< 0.1
A07-2310	85148	66.49	70.20	3.71	< 2	< 0.3	174	46	0.67	< 0.5	< 2	< 1	0.2
A07-2310	85149	70.20	71.20	1.00	< 2	< 0.3	116	27	0.44	< 0.5	< 2	< 1	< 0.1
A07-2310	85150	71.20	72.59	1.39	< 2	< 0.3	116	53	0.66	1.8	< 2	< 1	< 0.1
A07-4247	85945	72.59	75.64	3.05	5	< 0.3	120	71	0.84	6	< 2	< 1	< 0.1
A07-4247	85946	75.64	76.86	1.22	< 2	0.4	106	79	1	6.7	< 2	< 1	0.2
A07-4247	85947	76.86	78.69	1.83	< 2	0.4	107	67	0.87	5.2	< 2	< 1	0.2
A07-4247	85948	78.69	79.10	0.41	< 2	0.4	81	61	0.53	6.4	< 2	< 1	0.2
A07-4247	85949	79.10	81.30	2.20	< 2	< 0.3	136	67	0.75	7.9	< 2	< 1	0.6
A07-4247	85950	81.30	82.80	1.50	< 2	< 0.3	140	49	0.57	4.4	< 2	< 1	< 0.1
A07-4247	85951	82.80	83.57	0.77	< 2	0.5	114	44	0.54	1.7	< 2	< 1	< 0.1
A07-2310	85151	83.57	85.60	2.03	< 2	< 0.3	216	31	1.05	< 0.5	< 2	< 1	0.3
A07-2310	85152	85.60	86.60	1.00	9	< 0.3	38	61	0.24	5	3	< 1	0.3
A07-2310	85153a	WCM Minerals Standard PB113			2400	21.6	4320	14300	2.12	121	< 2	< 1	24.4
A07-2310	85154	86.60	87.84	1.24	< 2	< 0.3	85	48	0.52	3.9	< 2	< 1	0.4
A07-2310	85155	87.84	90.59	2.75	< 2	< 0.3	150	38	0.5	6.6	< 2	< 1	0.6
A07-2310	85156	90.59	92.11	1.52	9	< 0.3	87	54	0.78	4	< 2	< 1	0.5
A07-2310	85157	92.11	94.25	2.14	< 2	< 0.3	167	45	1.07	5	< 2	< 1	0.6
A07-2310	85158	94.25	96.08	1.83	< 2	< 0.3	209	47	1.24	6.8	< 2	< 1	0.9
A07-2310	85159	96.08	98.52	2.44	< 2	< 0.3	244	27	1.42	4.2	< 2	< 1	1
A07-2310	85160	98.52	100.96	2.44	< 2	< 0.3	108	41	0.68	6.3	< 2	< 1	0.7
A07-2310	85161	100.96	102.98	2.02	< 2	< 0.3	56	36	0.33	4.2	< 2	< 1	0.5
A07-2310	85162	102.98	105.23	2.25	5	< 0.3	102	41	0.45	2.8	< 2	< 1	< 0.1
A07-2310	85163	105.23	107.97	2.74	< 2	< 0.3	99	50	0.39	4	< 2	< 1	< 0.1
A07-2310	85164	107.97	109.80	1.83	9	0.4	134	37	0.46	23.4	< 2	< 1	1
A07-2310	85165	109.80	111.47	1.67	< 2	< 0.3	67	49	0.42	7.3	< 2	< 1	1.2
A07-2310	85166	111.47	113.00	1.53	< 2	< 0.3	67	65	1.27	18.1	< 2	< 1	2
A07-2310	85167	113.00	116.00	3.00	122	0.5	43	67	0.27	17.2	< 2	< 1	1.4
A07-2310	85168	116.00	118.36	2.36	< 2	< 0.3	73	43	0.34	8.5	< 2	< 1	0.6
A07-4247	85952	118.36	120.17	1.81	< 2	0.4	62	43	0.28	< 0.5	< 2	< 1	0.5
A07-4247	85953	120.17	122.60	2.43	< 2	< 0.3	73	39	0.46	46.4	< 2	< 1	2.3
			Sampling gap - 3.67m										
A07-2310	85169	126.27	127.05	0.78	< 2	< 0.3	265	93	1.38	5.4	< 2	< 1	0.7

BARKER MINERALS LTD.

DRILL HOLE K07-8

Sample Intervals: DDH K07 - 8													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-2310	85170	127.05	128.50	1.45	10	< 0.3	189	58	0.98	11.5	< 2	< 1	0.7
A07-4247	85954	128.50	130.54	2.04	< 2	1.1	36	58	0.13	4.7	< 2	< 1	0.5
A07-4247	85955	130.54	132.67	2.13	< 2	0.7	84	60	1.22	9.4	< 2	< 1	0.8
A07-4247	85956	132.67	133.70	1.03	< 2	1.9	44	66	0.13	3.2	< 2	< 1	0.4
A07-4247	85957	133.70	134.90	1.20	< 2	0.4	34	40	0.16	5.6	< 2	< 1	0.8
A07-4247	85958a	WCM Minerals Standard PB115			98	18.6	4940	14200	2.12	30	< 2	< 1	37.5
			Sampling gap - 4.79m										
A07-2310	85171	139.69	142.74	3.05	< 2	< 0.3	37	32	0.16	3.4	< 2	< 1	0.5
			Sampling gap - 6.86m										
A07-2310	85172	149.60	151.80	2.20	< 2	< 0.3	123	44	0.38	3.8	< 2	< 1	1.2
			Sampling gap - 5.27m										
A07-4247	85959	157.07	158.60	1.53	< 2	0.8	205	49	0.44	6.4	< 2	< 1	0.8
A07-4247	85960	158.60	160.12	1.52	< 2	0.6	55	49	0.17	4.9	< 2	< 1	0.3
A07-2310	85173	160.12	162.87	2.75	13	< 0.3	214	222	0.53	19.1	< 2	< 1	1.5
A07-4247	85961	162.87	164.09	1.22	25	0.8	188	79	1.68	39.5	< 2	< 1	4.7
			Sampling gap - 1.91m										
A07-4247	85962	166.00	167.50	1.50	5	0.5	28	32	0.2	3	< 2	< 1	0.6
			Sampling gap - 4.82m										
A07-4247	85963	172.32	174.46	2.14	11	0.3	26	43	0.04	< 0.5	< 2	< 1	0.4
A07-2310	85174	174.46	175.75	1.29	< 2	< 0.3	41	42	0.06	< 0.5	2	< 1	0.3
A07-2310	85175	175.75	177.20	1.45	< 2	< 0.3	119	46	0.18	< 0.5	< 2	< 1	< 0.1
A07-4247	85964	177.20	178.42	1.22	< 2	< 0.3	40	39	0.15	3.6	< 2	< 1	< 0.1
A07-4247	85965	178.42	179.95	1.53	< 2	< 0.3	34	44	0.17	2.6	< 2	< 1	0.4
			Sampling gap - 2.85m										
A07-4247	85966	182.80	184.52	1.72	< 2	0.6	79	49	0.06	3.6	< 2	< 1	0.3
			Sampling gap - 3.71m										
A07-4247	85967	188.23	190.62	2.39	9	0.8	42	34	0.04	4.3	< 2	< 1	0.4
			Sampling gap - 3.05m										
A07-4247	85968	193.67	195.50	1.83	< 2	0.6	59	39	0.02	3.3	< 2	< 1	0.5
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB114 (certified for Pb=2.00%, Zn=1.12%, Cu=0.33%, Ag=26 g/tonne)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 8

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
1.53	2.44	0.91	**2**
2.44	4.27	1.83	**0**
4.27	5.19	0.92	**2**
5.19	7.02	1.83	**4**
7.02	8.85	1.83	**9**
8.85	11.59	2.74	**6**
11.59	14.64	3.05	**7**
14.64	16.47	1.83	**8**
16.47	19.22	2.75	**11**
19.22	21.66	2.44	**4**
21.66	23.79	2.13	**3**
23.79	26.84	3.05	**7**
26.84	28.37	1.53	**5**
28.37	28.98	0.61	**2**
28.98	29.89	0.91	**6**
29.89	30.50	0.61	**5**
30.50	33.55	3.05	**3**
33.55	35.08	1.53	**5**
35.08	36.60	1.52	**9**
36.60	39.04	2.44	**10**
39.04	42.09	3.05	**11**
42.09	45.14	3.05	**7**
45.14	46.66	1.52	**12**
46.66	48.19	1.53	**10**
48.19	50.32	2.13	**10**
50.32	51.55	1.23	**7**
51.55	53.68	2.13	**4**
53.68	56.12	2.44	**11**
56.12	57.34	1.22	**13**
57.34	60.39	3.05	**11**
60.39	63.14	2.75	**10**
63.14	64.66	1.52	**5**
64.66	66.49	1.83	**12**
66.49	69.54	3.05	**11**
69.54	72.59	3.05	**12**
72.59	73.50	0.91	**3**
73.50	75.64	2.14	**2**
75.64	76.86	1.22	**2**
76.86	78.69	1.83	**4**
78.69	79.30	0.61	**6**
79.30	82.96	3.66	**3**
82.96	83.57	0.61	**3**
83.57	85.40	1.83	**2**
85.40	87.84	2.44	**1**
87.84	89.37	1.53	**2**
89.37	90.59	1.22	**6**
90.59	92.11	1.52	**7**
92.11	93.33	1.22	**6**
93.33	94.25	0.92	**7**
94.25	96.08	1.83	**6**
96.08	96.69	0.61	**2**
96.69	97.30	0.61	**1**
97.30	98.52	1.22	**4**
98.52	100.04	1.52	**4**
100.04	100.35	0.31	**2**
100.35	100.96	0.61	**1**
100.96	102.18	1.22	**7**
102.18	105.23	3.05	**4**
105.23	107.97	2.74	**2**
107.97	109.19	1.22	**6**
109.19	109.80	0.61	**6**
109.80	111.47	1.67	**7**
111.47	113.76	2.29	**13**
113.76	115.90	2.14	**4**
115.90	117.12	1.22	**8**
117.12	120.17	3.05	**7**
120.17	122.30	2.13	**10**
122.30	124.44	2.14	**10**
124.44	126.27	1.83	**7**
126.27	129.01	2.74	**8**
129.01	130.54	1.53	**7**
130.54	131.76	1.22	**7**
131.76	133.89	2.13	**8**
133.89	136.64	2.75	**7**
136.64	139.69	3.05	**3**
139.69	142.74	3.05	**5**
142.74	145.79	3.05	**4**
145.79	148.84	3.05	**6**
148.84	151.89	3.05	**11**
151.89	154.94	3.05	**5**
154.94	157.07	2.13	**6**
157.07	160.12	3.05	**8**
160.12	162.87	2.75	**10**
162.87	164.09	1.22	**7**
164.09	167.14	3.05	**1**
167.14	168.36	1.22	**7**
168.36	169.27	0.91	**4**
169.27	172.32	3.05	**8**
172.32	174.46	2.14	**2**
174.46	176.29	1.83	**7**
176.29	178.42	2.13	**12**
178.42	181.47	3.05	**6**
181.47	184.52	3.05	**7**
184.52	187.57	3.05	**7**
187.57	190.62	3.05	**8**
190.62	193.67	3.05	**9**
193.67	195.51	1.84	**4**
End of Hole			

Core Recovery: DDH K07 - 8					**Recovered**									**Recovered**	
Box No.	From	To	Distance		(metres)	**%**		Box No.	From	To	Distance		(metres)	**%**
1	1.53	5.84	4.31		4.0	**93**		35	163.33	167.93	4.60		4.6	**100**
2	5.84	10.55	4.71		4.6	**98**		36	167.93	172.87	4.94		4.9	**99**
3	10.55	15.71	5.16		5.2	**101**		37	172.87	177.54	4.67		4.6	**99**
4	15.71	20.52	4.81		4.7	**98**		38	177.54	182.80	5.26		5.3	**101**
5	20.52	25.21	4.69		4.7	**100**		39	182.80	188.23	5.43		5.4	**99**
6	25.21	29.97	4.76		4.4	**92**		40	188.23	193.67	5.44		5.4	**99**
7	29.97	34.82	4.85		4.7	**97**		41	193.67	195.50	1.83		1.8	**98**
8	34.82	39.85	5.03		5.0	**99**			End of Hole					
9	39.85	45.35	5.50		5.2	**95**								
10	45.35	49.77	4.42		3.8	**86**								
11	49.77	54.08	4.31		4.1	**95**								
12	54.08	58.99	4.91		4.9	**100**								
13	58.99	63.74	4.75		5.3	**112**								
14	63.74	69.54	5.80		5.0	**86**		Blocks appear misplaced in boxes 13, 14, 15.						
15	69.54	73.50	3.96		4.8	**121**								
16	73.50	78.69	5.19		5.2	**100**								
17	78.69	83.02	4.33		4.3	**99**								
18	83.02	87.29	4.27		4.3	**101**								
19	87.29	90.31	3.02		3.0	**99**								
20	90.31	95.83	5.52		5.3	**96**								
21	95.83	99.92	4.09		3.7	**90**								
22	99.92	104.32	4.40		4.0	**91**								
23	104.32	108.99	4.67		4.3	**92**								
24	108.99	113.65	4.66		4.3	**92**								
25	113.65	118.36	4.71		4.7	**100**								
26	118.36	123.50	5.14		5.1	**99**								
27	123.50	127.87	4.37		4.4	**101**								
28	127.87	132.67	4.80		4.7	**98**								
29	132.67	137.94	5.27		5.3	**101**								
30	137.94	142.97	5.03		5.0	**99**								
31	142.97	148.17	5.20		5.2	**100**								
32	148.17	153.45	5.28		5.3	**100**								
33	153.45	158.53	5.08		5.1	**100**								
34	158.53	163.33	4.80		4.8	**100**								

BARKER MINERALS LTD.

PROPERTY: KANGAROO

DRILL HOLE NO. K07 - 9

Dip & Azmth Tests			DDH K07-9	**Easting (NAD 83):** 589731	**Core Size:** NQ2	**Started:** June 1, 2007
Depth	**Dip**	**Azmth**	**Other tests**	**Northing (NAD 83):** 5837967	**Hole Azimuth**: 335°	**Finished:** June 3, 2007
9.15	-48.4	311.6	Temp=20.4, Mag=57380, Roll=134.7	**Grid Location:** '9+50' on road	**Hole Angle:** -50°	**Logged by:** RT
67.10	-48.1	314.1	Temp=20.2, Mag=56200, Roll=228.7	**Elevation:**	**Total Depth:** 154.94m	**Analysis by:** ActLabs
143.35	-48.0	314.6	Temp=23.5, Mag=56220, Roll=18			**Drilling by:** Radius Drilling

Note: Azmths above may be underestimated by approx 20°.

Depth (m)		**Litho-**						**Alteration Scale: 1 - 5**					
From	**To**	**Code**	**Description**	**% Py**	**% Cpy**	**% Pyrr**		**Ep**	**Seri-cite**	**2nd Carb**	**2nd Sil**	**2nd Chl**	**Reactions to Magnet & Acid.**
0.00	3.05		CASING - Overburden. No core recovery.										
3.05	6.40		Rubble. Likely overburden. Fracture surfaces are rusty. Rocks are basalt. Dark grey.										
6.40	25.10		40% basalt, 30% diorite, 30% siltstone . Mixed rocks here suggest a contact zone. Clasts and small islands of diorite occur in basalt, suggesting the diorites are xenoliths in basalt dikes. Diorite is blackwhite salt & pepper colour. Siltstone occurs as xenoliths in the diorite. Blebs of pyrrhotite occur in the siltstone xenoliths and in some fractures in basalt. Pyrite occurs disseminated and as as stringers in diorite, mainly in fractures and chloritic stringers in basalt. Minor calcite veining. Bottom 50cm is 60% calcite veins, vein edges are generally 60 degrees to core axis (CA). **At 8.70m a specimen taken for thin section**, shows average basalt (later identified as gabbro). **At 21.05m a specimen taken for thin section**, shows basalt (later identified as basalt flow). Lower contact is unclear in broken rock.	3		tr		tr	1	3	1	3	The basalt is usually magnetic. Basalt fizzes readily with acid, siltstone much less, diorite not.
25.10	26.90		Basalt dike. Has 5% augite phenocrysts in a medium grey groundmass. Uniform massive texture. Contains siltstone xenoliths containing pyrrhotite. Lower contact is lost in shattered rock.	tr		tr			1	3		2	Magnetic. Fizzes in acid.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
26.90	32.10		Siltstone. Medium grey, locally weakly tan. Intense chloritic fracturing. Most of the core in this interval is shattered. Minor calcite veining. Pyrite is spotty, mostly in fractures. Lower contact is unclear in broken rock.	0.5		tr			1	1	1	2	Spotty magnetism is related to spotty pyrrhotite.
32.10	43.45		Mostly fine grained blackwhite diorite. Balsalt dikes. Siltstone xenoliths. The diorite is relatively fine grained here, perhaps a chilled margin of the stock. At 37.3m a 30cm rubbly gouge zone. Fine chloritic fractures occur extensively. Pyrite occus in the diorite disseminated and in fractures, mainly in fractures in basalt and siltstone.	5		tr		tr	1			2	Spotty magnetism appears related to pyrrhotite in fractures, overall the rock is not magnetic.
43.45	46.75		Basalt. Dark greenish grey. Augite and feldspar phenocrysts appear altered to epidote and sericite. Very minor calcite veinlets. Pyrite is mainly disseminsted. Contact is lost in broken rock.	2				tr	1	1		2	Magnetism appears related to fine magnetite. Weak spotty fizzing.
46.75	59.40		Diorite, as above, with several basaltic dikelets. Chlorite is stronger, more pervasive. Minor calcite quartz veinlets. Pyrite is mainly disseminated, less in fractures. Lower contact attitude is unclear in minor gouge and calcite veining.	5				tr	1			3	No magnetism noted. No fizzing, only in veins.
59.40	64.62		Basalt porphyry, as at 44-46m. Lower contact is irregular, orientation unclear.	1				1	1	1		2	Spotty weak magnetism. No fizzing, only in veins.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
64.62	92.40		Diorite. Blackwhite salt & pepper colour. Similar to that at 6-25m and 47-59m medium grained. Some weakly pinkish primary minerals appear to be mica. Minor calcite veinlets, less calcite quartz. Pyrite is mostly disseminated, minor concentration in fractures. Lower contact is sharp but irregular, orientation unclear. **At 74.65m a 23cm long Library Piece taken,** showing average rock. **At 84.65m a 5cm long Library Piece taken,** shows 'pinkish' micas in matrix. **At 84.45m a specimen taken for thin section**, (later identified as alkali gabbro) shows 'pinkish' micas.	3		tr			1			1	Spotty magnetism appears related to pyrrhotite in fractures, overall the rock is not magnetic. No fizzing, only in veins.
92.40	99.12		Basalt porphyry, as at 60-64m. Apparently a dike, a 90cm diorite (xenolith?) occurs at 98.2m. Minor calcite veinlets, less calcite quartz. Pyrite is disseminated. Lower contact is irregular, orientation unclear.	0.5				3	1	1		2	Spotty weak magnetism. No fizzing, only in veins.
99.12	105.70		Diorite. Similar to that above. Medium grained. Minor calcite veinlets, less calcite quartz. Pyrite is disseminated. At 103.6-104.6m is basalt dike. Lower contact is sharp, slightly irregular, 25 deg to CA.	2					1			2	Overall the rock does not appear magnetic. Weak spotty fizzing.
105.70	111.95		Basalt, likely a dike. Very fine grained, not porphyritic much. Pyrite is very fine grained, disseminated. At 105.70-106.14m has 20% calcite vein stockwork. Lower contact appears gradational, 45 deg to CA.	1				1	1			2	No magnetism. Weak spotty fizzing.
111.95	119.30		Diorite. Medium to dark green. Darker and finer grained than diorite above. Perhaps a chill margin to the stock? Pyrite is disseminated. Minor calcite veinlets. At 112.55m is 1.5cm calcite vein at 25 deg to CA. Lower contact is 20 deg to CA, marked by very local breccia and gouge.	2		tr			1			3	Weakly magnetic. Moderate fizzing.

Depth (m) From	Depth (m) To	Litho-Code	Description	% Py	% Cpy	% Pyrr		Alteration Scale: 1 - 5 Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl	Reactions to Magnet & Acid.
119.30	130.60		Basalt. Dark greyish green. Minor calcite and quartz veinlets. Local breccia or xenoliths. Spotty fine disseminated pyrite with slight concentration in fractures and quartz veinlets. **At 124.35m a specimen taken for thin section**, shows average basalt. Lower contact is unclear in chloritized rock, appears 40 deg to CA.	0.5		tr		1				3	Weak spotty magnetism. Moderate fizzing.
130.60	153.90		Siltstone. Very fine grained, uniform texture. Medium grey, locally weakly tan. Minor calcite veinlets. Spotty pyrite and pyrrhotite occur in local bleached silicified zones. At 146.6-149.87m is basalt dike. Lower contact appears 30 deg to CA in chloritic and slightly brecciated rock.	0.1		0.1			tr	1	1	1	Spotty magnetism. Weak spotty fizzing.
153.90	154.94		Basalt. Dark greyish green. Minor calcite and quartz veinlets. Spotty disseminated pyrite. **End of Hole at 154.94m.**	0.5				1				3	Weakly magnetic. Fizzes only in calcite veinlets.

Lithology: DDH K07 - 9

Depth (metres)		Summary Description	%	%	%		Alteration Scale: 1 - 5				
From	To		Py	Cpy	Pyrr		Ep	Seri-cite	2nd Carb	2nd Sil	2nd Chl
0.00	3.05	**CASING - Overburden.**									
3.05	6.40	**Basalt rubble. Likely overburden.**									
6.40	25.10	**40% basalt, 30% diorite, 30% siltstone .**	3		tr		tr	1	3	1	3
25.10	26.50	**Basalt dike.**	tr		tr			1	3		2
26.50	31.70	**Siltstone.**	0.5		tr			1	1	1	2
31.70	43.45	**Diorite.**	5		tr		tr	1			2
43.45	46.75	**Basalt porphyry.**	2				tr	1	1		2
46.75	59.40	**Diorite.**	5				tr	1			3
59.40	64.62	**Basalt porphyry.**	1				1	1	1		2
64.62	92.40	**Diorite**	3		tr			1			1
92.40	99.12	**Basalt porphyry.**	0.5				3	1	1		2
99.12	105.70	**Diorite**	2					1			2
105.70	111.95	**Basalt.**	1				1	1			2
111.95	119.30	**Diorite**	2		tr			1			3
119.30	130.60	**Basalt.**	0.5		tr		1				3
130.60	153.90	**Siltstone.**	0.1		0.1			tr	1	1	1
153.90	154.94	**Basalt.**	0.5				1				3
		End of Hole.									

BARKER MINERALS LTD.

DRILL HOLE NO. K07-9

Sample Intervals: DDH K07 - 9													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
A07-4248	85976	4.72	6.40	1.68	< 2	0.9	301	52	1.68	< 0.5	< 2	< 1	< 0.1
A07-4248	85977	6.40	7.93	1.53	< 2	0.6	270	41	1.47	< 0.5	< 2	< 1	< 0.1
A07-4248	85978	7.93	9.76	1.83	< 2	0.5	133	41	0.73	2.4	< 2	< 1	< 0.1
A07-2311	85176	9.76	11.59	1.83	< 2	0.5	75	68	0.52	4.2	< 2	< 1	< 0.1
A07-2311	85177	11.59	14.64	3.05	< 2	0.3	162	59	0.9	5.2	< 2	< 1	0.5
A07-2311	85178	14.64	17.69	3.05	< 2	0.6	184	52	1.29	2.5	< 2	< 1	< 0.1
A07-2311	85179	17.69	20.74	3.05	< 2	0.6	318	52	2.35	6.8	< 2	< 1	0.9
A07-2311	85180	20.74	23.79	3.05	< 2	< 0.3	200	57	1.65	19.4	< 2	< 1	0.7
A07-2311	85181	23.79	25.10	1.31	< 2	0.4	214	40	1.61	74.3	< 2	< 1	4.6
A07-2311	85182	25.10	26.90	1.80	< 2	0.4	195	52	1.14	8.1	< 2	< 1	0.9
A07-2311	85183	26.90	28.97	2.07	< 2	0.7	169	36	1.89	41.2	< 2	< 1	1.4
A07-2311	85184	28.97	32.10	3.13	< 2	0.3	135	57	0.82	3.8	< 2	< 1	< 0.1
A07-4248	85979	32.10	33.55	1.45	< 2	0.6	74	41	1.02	4	< 2	< 1	< 0.1
A07-4248	85980	33.55	35.99	2.44	< 2	0.6	444	40	1.91	1.4	< 2	< 1	0.6
A07-2311	85185	35.99	37.82	1.83	< 2	0.3	157	118	1.9	4	< 2	< 1	< 0.1
A07-2311	85186	37.82	38.40	0.58	< 2	< 0.3	26	75	0.19	9.2	< 2	< 1	0.6
A07-2311	85187	38.40	40.87	2.47	< 2	0.4	141	39	2.85	2.8	< 2	< 1	0.4
A07-4248	85981	40.87	43.45	2.58	< 2	0.7	156	34	2.1	< 0.5	< 2	< 1	< 0.1
A07-4248	85982	43.45	46.75	3.30	< 2	0.5	123	50	0.67	3.2	< 2	< 1	< 0.1
A07-4248	85983	46.75	49.76	3.01	< 2	0.3	84	45	0.63	< 0.5	< 2	< 1	< 0.1
			Sampling gap - 4.53m										
A07-4248	85984	54.29	55.51	1.22	< 2	0.4	54	51	0.4	< 0.5	< 2	< 1	0.6
			Sampling gap - 1.88m										
A07-2311	85188	57.39	59.40	2.01	< 2	0.4	114	62	1.06	30.1	< 2	< 1	3.3
A07-2311	85189	59.40	62.83	3.43	< 2	0.7	42	59	0.33	11.6	< 2	< 1	1.8
A07-2311	85190	62.83	63.60	0.77	< 2	0.5	111	59	0.33	12.6	< 2	< 1	1.6
A07-2311	85191a	WCM Minerals Standard PB115			31	17.9	5390	16000	2.18	24.7	4	< 1	37.1
A07-4248	85985	63.60	64.62	1.02	< 2	0.5	161	69	1.53	11.4	< 2	< 1	1.5
			Sampling gap - 1.26m										
A07-2311	85192	65.88	68.01	2.13	< 2	0.6	217	56	2.03	2.9	< 2	< 1	0.5
A07-4248	85986	68.01	69.40	1.39	< 2	0.9	292	42	2.02	5.1	< 2	< 1	0.5
			Sampling gap - 1.66m										
A07-4248	85987	71.06	74.11	3.05	< 2	0.8	180	37	1.87	< 0.5	< 2	< 1	0.5

BARKER MINERALS LTD.

DRILL HOLE NO. K07-9

Sample Intervals: DDH K07 - 9													
Certificate Number	Sample Number	From (metres)	To (metres)	Sample Width (m)	Au ppb	Ag ppm	Cu ppm	Zn ppm	S %	As ppm	Bi ppm	Hg ppm	Sb ppm
			Sampling gap - 1.53m										
A07-4248	85988	75.64	78.69	3.05	< 2	0.6	267	35	1.33	< 0.5	< 2	< 1	< 0.1
			Sampling gap - 3.05m										
A07-2311	85193	81.74	84.79	3.05	< 2	0.5	229	61	0.77	2.5	< 2	< 1	0.4
			Sampling gap - 3.05m										
A07-4248	85989	87.84	88.35	0.51	5	0.3	123	57	0.26	< 0.5	< 2	< 1	< 0.1
			Sampling gap - 4.05m										
A07-2311	85194	92.40	93.94	1.54	< 2	< 0.3	138	71	0.65	< 0.5	< 2	< 1	< 0.1
			Sampling gap - 3.05m										
A07-4248	85990	96.99	99.12	2.13	< 2	0.4	208	58	0.63	< 0.5	< 2	< 1	0.7
			Sampling gap - 3.97m										
A07-4248	85991	103.09	105.70	2.61	< 2	< 0.3	103	51	0.21	1.7	< 2	< 1	< 0.1
A07-4248	85992	105.70	106.14	0.44	< 2	1.3	76	36	0.7	5	< 2	< 1	1.2
			Sampling gap - 1.41m										
A07-2311	85195	107.55	109.80	2.25	< 2	0.4	176	58	0.7	5.2	< 2	< 1	0.6
			Sampling gap - 2.15m										
A07-4248	85993	111.95	113.15	1.20	< 2	0.4	192	55	0.45	2.8	< 2	< 1	0.5
			Sampling gap - 4.27m										
A07-2311	85196	117.42	119.30	1.88	< 2	0.4	295	62	1.08	6.6	< 2	< 1	0.6
A07-2311	85197	119.30	122.00	2.70	< 2	0.5	165	61	0.75	10.6	< 2	< 1	0.9
A07-4248	85994	122.00	123.83	1.83	< 2	0.7	208	53	0.91	3.6	< 2	< 1	0.7
A07-4248	85995	123.83	124.95	1.12	< 2	0.6	114	56	0.69	2.5	< 2	< 1	0.7
A07-4248	85996	124.95	127.15	2.20	< 2	0.5	103	61	0.46	< 0.5	< 2	< 1	0.4
A07-4248	85997	127.95	129.00	1.05	< 2	0.4	120	47	0.51	< 0.5	< 2	< 1	< 0.1
A07-4248	85998	129.00	130.60	1.60	< 2	< 0.3	145	61	0.44	< 0.5	< 2	< 1	0.6
A07-4248	85999a	WCM Minerals Standard PB113			2570	22.3	4700	> 10000	2.51	132	2	< 1	22.6
A07-2311	85198	130.60	132.37	1.77	< 2	0.6	210	59	1.46	< 0.5	< 2	< 1	0.6
A07-2311	85199	132.37	134.81	2.44	< 2	< 0.3	68	53	0.36	< 0.5	< 2	< 1	< 0.1
A07-2311	85200	134.81	136.64	1.83	3	< 0.3	71	40	0.21	8.7	< 2	< 1	1.9
A07-2311	85201	136.64	137.86	1.22	< 2	< 0.3	77	45	0.32	7.9	< 2	< 1	0.8
A07-2311	85202	137.86	139.39	1.53	< 2	< 0.3	49	52	0.39	< 0.5	< 2	< 1	< 0.1
A07-2311	85203	139.39	141.83	2.44	< 2	< 0.3	87	55	0.45	2.2	< 2	< 1	0.3
A07-2311	85204	141.83	144.57	2.74	< 2	< 0.3	145	54	0.99	3.6	< 2	< 1	0.6

A07-2311	85205	144.57	146.60	2.03	< 2	< 0.3	65	56	0.2	2.2	< 2	< 1	< 0.1
A07-2311	85206	146.60	149.87	3.27	< 2	0.5	134	59	0.91	12.9	< 2	< 1	0.8
A07-2311	85207	149.87	151.59	1.72	< 2	0.5	158	50	0.95	6.6	< 2	< 1	0.7
A07-2311	85208	151.59	153.90	2.31	< 2	< 0.3	73	32	0.25	5	< 2	< 1	0.6
A07-4248	86000	153.90	154.94	1.04	< 2	0.4	143	61	0.48	11.1	< 2	< 1	0.6
		Note:											
		WCM Minerals Standard PB113 (certified for Pb=1.11%, Zn=1.40%, Cu=0.47%, Ag=22 g/t)											
		WCM Minerals Standard PB115 (certified for Pb=2.61%, Zn=1.65%, Cu=0.53%, Ag=17 g/tonne)											

Vein Counts: DDH K07 - 9

Veins counts per average metre within intervals

Veins are greater or equal to 1mm in width.

From (metres)	To (metres)	Distance (metres)	Veins / metre >1mm
3.05	3.66	0.61	**1**
3.66	4.72	1.06	**0**
4.72	5.18	0.46	**1**
5.18	5.49	0.31	**0**
5.49	5.79	0.30	**0**
5.79	6.40	0.61	**0**
6.40	7.01	0.61	**1**
7.01	7.93	0.92	**2**
7.93	9.76	1.83	**3**
9.76	11.59	1.83	**7**
11.59	11.89	0.30	**3**
11.89	14.64	2.75	**3**
14.64	17.69	3.05	**4**
17.69	18.30	0.61	**3**
18.30	20.74	2.44	**10**
20.74	23.79	3.05	**9**
23.79	25.62	1.83	**15**
25.62	27.14	1.52	**4**
27.14	28.06	0.92	**5**
28.06	28.97	0.91	**4**
28.97	29.80	0.83	**1**
29.80	30.80	1.00	**3**
30.80	33.55	2.75	**5**
33.55	35.99	2.44	**9**
35.99	37.82	1.83	**4**
37.82	40.87	3.05	**5**
40.87	43.61	2.74	**4**
43.61	46.66	3.05	**4**
46.66	49.71	3.05	**3**
49.71	51.24	1.53	**3**
51.24	54.29	3.05	**11**
54.29	55.51	1.22	**7**
55.51	57.34	1.83	**12**
57.34	60.39	3.05	**10**
60.39	62.83	2.44	**11**
62.83	64.96	2.13	**11**
64.96	65.88	0.92	**9**
65.88	68.01	2.13	**7**
68.01	71.06	3.05	**7**
71.06	74.11	3.05	**7**
74.11	75.64	1.53	**4**
75.64	78.69	3.05	**8**
78.69	81.74	3.05	**7**
81.74	84.79	3.05	**8**
84.79	87.84	3.05	**10**
87.84	90.89	3.05	**5**
90.89	92.41	1.52	**6**
92.41	93.94	1.53	**6**
93.94	96.99	3.05	**8**
96.99	98.82	1.83	**6**
98.82	101.87	3.05	**6**
101.87	103.89	2.02	**8**
103.89	106.14	2.25	**10**
106.14	107.36	1.22	**3**
107.36	109.19	1.83	**6**
109.19	111.63	2.44	**5**
111.63	113.15	1.52	**7**
113.15	114.37	1.22	**3**
114.37	117.42	3.05	**7**
117.42	119.25	1.83	**7**
119.25	122.00	2.75	**7**
122.00	123.83	1.83	**8**
123.83	124.74	0.91	**7**
124.74	126.57	1.83	**8**
126.57	128.10	1.53	**7**
128.10	130.23	2.13	**7**
130.23	132.22	1.99	**11**
132.22	132.37	0.15	**3**
132.37	133.59	1.22	**7**
133.59	134.81	1.22	**6**
134.81	136.64	1.83	**10**
136.64	137.86	1.22	**5**
137.86	139.39	1.53	**6**
139.39	141.83	2.44	**11**
141.83	143.05	1.22	**7**
143.05	144.57	1.52	**6**
144.57	145.79	1.22	**4**
145.79	147.62	1.83	**6**
147.62	150.67	3.05	**16**
150.67	151.59	0.92	**4**
151.59	154.33	2.74	**9**
154.33	154.94	0.61	**5**
End of Hole			

Core Recovery: DDH K07 - 9					**Recovered**										
Box No.	From	To	Distance		(metres)	**%**									
1	3.05	7.25	4.20		3.5	**83**									
2	7.25	11.70	4.45		4.5	**101**									
3	11.70	17.02	5.32		5.2	**98**									
4	17.02	21.64	4.62		4.5	**97**									
5	21.64	26.70	5.06		5.0	**99**									
6	26.70	31.92	5.22		4.0	**77**		Note:	27-32m has shattered rubble with poor core recovery.						
7	31.92	37.23	5.31		5.2	**98**									
8	37.23	41.98	4.75		4.7	**99**									
9	41.98	46.75	4.77		4.8	**101**									
10	46.75	51.94	5.19		5.2	**100**									
11	51.94	57.39	5.45		5.5	**101**									
12	57.39	62.68	5.29		4.8	**91**									
13	62.68	65.10	2.42		4.5	**186**		Rock is rather broken up in boxes 12,13,14.							
14	65.10	69.40	4.30		5.0	**116**		Excess core in Boxes 13, 14 is difficult to explain,							
15	69.40	74.79	5.39		5.4	**100**		may be due to mislabled or misplaced blocks.							
16	74.79	80.39	5.60		5.6	**100**									
17	80.39	86.00	5.61		5.5	**98**									
18	86.00	91.55	5.55		5.6	**101**									
19	91.55	97.07	5.52		5.5	**100**									
20	97.07	102.32	5.25		5.3	**101**									
21	102.32	107.19	4.87		4.9	**101**									
22	107.19	112.16	4.97		5.0	**101**									
23	112.16	117.42	5.26		5.2	**99**									
24	117.42	122.16	4.74		4.5	**95**									
25	122.16	127.15	4.99		4.9	**98**									
26	127.15	132.22	5.07		5.1	**101**									
27	132.22	136.83	4.61		4.6	**100**									
28	136.83	141.83	5.00		4.9	**98**									
29	141.83	147.84	6.01		5.4	**90**									
30	147.84	153.29	5.45		5.4	**99**									
31	153.29	154.94	1.65		1.6	**97**									
	End of Hole														

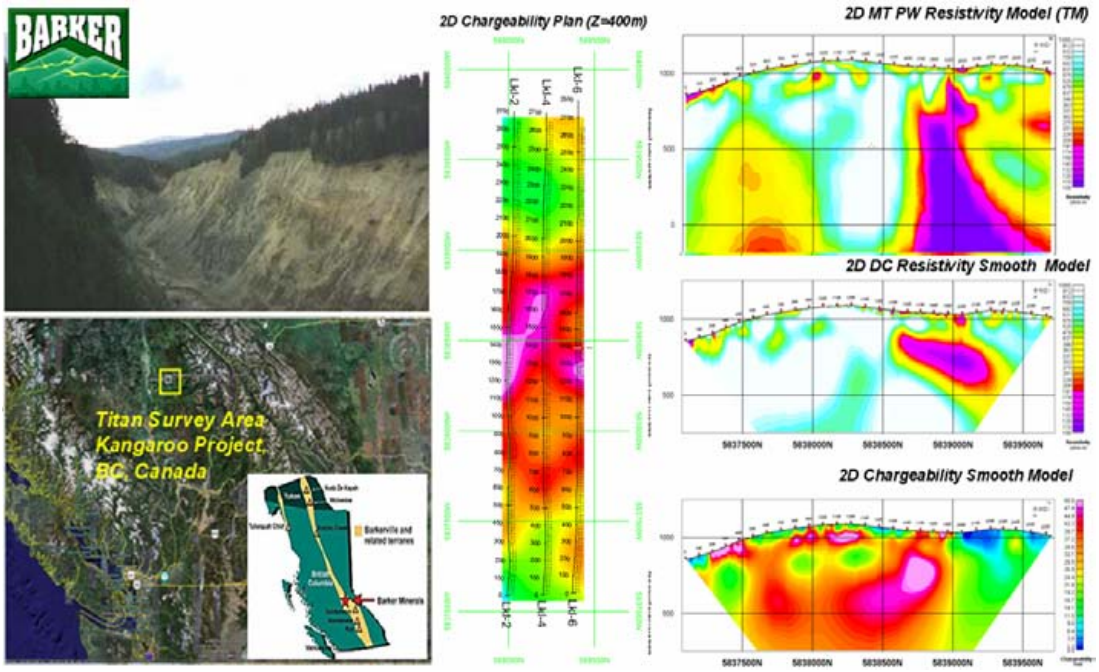
APPENDIX H

KANGAROO PROPERTY
TITAN INDUCED POLARIZATION SURVEY

See Report by Quantec Geoscience Inc.

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Geophysical Survey Interpretation Report



Regarding the TITAN-24 Tensor-Magnetotelluric, DC Resistivity and Induced Polarization Surveys over KANGAROO PROJECT, near Likely, BC. For: BARKER MINERALS INC., Prince George, BC.

E. Martinez
JM Legault
February, 2008
Project CA00522T

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EXECUTIVE SUMMARY

Quantec Geoscience Ltd. has undertaken Direct Current Resistivity and Induced Polarization (DCIP) and Magnetotelluric Resistivity (MT) surveys on the Kangaroo Project (Likely, BC) owned by Barker Minerals Inc. The project is located approximately 15-20 kilometers northwest of Likely, Central British Columbia, Canada. The survey was performed from October 16th to 28th 2007.

The primary objective of the Titan-24 survey at Kangaroo Project was to locate potential skarn-related gold and copper mineralization, and to map magnetic mineralization and the associated alteration. The survey consists of three lines of data (***KL2***, ***KL4***, ***KL6***), totalling 9.25 kilometers of DCIP and 7.8 kilometers of MT coverage.

Results and Interpretation

The Titan-24 survey has successfully identified geophysical anomalies, which may represent skarn-related gold and copper mineralization and/or alteration zones at depth. The responses appear to primarily be laterally extensive and intercalated vertically, suggesting layered DCIP features relating to massive to semi-massive and disseminated mineralization. In addition to these layer-like DCIP responses, a more steeply dipping DC and MT conductive zone, similar to a high angle mineralized fault structure or alteration zone has also been defined.

Both the DC and IP inversion models have successful delineated anomalies from surface to approximately 700 meters depth. The MT inversion models show good resolution of the anomalies to approximately 1km depth. The DCIP and MT interpretation could possibly be affected by structures, which run parallel and/or sub-parallel to the survey lines.

A total of eleven (12) DCIP and MT anomalous zones have been identified for follow-up at Kangaroo. Three zones have been classified as high priority targets (***T3***, ***T4*** and ***T5***) for gold mineralization at depth. Seven (7) anomalous zones (***T1a,b,c, T6, T2***, ***T7***, ***MT1***, ***MT2*** and ***MT3***) are classified with a lower priority. In addition, the MT inversion models have resolved sub-vertical anomalies from surface to approximately >1.5 kilometers depth that may represent feeder zones, structures, deep mineralization and/or alteration.

Conclusions and Recommendations

The Kangaroo Project shows significant anomalies in the DCIP and MT raw data and inversion models that appear to be consistent with the geologic target model. However, the interpreted anomalies may not necessarily be related to gold and copper mineralization. Other sources, such as iron-rich formations and graphite can produce similar responses.

We propose the following recommendations:

1. Drill testing the high priority targets ***T3, T4*** & ***T5***.

   T3: from line ***KL-2*** to line ***KL-6***, station 700N to 900N. **Target line/station/Max-depth: *KL4, KL6/700N/600 meters*.**

   T4: from line ***KL-2*** (1100N to 1500N) to line ***KL-6*** (1100N to 1400N). **Target line/station/Max-depth: *KL-6/1300N/600 meters*.**

   T5: from line ***KL-2*** (station 1600N to 1900N) to line ***KL-6*** (station 1500N to 1800N). **Target line/station/Max-depth: *KL-4/1700N/500 meters*.**

2. If favourable drill results are obtained, the low priority targets should be drilled.
3. Drill testing the deep MT anomalies ***MT1*** and ***MT2***. Optionally, ***MT3*** to be drill tested if encouraging results are obtained.
4. Review and evaluate all available geological and geochemical data in the vicinity of the interpreted priority target areas.

.

5. Consider extending the lines to the north, to re-define the extent of anomaly ***T7***.
6. When the deep targets (***MT-1***, ***MT-1*** and ***MT-3***) are drilled, follow up with downhole BHTEM, and consider physical property logging on all drilled Titan targets to understand and explain the source of the responses observed.
7. Consider 3D DCIP and MT inversions to improve the interpretation and targeting.
8. Examination and/or acquisition of additional surficial geophysical data (Gravity, Magnetics, TEM, etc) for further enhance the interpretation and drill targeting is recommended and to integrate all available geo-scientific information into 3D Gocad earth model and perform physical property and 3D query evaluation to corroborate the interpreted Titan anomalies.

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1. INTRODUCTION

Quantec Geoscience Ltd. has undertaken Direct Current Resistivity and Induced Polarization (DCIP) and Magnetotelluric Resistivity (MT) surveys over the Kangaroo Project, owned by Barker Minerals Ltd. The survey was performed from October 16th to 28th 2007.

The project is located approximately 15-20 kilometers northwest of Likely, Central British Columbia. See Figure 1).

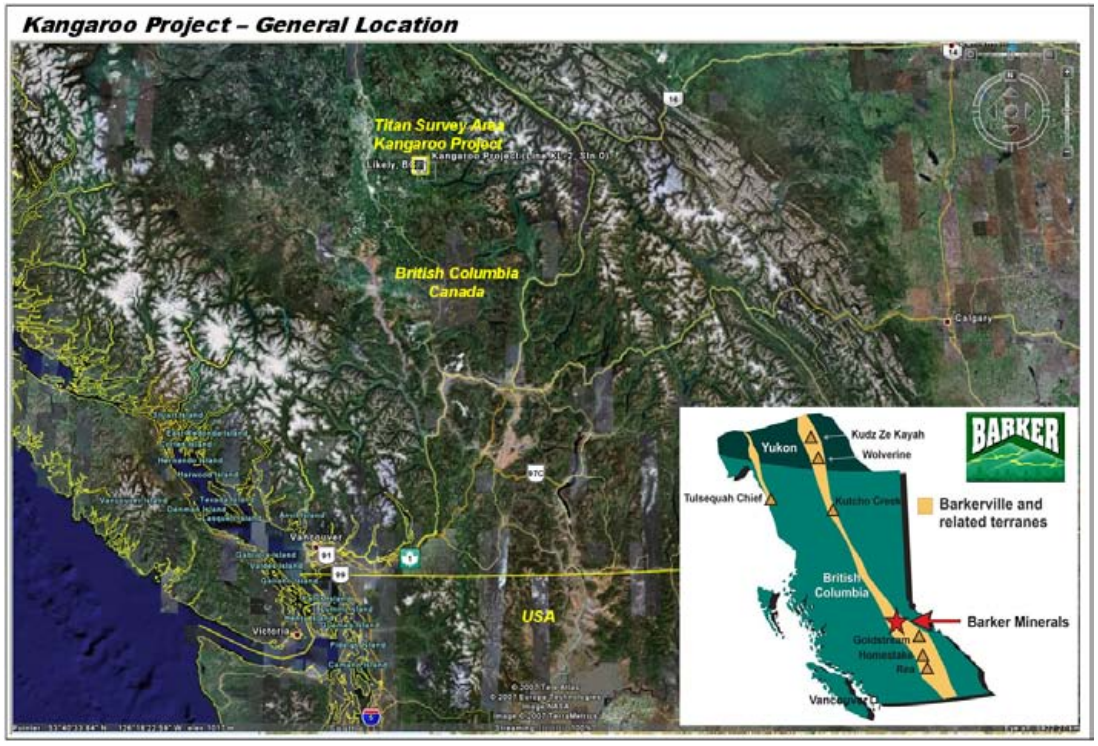


Figure 1: General Location Map[1]

1.1 TITAN-24 SURVEY OVERVIEW

The Titan-24 system combines Tensor Magnetotelluric (MT) Resistivity measurements capable of high resolution and deep penetration (>1.5 kilometers) with Galvanic DC Resistivity and Induced Polarization (DCIP) capable of superior shallow to mid-depth resolution and penetration (<500-750 meters). The system is designed to identify and discriminate between massive and disseminated metallic mineralization and mapping geological contacts and deep conductors that may potentially represent alteration or mineralization.

The Titan-24 is a multi-channel **D**istributed **A**cquisition **S**ystem (**DAS**), Sheard, N., (1998), which records full-waveform time series for each geophysical event (Direct Current Resistivity, Induced Polarization (DCIP) and Magnetotellurics (MT)), enabling the application of sophisticated digital signal processing techniques to ensure the best possible data quality.

DC Resistivity, IP Chargeability and MT Resistivity have been collected on three (3) lines spaced approximately 200 meters apart, covering approximately 17 line-kilometers. The DCIP survey utilised a pole-dipole configuration with 100 meters dipoles and current injection located midway between the potential dipoles.

[1] *General Location Map captured from Google Earth (v-4.2-Beta), 2007. Kangaroo Grid Map supplied by Barker Minerals Ltd.*

The MT data was acquired in the frequency bandwidth of 0.1 Hertz to 10 Kilohertz. The MT configuration used contiguous 100 meters dipoles measuring the in-line electric field (Ex) and 100 meters dipoles at every second site for measuring the orthogonal component (Ey). Two pairs of orthogonal magnetometers, one pair for the high frequency data and one pair for the low frequency data were used to record the Hx and Hy magnetic fields, respectively.

A remote reference site located approximately 20-30 kilometers away was used for noise reduction and monitoring. The remote reference station consisted of one pair of orthogonal dipoles (100 meters) for measuring the electric field (Ex and Ey) and two pairs of orthogonal magnetometers orientated in the same direction as the survey line spread. ***Appendices C***, ***D and I*** provide more information of the survey details.

For each line surveyed, three independent 2D earth models (IP Chargeability, DC and MT Resistivity) are calculated and presented for interpretation of metallic mineralization, and particular to Kangaroo Project for targeting skarn-related gold mineralization.

1.2 SURVEY OBJECTIVES

The primary objective of the Titan-24 survey at Kangaroo Project was to locate potential gold and copper mineralization, and to map magnetic mineralization and the associated alteration. Gold, pyrrhotite and chalcopyrite are the most common sulphide minerals, which occur in the siltstones as veinlets, and disseminated grains in the intrusive rock. This type of mineralization can also exist in shear zones and lithologic contacts.

The survey was conducted on the Barker's Kangaroo property and claims as depicted in Figure 2.

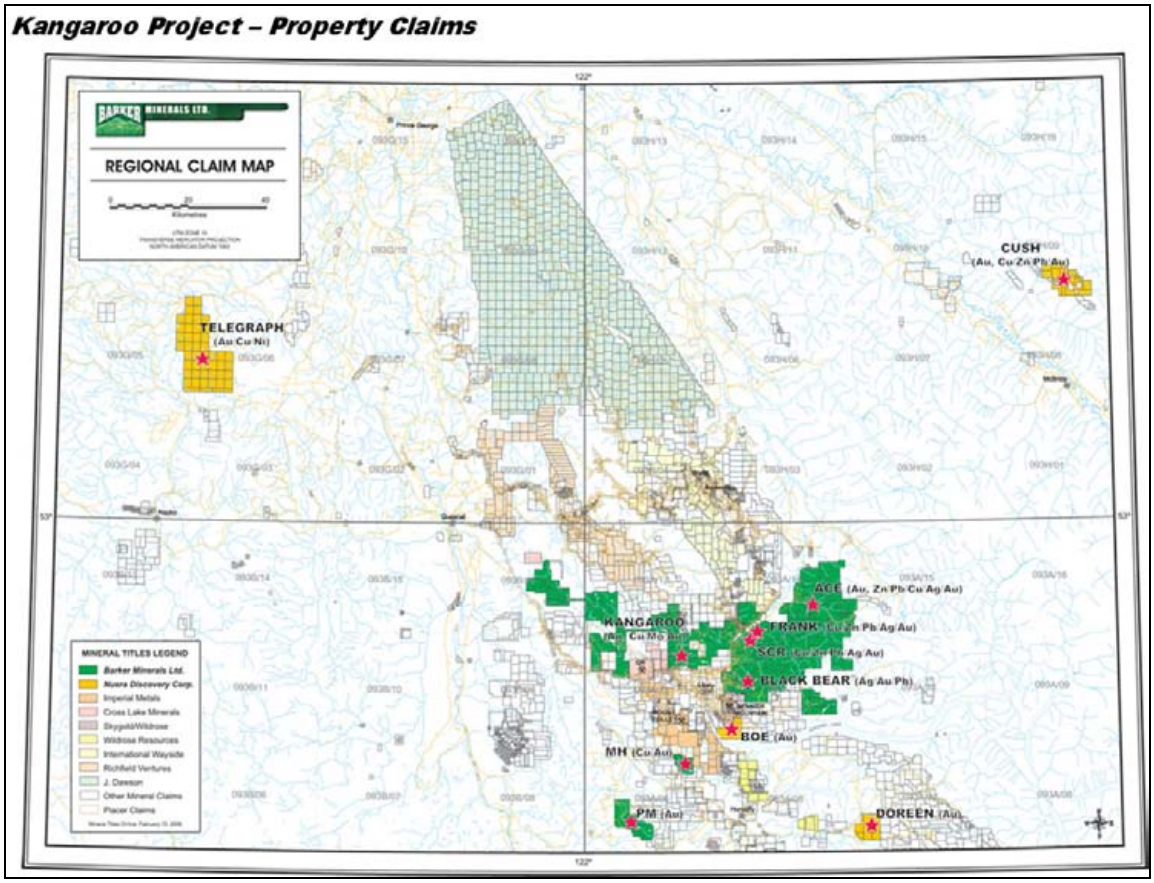


Figure 2: Barker Minerals Regional Claim Map

1.3 GENERAL GEOLOGY AND MINERALIZATION

The Kangaroo project is located in the Cariboo Mining District (gold belt) of the East-Central British Columbia. According to general geology (Barker Minerals Ltd., 2007; and Ferri, Hoy and Friedman, 1999) the District encompasses at least five stratigraphic units as follow (Figure 3; after Massey, MacIntyre, Desjardins and Cooney, 2000):

1- Cariboo Terrane (Late Proterozoic and Paleozoic marine peri-cratonic sedimentary strata).

This Terrane consists mainly of limestone, dolomite, sedimentary rocks and argillite. Some of the carbonate layers in the lowest part of the Cariboo Terrane are enriched in zinc and lead.

2- Barkerville Terrane (Late Proterozoic to Mid-Paleozoic marine strata).

According to the Geological Survey of Canada this Terrane is a subdivision of the Kootenay Terrane composed by quartzite, siltstone, ankeritic dolomite, pelite and amphibolite. These rocks are cut by dikes and sills of metamorphosed diorite. The Barkerville mines and the Cariboo Hudson deposit are located in this Terrane.

3- Slide Mountain Terrane (Devonian to Late Triassic).

Mafic volcanics and ultramafics are the basic rock types for this Terrane. They are well documented in the vicinity of the Eureka thrust. Minor lithologies include chert, meta-siltstone and argillite.

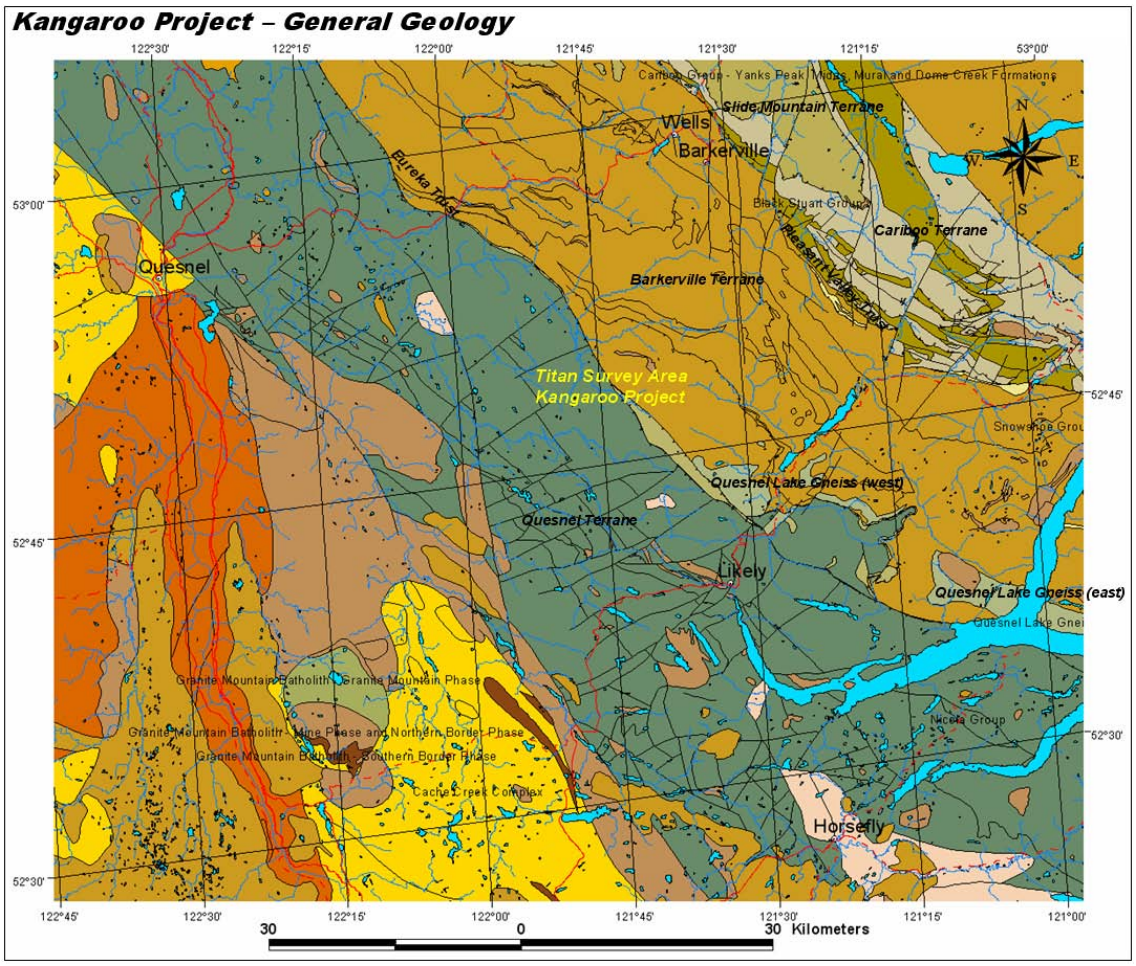


Figure 3: General Geology

4- Quesnel Terrane (Late Triassic to Early Jurassic).

This Terrane consists of volcanic and volcaniclastic rocks and co-magmatic intrusions, with minor carbonate lenses and related sedimentary rocks. The Eureka thrust fault delineates the Quesnel and Barkerville Terranes.

Regionally, it hosts important mineral deposits, mainly of Cu and Cu-Au, such as Highland Valley, Craigmont, Copper Mountain, QR and Mt. Polley. The Bullion Pit (placer gold deposit) is near Likely on the boundary between the Barkerville and Quesnel Terranes.

5- Quesnel Lake Gneiss-QLG (Mid-Paleozoic intrusive).

Consist of sill intrusions in the Barkerville SubTerrane, generally located between the Cariboo Lake and the Quesnel Lake.

1.4 PREVIOUS EXPLORATION

The full extent of previous exploration at Kangaroo it is not known to the author.

Local and regional geology and previous exploration at Kangaroo are discussed in the Assessment Report by Barker Minerals Ltd., in which this Report is included as an Appendix.

2. SURVEY DESCRIPTION

2.1 GENERAL SURVEY DETAILS

- **General Location:** East-Central British Columbia
- **Province:** British Columbia
- **District:** Cariboo Mining District, BC
- **Nearest Settlements:** Likely/BC
- **Coordinate System/Zone:** Universal Transverse Mercator Projection (UTM)
- **Datum:** NAD 83
- **Zone:** 10N
- **Lat/Lon (Line KL-2, Station 0):** N52°40'35.18", W121°41'01.65"
- **UTM position**[2] **(Line KL-2, Station 0):** 588988mE, 5837091mN @ 866msl

2.2 ACCESS

- **Base of Operations** Barker Minerals Camp, Likely, BC
- **Mode of Access to Grid:** Trucks
- **Mode of Access to Lines:** Trucks, ATVs, and by foot

2.3 SURVEY GRID

- **Established by:** Barker Minerals Ltd.
- **Azimuth:** approx. 0 degrees
- **Declination:** approx. 19 degrees East
- **Station Interval:** 100 meters
- **Coordinate Reference System:** Survey Grid referenced to UTM Coordinates, (Figure 4 and Table 1)
- **Method of Chaining:** Metric, secant distance, pickets GPS surveyed.

2.4 SURVEY WORK UNDERTAKEN

- **Number of Lines Surveyed:** 3 lines (Table 1)
- **Survey Coverage:** DCIP survey: 9.25 kilometers
  MT survey: 7.8 kilometers[3]

[2] *UTM coordinates (NAD 83, Zone10U) supplied by Barker Minerals Ltd.*
[3] *MT data for line kl-2 were not acquired due to technical issues and time/contract restrictions.*

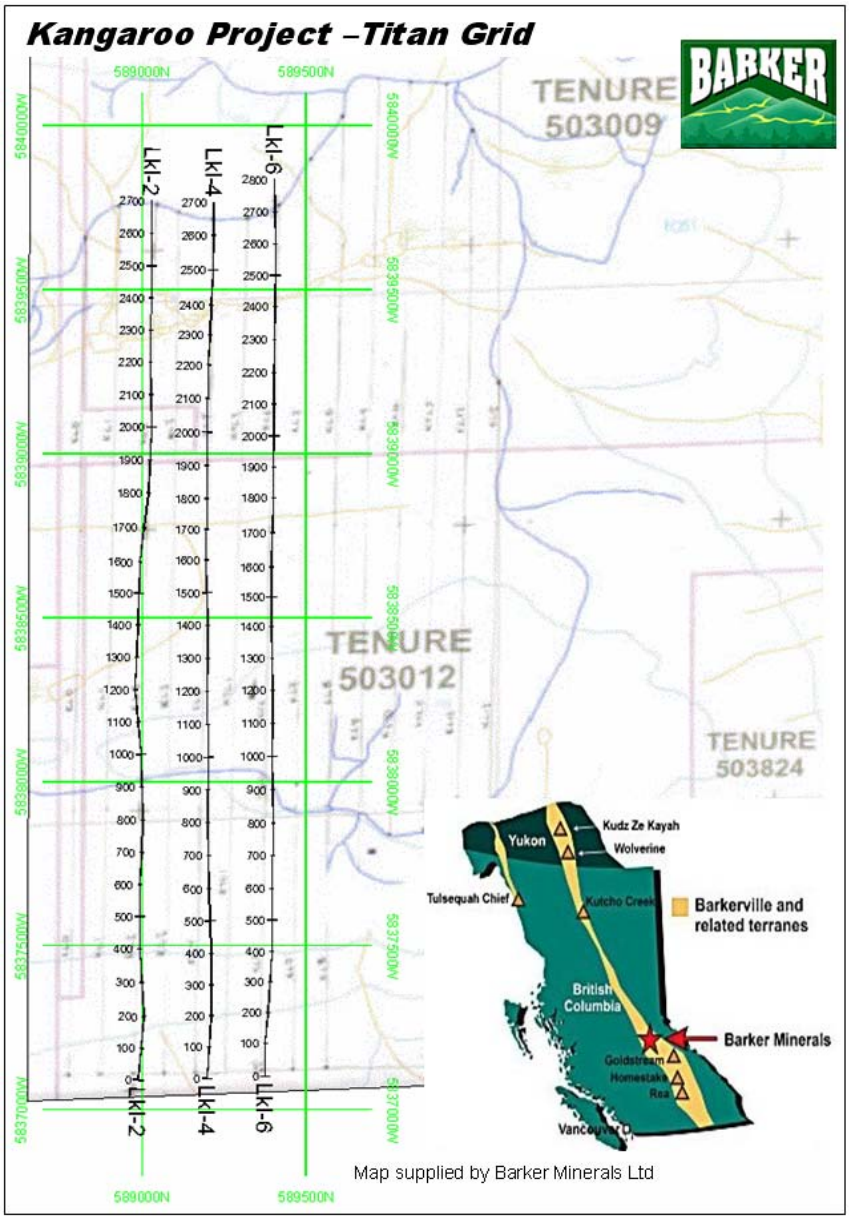


Figure 4: Kangaroo Project Line Location Map and Surveyed Claims[4]

Line	Array Coord. Start	Array Coord. End	UTM Coord. Start		UTM Coord. End	
			Easting	Northing	Easting	Northing
KL-2	0	2700N	588988	5837091	589030	5839770
KL-4	0	2700N	589198	5837095	589219	5839765
KL-6	0	2700N	589376	5837102	589404	5839835

Table 1: Titan Survey Lines (UTM Referenced NAD 83, Zone 10U)

[4] *Kangaroo Line Location Map supplied by Barker Minerals Ltd, 2007.*

3. RESULTS AND INTERPRETATION

This section presents the interpretation of the Titan-24 data in context with the known geology, survey objectives and significance to future exploration for skarn-related gold and copper mineralization at Kangaroo. ***Appendix E*** provides pseudo-section plots of the DCIP and MT data used in the 2D inversions along with a more complete description of data pre-processing.

In *Section 3.3* the 2D inversion models are presented graphically, along with an interpretation and comments on the most significant results. Scaled Geosoft format plans and cross-sectional plots of the DC resistivity, chargeability and MT models are also provided in ***Appendices F, G and H***.

3.1 DC RESISTIVITY & INDUCED POLARIZATION INVERSIONS

Pre-processing of the DC Resistivity & Induced Polarization (DCIP) data involved adjustment of data errors and removal of poor quality data. For the DCIP inversions, the UBC DCInv2D^{TM} 2D platform was used (Oldenburg & Li, 1994). Several inversions were generally run with successive removal of poorly fitting data or error adjustment before arriving at the final 2D models.

The DCIP raw data quality in general is good to excellent. Some data acquired with large transmit-receiver separations were not of a high quality, and were removed prior to interpretation. A more detailed discussion of the UBC technique for inverting the DCIP data can be found in Appendix D.

Several DCIP models were calculated. In some instances, using the DC inversion models as the resistivity distribution for the IP inversion produced models with abnormally large chargeability amplitudes coincident with the high resistivity zones that are not consistent with the raw data. Additional IP models were derived by inverting the IP data assuming a constant resistivity distribution (half-space homogeneous conductivity). These models are thought to have provided a better image of the apparent chargeability distribution.

3.2 TENSOR MAGNETOTELLURIC INVERSIONS

The unconstrained Tensor Magnetotelluric (2D MT) inversion models were calculated using the Geotools^{TM} MT data processing and model-inversion platform. The initial data input into the Geotools database were line-station unrotated data, taken directly from the EDI archive[5]. The impedance tensor data span frequencies from 0.1Hertz to 10x10^3 Hertz, with a data density of approximately eight (8) points per decade.

The MT raw data quality is good to excellent, including the frequency range from 1000 Hertz to 3000 Hertz (dead band). One-dimensional (1D) inversions for each mode[6] (XY and YX) of the data were generated at each site. These were used to make interpretative decisions about how to "best" fit the data, and ensure that the apparent resistivity and phase data are consistent. The apparent resistivity and phase from the 1D model are then interpolated to obtain twelve (12) frequency responses per decade.

2D smooth models were constructed using the RLM inversion method (Rodi & Mackie, 2001). The RLM inversion models were calculated using the interpolated resistivity and phase curves for the TM resistivity and phase modes only, in the 0.1Hertz to 10x10^3 Hertz bandwidth. A maximum of five percent (5%) error for the resistivity and three (3) degrees error for the phase was assumed for four (4) to six (6) equi-spaced frequencies per decade. The RLM and the 1D Stitched Determinant inversion models were used as starting models for the 2D "PW" inversions. Different combinations of datasets (TM phase, TM resistivity, TE phase and TE resistivity) were tested before arriving at the final 2D models.

---

[5] Electronic Data Interchange (EDI) data available in the digital archive submitted along with the "Geophysical Survey Logistics Report", Martinez, E. and Legault, J. M. (2007).

[6] MT Modes include: Transverse Electric field (TE or XY) parallel to geology (strike direction) and Transverse Magnetic field (TM or YX) perpendicular to geological strike (dip direction).

The TM mode only inversions (pw1 models[7]) were found to produce the most consistent models for interpretation. For further details on inversion parameters and alternate inversion models and MT interpretation refer to ***Appendix E*** and ***Appendix I***.

3.3 TITAN 2D MULTI-PARAMETER INTERPRETATION

This section[8] presents a description of the most significant geophysical anomalies and potential targets interpreted from the final Titan-24 DCIP and MT inversion models. A brief description of the results and targeting recommendations is also provided in this section.

The interpretation is presented as figures containing 2D sections and plan maps of the MT Resistivity (pw1 models), DC Resistivity (smDC models) and IP Chargeability (smIP models) with an overlay of the final Titan-24 target areas and anomaly trends. Additional 2D and 3D sections and plans are included in ***Appendix G*** and ***Appendix I***.

For the resistivity plots, cool colors (blue series) represent resistivity highs and warm colors (red series) resistivity lows. Alternatively, for the IP cool colors represent chargeability lows, warm colors represent chargeability highs. Unless specified otherwise, all resistivity plots are in the 100-1000 ohm-meters color range and the chargeability plots in the 0-50 milliradians.

The interpreted target areas, which are not geologically unique, are derived from the 2D Chargeability and 2D DC Resistivity and MT inversion models. The anomalies were classified and assigned a priority according to amplitude, size and multi-parameter IP, DC and MT Resistivity association as follows:

- *High priority targets:*
  - Anomalies exhibiting a strong to moderate IP response (> 20 milliradians), DC and MT resistivity low association (rho <1000 ohm-meters); interpreted to be massive or stringer gold and/or copper mineralization.
- *Low priority targets:*
  - Weak IP response (< 10 milliradians), DC and MT resistivity moderate to high association (rho > 5000 ohm-meters); interpreted as consistent with weakly disseminated concentrations, alteration zones, magnetite, graphite or structures.
  - Deep MT resistivity lows (> 500 meters depth).

A total of twelve (12) Titan anomalous zones have been identified at Kangaroo. These anomalies occur at three (3) depth levels and are interpreted to represent different sub-horizontal sedimentary stratigraphic layers with associated mineralization.

Three (3) deep MT anomalies including one sub-vertical response with a strong resistivity gradient have been interpreted as a potential convection feeder zone (or structure). It may also represent deep mineralization or alteration.

Of all the interpreted responses, three (3) Titan anomalies (***T3***, ***T4*** and ***T5***) have been classified as high priority targets for follow up. Seven (7) anomalous zones (***T1a-b-c, T6***, ***T2***, ***T7***, ***MT1***, ***MT2*** and ***MT3***) are classified as low priority targets (Figure 5).

[7] ***P****lane* ***W****ave (PW1) inversion models calculated from TM (phase & resistivity) data only.*

[8] *The final models of the inversion results only are shown in this section. It is useful to review the actual data input into the 2D inversion (Appendix E) and all the raw data, which is available in the Logistics Report previously submitted.*

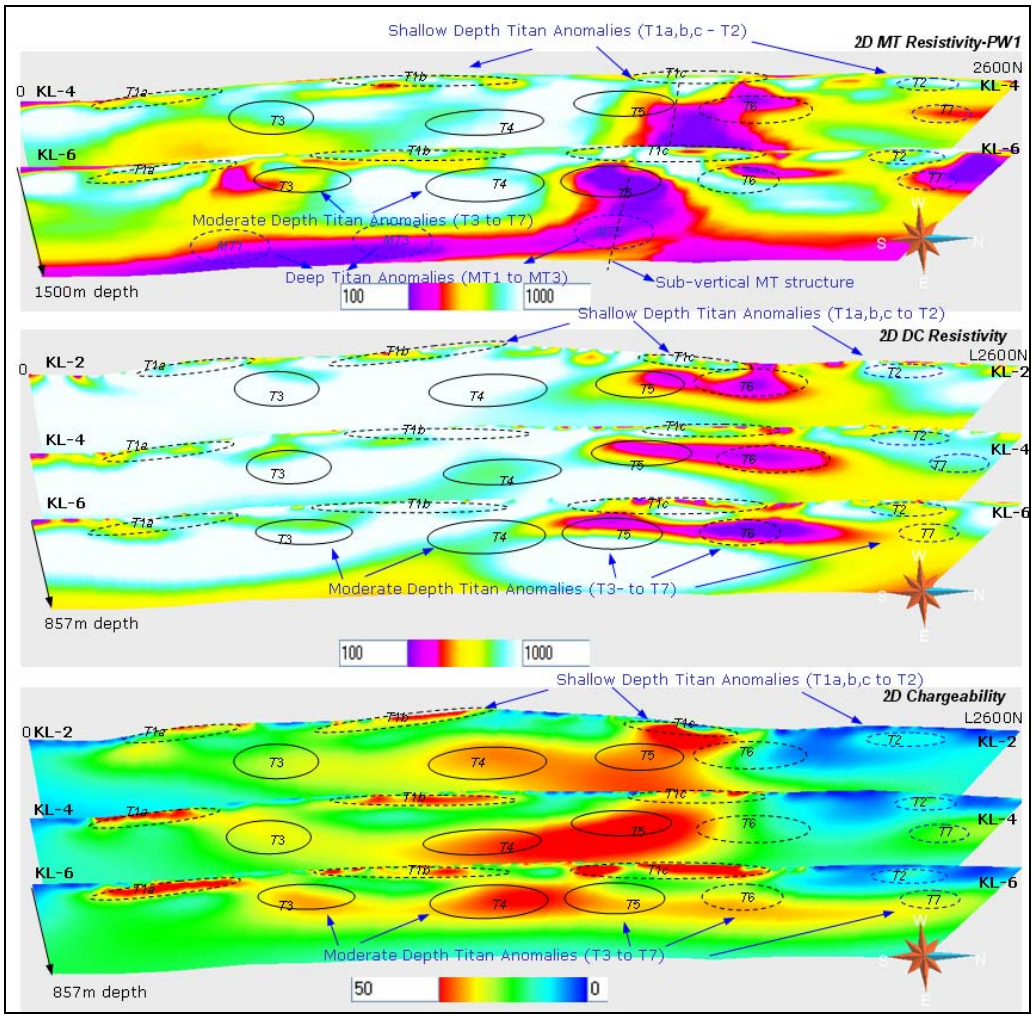


Figure 5: 3D Views of the Titan DCIP & MT Anomalous Zones

3.3.1 Shallow Depth Titan Anomalous Zones

This group includes Titan responses ***T1a-b-c*** and ***T2***, observed from near surface to approximately 200 meters depth (Figure 6 and Figure 7).

These anomalous zones appear to be related to near surface placer-gold and associated mineralization hosted in gravels or clay layers within the glacial drift and similar to that observed at the Bullion Pit. Secondary enrichment, or related sulphide alteration zones may be encountered associated to sedimentary volcanic and carbonaceous rocks from the Barkerville or Quesnel Terranes. Lenses of semi-massive to massive copper and zinc sulphides bearing pyrite, pyrrhotite, magnetite and chalcopyrite are typically hosted by metamorphosed greywackes, argillites and basalts.

T 1. Anomaly ***T1*** represents an association of discrete near surface strong IP responses and DC and MT resistivity low (including **T1a**, **T1b**, **and T1c**). They are depth limited sub-horizontal features and present large strike length, particularly covering most of the survey area from surface to approximately 200 meters depth. Although, the large amplitude of the IP and the low resistivity association makes ***T1*** a perspective anomaly for follow up, a low priority has been assigned to this zone due to its limited depth extent.

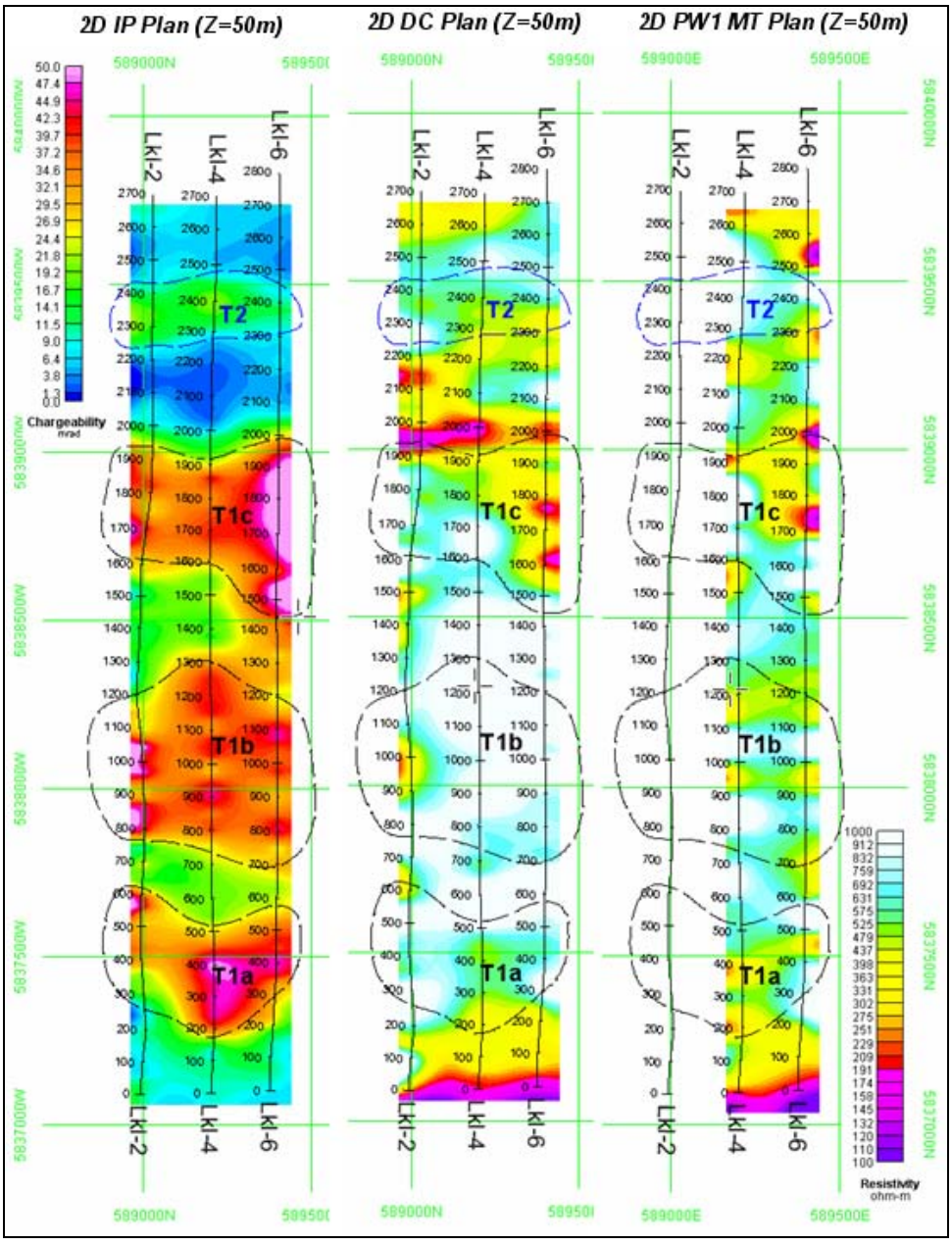


Figure 6: Shallow depth Titan Anomalous Zones at Kangaroo[9]

Anomaly ***T1a*** is observed in the southern part of the survey area, from line ***KL-2*** to line ***KL-6*** (stations 300N to 600N). This anomaly exhibits a strong to moderate IP response (>30 milliradians) coincident with a DC and MT moderate to low resistivity anomaly (<500 ohm-meters). Towards the west, it is considerably extent limited and closer to the surface and associated to a resistive environment. Although the IP response to the west is weaker, it may be related to semi-massive or disseminate mineralization or alteration zones. The most prospective portion for ***T1a*** is observed at line ***KL-6*** at station 200N, where the anomaly exhibits a strong IP chargeability (>40 milliradians) at depth and coincident MT resistivity low (<500 ohm-meters), (Figure 7).

[9] *The interpreted shallow depth Titan anomalies are open to the east and west respectively beyond the survey coverage.*

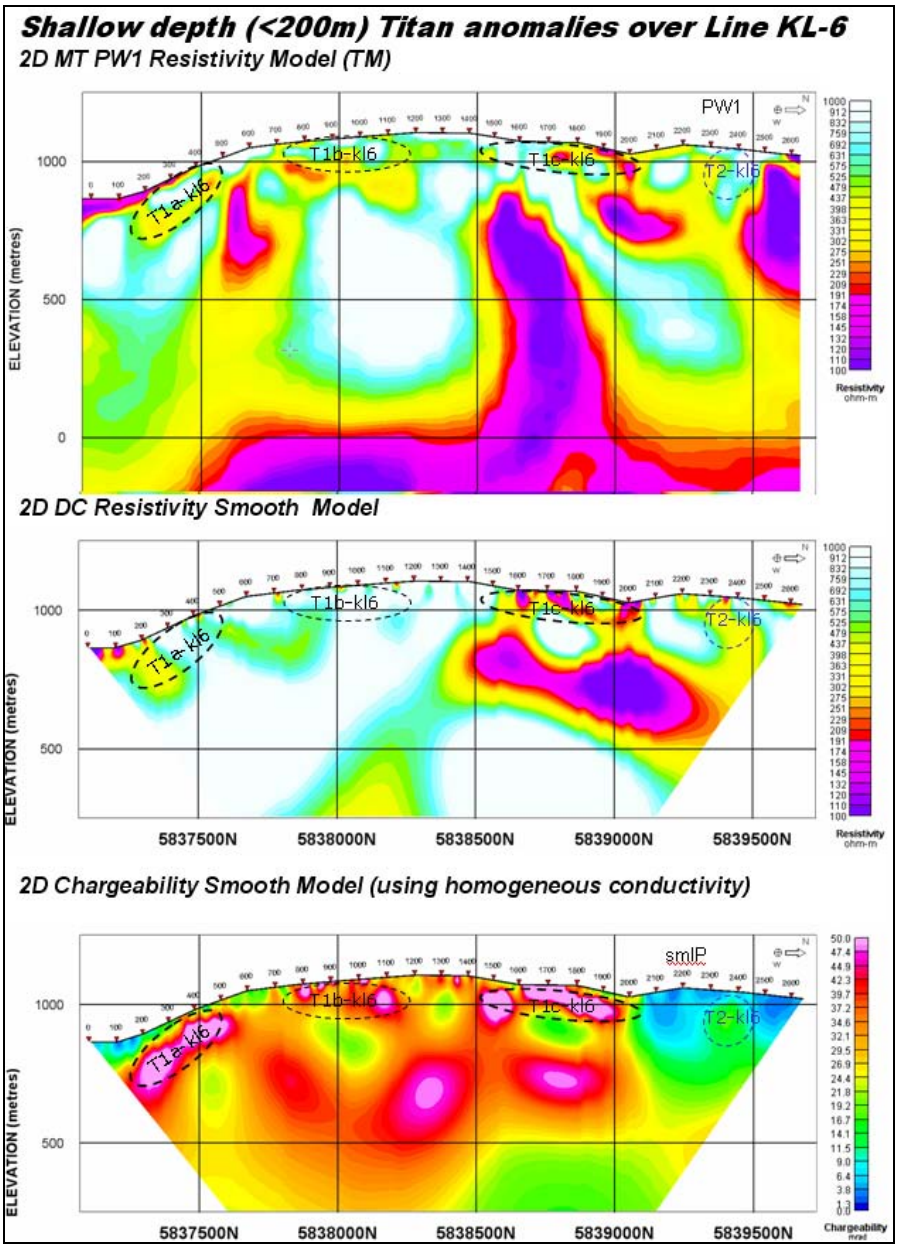


Figure 7: Shallow depth Titan Anomalies over Line KL-6

Anomaly ***T1b*** is located in the south-central portion of the area, extending from line ***KL-2*** to line ***KL-6*** (from ~700N to 1200N). It exhibits a strong to moderate IP response (>30 milliradians) with coincident DC and moderate MT resistivity responses (500-1000 ohm-meters). On line ***KL-2*** this anomaly is closer to the surface in a resistive host, potentially indicating disseminated mineralization. The most prospective area for ***T1b*** is located on line ***KL-4*** from station 1100N & 1200N to line ***KL-6*** at station 1100N (Figure 7).

T1c is observed on line ***KL-6***, over the north-central part of the line from station 1400N to 2000N. This zone exhibits a strong to moderate IP response (>30 milliradians) associated with coincident DC and moderate MT resistivity responses (500-1000 ohm-meters), (Figure 7). The west portion of this anomaly, including line ***KL-4*** and ***KL-2*** are interpreted as discrete, near surface IP responses of limited horizontal extent where near-surface disseminated mineraliza-

tion or alteration zones are expected to occur. The most significant portion of ***T1c*** is on line ***KL-6*** at station 1750N. Significant depth extent, strong IP (>40 milliradians) and coincident MT resistivity low (<500 ohm-meters) is observed, suggesting massive mineralization at depth.

T 2. Anomaly T2 is located in the northern part of the survey area, and strikes east from line ***KL-2*** to line ***KL-6***, from approximately 2300N to 2500N, (Figure 6 and Figure 7). It is characterized by a weak to moderate IP response (15-20 milliradians) associated with a moderate (to high) DC and MT resistivity (<500 ohm-meters). To the west, both the DC and MT models indicate a more resistive association.

Contrary to other targets, this anomaly is hosted in a different rock type, possibly mafic volcanics. A significant sub-vertical IP, DC and MT resistivity gradient is observed on all lines surveyed at approximately 1900N-2000N, indicating the presence of a contact or fault system. To the north, the IP chargeability shows a significant amplitude decrease indicating low mineral content and/or alteration.

The most prospective portion is observed on lines ***KL-2*** and ***KL-4*** at approximately station 2400N. The target is closer to surface and exhibits significant depth extent and a stronger response in a conductive host as illustrated the IP and MT inversion models. A low priority has been assigned to this zone.

3.3.2 Moderate depth Titan Anomalous Zones

This group includes the observed moderate depth Titan responses (approximately 150 meters to 400 meters). Anomalies ***T3***, ***T4***, ***T5, T6*** and ***T7*** are included in this group (Figure 8).

The idealized geological model for this zone suggests the Titan anomalies are potentially associated to buried gold mineralization and alteration in the underlying sediments and the associated deep feeder channels, common in the skarn type deposits. High grade gold and sulphide mineralization (including pyrite, pyrrhotite, magnetite, chalcopyrite and graphite) may be encountered within the bedrock channels or marine sedimentary rocks covering the deep portion of valley. Chlorite alteration zones in the host rock of the sulphide ore may represent significant exploration targets.

T 3. This zone is observed in the southern part of the survey area, and strikes east from line ***KL-2*** to line ***KL-6***, station 700N to 900N, (Figure 8 and Figure 9)**.** This zone exhibits a strong to moderate IP anomalous response (30-40 milliradians) with coincident DC and MT low to moderate resistivity responses (<500 ohm-meters).

To the west the anomaly is associated with a more resistive environment. The IP response is stronger and deeper, and it may be related to semi-massive or disseminated mineralization or alteration zone.

The most prospective portion of this zone is observed between line ***KL-6*** and ***KL-4***. The IP model indicates a sub-vertical feature, slightly dipping to the north. The DC and MT suggest this feature is depth limited to approximately 300 meters (Figure 9). The amplitude and extent of the IP anomaly and moderate to low DC and MT resistivity make this zone a high priority target for further exploration.

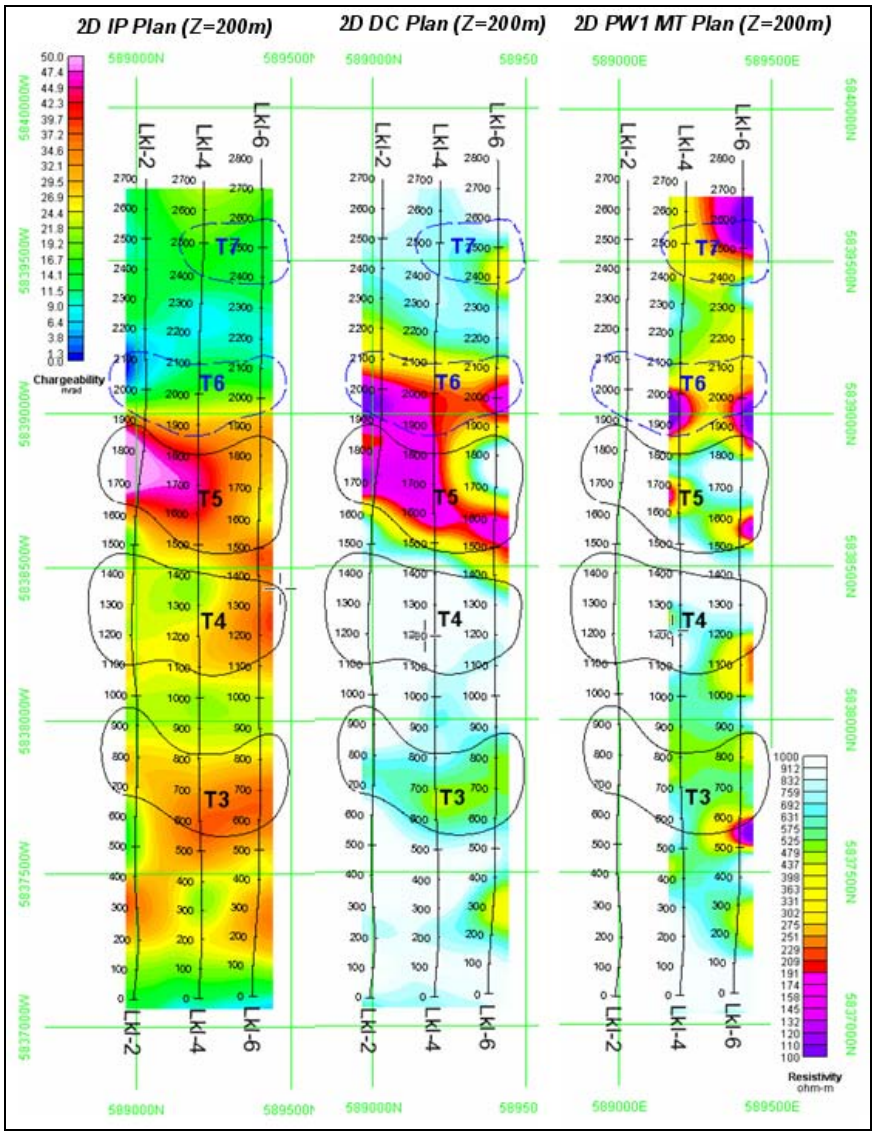


Figure 8: Moderate depth Titan Anomalous Zones at Kangaroo[10]

T 4. Anomaly ***T4*** is located in the central part of the Titan-24 survey grid, and extends from line ***KL-2*** (1100N to 1500N) to line ***KL-6*** (1100N to 1400N), (Figure 8 and Figure 9**)**.

This anomaly consists of a strong to moderate IP response (30-50 milliradians) associated with a moderate to high DC and MT resistivity response (<1000 ohm-meters). The top of the anomaly is at approximately 200 meters and extends to about a depth of 500m. To the east, on ***KL-2***, this anomaly seems to be stronger, and associated to a more resistive host rock, and may overlap with nearby anomaly ***T5***, located approximately 300 meters to the north.

The anomaly ***T4*** is interpreted to be strongest on line ***KL-6*** at station 1300N. The models for this line show a considerably larger area IP chargeability response, extending to depth and slightly south dipping. This zone is classified as high priority, suggestive of disseminated mineral target.

[10] *The interpreted moderate depth Titan anomalies are open to the east and west respectively beyond the survey coverage.*

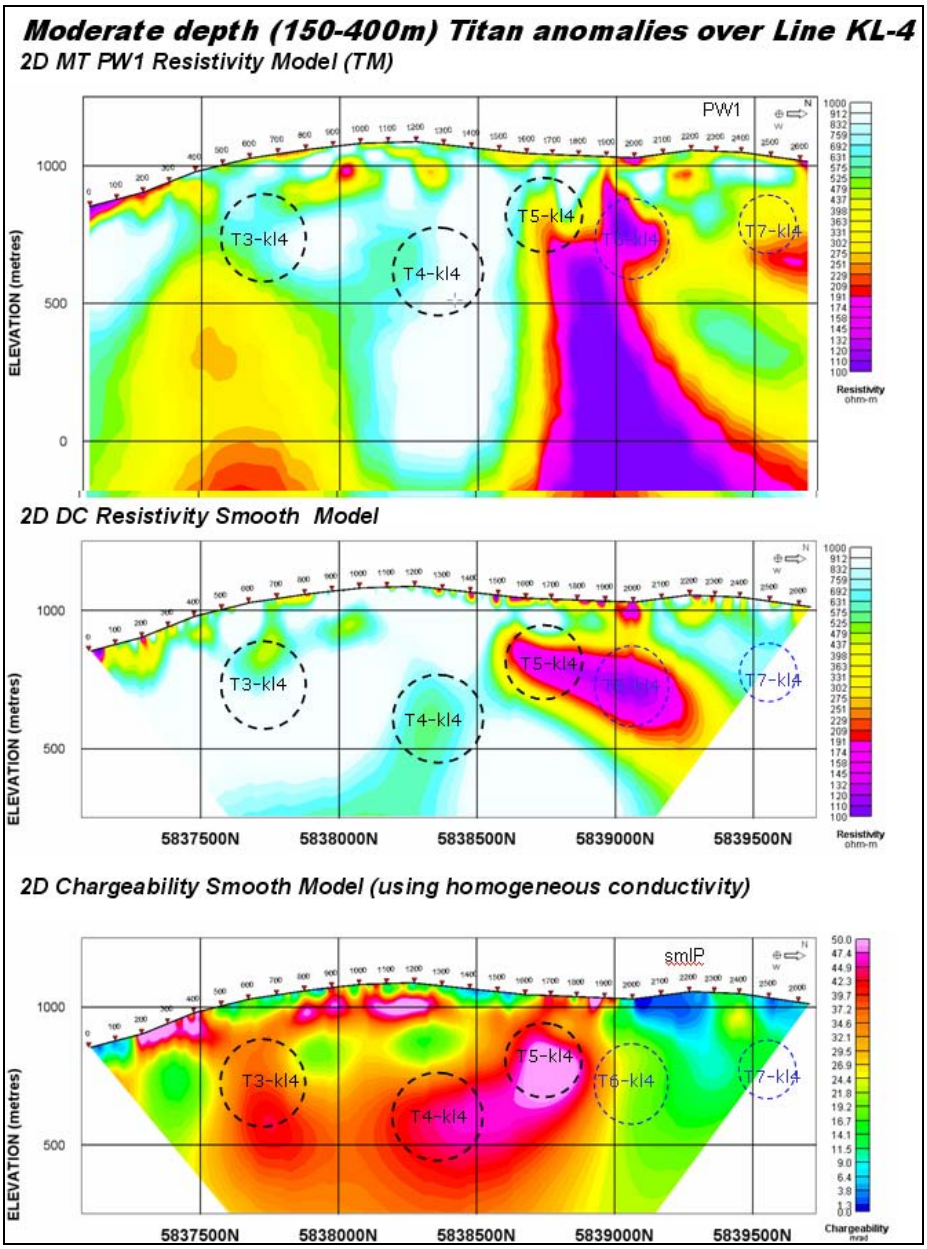


Figure 9: Moderate Depth Titan Anomalies over Line KL-4

T 5. This zone is observed in the central part of the survey area from line ***KL-2*** (station 1600N to 1900N) to line ***KL-6*** (station 1500N to 1800N), (Figure 8 and Figure 9).

This Titan anomaly consist of a strong IP response (>40 milliradians) associated with a DC and MT resistivity low (<500 ohm-meters). The IP, DC and MT models indicate this anomaly represents a sub-horizontal feature of limited depth (approximately 300-500 meters). The west portion of the anomaly is closer to the surface (<100 meters depth), and to the west the response is deeper and extends over a larger area, with a decreasing IP response.

The best potential for ***T5*** is interpreted to be on line ***KL-4*** at station 1700N. The inversion models for this line indicate a multi-parameter large area IP anomaly suggesting massive to semi-massive mineralization. This zone is classified as a high priority target.

T 6. This zone is observed in the north part of the survey area from line ***KL-2*** to ***KL-6*** (stations 1900N to 2100N), (Figure 8 and Figure 9).

The most significant portion of ***T6*** (on line ***KL-2,*** station 1950N) is characterized by a DC and MT low resistivity response (<500 ohm-meters). The response consists of a weak to moderate gradient IP anomaly. The strong low DC and MT responses are suggestive of massive to semi-massive mineralization.

The inversion models suggest this anomaly has considerable depth extent indicating deep mineralization, alteration zones or other structures. The complexity of this response required that the anomaly be tested at shallow depth initially (top 200-300 meters). If encouraging results are obtained then a deep test hole to test anomaly ***MT2*** is recommended. Anomaly ***T6*** is classified as a low priority target.

T 7. This zone is observed in the northern part of the survey area from lines ***KL-4*** to ***KL-6*** (stations 2400N to 2600N), (Figure 8 and Figure 9).

The most significant portion of ***T7*** (on line ***KL-6***), is characterized by a low DC and MT resistivity response (<500 ohm-meters). The DC and IP responses represent a weak "edge" anomaly, which is not very well resolved by the inversion models due to the survey coverage limitations. ***T7*** is classified as a low priority target.

3.3.3 Deep Titan Anomalies

This group consist of deep Titan MT resistivity low anomalies, observed at depth greater than >500 meters, and includes anomalies ***MT1***, ***MT2*** and ***MT3***.

The geological model for these zones suggests deep mineralization or alteration due to convection activity in the feeder channels and structures, ranging in depth from near surface to several kilometres. Copper sulphide and gold mineralization may be encountered within the bedrock channels exceeding 500 meters depth. Chlorite and sericite alteration may represent significant exploration targets. These structures and deep mineralization are expected to occur at Kangaroo.

MT 1. This zone is located in the southern part of the survey area at approximately 700-800 meters depth, and strikes from line ***KL-4*** (400N to 700N) to line ***KL-6*** (400N to 800N), (Figure 10). Zone ***MT-1*** represents a low to moderate MT resistivity response (<1000 ohm-meters).

The most significant part of this zone is on line ***KL-6*** (station 600N), where it is characterized by resistivity values <200 ohm-meters, but also open at depth. This potentially indicates a source of deep mineralization, alteration or other structures. This anomaly is a low priority target.

MT 2. This zone is observed in the north-central part of the survey area from line ***KL-4*** (1700N to 2000N) to line ***KL-6*** (1600N to 2000N), (Figure 10). Zone ***MT2*** represents the strongest deep low resistivity MT response (<200 ohm-meters) yet observed at Kangaroo.

