REPORT OF 1996 GEOLOGICAL, GEOCHEMICAL, AND GEOPHYSICAL EXPLORATION PROGRAM, STEWART PROPERTY, B.C.

Nelson Mining Division
British Columbia

NTS 82F/3
Latitude 49°14"N
Longitude 117°20"W

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Orvana Minerals Corp.
February 18, 1997

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INTRODUCTION

The Stewart property, located near Salmo, B.C. (Fig. 1) was aquired by Orvana Minerals in 1995. The Stewart property has been explored in the past for molybdenum, copper, tungston, silver, gold, lead and zinc. Most exploration has been conducted during the past two decades. These exploration programs identified several different areas and types of mineralization (porphyry, vein, volcanogenic massive sulphide), some of which have potential to host economic gold or copper/gold mineralization. Orvana partly explored the property, principally for gold and copper, during the 1995 and 1996 field seasons. This report presents results of work conducted during the 1996 assessment year, which includes geologic mapping, rock, soil and stream sediment geochemistry, grid installation, and a ground magnetic/VLF-EM survey. Core from a previous drill program was relogged, with the collection of some geochemical and petrographic samples. The purpose of this program was to characterize potentially economic mineralization known to occur on the property, and to develop targets for drill testing.

PROPERTY

The Stewart property covers an area of 42 Km^2, and includes both two and four post mineral claims and reverted crown grants (Fig. 2). In all, the claims comprise 172 units in 28 different claims. The claims are owned by Eric and Jack Denny of Nelson and Salmo, B.C., and M.A. Kaufman of Spokane, WA, and are under option to Orvana Minerals Inc. of Vancouver, B.C. Pertinant claim information is summarized below:

Name	Units	Tenure #	Expiry Date
Free Silver, Ruby	1	232633	April 18, 2003
Royal	1	232634	April 18, 2002
Stewart 1	20	232635	April 28, 1999
Stewart 2	20	232636	April 28, 1999
Stewart 3	20	232637	May 8, 1998
Stewart 5	9	232697	Nov. 28, 1997
Stewart 6	16	232698	Nov. 28, 1999
Stewart 7	12	232699	Nov. 28, 1999
Stewart 8	20	232700	Nov. 28, 1999
Stewart 9	20	232701	Nov. 28, 1999
Stewart 10	20	232702	Nov. 28, 1999
Stewart 12	8	232704	Nov. 28, 1999
Houlton	1	232705	Nov. 28, 1999
Fairview	1	234612	Mar. 15, 2002
Dog 1- 6	6	314273-314278	Oct. 25, 1997
Dog 7- 8	2	321746-321747	Oct. 11, 1997
Dog 9 -12	4	321748-321751	Oct. 23, 1997
Dog 13-14	2	338999-339000	Aug. 19, 1997

Surface rights are held by several different owners, including timber companies and the Crown.

LOCATION AND ACCESS

The Stewart property is located 50 Km south of Nelson, and 7 Km north of Salmo, British Columbia, at latitude 49°16N', longitude 117°18'W. Map coverage is on sheets 82F/3 and 82F/6. Access to the property is good via the Erie Creek road, 4 Km west of Salmo on Highway 3, and the Stewart Creek road, 4 Km north of Ymir on Highway 6. There are several logging roads and old mining roads that provide additional access on the property. These roads are in various conditions, some being maintained and

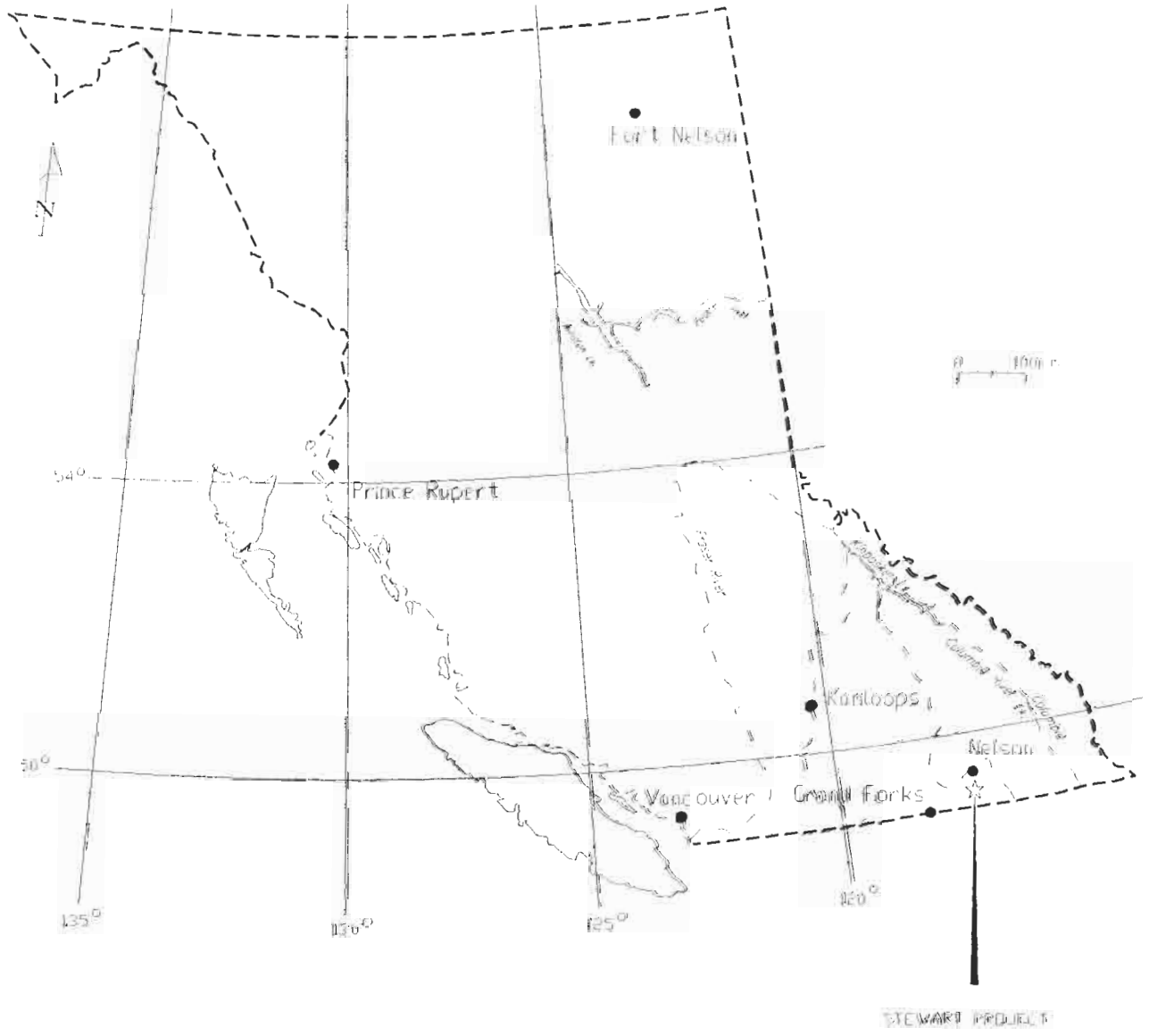

Figure 1

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STEWART PROJECT

Property Location Map

Nelson Mining Division, B.C.
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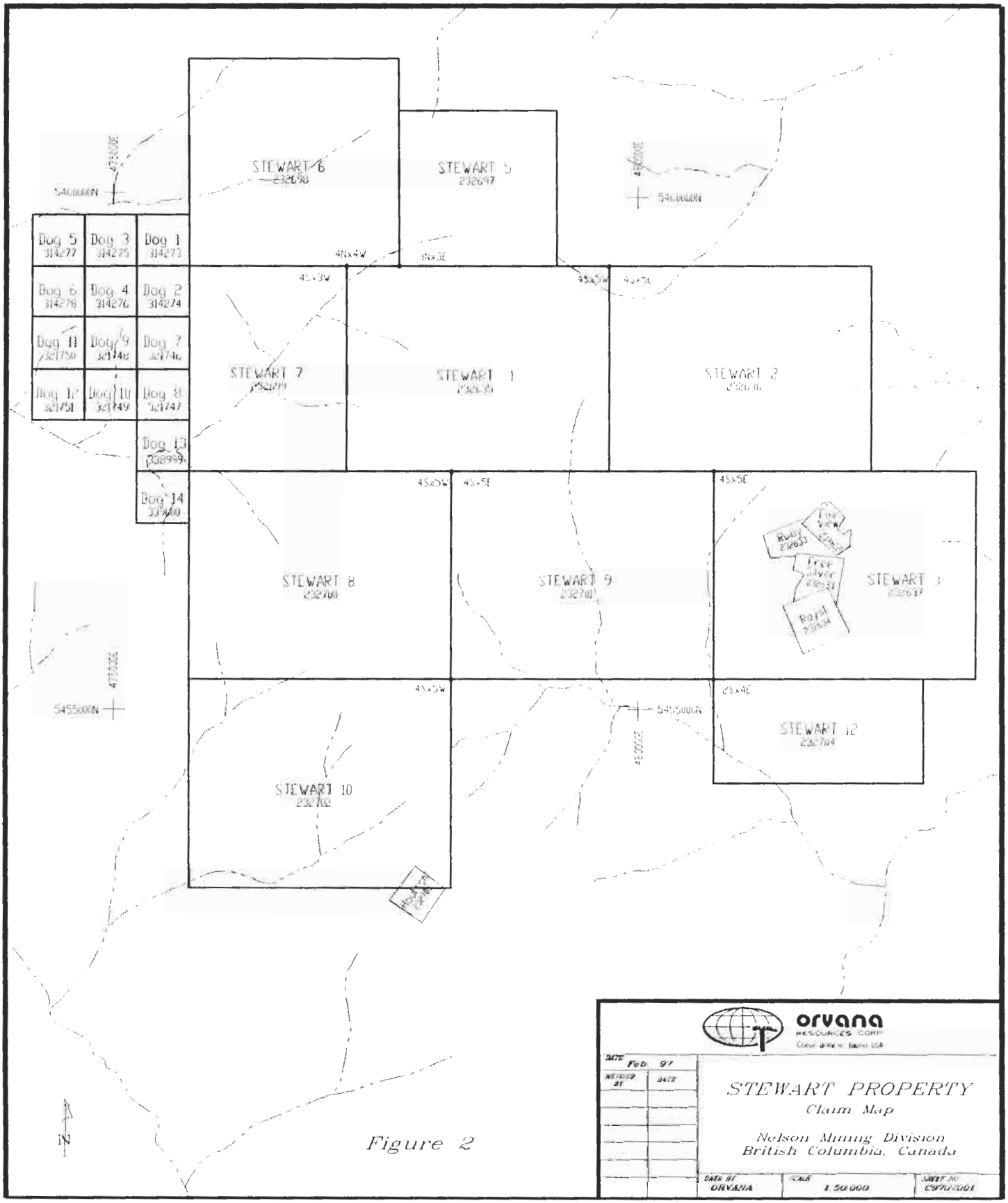

Figure 2

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STEWART PROPERTY
Claim Map

Nelson Mining Division
British Columbia, Canada

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others growing up with brush and alder. As some of the roads are on private land, they have been gated by the owners to restrict access by the public. Access to this land has been impeded.

PHYSIOGRAPHY AND CLIMATE

The Stewart property is characterized by mountainous terrain, with elevations ranging 750-1950 meters. Most of the property is forested with dominantly conifer stands, but also with some deciduous stands and minor brush fields. The highest regions are sparcely forested. Logging has been and continues to be widely practiced on the property. Exposure is not real good in general, although on ridge crests outcrop is fairly common. The lower slopes and valley bottoms have extensive deposits of till.

