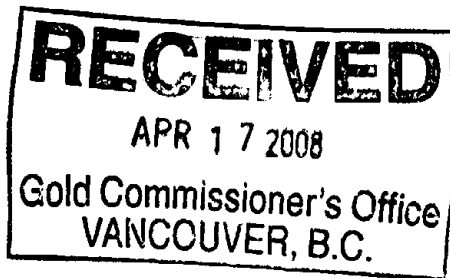


2007 ASSESSMENT REPORT ON THE GNOME PROPERTY

(OMINECA MINING DIVISION, NORTHEAST BRITISH COLUMBIA)

NTS map sheet 94F/01W,02E,07S

Latitude 57°~~24~~¹⁴'N, Longitude 124°~~58~~³¹'W



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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
29,831

SUMMARY

The Gnome property is located within the Kechika Trough, roughly 400 km NNW of Prince George in north-central British Columbia. The 2007 exploration program covering the Gnome property consisted of preliminary mapping, prospecting, and soil sampling. The claim is underlain by Ordovician to Devonian sediments including clastics from the prospective Gunsteel Formation. Rock and soil samples from the Gnome property returned anomalous values for silver, barium, and zinc, lead values were relatively flat. The single soil line completed was not enough to gain an in-depth understanding of the property mineralization, however, initial results are promising. Mineralization observed in the field includes calcite veins hosting trace chalcopyrite and sphalerite, as well as barite veins with sulfide selvage.

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1 INTRODUCTION AND TERMS OF REFERENCE

This report has been prepared both for assessment purposes and as an internal report for Mantle Resources Inc., Megastar Development Corporation, and their directors. Fieldwork conducted on the Gnome property during the 2007 field season was part of a larger regional study of the Akie River and Kechika Trough. Both authors of this report were not present throughout the entire 2007 field program, but the first author was present on the Gnome property during the field days worked on the claim.

The Gnome property is situated within an extensive northwest trend of mineralization being investigated by a regional study of the Akie claims (Figure 1). Work completed during the 2007 field season included preliminary mapping, prospecting, and soil sampling.

Units of measure in this report are metric. Maps and other location data are presented in Universal Transverse Mercator (UTM) projection, using the 1983 North American Datum (NAD'83). The reader is referred to Appendix I for a review of co-ordinate systems. Monetary amounts are expressed in Canadian dollars.

2 LOCATION AND STATUS OF PROPERTY

2.1 Location

The Gnome property is situated approximately 400 km NNW of Prince George in north-central British Columbia. More specifically, the Gnome property is located 20 km west of Sikanni Chief Lake, and is centred on latitude 57°23'N and longitude 124°53'W within National Topographic System Map Sheet 94F (Figure 1). The property was accessed by a helicopter, which was based at Mantle Resources' all season camp on the Akie property, a distance of 28 km from the Gnome property

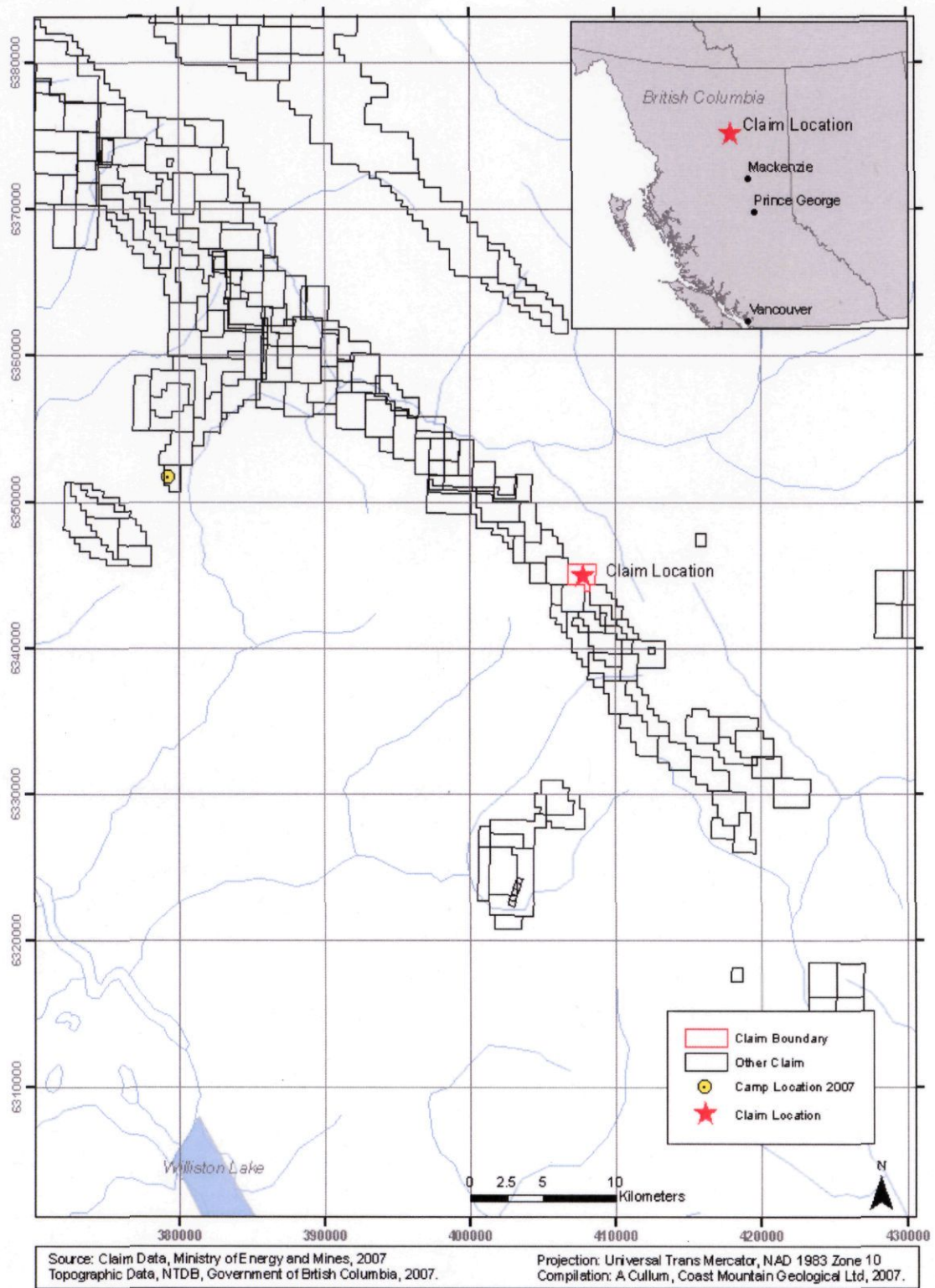


Figure 1. Location of the Gnome property.

2.2 Property status

The Gnome property consists of only one claim, Gnome East, and covers 280.2 hectares. The claim is owned by Mantle Resources Inc. and is part of the property pursuant to an Option Agreement with Megastar Development Corporation. A map of the claim is shown in Figure 2 and details of the individual tenure are summarised in Table 1.

Table 1. Property status.

Tenure Number	Claim Name	Owner	Good To Date	Status	Hectares
545899	GNOME EAST	202429 (100%)	2011/jul/29	GOOD	280.219

3 PHYSIOGRAPHY, CLIMATE, VEGETATION, ACCESS, LOCAL RESOURCES, AND INFRASTRUCTURE

Topography of the Gnome property is moderate to steep, with elevations ranging from 1600 m to 2120 m above sea level. Topography within the claim consists of one single large peak with convoluted ridges and variably steep drops into the surrounding valleys.

The climate is highly variable (5-30°C), with moderate rainfall or snow during the summer months. During the winter months, temperatures as low as -40°C accompany moderate accumulation of snow. The window of opportunity for fieldwork is best between May, when the valleys become snow-free, and late September, when snow starts accumulating again.

Tree line occurs at approximately 1700 m asl, below which the slopes are covered with forests of mostly spruce, with some pine and balsam. Above tree line vegetation is scarce; alpine grasses, mosses, alpine flowers and lichen occur on otherwise barren slopes of felsenmere and talus. Animal species include abundant grizzly bear, caribou, mountain goat, porcupine, wolf and marmot.

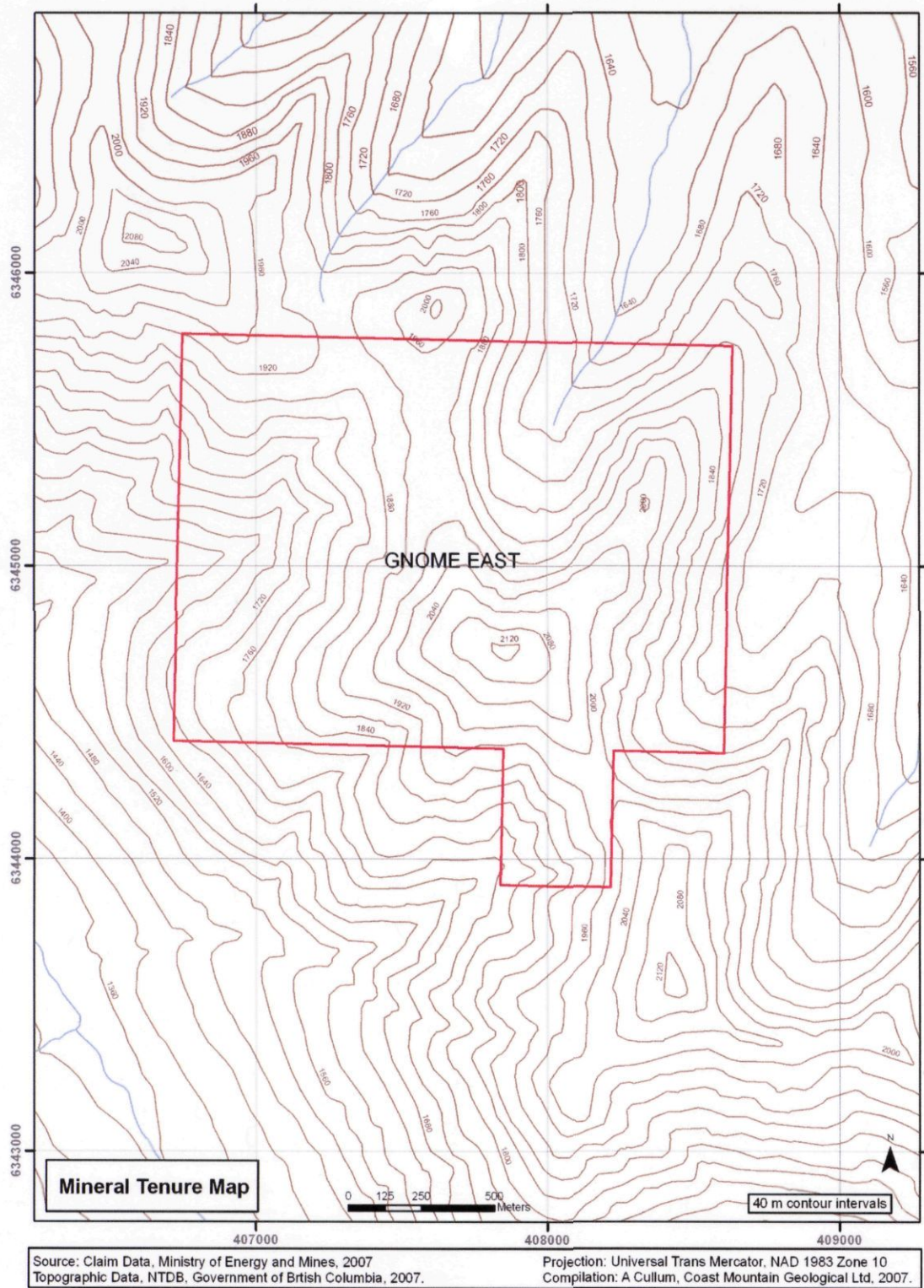


Figure 2. Mineral tenure map of the Gnome East claim.

The 2007 exploration project was based out of Mantle Resources' field camp located in the Akie River Valley. This camp can be accessed by driving north from the town of Tsay Keh, along the main logging road to the Del Creek main road. This road leads to the Akie River logging road. The camp is located at Kilometre 24.5 on this road. The Gnome property is located approximately 28 km east-southeast of the exploration camp and can be accessed by helicopter only.

4 PROPERTY HISTORY

The Gnome property currently consists of the single Gnome East claim. Cominco Ltd. originally staked land presently covered by the Gnome property in 1979 as well as adjacent claims not covered by the Gnome East claim. Fieldwork conducted between 1980 and 1985 included detailed geological mapping, as well as soil and stream sediment sampling, and whole rock geochemistry. No significant base metal mineralization was found and Cominco Ltd. allowed the Gnome property to lapse. In 1995, the land covering the original Gnome property was re-staked by Inmet Mining Corporation as the Muskwa property. Further soil geochemical sampling was conducted and the Muskwa property claims were again allowed to lapse. In 2006, David Heyman acquired the Gnome East claim, which covers a portion of the original Gnome property as well as a small extent of land East of the original claims. This claim was subsequently transferred to Mantle Resources Inc. in 2007.

5 GEOLOGICAL SETTING

5.1 Regional geology

The Gnome property is located within the Rocky Mountain fold and thrust belt of northeastern British Columbia (Figure 3). The area lies at the margin of ancestral North America and was a depositional environment for clastic and carbonate sedimentary rocks of Late Cambrian to Late Triassic age (MacIntyre, 2005).

The property is located within the Kechika Trough, a southeastern extension of the Selwyn Basin, bounded to the west and east by carbonates and shallow water clastic rocks of the Cassiar and MacDonald Platforms, respectively (Taylor and MacKenzie 1970). Rocks of the MacDonald Platform are host to Mississippi Valley type Pb-Zn deposits (MacQueen and Thompson 1978).