The most prospective portion of this zone is observed at line ***KL-4*** (station 1800N), where the resistivity values are lower and show significant depth extent. This anomaly is positioned just below the strong, moderate depth IP chargeability response suggestive of deep mineralization and/or feeder channel or other structure. This anomaly is a low priority target.

MT 3. This response consists of a one line MT resistivity low anomaly (<500 ohm-meters), observed in the central part of the survey area on line ***KL-6*** (900N to 1100N), (Figure 10).

The lowest priority is assigned to this anomaly. This response may be an inversion artefact occurring when attempting to resolve two deep sub-parallel conductors, such as ***MT1*** and ***MT2***.

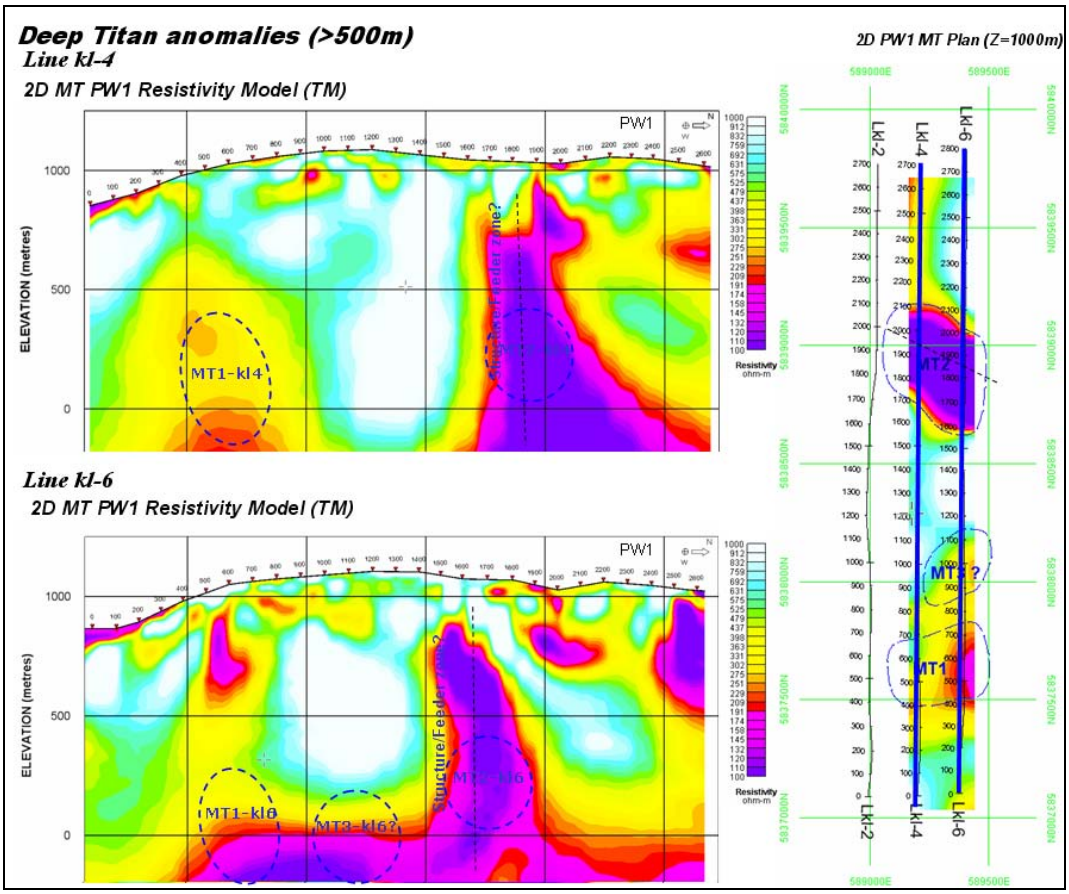


Figure 10: Deep Titan Anomalous Zones at Kangaroo[11]

Additional information on the inversion models and parameters are included in ***Appendix G*** and ***Appendix I***. Plan Maps and Sections in Geosoft format are also included in these appendices.

[11] *The interpreted deep Titan anomalies are open to the east and west respectively beyond the survey coverage.*

4. CONCLUSION AND RECOMMENDATIONS

The Titan-24 survey at the Kangaroo Project indicates significant anomalies in the DCIP and MT raw data and inversion models that are consistent with the skarn-related gold and copper sulphide geologic target model. The responses appear to be laterally extensive, suggestive of a layer-like massive to semi-massive and disseminated mineralization. In addition to these layer-like DCIP responses, a more steeply dipping DC and MT conductive zone, similar to a high angle mineralized fault structure or alteration zone has also been defined.

4.1 CONCLUSIONS

The interpreted DCIP and MT anomalies and the target prioritization were mainly based on the anomaly amplitude, extent and multi-parameter association. The DC and IP inversion models have successfully delineated anomalies from surface to approximately 700 meters depth.

The MT inversion models show good resolution of the anomalies to approximately 1 kilometer depth. The DCIP & MT interpretation could possibly be affected by structures, which run parallel and/or sub-parallel to the survey lines.

A total of twelve (12) DCIP and MT anomalous zones have been identified for follow-up at Kangaroo. Three (3) zones have been classified as high priority targets (***T3***, ***T4*** and ***T5***) for gold and copper sulphide mineralization at depth. The remaining nine (9) anomalous zones (***T1a-b-c, T6, T2***, ***T7***, ***MT1***, ***MT2*** and ***MT3***) are classified as lower priority.

In addition, the MT inversion models have resolved sub-vertical features extending from surface to approximately >1.5 kilometer depth that may represent feeder zones, structures, deep mineralization and/or alteration zones.

The survey has successfully identified geophysical anomalies which may represent layered massive to disseminated mineralization and/or alteration zones at depth. The interpreted anomalies may not necessarily be related to gold and copper mineralization. Other sources, such as iron-rich formations and graphite can produce similar DCIP and MT responses.

4.2 RECOMMENDATIONS

We have the following recommendations

1. Drill test the high priority targets ***T3, T4*** & ***T5***.

   T3: from line ***KL-2*** to line ***KL-6***, station 700N to 900N. **Target line/station/Max-depth: *KL4, KL6/700N/600m*.**

   T4: from line ***KL-2*** (1100N to 1500N) to line ***KL-6*** (1100N to 1400N). **Target line/station/Max-depth: *KL-6/1300N/600m*.**

   T5: from line ***KL-2*** (station 1600N to 1900N) to line ***KL-6*** (station 1500N to 1800N). **Target line/station/Max-depth: *KL-4/1700N/500m*.**

2. If favourable drill results are obtained, the low priority targets should be drilled.
3. Drill testing the deep MT anomalies **MT1** and **MT2**. Optionally, **MT3** to be drill tested if encouraging results are obtained.
4. Review and evaluate all available geological and geochemical data in the vicinity of the interpreted priority target areas.
5. Consider extending the lines to the north, to re-define the extent of anomaly ***T7***.
6. When the deep targets (***MT-1***, ***MT-1*** and ***MT-3***) are drilled, follow up with downhole BHTEM, and consider physical property logging on all drilled Titan targets to understand and explain the source of the responses observed.

7. Consider 3D DCIP and MT inversions to improve the interpretation and targeting.
8. Examination and/or acquisition of additional surficial geophysical data (Gravity, Magnetics, TEM, etc) for further enhance the interpretation and drill targeting is recommended and to integrate all available geo-scientific information into 3D Gocad earth model and perform physical property and 3D query evaluation to corroborate the interpreted Titan anomalies.

RESPECTFULLY SUBMITTED BY
QUANTEC GEOSCIENCE LTD.

Jean M Legault
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Titan Interpretation Group

Evelio Martinez.
Senior Geophysicist
Titan Interpretation Group

Toronto ON
February, 2008

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APPENDIX A - STATEMENT OF QUALIFICATIONS

I, Evelio Martinez del Pino, declare that:

1. I am a Geophysicist with residence in Hamilton, Ontario and am presently employed in this capacity with Quantec Geoscience Inc., Toronto, Ontario.

2. I obtained a Bachelor's Degree in Engineering Geophysics at ISPJAE University in La Habana, CUBA, in 1993, and a Masters Degree in Applied Geophysics (M.Sc.) at the ITC in Delft, The Netherlands, in 2000.

3. I am a registered geoscientist, since 2004, with license to practice in the Province of Ontario, (APGO Lic. # 1058).

4. I am a member of the American Geophysical Union (AGU).

5. I have practiced my profession continuously since September 1993, in Cuba, The Netherlands, Portugal, and Canada.

6. I have no interest, nor do I expect to receive any interest in the properties or securities of **Barker Minerals Ltd.**, its subsidiaries or its joint-venture partners.

7. I am the qualified Geophysicist and the supervisor for this project. I am responsible for the data acquisition, quality and compilation of the final processed results. I authored this interpretation report and I am responsible for the 2D DCIP and 2D MT inversions, their compilation and the geophysical data interpretation. I attest that the supplied information accurately and faithfully reflect the data acquired on site. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Toronto, Ontario
February, 2008

Evelio Martinez del Pino, M.Sc., P. Geoph (ON).
Senior Geophysicist. Interpretation Group
Quantec Geoscience Ltd.

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Jean M. Legault, declare that:

1. I am a consulting geophysicist with residence in Waterdown, Ontario and am presently employed in this capacity with Quantec Geoscience Ltd., Toronto, Ontario.

2. I obtained a Bachelor's Degree, with Honours, in Applied Science (B.A.Sc.), Geological Engineering (Geophysics Option), from Queen's University at Kingston, Ontario, in spring of 1982. I obtained a Master's of Applied Science (M.A.Sc.), in geophysics, at Ecole Polytechnique de Montreal, Quebec, in spring, 2005.

3. I am a registered professional engineer (# 90531542), since 1985, and a registered professional geoscientist (#0948), since 2003, with license to practice in the Province of Ontario. I have obtained a permit for incidental practice in the province of Quebec with OGQ.

4. I have practiced my profession continuously since May, 1982, in North-America, Europe, South-America, North-Africa and Asia.

5. I am a member of the Association of Professional Geoscientists of Ontario, the Association of Professional Engineers of Ontario, the Association des Explorateurs du Quebec, the Prospectors and Developers Association of Canada, and the Canadian Exploration Geophysics Society (KEGS).

6. I have no interest, nor do I expect to receive any interest in the properties or securities of **Barker Minerals Ltd.,** its subsidiaries or its joint-venture partners.

7. I am the secondary author of this report. I have reviewed the survey results and their interpretation, and can attest to that these accurately and faithfully reflect the data acquired on site. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Toronto, Ontario
February, 2008

Jean M. Legault, M.Sc.A. P.Eng., P.Geo. (ON)
Senior Geophysicist
Quantec Geoscience Ltd.

APPENDIX B - PRODUCTION SUMMARY

DATE	DESCRIPTION	LINE	START	END	READ (m)		TOTAL (m)	
					IP	MT	IP	MT
October 16, 2007	Mobilization Princeton - Likely (BC)	***	***	***	***	***	***	***
October 17, 2007	Orientation, parallel sensor test, scouting, prep infinite	***	***	***	***	***	***	***
October 18, 2007	Prep. line kl-2, troubleshoot system (scsi issues)	***	***	***	***	***	***	***
October 19, 2007	Troubleshooting, waiting on parts	***	***	***	***	***	***	***
October 20, 2007	Waiting on parts	***	***	***	***	***	***	***
October 21, 2007	C. Early arrive, repair one system, order parts	***	***	***	***	***	***	***
October 22, 2007	-Read IP	Kl-2 ***	0 ***	2650N ***	2650 ***	*** ***	2650 ***	*** ***
October 23, 2007	Prep. line kl-4, MT failed d/t equipment	***	***	***	***	***	***	***
October 24, 2007	-Read IP -Read MT	Kl-4 Kl-4	0 0	2650N 2650N	1300 ***	*** 2600	3950 ***	*** 2600
October 25, 2007	-Read IP -Repeat MT	Kl-4 Kl-4	0 0	2650N 2650N	2650 ***	*** 2600	6600 ***	*** 5200
October 26, 2007	-Read IP -Read MT	Kl-6 Kl-6	0 0	2650N 2650N	2650 ***	*** 2600	9250 ***	*** 7800
October 27, 2007	Pick up equipment	***	***	***	***	***	***	***
October 28, 2007	Demobilization from Likely to Timmins (Ontario)	***	***	***	***	***	***	***

TOTAL SURVEY DAYS	**13**
READ TIME	4
BREAK DOWN DAYS	4
SET UP DAYS	3
MOBILIZATION DAYS	2
WEATHER DAYS	0

TOTAL PRODUCTION: IP: 9.25 Km
MT: 7.8 Km

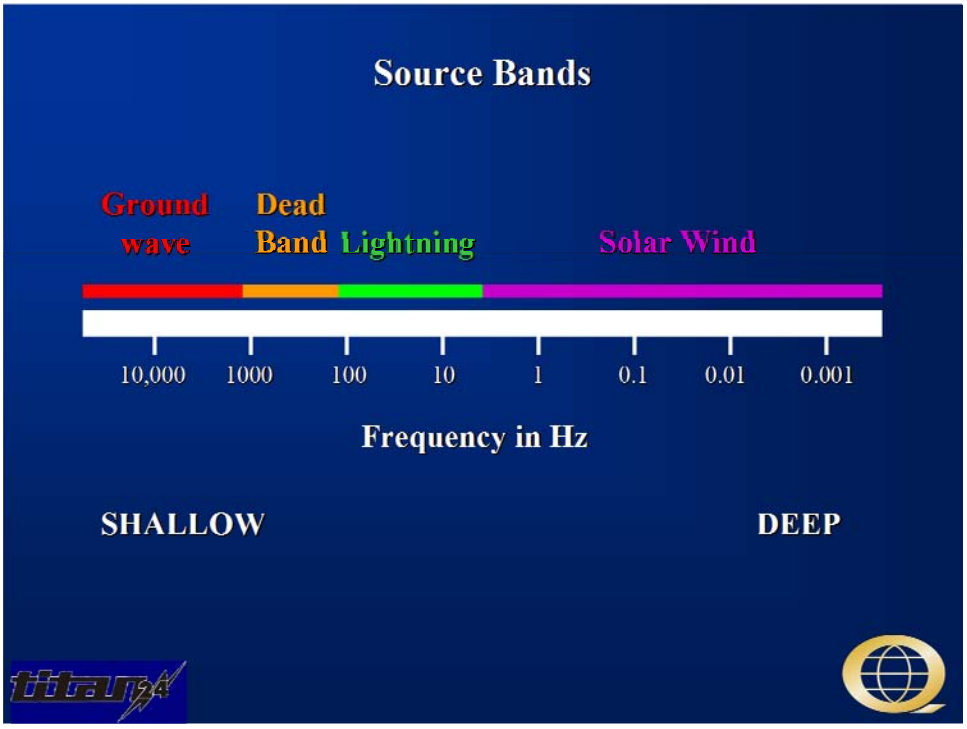
APPENDIX C - MAGNETOTELLURIC (MT) THEORY

The magnetotelluric (MT) method measures time-variations in the Earth's natural electric (E) and magnetic (H) fields to image the subsurface resistivity structure. No source or transmitter is used. These natural fields penetrate much deeper than is practical with a transmitter. At the same time the natural signals are a plane-wave source. The plane-wave source is much simpler to model than complex transmitter geometries and signals.

The E and H fields are measured over a broad range of frequencies. Typically, the frequencies can range from above 10 kHz to below 0.001Hz. High frequency signals are attenuated more rapidly in the subsurface. High frequency data are indicative of shallow resistivity structure while low frequency data are indicative of deep resistivity structure.

At frequencies below 1Hz the signal source is due to oscillations of the Earth's ionosphere as it interacts with the solar wind. At frequencies above 1Hz the signal source is due to worldwide lightning activity. There is a lack of signal around 1Hz, often referred to as the "hole". Modern 24-bit recording hardware and signal processing techniques have largely eliminated the data quality problems that have been traditionally seen around the 1Hz signal hole.

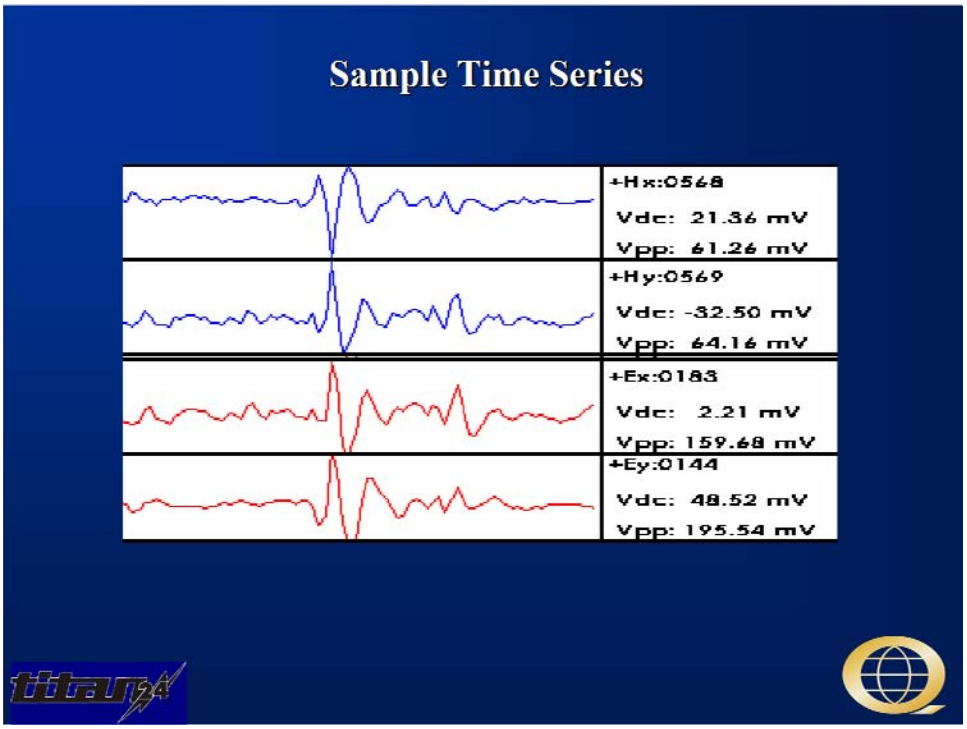
Between about 8Hz and 300Hz the signal from worldwide lightning activity propagates in a "resonant" cavity (the resistive atmosphere) between the conductive ionosphere and the Earth's surface. Above 3 kHz the signal propagates as a ground wave. Between 300Hz and 3 kHz there is a "dead-band" where the signal does not propagate well. Despite hardware and signal processing improvements this dead-band remains problematic. When signal (atmospheric activity) is present within several hundreds of miles of the survey area the data is quite good. When no signal is being generated in the vicinity data quality is poor.



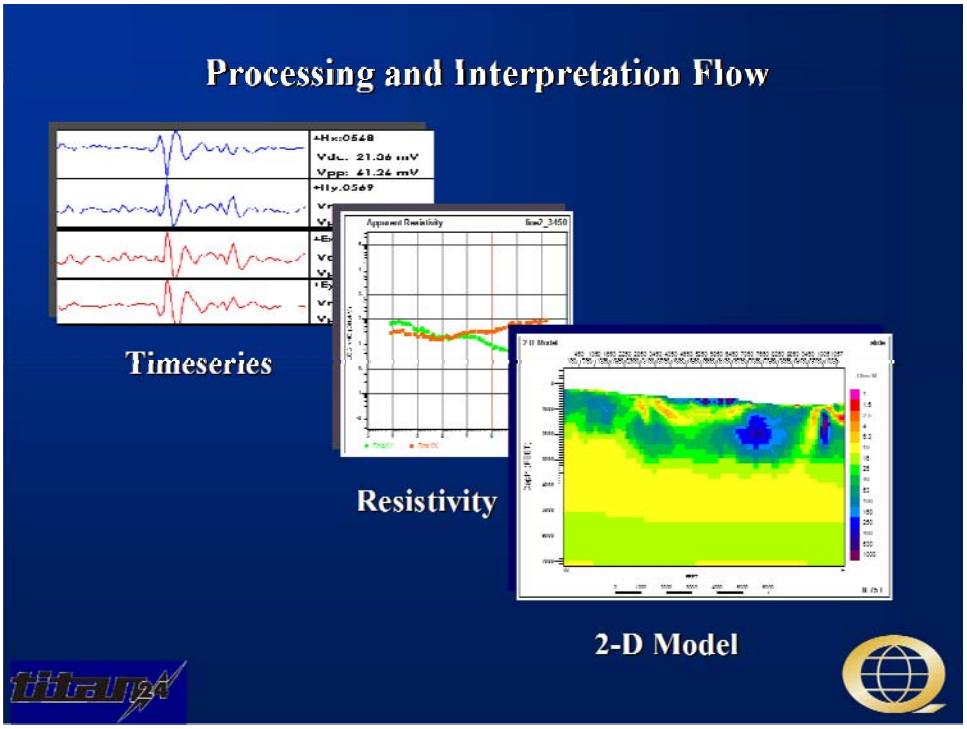
Both the electric and magnetic fields are measured. The measured fields depend on the ionosphere and lightning, and are essentially random. While the E and H fields are random the ratio of the fields depends on the subsurface resistivity structure. Note that it is primarily the orthogonal E and H fields that are related. The magnetic field must be measured perpendicular to the electric field. It is possible for complex subsurface resistivity structure to rotate the fields, and full tensor data are usually measured.

It is often useful to think of the magnetic field as the source signal and the electric field as the response. Time variations in the magnetic field induce currents to flow in the ground.

In the field the electric and magnetic fields are measured as a function of time. The electric field is measured using two orthogonal dipoles consisting of a wire connecting two grounded electrodes. In essence, the recording system consists of a voltmeter between the electrodes. The voltage measured depends on the electric field strength and the length of the dipole. The magnetic field is measured using an induction coil.



While the actual fields that are measured vary randomly (with solar and lightning activity), the relationship between the measured magnetic and electric fields is constant and depends on the subsurface resistivity structure. Extracting the subsurface resistivity structure from the measured magnetic and electric fields is a multi-step process. First time series processing techniques are used to derive geophysical parameters from the electric and magnetic fields. Then geophysical processing and inversion techniques are used to convert the geophysical parameters to a subsurface resistivity image. Finally, the resistivity image must be interpreted in terms of geologic units.



The measured magnetic and electric fields are Fourier transformed into the frequency domain. The system response is removed from the data (making the measurement independent of the hardware system). The Fourier coefficients represent the amplitude and phase of the electric and magnetic fields as a function of frequency.

A variety of signal processing techniques are used to minimize noise and bias in the estimation of geophysical parameters from the measured fields. The details are complex, but the approach is easily understood. Philosophically, the idea is to use multiple approaches to noise and bias reduction, not letting any one statistical approach have too much impact on the data, but relying on the combination of approaches to produce good estimates. The approaches include:

1. Spatial isolation of noise. A remote reference magnetic station is used to separate widely distributed signal from local noise.
2. Coherency sieves to find coherent signal. First the local and remote magnetic field measurements are compared and coherent signal kept. Then the local magnetic and electric fields are compared for coherency.
3. Frequency isolation of noise. Long Fourier transforms are used to provide extremely sharp isolation of noise in frequency.
4. Time isolation of noise. Short Fourier transforms are used to remove noise that is isolated in time (noise spikes, or noise that is randomly turning off and on).
5. Robust statistics that minimize biasing effects of a few isolated measurements.

Once the time series processing is complete geophysical parameters can be estimated. The primary geophysical parameters for MT are typically the apparent resistivity versus frequency and phase versus frequency.

The depth of penetration of the signal depends on its frequency and the resistivity of the rocks. The depth at which the signal amplitude has been attenuated to 37% (1/e) is called the skin depth and is defined:

$$\delta = \sqrt{\frac{2}{\mu\omega\sigma}} = 503\left(\sqrt{\frac{\rho}{f}}\right)(m)$$

where

δ = skin depth

μ = magnetic permeability

σ = conductivity=1/resistivity

ω = angular frequency=$2\pi f$

ρ=resistivity=1/conductivity

The ratio between the two measured components (E and H) is the electrical impedance. The impedance (denoted Z) is defined as $|Z| = |E/H|$. The impedance is a complex number because the E and H fields are out of phase. Note that Z, E, and H are all functions of frequency.

The complex impedance is used to calculate an apparent resistivity as follows:

$$\rho_a = \frac{1}{\mu\omega}|Z|^2 (ohm.m)$$

The apparent resistivity is also a function of frequency. At any frequency the fields must travel through the overlying geology. The apparent resistivity depends on the integrated (weighted) conductance of the rocks being sampled. It is a smoothly varying function of frequency because it represents the average resistivity of a progressively larger volume of the subsurface. On a log resistivity-log frequency plot the apparent resistivity generally can not exceed a slope of +/- 45 degrees.

The phrase “apparent resistivity” arises from the volume averaging. At a single frequency the electric and magnetic fields measurements can be used to calculate an impedance. This impedance depends on the resistivity of a large volume of the subsurface. The impedance can be thought of as the impedance of a half-space that would provide identical measurements to the actual subsurface.

The calculated phase or apparent phase is the difference between the measured E field phase and the measured H field phase. If the subsurface is one-dimensional (1D) or two-dimensional (2D) the phase is related to the resistivity. The Hilbert formula (minimum phase wavelet) relates the phase to the slope of the apparent resistivity curve. If the slope of the resistivity curve (on a log-log plot) is 0 the phase is 45 degrees. If the resistivity is increasing with decreasing frequency the phase is less than 45 degrees. If the resistivity is decreasing with decreasing frequency the phase is more than 45 degrees. As the apparent resistivities are constrained to a slope of no more than 45 degrees on a log-log plot, the phases are constrained to remain in a quadrant, between 0 and 90 degrees.

The phase measurement is largely independent of the apparent resistivity measurement. The Hilbert relationship provides an independent way to calculate the apparent resistivity curve from the phase data. There are effectively two independent measurements of the resistivity curve, providing a powerful check on data quality.

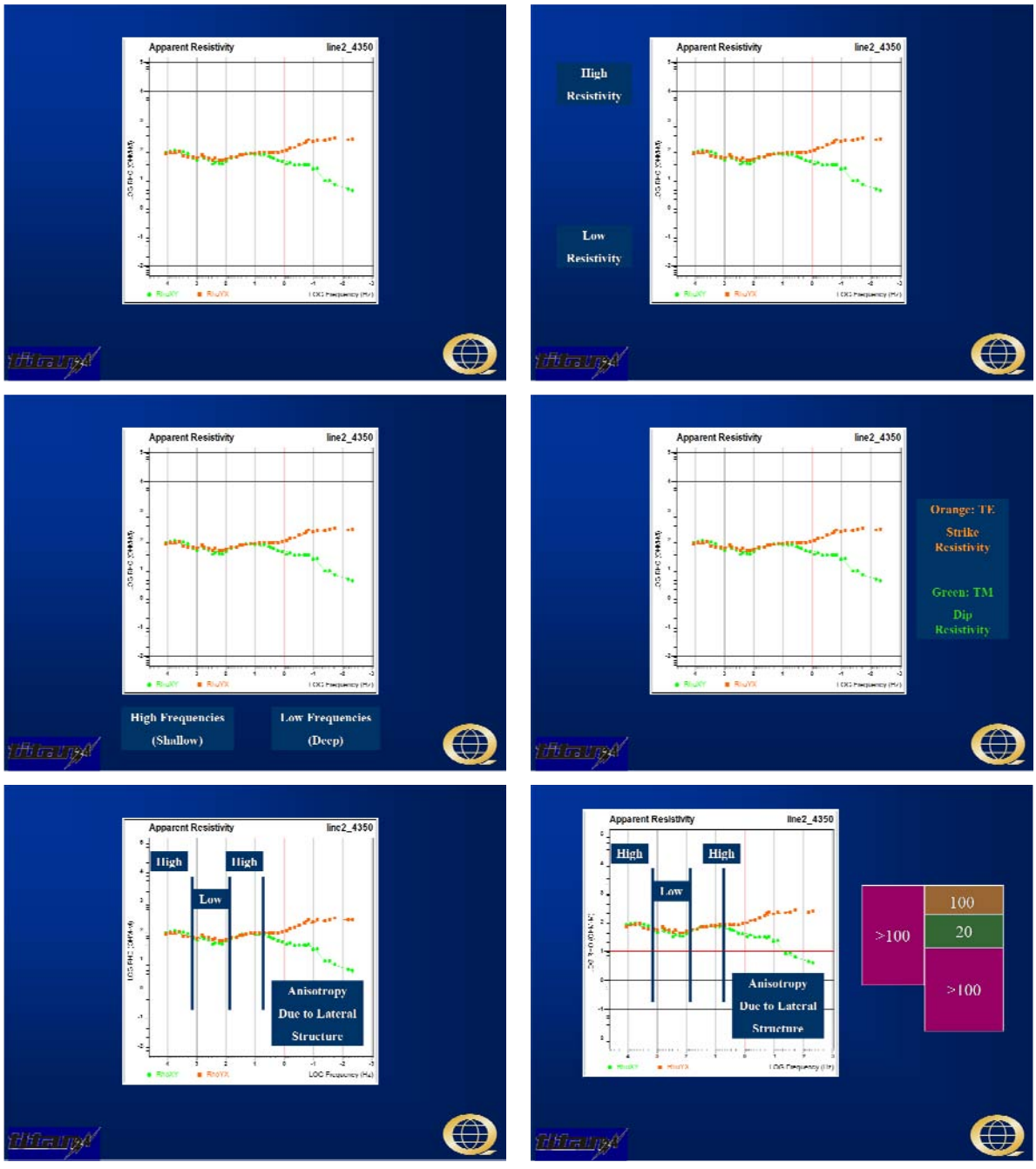
The apparent resistivity and phase curves are the primary parameters used in the interpretation of MT data. For a layered (1D) earth the apparent resistivity and phase data can be converted into intrinsic resistivity versus depth simply by accounting for the volume averaging nature of the method. There are a variety of algorithms for doing the conversion. The conversion is not unique. Some algorithms provide smoothly varying intrinsic resistivity versus depth functions (Occam inversion, Bostick transform). Others provide distinct layered solutions (Marquardt inversion).

1D modeling and inversion raises the following points:

- A single MT site provides information about resistivity versus depth. This is a major distinction from potential fields techniques that only provide information about relative variations along a profile.
- The conversion from apparent resistivity versus frequency to intrinsic resistivity versus depth is not unique. It is susceptible to equivalence. In particular any sharp resistivity contrast can be replaced by an equivalent transition zone.
- In a layered model the thickness of a resistive layer is well resolved. The resistivity of a resistive layer is poorly resolved.
- In a layered model the conductance (conductivity*thickness) of a layer is resolved. Neither the thickness nor the conductivity is uniquely resolved.
- Once the constraint that the subsurface is composed of distinct, resolvable, units is imposed the 1D inversion of MT data is essentially unique. Resolution is excellent (better than 5% of depth).

Apparent resistivity versus frequency is the most fundamental way of looking at the data in the interpretation phase. While the overall process is complex, with advanced processing techniques and inversions, it is important to keep in mind that the subsurface structures are apparent in the raw data – the apparent resistivity plots.

The following sequence of illustrations is intended to introduce the apparent resistivity versus frequency sounding curves. But it is also intended to highlight the relatively complex, but understandable, relationships between the observed data and subsurface structure.



A simple layered subsurface structure is not generally the problem of immediate interest in exploration. In the case of more complex two-dimensional (2D) or three-dimensional (3D) structure the MT response will be affected by lateral resistivity variations.

The MT measurement relies on natural, plane-wave, source signals. The measured response depends on lateral resistivity variations as much as (or more than) resistivity variations below the immediate sounding site.

Full tensor measurements of the E and H fields are made at every site. For each site there are two apparent resistivity sounding curves (or modes) and phase curves. These two modes are arbitrarily

labeled Rho-XY and Rho-YX. The first, Rho-XY, refers to the apparent resistivity (Rho) calculated from Ex and Hy.

Once full tensor measurements are made in the field it is possible to mathematically rotate the fields to any arbitrary coordinate system. Traditionally, the data are rotated independently at each frequency to maximize the difference between the two apparent resistivity sounding curves. This puts the data into “geologic” or “principal” coordinates.

One sounding curve will have the electric field in the geologic strike direction and is referred to as “Transverse Electric” or TE. The other mode will have the electric field in the geologic dip direction and is referred to as “Transverse Magnetic” or TM. Note that TE and TM are interpretive designations, and refer to geologic strike. XY and YX were simply geometric designation.

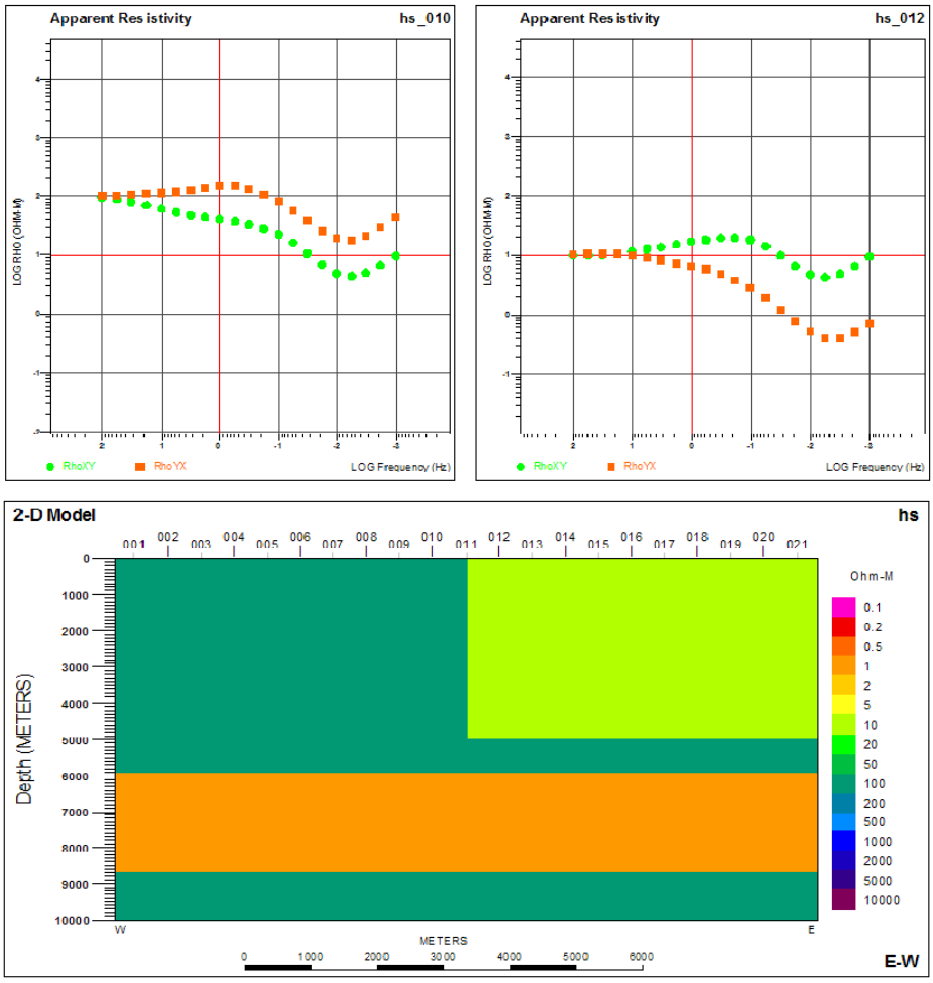
For a layered (1D) earth the two measurements are identical. When the structure is 2D or 3D the lateral resistivity variations will distort (often severely) the simple 1D response. The distortion of the fields by complex structure is realized in the apparent resistivity data as “anisotropy”. This is a divergence between the two apparent resistivity sounding curves.

The measurement of two orthogonal apparent resistivity sounding curves provides valuable information. Both curves reflect the resistivity structure underlying the site. Both curves will show increasing or decreasing resistivity at a frequency in response to resistivity structure under a site. The two apparent resistivity curves will diverge in response to lateral resistivity variations.

If the site is located on the resistive side of a lateral resistivity contrast the TE mode will be slightly suppressed due to the contact and the TM mode will be significantly biased up by the contact. If the site is located on the conductive side of a lateral resistivity contrast the TE mode will be slightly biased up while the TM mode will be significantly biased down by the contact.

For a 2D resistivity structure the TE mode is always providing an indication of the integrated conductance of the volume being sampled. It will always be a slowly varying function of position. The TM mode is responding dramatically to the presence of changes on the lateral resistivity boundaries, and will dramatically overshoot on the resistive side of a contact and undershoot on the conductive side. The anisotropy (divergence of the two sounding curves) is diagnostic of a lateral resistivity contrast.

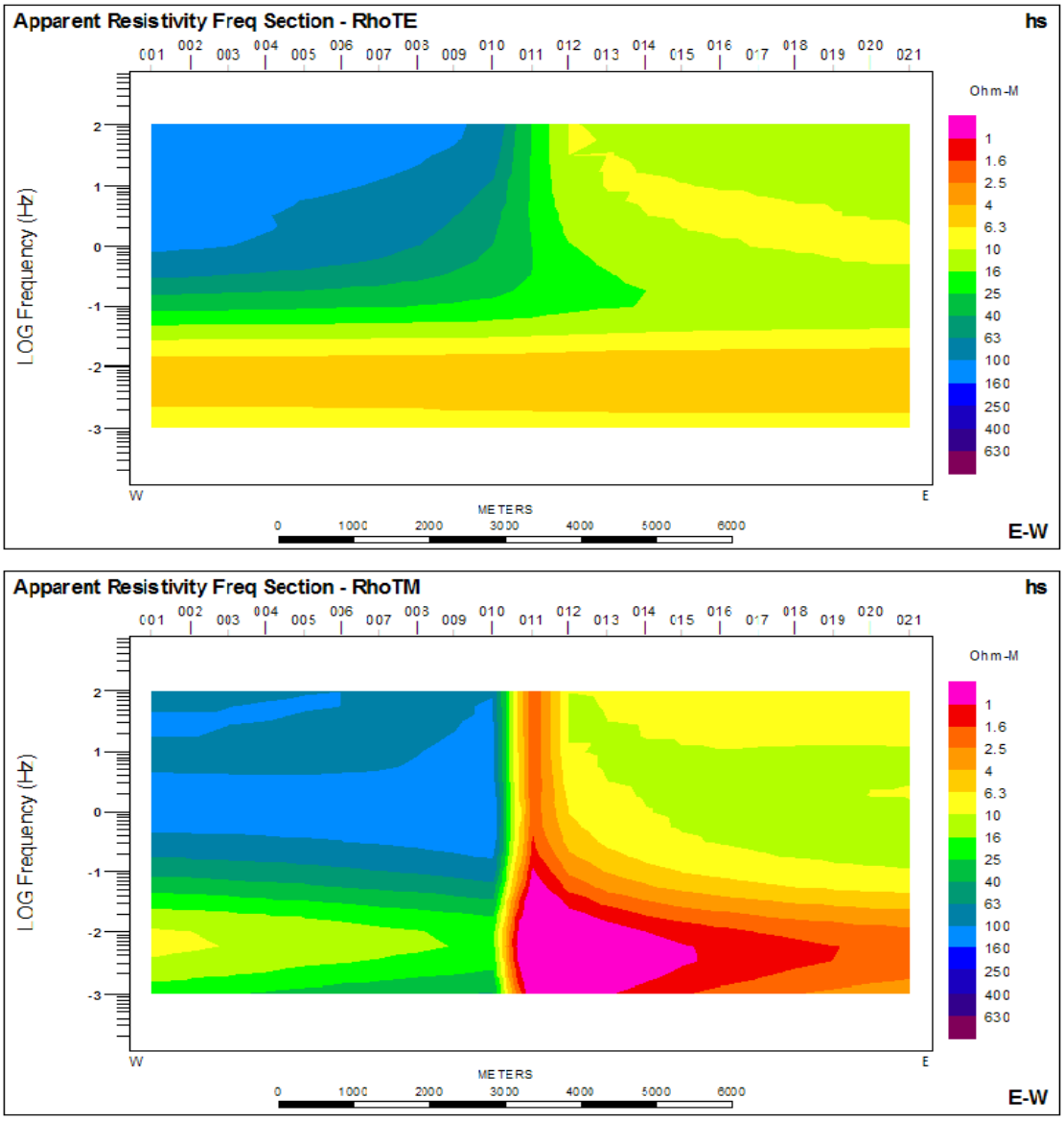
The following simple model demonstrates most of the critical 2D behaviours. The model consists of a 100 Ohm-m host with a 10 Ohm-m basin on the right. There is a 1 Ohm-m layer buried within the host and below the basin. The response is shown at two sites, one immediately on the resistive side of the basin contact and the other immediately on the conductive side of the contact.



The following observations summarize the behaviour of 2D MT responses:

- The apparent resistivity at high frequencies reflects the true shallow resistivity.
- The apparent resistivities converge at high frequencies to the true shallow resistivity.
- The divergence in apparent resistivities occurs at a higher frequency for the site on the resistive side of the contact. Because the skin depth is larger in the resistive media the site on the resistive side of the contact is effectively “closer” to the contact than the site on the conductive side of the contact. The TE mode is constrained to the range of physical resistivities actually present in the model
- The TE mode “volume averages” the intrinsic resistivity. The TM mode exhibits apparent resistivities outside the range of physical resistivities in the model. Note that for the site on the right the TM mode indicates resistivities below 1 Ohm-m.
- Both the TE and TM modes respond in tandem, at the same frequency, to resistivity structure under the site. At both sites both the TE and TM modes indicate the top and bottom of the 1 Ohm-m layer. While 1D inversion of the TE and TM modes would place different apparent depths to the 1 Ohm-m layer the response is at the same frequency in both modes indicating it is the response of one layer.
- The intrinsic resistivity of the 1 Ohm-m layer is difficult or impossible to discern. Without physical property data only the conductance of the layer can be resolved.

These effects can also be clearly seen in pseudo-sections of the TE and TM apparent resistivity response of the model:



The apparent resistivity data at each site have been contoured, as a function of frequency. The inherent smoothness of the TE section can be clearly discerned. The distinctive “undershoot” of the TM response on the conductive side of the contact can be clearly seen.

One of the key factors in multidimensional MT data is “static shifts”. The apparent resistivity sounding curves can be biased, up or down, by lateral resistivity contrasts too small to be resolved by the MT data. The curve is essentially DC shifted on the log-log apparent resistivity plot. This can be seen by examining the sounding curves from the previous 2D model. Assuming data had not been acquired above 1Hz the two sounding modes would be seen to be separated in the highest frequency data. Note that there are no static shift effects in the phase data.

Inversions and forward modeling are used to derive the subsurface resistivity structure from the data. The primary interpretation tools are 2D inversions. Problems emerge when the real world, complex, data are not consistent with the simplistic 2D assumptions. In a perfect world we would use modeling and inversion programs capable of reflecting the full complexity of the subsurface. However, in practice incorporating too much complexity in the modeling and inversion programs results in very coarse models which are incapable of resolving exploration targets. Instead, we must find ways to remove some of the complexity from the actual data. To this end, we have developed the Titan "EVA" data processing stream:

- Rotation to principal coordinates. The inversion algorithms presume that we have acquired a true geologic dip profile. In reality, geologic dip is often difficult to define, and seldom known prior to acquisition. However, because we have acquired full tensor data we can rotate our data to the geologic dip direction after acquisition.
- Eigenvector processing. 3D structures can introduce complex "rotations" of the electrical currents. These rotations produce effects, such as excessively steep resistivity curves and out-of-range phases, which would be impossible to fit with 2D modeling programs. By relaxing the assumption that the electric and magnetic fields are orthogonal, eigenvector analysis provides a unique and trivial methodology for simplifying complex 3D data.
- 1D inversion for curve fitting. Real data are often noisy, and inconsistent. Out-of-range phases are a typical example of features seen in real data that can not be fit using 2D inversion. It is often best to make use 1D inversion to make interpretative decisions about how to "best" fit the data, rather than letting the 2D inversion thrash trying to fit inconsistent data.

Once these data processing techniques have been completed the data are inverted. Generally, two inversions of the MT data are done. The first inversion uses an approach (a model norm) that explicitly looks for the "smoothest" model consistent with the data. This approach essentially finds the minimal subsurface structure consistent with the data. The second inversion uses an approach (a model norm) that looks for a model most consistent with the known geology.

For the geologically constrained inversion we use a proprietary approach developed by Dr. Phil Wannamaker. This approach uses the geologic constraints as a target, while not imposing any intrinsic smoothing on the inversion. The approach finds the maximum structural information, at the risk of sometimes including structure not required by the data. It represents an effort to extract the maximum exploration information from the data.

Both approaches are valid, and important. A smooth model approach to inversion can be viewed as finding the least possible useful exploration information. However, it does provide an independent assessment of what the data actually require. The geologically constrained inversion will provide a much sharper subsurface image. But it will also reproduce the known geology where the data does not require a change to the model. Without an independent smooth model inversion it can be hard to determine whether a geologically constrained inversion has confirmed the geologic interpretation, or simply doesn't have any information either way.

APPENDIX D – DIRECT CURRENT RESISTIVITY AND INDUCED POLRIZATION (DCIP) THEORY

INTRODUCTION

The resistivity is among the most variable of all geophysical parameters, with a range exceeding 10^6. Because most minerals are fundamentally insulators, with the exception of massive accumulations of metallic and submetallic ores (electronic conductors) which are rare occurrences, the resistivity of rocks depends primarily on their porosity, permeability and particularly the salinity of fluids contained (ionic conduction), according to Archie's Law. In contrast, the chargeability responds to the presence of polarizeable minerals (metals, submetallic sulphides and oxides, and graphite), in amounts as minute as parts per hundred. Both the quantity of individual chargeable grains present, and their distribution within subsurface current flow paths are significant in controlling the level of response. The relationship of chargeability to metallic content is straightforward, while the influence of mineral distribution can be understood in geologic terms by considering two similar, hypothetical volumes of rock in which fractures constitute the primary current flow paths. In one, sulphides occur predominantly along fracture surfaces. In the second, the same volume percent of sulphides are disseminated throughout the rock. The second example will, in general, have significantly lower intrinsic chargeability.

More detailed descriptions on the theory and application of the IP/Resistivity method can be found in Van Blaricom (1992) and Telford et al. (1976).

HALVERSON-WAIT CHARGEABILITY

The Titan-24 DCIP chargeability decays are described using the Halverson-Wait spectral model (Halverson et al., 1981), which is not well known, but is similar to the Cole-Cole model proposed by Pelton et al. (1978) which is a simple relaxation model that fits complex (frequency-dependant) resistivity results.

The time domain chargeability, originally proposed by Siegel (1959), is defined (Telford et al., 1976) as:

$$M = \frac{1}{V_C}\int_{t1}^{t2} V(t)dt$$

Where $V(t)$ is the residual or secondary voltage at a time t, that is decaying after the current is cut off, between time t_1 and t_2, with the steady voltage V_C during the current flow interval. The ratio $V(t)/V_C$ is expressed in millivolts per volt.

In the frequency domain, the "frequency effect" is defined as:

$$fe = (\rho_{DC} - \rho_{AC}) / \rho_{AC}$$

Where ρ_{DC} and ρ_{AC} are apparent resistivities measured at d.c. and "very high" frequency, usually in the 0.1 to 10 Hz range. The Cole-Cole model for the chargeability m, as defined by Pelton et al. (1978) is given by the following:

$$Z(\omega) = R_0\left[1 - m\left(1 - \frac{1}{1+(i\omega\tau)^C}\right)\right]$$

Where $Z(\omega)$ is the complex impedance, R_0 is the DC resistivity, m is the chargeability in volts per volt, ω is the angular frequency in Hz, τ is the time constant in seconds, and c is the frequency dependence (unitless). The latter two physical properties describe the shape of the decay curve in time domain or the phase spectrum in frequency domain, and commonly range between 0.01s to +100s and 0.1 to +0.5, respectively (Johnson, 1984).

The Halverson-Wait model was proposed by Halverson et al. (1981) as an extension to the Wait (1959) model of the impedance of "volume loading" of spheres, given by:

$$Z(\omega) = \frac{\rho}{G}\left[1 - 3v\left(1 - \frac{3\delta}{1+2\delta}\right)\right]$$

Where ***G*** is a geometric factor, ***ρ*** is the resistivity of the media, ***v*** is the volume loading (the volume fraction of chargeable "spheres"), δ is the sphere surface impedance. The Wait model was designed to provide an explanation of the differences in the shape of decay curves from different polarizeable targets, but does not describe very well the physical attributes of the rocks.

The Halverson-Wait model expands the Wait coated sphere IP model to include a new formulation of the sulphide-rock interface impedance, based on field studies and laboratory tests on samples. It is closely correlated to the Pelton et al. (1978) Cole-Cole model and is given by:

$$Z(\omega) = \frac{\rho}{G}\left[1 - 3v\left(1 - \frac{3/2}{1+r[i\omega]^K}\right)\right]$$

Where ***r*** is the sphere radius and is equivalent to τ - the Cole-Cole time constant ($r = \tau^K$). The ***v*** volume loading compares well to ***m*** – the Cole-Cole chargeability (see equation below) – and the exponent ***k*** is equal to ***c*** - the Cole-Cole frequency dependence (Halverson et al., 1983). For sulphide systems, the *r*-factor reflects the size or interconnection of the sulphide grains and the *k*-factor reflects the electrical characteristics of the sulphide surfaces. An example of time domain Halverson-Wait model responses is shown in Figure J.1.

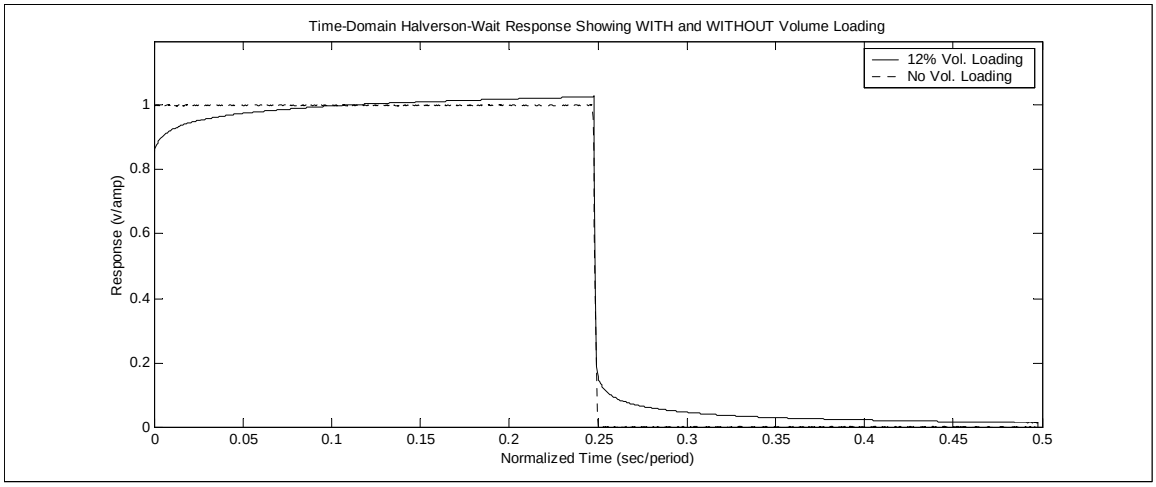


Figure J.1: Polarizeable versus Non-Polarizeable TDIP Response using Halverson-Wait Model

In practice the Titan chargeability decays are fit to a Halverson-Wait model. In order to solve for the volume loading v, the r-factor and k-factor are set to the standard (typical) Halverson-Wait values of 1.0 and 0.2, respectively. In the Halverson-Wait model the theoretical PFE (for infinite bandwidth), which equates to the theoretical chargeability in the Cole-Cole equation, is thereby defined by the volume loading:

$$PFE_0 = m_0 = \frac{9v}{(2+3v)}$$

and m is output in units of milliradians.

INVERSION THEORY

An excellent overview and introduction to both the philosophy and use of inversions in geophysics is available on the University of British Columbia (UBC) website (http://www.geop.ubc.ca/ubcgif/; Oldenburg et al., 1998).

Several points, detailed on the website, are crucial to understanding the Titan-24 approach to exploration:

- Inversion is a powerful 'tool', not a 'solution'.
- Inversion is not normally "unique". Given noisy and incomplete data of inherently limited resolution there are usually an 'infinite' range of models that 'fit' the data equally well. Recognition of this inherent non-uniqueness is why inversion must be viewed as a tool rather than a solution. Understanding and exploration of this non-uniqueness is an important part of the interpretive process.
- Inversion finds a model that 'fits' the data. The precise definition of 'fit' can be critical in the actual model that is found.
- The inversion depends on the data, and the data errors. The importance of the data errors is often overlooked.
- Inversion depends on a "model norm" – the mathematical definition of which model the inversion should try to find. This definition is almost as important as the actual data in determining the final inversion model.

Mathematically, inversion is the process of minimizing a function. The choice of which function to minimize ultimately defines the inversion model. Schematically, this function might be expressed:

$$\phi = \phi_d + \beta \phi_m = \text{(misfit)} + \beta\,\text{(model norm)}$$

$$0 < \beta < \infty \quad \beta \text{ is a constant}$$

This defines a function to be minimized that consists of some function that minimizes the data misfit, combined with some function that finds a "smooth" model. Beta represents a relative weighting between fitting the data and smoothing the model.

Clearly, the data misfit function must be defined in more detail. One approach might be:

$$\phi_d = \sum_{i=1}^{N} \left(\frac{F_i[m] - d_i^{obs}}{\varepsilon_i} \right)^2$$

This function defines the data misfit as the sum of the individual misfits squared, normalized by the errors associated with each data point. It is a very common, and stable, definition of the data misfit.

An important point not made on the UBC website is that the errors depend on many factors. The most common measure of data errors is simply the repeatability of the voltage and current measurements in the field. This may be misleading as there are also "errors" associated with electrode positioning, geologic complexity (2D vs 3D, but also coupling of shallow and deeper structure), and errors in the numerical calculation of model responses and inversion.

Another point not sufficiently detailed on the UBC site is the importance of not overestimating the data errors and fitting the data as closely as possible. Most geophysical techniques, but particularly electrical techniques, have large responses to shallow structure. This is expressed as "pant legs" in DC/IP, or "statics" in MT. The response to deep structure is generally a very subtle component of the data, compared to the sensitivity to shallow structure. Without excellent data, and an excellent match between the data and model response, the deep structure will not be imaged to the degree necessary for commercial exploration.

The model misfit function must also be defined in more detail. One of the most flexible definitions is the one used by UBC:

$$\phi_m(m,m_0)=\alpha_s\int_{vol}(m-m_0)^2dv+\alpha_x\int_{vol}\left(\frac{\partial(m-m_0)}{\partial x}\right)^2dv+\alpha_z\int_{vol}\left(\frac{\partial(m-m_0)}{\partial z}\right)^2dv$$

In this definition there are three components to the "model norm" (or "smoothness" constraint, or "regularization"), each of which contains an α constant (α_S, α_X, α_Z) that are commonly referred to as "alpha parameters". The first component is simply an overall difference between the model and a "target" model, the second component is a horizontal smoothness, and the third component is a vertical smoothness. The three "alpha" parameters (α_S, α_X, α_Z) represent a relative weighting of each component. A fourth variable, m_0, refers to the starting or reference model – either a half-space or geophysical constraint – that also has a profound influence on the model-misfit.

The UBC website provides an excellent example of the importance of selecting an appropriate "model norm", reproduced in Figure J.2

In this example the expected response of the top figure was computed. These 'data' were then inverted six times, using different "model norms" (α_S, α_X, α_Z, m_0). The lower six figures show the range of valid inversion models that can be produced. Note that six of these models are essentially mathematically equivalent, they all "fit" the data.

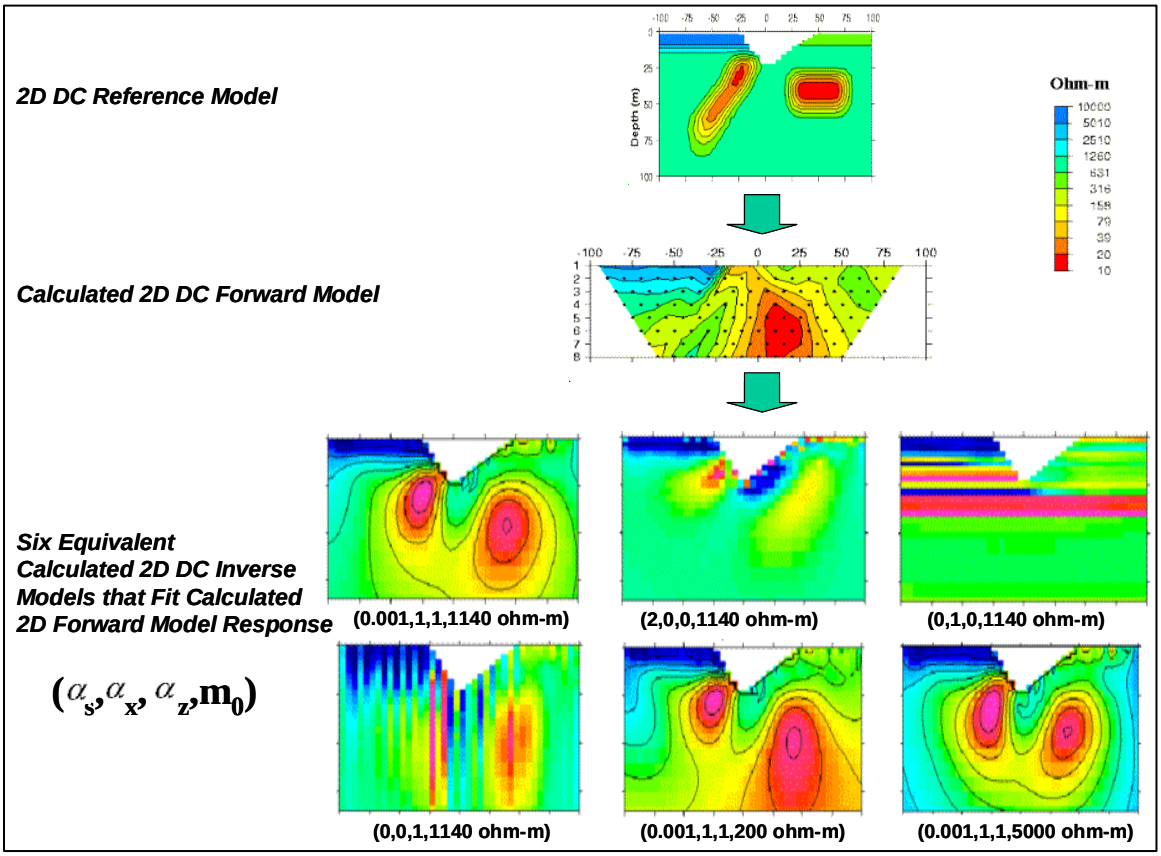


Figure J.2: Effects of Model Norm and Starting Model on Inversion Results (modified after Oldenburg, et al.,1998).

An important philosophy, driving much of the academic communities approach to inversion for the last two decades, is that the "best" model is the "smoothest" model consistent with the data. There are good reasons for taking this approach. However, from an exploration viewpoint this philosophy can be rephrased to "find the model with the least exploration value" – perhaps not reflecting the real goal of an exploration program.

Recently, several groups have taken major steps towards developing inversion approaches more tuned to exploration needs. Instead of using "smooth" model norms, they are being replaced with "focused (minimum transition zone) inversion, or smoothing to a geologic "target" model.

For exploration smoothing to a geologic target model makes sense. It requires good geologic control, and some understanding of the rock physical properties. There are three drawbacks to the geologic target approach:

- The geologic information is incomplete or inaccurate.
- Physical property data are incomplete.
- It is difficult to determine whether the geophysical data support the geologic model, or simply provide no information.

The most sensible approach is to combine smooth model inversion with geologic target inversion. For now, we are focusing on providing inversions using both approaches. It is up to the project geologist and geophysicist to review these inversions and develop a final interpretation.

APPENDIX E: TITAN INVERSION RESULTS

This appendix contains a description on the TITAN DCIP and MT data processing and inversion, as well as an outline on the inversion results for each individual model, including Quality Control and Assurance (QC/QA) comments.

2D DCIP Data Preprocessing:

For the inversions, the raw data was edited, including adjustment of data errors and removal of poor quality data, allowing the program to reach appropriate model misfits and consistent inversion models. The edition and preprocessing of the datasets included:

1. Filtering the raw data[1] using the ***DCIPSuper.exe*** program with the following "Quantec[2]" input parameters:
   - All the negative Vp values were excluded
   - All the high resistivity values were included
   - Small apparent resistivity values were excluded
   - All the high phase values where included
   - All low phase values were included
   - High Vp errors were included
   - High phase errors were included
   - Big apparent resistivity limit: 100 000 Ohm.meters
   - Small apparent resistivity limits: 0.001 Ohm.meters
   - Big phase limit: 100 mrads
   - Small phase limit: 0 mrads
2. Exclusion of the data points (for both the voltage and phase) with Vp errors higher than 5%.
3. Exclusion of negative phase data points (for the phase file only)
4. Exclusion of data points with phase errors >10mrads (for the phase file only).
5. Errors of 0.5 mrads added to the final phase data files for inversions.

[1] *Raw data contained in the digital files "Line#.csv".*
[2] *Quality Control Process passes all data thru except dipoles straddling current electrodes.*

2D DCIP Unconstrained Inversions:

The DC Resistivity and IP unconstrained inversion models were calculated using the ***UBC DCInv2D^{TM} 2D***[3] algorithm (Oldenburg & Li, 1994) and ***IPView-IIC***[4] platform.

Multiple unconstrained inversion models were produced in order to arrive at the final 2D inversion models. Smooth inversions were executed for both, the DC resistivity and IP datasets.

The Smooth DC and IP Inversion Models[5] were derived from setting the ***chi***[6] factor to NULL. The αs[7], αx and αy[8] parameters were also set to default (NULL). The data was further edited as necessary to achieve convergence with a final resulting chi factor of 1 or less. No Sharp Inversion Models were produced or included in this interpretation report.

One set of Smooth IP inversion models was derived assuming a homogenous half-space (conductivity distribution set to NULL). This model (calculated apparent chargeability distribution) was useful for defining and/or improving the interpretation of the chargeability models when the resulting IP inversions were distorted by incorporating a DC model with high resistivity gradients.

Three DC and IP models were derived as follow:

1. **Line L# smDC**: Smooth DC "Resistivity" inversions from inverting the voltage data (contained in the raw *L#.csv* file). The Smooth DC inversions were topographically corrected according to the Quantec inversion mesh (*L#_meshPLDP.txt*), and the elevation file (*L#_topo.dat*) from the GPS survey files.
2. **Line L# smIP**: Smooth IP "Chargeability" inversions from inverting the phase data (contained in the raw *L#.csv file*). The Smooth IP inversions used the Titan 2D conductivity model (derived from the Smooth DC "Resistivity" inversions), and were topographically corrected according to the Quantec inversion mesh (*L#_meshPLDP.txt*), and the elevation file (*L#_topo.dat*) from the GPS survey files.
3. **Line L# smIP nullcond**: Smooth IP "nullcond or half-space conductivity " inversions from inverting the phase data (contained in the raw *L#.csv file*). The Smooth IP "nullcond" inversions used the half-space conductivity, and were topographically corrected according to the Quantec inversion mesh (*L#_meshPLDP.txt*), and the elevation file (*L#_topo.dat*) from the GPS survey files.

[3] *UBC-Geophysical Inversion Facility (GIF): Department of Earth and Ocean Sciences at the University of British Columbia.*
[4] *IPView: Version 2.1.5 beta (Industrial imaging Co., Inc.); Written by B. Petrick and Licensed to Quantec Geoscience Ltd.*
[5] *The inversion models presented in this report are the most consistent models according to the degree of association with the DC and MT results and the available geological information. Additional inversion models are available in the Digital Archive attached to this Interpretation Report.*
[6] *The **chi** parameter controls the inversion misfit.*
[7] *The αs parameter controls the degree of closeness between the constructed model and the initial model.*
[8] *The αx and αy parameters control the horizontal and vertical smoothness of the model respectively.*

2D MT Data Preprocessing:

The initial data input into the Geotools database were line-station data, taken directly from the EDI archive[9]. The raw impedance tensor data span the 0.1 Hz to 10000 Hz bandwidth, with a data density of approximately 8 points per decade. Data points with high noise levels were removed from the Apparent Resistivity and Phase curves prior to inversion.

In some cases, low frequency data <1 Hz was not included in the inversion due to low signal-to-noise levels. High frequency (>1 kHz) phase data, not consistent with the resistivity data, was excluded.

1D MT Inversions:

One-dimensional (1D) inversions for each mode (XY and YX) of the processed data were generated for each site using the ***Occam 1D*** algorithm (Constable, S.C., R.L. Parker, and C.G. Constable, 1987). The 1D inversion is used to make interpretative decisions about how to "best" fit the data, and ensure that the apparent resistivity and phase are smooth and consistent.

The calculated apparent resistivities and phases from the 1D models are then interpolated to obtain 12 frequency responses per decade. Stitched 1D Determinant sections were also created.

2D MT Unconstrained Inversions:

The MT inverse models were calculated using the Geotools™ MT processing and model-inversion platform. Several MT 2D-PW inversions were run using different starting models ("RLM" smooth models and Stitched 1D Determinant sections), as well as different combinations of the data (TM phase, TM resistivity, TE phase and TE resistivity) before arriving at the final 2D models.

"RLM" smooth ("Mackie") models were constructed using the conjugate gradient algorithm (Rodi & Mackie, 2001)[10]. The inversion parameters for the Smooth "RLM" models used a maximum of 100 iterations, Tau set to 3, and a noise floor of 5%. The "Mackie" inversions were constructed using TM (phase + resistivity) data only.

The PW inversion mesh parameters used 50 single rows, and a regularization width/depth ratio of 0.1. The finite element and regularization meshes were constructed using frequencies at 10k, 1k, 100, 10 and 0.1 Hz, a column width of 40-50m (for smooth and PW, inversions respectively), 100 rows maximum and a minimum row-thickness of 10m.

The MT inversion models were calculated using the interpolated resistivity and phase curves, in the 10kHz to 0.1Hz bandwidth, assuming a 5% error for the resistivity and 3 degrees for the phase, at 4 to 6 equi-spaced frequencies per decade.

Two RLM models were derived as follow:

1. **L#_rlm1_it#***:* Unrotated Smooth inversions derived from inverting the 1D fit interpolated data, with no further edition and/or rotation of the principal components. "*rlm1*" uses the half-space resistivity (2500 Ohm.meters) as starting model, and were constructed using TM (phase + resistivity) data.
2. **L#_rlm2_it#:** Unrotated Smooth inversions derived from inverting the 1D fit interpolated data, with no further edition and/or rotation of the principal components. "*rlm2*" uses the half-space resistivity (2500 Ohm.meters) as starting model, and were constructed using TM (phase + resistivity) data.

[9] *Data Archive contained within "CA00491T Kirkland Lake_Upper Beaver Project "Geophysical Survey Logistics Report"; Written by:E. Martinez and J. Legault. October 2007.*
[10] *Rodi, W., and R.L. Mackie, 2001. Nonlinear conjugate gradients algorithm for 2-D magnetotelluric inversion: Geophysics, 66, 174-187.*

A total of three (3) PW models were derived as follow:

3. **L# pw1 it#:** Unrotated inversions derived from inverting the 1D fit interpolated data, with no further edition and/or rotation of the principal components. *PW1* models used the "*rlm1*" smooth inversions as starting models, and were constructed using TM (phase + resistivity) data.
4. **L# pw2 it#:** Unrotated inversions derived from inverting the 1D fit interpolated data, with no further edition and/or rotation of the principal components. *PW2* models used the "*rlm2*" smooth inversions as starting models, and were constructed using TM (phase + resistivity) and TE (phase) data.
5. **L# pw4 it#:** Unrotated inversions derived from inverting the 1D fit interpolated data, with no further edition and/or rotation of the principal components. *PW4* models used the Stitched 1D Determinant inversions as starting models, and were constructed using TM (phase + resistivity) data.

It is useful to review the actual data input into the 2D inversions and all the raw data, which is available in the Project Logistical Report submitted previously. Only the final models of the inversion results are shown in this appendix. Note that the inversion models presented in this appendix are not always derived from the final iteration of the inversion program.

The following pages will present a set of six-figures per survey line with the exception of line kl-2, containing the Raw Data and the DCIP and MT inversion results, in ascending order as:

a) 2D DC & IP Unconstrained Inversion Results with Observed Data and Calculated Models), (all lines),

b) 2D IP Unconstrained Inversion Results with Observed Data and Calculated Models (using homogeneous conductivity), (all lines),

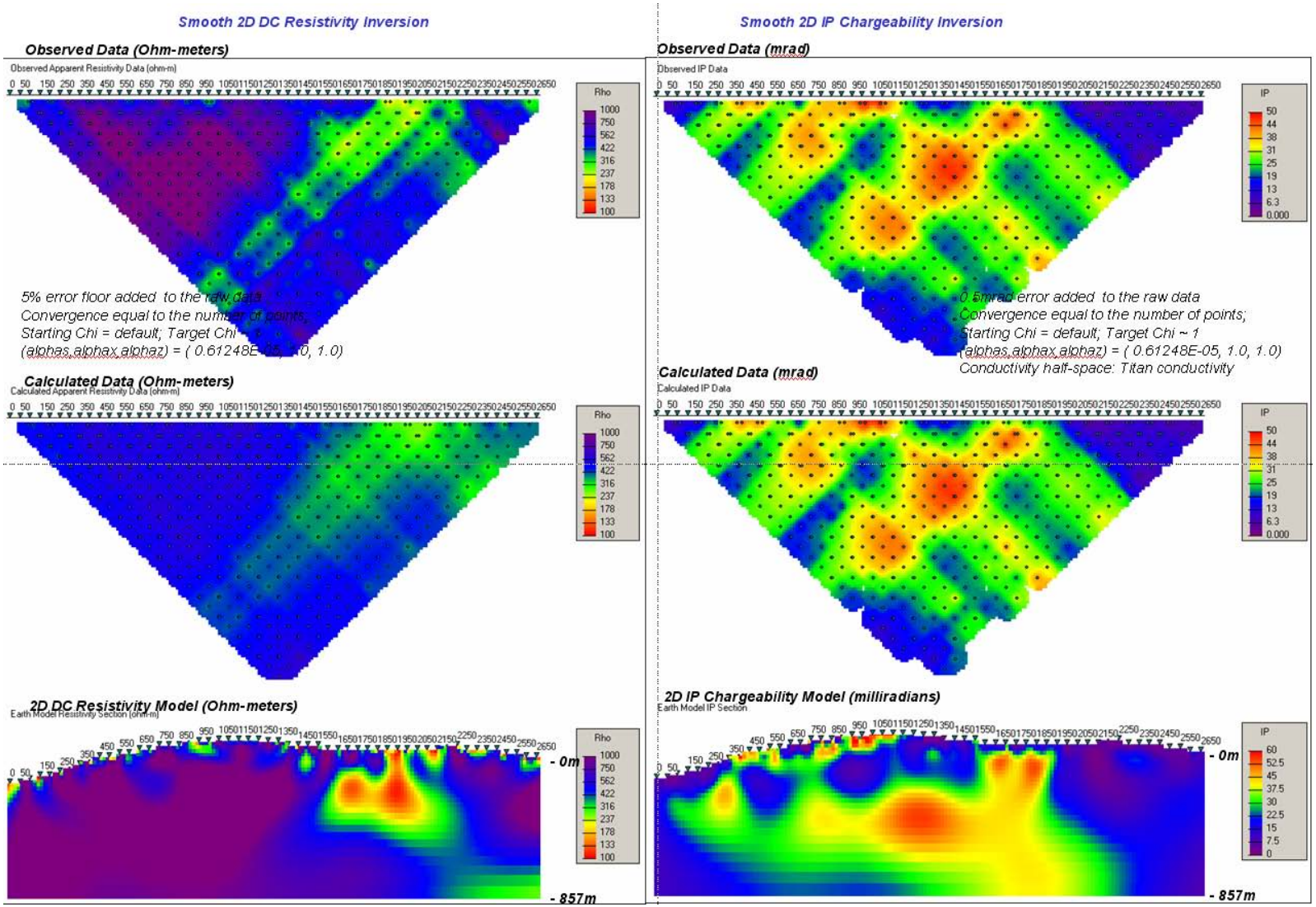
c) Raw MT (TM & TE) Frequency Profiles (rho range: 100 to 100,000 ohm-m, phase range: 180 to –180 degrees), (lines kl-4 and kl-6 only)

d) 2D MT Unrotated Raw Data (left) and Stitched 1D Models (right), (lines kl-4 and kl-6 only),

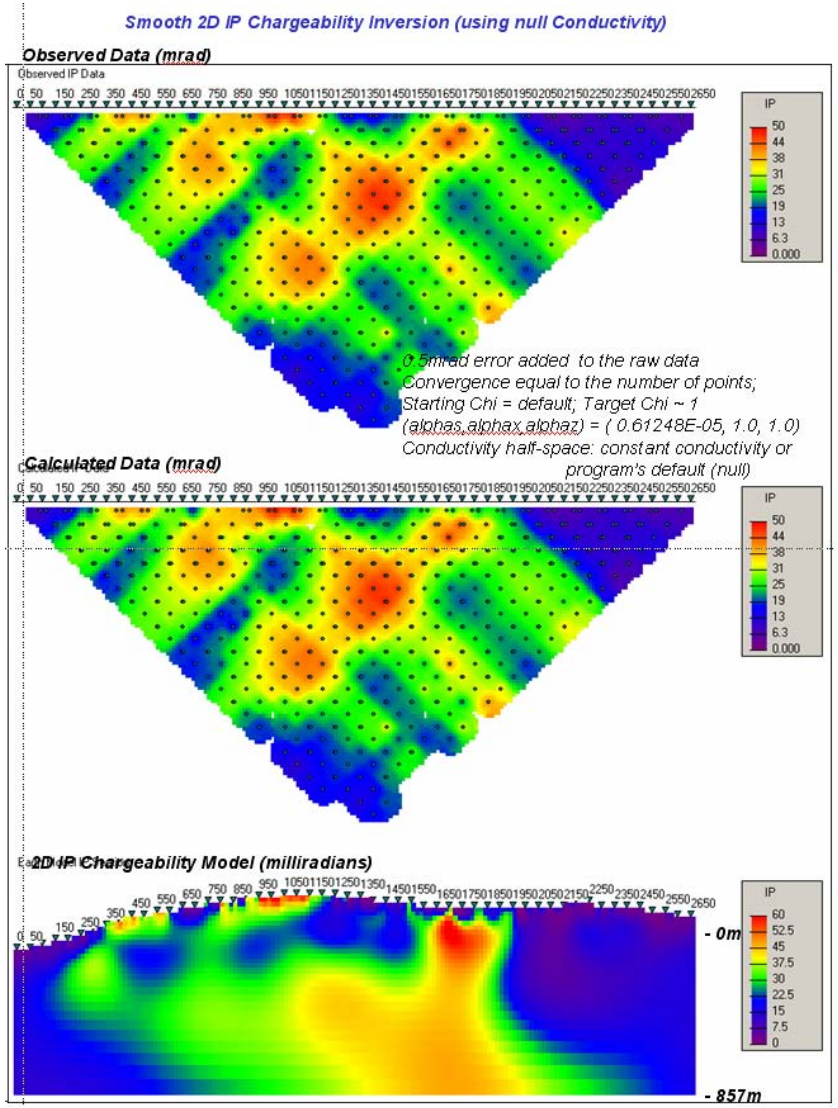
e) 2D-MT RLM and PW Resistivity Inversion Models (derived using the RLM models), (lines kl-4 and kl-6 only),

f) Stitched 1D Determinant and 2D-MT PW Resistivity Inversion Models (derived using the Stitched 1D Determinant), (lines kl-4 and kl-6 only).

Line KL-2

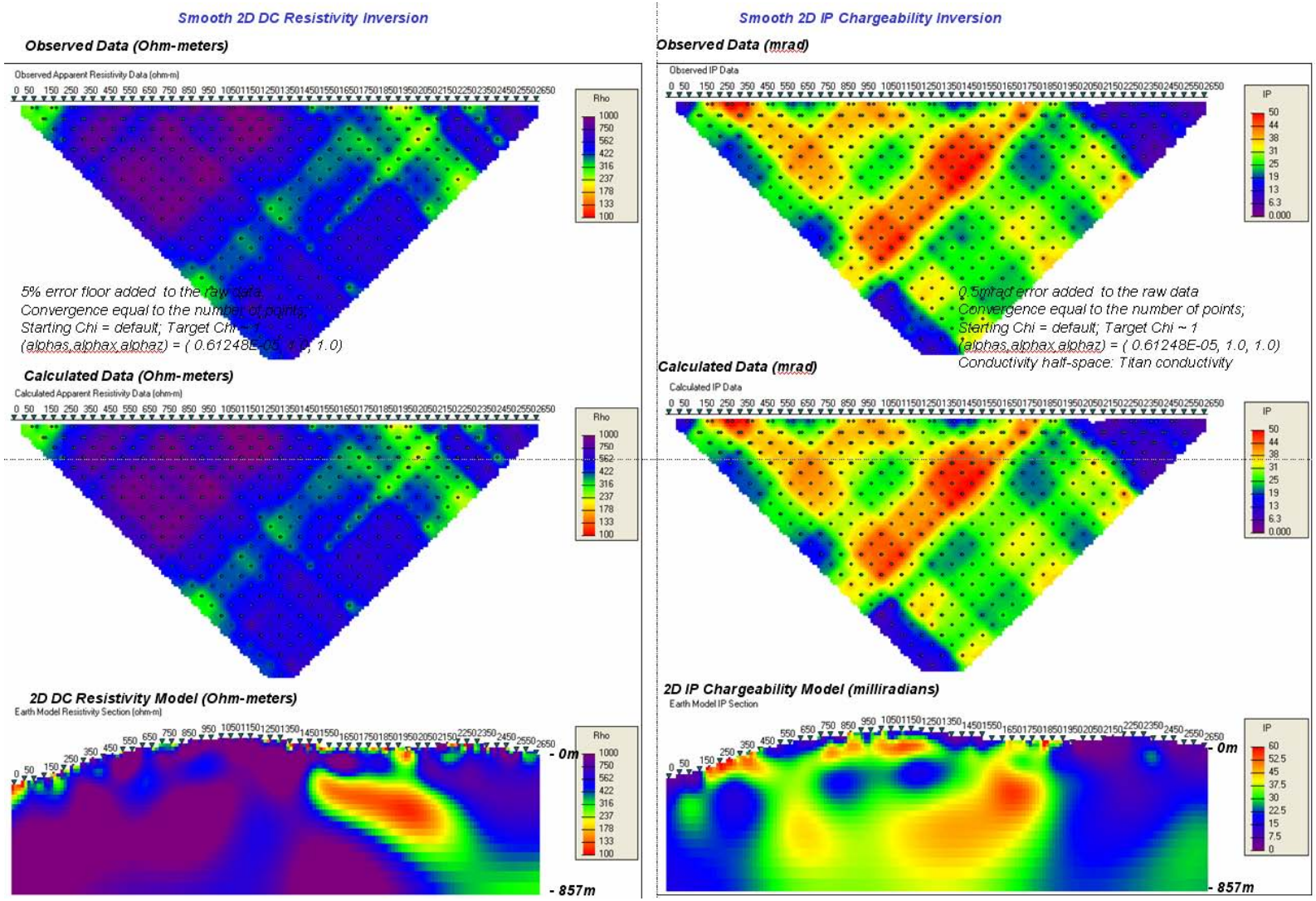


Line KL-2: a) 2D DC & IP Unconstrained Inversion Results with Observed Data and Calculated Models

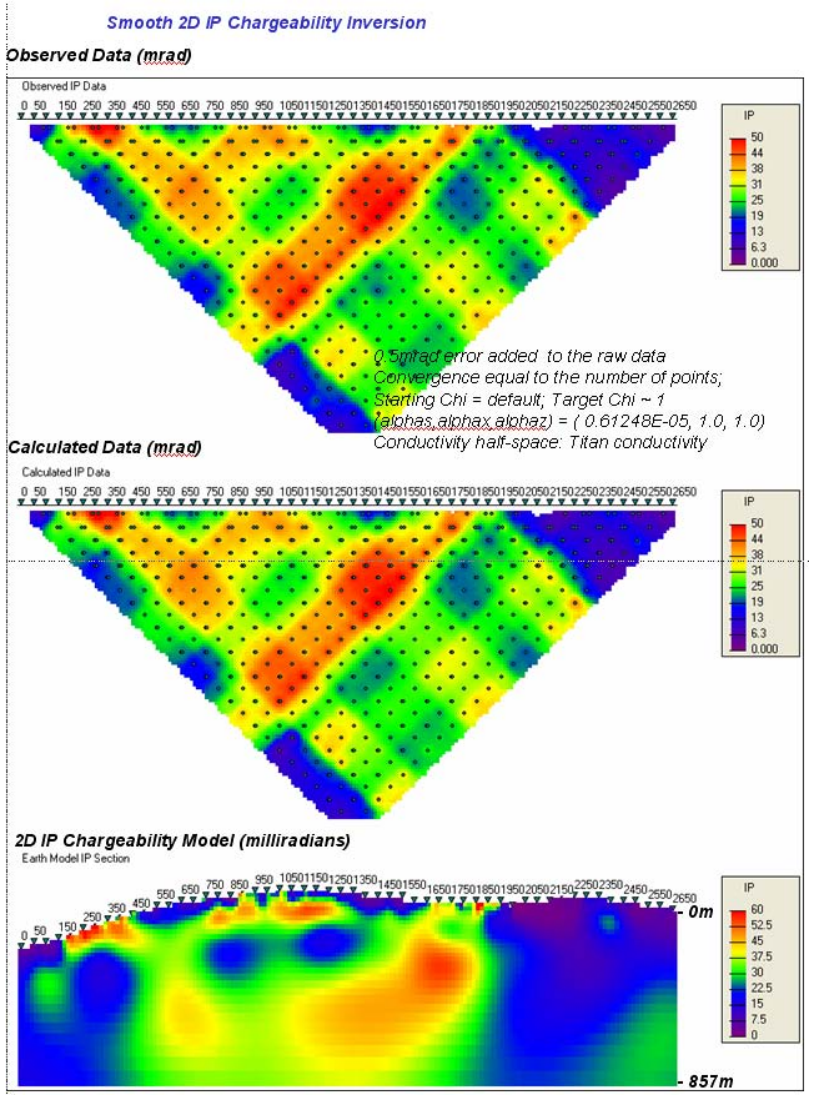


Line KL-2: b) 2D IP Unconstrained Inversion Results with Observed Data and Calculated Models (using homogeneous conductivity)

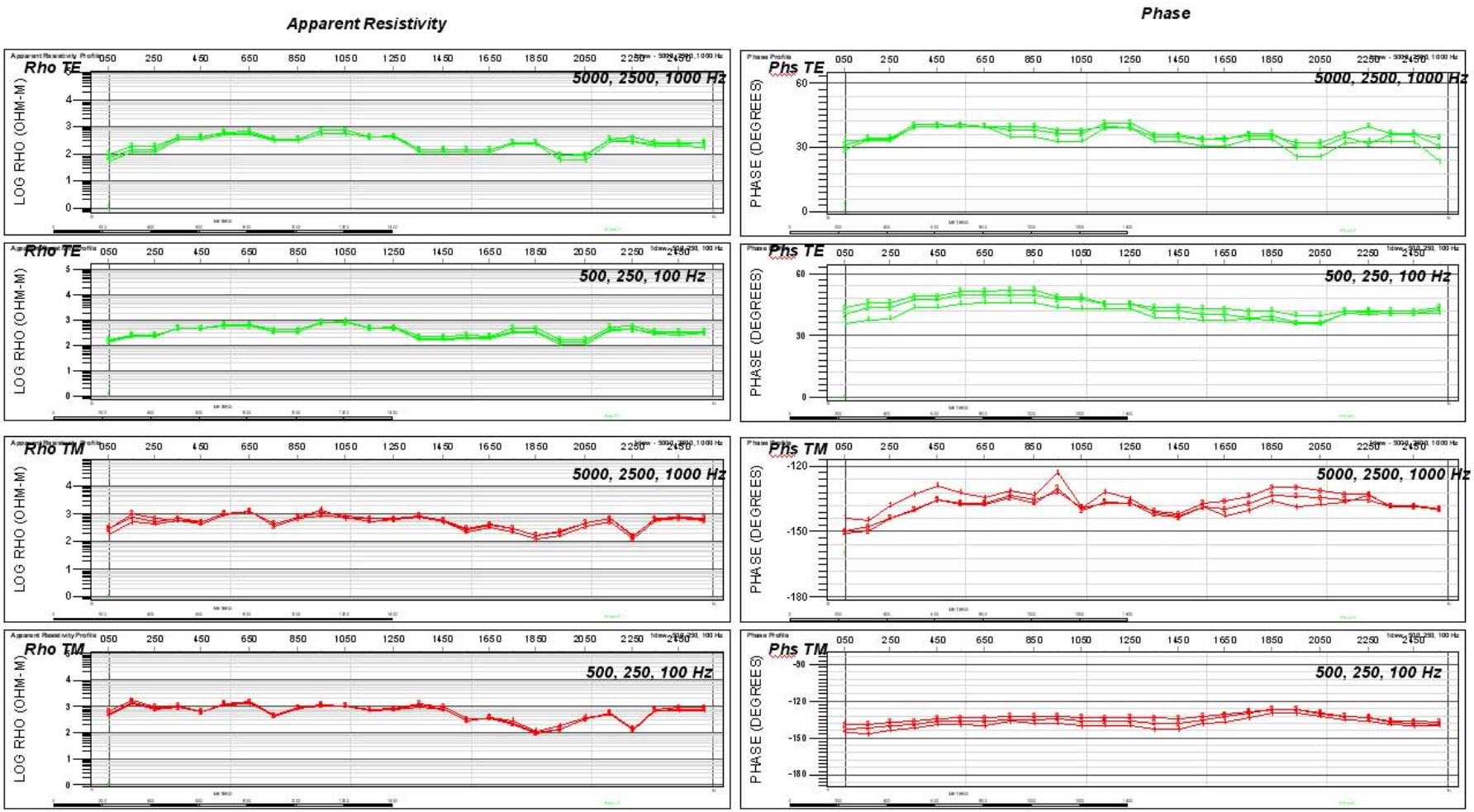
Line KL-4



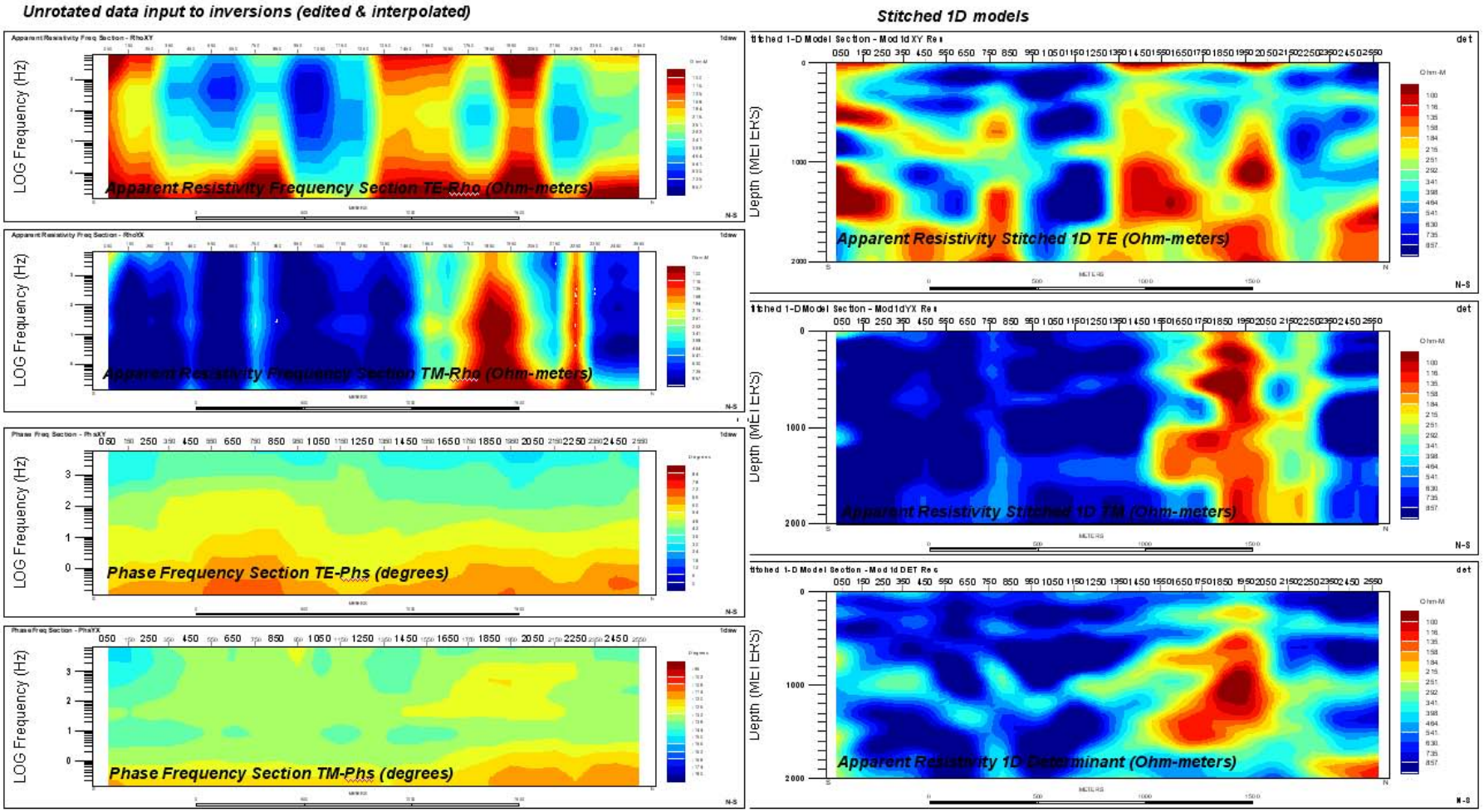
Line KL-4: a) 2D DC & IP Unconstrained Inversion Results with Observed Data and Calculated Models



Line KL-4: b) 2D IP Unconstrained Inversion Results with Observed Data and Calculated Models (using homogeneous conductivity)

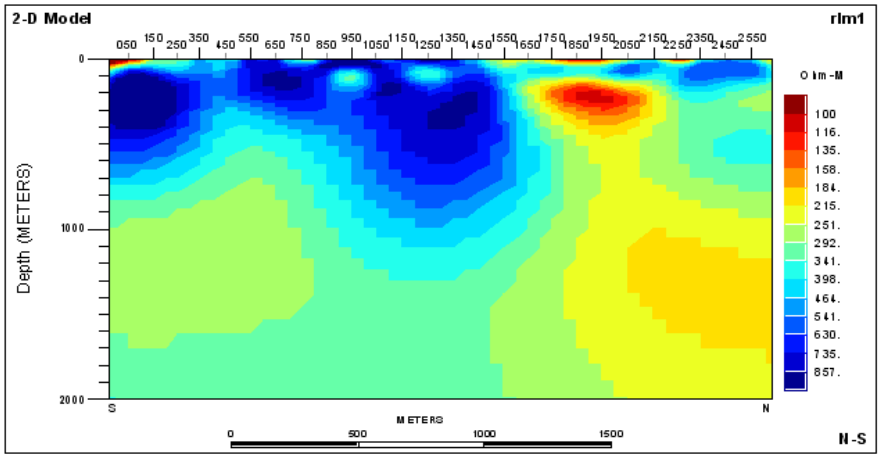


Line KL-4: c) Raw MT (TM & TE) Frequency Profiles (rho range: 100 to 100,000 ohm-m, phase range: 180 to –180 degrees)

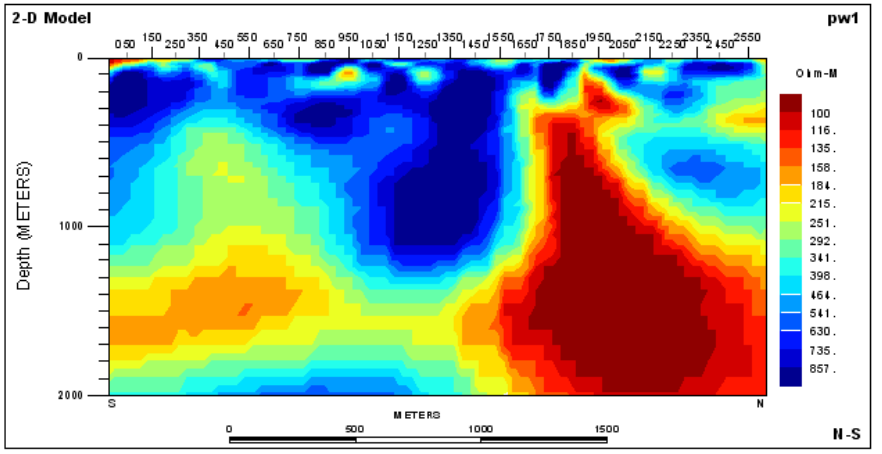


Line KL-4: d) 2D MT Unrotated Raw Data (left) and Stitched 1D Models (right)

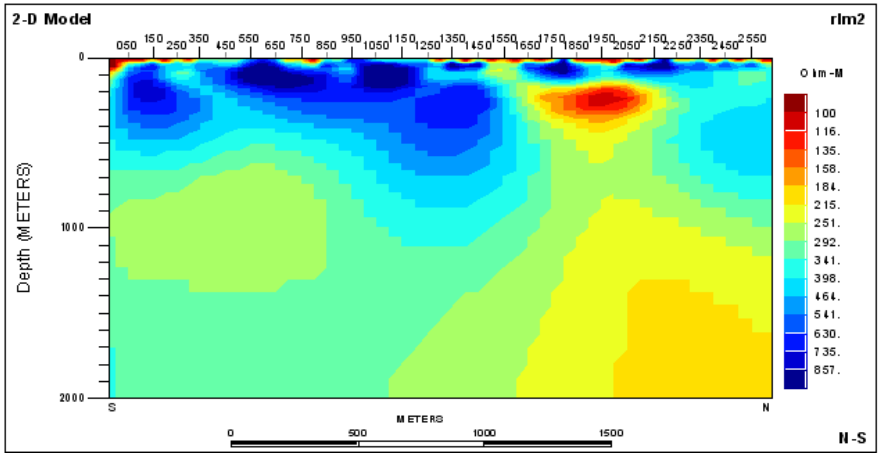
2D MT RLM1 Resistivity Model (ohm-m)
Starting model: Half space 2500 Ohm.meters
Input data: TM (Phs+Rho)



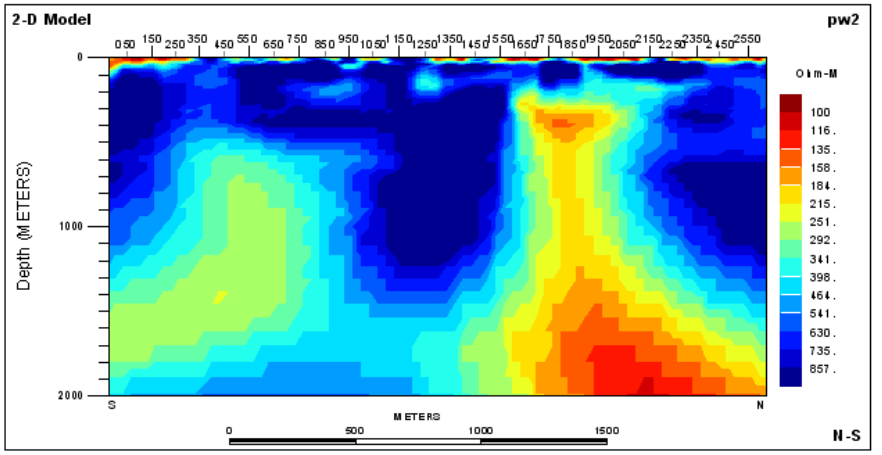
2D MT PW1 Resistivity Model (ohm-m)
Starting model: rlm model
Input data: TM (Phs+Rho)



2D MT RLM2 Resistivity Model (ohm-m)
Starting model: Half space 2500 Ohm.meters
Input data: TM (Phs+Rho) and TE (Phs)

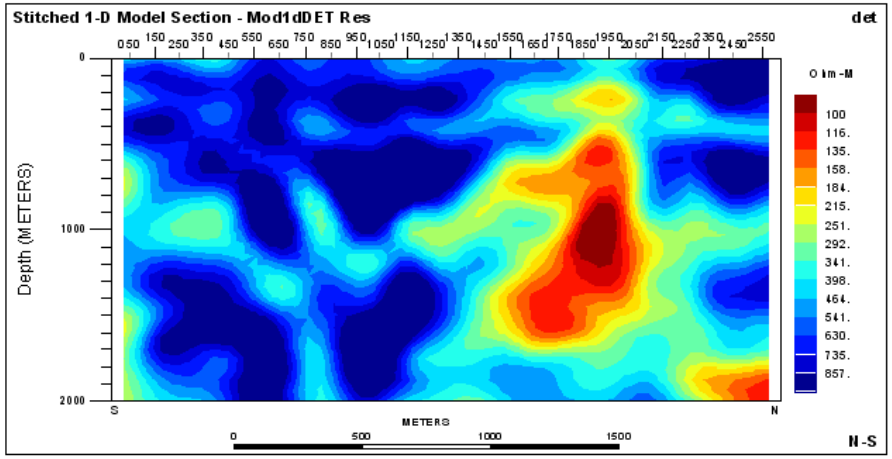


2D MT PW2 Resistivity Model (ohm-m)
Starting model: rlm model
Input data: TM (Phs+Rho) and TE (Phs)