The climate is moderate. Precipitation can occur throughout the year, but is lightest during the summer months. Most of the property is snow-covered during December - April, with the highest regions not melting off until June or July. Temperatures typically range -15° to 20°C annually.

PREVIOUS WORK

The Stewart property is located in an area of much early mining activity, with the Ymir, Erie, Sheep Creek, and Nelson districts being the sites of extensive exploration and production for over 100 years. Recorded work on the Stewart property begins with surface exploration and development of the Arrow Tungston showing by Premier Gold Mining Co. in 1942. Tungston mineralization was identified over a 1000 ft strike length, with samples up to a few feet of over 1% WO_3. In the late 1960's and early 1970's, the property was explored for copper by Quintana and Copper Horn. Prospectors Eric and Jack Denny staked the property in 1978, and Shell Canada, followed by Selco, explored the property for molybdenum. Most of this work (including extensive drilling) was focused on the Stewart Moly and Breccia Summit areas. Large areas of the property were also soil sampled on a wide grid, and covered by airborne magnetic and impulse EM surveys. From the mid 1980's to the mid 1990's, several groups explored the property for gold. US Borax and Lacana conducted geochemical surveys, concentrating in the Rest Creek area. Minnova, followed by Cameco, explored in the Craigtown Creek area with geochemistry and geophysics (I.P. and magnetics). Cameco drilled four core holes into one of the targets identified by this work. They found extensive anomalous gold in altered andesite, diorite, and feldspar porphyry (values in the 10's and low 100's of ppb; maximum of 24854ppb over 1 meter in a quartz-sulphide vein).

1996 PROGRAM

In 1996 a program with a two-fold purpose was initiated on the Stewart property. The first objective was to identify the showings, occurrences, and geology most prospective for the discovery of economic concentrations of gold and copper. This was done by reviewing the available data from the previous exploration programs, examining known showings, and reconning prospective areas. Rock and stream sediment (moss mat) sampling was carried out concurrently. Drill core from Cameco's drill program in the Craigtown Creek area was examined, and several samples were collected for petrographic study (Appendix 1).

The second portion of the 1996 program involved focusing on the most prospective areas with more intensive exploration. Two areas, one in the Craigtown Creek drainage, and the other in the Rest Creek drainage, were identified for this work. Due to difficulties gaining access to the Rest Creek area, little additional work was done there. In the Craigtown Creek area, a mostly east-west grid was established to cover an area west of previous work conducted by Minnova and Cameco. A total of 35.5 Km of grid was established, including 2.2 Km of N-S base line. The grid was installed with line spacings of 100 and 200 meters, and station intervals of 30 meters. The lines were brushed out with an axe, flagged, and stations marked with flagging and tyvic/aluminum tags. The grid was used for a soil geochemical survey, a ground magnetic/VLF-

EM survey, and control for geologic mapping and rock sampling. Mapping was conducted at a scale of 1:5000.

REGIONAL GEOLOGY

The immediate region is underlain in the east by Paleozoic clastic and carbonate sedimentary rocks of the Kootenay Terrane, and in the west by Mesozoic volcanic rocks of the Quesnel Terrane. In this region, the stratigraphy of both the Kootenay and Quesnel Terranes have been folded and faulted along an east-west compressional axis. They are intruded by felsic rocks that range in age from Jurassic to Tertiary. Coeval dioritic intrusions are common in the mafic andesitic volcanic rocks of the Jurassic Rossland Group. These tend to be relatively small bodies. Extensive late Mesozoic intrusive activity produced the widely distributed Nelson Group intrusives of granitic to dioritic compositions. Eocene age, typically potassic (monzonite) intrusive rocks of the Coryell Group are also widely distributed in the region. Young (Tertiary) dikes and sills of rhyolite and felsite are common, and some more mafic small intrusives are present. Much older clastic sedimentary rocks of the Proterozoic Aldridge (Belt) Supergroup outcrop extensively to the east.

PROPERTY GEOLOGY

The Stewart property is underlain by sedimentary and volcanic rocks of the Jurassic Rossland Group, and intrusive rocks of various younger ages (Fig. 3). The oldest rocks are of the Elise Formation, the volcanic lower component of the Rossland Group. The Archibald Formation, which is the basal unit of the Rossland Group and composed of fine clastic sediments, outcrops west of the Stewart Property. The volcanic rocks of the Elise Formation are basaltic to andesitic in composition, tend to be porphyritic flows, breccias, pyroclastics, and subvolcanic intrusives. A fairly significant component of this formation includes fine-grained, equigranular to porphyritic/aphanitic diorite/andesite. Phenocrysts of feldspar, augite, and hornblende are common in some of the units.

Overlying the Elise Formation is the Hall Formation (also Jurassic). These rocks are mostly argillite, siltstone, fine-grained sandstone, and minor conglomerate. They are rarely limy, but are commonly siliceous. Compositionally, the rocks are very heterolithic, with a variety of clasts, including a high percentage of volcanic fragments. The Elise and Hall Formations are folded into a broad, N-S trending syncline (Hall Creek Syncline) that runs through the property and extends both north and south over a 15 mile strike length. This N-S structural feature is the strongest on the property.

A variety of intrusive rock types and ages have intruded the older rocks. These belong to three major groups. The older group consists of coeval diorite intrusives in the andesite pile of the Elise Formation. These tend to be fine to medium-grained, equigranular to weakly porphyritic. They range from very weakly to moderately magnetic. They probably aren't very large, occuring as dikes or sills a few meters thick. Flow lineation in feldspar or hornblende phenocrysts is seen near the intrusive contacts in core.

The next set of intrusive rocks are the Cretaceous Nelson intrusive suite, mostly quartz monzonite on the property, but also monzonite and diorite. These tend to be large, in places composite, intrusive masses outcropping most extensively in the eastern portion of the property, in the Stewart Creek drainage. Smaller stocks occur in the western portion of the property. Rocks of these intrusives are generally medium-grained, equigranular to porphyritic. They seem to range from weakly to fairly strongly magnetic. Porphyry molybdenum mineralization on the property is thought to be related to these intrusives.

Younger intrusives of the Coryell Suite (Eocene or later?) are also monzonitic, but tend to be a little more quartz-poor and alkaline than the Nelson rocks. They are typically biotitic. They may be equigranular or porphyritic. They occur in both the east central and west central portions of

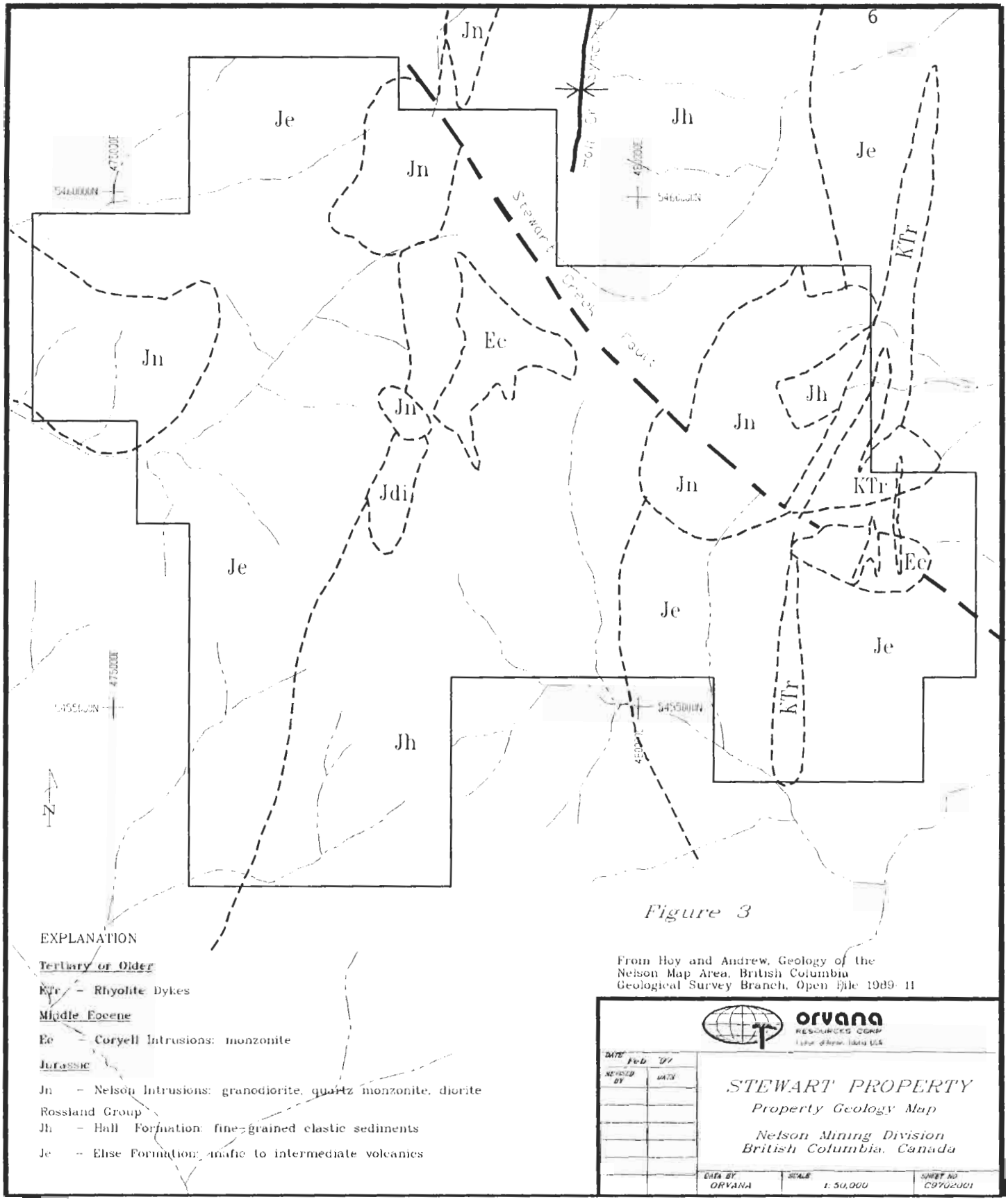

Figure 3

EXPLANATION

Tertiary or Older

KTr – Rhyolite Dykes

Middle Eocene

Ec – Coryell Intrusions: monzonite

Jurassic

Jn – Nelson Intrusions: granodiorite, quartz monzonite, diorite

Rossland Group

Jh – Hall Formation: fine-grained clastic sediments

Je – Elise Formation: mafic to intermediate volcanics

From Hoy and Andrew, Geology of the Nelson Map Area, British Columbia Geological Survey Branch, Open File 1989-11

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DATE Feb '97

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STEWART PROPERTY

Property Geology Map

Nelson Mining Division
British Columbia, Canada

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the property. What are probably the youngest intrusives are rhyolite sills/dikes that intrude the older Rossland rocks and both Nelson and Coryell intrusives. These cross-cutting intrusives are aphanitic to weakly porphyritic (some have quartz eyes), generally strike N-S and are widely scattered on the property. They commonly have distinct flow banding near their contacts with the country rock.

The dominant structural grain on the property is N-S. The Rossland Group stratigraphy generally strikes N-S, as does the Hall Creek Syncline. Northwest and northeast faults and shear zones are known on the property; they appear to be significant controls to mineralization. The common young rhyolite dykes and sills also strike N-S and dip steeply. All of these features indicate that the deformation occurred within a stress regime with an east-west compressional axis that was probably long-lasting and contemporaneous with accretion onto the North American continent.