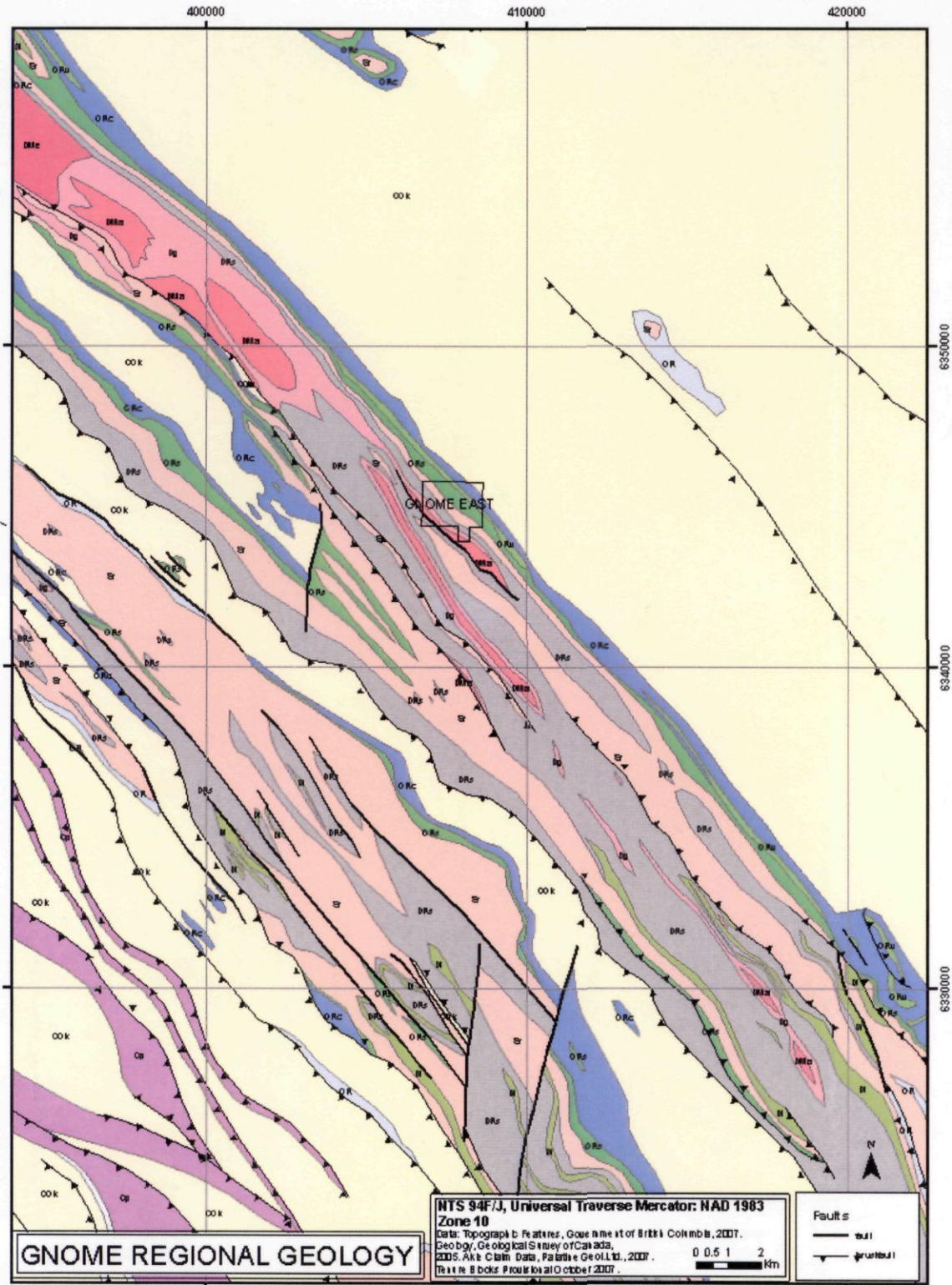




Figure 3a. Regional geology of the Kechika Trough with the locations of the Gnome property, after MacIntyre (2005). Geological polygons from Massey *et al.* (2005).

KECHIKA TROUGH GEOLOGY MAP LEGEND


TRIASSIC


 Ts dolomitic siltstone, minor limestone, dolostone.


CARBONIFEROUS to PERMIAN


 Mp pale grey to greenish grey chert.

UPPER DEVONIAN to MISSISSIPPIAN


 DMe argillite, slate, shale, locally carbonaceous and pyritic; chert arenite and pebble conglomerate, polymictic conglomerate; limestone

 DMA AKIE FORMATION: brown weathering silty shale; minor siltstone.


 Dg GUNSTEEL FORMATION: blue grey weathering chert, cherty mudstone, argillite, shale; nodular and bedded barite +/- sulphides; minor pelagic limestone.

 Db black, siliceous shale, minor sandstone and pebble conglomerate, barite.

LOWER to MIDDLE DEVONIAN

 DI medium to thick-bedded micritic and bioclastic limestone reefs and carbonate buildups; minor shaly argillite and chert; limestone, dark grey, argillaceous.


UPPER SILURIAN to MIDDLE DEVONIAN

 Dc mainly limestone in western part of 94F; basal quartzities, shale and limestone debris flows in eastern part of 94F.


ORDOVICIAN to DEVONIAN

 OSDr undivided, shale, black, graptolitic, mainly Ordovician; siltstone, tan, platy, mainly Silurian; sandstone, calcareous shale.


UPPER SILURIAN to MIDDLE DEVONIAN

 DRs rusty-weathering black silty shale, limy siltstone; lower section includes interbedded limestone debris flows, crinoidal siltstone, calcarenite, graptolitic black shale, quartzose conglomerate and wacke near carbonate platform and reefs; basal chert.


SILURIAN


 Sr brown to buff weathering dolomitic siltstone; platy, flaser-bedded; minor quartz wacke, limestone olistostromes; includes basal unit of dolostone, mudstone, black chert and argillite.


ORDOVICIAN

 OR undivided shale, limestone, siltstone, limestone debris flows.


MIDDLE to UPPER ORDOVICIAN


 ORs black graptolitic shale, minor black chert, siltstone.

 ORv orange weathering arkeritic tuffs, altered flows and sills.

 ORq mainly quartz wacke turbidites with minor interbeds of graptolitic black shale.

LOWER to UPPER ORDOVICIAN


 ORc platy, laminated buff to cream weathering, limy siltstone, mudstone, limestone and debris flows near base.

 OSk SKOKI FORMATION: medium to thin-bedded dolostone, limestone, limy mudstone, crinoidal.

CAMBRIAN - ORDOVICIAN

 COK nodular, wavy-banded phyllitic siltstone, limestone, shale, minor green tuff.

CAMBRIAN

 mCc medium to thick-bedded limestone patch reefs, minor quartz wacke.


 Cp quartzite, orange-weathering dolostones, minor siltstone, shale; may locally include Lynx Formation equivalents.

Figure 3b. Legend of lithological units.

The Kechika Trough itself was an area of deposition for a thick succession of basinal facies clastic and subordinate carbonates during the Palaeozoic and Early Mesozoic. A generalized stratigraphic column for the Kechika Trough is presented in Figure 4. As noted on this figure, at least three stratigraphic levels within the basinal succession are prospective for sedimentary exhalative (SEDEX) type Zn-Pb-Ag mineralization.

The basinal facies rocks occur in a number of southwest-dipping, northeasterly-vergent thrust fault panels which repeat the stratigraphy. The following is a summary of the stratigraphic units present in the general area of the Kechika Trough. These descriptions are abstracted from previous works, chiefly MacIntyre (2005), with only minor modifications.

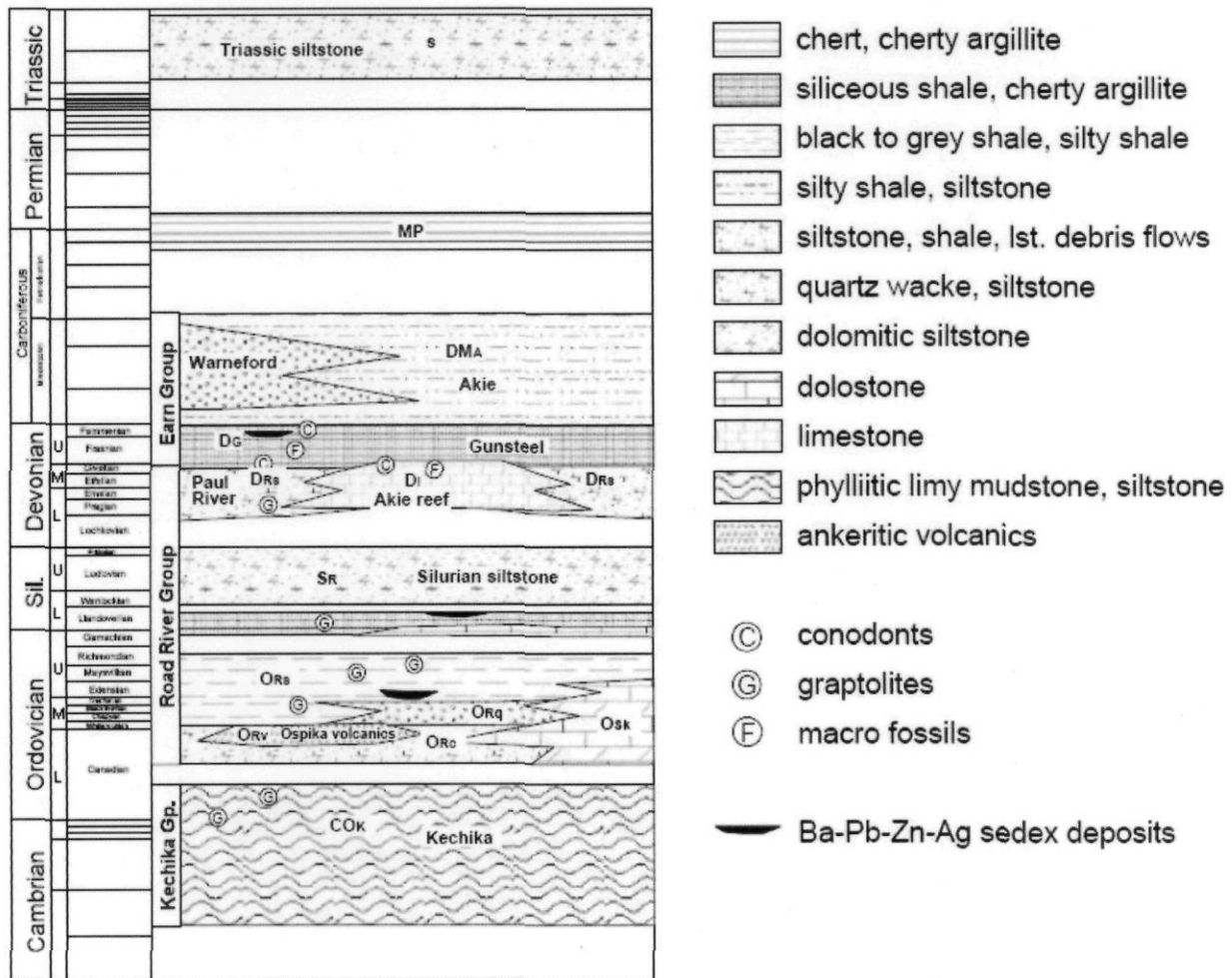


Figure 4. Stratigraphic assemblages of the Kechika Trough from MacIntyre (2005).

5.2 Stratigraphic units

5.2.1 Kechika Group

The oldest rocks exposed in the the Gnome property are assigned to the Kechika Group. Ferri *et al.* (1999) noted that this stratigraphic unit comprises mainly calcareous argillites and argillites of Late Cambrian to Early Ordovician age. The Kechika Group also includes limestone and rare tuffaceous strata. In the Gnome property, this assemblage is present on the north-eastern edge of the property and forms a base for the stratigraphic section.

5.2.2 Road River Group (Ordovician to latest Middle Devonian)

The Kechika Group is overlain unconformably by the Road River Group. In areas this stratigraphic unit comprises a succession of calcareous siltstones, shales, limestones and minor volcanic rocks. The unit was previously defined as a Formation of the same name (Taylor *et al.* 1979; Cecile and Norford 1979). This report uses the revised description of Road River Group recommended by MacIntyre (1998, 2005), after Gordey . (1981).

5.2.2.1 Lower Road River Group

The lower (Ordovician) part of the Road River Group includes a lower unit of thinly bedded cream, beige and reddish brown-weathering, laminated calcareous siltstone and shale with intercalated limestone turbidites and debris flows (Cecile and Norford 1979). The calcareous siltstones grade up section into a distinctive black shale unit with abundant Middle to Late Ordovician graptolites.

5.2.2.2 Ospika Volcanics (Late Ordovician)

Late Ordovician volcanic rocks occur as discontinuous lenses and beds of green mafic flows or microdioritic sills and orange-weathering ankeritic crystal and lapilli tuffs (MacIntyre 2005). These rocks depart from the stratigraphic relationship indicated in Figure 4; they are listed in the BC government database (Massey *et al.* 2005) with an age range from Middle Ordovician to Middle Devonian in age. However, MacIntyre (2005) notes that (in the Akie River area) the volcanic rocks are interbedded only with the late Early to early Middle Ordovician black shale facies and time-equivalent platformal rocks, within an areal extent parallel to the central axis of

the Kechika Trough. Their composition and linear distribution suggest they were erupted along trough-bounding rifts.

