Ground geophysical survey and prospecting report, Char property, southeastern British Columbia:

Mineral Tenures: 844018, 970524, 970529

NTS map sheet 082F 1:20,000 trim map sheets 082F007 Centered at -116°58'50"W, 49°04'43"N

Nelson Mining Division

BC Geological Survey Assessment Report 34161

By

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Claim owner: Trygve Höy

Claim operator: Integra Gold Corp. 2270-1055 W. Georgia Street, Royal Center P.O. Box 11144, Vancouver, BC V6E 3P3

March 31, 2013

Ground geophysical survey and prospecting report, Char property, southeastern British Columbia

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## Introduction

The Char property consists of 3 mineral tenures owned by T. Höy and operated by Integra Gold Corporation. The property has had some historical grass roots exploration, including geological mapping, rock and silt sampling and prospecting.

This report describes the results of a ground VLF-EM and mag survey and a prospecting and rock sampling program on the Char property done in 2012.

### Location, access and physiography.

The Char property is located 38 km west of the town of Creston along Hwy 3, 7.7 km east of the summit of the Salmo-Creston Pass (Figure 1). The property is accessed by turning south off Hwy 3 on to the first dirt road west of the avalanche gate. The road, referred to as Char Road, crosses Summit Creek before heading south along Char Creek, and enters the property after approximately 500m. A switchback trail, marked with a recreation sign indicating the way to an alpine lake, provides the best access to the central part of the property. Disturbance on the property is generally limited to the roads and tree cover is widely spaced, typical of subalpine forests.

Elevation ranges from 2020m in the west of the property to 1360m in the northeast near the confluence of Char and Summit creeks. North and south facing slopes are relatively gentle while the major east facing slope, draining into Char Creek, is much steeper approaching a 30° slope. Outcrop is in abundance on the upper slopes in the central part of the property but becomes considerably more limited on the gentle slopes.

## **Exploration History**

The earliest work conducted on the property is thought to have occurred in the 1950s after the Bayonne Mine (Minfile 082FSE030) opened although no documented evidence could be found for this period of exploration. In the 1970s a province wide regional stream silt program, sponsored by the British Columbia government, indicated anomalous gold in Char Creek. Since that silt program, only three assessment reports have been filed describing exploration work on the property.

The earliest recorded exploration work was conducted in 1991 (Hawkins, 1992) by Cominco Exploration Ltd. after the property was staked in response to the high gold concentrations in stream sediment samples from Char Creek. Exploration by Cominco consisted of closely spaced soil geochemistry sampling on both side of Char Creek, a property wide rock chip sampling program and geological mapping. Further work was recommended at that time, including additional soil geochemistry, in order to delineate anomalous trends (Hawkins, *op. cit.*)

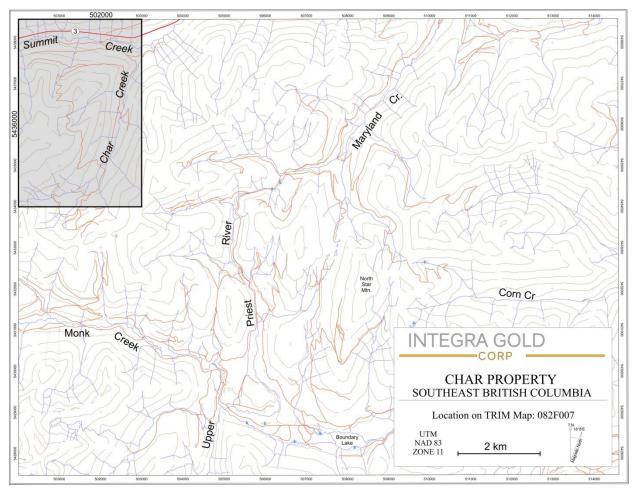


Figure 1: Location map of the Char property on TRIM map 082F007; the shaded area shows the location of Figure 2.

In 2001 further stream sampling was done to confirm the results of the earlier stream geochemical program (Rodgers, 2002). In addition, 25 rock samples were collected and assayed, and descriptions of the host rocks were noted. These descriptions included mineralization, alteration and structures with the intent of locating the source of placer gold in Char Creek. At this time, a BC Minfile occurrence was created and named Irene (BC Minfile#082FSE134); however, its recorded position is the location of a former claim post and does not represent a specific showing. The 2002 sampling discovered several anomalous gold occurrences, from quartz veins and breccias that are hosted in volcanic rocks north of the work done by Cominco.

Work in 2011, reconnaissance geological mapping and sampling, recognized two separate zones of mineralization: a copper zone associated with epidote and pyrrhotite and a quartz-carbonate-iron oxide-pyrite vein system that contains base metal values and anomalous gold (Seabrook and Höy, 2012). The 2012 program was intended to determine the extent of the vein system through a ground geophysical survey and sampling, and to search for possible related mineralized veins.

### Claims

	-		-		_
Claim No.	Туре	Туре	Owner	Good to	Area (ha)
844018	Char	Mineral	Trygve Hoy	2019/Jul/12	507.79
970529	Char E	Mineral	Trygve Hoy	2019/Jul/12	63.48
970574	Char South	Mineral	Trygve Hoy	2019/Jul/12	232.81

The Char property consists of three mineral tenures, covering an area of 804.08 ha, owned by T. Höy and operated by Integra Gold Corp. These are listed in Table 1 and shown on Fig. 2.

Table 1. Mineral tenures, Char property.

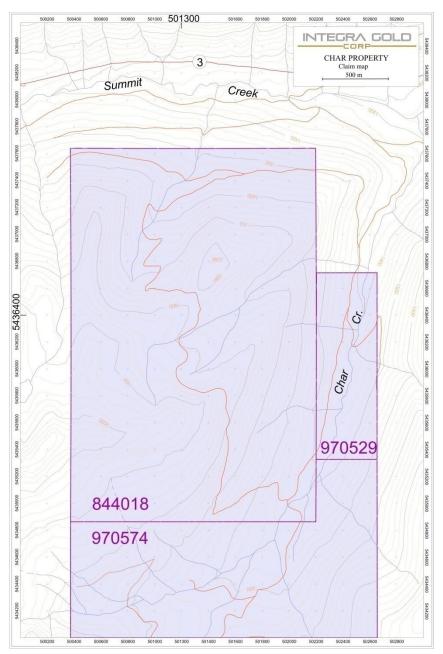


Figure 2: Location of Char property claims; see Table 1 for description of tenures.

### **Regional Geology**

The Char property is at the southern end of the Kootenay arc, an arcuate structural belt that extends southward from near Revelstoke to the United States border. The arc is characterized by highly deformed and variably metamorphosed continental margin rocks of the Kootenay terrane and, along the eastern edge at its southern end, mainly metasedimentary rocks of the Late Proterozoic Windermere and Middle Proterozoic Purcell Supergroups. The Kootenay terrane is intruded by numerous stocks and batholiths of mainly Middle Jurassic and Cretaceous ages.

The oldest rocks within the region are syn-rift turbidites of the Middle Proterozoic Aldridge Formation, conformably overlain by generally shallow water clastic and carbonate rocks of the Creston and Kitchener Formations (Figure 3). The Dutch Creek and Mount Nelson Formations, the youngest rocks of the Purcell Supergroup, include fine to coarse clastic rocks, dolomites and dolomitic siltstones. These are unconformably overlain by a Late Proterozoic polymict conglomerate, the Toby Formation, which forms the base of the Windermere Supergroup. Overlying rocks of the Windermere Supergroup in the southern part of the area, including the Char property, include a well-differentiated succession of interlayered mafic volcanics, carbonate and conglomerate of the Irene Formation, and clastic and carbonate rocks of the overlying Monk Formation. Farther north, Windermere rocks are not as well differentiated and a thick, immature mainly clastic succession, the Horsethief Creek Group, overlies the Toby Formation. These Windermere rocks grade upward into mainly quartzites a grits of the "Three Sisters Formation" or Hamill Group of Late Proterozoic to early Cambrian age.

The Toby Formation is in part a diamictite with clasts derived from the underlying Purcell Supergroup (Rice, 1956); Aalto (1971) has suggested that the formation is a tillite. Elsewhere the Toby Formation consists of well-sorted and closely packed clasts suggestive of fluvial deposition (Lis and Price, 1976). Immature clastic rocks in the overlying Horsethief Creek Group are interpreted to have been deposited in a developing structural basin to the north of an uplifted source terrain located to the south (Lis and Price, op. cit.), and similarly, quartzites of the overlying Hamill Group are interpreted to have been deposited as north prograding deltaic and fluvial deposits (Devlin and Bond, 1988). The structural break marking the transition from an uplifted southern source terrain to a depositional basin in the north, referred to as Montania in Purcell rocks to the east, trends west-southwest, approximately following the loci of young faults in the Purcell Mountains, including the St. Mary and Moyie faults, as well as dramatic facies changes in both Proterozoic and early Paleozoic rocks in the southern Kootenay Arc (Höy, 1982). This broad structural zone defines the location of the initiation of continental breakup in Late Proterozoic time, and is marked sedimentary facies changes, including the Irene volcanics and conglomeratic facies in the Char area, by intrusion of younger batholiths and stocks, and by a variety of mineral deposits that extend in a metallotect from the eastern Purcell Mountains near the Sullivan deposit to the carbonate replacement deposits in the Pend O'Reille district of northern Washington (Höy, 1982).

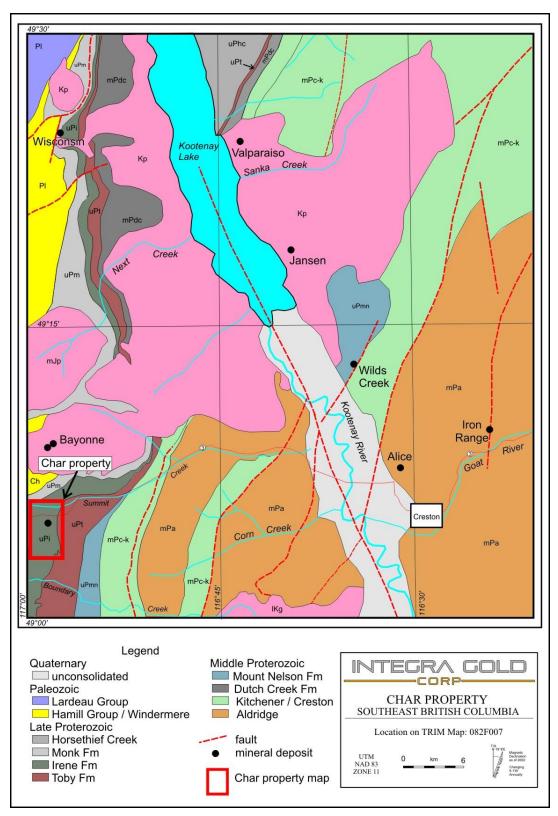


Figure 3: Regional geology map (geology after Rice, 1956; Reesor, 1993, 1996; Glover, 1978; Glombick *et al.*, 2009, 2010; Brown *et al.*, 2010a, b).

## **Property geology**

The geology of the Char property (Figure 4) is taken largely from mapping by M. Seabrook in 2011 and a compilation presented in Seabrook and Höy (2012). Additional geological observations, mainly dealing with mineralization, were made during the 2012 prospecting program and this data is also included in Figure 4.

The Char property is largely underlain by volcanic rocks of the Late Proterozoic Irene Formation. The volcanic units are intermediate in composition comprised of fine grained plagioclase and amphibole with minor coarse biotite. Regional metamorphism has altered these rocks to greenschist facies with the addition of chlorite and calcite. Along with this metamorphism is a weak foliation that is locally intensified by structures. A band of similar volcanic rocks containing rolled quartz lapilli was mapped to the east. These rocks generally strike northerly and dip steeply to the west. Bedding was not easily recognized due to cleavage and foliation, but it is likely that cleavage is roughly parallel to bedding.

A thin bed of conglomerate separates the quartz bearing volcanics in the east from the more abundant intermediate variety to the west (Figure 4). The conglomerate contains cm-size rounded to sub-rounded pebble clasts of volcanic rock and limestone in a dark, metamorphosed matrix of mainly plagioclase, chlorite and calcite.

Several thick (>10m) units of light blue, striped limestone are interbedded with the volcanics. Weathered out beds of iron rich dolomite appear sporadically within the limestone sequence but it is difficult to distinguish these dolomite beds from hydrothermal alteration within the limestone. The limestone is locally cleaved.

## Ground geophysical survey

A ground geophysical survey was done on the Char claim group in early September, 2012. The survey, a VLF-EM and magnetic survey, was an attempt to trace a mineralized shear zone, to search for conductors that could be related to unrecognized structures or mineralization, and to define more clearly lithologic units on the property. The ground survey was done by B.A. Belton and data processing by F. Moul.

The survey included 33 east-west lines spaced 50 meters apart and approximately 400 meters in length for a total survey line length of 13.2 km. Survey stations were placed 12.5 m apart and hand-held Garmin GPS readings were taken at 100 m spacing. The details of the survey are given in Appendix 5.

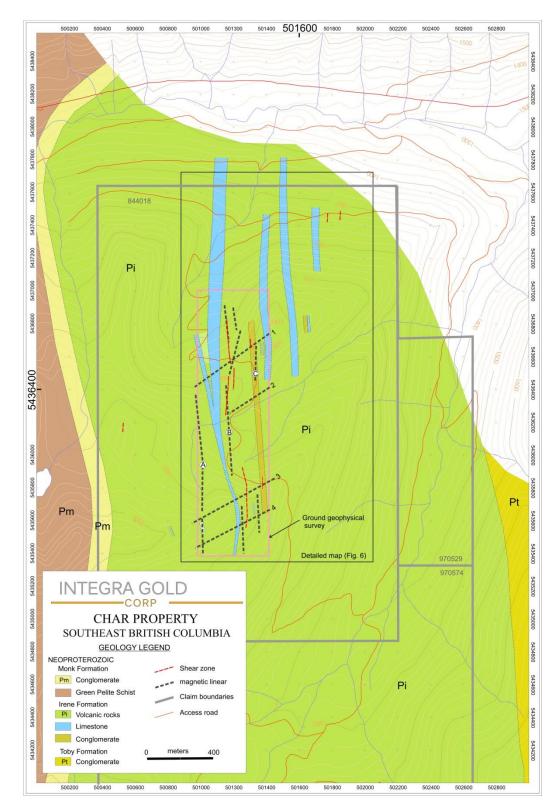


Figure 4: Geological map of the Char property, showing magnetic linears and mineralized shear zones; note claim boundaries, area of geophysical survey and location of detailed map (Figure 6).

### Interpretation

As noted by Moul (Appendix 5), there is no clear VLF-EM response in the survey area. This may be due to lack of a strong conductor, poor spatial sampling of closely spaced conductors, or poor coupling between the source and available transmitters.

Figure 5, a total magnetic intensity map, shows several prominent north-trending magnetic highs separated by lows. A comparison with known geology (Figure 5) shows that the lows correspond approximately with north-trending, steeply west-dipping limestone layers. The most western limestone layer thins to the south, accounting for the decrease in the magnetic signature to the south. The more eastern magnetic low suggests that the central limestone unit (in the east part of the geophysical grid) continues south beyond to the southern limit of the grid.

The magnetic highs define three north-trending zones, labelled A, B and C (Figure 5 and Appendix 5). As noted by Moul (Appendix 5), these appear to be related to steeply dipping, north-trending units. Underlying geology indicates that they are within mafic to intermediate volcanics and may indicate layers with higher magnetite content.

The magnetic highs also appear to be amplified and truncated along northeast trends. For example, all three north trending magnetic highs appear to be truncated, or possibly offset, by a northeast-trending zone (3) in the southern part of the grid area (Figure 5). Similarly, two northeast-trending linears (1 and 2) roughly delineate highs in the north trending linears.

The northeast trending zones are not readily explained by known geological features. However, they do parallel topographic features, including the orientation of creeks that drain northeast into Char Creek and ridges that cut across the generally northern grain of the topography. Furthermore, both Seabrook (Seabrook and Höy, 2012) and prospecting (this report) identify and describe northeast-trending veins and joints; these are particularly conspicuous in the area of the most northern transverse magnetic linear. Finally, most known mineralization is located near the intersection of the north-trending shears with these magnetic linears. It is possible that they represent a late northeast-trending structural grain, possibly faults with only minor displacement, and hence may define areas with increased permeability and mineralizing fluid flow.

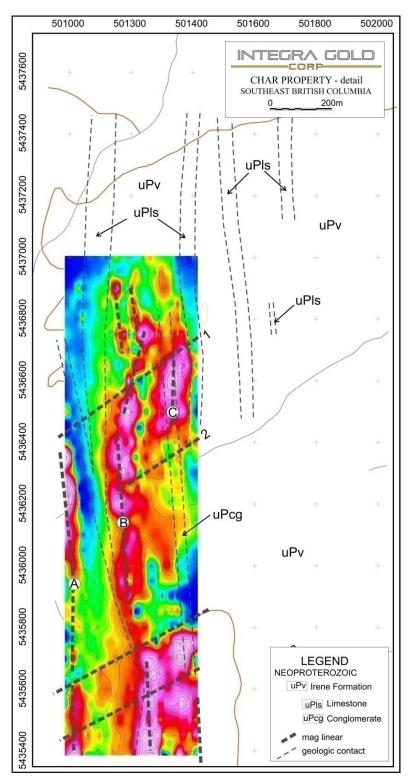


Figure 5: Total magnetic field intensity map with inferred geology (from Figure 4). See Appendix 5 for ground geophysical data.

### **Alteration and Mineralization**

Mineralization on the Char property was first discovered on a follow-up program of anomalous gold in silt samples from Char Creek. Several occurrences with elevated gold were discovered in a 2002 sampling and reconnaissance mapping program, with one sample of a 30 cm wide quartz vein breccia assaying 8772 ppb gold (Rodgers, 2002). Sampling and mapping by Seabrook in 2011 recognized several north-trending zones of quartz vein breccias containing copper mineralization and locally gold values to several hundred ppb Au (Seabrook and Höy, 2012).