CRAIGTOWN MAP AREA GEOLOGY

Mapping was conducted over the 1996 grid area. Much of the area is covered with colluvium or till, so float mapping was employed, and the accuracy of the map is compromised. A compilation of the salient geologic features is presented in Plate 1, and all mapping data points (outcrops, float, etc.) is included in Plate 2. Portions of the area adjacent to this on the east were partially mapped by various earlier workers, including Shell, BP-Selco, Minnova, and Cameco. Begining in the west, a lobe of Nelson (Cretaceous) quartz monzonite to diorite extends eastward from the Bonnington pluton up Craigtown Creek. This rock is medium-grained and generally equigranular to weakly porphyritic. It is more dioritic in the northern portions of its known distribution, and may in fact be a composite intrusive. It is generally unaltered or only propyllitically altered, except near its contact with the country rocks. This lobe intrudes the andesites of the Jurassic Elise Formation.

The Elise (Rossland) Formation andesite underlies a large portion of the Craigtown Creek area, and hosts most of the known mineralization. The strike generally N-S and dip steeply (west?). Lithologies of the Elise Formation are texturally highly variable. The rocks constitute essentially an andesitic volcanic pile, but include flows, clastics, and intrusives. Color varies from light to dark grey, green, or almost black. Most of the rocks are either porphyritic/aphanitic andesite flows, or tuffs. Feldspar, hornblende, and augite phenocrysts are common. The tuffs vary from ashes to lapilli or even cobble tuffs. Rarely, bedding is visible in ashy beds. Dioritic, porphyritic coeval dikes and/or sills are also common. These commonly have flow lineations preserved in the phenocrysts, near the contacts with the country rock. Compositionally, rocks of the Elise Formation are seen to vary from andesite to gabbro. Some of the rocks contain up to 25% dark green to black augite phenocrysts. It hasn't been determined whether these rocks are flows or coeval intrusions. Alteration in the Elise Formation includes propyllitic, potassic, carbonate, and silicification.

Overlying the Elise Formation on the east are argillite, siltstone and tuffaceous rocks of the Hall Formation. These rocks also strike N-S and dip steeply. They are dark grey, tan, to black, and thinly-bedded. They have not been identified as calcareous in the Craigtown Creek area, although they are in other areas of the property. They are often graphitic. Mineralization of these rocks in the study area seems to be restricted to the contact aureol around the "West Moly Intrusion", which is mostly further east. This mineralization is limited to disseminated pyrite/pyrrhotite and minor small quartz-sulphide veins. Alteration in this aureol includes silicification and hornfels (possible potassium metasomatism or silica flooding).

Small feldspar porphyry intrusive plugs seem to occur in the Craigtown study area. These rocks are thought to belong to the Nelson intrusive group (Cretaceous). However, Hoy and Andrew (1988) suggest that rocks similar to these, including the Silver King porphyry, may be synvolcanic. One of these porphyries outcrops east of the 1996 grid on "Anomaly Ridge", where Cameco drilled four holes. Others bodies are certain to underlie other areas, as the float is very common. These rocks are porphyritic, with 10-30% feldspar phenocrysts 1/4 - 1 cm long, set in

a fine-grained, tannish grey groundmass. In places, anhedral quartz eyes constitute a few modal percent. The feldspar crystals are cream colored and euhedral, and are thought to be orthoclase. In places they demonstrate a flow lineation. Mafics are mostly biotite and minor hornblende, and constitute a minor portion of the mode. They often contain disseminated pyrite, and in places are cut by stockwork quartz veinlets. A small plug of a trachytic feldspar porphyry with quartz veinlet stockwork and anomalous Au (>1 g/t) outcrops poorly in the area of 5458600N 476100E. This rock is probably the same as those initially described, but has an aphanitic groundmass (more quenched?).

In a poorly exposed NW trending zone that traverses the central portion of the 1996 grid, a series of outcrops and float of fine-grained, equigranular felsic rocks occur. These rocks are light tan or grey, with pinkish hue in places, and contain only minor mafic minerals (generally 5% biotite). In places, especially near the ridge crest, brecciation is strong in these rocks. These appear to be intrusive breccias and show several cross-cutting relations. They seem to be altered and mineralized, and are associated with anomalous Au and Cu geochemistry both in soils and rocks. Several percent magnetite is a common component, both as fine to medium-grained disseminations and as stockwork veinlets, with or without quartz. Potassium feldspar and quartz veining and flooding are present in places. These rocks probably represent an elongate intrusive, perhaps 100 meters wide by 400 meters long, that was subsequently emplaced along the contact between the Elise Formation and the diorite portion of the lobe of the Bonnington Pluton. The strong NW elongation implies structural control.

Rhyolite dikes are common on the Stewart Property, and a few of these traverse the Craigtown Creek map area. They always strike N-S, and dip near vertically. They are a few meters in thickness. Texturally, the rhyolite is aphanitic, with minor quartz eyes in places. They have been mapped and logged as tuffs, flows, or intrusives by other workers. Based on flow lineations, and chilled lower and upper contacts as seen in core, we believe that they are later intrusives. They are little altered except for some minor late quartz-carbonate veinlets. Some of them contain disseminated pyrite; in fact some earlier workers concluded that they are the source of the Au soil geochemical anomalies at Craigtown Creek. In our experience, they contain very little Au except where accompanied by quartz veinlet stockwork and pyrite.

Minor lamprophyre or porphyritic basaltic dikes or sills are present in the area. These are on the order of a couple meters in width. They are dark greyish brown, unaltered, not magnetic, and aphanitic, with minor biotite phenocrysts in places. They have distinct chill margins along both contacts in core. They are probably late and unrelated to mineralization.

MINERALIZATION

Mineralization on the property is widespread and varied. Included are porphyry Mo (and Cu?) with high grade breccia (Stewart Moly), contact/skarn related Mo and W (Arrow Tungston), porphyry/stockwork Au/Cu (Craigtown Creek), stratabound sediment hosted Au-rich sulphide (replacement manto or exhalative, ie.Arlington Mine; Gold Hill?), quartz-pyrite-arsenopyrite stockwork in sediments (Trixi V), sediment hosted Ag-Zn-Pb (Free Silver), and quartz-pyrite veins with gold (Craigtown Creek). Additionally, disseminated pyrite is common in several rock types, including andesite, argillite, rhyolite, and diorite/monzonite intrusives.

In the Craigtown Creek area, where most of the work was concentrated in the 1996 program, six types of mineralization were noted. These include: 1) disseminated and fracture filling pyrite and/or pyrrhotite, +/- chalcopyrite, 2) quartz-magnetite veinlets, 3) quartz veinlet stockwork, 4) pyrite veinlets, 5) quartz-carbonate veins, and 6) quartz-sulphide veins. The first four types are associated with potentially economic, bulk tonnage, porphyry style gold and copper mineralization. The last type could be associated with the same system that produced the former mineralization types, but is a distinctly different target type that also has economic potential.

Pyrite and pyrrhotite as disseminated grains and fracture fillings is common in the Craigtown Creek area. This type of mineralization is observed in all of the rock types mapped in the area, with the exception of the basalt dykes. Traces of chalcopyrite are present with this mineralization where it occurs in intrusive or volcanic rocks, usually in association with shearing, brecciation, or quartz veinlets. Propyllitically altered quartz monzonite and diorite generally has only 0.5 - 2% sulphide. Andesite typically has more sulphide; 2 - 3% in propyllitic rocks and 5 - 10% in silicified rocks, in relative proportion to the amount of alteration. Potassically altered intrusive and volcanic rocks has less sulphide, generally in the 0.5 - 4% range. This type of sulphide is also very common in feldspar porphyry.

Quartz-magnetite veinlets are common in the contact zone between the Bonnington intrusives and the Elise volcanics. The ground magnetic survey indicates that this contact coincides with strong and variable magnetic intensity. The veinlets seem to be associated with the fine-grained felsic intrusive rocks that occur along this contact. This zone has strongly anomalous Au and Cu in soils. The host rocks are generally intrusive and less commonly volcanic. The are very rarely exposed in outcrop, mostly being seen in float or talus. The veinlets range <1mm - 5mm in thickness, constitute 2 - 20% of the rock, and in places constitute a stockwork. Two or three stages of veining are visible in some hand samples; at least one stage is quartz only. Malachite stains are present in places, though the rocks rarely contain sulphide. Where sampled on the surface, rocks containing this type of mineralization contain anomalous Au (100 - 300ppb range) and Cu (200 - 500 ppm range).

Quartz veinlet stockwork was observed in feldspar porphyry float in several places, and in the small plug mapped in the southern portion of the NW-striking zone of alteration and anomalous geochemistry that bisects the central portion of the 1996 grid. The rocks hosting this stockwork generally are moderately silicified, and contain several percent disseminated pyrite. Pyrite may also have been a component of the veinlets in some samples, but has been oxidized to limonite. This mineralization potentially represents the potential for discovery of a large tonnage Au deposit, as several samples have returned Au values > 1 g/t. This mineralization may represent more than one stage, as some rock samples contain high Au and low Cu; others have high Cu with high Au.

Pyrite veinlets in mafic andesite contain highly anomalous Au values in the central portion of Minnova's southern grid, east of Craigtown Creek. Their reports mention a sample of "pyritic gabbro" that contains >10 g/t Au. An effort was made to relocate these rocks on the ground. Despite faded flagging location markers, we think we found the sample location. Dark green to black augite porphyritic mafic andesite or basalt is exposed in a few small outcrops, subcrop, and float. The rock appears little altered, though it could be weakly chloritized. It typically contains a few percent disseminated pyrite. In a couple small outcrops, vague pyrite veinlets and clots are present. These vague veinlets have NE orientations. A sample of this material (#24761) returned 8696ppb Au and only 230ppm Cu. This is possibly the outcrop where Minnova collected the highly anomalous samples reported in their work.

Quartz-carbonate veinlets are present in both the Bonnington Pluton intrusive rocks and the Elise volcanics. They seem to occur in sheared, weakly altered (propyllitic) outcrops. Shear directions are either NE or N-S, with near vertical dips. Minor amounts of pyrite and or magnetite are present in the host rocks. Samples of these rocks have up to 348ppb Au and only weakly anomalous Cu.

Quartz-calcite-sulphide veins occurring in Elise volcanic rocks were intersected in Cameco drill hole DEN-93-4. They are range 10 - 30 cm wide, and contain mostly white quartz and calcite, with 10 - 30% sulphide (pyrite, pyrrhotite, and minor chalcopyrite). These veins contain up to 24,854ppb Au. They appear to have high enough grade potential to be considered as targets, even in an underground mining situation. They are not known to outcrop anywhere. It is possible that the NE striking Au in soil anomalies located on the 1996 grid, north of Craigtown Creek, are related to this type of mineralization. These anomalies are fairly narrow and linear,

appearing to be derived of relatively narrow veins or structures. Veins like this have been demonstrated to occur around porphyry type mineral systems in other important mining camps in British Columbia. Some of these have been + million ounce producers, and include Rossland and the camps of the Iskut River region (Snip, Johnny Mountain, etc.).

In the Rest Creek area, three types of mineralization were noted. These include quartz veinlet stockwork, quartz-carbonate veins, and disseminated pyrite. Quartz veinlet stockwork is present in small rhyolite intrusives (or possibly tuff beds). The rhyolite often has disseminated pyrite. These mineralized rocks have been exposed in an old dozer trench and several small, shallow workings in the area. These rocks have anomalous Au, with values up to > 1 g/t. Quartz-carbonate vein material is seen in float and on dumps of argillaceous rocks of the Hall Formation. This material doesn't produce very anomalous geochemistry, with the exception of moderately elevated Zn.