5.2.2.3 Silurian Siltstone Unit

The Ordovician graptolitic black shales of the Road River rocks are overlain unconformably by basal Silurian thin-bedded to cross-laminated limestone and dolostone beds. A second unconformity (Cecile and Norford 1979) separates the basal Silurian calcareous beds from the overlying tan to orange-brown weathering dolomitic siltstone interbedded with varying proportions of orange-weathering limestone and dolostone.

5.2.2.4 Upper Road River Group

The upper part of the Road River Group is Lower to Middle Devonian in age and disconformably overlies the Silurian siltstone (MacIntyre 1998). This upper part to the group exhibits considerable lateral variation in facies. It includes the carbonate rocks of the Akie reef and, in several areas, including the Gnome property, Lower Devonian marine turbidites comprising interbedded black shale and limestone debris flows with rusty dark grey siltstone to silty shale (*ibid.*).

5.2.3 Earn Group (Late Devonian to Mississippian)

The contact between the top of the Road River Group and base of the conformably or paraconformably overlying Earn Group is probably diachronous. It is convenient, for the present, to infer that the contact lies at the transition from Givetian to Frasnian.

MacIntyre (1998) and Pigage (1986) divided the Earn Group informally into three formations. From oldest to youngest, these are the Gunsteel, Akie, and Warneford formations. Rocks of the Gunsteel and the Akie formations occur on the Akie property (the latter should not be confused with the Akie Reef which is a facies of the Road River Group). Neither the Warneford formation nor rocks younger than Warneford have been identified in the general area of the property and are not described herein.

5.2.3.1 *Gunsteel formation*

The Gunsteel formation is a thick, fairly homogeneous sequence of black, graphitic, generally massive, featureless shale, with a distinctive gunsteel blue weathering. These shales are locally weakly siliceous, with cherty, carbonaceous and silty beds. Angular to subrounded, somewhat flattened and often weakly calcareous clasts occur throughout the unit but appear to increase downsection. MacIntyre (1998) suggests these clasts are derived from the crinoidal interbasinal reefs. Small, millimetric barite and calcite nodules often define bedding in otherwise featureless shale.

At or near the base of the Gunsteel formation, the shales are richer in silt, more siliceous and, as noted above, contain greater amounts of reef-derived clasts and barite nodules, which decrease upsection. The silty shales are thickly to thinly laminated. Pyritic banding with zinc-lead-silver mineralization decreases upsection from the base of the formation. MacIntyre (2005) suggested that the pyritic bands are situated closer to the top of the Gunsteel formation. Information acquired during the 2005 drill program indicates that sulphide bands also occur near the base of the formation.

Barite beds with sulphide mineralization (pyrite, sphalerite and galena) are situated at the base of the Gunsteel formation. These beds are locally deformed and vary from massive to laminar. The barite beds are interbedded with black shale layers up to 5 m thick.

5.2.3.2 *Akie formation*

The following description of the Akie formation rocks is from MacIntyre (2005):

Gunsteel rocks are conformably overlain by recessive, thick bedded, non-siliceous, rusty brown to tan weathering, medium grey aluminous shales of probable Late Devonian to Mississippian age. These rocks comprise the informal Akie formation as first defined by Jefferson *et al.*, (1983). The Akie formation correlates, in part, with the Besa River formation (Pelzer 1966) of the MacDonald Platform. These formations were deposited during a major, eastward advancing, marine transgression that occurred in Late Devonian to Mississippian time.

5.3 Regional structure

The geology of the Kechika Trough is typical of the thin-skinned tectonic style of the Rocky Mountain Fold and Thrust Belt (MacIntyre 1998, 2005). Northeast-vergent compression caused

detachment of Palaeozoic strata from the rigid crystalline basement, partially stacking and also folding the relatively incompetent plates (composed of basinal facies rocks) along a series of imbricate thrust faults.

MacIntyre (*ibid.*) notes that the structural style changes across the map area from west to east. In the west, imbricate, southwest dipping reverse faults bound asymmetric northeast-vergent overturned folds; in the east, outwardly dipping reverse faults bound major synclinoria and truncate folds within overriding anticlinoria. These eastern synclinoria are characterised by large-scale upright folds and preserve the Devonian strata.

MacIntyre also infers that that high-angle growth faults bounding the Devonian-Mississippian depositional troughs were reactivated to form major thrust faults during Tertiary compression. He cites the proximity of Palaeozoic rift-style volcanism, fracture-channelled mineralising fluids, clastic fans and reef margins to the present thrust faults as evidence that these faults were active in Palaeozoic time, albeit with different dynamics.

Pigage (1986) recognised two coaxial phases of deformation at the Cirque deposit, the largest known Cu-Zn deposit within the Kechika Trough. The earlier ubiquitous (D1) phase includes northeast-vergent tight asymmetric folds with gently dipping southwest limbs and steep to overturned northeast limbs; the latter are often offset by high angle reverse faults, juxtaposing Ordovician and Silurian strata against Devonian Gunsteel shales. The shales typically have a penetrative slaty cleavage that is axial planar to the S1 folds. At the Cirque deposit, a second (D2) phase of deformation folded the early slaty cleavage and developed a penetrative crenulation cleavage, axial planar to these late, open to upright, northeast-vergent folds (Pigage 1986).

North to northeast trending high angle faults, some with a strike-slip component, are interpreted as synthetic shears related to an oblique compressional stress regime of inferred Tertiary age (MacIntyre 2005).

The reader is reminded here that the foregoing description of regional stratigraphy and structure is merely a synthesis of far more extensive research in the Kechika

Trough, most notably by MacIntyre (1998) and by Ferri et al. (1999). The reader is referred to these and other works cited therein for a far more detailed review of the geological history.

5.4 Property geology

5.4.1 Stratigraphic units

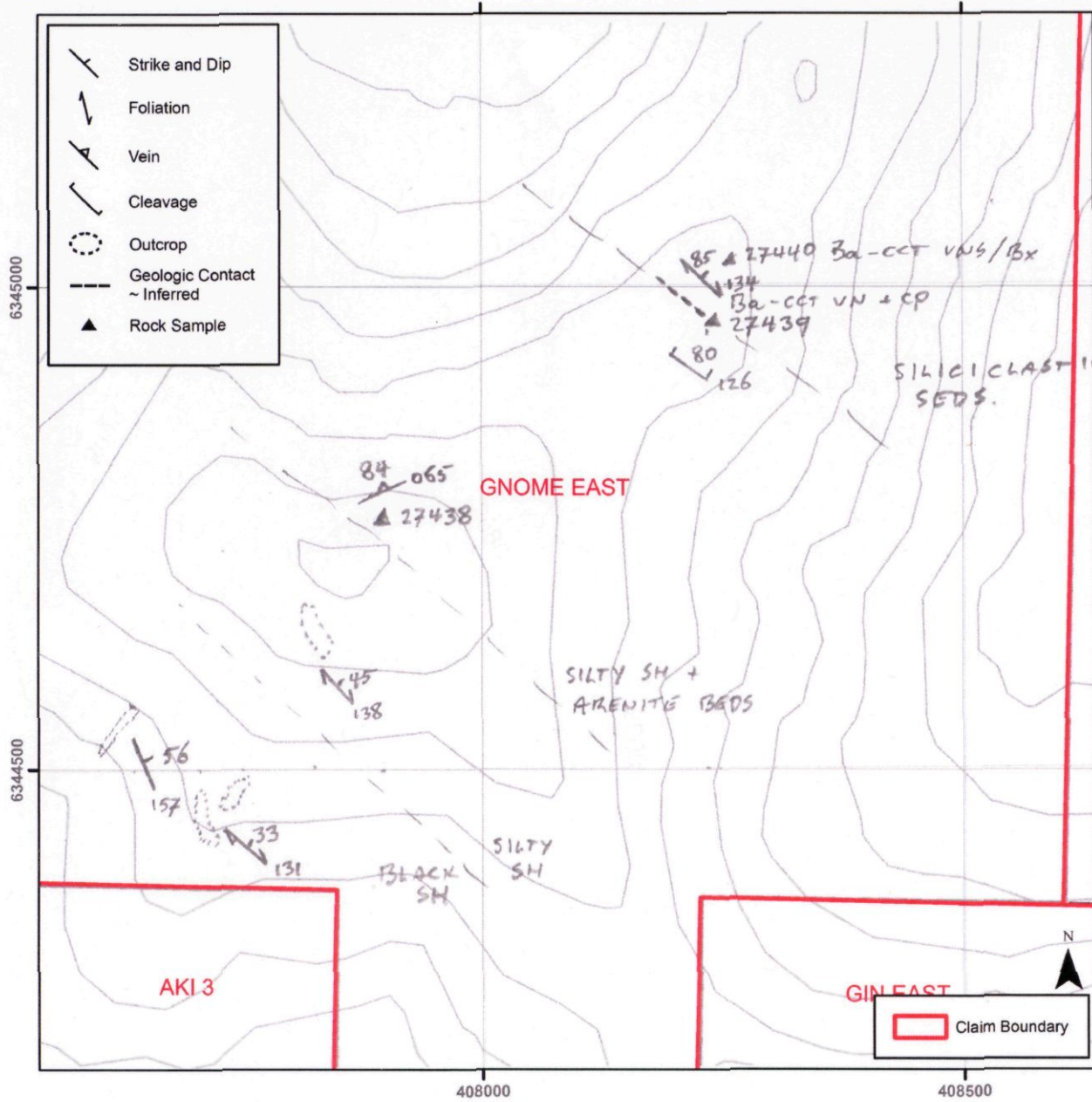
Past geological mapping of the original Gnome property and later Muskwa property have delineated a series of northwest trending anticlinal and synclinal belts of Devonian clastics from the prospective Gunsteel Formation (Kapusta 1996, Kuran 1981, Pride 1980, Rhodes 1986). These early exploration programs covered only the western portion of the current Gnome property. Regional geologic mapping by MacIntyre (2005) correlates reasonably well with the previous maps by the aforementioned authors.

The oldest rocks exposed within the Gnome East claim are Cambrian to Ordovician calcareous mudstone and phyllite from the Kechika Group; these rocks are exposed along the northeastern corner of the property. The Kechika Group is overlain by rocks of the Road River Formation, which are generally exposed throughout the property. The prospective Gunsteel Formation has been documented within the southwestern region of the claim.

Work completed during the 2007 field season consisted of preliminary mapping (Figure 5), prospecting, and soil sampling. Early snow cover limited more detailed geologic observations and mapping of the claim.

5.4.2 Structure

Major anticlinal and synclinal folding, as well as faulting of the Gnome East claim and surrounding area have been documented by past geologic mapping (Kapusta 1996, Kuran 1981, Pride 1980, Rhodes 1986). These features are the result of strong northeast-southwest compression. Snow cover obscured many of these larger scale features during the 2007 exploration.



GNOME FIELD MAPPING, 2007

Source: Field Mapping, M. Vanwermeskerken, CMG, 2007.
 Claim Data, Ministry of Energy and Mines, 2007
 Topographic Data, NTDB, Government of British Columbia, 2007.
 Projection: Universal Trans Mercator, NAD 1983 Zone 10
 Compilation: A Cullum, Coast Mountain Geological Ltd, 2007.

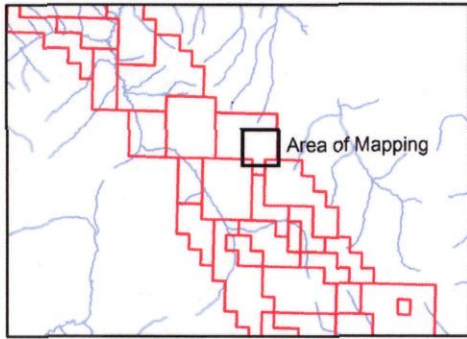
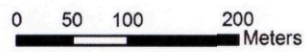


Figure 5 Geology map of the Gnome property. Abbreviations are as follows: ba, barite; cct, calcite; vn, vein; bx, breccia; sh, shale; seds, sediments; cp, chalcopryite.

6 REGIONAL METALLOGENY AND DEPOSIT TYPE

MacQueen and Thompson, (1978) and subsequent authors noted that carbonates and shallow water clastic rocks of the MacDonald Platform, bounding the Kechika trough to the east of the Akie property, are host to Mississippi Valley and Irish type Pb-Zn deposits, such as the Prairie Creek Mine (11.8 Mt grading 12.5% Zn, 10.1% Pb, 161 gm/t Ag and 0.4% Cu). However, with the exception of several minor, unclassified showings, all recorded occurrences within the Kechika trough are of the sedimentary exhalative (SEDEX) Zn-Pb-Ag type (BC Geological Survey Branch Deposit Profile E14; MacIntyre 1995).

All 21 MINFILE mineral occurrences which lie within the 094 NTS map sheet and which are identified as SEDEX Zn-Pb-Ag lie on a NW-SE trend, part of which is shown on Figure 3. These mineral occurrences are hosted exclusively by the basinal facies of the Kechika Trough.

Three generalised stratigraphic levels within the Trough are presently identified as prospective for this deposit type (MacIntyre 2005) and are shown in Figure 4. These are:

1. The shales at or near the Llandeilian - Caradocian (Middle-Upper Ordovician) boundary in the lower part of the Road River Group;
2. The Llandoveryian (Lower Silurian) siliceous shale base of the middle Road River Group's Silurian Siltstone unit and;
3. The latest Middle to Upper Devonian Gunsteel formation.

Of the 21 MINFILE mineral occurrences, 14 (including all those more advanced than "showing") are explicitly hosted within the Gunsteel formation. These include all occurrences close to Cardiac Creek: Cirque (094F 008; 32.2 Mt grading 7.9% Zn, 2.1% Pb and 48 gm/t Ag), Fluke (094F 009), Elf (094F 011), Mount Alcock (094F 015), Pie (094F 023), Bear (094F 024), Aki (094F 027), and Erin (Ern) (094E 055). The Gunsteel occurrences lie on a sharply defined NW-SE trend, parallel with the inferred margins of the Kechika Trough.