The 2012 exploration program included sampling of previously recognized veins and breccias, prospecting for other mineral occurrences, and a ground VLF-EM and mag survey in an attempt to better define structures and to locate extensions of veins through overburden-covered areas.

The program covered the central part of the property, in areas of known mineralization, along ridges to the west and along the main access road on the north side of the property. Sample locations are shown in Figures 4 and 6, and those with gold values greater than 100 ppb are highlighted. The main shear zone, immediately east of the prominent limestone, was sampled in outcrop where it cut the northeast trending ridges or road cuts (Figure 6). Descriptions of all samples are given in Appendix 3 and analyses in Appendix 4.

Mineralization occurs mainly in north-trending, steeply dipping shears that contain quartzcarbonate veins with variable, but locally anomalous to high base metal and/or gold values. Several individual shear zones are recognized, largely restricted to a zone between a prominent limestone unit on the west and a conglomerate on the east. The shears have been traced, or extrapolated through areas of overburden and vegetation, for a strike length of approximately 1200 meters with individual shears having widths up to several meters.

The main shear, exposed along the access road in the southern part of the area (Figure 6), contains several steeply dipping, north-trending quartz-carbonate veins with minor sphalerite, galena, chalcopyrite and pyrite, with anomalous gold. These veins are up to several 10s of cm in thickness, and are exposed in outcrop or occurring in a number of angular boulders along the access road. Descriptions of samples are given in Appendix 3 and analyses of both subcrop boulders and outcrop samples are given in Appendix 4. These analyses indicate highly anomalous gold content with values of several hundred ppb, and with one sample (Charmk-23) returning 600 ppb Au. The sphalerite and galena content are reflected in high lead and zinc values; two float samples from the immediate area (Charmk-23 and -24) contained 4.82% Pb and 7.15% Zn, and 2.67 % Pb and 3.27 % Zn respectively, and one outcrop sample (Charmk-26), 1.34 % Pb and 3.41 % Zn.

Approximately 100 m to the east, also exposed along the road, is a parallel vein within a volcanic conglomerate. The vein is approximately 15 cm thick, trends northerly with a vertical dip, and contains quartz and carbonate with minor pyrite, galena and sphalerite. Analyses (Char-

15; Appendix 4) returned 2923 ppm Pb, 4974 ppm Zn and 201.4 ppb Au. A sample of float 20 m to the west (Charmk-19) assayed 0.86 % Pb and 2.38 % Zn, with only slightly anomalous (38.9 ppb) gold. Approximately 100 m to the west of the main shear vein, a similar north-trending quartz +/- carbonate vein assayed 226.3 ppb gold (Char 11).

The shear zones are exposed approximately 600 to 800 meters to the north where minor excavations and trenching indicate historical exploration. The intervening area is largely covered in overburden with few exposures of the shears or associated veins. However, two widely spaced samples within this area returned gold values of 129.7 ppb Au (Char 12) and 255.5 ppb Au (Char 17) (Figure 6).

In the area of historical workings (Figure 6), two parallel vein zones approximately 30 meters apart are recognized. The western vein is poorly exposed, with samples largely restricted to quartz-boulder rubble that contains minor carbonate, pyrite and limonite. Most analyzed samples were oxidized but one relatively fresh sample contained galena, sphalerite and minor chalcopyrite (Charmk-19) and assayed 0.86% Pb and 2.38 % Zn. Gold content was anomalous in these samples, ranging up to 255 ppb Au in a piece of quartz vein with limonite and pyrite (Charmk-17). Sampling of vein quartz breccia from this locality in 2002 returned a value of 8772.9 ppb Au (sample Char 16, Rodgers, 2002); this discrepancy in gold values may be the result of a nugget effect or possibly to analyses of weathered samples. The descriptions of the 2002 samples refer to "vein quartz, quartz breccia and carbonate-altered volcanic rocks that host rare galena" (Rodgers, op. cit., p.10), and specifically of the Char 16 sample, a "30 cm quartz vein".

A parallel vein zone, located approximately 30 meters to the east, comprises mainly quartz with variable carbonate, sericite, minor pyrite and limonitic alteration. The zone trends north to northeast, with steep dips. Quartz vein material, both in situ and in rubble, indicates that individual quartz veins have widths to at least 30 cm. Base metal values are low, but one sample of a thin vein (Charmk-4, Appendix 3) assayed 491.6 ppb Au.

Reconnaissance prospecting along the ridge approximately 600 m west of the main shears discovered some thin quartz veins in mafic volcanics associated with epidote alteration and disseminated pyrite and chalcopyrite. A sample (Char-9) contained 7353 ppm Cu and 1031 ppb gold. As well, several quartz veins, mainly exposed as rubble, were discovered on the access road approximately 1 km northeast of the historical workings and these as well were anomalous in gold, with two samples (Charmk-42 and 44) assaying 404.1 ppb Au and 151.7 ppb Au. These widely scattered occurrences suggest that further reconnaissance exploration is warranted.

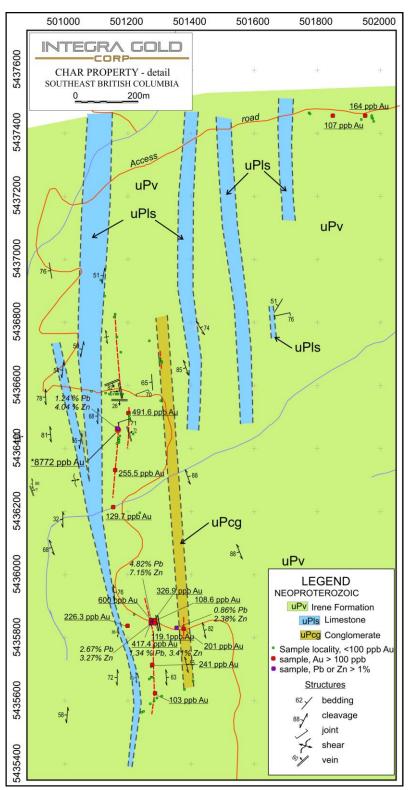


Figure 6: Geological map of the central part of the Char claims showing 2012 sample locations and gold, lead and zinc values of selected samples; note also location of 2002 sample\*, and location of shear zones (dashed red). Sample locations and descriptions in Appendix 3, analyses in Appendix 4.

### **Summary and Recommendations**

Recognized veins on the Char property are in north-trending shear zones within mafic volcanics of the Irene Formation. The main shear zone is traced or extrapolated through a strike length of approximately 1200 m, and comprises several shears, several 10s of meters apart. Individual quartz veins within these shear zones have variable thickness, but are commonly up to several 10s of cm to a meter in width, comprising mainly quartz with carbonate and sericite, minor chlorite and pyrite, and variable but generally low galena and sphalerite content. A number of selected samples returned assays of several percent lead and zinc and gold content is anomalous, generally less than a gram, although one sample collected in 2002 contained 8773 g/T Au. Vein thickness and metal content appears to be enhanced where the north-trending shears intersect prominent southwest-trending structural zones, marked by dykes, some shearing and prominent ground magnetic trends.

Reconnaissance mapping in 2011 (Seabrook and Höy, 2012) and prospecting (this report) discovered several new quartz vein occurrences that contain anomalous gold values and base metal content. Breccia zones in the volcanics, associated with wide alteration zones and minor copper mineralization were also discovered.

### Recommendations

Follow up work is recommended:

- Additional prospecting, covering a larger part of the claim group, and also concentrating along strike of the main zone to the south, towards the mineral occurrences, Motherlode (BC Minfile 082FSE080) and Copper Queen (082FSE053), that occur approximately 1.5 km south of the Char claim boundary
- Prospecting and sampling to determine the extent and metal concentrations in the two new vein discoveries
- Geological mapping, specifically detailed mapping in the areas of known mineralization and historical workings, and more regional mapping to better determine structural and lithological controls of mineralization
- Soil geochemical survey, covering the approximate area of the 2012 ground geophysical survey
- Trenching, in the area of historical exploration, and in the largely overburden covered area between the north and south exposures of the main vein

## Acknowledgements

Prospecting and sampling were done by M. Kennedy and S. Kennedy, the ground geophysical survey by BA Belton, assisted in the field by D. Henderson, and interpretation and preparation of maps for the geophysical survey, by F. Moul. Their help is much appreciated.

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Field geology:	
T. Hoy: 1 day @ \$600	600.00
Vehicle: 1 day @ \$150	150.00
Prospecting:	
S. Kennedy: 4 days @ \$350	1400.00
M. Kennedy: 4 days @ \$350	1400.00
Vehicle rental: 4 days @ \$150.00	600.00
Analyses: 79 samples	2517.13
Geophysical Survey:	
B.A. Belton: ground survey: 10.5 days @ \$400	4200.00
D. Henderson, assistant: 10 days @ \$250	2500.00
Vehicle rental 10 days @ \$150	1500.00
Accommodation/meals	630.00
Supplies (flagging, marking pens)	49.14
F. Moul: report and maps:	719.00
Report preparation:	
T. Hoy: 7.5 days @ \$600	4500.00
Base map preparation:	225.00
Subtotal:	\$20,990.27
Administration (10%):	
Total	\$23,089.27

# **Appendix 1: Statement of Costs**

## Appendix 2a: Statement of Qualifications: (Trygve Höy)

I, Trygve Höy, PhD., P. Eng. do hereby certify that:

1. I attained the degree of Doctor of Philosophy (PhD) in geology from Queens University, Kingston, Ontario in 1974.

2. I have an MSc. in Geology from Carleton University, Ottawa, Ontario (1970), and a BSc. in Geology from the University of British Columbia (1968).

3. I am a member of the Association of Professional Engineers and Geoscientists of BC. and a member of the Society of Economic Geologists.

4. I have worked as a geologist for a total of 38 years since my graduation from university, 27 years as a project geologist with the B.C. Geological Survey Branch and 11 years as an independent consulting geologist.

5. I acted as British Columbia exploration manager for Integra Gold Corp. during this program and have visited the property several times, most recently in September, 2012.

6. I am the author of this report entitled: *Ground geophysical survey and prospecting report, Char property, southeastern British Columbia* dated March 31st, 2013.

Trygve Höy, P.Eng.

## Appendix 2b: Statement of Qualifications: (BA Belton)

I, B.A. Belton, certify that:

- 1. I attained a Bachelor of Arts, with a major in Geography, from the University.....etc
- 2. I presently reside at 2550 Paul Street, Rossland, B.C.
- 3. I have been actively engaged in mineral exploration throughout BC, Yukon, Northwest Territories and Nunavut for the past 10 years.
- 4. I have been employed as a field ground geophysical surveyor by several junior mineral exploration companies.
- 5. I conducted the ground geophysical survey on the Char property for 10 days in September, 2012.

I and my co-authors, Trygve Höy and S. Kennedy, are responsible for the preparation of this report, entitled **"Ground geophysical survey and prospecting report, southeastern British Columbia"**, dated March 31, 2013.

Dated this 31st day of March, 2013

B.A. Belton

BA Belton

## Appendix 2c: Statement of Qualifications: (Sean Kennedy)

I, Sean Kennedy, certify that:

- 6. I am an independent prospector residing at 107-6<sup>th</sup> Ave, Kimberley, BC.
- 7. I have been actively prospecting throughout BC, Nevada, Mexico, and Arizona for the past 15 years.
- 8. I have been employed as a professional prospector by junior mineral exploration companies.
- 9. I own and maintain mineral claims in BC.
- 10. I worked on the Char property, prospecting and collecting samples, for 4 days in September, 2012.

I and my co-authors, BA Belton and Trygve Höy, are responsible for the preparation of this report entitled, entitled **"Ground geophysical survey and prospecting report, southeastern British Columbia",** dated March 31, 2013.

Dated this 31st day of March, 2013

Sean Kennedy

Sean Kennedy

## Appendix 3: List of analyzed samples, locations and descriptions

Notes:

- All samples collected by Sean Kennedy (Char series) or Michael Kennedy (Charmk series) in 2012.
- Gold analyses taken from Appendix 4; Appendix 4 also shows complete analyses
- Location of samples with anomalous gold values are plotted in Figure 6.
- All samples are selected grab samples, from outcrop, subcrop or float, as noted.

### • Abbreviations used:

se - sericite	lim - limonite	hem – hematite alt –
pbs – galena	cpy – chalcopyrite	
py- pyrite	qz – quartz	carb – carbonate
se – sericite	zn – sphalerite	chl - chlorite
F – float	sc – sub crop	oc – outcrop
m – meter	diss – disseminated	bx - boxwork

Sample ID	UTM E	UTM N	Au (ppb)	Notes
Charmk-1	501303	5436552		1 piece of qz float with py, lim.
Charmk-2	501206	5436515		140 degree trend qz blowout to 20 cm with py, chlorite, lim and seussite
Charmk-3	501204	5436514		2 foot piece qz with hem stain, lim py, and se.
Charmk-4	501203	5436513	492	160 degree trend 1 inch qz vein with py, lim, and se.
Charmk-5	501204	5436506		180 degree trending 8 inch qz carbonate vein with py, lim, and se.
Charmk-6	501206	5436498		3 pieces of float qz with lim, py, and se.
Charmk-7	501205	5436489		2,1 feet pieces of qz float with lim, py and se.
Charmk-8	501168	5436466		2 inch qz subcrop vein with lots of carbonate and py.
Charmk-9	501164	5436468		Rubble, subcrop of qz with rare pbs, py, se.
Charmk-10	501216	5436446		qz rubble subcrop up to 5 inch pieces of qz with boxworks of lim.
Charmk-11	501174	5436440		Subcrop 6 inch piece of qz with py, lim.
Charmk-12	501173	5436433		2 feet pieces of qz with py and lim.
Charmk-13	501173	5436431		Subcrop of big 2 feet pieces of qz with carbonate and se.
Charmk-14	501173	5436425		Subcrop of big 2 feet pieces of qz with carbonate and se.
Charmk-15	501172	5436421		Subcrop of big 2 feet pieces of qz with carbonate and se.
Charmk-16	501165	5436418		Subcrop of big 2 feet pieces of qz with carbonate and se.
Charmk-17	501160	5436333	255	1 feet piece of qz with lim, py.
Charmk-18	501237	5436195		1 big piece of float with py, lim, se.
Charmk-19	501356	5435830		F qz carbonate on edge of road with py, lim, pbs, and cpy.
Charmk-20	501270	5435850		1 feet piece of qz with lim, py.
Charmk-21	501273	5435853		2 feet qz carbonate float with rare pbs, py.
Charmk-22	501270	5435854		1 feet piece of qz with lim, py.
Charmk-23	501273	5435856	600	1 piece float qz carbonate with pbs, zn, py, cpy
Charmk-24	501273	5435850	417	2 piece float qz carbonate with pbs, zn, py, cpy
Charmk-25	501287	5435849		180 degree trend 1 metre qz vein with poddy py, lim.
Charmk-26	501285	5435845	119	180 degree contact on qz vein with pbs and zn.
Charmk-27	501408	5435663		Epidote py fractures in volcanics
Charmk-28	501381	5435634		1 foot qz vein with lim, py, trending 180 degrees.
Charmk-29	501306	5435614		small pieces of qz float with py and lim.
Charmk-30	501292	5435609		qz float with py and lim.
Charmk-31	501284	5435599		180 degree trending qz veins 1 to 4 inches with py and lim.
Charmk-32	501282	5435599		180 subcrop veins with lim and py.
Charmk-33	501270	5435588		2 feet qz vein blowout with py, lim trending 180 degrees.