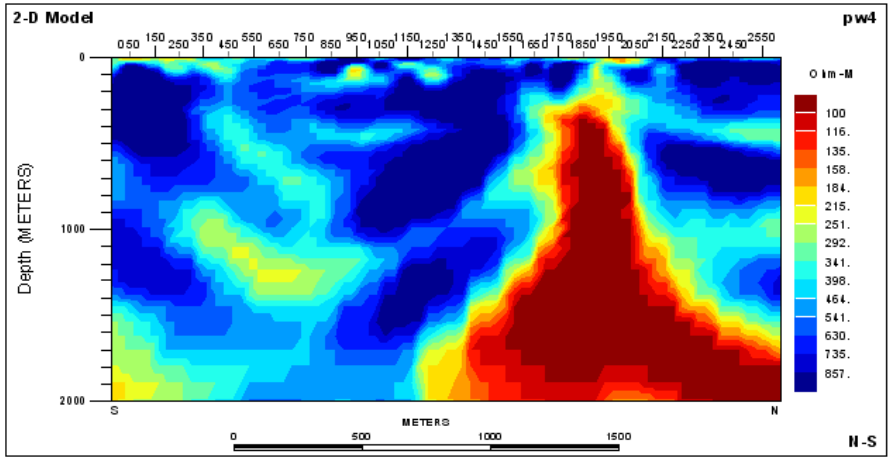


Line KL-4: e) 2D-MT RLM and PW Resistivity Inversion Models (derived using the RLM models)

1D Stitched Determinant Model (ohm-m)

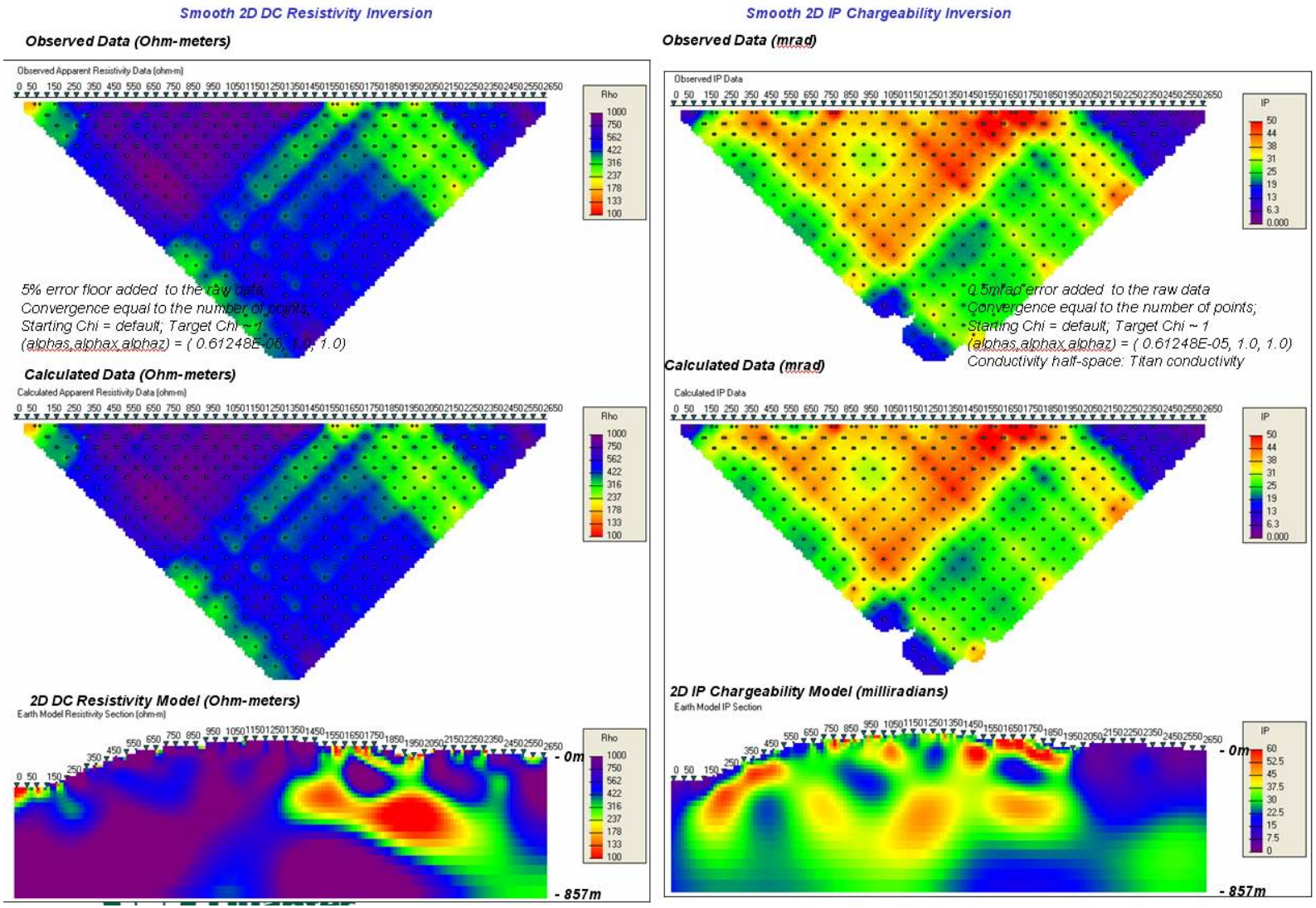


2D MT PW4 Resistivity Model (ohm-m)
Starting model: Stitched 1D Determinant model
Input data: TM (Phs+Rho)

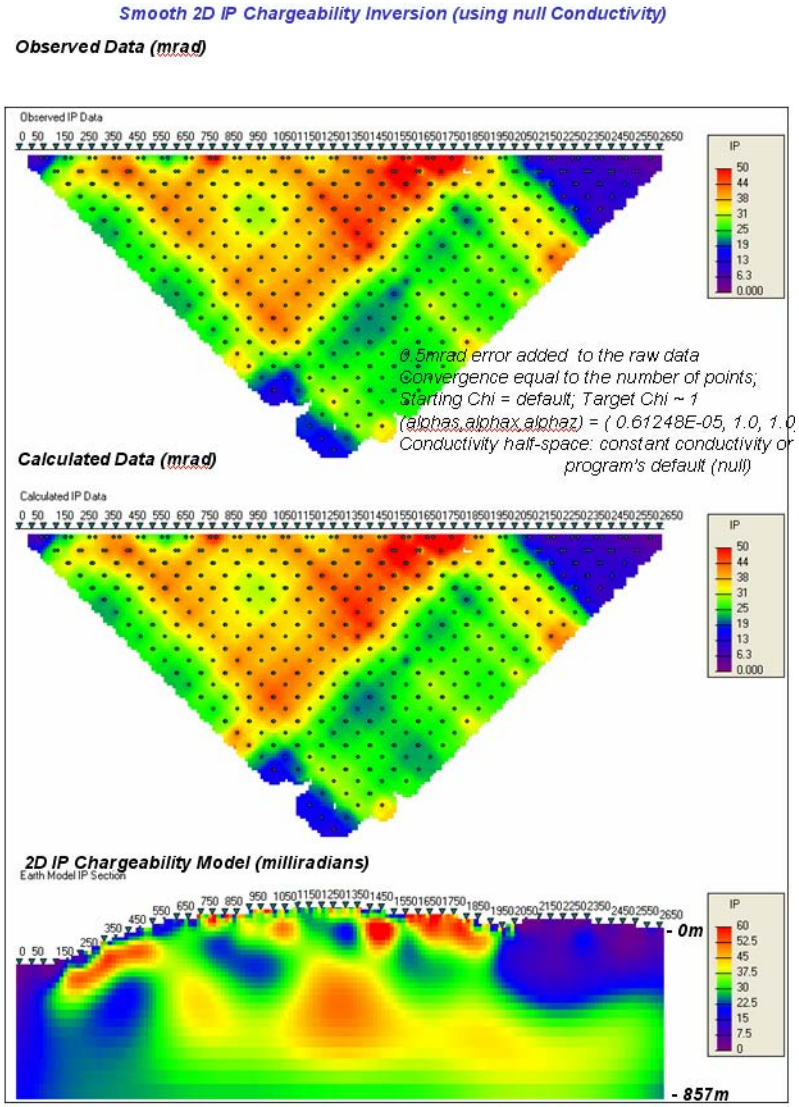


Line KL-4: f) Stitched 1D Determinant and 2D-MT PW Resistivity Inversion Models (derived using the Stitched 1D Determinant)

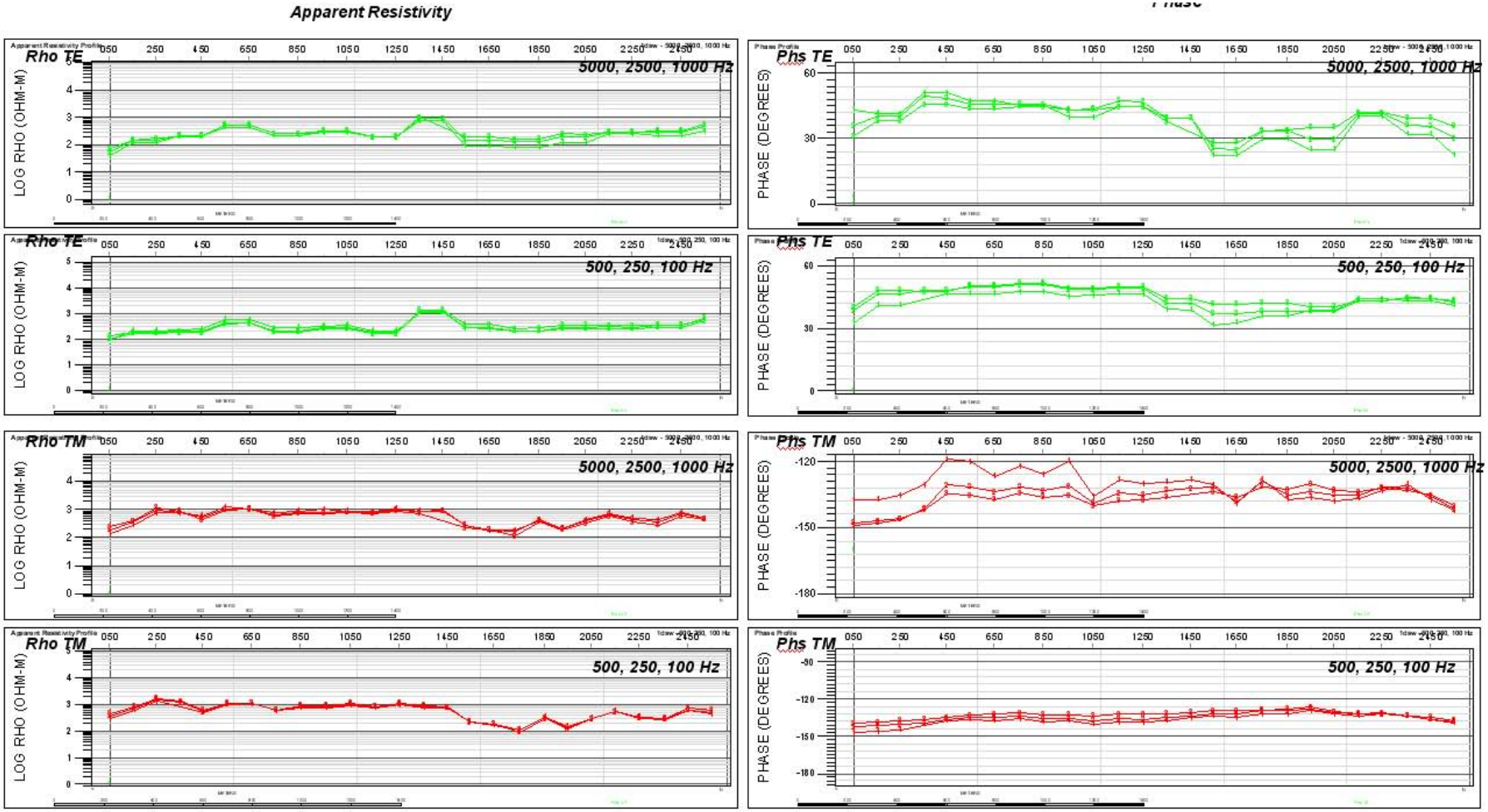
Line KL-6



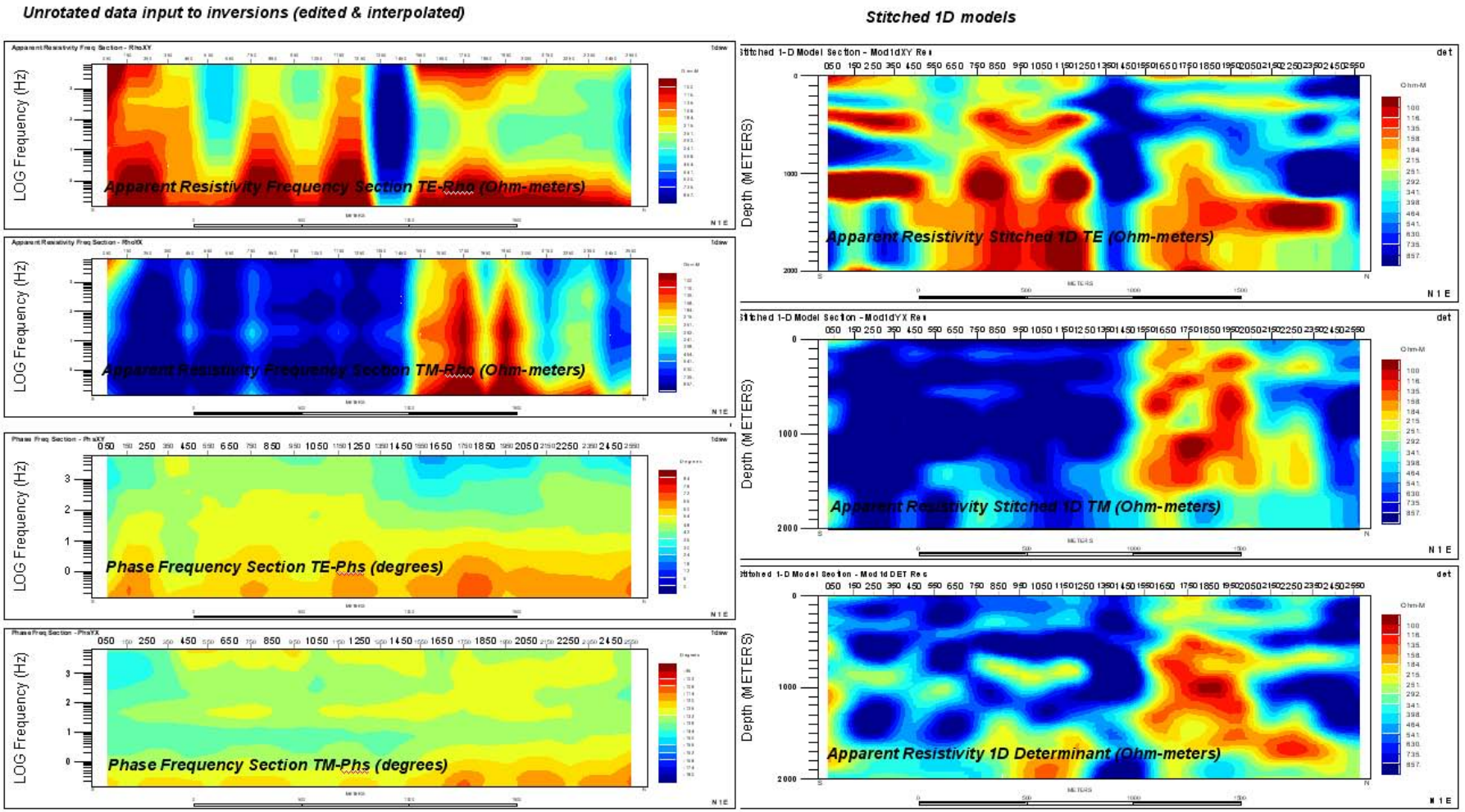
Line KL-6: a) 2D DC & IP Unconstrained Inversion Results with Observed Data and Calculated Models



Line KL-6: b) 2D IP Unconstrained Inversion Results with Observed Data and Calculated Models (using homogeneous conductivity)

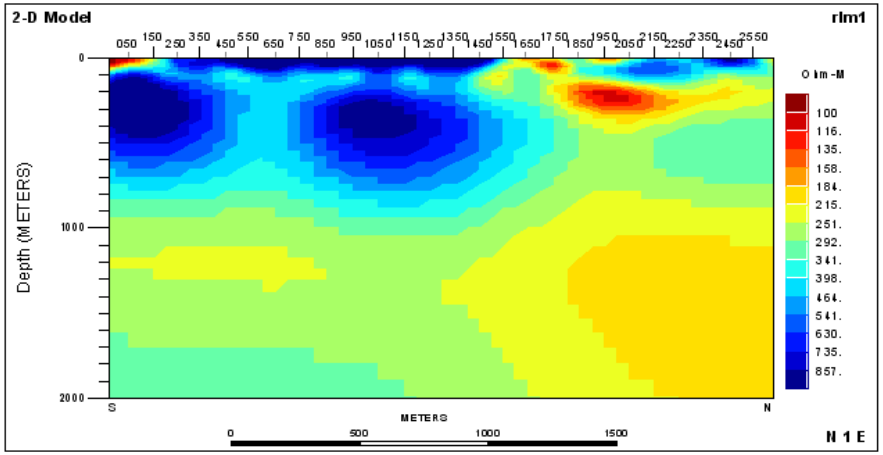


Line KL-6: c) Raw MT (TM & TE) Frequency Profiles (rho range: 100 to 100,000 ohm-m, phase range: 180 to –180 degrees)

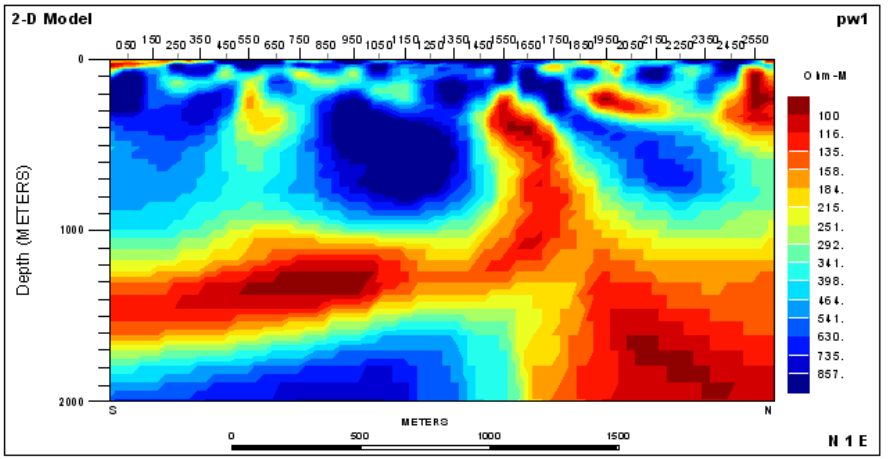


Line KL-6: d) 2D MT Unrotated Raw Data (left) and Stitched 1D Models (right)

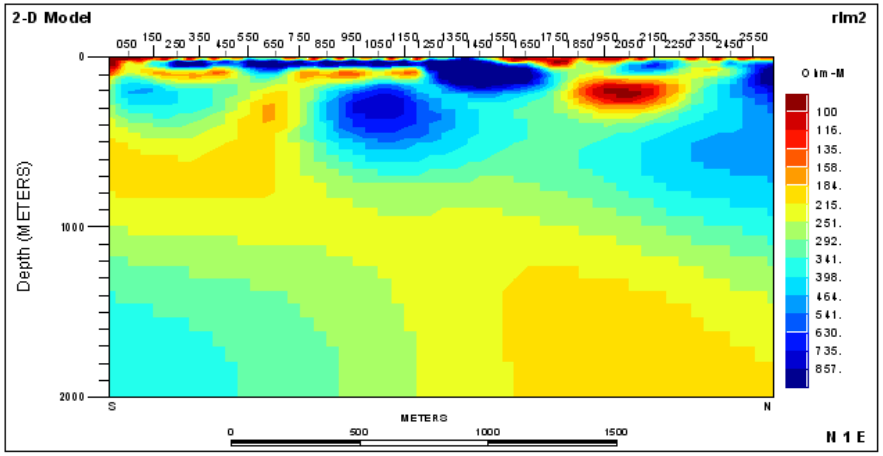
2D MT RLM1 Resistivity Model (ohm-m)
Starting model: Half space 2500 Ohm.meters
Input data: TM (Phs+Rho)



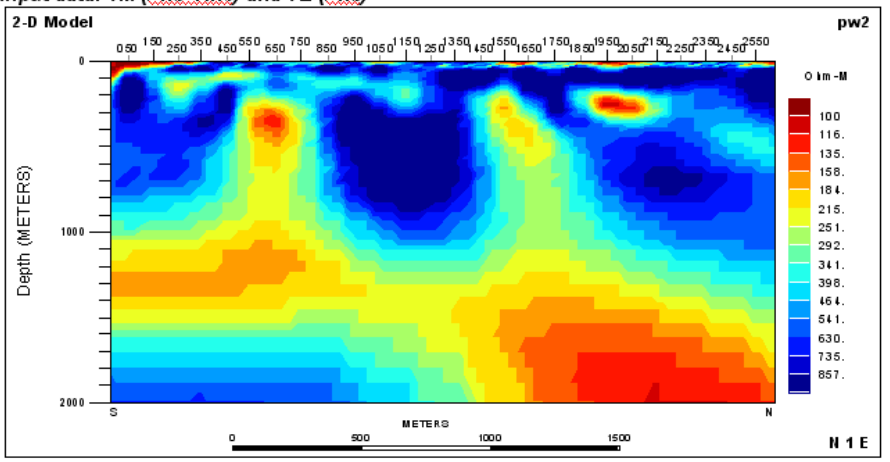
2D MT PW1 Resistivity Model (ohm-m)
Starting model: rlm model
Input data: TM (Phs+Rho)



2D MT RLM2 Resistivity Model (ohm-m)
Starting model: Half space 2500 Ohm.meters
Input data: TM (Phs+Rho) and TE (Phs)

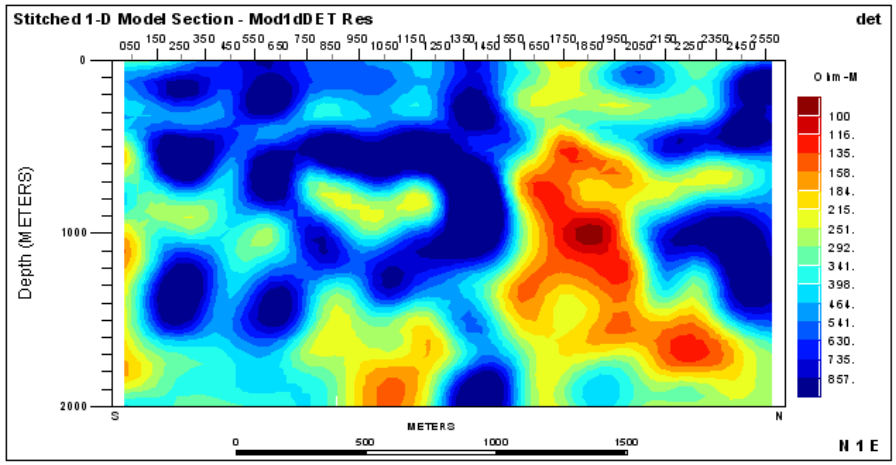


2D MT PW2 Resistivity Model (ohm-m)
Starting model: rlm model
Input data: TM (Phs+Rho) and TE (Phs)

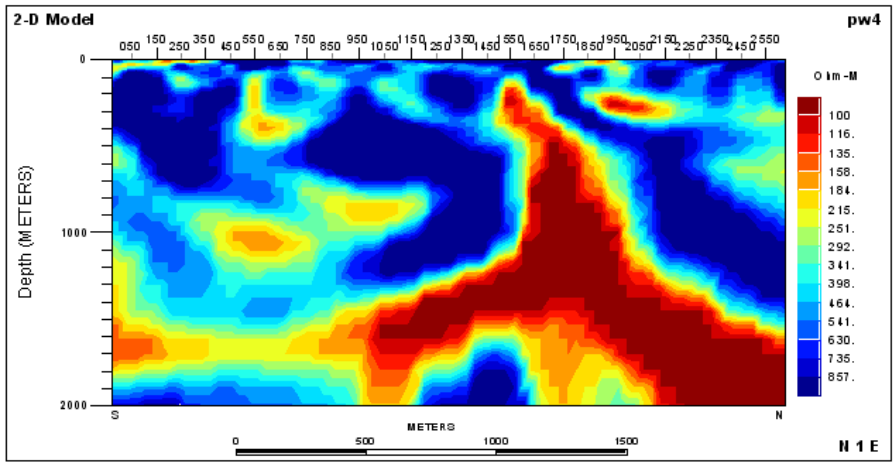


Line KL-6: e) 2D-MT RLM and PW Resistivity Inversion Models (derived using the RLM models)

1D Stitched Determinant Model (ohm-m)



2D MT PW4 Resistivity Model (ohm-m)
Starting model: Stitched 1D Determinant model
Input data: TM (Phs+Rho)



Line KL-6: f) Stitched 1D Determinant and 2D-MT PW Resistivity Inversion Models (derived using the Stitched 1D Determinant)

APPENDIX F. LIST OF MAPS[1]

GLOSSARY OF TERMS

SMDC – SMOOTH DIRECT CURRENT RESISTIVITY

SMIP – SMOOTH INDUCED POLARIZATION

NULLCOND – UBC INVERSION MODEL USING THE HALF SPACE CONDUCTIVITY AS REFERENCE

RLM – SMOOTH CONJUGATE GRADIENT 2D MT INVERSION MODEL "MACKIE"

PW – PLANE WAVE MT INVERSION MODEL

IT# – ITERATION NUMBER

TITAN 2D CROSS-SECTIONS (MAPS IN OASISMONTAJ FORMAT)

PAGE	MAP TYPE	Drawing Name (Line#maptype.map)
G1	Unconstrained UBC Smooth 2D DC Inversion Model	KL-2_smDC.map
G2	Unconstrained UBC Smooth 2D IP Inversion Model	KL-2_smIP.map
G3	Unconstrained UBC Smooth 2D DC Inversion Model	KL-4_smDC.map
G4	Unconstrained UBC Smooth 2D IP Inversion Model	KL-4_smIP.map
G5	Unconstrained PW (Unrotated TM model) 2D MT Resistivity (using starting model from 2D MT Smooth Models/rlm)	KL-4_pw1_it20.map
G6	Unconstrained UBC Smooth 2D DC Inversion Model	KL-6_smDC.map
G7	Unconstrained UBC Smooth 2D IP Inversion Model	KL-6_smIP.map
G8	Unconstrained PW (Unrotated TM model) 2D MT Resistivity (using starting model from 2D MT Smooth Models/rlm)	KL-6_pw1_it20.map

DEPTH LEVEL PLAN MAPS (MAPS IN OASISMONTAJ FORMAT)

PAGE	MAP TYPE	Drawing Name (Line#maptype.map)
G9	2D Resistivity (Z=50m) - Unconstrained UBC Smooth 2D Resistivity	2D DC at 50m.map
G10	2D Chargeability (Z=50m) - Unconstrained UBC Smooth 2D IP Chargeability	2D IP at 50m.map
G11	2D Resistivity (Z=50m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)	2D PW1 MT at 50m.map
G12	2D Resistivity (Z=100m) - Unconstrained UBC Smooth 2D Resistivity	2D DC at 100m.map
G13	2D Chargeability (Z=100m) - Unconstrained UBC Smooth 2D IP Chargeability	2D IP at 100m.map
G14	2D Resistivity (Z=100m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)	2D PW1 MT at 100m.map
G15	2D Resistivity (Z=150m) - Unconstrained UBC Smooth 2D Resistivity	2D DC at 150m.map

[1] For details on other inversion models and Maps refer to ***Appendix E "TITAN-24 Inversion Results", and "Digital Archive HDD"***. All section maps are grouped and archived in separated folders according to their line numbers.

G16	**2D Chargeability (Z=150m) - Unconstrained UBC Smooth 2D IP Chargeability**	**2D IP at 150m.map**
G17	**2D Resistivity (Z=150m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)**	**2D PW1 MT at 150m.map**
G18	**2D Resistivity (Z=200m) - Unconstrained UBC Smooth 2D Resistivity**	**2D DC at 200m.map**
G19	**2D Chargeability (Z=200m) - Unconstrained UBC Smooth 2D IP Chargeability**	**2D IP at 200m.map**
G20	**2D Resistivity (Z=200m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)**	**2D PW1 MT at 200m.map**
G21	**2D Resistivity (Z=300m) - Unconstrained UBC Smooth 2D Resistivity**	**2D DC at 300m.map**
G22	**2D Chargeability (Z=300m) - Unconstrained UBC Smooth 2D IP Chargeability**	**2D IP at 300m.map**
G23	**2D Resistivity (Z=300m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)**	**2D PW1 MT at 300m.map**
G24	**2D Resistivity (Z=400m) - Unconstrained UBC Smooth 2D Resistivity**	**2D DC at 400m.map**
G25	**2D Chargeability (Z=400m) - Unconstrained UBC Smooth 2D IP Chargeability**	**2D IP at 400m.map**
G26	**2D Resistivity (Z=400m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)**	**2D PW1 MT at 400m.map**
G27	**2D Resistivity (Z=600m) - Unconstrained UBC Smooth 2D Resistivity**	**2D DC at 600m.map**
G28	**2D Chargeability (Z=600m) - Unconstrained UBC Smooth 2D IP Chargeability**	**2D IP at 600m.map**
G29	**2D Resistivity (Z=600m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)**	**2D PW1 MT at 600m.map**
G30	**2D Resistivity (Z=800m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)**	**2D PW1 MT at 800m.map**
G31	**2D Resistivity (Z=1000m/PW MT Model) - Unconstrained PW 2D MT Resistivity (Unrotated TM Model)**	**2D PW1 MT at 1000m.map**

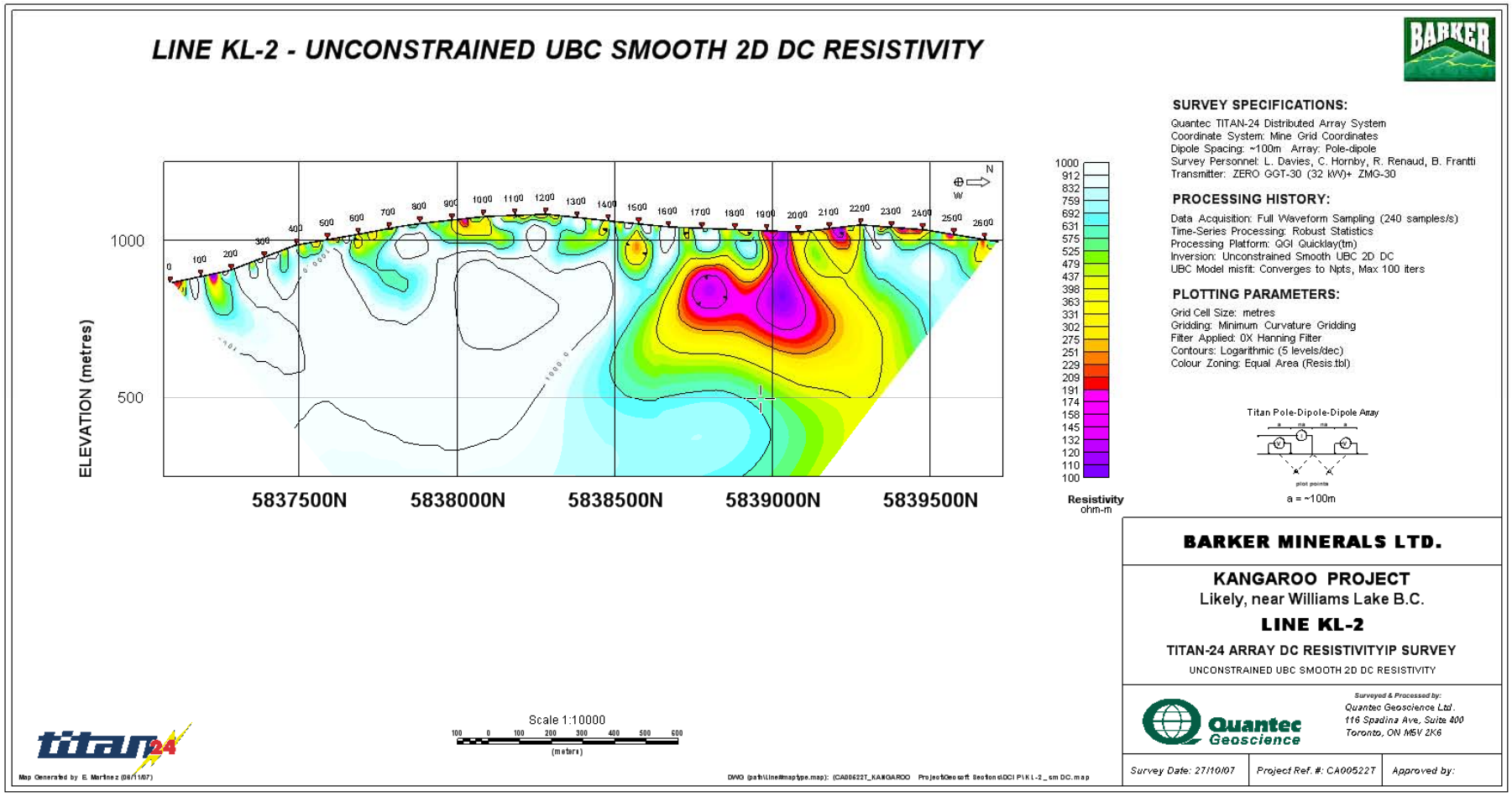
INTERPRETATION PLAN MAPS (MAPS IN OASISMONTAJ FORMAT)

PAGE	MAP TYPE	**Drawing Name** (Line#maptype.map)
G32	**Titan-24 Geophysical Interpretation Plan Map (over 2D Chargeability at 50m depth)**	**Interpretation_Plan_at_50m_depth.map**
G33	**Titan-24 Geophysical Interpretation Plan Map (over 2D Chargeability at 400m depth)**	**Interpretation_Plan_at_400m_depth.map**
G34	**Titan-24 Geophysical Interpretation Plan Map (over 2D PW MT Resistivity at 50m depth)**	**Interpretation_Plan_at_1000m_depth.map**

APPENDIX G: OASIS SECTIONS AND PLAN MAPS[1]

CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\DCIP\KL-2_smDC.map

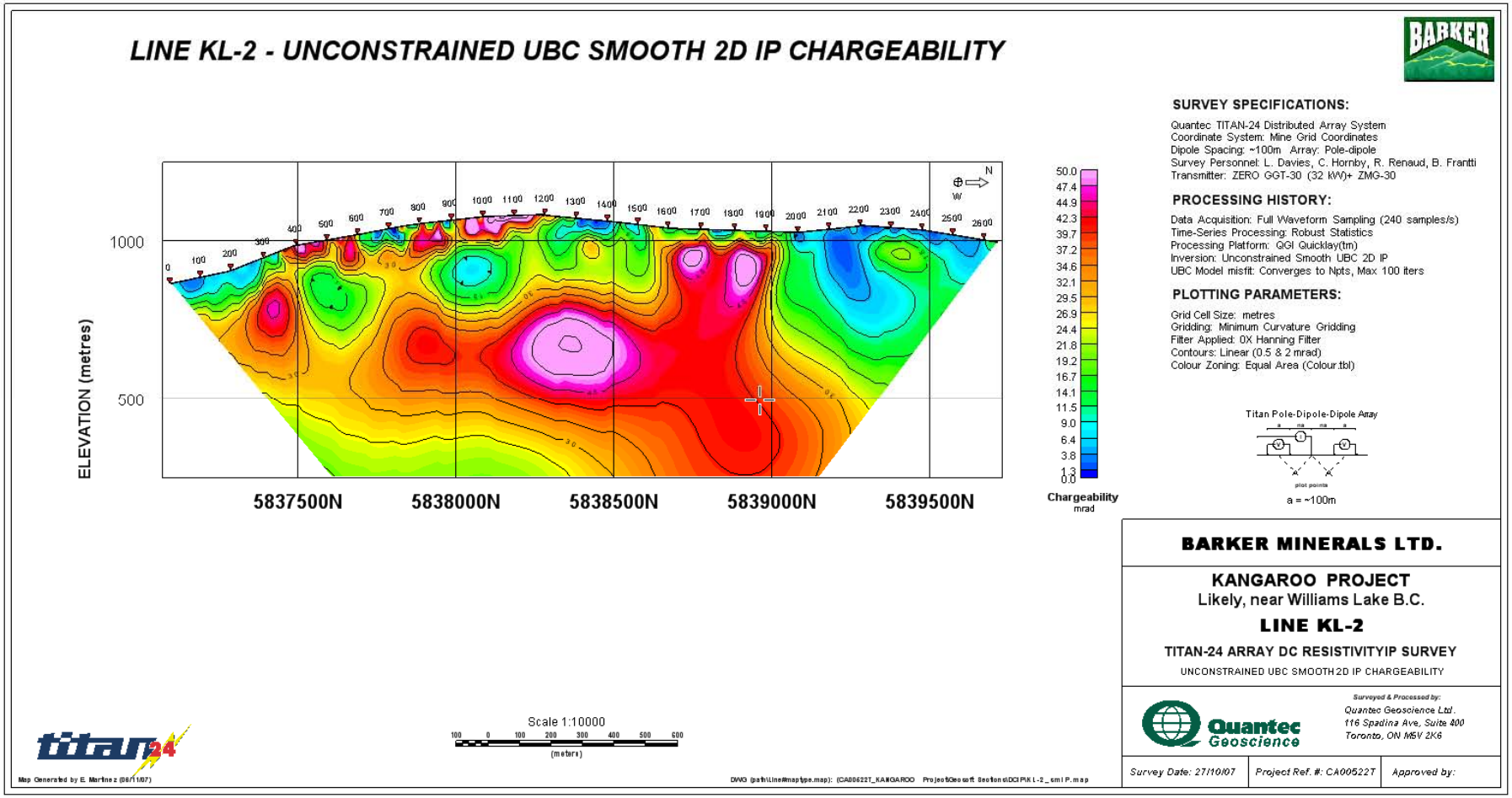
(Digital Archive Path\DWG: Line#maptype.map)



[1] *The Oasis Sections presented in this appendix are the most consistent models according to the degree of association with the DC and MT results and the available geological information. Additional models are available in the Digital Archive attached to this Interpretation Report. OasisMontaj Viewer available @ http://www.geosoft.com/pinfo/oasismontaj/free/montajviewer.asp*

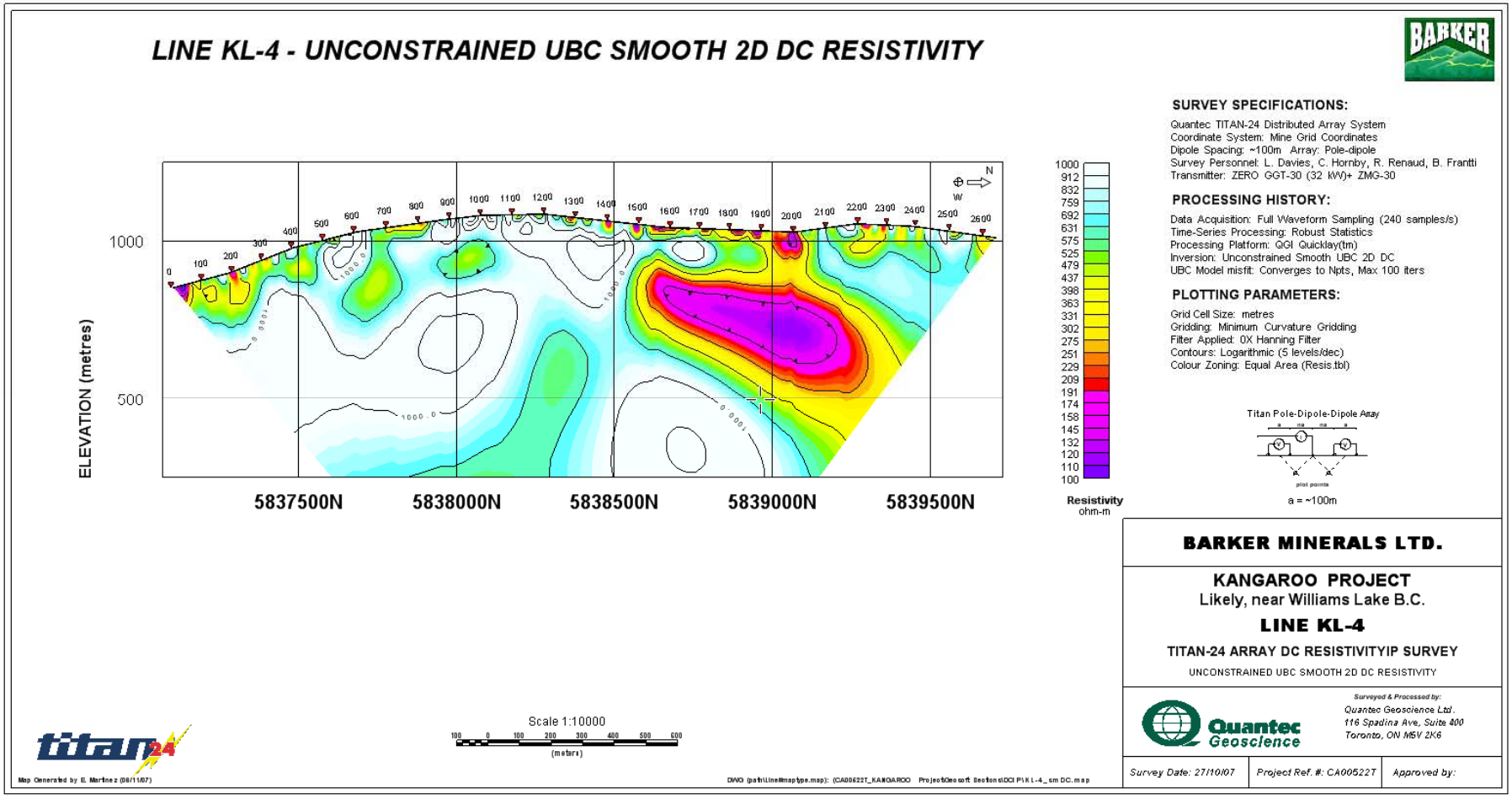
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\DCIP\KL-2_smIP.map

(Digital Archive Path\DWG: Line#maptype.map)



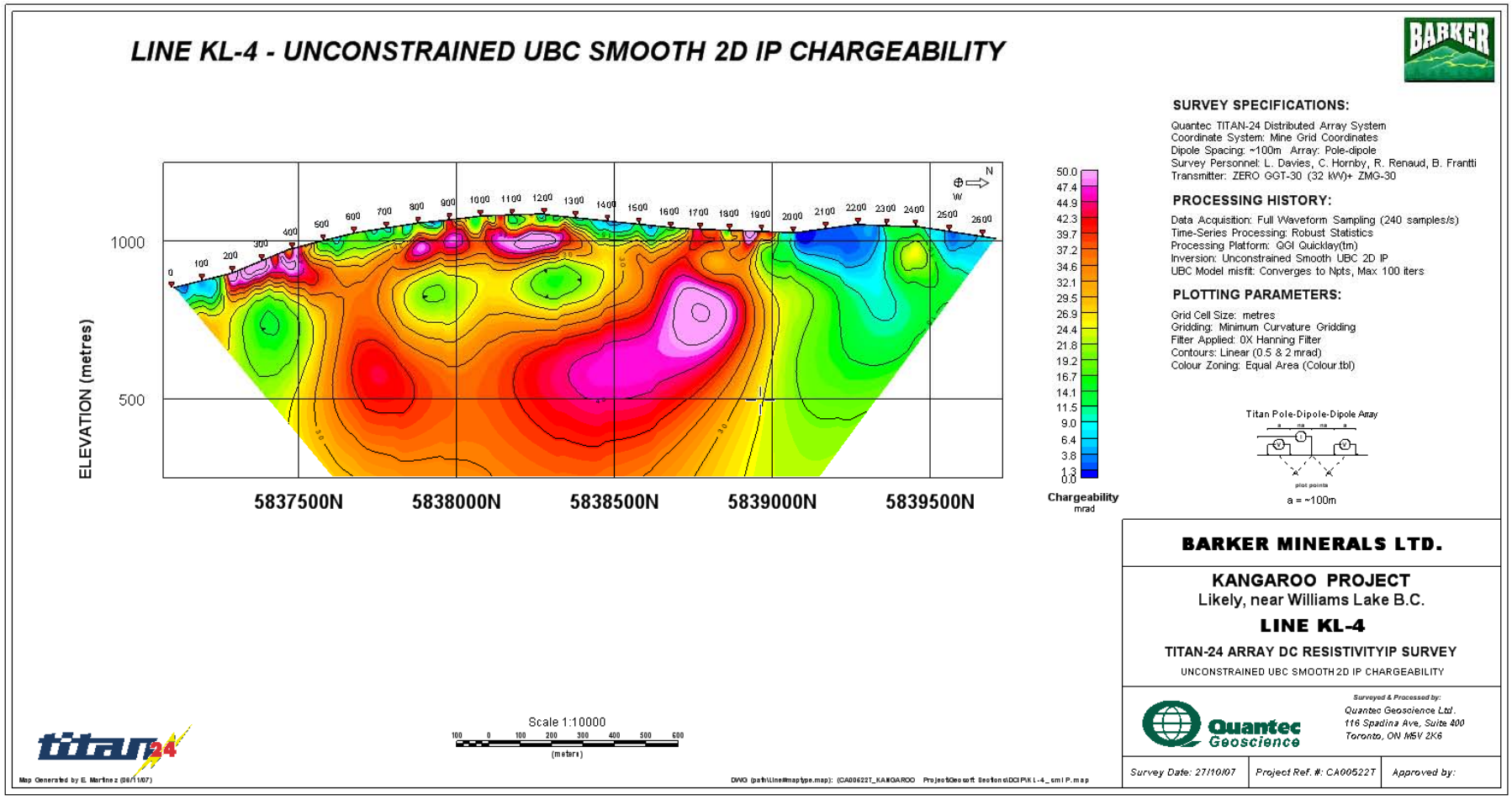
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\DCIP\KL-4_smDC.map

(Digital Archive Path\DWG: Line#maptype.map)



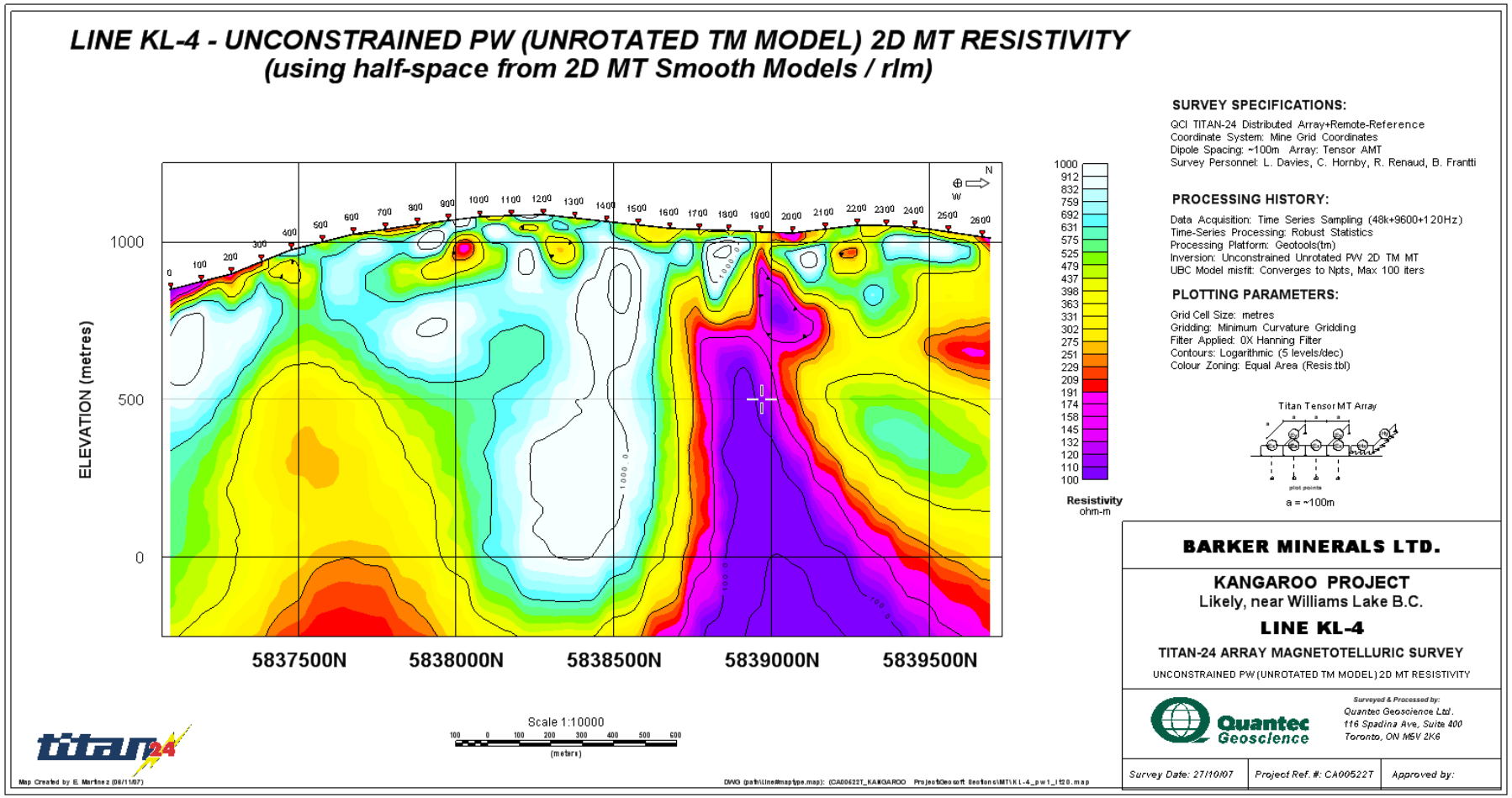
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\DCIP\KL-4_smIP.map

(Digital Archive Path\DWG: Line#maptype.map)



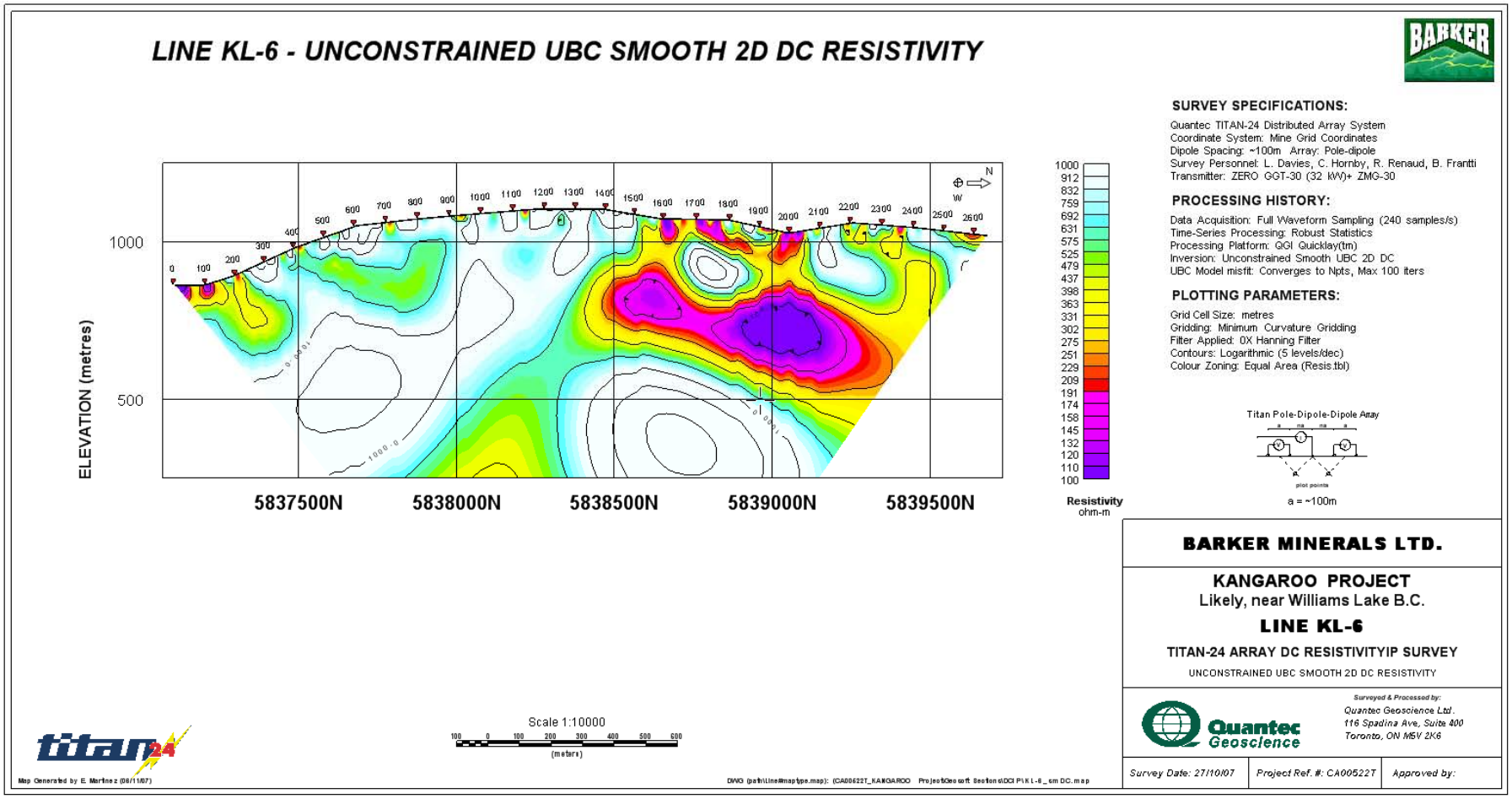
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\MT\kl-4_pw1_it20.map

(Digital Archive Path\DWG: Line#maptype.map)



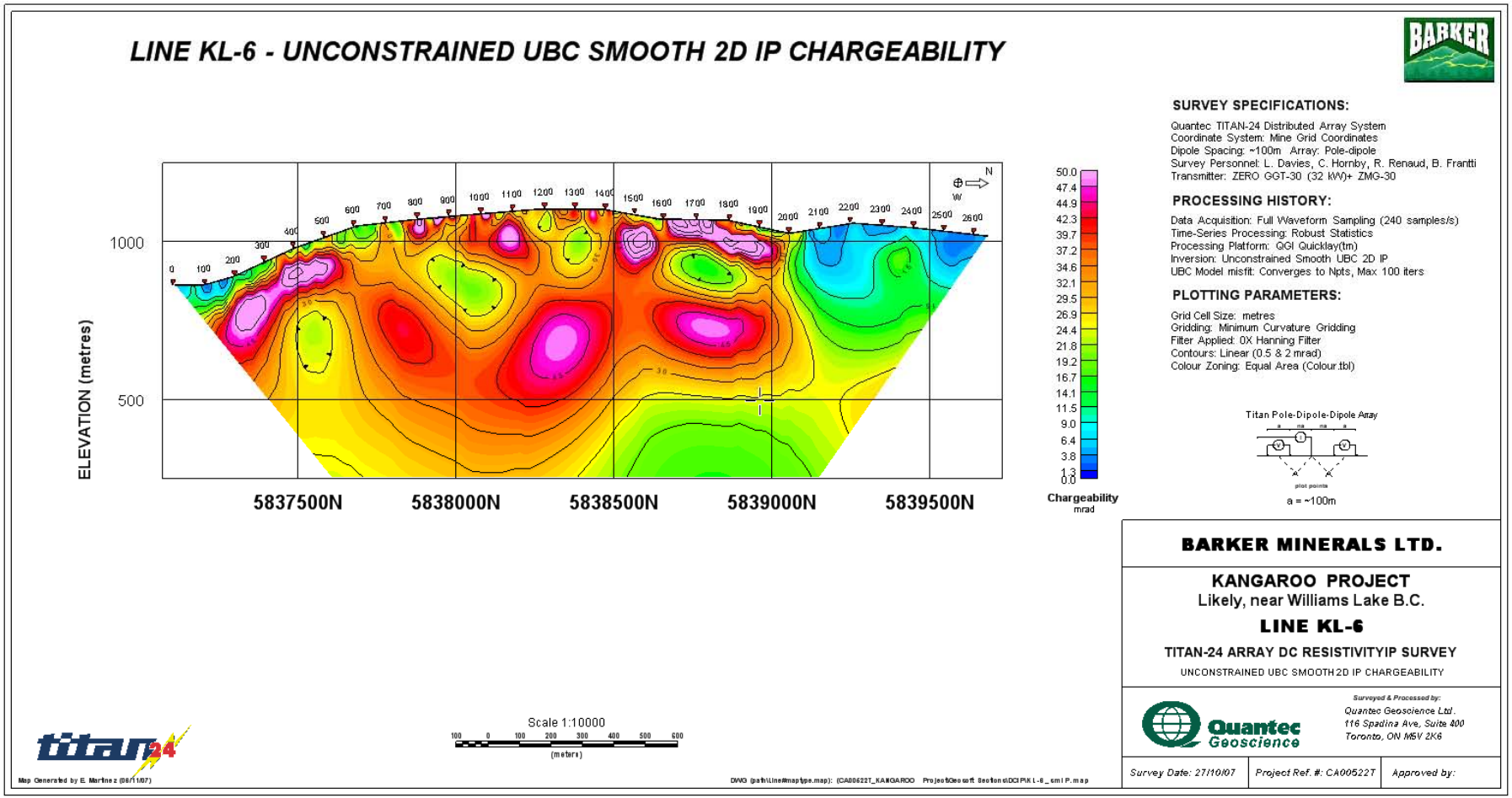
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\DCIP\KL-6_smDC.map

(Digital Archive Path\DWG: Line#maptype.map)



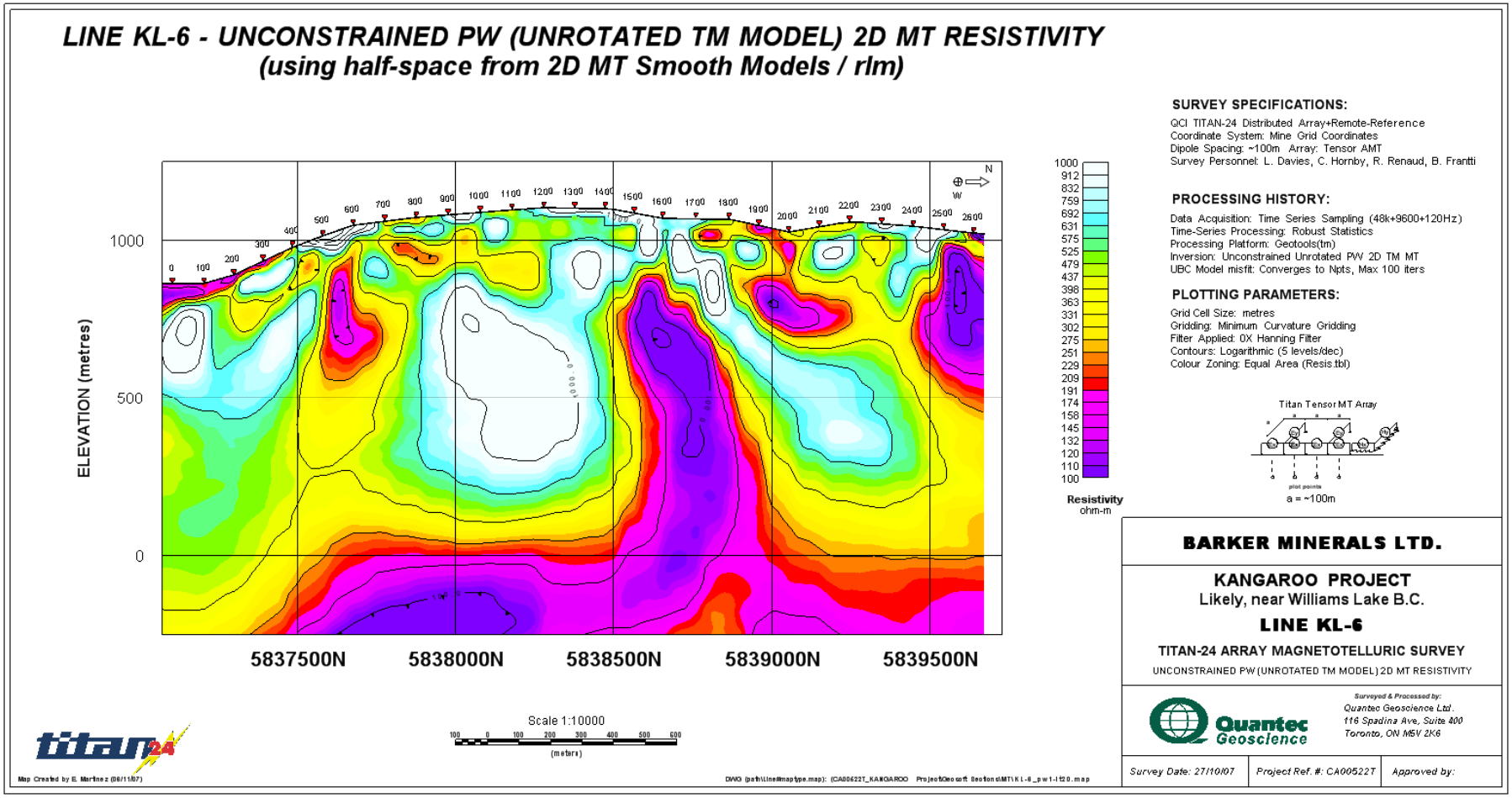
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\DCIP\KL-6_smIP.map

(Digital Archive Path\DWG: Line#maptype.map)



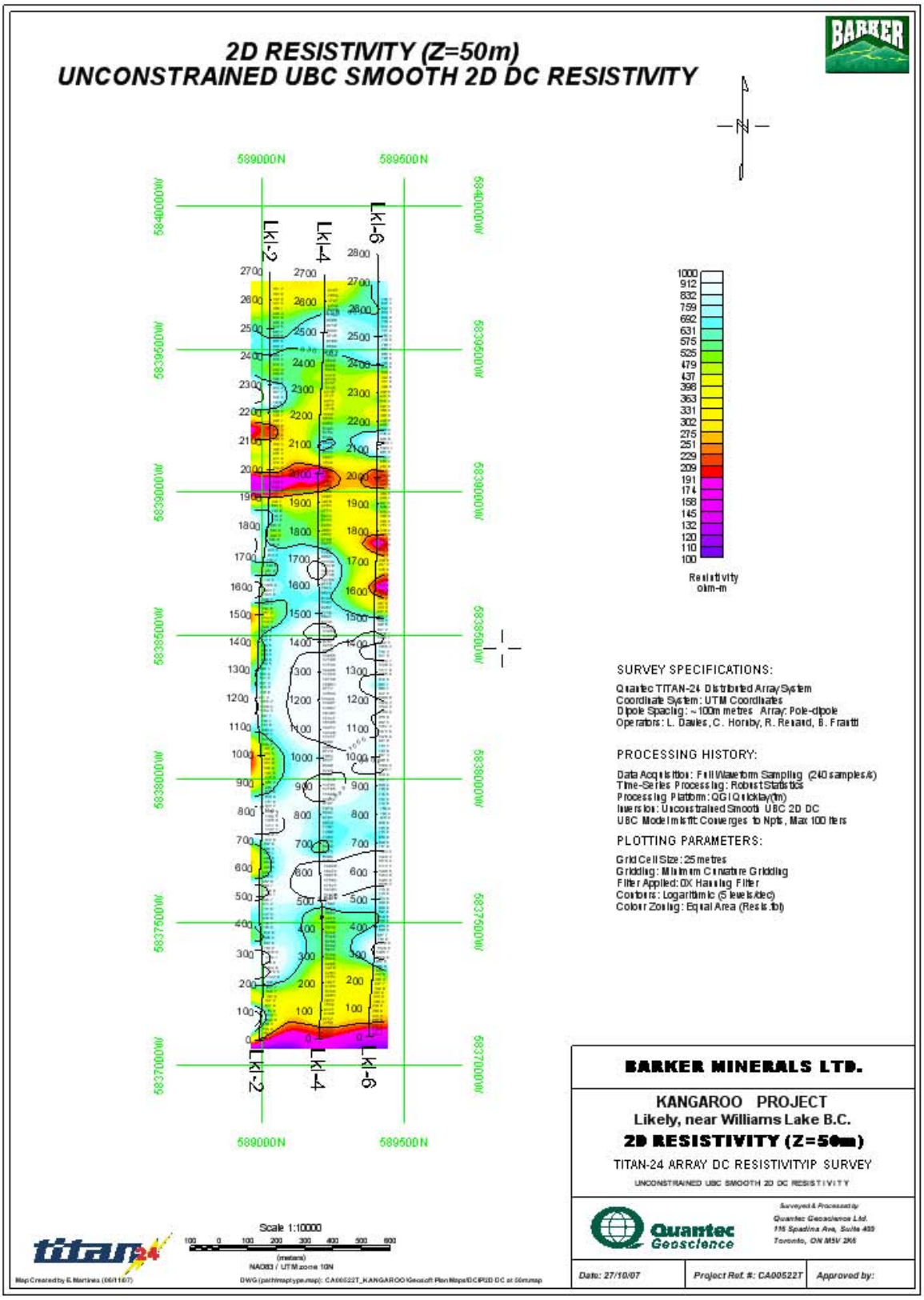
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Sections\MT\kl-6_pw1_it20.map

(Digital Archive Path\DWG: Line#maptype.map)



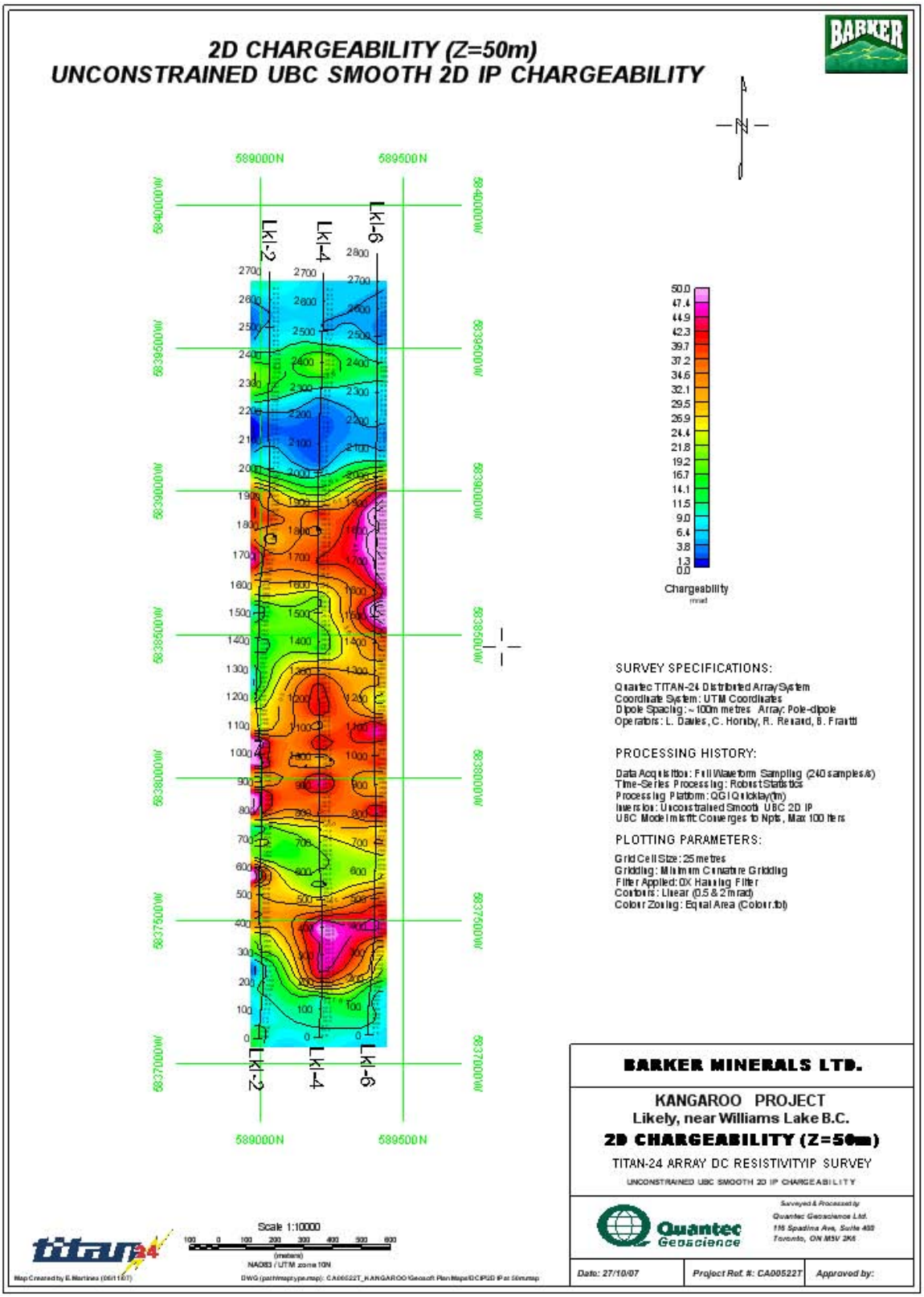
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D DC at 50m.map

(Digital Archive Path\DWG: Line#maptype.map)



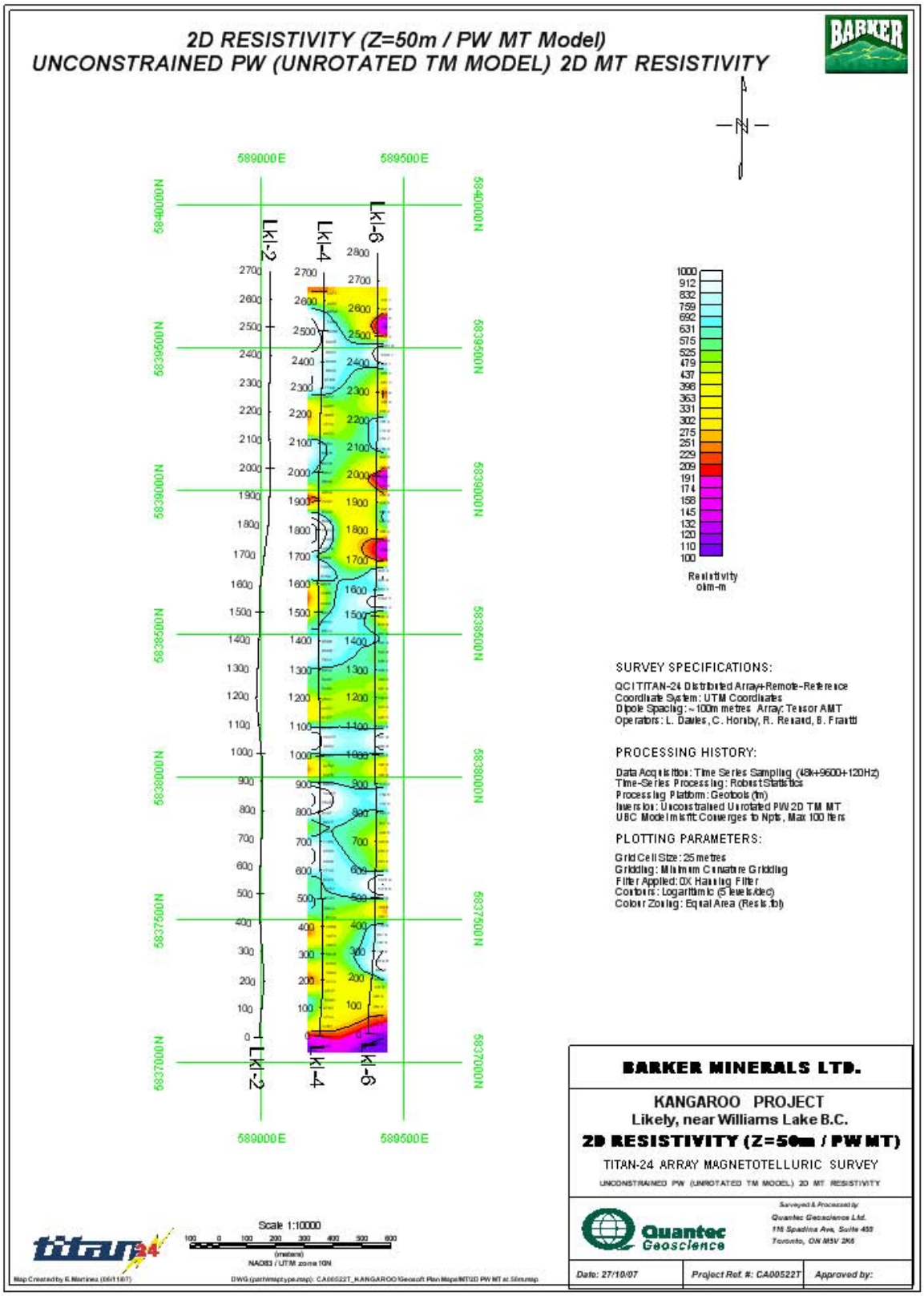
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D IP at 50m.map

(Digital Archive Path\DWG: Line#maptype.map)



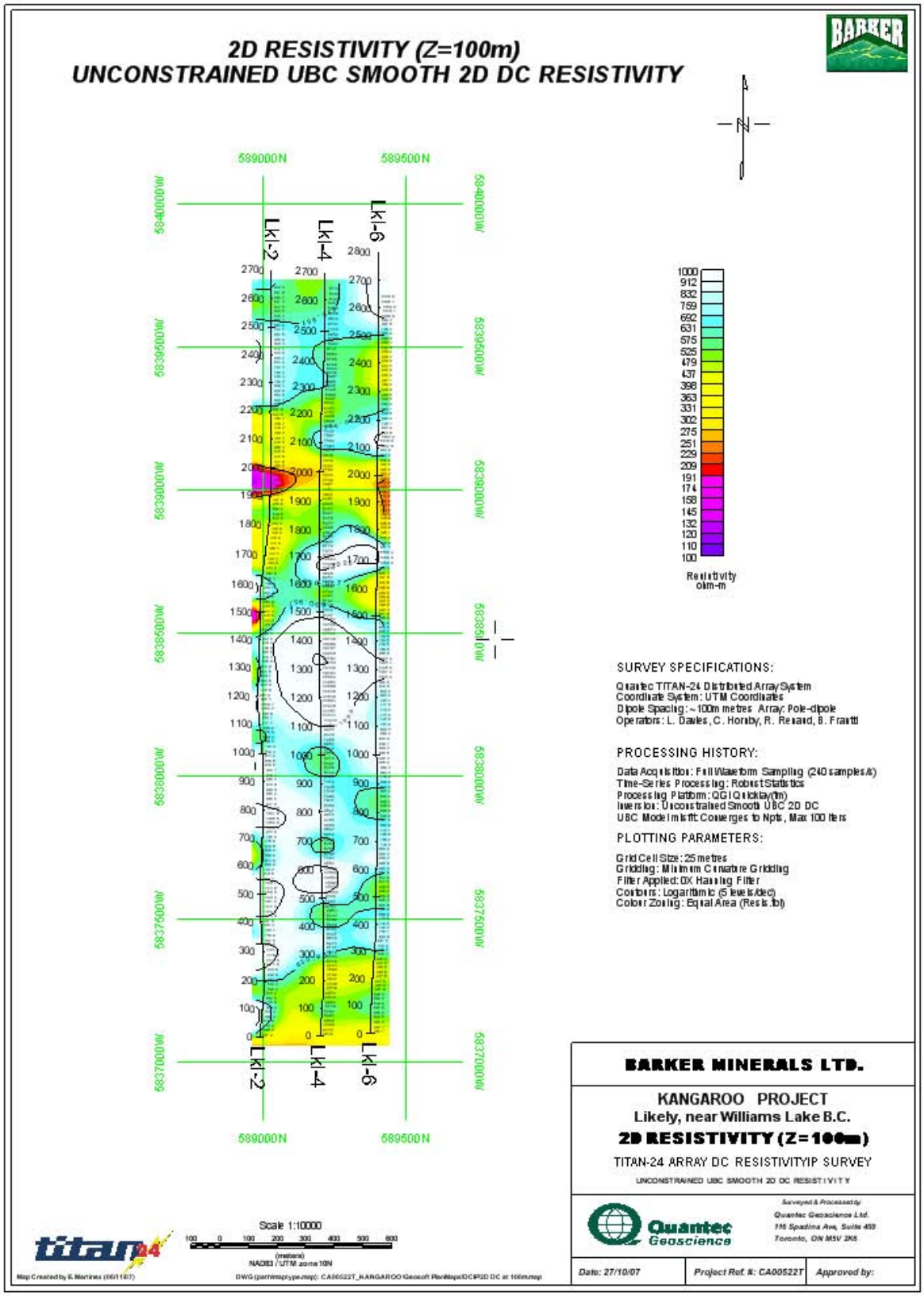
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\MT\2D PW1 MT at 50m.map

(Digital Archive Path\DWG: Line#maptype.map)



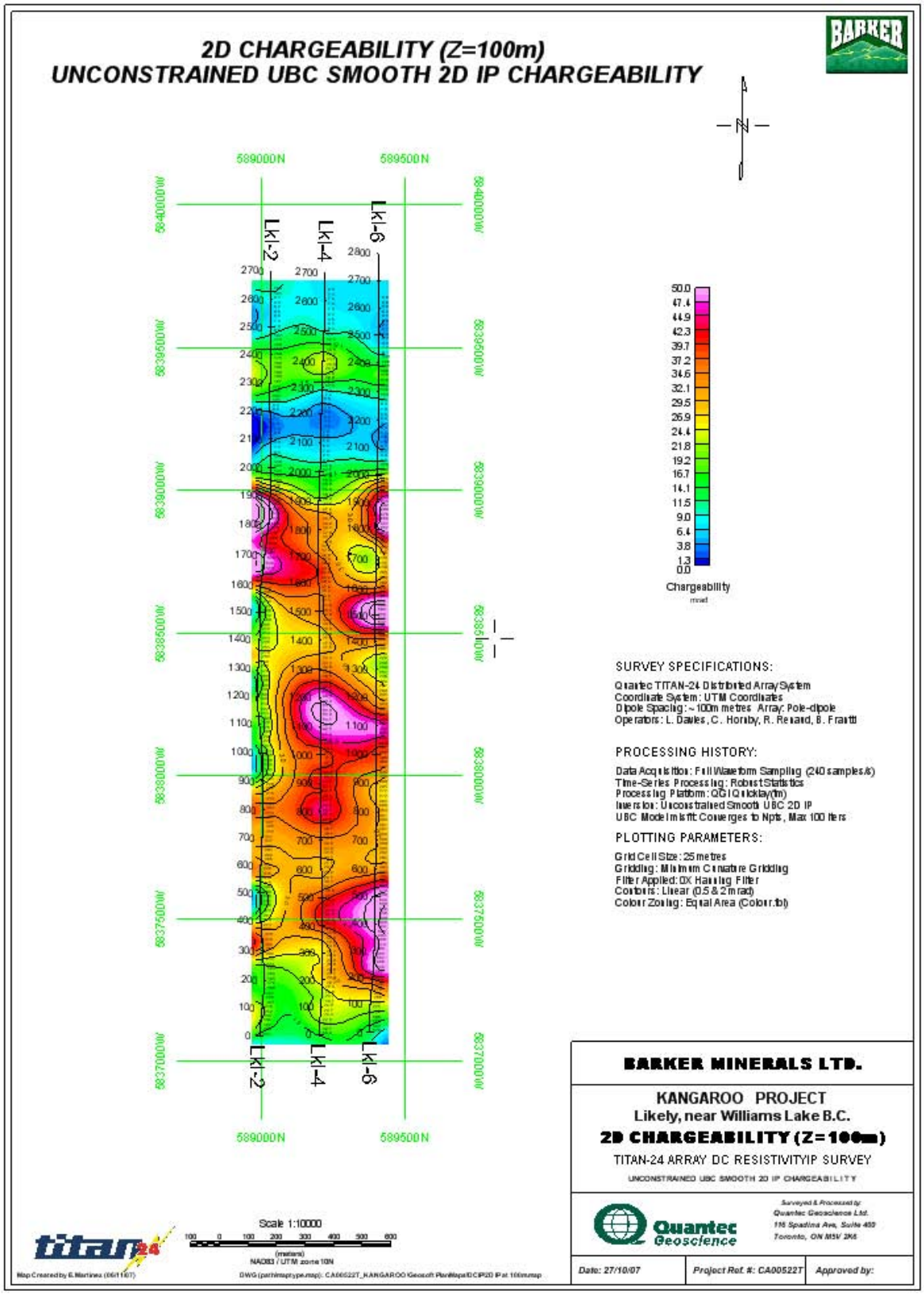
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D DC at 100m.map

(Digital Archive Path\DWG: Line#maptype.map)



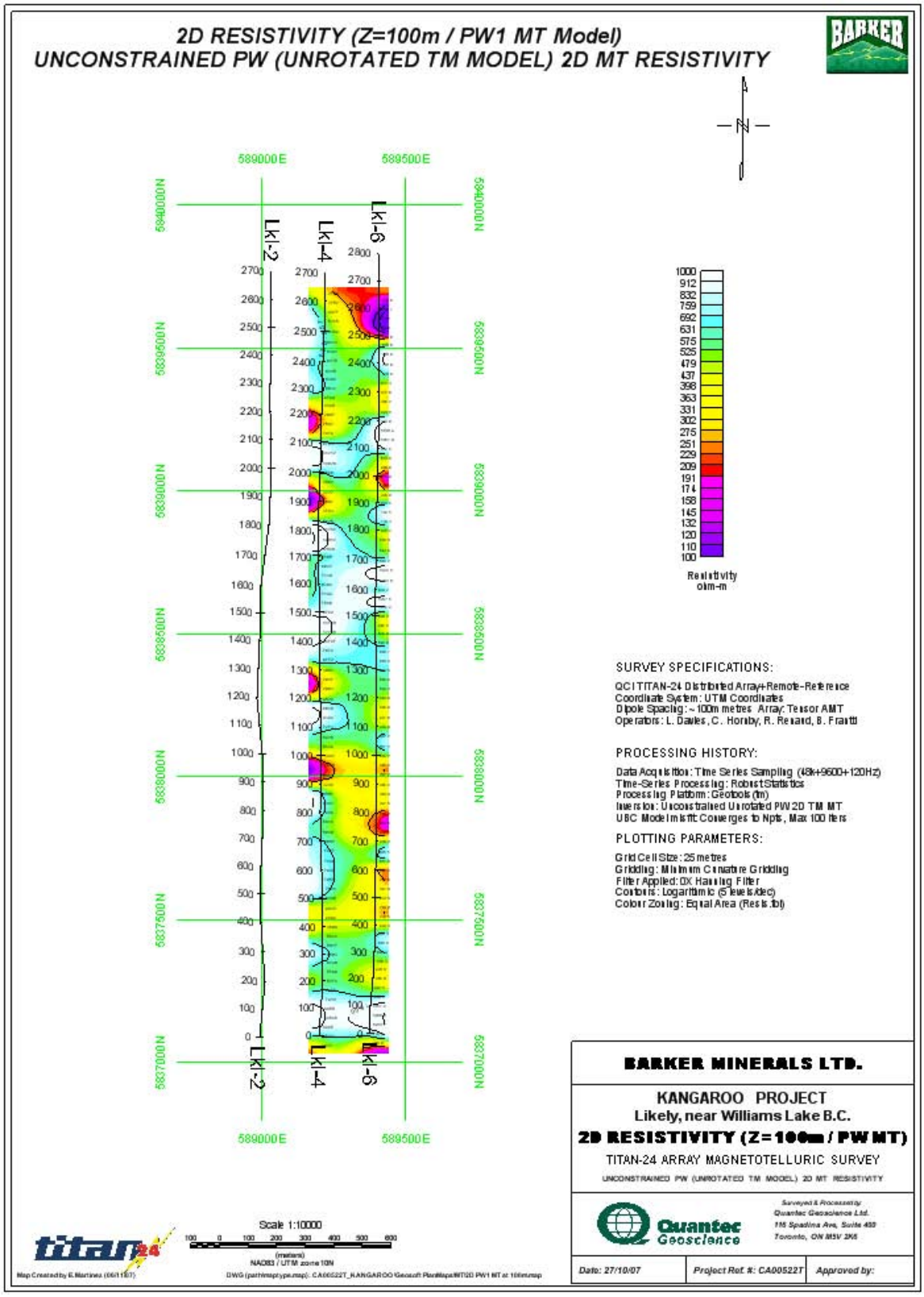
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D IP at 100m.map

(Digital Archive Path\DWG: Line#maptype.map)



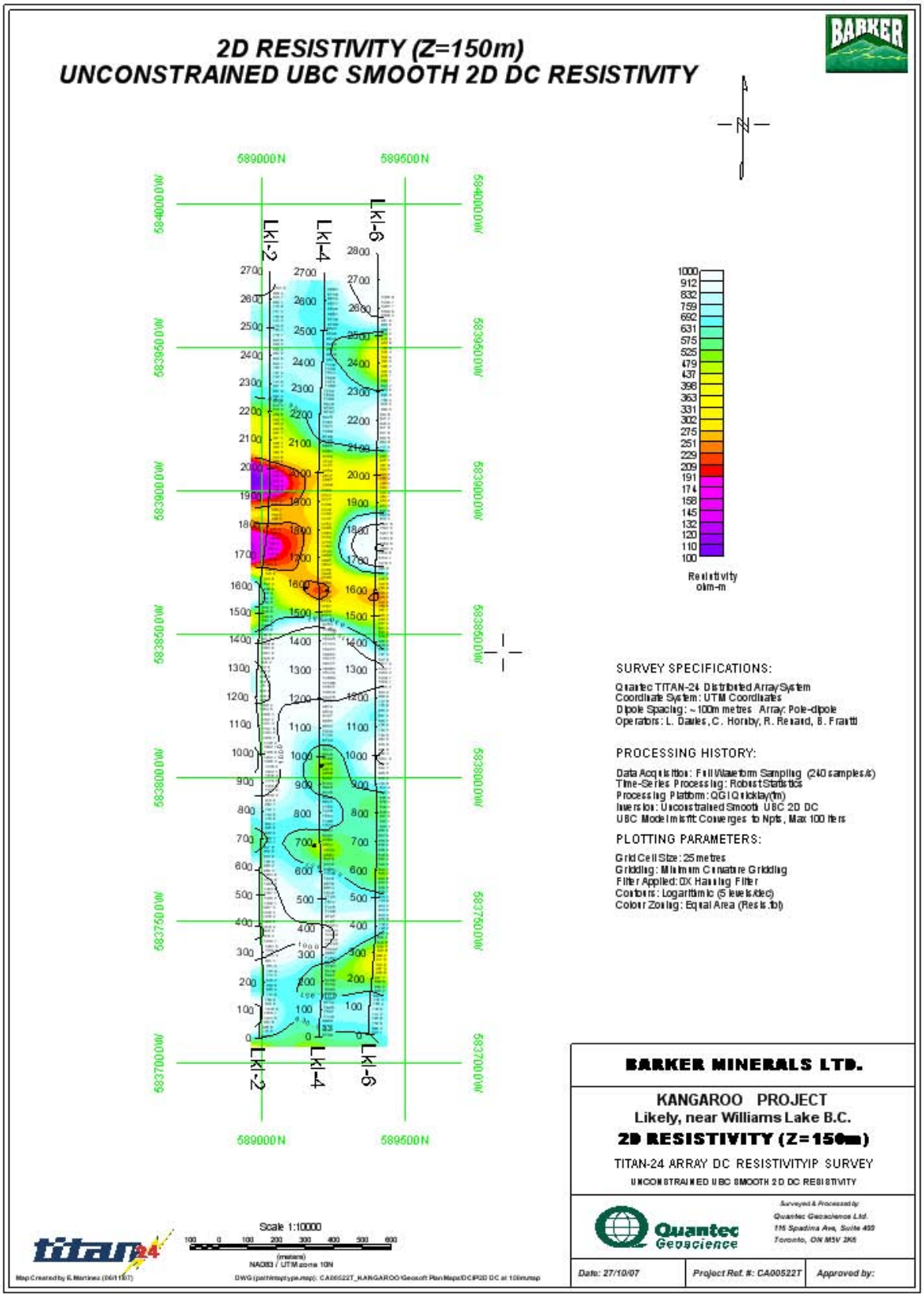
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\MT\2D PW1 MT at 100m.map

(Digital Archive Path\DWG: Line#maptype.map)



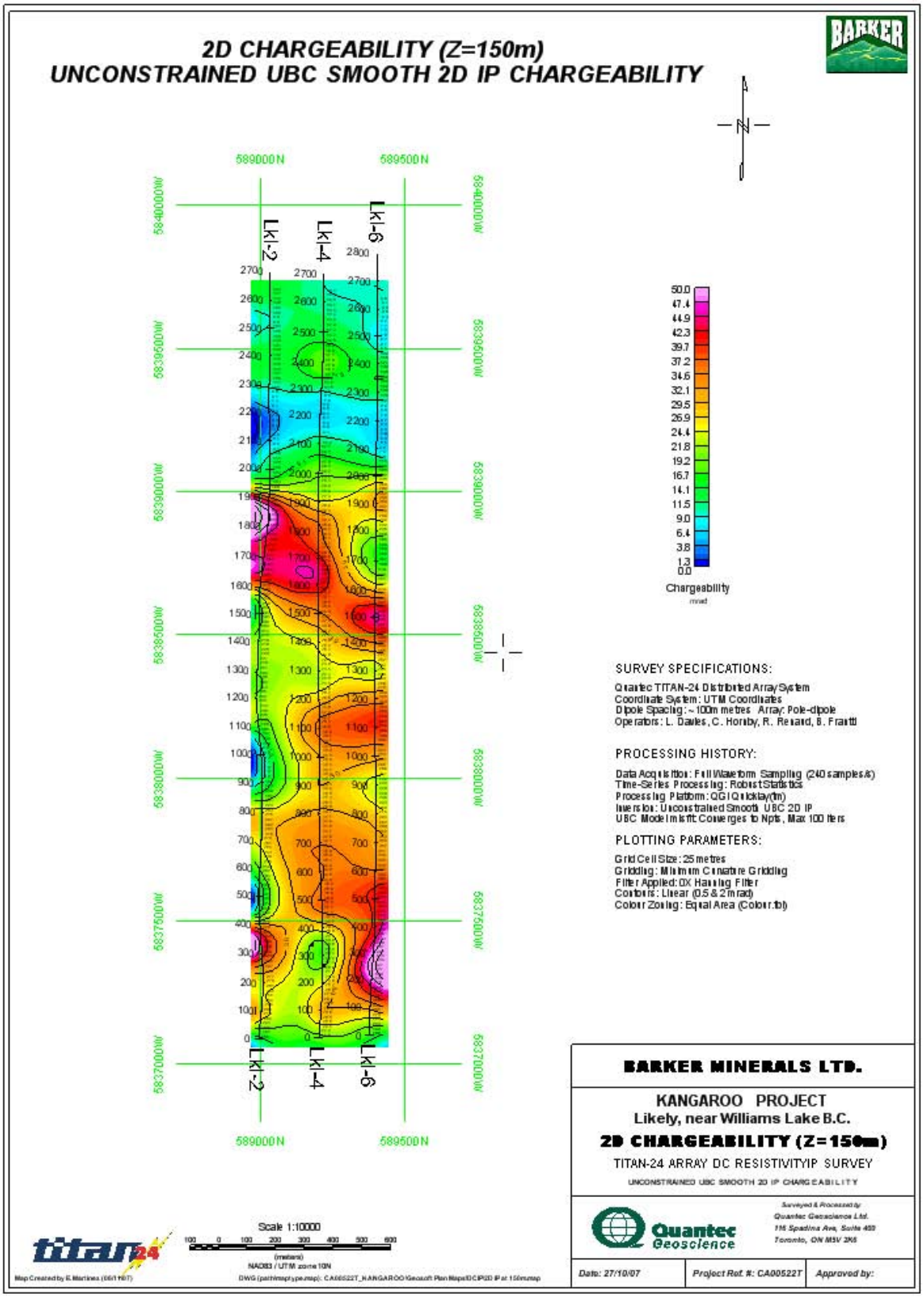
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D DC at 150m.map

(Digital Archive Path\DWG: Line#maptype.map)



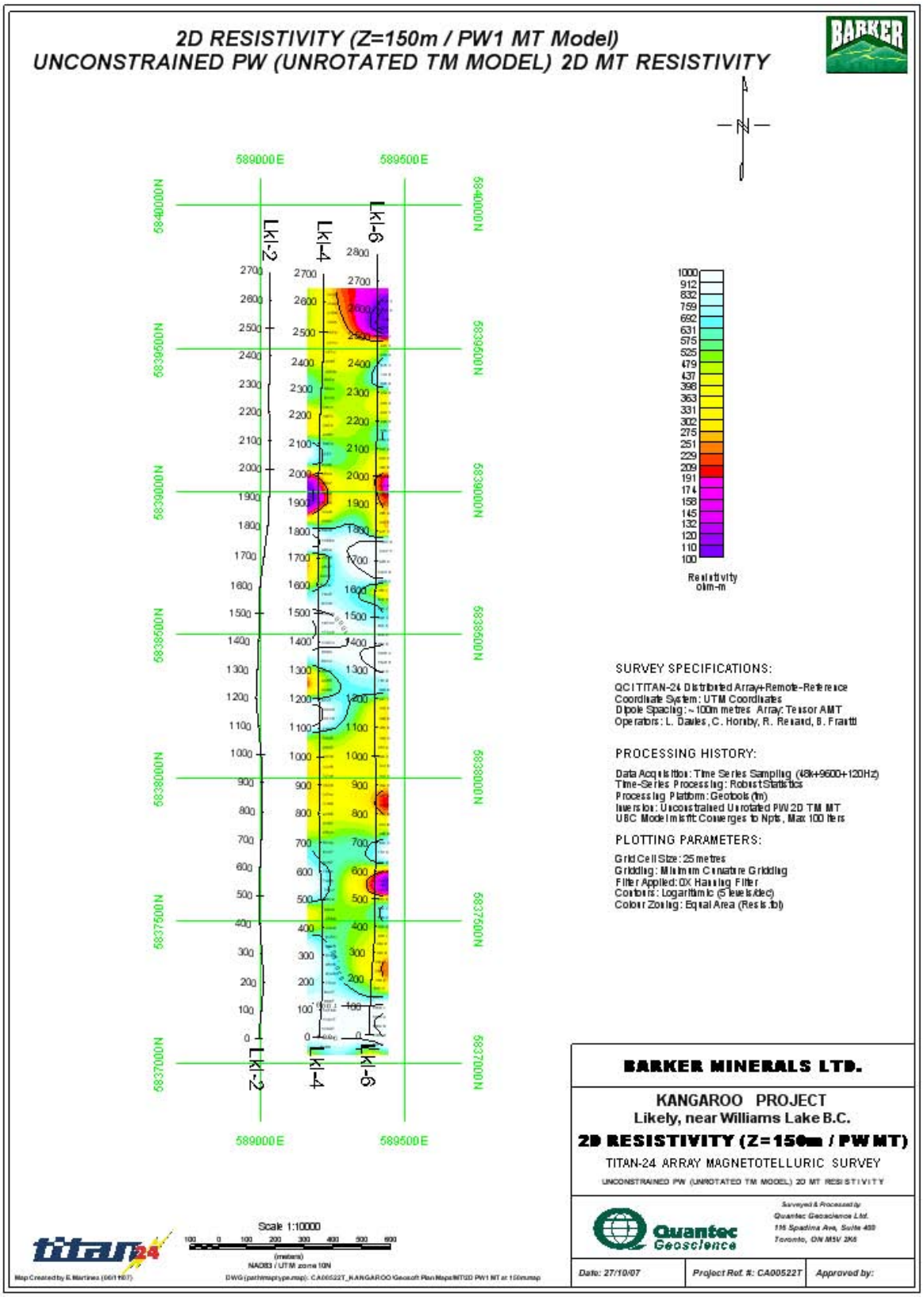
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D IP at 150m.map

(Digital Archive Path\DWG: Line#maptype.map)