ALTERATION

Various types of alteration are known on the Stewart Property. In the area of the porphyry molybdenum occurrences, phyllic and potassic alteration are reported by earlier workers. Silicification is common in various rock types. Propyllitic alteration of intrusive and volcanic rocks is widespread on the property. In the Craigtown Creek area, the focus of work in 1996, alteration types observed include propyllitic, silicification, carbonate, potassic, and skarn.

Mapping in the Craigtown Creek area demonstrate that propyllitic alteration is common in andesitic volcanic rocks of the Elise Formation. Patchy, pervasive epidote and chlorite tint the rocks green. Fractures in the Elise volcanics have fillings, coatings, or selvages of these minerals. Intrusive rocks, including monzonite and diorite, also commonly display pervasive to fracture-controlled propyllitic alteration, where mafic crystals have altered to chlorite and/or epidote. Not all of the intrusives mapped are altered; fresh diorite appears to underlay the west-central portion of the 1996 grid. The propyllitic alteration may be related to the margins of the Bonnington intrusive rocks that invade from the west. However, mapping to date is too restricted spatially to define the geometry of porphyry-type alteration halos.

Silicification is intense within the Elise Formation andesite in portions of the map area. These rocks typically have a mottled, bleached coloration. Silicification is pervasive, and mafic minerals are generally chloritized. The silicification is usually accompanied by disseminated pyrite or pyrrhotite. It also is coincident with anomalous soil and rock geochemistry (Au, Cu, As) in places, and therefor is assumed to be a function of the mineralization system. On the surface, these silicified rocks tend to form small, iron-stained ridges and knobs with sparce vegetation. They appear to be associated primarily with NW structures, also possibly intrusive contacts and NE structure. On the ridge crest, in the vicinity of UTM 5,459,200N 476000E, silicified rocks appear to extend 100 meters east of the saddle where several NW structures are mapped. This is also within 100 meters of an intrusive contact where potassic alteration is present. In core, silicification of the volcanics appears more intense proximal to diorite dyke or sill contacts. Whether this is a genetic function directly related to the intrusive body, or the contact being used as a fluid pathway, is unknown.

Carbonate alteration is present in places in the andesite of the Elise Formation. This alteration can be either pervasive or veinlet/fracture controlled. Where pervasive, it tends to be apparent only when the rocks are subjected to HCL acid, or with petrography. Petrographic study of Cameco's core samples indicate that most of the carbonate is ferroan dolomite and is generally a late alteration product. A few outcrops were located containing small veinlets of calcite, commonly associated with N-S or NE shearing.

Potassic alteration is present in places in brecciated and veined intrusive rocks along the Bonnington diorite - Elise andesite contact. This alteration is fairly weak, and consists of pinkish to greyish flooding and veinlets of potassium feldspar. Quartz +/- magnetite veinlets are

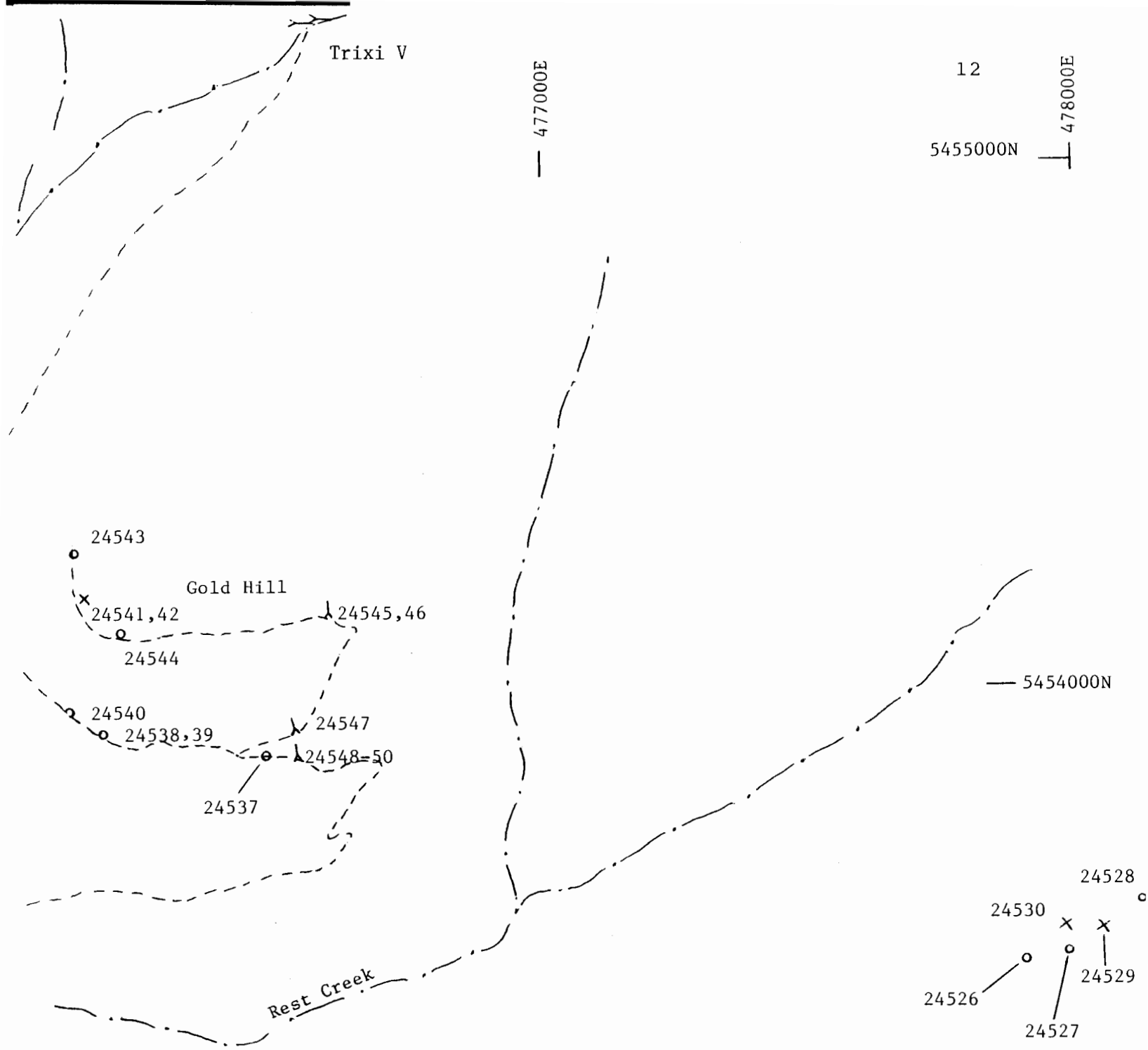
commonly associated with this alteration. These observations are made in hand specimens; petrographic work would better establish the character of this alteration.Skarn alteration was observed in two locations in the Craigtown Creek map area, and in Cameco drill hole DEN-93-4. A small outcrop of green calc-silicate skarn was found just off the western end of the 1996 grid. This rock contains green pyroxene, brownish garnet, and black amphibole (+chlorite?). It contains anomalous Au (250ppb; #24602), despite having very little sulphide or magnetite. Similar skarn was found in float near the east end of the old road running up the north side of the North Fork Craigtown Creek. Skarn in drill hole DEN-93-4 is similar in character, as well. Significantly, this is the western-most location drilled, and is about 300m northeast of the outcrop mentioned above. In all three examples, the protolith is probably andesitic fragmental volcanic rock.

LITHOGEOCHEMISTRY

Rock samples were collected during the course of geologic mapping and reconnaissance sampling during the 1996 work program. Most of the samples were collected in the Craigtown Creek area, though a few were collected in the Gold Hill and Wind Gap areas. A total of 250 samples were collected, mainly from outcrops, and float, and a few from small prospects or workings. Craigtown Creek sample locations and results are presented in Plates 3 and 4. Gold Hill and Wind Gap locations and results are included in Figures 4 - 7. Field sample descriptions are included in Appendix 3. The rock samples were submitted to SVL Analytical, Inc. of Kellogg, Idaho for analysis of 10 elements. Copies of the lab reports are included in Appendix 2. Sample preparation was accomplished by crushing the sample to 1/8 inch, the rolling to -10 mesh, splitting the sample and pulverizing to -140 mesh. A 30 gram split was used for Au and Ag, analyzed by standard fire assay with an AA finish. At the cupulation stage the bead was dissolved in aqua regia and the resulting solution analyzed by flame atomic absorbtion. The other elements, As, Bi, Co, Cu, Pb, Mo, Zn, and Ba were all determined by ICP. A 0.28 gram sample was digested in aqua regia and analyzed by ICP emission spectroscopy. Detection limits for elements using the above described techniques are as follows:

Element	Lower Limit	Upper Limit
Au	5 ppb	none
Ag	0.1 ppm	25 ppm
As	10 ppm	20000 ppm
Bi	10 ppm	10000 ppm
Co	2 ppm	10000 ppm
Cu	2 ppm	20000 ppm
Pb	5 ppm	20000 ppm
Mo	2ppm	10000ppm
Zn	2ppm	20000ppm
Ba	2ppm	50000ppm

Results of the rock sampling demonstrate that elevated Au, and to a lesser degree Cu, are widespread in the Craigtown Creek area. Rock sampling is hindered by lack of exposure, and many of the samples collected are of float. Values range up to 8696 ppb Au, and 3200 ppm Cu. Most Au values are in tens to low hundreds of ppb. This broad but low grade distribution of Au is typical in large portions of alkalic porphyry systems. Gold values exceeding 1 g/t are associated with several types of mineralization, including disseminated pyrite, pyrite veinlets, and quartz +/- pyrite veinlet stockwork. Values exceeding 1 g/t Au are associated this these types of mineralization where they occur in the Elise Formation or felsic Nelson Group intrusives (feldspar porphyry of felsic monzonite), but not in monzonite or diorite of the Bonnington Pluton. Lower Au values are commonly found in potassic to silica-flooded intrusive rocks with quartz-magnetite veinlet stockwork, in addition to the styles mentioned above. The common presence of magnetite veinlets in both intrusive, and to a lesser extent, volcanic rocks, does not in itself correlate with anomalous Au. Some samples of this material are anomalous, others aren't.