Sample ID	UTM E UTM N	Au (ppb)	Notes
Charmk-34	501250 5435566		qz vein chips with lim.
Charmk-35	501243 5435561		qz vein chips with lim.
Charmk-36	501275 5435708		190 degree trending qz vein with py, lim.
Charmk-37	501277 5435714	241	180 degree trending qz vein with py, lim.
Charmk-38	501956 5437460		qz float with py, lim.
Charmk-39	501977 5437450		qz float with py, lim.
Charmk-40	501975 5437454		3 pieces of float with py, lim, and se.
Charmk-41	501981 5437441		2 feet qz pieces of lim and py.
Charmk-42	501850 5437460	107	3 feet piece of qz with poddy lim and py.
Charmk-43	501776 5437468		qz float with py and lim.
Charmk-44	501779 5437465		qz float with py and lim.
Charmk-45	501113 5436936		qz float with py and lim.
Charmk-46	501127 5436884		Small qz veins with py,lim.
Charmk-47	501157 5436818		Float qz carbonate vein with py,lim
Charmk-48	501268 5436743		abundant qz float with py and lim.
Charmk-49	501300 5436686		2 metre qz vein with lim and py pods.
Charmk-50	501300 5436686		Same zone as above with Float with boxworks and py.
Charmk-51	501300 5436685		qz float with lim py.
Charmk-52	501301 5436682		1 metre sc with py and lim.
Charmk-53	501306 5436677		1 metre outcrop qz with py, lim.
Charmk-54	501306 5436673		qz vein float with py and lim.
Char-1	501181 5436570		Carbonate alt. mafic volcanics, anastomizing qz veins/sweats, rusty qz
			veins with sericite, goethite boxworks, Fe carbonate, Mn, 6 cm wide
Char-2	501183 5436575		Same as last, veins are 340-350 and steep to vertically dipping, other veins are whiter with carb punk and chlorite, some thin cross-cutting E-W qz veins
Char-3	501168 5436574		Same as last, old pit, some grey se, hem stain, qz vein is up to 20 cm, vein is 350/84
Char-4	501169 5436574		Same as last, old pit, some grey se, hematite stain, qz vein is up to 20 cm, vein is 350/85
Char-5	501162 5436575		Same as last, qz vein subcrop, more hematitic stain
Char-6	501141 5436574		Carb altered zone in mafic volcanics, roughly 4 m wide, some qz veins with chl,
			select grab of more py rich qz veins similar to last
Char-7	501128 5436576		Same as last, continuation of last carbonate altered zone
Char-8	501083 5436584		Limestone/dolomite band, dolomitization with PbS stringers and pods

Sample ID	UTM E UTM	1N Au (p	pb) Notes
Char-9	500526 5430	6165 103	1 Thin qz veins with epidote at 350/90, some Cpy in mafic volcanics, some Po/Cpy
			blebs disseminate in epidote altered volcanics
Char-10	501219 543	5874	Rusty sericite and pyrite ric qz vein float in skid trail, up to 20 cm wide, carbonate
Char-11	501200 543	5838 226	5 Same as last, good boxworks, zone is outcropping, carb alteration in mafic volcanics
Char-12	501153 5436	6215 130	Carb altered zone with thin qz veins with py, chl, Cpy, veins are 320/60, sericite, carb
Char-13	501283 543	5854 324	30 cm wide qz vein boulder, rusty, sericite, pyrite rich, lots of boxworks
Char-14	501285 543	5856 108	3 Same as last
Char-15	501377 543	5827 202	1 360/90 qz vein with carbonate, pyrite, grey sericite, PbS/ZnS, vein is more of a bullish white qz vein, 15 cm wide, locally alters volcanic conglomerate host
Char-16	501277 543	5674	Rusty qz vein subcrop, sericite, goethite, hematite boxworks in carbonate altered mafic volcanics
Char-17	501273 543	5673	Same as last, vein is up to 20 cm wide
Char-18	501269 543	5669	Same as last, hematite stain
Char-19	501286 543	5622 103	3 qz vein swarm in carb altered mafic volcanics, zone is > 5 m wide with qz veins up to 1 m wide occurring where E-W veins intersect N-S veins; vein density not strong, veins are similar to last
Char-20	501976 543	7459	Milky orange bull qz float, carbonate altered mafic volcanic float. qz vein up to 10 cm wide, sericite, goethite, pyrite, mineralization is developed along fractures, carbonate punk
Char-21	501953 543	7460 165	5 Same as last
Char-22	501941 543	7448	Same as last, vein is 20-30 cm wide, Fe-oxide rich fractures at 90 degrees to the vein orientation
Char-23	501159 5430	6827	qz-carbonate vein system >5 m wide, developed sub parallel to bedding at limestone-mafic
			volcanic (to the east) contact, some pyrite, north-south trend, rare Cpy, qz is crystalline and sugary
Char-24	501165 5436	6755	Pyrite rich qz float/subcrop, sericite, carbonate, in carbonate altered volcanics.
Char-25	501179 5430	6707	Same as last, outcropping, anastomizing veins over 1.5 meters.
abbreviatio	ns: qz - d	quartz; py -	pyrite; lim- limonite; hem - hematitie; pbs - galena; cpy - chalcopyrite; zn- sphalerite;
	F - fl	oat·sc - sub	crop: m - meter: cm - centimeter: alt - alteration: se - sericite: carb - carbonate: chl - chlorite

F - float; sc - subcrop; m - meter; cm - centimeter; alt - alteration; se - sericite; carb - carbonate; chl - chlorite po - pyrrhotite;

## **Appendix 4: Analyses of samples**

• See Appendix 3 for description and location of samples



CERTIFICATE OF ANALYSIS

Client:

Integra Gold Corporation 202 - 200 Granville Square Vancouver BC V6C 1S4 Canada

Submitted By:	John deJong
Receiving Lab:	Canada-Vancouver
Received:	September 20, 2012
Report Date:	October 23, 2012
Page:	1 of 4

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### VAN12004446.1

#### **CLIENT JOB INFORMATION**

Project:	Char
Shipment ID:	
P.O. Number	
Number of Samples:	79

#### SAMPLE DISPOSAL

DISP-PLP	Dispose of Pulp After 90 days
DISP-RJT	Dispose of Reject After 90 days

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

oice To:	Integra Gold Corporation
	202 - 200 Granville Square
	Vancouver BC V6C 1S4
	Canada

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### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	79	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1DX3	79	1:1:1 Aqua Regia digestion ICP-MS analysis	30	Completed	VAN
7AR	5	1:1:1 Aqua Regia Digestion ICP-ES Finish	0.4	Completed	VAN

### ADDITIONAL COMMENTS



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

Page:

### Integra Gold Corporation

202 - 200 Granville Square

Vancouver BC V6C 1S4 Canada

Project: Char

Report Date:

October 23, 2012

2 of 4

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Acme Analytical Laboratories (Vancouver) Ltd.

Part: 1 of 1

VAN12004446.1

## CERTIFICATE OF ANALYSIS

	Method	WGHT	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
	Analyte	Wgt	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	v	Ca	Р
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
G1	Prep Blank	<0.01	0.2	1.9	2.7	51	<0.1	3.9	4.6	604	1.97	<0.5	3.0	5.5	55	<0.1	<0.1	<0.1	36	0.50	0.076
G1	Prep Blank	<0.01	0.1	2.2	3.9	54	<0.1	3.9	4.7	643	2.07	<0.5	1.3	5.4	62	<0.1	<0.1	<0.1	37	0.51	0.081
CHAR-1	Rock	0.65	0.3	2.3	15.3	52	<0.1	1.9	2.7	492	2.85	25.5	4.9	<0.1	<1	0.3	<0.1	<0.1	2	0.03	0.024
CHAR-2	Rock	0.62	0.2	14.8	5.6	12	<0.1	8.9	14.9	220	2.62	65.7	27.0	<0.1	3	<0.1	0.1	0.1	2	0.03	0.022
CHAR-3	Rock	0.88	0.2	2.6	2.3	6	<0.1	3.3	4.3	118	1.42	29.9	23.3	<0.1	2	<0.1	<0.1	0.2	3	0.03	0.026
CHAR-4	Rock	0.66	0.3	4.6	3.9	9	<0.1	1.3	1.2	115	1.24	20.0	8.1	<0.1	1	<0.1	<0.1	<0.1	<2	0.02	0.014
CHAR-5	Rock	0.64	0.2	2.1	6.8	6	<0.1	0.9	1.4	149	0.87	17.7	1.8	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	0.008
CHAR-6	Rock	0.55	0.6	8.2	1.6	11	<0.1	7.1	12.8	300	2.64	40.3	4.5	<0.1	<1	<0.1	<0.1	<0.1	2	<0.01	0.010
CHAR-7	Rock	0.63	0.4	8.8	3.7	12	<0.1	4.7	9.1	237	1.86	16.5	2.7	<0.1	3	<0.1	0.2	0.2	3	0.07	0.035
CHAR-8	Rock	1.06	0.6	146.0	>10000	>10000	26.4	0.5	3.9	464	0.73	<0.5	6.6	<0.1	409	255.6	26.8	0.2	<2	22.15	0.019
CHAR-9	Rock	0.73	0.2	7353	23.7	117	5.1	18.1	17.8	595	4.10	<0.5	1031	0.2	16	2.1	0.3	0.1	61	0.67	0.062
CHAR-10	Rock	0.51	0.5	23.6	3.7	19	<0.1	6.2	10.8	584	2.85	34.3	43.8	0.2	12	0.1	0.1	<0.1	4	0.11	0.091
CHAR-11	Rock	0.56	0.3	649.2	7.0	49	7.5	12.2	13.4	113	4.65	47.6	226.3	<0.1	<1	0.3	<0.1	0.2	<2	<0.01	0.031
CHAR-12	Rock	0.85	0.5	7957	20.9	60	8.3	7.0	5.1	426	2.48	<0.5	129.7	<0.1	44	1.6	<0.1	0.2	3	1.42	0.124
CHAR-13	Rock	0.95	4.8	52.6	288.2	129	1.3	26.8	60.7	701	17.82	731.5	326.9	<0.1	1	1.0	0.6	2.8	7	0.02	0.022
CHAR-14	Rock	0.69	4.3	14.3	291.0	71	0.8	17.3	39.9	571	11.36	461.1	108.6	<0.1	1	0.4	0.6	1.1	7	0.01	0.012
CHAR-15	Rock	0.95	0.2	53.1	2923	4974	3.1	4.0	15.3	389	3.52	59.8	201.4	<0.1	10	31.0	0.6	0.3	24	0.28	0.024
CHAR-16	Rock	0.70	0.2	7.7	19.7	39	<0.1	8.4	12.3	93	1.74	19.1	12.9	<0.1	<1	0.2	<0.1	<0.1	2	0.01	0.012
CHAR-17	Rock	0.98	0.3	63.7	6.5	22	0.2	12.7	18.6	162	3.03	37.9	14.4	<0.1	1	<0.1	0.1	0.1	5	0.01	0.018
CHAR-18	Rock	1.02	0.3	8.8	3.8	17	<0.1	6.9	7.4	238	4.23	41.0	2.2	<0.1	2	<0.1	<0.1	<0.1	8	<0.01	0.025
CHAR-19	Rock	0.70	1.9	334.8	7.1	50	1.1	34.3	43.6	518	11.93	208.8	103.2	0.5	17	0.2	0.3	1.0	19	0.02	0.160
CHAR-20	Rock	0.53	0.8	3.9	6.0	5	<0.1	16.8	55.4	49	2.22	89.2	7.8	0.2	1	<0.1	0.1	0.5	15	0.02	0.009
CHAR-21	Rock	0.88	5.2	14.3	48.4	51	0.6	42.9	41.9	936	15.00	482.8	165.3	<0.1	3	<0.1	0.3	1.0	108	0.02	0.032
CHAR-22	Rock	0.89	2.6	4.6	29.4	11	0.3	18.8	69.6	41	4.65	67.7	24.8	<0.1	<1	<0.1	0.4	1.8	21	<0.01	0.008
CHAR-23	Rock	0.87	0.9	8.0	2.6	15	<0.1	11.0	15.9	342	7.71	129.9	86.9	0.1	6	<0.1	0.1	0.5	8	<0.01	0.037
CHAR-24	Rock	0.80	0.2	4.6	1.6	10	<0.1	2.9	3.4	292	1.55	16.7	10.0	<0.1	3	0.1	<0.1	<0.1	<2	0.03	0.024
CHAR-25	Rock	1.00	0.1	4.1	1.1	5	<0.1	2.5	2.1	132	1.59	29.3	7.3	<0.1	<1	<0.1	<0.1	<0.1	<2	0.01	0.006
CHARMK-1	Rock	0.55	1.5	4.7	3.5	26	<0.1	6.2	4.4	249	4.33	57.5	18.2	0.9	10	<0.1	0.1	0.2	8	0.15	0.188
CHARMK-2	Rock	0.38	0.2	6.0	1.5	13	<0.1	2.7	4.2	281	1.47	1.4	3.2	<0.1	2	<0.1	<0.1	<0.1	4	0.03	0.017
CHARMK-3	Rock	0.47	0.1	1.4	0.3	3	<0.1	0.7	0.4	28	0.41	2.6	2.7	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	0.002

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



Project:

Page:

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Char Report Date:

October 23, 2012

2 of 4

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Part: 2 of 1

VAN12004446.1

		1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	7AR	7AR
	Analyte	La	Cr	Mg	Ва	Ti	в	AI	Na	к	w	Hg	Sc	ті	S	Ga	Se	Те	Pb	Zn
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.01	0.01
G1	Prep Blank	10	9	0.61	237	0.132	2	1.11	0.121	0.56	<0.1	<0.01	2.6	0.4	<0.05	6	<0.5	<0.2		
G1	Prep Blank	10	9	0.62	242	0.133	1	1.13	0.136	0.58	<0.1	<0.01	2.9	0.4	<0.05	6	<0.5	<0.2		
CHAR-1	Rock	<1	3	0.01	8	<0.001	2	0.05	0.004	0.01	<0.1	<0.01	1.8	<0.1	<0.05	<1	<0.5	<0.2		
CHAR-2	Rock	<1	2	0.01	9	<0.001	1	0.05	0.004	0.03	<0.1	<0.01	0.7	<0.1	0.82	<1	<0.5	<0.2		
CHAR-3	Rock	<1	3	<0.01	13	<0.001	<1	0.05	0.005	0.04	<0.1	<0.01	0.7	<0.1	0.07	<1	<0.5	<0.2		
CHAR-4	Rock	<1	3	<0.01	5	<0.001	1	0.01	0.003	0.01	<0.1	<0.01	0.3	<0.1	<0.05	<1	<0.5	<0.2		
CHAR-5	Rock	<1	3	<0.01	6	<0.001	<1	0.03	0.002	0.02	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
CHAR-6	Rock	<1	2	<0.01	7	<0.001	<1	0.05	0.005	0.02	<0.1	<0.01	1.2	<0.1	1.03	<1	<0.5	<0.2		
CHAR-7	Rock	<1	3	0.02	8	0.001	<1	0.06	0.004	0.02	<0.1	<0.01	1.0	<0.1	0.28	<1	<0.5	<0.2		
CHAR-8	Rock	3	<1	7.06	3	<0.001	<1	0.03	<0.001	<0.01	<0.1	0.27	1.3	<0.1	0.08	<1	<0.5	<0.2	1.24	4.04
CHAR-9	Rock	2	30	0.59	35	0.130	<1	0.96	0.065	0.03	<0.1	<0.01	3.9	<0.1	0.46	4	11.3	0.4		
CHAR-10	Rock	2	3	0.02	23	0.001	<1	0.12	0.009	0.06	<0.1	<0.01	1.5	<0.1	0.37	<1	<0.5	<0.2		
CHAR-11	Rock	<1	3	<0.01	3	<0.001	1	0.02	0.004	0.01	<0.1	<0.01	0.8	<0.1	1.50	<1	1.2	<0.2		
CHAR-12	Rock	<1	3	0.05	12	0.004	<1	0.05	0.006	0.04	<0.1	0.01	1.9	<0.1	0.50	<1	2.2	<0.2		
CHAR-13	Rock	1	3	0.05	8	<0.001	<1	0.18	0.006	0.03	<0.1	0.01	5.9	<0.1	0.38	<1	1.9	1.0		
CHAR-14	Rock	<1	1	0.04	6	<0.001	<1	0.09	0.008	0.03	<0.1	<0.01	4.8	<0.1	0.20	<1	1.1	0.4		
CHAR-15	Rock	<1	1	0.03	20	<0.001	2	0.15	0.016	0.18	<0.1	0.39	0.8	<0.1	2.40	<1	<0.5	<0.2		
CHAR-16	Rock	<1	2	<0.01	9	<0.001	<1	0.05	0.003	0.03	<0.1	<0.01	0.6	<0.1	0.33	<1	0.6	<0.2		
CHAR-17	Rock	<1	2	0.02	9	<0.001	<1	0.11	0.011	0.06	<0.1	<0.01	1.1	<0.1	0.52	<1	1.2	<0.2		
CHAR-18	Rock	<1	1	0.02	22	<0.001	<1	0.13	0.005	0.11	<0.1	<0.01	1.9	<0.1	0.14	<1	0.6	<0.2		
CHAR-19	Rock	4	4	0.04	27	0.004	<1	0.23	0.011	0.14	0.2	<0.01	4.4	<0.1	0.49	1	7.0	<0.2		
CHAR-20	Rock	2	2	<0.01	11	<0.001	1	0.06	0.003	0.04	<0.1	<0.01	0.8	<0.1	<0.05	<1	<0.5	<0.2		
CHAR-21	Rock	<1	3	0.04	8	<0.001	<1	0.05	0.003	0.02	<0.1	<0.01	5.2	<0.1	<0.05	1	<0.5	<0.2		
CHAR-22	Rock	<1	3	0.01	5	<0.001	<1	0.04	0.003	0.02	<0.1	<0.01	0.9	<0.1	<0.05	<1	<0.5	<0.2		
CHAR-23	Rock	<1	1	0.03	22	0.003	<1	0.07	0.008	0.10	<0.1	<0.01	1.5	<0.1	2.32	<1	0.8	<0.2		
CHAR-24	Rock	<1	2	<0.01	8	<0.001	1	0.05	0.010	0.01	<0.1	<0.01	1.2	<0.1	0.11	<1	<0.5	<0.2		
CHAR-25	Rock	<1	1	<0.01	4	<0.001	<1	0.01	0.003	0.01	<0.1	<0.01	0.4	<0.1	0.56	<1	<0.5	<0.2		
CHARMK-1	Rock	7	2	0.02	29	0.004	2	0.16	0.007	0.12	<0.1	<0.01	3.3	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-2	Rock	2	2	0.04	13	0.008	<1	0.11	0.005	0.04	<0.1	<0.01	1.0	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-3	Rock	<1	<1	<0.01	2	<0.001	<1	<0.01	0.003	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		

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CERTIFICATE OF ANALYSIS

Page:

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Project: Char

Report Date: October 23, 2012

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Part: 1 of 1

VAN12004446.1

## CERTIFICATE OF ANALYSIS

	Method	WGHT	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
	Analyte	Wgt	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	v	Ca	Р
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
CHARMK-4 Rock		0.31	0.4	99.8	3.9	17	0.2	5.2	9.2	744	2.36	1.6	491.6	0.3	180	0.1	<0.1	<0.1	7	2.87	0.080
CHARMK-5 Rock		0.49	0.4	2.1	0.8	11	<0.1	1.1	0.8	294	1.01	0.7	2.9	<0.1	1	<0.1	<0.1	<0.1	<2	<0.01	0.009
CHARMK-6 Rock		0.41	0.3	1.7	1.1	8	<0.1	1.6	2.5	132	2.54	41.3	5.4	<0.1	1	<0.1	<0.1	<0.1	3	0.01	0.014
CHARMK-7 Rock		0.87	0.8	11.4	1.5	11	<0.1	2.9	5.4	216	1.05	5.5	1.9	0.1	11	<0.1	<0.1	<0.1	<2	0.34	0.034
CHARMK-8 Rock		0.40	0.3	10.0	9.0	14	0.1	58.7	74.5	358	10.75	222.3	94.2	<0.1	11	<0.1	0.3	0.4	4	0.16	0.073
CHARMK-9 Rock		0.65	0.3	9.6	635.9	275	0.8	2.5	4.2	227	1.26	2.9	4.1	<0.1	1	0.8	0.4	<0.1	3	0.02	0.011
CHARMK-10 Rock		0.60	0.7	4.2	7.8	20	<0.1	3.2	3.8	217	2.08	23.9	17.3	<0.1	<1	<0.1	<0.1	0.1	3	0.01	0.016
CHARMK-11 Rock		0.51	0.2	3.1	4.1	10	<0.1	5.2	7.5	77	1.97	32.7	16.9	<0.1	4	<0.1	<0.1	<0.1	<2	0.02	0.029
CHARMK-12 Rock		0.67	0.5	3.0	6.2	15	<0.1	3.7	4.5	291	2.40	21.7	13.3	0.4	4	<0.1	<0.1	<0.1	5	0.03	0.080
CHARMK-13 Rock		0.43	0.2	3.2	1.5	5	<0.1	2.6	3.5	50	0.98	11.4	21.5	<0.1	1	<0.1	<0.1	<0.1	<2	0.01	0.016
CHARMK-14 Rock		0.62	0.4	7.9	4.5	14	<0.1	7.1	9.3	242	2.53	25.7	9.4	<0.1	1	<0.1	<0.1	<0.1	<2	0.02	0.023
CHARMK-15 Rock		0.74	0.2	2.3	1.1	8	<0.1	5.4	7.0	203	2.11	20.2	17.7	<0.1	1	<0.1	<0.1	<0.1	<2	0.01	0.022
CHARMK-16 Rock		0.59	1.0	7.8	5.9	42	<0.1	21.8	30.8	1491	7.32	64.0	78.4	0.4	25	0.2	<0.1	0.1	13	2.19	0.247
CHARMK-17 Rock		0.45	0.6	130.0	7.5	25	4.3	18.2	14.4	45	3.65	127.1	255.4	<0.1	3	<0.1	1.3	0.2	<2	<0.01	0.016
CHARMK-18 Rock		0.73	0.9	24.8	10.5	55	0.1	16.2	17.7	1072	4.50	18.1	25.3	0.3	100	0.2	<0.1	<0.1	13	2.73	0.189
CHARMK-19 Rock		0.38	0.1	157.7	8050	>10000	8.8	5.1	14.0	492	3.00	2.1	38.9	0.2	128	145.0	2.6	0.4	50	2.51	0.035
CHARMK-20 Rock		0.90	0.2	2.9	35.2	45	0.1	10.5	18.9	142	3.96	101.1	11.8	<0.1	<1	0.2	<0.1	0.1	<2	0.01	0.011
CHARMK-21 Rock		0.61	<0.1	12.2	52.1	72	<0.1	9.2	10.3	1785	3.45	17.1	4.2	<0.1	945	1.1	0.1	<0.1	6	19.96	<0.001
CHARMK-22 Rock		0.45	0.2	3.2	16.4	18	<0.1	12.8	31.4	590	3.29	85.0	3.3	<0.1	161	0.3	<0.1	<0.1	<2	4.27	0.006
CHARMK-23 Rock		0.38	8.7	298.0	>10000	>10000	87.1	17.3	32.6	2972	9.45	33.0	600.4	0.1	97	567.8	55.4	0.3	6	3.93	0.178
CHARMK-24 Rock		0.47	21.1	362.9	>10000	>10000	45.5	19.1	29.6	3300	10.63	34.9	417.4	0.4	213	238.7	26.9	0.2	12	9.86	0.324
CHARMK-25 Rock		0.63	0.3	5.5	154.2	184	0.5	33.8	35.2	1191	6.60	129.4	31.7	<0.1	89	1.0	0.4	0.2	5	3.35	0.027
CHARMK-26 Rock		0.28	0.2	33.8	>10000	>10000	23.5	14.5	20.6	3194	6.25	42.2	119.1	<0.1	562	209.6	10.9	0.2	4	15.76	0.036
CHARMK-27 Rock		0.40	<0.1	9.8	27.6	81	<0.1	6.4	11.8	1578	5.03	1.4	<0.5	0.2	282	0.4	0.4	<0.1	159	5.86	0.379
CHARMK-28 Rock		0.32	<0.1	2.1	45.0	80	<0.1	0.7	0.4	66	0.35	<0.5	1.5	<0.1	<1	0.5	0.1	<0.1	<2	0.06	0.001
CHARMK-29 Rock		0.37	0.8	6.4	10.3	31	<0.1	7.5	27.1	217	10.05	282.4	18.5	0.4	12	0.1	0.2	0.4	6	0.06	0.168
CHARMK-30 Rock		0.22	0.3	2.9	7.7	21	<0.1	1.8	3.0	223	1.13	5.2	1.0	<0.1	<1	0.1	<0.1	<0.1	2	0.01	0.006
CHARMK-31 Rock		0.55	1.0	6.5	3.9	16	<0.1	3.4	5.0	284	1.55	3.4	2.2	<0.1	2	<0.1	<0.1	<0.1	4	0.02	0.018
CHARMK-32 Rock		0.55	0.3	9.8	11.8	22	<0.1	4.4	4.8	133	2.31	38.8	1.7	<0.1	4	<0.1	<0.1	0.1	<2	0.04	0.034
CHARMK-33 Rock		0.29	2.5	27.3	6.1	18	0.1	19.7	38.6	113	6.25	88.3	18.8	0.1	1	<0.1	<0.1	0.2	4	<0.01	0.022

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Page:

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Project:	Char
Report Date:	October 23, 2012

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Part: 2 of 1

VAN12004446.1

## CERTIFICATE OF ANALYSIS

	Method	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	7AR	7AR
	Analyte	La	Cr	Mg	Ва	Ti	в	AI	Na	κ	w	Hg	Sc	ті	s	Ga	Se	Те	Pb	Zn
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.01	0.01
CHARMK-4 F	Rock	3	3	0.35	40	0.035	<1	0.18	0.008	0.10	<0.1	<0.01	2.5	<0.1	0.09	<1	0.5	<0.2		
CHARMK-5 F	Rock	<1	<1	<0.01	7	0.001	<1	0.03	0.003	0.01	<0.1	<0.01	0.3	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-6 F	Rock	<1	1	<0.01	7	<0.001	<1	0.03	0.003	0.02	<0.1	<0.01	0.5	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-7 F	Rock	1	<1	0.02	9	0.002	1	0.04	0.004	0.03	<0.1	<0.01	0.7	<0.1	0.09	<1	<0.5	<0.2		
CHARMK-8 F	Rock	<1	1	0.02	12	< 0.001	1	0.04	0.005	0.02	<0.1	<0.01	2.1	<0.1	8.81	<1	0.8	<0.2		
CHARMK-9 F	Rock	<1	2	0.03	6	<0.001	1	0.07	0.005	0.02	<0.1	0.02	0.8	<0.1	0.15	<1	<0.5	<0.2		
CHARMK-10 F	Rock	<1	1	<0.01	10	<0.001	<1	0.08	0.004	0.04	<0.1	<0.01	0.7	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-11 F	Rock	<1	2	<0.01	15	<0.001	3	0.04	0.005	0.05	0.1	<0.01	0.7	<0.1	0.35	<1	<0.5	<0.2		
CHARMK-12 F	Rock	4	3	0.01	20	0.001	1	0.15	0.009	0.10	<0.1	<0.01	1.6	<0.1	0.25	<1	<0.5	<0.2		
CHARMK-13 F	Rock	<1	1	<0.01	3	<0.001	2	0.02	0.004	0.01	<0.1	<0.01	0.3	<0.1	0.18	<1	<0.5	<0.2		
CHARMK-14 F	Rock	<1	2	<0.01	9	0.001	3	0.05	0.005	0.02	<0.1	<0.01	1.7	<0.1	0.58	<1	<0.5	<0.2		
CHARMK-15 F	Rock	<1	1	<0.01	6	<0.001	2	0.04	0.004	0.02	<0.1	<0.01	1.0	<0.1	0.21	<1	<0.5	<0.2		
CHARMK-16 F	Rock	4	4	0.09	48	0.005	4	0.36	0.015	0.20	0.3	<0.01	4.8	<0.1	1.90	1	0.6	<0.2		
CHARMK-17 F	Rock	<1	2	<0.01	56	<0.001	<1	0.01	0.002	0.10	<0.1	<0.01	0.3	<0.1	0.46	<1	1.5	<0.2		
CHARMK-18 F	Rock	3	5	0.61	46	0.012	3	0.35	0.013	0.18	0.2	<0.01	3.8	<0.1	1.07	1	<0.5	<0.2		
CHARMK-19 F	Rock	2	2	0.45	33	0.020	1	0.62	0.017	0.15	<0.1	1.26	2.8	<0.1	0.93	3	1.1	<0.2	0.86	2.38
CHARMK-20 F	Rock	<1	2	<0.01	6	<0.001	3	0.08	0.006	0.05	<0.1	<0.01	1.2	<0.1	2.06	<1	<0.5	<0.2		
CHARMK-21 F	Rock	<1	<1	0.61	15	<0.001	3	0.04	0.008	0.04	0.1	<0.01	6.1	<0.1	0.48	<1	<0.5	<0.2		
CHARMK-22 F	Rock	<1	2	0.05	5	<0.001	<1	0.02	0.007	<0.01	<0.1	<0.01	2.6	<0.1	2.45	<1	<0.5	<0.2		
CHARMK-23 F	Rock	<1	<1	0.62	16	<0.001	2	0.22	0.025	0.11	0.1	1.41	7.5	<0.1	2.83	<1	2.3	0.2	4.82	7.15
CHARMK-24 F	Rock	1	<1	1.32	30	0.002	5	0.35	0.017	0.25	0.2	0.49	5.2	<0.1	2.40	1	0.7	<0.2	2.67	3.27
CHARMK-25 F	Rock	<1	1	0.20	9	<0.001	3	0.09	0.029	0.05	<0.1	<0.01	2.4	<0.1	3.95	<1	<0.5	<0.2		
CHARMK-26 F	Rock	<1	<1	0.87	13	<0.001	4	0.15	0.008	0.16	<0.1	0.53	10.9	<0.1	2.47	<1	1.2	<0.2	1.34	3.41
CHARMK-27 F	Rock	5	3	0.94	264	0.036	4	2.19	0.006	0.32	<0.1	<0.01	5.2	<0.1	<0.05	12	<0.5	<0.2		
CHARMK-28 F	Rock	<1	1	0.01	3	<0.001	4	0.03	0.003	<0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-29 F	Rock	3	2	0.02	13	0.001	3	0.07	0.005	0.05	0.1	<0.01	4.3	<0.1	1.54	<1	<0.5	<0.2		
CHARMK-30 F	Rock	<1	2	0.01	14	<0.001	2	0.05	0.003	0.03	<0.1	<0.01	0.5	<0.1	0.06	<1	<0.5	<0.2		
CHARMK-31 F	Rock	<1	2	0.03	11	<0.001	1	0.10	0.004	0.05	<0.1	<0.01	1.0	<0.1	0.07	<1	<0.5	<0.2		
CHARMK-32 F	Rock	<1	2	<0.01	10	<0.001	1	0.06	0.005	0.03	<0.1	<0.01	0.6	<0.1	0.17	<1	<0.5	<0.2		
CHARMK-33 F	Rock	1	2	0.02	21	<0.001	2	0.10	0.010	0.05	<0.1	<0.01	1.4	<0.1	2.52	<1	1.7	<0.2		

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Page:

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Report Date:

October 23, 2012

4 of 4

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Acme Analytical Laboratories (Vancouver) Ltd.

Part: 1 of 1

VAN12004446.1

## CERTIFICATE OF ANALYSIS

AcmeLabs

	Method	WGHT	1DX30																		
	Analyte	Wgt	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	v	Ca	Р
	Unit	kg	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%							
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
CHARMK-34 Rock		0.22	0.3	29.7	5.2	16	<0.1	16.1	22.5	215	4.35	111.6	52.6	<0.1	19	<0.1	0.1	0.2	<2	0.26	0.152
CHARMK-35 Rock		0.26	1.0	8.3	3.7	16	<0.1	3.5	6.3	132	4.34	195.0	18.5	<0.1	2	<0.1	<0.1	0.2	<2	0.01	0.051
CHARMK-36 Rock		0.25	2.8	9.7	3.1	9	<0.1	6.9	12.5	79	2.84	61.7	3.3	<0.1	5	<0.1	<0.1	<0.1	<2	0.04	0.028
CHARMK-37 Rock	:	0.62	0.4	708.6	3.4	24	2.4	6.9	73.5	226	1.89	9.4	241.1	<0.1	1	0.3	<0.1	0.2	2	0.02	0.017
CHARMK-38 Rock	[	0.85	0.4	2.7	3.3	6	<0.1	3.5	8.8	77	0.82	16.2	4.9	<0.1	<1	<0.1	<0.1	<0.1	<2	0.01	0.006
CHARMK-39 Rock	:	0.50	0.2	42.9	3.1	6	<0.1	1.9	0.9	224	0.53	0.7	<0.5	<0.1	2	<0.1	<0.1	<0.1	5	0.02	0.005
CHARMK-40 Rock		0.33	0.4	2.6	3.5	4	<0.1	2.0	3.1	62	0.77	20.1	4.5	<0.1	<1	<0.1	<0.1	<0.1	8	<0.01	0.003
CHARMK-41 Rock	:	0.64	0.4	2.2	4.9	3	<0.1	1.5	2.8	44	0.59	16.0	2.9	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	0.002
CHARMK-42 Rock	:	0.30	2.9	45.7	51.9	35	1.0	90.4	344.5	121	17.05	405.1	107.6	1.4	5	0.2	0.5	2.2	89	0.03	0.042
CHARMK-43 Rock	:	0.52	0.4	3.6	4.9	3	<0.1	5.9	10.8	33	1.35	61.2	7.2	<0.1	<1	<0.1	0.2	<0.1	2	<0.01	0.001
CHARMK-44 Rock		0.65	1.1	7.1	28.1	8	0.7	48.5	113.2	39	5.92	151.7	37.2	<0.1	<1	<0.1	0.4	1.1	3	<0.01	0.006
CHARMK-45 Rock	[	1.09	5.5	5.9	20.7	49	<0.1	24.6	32.7	1641	6.92	10.7	1.8	1.0	613	0.4	<0.1	0.6	93	18.01	0.056
CHARMK-46 Rock		0.81	0.8	9.2	2.7	43	<0.1	15.9	19.3	1937	5.02	8.9	72.7	0.5	84	<0.1	<0.1	<0.1	27	3.38	0.259
CHARMK-47 Rock	:	0.66	0.8	2.2	0.6	9	<0.1	3.6	4.6	388	1.47	26.1	1.3	<0.1	2	<0.1	<0.1	<0.1	<2	0.04	0.010
CHARMK-48 Rock	:	0.62	0.6	28.0	5.1	64	<0.1	20.4	24.6	1714	6.49	24.5	4.7	0.1	112	0.2	0.1	0.2	15	2.56	0.092
CHARMK-49 Rock		0.34	0.4	2.2	2.2	7	<0.1	2.1	2.5	122	2.83	51.7	50.9	<0.1	<1	<0.1	<0.1	0.2	<2	0.02	0.013
CHARMK-50 Rock	i i	0.35	2.8	2.3	1.4	12	<0.1	2.9	3.4	281	2.82	14.3	5.8	<0.1	3	<0.1	<0.1	<0.1	<2	0.02	0.049
CHARMK-51 Rock	i.	0.52	0.4	14.8	3.2	24	<0.1	5.7	7.7	480	4.55	46.7	1.1	<0.1	3	<0.1	<0.1	<0.1	<2	0.02	0.053
CHARMK-52 Rock		0.59	0.6	9.4	4.9	13	<0.1	2.7	2.4	125	5.14	278.5	35.5	<0.1	3	<0.1	0.1	0.4	4	0.04	0.055
CHARMK-53 Rock		0.42	0.4	2.6	1.1	5	<0.1	2.1	2.6	243	0.99	8.0	0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	0.01	0.012
CHARMK-54 Rock		1.39	0.6	1.9	2.9	5	<0.1	2.2	2.5	87	2.69	79.0	9.8	0.1	3	<0.1	<0.1	0.3	<2	<0.01	0.028



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### Integra Gold Corporation

202 - 200 Granville Square

Vancouver BC V6C 1S4 Canada

Project: Char Report Date:

October 23, 2012

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VAN12004446.1

## CERTIFICATE OF ANALYSIS

	Method	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	7AR	7AR
	Analyte	La	Cr	Mg	Ва	Ti	в	AI	Na	к	w	Hg	Sc	ті	S	Ga	Se	Те	Pb	Zn
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.01	0.01
CHARMK-34 Rock		<1	2	<0.01	11	<0.001	1	0.05	0.008	0.03	<0.1	<0.01	1.0	<0.1	1.63	<1	1.8	<0.2		
CHARMK-35 Rock		<1	3	0.01	12	<0.001	1	0.02	0.004	0.03	<0.1	<0.01	1.0	<0.1	0.25	<1	<0.5	<0.2		
CHARMK-36 Rock		<1	2	0.02	5	<0.001	2	0.05	0.006	0.02	<0.1	<0.01	0.3	<0.1	1.73	<1	<0.5	<0.2		
CHARMK-37 Rock		<1	2	0.01	11	<0.001	1	0.05	0.003	0.03	<0.1	<0.01	0.5	<0.1	0.19	<1	0.8	<0.2		
CHARMK-38 Rock		<1	2	<0.01	2	<0.001	<1	<0.01	0.002	<0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-39 Rock		<1	3	0.02	10	0.005	3	0.05	0.007	<0.01	<0.1	<0.01	0.5	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-40 Rock		<1	3	<0.01	4	0.002	1	0.03	0.003	0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-41 Rock		<1	2	<0.01	2	<0.001	<1	<0.01	0.002	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-42 Rock		9	21	0.06	43	0.001	4	0.25	0.005	0.16	0.1	<0.01	3.0	<0.1	0.14	3	<0.5	<0.2		
CHARMK-43 Rock		<1	3	<0.01	1	<0.001	<1	<0.01	0.003	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-44 Rock		<1	13	0.01	10	<0.001	<1	0.01	0.003	<0.01	<0.1	<0.01	0.6	<0.1	0.65	<1	<0.5	<0.2		
CHARMK-45 Rock		4	21	2.65	12	0.010	<1	2.34	0.012	0.06	<0.1	<0.01	13.5	<0.1	2.43	8	0.8	<0.2		
CHARMK-46 Rock		3	11	0.85	43	0.036	<1	0.77	0.023	0.18	0.1	<0.01	5.5	<0.1	0.49	3	<0.5	<0.2		
CHARMK-47 Rock		<1	11	0.01	6	<0.001	<1	0.03	0.004	0.02	<0.1	<0.01	0.6	<0.1	0.16	<1	<0.5	<0.2		
CHARMK-48 Rock		1	7	0.90	37	0.001	<1	0.44	0.011	0.17	<0.1	<0.01	3.2	<0.1	0.70	2	<0.5	<0.2		
CHARMK-49 Rock		<1	6	0.01	6	<0.001	<1	0.03	0.002	0.02	<0.1	<0.01	0.5	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-50 Rock		<1	9	0.02	12	<0.001	<1	0.07	0.003	0.04	<0.1	<0.01	1.3	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-51 Rock		<1	8	0.01	14	0.001	<1	0.08	0.006	0.07	<0.1	<0.01	2.0	<0.1	0.19	<1	<0.5	<0.2		
CHARMK-52 Rock		<1	10	<0.01	12	<0.001	<1	0.11	0.005	0.07	<0.1	<0.01	1.8	<0.1	0.14	<1	<0.5	<0.2		
CHARMK-53 Rock		<1	11	<0.01	7	<0.001	<1	0.04	0.003	0.02	<0.1	<0.01	0.4	<0.1	0.24	<1	<0.5	<0.2		
CHARMK-54 Rock		<1	15	<0.01	8	<0.001	<1	0.04	0.004	0.03	<0.1	<0.01	0.5	<0.1	0.08	<1	<0.5	<0.2		

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#### **Integra Gold Corporation** 202 - 200 Granville Square

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Project: Report Date:

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## QUALITY CONTROL REPORT

	Method	WGHT	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
	Analyte	Wgt	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	v	Ca	Р
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																					
CHAR-20	Rock	0.53	0.8	3.9	6.0	5	<0.1	16.8	55.4	49	2.22	89.2	7.8	0.2	1	<0.1	0.1	0.5	15	0.02	0.009
REP CHAR-20	QC		0.6	2.7	5.8	5	0.1	16.6	56.9	47	2.31	87.6	10.4	0.1	1	<0.1	<0.1	0.5	15	0.01	0.009
CHARMK-8	Rock	0.40	0.3	10.0	9.0	14	0.1	58.7	74.5	358	10.75	222.3	94.2	<0.1	11	<0.1	0.3	0.4	4	0.16	0.073
REP CHARMK-8	QC		<0.1	10.3	10.0	15	0.2	59.7	76.4	383	11.31	234.6	187.1	<0.1	11	<0.1	0.3	0.4	5	0.17	0.078
CHARMK-26	Rock	0.28	0.2	33.8	>10000	>10000	23.5	14.5	20.6	3194	6.25	42.2	119.1	<0.1	562	209.6	10.9	0.2	4	15.76	0.036
REP CHARMK-26	QC																				
CHARMK-30	Rock	0.22	0.3	2.9	7.7	21	<0.1	1.8	3.0	223	1.13	5.2	1.0	<0.1	<1	0.1	<0.1	<0.1	2	0.01	0.006
REP CHARMK-30	QC		0.3	3.2	8.7	23	<0.1	2.1	3.3	238	1.18	4.9	1.2	<0.1	<1	0.1	<0.1	<0.1	2	<0.01	0.007
CHARMK-43	Rock	0.52	0.4	3.6	4.9	3	<0.1	5.9	10.8	33	1.35	61.2	7.2	<0.1	<1	<0.1	0.2	<0.1	2	<0.01	0.001
REP CHARMK-43	QC		0.4	3.4	4.8	2	0.1	5.9	10.7	33	1.26	58.3	6.5	<0.1	<1	<0.1	0.1	<0.1	<2	<0.01	0.001
CHARMK-53	Rock	0.42	0.4	2.6	1.1	5	<0.1	2.1	2.6	243	0.99	8.0	0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	0.01	0.012
REP CHARMK-53	QC		0.4	2.7	1.1	5	<0.1	2.1	2.6	236	0.98	7.4	0.6	<0.1	<1	<0.1	<0.1	<0.1	<2	0.01	0.012
CHARMK-54	Rock	1.39	0.6	1.9	2.9	5	<0.1	2.2	2.5	87	2.69	79.0	9.8	0.1	3	<0.1	<0.1	0.3	<2	<0.01	0.028
REP CHARMK-54	QC		0.6	2.3	2.7	4	<0.1	2.2	2.3	88	2.75	80.4	19.3	0.1	3	<0.1	<0.1	0.3	<2	<0.01	0.026
Core Reject Duplicates																					
CHAR-16	Rock	0.70	0.2	7.7	19.7	39	<0.1	8.4	12.3	93	1.74	19.1	12.9	<0.1	<1	0.2	<0.1	<0.1	2	0.01	0.012
DUP CHAR-16	QC	<0.01	0.1	9.3	10.6	27	<0.1	8.0	11.6	85	1.67	19.4	34.4	<0.1	<1	0.1	<0.1	<0.1	2	0.01	0.012
CHARMK-25	Rock	0.63	0.3	5.5	154.2	184	0.5	33.8	35.2	1191	6.60	129.4	31.7	<0.1	89	1.0	0.4	0.2	5	3.35	0.027
DUP CHARMK-25	QC	<0.01	0.4	6.0	209.1	168	0.5	31.5	32.9	1164	6.24	125.4	22.0	<0.1	86	1.3	0.4	0.2	5	3.33	0.026
Reference Materials																					
STD DS9	Standard		13.0	112.2	128.2	324	1.8	42.1	7.8	617	2.43	24.8	125.1	7.0	75	2.2	5.1	6.4	41	0.76	0.082
STD DS9	Standard		15.0	93.9	121.0	319	1.8	42.3	7.8	631	2.37	26.9	116.7	5.7	64	2.4	4.4	5.0	40	0.76	0.088
STD DS9	Standard		12.9	112.2	117.8	293	1.6	41.3	7.7	574	2.32	24.1	100.6	6.4	64	2.1	5.1	6.0	38	0.70	0.076
STD GC-7	Standard																				
STD GC-7	Standard																				
STD OREAS133B	Standard																				
STD OREAS133B	Standard																				
STD DS9 Expected			12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819

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Client: In

### Integra Gold Corporation

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Report Date: October 23, 2012

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## QUALITY CONTROL REPORT

	Method	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	7AR	7AR
	Analyte	La	Cr	Mg	Ва	Ті	в	AI	Na	κ	w	Hg	Sc	ті	S	Ga	Se	Те	Pb	Zn
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.01	0.01
Pulp Duplicates																				
CHAR-20	Rock	2	2	<0.01	11	<0.001	1	0.06	0.003	0.04	<0.1	<0.01	0.8	<0.1	<0.05	<1	<0.5	<0.2		
REP CHAR-20	QC	2	2	<0.01	11	<0.001	2	0.06	0.003	0.04	<0.1	<0.01	0.6	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-8	Rock	<1	1	0.02	12	<0.001	1	0.04	0.005	0.02	<0.1	<0.01	2.1	<0.1	8.81	<1	0.8	<0.2		
REP CHARMK-8	QC	<1	2	0.03	13	<0.001	<1	0.05	0.005	0.03	<0.1	<0.01	2.1	<0.1	9.01	<1	0.8	<0.2		
CHARMK-26	Rock	<1	<1	0.87	13	<0.001	4	0.15	0.008	0.16	<0.1	0.53	10.9	<0.1	2.47	<1	1.2	<0.2	1.34	3.41
REP CHARMK-26	QC																		1.35	3.45
CHARMK-30	Rock	<1	2	0.01	14	<0.001	2	0.05	0.003	0.03	<0.1	<0.01	0.5	<0.1	0.06	<1	<0.5	<0.2		
REP CHARMK-30	QC	<1	2	0.01	16	<0.001	1	0.06	0.003	0.04	<0.1	<0.01	0.4	<0.1	0.07	<1	<0.5	<0.2		
CHARMK-43	Rock	<1	3	<0.01	1	<0.001	<1	<0.01	0.003	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
REP CHARMK-43	QC	<1	3	<0.01	1	<0.001	<1	<0.01	0.003	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
CHARMK-53	Rock	<1	11	<0.01	7	<0.001	<1	0.04	0.003	0.02	<0.1	<0.01	0.4	<0.1	0.24	<1	<0.5	<0.2		
REP CHARMK-53	QC	<1	10	<0.01	7	<0.001	<1	0.04	0.003	0.02	<0.1	<0.01	0.5	<0.1	0.24	<1	<0.5	<0.2		
CHARMK-54	Rock	<1	15	<0.01	8	<0.001	<1	0.04	0.004	0.03	<0.1	<0.01	0.5	<0.1	0.08	<1	<0.5	<0.2		
REP CHARMK-54	QC	<1	14	<0.01	7	<0.001	<1	0.04	0.004	0.03	<0.1	<0.01	0.5	<0.1	0.09	<1	<0.5	<0.2		
Core Reject Duplicates																				
CHAR-16	Rock	<1	2	<0.01	9	<0.001	<1	0.05	0.003	0.03	<0.1	<0.01	0.6	<0.1	0.33	<1	0.6	<0.2		
DUP CHAR-16	QC	<1	1	0.01	9	<0.001	<1	0.04	0.003	0.03	<0.1	<0.01	0.4	<0.1	0.36	<1	<0.5	<0.2		
CHARMK-25	Rock	<1	1	0.20	9	<0.001	3	0.09	0.029	0.05	<0.1	<0.01	2.4	<0.1	3.95	<1	<0.5	<0.2		
DUP CHARMK-25	QC	<1	1	0.21	10	<0.001	2	0.09	0.032	0.05	<0.1	<0.01	2.4	<0.1	3.81	<1	<0.5	<0.2		
Reference Materials																				
STD DS9	Standard	13	125	0.65	282	0.118	3	1.04	0.100	0.42	3.1	0.22	2.7	5.6	0.16	5	6.4	5.2		
STD DS9	Standard	13	129	0.64	307	0.108	3	1.02	0.092	0.41	3.1	0.23	2.6	5.4	0.16	5	5.1	5.1		
STD DS9	Standard	12	125	0.61	271	0.108	<1	0.98	0.103	0.42	2.8	0.18	2.1	4.9	0.16	4	4.8	4.6		
STD GC-7	Standard																		9.97	21.69
STD GC-7	Standard																		>10	21.79
STD OREAS133B	Standard																		4.91	10.84
STD OREAS133B	Standard																		5.18	11.31
STD DS9 Expected		13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	0.2	2.5	5.3	0.1615	4.59	5.2	5.02		

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202 - 200 Granville Square

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## QUALITY CONTROL REPORT

		WGHT	1DX30																		
		Wgt	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	v	Ca	Р
		kg	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%							
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
STD GC-7 Expected																					
STD OREAS133B Expected																					
BLK	Blank		<0.1	0.2	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	3	<0.01	<0.001
BLK	Blank																				
BLK	Blank		<0.1	0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank																				
Prep Wash																					
G1	Prep Blank	<0.01	0.2	1.9	2.7	51	<0.1	3.9	4.6	604	1.97	<0.5	3.0	5.5	55	<0.1	<0.1	<0.1	36	0.50	0.076
G1	Prep Blank	<0.01	0.1	2.2	3.9	54	<0.1	3.9	4.7	643	2.07	<0.5	1.3	5.4	62	<0.1	<0.1	<0.1	37	0.51	0.081

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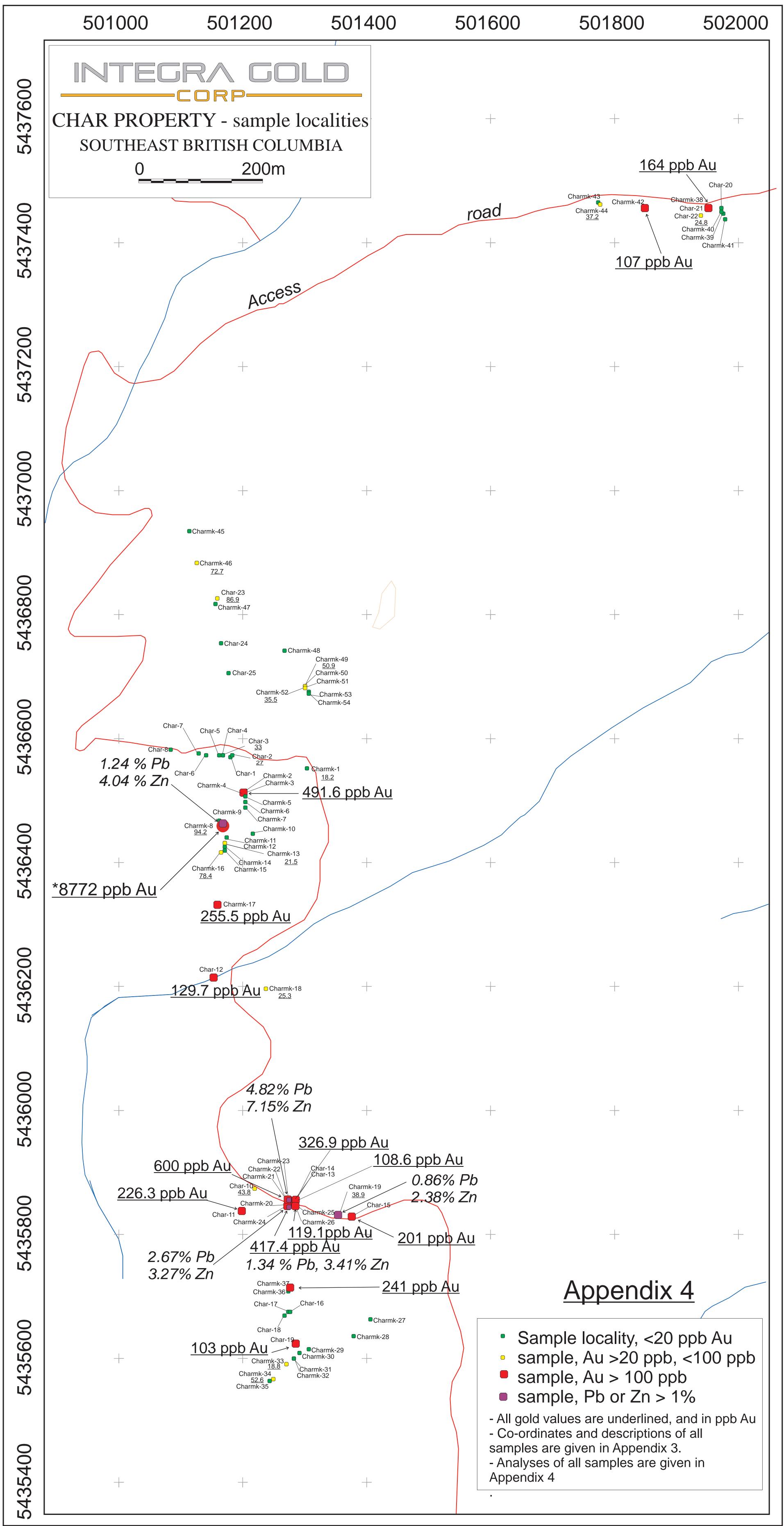
## QUALITY CONTROL REPORT

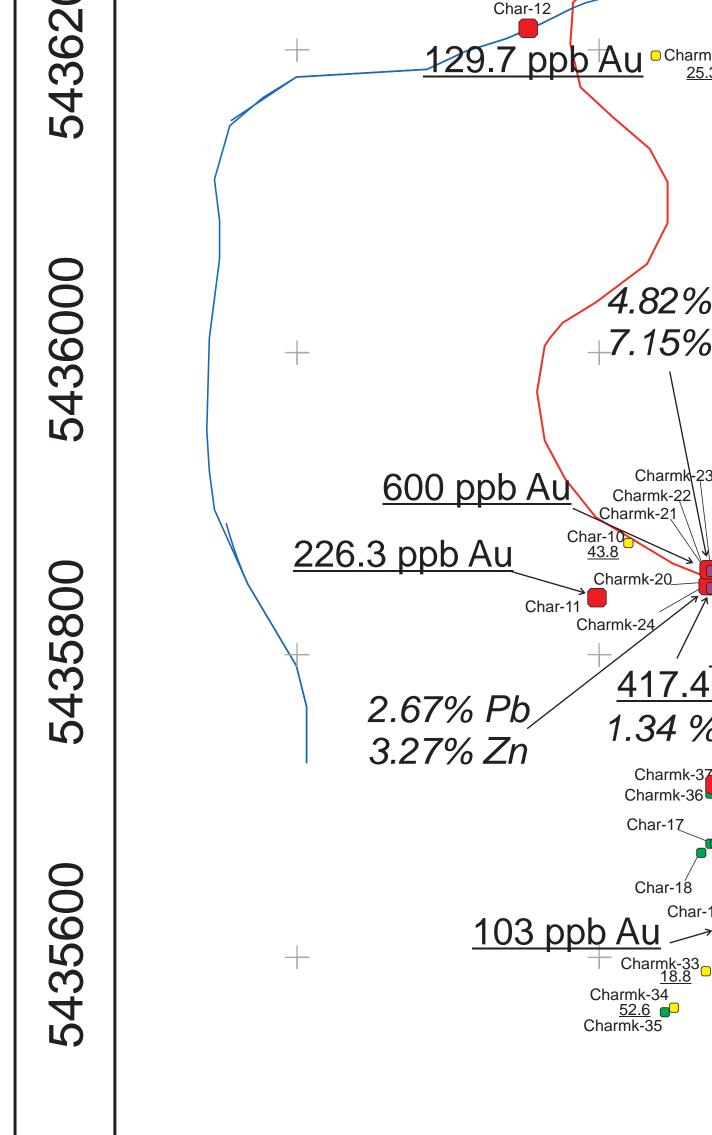
		1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	7AR	7AR
		La	Cr	Mg	Ва	Ti	в	AI	Na	к	w	Hg	Sc	TI	S	Ga	Se	Те	Pb	Zn
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.01	0.01
STD GC-7 Expected																			10.44	22.06
STD OREAS133B Expected																			5.07	11.12
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank																		<0.01	<0.01
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank																		<0.01	<0.01
Prep Wash																				
G1	Prep Blank	10	9	0.61	237	0.132	2	1.11	0.121	0.56	<0.1	<0.01	2.6	0.4	<0.05	6	<0.5	<0.2		
G1	Prep Blank	10	9	0.62	242	0.133	1	1.13	0.136	0.58	<0.1	<0.01	2.9	0.4	<0.05	6	<0.5	<0.2		



2 of 2

VAN12004446.1





# **Appendix 5: Ground geophysical survey**

## Explanation notes, methodology, maps

By: Francis, Moul, Vancouver, B.C.