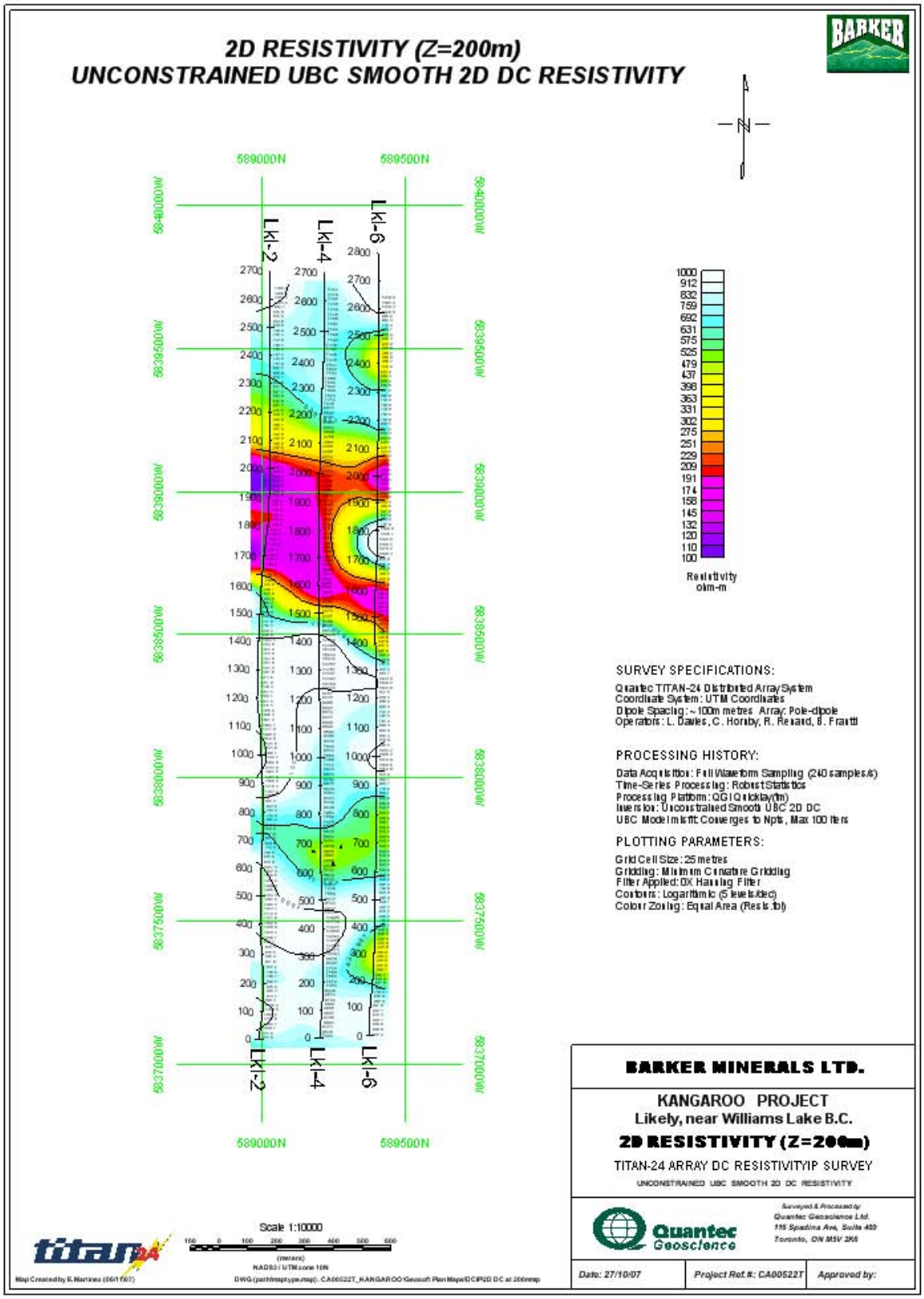
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\MT\2D PW1 MT at 150m.map

(Digital Archive Path\DWG: Line#maptype.map)



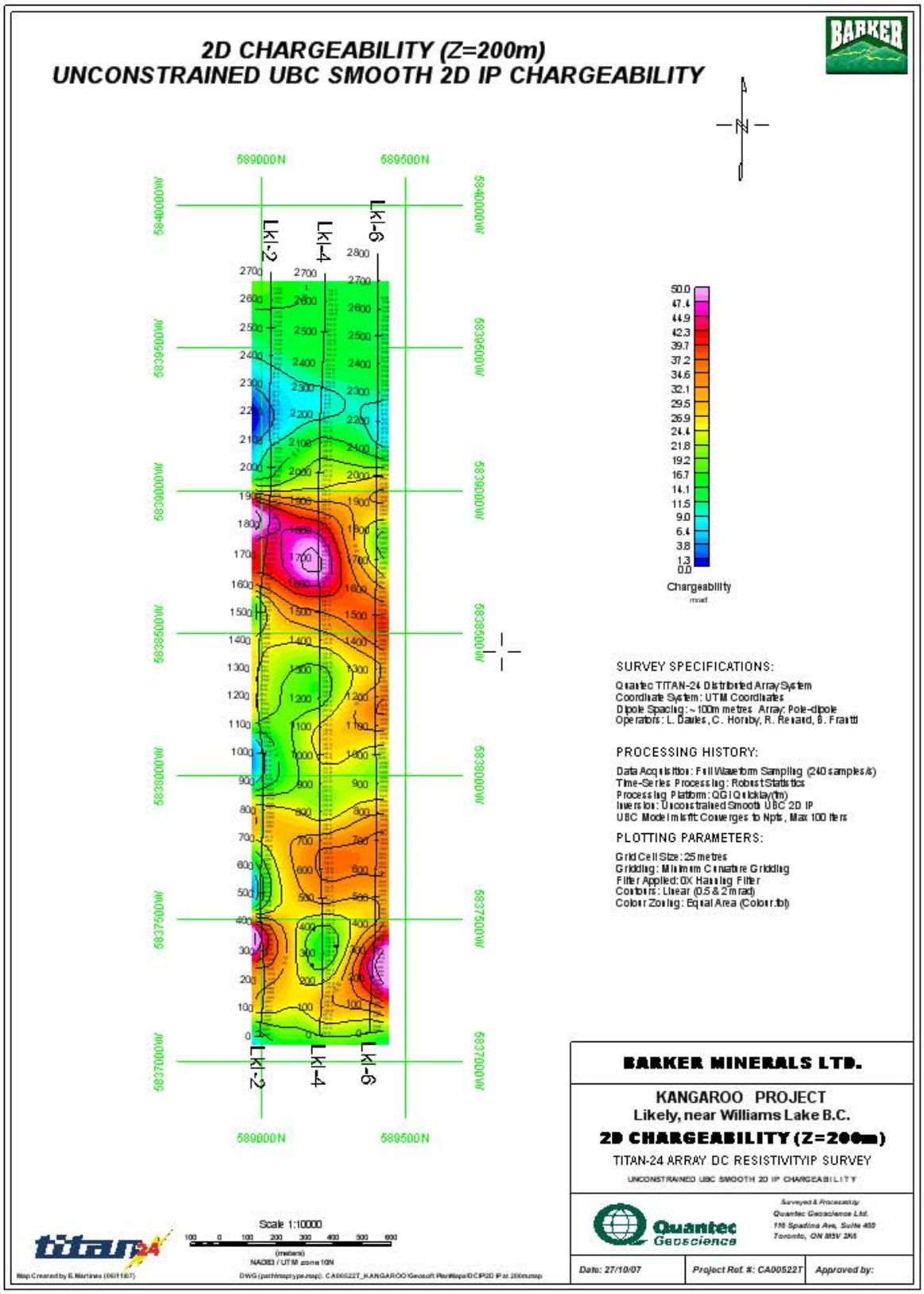
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D DC at 200m.map

(Digital Archive Path\DWG: Line#maptype.map)



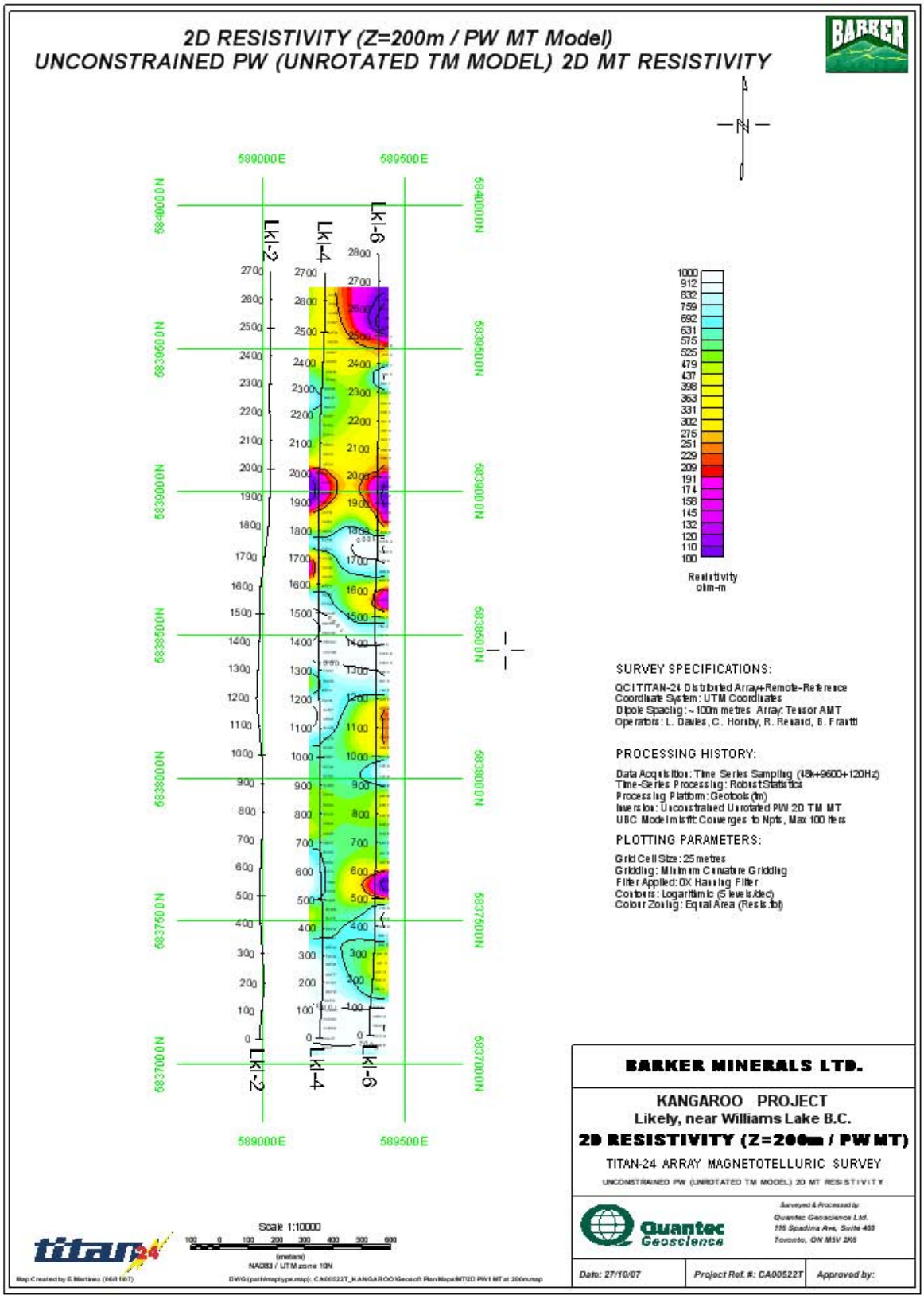
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D IP at 200m.map

(Digital Archive Path\DWG: Line#maptype.map)



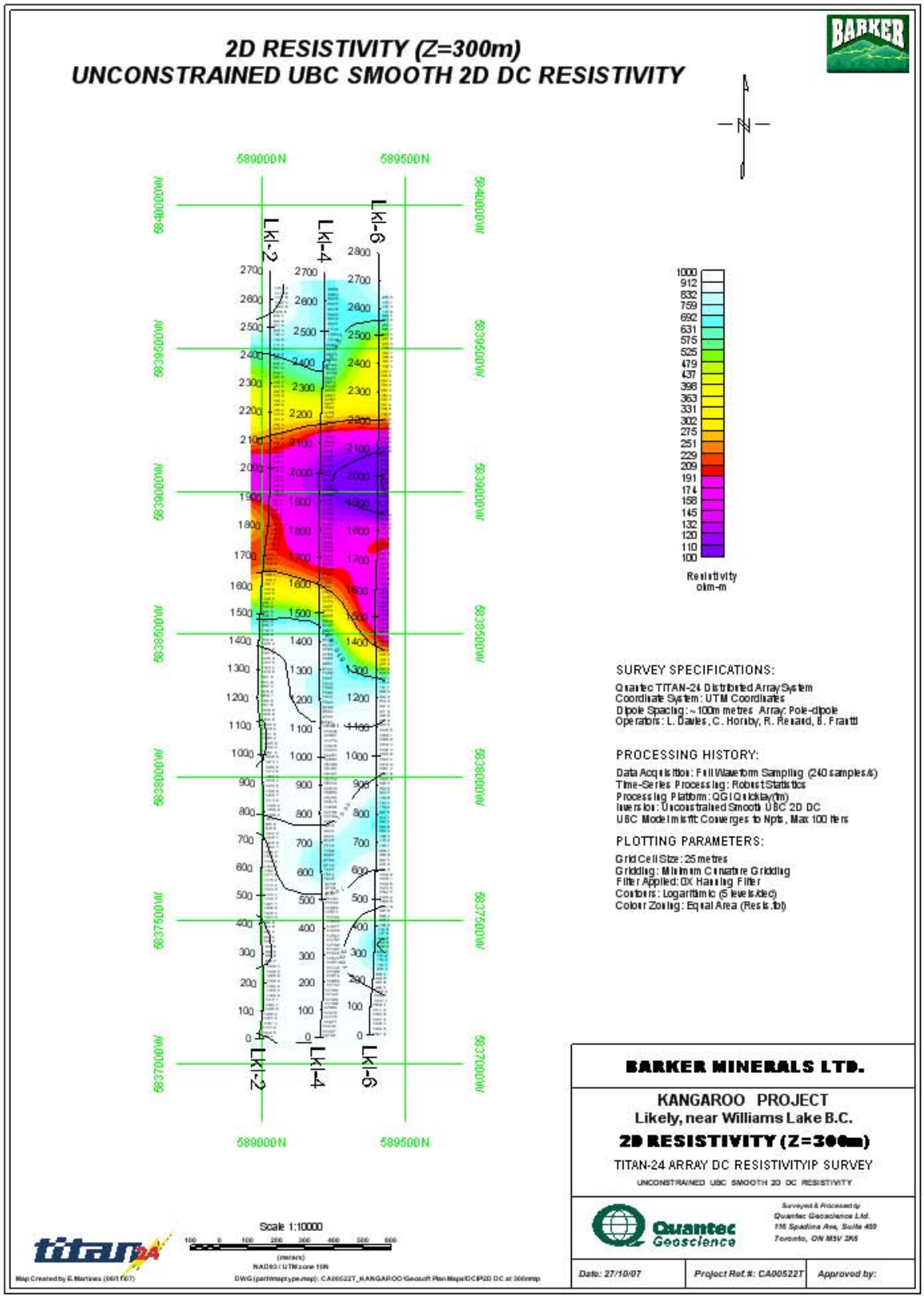
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\MT\2D PW1 MT at 200m.map

(Digital Archive Path\DWG: Line#maptype.map)



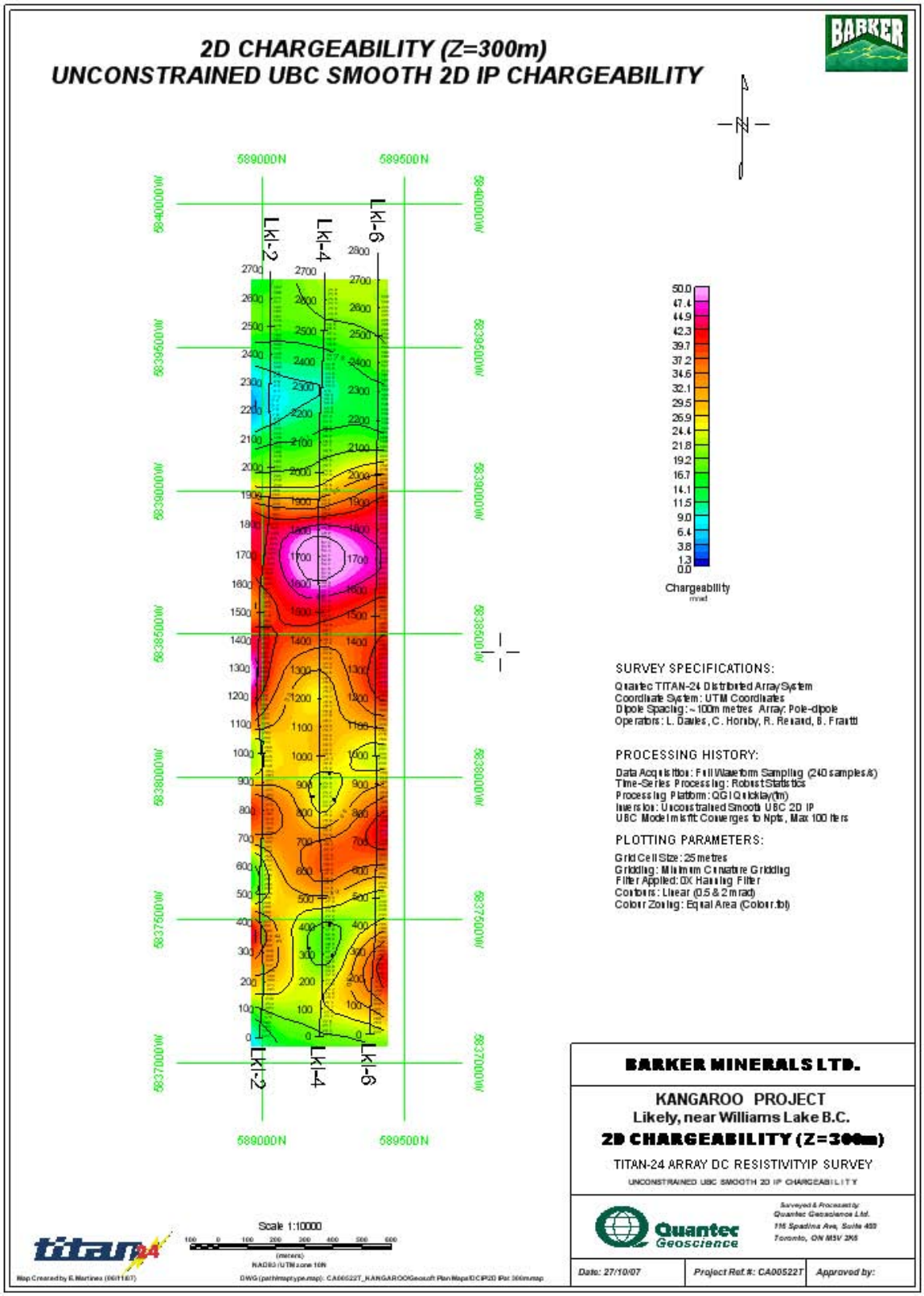
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D DC at 300m.map

(Digital Archive Path\DWG: Line#maptype.map)



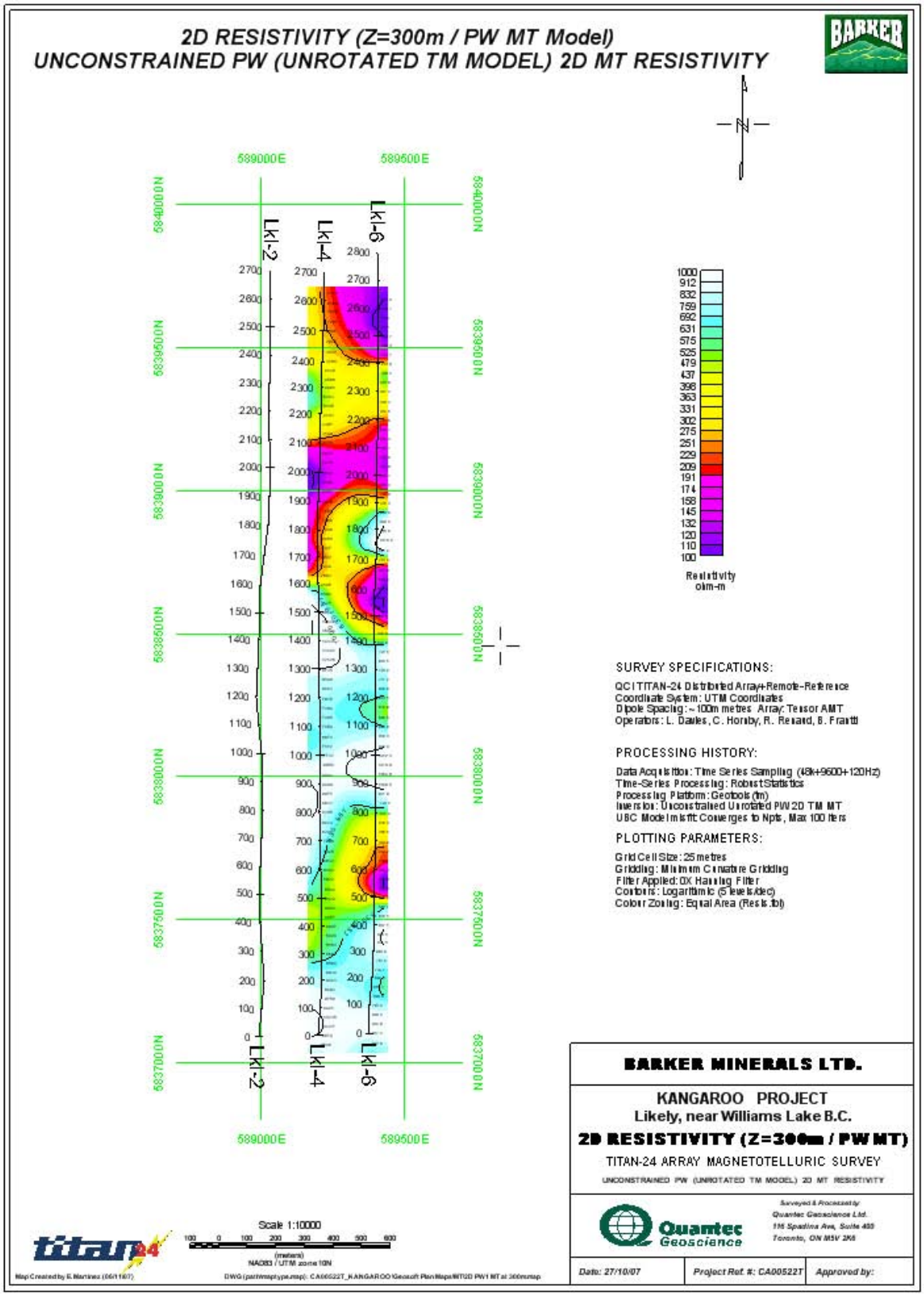
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D IP at 300m.map

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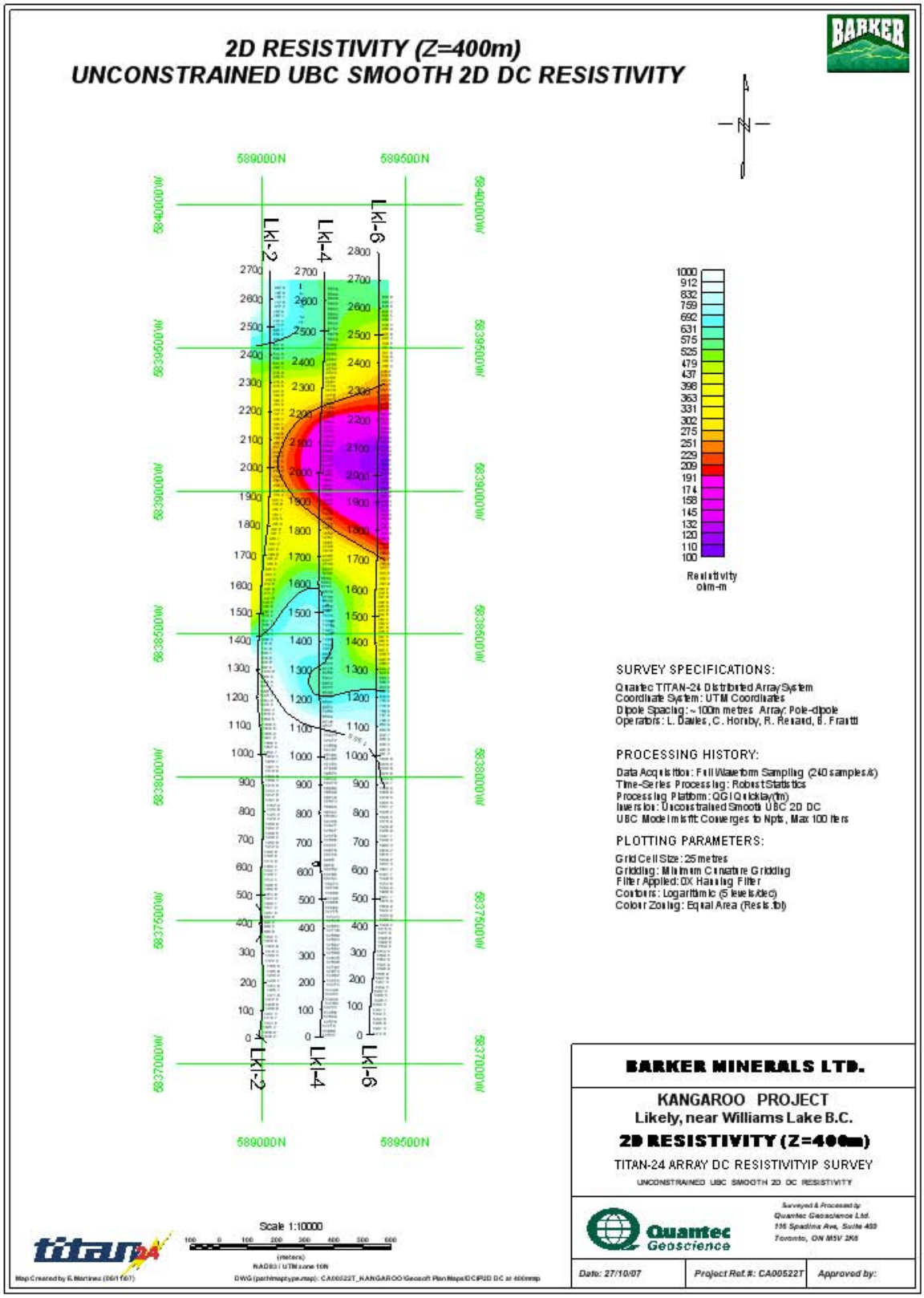
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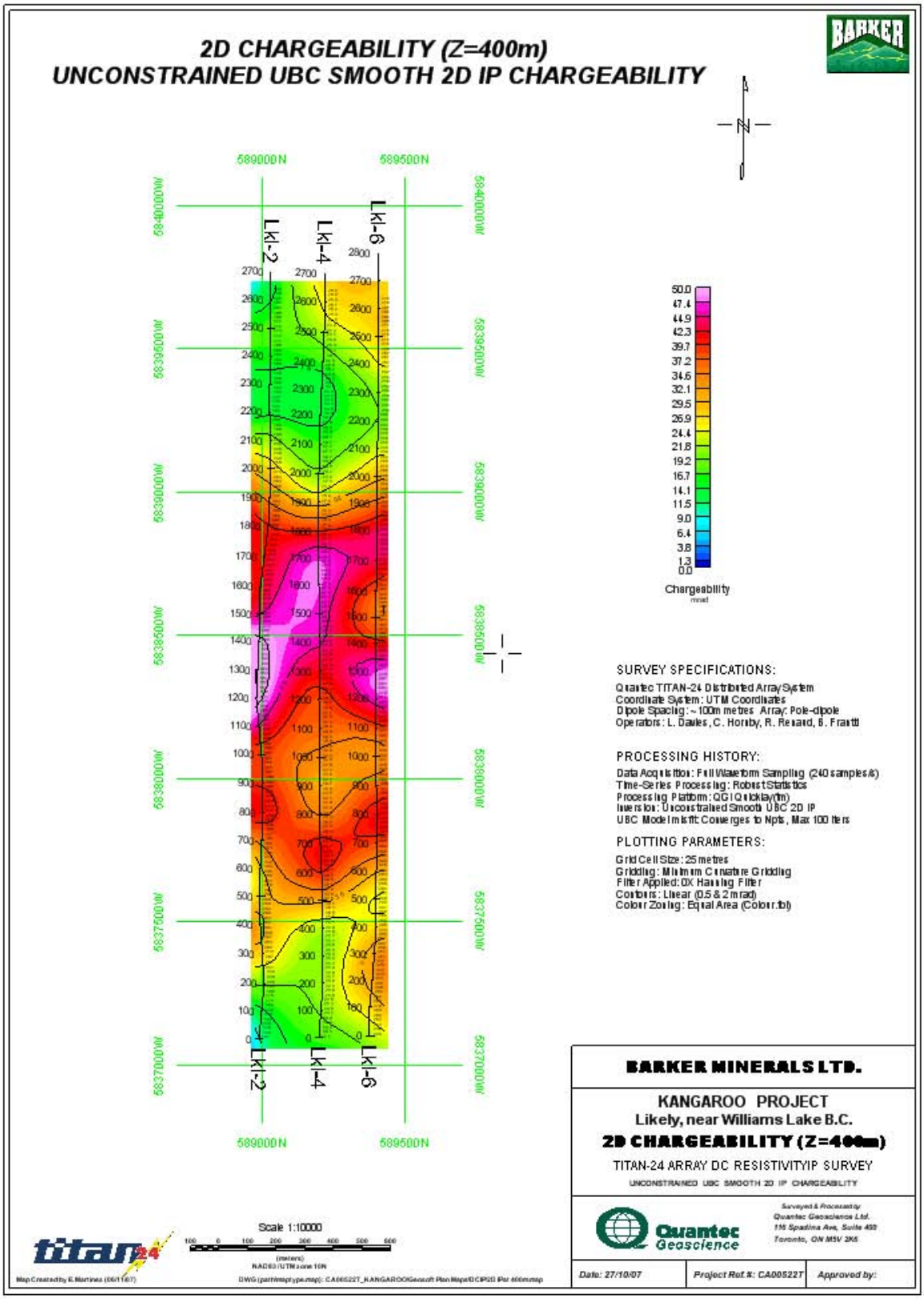
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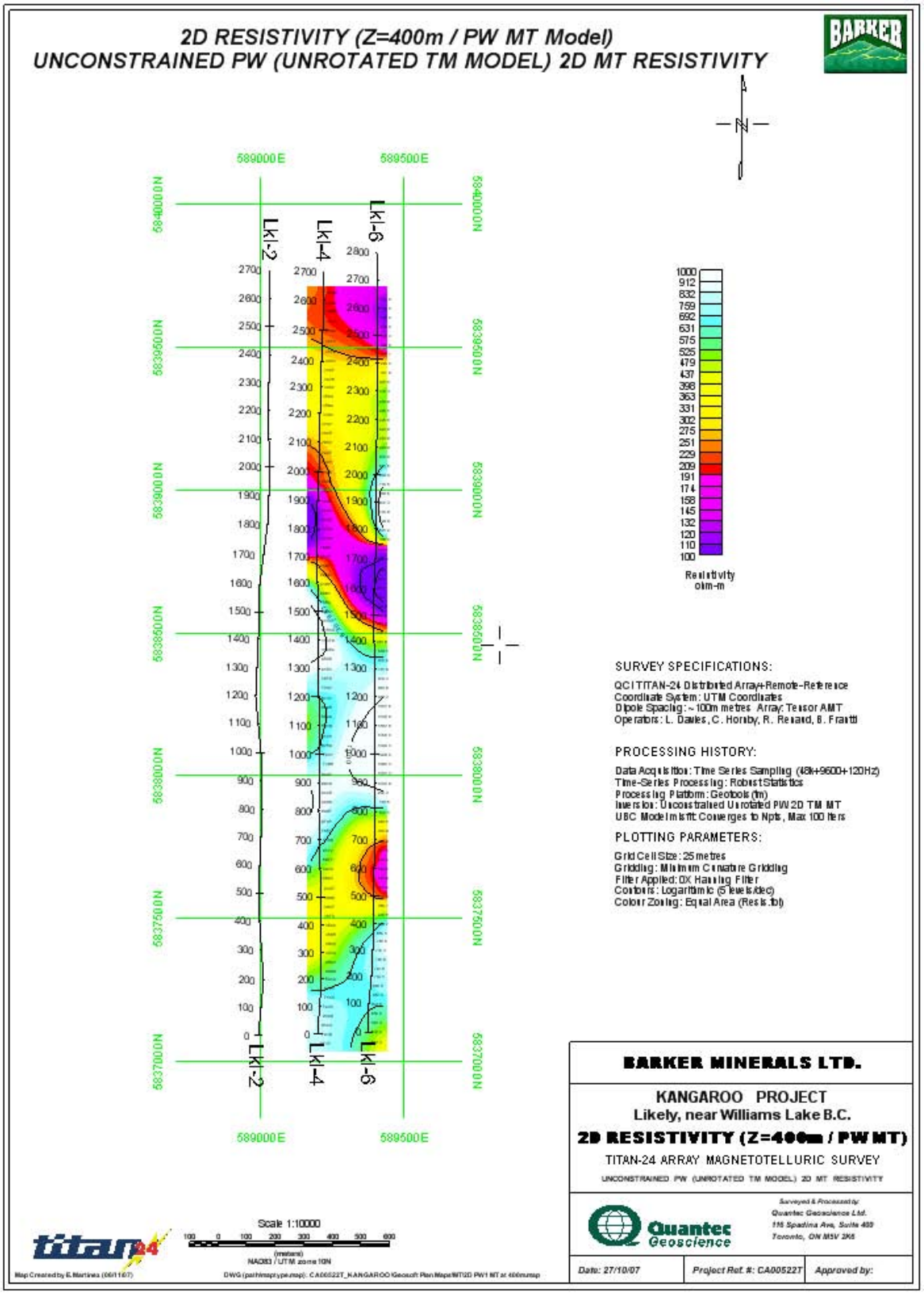
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(Digital Archive Path\DWG: Line#maptype.map)



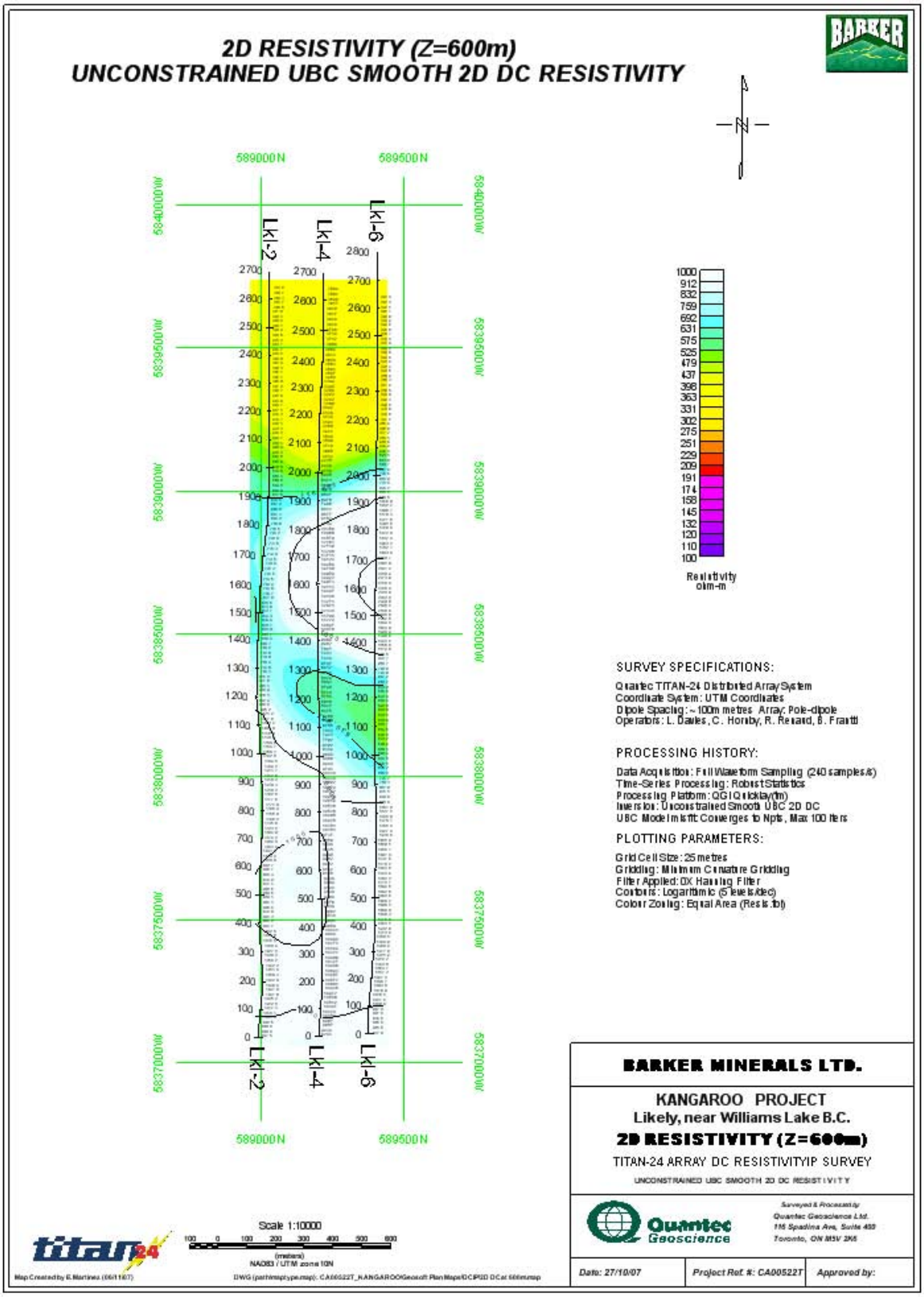
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(Digital Archive Path\DWG: Line#maptype.map)



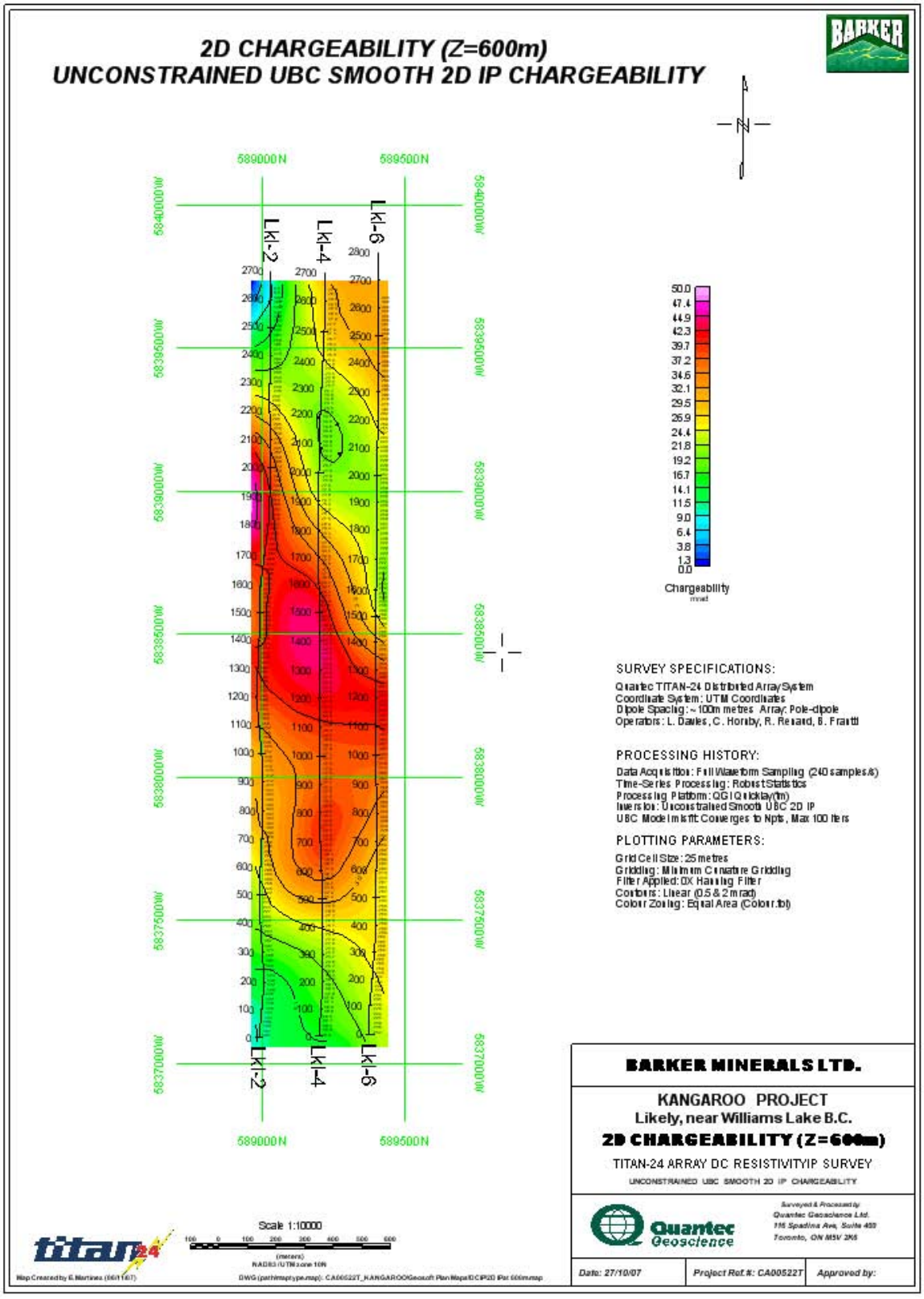
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D DC at 600m.map

(Digital Archive Path\DWG: Line#maptype.map)



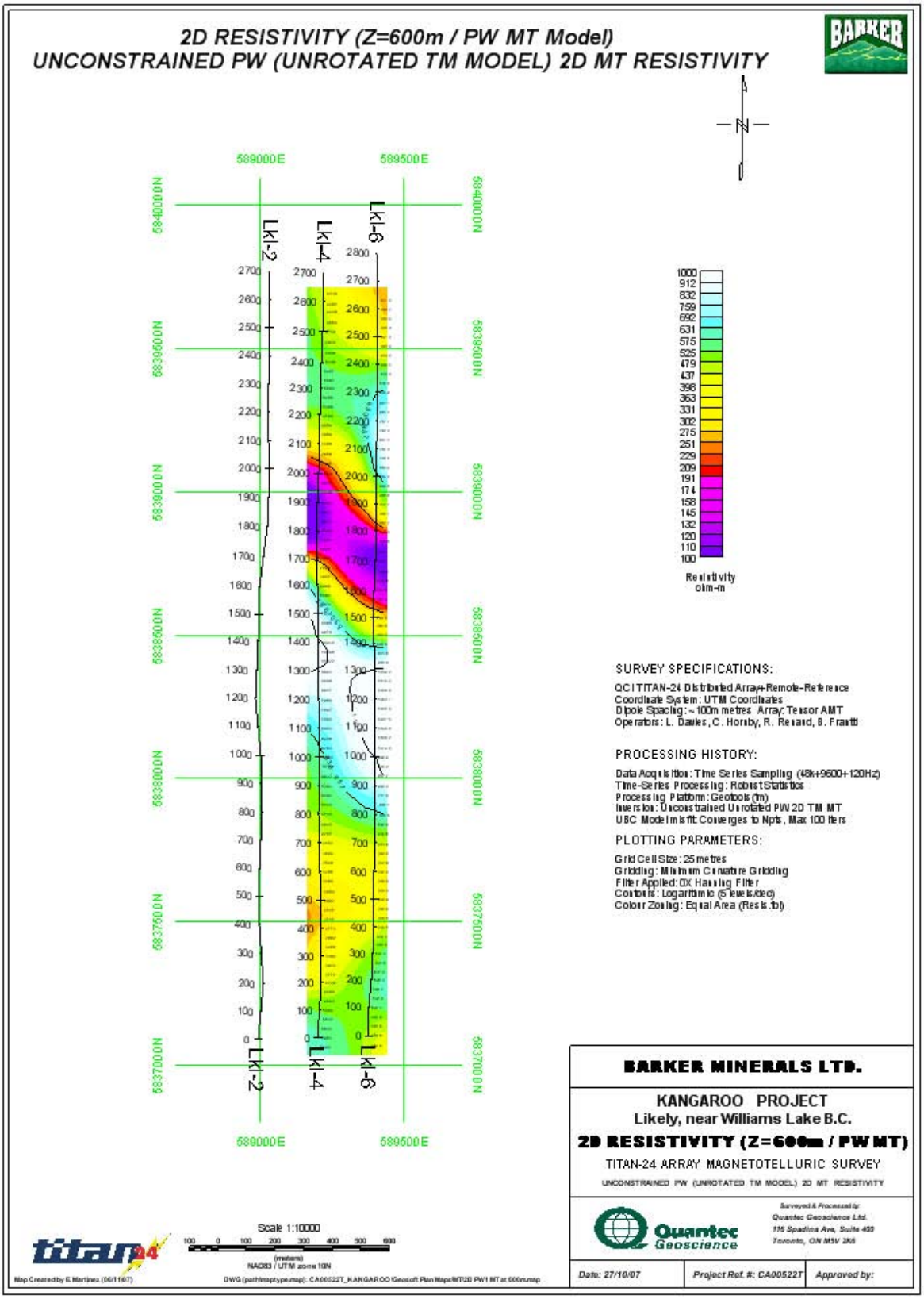
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\DCIP\2D IP at 600m.map

(Digital Archive Path\DWG: Line#maptype.map)



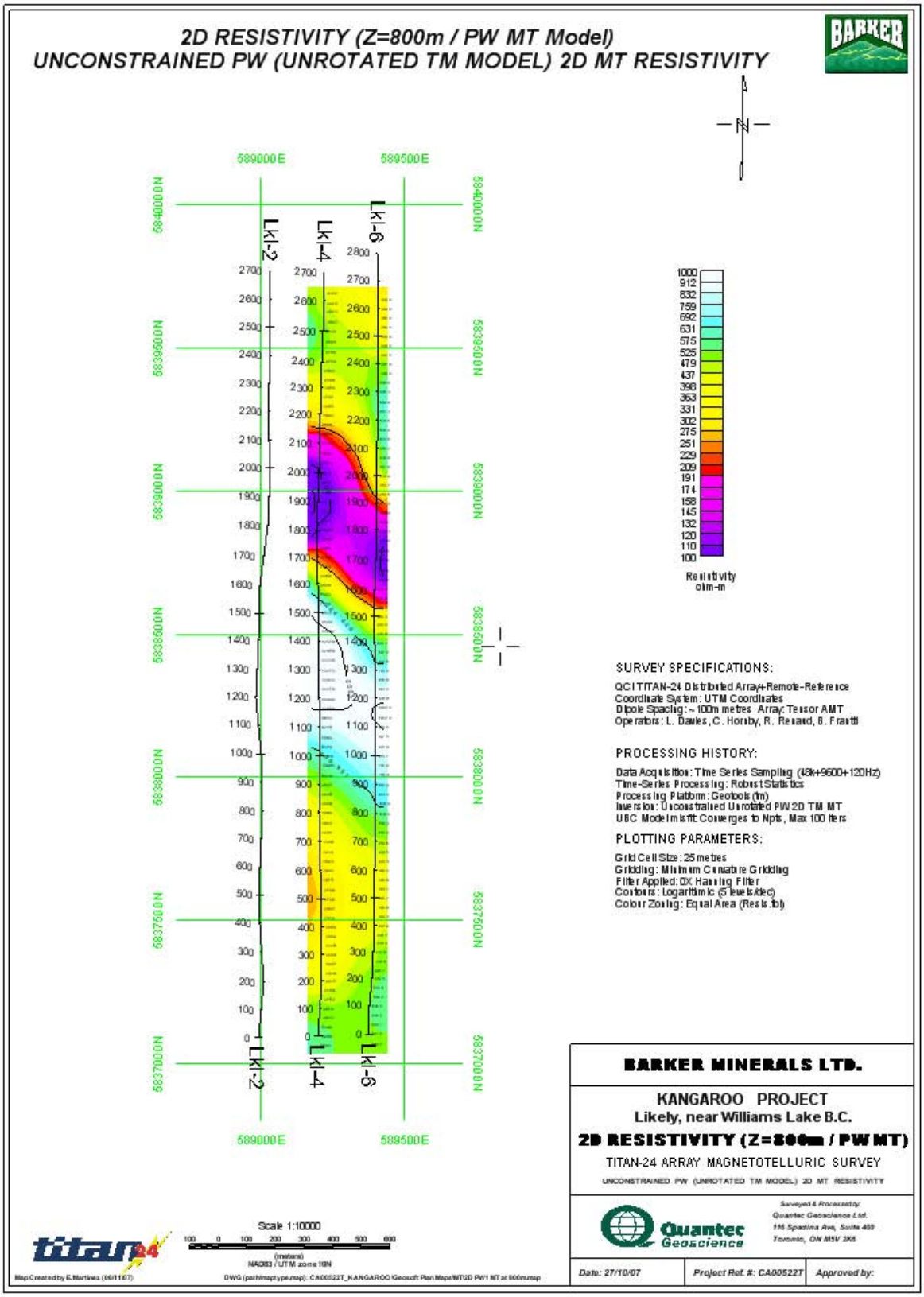
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\MT\2D PW1 MT at 600m.map

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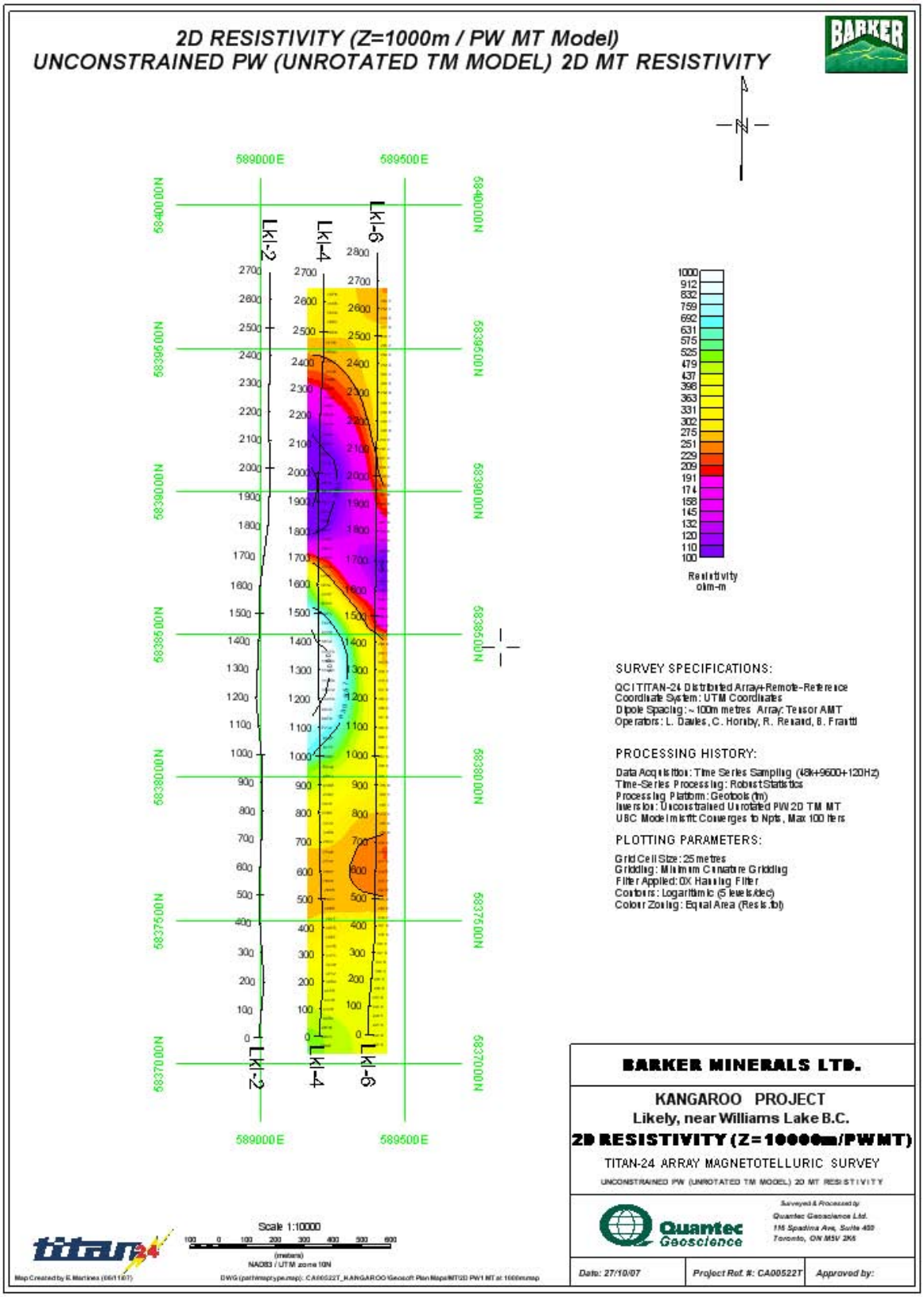
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\MT\2D PW1 MT at 800m.map

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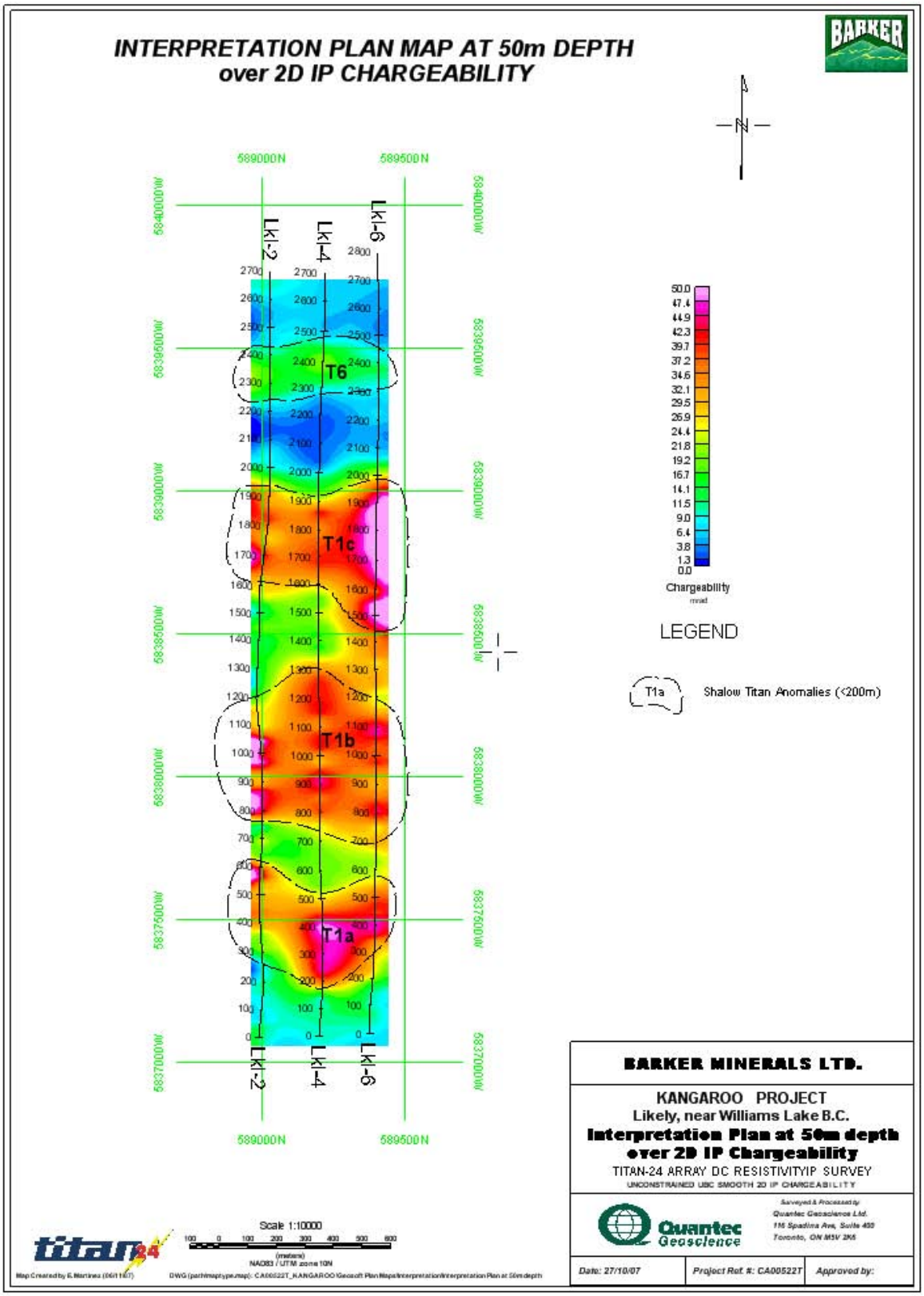


CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\MT\2D PW1 MT at 1000m.map

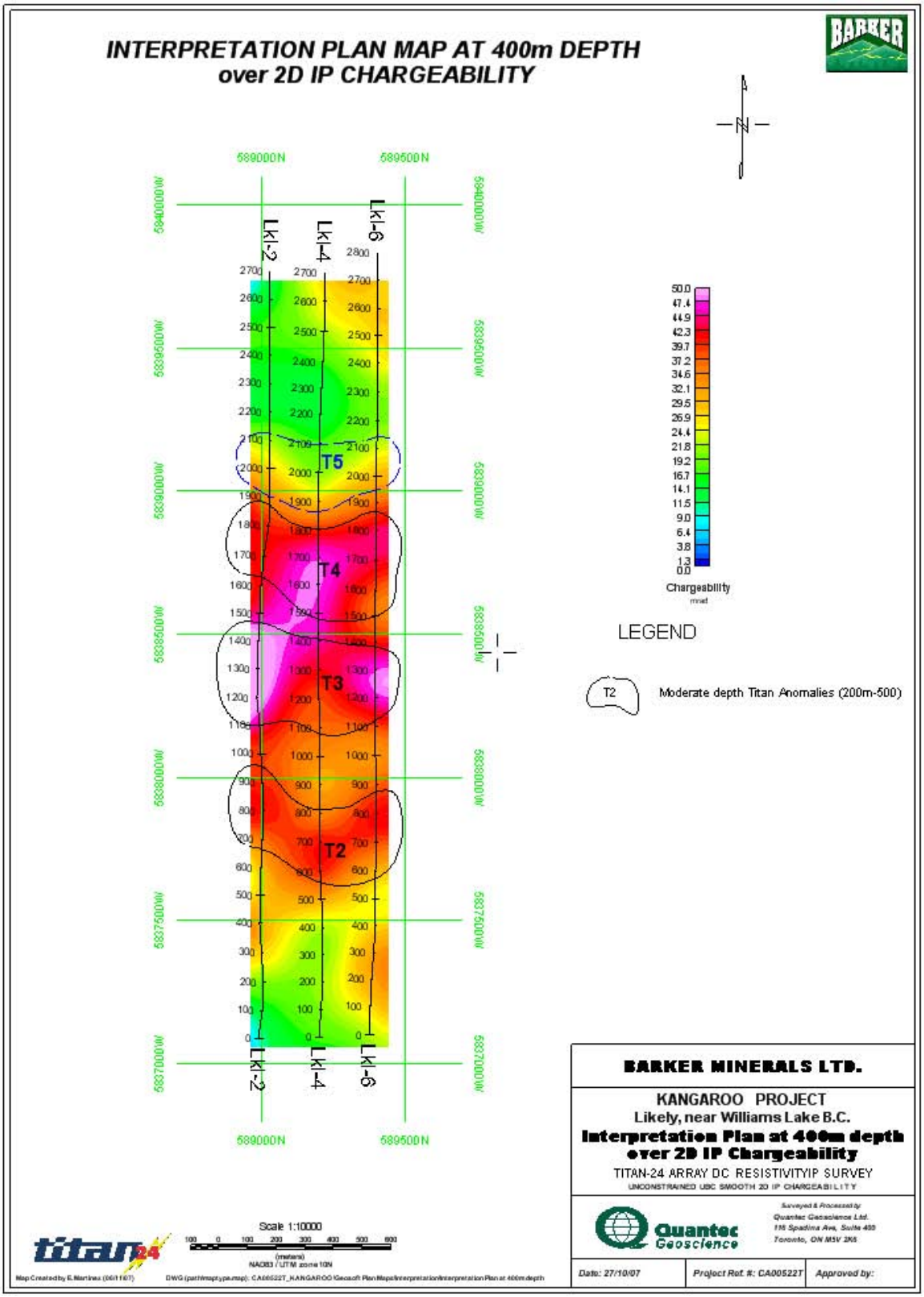
(Digital Archive Path\DWG: Line#maptype.map)



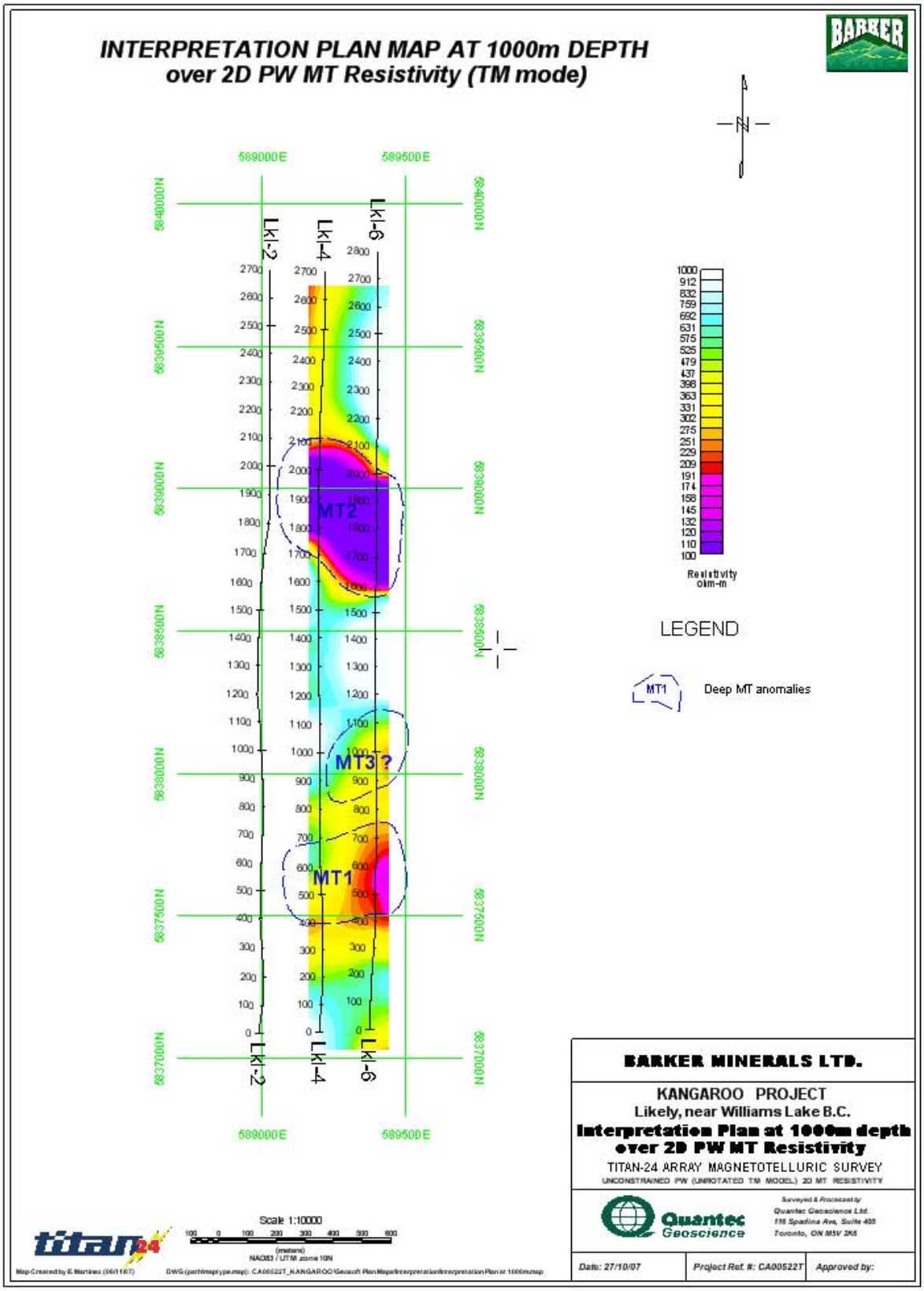
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\Interpretation\Interpretation Plan at 50m depth.map *(Digital Archive Path\DWG: Line#maptype.map)*



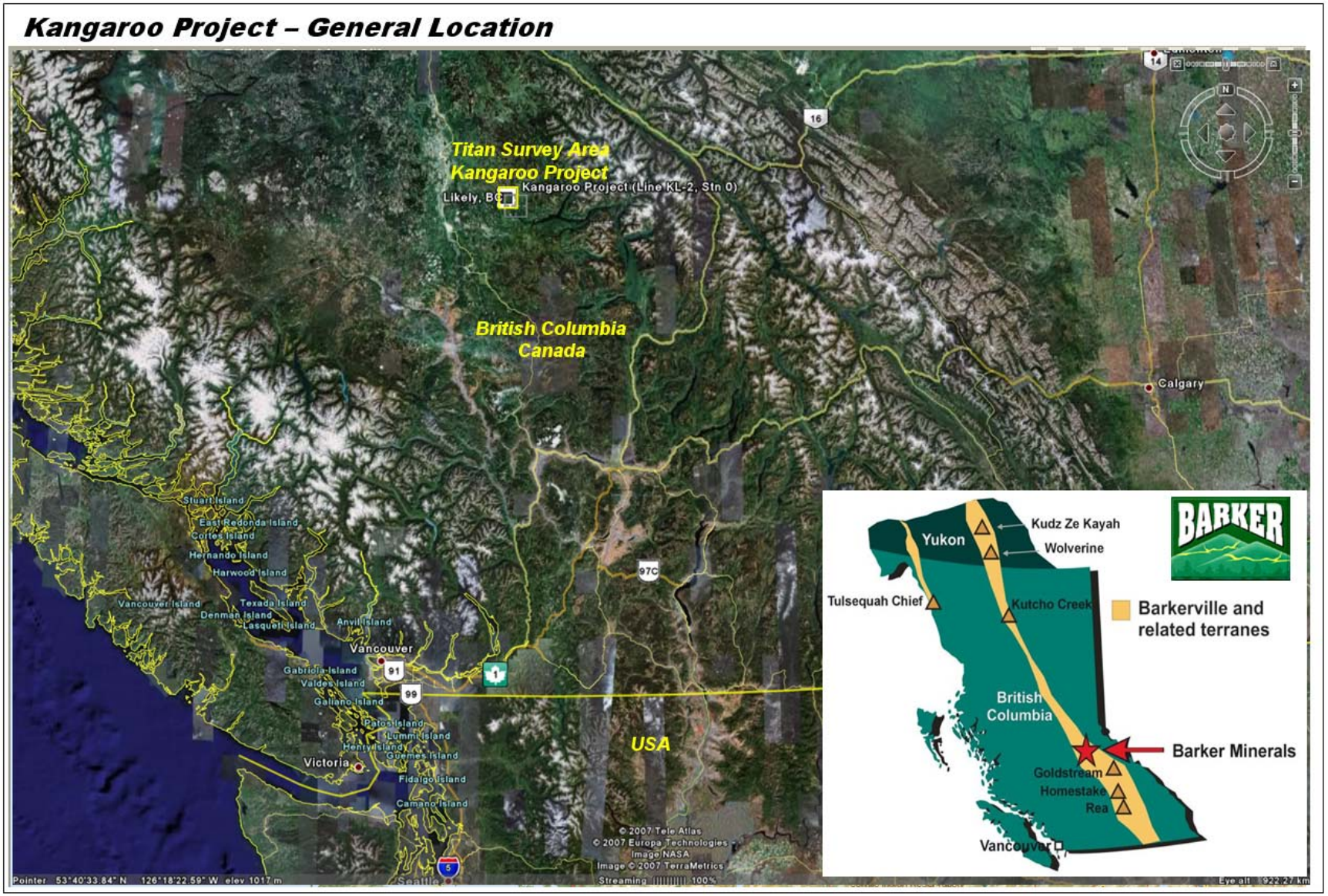
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\Interpretation\Interpretation Plan at 400m depth.map *(Digital Archive Path\DWG: Line#maptype.map)*

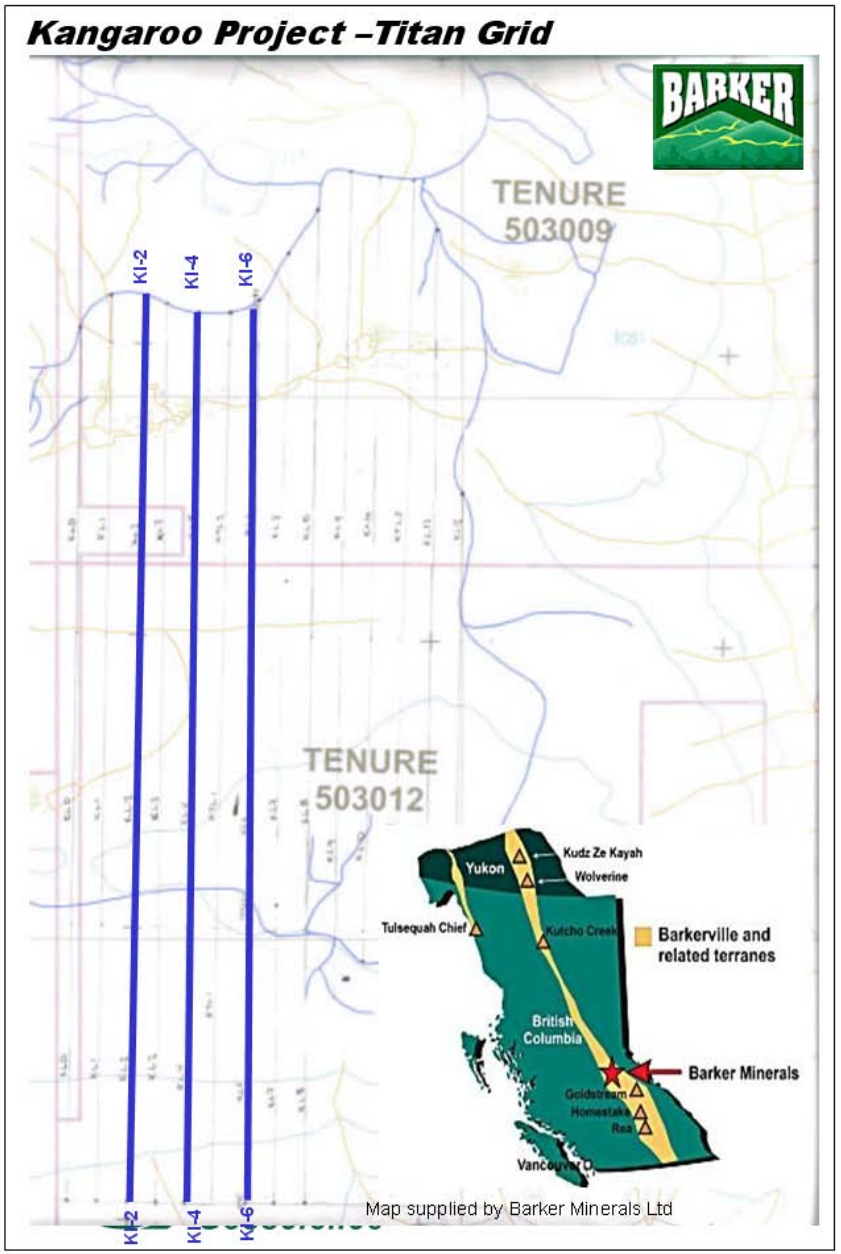


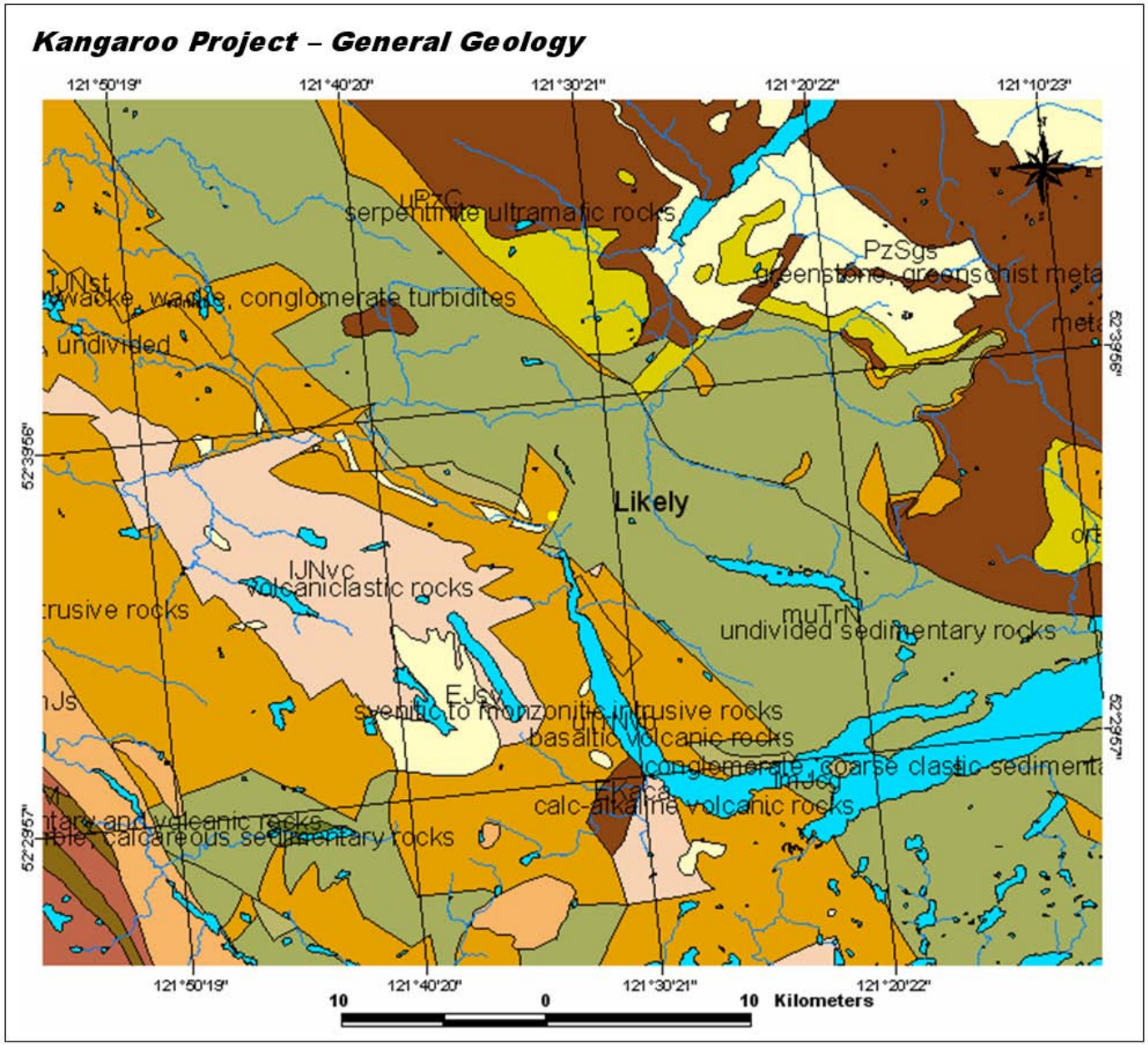
CA00522T- Kangaroo Project\Maps and Sections\Geosoft Plan Maps\Interpretation\Interpretation Plan at 1000m depth.map *(Digital Archive Path\DWG: Line#maptype.map)*



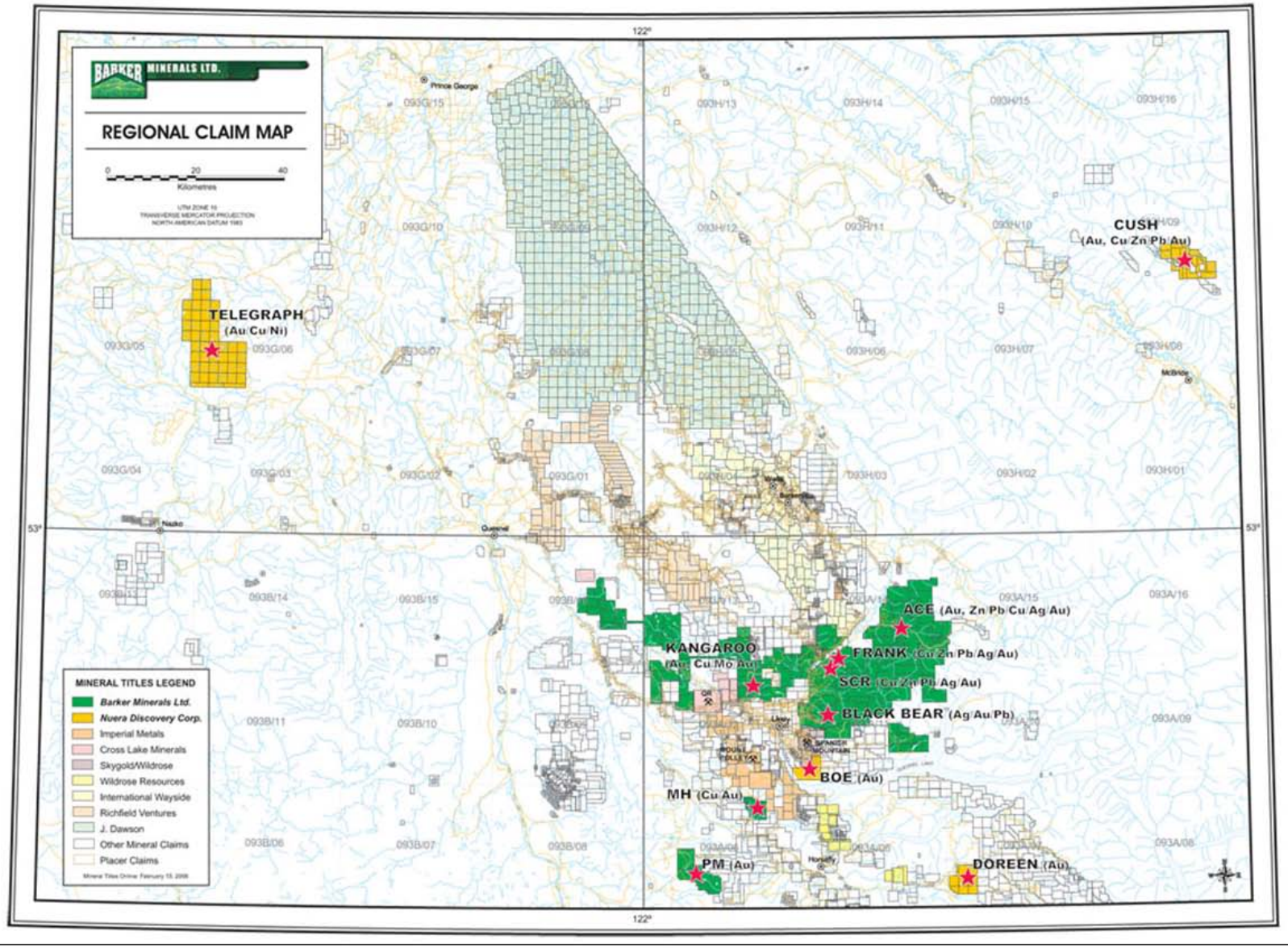
APPENDIX H: BASE MAPS AND 3D VIEWS

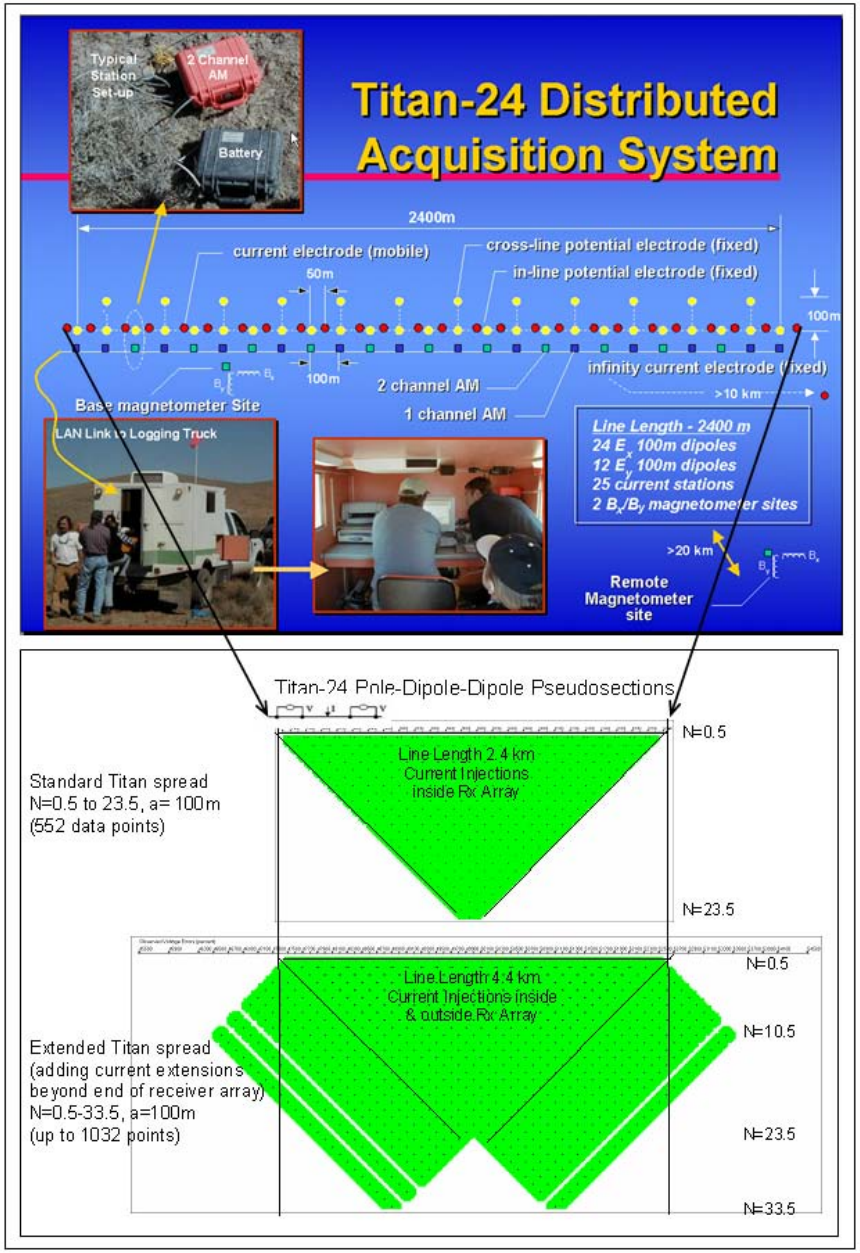



Kangaroo Project –Titan Grid
BARKER
TENURE
503009
TENURE
503012
KI-2
KI-4
KI-6
Yukon
Kudz Ze Kayah
Wolverine
Tulsequah Chief
Kutcho Creek
Barkerville and related terranes
British Columbia
Barker Minerals
Goldstream
Homestake
Rea
Vancouver
Map supplied by Barker Minerals Ltd


Kangaroo Project – General Geology
121°50'19"
121°40'20"
121°30'21"
121°20'22"
121°10'23"
52°39'58"
52°29'57"
UPzC
serpentinite ultramafic rocks
PzSgs
greenstone, greenschist meta
IJNst
undivided
Likely
IJNvc
volcaniclastic rocks
muTrN
undivided sedimentary rocks
EJSy
basaltic volcanic rocks
EKaca
calc-alkaline volcanic rocks
10 0 10 Kilometers

Kangaroo Project – Property Claims



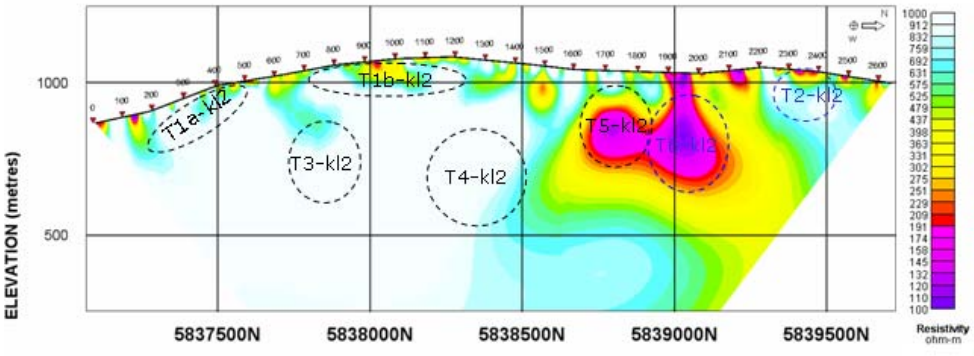

Titan-24 Distributed Acquisition System
Typical Station Set-up
2 Channel AM
Battery
2400m
current electrode (mobile)
cross-line potential electrode (fixed)
in-line potential electrode (fixed)
50m
100m
100m
infinity current electrode (fixed)
>10 km
2 channel AM
1 channel AM
Base magnetometer Site
LAN Link to Logging Truck
Line Length - 2400 m
24 Ex 100m dipoles
12 Ey 100m dipoles
25 current stations
2 Bx/By magnetometer sites
>20 km
Remote Magnetometer site
Titan-24 Pole-Dipole-Dipole Pseudosections
Standard Titan spread
N=0.5 to 23.5, a= 100m
(552 data points)
Line Length 2.4 km
Current Injections
inside Rx Array
N=0.5
N=23.5
Extended Titan spread
(adding current extensions
beyond end of receiver array)
N=0.5-33.5, a=100m
(up to 1032 points)
Line Length 4.4 km
Current Injections inside
& outside Rx Array
N=0.5
N=10.5
N=23.5
N=33.5

High priority targets: T3, T4, T5

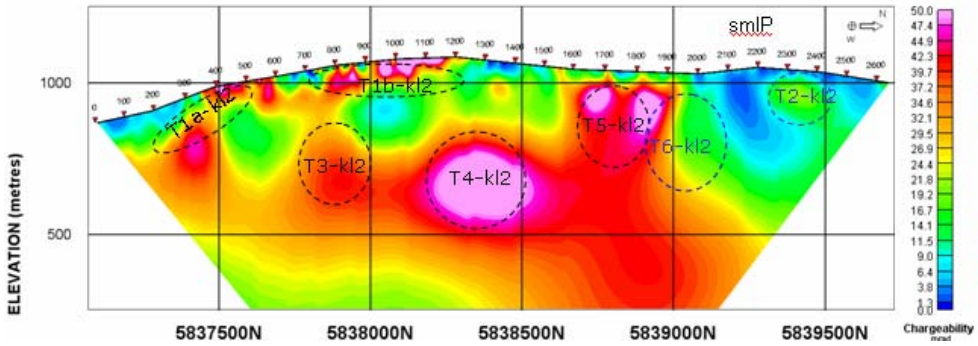
Low priority targets: T1a, T1b, T1c, T6, T2

Kangaroo Project Interpretation – Line kl-2

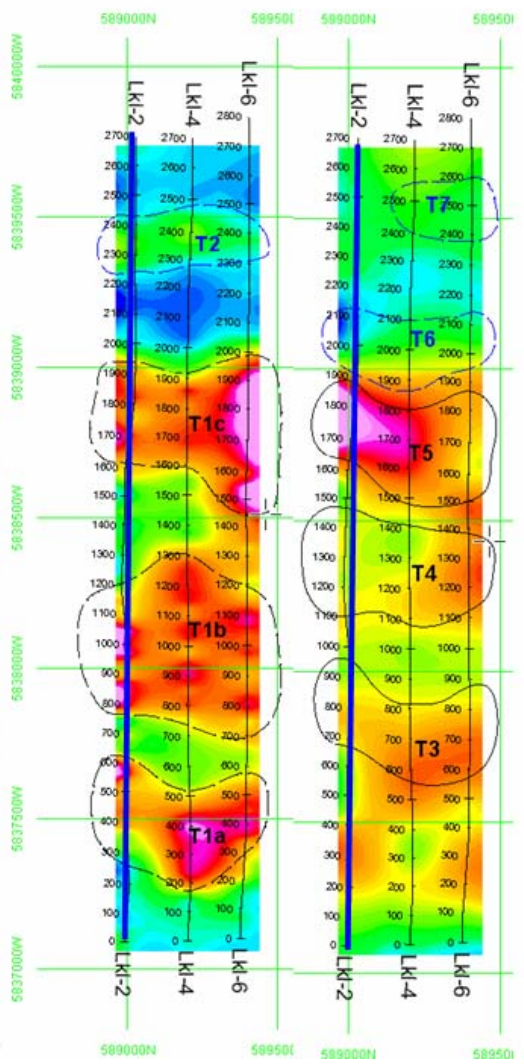
2D DC Resistivity Smooth Model



2D Chargeability Smooth Model (using homogeneous conductivity)

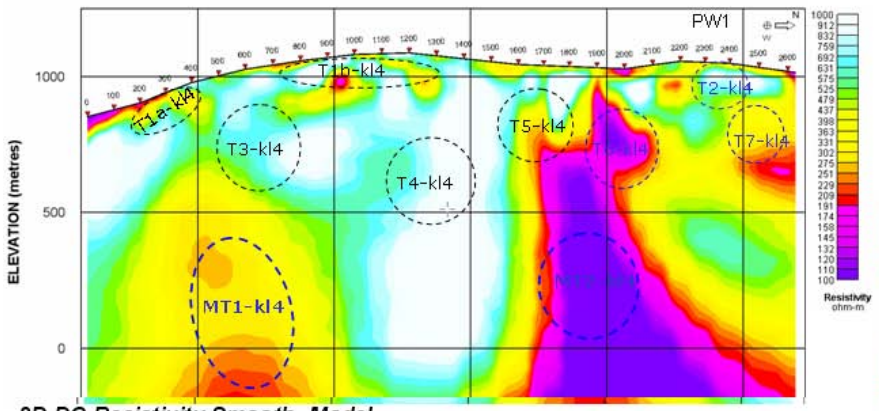


2D IP Plan (Z=50m) *2D IP Plan (Z=200m)*

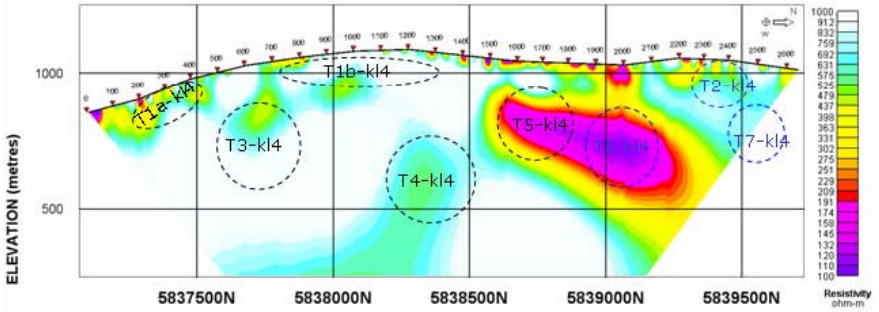


Kangaroo Project Interpretation – line kl-4

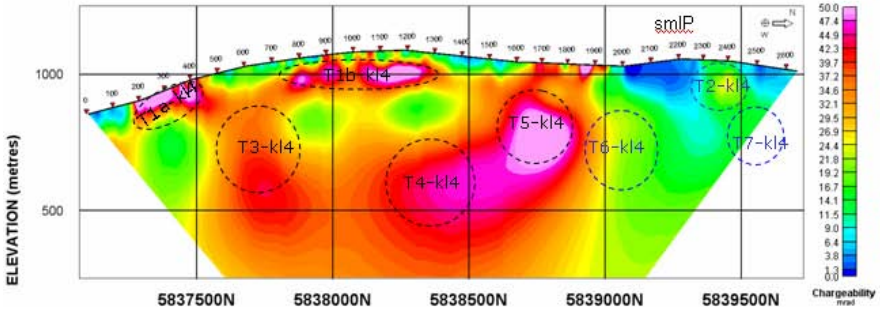
2D MT PW1 Resistivity Model (TM)



2D DC Resistivity Smooth Model



2D Chargeability Smooth Model (using homogeneous conductivity)



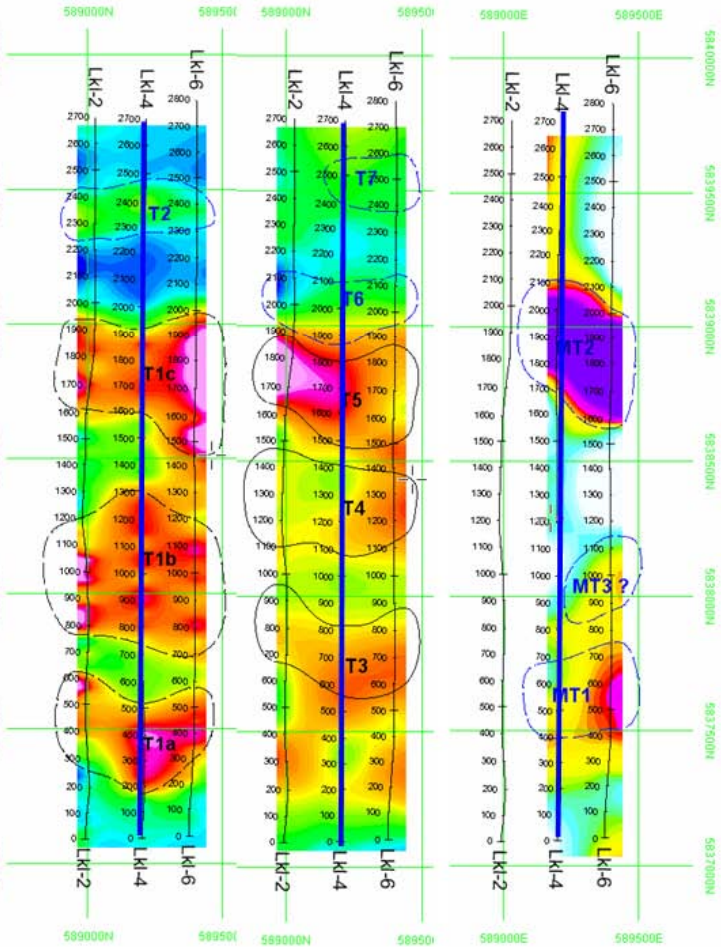
High priority targets: T3, T4, T5

Low priority targets: T1a, T1b, T1c, T6, T2, T7, MT1, MT2

2D IP Plan (Z=50m)

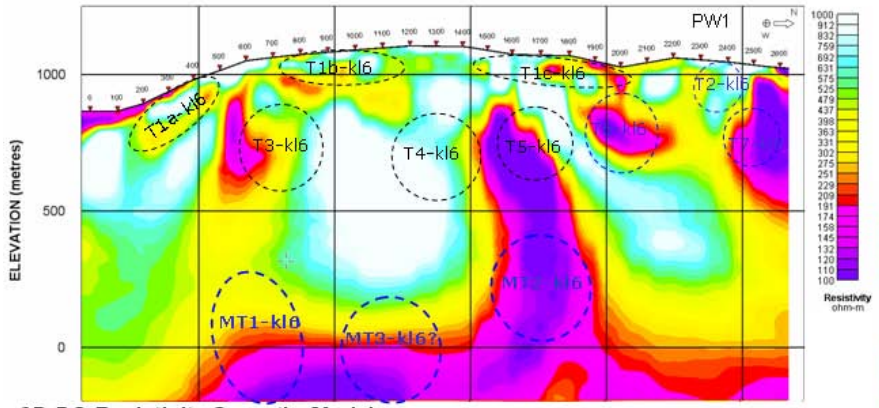
2D IP Plan (Z=200m)

2D PW MT Plan (Z=1000m)

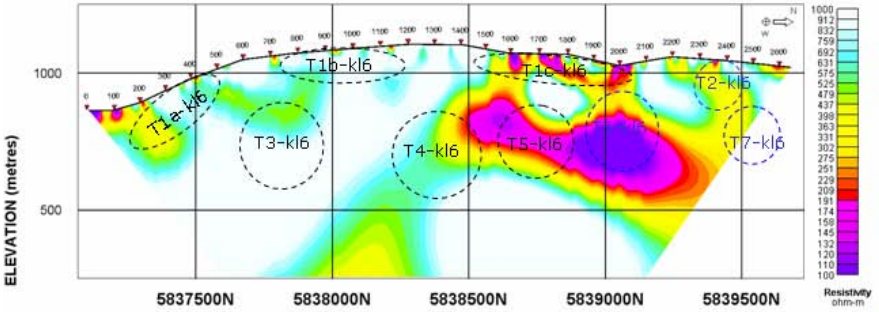


Kangaroo Project Interpretation – line kl-6

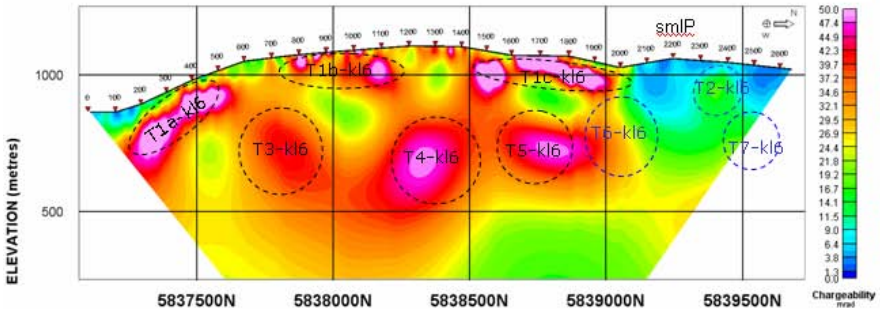
2D MT PW1 Resistivity Model (TM)



2D DC Resistivity Smooth Model



2D Chargeability Smooth Model (using homogeneous conductivity)



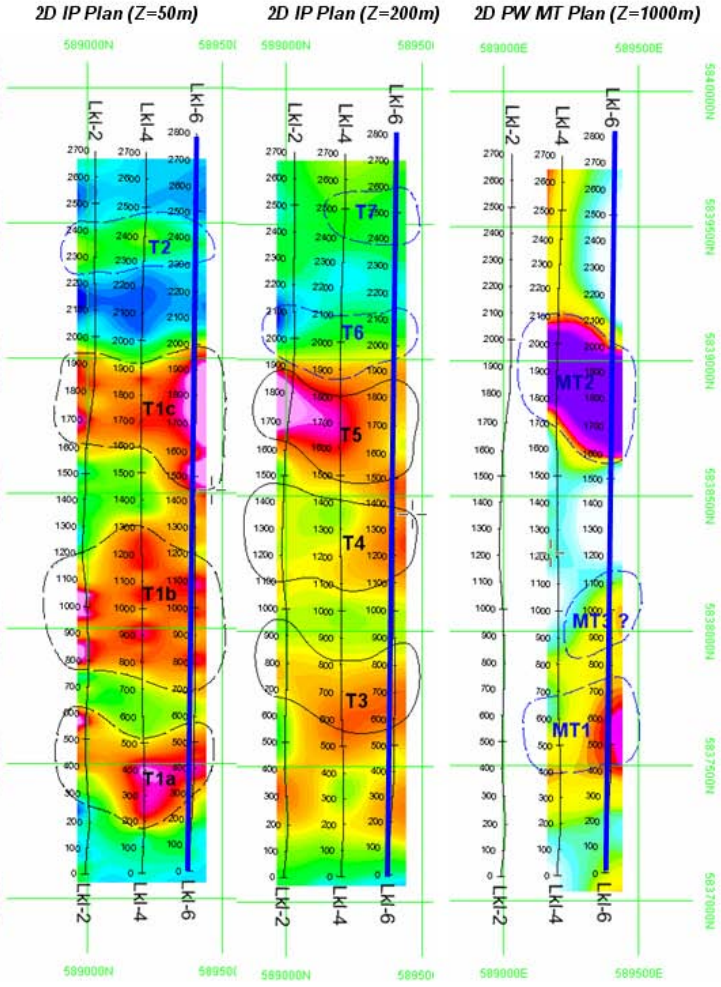
High priority targets: T3, T4, T5

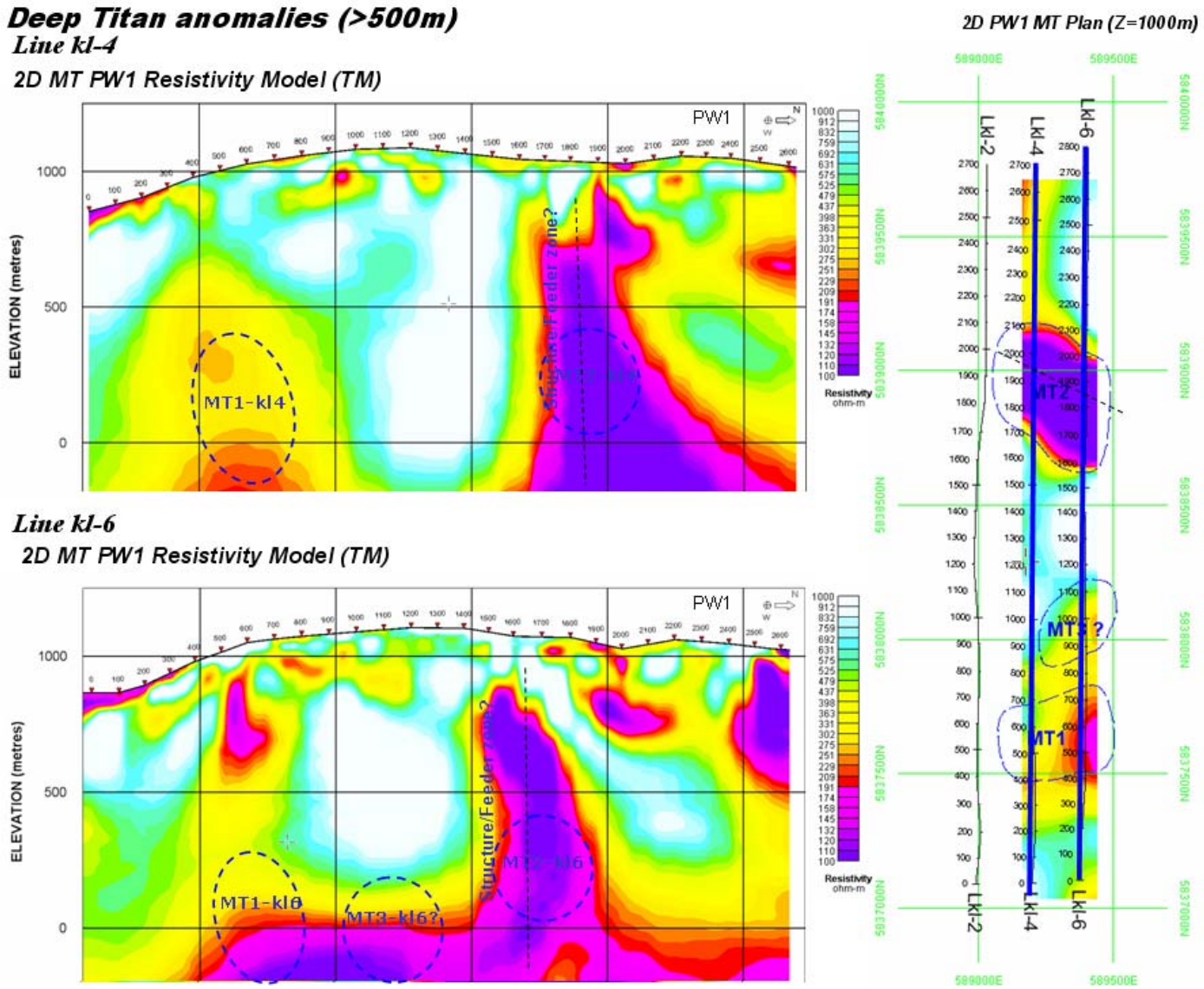
Low priority targets: T1a, T1b, T1c, T6, T2, T7, MT1, MT2, MT3?