MacIntyre (2005) notes that conodont biostratigraphic data collected at the Cirque deposit (Paradis *et al.* 1998) indicate that the deposit is Upper Famennian. The goniaticite retrieved from the Cardiac Creek unit lies precisely at the top of the zinc-rich section of the mineralized panel and therefore could be interpreted as the youngest mineralized horizon at Cardiac Creek. MacIntyre notes that the occurrence of the goniaticite constrains this top horizon to a lower to

middle Famennian age, slightly older than that of the Cirque deposit. Based on the Devonian time scale of Kaufmann (2006), this is a time interval of as much as 3.6 Ma.

7 PROPERTY MINERALIZATION

Field observations from the 2007 exploration program documented coarse calcite veining hosting <1% chalcopyrite and possibly <1% sphalerite. Barite veins with sulfide selvage are also present and are cut by the sulphide bearing calcite veins. The barite veins can be followed intermittently for at least 40 m, snow cover limited further exploration of this mineralized zone. Gossans were also documented proximal to the mineralized veins.

The 2007 soil samples returned anomalous values for silver, barium, and zinc, lead values were relatively flat. The single soil line completed was not enough to gain an in-depth understanding of the property mineralization, however, results are promising. Zinc values range from 26 ppm to 938 ppm, silver values range from 197 ppb to 3263 ppb, barium ranges from 67 ppm to 2794 ppm, and lead values are low ranging from 14 ppm to 53 ppm. Lead and zinc values show no correlation, while zinc values are moderately correlated with copper and nickel, lead values are very weakly correlated with silver. For further information, refer to the analytical results section in this report.

8 2007 EXPLORATION

8.1 Purpose

The purpose of the 2007 exploration program was to investigate the spatial extent and economic potential of lead-zinc-barium anomalies hosted in the Gunsteel Formation. During the 2007 field season, one soil line was completed as well as preliminary mapping and prospecting. The transects were designed to cut perpendicular to the strike of northwest trending lithologies.

8.2 Logistics, personnel, and duration

Work on the Gnome property was part of a larger regional programme that operated from Mantle Resources' AKIE drill camp, where the field crew and logistical support was based. The camp

was located at Kilometre 24.5 on the Akie logging road. Logistical support in the case of minor supplies came from the nearby town of Tsay Keh, at the north end of Williston Lake. Major supplies and groceries were delivered from MacKenzie and Prince George. The exploration and support crew consisted of two geologists, one field technologist, a helicopter pilot and an engineer, in addition to Akie project and camp personnel. Work on the Gnome property was completed over one day, September 23, 2007.

8.3 Exploration procedures

Soil samples were taken approximately every 50 meters along parallel linear traverses spaced approximately 100 meters apart. Sample locations were documented using GPS and physically marked using flagging tape. Soil samples were collected from the B-horizon, placed in sample bags, and shipped to ACME Analytical Laboratories Ltd. in Vancouver for analysis.

8.3.1 Sample security

All samples were packed in rice bags, sealed with plastic security straps, and readied for shipping on site by the field crew.

8.3.2 Analytical procedures, replicates and blanks

Rock and soil samples were analysed by Acme Analytical in Vancouver; refer to Acme's brochure for details on assay procedures and codes. Soils and silts were: dried and sieved according to SS80; tested for pH; analysed by the 1F-MS full suite to measure *aqua regia*-extractable Sn + In; analysed by the 4A full package with priorities to Ba, Sr, S, C, and Al, followed by Si; analysed for over limits of Zn, Pb, and Ag using the 7AX sequential leaching.

Unmarked blanks were included with the samples submitted, roughly once in every 20 samples. The blanks were collected from a road cut in the vicinity of the exploration camp. No replicate samples were taken. Acme laboratories re-assayed one in every 20 to 30 samples a second and a third time.

8.4 Results of 2007 exploration

One day (3 mandays) have been spent on the claim so far, with the collection of 26 soil and 4 rock samples. Geochemical results for the rock samples are yet to be returned.

8.4.1 Analytical results

The results from the 2007 exploration program are tabulated in Appendix II. Maps displaying geochemical results from the 2007 soil sampling program for lead with zinc, and barium with silver are shown in figures 6 and 7 respectively.

9 INTERPRETATIONS AND CONCLUSIONS

Past exploration programs of the area surrounding and including portions of the Gnome East claim failed to uncover any significant mineralization. The single soil line and prospecting completed during the 2007 field season revealed promising results, however, the extent of mineralization and significance of the anomalous soil values are yet to be fully understood.

10 RECOMMENDATIONS

Proposed follow up work for the 2008 field season includes additional soil and outcrop sampling in order to better define mineralized zones. Detailed mapping of the property is also recommended in order to gain a better understanding of the source of the anomalous soil values.

11 ACKNOWLEDGEMENTS

The authors wish to thank Paul Metcalf and Marie Brannstrom for their help and advice throughout this project. Technical support by Alissa Cullum and Demer McIntosh was instrumental in the completion of this project.

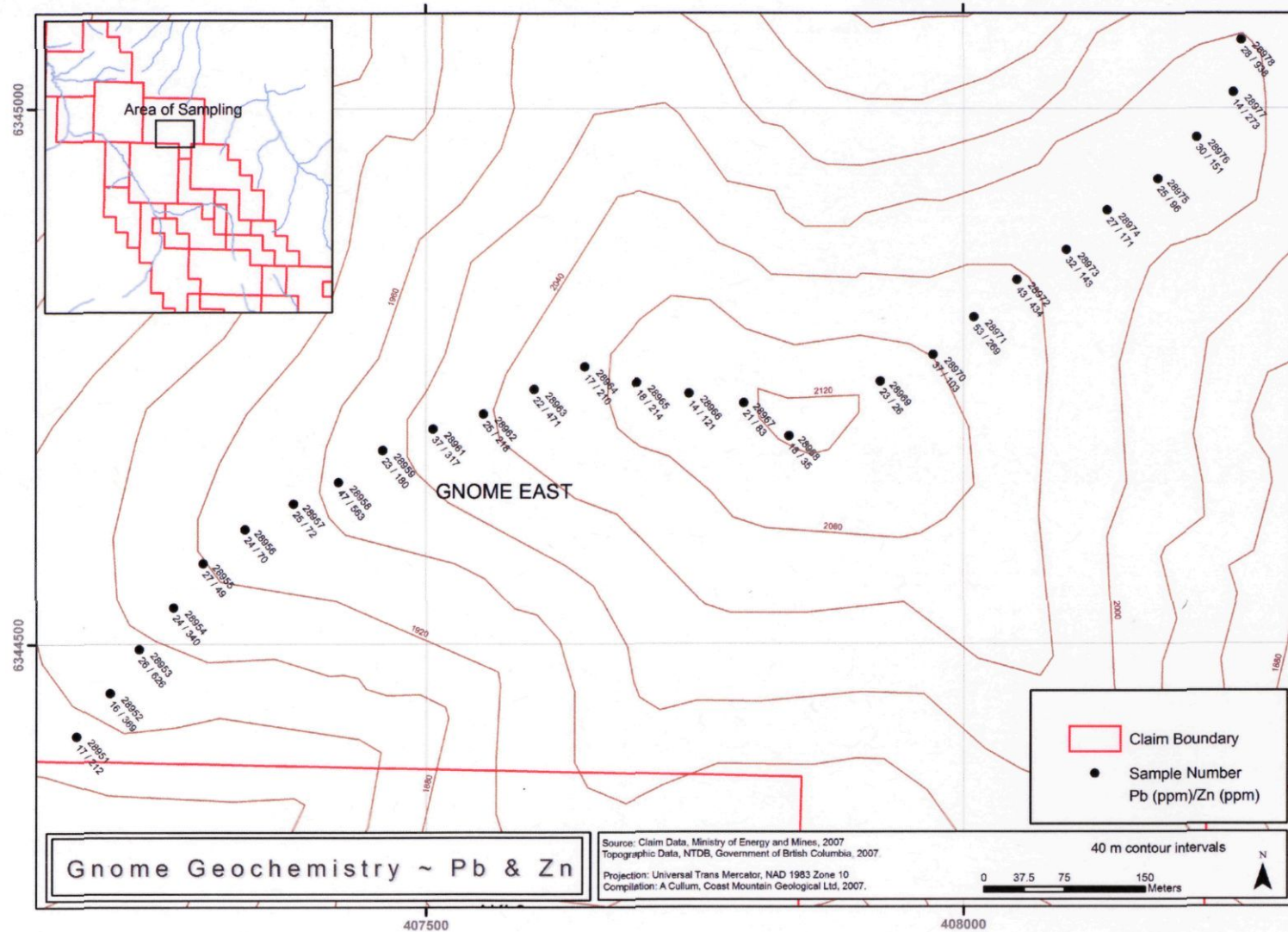


Figure 6 Geochemical results for lead and zinc from 2007 soil samples

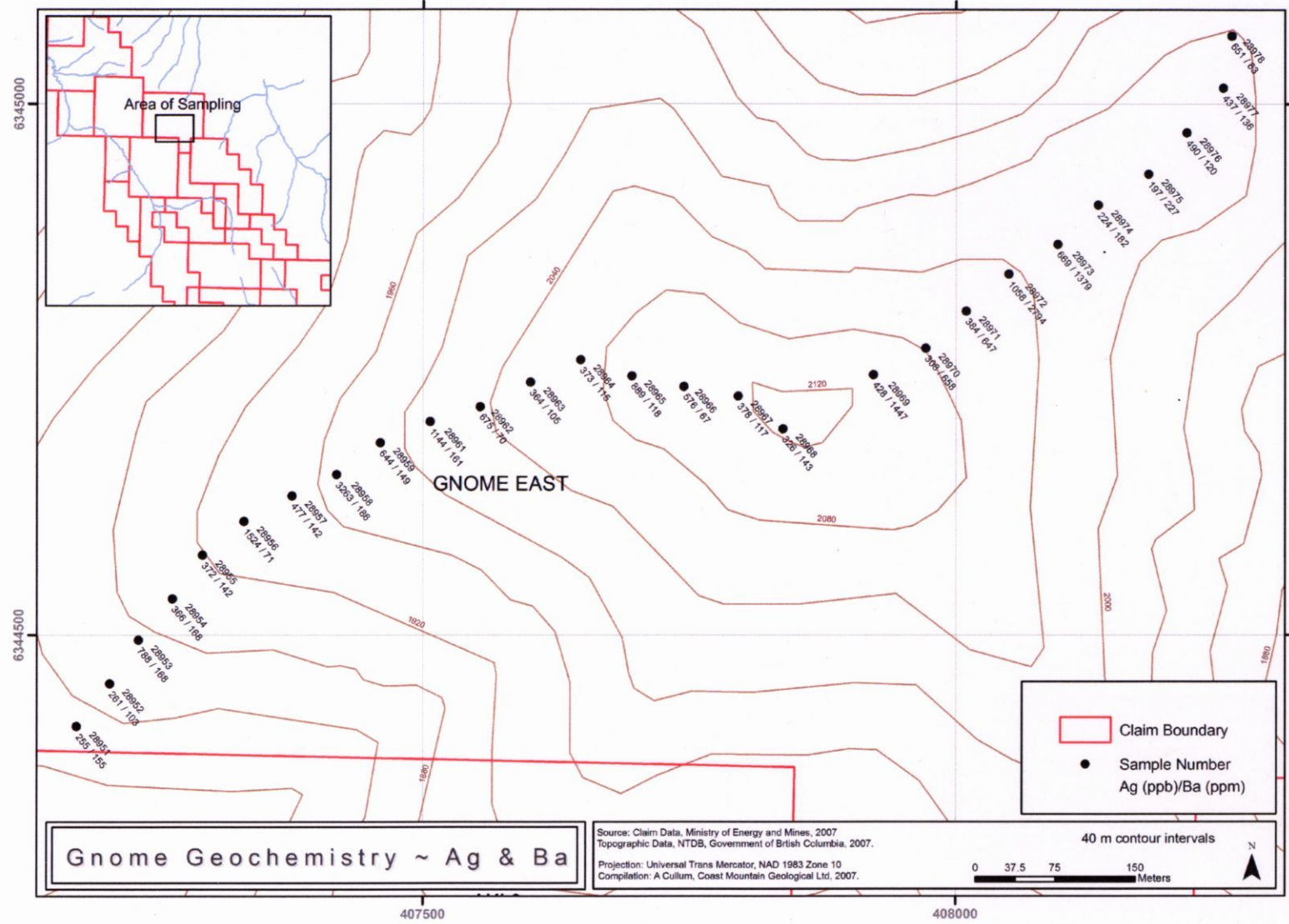


Figure 7 Geochemical results for silver and barium from 2007 soil samples

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STATEMENT OF QUALIFICATIONS

I, Marcus Vanwermeskerken, of Saltspring Island, British Columbia hereby certify that:

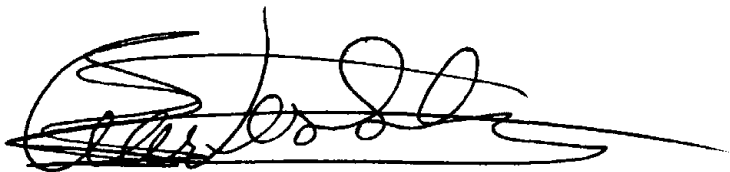
I am a geologist residing at and with office at 274 Langs Road, Saltspring Island and under contract with Coast Mountain Geological Ltd. of 620-650 West Georgia Street, Vancouver, British Columbia, V6B 4N9.

I am a graduate of University of British Columbia, with a Bachelor degree in Geology (1987) and I have practised my profession for 19 years since in Canada, Mexico and South America.