List of maps

- 1. Interpretation: memo re Integra ground geophysical survey at Char property, Fall, 2012
- 2. Digital elevation model
- 3. Interpretation with RTP TMI
- 4. Interpretation with RTP-TMI, colour contours
- 5. Survey line path
- 6. Total magnetic field identity
- 7. Analytic signal of total magnetic field intensity
- 8. Total magnetic field intensity stacked profiles
- 9. Total magnetic field intensity stacked profiles (colour)
- 10. Reduced to pole total magnetic field intensity
- 11. VLF-EM in-phase and quadrature profiles NAA
- 12. VLF-EM in-phase and quadrature profiles NML

Memo: includes methodology, instrumentation, data acquisition, processing.

#### Memo

Date: Nov. 14, 2012

To: Trygve Hoy

#### From: Francis Moul

### Re: Integra Gold Ground Geophysical Survey at Char Property Fall 2012.

### Introduction:

A ground magnetic total field intensity (TMI) and very low frequency electromagnetic (VLF) survey was conducted during the Fall 2012. A single grid was covered on the Char property. In the data processing directory there is a file called survey\_inf.txt which contains additional processing notes for the project.

### Instruments:

Magnetic and VLF data were acquired using a Gem Systems GSM-19 v7.0 magnetometer (rover, SN. 6041852) with a second GSM-19 v7.0 magnetometer employed for measurement for diurnal magnetic field variations (base, SN. 6041853). The rover measurements were acquired at stations separated by constant distance which had been previously surveyed in using a Garmin handheld GPS.

### VLF Transmitters:

The VLF method takes advantage of communication transmitters used for long distance communication (typically military submarine). The transmitters used during these surveys were located in Cutler, Maine (NAA), LaMour, North Dakota (NML) and Pearl Harbour, Hawaii (NPM). While data were collected from all three transmitters during the survey it was found that the signal from the NPM station was unacceptably low (mean VLF total field was 0.3 pT with a maximum less than 0.5 pT) and it was excluded from the results. The distance and bearing to each transmitter from the survey grid is presented on each profile map. The distance is related inversely to signal strength (though this is not a linear relationship). The bearing is an important factor as linear bodies striking perpendicular to the transmitter bearing will be poorly coupled and may not be resolved during the survey.

### Acquisition:

All field data were acquired by Brian Alexander (BA) Benton for Integra Gold. Rover magnetic data were acquired at stations separated by a constant spatial interval while base station magnetic data were acquired at a constant sampling rate of 0.33 Hz.

### Processing:

The following processing methodology was applied to all block with variations noted where necessary:

- 1. GPS data converted from Garmin .gdb file to delimited .txt file using Garmin Mapsource.
- 2. GPS data imported into Geosoft database and converted from NAD83 latitude, longitude (as defined in the raw GPS data files) to NAD83 UTM 11N.
- 3. Rover magnetic data imported into Geosoft database.

- 4. A day of year channel was created (DOY) to allow processing based on acquisition date later (an error emerged at the conclusion of import. All DOY values are off by 1 due to failure to use leap year calendar for 2012).
- 5. Base magnetic data imported from .txt to geosoft binary database.
- 6. Review of base station magnetic during rover survey periods. Data were manually despiked and reviewed to ensure diurnal variation was reasonable and the data suitable for correcting the rover.
- 7. Base database interpolated from 0.33 Hz to 1 Hz (linear).
- 8. Rover database populated with position data from GPS database and base station magnetic data from base station database.
- Position channels were interpolated from 50 m intervals so that there was a position for each sample location (linear interpolation – possible since all samples were at constant 12.5 m sample interval).
- 10. The mean value for the base station (56202 nT) was removed from the base station total field channel to create a diurnal correction channel with mean value of zero (the diurnal correction will not change the mean value of the TMI at the rover). This value was not used as the magnetic field datum as the base station was located on a strong relative magnetic high. Instead, the mean value from the diurnally corrected rover TMI was taken as the grid datum.
- 11. IGRF constant value calculated but was not used as datum value. The grid datum value was calculated from the diurnally corrected rover total field data to reduce the mean of the final gridded TMI to near zero.
- 12. Diurnally corrected rover magnetic channel calculated as follows (nT\_cor = nT Diurnal nt\_dc).
- 13. Repeat values and values where the magnetic signal quality channel indicated a problem with the total field reading (in the database these samples are indicated by repeat\_flag and sq\_flag set to DUMMY).
- 14. Final TMI channel was gridded using minimum curvature, no cell expansion beyond data limits, blanking distance of 75 m.
- 15. The gridded TMI data were reduced to magnetic pole (RTP) for the IGRF at geometric grid centre and mean acquisition date using the USGS Geosoft GXs (OFR 2007–1355).
- 16. The gridded data (both TMI and RTP TMI) were filtered (again using the USGS GXs) to produce derivative (and analytic signal) products.
- 17. Stacked profiles of the magnetic data were created.
- 18. The VLF total magnetic field statistics were compiled and the total field data review along with the in-phase and quadrature components in profile to determine an appropriate signal strength (total field) minimum value below which the data were nulled.
- 19. Repeat stations were nulled such that only the first value was retained.

20. In-phase and quadrature stacked profile maps were created for each transmitter.

### Products:

- 1. Stacked profiles for TMI, VLF In-phase and Quadrature
- 2. TMI and RTP TMI contours and grids
- 3. Analytic Signal, vertical and horizontal derivative grids from TMI and RTP TMI.
- 4. DEM contours and grid
- 5. Geosoft .XYZ ASCII database for assessment use

Survey Grid Descriptions:

Char Grid:

Name: 1 Acquisition Dates: Sept. 17 - 21, 2012 and Sept 24 – 28, 2012 Line Spacing: 50 m Line Orientation: 90° / 270° Station Spacing: 12.5 m (TMI,VLF), 100 m (GPS) Block Dimensions: 400m x 1600m Total unique survey stations: 1103 (TMI,VLF) Total Line Length: 13.2 km Magnetic Base Station Location: 501320mE 5436584mN NAD83 UTM11N 1796m WGS84 Total Magnetic Field Datum= 55561 nT

Interpretation:

A first-pass interpretation layer was completed. This interpretation has not been reviewed by a qualified professional geoscientist and should not be used for exploration decision making or assessment purposes.

GIS Base Data:

No property scale base data or claims layers were available for any of these projects. Canvec vector data were downloaded at a 1:50,000 scale but the only relevant features were the elevation contours and drainages. CDED DEM gridded data (15m x 23 m grid cells) were downloaded from Geobase as an alternative to the elevation data acquired during the survey. Claims data may have to be added to these maps to make them acceptable for assessment filing.

## Topography:

The survey area has a general slope to the ENE with two spurs trending across the area at approximately 55 deg. which are separated by a saddle area containing two parallel drainages (from approximately 5435700mN to 5436500mN). There is approximately 350 m total variation in elevation across the survey area. The grid topography was calculated using the survey elevations from the GPS. The CDED DEM was preferred due to good correspondence with the elevation data acquired in the field and improved precision (no levelling issues).

Total Magnetic Intensity:

A series of at least three relatively narrow magnetic high lineaments dominate the survey area. These linear anomalies appear to have a relatively consistent and common strike of approximately 175 deg.

There is a good correlation between magnetic intensity along the linear magnetic highs and the topography. The easternmost magnetic high lineament becomes muted or disappears in the saddle area (possibly suppressed by the presence of increased overburden) but otherwise appears to have consistent orientation relative to the central lineament outside of the saddle area. The areas of highest intensity appear to be on the spurs (for example at 501360mE 5435740mN and 501350mE 5436615mN) possibly coincident with areas of decreased overburden.

The reduced to pole total magnetic intensity grid was draped on the CDED DEM in a 3D viewer. Rotating the view to look along the strike of the linear anomalies it may be demonstrated that a feature of constant 175 deg. strike trending across the measured topography could produce the sinuous linear features in plan view.

The linear features are poorly spatially sampled (there is a relatively wide sample spacing inferred due to the inconsistent anomaly shape from line to line particularly evident in areas of high magnetic field gradient). Due to the multiple peaks observed in the profile data it seems likely that these linear anomalies are aggregate responses from a number of relatively narrow parallel sources.

The width of the sources could not be estimated due to poor spatial sampling and lack of constraints on the magnetic susceptibility and depth to source. Physical measurement of dip, apparent width, and magnetic susceptibility on any exposed units in the area of the labelled features would provide valuable information for modelling of the magnetic total field data.

VLF-EM:

The strike of the magnetic lineaments means that they are very poorly coupled with the available VLF-EM transmitters. There is no clear VLF-EM response in the survey area which may be due to poor coupling between the source and the available transmitters, lack of a strong conductor producing a resolvable response or poor spatial sampling of closely spaced conductors.

## Α

The features labelled " $A_1$ " (southern) and " $A_2$ " (northern) on the interpretation map and are separated by several hundred metres where the anomaly is not clearly linked in the profiles. A significant portion of the anomaly defining the  $A_2$  segment is outside the survey area. If  $A_1$  and  $A_2$  are related the strike of the combined feature (175 deg.) is consistent with that identified from "B".

 $A_1$  is a linear magnetic high greater than 200 m in extent (open to the south at the margin of the survey area and terminating at 501025mE, 5435600mN) and maximum amplitude of approximately +600 nT.  $A_2$  is a linear dipolar, magnetic high at least 300m in extent (open to the north and possibly to the south due to limits of area surveyed) with measured variation in amplitude of at least 1300 nT.

The portions of the  $A_1$  anomaly inside the survey area may be consistent with a vertical to steeply dipping source. The  $A_2$  feature is clipped at the boundary of the survey area; the relatively total magnetic intensity low located just east may be consistent with the expected response due to a W dipping source at  $A_2$  but the truncation of the anomaly at the edge of the survey area mean it is not possible to make any well supported interpretation.

The features labelled  $B_1$  through  $B_3$  along the centre of the survey grid are consistent with at least two parallel vertical to steeply dipping sources.

At  $B_1$  the feature consists of a linear magnetic high trending N. The high is asymmetrical, consists of two peaks with maximum amplitude approximately 800 nT (L5450 @ 501300mE). The asymmetric character of the anomalies remains fairly consistent but the number peaks varies along trend.

At  $B_2$  (between 5435750mN and 5436250mN) the amplitude of the feature is significantly decreased typically around +300 nT.

At  $B_3$  the amplitude of the feature increases at the ridge with amplitude up to 1200 nT (L6500 @ 501186mE 5436500mN). The character of the anomaly varies considerably between lines indicating likely multiple sources on some lines.

The sources may be dipping steeply to the west based on the deflection of the feature to the west at  $B_2$  in the area of the topographic low in the "saddle" at the centre of the grid. The character of the anomalies at  $B_1$  and  $B_2$  is also consistent with a depth extensive, vertical to steeply W dipping source with a high gradient and negative lobe on the E and lower gradient on the W.

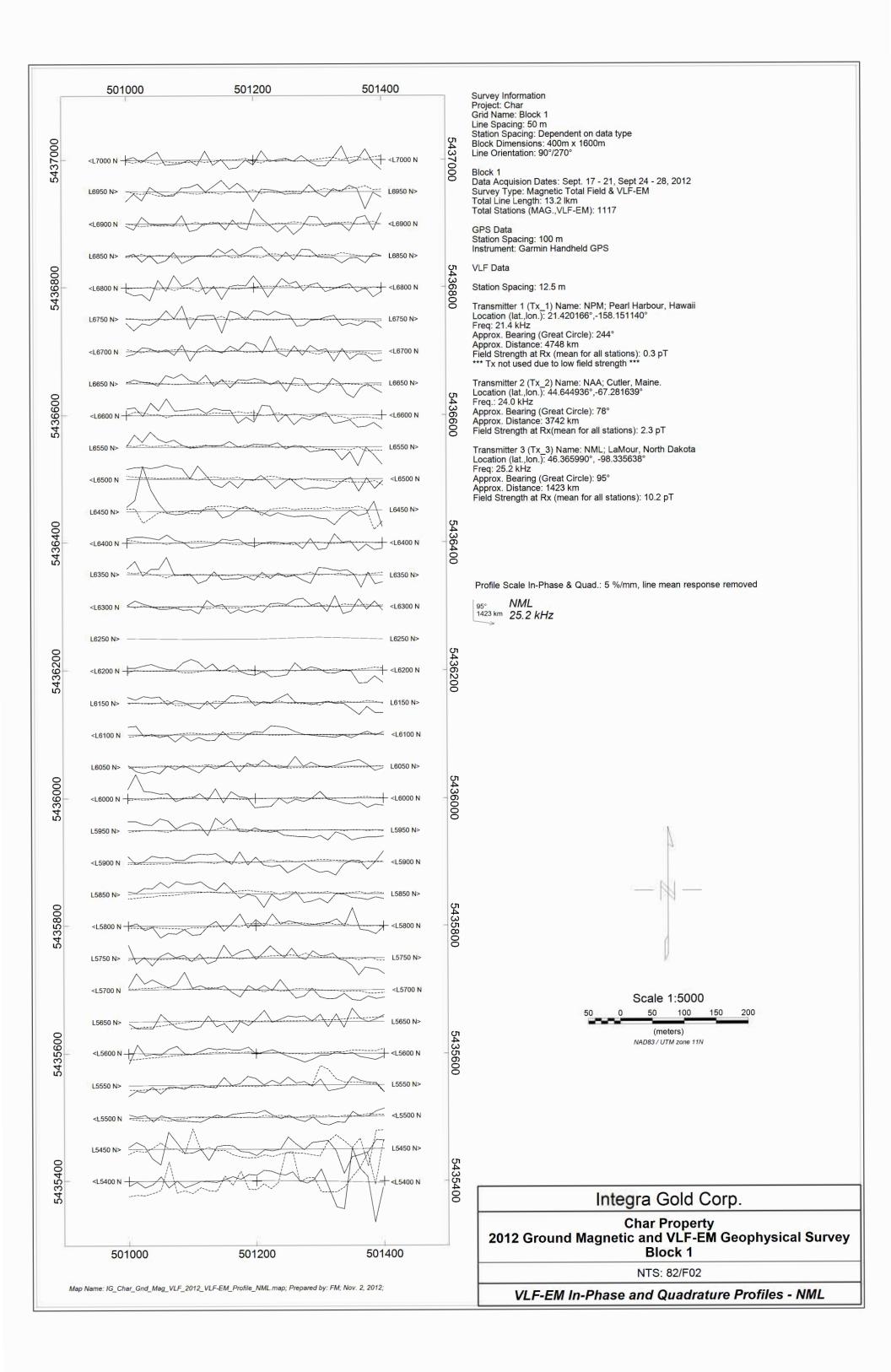
The anomaly is poorly resolved north of 5436660mN where the response becomes very unsettled and correlates poorly between neighbouring lines.