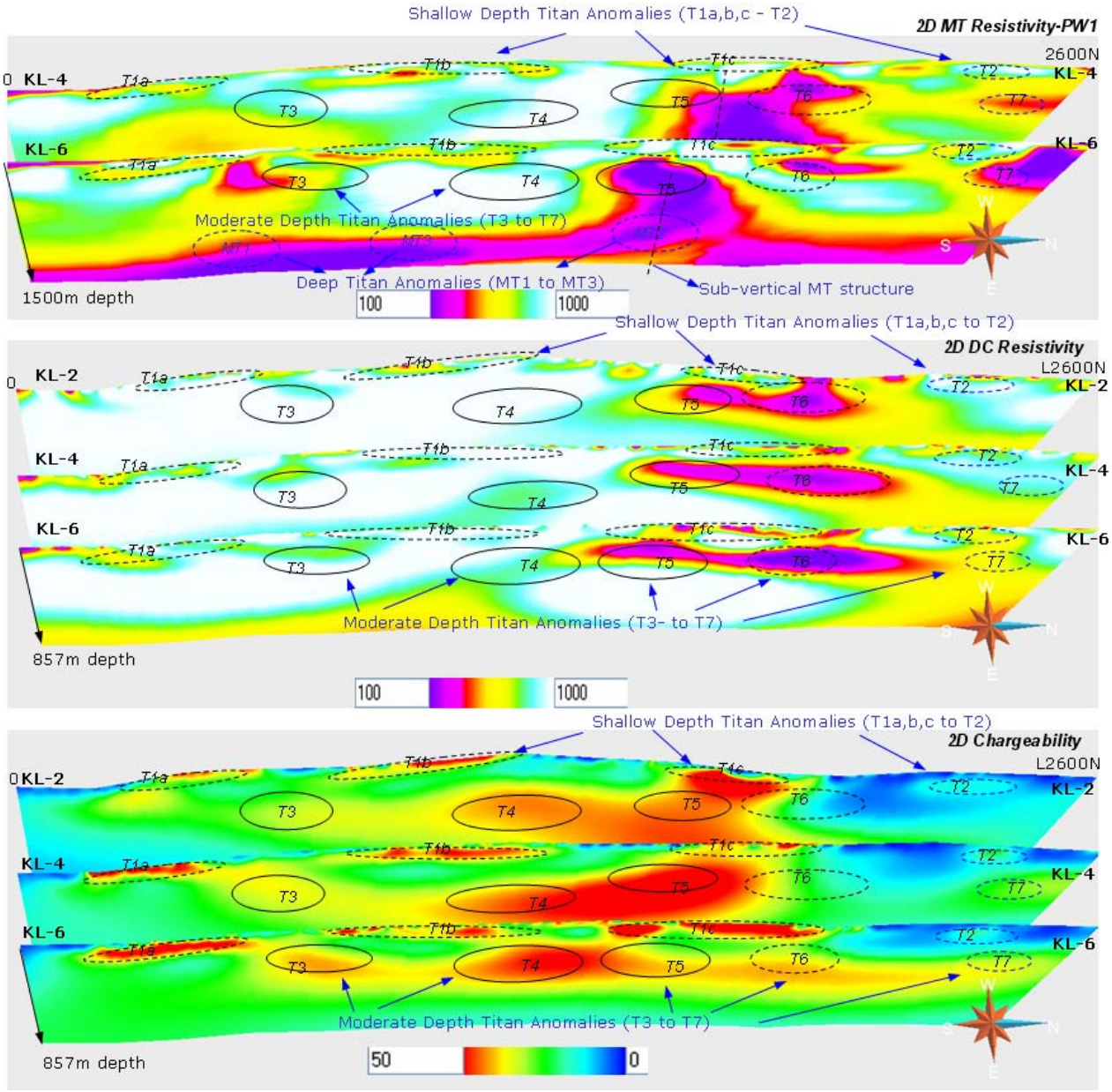
2D IP Plan (Z=50m)

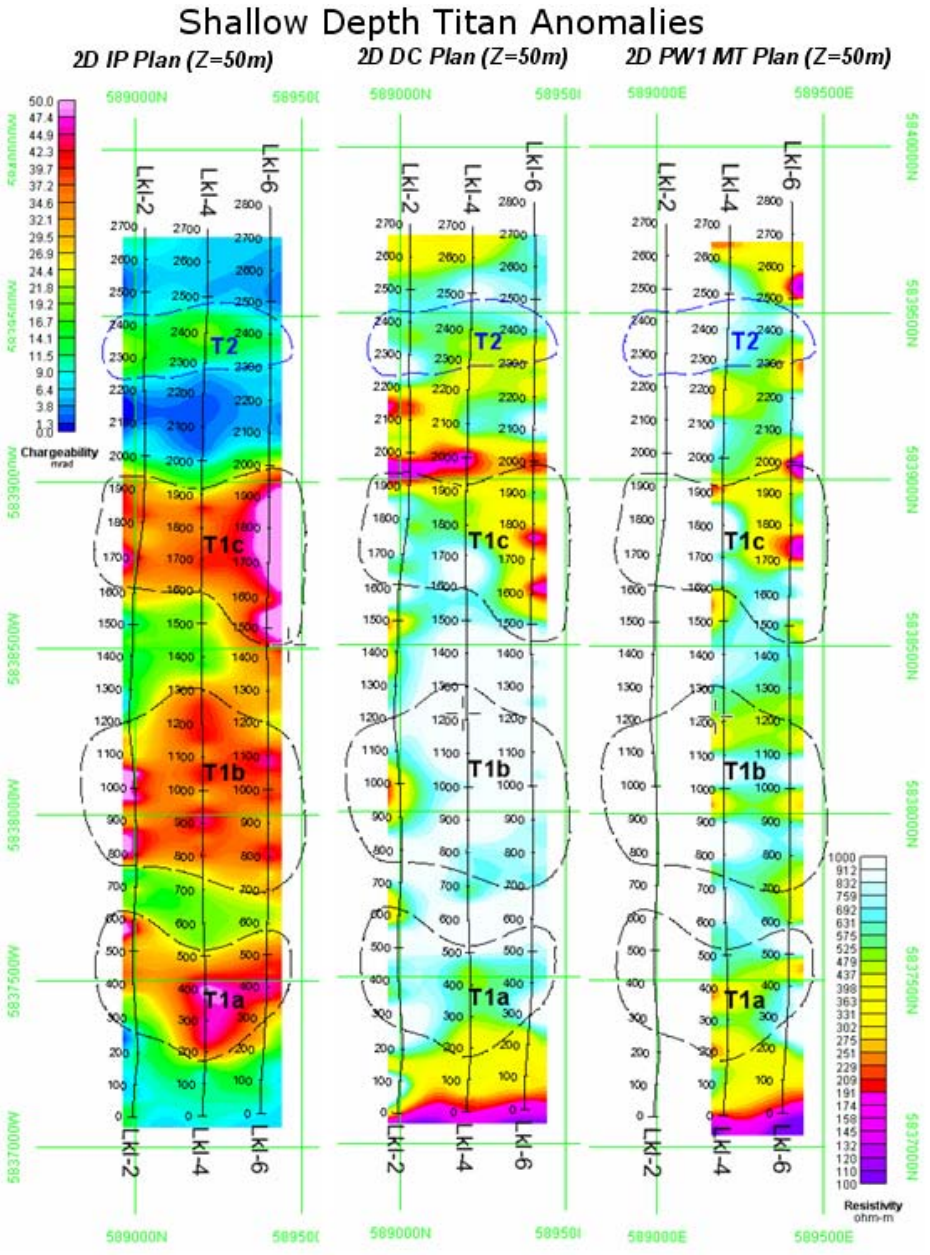
2D IP Plan (Z=200m)

2D PW MT Plan (Z=1000m)

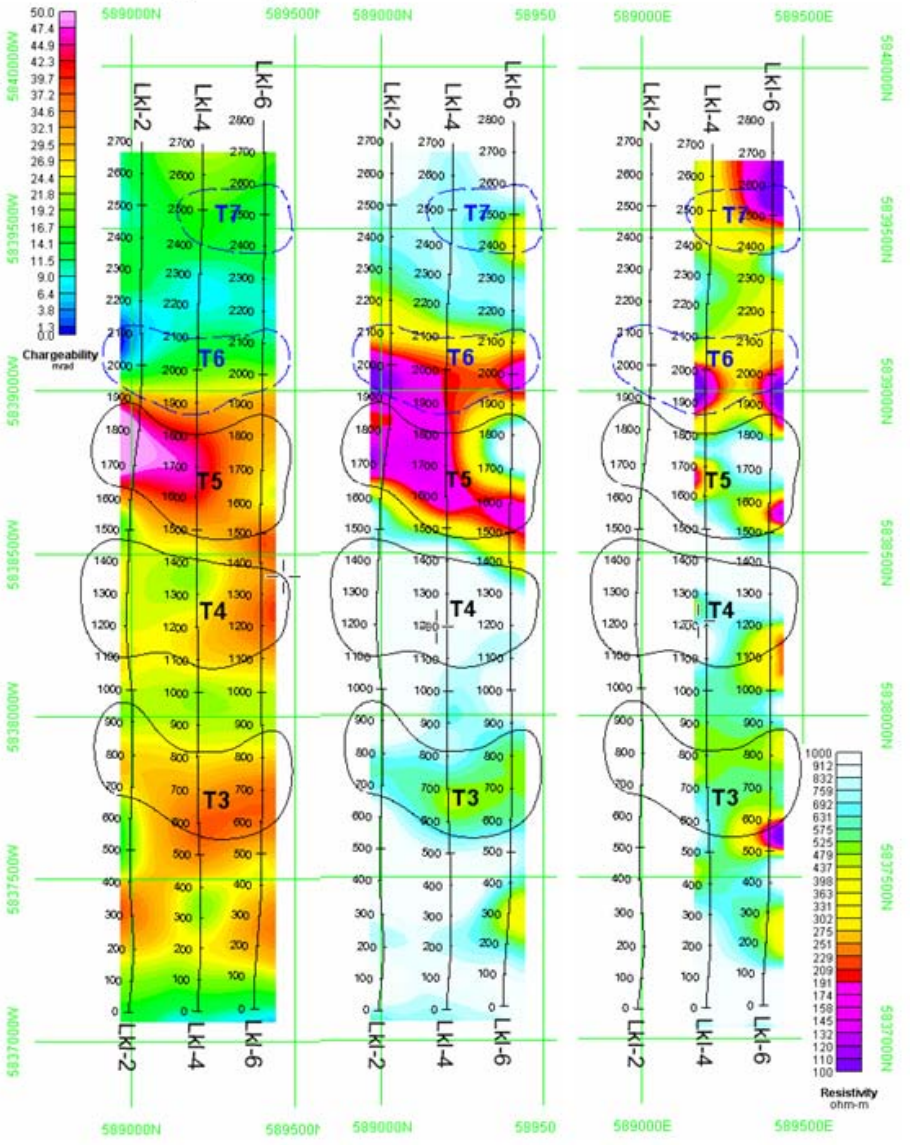



Deep Titan anomalies (>500m)
Line kl-4
2D MT PW1 Resistivity Model (TM)
PW1
ELEVATION (metres)
1000
500
0
MT1-kl4
Structure/Feeder zone?
Resistivity
ohm-m
Line kl-6
2D MT PW1 Resistivity Model (TM)
PW1
ELEVATION (metres)
MT1-kl6
MT3-kl6?
Structure/Feeder zone?
MT2-kl6
Resistivity
ohm-m
2D PW1 MT Plan (Z=1000m)
LK-2
LK-4
LK-6
MT2
MT3?
MT1
LKl-2
LKl-4
LKl-6

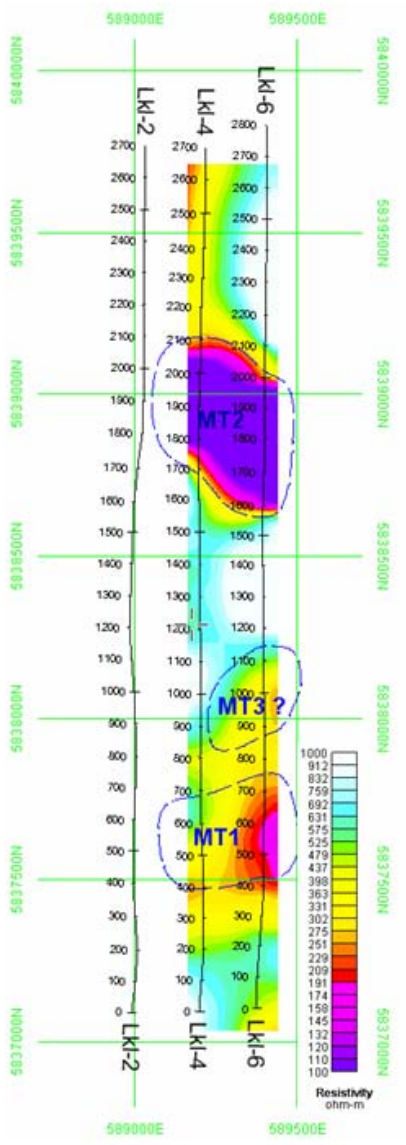

Shallow Depth Titan Anomalies (T1a,b,c - T2)
2D MT Resistivity-PW1
2600N
KL-4
KL-6
T1a
T1b
T1c
T2
T3
T4
T5
T6
T7
Moderate Depth Titan Anomalies (T3 to T7)
MT1
MT2
MT3
Deep Titan Anomalies (MT1 to MT3)
Sub-vertical MT structure
1500m depth
100
1000
Shallow Depth Titan Anomalies (T1a,b,c to T2)
2D DC Resistivity
L2600N
KL-2
Moderate Depth Titan Anomalies (T3- to T7)
857m depth
Shallow Depth Titan Anomalies (T1a,b,c to T2)
2D Chargeability
L2600N
Moderate Depth Titan Anomalies (T3 to T7)
857m depth
50
0


Shallow Depth Titan Anomalies
2D IP Plan (Z=50m)
2D DC Plan (Z=50m)
2D PW1 MT Plan (Z=50m)
Chargeability
mrad
Resistivity
ohm-m
T1a
T1b
T1c
T2
Lkl-2
Lkl-4
Lkl-6
589000N
589500E

Moderate Depth Titan Anomalies



Deep Titan Anomalies



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1. INTRODUCTION

- **Quantec Project No:** CA00522T
- **Project Name:** Kangaroo Project
- **Client**: Barker Minerals Ltd
- **Client Address:** 8384 Toombs Drive
  Prince George, BC
  Canada, V2K 5A3
- **Client Representative:** Louis Doyle
  Phone: 250 563 8752
  Facsimile: (303) 563-8751
  Email: barker@telus.net
- **Survey Type**: Tensor Magnetotelluric (MT)
  DC Resistivity and Induced Polarization (DCIP).
- **Survey Period:** 13 days (from October 16th, to October 28 th, 2007)
- **Objectives:**

  The objective of the Titan 24 DCIP & MT survey at Kangaroo Project is to locate potential sulfide and gold mineralization, and to map magnetic mineralization and the associated alteration.

  Pyrrhotite is the most common sulfide mineral, which may occurs in the siltstones in veinlets, and disseminated in the intrusive rock. Mineralization can also exist in shear zones and lithologic contacts.

  The Titan 24 survey provides the subsurface chargeability and resistivity at depth to assist geologic interpretations and focus drilling. The DCIP component of the survey should assist in delineating target mineralization within the top 500 to 750 meters pending geologic and cultural environment. MT resistivity provides additional resistivity information from surface to depths beyond one kilometer. The MT resistivity is useful for mapping geological contacts with resistivity contrasts and deep conductors that may potentially represent alteration or mineralization.

  The Titan 24 Distributed Acquisition System (DAS1) employs a combination of multiplicity of sensors, 24-bit digital sampling, and advanced signal processing. It provides three independent datasets capable of measuring subsurface resistivity (structure, alteration & lithology) and chargeability (mineralization) to depth.

- **Report Type:**

  Survey logistics, describing the survey parameters and methodology, as well as presenting the survey results in digital/plot forms.

[1] *Ref., Sheard, N. (1998). MIMDAS: A new direction in geophysics. Proceedings of the ASEG 13th International Conference, Hobart, Tasmania.*

2. GENERAL SURVEY DETAILS

2.1 LOCATION

- **General Location:** Central British Columbia, Canada (see Figure 1)
- **Province:** British Columbia
- **District:** Cariboo Mining District, BC
- **Nearest Settlements:** Likely/BC
- **Lat/Lon (Line KL-2, Stn 0):** N52°40'35.18", W121°41'01.65"
- **UTM position[2] (Line KL-2, Stn 0):** 588988 mE, 5837091 mN @ 866msl
- **Datum:** NAD 83
- **UTM Zone:** 10N

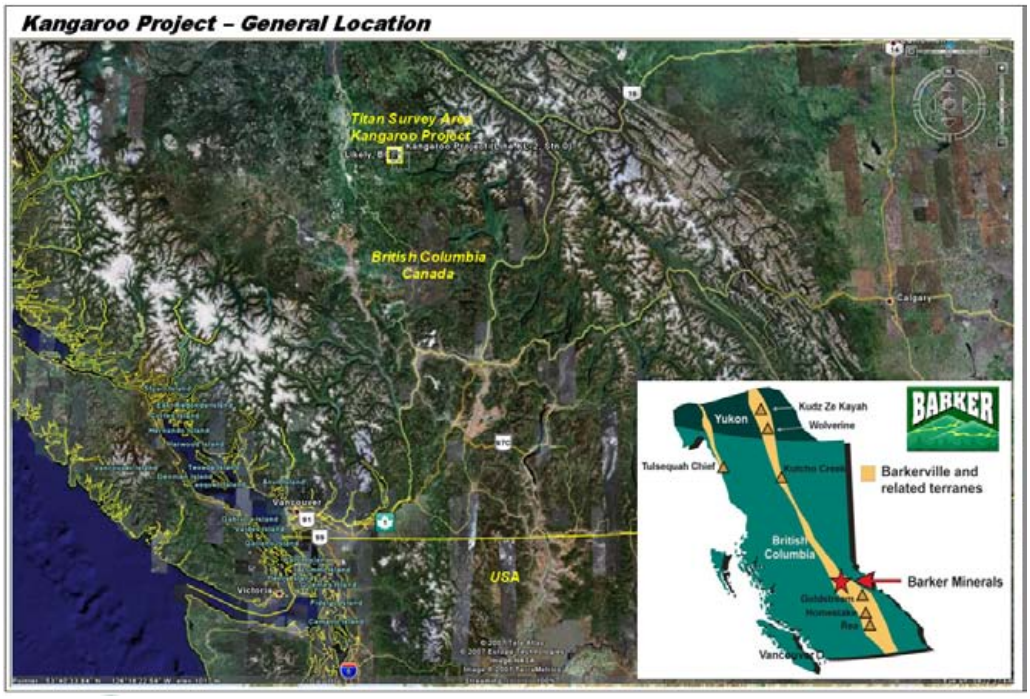


Figure 1: Kangaroo Project General Location Map[3]

2.2 ACCESS

- **Base of Operations** Barker Minerals Camp, Likely, Central BC
- **Mode of Access to Grid:** Trucks
- **Mode of Access to Lines:** Trucks, ATVs, and by foot

[2] *UTM coordinates (NAD 83, Zone10U) supplied by Barker Minerals Ltd.*
[3] *Kangaroo Project General Location Map obtained from Google Earth, V4.2, 2007.*

2.3 SURVEY GRID

- **Established by:** Barker Minerals Ltd.
- **Azimuth:** approx. 0 degrees
- **Declination:** approx. 19 degrees East
- **Station Interval:** 100 meters
- **Coordinate Reference System:** Survey Grid referenced to UTM Coordinates, (see Figure 2 and Table 1)
- **Method of Chaining:** Metric, slope distance, pickets GPS surveyed

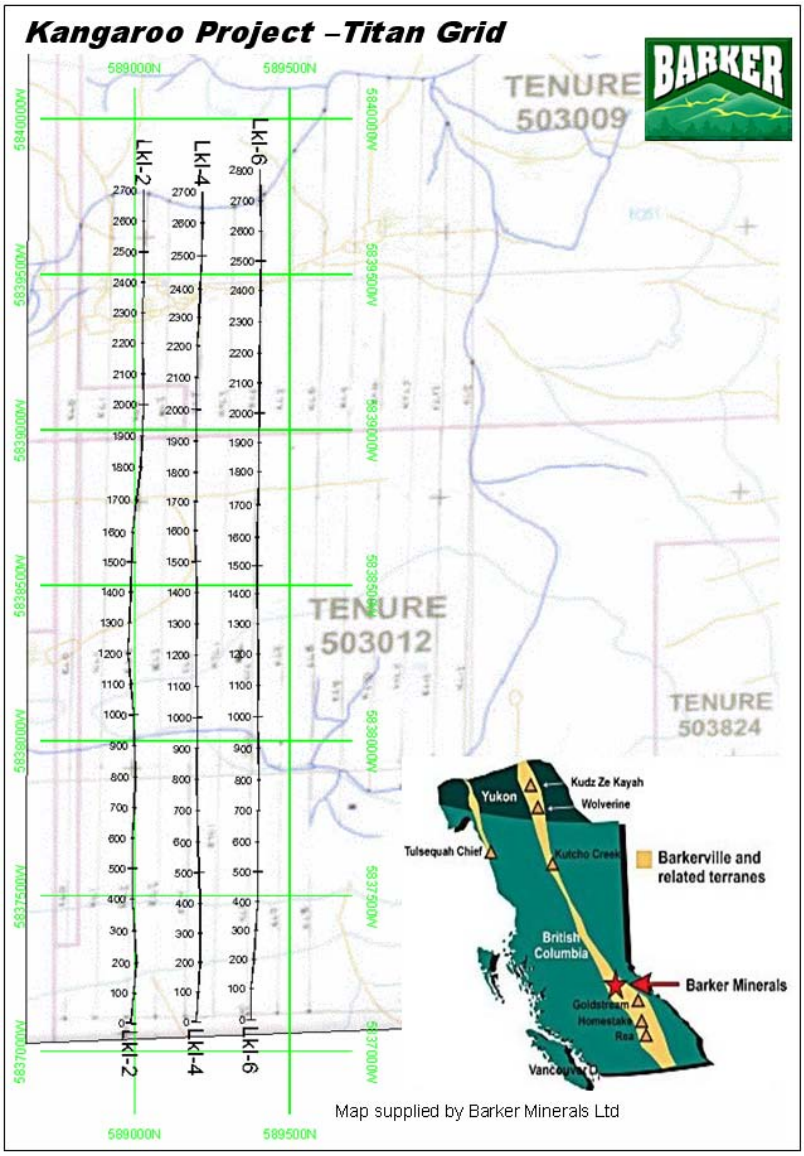


Figure 2: Kangaroo Line Location Map[4]

[4] *Kangaroo Line Location Map supplied by Barker Minerals Ltd, 2007.*

Line	Array Coord. Start	Array Coord. End	UTM Coord. Start		UTM Coord. End	
			Easting	Northing	Easting	Northing
KL-2	0	2700N	588988	5837091	589030	5839770
KL-4	0	2700N	589198	5837095	589219	5839765
KL-6	0	2700N	589376	5837102	589404	5839835

Table 1: Kangaroo Survey Lines (UTM Referenced NAD 83, Zone 10U)

- **Claims surveyed:** see Figure 3

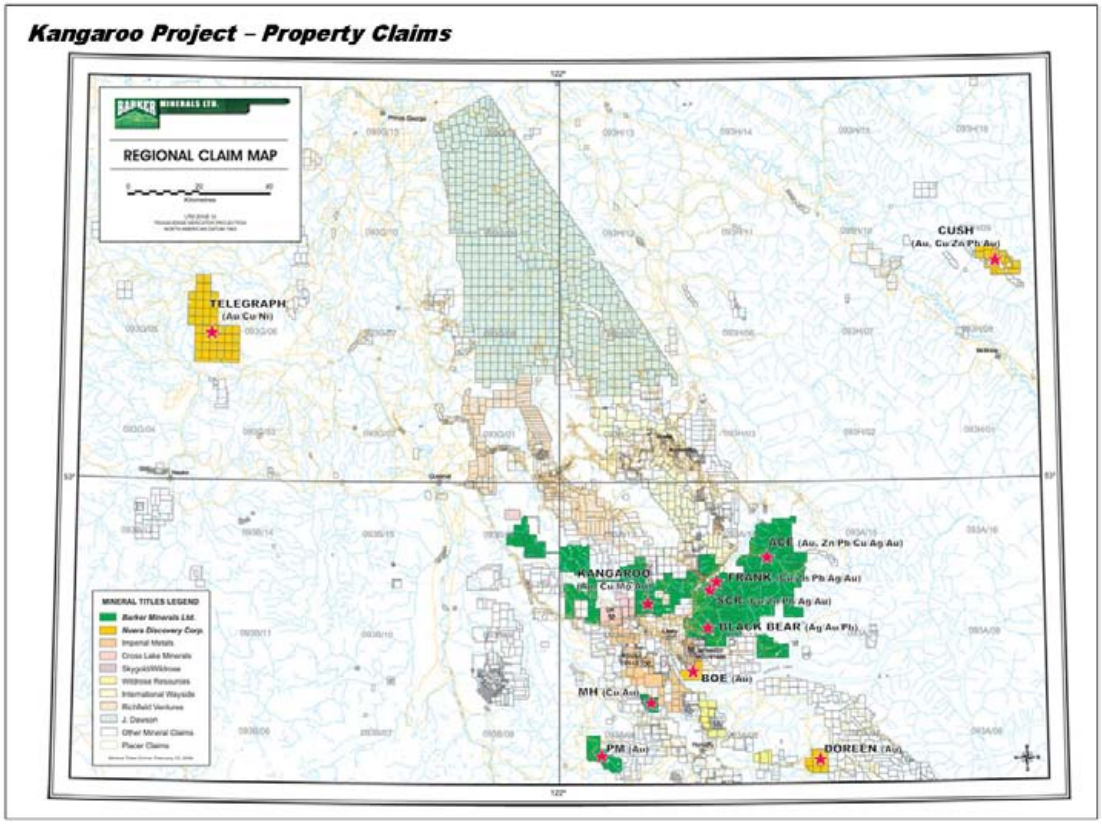


Figure 3: Kangaroo Project Property Claims

3. SURVEY WORK UNDERTAKEN

3.1 GENERALITIES

- **Survey Days (read time):** 13 (4 days)
- **Mob/Demob:** 2 days
- **Line Setup/Pickup:** 3 days
- **Parallel Sensor Test:** 1 day (same day as for the Line Setup)
- **Weather/Down Days:** 4 days
- **Number of Lines Surveyed:** 3 lines (see Figure 2 and Table 1)
- **Survey Coverage:** DCIP survey: 9.25 km (see Table 2)
  MT survey: 7.8 km (see Table 3)

3.2 PERSONNEL

- **Project Manager:** Kevin Blackshaw, Porcupine, ON
- **Supervising Res. Geophysicist:** Evelio Martinez, Toronto, ON
- **Data Processing (in field):** Bruce Frantti, Reno NV, USA
- **Crew Chiefs:** Steve Wynn, Sturgeon Falls, ON
  David Clinton, Australia
  Lee Davies, ON
- **IP operators:** Steve Wynn, Sturgeon Falls, ON
  Badden Leuszler , Sturgeon Falls, ON
- **MT Operators:** Chris Hornby, Oakville, ON
  Tyler Fletcher, Englehart, ON
- **Remote MT Operator:** Rodney Renaud, Sturgeon Falls, ON
- **Field Technicians:** Jesse Rondeau, Sturgeon Falls, ON
  Tyler Debruyn, Fort McMurray, AB
  Jean Francois, ON
  Cody Picket, Port Elgin, ON
  Tyler Debruyn, Fort McMurray, AB
  Alain Dufour, QU
  Shayn Wilson, Thunder Bay, ON
  William Natomogan, Beauval, SK
  Leon Simpson, North Bay, ON

3.3 SURVEY SPECIFICATIONS

3.3.1 DCIP Surveys

- **Survey Array:** Pole-Dipole-Dipole Array (combined PDR & PDL, see Figure 4) using Standard Titan Spread[5] (see Figure 5)
- **Receiver Configuration**: 24 Ex = Continuous In-line voltages (see Figure 6)
  12-13 Ey = Alternating (2-station) cross-line voltages[6]
- **Array Length:** 2400 meters
- **Number of Arrays/line:** 1
- **Dipole spacing:** 100 meters
- **Sampling Interval:** Ex = 100 meters
  Ey = 200 meters
- **Rx-Tx Separation:** N-spacing (Pn-Cn min)=0.5 to 23.5
- **Infinite Pole Location:** UTM: 584960E, 5839169N (NAD83, 10U)
- **Spectral Domain:** Tx = Frequency-domain square-wave current
  Rx = Full waveform time-series acquisition

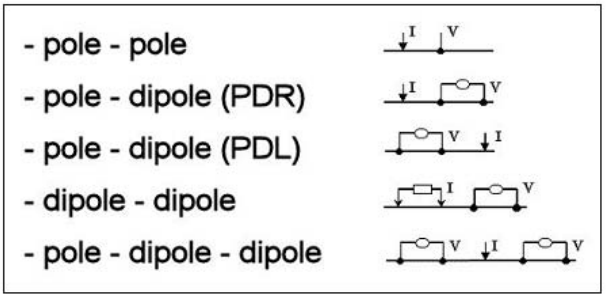


Figure 4: Conventional DCIP Survey Layouts

[5] *Note: Standard pldpdp array has current injections inside DAS receiver array at dipole-midpoints; Extended pldpdp array has current injections at 100m centers extending beyond each end of Rx array.*
[6] *Note: Cross-Line Ey voltages obtained for future reference purposes – not presented in cross-sectional plots.*

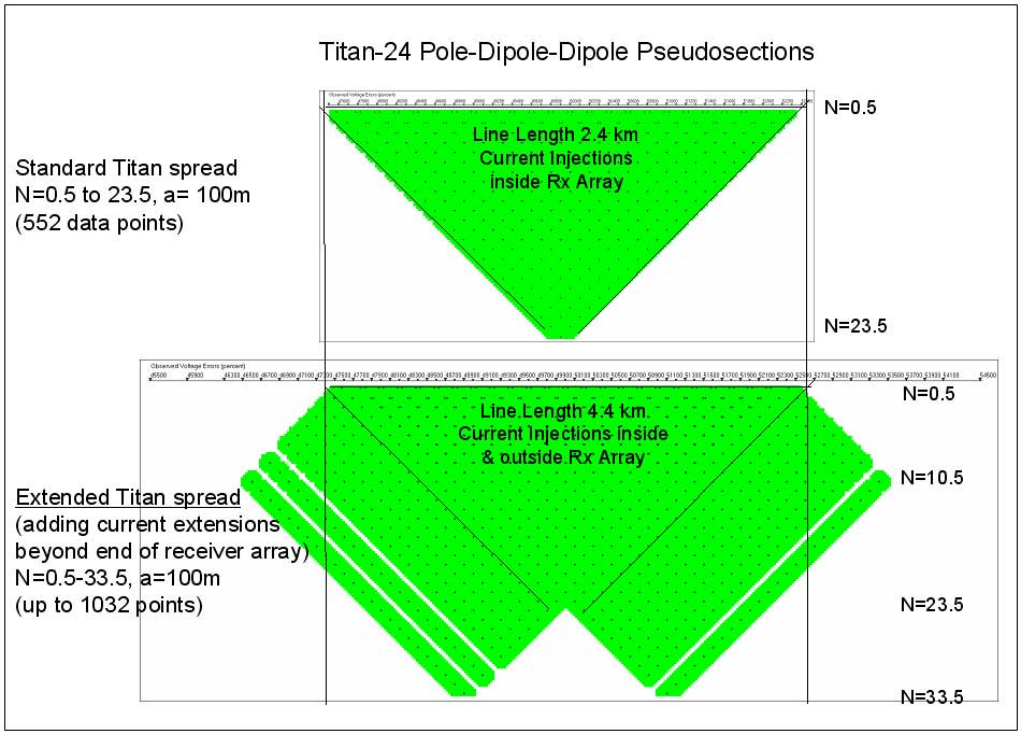


Figure 5: Titan 24 DCIP Survey Layouts

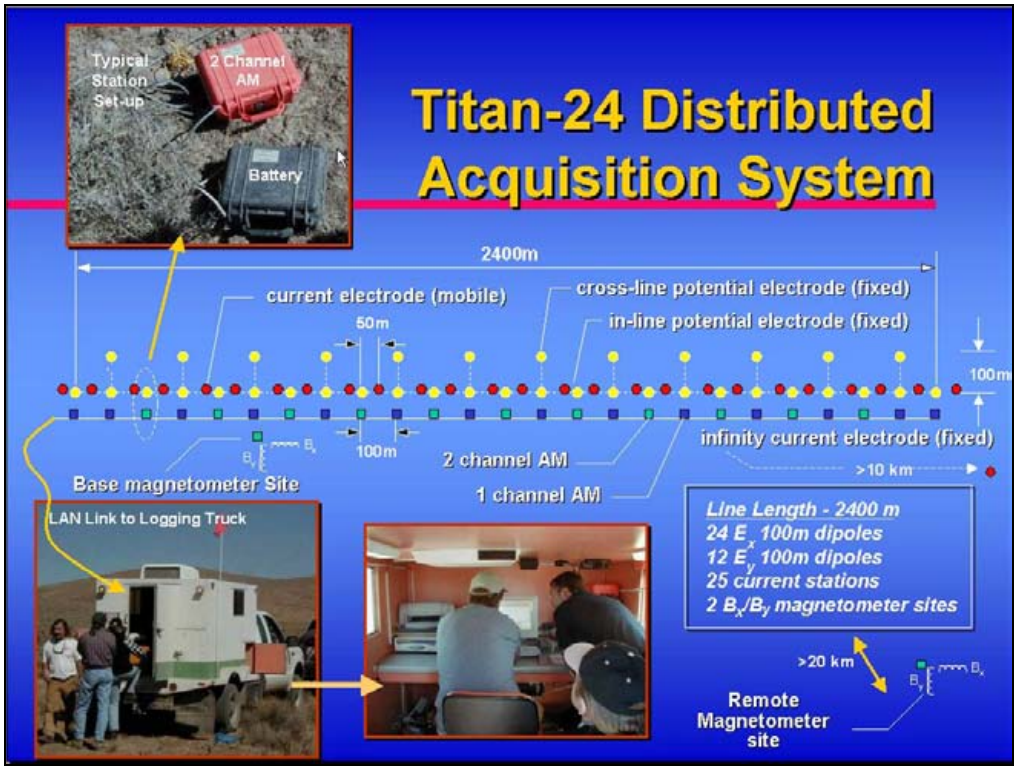


Figure 6: Titan DCIP and Tensor MT Schematic Distributed Acquisition System

3.3.2 MT Surveys

- **Technique:** Tensor soundings, remote-referenced
- **Base Configuration:** 24 Ex = Continuous In-line E-fields
  12-13 Ey = Alternating (2-station) cross-line E-fields
  1 pair LF coils
  1 pair HF coils
- **Remote Configuration** 1 Ex = in line E-fields
  1 Ey = cross-line E fields
  1 pair LF coils
  1 pair HF coils
- **Array Length:** 2400 meters
- **Number of Arrays/line:** 1
- **Dipole Spacing:** 100 meters
- **Sampling Interval:** Ex = 100 meters
  Ey = 200 meters
- **Ex/Ey Sampling Ratio:** 2/1
- **E/H Sampling Ratio:** Ex = 24/1
  Ey = 13/1
- **Remote-reference Measurements:** 1 Hx/Hy set (1 Ey/Ex set for verification/monitoring)
- **Remote Reference Position:** UTM: 682017E, 5457092N (NAD83 / Zone 10U)
- **Frequency bandwidth:** 0.1 to 10000 Hz (final product)
- **Data Acquisition:** Full-waveform time-series acquisition
  Data processing/output in frequency-domain

3.4 SURVEY COVERAGE

3.4.1 DCIP Survey

LINE	SETUP	Min Ex (m)	Max Ex (m)	Min Tx (m)	Max Tx (m)
KL-2	1	50	2550	50	2650
KL-4	1	50	2550	50	2650 (+1300m repeat)
KL-6	1	50	2550	50	2650
				TOTAL	**9.25 km**

Table 2: Kangaroo Grid - DCIP Survey Coverage (Max and Min Electrode Positions)

3.4.2 MT Survey

LINE	Min EXTENT (m)	Max EXTENT (m)	TOTAL
KL-4	0	2600	2600 (+2600m repeat)
KL-6	0	2600	2600
		TOTAL	**7.8 km**

Table 3: Kangaroo Grid - MT Survey Coverage (Electrode to Electrode)

3.5 INSTRUMENTATION

- **Receiver System:** Quantec Distributed Array Acquisition System, comprising:
  - 61channels max. per system (55ch operationally with internal A/D conversion (24bit @120db / dual speed @120-48kHz), and buffer memory (6Mb).
    22 x 2-channel Acquisition Modules (AMs)
    17 x 1-channel Acquisition Modules (Ams)
    AM data transmission using LAN cabling
  - 2 Central Recording Units (CRU), at base & remote (MT surveys) reference sites (140Gb data storage)
  - 2 GPS synchronization clocks (10nsec precision clock-speed), at base & remote (MT surveys) CPU's (12.3MHz)
  - 2 PC-based Central Processing Units (base & remote)
- **Transmitter (DCIP Surveys):** GDD (5kW) with frequency/waveform control, using CPU, and Current Monitor (CM)
- **Power Supply (DCIP Surveys):** Honda 6500 Generator. Single phase, 220V
- **Receiver Electrodes**: Ground contacts using stainless steel rods
- **Transmit electrodes** 4 x 1.2cm diameter 1 meter long stainless steel rods
- **Receiver Coils (MT Surveys):** a) Four Phoenix magnetometers "P50" models[7] (effective frequency range from 400 Hz to 0.0002 Hz) Two at base (line) and two at remote site (Line Hx: P50-1953, Line Hy: P50-1996, Rem Hx: P50-1988, Rem Hy: P50-1989), b) Four EMI magnetometers "BF-6" models (effective frequency range from 1Hz to 25 kHz) Two at base (line) and two at remote site (Line Hx: BF6-0315, Line Hy: BF6-9922, Rem Hx: BF6-0110, Rem Hy: BF6-0117),

3.6 PARAMETERS

3.6.1 DCIP Survey

- **Transmitter Waveform:** 30/256 Hz square waves at 100% duty cycle (~4sec Pos./Neg.)
- **Transmitter Output Current:** min ~0.2 amperes to max ~2.3 amperes
- **Receiver Sampling Speed:** 240 samples/second (24 bit A/D @ 120 db dynamic range)
- **Tx-Rx Synchronization:** using current monitor (10 μsec time-accuracy)
- **Time-Series Stacking:** 20 cycles (full-waveform)
- **Read Time:** approx 2.5 minutes per event
- **Integration Start Time:** T_O = 1.004 seconds

[7] *According to Quantec, the Phoenix "MTC-50" magnetic sensor coils are also referred to as "P50" models..*

- **Integration End Time:** T_F = 2.032 seconds

- **Post-Processing:** using QGL QuickLay™ v.2.3.14
  1) Time-series stacking
  2) Robust statistics
  3) Current waveform deconvolution
  4) Digital filtering (60Hz + harmonics)
  5) Spectral model decay-curve fitting (see Figure 7)
- **Time-Domain Decay Window:** T_O to T_F= 1.028 seconds
- **Final Data Output:**
  1) Normalized voltage (volts/ampere)
  2) Voltage error (volts/ampere)
  3) Phase (milliradians)
  4) Phase error (milliradians)
  5) Apparent Resistivity (Ohm-m)
- **Spectral Chargeability Model[8]:** Halverson-Wait (see Figure 7)

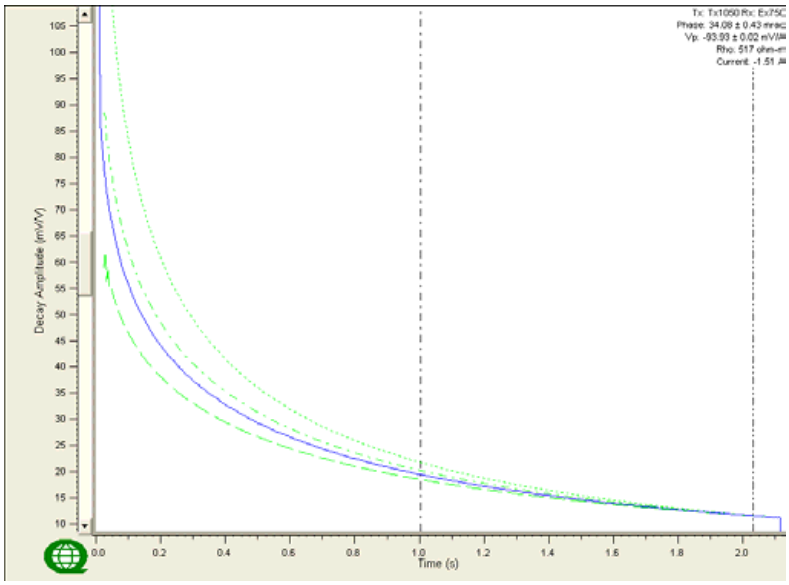


Figure 7: Spectral Chargeability Model and Calculated Halverson-Wait Decays[9]

3.6.2 MT Survey

- **Frequency Bandwidth:** Operating: 0.01 to 48000 Hz
  Effective: 0.1 to 20000 Hz
- **Time-series Sampling:** High Range: 48000 samples/sec
  Mid-Range: 9600 samples/sec
  Low Range: 120 samples/sec.
- **Remote-Base Synchronization**: GPS clocks (10μsec time-accuracy)

[8] *The Halverson-Wait model chargeability (Halverson et al., 1981) is similar to and improves upon the frequency-domain Cole-Cole model (Pelton et el., 1978) described in the time-domain by Johnson (1984).*
[9] *HW model parameters calculated in frequency domain, with hatched green lines corresponding to theoretical HW decay with spectral r-factors of 0.1, 1.0 (default) & 10, k-factor of 0.2 (default).*

- **Time-Series Stacking:**

  High Range: 1,534,999 samples
  Mid-Range: 20^{20} (1,048,576) samples
  Low Range: 2^{19} (524,288) samples

- **Sample/Record Time:**

  High Range: min. 4 events @ 30 seconds per event
  Mid Range: min. 2 events @ 2.5 minutes per event
  Low Range: 1.5 events @ 80 minutes for a full event.
  Total recording and retrieving time approx. 5 to 7 hours

- **Post-Processing:** using QGL QuickLay™ v.2.30.14
  1) Coherent noise rejection using remote-reference
  2) Proprietary digital filtering (scrubbing)
  3) Coherency sorting
  4) Impedance estimate stacking

- **Final Data Output:**
  1) Auto and cross-power spectral estimates
  2) Unrotated (XY & YX) Tensor impedances + errors (apparent resistivities and E/H phase – see Figure 8)

- **Final Data Processing:** Edited and un-edited phase & resistivity sounding curves (0.1-10000 Hz @ 8 pts/decade) using Geotools™

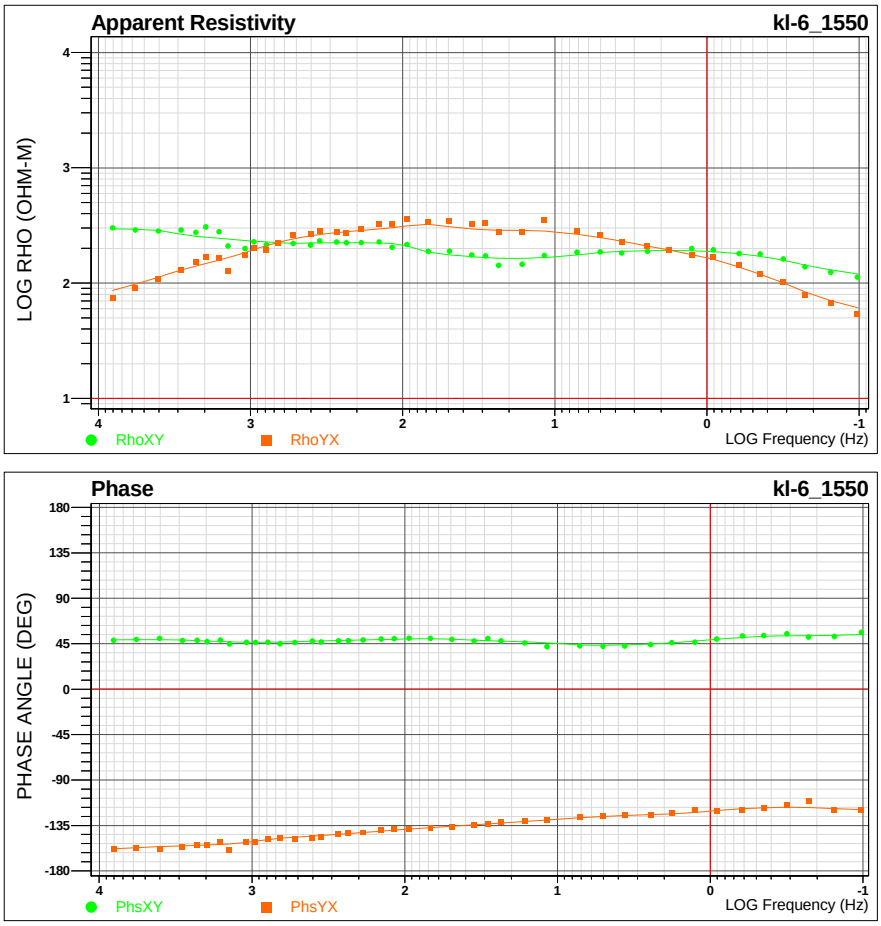


Figure 8: Apparent Resistivity and Phase (XY and YX) Sounding Curves

3.7 DATA ACCURACY AND REPEATABILITY

3.7.1 DCIP Survey

ERROR TYPE	PHASE ERRORS	VOLTAGE ERRORS
1. **Measured Data**[10]**/** average error (from csv files) using Halverson-Wait model calculation.	< 0.23 mrad	<0.0097 mV/A
2. **Data presentation**/ minimum acceptable error	< 5 mrad	< 1%

Table 4: Minimum Errors for DCIP Measurements

- **Data QA/QC Comments:** The DC and IP data quality is generally good. Cultural effects are not observed within the survey area. Acquisition was repeated for several stations due to low signal amplitude and high errors observed when transmitting with large dipoles (e.g. kl-2: 50N, 250N, 2650N and 1750N). Low level telluric noise was frequently observed in the time series. For line KL-4, the low signal amplitude and high errors observed for large N spacing on the lagging sections (around 2200N) caused to remove several points for processing. Numerous attempts have been made in the field to improve data quality. Refer to Appendix D, Processor Reports and Field Notes for details and views of the data.
  Notes by E. Martinez, November, 2007

3.7.2 MT Survey

- **Parallel Sensor Test:** Test for EMI-BF6 coils (High to Mid Frequency Range) see Figure 9
  Test for Phoenix-P50 coils (Low Frequency Range) see Figure 10
- **Data Error:** Apparent Resistivity = <1/20TH decade average.
  Phase = <3 degrees average
- **Inversion Error:** 1/20TH decade, minimum acceptable
- **Data QA/QC Comments:** The quality of the raw MT data is generally good. Several stations show relatively noisy low frequency data below 1Hz (e.g. KL-4, sites 2150N, 2350N & 2350N). Reprocessing the data using several combinations of events and manual edition improved the results.
  Notes by E. Martinez, November, 2007

[10] *Measured IP errors were calculated using 95.3% of the measured data. Data having phase errors >1.5mrads were dismissed. Measured Vp errors were calculated using 100% of the measured data.*

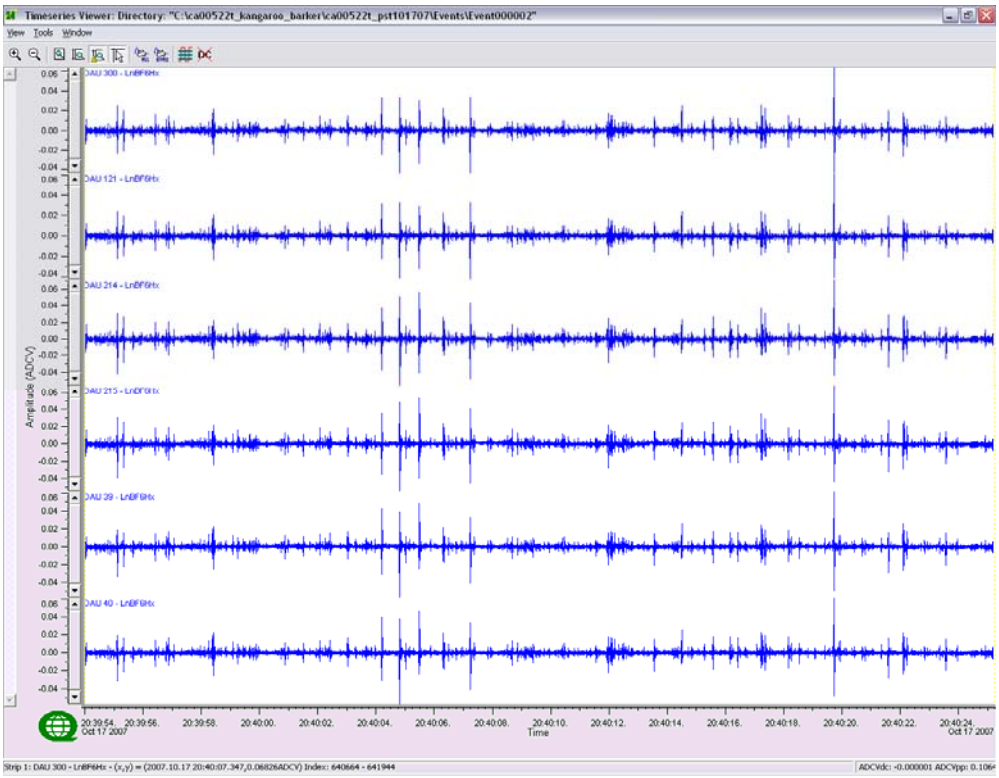


Figure 9: Example of Time Series from Parallel Sensor Test (EMI-BF6 coils)

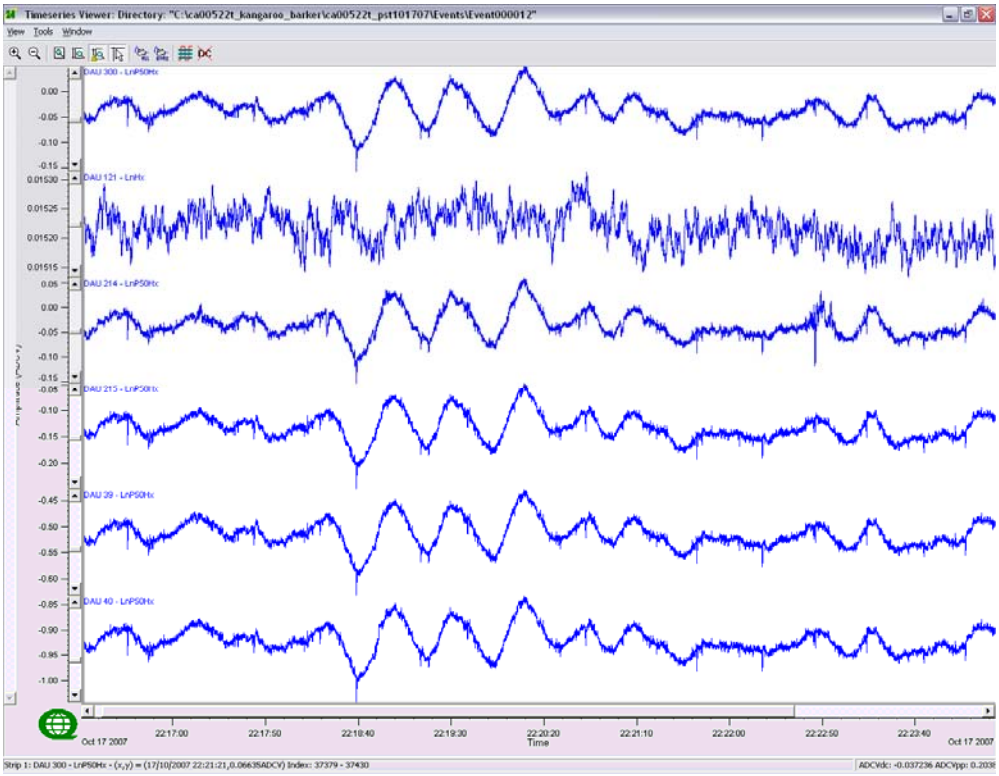


Figure 10: Example of Time Series from Parallel Sensor Test (Phoenix-P50 coils)

3.8 DATA PRESENTATION

3.8.1 DCIP Survey

- **Pseudosection Plots:** In-line[11] DC/IP Resistivity and Chargeability Pseudo sections, posted, contoured (equal area zoning) and plotted in ground units using Quantec's QuickLay viewer (Appendix D)

- **Digital** Raw Data: Raw Event Log File Folders (eg. Eventxxxx.dat) Also contains AU.txt and Event.log files, which contain information on the location and time of the event in QuickLay propriety digital format (output to Matlab format upon request)

  Processed data: DCIP ASCII DATA, in *.CSV (comma delimited) file format, from QuickLay, containing final processed voltage and phase data (Ex)

Line 1:	Column headings
Column 1:	Event name/number (e.g., Event100020)
Column 2:	Transmitter site ID (e.g., Tx150)
Column 3:	Receiver site ID (e.g., Rx150)
Column 4-11:	C1-C2/P1-P2 positions in X and Y meters)
Column 12:	Current (amperes)
Column 13:	Current error (amperes)
Column 14:	Normalized voltage (volts/ampere)
Column 15:	Voltage error (volts/ampere)
Column 16:	Phase (milliradians)
Column 17:	Phase error (milliradians)
Column 18:	Apparent resistivity (ohm-meters)[12].

3.8.2 MT Survey

- **Sounding Curves:** MT Apparent Resistivity and Phase (XY and YX), (Appendix E) in log frequency format, using Geotools™ viewer

- **Pseudosection Plots:** MT Apparent Resistivity and Phase Pseudosections (XY, and YX), posted, contoured (equal area zoning) and plotted, in grid units using Geotools™ viewer (Appendix F)

- **Digital:** Raw data: Base and Remote Raw Event Log File Folders (i.e. Base - Eventxxx.dat; Remote Eventxxxx.dat). Also contains AU.txt and Event.log files, which contain information on the location and time of the event in QuickLay propriety digital format

  Processed data: MT DATA, in .EDI (electronic data inter-change) file, created in Geotools™ containing tensor-sounding data (XY & YX)[13], for individual stations (sites) and profiles (site-sets), in a format conforming to SEG standard for the storage MT data

[11] *Note: Cross-line (YX) values not shown for presentation purposes.*

[12] *Note: Apparent resistivities calculated in 2d space using 4-electrode general array configuration (as per XY electrode position-ing in columns 4-11 of csv file) – not based on pole-dipole calculations (K. Nurse, QGL, pers. comm., 07-2004).*

[13] *XY denotes in-line electrical (E) field and orthogonal magnetic (H) field (Ex/Hy). YX denotes in-line H field and orthogonal E-field (Ey/Hx).*

4. REFERENCES

1. Halverson, M.O., Zinn, W.G., McAlister, E.O., Ellis, R., and Yates, W.C. (1981). Assessment of results of broad-band spectral IP field test. In: Advances in Induced Polarization and Complex Resistivity, pp.295-346, University of Arizona.
2. Johnson, I.M (1984). Spectral induced polarization parameters as determined through time-domain measurements. Geophysics, v. 49, pp. 1993-2003.
3. Pelton, W.H., Ward, S.H., Hallof, P.G., Sill, W.R. and Nelson, P.H. (1978). Mineral discrimination and removal of inductive coupling with multi-frequency IP. Geophysics, v.43, pp.588-609.

RESPECTFULLY SUBMITTED
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November, 2007
Toronto, ON

INSTRUMENT SPECIFICATIONS

REF TEK – 120 Data Acquisition System

Acquisition Module (AM)

SPECIFICATIONS

Physical	
Size:	♦ 267 x 248 x 184 mm ♦ 10.5 x 9.75 x 7.25 in.
Weight:	♦ 3.7kg ♦ 305 g ♦ 8 lbs (2-Channels maximum weight))
Temperature:	♦ -40°C to 60°C operating range.
Environmental:	♦ Operates in 1m of water without leaking for 48 hours. ♦ Airtight to 1.0 psi.
Shock:	♦ Remains operational after 1m drop (any corner) onto cement floor.
Connectors	
Line A & Line B:	♦ A pair of identical 10 pin U77/U style connectors. ♦ Each connector provides 3 pairs of lines (+): — A (+)/B (-) Receive telemetry data and/or commands — C (+)/D (-) Transmit telemetry data and/or commands — E (+)/F (-) Sync
Power:	♦ PTO7A12-8S style connector. ♦ Provides input +12 VDC supplied from battery.
Sensor:	♦ PU283/U style connector. ♦ Provides for a direct connection from the AM to the sensor.
Power Requirements	
Battery:	♦ Two 12 volt lead acid battery (7 Ah).
Signal Input	
Input Impedance:	♦ 10 megohms, 330pF, differential
Broadband Dynamic Range:	♦ 130dB (noise power ratio test @ 125 sample per second [sps])
ADC Type:	♦ Delta-sigma modulation
Sample Rage:	♦ Multiple 50 to 48,000
Gain Settings:	♦ Four – programmable for 1, 4, 16 and 64.

Sensor Input Signal Range:

Gain	***24-Bit High Speed A/D***		***24-Bit Low Speed A/D***	
	Actual	***Reported***	***Actual***	***Reported***
1	1.192μV	78.12mV	1.907μV	125.0mV
4	298.0nV	19.53mV	476.8nV	31.25mV
16	74.51nV	4.883mV	119.2nV	7.812mV
64	18.63nV	1.221mV	29.80nV	1.953mV

Data Storage	
Data Size:	♦ 32-bit two's compliment.
Base Memory:	♦ 128K EPROM ♦ 6.5Mb SRAM
Base Capacity:	♦ Better than 1.5 million samples or approximately 3 hours 10 minutes continuous data @ 125 sps.
AM Telemetry	
Protocol:	♦ Full duplex synchronous data link control (SDLC).
Error Correction:	♦ Packet acknowledge with modulo 8 sliding window.
Speed	♦ 3.072Mb/second
Encoding:	♦ Bi-phase pulse = 1, missing pulse = 0
Line Impedance:	♦ 100 Ohm
Synchronization	
Timing:	♦ Each AM on-line is timed and synchronized for simultaneous sampling within ± 1.50 μsecond.
Protection	
Electrical Protection:	♦ Line A and Line B signals circuits are protect by: — A surge arrestor located on the RT514 board (SS1-14). — A line isolation transformer located on the RT514 board (T1-6) with over-voltage diodes (D1-4) on both sides of each secondary windings.
State-of-Health	
Information Provided:	♦ The AM reports information on battery status, clock setting, gain setting, calibration mode and the communications link.

ACQUISITION PARAMETERS

Acquisition parameters include the sample rate, transmitter frequency and number of samples desired. The operator can also determine whether the AMs calibration signal is activated during data collection.
In typical use, the acquisition parameters are set according to the specific application configuration and event type. For each event type, several recording sessions are made, each at a different transmitter frequency and sample rate. The recording period is set based on event type and transmitter frequency.

SENSOR CALIBRATION

The AM can source a 12.5Hz, 50μA signal to the sensor input for measuring the source impedance of the attached sensor. The user can also specify frequency in amplitude of calibration signal.

TELEMETRY CABLE

The telemetry cable is a *Category V* specification cable and is supplied by the customer.

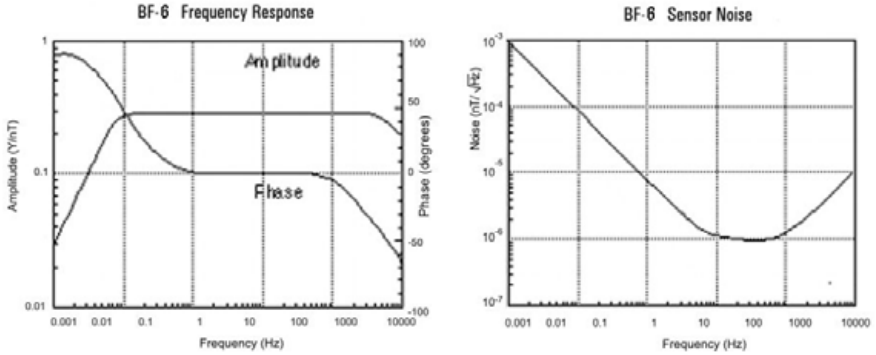
SAMPLE RATES

The following table shows all available sample rates, based on a 12.288 Mhz oscillator. A 24-bit resolution ADC is used for sample rates 48000 through 4800 and a 24-bit resolution ADC is used for sample rates 3200 and below. The correct ADC is selected automatically by the AM, based on the sample rate.
Typically, different sample rates and transmitter frequencies are used in 50 Hz and 60 Hz power environments to minimize AC power effects on the data. In the table, the shaded areas indicate the sample rates typically used in a 60 Hz power environmentEMI – Electromagnetic Instruments Inc. – Berkeley, CA

BF-6 Magnetic Field Induction Sensor

The BF-6 sensor utilizes a magnetic feedback design to provide a stable flat response over several decades of frequency. The sensors respond as a B field detector over the flat band regions. Both the amplitude and phase responses are highly stable with variations of less than 0.1dB in amplitude and +/- one degree in phase between sensors. For the frequencies below the flat response region, the sensor response is proportional to signal frequency so that the sensor acts as a dB/dt detector. The coil is potted with epoxy and housed inside a rugged impact-resistant ABS tube. A matched low noise preamplifier is connected to the coil in a waterproof case and powered by an external +/- 12V power supply.

BF-6 Magnetic Field Induction Sensor Image



Technical Specifications

Performance

Frequency Range: 1 Hz to -100 kHz or 1 Hz to 25 kHz

3 dB frequency corners: 10 Hz, 25 kHz or 10 Hz, 100 kHz

Sensitivity (flat region): 0.3 V/nT (standard).

Physical

Housing: High Impact ABS Straight Tube

Length: 73 cm (29 inches)

Diameter: 5 cm (2 inches)

Weight: 1.7 kg (3.7 lbs)

Connector: 8-pin Tajimi

Features

High sensitivity
Very low noise
Magnetic feedback design
Ruggedized and waterproof
Light weight and compact
Low power consumption (210 mW)
Stable phase response

Applications

Magnetotellurics
Audiomagnetotellurics
Controlled-source electromagnetics
Magnetometric resistivity
Time domain electromagnetics

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PHOENIX GEOPHYSICS LTD. TORONTO, CANADA.

General Information

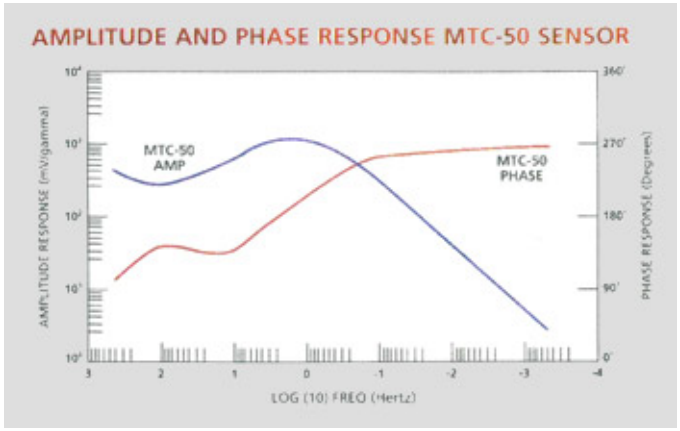
Phoenix offers a range of electrical and magnetic sensors for MT and AMT data acquisition.

All Phoenix field sensors are highly reliable, lightweight, and manufactured to exacting standards. Designed for use in the most demanding environments, they have proven their reliability and quality on many thousands of MT and AMT sites around the world.

MT Low Frequency Sensors



MTC-50[14] magnetic sensor coils weigh just over 10 kg, and measure only 141 cm. They provide magnetotelluric data at frequencies between 400 Hz to 0.0002 Hz.



Coil Model MTC-50

Overall Length:	141 cm
Outside Diameter:	6.0 cm
Weight:	10.5 kg

© 2006 Phoenix Geophysics.

[14] *According to Quantec, the Phoenix "MTC-50" magnetic sensor coils are also referred to as "P50" models.*

PRODUCTION SUMMARY

DATE	DESCRIPTION	LINE	START	END	READ (m)		TOTAL (m)	
					IP	MT	IP	MT
October 16, 2007	Mobilization Princeton - Likely (Quebec)	***	***	***	***	***	***	***
October 17, 2007	Orientation, parallel sensor test, scouting, prep infinite	***	***	***	***	***	***	***
October 18, 2007	Prep. line kl-2, troubleshoot system (scsi issues)	***	***	***	***	***	***	***
October 19, 2007	Troubleshooting, waiting on parts	***	***	***	***	***	***	***
October 20, 2007	Waiting on parts	***	***	***	***	***	***	***
October 21, 2007	C. Early arrive, repair one system, order parts	***	***	***	***	***	***	***
October 22, 2007	-Read IP	Kl-2 ***	0 ***	2650N ***	2650 ***	*** ***	2650 ***	*** ***
October 23, 2007	Prep. line kl-4, MT failed d/t equipment	***	***	***	***	***	***	***
October 24, 2007	-Read IP -Read MT	Kl-4 Kl-4	0 0	2650N 2650N	1300 ***	*** 2600	3950 ***	*** 2600
October 25, 2007	-Read IP -Repeat MT	Kl-4 Kl-4	0 0	2650N 2650N	2650 ***	*** 2600	6600 ***	*** 5200
October 26, 2007	-Read IP -Read MT	Kl-6 Kl-6	0 0	2650N 2650N	2650 ***	*** 2600	9250 ***	*** 7800
October 27, 2007	Pick up equipment	***	***	***	***	***	***	***
October 28, 2007	Demobilization from Likely to Timmins (Ontario)	***	***	***	***	***	***	***

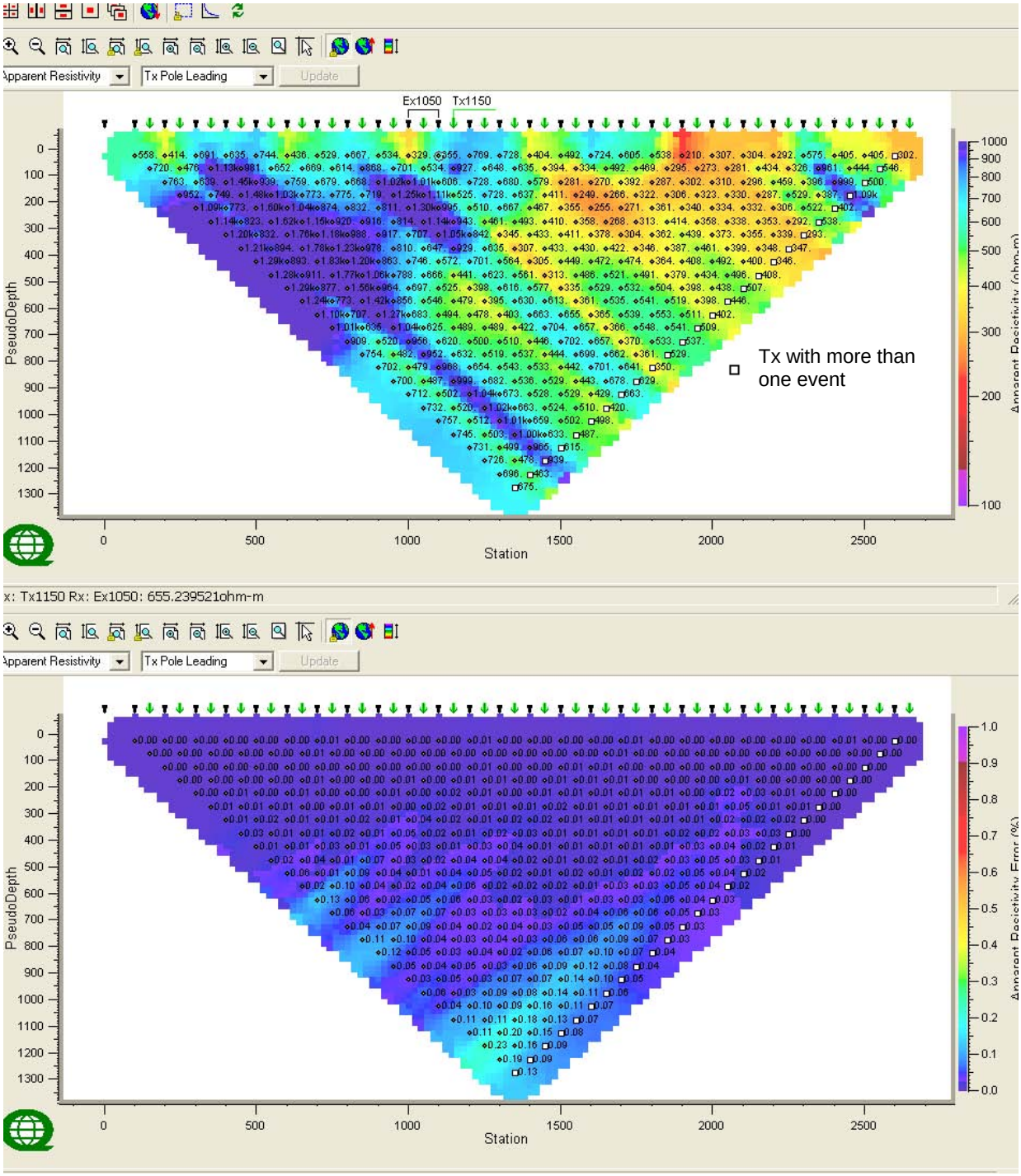
TOTAL SURVEY DAYS	13
READ TIME	4
BREAK DOWN DAYS	4
SET UP DAYS	**3**
MOBILIZATION DAYS	**2**
WEATHER DAYS	0