I am a co-author of this report.

This report is based on work carried out under my supervision on the Gnome Project during the period of July 2007 to September 2007 as well as a study of various published reports.

I have no direct or indirect interest in the claims or securities of Mantle Resources Inc., Megastar Development Corp., nor their parent companies.

A handwritten signature in black ink, appearing to read 'Marcus Vanwermeskerken', with a long horizontal flourish extending to the right.

Marcus Vanwermeskerken, B. Sc., P. Geo

Coast Mountain Geological Ltd.

April 30th, 2008

Vancouver, B.C.

STATEMENT OF QUALIFICATIONS

I, Kerri Laura Heft, of Victoria, British Columbia, do hereby certify that:

1. I graduated with a B.Sc. in Earth Sciences (Honours and Distinction) from the University of Victoria in 2003. In addition, I completed a M.Sc. in Earth Sciences specializing in Marine Geochemistry from the University of Victoria in 2007.
2. I have been practicing my profession since 2003.
3. I have been employed by Coast Mountain Geological Ltd. as a geologist and have been actively involved in mineral exploration from 2007 to the present.
4. I am co-author of this report.
5. I have worked as a geologist on numerous properties within the Kechika Trough and am familiar with the geology of the region.
6. I have no personal interest in the claims, Mantle Resources Inc., Megastar Development Corporation, or their parent companies.



Kerri Heft, M.Sc.

Coast Mountain Geological Ltd.

April 10, 2008

APPENDIX I: A REVIEW OF CO-ORDINATE SYSTEMS

Grids are the co-ordinate systems used to identify field locations uniquely in notes and on maps. These are systems of easting and northing values or co-ordinates, which are displacements of distance or angle measured from defined zero-lines or origins. The geographic co-ordinate system is the best-known of these systems, where meridians (north-south lines of longitude) and parallels (east-west lines of latitude) are measured in degrees, from the Greenwich zero meridian and from the equator, respectively. For a unique combination of values (e.g. 49°N, 123°W, there is a corresponding, unique location on the Earth's surface.

As noted above, the geographic system uses angles to measure location and is therefore not based upon a rectangular grid. Moreover, this system is a direct representation of the Earth's curved surface and translates poorly onto a flat sheet of paper, making it difficult to use in many applications unless a projection is carried out.

A projection is a mathematical method for converting the curved surface of the earth to a flat surface, tangential to the earth's surface at a particular point. An ellipsoid is a model for the shape of the earth's globe used in the projection calculation. A datum identifies the location(s) where the ellipsoid is fixed to specific geographic locations and from which the resulting grid is measured or surveyed. This grid is therefore rectangular or Cartesian and can be represented by a distance X (easting) and a distance Y (northing) from an origin point; elevations are measured as distance above (or below) the geoid's surface.

National and regional grid systems and their associated maps that are based on the earth's shape require all three components in their definition: a projection, an ellipsoid and a datum. All three should be specified; otherwise co-ordinates given in a report or map will be ambiguous. Frequently a particular datum implies the use of a specific ellipsoid, which is therefore not necessarily mentioned.

Maps of small areas that do not need to account for the curvature of the earth or irregularities in its shape are based on simple, non-earth co-ordinate systems. These are usually called local grids and are commonly used for geological data collection. A local grid may be oriented arbitrarily and the conversion from local grid co-ordinates to a national or regional grid is simply treated as a shift and rotate operation.

APPENDIX II: STATEMENT OF WORK



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Confirmation

Recorder: BRANNSTROM, BRENDA
MARIE (144480)
Recorded: 2008/FEB/01
D/E Date: 2008/FEB/01

Submitter: BRANNSTROM, BRENDA
MARIE (144480)
Effective: 2008/FEB/01

Your report is due in 90 days. Please attach a copy of this confirmation page to the front of your report.

Event Number: 4193426

Work Start Date: 2007/SEP/23
Work Stop Date: 2007/SEP/23

Total Value of Work: \$ 4659.20
Mine Permit No:

Work Type: Technical Work
Technical Items: Geochemical

Summary of the work value:

Tenure #	Claim Name/Property	Issue Date	Good To Date	New Good To Date	# of Days Forward	Area in Ha	Work Value Due	Submission Fee
545899	GNOME EAST	2006/nov/25	2008/feb/03	2011/jul/29	1272	280.22	\$ 4659.14	\$ 390.62

Total required work value: \$ 4659.14

PAC name: 202429
Debited PAC amount: \$ 0.00
Credited PAC amount: \$ 0.06

Total Submission Fees: \$ 390.62

Total Paid: \$ 390.62

The event was successfully saved.

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Back

APPENDIX III: STATEMENT OF COSTS FOR 2007 EXPLORATION

Table 2 Cost tracking of the 2007 exploration program of the Gnome East claim.

Details	Quantity	Unit	Rate	Total
Labour				
Senior Geo	1	man days	750.00	\$750.00
Jr Geo	1	man days	600.00	\$600.00
Geotech	1	man days	375.00	\$375.00
Camp Costs	3	man days	208.00	\$624.00
Helicopter	1.1	hours	750.00	\$825.00
Fuel	125.4	litres	1.50	\$188.10
Analyses	26	soils	44.64	\$1,160.64
Analyses	5	rock	72.64	\$363.20
Office Compilation and Standby				\$867.19
Mob/Demob				\$429.92
Total				\$6,183.04

The above costs do not include an additional \$5000 for report writing and data compilation.

APPENDIX IV: SAMPLE DESCRIPTIONS

Gnome Sample Descriptions 2007

Sample #	Type	Easting	Northing	Claim	Sample Descriptions
27438	R	407895	6344759	GNOME EAST	2.5 m chip across very dense quartz stockwork <20 cm in grey siliceous shale trending 065/84 NW
					Grab from calcite-barite pod in medium grained arenite. Calcite very coarse, with <1% chalcopyrite and <1% sphalerite (?) and very minor malachite. Calcite crosscuts barite with sulphide selvage. Can be followed as subcrop intermittently for 50 m.
27439	R	408232	6344952	GNOME EAST	
27440	R	408253	6345025	GNOME EAST	Barite rich arenite with quartz-calcite-barite veins highly leached. Same as 27439 but no sulphides.
27593	R	407369	6344630	GNOME EAST	Dark Shale. Rock frag comprise pale, weakly-rusted colour, coarse grained qtz vein material.
28951	D	407175	6344414	GNOME EAST	On veg snow covered slope; med brn rocky soil.
28952	D	407206	6344454	GNOME EAST	On veg snow covered slope; med brn rocky soil.
28953	D	407233	6344495	GNOME EAST	On veg snow covered slope; med brn rocky soil.
28954	D	407265	6344534	GNOME EAST	On veg snow covered slope; med brn rocky soil (more pebbles).
28955	D	407293	6344575	GNOME EAST	On snow covered ridge; talus fines.
28956	D	407332	6344607	GNOME EAST	On snow covered ridge; talus fines.
28957	D	407377	6344631	GNOME EAST	On snow covered ridge; talus fines.
28958	D	407419	6344651	GNOME EAST	On snow covered ridge; talus fines; drk brn/blk.
28959	D	407460	6344681	GNOME EAST	No descrip.
28961	D	407507	6344701	GNOME EAST	On snow covered ridge; talus fines; drk brn/blk.
28962	D	407554	6344715	GNOME EAST	On snow covered ridge; med brn shale.
28963	D	407601	6344738	GNOME EAST	On snow covered ridge; med brn shale, rocky.
28964	D	407648	6344759	GNOME EAST	On snow covered ridge; med brn shale, more rocky.
28965	D	407696	6344744	GNOME EAST	On snow covered ridge; med brn shale, more rocky.
28966	D	407745	6344734	GNOME EAST	On snow covered ridge; blk silty fines.
28967	D	407796	6344725	GNOME EAST	On snow covered ridge; med brn soil some pebbles near summit.
28968	D	407838	6344694	GNOME EAST	On snow covered ridge; med brn soil some pebbles near summit.
28969	D	407923	6344745	GNOME EAST	On snow covered ridge; med brn/greyish soil, very rocky (frozen) skipped last waypoint too rocky.
28970	D	407972	6344770	GNOME EAST	On snow covered ridge; med brn/greyish soil, very rocky (frozen) skipped last waypoint too rocky.
28971	D	408010	6344805	GNOME EAST	On snow covered ridge; med brn/greyish soil, very rocky (frozen) skipped last waypoint too rocky.
28972	D	408050	6344840	GNOME EAST	On snow covered ridge; med brn soil (rocky).
28973	D	408096	6344868	GNOME EAST	On snow covered ridge; drk brn soil.
28974	D	408134	6344905	GNOME EAST	On snow covered ridge; med brn rocky soil.
28975	D	408181	6344934	GNOME EAST	On snow covered ridge; med brn rocky soil.
28976	D	408217	6344973	GNOME EAST	On snow covered ridge; med brn rocky soil.
28977	D	408251	6345015	GNOME EAST	On snow covered ridge; silty med brn sandy soil.
28978	D	408259	6345064	GNOME EAST	On snow covered saddle; gravely/sandy med brn soil (rocky).

APPENDIX IV: CERTIFICATES OF ANALYSIS

Geochemical results are tabulated below. For the location of samples, please reference the sample number with the geochemical maps in figures 6 and 7.



WHOLE ROCK ICP ANALYSIS



Coast Mountain Geological PROJECT Kechika File # A800322 Page 1

P.O. Box 11604 620 - 650, Vancouver BC V6B 4N9 Submitted by: Bruno Kasper

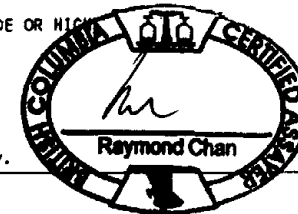
SAMPLE#	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	TOT/C	TOT/S	SUM
	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
27441	65.86	11.79	4.27	1.61	1.59	.48	3.23	.46	.33	.04	.009	560	15	50	269	48	10	14	10.3	2.59	.02	100.09
27442	76.63	8.91	3.60	1.00	.30	.21	2.05	.56	.18	.01	.009	779	17	28	137	16	8	8	6.5	1.22	.01	100.08
27443	81.68	7.14	1.88	.70	.32	.11	1.87	.55	.13	.01	.008	646	9	19	120	16	11	6	5.6	1.42	.02	100.09
27444	39.48	16.08	6.41	1.56	1.52	.15	3.29	.40	.36	.04	.019	4695	208	61	120	56	11	20	30.1	11.01	.10	100.01
27445	54.16	8.74	2.78	.97	2.29	.29	2.00	.44	.24	.10	.009	1067	448	62	128	26	8	9	27.6	11.93	.05	99.83
27446	74.35	10.59	2.45	1.26	.32	.26	2.49	.62	.15	.01	.011	1196	10	35	145	14	10	8	7.4	1.78	.02	100.08
27447	73.91	7.76	3.70	.71	.39	.41	1.96	.52	.24	.01	.009	951	21	45	177	12	12	6	10.3	3.68	.03	100.07
27448	74.62	8.63	1.93	.68	.42	.78	1.67	.83	.16	.01	.012	649	19	65	349	19	17	7	10.2	3.55	.03	100.08
27449	80.70	7.30	2.57	.66	.36	.28	1.36	.56	.17	.01	.008	787	49	31	163	16	12	6	5.9	1.22	.01	100.01
27450	75.72	8.83	5.27	.95	.28	.14	1.70	.56	.34	.01	.011	1165	23	22	118	16	13	7	6.1	.82	.01	100.07
27541	68.44	6.69	5.38	.84	1.47	.14	2.04	.33	.32	.15	.009	774	350	31	133	36	9	7	13.9	5.04	.04	99.87
27542	49.24	6.03	6.81	1.04	7.78	.17	1.51	.30	.28	.19	.007	658	1622	44	95	48	6	7	25.8	9.36	.05	99.47
27543	44.40	5.31	19.84	.61	2.50	.12	1.32	.23	.22	.26	.005	581	1557	39	62	157	<5	5	24.5	7.89	.06	99.61
27544	52.72	6.28	12.49	.76	1.99	.15	1.63	.30	.23	.08	.007	711	1026	33	86	105	<5	6	22.8	8.02	.19	99.67
27545	62.03	8.35	3.32	1.90	7.05	.30	2.25	.43	.20	.04	.009	1106	106	119	124	25	7	8	14.0	4.28	.05	100.06
27546	66.75	8.91	4.34	1.63	4.45	.24	2.41	.45	.20	.04	.010	1065	225	76	119	34	7	9	10.4	2.79	.04	100.01
27547	80.25	7.99	2.91	.90	.35	.16	1.94	.57	.14	.01	.009	1002	35	25	139	18	8	7	4.7	.82	.01	100.07
27548	76.62	9.51	3.43	1.05	.23	.21	2.02	.58	.15	.01	.011	1072	30	27	134	15	10	8	6.1	.97	.01	100.07
27549	75.26	9.37	3.61	1.10	.22	.18	2.02	.54	.20	.01	.011	956	24	25	132	14	5	7	7.4	1.42	.02	100.06
27550	77.59	8.58	3.99	.85	.46	.13	2.01	.63	.33	.01	.010	1277	29	27	130	21	12	8	5.3	.79	.02	100.07
27594	60.34	12.71	3.86	3.37	3.29	.59	3.00	.58	.24	.05	.011	783	21	85	214	17	11	10	11.9	2.98	.03	100.08
27595	63.85	13.56	5.27	3.91	1.11	.41	3.47	.53	.26	.08	.012	1063	70	37	222	31	8	12	7.4	1.22	.04	100.04
27596	48.70	10.63	3.26	4.88	13.50	.23	3.28	.45	.22	.07	.008	451	20	185	217	14	7	8	14.6	3.08	.01	99.94
27597	42.51	8.71	2.78	4.20	19.47	.30	2.47	.36	.21	.05	.006	352	10	267	172	13	9	6	18.8	4.57	.02	99.96
27598	45.39	10.79	3.55	5.17	15.16	.48	2.84	.46	.19	.05	.008	444	18	229	170	16	9	8	15.9	3.76	.01	100.09
27599	56.90	10.89	3.53	3.41	7.29	.12	3.72	.49	.21	.02	.008	1002	19	98	203	19	8	9	13.2	3.76	.03	99.94
27600	56.36	8.62	4.00	3.91	9.89	.07	3.52	.51	.25	.05	.008	1878	51	113	228	26	8	8	12.6	2.99	.04	100.06
28251	54.17	7.92	4.04	4.40	11.01	.06	3.30	.50	.25	.05	.007	1747	65	123	221	26	9	8	14.1	3.45	.03	100.06
28252	50.49	7.79	3.90	4.35	13.24	.04	3.23	.48	.22	.04	.007	1715	67	150	192	24	12	8	15.9	3.97	.05	99.94
28253	50.82	7.60	3.89	4.48	13.07	.05	3.14	.59	.20	.04	.009	2539	68	123	221	25	8	8	15.7	3.86	.04	99.95
28254	54.81	8.76	4.94	4.22	9.51	.05	3.56	.82	.23	.05	.013	2072	81	88	214	26	22	11	12.8	2.99	.04	100.06
RE 28254	54.27	8.80	4.95	4.19	9.52	.05	3.55	.82	.23	.05	.012	2058	74	87	213	25	20	11	13.2	2.96	.03	99.94
28255	60.99	11.04	6.37	3.99	3.43	.04	4.30	1.13	.27	.07	.017	1180	103	35	215	27	28	13	8.2	1.41	.03	100.04
28256	63.11	10.46	6.17	4.01	2.77	.05	4.08	1.21	.32	.07	.017	1040	93	31	212	26	33	14	7.6	1.43	.05	100.04
28257	62.26	9.35	5.54	3.46	5.55	.04	3.67	1.00	.25	.06	.017	872	97	51	205	25	25	12	8.7	1.83	.04	100.05
28258	74.26	8.67	4.29	2.08	1.34	.07	3.31	.58	.24	.06	.010	813	109	21	220	29	17	9	5.0	1.07	.03	100.05
28259	83.02	7.46	1.15	.64	.47	.30	1.78	.68	.14	.01	.008	991	<5	33	156	20	7	7	4.3	.67	<.01	100.11
STANDARD SO-18/CSC	58.32	14.07	7.48	3.33	6.33	3.71	2.14	.70	.82	.41	.561	495	39	395	284	32	19	25	1.9	3.15	4.14	99.92