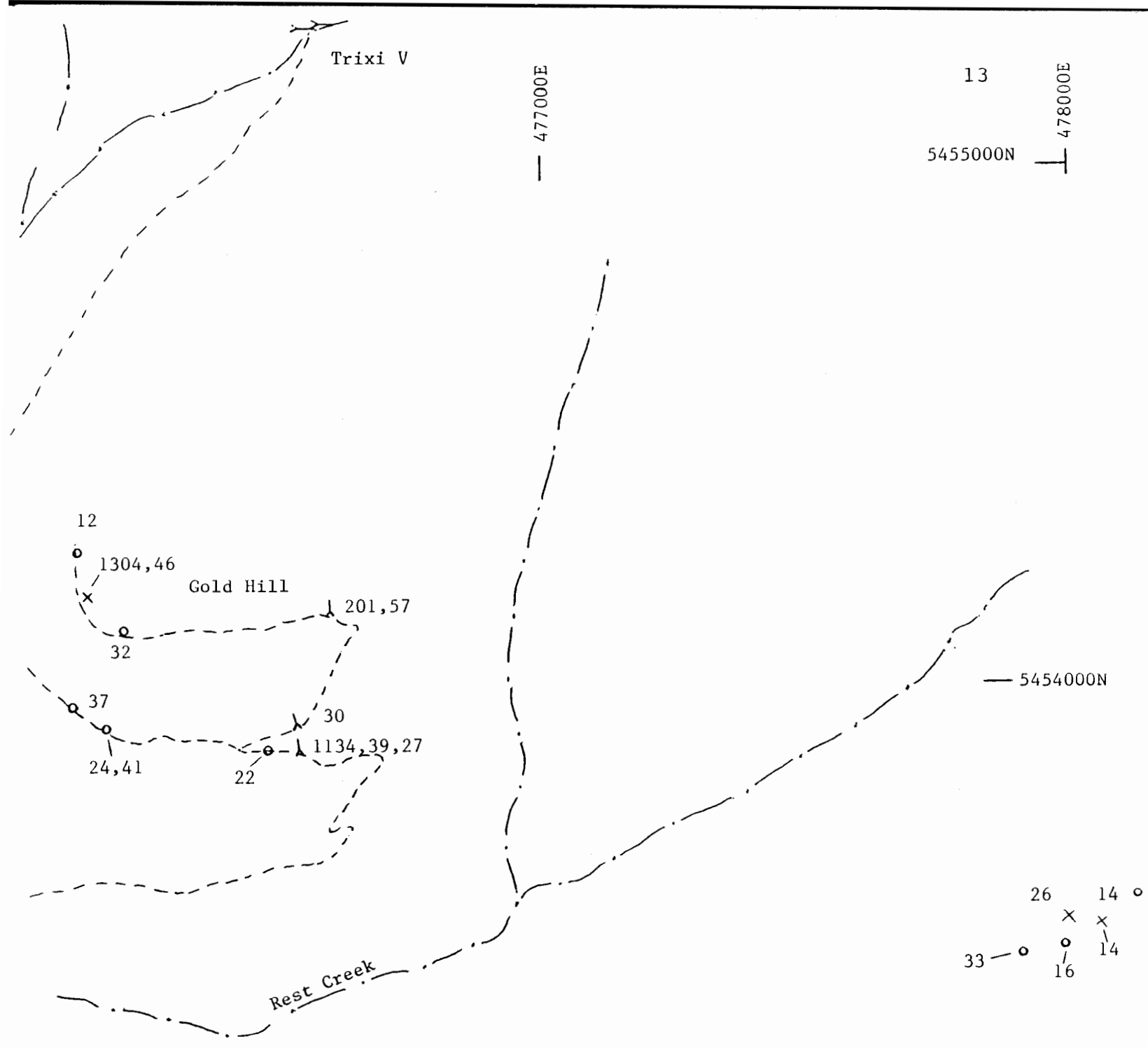
orvana RESOURCES CORP.
Coeur d'Alene, Idaho

STEWART PROJECT

Gold Hill/Rest Cr.
Rock Sample Locations

Nelson Mining Division, B.C.

DATE	SCALE	FIG. NO.
Feb. 1997	1:10,000	A

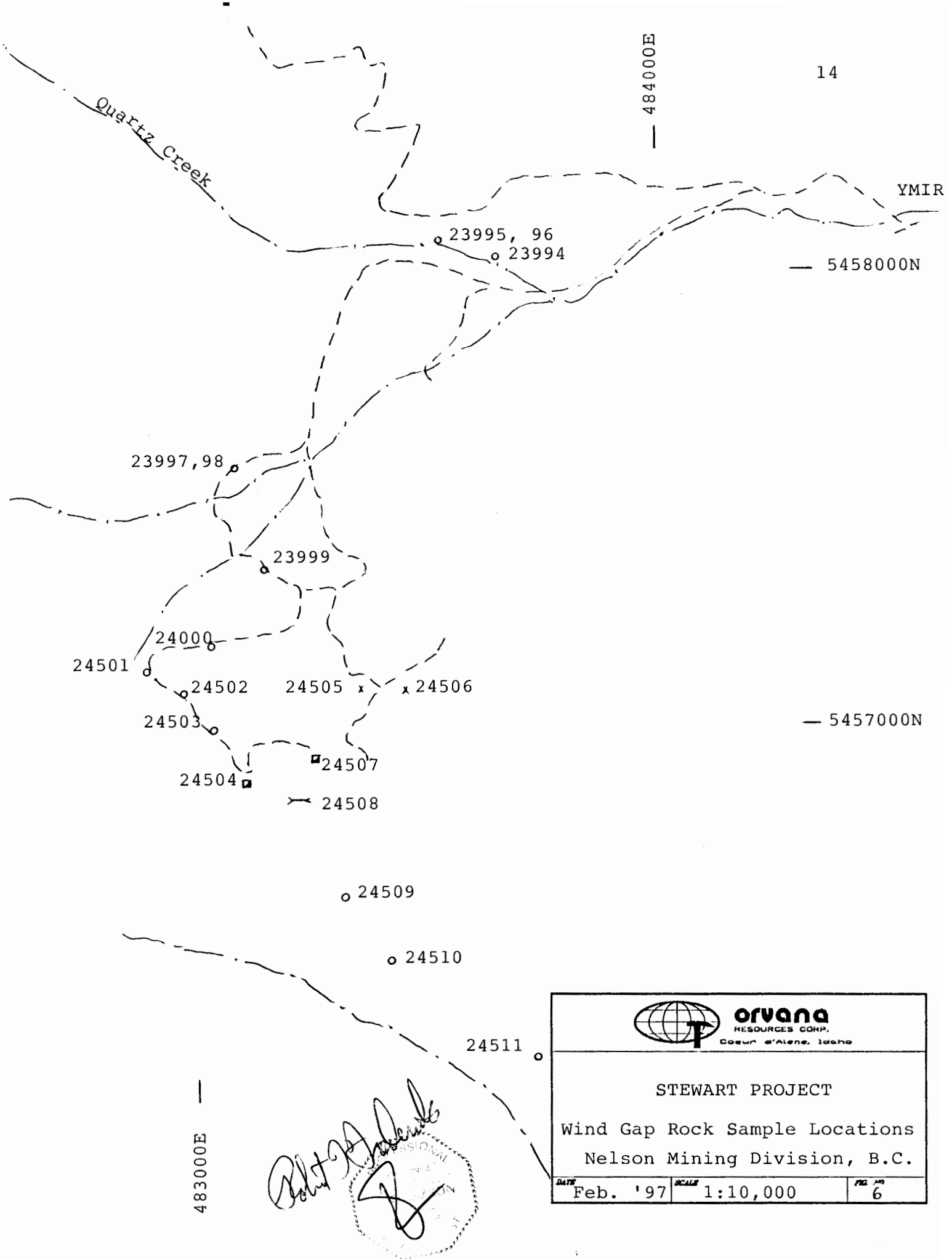


orvana RESOURCES CORP.
Coeur d'Alene, Idaho

STEWART PROJECT

Gold Hill/Rest Cr. Rock Samples
Au (ppb)
Nelson Mining Division, B.C.

DATE	SCALE	FIG. NO.
Feb. '97	1:10,000	5



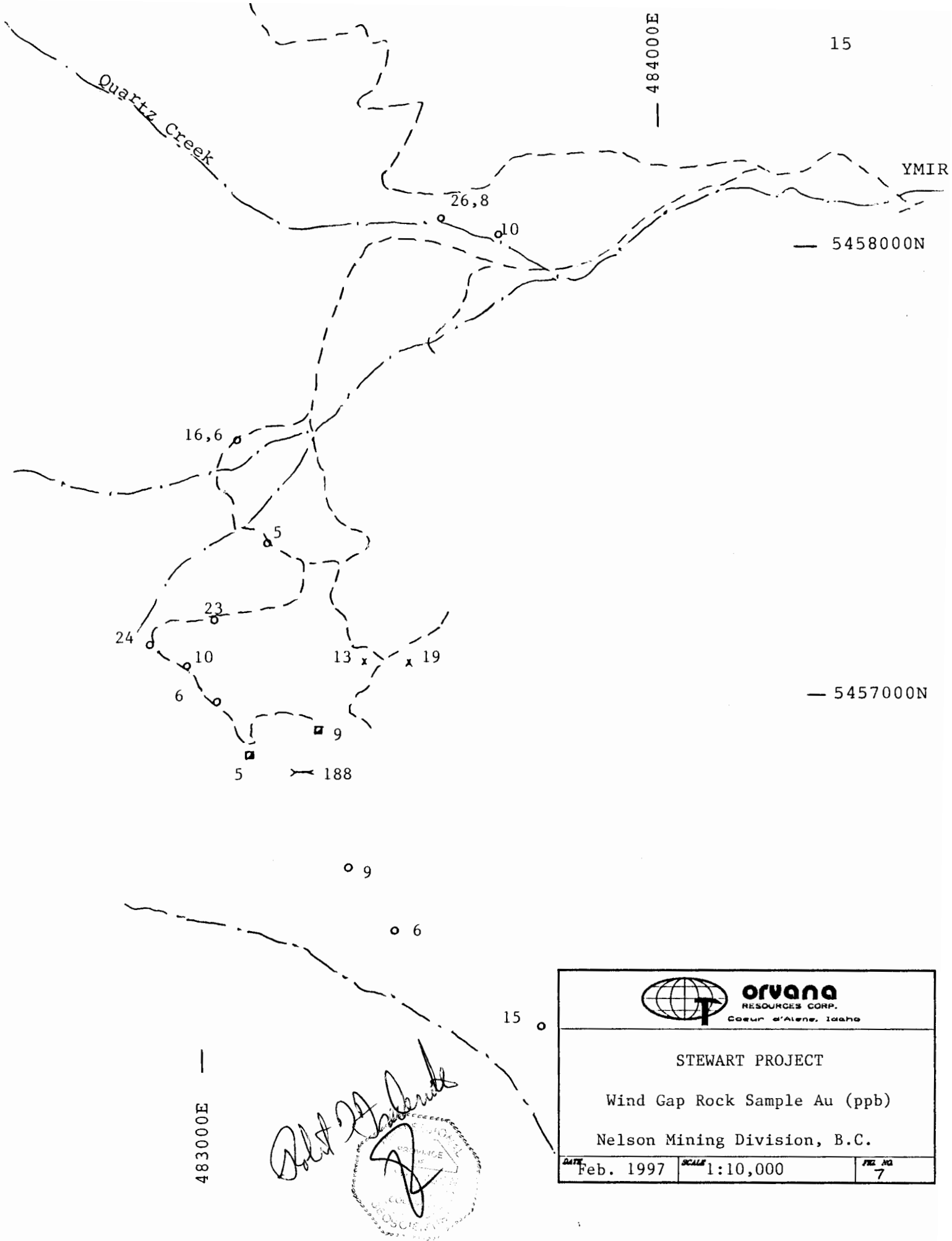
orvana RESOURCES CORP. Coeur d'Alene, Idaho

STEWART PROJECT

Wind Gap Rock Sample Locations

Nelson Mining Division, B.C.

DATE	SCALE	FIG. NO.
Feb. '97	1:10,000	6



orvana RESOURCES CORP.
Coeur d'Alene, Idaho

STEWART PROJECT

Wind Gap Rock Sample Au (ppb)

Nelson Mining Division, B.C.

DATE	SCALE	FIG. NO.
Feb. 1997	1:10,000	7

Samples of both rhyolite and lamprophyre dykes collected in 1996 in the Craigtown area do not yield anomalous Au. This contradicts some conclusions of earlier worker, which are that the rhyolite dykes are the source of the Au.

Most Cu values are in the low hundreds of ppm, which is relatively low. Higher Cu values are spatially restricted. This may be a function of the erosion level, indicating that the portion of the system currently exposed is above the zone of primary Cu deposition. The highest Cu values come from a float sample of brecciated, mixed intrusive and volcanic rocks located near a feldspar porphyry intrusive plug (#24665). This occurrence is in the southern portion of the NW-trending Cu in soil anomaly.