TOTAL PRODUCTION: IP: 9.25 Km
MT: 7.8 Km

IP PSEUDOSECTIONS

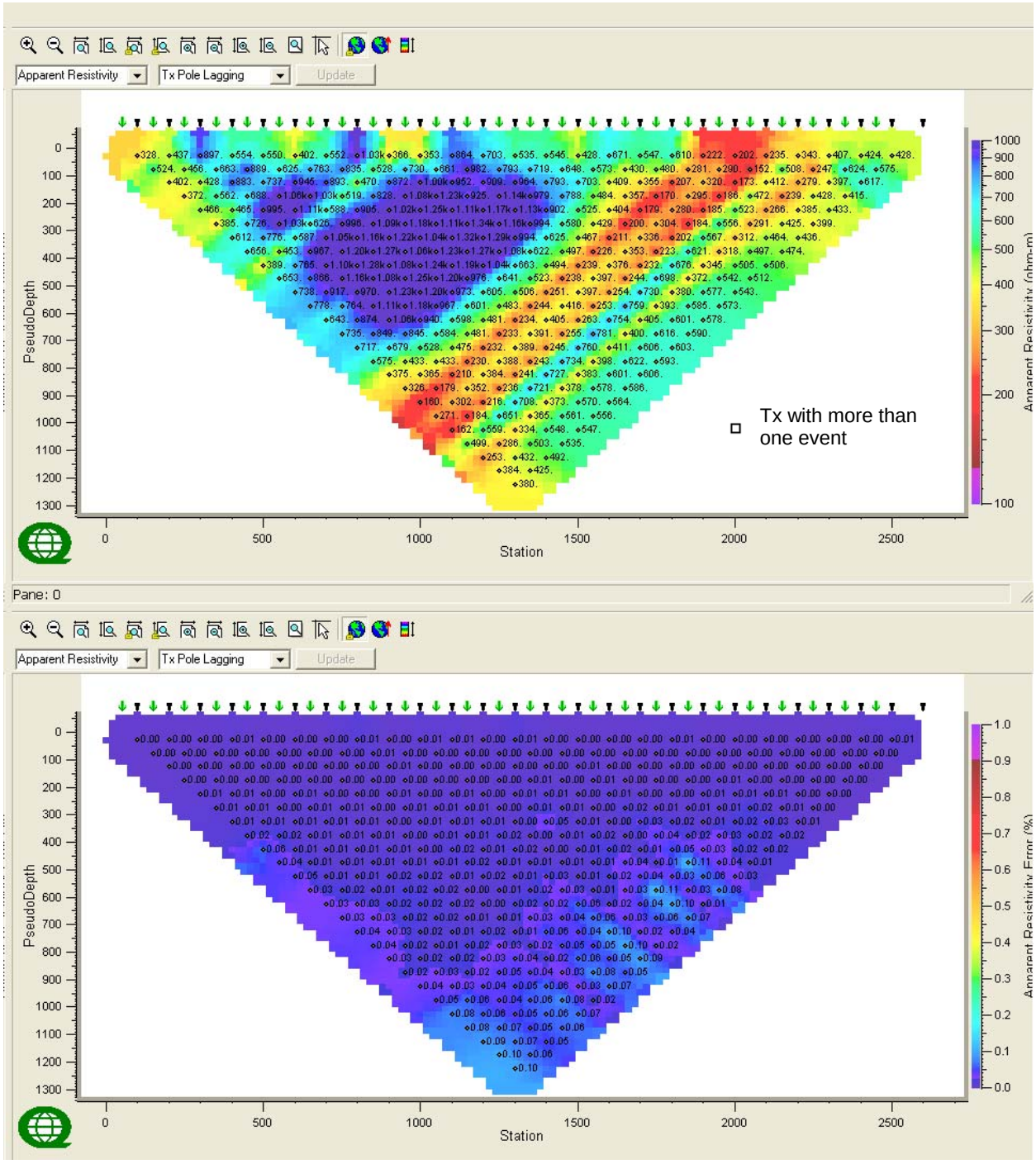
LINE KL-2

OBSERVED APPARENT RESISTIVITY RAW DATA (OHM-M) & VOLTAGE ERRORS (%)-TX POLE LEADING



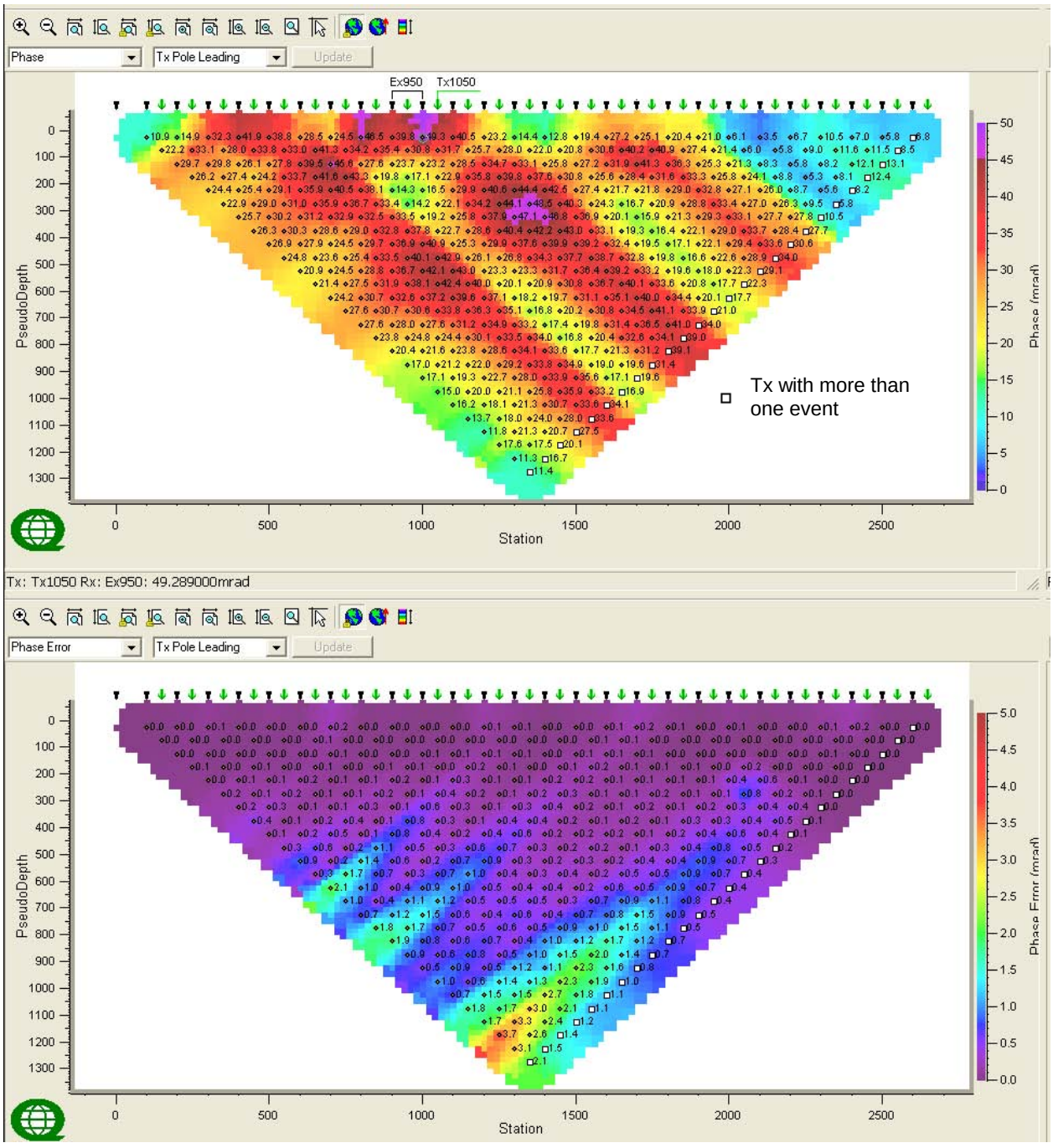
LINE KL-2

OBSERVED APPARENT RESISTIVITY RAW DATA (OHM-M) & VOLTAGE ERRORS (%)-TX POLE LAGGING



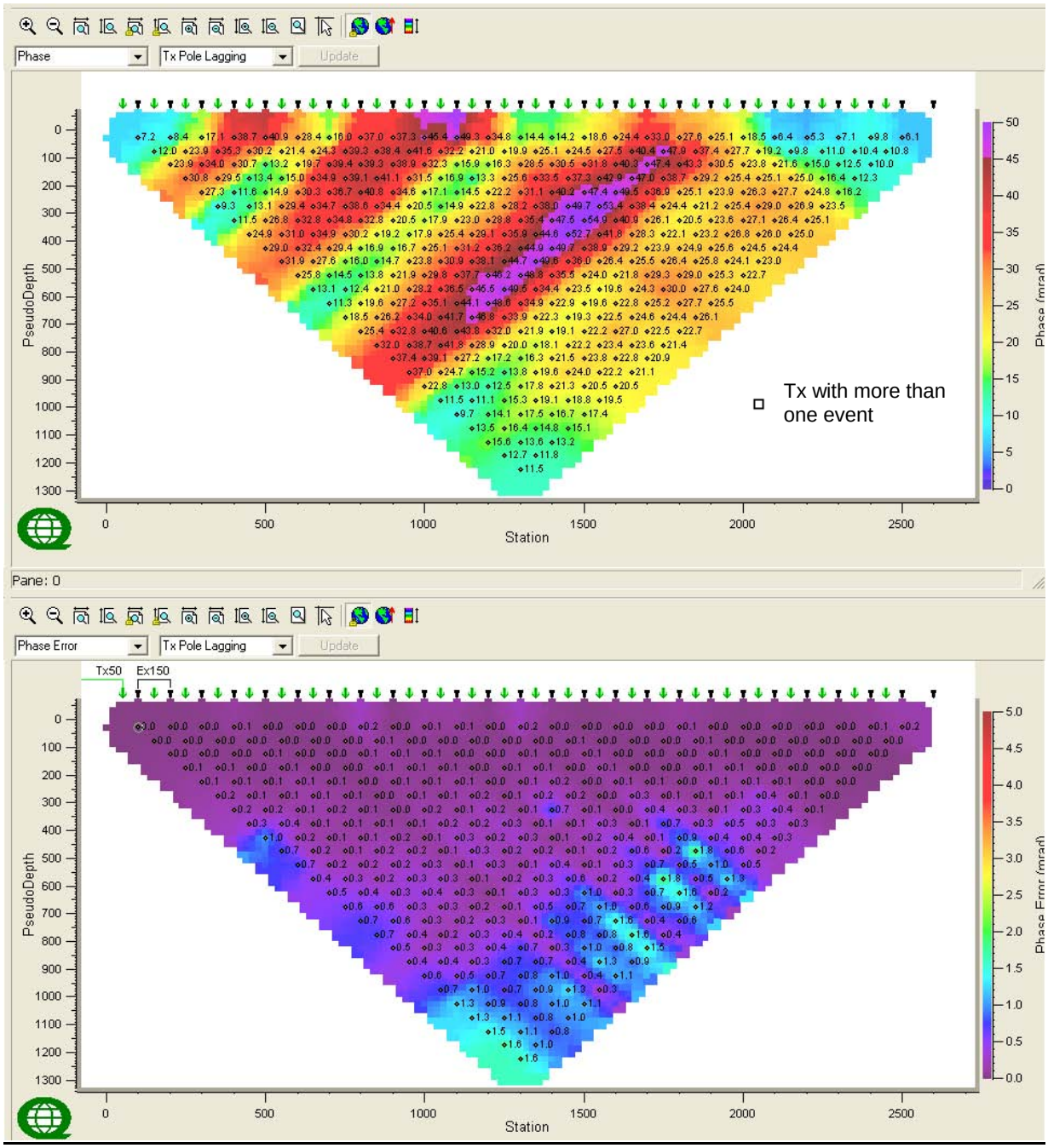
LINE KL-2

OBSERVED IP RAW DATA (MRAD) & IP ERRORS (MRADS)-TX POLE LEADING



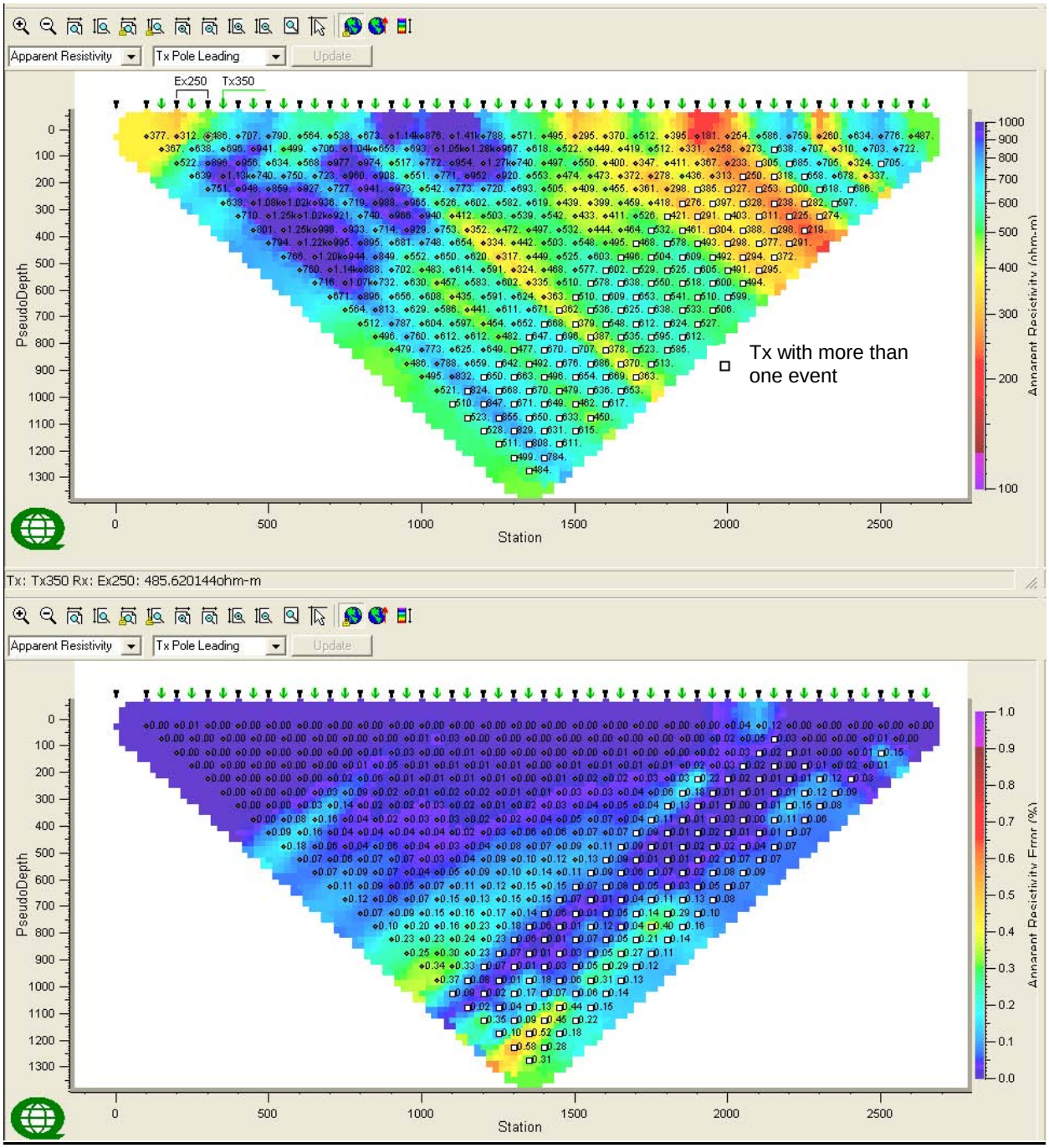
LINE KL-2

OBSERVED IP RAW DATA (MRAD) & IP ERRORS (MRADS)-TX POLE LAGGING



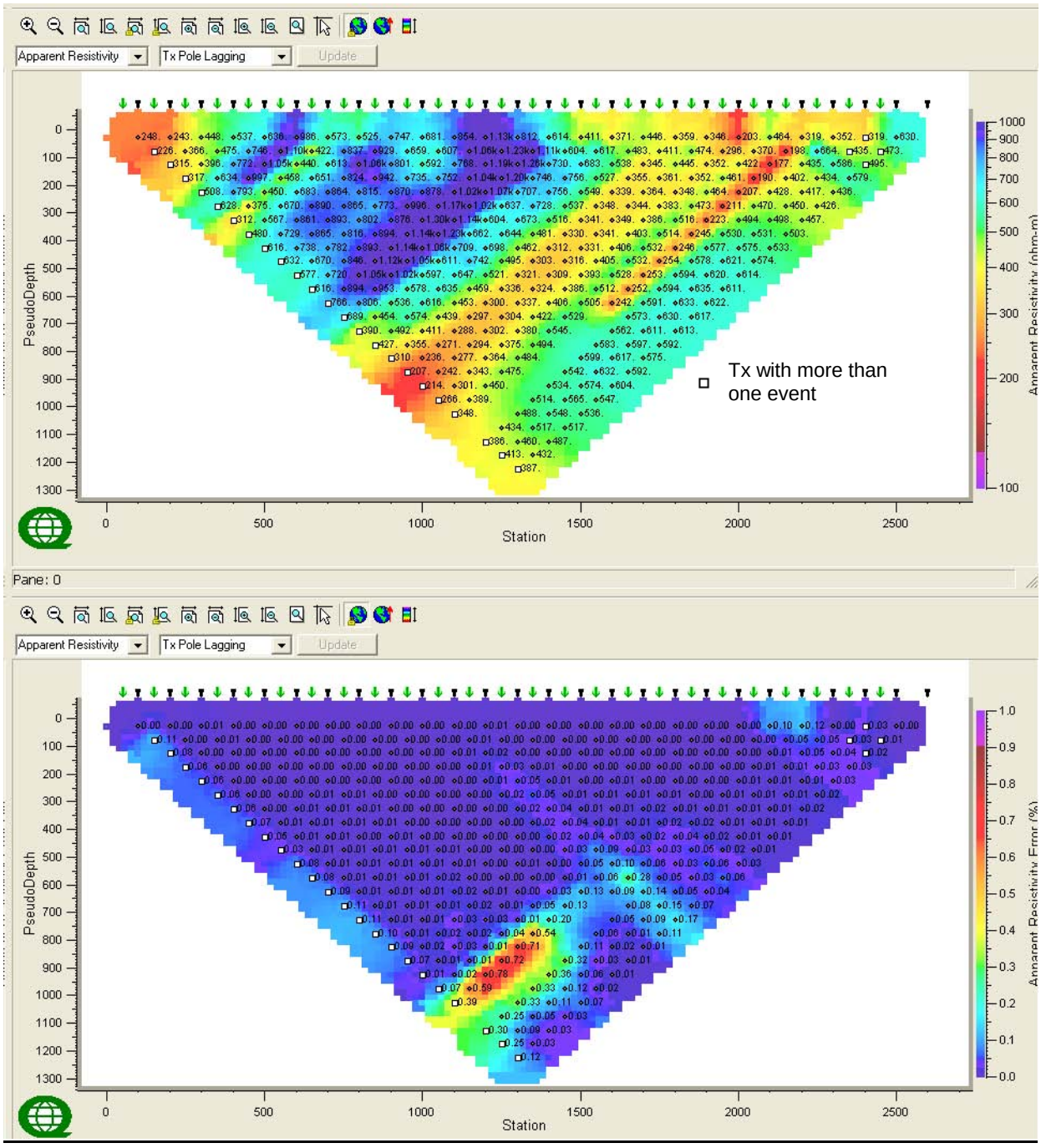
LINE KL-4

OBSERVED APPARENT RESISTIVITY RAW DATA (OHM-M) & VOLTAGE ERRORS (%)-TX POLE LEADING



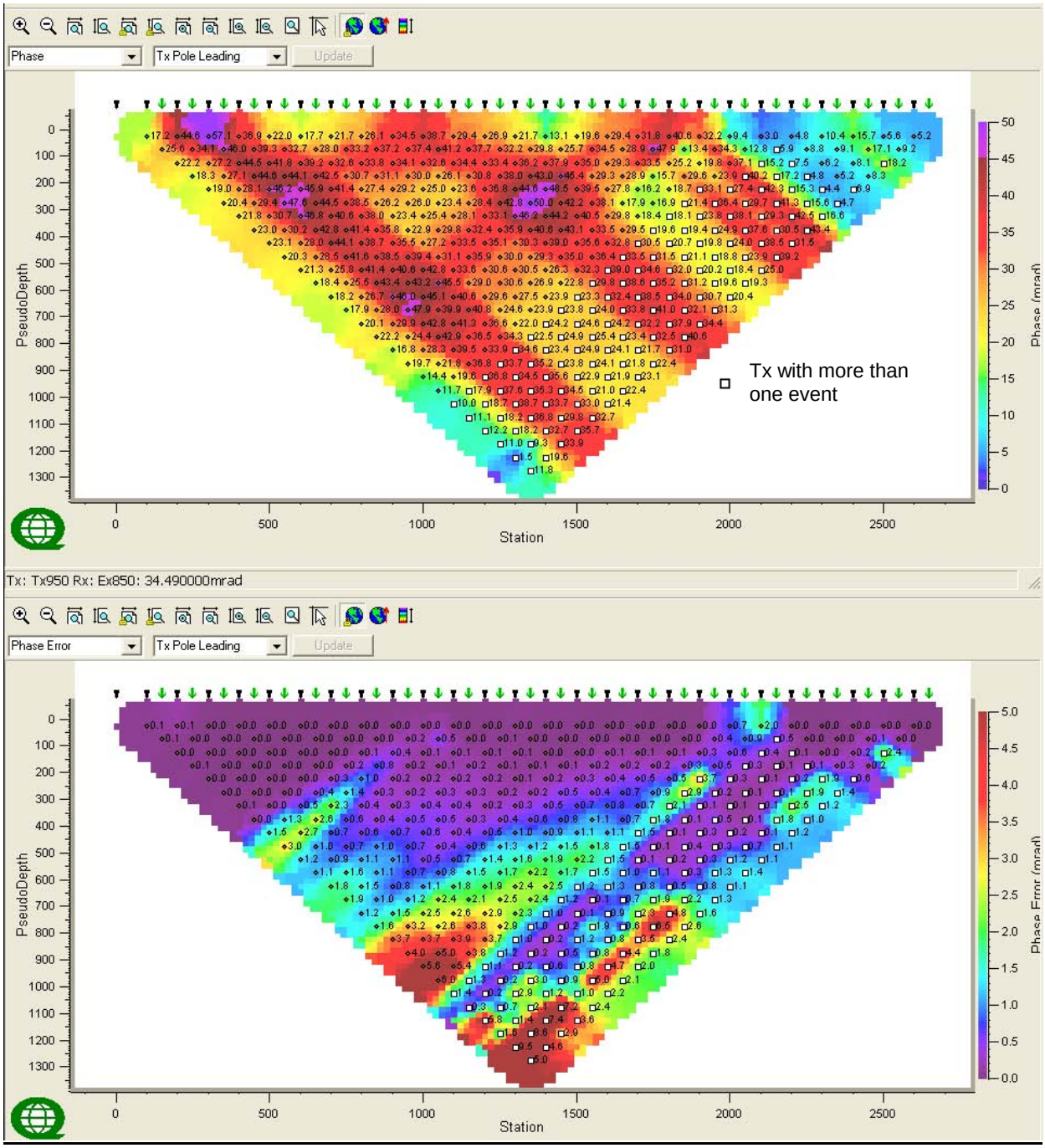
LINE KL-4

OBSERVED APPARENT RESISTIVITY RAW DATA (OHM-M) & VOLTAGE ERRORS (%)-TX POLE LAGGING



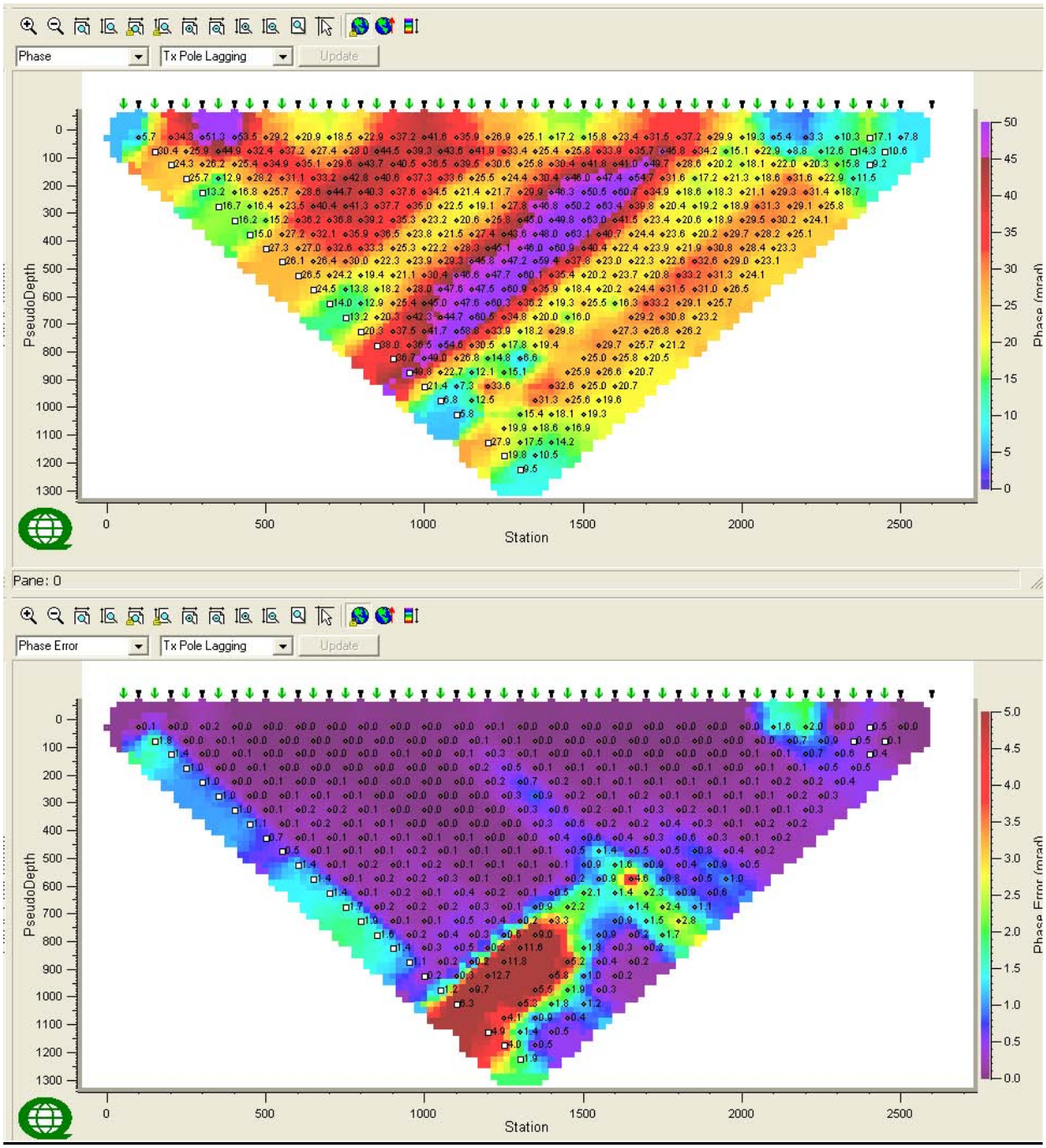
LINE KL-4

OBSERVED IP RAW DATA (MRAD) & IP ERRORS (MRADS)-TX POLE LEADING



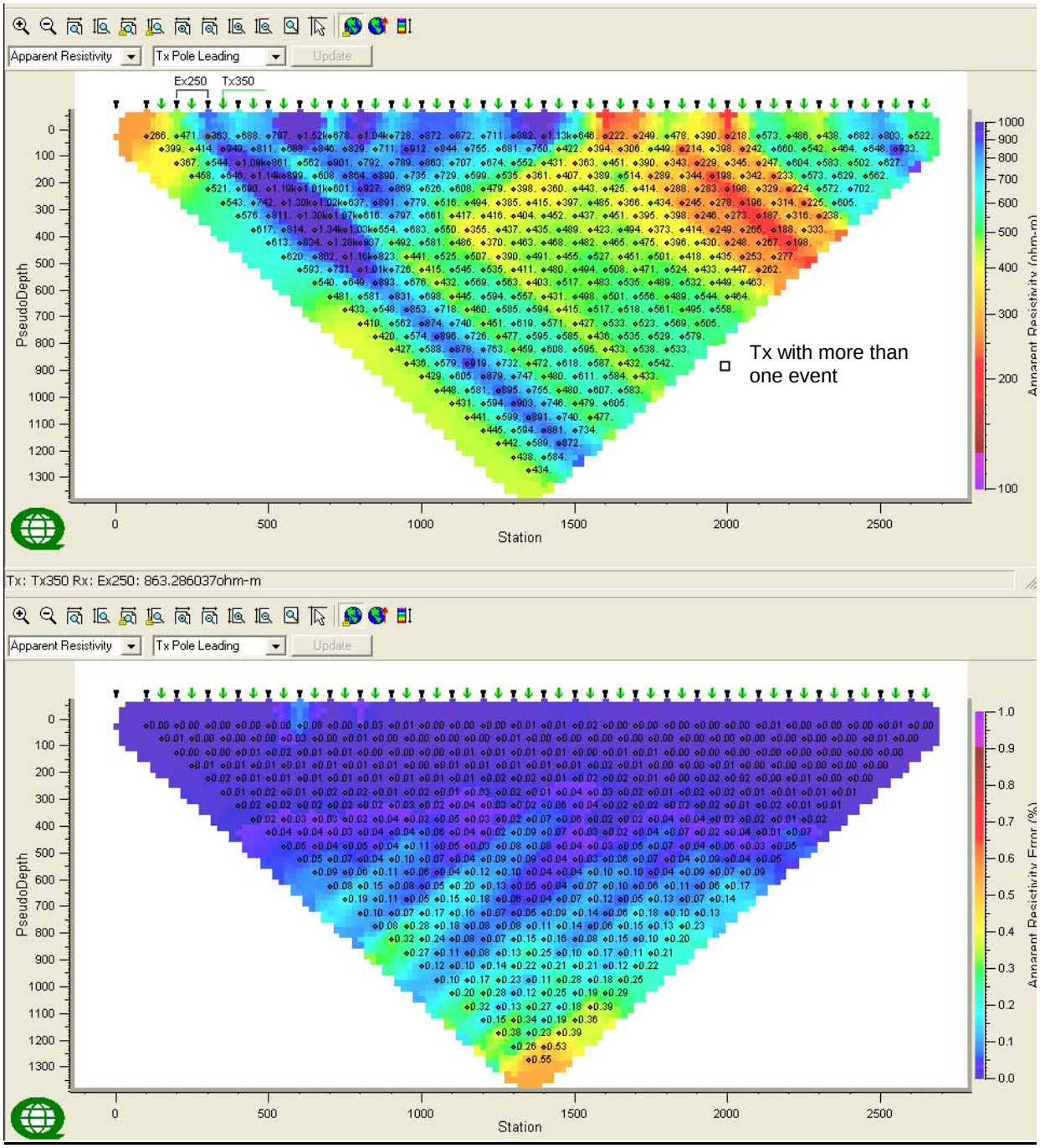
LINE KL-4

OBSERVED IP RAW DATA (MRAD) & IP ERRORS (MRADS)-TX POLE LAGGING



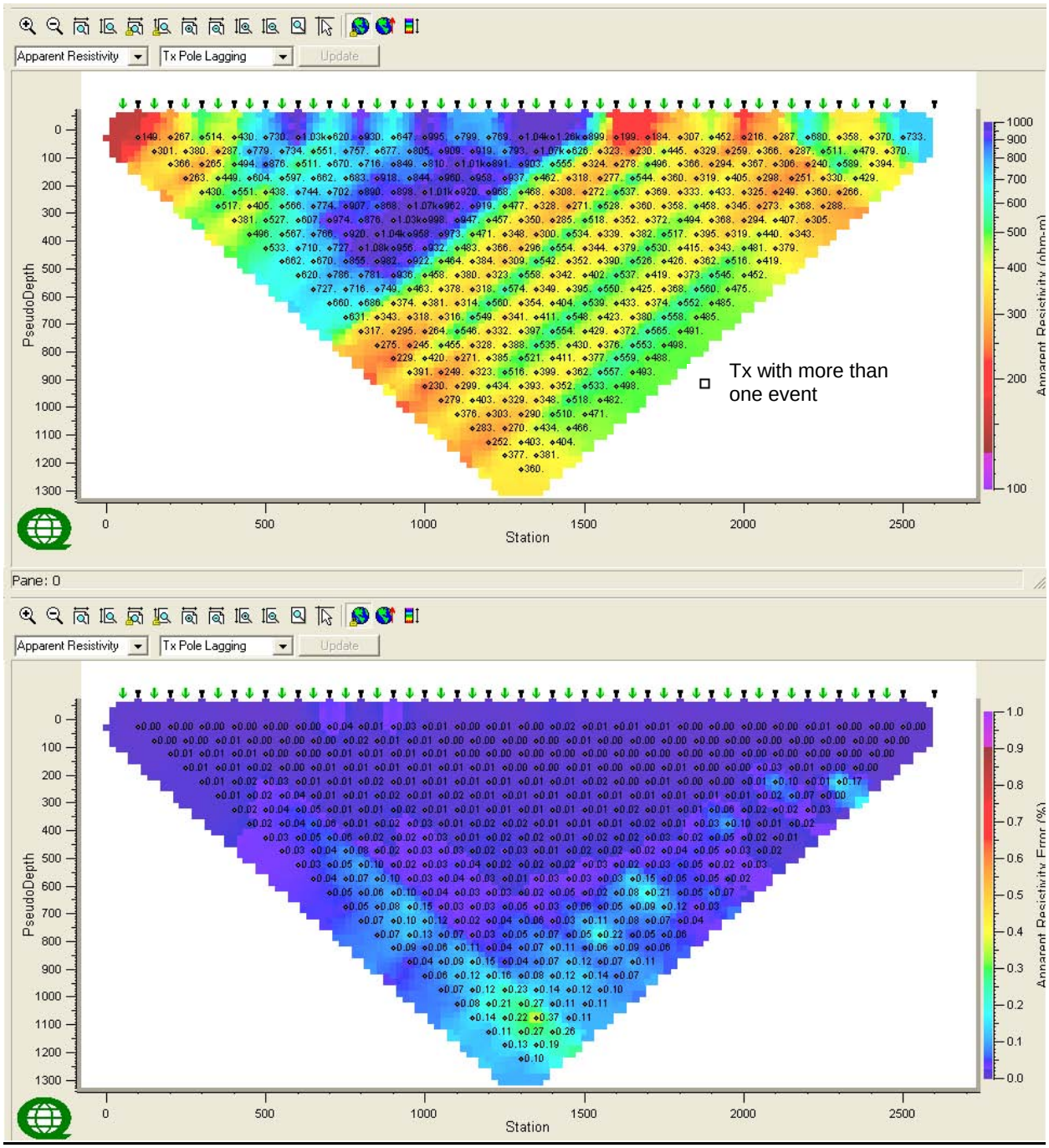
LINE KL-6

OBSERVED APPARENT RESISTIVITY RAW DATA (OHM-M) & VOLTAGE ERRORS (%)-TX POLE LEADING



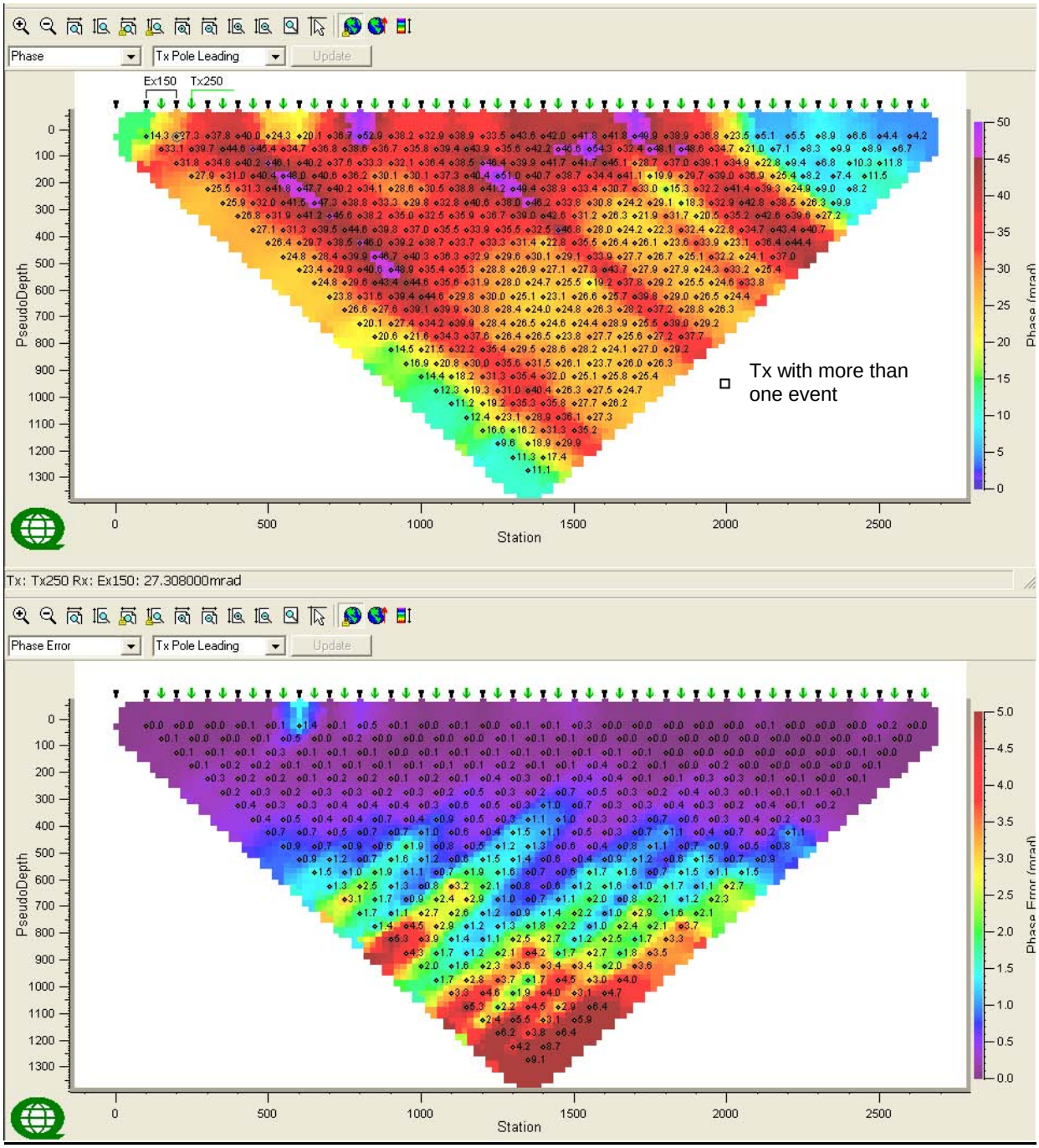
LINE KL-6

OBSERVED APPARENT RESISTIVITY RAW DATA (OHM-M) & VOLTAGE ERRORS (%)-TX POLE LAGGING



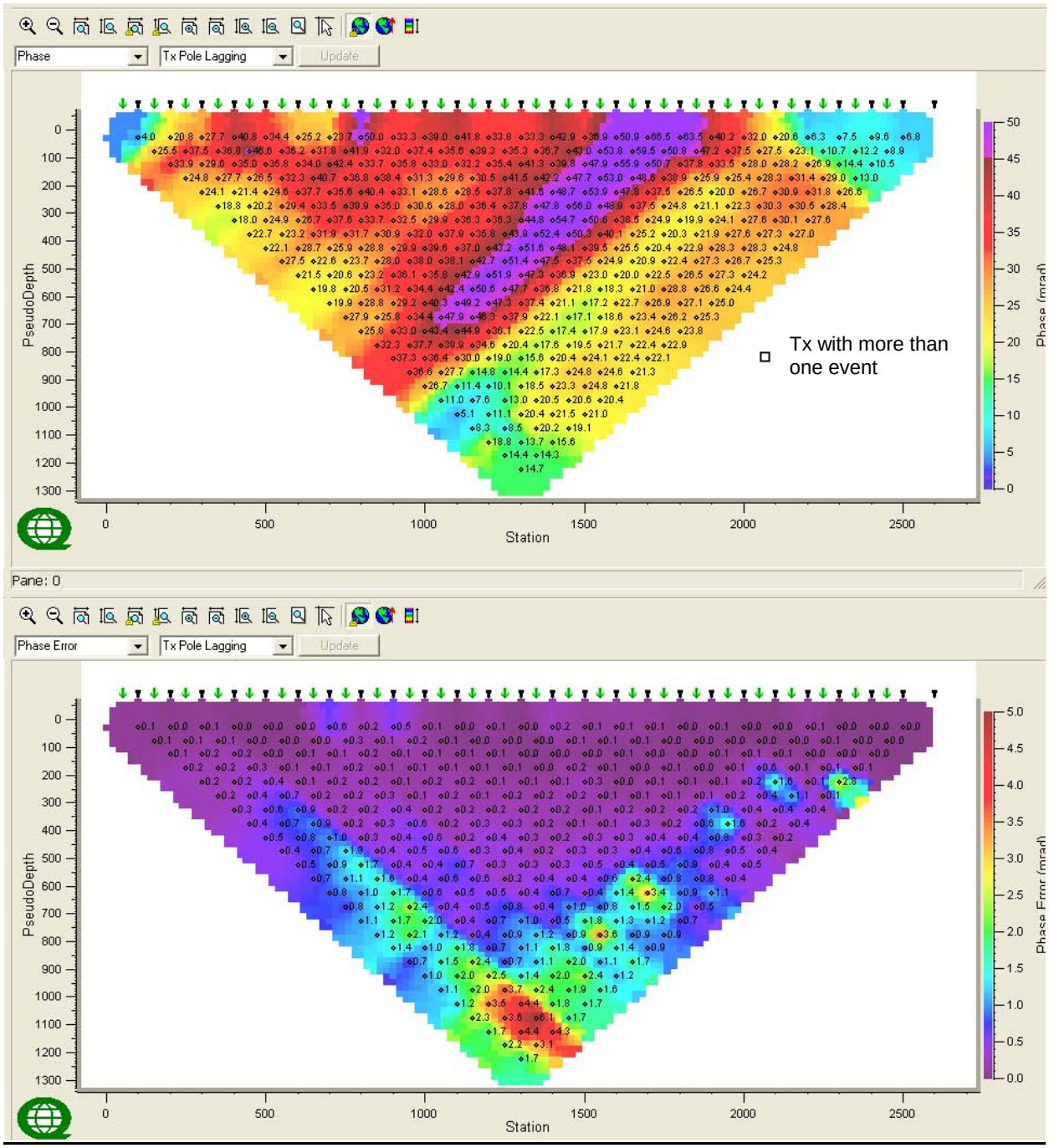
LINE KL-6

OBSERVED IP RAW DATA (MRAD) & IP ERRORS (MRADS)-TX POLE LEADING



LINE KL-6

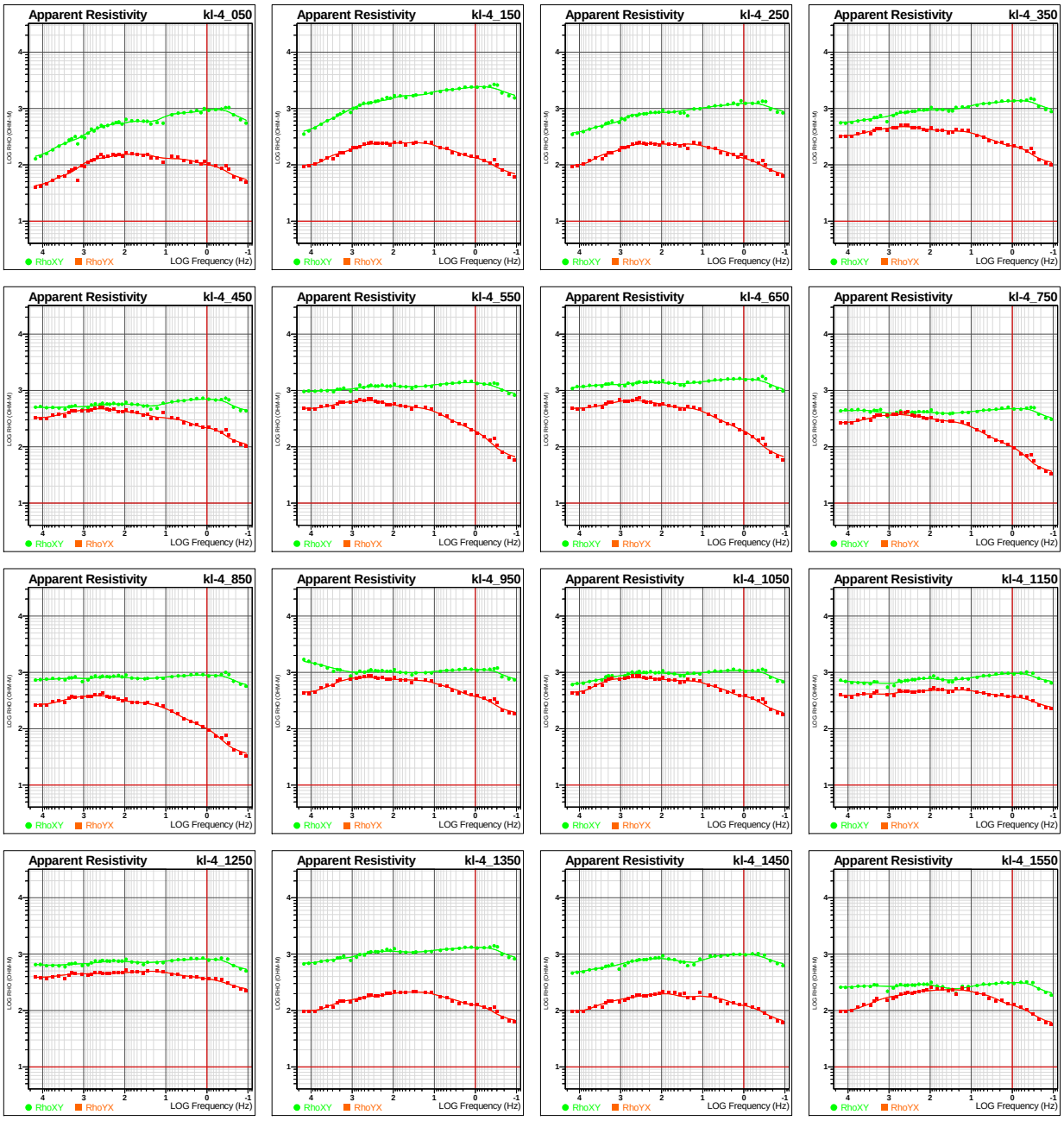
OBSERVED IP RAW DATA (MRAD) & IP ERRORS (MRADS)-TX POLE LAGGING



MT APPARENT RESISTIVITY AND PHASE SOUNDING CURVES

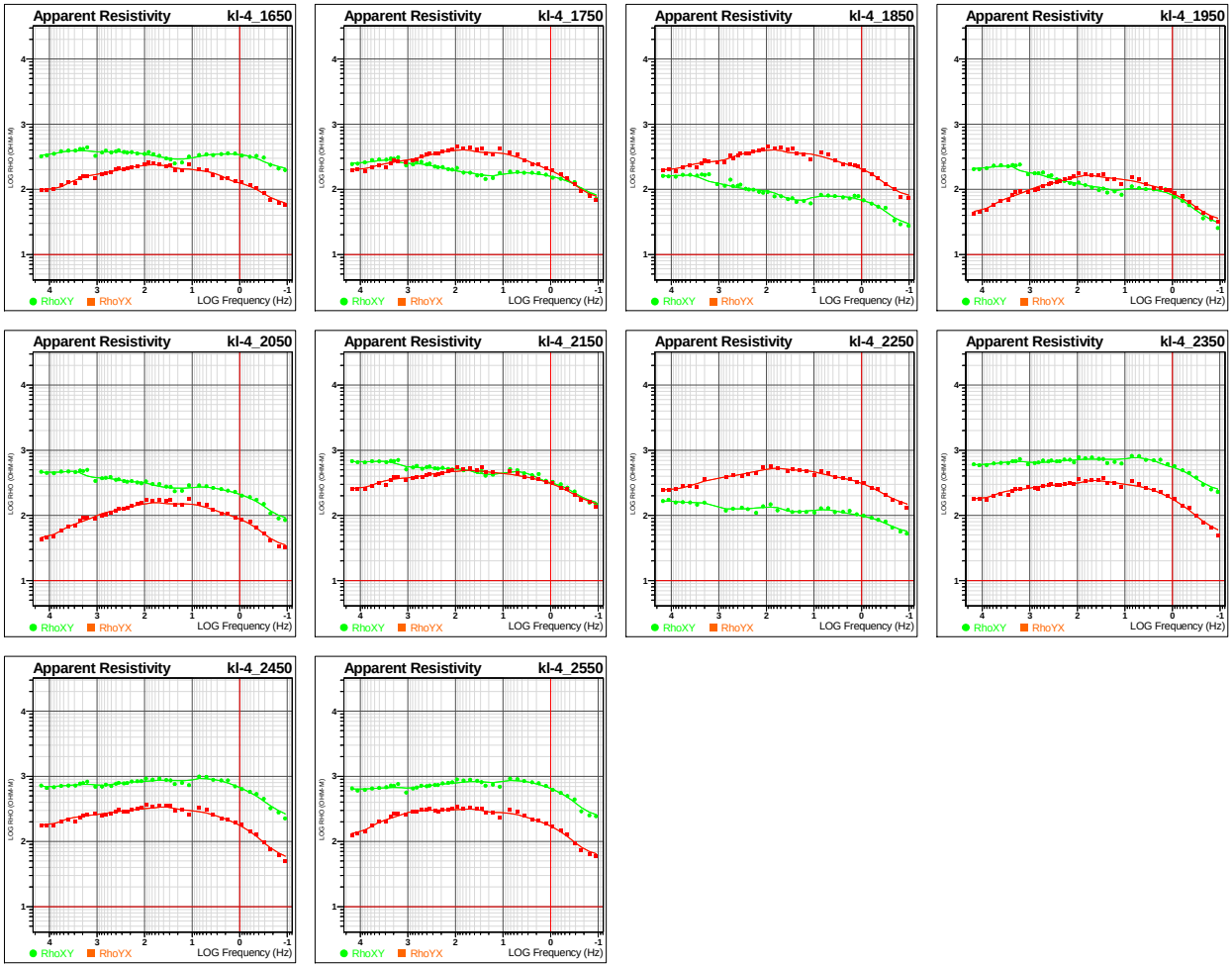
Note: **XY denotes in-line electrical (E) field and orthogonal (H) field (Ex/Hy)**
YX denotes in line H field and orthogonal E field (Ey/Hx)

LINE KL-4: APPARENT RESISTIVITY VS. FREQUENCY



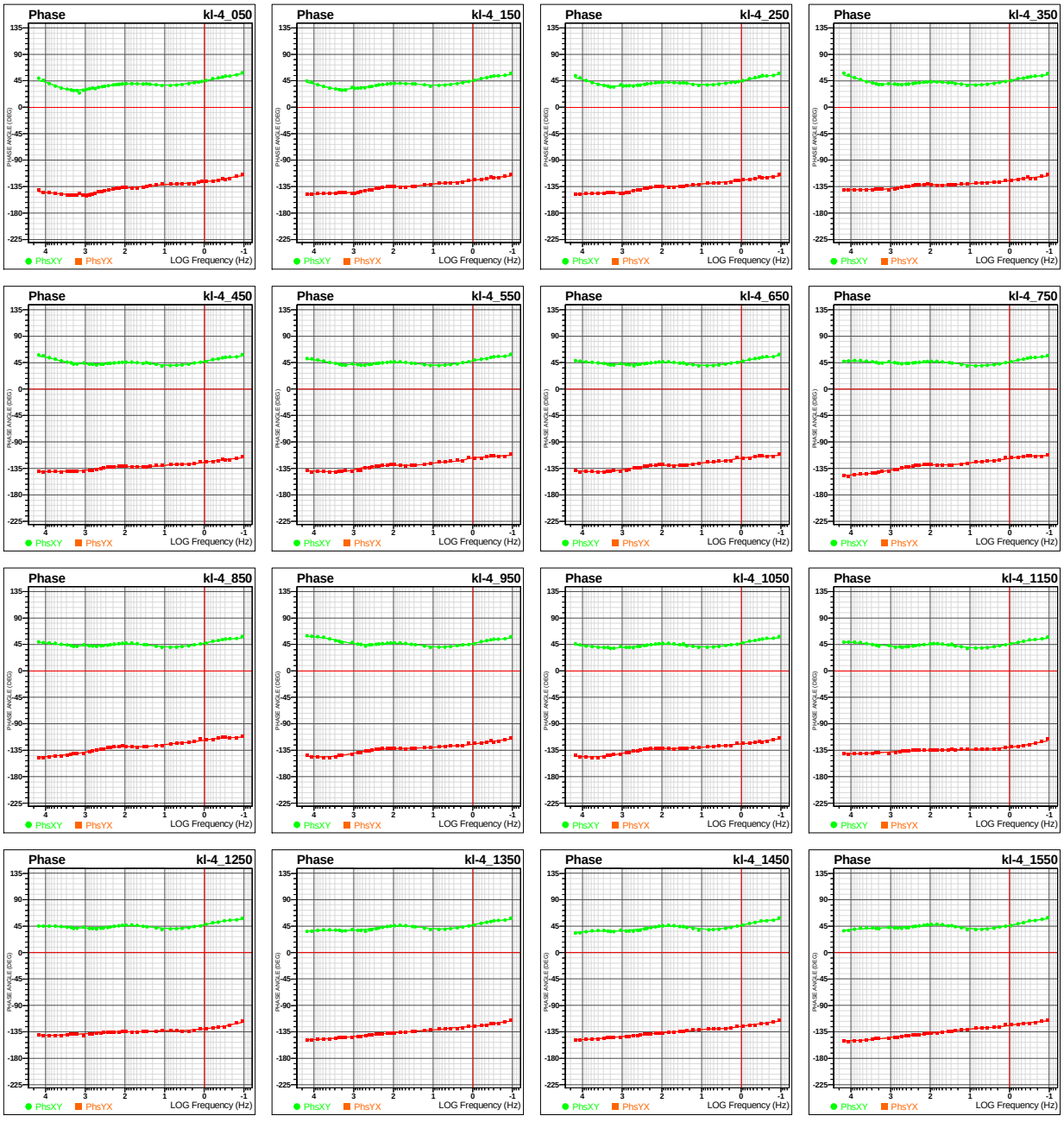
Rho ExHy ------- green
Rho EyHx ------- orange

LINE KL-4: APPARENT RESISTIVITY VS. FREQUENCY (CONT..)



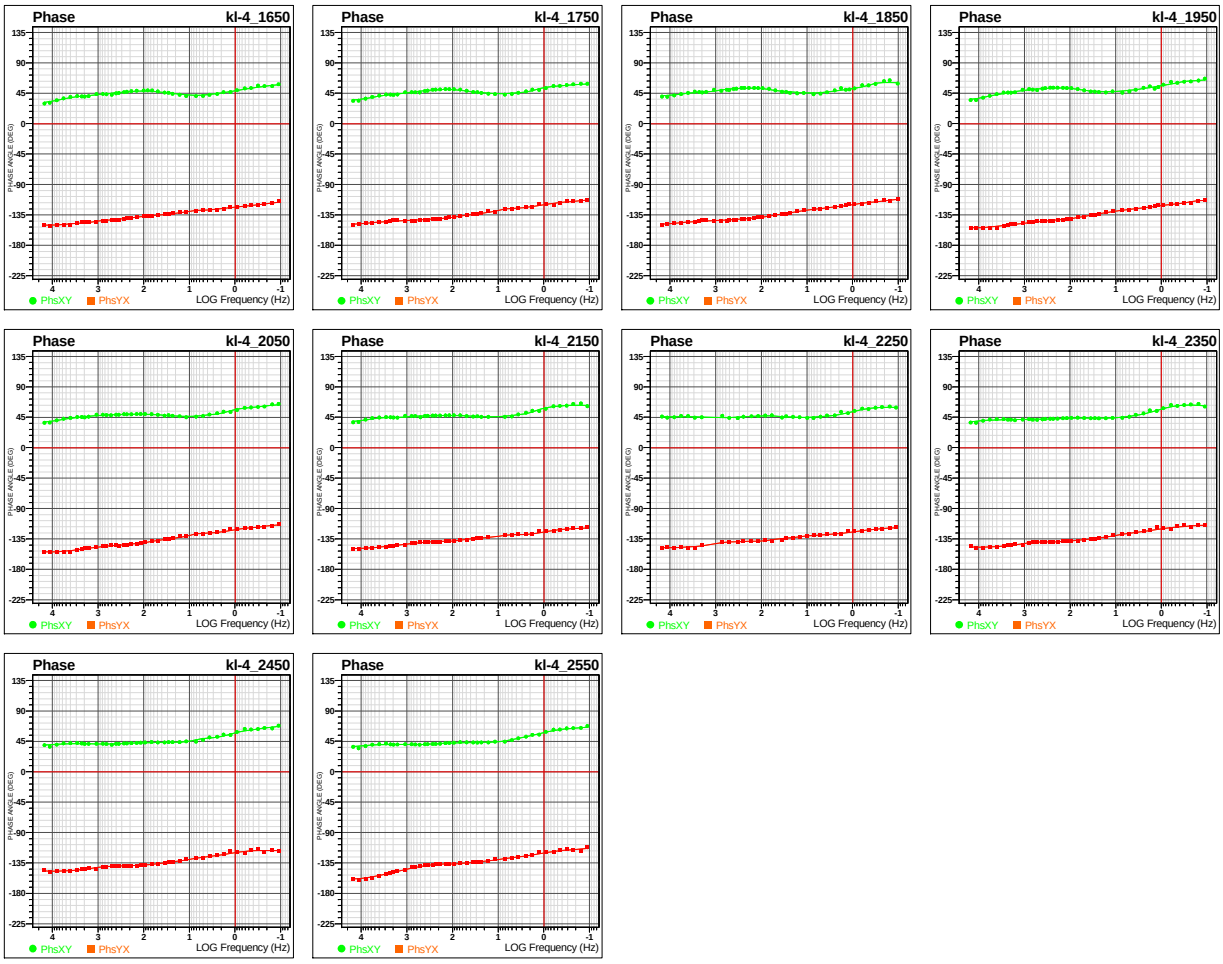
Rho ExHy ------- green
Rho EyHx ------- orange

LINE KL-4: PHASE VS. FREQUENCY



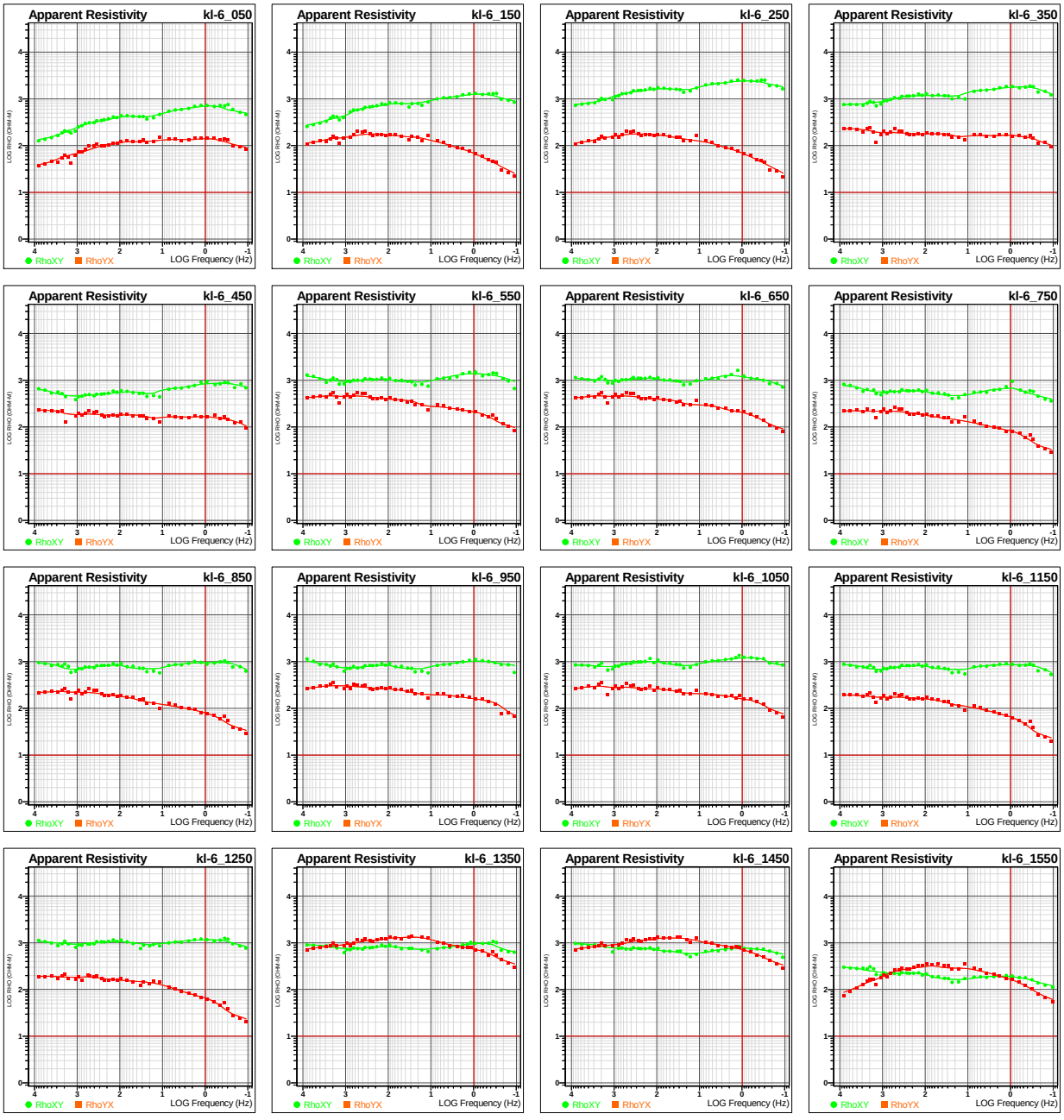
Phs ExHy ------- green
Phs EyHx ------- orange

LINE KL-4: PHASE VS. FREQUENCY (CONT..)



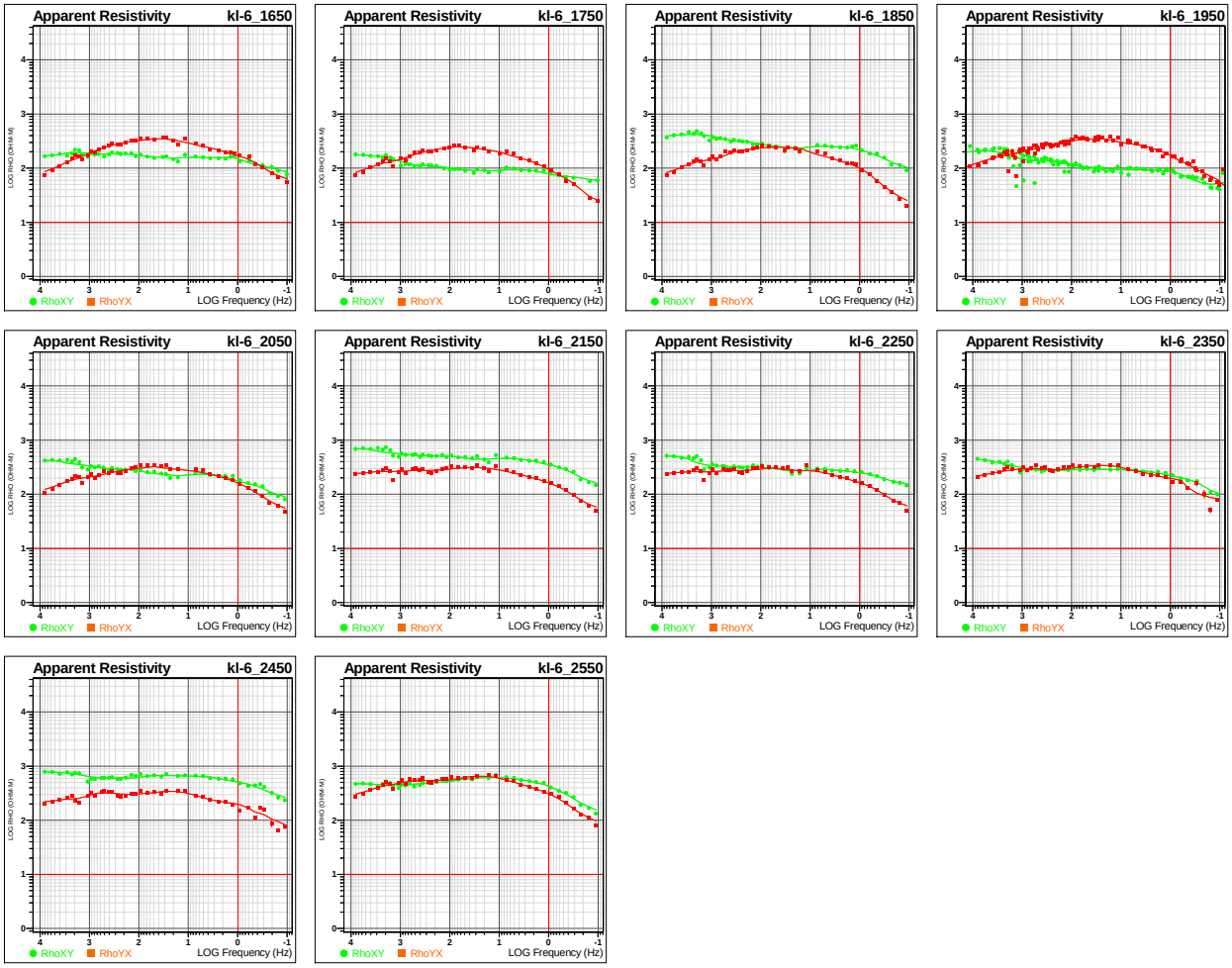
Phs ExHy ------- green
Phs EyHx ------- orange

LINE KL-6: APPARENT RESISTIVITY VS. FREQUENCY



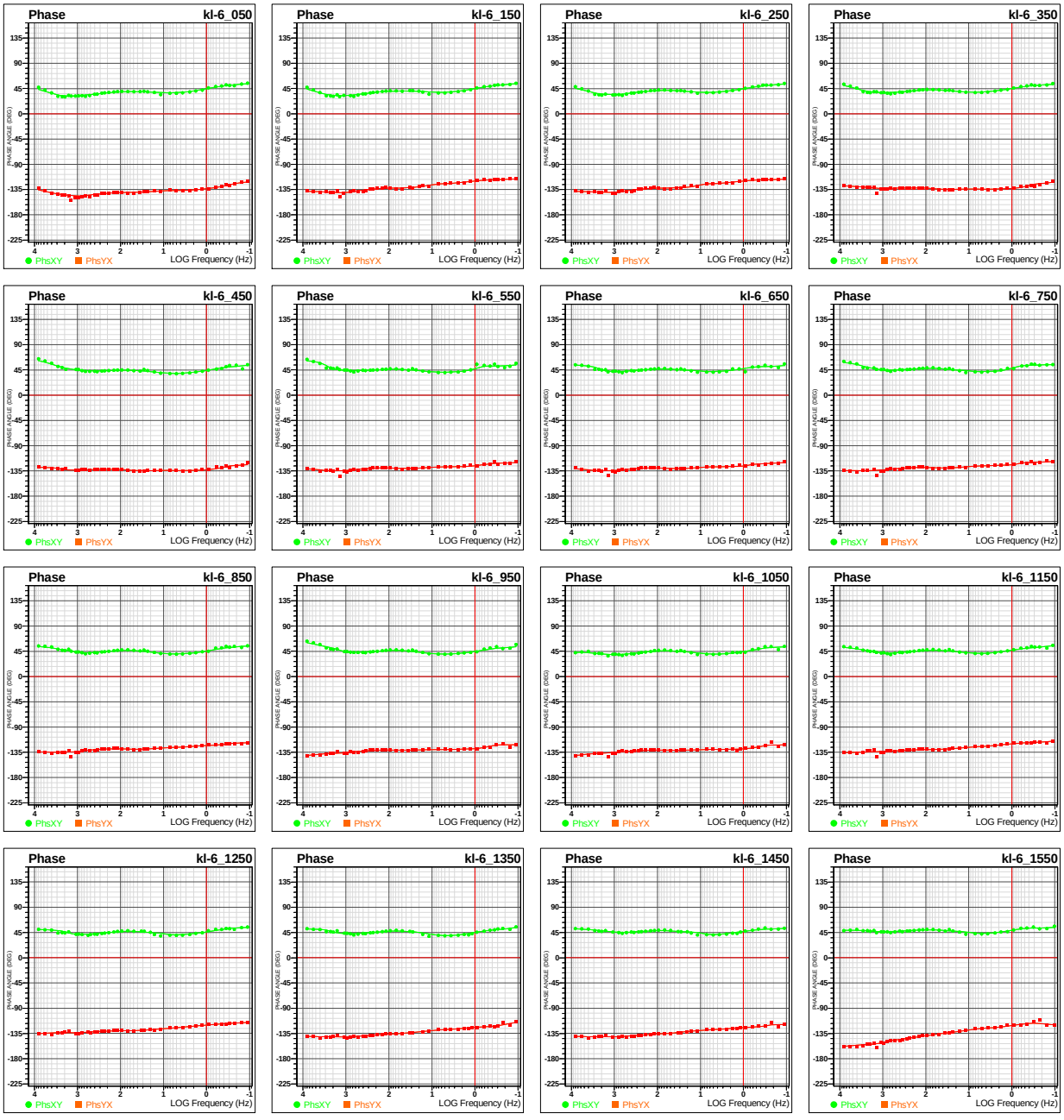
Rho ExHy ------- green
Rho EyHx ------- orange

LINE KL-6: APPARENT RESISTIVITY VS. FREQUENCY (CONT..)



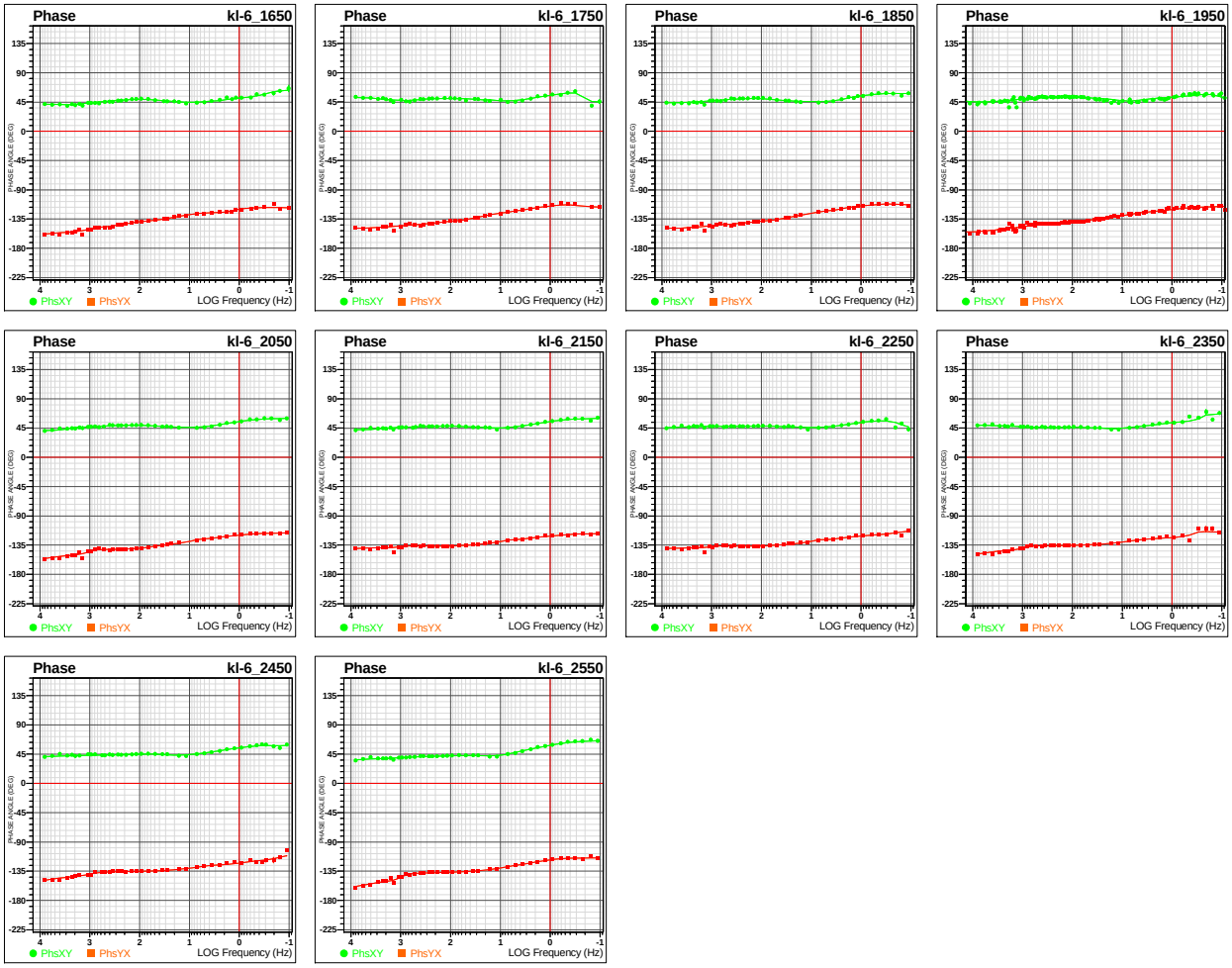
Rho ExHy ------- green
Rho EyHx ------- orange

LINE KL-6: PHASE VS. FREQUENCY



Phs ExHy ------- green
Phs EyHx ------- orange

LINE KL-6: PHASE VS. FREQUENCY (CONT..)

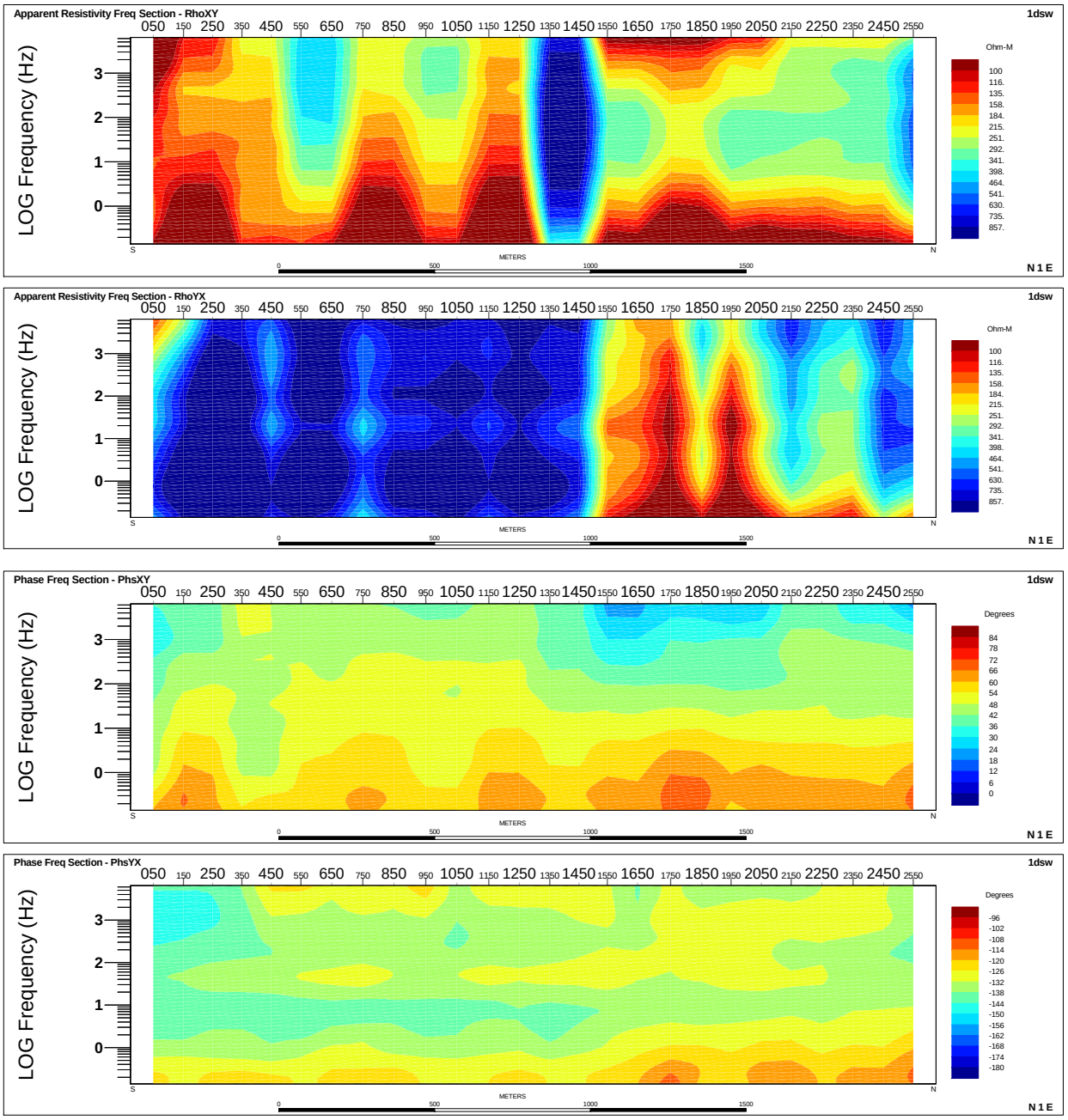


Phs ExHy ------- green
Phs EyHx ------- orange

MT APPARENT RESISTIVITY AND PHASE PSEUDO-SECTIONS

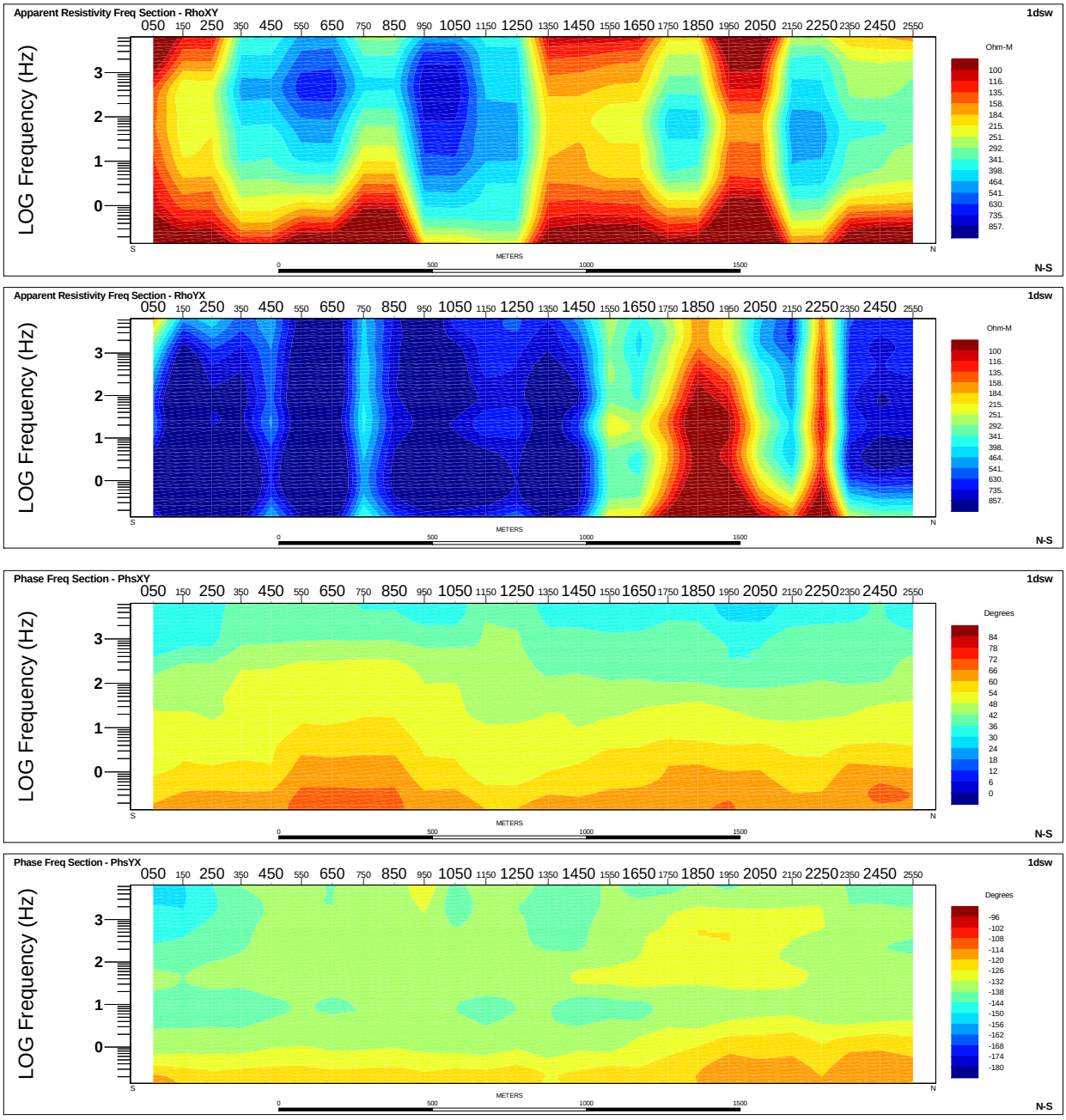
Note: **XY denotes in-line electrical (E) field and orthogonal (H) field (Ex/Hy)**
YX denotes in line H field and orthogonal E field (Ey/Hx)

LINE KL-4 –APPARENT RESISTIVITY AND PHASE (XY & YX) PSEUDOSECTION



STRIP 1 (TOP) – RHO XY, STRIP 2 – RHO YX, STRIP 3 – PHASE XY , STRIP 4 (BOTTOM) – PHASE YX

LINE KL-6 –APPARENT RESISTIVITY AND PHASE (XY & YX) PSEUDOSECTION

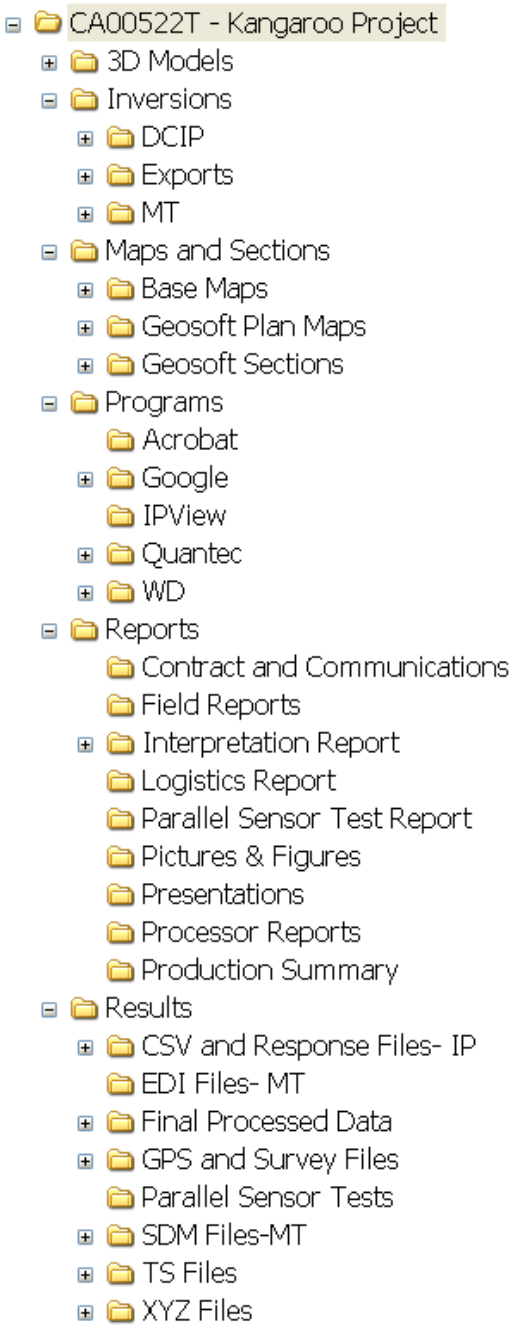


STRIP 1 (TOP) – RHO XY, STRIP 2 – RHO YX, STRIP 3 – PHASE XY , STRIP 4 (BOTTOM) – PHASE YX

APPENDIX J - DIGITAL ARCHIVE

***DVD'S ATTACHED ONTO INTERPRETATION REPORT* INCLUDES:**

- **DVD 1 OF 1:**



APPENDIX I

KANGAROO PROPERTY

POLE-DIPOLE INDUCED POLARIZATION SURVEY

See Report by Quantec Geoscience Inc.

Quantec Geoscience Ltd.
5825 King Street
Porcupine, ON P0N 1C0
Phone (705) 235-2166
Fax (705) 235-2255

Quantec Geoscience Ltd.

Geophysical Survey
Logistics Report

Regarding the
IP/RESISTIVITY SURVEYS
at the KANGAROO PROPERTY,
Caribou Region, British Columbia
on behalf of
BARKER MINERALS LTD.

QGL QGL QGL QGL QGL QGL

G. R. J. Warne

February 2008
Project CA00525C

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2.2 ACCESS 5
2.3 SURVEY GRIDS 5

3. SURVEY WORK UNDERTAKEN 6

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3.2 PERSONNEL 6
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APPENDIX B: PRODUCTION LOG
APPENDIX C: THEORETICAL BASIS AND SURVEY PROCEDURES
APPENDIX D: INSTRUMENT SPECIFICATIONS
APPENDIX E: LIST OF MAPS
APPENDIX F: MAPS AND SECTIONS

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Table 1: IP/Resistivity Survey Coverage. 7
Table 2: Decay Curve Sampling (2 Sec. Cycle) 8

1. INTRODUCTION

- **QGL Project No:** CA00525C
- **Project Name:** Kangaroo Project
- **Survey Period:** October 27th to November 25th, 2007
- **Survey Type**: Induced Polarization and Resistivity
- **Client:** Barker Minerals Ltd.
- **Client Address** 8384 Toombs Drive
  Prince George, BC
  V2K 5A3
- **Representative:** Louis Doyle, Rein Turna
- **Objectives:**

The primary objective of the surveys is to locate and delineate potential zones enriched in metallic mineralization based on the chargeable properties of metallic minerals. The distributions of resistivity and chargeability mapped by the results may, in addition, assist in interpretation of the geology by delineating lithologic units, structures or zones of alteration related to contrasts in either or both of these physical properties.

- **Report Type:** Logistics Report

2. GENERAL SURVEY DETAILS

2.1 LOCATION

- **Township:** N/A
- **Province/Territory:** British Columbia
- **Country:** Canada
- **Nearest Settlement:** Likely, BC, ~ 11.5 km SE.
- **UTM Reference :** Zone10U

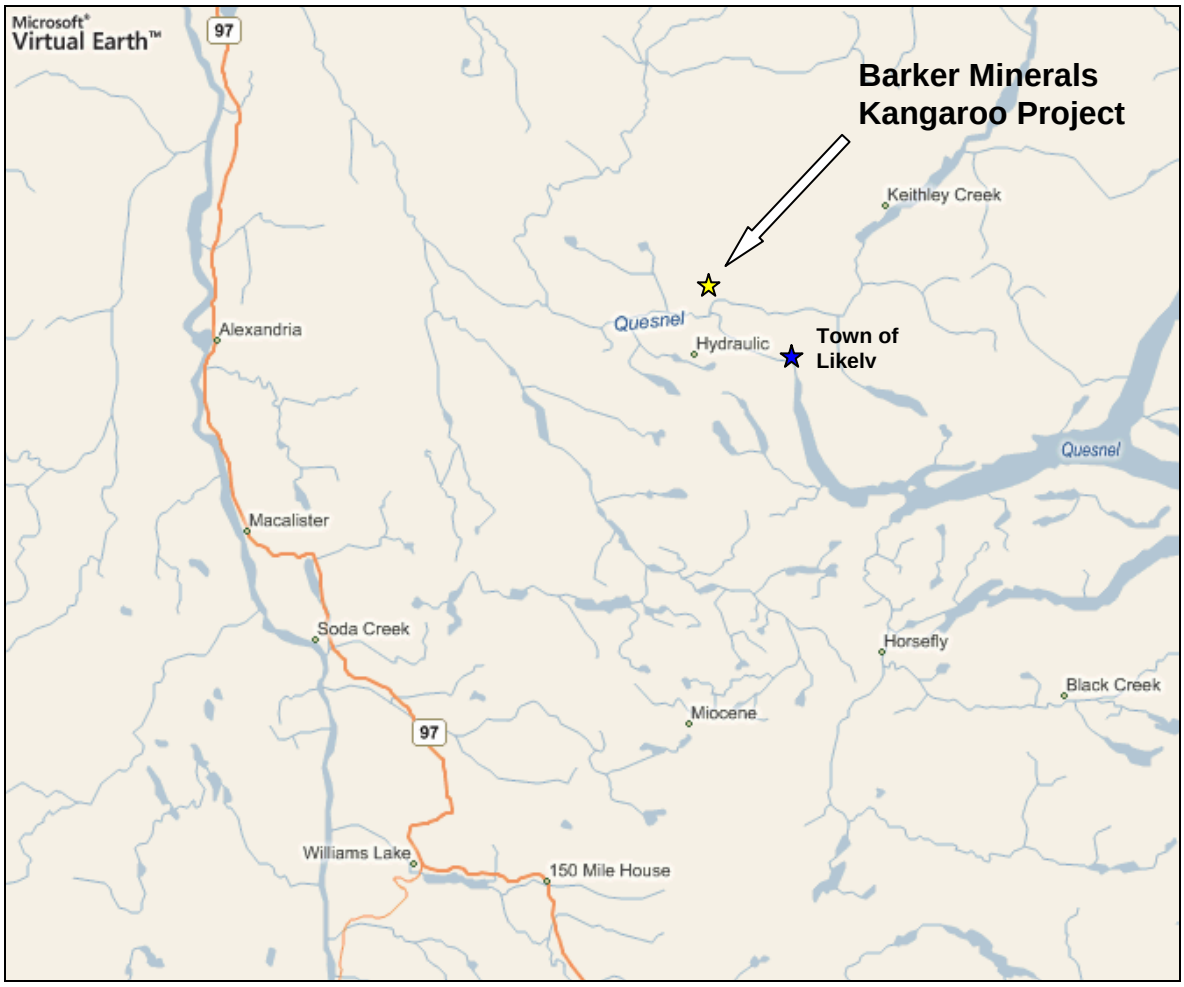


Figure 1: General Location of the Kangaroo Project

2.2 ACCESS

- **Base of Operations:** Likely, BC.
- **Mode of Access:** 4 WD truck, via logging roads.

2.3 SURVEY GRIDS

- **Coordinate Reference System:** Local exploration grid.
- **Established:** prior to survey execution
- **Line Direction:** N-S
- **Line Separation:** 100 metres
- **Station Interval:** 50 metres
- **Method of Chaining:** Slope-Distance rope chaining.

3. SURVEY WORK UNDERTAKEN

3.1 GENERALITIES

- **Survey Dates:** Oct 27th to Nov 25th, 2007
- **Survey Period:** 30 days
- **Survey Days (read time):** 29 days
- **Breakdown Days:** 0 days
- **Weather/Standby Days:** 0 days
- **Mobilization Days:** 1 days
- **Survey Coverage:** 34.7 line kilometers

3.2 PERSONNEL

- **Project Manager:** Jeff Warne, South Porcupine, ON
- **Field Supervisor:** Kevin MacKenzie, Sidney, NS
- **Geophysical Operators:** Eric Lott, Halifax, NS
- **Field Assistants:** J. F. Richard, Rouyn-Noranda, QC[1]
  Carmen Vuko, Kirkland Lake, ON
  Tyler Debruyn, Englehart, ON
  Matt Ruppenthal, Toronto, ON

3.3 SURVEY SPECIFICATIONS

- **Array:** Pole-dipole, roll-along technique (see Figure 2)
- **Rx dipole spacing "a":** 50 metres, n = 1 to 6
- **Sampling Interval:** 50 metres
- **Approximate Arial Coverage:** 3.8 kilometre[2]

[1] J. F. Richard replaced by Matt Ruppenthal, Nov 16, 2007

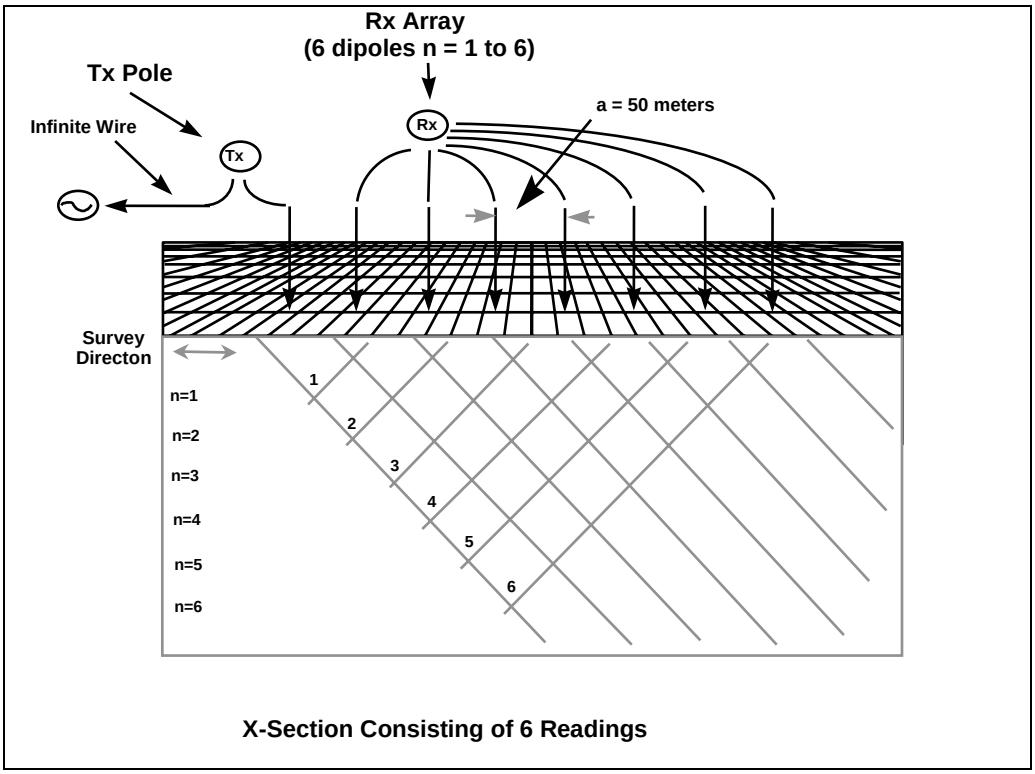


Figure 2: Pole-dipole Array Layout

3.4 SURVEY COVERAGE

- **IP/Resistivity:** 34.7 line kilometers (see Table I)

LINE	MINIMUM	MAXIMUM	TOTAL (km)
3+00 E	0 N	3050 N	3.05
5+00 E	0 N	3000 N	3.0
7+00 E	50 N	3150 N	3.1
8+00 E	0 N	3400 N	3.4
9+00 E	500 N	3450 N	2.95
10+00 E	550 N	3450 N	2.9
11+00 E	350 N	3450 N	3.1
12+00 E	300 N	3300 N	3.0
13+00 E	300 N	2350 N	2.05
14+00 E	450 N	1800 N	1.35
15+00 E	450 N	1800 N	1.35
16+00 E	300 N	1800 N	1.5
17+00 E	550 N	1800 N	1.25
18+00 E	350 N	1800 N	1.45
19+00 E	600 N	1800 N	1.2
		Total	**34.65**

Table 1: IP/Resistivity Survey Coverage.

3.5 INSTRUMENTATION

- **IP Receiver:** IRIS Elrec-6
- **IP Transmitter:** GDD TXii-5000 (5 kW / 150 – 2400V output)
- **IP Power Supply:** Honda EM-6500

3.6 PARAMETERS

- **Input Waveform:** 0.125 Hz square wave at 50% duty cycle (2 seconds On/Off)
- **Receiver Decay Sampling:** IRIS Elrec-6 semi-logarithmic mode windows (see Table 2)
- **Measured Parameters**:
    1) Chargeability in millivolts/Volt (10 time slices + total area under decay curve) (see also Appendix D).
    2) Primary Voltage in millivolts and Input Current in amperes for Resistivity calculation according to the pole-dipole array geometry factor (see Appendix D).

Slice	Duration (msec)	Start (msec)	End (msec)	Mid-Point (msec)
T_D	80	0	80	N/A
T_1	80	80	160	120
T_2	80	160	240	200
T_3	80	240	320	280
T_4	80	320	400	360
T_5	160	400	560	480
T_6	160	560	720	640
T_7	160	720	880	800
T_8	320	880	1200	1040
T_9	320	1200	1520	1360
T_{10}	320	1520	1840	1680
Total T_p	**1760**			

Table 2: Decay Curve Sampling (2 Sec. Cycle)

3.7 MEASUREMENT ACCURACY AND REPEATABILITY

- **Chargeability**: generally less than ± 1 mV/V, acceptable to ± 3 mV/V in limited instances.
- **Resistivity**: less than 5% cumulative error from Primary voltage and Input current measurements.

Notes Regarding Measurement Accuracy:

Four measurements were rejected from presentation. The measurements were located at:

line 16+00E, current station 1250N, n = 5, 6
line 19+00E, current station 1750N, n = 5, 6

The measurements were invalid due to contact contamination at the electrode common to each adjacent pair of measurement dipoles.

3.8 DATA PRESENTATION

- **Digital Data:**

Raw data:

Elrec-6 instrument dump files in ASCII text format, named according to survey line, e.g. L300E.dmp.

Processed data:

Geosoft Oasis format Database file.

Metal Factor, calculated as $MF = M_T * 1000 / \rho_a$

where

M_T is the Total Apparent Chargeability
ρ_a is the Apparent Resistivity

for each measurement location

Maps:

1) Stacked section maps presenting posted and contoured Pseudo-sections of Apparent Total Chargeability, Apparent Resistivity and Metal Factor for each line surveyed, at 1:5000 scale.

4. DISCUSSION OF RESULTS

The IP/Resistivity surveys over the Kangaroo property were completed successfully without incident. The progress of data acquisition was, however, hampered by the early-winter weather conditions.

The IP/Resistivity surveys have quantified apparent, bulk volume average DC resistivity and chargeability at the Kangaroo Property. The electrode array specifications employed for the surveys typically provide investigation to depths of approximately 150 meters, on a rule of thumb basis.

The bulk volume resistivity is primarily influenced by subsurface variations in porosity, permeability and moisture saturation. Significant volume concentrations of electrically interconnected conductive mineralization, where present, further influence the bulk volume resistivity.

Chargeability is a near-direct indicator of the presence of metallic mineralization, based on the electronic polarize-ability of minerals that possess metallic properties. These include those native metals which occur naturally, some metallic oxides, graphite and most metallic sulphides, with the note-able exception of sphalerite. Both conductivity and chargeability result from the mobility of electrons within metals. However, whereas electronic conduction occurs within metals, polarization occurs at the interfaces between metallic grains and pore fluids. For this reason, not only the volume content, but also the distribution and texture of chargeable mineralization within host rocks are important factors influencing bulk volume chargeability.

The apparent resistivity underlying the Kangaroo property is predominantly moderate in magnitude, within the range of 100 to 1,000 ohm-m. Localized zones of low resistivity, in the range 50 to 100 ohm-m, and high resistivity, in the range 1,000 to 5,000 ohm-m have also been detected.

The apparent total Chargeability ranges from low to high, within the range of 5 to 50 mV/V.

The pseudosection presentations of the calculated Metal Factor filter parameter highlight zones where elevated chargeability signatures coincide with reduced resistivity signatures.

RESPECTFULLY SUBMITTED
QUANTEC GEOSCIENCE LTD.

G. R. Jeffrey Warne
Senior Project Manager

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, G.R. Jeffrey Warne, hereby declare that:

1. I am a geophysical project manager with residence in South Porcupine, Ontario and am presently employed in this capacity with Quantec Geoscience Inc. of Toronto, Ontario.

2. I studied Engineering Geophysics in the Faculty of Applied Science at Queen's University in Kingston, Ontario, completing all but two of the course requirements for a B.Sc. (Eng.) in 1981.

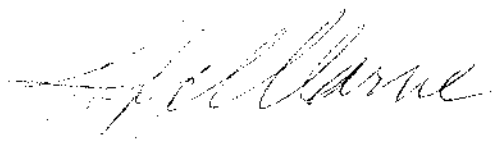
3. I am currently applying to be registered as a professional geoscientist with APGO (Ontario).

4. I have practiced my profession continuously since May, 1981 in Canada, the United States, Australia, Argentina, Bulgaria, Chile, Ireland, Mexico, Peru, and Portugal.

5. I have no interest, nor do I expect to receive any interest in the properties or securities of **Barker Minerals Ltd**.

6. I have supervised the acquisition of and evaluated the survey data, prepared the presentations and authored this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Porcupine, Canada
February, 2008



G.R. Jeffrey Warne
Senior Project Manager, QGI

APPENDIX B

CA00525C, DCIP Survey, Barker Minerals Ltd., Kangaroo Project, BC

Date	Description	Line	Start	End	Total (m)
27-Oct-07	Mob from Timmins to Likely				
28-Oct-07	Kevin MacKenzie did a grid recon and equipment check while Titan gear was collected. Infinate wire run to north boundary of grid. Begin running power wire along L3E.				
29-Oct-07	Complete installing 3 km of power wire on L3E. Prepare wire for the receiver. Begin survey of L3E.	L3+00E	30+50N	23+00N	750
30-Oct-07	Complete survey of L3E.	L3+00E	23+00E	0+00	2300
31-Oct-07	Relocate power wire to L5E. Begin survey of L5E.	L5+00E	0+00	10+00N	1000
01-Nov-07	Complete survey of L5E. Steep slope in the south	L5+00E	10+00N	30+00N	2000
02-Oct-07	Relocate power wire to L7E. Locate and repair a break in the infinate wire 4 Km west of grid. No Data				
03-Oct-07	Begin survey of L7E,	L7+00E	31+50N	12+00N	1950
04-Nov-07	Complete survey of L7E. Extremely wet and slippery conditions in the south.	L7+00E	12+00N	0+00	1200
05-Nov-07	Relocate power wire to L8E. Begin survey of L8E. Southern section of each line is iced over and slow to navigate because of slope.	L8+00E	0+00	10+00N	1000
06-Nov-07	Continue survey of L8E. Heavy rain and wet snow conditions hamper progress.	L8+00E	10+00N	24+00N	1400
07-Nov-07	Complete survey of L8E. Relocate power wire to L10E. L9E was not completed in the north.	L8+00E	24+00N	34+50N	1050
08-Nov-07	Begin survey of L10E.	L10+00	15+00N	34+50N	1950
09-Nov-07	Complete survey of L10E. Relocate power wire to L9E.	L10+00	5+00N	15+00N	1000
10-Nov-07	Begin survey of L9E.	L9+00E	5+00N	25+00N	2000

Date	Description	Line	Start	End	Total (m)
11-Nov-07	Complete survey of L9E. Relocate power wire to L12E.	L9+00E	25+00N	34+50N	950
12-Nov-07	Complete installing power wire Begin survey of L12E.	L12+00E	33+00N	15+00N	1800
13-Nov-07	Complete survey of L12E.	L12+00E	15+00N	3+00N	1200
14-Nov-07	Relocate power wire to L11E. Begin survey of L11E. This is an older line which was rechained. Much of the line, from 2500N to the north end, wanders west toward L10E. In some areas, the lines are only 25m apart. There wre some chaining errors in the north as well. One Quantec field assistant returned home for personel reasons today Barker Minerals supplied a substitute helper.	L11+00E	4+50N	11+50N	700
15-Nov-07	Continue survey of L11E. Still using a field assistant provided by the client.	L11+00E	11+50N	26+50N	1500
16-Nov-07	Complete survey of L11E. Relocate power wire to L13E. Begin survey of L13E. Still using a field assistant provided by the client.	L11+00E	26+50N	34+50N	800
		L13+00E	23+50N	17+00N	550
17-Nov-07	Complete survey of L13E.Still using a field assistant provided by the client.	L13+00E	17+00N	3+00N	1400
18-Nov-07	Install power wire for L14E, Survey L14E. Replacement technician arrived from Timmins. We also have an additional helper provided by Barker Minerals.	L14+00E	4+50N	18+00N	1350
19-Nov-07	Install power wire for L15E, Survey L15E	L15+00E	4+50N	18+50N	1350
20-Nov-07	Install power wire for L16E, Begin survey of L16E. Poor contact in south half of L16E. Both current and receiver electrodes needed extra work.	L16+00E	3+00N	14+50N	1150
21-Nov-07	Complete survey of L16E. Relocate power wire to L17E. Begin survey of L17E. Same poor contact conditions in southern half of line.	L16+00E	14+50N	18+00N	350
		L17+00E	18+00N	12+50N	550
22-Nov-07	Complete survey of L17E. Relocate power wire to L18E. Begin survey of L18E.	L17+00E	12+50N	4+50N	800
		L18+00E	3+00N	7+50N	450
23-Nov-07	Complete survey of L18E. Current electrodes and receiver electrodes both need	L18+00E	7+50N	18+00N	1050

Date	Description	Line	Start	End	Total (m)
	electrolyte solution and extra work to achieve good contact, Relocate power wire to L19E.				
24-Nov-07	Complete survey of L19E. Lots of prep necessary for electrode contact. From 6+00N to the south the slope was too rocky and covered with 16 inches of snow making contact and signal so weak as to present poor quality,useless data.	L19+00E	6+50N	18+00N	1150
25-Nov-07	Begin recovery of 15k of wire and all other equipment.The 5k of infinite wire west of the grid was trapped in the frozen creek-bed. Between .5k and 1k was unrecover-able.				

APPENDIX C

THEORETICAL BASIS AND SURVEY PROCEDURES

INDUCED POLARIZATION SURVEY

The resistivity is among the most variable of all geophysical parameters, with a range exceeding 10^6. Because most minerals are fundamentally insulators, with the exception of massive accumulations of metallic and sub metallic ores (electronic conductors) which are rare occurrences, the resistivity of rocks depends primarily on their porosity , permeability and particularly the salinity of fluids contained (ionic conduction), according to Archie's Law. In contrast, the chargeability responds to the presence of polarizeable minerals (metals, sub metallic sulphides and oxides, and graphite), in amounts as minute as parts per hundred. Both the quantity of individual chargeable grains present, and their distribution with in subsurface current flow paths are significant in controlling the level of response. The relationship of chargeability to metallic content is straightforward, and the influence of mineral distribution can be understood in geologic terms by considering two similar, hypothetical volumes of rock in which fractures constitute the primary current flow paths. In one, sulphides occur predominantly along fracture surfaces. In the second , the same volume percent of sulphides are disseminated throughout the rock. The second example will, in general, have significantly lower intrinsic chargeability.

The collected data sets are reduced to apparent resistivity and total chargeability as explained in the following figures and equations:

Using the following diagram (Fig. C3) for the electrode configuration and nomenclature:[2]

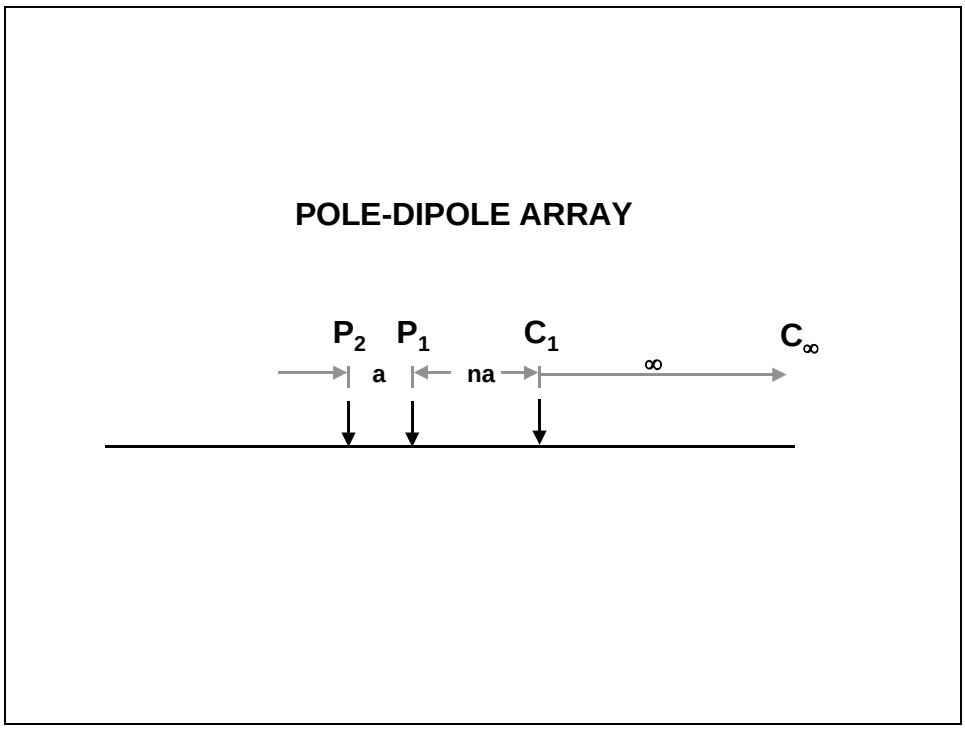


Figure C3: Pole-Dipole Electrode Array

[2] From Telford, et al., Applied Geophysics, Cambridge U Press, New York, 1983..

the apparent resistivity is given by:

$$\rho a = \; 2\pi n(n+1)\, a \times \frac{V_P}{I} \text{ ohm - metres}$$

where:"a" is the MN dipole spacing (metres)
"n" is the separation parameter between C_1 and P_1P_2
"V_P" is the primary voltage measured between P_1P_2 (volts)
"I" is the output current between C_1C_2 (amperes)

Using the diagram in Figure B2 for the Total Chargeability:

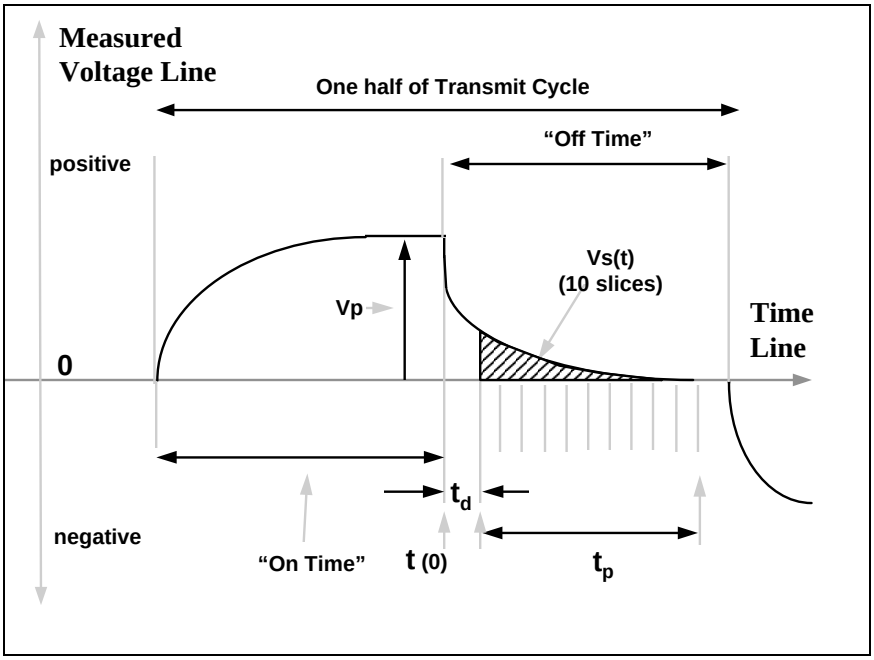


Figure B1: The measurement of the time-domain IP effect

the total apparent chargeability is given by:

Total Apparent Chargeability:[3]

$$\mathbf{M_T} \;=\; \frac{1}{\mathbf{t_p V_p}} \sum_{\mathbf{i=1\ to\ 10}} \int_{\mathbf{t_i}}^{\mathbf{t_{i+1}}} \mathbf{Vs}\;\;\mathbf{(t)\ dt} \qquad \textbf{millivolts per volt}$$

where t_i, t_{i+1} are the beginning and ending times for each of the chargeability slices,

[3] From Telford, et al., Applied Geophysics, Cambridge U Press, New York, 1983..

More detailed descriptions on the theory and application of the IP/Resistivity method can be found in the following reference papers:

Cogan, H., 1973, Comparison of IP electrode arrays, Geophysics, 38, p 737 - 761.

Langore, L., Alikaj, P., Gjovreku, D., 1989, Achievements in copper sulphide exploration in Albania with IP and EM methods, Geophysical Prospecting, 37, p 925 - 941.

Telford, W. M., Geldart, L. P., Sheriff, R. E., Keys, D. A., 1986, Applied Geophysics, Cambridge University Press.