GROUP 4A - 0.200 GM SAMPLE BY LIBO2/LI2B407 FUSION, ANALYSIS BY ICP-ES. (LIBO2/LI2B407 FUSION MAY NOT BE SUITABLE FOR MASSIVE SULFIDE OR HIGH BARIUM SAMPLES.) LOI BY LOSS ON IGNITION. TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)

SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Retruns and 'RRE' are Reject Retruns.

Data FA DATE RECEIVED: OCT 12 2007 DATE REPORT MAILED: MAR 18 2008

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.





ACME ANALYTICAL



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SAMPLE#	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	TOT/C	TOT/S	SUM
	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
28260	75.15	9.10	3.54	.78	.45	.52	2.10	.70	.38	.02	.011	952	33	53	220	19	17	8	7.0	1.98	.03	99.91
28261	63.09	12.08	5.32	1.57	.85	.18	3.15	.94	.29	.01	.023	975	41	36	177	20	10	12	12.2	3.75	.19	99.86
28262	74.88	9.08	4.13	.84	.40	.44	1.53	.72	.62	.01	.012	714	28	45	203	18	14	7	7.1	1.15	.03	99.89
28263	73.20	10.80	2.84	2.24	.40	.16	3.88	.54	.19	.02	.011	1483	109	34	306	26	15	8	5.4	1.13	.01	99.92
28264	78.78	7.37	1.05	1.51	.44	.74	1.67	.74	.06	.01	.011	559	14	51	370	22	14	6	7.4	2.69	.01	99.91
28265	77.41	9.67	1.46	1.23	.64	.38	2.06	.76	.09	.02	.010	1755	17	34	168	25	16	9	5.9	1.41	.01	99.87
28266	77.39	9.42	2.38	1.30	.50	.23	2.42	.70	.16	.01	.010	1150	23	30	140	24	11	8	5.2	1.14	.02	99.88
28267	78.13	8.75	2.96	1.21	.73	.18	2.22	.63	.19	.02	.011	1174	38	29	125	24	9	8	4.7	.98	<.01	99.89
28268	73.65	10.68	3.17	1.73	.37	.30	3.07	.60	.19	.02	.012	1356	36	38	177	18	7	8	5.9	1.27	.03	99.89
28269	63.25	11.03	7.28	1.88	1.17	.58	2.59	.38	.31	.13	.007	514	32	36	212	59	5	18	11.2	3.00	.04	99.91
28301	65.81	11.20	5.33	1.73	1.21	.53	2.71	.41	.29	.08	.008	515	28	37	234	53	12	16	10.5	2.79	.05	99.91
28302	68.21	10.59	3.71	1.71	1.28	.50	2.40	.58	.31	.03	.012	1141	261	71	170	28	11	10	10.1	3.53	.02	99.63
28303	60.12	10.21	3.69	1.07	1.75	.14	2.27	.46	.28	.02	.011	1822	145	47	117	29	8	10	19.5	7.51	.07	99.77
28304	76.25	6.20	3.28	.76	.43	.22	1.29	.61	.17	.01	.013	298	18	27	194	12	5	6	10.6	4.15	.06	99.91
28305	74.57	7.21	1.50	.70	.21	.44	1.37	.71	.10	<.01	.011	418	8	36	286	14	11	6	13.0	5.62	.06	99.92
28306	84.99	7.13	.26	.58	.18	.33	2.28	.59	.04	<.01	.006	626	12	37	392	17	9	4	3.4	.73	.01	99.93
28307	82.09	6.87	2.25	.68	.40	.19	1.53	.58	.21	.01	.008	661	7	25	133	17	9	6	5.0	1.02	.01	99.92
28308	83.87	7.08	.60	.52	.21	.39	1.65	.61	.07	<.01	.008	634	8	36	221	13	10	6	4.8	1.50	.01	99.92
28309	76.16	7.76	2.37	1.36	.59	.25	2.44	.46	.39	.02	.020	791	26	34	212	19	10	4	7.9	2.54	.03	99.85
28310	50.11	10.89	3.77	1.58	2.66	.25	2.60	.42	.48	.09	.016	2197	144	59	144	54	6	14	26.6	10.98	.08	99.77
28311	72.23	10.37	4.03	1.63	.50	.14	3.00	.51	.43	.02	.017	1393	57	31	172	19	6	7	6.8	1.34	.03	99.88
28312	42.95	6.38	2.16	8.77	11.17	.07	2.75	.35	.24	.03	.012	676	45	54	262	30	<5	6	24.9	7.49	.04	99.92
28313	68.37	8.32	2.15	2.23	2.25	.10	4.24	.40	.19	.02	.008	666	33	36	312	18	7	4	11.5	3.45	.01	99.90
28314	75.01	10.67	2.78	1.52	.43	.51	2.90	.68	.19	.01	.012	1366	12	47	179	17	12	8	5.0	.99	.02	99.90
28315	43.01	12.96	3.81	1.57	1.69	.19	2.96	.41	.39	.08	.016	3166	55	53	114	29	8	13	32.4	14.29	.07	99.88
28316	77.61	10.43	.64	1.00	.05	.14	4.83	.67	.06	<.01	.009	1840	<5	39	371	19	8	5	4.2	1.11	.02	99.91
28317	73.76	10.36	3.35	1.63	.47	.26	2.72	.70	.25	.01	.012	1311	24	37	152	19	18	8	6.2	1.57	.02	99.90
28318	64.23	13.70	4.27	2.05	.32	.51	3.77	.73	.30	.02	.015	1159	39	28	194	16	15	10	9.8	2.79	.03	99.89
28951	70.31	9.47	2.97	.96	.21	.49	2.81	.53	.55	.01	.012	963	56	44	291	24	10	8	11.4	4.22	.06	99.89
28952	69.94	9.63	3.37	1.12	.14	.47	3.02	.50	.48	.02	.011	1014	96	37	305	26	13	7	11.0	4.07	.07	99.88
28953	63.70	13.12	5.17	1.65	.39	.35	3.13	.59	.48	.04	.018	1172	141	53	207	34	23	12	11.0	3.01	.08	99.84
RE 28953	63.62	13.05	5.09	1.67	.39	.35	3.13	.59	.49	.04	.018	1204	143	54	201	34	16	12	11.2	3.06	.08	99.84
28954	60.78	14.61	5.11	1.21	.10	.20	3.44	.74	.28	.04	.015	2586	69	38	189	31	10	15	13.0	4.21	.13	99.87
28955	74.51	10.73	3.00	.78	.12	.10	2.09	1.12	.22	.01	.009	1421	34	49	166	106	16	11	7.0	1.67	.23	99.90
28956	61.11	17.80	6.52	1.59	.02	.45	3.45	.80	.26	.01	.019	1338	31	49	131	23	7	20	7.7	.94	.24	99.92
28957	56.52	19.66	8.05	1.57	.02	.17	3.82	.86	.32	.01	.018	2186	27	72	147	24	9	22	8.6	1.03	.25	99.91
28958	69.28	9.16	8.71	.55	.38	.12	1.92	.59	.53	.02	.011	1065	83	166	162	28	18	10	8.5	1.41	.51	99.95
STANDARD SO-18/CSC	58.19	14.01	7.52	3.45	6.42	3.61	2.11	.71	.83	.41	.581	482	46	397	287	31	14	25	1.9	3.10	4.24	99.90

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



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SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ba ppm	Ni ppm	Sr ppm	Zr ppm	Y ppm	Nb ppm	Sc ppm	LOI %	TOT/C %	TOT/S %	SUM %
28959	71.09	12.06	3.88	.89	.11	.12	2.32	.60	.24	.02	.014	3077	37	51	121	19	6	12	8.3	2.06	.06	100.03
28960	63.83	11.57	6.27	1.66	1.14	.61	2.42	.44	.24	.06	.008	509	17	43	232	42	11	15	11.7	3.31	.01	100.05
28961	69.26	11.80	6.16	1.00	.14	.12	2.13	.60	.43	.02	.012	2261	96	164	113	24	7	12	8.0	1.52	.12	99.99
28962	73.79	10.24	4.66	.77	.11	.09	2.10	.65	.35	.01	.012	980	67	91	124	18	11	12	7.1	1.39	.09	100.03
28963	70.64	10.72	5.49	.80	.12	.11	2.03	.70	.39	.01	.011	812	133	189	137	30	7	12	8.8	1.51	.09	99.97
28964	62.60	12.15	4.31	1.17	.11	.18	2.77	.61	.30	.04	.012	1030	55	48	134	27	13	13	15.6	5.76	.10	100.01
28965	72.79	10.45	4.60	1.10	.22	.14	2.67	.52	.23	.04	.011	869	49	43	126	22	8	11	7.1	1.79	.09	100.01
28966	76.95	9.35	3.57	1.13	.15	.05	2.49	.45	.16	.01	.010	605	47	49	112	20	15	9	5.6	.88	.16	100.02
28967	70.99	8.37	2.66	2.68	2.91	.05	2.69	.47	.12	.02	.008	853	49	60	269	29	10	8	8.9	2.56	.13	100.03
28968	68.93	10.31	2.54	1.41	.92	.08	3.15	.51	.18	.02	.010	1142	36	31	324	29	8	10	11.8	4.07	.08	100.05
RE 28968	69.20	10.36	2.57	1.40	.93	.08	3.18	.51	.19	.02	.011	1155	38	32	320	30	13	10	11.4	4.12	.08	100.05
28969	71.37	10.80	3.53	1.70	1.27	.08	4.05	.65	.15	.03	.009	13185	31	100	397	31	8	9	4.8	1.03	.09	100.06
28970	56.79	8.69	3.40	3.65	9.46	.07	3.24	.49	.15	.04	.009	9272	29	151	328	25	6	8	12.9	3.35	.03	100.04
28971	51.59	7.85	3.61	6.12	9.24	.05	2.69	.42	.16	.06	.009	5845	36	74	211	23	10	8	17.5	4.92	.03	100.03
28972	59.72	11.32	4.28	2.32	2.80	.07	4.14	.65	.38	.02	.021	24141	104	120	197	34	8	12	11.4	3.60	.25	99.99
28973	50.46	8.29	3.80	1.54	1.14	.08	2.72	.48	.34	.05	.013	3996	57	50	140	22	8	9	30.6	12.70	.18	100.02
28974	69.69	10.16	3.99	1.15	.21	.10	2.66	.59	.27	.03	.013	1109	80	29	179	26	17	10	11.0	3.51	.04	100.03
28975	68.22	9.43	4.25	1.07	.47	.37	2.43	.66	.30	.06	.012	990	58	44	225	21	20	9	12.6	4.38	.04	100.04
28976	69.89	9.50	5.57	2.08	1.56	.07	3.10	.63	.17	.06	.016	1093	140	26	211	32	10	13	7.2	1.68	.03	100.03
28977	55.25	14.75	5.20	1.74	.69	.15	6.68	1.28	.24	.08	.041	1976	88	28	352	49	27	34	13.6	4.83	.04	100.00
28978	44.85	7.15	5.95	7.75	10.42	.05	3.08	.50	.14	.07	.010	740	96	52	248	31	12	11	19.8	5.64	.01	99.91
28979	80.75	7.48	2.90	.80	.56	.14	1.85	.62	.24	.01	.010	1251	30	27	137	24	8	7	4.5	.95	.01	100.04
28980	73.29	5.35	1.89	2.69	1.14	.06	1.20	.30	.22	.02	.015	911	317	21	138	59	15	6	13.4	5.19	.04	99.75
28981	75.77	8.32	2.48	1.86	.35	.12	3.46	.39	.53	.01	.029	4004	79	26	222	19	7	5	6.0	1.59	.01	99.83
28982	78.59	6.58	1.21	.46	.21	.30	1.39	.64	.13	<.01	.009	1311	5	32	238	16	9	6	10.3	3.93	<.01	100.02
28983	76.90	7.33	2.97	.36	.19	.10	3.11	.25	.37	.02	.009	2448	11	27	263	19	<5	4	8.1	2.41	.01	100.03
28984	50.65	6.26	2.47	7.41	10.02	.09	3.24	.31	.14	.03	.015	9965	76	100	201	19	6	6	18.2	4.86	.03	100.05
28985	79.11	7.73	3.31	.86	.61	.37	2.01	.65	.13	.01	.011	2061	31	41	182	19	5	7	4.9	1.21	.01	99.98
28986	77.17	8.30	4.28	.97	.63	.15	1.92	.67	.41	.01	.011	1380	35	29	132	25	12	8	5.3	1.05	.01	100.01
28987	82.29	7.23	2.27	.69	.49	.24	1.80	.72	.17	.01	.009	951	11	30	155	20	9	7	4.0	.79	.01	100.05
28988	78.30	8.90	2.45	1.30	.64	.19	2.34	.71	.20	.01	.010	1222	6	30	120	24	12	8	4.7	1.17	<.01	99.92
28989	74.39	9.59	3.07	1.50	.49	.21	2.77	.49	.24	.02	.027	1005	76	31	249	25	9	6	7.0	1.55	.01	99.96
28990	76.47	8.17	4.45	.97	.68	.15	1.94	.64	.50	.01	.011	1285	58	30	137	24	11	8	5.7	1.17	.01	99.87
28991	70.90	10.30	5.76	1.08	.06	.10	4.85	.51	.19	.02	.009	643	87	29	341	23	<5	6	6.1	1.33	.01	100.02
28992	80.24	7.19	3.30	.98	.68	.19	1.95	.70	.21	.01	.010	1149	22	29	162	25	7	6	4.4	.67	.01	100.03
STANDARD SO-18/CSC	57.75	14.27	7.60	3.51	6.39	3.79	2.16	.72	.80	.41	.601	473	35	404	293	31	16	26	1.9	3.13	4.08	100.05