Strongly silicified and pyritic/pyrrhotitic volcanic rocks occur in several places along the NW-trending zone that transects the central portion of the 1996 grid. These rocks form some of the most prominent outcrops in the area. They tend to have only moderately elevated Au (<200 ppb) and Cu (<200 ppm). Arsenic values are weakly elevated in these rocks too.

Substantially elevated Au values were reported in two rock types from samples collected at Gold Hill. A silicified, porphyritic rhyolite with quartz veinlet stockwork, collected from a dump, has 1304 ppb Au (#24541). This sample contains highly elevated As (730 ppm). A sample of quartz-calcite-pyrite vein material from an adit (caved) dump has 1134 ppb Au and 760 ppm As. Wall rock on this dump is argillite of the Hall Formation. Samples of argillite or quartz-calcite vein material hosted in argillite tend to have anomalous Zn (300-500 ppm).

Rock samples collected in the Wind Gap area did not produce significantly anomalous Au of Cu. Most of these rocks are pyritic, propyllitic to weakly silicified andesite of the Elise Formation. The highest Au value is 188 ppm; most are much lower. This area was explored for molybdenum mineralization in the past. Anomalous Mo values (maximum 250 ppm) are fairly common in the samples collected in 1996.

SOIL GEOCHEMISTRY

Soil samples were collected over all of the E-W 1996 grid lines at 30 meter intervals; 967 samples were collected. The samples were submitted to Acme Analytical Laboratories in Vancouver, B.C, for preparation and analysis. Copies of the results are attached (Appendix 4). The samples were prepared by drying and sieving to -80 mesh. Gold was determined using a 10 gram aliquot, digested with hot aqua regia, extracted using MIBK and determined by graphite furnace atomic absorption. The detection limit is 2 ppb.

The elements Mo, Cu, Pb, Ag, Ni, Co, Mn, Fe, As, U, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Tl, and Hg were determined simultaneously by ICP emission spectroscopy from a 0.5 gram sample aliquot digested with 3 ml of 3-1-2 HCL-HNO_3-H_2O at 90° Celcius for one hour.

Detection limits for the ICP analysis are:

Ag	0.3 ppm
Al, Ca, Fe, K, Mg, Na, Ti	0.01%
As, Bi, Mn, Sb, Th, W	2 ppm
B, Pb	3 ppm
Ba, Co, Hg, Cr, Cu, La, Mo, Ni, Sr, V, Zn	1 ppm
Cd	0.2 ppm
Tl, U	5 ppm
P	0.001%

The soil geochemical survey was successful in identifying several discrete anomalies, several of which are multielemental. Both the primary metals of interest, Au and Cu, have well developed

anomalies. These are in places accompanied by other elements. Distinct anomalies are demonstrated by several other elements, and a general zonation is apparent. The primary elements of interest, including Au, Cu, As, Pb, Zn, and Ag are plotted at 1:5000 scale and presented in Plates 5-10. Other elements of potential interest in helping to map geology beneath cover include Fe, Mn, V, Cr, Ni, P, Ti, Ca, Sr, Co, Ba, Mg, K, and Al. Plots of contoured values of these elements are plotted at 1:10,000 scale and presented in Appendix 5.

Gold values in soil range from below the detection limit to 1550 ppb. Two distinct types of Au anomalies are present. One is a north to NW-striking anomaly that tends to coincide with the monzonite of the Bonnington Pluton, the contact between it and the Elise Formation, and the small intrusive plugs along the contact. This anomaly is broad (200-400m) and long (+1800m). It breaks up to the north, where it appears to be closed off. In the south, it continues off the 1996 grid, in part trending into an anomaly in Minnova's soil survey. The second type of Au anomaly trends NE and occurs as parallel elongate features, which are not as broad as the first type of anomaly. There are three or four of these anomalies, approximately 150m apart. Where they transect the Bonnington monzonite and the contact zone with the Elise Formation, they are somewhat diffuse, merging with the NW-striking anomaly. Where they transect the Elise Formation, they are narrower and discrete. These anomalies trend NE into similar anomalies defined in the Minnova soil geochemistry. They trend SW off the 1996 grid.

Copper values in soil range 25-1266 ppm. The 1996 grid defines discrete Cu anomalies, one trending NW and the other NE. Both of these anomalies occur in the area underlain by the Bonnington intrusive (mostly monzonite), and its contact with the Elise Formation. The NW-trending anomaly is 1500m long along strike and averages 200m across. It trends south of Craigtown Creek, into a Cu anomaly in soils defined by Minnova work. This anomaly probably represents mineralization having strong structural control. The NE-trending anomaly is centered on the Bonnington intrusive / Elise volcanic contact. It is about 1100m long and 400m wide. This anomaly is broader, and has generally lower values than the NW anomaly. It is not coincident with the NE-trending Au anomalies; it clearly has a different geologic control. Where the two Cu anomalies intersect, a 200m X 300m wide area has Cu values averaging 460 ppm. Float and outcrop mapping indicate that this area has common quartz-magnetite veinlets and some potassic alteration.

Some of the other elements in the analytical suite may correlate with Au or Cu, or partly define metal zonation in the mineral system. Arsenic seems to have some correlation with Au, in that anomalous As seems to parallel but flank Au anomalies. This holds true for both NE and NW trending anomalies. Elevated As in soils coincides with areas of silicification in the Elise Formation. Both Pb and Zn are elevated out near the southern, eastern, and western boarders of the grid. This potentially represents zonation around the core of a porphyry mineral system, centered near the middle of the 1996 grid. Alternatively, elevated Zn values east of Craigtown Creek may be the result of hydromorphic transport and depostion of Zn derived from the sediments of the Hall Formation, which outcrops further up the hill and is known to contain widespread anomalous Zn.

MOSS MAT GEOCHEMISTRY

Moss mat samples were collected during initial reconnaissance work in the Craigtown Creek area of the Stewart Property. These samples were collected from boulders, logs, and other objects located in or on the immediate bank of Craigtown Creek and its tributaries. The purpose of collecting the moss mats is to sample the fine silt sediment trapped in them. This sediment is transported and trapped during high water flows. The samples were deposited into soil sample bags and shipped to SVL Analytical of Kellogg, Idaho. There the samples were dried and screened to - 80 mesh. A 0.28 gram split is digested in aqua regia and analyzed by ICP emission spectroscopy. Element detection limits are the same as those listed in the lithogeochemistry section above.

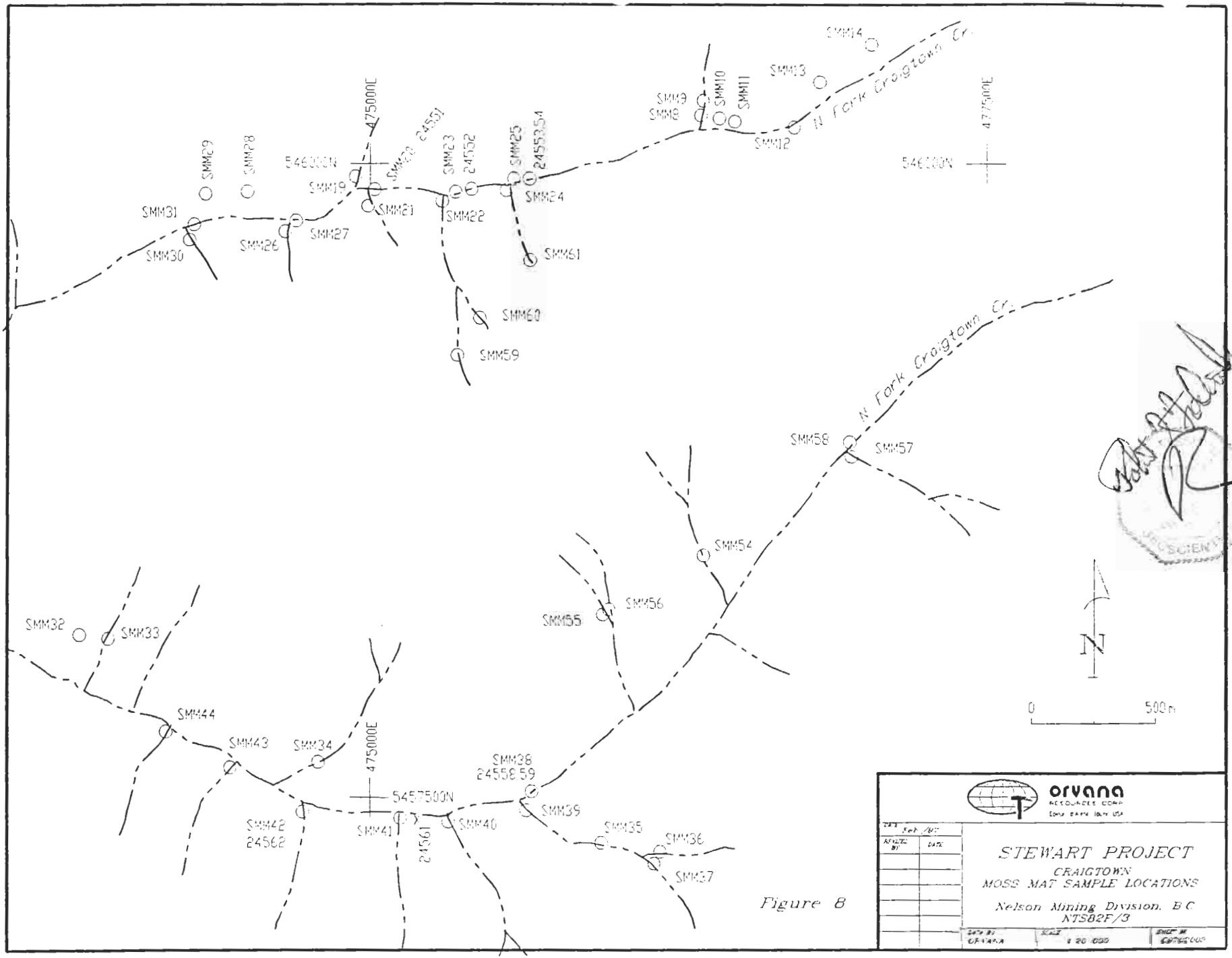


Figure 8

orvana RESOURCES CORP

STEWART PROJECT
CRAIGTOWN
MOSS MAT SAMPLE LOCATIONS
Nelson Mining Division, B.C.
NTS 82F/3