APPENDIX D

INSTRUMENT SPECIFICATIONS

IRIS ELREC 6 Receiver

(From IRIS Instruments IP 6 Operating Manual)

Weather proof case

Dimensions:	31 cm x 21 cm x 21 cm
Weight:	6 kg with dry cells 7.8 kg with rechargeable bat.
Operating temperature:	-20°C to 70°C (-40°C to 70°C with optional screen heater)
Storage:	(-40°C to 70°C)
Power supply:	6 x 1.5 V dry cells (100 hr. @ 20°C) or 2 x 6 V NiCad rechargeable (in series) (50 hr. @ 20°C) or 1 x 12 V external
Input channels:	6
Input impedance:	10 Mohm
Input overvoltage protection:	up to 1000 volts
Input voltage range:	10 V maximum on each dipole 15 V maximum sum over ch. 2 to 6
SP compensation:	6 automatic ± 10 V with linear drift correction up to 1 mV/s
Noise rejection:	50 to 60 Hz powerline rejections 100 dB common mode rejection (for Rs= 0) automatic stacking
Primary voltage resolution:	1 μV after stacking
accuracy:	0.3% typically; maximum 1 over whole temperature range
Secondary voltage windows:	up to 10 windows; 3 preset window specs .plus fully programmable sampling.
Sampling rate:	10 ms
Synchronization accuracy:	10 ms, minimum 40 μV
Chargeability resolution:	0.1 mV/V
accuracy:	typically 0.6%. maximum 2% of reading ± 1 mV/V for V_p > 10 mV
Battery test:	manual and automatic before each measurement
Grounding resistance:	0.1 to 467 kohm
Memory capacity:	2505 records, 1 dipole/record
Data transfer:	serial link @ 300 to 19200 baud

IRIS IP 6 Dump File Format

```
    *    IP 6  (V9.1) *
    *==================*

#77      Jul  1  1980         11:57
    dipole 1  trigger 1  domain Time  T wave
    Programmable wind.  Grad. RCTGL array

    V=  331.605 Sp= -319  I= 1350.00 Rs=  0.50
    Ro=   6679.4 Ohm-m    M=   11.97 E=  0.4
    M1= 40.44  M2= 33.55  M3= 29.48  M4= 26.68
    M5= 20.95  M6= 15.52  M7= 12.50  M8=  9.77
    M9=  7.50  M10=  6.05

    cycle  19 Time= 2000  V_D= 1260  M_D=   40
    T_M1=  20  T_M2=  30  T_M3=  30  T_M4=  30
    T_M5= 180  T_M6= 180  T_M7= 180  T_M8= 360
    T_M9= 360  T_M10= 360

    Spacing config. :  Imperial grid
      XP=-1300.0  Line=  400.0
       D= -100.0  AB/2= 2500.0

#78      Jul  1  1980         11:57
    dipole 2  trigger 1  domain Time  T wave
    Programmable wind.  Grad. RCTGL array

    V=  265.781 Sp=  388  I= 1350.00 Rs=  1.41
    Ro=   4687.7 Ohm-m    M=   26.75 E=  0.0
    M1= 76.18  M2= 66.06  M3= 59.31  M4= 54.53
    M5= 44.38  M6= 34.29  M7= 28.35  M8= 22.83
    M9= 18.06  M10= 14.96

    cycle  19 Time= 2000  V_D= 1260  M_D=   40
    T_M1=  20  T_M2=  30  T_M3=  30  T_M4=  30
    T_M5= 180  T_M6= 180  T_M7= 180  T_M8= 360
    T_M9= 360  T_M10= 360

    Spacing config. :  Imperial grid
      XP=-1400.0  Line=  400.0
       D= -100.0  AB/2= 2500.0
```

APPENDIX D

INSTRUMENT SPECIFICATIONS

GDD Tx-ii 5000 Transmitter
(From GDD Operator Manual)

Size :
Transmitter only: 47 x 40 x 20 cm
Transformer only: 38 x 33 x 16 cm

Weight :
Transmitter only: 16.8 kg
Transformer only: 27.6 kg

Operating Temperature : -40º C to 65º C (-40º F to 150º F)

Time Base: 2 s ON, 2 s OFF
Optional: 1, 2, 4 or 8 s
0.5, 1, 2 or 4 s
DC

Output current : 0.030 A to 10 A (normal operation)
0.0 A to 10 A (cancel open loop)
Maximum of 5 A in DC mode

Rated Output Voltage : 150 V to 2400 V

LCD Display :
_ Output current, 0.001 A resolution
_ Output power
_ Ground resistance (when the transmitter is turned off)

Power source : 220-240 V / 50-60 Hz

APPENDIX E

LISTS OF MAPS

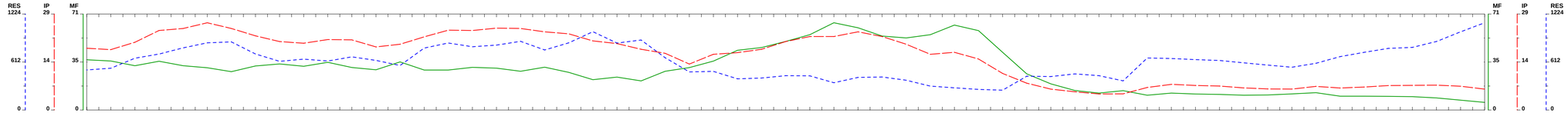
- **Pseudosection Maps at scale of 1:5000**

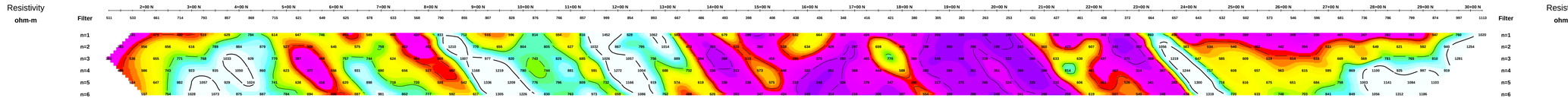
Description	Drawing No.
1. Pseudosection Map Line 3+00E	CA00525C-IP-Line 300 E
2. Pseudosection Map Line 5+00E	CA00525C-IP-Line 500 E
3. Pseudosection Map Line 7+00E	CA00525C-IP-Line 700 E
4. Pseudosection Map Line 8+00E	CA00525C-IP-Line 800 E
5. Pseudosection Map Line 9+00E	CA00525C-IP-Line 900 E
6. Pseudosection Map Line 10+00E	CA00525C-IP-Line 1000 E
7. Pseudosection Map Line 11+00E	CA00525C-IP-Line 1100 E
8. Pseudosection Map Line 12+00E	CA00525C-IP-Line 1200 E
9. Pseudosection Map Line 13+00E	CA00525C-IP-Line 1300 E
10. Pseudosection Map Line 14+00E	CA00525C-IP-Line 1400 E
11. Pseudosection Map Line 15+00E	CA00525C-IP-Line 1500 E
12. Pseudosection Map Line 16+00E	CA00525C-IP-Line 1600 E
13. Pseudosection Map Line 17+00E	CA00525C-IP-Line 1700 E
14. Pseudosection Map Line 18+00E	CA00525C-IP-Line 1800 E
15. Pseudosection Map Line 19+00E	CA00525C-IP-Line 1900 E
TOTAL SECTIONS	**15**

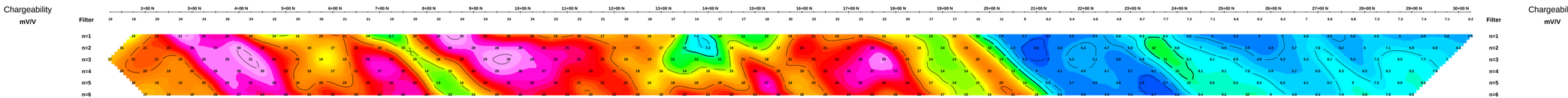
TOTAL MAPS: 15

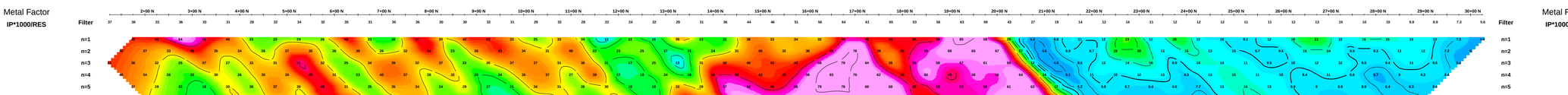
APPENDIX F

MAPS AND SECTIONS









Resistivity
ohm-m

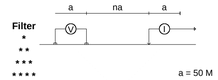
Chargeability
mV/V

Metal Factor
IP*1000/RES

Geosoft Software for the Earth Sciences

Line 300 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY

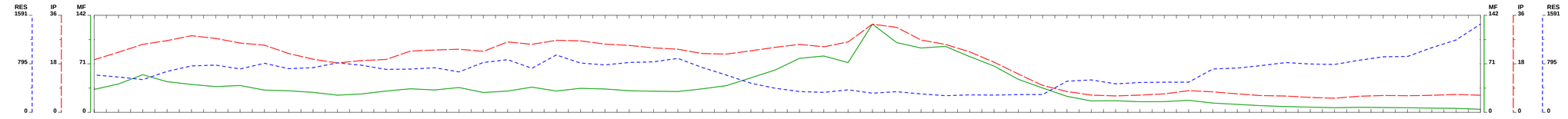
KANGAROO PROJECT

Cariboo Region, BC

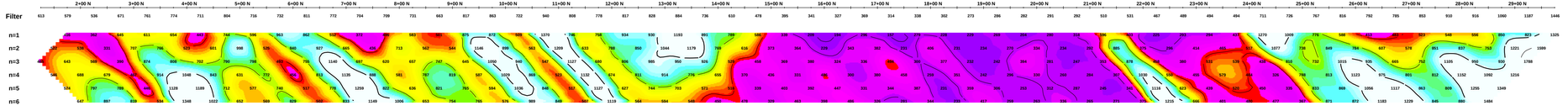
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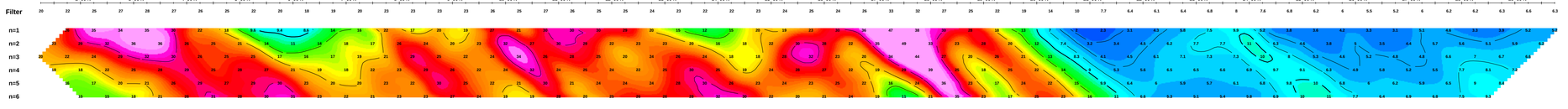
QUANTEC GEOSCIENCE LTD



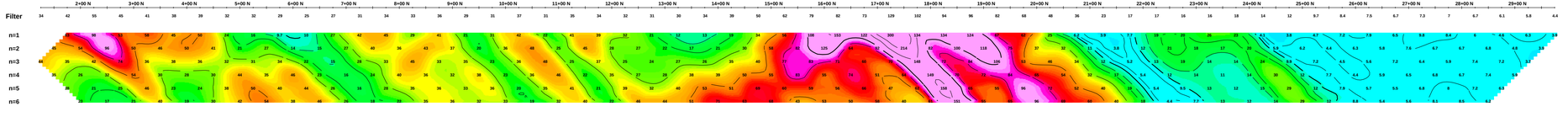
Resistivity
ohm-m



Chargeability
mV/V

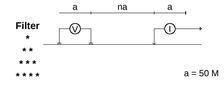


Metal Factor
IP*1000/RES



Line 500 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY

KANGAROO PROJECT

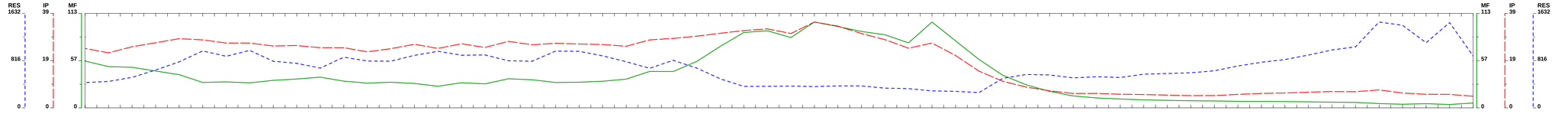
Cariboo Region, BC

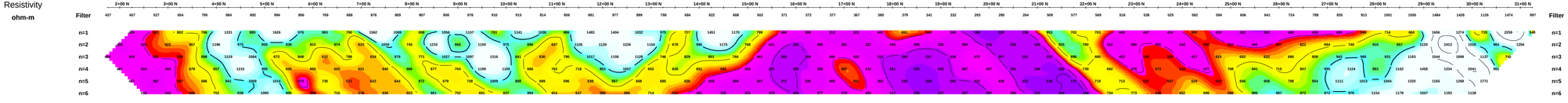
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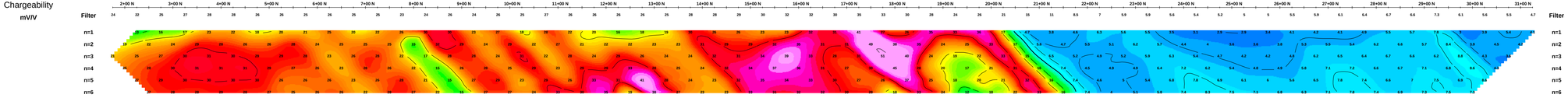
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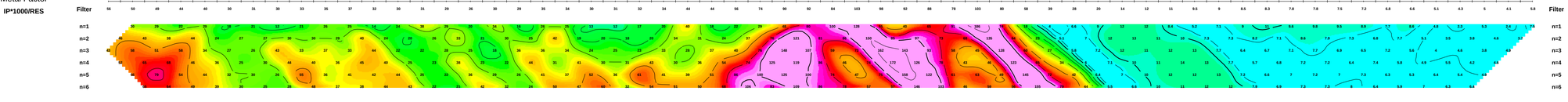
QUANTEC GEOSCIENCE LTD

Geosoft Software for the Earth Sciences



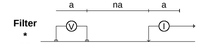






Line 700 E

Pole-Dipole Array



a = 50 M

plot point

SURVEY SPECIFICATIONS

Instrumentation: IRIS IP-6, GDD Txii-5000
Transmit Waveform: Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling: 10 semi log windows
Operators: K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

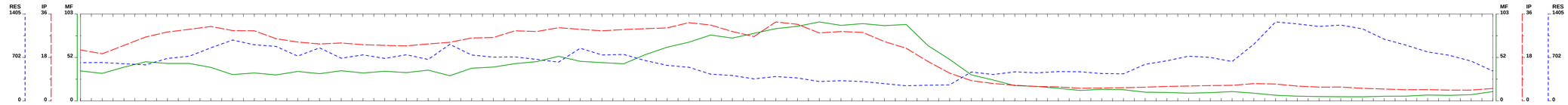
BARKER MINERALS LTD

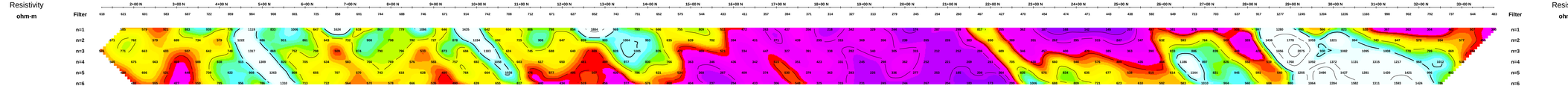
INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

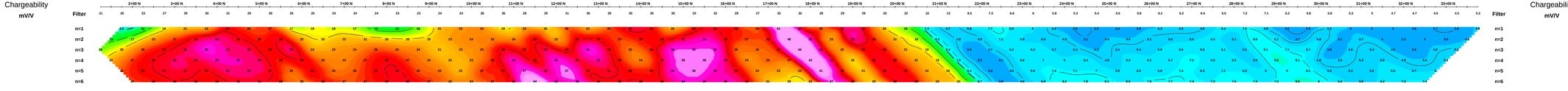
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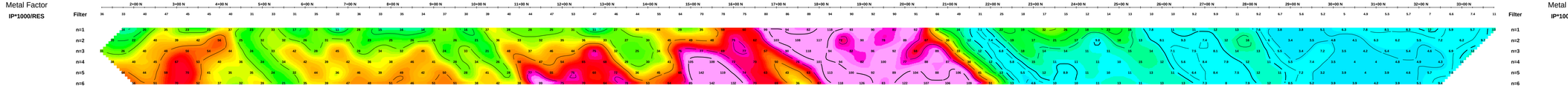
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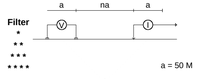




Geosoft Software for the Earth Sciences

Line 800 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Tx-II-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

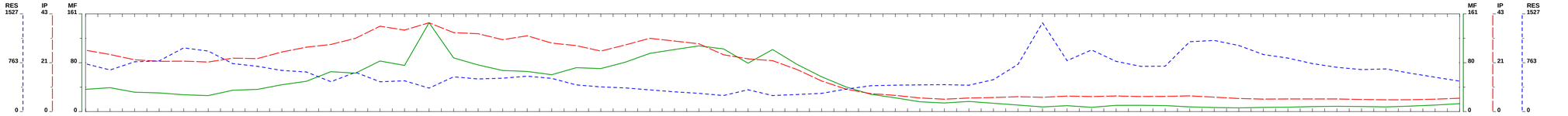
(metres)

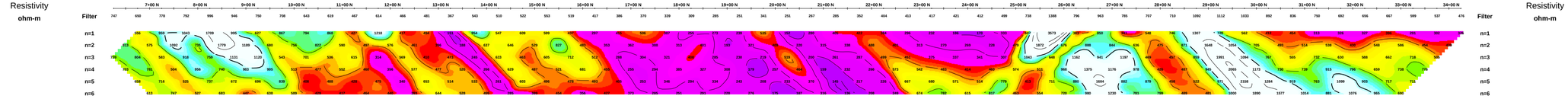
BARKER MINERALS LTD

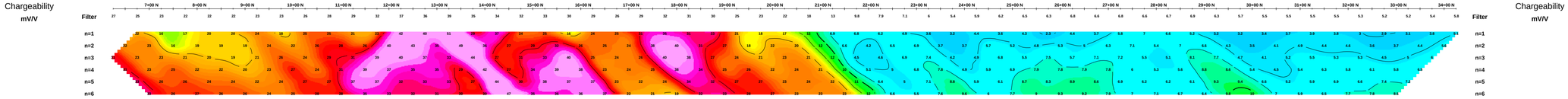
INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

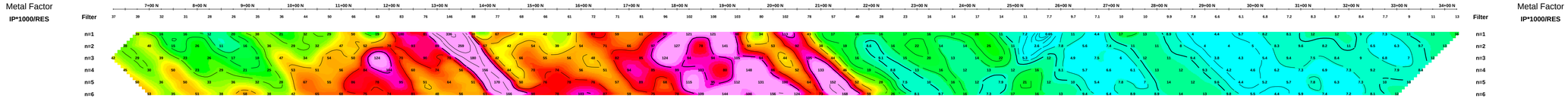
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QUANTEC GEOSCIENCE LTD





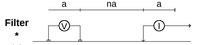




Geosoft Software for the Earth Sciences

Line 900 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

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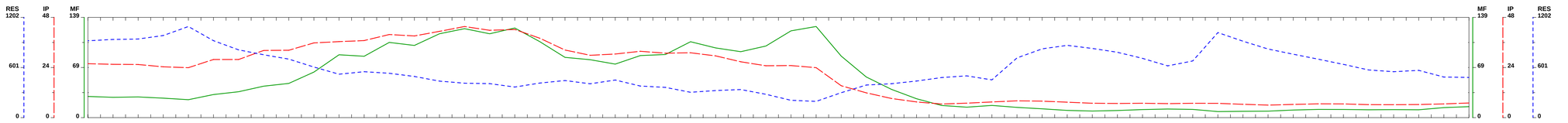
KANGAROO PROJECT

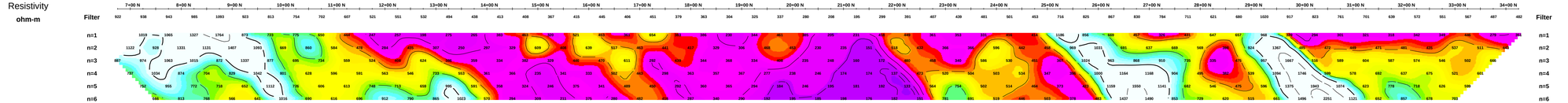
Cariboo Region, BC

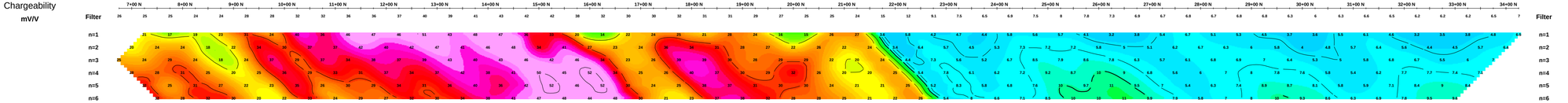
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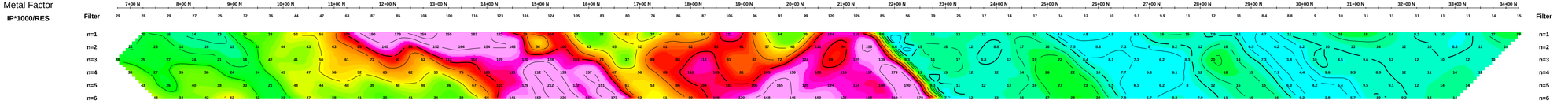
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QUANTEC GEOSCIENCE LTD



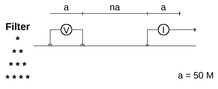






Line 1000 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation: IRIS IP-6, GDD TxII-5000
Transmit Waveform: Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling: 10 semi log windows
Operators: K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

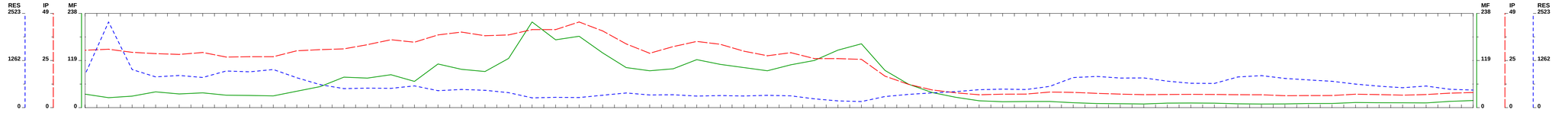
BARKER MINERALS LTD

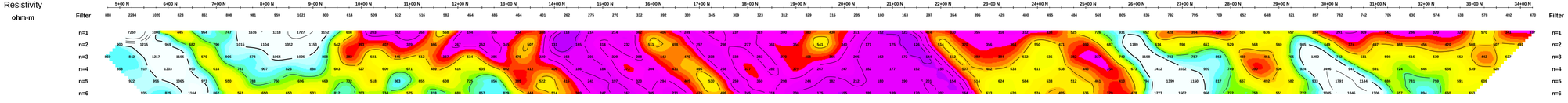
INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

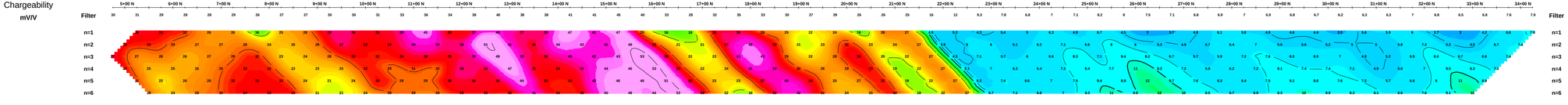
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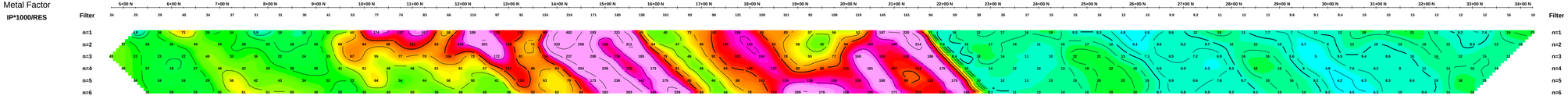
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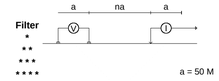




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Line 1100 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation: IRIS IP-6, GDD Txii-5000
Transmit Waveform: Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling: 10 semi log windows
Operators: K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

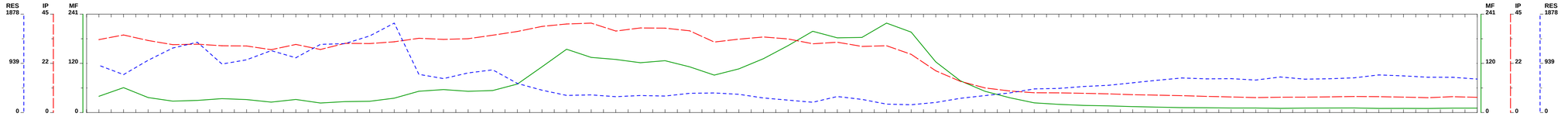
(metres)

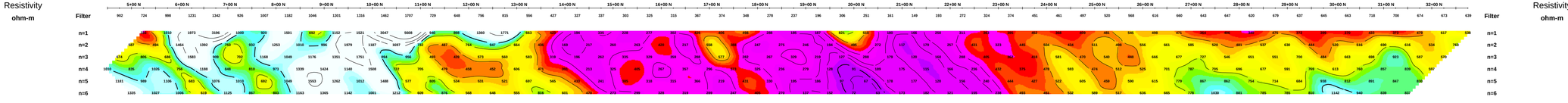
BARKER MINERALS LTD

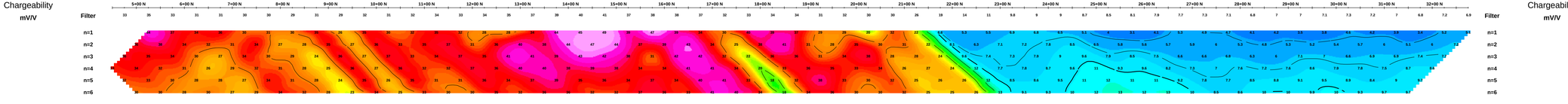
INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

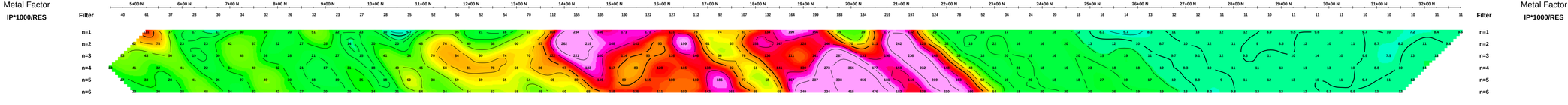
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QUANTEC GEOSCIENCE LTD





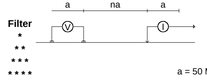




Geosoft Software for the Earth Sciences

Line 1200 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

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INDUCED POLARIZATION SURVEY

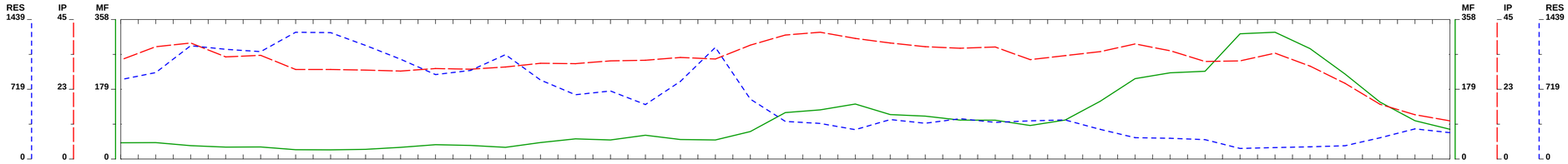
KANGAROO PROJECT

Cariboo Region, BC

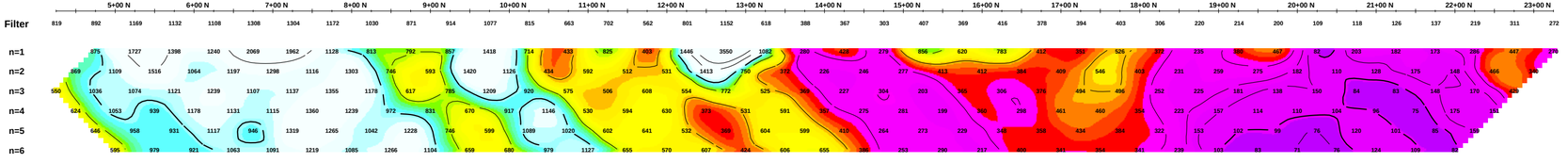
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Drawing Number: CA00525C-IP-Line 1200 E

QUANTEC GEOSCIENCE LTD

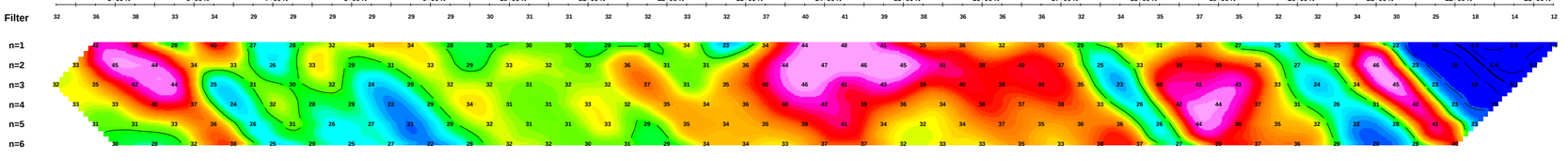


Resistivity
ohm-m



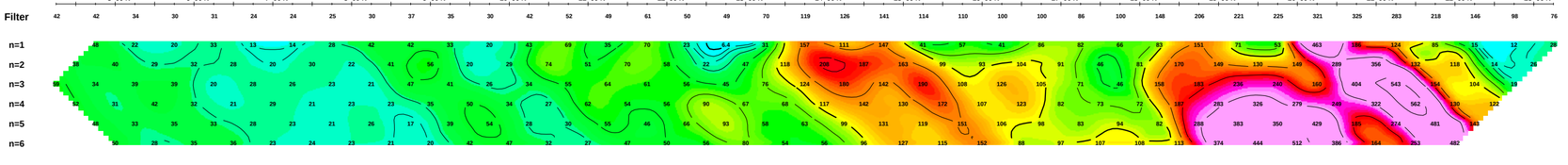
Resistivity
ohm-m

Chargeability
mV/V



Chargeability
mV/V

Metal Factor
IP*1000/RES

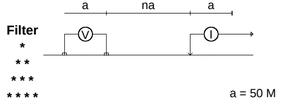


Metal Factor
IP*1000/RES

Geosoft Software for the Earth Sciences

Line 1300 E

Pole-Dipole Array



plot point

SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

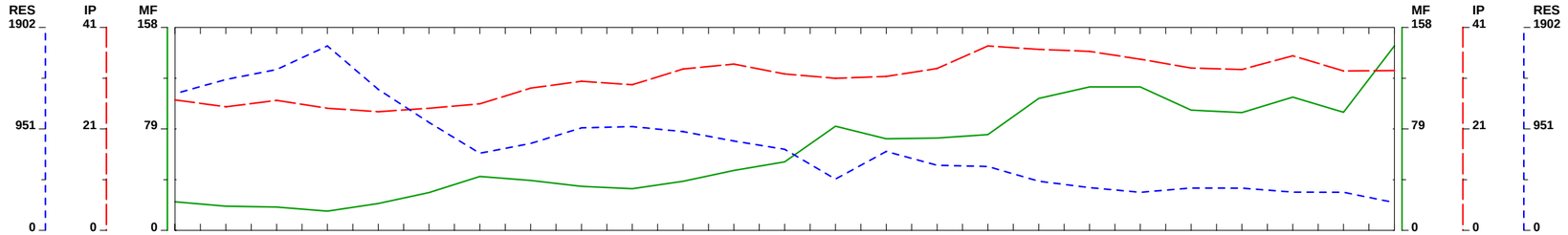
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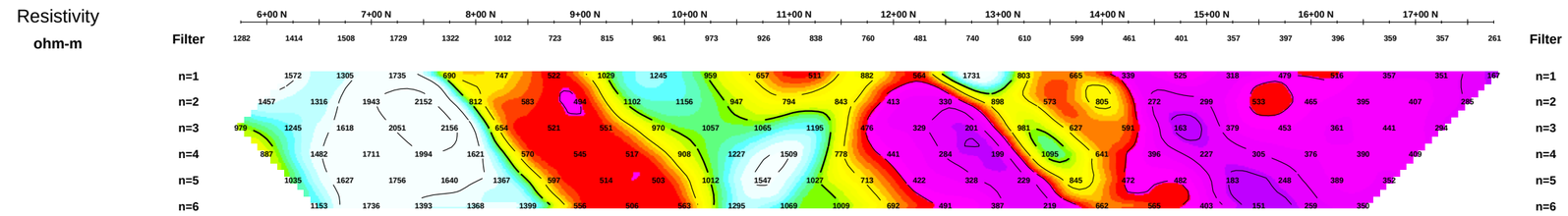
BARKER MINERALS LTD

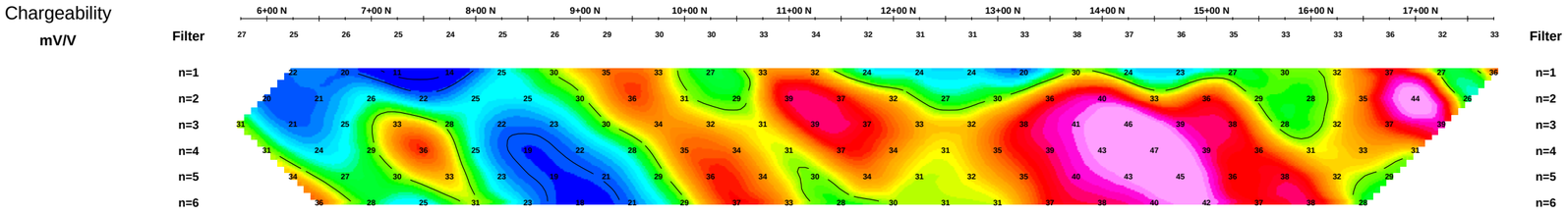
INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

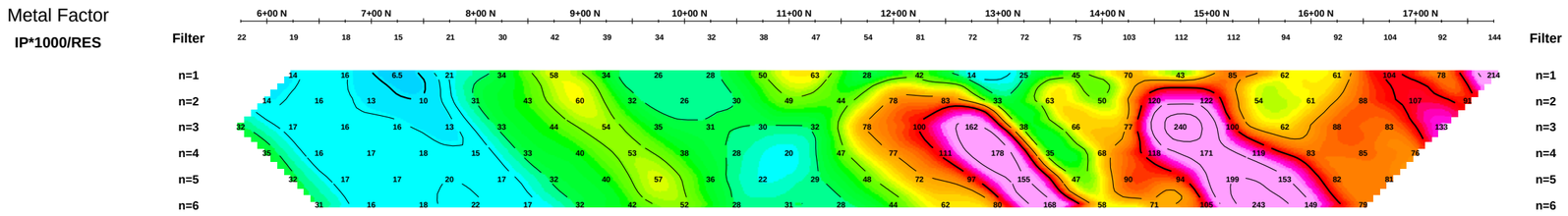
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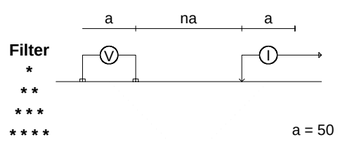






Line 1400 E

Pole-Dipole Array



a = 50 M

plot point

SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

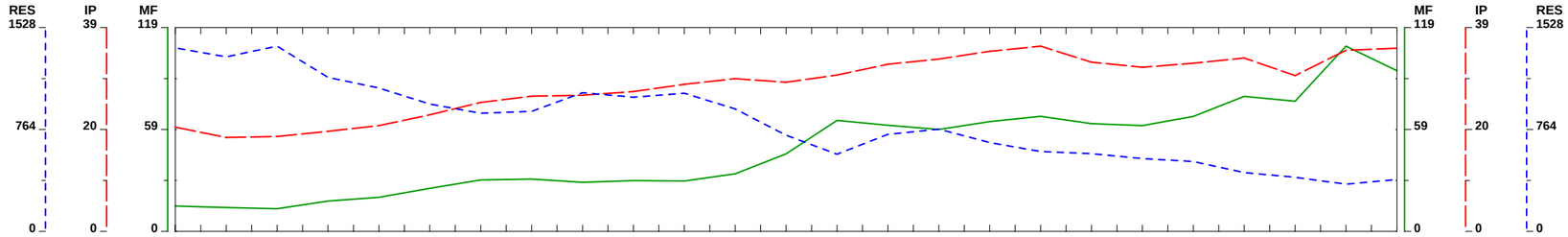
(metres)

BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

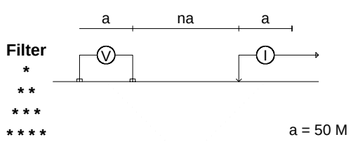
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QUANTEC GEOSCIENCE LTD



Line 1500 E

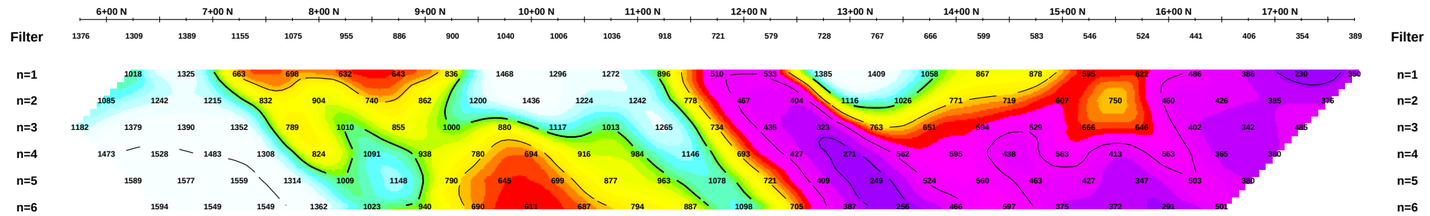
Pole-Dipole Array



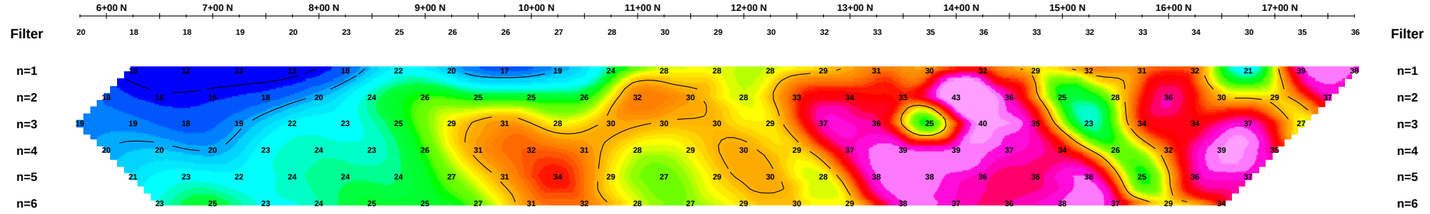
a = 50 M

plot point

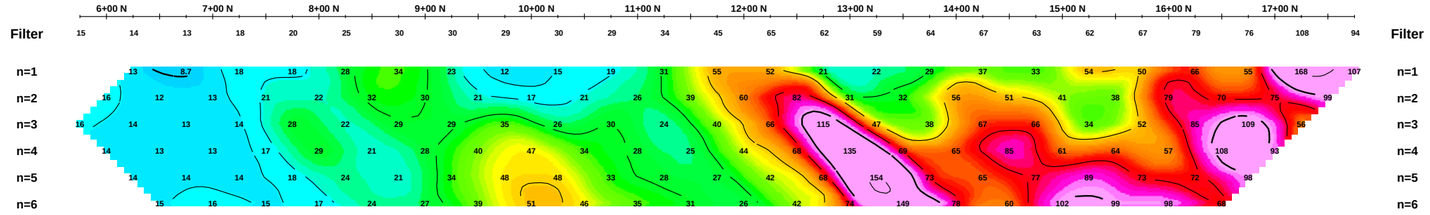
Resistivity
ohm-m



Chargeability
mV/V



Metal Factor
IP*1000/RES



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

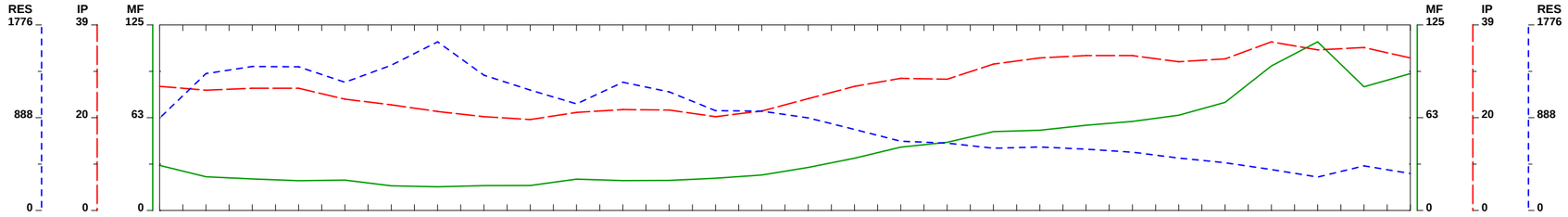
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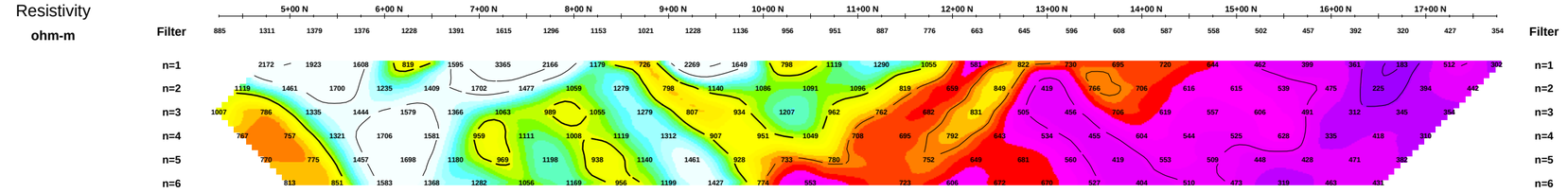
BARKER MINERALS LTD

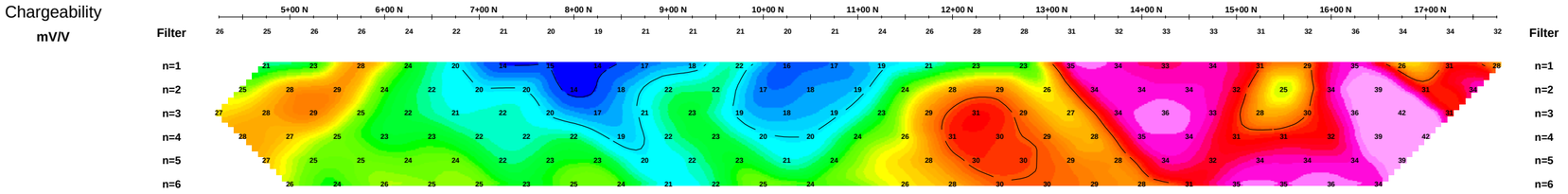
INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

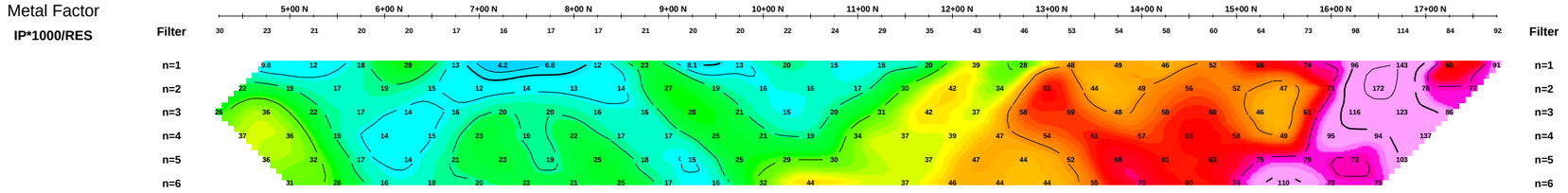
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Drawing Number: CA00525C-IP-Line 1500 E

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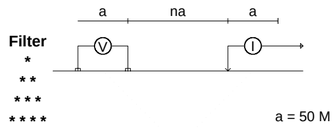






Line 1600 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

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(metres)

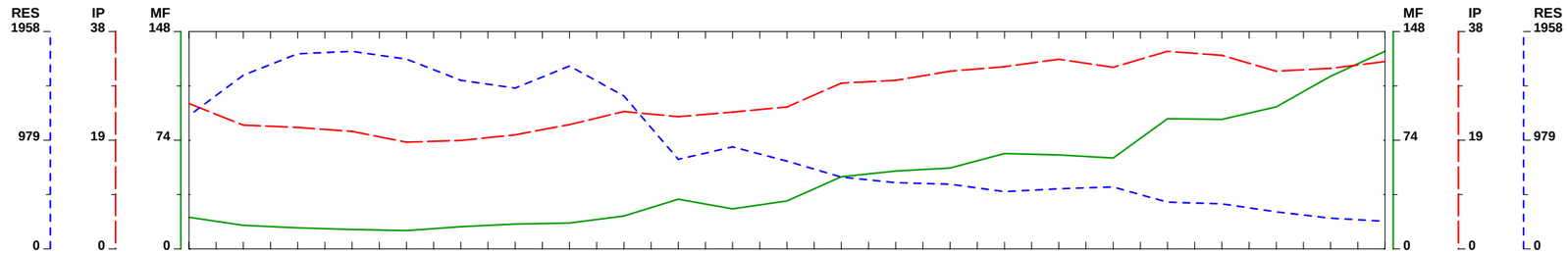
BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

Processing Date: 08/02/13
Drawing Number: CA00525C-IP-Line 1600 E

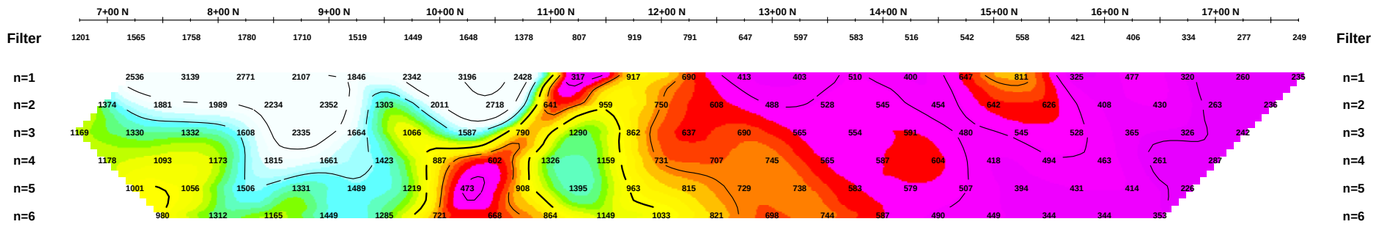
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Resistivity

ohm-m

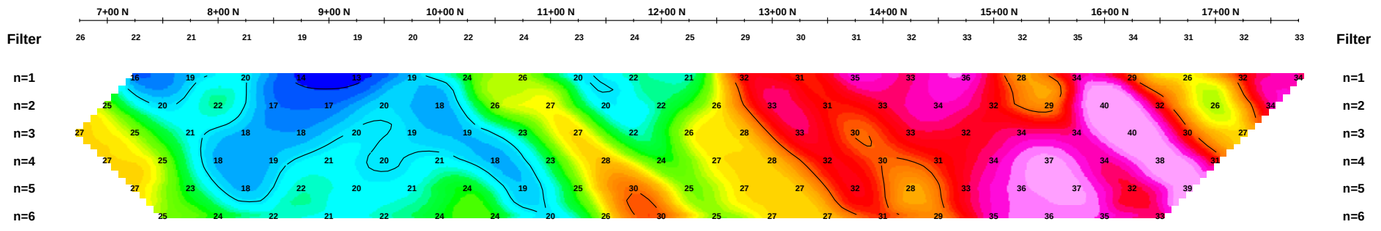


Resistivity

ohm-m

Chargeability

mV/V

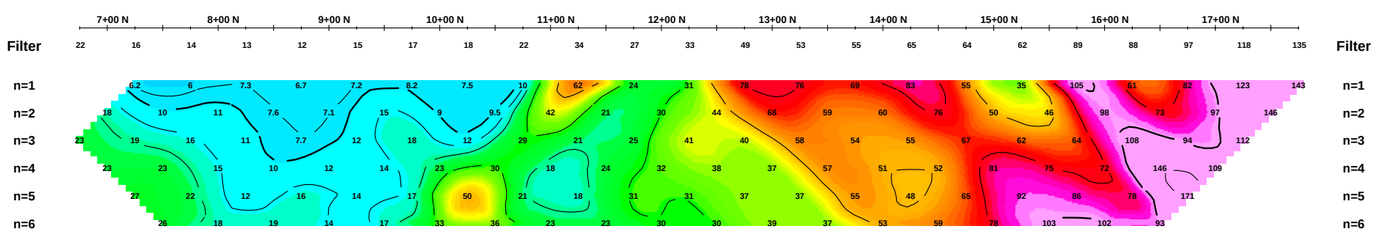


Chargeability

mV/V

Metal Factor

IP*1000/RES

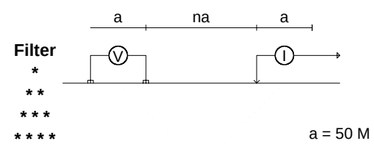


Metal Factor

IP*1000/RES

Line 1700 E

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	**IRIS IP-6, GDD Txii-5000**
Transmit Waveform:	**Time Domain, 0.125 Hz, 50% duty cycle**
IP Decay Sampling:	**10 semi log windows**
Operators:	**K. MacKenzie, E. Lott, J. F. Richard**

MAP SPECIFICATIONS

Logarithmic Contours **1, 1.5, 2, 3, 5, 7.5, 10,..**

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY

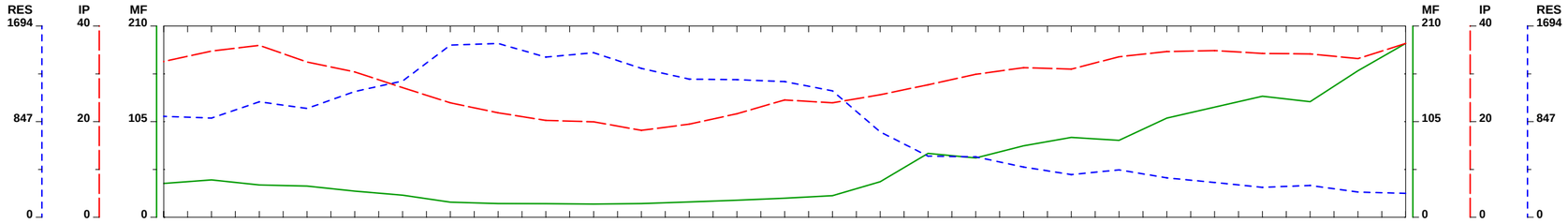
KANGAROO PROJECT

Cariboo Region, BC

Processing Date: 07/11/22

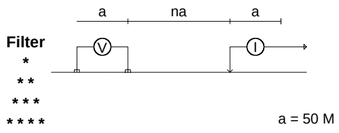
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Line 1800 E

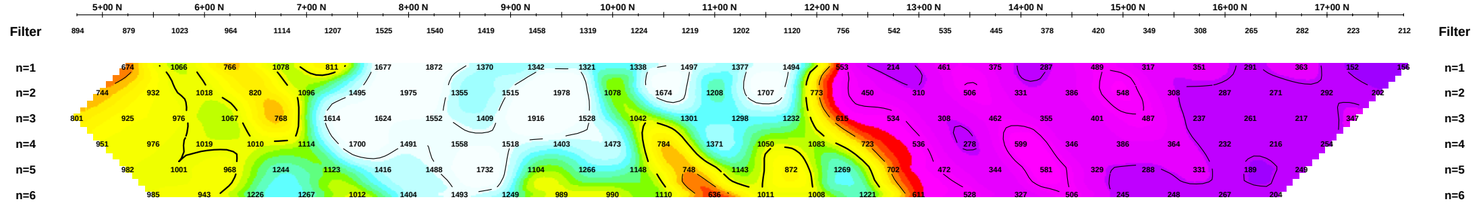
Pole-Dipole Array



a = 50 M

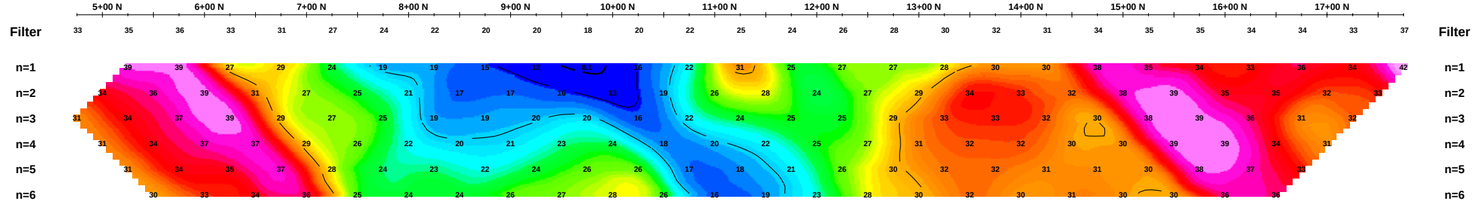
plot point

Resistivity
ohm-m



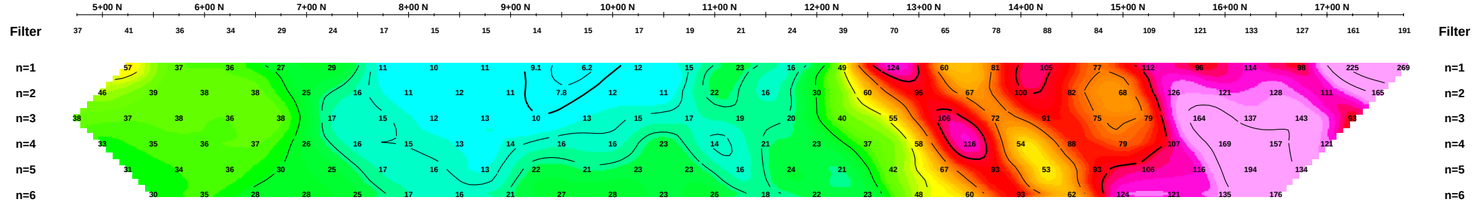
Resistivity
ohm-m

Chargeability
mV/V



Chargeability
mV/V

Metal Factor
IP*1000/RES



Metal Factor
IP*1000/RES

SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

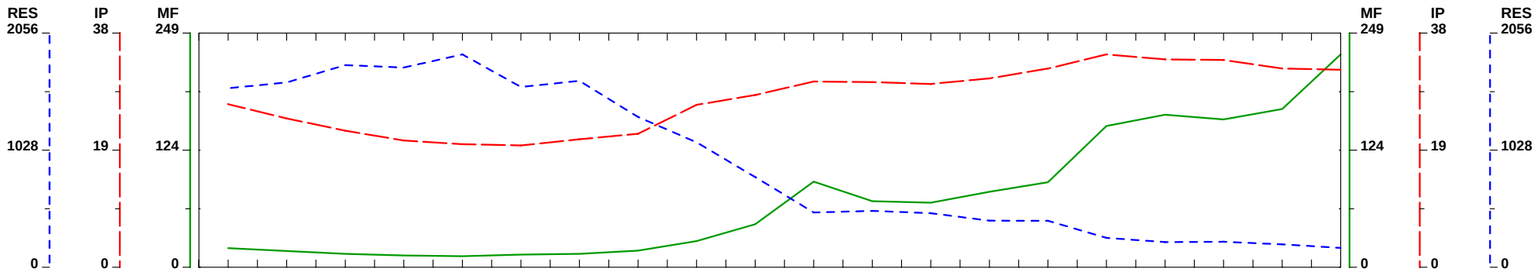
BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

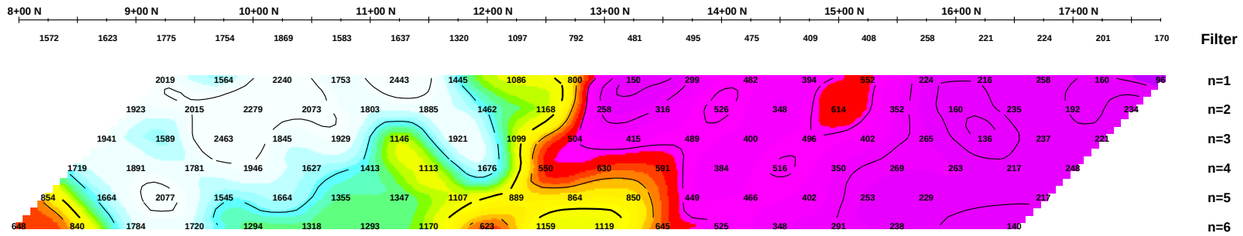
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Drawing Number: CA00525C-IP-Line 1800 E

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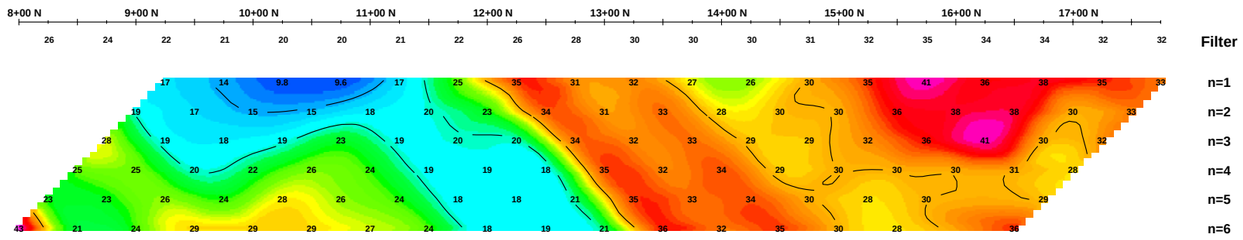


Resistivity
ohm-m



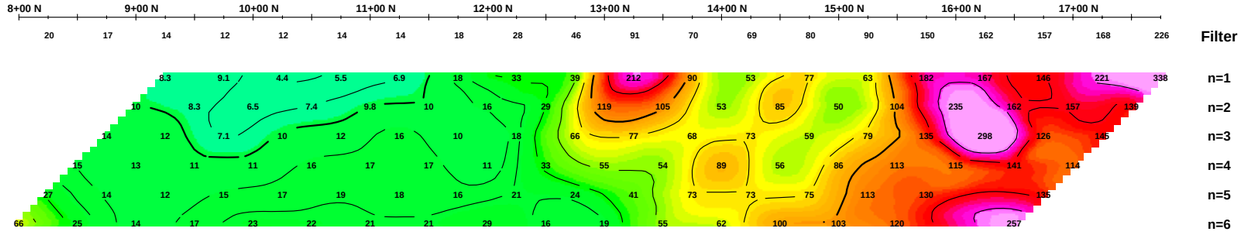
Resistivity
ohm-m

Chargeability
mV/V



Chargeability
mV/V

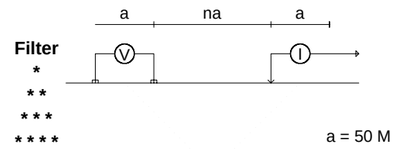
Metal Factor
IP*1000/RES



Metal Factor
IP*1000/RES

Line 1900 E

Pole-Dipole Array



a = 50 M

plot point

SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY
KANGAROO PROJECT
Cariboo Region, BC

Processing Date: 07/12/05
Drawing Number: CA00525C-IP-Line 1900 E

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Geosoft Software for the Earth Sciences

APPENDIX J

MAG PROPERTY

POLE-DIPOLE INDUCED POLARIZATION SURVEY

See Report by Quantec Geoscience Inc.

Quantec Geoscience Ltd.
5825 King Street
Porcupine, ON P0N 1C0
Phone (705) 235-2166
Fax (705) 235-2255

Quantec Geoscience Ltd.

Geophysical Survey
Logistics Report

Regarding the
IP/RESISTIVITY SURVEYS
at the MAG PROPERTY,
Caribou Region, British Columbia
on behalf of
BARKER MINERALS LTD.

QGL QGL QGL QGL QGL QGL

G. R. J. Warne

February 2008
Project CA00525C

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1. INTRODUCTION

- **QGL Project No:** CA00525C
- **Project Name:** Mag Project
- **Survey Period:** November 26th to December 1st, 2007
- **Survey Type**: Induced Polarization and Resistivity
- **Client:** Barker Minerals Ltd.
- **Client Address** 8384 Toombs Drive
  Prince George, BC
  V2K 5A3
- **Representative:** Louis Doyle, Rein Turna
- **Objectives:**

The primary objective of the surveys is to locate and delineate potential zones enriched in metallic mineralization based on the chargeable properties of metallic minerals. The distributions of resistivity and chargeability mapped by the results may, in addition, assist in interpretation of the geology by delineating lithologic units, structures or zones of alteration related to contrasts in either or both of these physical properties.

- **Report Type:** Logistics Report

2. GENERAL SURVEY DETAILS

2.1 LOCATION

- **Township:** N/A
- **Province/Territory:** British Columbia
- **Country:** Canada
- **Nearest Settlement:** Quesnel, BC, ~ 25 km NW.
- **UTM Reference :** Zone10U

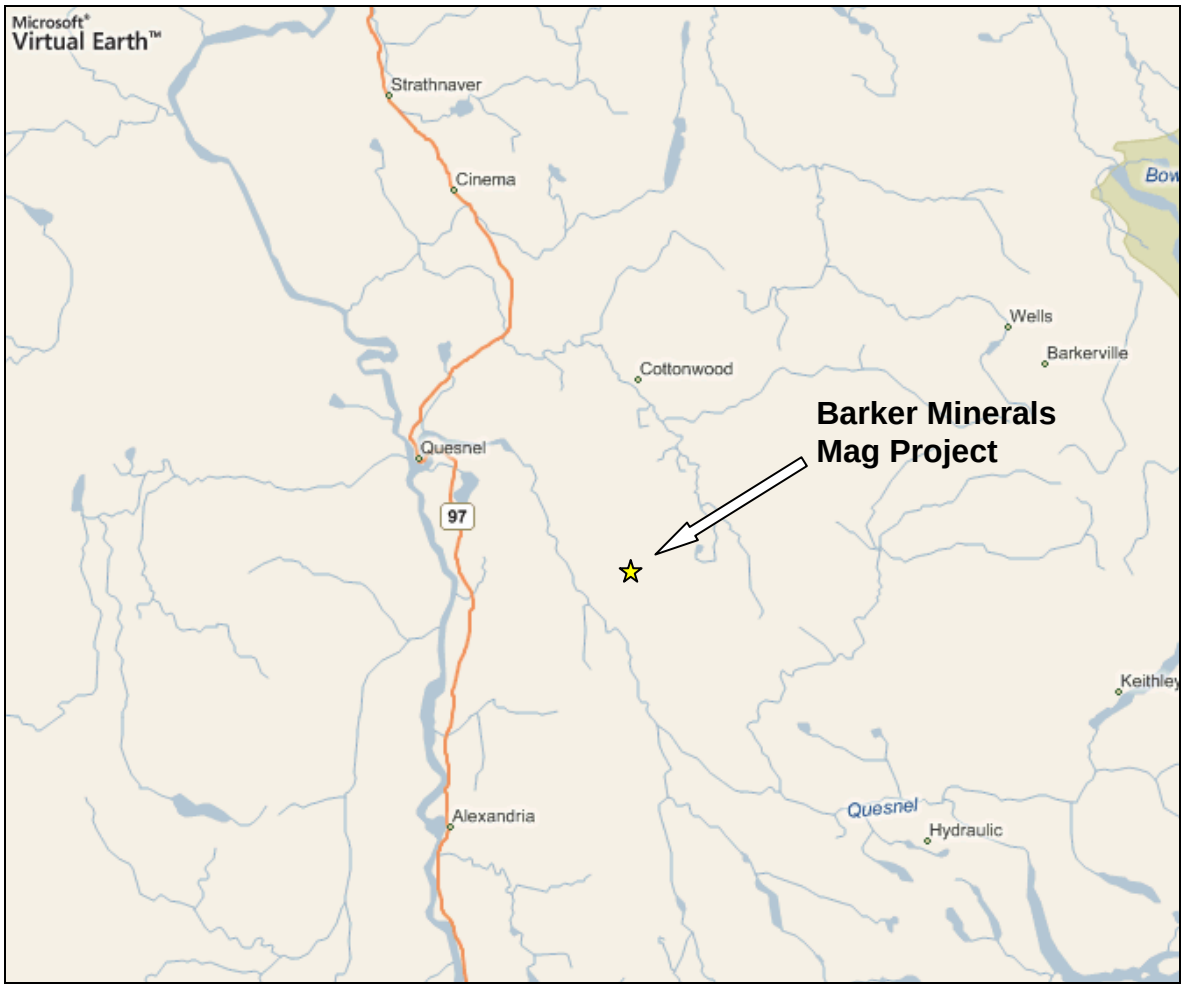


Figure 1: General Location of the Mag Project

2.2 ACCESS

- **Base of Operations:** Quesnel, BC.
- **Mode of Access:** 4 WD truck, via roads, logging roads.

2.3 SURVEY GRIDS

- **Coordinate Reference System:** Local exploration grid.
- **Established:** prior to survey execution
- **Line Direction:** E-W
- **Line Separation:** 200 metres
- **Station Interval:** 50 metres
- **Method of Chaining:** Slope-Distance rope chaining.

3. SURVEY WORK UNDERTAKEN

3.1 GENERALITIES

- **Survey Dates:** Nov 26th to Dec 1st, 2007
- **Survey Period:** 6 days
- **Survey Days (read time):** 5 days
- **Breakdown Days:** 0 days
- **Weather/Standby Days:** 0 days
- **Mobilization Days:** 1 days
- **Survey Coverage:** 3.9 line kilometers

3.2 PERSONNEL

- **Project Manager:** Jeff Warne, South Porcupine, ON
- **Field Supervisor:** Kevin MacKenzie, Sidney, NS
- **Geophysical Operators:** Eric Lott, Halifax, NS
- **Field Assistants:** Carmen Vuko, Kirkland Lake, ON
  Tyler Debruyn, Englehart, ON
  Matt Ruppenthal, Toronto, ON

3.3 SURVEY SPECIFICATIONS

- **Array:** Pole-dipole, roll-along technique (see Figure 2)
- **Rx dipole spacing "a":** 50 metres, n = 1 to 6
- **Sampling Interval:** 50 metres
- **Approximate Arial Coverage:** 0.4 kilometre^2

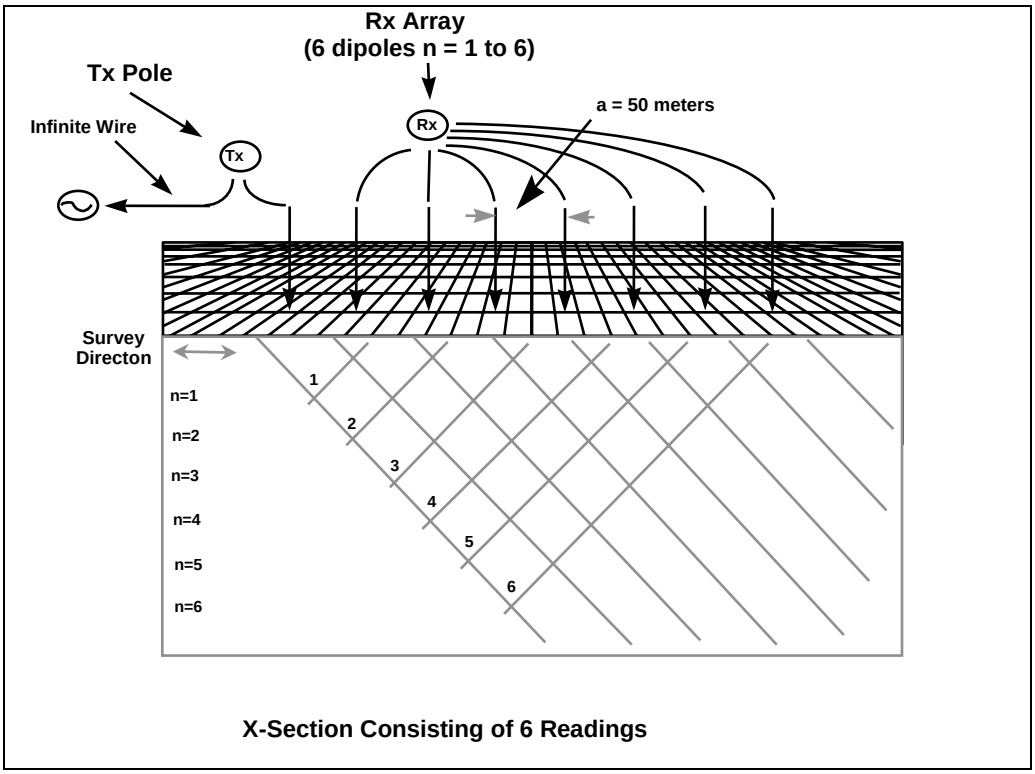


Figure 2: Pole-dipole Array Layout

3.4 SURVEY COVERAGE

- **IP/Resistivity:** 3.9 line kilometers (see Table I)

LINE	MINIMUM	MAXIMUM	TOTAL (km)
6+00 S	1300 W	1000 E	2.3
8+00 S	1000 W	600 E	1.6
		Total	**3.9**

Table 1: IP/Resistivity Survey Coverage.

3.5 INSTRUMENTATION

- **IP Receiver:** IRIS Elrec-6
- **IP Transmitter:** GDD TXii-5000 (5 kW / 150 – 2400V output)
- **IP Power Supply:** Honda EM-6500

3.6 PARAMETERS

- **Input Waveform:** 0.125 Hz square wave at 50% duty cycle (2 seconds On/Off)
- **Receiver Decay Sampling:** IRIS Elrec-6 semi-logarithmic mode windows (see Table 2)
- **Measured Parameters**:

1) Chargeability in millivolts/Volt (10 time slices + total area under decay

curve) (see also Appendix D).

2) Primary Voltage in millivolts and Input Current in amperes for Resistivity calculation according to the pole-dipole array geometry factor (see Appendix D).

Slice	Duration (msec)	Start (msec)	End (msec)	Mid-Point (msec)
T_D	80	0	80	N/A
T_1	80	80	160	120
T_2	80	160	240	200
T_3	80	240	320	280
T_4	80	320	400	360
T_5	160	400	560	480
T_6	160	560	720	640
T_7	160	720	880	800
T_8	320	880	1200	1040
T_9	320	1200	1520	1360
T_{10}	320	1520	1840	1680
Total T_p	**1760**			

Table 2: Decay Curve Sampling (2 Sec. Cycle)

3.7 MEASUREMENT ACCURACY AND REPEATABILITY

- **Chargeability**: generally less than ± 1 mV/V, acceptable to ± 3 mV/V in limited instances.
- **Resistivity**: less than 5% cumulative error from Primary voltage and Input current measurements.

3.8 DATA PRESENTATION

- **Digital Data:**

Raw data:

Elrec-6 instrument dump files in ASCII text format, named according to survey line, e.g. L300E.dmp.

Processed data:

Geosoft Oasis format Database file.

Metal Factor, calculated as $MF = M_T * 1000 / \rho_a$

where

M_T is the Total Apparent Chargeability
ρ_a is the Apparent Resistivity

for each measurement location.

Maps:

1) Stacked section maps presenting posted and contoured Pseudo-sections of Apparent Total Chargeability, Apparent Resistivity and Metal Factor for each line surveyed, at 1:5000 scale.

4. DISCUSSION OF RESULTS

The IP/Resistivity surveys over the Mag property were completed successfully without incident. The progress of data acquisition was, however, hampered by the early-winter weather conditions.

The IP/Resistivity surveys have quantified apparent, bulk volume average DC resistivity and chargeability at the Mag Property. The electrode array specifications employed for the surveys typically provide investigation to depths of approximately 150 meters, on a rule of thumb basis.

The bulk volume resistivity is primarily influenced by subsurface variations in porosity, permeability and moisture saturation. Significant volume concentrations of electrically interconnected conductive mineralization, where present, further influence the bulk volume resistivity.

Chargeability is a near-direct indicator of the presence of metallic mineralization, based on the electronic polarize-ability of minerals that possess metallic properties. These include those native metals which occur naturally, some metallic oxides, graphite and most metallic sulphides, with the note-able exception of sphalerite. Both conductivity and chargeability result from the mobility of electrons within metals. However, whereas electronic conduction occurs within metals, polarization occurs at the interfaces between metallic grains and pore fluids. For this reason, not only the volume content, but also the distribution and texture of chargeable mineralization within host rocks are important factors influencing bulk volume chargeability.

The apparent resistivity underlying the Mag property is moderate in magnitude, within the range of 100 to 1,000 ohm-m.

The apparent total Chargeability ranges from very low to low, within the range of 2 to 10 mV/V.

The pseudosection presentations of the calculated Metal Factor filter parameter highlight zones where elevated chargeability signatures coincide with reduced resistivity signatures.

RESPECTFULLY SUBMITTED
QUANTEC GEOSCIENCE LTD.

G. R. Jeffrey Warne
Senior Project Manager

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, G.R. Jeffrey Warne, hereby declare that:

1. I am a geophysical project manager with residence in South Porcupine, Ontario and am presently employed in this capacity with Quantec Geoscience Inc. of Toronto, Ontario.

2. I studied Engineering Geophysics in the Faculty of Applied Science at Queen's University in Kingston, Ontario, completing all but two of the course requirements for a B.Sc. (Eng.) in 1981.

3. I am currently applying to be registered as a professional geoscientist with APGO (Ontario).

4. I have practiced my profession continuously since May, 1981 in Canada, the United States, Australia, Argentina, Bulgaria, Chile, Ireland, Mexico, Peru, and Portugal.

5. I have no interest, nor do I expect to receive any interest in the properties or securities of **Barker Minerals Ltd**.

6. I have supervised the acquisition of and evaluated the survey data, prepared the presentations and authored this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Porcupine, Canada
February, 2008

G.R. Jeffrey Warne
Senior Project Manager, QGI

APPENDIX B

CA00525C, DCIP Survey, Barker Minerals Ltd., Mag Project, BC

Date	Description	Line	Start	End	Total (m)
26-Nov-07	Complete recovery of equipment and wire. Relocate to Quesnel. Locate linecutters and arrange for grid orientation.				
27-Nov-07	Locate grid and establish infinate electrodes approximately 3k east of grid. Install 2.4k of power wire on L6S. Set up equipment for survey.				
28-Nov-07	Survey L6S.	L6+00 S	9+00E	13+50W	2250
29-Nov-07	Relocate power wire to L8S. Linecutters have completed from 5+00E to 4+50W. Begin survey of L8S.	L8+00 S	5+00E	1+50W	650
30-Nov-07	Survey L8S. Begin recovering cable.	L8+00 S	1+50 W	10+00W	850
01-Dec-07	Complete cable and equipment recovery and commence demo-bilization				

APPENDIX C

THEORETICAL BASIS AND SURVEY PROCEDURES

INDUCED POLARIZATION SURVEY

The resistivity is among the most variable of all geophysical parameters, with a range exceeding 10^6. Because most minerals are fundamentally insulators, with the exception of massive accumulations of metallic and sub metallic ores (electronic conductors) which are rare occurrences, the resistivity of rocks depends primarily on their porosity , permeability and particularly the salinity of fluids contained (ionic conduction), according to Archie's Law. In contrast, the chargeability responds to the presence of polarizeable minerals (metals, sub metallic sulphides and oxides, and graphite), in amounts as minute as parts per hundred. Both the quantity of individual chargeable grains present, and their distribution with in subsurface current flow paths are significant in controlling the level of response. The relationship of chargeability to metallic content is straightforward, and the influence of mineral distribution can be understood in geologic terms by considering two similar, hypothetical volumes of rock in which fractures constitute the primary current flow paths. In one, sulphides occur predominantly along fracture surfaces. In the second , the same volume percent of sulphides are disseminated throughout the rock. The second example will, in general, have significantly lower intrinsic chargeability.

The collected data sets are reduced to apparent resistivity and total chargeability as explained in the following figures and equations:

Using the following diagram (Fig. C3) for the electrode configuration and nomenclature:[1]

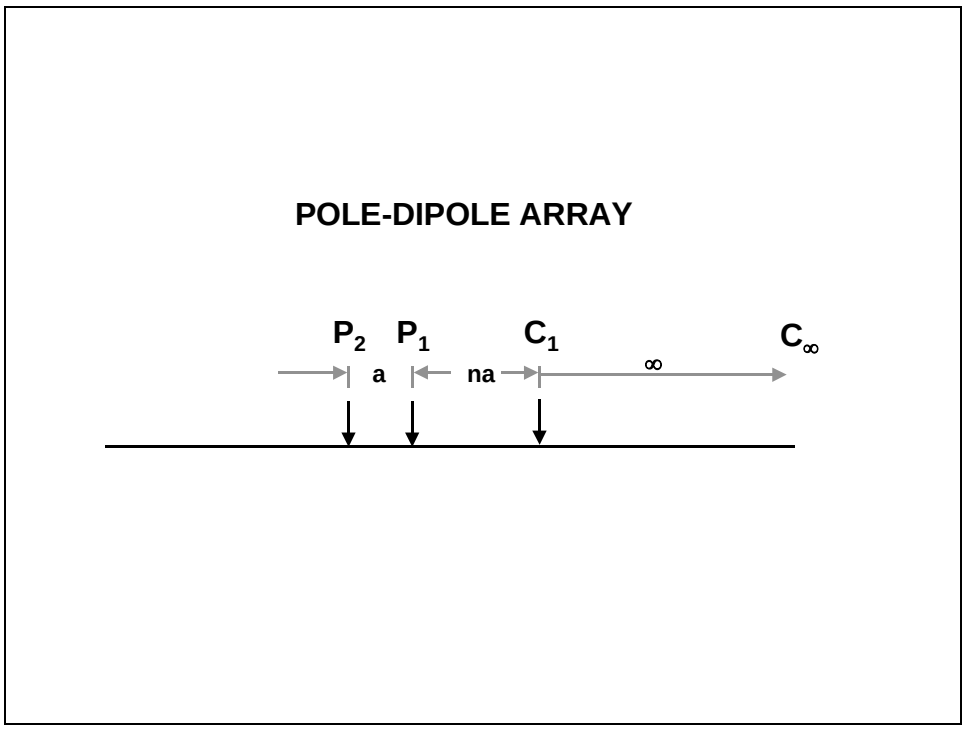


Figure C3: Pole-Dipole Electrode Array

[1] From Telford, et al., Applied Geophysics, Cambridge U Press, New York, 1983..

the apparent resistivity is given by:

$$\rho a = \ 2\pi n(n+1)\, a \times \frac{V_P}{I} \ \text{ohm - metres}$$

where:"a" is the MN dipole spacing (metres)
"n" is the separation parameter between C_1 and P_1P_2
"V_P" is the primary voltage measured between P_1P_2 (volts)
"I" is the output current between C_1C_2 (amperes)

Using the diagram in Figure B2 for the Total Chargeability:

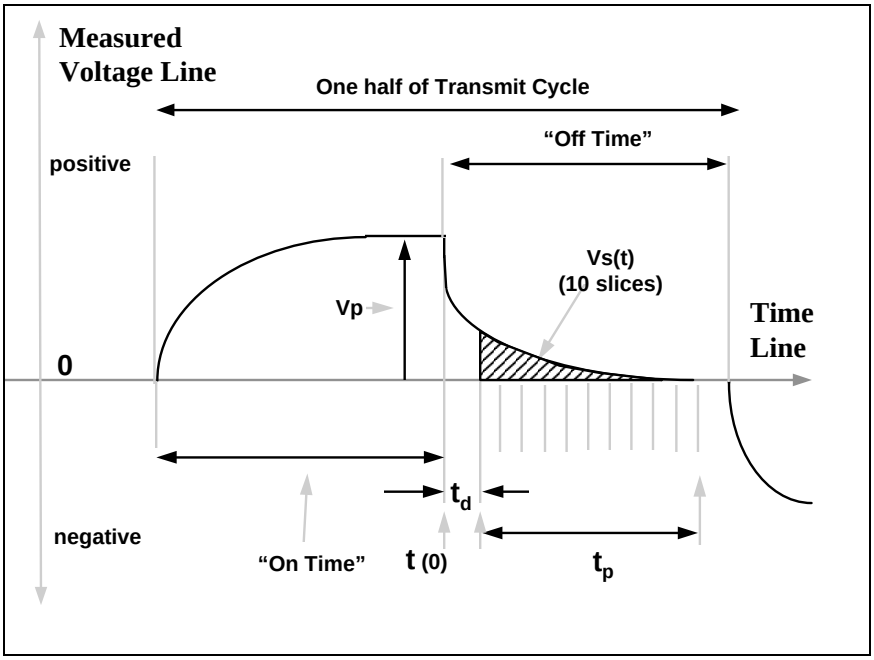


Figure B1: The measurement of the time-domain IP effect

the total apparent chargeability is given by:

Total Apparent Chargeability:[2]

$$\mathbf{M_T} \ = \ \frac{1}{\mathbf{t_p V_p}} \sum_{\mathbf{i=1\ to\ 10}} \int_{\mathbf{t_i}}^{\mathbf{t_{i+1}}} \mathbf{Vs} \ \ \mathbf{(t)\ dt} \qquad \textbf{millivolts per volt}$$

where t_i, t_{i+1} are the beginning and ending times for each of the chargeability slices,

[2] From Telford, et al., Applied Geophysics, Cambridge U Press, New York, 1983..

More detailed descriptions on the theory and application of the IP/Resistivity method can be found in the following reference papers:

Cogan, H., 1973, Comparison of IP electrode arrays, Geophysics, 38, p 737 - 761.

Langore, L., Alikaj, P., Gjovreku, D., 1989, Achievements in copper sulphide exploration in Albania with IP and EM methods, Geophysical Prospecting, 37, p 925 - 941.

Telford, W. M., Geldart, L. P., Sheriff, R. E., Keys, D. A., 1986, Applied Geophysics, Cambridge University Press.

APPENDIX D

INSTRUMENT SPECIFICATIONS

IRIS ELREC 6 Receiver

(From IRIS Instruments IP 6 Operating Manual)

Weather proof case

Dimensions:	31 cm x 21 cm x 21 cm
Weight:	6 kg with dry cells 7.8 kg with rechargeable bat.
Operating temperature:	-20°C to 70°C (-40°C to 70°C with optional screen heater)
Storage:	(-40°C to 70°C)
Power supply:	6 x 1.5 V dry cells (100 hr. @ 20°C) or 2 x 6 V NiCad rechargeable (in series) (50 hr. @ 20°C) or 1 x 12 V external
Input channels:	6
Input impedance:	10 Mohm
Input overvoltage protection:	up to 1000 volts
Input voltage range:	10 V maximum on each dipole 15 V maximum sum over ch. 2 to 6
SP compensation:	6 automatic ± 10 V with linear drift correction up to 1 mV/s
Noise rejection:	50 to 60 Hz powerline rejections 100 dB common mode rejection (for Rs= 0) automatic stacking
Primary voltage resolution:	1 μV after stacking
accuracy:	0.3% typically; maximum 1 over whole temperature range
Secondary voltage windows:	up to 10 windows; 3 preset window specs .plus fully programmable sampling.
Sampling rate:	10 ms
Synchronization accuracy:	10 ms, minimum 40 μV
Chargeability resolution:	0.1 mV/V
accuracy:	typically 0.6%. maximum 2% of reading ± 1 mV/V for V_p > 10 mV
Battery test:	manual and automatic before each measurement
Grounding resistance:	0.1 to 467 kohm
Memory capacity:	2505 records, 1 dipole/record
Data transfer:	serial link @ 300 to 19200 baud

IRIS IP 6 Dump File Format

```
    *    IP 6  (V9.1) *
    *==================*

#77      Jul  1  1980         11:57
    dipole 1  trigger 1  domain Time  T wave
    Programmable wind.  Grad. RCTGL array

    V=  331.605 Sp= -319  I= 1350.00 Rs=  0.50
    Ro=   6679.4 Ohm-m    M=   11.97 E=  0.4
    M1= 40.44  M2= 33.55  M3= 29.48  M4= 26.68
    M5= 20.95  M6= 15.52  M7= 12.50  M8=  9.77
    M9=  7.50  M10=  6.05

    cycle  19 Time= 2000  V_D= 1260  M_D=   40
    T_M1=  20  T_M2=  30  T_M3=  30  T_M4=  30
    T_M5= 180  T_M6= 180  T_M7= 180  T_M8= 360
    T_M9= 360  T_M10= 360

    Spacing config. :  Imperial grid
      XP=-1300.0  Line=  400.0
       D= -100.0  AB/2= 2500.0

#78      Jul  1  1980         11:57
    dipole 2  trigger 1  domain Time  T wave
    Programmable wind.  Grad. RCTGL array

    V=  265.781 Sp=  388  I= 1350.00 Rs=  1.41
    Ro=   4687.7 Ohm-m    M=   26.75 E=  0.0
    M1= 76.18  M2= 66.06  M3= 59.31  M4= 54.53
    M5= 44.38  M6= 34.29  M7= 28.35  M8= 22.83
    M9= 18.06  M10= 14.96

    cycle  19 Time= 2000  V_D= 1260  M_D=   40
    T_M1=  20  T_M2=  30  T_M3=  30  T_M4=  30
    T_M5= 180  T_M6= 180  T_M7= 180  T_M8= 360
    T_M9= 360  T_M10= 360

    Spacing config. :  Imperial grid
      XP=-1400.0  Line=  400.0
       D= -100.0  AB/2= 2500.0
```

APPENDIX D

INSTRUMENT SPECIFICATIONS

GDD Tx-ii 5000 Transmitter
(From GDD Operator Manual)

Size :
Transmitter only: 47 x 40 x 20 cm
Transformer only: 38 x 33 x 16 cm

Weight :
Transmitter only: 16.8 kg
Transformer only: 27.6 kg

Operating Temperature : -40º C to 65º C (-40º F to 150º F)

Time Base: 2 s ON, 2 s OFF
Optional: 1, 2, 4 or 8 s
0.5, 1, 2 or 4 s
DC

Output current : 0.030 A to 10 A (normal operation)
0.0 A to 10 A (cancel open loop)
Maximum of 5 A in DC mode

Rated Output Voltage : 150 V to 2400 V

LCD Display :
_ Output current, 0.001 A resolution
_ Output power
_ Ground resistance (when the transmitter is turned off)

Power source : 220-240 V / 50-60 Hz

APPENDIX E

LISTS OF MAPS

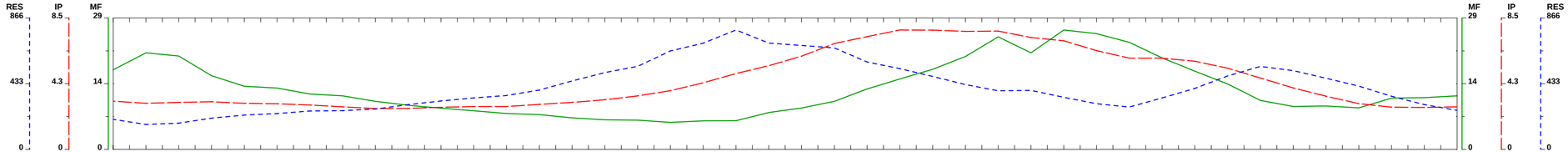
- **Pseudosection Maps at scale of 1:5000**

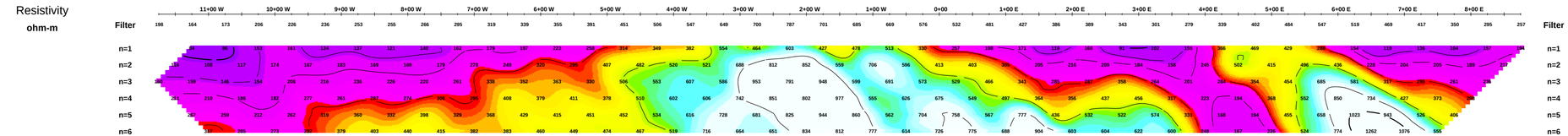
Description	Drawing No.
1. Pseudosection Map Line 6+00S	CA00525C-IP-Line 600 S
2. Pseudosection Map Line 8+00S	CA00525C-IP-Line 800 S
TOTAL SECTIONS	**2**

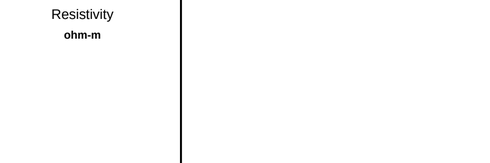
TOTAL MAPS: 2

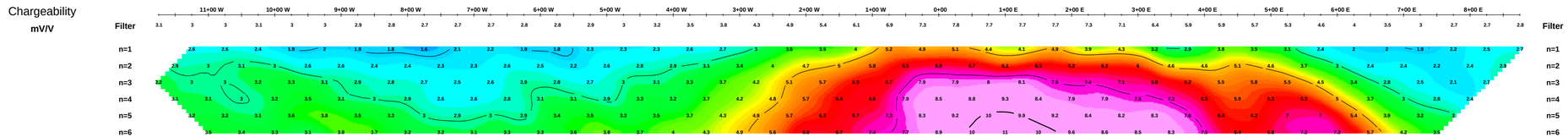
APPENDIX F

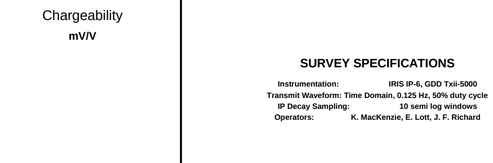
MAPS AND SECTIONS

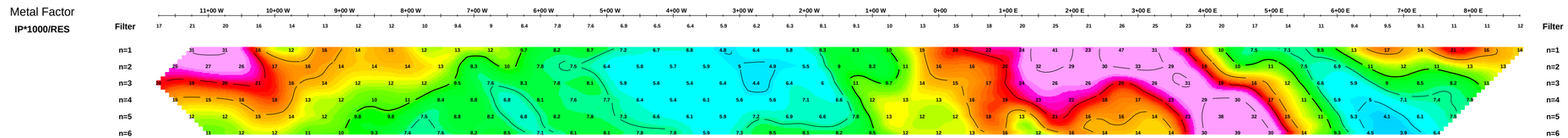


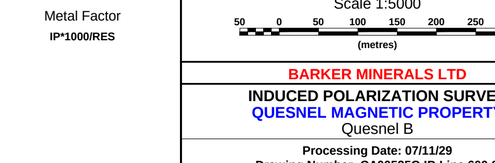








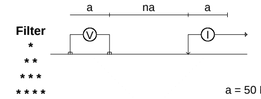




Geosoft Software for the Earth Sciences

Line 600 S

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY

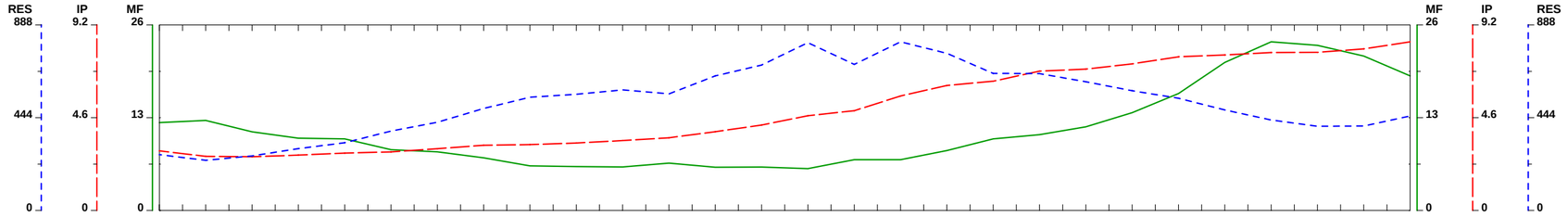
QUESNEL MAGNETIC PROPERTY

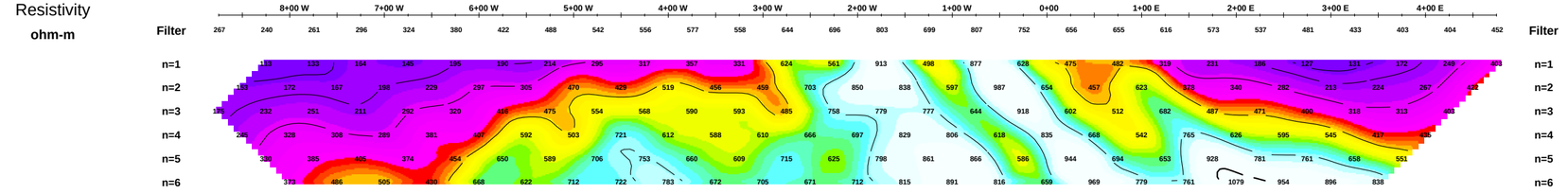
Quesnel B

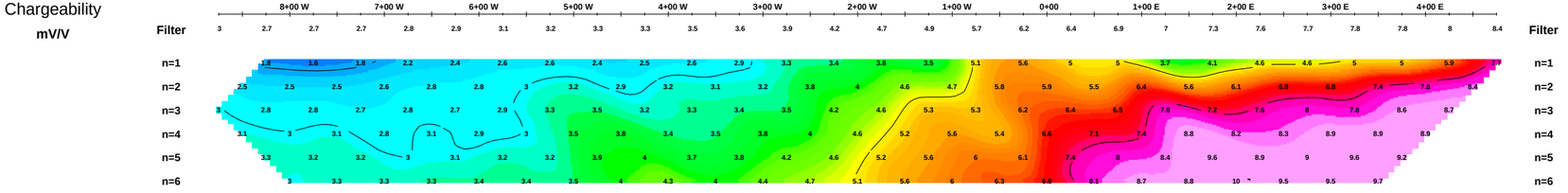
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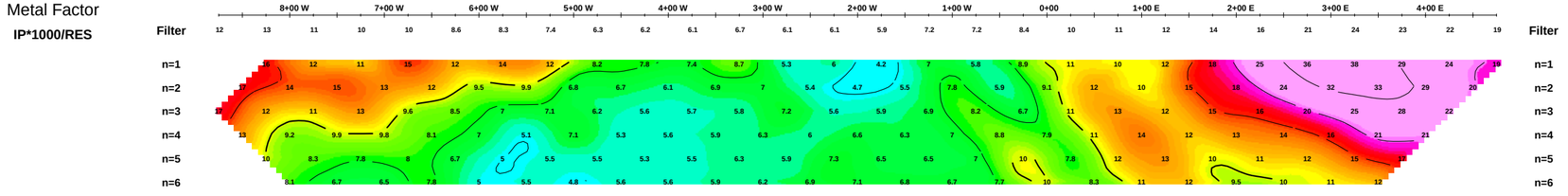
Drawing Number: CA00525C-IP-Line 600 S

QUANTEC GEOSCIENCE LTD





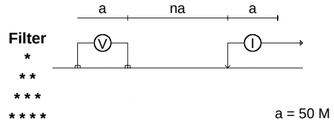




Geosoft Software for the Earth Sciences

Line 800 S

Pole-Dipole Array



SURVEY SPECIFICATIONS

Instrumentation:	IRIS IP-6, GDD Txii-5000
Transmit Waveform:	Time Domain, 0.125 Hz, 50% duty cycle
IP Decay Sampling:	10 semi log windows
Operators:	K. MacKenzie, E. Lott, J. F. Richard

MAP SPECIFICATIONS

Logarithmic Contours	1, 1.5, 2, 3, 5, 7.5, 10,..