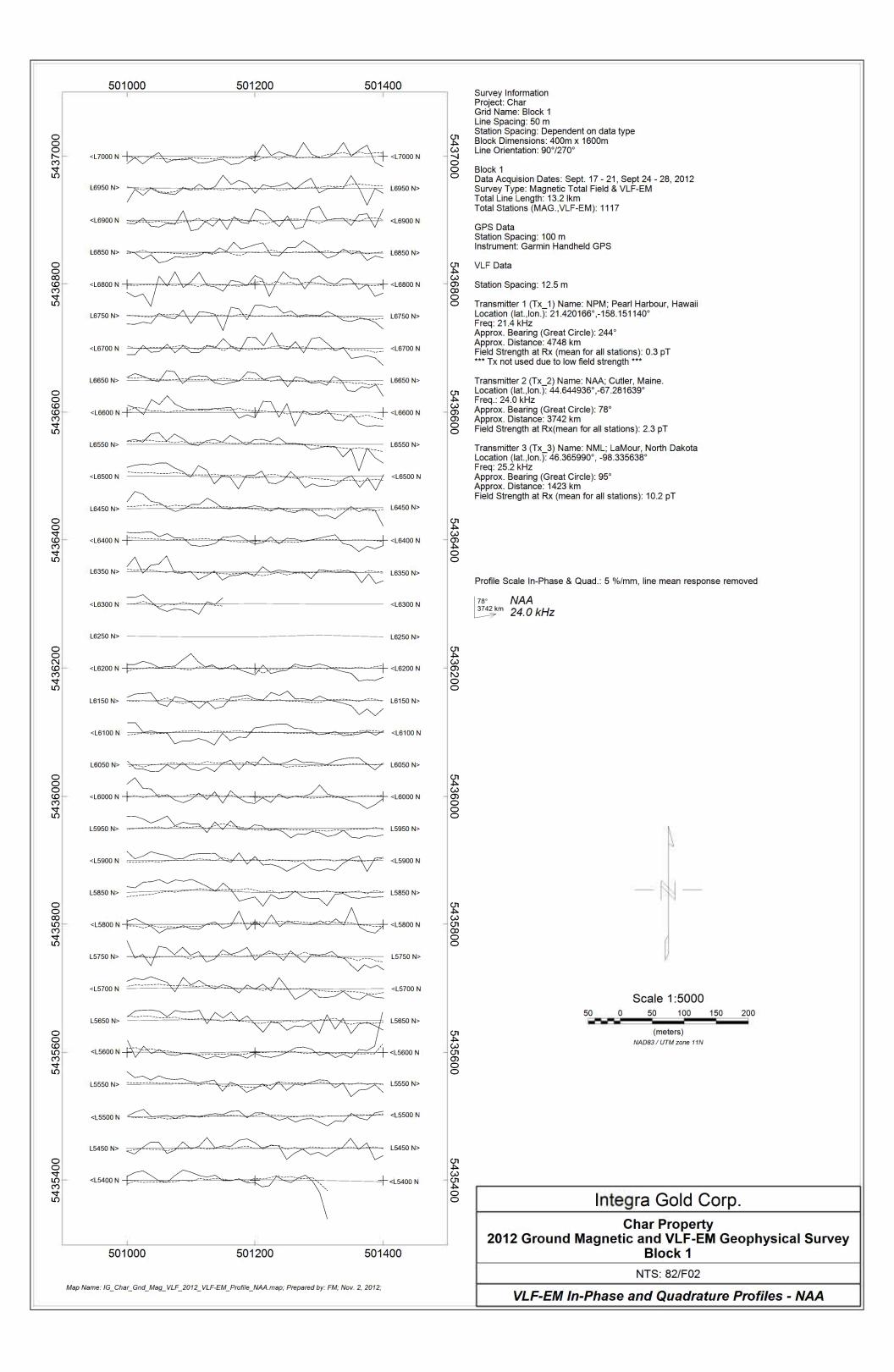
С

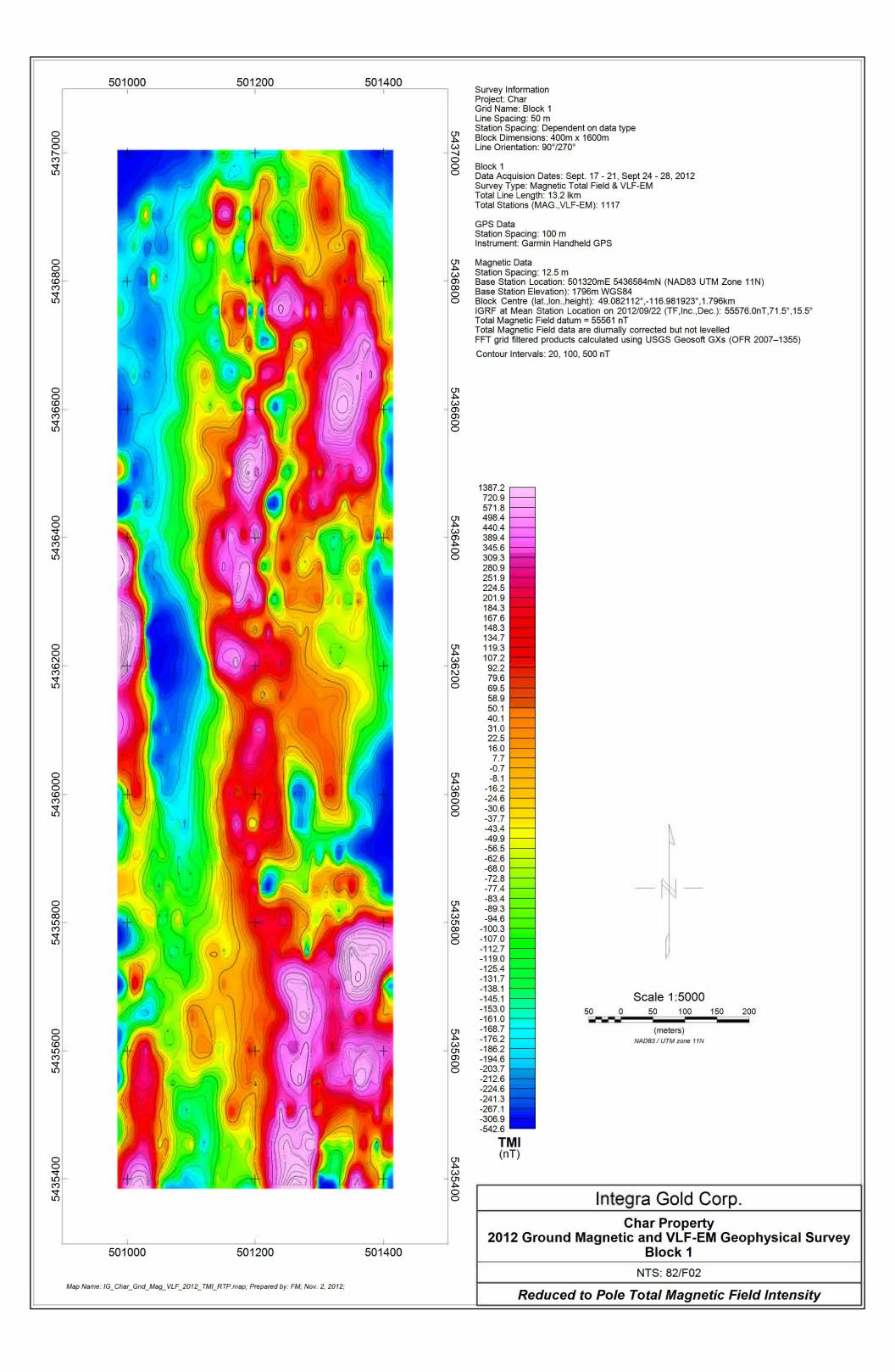
The features labelled  $C_1$  and  $C_2$  may not be related but they follow a consistent order sitting just east of  $B_1$  and  $B_3$  respectively and follow the 175 deg. trend established in  $B_1 - B_3$ .

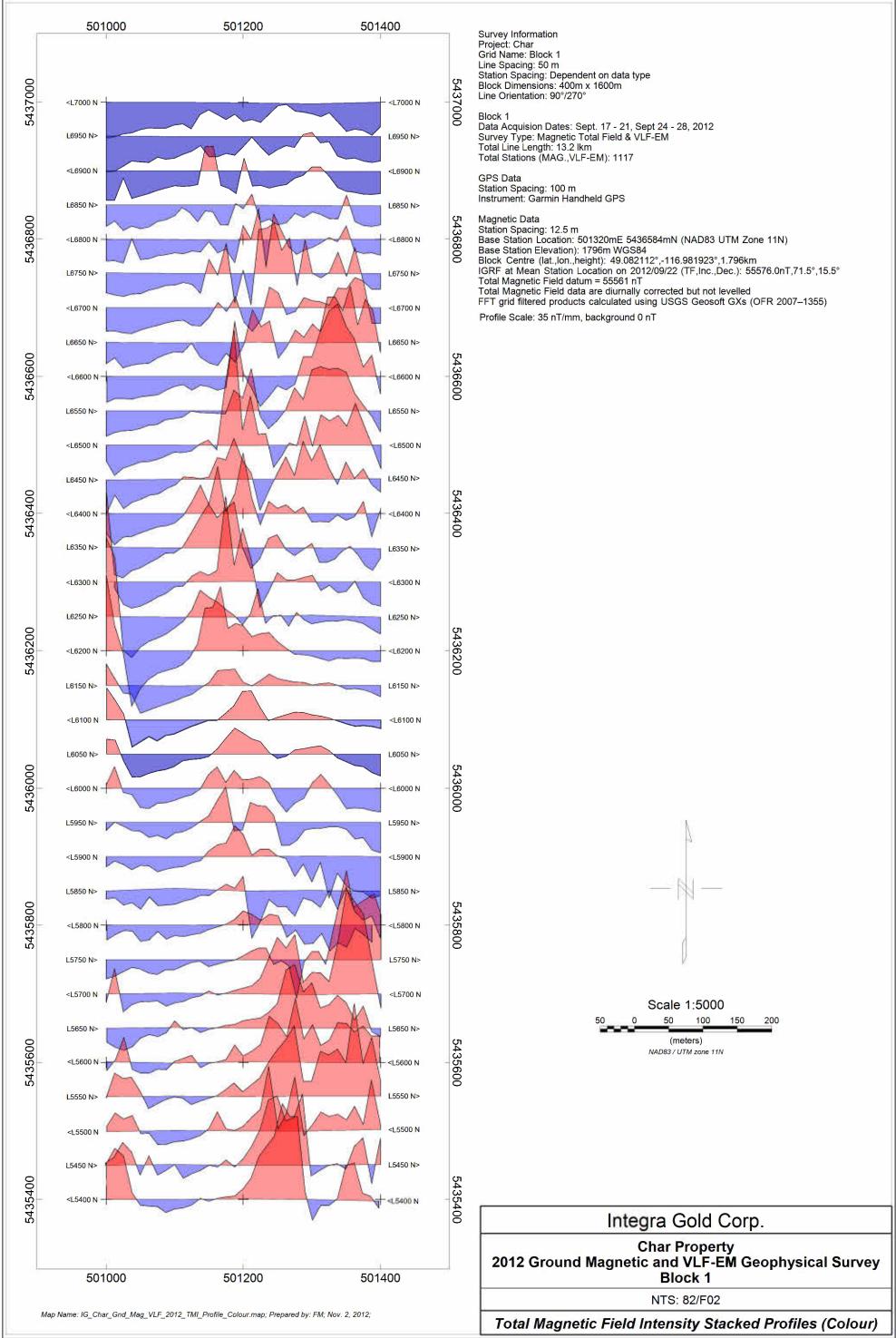
The gradients measured at C<sub>1</sub> (specifically at points 501350mE, 5435750mN and 501370mE, 5435750mN) are extreme with > 2000 nT variation between samples separated by 12.5 m. The profile at these points indicates multiple sources (multiple peaks). The gradient is sufficiently large that the total field may not be accurately represented at these points. If real, the lack of a negative component to these anomalies supports the possibility of a near surface, depth extensive, high susceptibility sources.

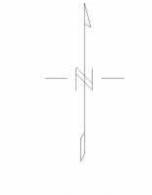
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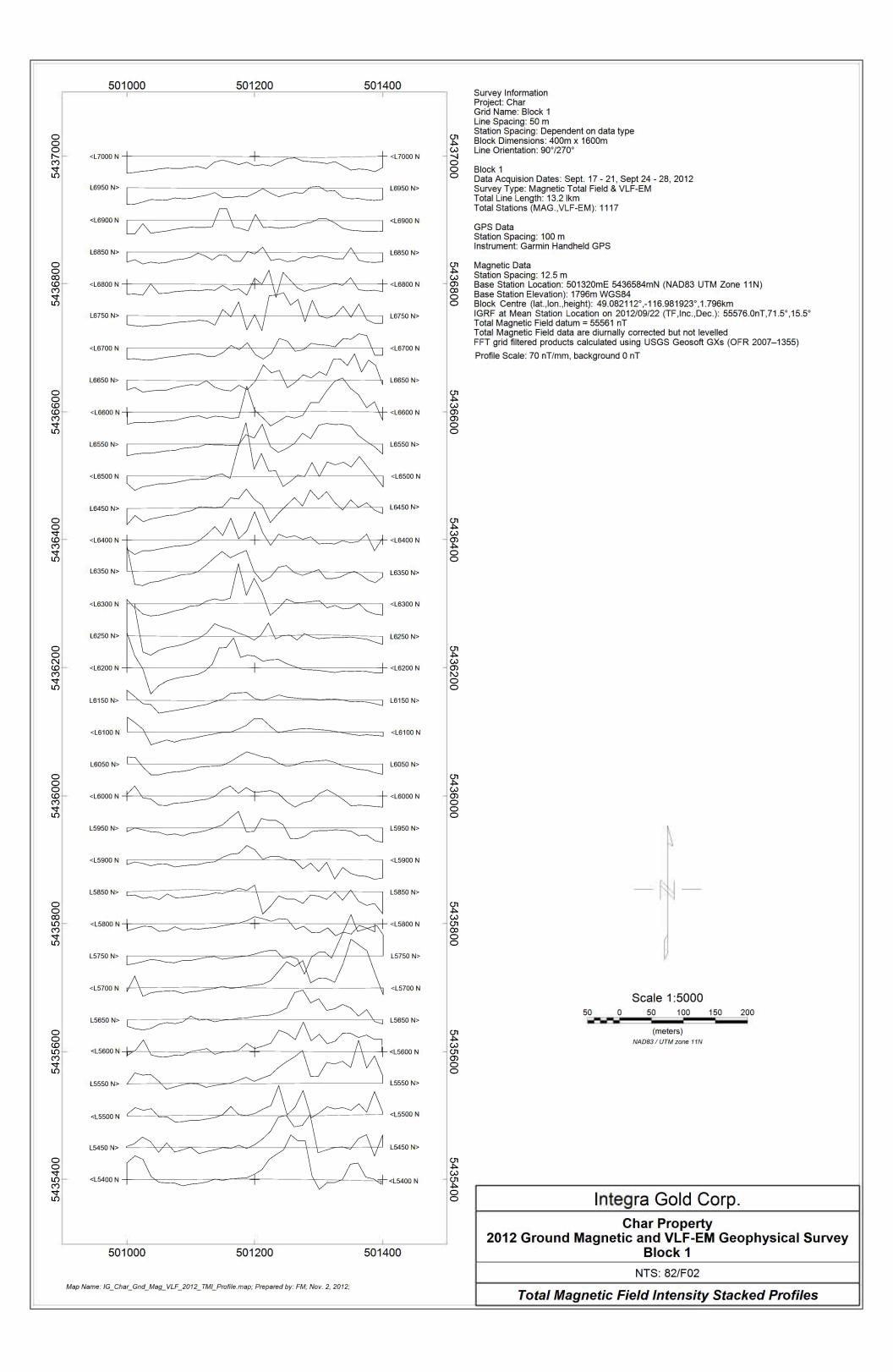