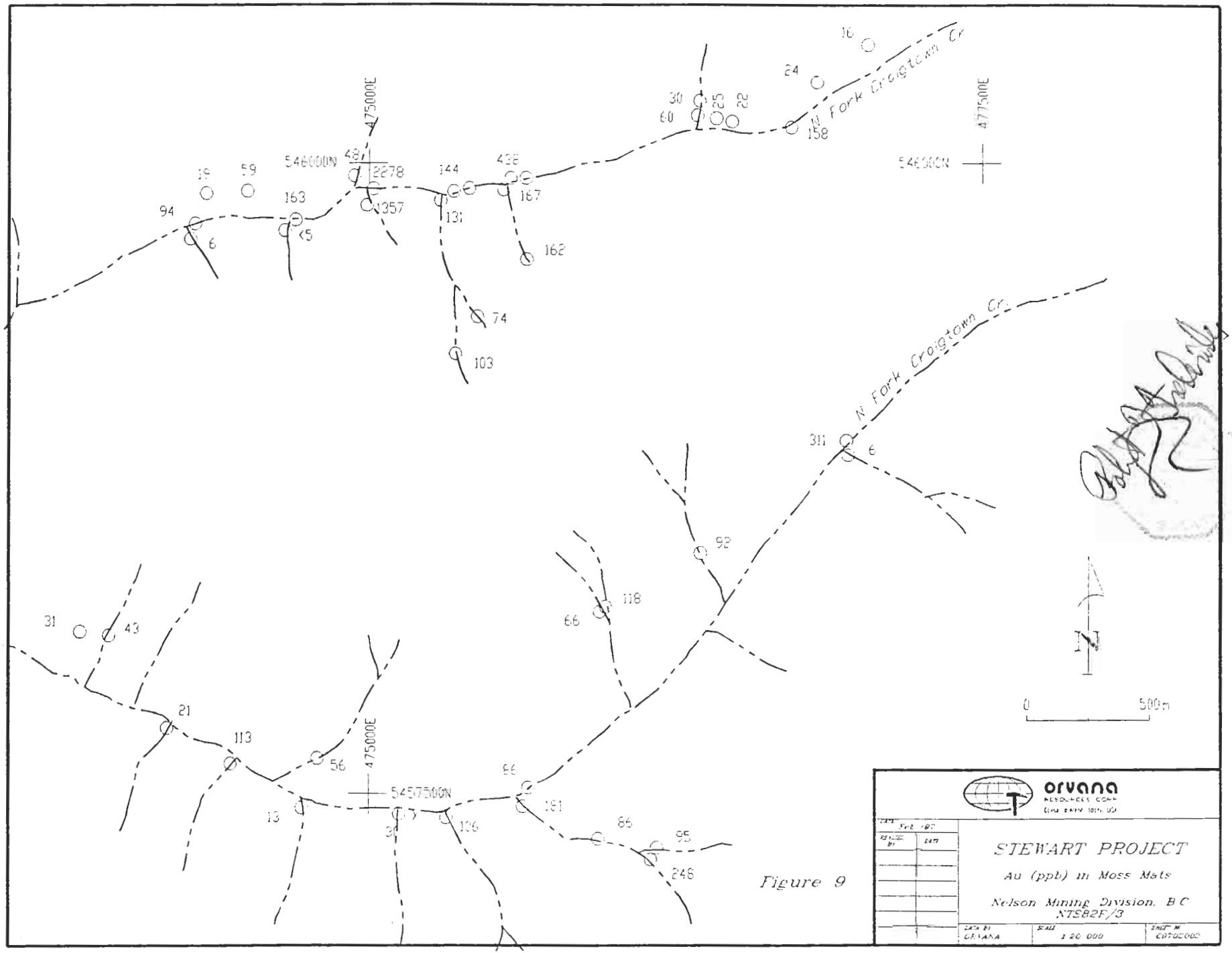


Figure 9

orvana RESOURCES CORP

STEWART PROJECT

Au (ppb) in Moss Mats

Nelson Mining Division, B.C.
NTS 82F/3

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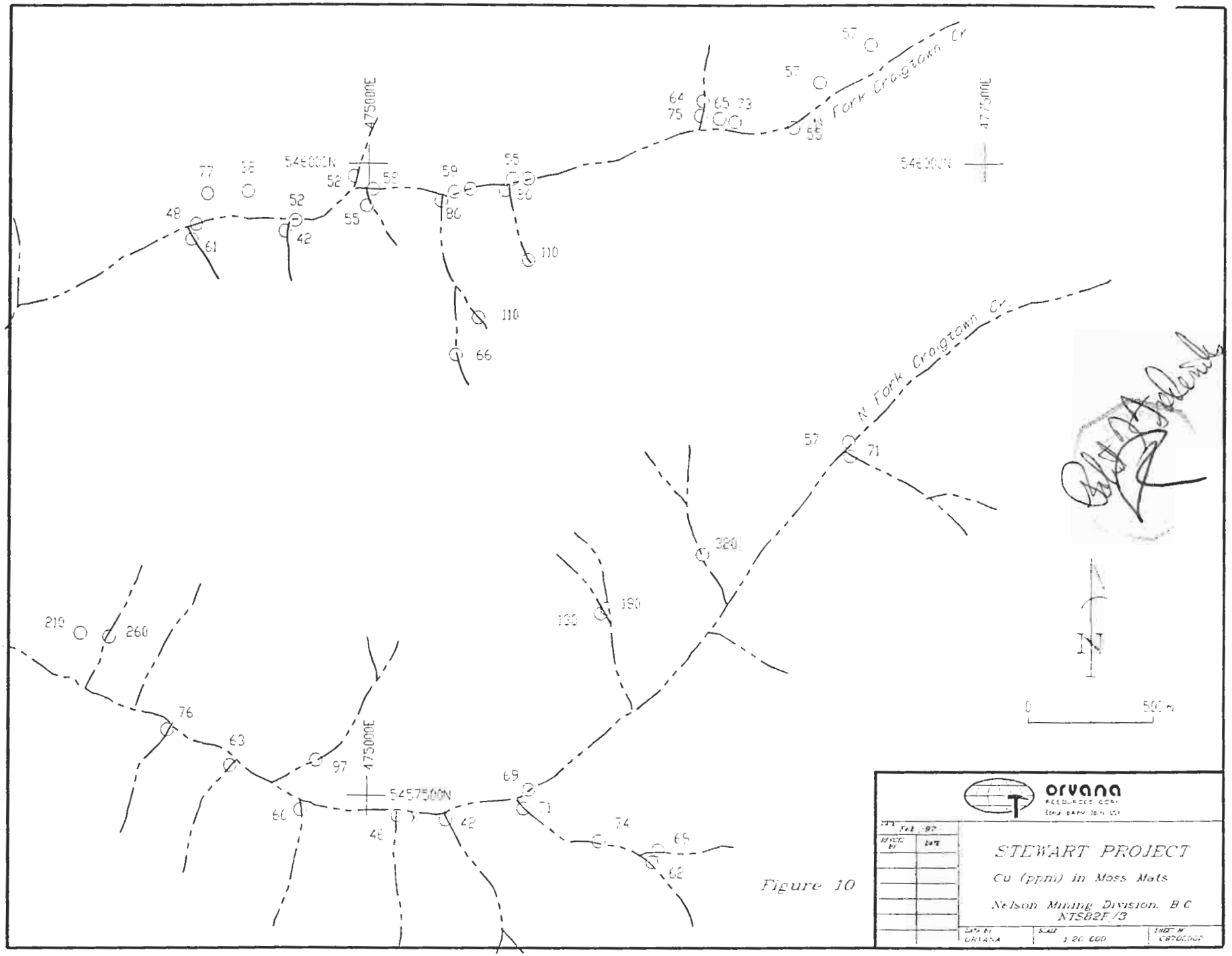
N Fork Craigtown Cr
N Fork Craigtown Cr
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500 m
STEWART PROJECT
Cu (ppm) in Moss Mats
Nelson Mining Division, B C
NTS82F/3
orvana
RESOURCES CORP.
DRAWN BY
ORVANA
SCALE
1:20,000

Figure 10

Results of the moss mat sampling tend to confirm the observation that the Craigtown Creek work area is a source of widespread anomalous Au, and less significantly, Cu (Figs. 8-10). Gold values are commonly in the tens to low hundreds of ppb, with a maximum of 2278 ppb, collected from the North Fork Craigtown Creek. The more anomalous Au values tend to occur in the central portion of the sampled area. This may be due to the sampling density or pattern. It could also reflect the NW trending structural/contact zone defined by results of the rest of the program (mapping and grid geochemistry). The higher Cu values also generally come from samples collected in this zone. Higher base metal values seem to come more from the margins of the sampled area. This may reflect metal zonation within a porphyry system. It very likely also reflects different bedrock lithologies in sample source areas. For example, the Hall Formation generally contains anomalous amounts of Zn, and sediment derived from it will reflect that.

MAGNETIC AND VLF-EM SURVEY

A combined ground magnetic and VLF-EM survey was run over the entire 1996 grid at Craigtown Creek. This includes all of the E-W cross lines, and 4800m of additional N-S lines. These lines are located in the northern third of the grid area. They were included in the survey to test a hypothesis that there is a regional E-W structure running through this area. This idea arose from an observation of a government map showing a linear feature in the results of a regional airborne magnetic survey.

The survey was contracted to Lloyd Geophysics of Vancouver, B.C. They used an OMNI base station and a backpack ground magnetometer and VLF receiver, both made by EDA Instruments. A copy of their report is included in Appendix 6, and the maps are presented as Figures 14-19.

The results of the magnetic survey demonstrate a significant contrast in the magnetic susceptibility, reflecting the content of magnetic minerals in the rocks below. Magnetic relief exceeds 6000 gammas in the central portion of the survey, through which runs the contact between the intrusive rocks of the Bonnington Pluton and the volcanics of the Elise Formation. The intrusives contain significantly elevated magnetite contents over those of the Elise Formation. The area of the contact has variable susceptibility, and is generally a strong low. Areas of mapped silicification tend to have low susceptibility, indicating possible destruction of magnetite during alteration.

The VLF-EM survey located only weak conductors. These tend to strike N-S to NE. They do not have very extensive linear continuity, and only a few of them coincide with mapped geological features or geochemical anomalies. It is possible that those that do, represent veins or structures that host mineralization.

CONCLUSIONS

The Stewart Property has very prospective geology and mineral occurrences, with the potential to host several different types of ore deposits. Efforts during the 1996 season were directed toward the discovery of bulk tonnage Au-Cu porphyry and/or vein deposits in the Craigtown Creek area. This work was all relatively preliminary in nature, with the purpose of identifying targets warrenting trenching and or drilling. Results of this work in the Craigtown Creek area are very encouraging. Several targets have evolved out of this work. These targets feature anomalous soil and/or rock geochemistry, and anomalous magnetic or VLF-EM response, within structural, alteration and mineralization parameters permissive of deposit models being considered. Both target types have the potential to host deposits exceeding one million ounces of Au or Au equivalent. The targets warrent further testing by physical methods, including trenching and drilling.

RECOMMENDATIONS

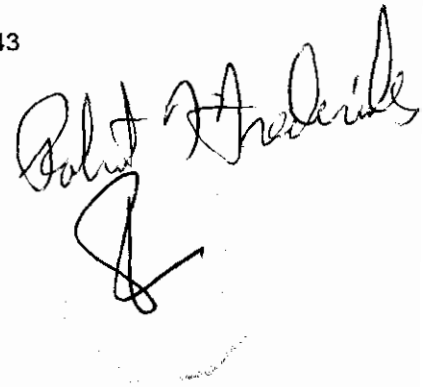
Results of the 1996 program delineate several targets warrenting additional work. The highest priority target is probably the Au/Cu porphyry system along the northerly striking contact between the Bonnington Pluton (Nelson) and the Elise Formation volcanics (Rossland). The NE-striking structure/vein targets as defined by coincident geochemistry +/- VLF-EM anomalies are also priority targets.

An I.P. survey should be conducted over that portion of the grid that covers the targets. This essentially is the southern 3/4 of the grid. This would provide valuable information regarding the distribution of sulphide minerals, relative to the intrusive contact. Work on other alkaline Cu/Au porphyry systems has demonstrated that better ore grades may actually flank the zone of greatest sulphide deposition. It is therefor important that the margins of any sulphide enriched zones be considered targets.

A program of trenching and drilling should follow the I.P. survey. Hopefully, excavator trenches will provide much more exposure in the target areas. These trenches should be dug in at least a couple different elevations when testing the porphyry target, as elevation may be a significant control to mineralization. The trench exposures should be mapped and sampled. Based on the results of the I.P. and trenching, the most prospective target areas should be drilled. A minimal program including 10 Km of I.P., 1 Km of road and trench construction, and 1000m of core drilling, is estimated to cost approximately $150,000.