Scale 1:5000

50 0 50 100 150 200 250 300

(metres)

BARKER MINERALS LTD

INDUCED POLARIZATION SURVEY
QUESNEL MAGNETIC PROPERTY
Quesnel B

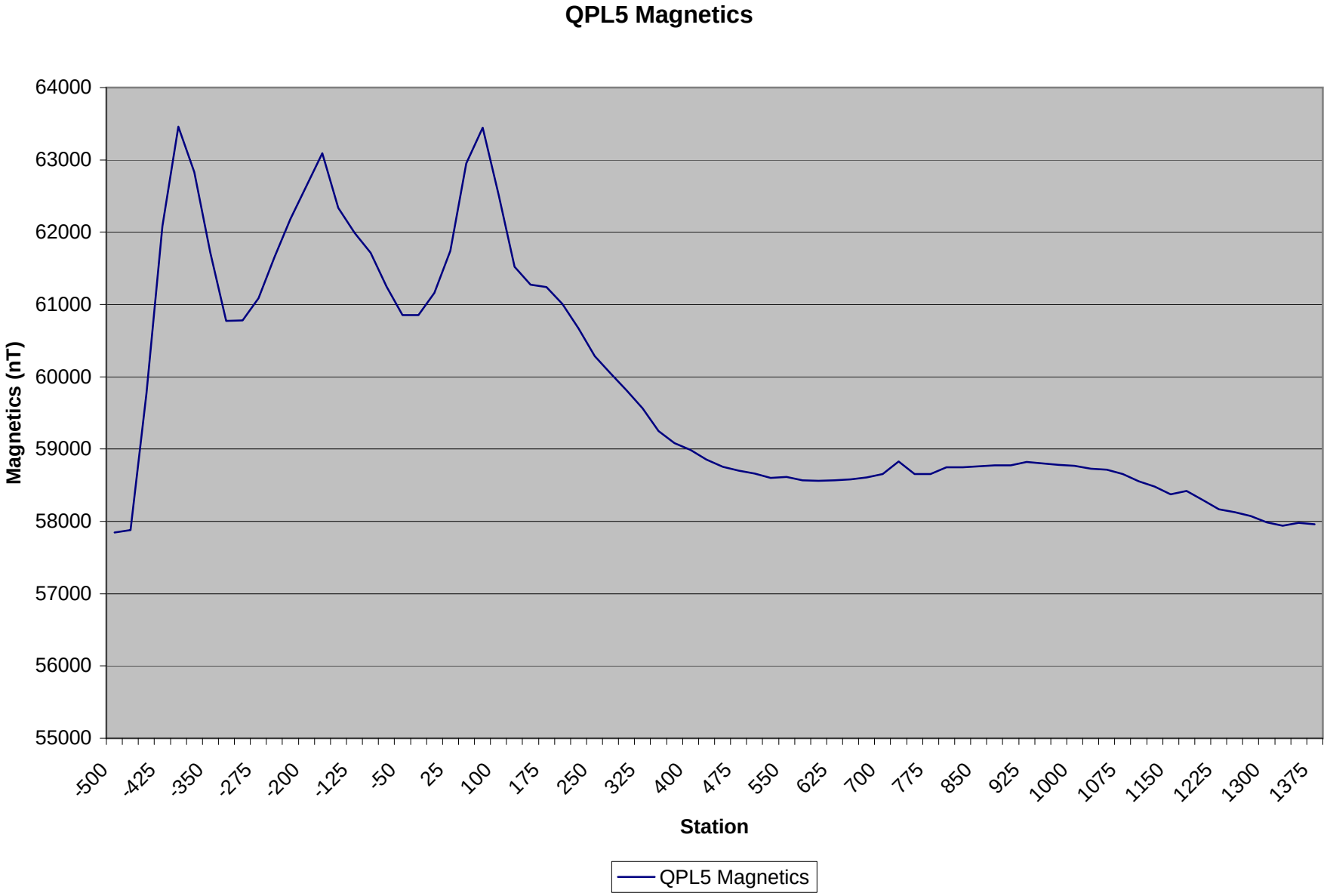
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Drawing Number: CA00525C-IP-Line 800 S

QUANTEC GEOSCIENCE LTD

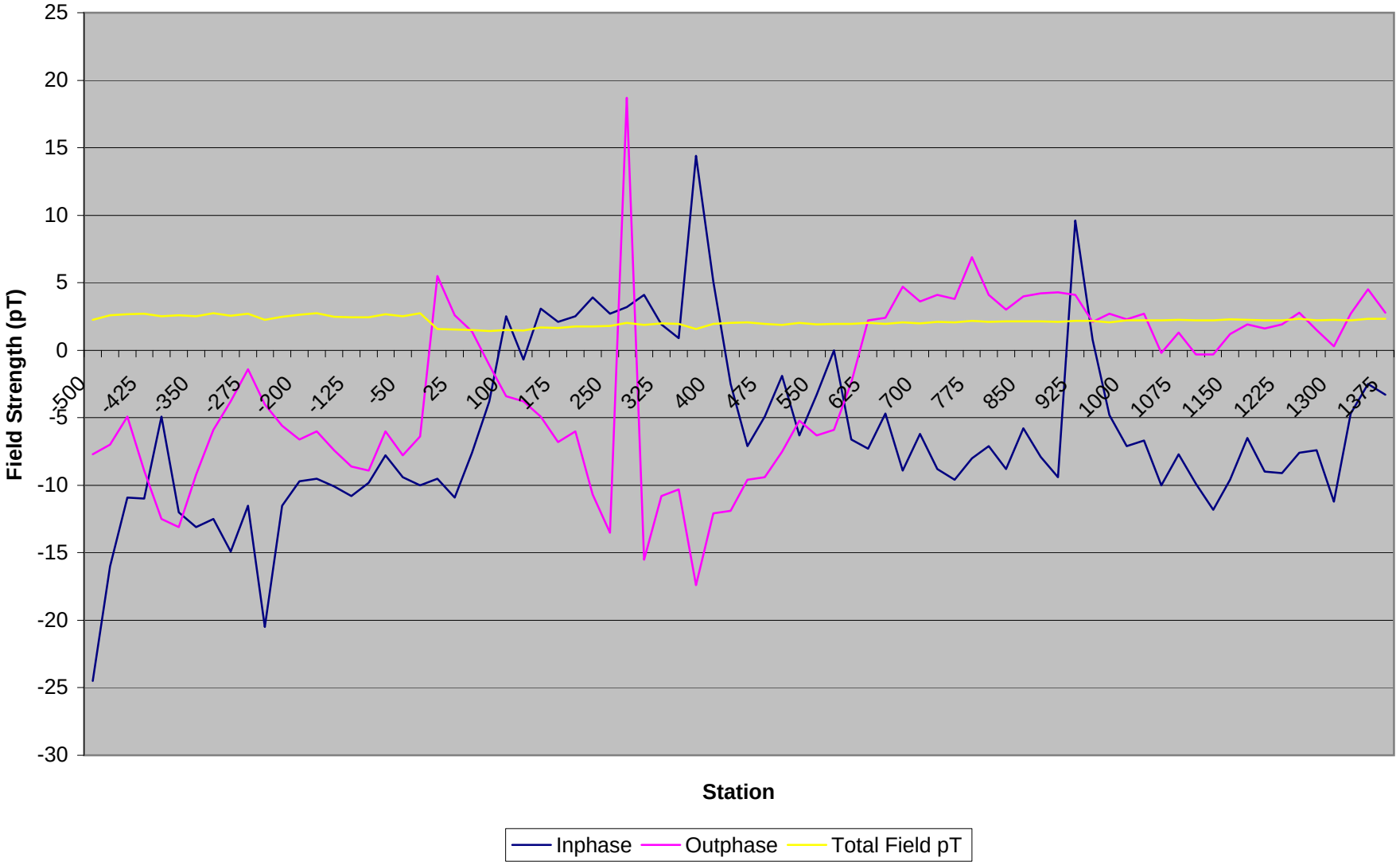
APPENDIX K

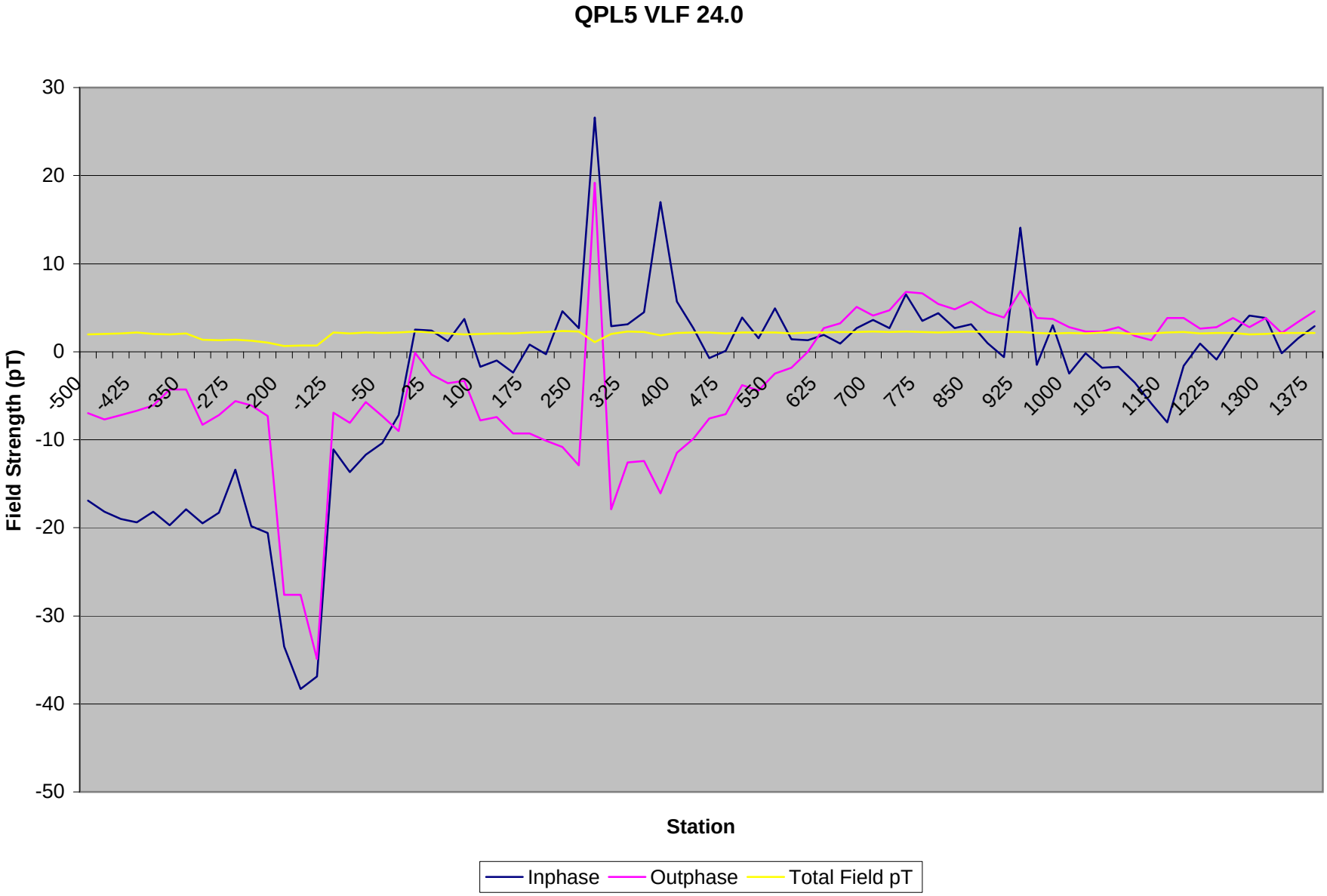
MAG PROPERTY

MAGNETOMETER and VLF-EM SURVEY DATA

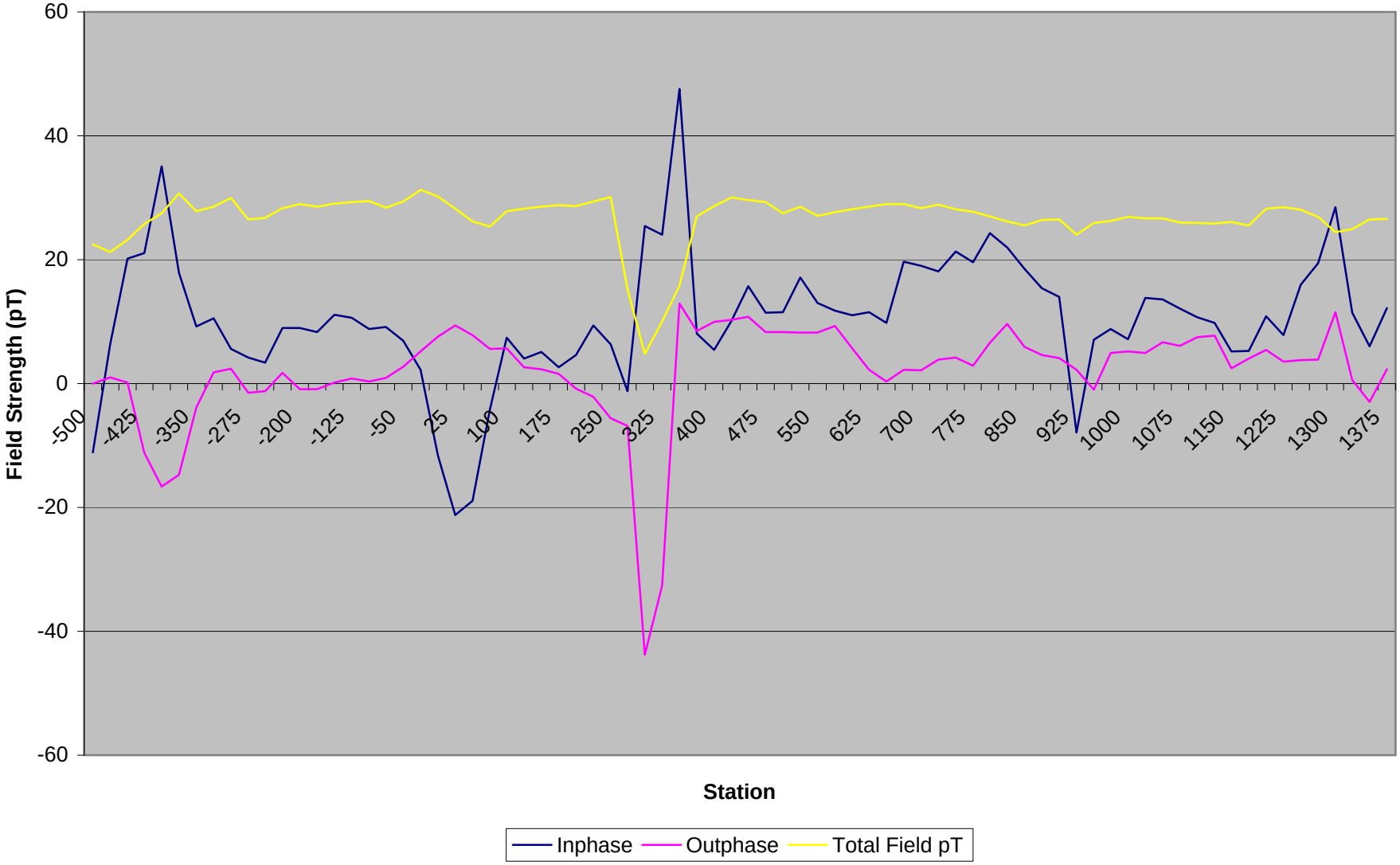

QPL5 Magnetics
Magnetics (nT)
64000
63000
62000
61000
60000
59000
58000
57000
56000
55000
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
1375
Station
QPL5 Magnetics

QPL5 VLF 21.4


25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Field Strength (pT)
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
1375
Station
Inphase
Outphase
Total Field pT


QPL5 VLF 24.0
Field Strength (pT)
30
20
10
0
-10
-20
-30
-40
-50
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
1375
Station
Inphase
Outphase
Total Field pT

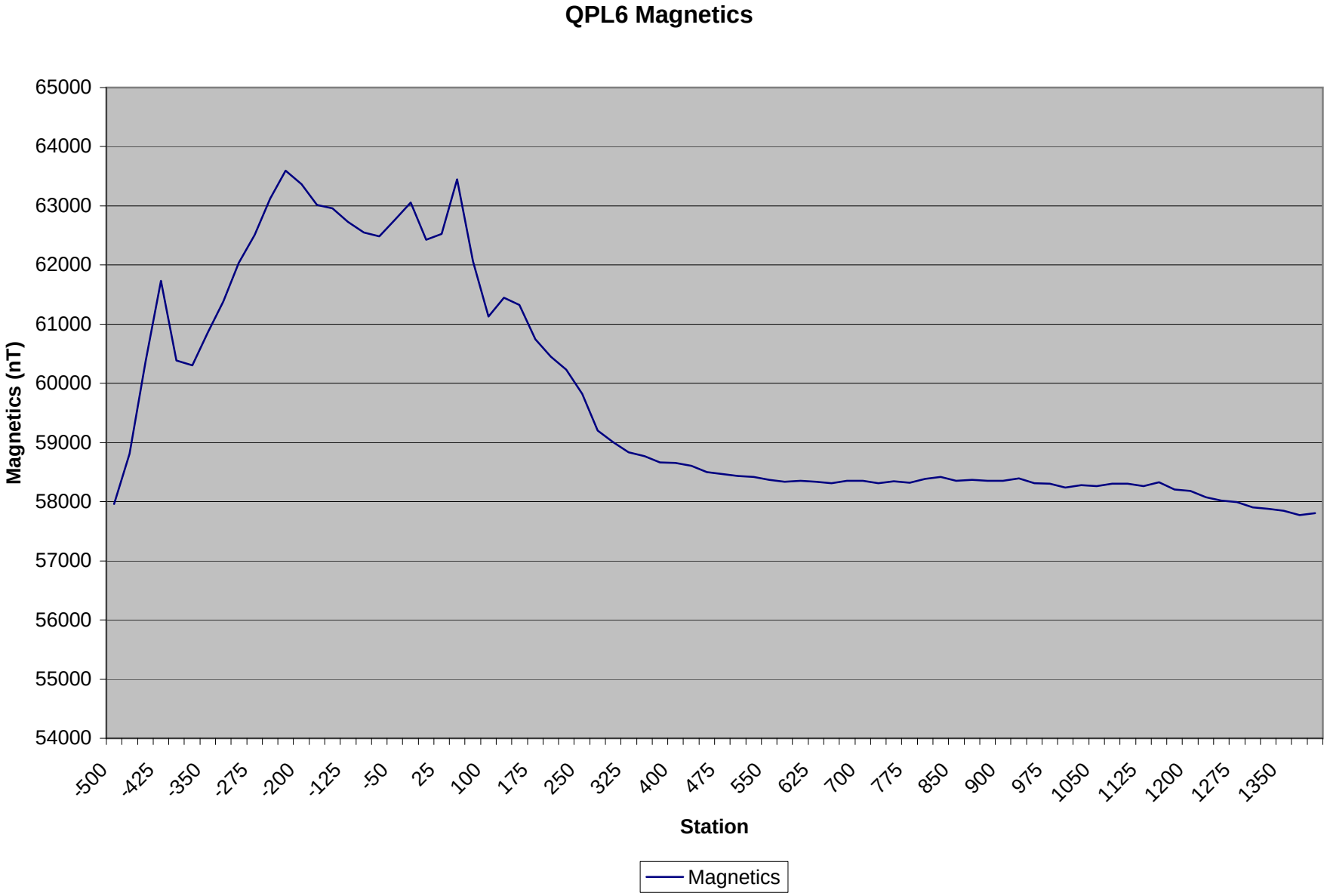
QPL5 VLF 24.8

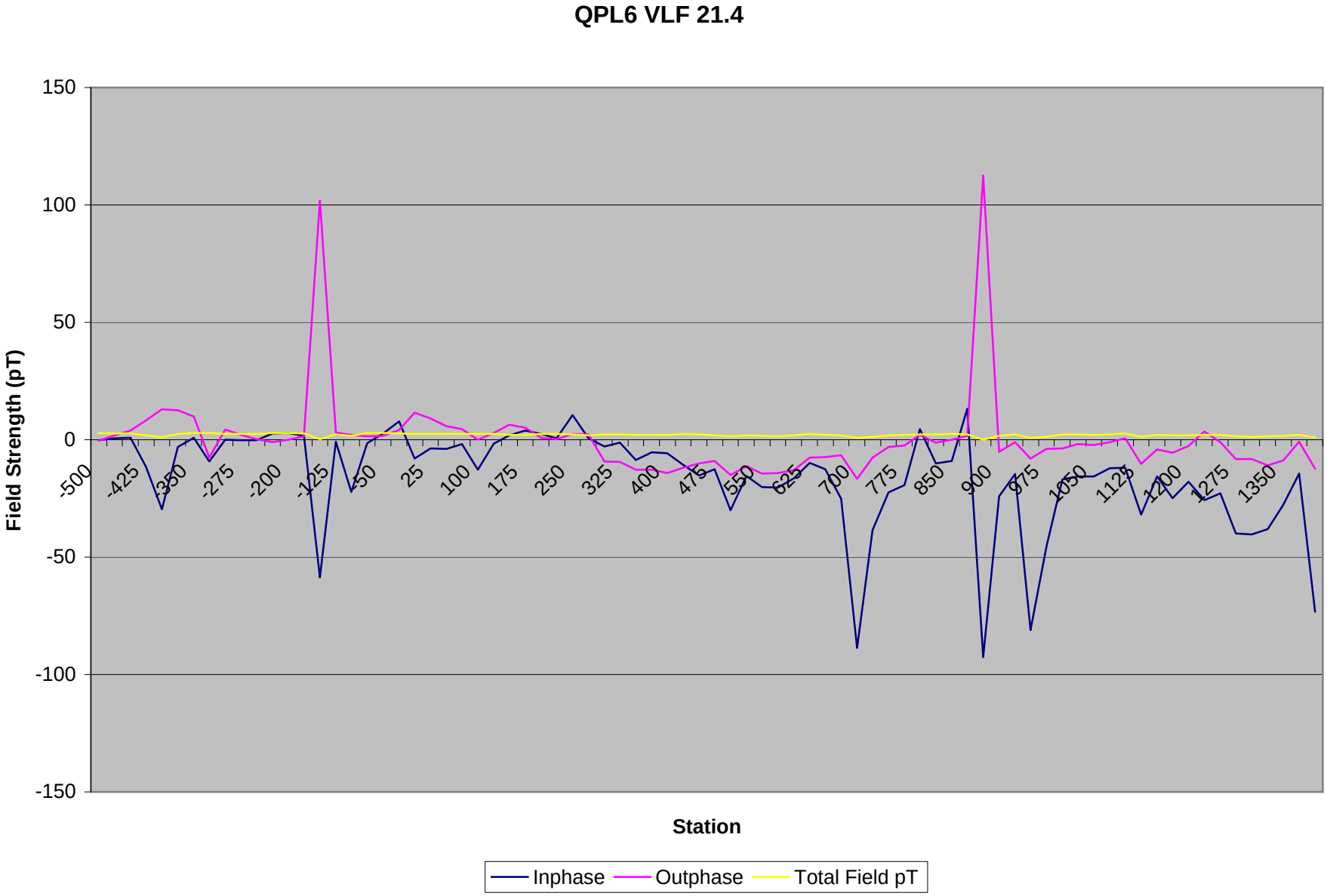

60
40
20
0
-20
-40
-60
Field Strength (pT)
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
1375
Station
Inphase
Outphase
Total Field pT

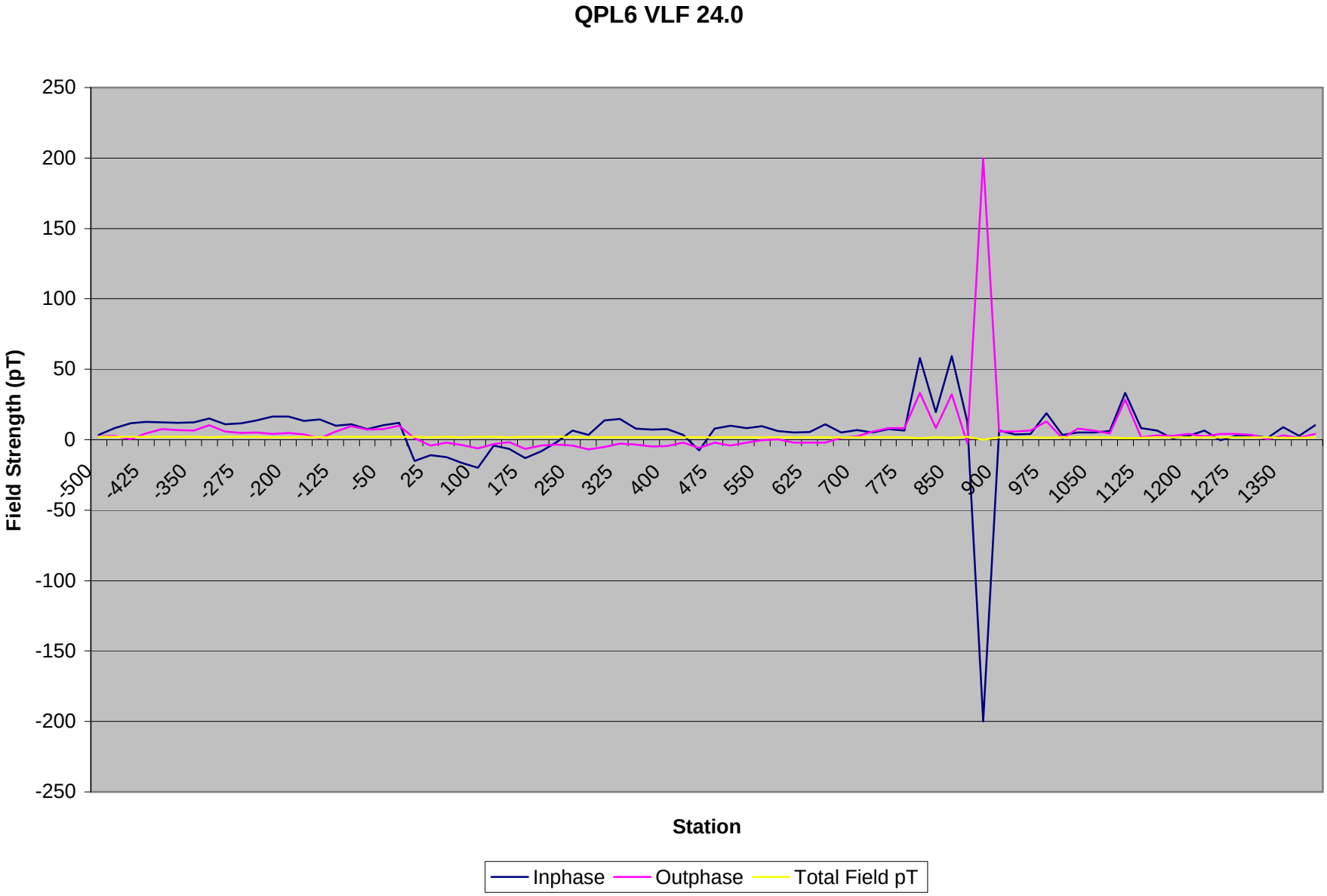
Quesnel Project Line #5

Line	Station	Magnetics	VLF #1	Inphase	Outphase	X Amp	Y Amp	Total #1	VLF #2	Inphase	Outphase	X Amp	Y Amp	Total #2	VLF #3	Inphase	Outphase	X Amp	Y Amp	Total #3
00005N	-500	57843.38	21.4	-24.5	-7.7	41	47	2.25	24	-16.9	-7	-29	53	1.94	24.8	-11.1	0	87	-25	22.44
00005N	-475	57877.49	21.4	-16	-7	-17	70	2.58	24	-18.2	-7.7	34	53	2.01	24.8	6.3	1	60	61	21.2
00005N	-450	59767.54	21.4	-10.9	-4.9	-6	74	2.66	24	-19	-7.2	27	59	2.09	24.8	20.2	0.2	76	55	23.2
00005N	-425	62080.64	21.4	-11	-8.9	-9	74	2.69	24	-19.4	-6.7	33	60	2.19	24.8	21.1	-11.2	39	33	25.74
00005N	-400	63455.82	21.4	-4.9	-12.5	44	55	2.52	24	-18.2	-6.1	-19	59	2	24.8	35.1	-16.6	55	-7	27.46
00005N	-375	62833.85	21.4	-12	-13.1	46	56	2.59	24	-19.7	-4.3	-15	59	1.96	24.8	17.9	-14.7	121	-26	30.68
00005N	-350	61721.23	21.4	-13.1	-9.2	16	68	2.51	24	-17.9	-4.3	56	117	2.07	24.8	9.2	-3.9	47	30	27.86
00005N	-325	60774.41	21.4	-12.5	-5.9	36	67	2.73	24	-19.5	-8.3	-8	84	1.34	24.8	10.5	1.8	57	5	28.54
00005N	-300	60777.77	21.4	-14.9	-3.8	40	59	2.56	24	-18.3	-7.2	-13	82	1.33	24.8	5.6	2.4	119	-23	29.96
00005N	-275	61086.98	21.4	-11.5	-1.4	-14	74	2.7	24	-13.4	-5.6	45	71	1.34	24.8	4.2	-1.5	43	31	26.48
00005N	-250	61653.4	21.4	-20.5	-4	32	54	2.25	24	-19.8	-6.1	-14	77	1.24	24.8	3.4	-1.2	54	3	26.73
00005N	-225	62183.98	21.4	-11.5	-5.6	32	62	2.49	24	-20.6	-7.3	-16	127	1.02	24.8	9	1.7	57	2	28.33
00005N	-200	62633.79	21.4	-9.7	-6.6	33	66	2.64	24	-33.5	-27.6	36	72	0.64	24.8	9	-0.9	58	1	29
00005N	-175	63088.5	21.4	-9.5	-6	3	76	2.73	24	-38.3	-27.6	15	42	0.71	24.8	8.3	-0.9	52	26	28.6
00005N	-150	62337.57	21.4	-10.1	-7.4	47	51	2.49	24	-36.9	-34.9	3	21	0.7	24.8	11.1	0.2	56	-18	29.03
00005N	-125	61990.84	21.4	-10.8	-8.6	50	46	2.45	24	-11.1	-6.9	-36	57	2.17	24.8	10.6	0.8	55	-20	29.31
00005N	-100	61711.62	21.4	-9.8	-8.9	4	68	2.43	24	-13.7	-8.1	-15	64	2.09	24.8	8.8	0.3	59	-6	29.46
00005N	-75	61244.18	21.4	-7.8	-6	14	73	2.66	24	-11.7	-5.7	12	67	2.17	24.8	9.1	0.9	55	16	28.42
00005N	-50	60852.22	21.4	-9.4	-7.8	47	53	2.53	24	-10.4	-7.3	-23	63	2.14	24.8	6.9	2.7	58	-13	29.37
00005N	-25	60852.2	21.4	-10	-6.4	18	33	2.75	24	-7.2	-9	-3	34	2.18	24.8	2.2	5.2	63	0	31.25
00005N	0	61161.2	21.4	-9.5	5.5	8	20	1.59	24	2.5	-0.1	1	18	2.3	24.8	-11.6	7.6	60	8	30.2
00005N	25	61744.18	21.4	-10.9	2.6	17	39	1.53	24	2.4	-2.6	4	34	2.18	24.8	-21.2	9.4	56	8	28.2
00005N	50	62953.39	21.4	-7.6	1.4	54	64	1.5	24	1.2	-3.6	-18	63	2.09	24.8	-18.9	7.8	49	-18	26.14
00005N	75	63443.28	21.4	-3.8	-1.1	59	54	1.44	24	3.7	-3.3	-24	56	1.95	24.8	-4.2	5.6	96	-36	25.33
00005N	100	62513.49	21.4	2.5	-3.4	57	62	1.5	24	-1.7	-7.8	-13	61	2.01	24.8	7.4	5.7	55	-12	27.83
00005N	125	61519.94	21.4	-0.7	-3.8	58	58	1.47	24	-1	-7.4	-19	62	2.06	24.8	4	2.6	55	-15	28.26
00005N	150	61272.75	21.4	3.1	-4.9	35	88	1.69	24	-2.4	-9.3	2	65	2.08	24.8	5.1	2.3	57	2	28.54
00005N	175	61238.73	21.4	2.1	-6.8	36	85	1.65	24	0.8	-9.3	8	67	2.16	24.8	2.6	1.6	57	8	28.79
00005N	200	61003.63	21.4	2.5	-6	42	89	1.76	24	-0.3	-10.1	1	71	2.25	24.8	4.6	-0.8	58	2	28.66
00005N	225	60671.07	21.4	3.9	-10.7	57	80	1.76	24	4.6	-10.8	-23	69	2.32	24.8	9.4	-2.1	58	-10	29.4
00005N	250	60282.05	21.4	2.7	-13.5	17	99	1.8	24	2.7	-12.9	20	69	2.3	24.8	6.3	-5.6	58	18	30.11
00005N	275	60044.66	21.4	3.2	18.7	-46	31	2.01	24	26.6	19.2	24	23	1.06	24.8	-1.2	-6.8	7	-30	15.25
00005N	300	59811.38	21.4	4.1	-15.5	48	92	1.86	24	2.9	-17.9	-7	127	2.03	24.8	25.4	-43.8	-12	14	4.75
00005N	325	59564.27	21.4	1.9	-10.8	23	50	1.98	24	3.1	-12.6	0	72	2.29	24.8	24	-32.6	-75	30	10.05
00005N	350	59251.12	21.4	0.9	-10.3	22	50	1.96	24	4.5	-12.4	-2	70	2.22	24.8	47.6	12.9	127	-2	15.79
00005N	375	59083.42	21.4	14.4	-17.4	27	34	1.57	24	17	-16.1	-20	54	1.85	24.8	8.1	8.5	101	-42	27.03
00005N	400	58990.19	21.4	5.1	-12.1	60	91	1.95	24	5.7	-11.5	-13	64	2.1	24.8	5.4	10	57	-6	28.66
00005N	425	58852.96	21.4	-2.5	-11.9	31	47	2.04	24	2.7	-9.9	-11	68	2.2	24.8	10.1	10.3	60	-1	30.02
00005N	450	58755.9	21.4	-7.1	-9.6	71	92	2.08	24	-0.7	-7.6	-16	67	2.2	24.8	15.7	10.8	59	-7	29.62
00005N	475	58704.21	21.4	-4.9	-9.4	23	49	1.95	24	0.1	-7.1	7	65	2.08	24.8	11.4	8.3	58	-11	29.28
00005N	500	58663.74	21.4	-1.9	-7.5	12	105	1.89	24	3.9	-3.8	20	66	2.2	24.8	11.5	8.3	53	17	27.53
00005N	525	58600	21.4	-6.3	-5.2	29	48	2.01	24	1.5	-4.4	-5	68	2.18	24.8	17.1	8.2	58	-1	28.57
00005N	550	58614	21.4	-3.3	-6.3	48	96	1.91	24	4.9	-2.5	-1	68	2.17	24.8	13	8.2	55	0	27.06
00005N	575	58567.81	21.4	0	-5.9	33	42	1.94	24	1.4	-1.8	-15	63	2.08	24.8	11.8	9.3	55	-9	27.65
00005N	600	58562.45	21.4	-6.6	-2.4	46	100	1.97	24	1.3	0	1	68	2.17	24.8	11	5.7	57	4	28.17
00005N	625	58570	21.4	-7.3	2.2	33	46	2.03	24	1.9	2.7	-8	67	2.17	24.8	11.5	2.2	58	-2	28.6
00005N	650	58582.36	21.4	-4.7	2.4	46	99	1.94	24	0.9	3.2	10	70	2.26	24.8	9.8	0.3	58	10	29
00005N	675	58608.89	21.4	-8.9	4.7	36	44	2.06	24	2.7	5.1	-12	69	2.25	24.8	19.7	2.2	58	-8	28.97
00005N	700	58651.59	21.4	-6.2	3.6	56	96	1.99	24	3.6	4.1	-7	71	2.27	24.8	19	2.1	57	0	28.3
00005N	725	58828.58	21.4	-8.8	4.1	32	49	2.11	24	2.7	4.7	-6	69	2.23	24.8	18.1	3.9	58	-1	28.88
00005N	750	58654.32	21.4	-9.6	3.8	31	111	2.07	24	6.5	6.8	15	70	2.28	24.8	21.3	4.2	55	15	28.11
00005N	775	58656.9	21.4	-8	6.9	46	40	2.19	24	3.5	6.6	-28	63	2.21	24.8	19.6	2.9	54	-14	27.77
00005N	800	58751.45	21.4	-7.1	4.1	84	83	2.11	24	4.4	5.4	-23	64	2.17	24.8	24.3	6.6	53	-10	27.03
00005N	825	58747.89	21.4	-8.8	3	54	107	2.14	24	2.7	4.8	-1	69	2.21	24.8	22	9.6	52	5	26.14
00005N	850	58762.08	21.4	-5.8	4	23	55	2.14	24	3.1	5.7	3	71	2.28	24.8	18.5	5.9	50	10	25.53
00005N	875	58777.25	21.4	-7.9	4.2	27	53	2.15	24	1	4.5	0	70	2.23	24.8	15.4	4.6	52	10	26.39
00005N	900	58778.14	21.4	-9.4	4.3	18	56	2.11	24	-0.6	3.9	-1	70	2.23	24.8	14	4.1	53	9	26.51
00005N	925	58819.1	21.4	9.6	4.1	-13	59	2.16	24	14.1	6.9	37	59	2.23	24.8	-7.9	2.2	26	41	24.02
00005N	950	58798.98	21.4	0.8	2.1	30	52	2.17	24	-1.5	3.8	7	66	2.13	24.8	7.1	-1	105	0	25.9

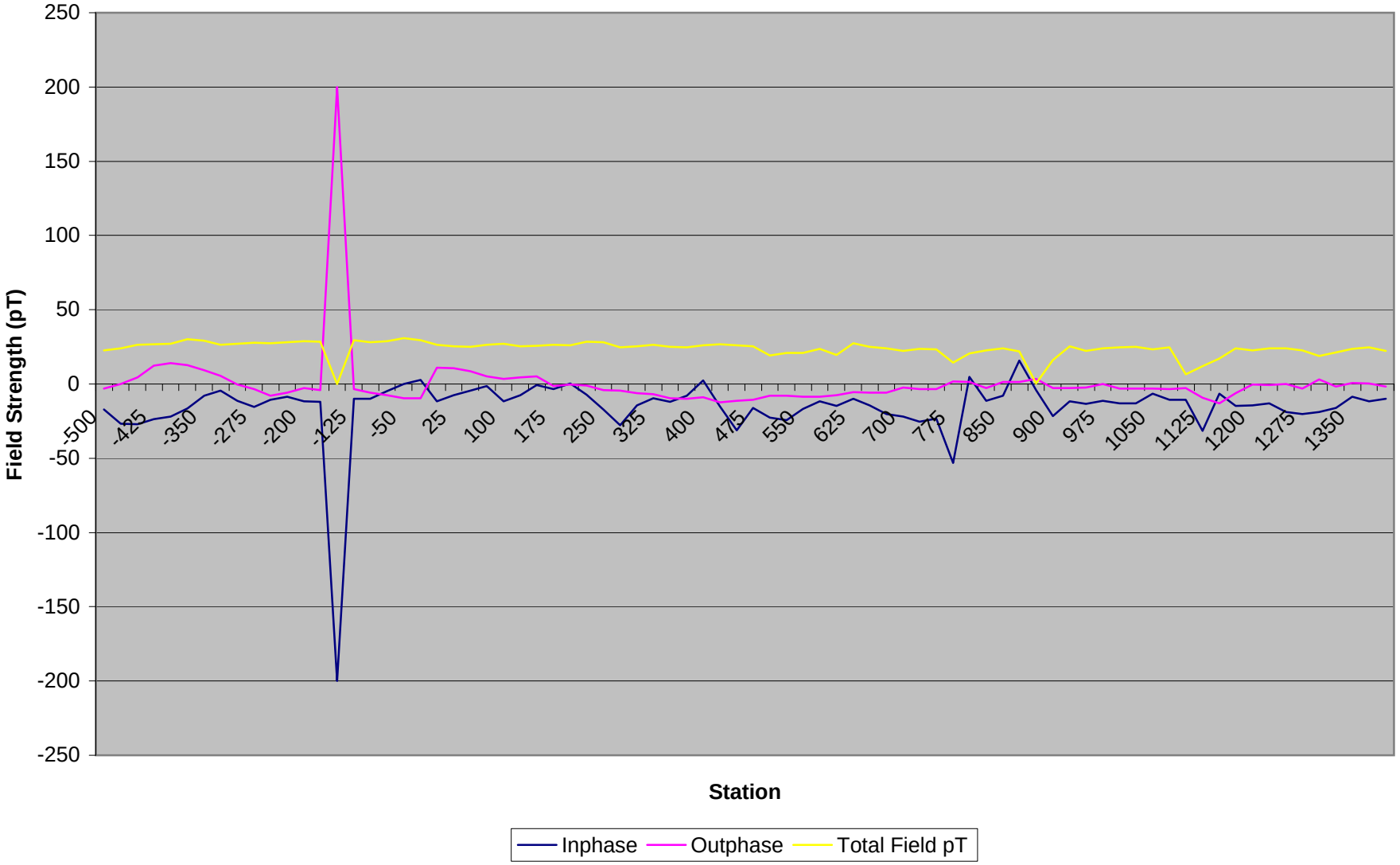
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00005N	1000	58767.85	21.4	-7.1	2.3	16	59	2.2	24	-2.5	2.8	1	67	2.13	24.8	7.2	5.2	54	-2	26.94
00005N	1025	58728.21	21.4	-6.7	2.7	44	43	2.22	24	-0.2	2.3	-20	61	2.06	24.8	13.8	4.9	52	-12	26.7
00005N	1050	58714.73	21.4	-10	-0.2	69	102	2.21	24	-1.8	2.3	-5	69	2.2	24.8	13.6	6.7	54	0	26.63
00005N	1075	58652.57	21.4	-7.7	1.3	39	49	2.25	24	-1.7	2.8	0	67	2.14	24.8	12.1	6.1	52	5	25.99
00005N	1100	58552.52	21.4	-9.9	-0.3	72	102	2.23	24	-3.5	1.8	0	64	2.03	24.8	10.7	7.5	51	8	25.9
00005N	1125	58481.01	21.4	-11.8	-0.3	37	50	2.23	24	-5.9	1.3	-7	65	2.08	24.8	9.8	7.7	52	-2	25.83
00005N	1150	58375.39	21.4	-9.6	1.2	61	112	2.28	24	-8	3.8	5	67	2.16	24.8	5.2	2.5	52	6	26.11
00005N	1175	58421.31	21.4	-6.5	1.9	-1	63	2.26	24	-1.6	3.8	32	62	2.21	24.8	5.3	4	46	22	25.53
00005N	1200	58292.13	21.4	-9	1.6	38	48	2.21	24	0.9	2.6	-9	64	2.05	24.8	10.9	5.4	114	-10	28.19
00005N	1225	58167.85	21.4	-9.1	1.9	72	100	2.2	24	-0.9	2.8	-1	67	2.14	24.8	7.8	3.5	57	-7	28.48
00005N	1250	58126.06	21.4	-7.6	2.8	34	55	2.31	24	2	3.8	-4	66	2.11	24.8	16	3.8	56	-3	28.08
00005N	1275	58075.53	21.4	-7.4	1.5	41	46	2.22	24	4.1	2.8	-8	62	1.98	24.8	19.4	3.9	54	-7	26.94
00005N	1300	57986.64	21.4	-11.2	0.3	77	101	2.27	24	3.8	3.8	-9	62	2.02	24.8	28.5	11.5	49	-5	24.48
00005N	1325	57941.86	21.4	-4.7	2.7	16	60	2.22	24	-0.2	2.1	8	65	2.11	24.8	11.4	0.6	98	21	24.9
00005N	1350	57978.71	21.4	-2.5	4.5	26	60	2.33	24	1.5	3.4	5	67	2.14	24.8	6	-3	53	7	26.54
00005N	1375	57962.5	21.4	-3.3	2.8	27	58	2.31	24	2.9	4.6	4	66	2.1	24.8	12.2	2.3	53	6	26.57


QPL6 Magnetics
Magnetics (nT)
65000
64000
63000
62000
61000
60000
59000
58000
57000
56000
55000
54000
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
900
975
1050
1125
1200
1275
1350
Station
Magnetics


QPL6 VLF 21.4
Field Strength (pT)
150
100
50
0
-50
-100
-150
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
900
975
1050
1125
1200
1275
1350
Station
Inphase
Outphase
Total Field pT


QPL6 VLF 24.0
Field Strength (pT)
250
200
150
100
50
0
-50
-100
-150
-200
-250
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
900
975
1050
1125
1200
1275
1350
Station
Inphase
Outphase
Total Field pT

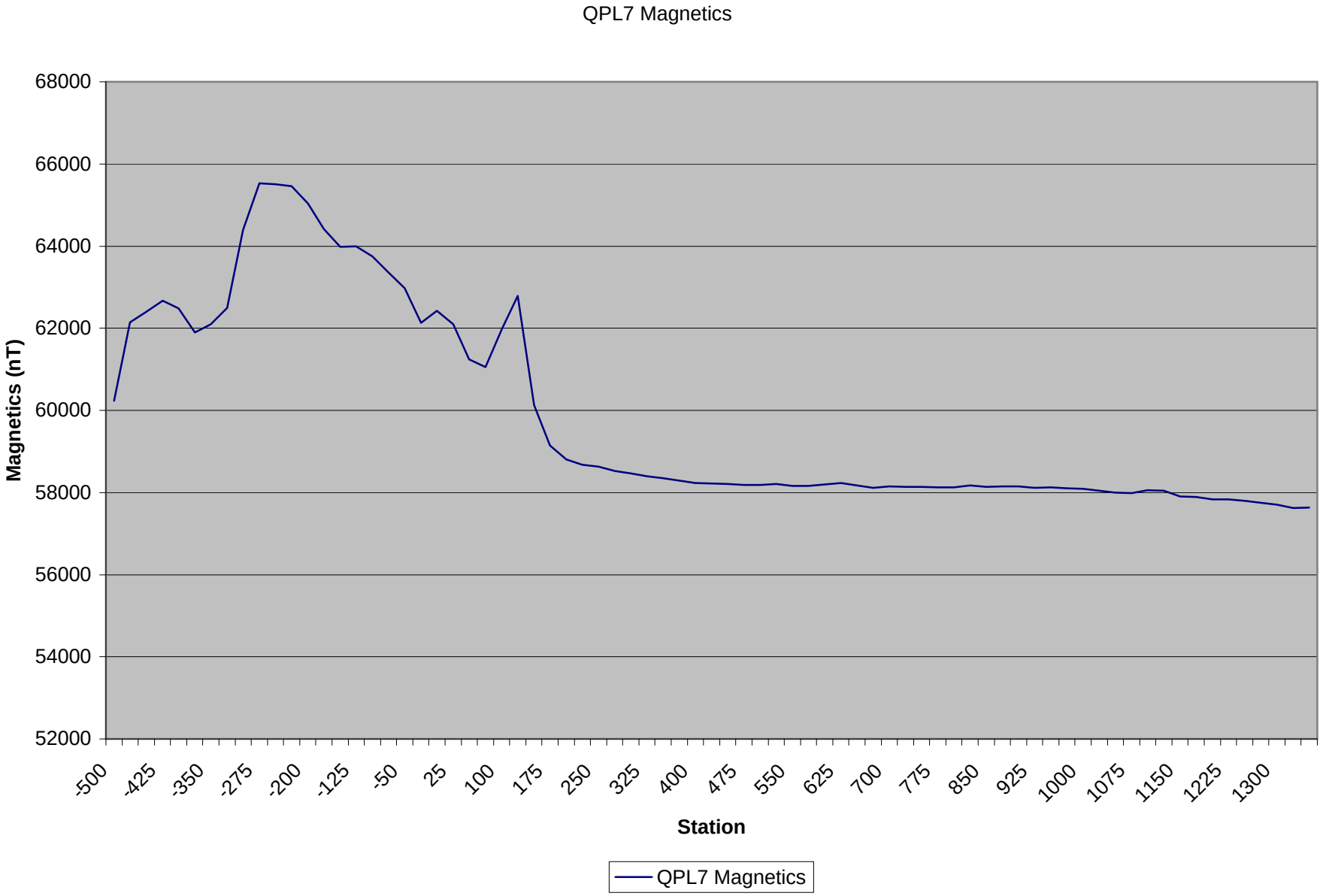
QPL6 VLF 24.8


250
200
150
100
50
0
-50
-100
-150
-200
-250
Field Strength (pT)
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-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
900
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1200
1275
1350
Station
Inphase
Outphase
Total Field pT

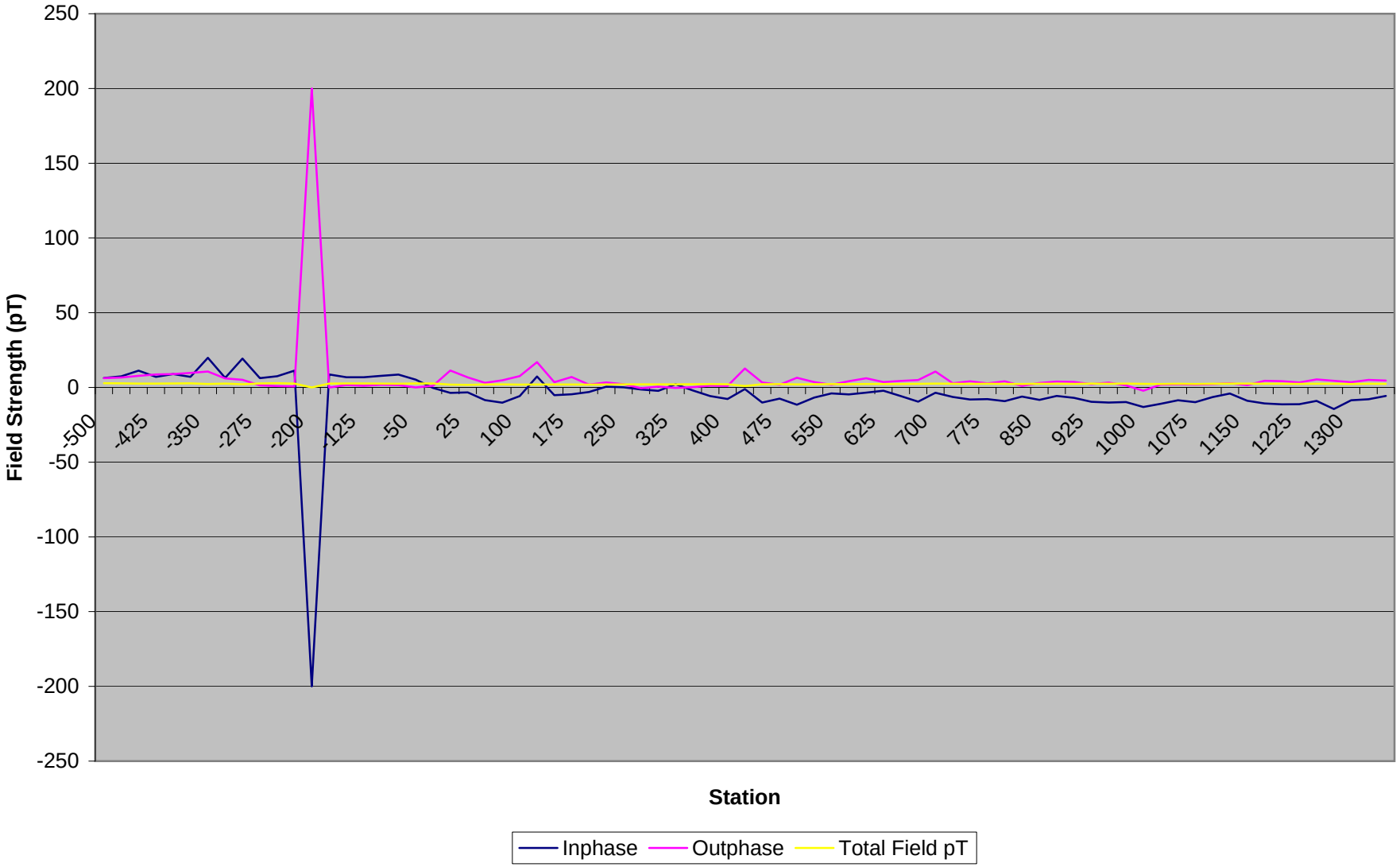
Quesnel Project Line #6

Line	Station	Magnetics	VLF #1	Inphase	Outphase	X Amp	Y Amp	Total #1	VLF #2	Inphase	Outphase	X Amp	Y Amp	Total #2	VLF #3	Inphase	Outphase	X Amp	Y Amp	Total #3
00006N	-500	57960.52	21.4	-0.2	-0.4	20	77	2.86	24	3.6	2.3	-4	66	2.11	24.8	-17.2	-3.2	88	-27	22.71
00006N	-475	58808.25	21.4	0.6	1.8	39	63	2.66	24	8.3	2.9	13	60	1.98	24.8	-26.8	0.1	48	0	23.84
00006N	-450	60364.06	21.4	0.9	3.9	39	66	2.75	24	11.8	0.4	10	61	1.97	24.8	-27	4.6	53	0	26.27
00006N	-425	61737.39	21.4	-11.5	8.3	46	92	1.83	24	12.6	4.4	-14	63	2.06	24.8	-23.8	12.5	50	-20	26.73
00006N	-400	60388.95	21.4	-29.7	12.9	21	23	1.13	24	12.5	7.5	-16	63	2.09	24.8	-21.8	14.2	52	-17	26.97
00006N	-375	60305.81	21.4	-3	12.5	47	53	2.56	24	12.1	6.7	7	64	2.06	24.8	-16.5	12.6	61	0	30.2
00006N	-350	60863.16	21.4	0.9	9.9	65	42	2.79	24	12.4	6.5	52	113	1.98	24.8	-7.9	9.1	111	40	29.25
00006N	-325	61384.59	21.4	-9.2	-7.6	79	12	2.85	24	15.1	10.2	-26	44	1.66	24.8	-4.4	5.4	29	-44	26.39
00006N	-300	62034.07	21.4	-0.1	4.3	53	44	2.48	24	10.9	6	19	57	1.92	24.8	-11.4	-0.2	53	12	27.13
00006N	-275	62505.56	21.4	-0.2	2	42	58	2.57	24	11.8	4.8	4	63	2.02	24.8	-15.3	-3.5	56	2	27.68
00006N	-250	63125.12	21.4	-0.2	0.2	33	57	2.37	24	13.7	5.3	-17	122	1.96	24.8	-10.5	-7.9	107	-30	27.39
00006N	-225	63598.69	21.4	2.6	-1.1	80	12	2.89	24	16.5	4	86	79	1.86	24.8	-8.5	-6	88	72	28.08
00006N	-200	63367.68	21.4	2.9	0	80	12	2.9	24	16.3	4.7	42	41	1.87	24.8	-11.7	-2.6	43	39	28.88
00006N	-175	63014.37	21.4	1.7	1.4	127	76	2.65	24	13.5	3.9	30	54	2	24.8	-12.1	-4	105	45	28.34
00006N	-150	62957.66	21.4	-58.7	101.9	5	1	0.18	24	14.4	1.1	0	56	1.8	24.8	-200	200	0	0	0.03
00006N	-125	62730.33	21.4	-0.8	3	74	109	2.35	24	9.8	5.7	0	65	2.07	24.8	-9.9	-3.5	59	-2	29.37
00006N	-100	62551.28	21.4	-22.3	2.1	29	33	1.58	24	11	9.6	-10	124	1.98	24.8	-10.1	-5.9	113	-17	28.25
00006N	-75	62483.95	21.4	-1.4	1.5	81	13	2.94	24	7.7	7.3	45	41	1.95	24.8	-4.7	-7.6	43	39	28.94
00006N	-50	62760.59	21.4	2.6	1.6	57	53	2.79	24	10.3	7.7	15	65	2.13	24.8	-0.1	-9.5	61	8	30.76
00006N	-25	63053.06	21.4	7.9	4.1	19	32	2.71	24	12	10.1	0	33	2.12	24.8	2.7	-9.7	59	-7	29.5
00006N	0	62426.86	21.4	-8	11.6	8	15	2.52	24	-15.2	1.1	4	14	1.95	24.8	-11.5	11	52	10	26.36
00006N	25	62526.99	21.4	-3.8	9	16	30	2.46	24	-11.1	-4.2	6	28	1.88	24.8	-7.4	10.8	50	7	25.31
00006N	50	63444.99	21.4	-3.9	5.7	27	66	2.54	24	-12.5	-2.2	9	61	1.96	24.8	-4.6	8.5	50	5	25.19
00006N	75	62059.49	21.4	-1.8	4.6	38	58	2.48	24	-16.4	-3.8	18	55	1.86	24.8	-1.3	5.2	51	15	26.57
00006N	100	61130.58	21.4	-12.7	0	30	62	2.49	24	-20	-6.2	0	60	1.93	24.8	-11.7	3.4	55	0	27.19
00006N	125	61448.67	21.4	-1.7	2.8	19	67	2.51	24	-4	-3.2	-7	59	1.91	24.8	-7.5	4.6	51	-6	25.28
00006N	150	61321.49	21.4	1.8	6.4	31	50	2.14	24	-6.6	-1.7	19	54	1.83	24.8	-0.6	5.1	49	18	25.83
00006N	175	60745.45	21.4	3.9	5.2	28	51	2.1	24	-13.2	-6.4	18	56	1.89	24.8	-3.3	-1.3	101	31	26.25
00006N	200	60449.24	21.4	2.4	0.8	14	67	2.46	24	-8.4	-4.2	-11	62	2	24.8	0.3	-0.3	52	-6	26.23
00006N	225	60230.66	21.4	0.7	0.3	8	71	2.56	24	-1.6	-3.3	-19	63	2.09	24.8	-7.1	-1.1	56	-10	28.33
00006N	250	59825.94	21.4	10.5	2.5	31	58	2.36	24	6.4	-4	13	61	1.99	24.8	-17.1	-4	53	18	28.02
00006N	275	59201.83	21.4	0.7	2.3	45	20	1.78	24	3.6	-6.9	39	36	1.73	24.8	-27.7	-4.5	36	35	24.85
00006N	300	59002.49	21.4	-2.8	-9.2	95	82	2.24	24	13.8	-5	20	111	1.8	24.8	-14.4	-6.3	102	13	25.34
00006N	325	58838.16	21.4	-1.3	-9.4	43	43	2.2	24	14.6	-2.7	2	58	1.86	24.8	-9.7	-6.8	53	-2	26.33
00006N	350	58770.83	21.4	-8.7	-12.7	84	82	2.1	24	8	-3.4	3	56	1.81	24.8	-11.9	-9.6	51	-1	25.19
00006N	375	58663.68	21.4	-5.3	-12.8	74	83	2	24	7.1	-4.8	4	56	1.79	24.8	-7.8	-10	50	0	24.6
00006N	400	58651.06	21.4	-5.7	-14.1	84	76	2.02	24	7.7	-4.4	2	56	1.78	24.8	2.3	-8.8	52	-3	26.02
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00006N	475	58468.88	21.4	-12.6	-9.1	37	36	1.85	24	7.8	-2.1	-4	55	1.76	24.8	-16	-10.6	51	-5	25.53
00006N	500	58433.51	21.4	-30	-15.1	78	20	1.44	24	9.9	-4	2	50	1.61	24.8	-22.7	-7.9	38	3	19.04
00006N	525	58420.08	21.4	-15.5	-11.4	68	78	1.86	24	8.4	-2.1	0	55	1.77	24.8	-24.3	-8	84	-9	21
00006N	550	58371.01	21.4	-20.1	-14.5	77	58	1.72	24	9.6	-0.3	5	51	1.63	24.8	-16.9	-8.7	83	16	21.05
00006N	575	58339.52	21.4	-20.4	-14.2	54	57	1.41	24	6.3	0.2	-7	56	1.8	24.8	-11.6	-8.5	93	-21	23.59
00006N	600	58353.07	21.4	-16.5	-12.9	74	70	1.82	24	5.3	-2	4	52	1.68	24.8	-14.6	-7.5	39	6	19.44
00006N	625	58333.19	21.4	-9.8	-7.6	113	77	2.44	24	5.6	-2.2	14	53	1.76	24.8	-10	-5.6	109	21	27.37
00006N	650	58311.27	21.4	-12.6	-7.5	50	32	2.14	24	11.1	-2	12	51	1.67	24.8	-14.4	-5.7	49	12	25.07
00006N	675	58348.92	21.4	-25.2	-6.5	34	37	1.81	24	5.1	1.3	-2	55	1.78	24.8	-20.4	-5.8	97	-5	23.96
00006N	700	58353.51	21.4	-88.7	-16.6	44	-2	0.8	24	6.8	2.3	-16	56	1.86	24.8	-22.1	-2.3	41	-17	22.33
00006N	725	58309.61	21.4	-38.4	-7.7	112	93	1.3	24	5	5.7	-6	58	1.88	24.8	-25.5	-3.3	94	-22	23.82
00006N	750	58342.72	21.4	-22.4	-3.1	93	44	1.84	24	7.6	8.1	16	46	1.55	24.8	-23.3	-3.3	45	12	23.22
00006N	775	58320.09	21.4	-19.4	-2.5	42	36	1.98	24	6.4	8.4	24	106	1.73	24.8	-53	1.8	57	8	14.3
00006N	800	58382.93	21.4	4.6	2	127	0	2.27	24	57.8	33.2	0	33	1.05	24.8	4.7	1.3	48	68	20.61
00006N	825	58414.44	21.4	-10.1	-1.2	51	36	2.25	24	19.5	8.1	15	97	1.57	24.8	-11.4	-2.7	89	23	22.71
00006N	850	58354.97	21.4	-9.1	-0.1	70	-14	2.55	24	59.2	32.2	-14	38	1.3	24.8	-7.8	1.3	53	81	24.02
00006N	875	58368.01	21.4	13.1	1.7	38	49	2.23	24	13.2	-2.5	-4	120	1.92	24.8	15.7	1.4	89	3	22.1
00006N	900	58355.74	21.4	-92.6	112.6	2	4	0.08	24	-200	200	0	0	0.02	24.8	-4	3.5	0	0	0.3
00006N	900	58351.03	21.4	-24	-5.2	127	126	1.6	24	6.5	5.9	8	107	1.71	24.8	-21.5	-2.7	127	25	16
00006N	925	58391.53	21.4	-14.6	-1	87	87	2.2	24	3.8	5.8	4	55	1.78	24.8	-11.6	-2.6	102	12	25.28

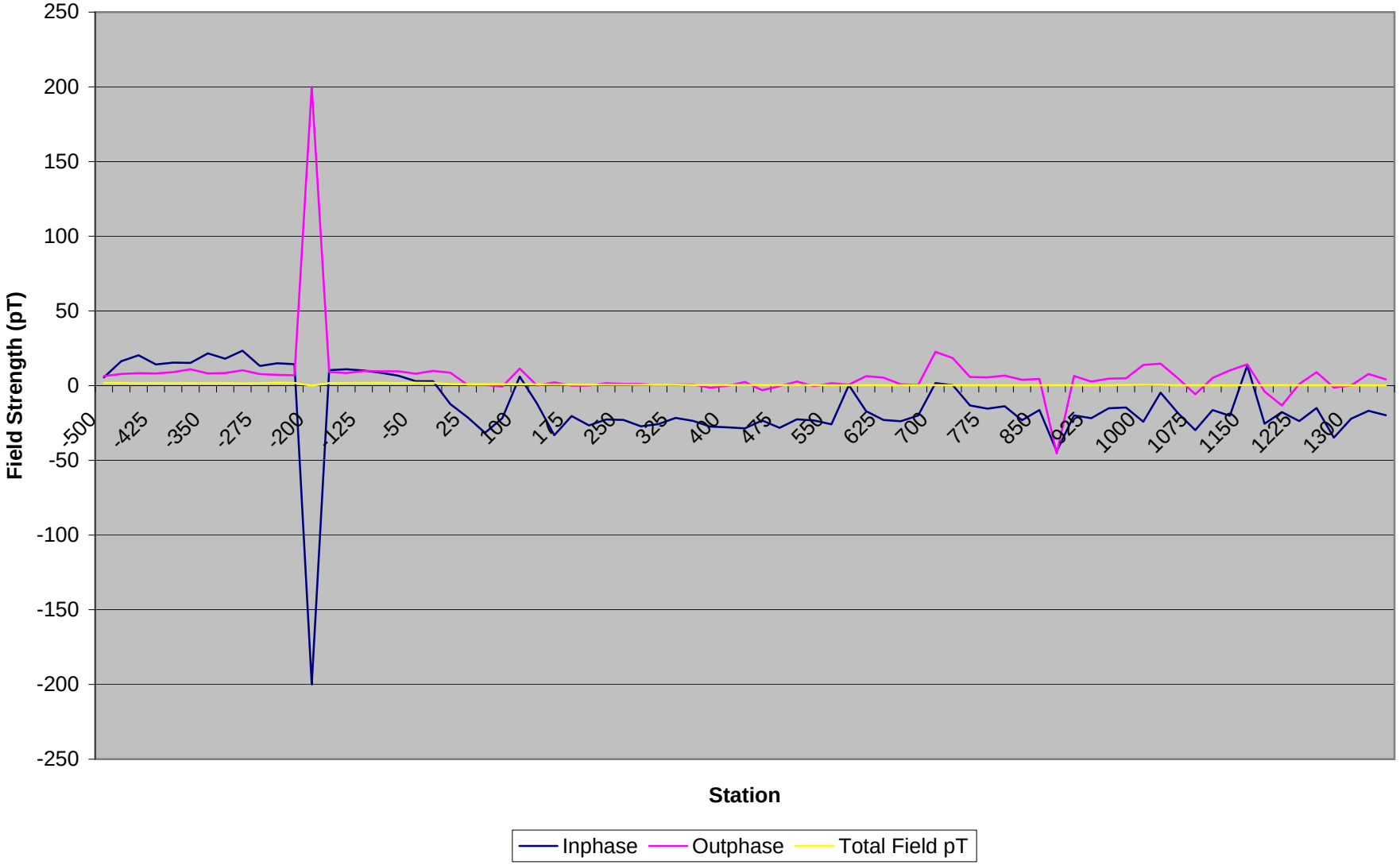
00006N	950	58313.56	21.4	-81	-8.1	39	-16	0.76	24	4.2	6.4	-22	55	1.88	24.8	-13.5	-2.5	41	-17	22.33
00006N	975	58301.7	21.4	-45.5	-3.9	127	43	1.2	24	18.7	13.2	14	39	1.34	24.8	-11.3	0.1	73	63	23.9
00006N	1000	58237.19	21.4	-16.8	-3.8	119	55	2.35	24	3.6	1.2	39	95	1.64	24.8	-13.2	-3.2	89	47	24.85
00006N	1025	58280.19	21.4	-15.6	-1.9	57	29	2.29	24	5	8	14	51	1.68	24.8	-12.9	-3.2	98	26	25.02
00006N	1050	58262.13	21.4	-15.7	-2.3	47	31	2.02	24	5.3	6.4	8	48	1.55	24.8	-6.6	-3.1	45	14	23.47
00006N	1075	58305.86	21.4	-12.2	-1	123	39	2.31	24	6.3	4.3	47	89	1.6	24.8	-10.7	-3.3	88	46	24.67
00006N	1100	58302.44	21.4	-11.9	0.7	60	-42	2.62	24	33.1	28.3	-60	42	1.18	24.8	-10.6	-2.7	10	23	6.35
00006N	1125	58263.59	21.4	-31.8	-10.3	21	23	1.14	24	8.4	1.7	14	84	1.35	24.8	-31.4	-9.3	64	75	12.15
00006N	1150	58330.97	21.4	-15.6	-4.2	79	81	2.03	24	6.6	3	3	105	1.67	24.8	-6.5	-13	127	53	16.98
00006N	1175	58203.86	21.4	-24.9	-5.6	66	75	1.79	24	1	2.6	-1	53	1.69	24.8	-14.7	-6.1	97	-1	24.1
00006N	1200	58184.35	21.4	-17.8	-2.7	79	70	1.89	24	2.6	4.2	5	50	1.62	24.8	-14.3	-0.5	45	5	22.76
00006N	1225	58072.72	21.4	-25.7	3.6	91	63	1.98	24	6.5	2.4	-1	50	1.59	24.8	-13.2	-0.7	98	-1	24.16
00006N	1250	58013.83	21.4	-22.9	-1.1	38	41	2.01	24	-0.5	4	2	52	1.65	24.8	-18.9	0	48	0	23.84
00006N	1275	57995.24	21.4	-40	-8.3	68	33	1.35	24	2.7	4.2	-3	51	1.63	24.8	-20.2	-3.1	92	4	22.7
00006N	1300	57906.5	21.4	-40.3	-8.3	53	44	1.23	24	3.2	3.5	-4	50	1.6	24.8	-18.8	3.2	38	-5	18.97
00006N	1325	57878.14	21.4	-38	-11	63	44	1.38	24	1.4	0.3	-3	48	1.55	24.8	-16	-1.8	85	-6	21.16
00006N	1350	57849.32	21.4	-27.7	-8.8	74	59	1.68	24	9	3.2	41	69	1.28	24.8	-8.6	0.7	62	73	23.68
00006N	1375	57771.22	21.4	-14.5	-0.8	89	67	2	24	2.6	1.3	19	94	1.53	24.8	-11.5	0.2	97	20	24.56
00006N	1400	57803.33	21.4	-73.2	-12.3	59	0	1.06	24	10.2	4.2	-6	48	1.56	24.8	-9.9	-1.7	44	-6	22.2


QPL7 Magnetics
68000
66000
64000
62000
60000
58000
56000
54000
52000
Magnetics (nT)
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
Station
QPL7 Magnetics

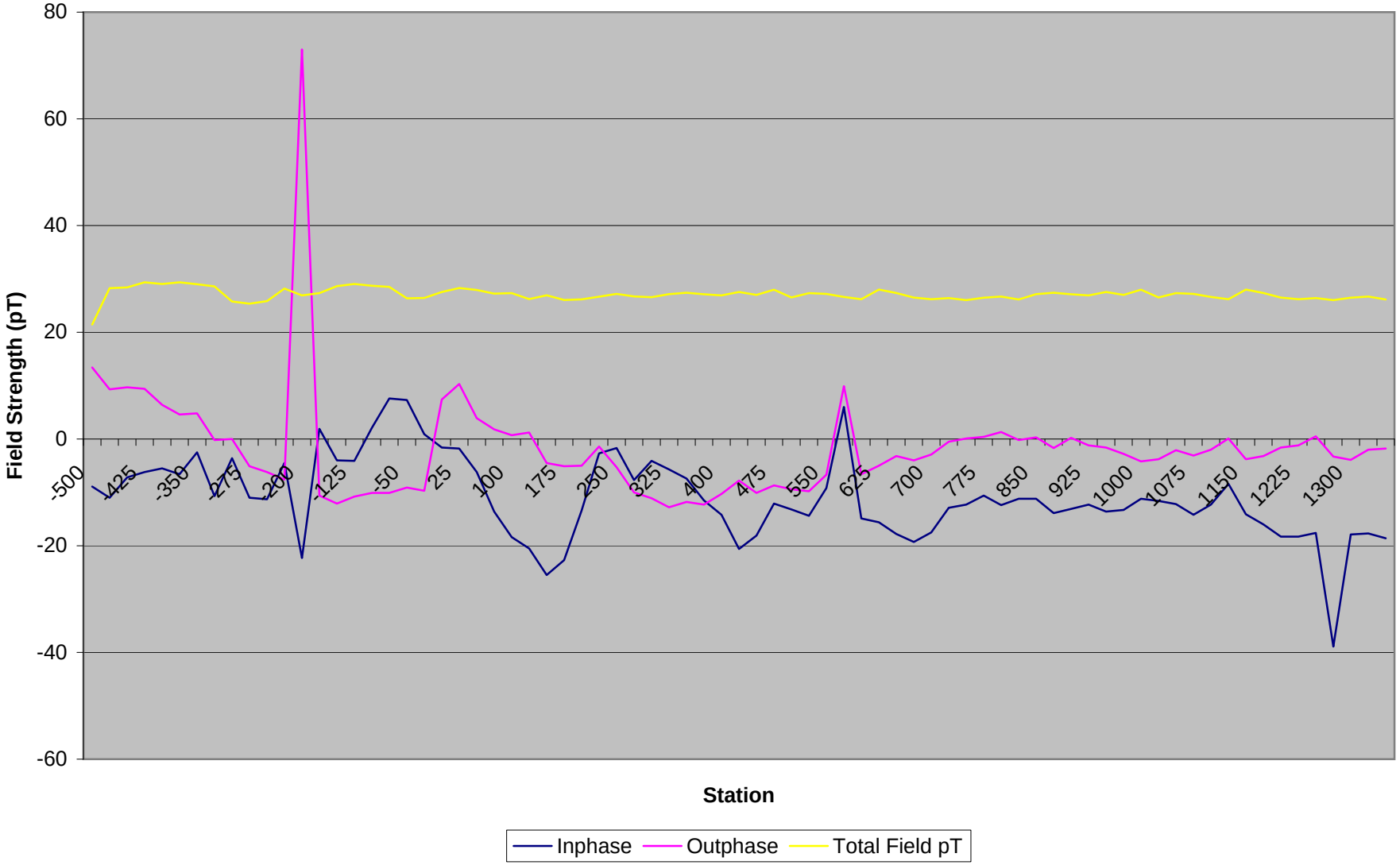
QPL7 VLF 21.4


Field Strength (pT)
250
200
150
100
50
0
-50
-100
-150
-200
-250
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
Station
Inphase
Outphase
Total Field pT

QPL7 VLF 24.0


250
200
150
100
50
0
-50
-100
-150
-200
-250
Field Strength (pT)
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
Station
Inphase
Outphase
Total Field pT

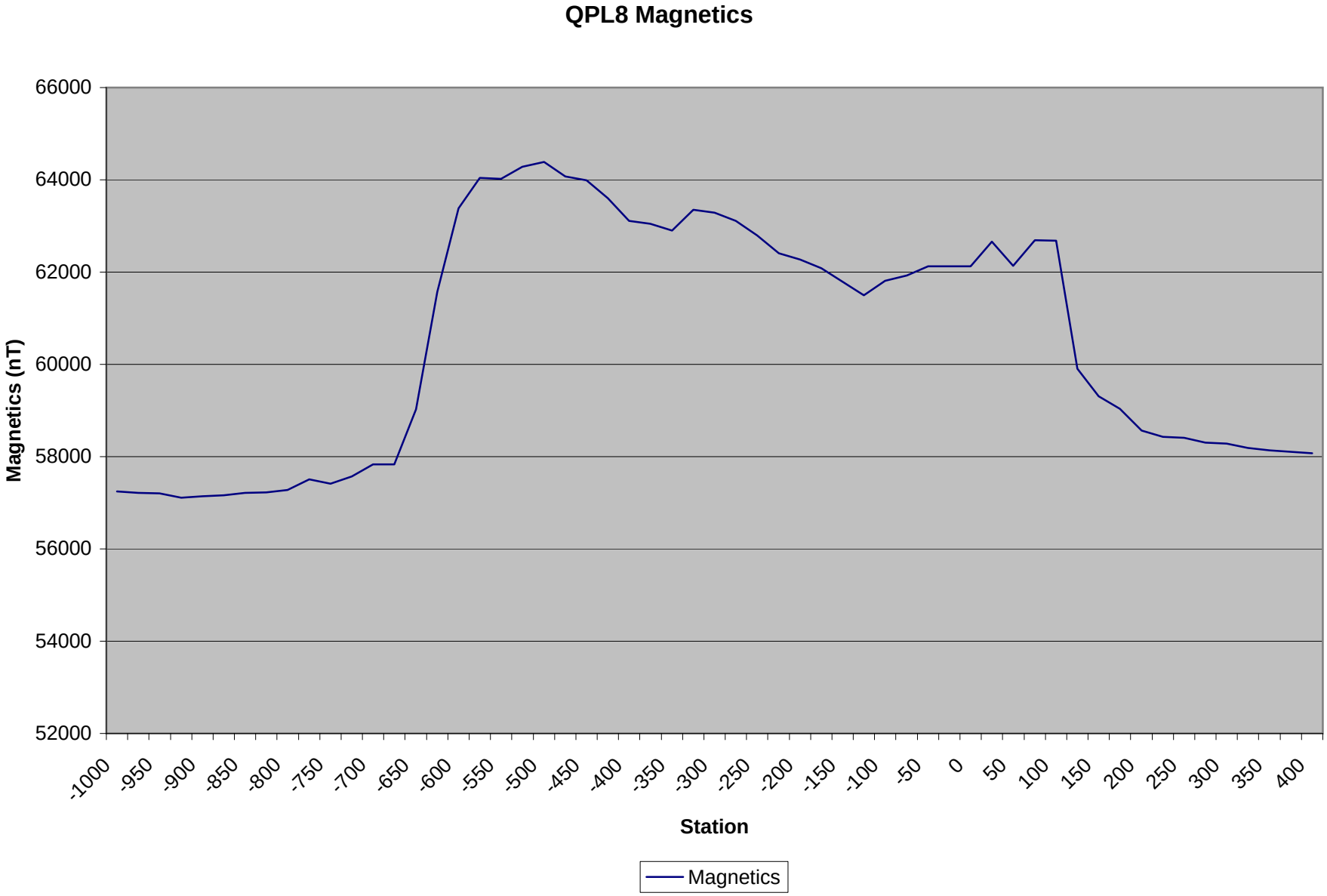
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80
60
40
20
0
-20
-40
-60
Field Strength (pT)
-500
-425
-350
-275
-200
-125
-50
25
100
175
250
325
400
475
550
625
700
775
850
925
1000
1075
1150
1225
1300
Station
Inphase
Outphase
Total Field pT

Quesnel Project Line #7

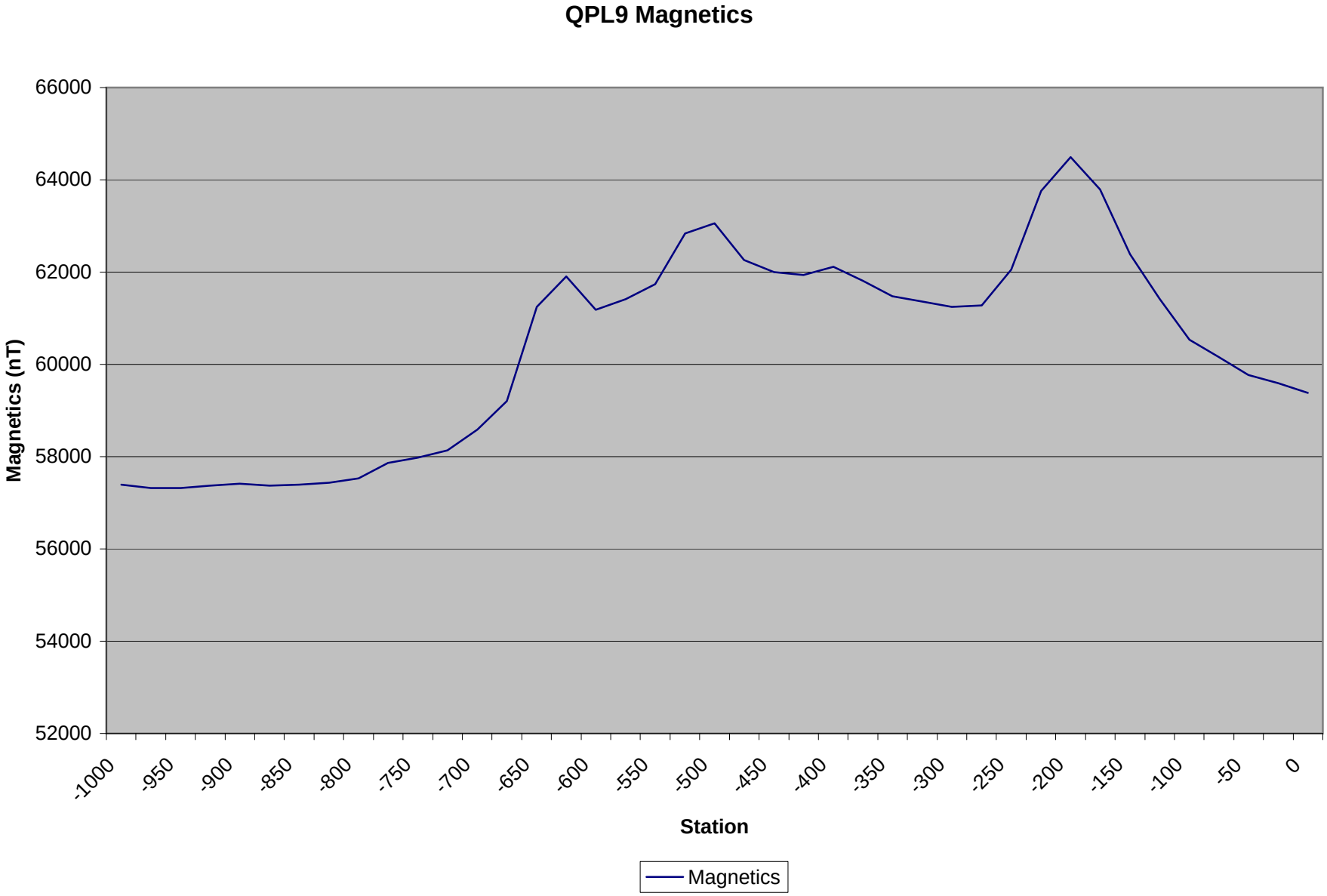
Line	Station	Magnetics	VLF #1	Inphase	Outphase	X Amp	Y Amp	Total #1	VLF #2	Inphase	Outphase	X Amp	Y Amp	Total #2	VLF #3	Inphase	Outphase	X Amp	Y Amp	Total #3
00007N	-500	60229.37	21.4	6.3	6.2	-43	66	2.84	24	5.5	6.4	-98	59	1.83	24.8	-8.9	13.4	25	-83	21.45
00007N	-475	62148.46	21.4	7.4	6.6	-13	74	2.69	24	16.3	7.8	-34	47	1.86	24.8	-11	9.3	42	-16	28.28
00007N	-450	62397.31	21.4	11.2	7.7	43	55	2.51	24	20.3	8.3	4	51	1.64	24.8	-7.2	9.7	52	-18	28.42
00007N	-425	62667.69	21.4	7.1	8.7	50	51	2.57	24	14.2	8.2	10	51	1.66	24.8	-6.2	9.4	53	-3	29.37
00007N	-400	62482.05	21.4	8.9	8.9	45	57	2.6	24	15.4	9	9	51	1.65	24.8	-5.5	6.4	54	9	29.06
00007N	-375	61901.53	21.4	7.1	9.7	48	58	2.69	24	15.2	11	22	107	1.74	24.8	-6.6	4.6	112	0	29.37
00007N	-350	62097.89	21.4	19.8	10.6	17	62	2.3	24	21.6	8.2	-9	49	1.59	24.8	-2.5	4.8	47	-2	29
00007N	-325	62498.48	21.4	6.4	6	94	110	2.58	24	18	8.4	24	103	1.68	24.8	-10.7	-0.2	107	-6	28.6
00007N	-300	64390.83	21.4	19.3	5.1	32	50	2.13	24	23.4	10.3	0	48	1.52	24.8	-3.6	0	48	-3	25.77
00007N	-275	65530.41	21.4	6.2	1.4	41	62	2.66	24	13.2	7.7	4	54	1.73	24.8	-11	-5.1	56	-1	25.37
00007N	-250	65503.47	21.4	7.5	0.9	17	75	2.77	24	15	7.2	-14	59	1.93	24.8	-11.3	-6.2	53	-5	25.83
00007N	-225	65462.57	21.4	11.2	0.7	98	105	2.57	24	14.4	6.9	30	110	1.81	24.8	-4.5	-7.6	116	-1	28.2
00007N	-200	65034.07	21.4	-200	200	0	0	0	24	-200	200	0	0	0	24.8	-22.3	73	0	-6	26.91
00007N	-175	64419.34	21.4	8.7	-0.1	40	59	2.56	24	10.4	9.1	6	53	1.7	24.8	1.9	-10.6	57	5	27.34
00007N	-150	63983.08	21.4	6.8	1.6	46	57	2.63	24	11	8.4	12	54	1.78	24.8	-4	-12.1	58	0	28.66
00007N	-125	63996.16	21.4	6.8	1.1	32	66	2.62	24	10.1	9.8	-4	56	1.8	24.8	-4.1	-10.8	59	-5	29.06
00007N	-100	63746.69	21.4	7.7	1.8	17	68	2.51	24	8.6	9.6	-15	55	1.83	24.8	2.1	-10.1	58	-4	28.73
00007N	-75	63352.36	21.4	8.6	1.5	39	56	2.47	24	6.6	9.6	5	52	1.66	24.8	7.6	-10.1	58	-4	28.51
00007N	-50	62972.01	21.4	5.2	0	24	70	2.65	24	3	8	-7	61	1.96	24.8	7.3	-9.1	58	37	26.36
00007N	-25	62132.2	21.4	-0.3	1.1	24	27	2.62	24	3	9.9	6	29	1.89	24.8	0.9	-9.7	53	-3	26.43
00007N	0	62429.53	21.4	-3.7	11.3	13	22	1.85	24	-12.3	8.7	10	11	0.99	24.8	-1.6	7.4	113	12	27.56
00007N	25	62094.94	21.4	-3.3	6.7	19	44	1.72	24	-21.3	0.4	19	22	0.93	24.8	-1.8	10.3	54	18	28.3
00007N	50	61240.06	21.4	-8.5	3.1	49	98	1.96	24	-31.6	0.4	39	44	0.93	24.8	-6.2	3.9	59	-42	27.93
00007N	75	61052.56	21.4	-10.2	4.8	36	43	2.02	24	-21.8	-0.6	76	86	0.91	24.8	-13.6	1.8	58	13	27.25
00007N	100	61981.83	21.4	-5.8	7.6	45	95	1.88	24	6	11.4	101	58	0.93	24.8	-18.4	0.7	59	1	27.34
00007N	125	62782.94	21.4	7.3	16.9	22	48	1.92	24	-12	0.1	36	39	0.86	24.8	-20.5	1.2	58	7	26.23
00007N	150	60128.91	21.4	-5.2	3.5	53	95	1.95	24	-33.2	2.2	69	71	0.79	24.8	-25.5	-4.5	57	13	26.94
00007N	175	59147.95	21.4	-4.6	7	27	47	1.94	24	-20.3	0	64	71	0.76	24.8	-22.7	-5.1	52	0	26.05
00007N	200	58801.06	21.4	-3.1	1.9	59	88	1.9	24	-26.6	0.1	58	68	0.71	24.8	-13.4	-5	51	-21	26.17
00007N	225	58681.79	21.4	0.5	3.3	57	94	1.97	24	-22.6	1.6	57	64	0.68	24.8	-2.7	-1.4	52	0	26.67
00007N	250	58631.8	21.4	0.1	2.1	32	46	2	24	-23	1.2	54	62	0.66	24.8	-1.7	-5.3	57	2	27.19
00007N	275	58521.29	21.4	-1.4	-0.5	65	94	2.03	24	-27.2	1.1	51	55	0.6	24.8	-7.7	-10	54	16	26.73
00007N	300	58466.57	21.4	-2.3	0.5	36	44	2.05	24	-25.8	0.3	50	55	0.59	24.8	-4.1	-11.1	55	-17	26.57
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00007N	400	58226.53	21.4	-7.7	1	23	54	2.1	24	-27.9	-0.1	73	57	0.36	24.8	-14.2	-10.3	57	-1	26.91
00007N	425	58222.04	21.4	-1.1	12.7	21	15	0.94	24	-28.6	2.5	65	79	0.41	24.8	-20.6	-7.8	38	0	27.56
00007N	450	58209.96	21.4	-10.1	3.3	68	99	2.14	24	-23.3	-3.1	73	39	0.33	24.8	-18.1	-10.1	107	7	27
00007N	475	58181.41	21.4	-7.5	1.8	35	49	2.17	24	-28.2	-0.3	64	39	0.3	24.8	-12.1	-8.7	53	9	27.99
00007N	500	58184.69	21.4	-11.6	6.5	91	67	2.02	24	-22.5	2.7	65	47	0.31	24.8	-13.2	-9.4	51	30	26.54
00007N	525	58207.21	21.4	-6.8	3.6	41	42	2.11	24	-23.3	-0.3	65	43	0.31	24.8	-14.4	-9.8	54	-9	27.34
00007N	550	58164.67	21.4	-4	1.8	94	83	2.24	24	-25.9	1.6	62	40	0.29	24.8	-9.2	-6.7	54	-5	27.19
00007N	575	58157.16	21.4	-4.7	4.2	32	54	2.25	24	0.3	0.7	70	3	0.28	24.8	6	9.9	38	7	26.63
00007N	600	58195.1	21.4	-3.5	6.1	43	46	2.27	24	-17.1	6.4	77	29	0.32	24.8	-14.9	-6.6	109	-42	26.2
00007N	625	58237.13	21.4	-2.2	3.6	79	102	2.3	24	-23	5.4	64	30	0.28	24.8	-15.6	-5	55	-7	28
00007N	650	58173.9	21.4	-5.8	4.3	44	45	2.26	24	-23.8	0.9	61	24	0.26	24.8	-17.8	-3.2	52	16	27.37
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00007N	1225	57829.4	21.4	-11.2	3.3	50	125	2.4	24	-23.7	1.1	60	7	0.24	24.8	-18.3	-1.2	51	-13	26.2
00007N	1250	57798.75	21.4	-9	5.4	45	53	2.5	24	-15	9	64	22	0.27	24.8	-17.6	0.5	53	7	26.42
00007N	1275	57754.12	21.4	-14.5	4.4	47	49	2.43	24	-34.8	-1.3	60	24	0.25	24.8	-38.9	-3.3	52	7	26.02
00007N	1300	57701.87	21.4	-8.6	3.5	-12	127	2.29	24	-22.1	0.2	51	0	0.2	24.8	-17.9	-3.9	45	-29	26.48
00007N	1325	57622.68	21.4	-7.9	5	32	62	2.49	24	-16.8	7.8	69	5	0.27	24.8	-17.7	-2	108	-7	26.7
00007N	1350	57628.48	21.4	-5.7	4.6	-5	67	2.41	24	-19.8	4.2	47	-1	0.18	24.8	-18.6	-1.8	45	-27	26.14


QPL8 Magnetics
Magnetics (nT)
66000
64000
62000
60000
58000
56000
54000
52000
-1000
-950
-900
-850
-800
-750
-700
-650
-600
-550
-500
-450
-400
-350
-300
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Station
Magnetics

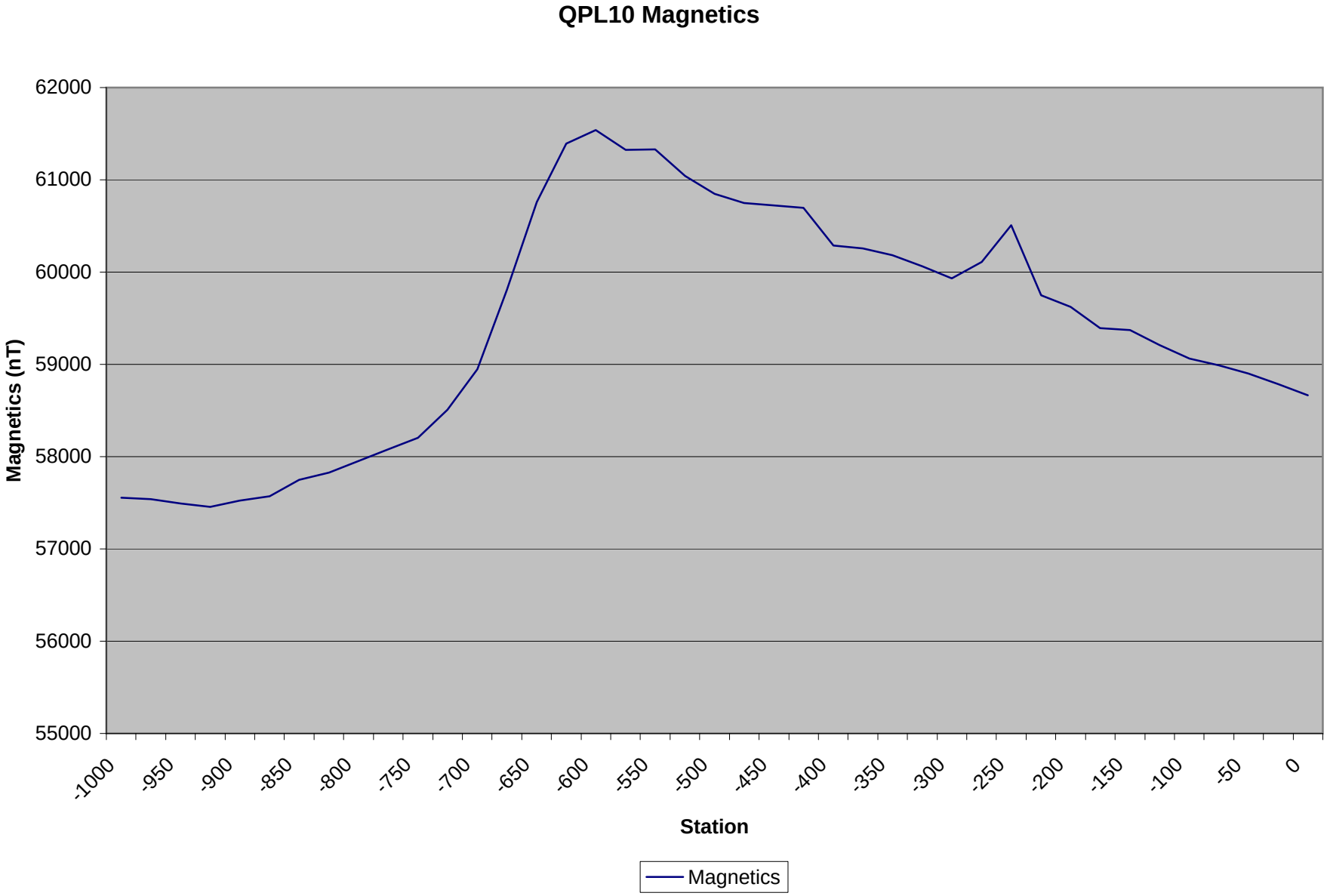
Quesnel Project Line #8

line	station	Magnetics
00008E	-1000	57242.11
00008E	-975	57219.35
00008E	-950	57207.11
00008E	-925	57112.01
00008E	-900	57144.93
00008E	-875	57164.48
00008E	-850	57219.83
00008E	-825	57224.32
00008E	-800	57278.3
00008E	-775	57511.45
00008E	-750	57417.58
00008E	-725	57571.05
00008E	-700	57829.32
00008E	-675	57833.33
00008E	-650	59021.51
00008E	-625	61568
00008E	-600	63383.33
00008E	-575	64040.68
00008E	-550	64016.89
00008E	-525	64283.88
00008E	-500	64386.3
00008E	-475	64078.47
00008E	-450	63987.53
00008E	-425	63598.21
00008E	-400	63109.36
00008E	-375	63049.26
00008E	-350	62904.84
00008E	-325	63355.61
00008E	-300	63290.77
00008E	-275	63108.92
00008E	-250	62798.88
00008E	-225	62410.43
00008E	-200	62268.52
00008E	-175	62087.41
00008E	-150	61786.13
00008E	-125	61502.47
00008E	-100	61806.9
00008E	-75	61931.21
00008E	-50	62124.99
00008E	-25	62125.86
00008E	0	62126.46
00008W	25	62661.22
00008W	50	62138.68
00008W	75	62688.45
00008W	100	62684.36
00008W	125	59903.74
00008W	150	59312.77
00008W	175	59039.24
00008W	200	58561.06
00008W	225	58430.47
00008W	250	58413.44
00008W	275	58306.97
00008W	300	58278.58
00008W	325	58183.7
00008W	350	58134.57
00008W	375	58105.9
00008W	400	58077.54


QPL9 Magnetics
66000
64000
62000
60000
58000
56000
54000
52000
Magnetics (nT)
-1000
-950
-900
-850
-800
-750
-700
-650
-600
-550
-500
-450
-400
-350
-300
-250
-200
-150
-100
-50
0
Station
Magnetics

Quesnel Project Line #9

line	station	Magnetics
00009E	-1000	57393.22
00009E	-975	57317.25
00009E	-950	57320.43
00009E	-925	57368.65
00009E	-900	57409.84
00009E	-875	57376.14
00009E	-850	57393.21
00009E	-825	57436.57
00009E	-800	57526.89
00009E	-775	57863.54
00009E	-750	57982.1
00009E	-725	58140.89
00009E	-700	58588.77
00009E	-675	59200.19
00009E	-650	61250.39
00009E	-625	61901.75
00009E	-600	61182.37
00009E	-575	61412.94
00009E	-550	61741
00009E	-525	62836.66
00009E	-500	63054.64
00009E	-475	62261.24
00009E	-450	61996.56
00009E	-425	61934.19
00009E	-400	62119.79
00009E	-375	61810.17
00009E	-350	61474.53
00009E	-325	61362.25
00009E	-300	61241.57
00009E	-275	61281.18
00009E	-250	62056.72
00009E	-225	63757.04
00009E	-200	64490.15
00009E	-175	63788.59
00009E	-150	62387.82
00009E	-125	61425.76
00009E	-100	60534.91
00009E	-75	60157.26
00009E	-50	59772.15
00009E	-25	59594.77
00009E	0	59385.55


QPL10 Magnetics
62000
61000
60000
59000
58000
57000
56000
55000
Magnetics (nT)
-1000
-950
-900
-850
-800
-750
-700
-650
-600
-550
-500
-450
-400
-350
-300
-250
-200
-150
-100
-50
0
Station
Magnetics

Quesnel Project Line #10

line	station	Magnetics
00010E	-1000	57552.71
00010E	-975	57538.43
00010E	-950	57492.92
00010E	-925	57455.63
00010E	-900	57522.88
00010E	-875	57569.49
00010E	-850	57751.13
00010E	-825	57826.98
00010E	-800	57954.72
00010E	-775	58077.33
00010E	-750	58204.41
00010E	-725	58505.63
00010E	-700	58946.22
00010E	-675	59803.92
00010E	-650	60761.49
00010E	-625	61394.43
00010E	-600	61540.26
00010E	-575	61324.91
00010E	-550	61330.6
00010E	-525	61041.89
00010E	-500	60849.29
00010E	-475	60748.17
00010E	-450	60720.95
00010E	-425	60695.71
00010E	-400	60288.63
00010E	-375	60257.95
00010E	-350	60183.16
00010E	-325	60064.37
00010E	-300	59931.02
00010E	-275	60109.6
00010E	-250	60506.98
00010E	-225	59750.98
00010E	-200	59625.5
00010E	-175	59394.02
00010E	-150	59372.42
00010E	-125	59208.2
00010E	-100	59064.48
00010E	-75	58986.98
00010E	-50	58902.97
00010E	-25	58785.59
00010E	0	58666.35

APPENDIX L

REFERENCES

APPENDIX L

REFERENCES

Below, with additions, is a partial list of references relevant to Barker Minerals' Ltd. Property with emphasis on the Frank Creek, Kangaroo and MAG project areas of 2007, abbreviated after McKinley, 2004.

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APPENDIX M

STATEMENT OF EXPENDITURES

Barker Minerals Ltd.

Work was completed on the following claims:
504438, 514195, 514197, 503009, 503012, 503824 & 514364

Work was completed between October 24, 2006 and October 31, 2007

Geological - Drilling

Louis Doyle - Planning, supervising and report preparation		
10 days @ $350.00/day wages	$	3,500.00
10 days @ $100.00/day room & board	$	1,000.00
10 days @ $125.00/day vehicle & gas	$	1,250.00
Geocon Exploration Management Ltd. - VP of Exploration	$	25,119.91
Planning, supervising and report preparation		
25 days @ $100.00/day room & board	$	2,500.00
25 days @ $125.00/day vehicle & gas	$	3,125.00
Mining Insights Inc.	$	16,155.00
11 days @ $100.00/day room & board	$	1,100.00
Richard Ney - Core splitter	$	3,800.00
18 days @ $100.00/day room & board	$	1,800.00
James Doyle - Camp cook & expiditor etc….		
56 days @ $300.00/day wages	$	16,800.00
56 days @ $100.00/day room & board	$	5,600.00
56 days @ $125.00/day vehicle & gas	$	7,000.00
Jacqueline Wishart - Cooks helper		
22 days @ $150.00/day wages	$	3,300.00
22 days @ $100.00/day room & board	$	2,200.00
Kathryn Doyle - Cooks helper		
36 days @ $200.00/day wages	$	7,200.00
36 days @ $100.00/day room & board	$	3,600.00
Rosemae Pejidoro - Cooks helper		
25.5 days @ $200.00/day wages	$	5,100.00
25.5 days @ $100.00/day room & board	$	2,550.00
Marilyn Salmon - Camp cook		
33.5 days @ $250.00/day wages	$	8,375.00

Andrew Harris - Core teching			
	3 days @ $250.00/day wages	$	750.00
	3 days @ $100.00/day room & board	$	300.00
ACD Contracting		$	38,705.36
	25 days @ $100.00/day room & board	$	2,500.00
	25 days @ $125.00/day vehicle & gas	$	3,125.00
Wayne Jackaman - Map drafting		$	1,210.00
Radius Drilling Corporation		$	360,303.98
	310 days @ $100.00/day room & board	$	31,000.00
		$	558,969.25

Miscallaneous Drilling Expenditures

A&D Enterprises		$	1,462.50
Grand Logging & Lowbedding		$	562.50
Interior Roads Cariboo		$	892.80
Bri-Mel Lowbedding & Piloting		$	2,440.00
Ed Thibeault		$	375.00
Van Kam Freightways		$	3,668.06
Greyhound Courier		$	2,913.97
Quad rental			
	82 days @ $100.00/day	$	8,200.00
Satelite phone			
	82 days @ $25.00/day	$	2,050.00
		$	22,564.83
	Total drilling	$	581,534.08
Vancouver Petrographics Ltd.		$	4,717.00
		$	4,717.00

Geological -Trenching

Louis Doyle - Planning, supervising and report preparation

28 days @ $350.00/day wages	$	9,800.00
28 days @ $100.00/day room & board	$	2,800.00
28 days @ $125.00/day vehicle & gas	$	3,500.00
Geocon Exploration Management Ltd. - VP of Exploration	$	5,500.00
Planning, supervising and report preparation		
15 days @ $100.00/day room & board	$	1,500.00
15 days @ $125.00/day vehicle & gas	$	1,875.00
ACD Contracting	$	33,051.00
23 days @ $100.00/day room & board	$	2,300.00
23 days @ $125.00/day vehicle & gas	$	2,875.00
Seth Beauchesne - Swamper		
23 days @ $250.00/day wages	$	5,750.00
23 days @ $100.00/day room & board	$	2,300.00
	$	71,251.00

Geological -Linecutting

Chris Stevens		
60 days @ $300.00/day wages	$	18,000.00
60 days @ $100.00/day room & board	$	6,000.00
60 days @ $125.00/day vehicle & gas	$	7,500.00
Clayton Harris		
38.5 days @ $200.00/day wages	$	7,700.00
38.5 days @ $100.00/day room & board	$	3,850.00
Tyrell Williams		
17 days @ $150.00/day wages	$	2,550.00
17 days @ $100.00/day room & board	$	1,700.00
Gabe Larocque		
4 days @ $200.00/day wages	$	800.00
4 days @ $100.00/day room & board	$	400.00
Dennis Ross		
3 days @ $175.00/day wages	$	525.00
3 days @ $100.00/day room & board	$	300.00
	$	49,325.00

Geological - Mapping/Prospecting & Sampling		
Geocon Exploration Management Ltd. - VP of Exploration	$	32,500.00
40 days @ $100.00/day room & board	$	4,000.00
40 days @ $125.00/day vehicle & gas	$	5,000.00
	$	41,500.00
Geological - Soil Sampling		
Chris Stevens		
22 days @ $300.00/day wages	$	6,600.00
15 days @ $100.00/day room & board	$	1,500.00
15 days @ $125.00/day vehicle & gas	$	1,875.00
Andrew Harris		
15 days @ $300.00/day wages	$	4,500.00
15 days @ $100.00/day room & board	$	1,500.00
Clayton Harris		
10 days @ $175.00/day wages	$	1,750.00
10 days @ $100.00/day room & board	$	1,000.00
Tyrell Williams		
1 day @ $150.00/day wages	$	150.00
1 day @ $100.00/day room & board	$	100.00
Gabe Larocque		
10 days @ $200.00/day wages	$	2,000.00
10 days @ $100.00/day room & board	$	1,000.00
Dennis Ross		
2 days @ $175.00/day wages	$	350.00
2 days @ $100.00/day room & board	$	200.00
	$	22,525.00
Geochemical		
Assays	$	87,691.00
	$	87,691.00
Total Geological Expenditures	**$**	**858,543.08**

APPENDIX N

STATEMENTS OF QUALIFICATIONS

I, Rein Turna, of the City of West Vancouver, British Columbia, hereby certify that:

1. I am Vice President of Exploration of Barker Minerals Ltd.
2. I am a graduate of the University of British Columbia with a B.Sc. in Geological Sciences granted in 1975.
3. I am a registered member of the Professional Engineers and Geoscientists of British Columbia.
4. I have worked as a geologist in British Columbia, Saskatchewan, Ontario, Yukon and Northwest Territories in Canada since 1975.
5. I carried out or supervised work described in this report.

R. Turna, P.Geo.
February 23, 2008

I, Louis Doyle, of the City of Prince George, British Columbia, hereby certify that:

1. I am President of Barker Minerals Ltd.
2. I have 14 years experience prospecting and managing exploration projects in the Cariboo region of British Columbia.
3. I carried out or supervised work described in this report.

L. Doyle
February 23, 2008