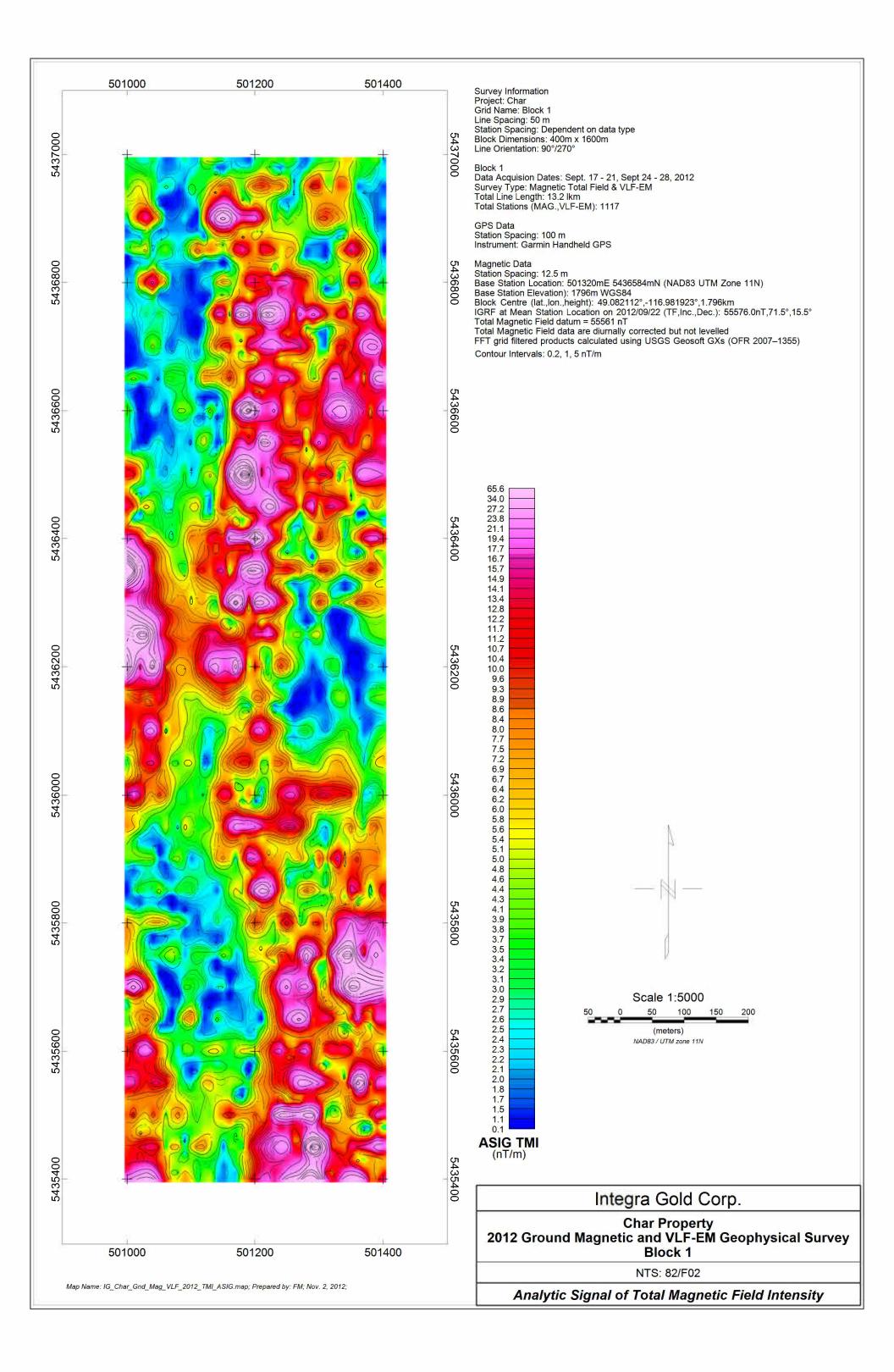


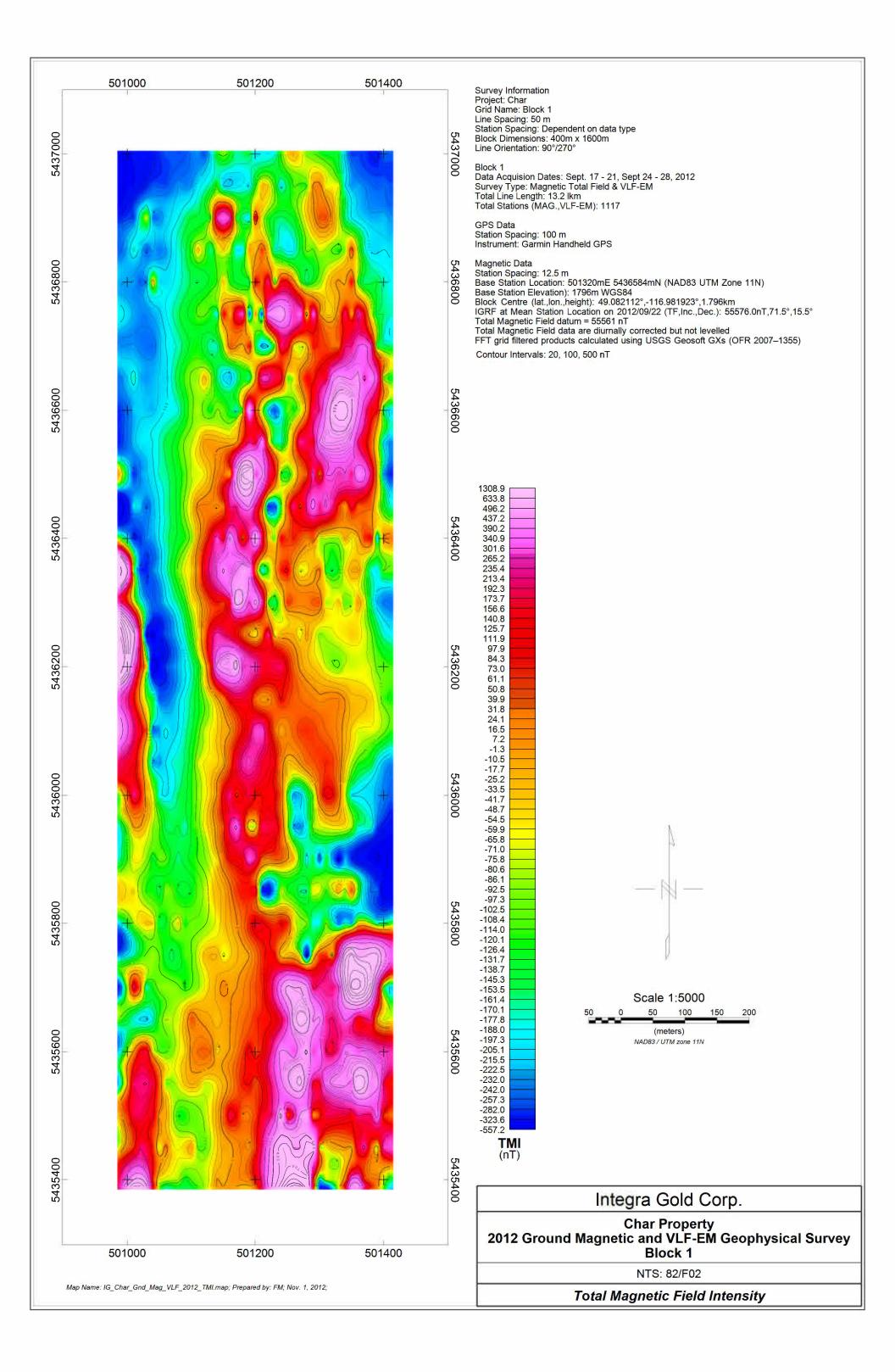




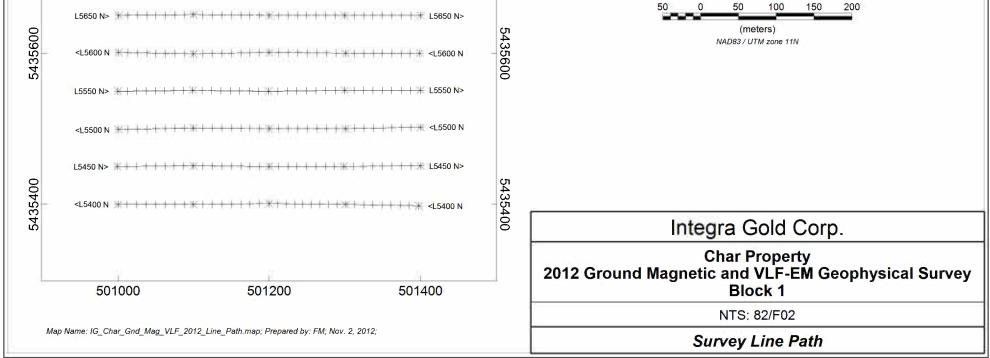


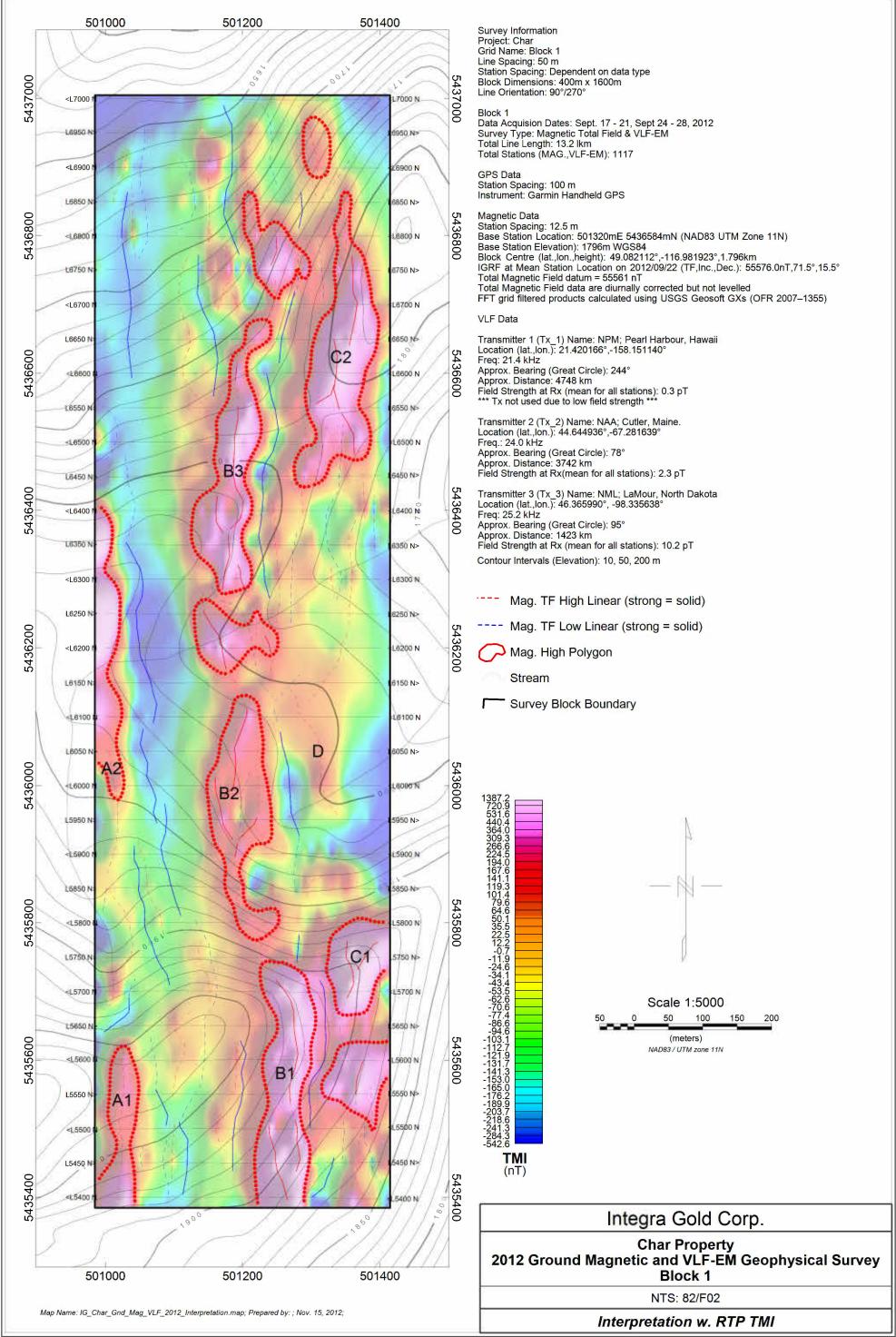


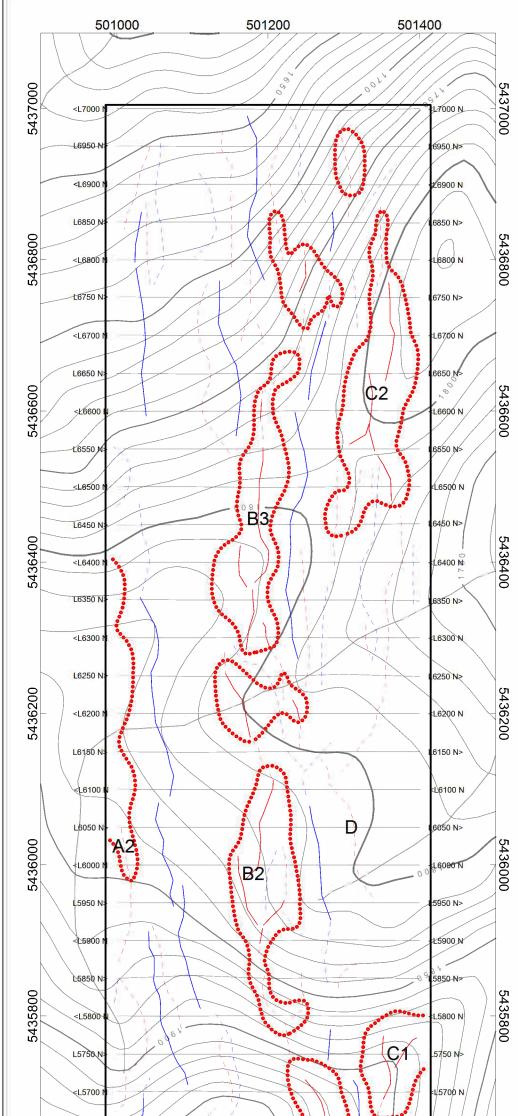




	501000	501200	501400		Survey Information
000	-1	D		543	Project: Char Grid Name: Block 1 Line Spacing: 50 m Station Spacing: Dependent on data type Block Dimensions: 400m x 1600m Line Orientation: 90°/270°
5437000		<u>*+++++++*+++++++</u>		5437000	Block 1 Data Acquision Dates: Sept. 17 - 21, Sept 24 - 28, 2012
		<u>K++++++(%+++++++</u>			Survey Type: Magnetic Total Field & VLF-EM Total Line Length: 13.2 lkm Total Stations (MAG.,VLF-EM): 1117
		****************			GPS Data Station Spacing: 100 m Instrument: Garmin Handheld GPS
800	L6850 N> <del>*++++++*</del> L6850 N>		543	Magnetic Data Station Spacing: 12.5 m	
5436800		K++++++*+++++++++		5436800	Base Station Location: 501320mE 5436584mN (NAD83 UTM Zone 11N) Base Station Elevation): 1796m WGS84 Block Centre (lat.,lon.,height): 49.082112°,-116.981923°,1.796km
		<del>K                                      </del>			IGRF at Mean Station Location on 2012/09/22 (TF,Inc.,Dec.): 55576.0nT,71.5°,15.5° Total Magnetic Field datum = 55561 nT Total Magnetic Field data are diurnally corrected but not levelled FFT grid filtered products calculated using USGS Geosoft GXs (OFR 2007–1355)
	<li>L6700 N 💥 + + + + + + + + + + + + + + + + + +</li>	<del>K+++++++*++++++*</del>	<del>(+ + + + + + + ★</del> <l6700 n<="" td=""><td></td><td>VLF Data</td></l6700>		VLF Data
200		<u> </u>		5436600	Transmitter 1 (Tx_1) Name: NPM; Pearl Harbour, Hawaii Location (lat.,lon.): 21.420166°,-158.151140° Freq: 21.4 kHz
5436600	<l6600 <u="" n="">★ + + + + + + + + →</l6600>	<del>K+++++++*</del> +++++++++	++++++≭ <l6600 n<="" td=""><td>Approx. Bearing (Great Circle): 244° Approx. Distance: 4748 km Field Strength at Rx (mean for all stations): 0.3 pT *** Tx not used due to low field strength ***</td></l6600>		Approx. Bearing (Great Circle): 244° Approx. Distance: 4748 km Field Strength at Rx (mean for all stations): 0.3 pT *** Tx not used due to low field strength ***
		<u> </u>			Transmitter 2 (Tx_2) Name: NAA; Cutler, Maine. Location (lat.,lon.): 44.644936°,-67.281639°
		<u><u><u> </u></u></u>			Freq.: 24.0 kHz Approx. Bearing (Great Circle): 78° Approx. Distance: 3742 km
36400		*++++++*+*++++++*		543	Field Strength at Rx(mean for all stations): 2.3 pT Transmitter 3 (Tx_3) Name: NML; LaMour, North Dakota Location (lat.,lon.): 46.365990°, -98.335638°
5436		K+++++++*++++++++*********************		5436400	Freq: 25.2 kHz Approx. Bearing (Great Circle): 95° Approx. Distance: 1423 km Field Strength at Rx (mean for all stations): 10.2 pT
	<l6300 +="" +<="" n="" td="" 🔭=""><td><u> </u></td><td>&lt;++++++* <l6300 n<="" td=""><td></td><td>GPS Station + VLF,MAG Station Interpolated Line Path</td></l6300></td></l6300>	<u> </u>	<++++++* <l6300 n<="" td=""><td></td><td>GPS Station + VLF,MAG Station Interpolated Line Path</td></l6300>		GPS Station + VLF,MAG Station Interpolated Line Path
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	<li>L5700 N *++++++++</li>	<del>K+++++++*+++++++</del>			Scale 1:5000







Survey Information

Project: Char Grid Name: Block 1 Line Spacing: 50 m Station Spacing: Dependent on data type Block Dimensions: 400m x 1600m Line Orientation: 90°/270°

#### Block 1

Data Acquision Dates: Sept. 17 - 21, Sept 24 - 28, 2012 Survey Type: Magnetic Total Field & VLF-EM Total Line Length: 13.2 lkm Total Stations (MAG.,VLF-EM): 1117

#### GPS Data

Station Spacing: 100 m Instrument: Garmin Handheld GPS

Magnetic Data

Station Spacing: 12.5 m Base Station Location: 501320mE 5436584mN (NAD83 UTM Zone 11N) Base Station Elevation): 1796m WGS84 Block Centre (lat.,lon.,height): 49.082112°,-116.981923°,1.796km IGRF at Mean Station Location on 2012/09/22 (TF,Inc.,Dec.): 55576.0nT,71.5°,15.5° Total Magnetic Field datum = 55561 nT Total Magnetic Field data are diurnally corrected but not levelled FFT grid filtered products calculated using USGS Geosoft GXs (OFR 2007–1355)

#### VLF Data

Transmitter 1 (Tx\_1) Name: NPM; Pearl Harbour, Hawaii Location (lat.,lon.): 21.420166°,-158.151140° Freq: 21.4 kHz Approx. Bearing (Great Circle): 244° Approx. Distance: 4748 km Field Strength at Rx (mean for all stations): 0.3 pT \*\*\* Tx not used due to low field strength \*\*\*

Transmitter 2 (Tx\_2) Name: NAA; Cutler, Maine. Location (lat.,lon.): 44.644936°,-67.281639° Freq.: 24.0 kHz Approx. Bearing (Great Circle): 78° Approx. Distance: 3742 km Field Strength at Rx(mean for all stations): 2.3 pT

Transmitter 3 (Tx\_3) Name: NML; LaMour, North Dakota Location (lat.,lon.): 46.365990°, -98.335638° Freq: 25.2 kHz Approx. Bearing (Great Circle): 95° Approx. Distance: 1423 km Field Strength at Rx (mean for all stations): 10.2 pT Contour Intervals (Elevation): 10, 50, 200 m

Mag. TF High Linear (strong = solid)

5 5 ( 5 /

--- Mag. TF Low Linear (strong = solid)

Scale 1:5000

Mag. High Polygon

Stream

Survey Block Boundary