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data *JA*



GEOCHEMICAL ANALYSIS CERTIFICATE



Coast Mountain Geological PROJECT Kechika File # A800322 Page 1
P.O. Box 11604 620 - 650, Vancouver BC V6H 4N9 Submitted by: Bruno Kasper

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	Li	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Tb	Ga	Sn	In
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	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
G-1	38	1.98	2.77	42.2	7	4.4	4.2	517	1.75	5	2.5	3	4.4	64.3	.01	<0.02	.06	31	45	085	6.9	11.4	57	210.2	1.20	<20	1.12	0.76	.51	<1	2.1	35	0.2	7	<1	<0.02	4.5	4	0.2
27441	1.81	9.93	13.66	25.5	76	13.6	4.6	275	2.47	3.0	5	1.3	2.7	26.8	.08	.23	12	10	99	148	39.3	8.5	31	73.8	0.03	<20	75	0.03	0.6	<1	6.1	0.6	0.4	66	3	<0.02	1.6	2	0.4
27442	8.52	23.28	12.59	99.9	226	24.2	3.3	43	2.18	13.3	1.1	1.2	2.4	4.6	.35	1.94	18	55	.05	0.73	9.3	11.0	17	79.5	0.25	<20	75	0.02	0.6	1	1.1	.27	.52	22	1.6	0.4	2.5	4	0.2
27443	9.57	14.37	8.52	77.5	746	15.5	1.8	18	1.03	11.4	.8	.7	4	4.3	.39	1.85	14	45	0.6	0.46	7.9	5.2	0.6	52.9	0.37	<20	28	0.02	0.5	1	.6	.22	<0.02	17	1.1	0.2	1.6	4	<0.02
27444	15.20	117.19	25.77	371.5	7836	204.7	19.1	257	3.79	18.8	13.1	6.6	2.8	39.0	5.85	2.61	.27	110	1.01	159	30.6	26.0	.26	2738.4	0.07	<20	1.86	0.05	.22	1	5.9	1.03	.14	627	6.2	0.5	3.9	9	0.9
27445	15.56	85.19	11.31	1809.2	2124	464.3	15.5	776	1.60	6.6	8.8	1.5	8	37.6	42.55	4.53	.17	47	1.45	113	12.8	12.4	.19	338.8	0.13	<20	73	0.04	.07	<1	1.7	.60	.09	98	4.1	0.3	2.0	3	0.2
27446	6.05	8.50	12.26	81.5	431	13.6	2.0	76	1.31	7.8	.8	4	1.9	7.2	.59	85	14	62	19	0.62	13.1	13.1	.28	163.7	0.09	<20	92	0.03	0.9	<1	1.0	.22	<0.02	32	1.2	0.2	3.1	4	0.2
27447	14.89	30.71	13.35	154.8	2481	19.2	2.6	66	2.22	21.9	1.0	4	5	8.6	1.20	3.20	.19	96	14	0.96	11.1	9.4	0.7	262.0	0.19	<20	53	0.04	0.6	2	.8	.30	<0.02	21	2.7	0.5	3.4	7	0.2
27448	7.86	12.35	9.28	90.5	1160	13.4	2.3	44	0.6	7.2	9	4	4	7.1	1.95	1.77	.19	110	0.6	0.45	10.1	14.3	0.7	161.0	0.26	<20	69	0.04	0.5	<1	.7	.53	<0.02	22	1.1	0.2	5.2	1.0	<0.02
27449	11.06	14.01	7.91	556.4	826	64.8	2.4	39	1.62	9.3	1.6	7	2.1	4.0	86	1.93	.12	67	0.7	0.79	11.1	13.8	.14	127.0	0.19	<20	99	0.02	0.5	1	1.3	.45	<0.02	32	1.6	0.2	3.1	5	0.2
27450	9.19	20.26	12.45	197.1	1720	30.7	3.3	38	3.18	17.8	1.3	1.4	2.8	4.3	86	2.34	.17	78	0.1	152	7.5	16.4	.19	204.6	0.11	<20	116	0.01	0.6	2	1.3	.31	<0.02	71	2.6	0.3	2.6	5	0.3
27541	28.35	42.37	18.34	1548.3	976	343.2	26.0	1092	3.24	29.2	2.6	1.9	1.5	18.3	16.97	5.53	.13	125	86	133	18.5	14.5	17	146.4	0.26	<20	49	0.02	1.0	<1	2.1	.48	.08	108	3.3	0.5	1.3	3	0.2
27542	27.81	39.28	11.67	3793.8	832	1408.5	40.7	1392	4.00	36.5	2.1	1.2	8	29.1	25.84	2.56	.12	65	4.77	121	12.7	10.6	.30	145.0	0.08	<20	58	0.03	0.8	<1	1.7	.42	.12	93	2.0	<0.02	1.3	2	0.2
27543	29.55	50.22	9.52	3270.3	515	1386.3	140.9	1769	13.57	34.2	5.4	1.6	1.8	26.7	81.45	2.72	.10	43	1.39	0.53	64.8	7.3	.14	172.3	0.11	<20	56	0.04	0.8	<1	1.6	1.23	.16	84	3.0	0.3	8	2	0.2
27544	71.69	51.81	11.03	7054.4	591	945.1	122.7	559	7.75	23.6	7.8	1.0	1.9	22.0	35.79	3.07	.11	49	1.21	0.97	31.5	8.8	.18	183.2	0.16	<20	55	0.04	1.1	<1	1.9	1.13	.34	83	3.6	0.3	1.0	2	0.2
27545	13.12	46.73	12.20	191.5	850	104.5	9.6	282	1.89	11.1	2.0	2.9	2.9	92.3	2.39	2.77	.15	45	4.20	0.86	11.2	10.8	.66	317.5	0.18	<20	68	0.03	.12	1	2.2	.40	.09	77	1.5	0.2	1.5	2	0.2
27546	15.49	47.72	17.32	527.6	1434	235.5	18.2	292	2.54	16.0	2.2	2.2	4.0	55.0	3.37	3.17	.17	63	2.87	0.95	16.8	13.7	.54	240.8	0.30	<20	65	0.04	.15	1	2.9	.45	0.7	101	1.8	0.6	1.7	3	0.3
27547	6.33	18.59	9.41	242.3	479	32.8	3.7	40	1.82	10.5	1.1	1.8	2.5	6.1	1.11	1.91	.13	57	11	0.61	11.9	12.0	.20	196.5	0.21	<20	82	0.02	0.7	1	1.3	.28	<0.02	40	1.3	0.3	1.8	3	0.2
27548	7.02	13.78	13.23	212.5	346	25.3	2.8	38	2.14	11.6	.9	8	2.3	5.7	1.06	1.68	.15	78	0.6	0.62	10.9	15.3	.24	154.3	0.15	<20	1.09	0.02	0.8	1	1.3	.30	<0.02	25	1.3	0.5	3.2	4	0.2
27549	6.84	13.70	14.97	239.7	398	28.5	2.8	41	2.38	10.8	1.0	6	2.6	4.5	.98	1.56	.15	83	0.5	0.92	10.7	17.8	.29	110.1	0.12	<20	1.21	0.03	0.9	1	1.3	.32	<0.02	27	1.5	0.4	3.3	4	0.2
27550	8.47	19.01	11.39	156.6	1157	30.0	3.5	50	2.43	15.5	1.3	1.9	3.0	7.8	.98	2.51	.17	55	11	150	8.3	11.8	.15	137.1	0.23	<20	67	0.01	0.6	2	1.2	.22	<0.02	22	1.8	0.5	1.8	3	0.3
27551	7.81	12.57	13.78	57.9	83	18.4	6.7	304	2.02	3.9	.6	8	1.8	56.8	.52	5.1	.14	27	2.01	0.93	16.6	16.5	0.1	136.2	0.06	<20	1.47	0.03	0.7	<1	1.6	.16	<0.02	24	5	0.2	4.4	5	0.3
27552	7.80	28.78	20.23	227.4	538	55.0	16.5	547	2.99	11.8	2.5	1.1	5.4	73.8	1.49	2.27	.15	38	.71	119	24.9	18.3	1.28	136.6	0.02	<20	1.41	0.02	0.8	<1	3.1	.35	<0.02	95	1.5	0.2	3.0	1	0.5
27553	4.3	8.29	14.36	49.5	22	16.2	10.6	518	1.81	2.7	3	6	6.3	166.5	.07	1.6	.11	6	8.85	106	17.2	11.3	1.69	31.4	0.02	<20	1.19	0.02	0.7	<1	2.4	.06	.03	12	1	<0.02	2.6	1	<0.02
27557	.32	6.84	9.10	30.0	17	11.6	6.2	351	1.40	1.5	4	<2	4.4	246.2	.27	11	.07	7	12.96	0.93	15.5	11.2	1.62	29.5	0.02	<20	1.22	0.02	0.7	<1	2.0	.04	<0.02	8	2	<0.02	2.4	1	<0.02
27558	4.0	10.68	19.22	45.7	42	20.8	10.1	950	2.05	2.4	4	3	6.7	213.3	.19	15	.09	11	10.35	0.93	20.1	19.9	2.10	39.4	0.02	<20	1.70	0.03	0.9	<1	3.1	.07	.02	13	2	<0.02	4.1	1	0.2
27559	5.35	16.03	12.83	82.8	87	28.7	6.8	172	2.06	4.4	1.0	4	4.5	90.4	.28	87	.11	24	4.83	0.99	21.8	12.4	1.12	83.9	0.03	<20	99	0.03	.14	<1	3.2	.15	.06	21	4	<0.02	2.2	1	0.2
27600	19.10	29.48	19.00	166.2	199	57.6	12.1	358	2.36	11.3	3.3	7	5.2	97.2	.85	2.85	.14	52	6.80	115	17.7	9.8	1.52	141.8	0.06	<20	.63	0.04	.22	<1	3.6	.35	.05	49	9	<0.02	1.4	2	0.2
28251	23.21	33.60	22.00	182.6	227	63.8	12.7	331	2.47	13.0	3.7	6	5.3	113.3	.92	3.08	.16	63	7.68	113	16.8	9.3	1.81	141.8	0.06	<20	.48	0.04	.22	<1	3.9	.41	.05	68	1.2	0.7	1.2	2	0.3
28252	21.58	30.82	20.04	142.7	215	58.6	11.3	305	2.31	11.3	3.1	3	4.7	135.5	.73	2.80	.16	43	8.67	0.93	12.6	6.8	1.70	128.6	0.04	<20	.34	0.04	.17	<1	3.6	.40	.04	7					



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Sn	In	
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
G-1	37	2.91	3.09	47.2	5	4.7	4.6	566	1.90	2	2.7	<2	4.9	58.0	02	02	07	38	47	088	7.4	13.0	61	213.4	134	<20	1.03	082	55	<1	2.1	37	07	<5	<1	<02	4.9	6	02	
28260	9.35	16.40	15.28	145.8	923	25.0	3.5	80.2	16.14	9.0	2.6	1.9	7.8	1.30	2.32	22	87	10	169	12.0	9.3	08	151.0	034	<20	52	002	06	<2	1.0	.28	03	21	2.6	06	4.3	8	02		
28261	136.17	40.92	70.53	375.6	1581	26.0	3.3	73.3	32.67	5.6	1.1	2.0	16.6	3.48	43.11	34	725	29	111	11.4	18.7	14	261.2	216	<20	65	005	17	3	1.6	2.32	.23	87	16.5	52	4.3	1.7	06		
28262	7.96	15.66	17.56	151.8	1388	22.3	2.8	41.0	61.14	7.1	<2	3.1	9.0	1.59	1.48	19	134	05	279	10.9	20.1	16	125.2	019	<20	1.18	002	06	1	1.4	.36	03	43	2.3	06	4.6	8	04		
28263	14.06	20.99	22.25	964.7	662	100.1	8.2	154.1	67.12	3.8	2	3.7	9.2	4.50	4.32	15	93	23	073	16.9	19.5	39	270.6	012	<20	1.03	002	31	<1	2.3	.56	<02	38	1.4	.03	2.8	6	02		
28264	5.04	5.28	16.09	98.9	271	5.6	8	21	.42	2.0	1.0	<2	.6	4.1	7.17	1.98	11	113	10	017	13.5	7.9	14	87.8	028	<20	39	001	06	<1	.6	.73	<02	13	7	02	2.4	6	<02	
28265	1.99	6.80	12.09	182.9	385	9.5	3.9	113	.66	1.0	9	<2	.8	3.9	2.52	.39	11	107	13	030	10.6	10.3	25	510.3	016	<20	86	001	07	<1	1.1	.42	<02	10	.5	.02	2.9	5	<02	
28266	4.87	7.98	11.95	121.2	311	15.6	3.2	57.1	29.7	7.6	8	<2	1.2	6.2	1.01	1.07	16	57	13	058	11.4	9.1	26	221.0	017	<20	62	001	08	1	9	.18	<02	17	1.1	.07	1.9	4	02	
28267	8.10	12.75	12.59	183.7	569	27.7	6.0	136.1	83.11	7.1	1.3	8	2.0	8.3	94	2.53	16	80	24	079	9.0	11.4	28	237.3	021	<20	594	001	08	2	1.2	.26	<02	31	1.5	.08	1.6	3	02	
28268	4.62	12.43	14.78	212.3	256	30.2	5.2	143.1	89.9	9.0	1.0	4	2.5	8.0	1.38	1.29	17	73	13	079	14.7	17.3	52	150.7	009	<20	97	001	11	<1	1.3	.25	<02	22	1.1	.04	2.7	3	02	
28269	2.48	9.87	12.54	33.1	73	71.0	6.0	1020	4.48	3.5	7	<2	3.5	24.0	14	32	10	12	76	127	53.1	10.5	56	105.6	003	<20	1.10	004	06	<1	8.1	.87	.02	96	.5	<02	2.3	3	08	
28301	1.91	9.85	13.09	30.7	70	17.8	5.6	588	3.32	3.3	7	2	3.0	23.8	14	25	11	12	80	127	45.6	11.4	47	90.9	003	<20	1.02	003	06	<1	6.8	.87	.03	52	.5	.02	2.3	3	06	
28302	10.69	37.36	11.07	2491.1	1636	259.8	8.6	169	2.19	8.9	4.8	7	1.6	20.6	23.12	3.41	15	66	66	140	13.9	17.8	47	241.0	018	<20	1.00	003	10	1	1.9	.41	<02	59	1.8	.07	2.8	4	03	
28303	8.18	48.11	20.83	963.9	3059	130.7	8.6	147	2.31	11.3	5.1	1.4	8	28.2	11.56	2.66	16	69	1.13	119	15.1	14.6	22	673.5	009	<20	99	005	11	1	2.0	.46	.04	182	3.4	.06	2.4	4	03	
28304	27.30	20.92	23.57	182.0	1034	24.4	1.4	16	2.05	21.8	1.3	<2	9	6.9	1.19	10.13	18	409	11	066	8.6	16.8	06	75.6	085	<20	50	002	07	<1	9.1	14	03	37	5.3	17	4.4	1.1	02	
28305	35.68	11.90	16.29	120.5	1369	8.9	1.1	14	.82	7.3	1.7	<2	1.1	6.6	4.86	7.15	13	370	08	028	16.5	16.8	08	90.6	037	<20	74	002	06	<1	1.0	.82	<02	43	2.0	.09	4.4	8	<02	
28306	1.07	1.19	2.34	24.1	89	1.5	2	5	10	.6	2	<2	1.5	2.2	.67	.15	04	12	06	009	20.6	2.9	04	47.8	007	<20	25	001	07	<1	4	14	<02	<5	1	<02	1.7	4	<02	
28307	8.05	6.18	9.84	77.4	507	10.4	1.4	24	1.31	10.1	6	4.0	1.5	4.1	.84	2.02	13	90	08	088	7.5	7.6	09	58.5	025	<20	51	001	05	1	7	.21	<02	18	1.5	.06	2.0	4	<02	
28308	1.95	3.14	3.90	18.4	574	2.2	3	8	17	1.5	3	<2	1	2.3	28	44	06	27	04	016	12.6	4.9	03	45.6	017	<20	28	002	05	<1	4	.19	<02	12	2	.02	3.0	5	<02	
28309	3.78	7.71	38.65	611.6	609	26.2	5.0	114	1.39	8.7	1.9	<2	2.0	7.3	2.61	1.11	19	273	31	177	14.4	50.2	46	133.9	013	<20	1.00	003	17	1	1.1	.36	<02	64	1.4	.07	3.8	9	03	
28310	2.64	95.90	16.43	944.6	4456	127.8	12.7	584	2.16	7.1	5.7	1.4	9	31.8	21.76	1.59	17	72	1.57	200	27.6	29.4	44	814.2	008	<20	1.15	003	15	<1	2.9	1.04	.08	313	3.8	.05	2.4	5	04	
28311	6.71	22.30	23.91	364.6	894	56.8	6.1	142	2.62	13.0	1.5	1.1	2.5	10.4	1.72	2.36	17	143	29	195	12.8	35.2	52	261.5	011	<20	1.23	003	18	1	1.6	.47	<02	55	2.3	.07	2.9	5	03	
28312	2.09	15.13	17.98	127.9	1141	32.1	4.9	196	1.25	5.5	1.1	5	1.6	36.8	2.66	.91	13	79	7.57	096	22.9	36.9	4.65	145.9	005	<20	92	008	17	1	2.4	.40	.02	59	1.4	.02	2.0	3	<02	
28313	1.37	16.86	15.36	175.4	540	29.6	6.3	179	1.32	6.1	7	<2	1.2	8.9	2.36	47	17	49	1.51	081	12.1	17.6	92	101.9	003	<20	59	003	12	<1	1.5	.38	.04	29	1.0	.04	1.7	5	02	
28314	5.36	9.72	12.22	99.8	449	17.2	3.0	57	1.48	7.4	8	<2	2.1	9.4	88	1.16	15	65	14	075	15.9	17.5	40	253.8	021	<20	76	003	10	<1	1.0	.20	<02	70	1.0	.03	2.5	4	02	
28315	5.18	44.01	17.18	286.1	4153	47.8	21.4	590	2.21	7.4	3.7	5	5	28.4	10.47	1.33	16	84	1.12	157	17.2	17.9	35	1540.3	025	<20	1.24	004	18	<1	1.5	.33	.07	136	1.9	.04	3.0	5	05	
28316	55	4.39	3.59	26.1	326	4.2	1.1	12	.21	.7	4	<2	2.7	1.5	1.09	13	04	8	03	019	22.1	3.8	03	84.1	002	<20	22	001	07	<1	5	.07	<02	13	2	.02	1.2	2	<02	
28317	8.15	13.74	15.37	120.5	221	26.1	3.9	89	2.95	12.5	1.1	5	2.2	10.4	92	1.35	18	75	15	101	14.2	15.6	45	182.1	024	<20	82	002	10	<1	1.2	.20	<02	29	1.6	.06	2.6	3	02	
28318	4.31	16.10	16.70	207.3	251	34.8	7.7	164	2.52	9.0	9	<2	2.0	7.9	2.75	95	21	63	16	121	16.5	16.9	44	152.9	004	<20	1.13	003	20	<1	1.8	.32	<02	38	1.0	.05	3.3	5	03	
28951	4.56	17.18	17.45	212.3	256	35.3	7.6	167	2.58	9.4	9	2	2.2	8.4	2.83	97	22	64	15	129	18.1	17.4	45	154.8	007	<20	1.15	003	20	<1	1.9	.32	<02	40	8	.96	3.4	5	03	
28952	34.26	37.30	15.90	369.4	261	93.0	9.1	109	2.99	14.8	1.9	2	1	8.9	1.41	6.81	14	89	07	128	14.5	9.4	11	103.4	001	<20	55	002	07	<1	7	.45	<02	39	4.7	.88	1.5	3	02	
28953	41.55	82.17	25.93	625.9	788	151.3	15.3	290	3.25	22.7	4.8	8	3	23.0	9.34	7.67	22	143	17	176	21.1	21.2	32	168.4	005	<20	1.37	003	13	<1	7	1.28	.07	149	8.9	13	3.0	5	04	
RE 28953	41.04	81.24	25.96	624.2	787	154.4	15.8	292	3.15	22.6	4.8	1.1	3	22.9	9.46	7.80	22	144	17	175	21.5	21.6	31	161.6	005	<20	1.37	003	12	<1	7	1.29	.07	158	8.4	13	2.9	5	04	
28954	20.27	59.66	23.69	339.8	356	71.7	13.5	329	3.24	19.3	3.6	4	1.0	18.5	4.98	4.41	27	58	05	118	17.2	14.5	20	169.6	002	<20	83	004	10	<1	1.3	.65	.17	67	5.4	.88	2.1	2	04	
28955	78.57	21.85	27.39	49.1	372	26.0	9	29	2.03	49.1	5.8	1.1	2.4	33.8	35	12.23	30	131	07	087	29.8	11.8	08	141.7	003	<20	34	002	10	6	9	1.60	26	115	7.5	18	1.1	3	05	
28956	4.29	33.40	23.95	69.8	1524	23.3	8	83	4.7	12.2	1.9	<2	7.2	27.6	82	7.88	32	42	01	117	4.2																			



SAMPLE#	Hg	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ce	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	Sc	Tl	S	Hg	Se	Te	Ga	Sn	In		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm
G-1	40	2.04	3.39	49.0	9	5.0	4.5	554	2.03	3	2.4	3	4.6	60.6	02	02	07	37	50	096	8.0	14.5	63	235.5	139	<20	1.11	077	55	<1	2.4	41	<02	<5	1	02	5.0	5	<02	
28959	35.89	45.06	22.98	180.4	644	47.4	3.4	152	2.35	26.1	5.9	8	4.7	25.4	96	13.77	22	70	06	093	16.7	34.4	19	149.2	153	<20	70	002	07	<1	1.5	1.01	05	54	7.5	08	1.7	7	04	
28960	1.78	9.88	12.50	31.4	48	17.4	5.3	436	3.88	2.6	.6	4	3.5	23.5	10	21	11	15	73	104	40.2	12.6	44	125.5	003	<20	1.35	003	05	<1	5.6	05	<02	42	3	<02	2.9	4	07	
28961	51.83	79.10	36.60	316.5	1144	65.7	4.5	118	4.00	52.4	8.4	4	10.2	137.5	1.27	23.99	22	131	05	282	43.5	17.5	37	160.5	173	<20	1.19	010	08	1	2.6	1.58	11	127	14.1	10	2.5	7	07	
28962	114.58	29.73	25.46	218.3	675	55.6	2.8	32	2.85	50.6	24.9	1.8	7.8	71.2	86	18.84	27	185	04	152	28.7	8.9	10	70.3	218	<20	51	003	07	1	2.5	1.47	06	181	11.2	17	1.3	6	05	
28963	90.62	74.47	22.37	471.2	364	130.9	9.5	88	3.59	48.1	17.2	1.9	6.3	164.4	2.00	11.99	26	135	06	184	28.4	9.7	11	105.0	124	<20	1.18	003	08	2	2.3	1.26	10	83	6.3	17	1.3	5	03	
28964	24.02	31.78	17.78	212.0	373	48.7	8.5	299	2.57	18.3	4.5	5	4	31.5	2.05	4.29	21	55	07	112	9.2	11.1	22	114.7	006	<20	78	002	09	<1	9	73	13	31	4.2	07	1.8	3	03	
28965	18.25	46.00	17.88	213.5	889	41.7	5.8	316	2.74	20.3	2.7	<2	3.1	29.5	98	8.07	19	48	14	102	10.1	10.7	22	117.5	004	<20	71	003	10	<1	1.3	71	11	93	10.4	09	1.5	2	04	
28966	24.44	51.81	14.17	121.1	576	37.1	3.0	83	2.67	16.6	3.5	7	4.7	39.2	54	5.97	13	49	11	061	10.9	7.6	23	66.8	001	<20	52	002	10	<1	9	79	14	76	5.5	09	1.2	1	03	
28967	22.90	29.38	20.59	83.3	378	33.8	4.5	170	1.47	9.9	1.7	1.6	2.7	50.9	46	3.92	14	22	2.00	105.6	9.6	4.2	1.02	116.9	002	<20	19	003	10	<1	1.8	52	15	70	3.1	07	5	1	02	
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RE 28968	12.23	27.08	17.59	35.0	320	30.6	3.3	173	1.41	8.1	2.6	1.0	1.5	23.8	24	3.16	14	24	62	085	9.6	5.7	20	141.0	004	<20	34	001	08	<1	1.7	38	28	53	3.1	04	8	2	02	
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