STATEMENT OF COSTS

Geologists/Consultants	$24,961
Contractors	$11,000
Assays	$19,491
Geophysical Survey (VLF-EM) and Report	$14,220
Room/Board/Travel	$5904
Vehicles/Transportation	$3630
Petrography	$500
Drafting, Compilation	$3537
Total	$83,243



STATEMENT OF QUALIFICATIONS

I, Robert T. Fredericks, of 2635 City View Drive, Coeur d'Alene, Idaho, U.S.A., certify that:

1. I am a geologist employed by Orvana Minerals Corperation, 710-1177 West Hastings Street, Vancouver, B.C., V6E 2K3, at their office located at 1755 Silver Beach Road, Coeur d'Alene, Idaho 83814.

2. I am a graduate (1986) of the University of Idaho, Moscow, Idaho, and hold a B.Sc. degree in Geology.

3. I have been practicing my profession for the past 11 years.

4. This report is based on information that I and others working under my direction obtained while working on the Stewart Property during the period May 14 - October 18, 1996.

Robert T. Fredericks
Geologist, Orvana Minerals Corperation

STATEMENT OF QUALIFICATIONS

I, Ian Thomson of 1628 West 66 Avenue, Vancouver, British Columbia, V6P 2S2, do hereby certify that:

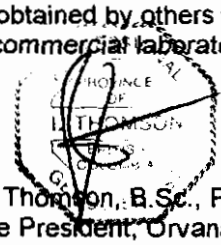
1. I am a graduate (1967) of the University of London, England, with a Bachelor of Science degree in Geology and a graduate (1971) of the University of London, England, with a Doctor of Philosophy degree in Applied Geochemistry.

2. I am a registered Professional Geoscientist in the Province of British Columbia.

3. I have been continuously employed as a geologist-geochemist involved with mineral exploration for 23 years.

4. I hold the position of Vice President, Technical and Environment, with Orvana Minerals Corperation, Vancouver, British Columbia.

5. This report is based on information obtained by others working under my guidance and from analytical data obtained from commercial laboratories.



Ian Thomson, B.Sc., Ph.D., P.Geo.
Vice President, Orvana Minerals Corperation

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APPENDIX 1

PETROGRAPHIC REPORTS

STEWART PROJECT

Petrographic Report #EYS

June 25, 1996

for

Robert Fredericks
Orvana Resources Corp.
1755 Silver Beach loop
Coeur d'Alene, ID 83814

by

Michael DePangher, Ph.D.
Spectrum Petrographics, Inc.

Comments

The reported "fragmental" appearance of some of these samples, apparently from hand specimen, is not apparent in most of the thin sections. What little "fragmental" texture there is appears to be the result of cataclasis.

A seriate (pseudoporphyritic) andesite shallow intrusive (dike ?) appears to be the protolith of all samples except Den93-3(81.2m).

Key to Petrographic and Photomicrographic Descriptions

Clay minerals common in altered rocks must often be identified by X-ray diffraction either because their optic properties are not diagnostic or because they are too fine grained to be reliably identified by optical methods. The term "clay" is used herein to denote fine grained phyllosilicates in general. Under ideal conditions, it is often possible to optically discriminate between 4 major groups: kaolinite, smectite, mica (including illite), and chlorite. This is done whenever conditions permit.

The term "sericite" is applied to fine grained colorless phyllosilicates that show upper 2nd order maximum interference colors. These could include muscovite, illite, paragonite, lepidolite, margarite, clintonite, pyrophyllite, and talc. The term "intermediate clay" is applied to fine grained very pale or colorless phyllosilicates that show upper 1st order maximum interference colors. These are probably dominated by chlorite, smectite, and mixed-layer illite/smectite.

The term "opaques" is used to refer to all materials opaque (and sometimes semi-opaque) to transmitted light. The term "FEOH" is herein used to indicate fine grained, yellowish to reddish brown, earthy materials of varying opacity in transmitted light. FEOH is probably mostly Fe oxy-hydroxides but may sometimes include sphalerite, realgar, orpiment, jarosite, a number of Mn oxy-hydroxides, and organic matter.

Particle size distributions are given as (A-B-C μm), where A, B, and C are the smallest, median, and largest particle sizes, respectively, in microns. A question mark (?) in the position of A, B, or C indicates that the value of A, B, or C was indeterminate, probably because of excessively large or small particle size or statistically insignificant numbers of particles.

Mineral abundances are visual estimates. For multi-lithologic materials (cuttings, etc...), mineralogy, textures, and alteration are described only for the dominant lithology.

Section preparation codes are as follows: (1) Format: 27 x 46 mm, 51 x 76 mm, or 1" round; (2) Finish: standard lapping (STD) or polished (POL); (3) Stains: sodium cobaltinitrite (SCN), alizarin red S (ARS), potassium ferricyanide (PF), and barium chloride + potassium rhodizonate (BCPR); and (4) Cover: none, permanent Loctite acrylic (PLA), or removable Canada Balsam (RCB).

Photomicrograph captions/labels contain the following items of information in consecutive order separated by forward slashes: (1) sample identification, (2) film roll number, (3) frame number, (4) type of illumination, (5) field of view (FOV) or the magnification on the color print, which is given as the number of times actual size (ie., 32X), and (6) the job identification number. "PPL" indicates plane-polarized light; "XPL indicates cross-polarized light. "R" indicates reflected light. "550" means that a 550 nanometer wavelength plate was inserted to highlight features of extremely low birefringence. "C" indicates that the substage condenser was in (sometimes used for Fe-oxides). "O" indicates substage condenser in an oblique position. These various illuminations can be combined. "CON" indicates conoscopic illumination. For normal photography of hand specimens, the focal length of the lens used is given rather than the magnification. POL means that a polarizing filter was used with the lens, and DAY means the sample was photographed in diffused daylight.

Features on photomicrographs can be located by overlaying the accompanying orthogonal plastic grid. A block of squares is marked by referencing the uppermost left and lowermost right corners of the block, ie. A6-E15. Linear features are marked by designating the extent of the feature from beginning to ending points, ie. B6 to L19.

A question mark after a rock or mineral name in a petrographic description means that there is some degree of uncertainty about the identification of that rock or mineral.

SAMPLE # # Den93-1(22.7m) June 25, 1996

ROCK NAME ALTERED ANDESITE BRECCIA -- probably formed by cataclastic brecciation and hydrothermal alteration (secondary K-feldspar + sericite + ferroan dolomite + quartz + clinozoisite + opaques + actinolite + ferroan calcite + sphene + apatite) of a fine grained seriate andesite shallow intrusion.

MINERALS Plagioclase (30%) + K-feldspar (25%) + sericite (18%) + ferroan dolomite (10%) + quartz (5%) + clinozoisite (5%) + opaques (5%) + actinolite (2%) + ferroan calcite (<1%) + sphene (<1%) + apatite (<1%).

TEXTURES Cataclastically brecciated; non-directed fabric.

Breccia Clasts (75%) are angular to round, 800-?- >40,000 μm lithic fragments of seriate andesite (75%). Contacts between breccia clasts are tangential to curved.

Matrix (20%) is composed of the altered comminuted equivalent of the clasts, suggesting a dominantly cataclastic mechanism of brecciation.

Cement (5%) is composed of quartz + apatite + sphene.

ALTERATION Alteration features in relative chronological order from oldest to youngest are: (1) cataclastic brecciation; (2) veins and cement of quartz + apatite + sphene; and (3a) veins of ferroan dolomite; (3b) veins of ferroan dolomite + opaques; and (3c) veins of ferroan dolomite + quartz + opaques. The following alteration features are present but of indeterminate relative ages: (1) plagioclase moderately altered to sericite + clinozoisite + K-feldspar; and (2) hornblende/clinopyroxene (?) completely altered to actinolite + ferroan calcite + opaques. The "fracture with bleached selvage" in hand specimen is actually a vein of ferroan dolomite with no selvage.

SECTIONING Format: 27 x 46 mm Finish: STD Stains: SCN + ARS + PF Cover: PLA

PHOTOS

Den93-1(22.7m)/96016/10/DAY/3X/EYS ALTERED ANDESITE BRECCIA showing typical appearance of hand specimen.

Den93-1(22.7m)/96018/02/XPL/28X/EYS ALTERED ANDESITE BRECCIA showing typical appearance of cataclastic breccia texture.

Den93-1(22.7m)/96018/03/XPL/28X/EYS ALTERED ANDESITE BRECCIA showing typical appearance of veins of ferroan dolomite (stained blue; A4 to T26).

Spectrum Petrographics, Inc. 499 Dillard Gardens Road, Suite 2 . Winston . OR . 97496 . USA Phone (800) 625-2476

SAMPLE # **Den93-3(81.2m)** June 25, 1996

ROCK NAME ALTERED RHYOLITE -- probably formed by hydrothermal alteration (secondary clay + ferroan dolomite + opaques) of a sparsely porphyritic rhyolite flow or shallow intrusion.

MINERALS K-feldspar (40%) + quartz (20%) + plagioclase (20%) + clay (10%) + ferroan dolomite (10%) + opaques (<1%).

TEXTURES Aphanitic, holocrystalline, weakly porphyritic, fine grained. Flow banding defines a moderately directed fabric. No relict tuffaceous textures or structures were observed.

Phenocrysts (<1%) subhedral to euhedral, whole, isolated, 640-640-640 μm.

Plagioclase (<1%) -- Albite twinned, unzoned, moderately altered to ferroan dolomite + clay.

Quartz (<1%)

Groundmass (100%) has a very fine texture composed of very fine grained [K-feldspar + plagioclase] + irregular patches of quartz.

Vesicles (0%) and Xenoliths (0%) were not observed.

ALTERATION The following alteration features are present but of indeterminate relative ages: (1) veins of ferroan dolomite.

SECTIONING Format: 27 x 46 mm Finish: STD Stains: SCN + ARS + PF Cover: PLA

PHOTOS

Den93-3(81.2m)/96016/11/DAY/3X/EYS ALTERED RHYOLITE showing typical appearance of flow banding in hand specimen.

Den93-3(81.2m)/96018/04/XPL/28X/EYS ALTERED RHYOLITE showing typical appearance.

Den93-3(81.2m)/96018/05/PPL/28X/EYS ALTERED RHYOLITE showing typical appearance of small amounts of linearly distributed ferroan dolomite (T12 to F25) that helps define the moderately directed fabric.

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SAMPLE # **Den93-4(21.9m)** June 25, 1996

ROCK NAME ALTERED ANDESITE -- probably formed by cataclastic brecciation and hydrothermal alteration (secondary plagioclase + K-feldspar + clinozoisite + clay + clinopyroxene + chlorite + ferroan calcite + opaques) of a fine grained seriate andesite shallow intrusion.

MINERALS Plagioclase (30%) + K-feldspar (30%) + clinozoisite (10%) + clay (10%) + clinopyroxene (5%) + chlorite (5%) + ferroan calcite (5%) + opaques (5%). Garnet was not observed. Pale green color of sample is probably due to clinozoisite + clinopyroxene + chlorite.

TEXTURES Phaneritic, holocrystalline, seriate, hypidiomorphic, fine grained, non-directed fabric.

ALTERATION Alteration features in relative chronological order from oldest to youngest are: (1) cataclasis; and (2a) veins and cement of K-feldspar + chlorite + clinopyroxene + opaques; and (3b) veins and cement of K-feldspar + ferroan calcite + plagioclase + clinopyroxene. The following alteration features are present but of indeterminate relative ages: (1) plagioclase moderately altered to clinozoisite + clay; and (2) hornblende (?) completely altered to clinopyroxene + K-feldspar + opaques + chlorite.

SECTIONING Format: 27 x 46 mm Finish: STD Stains: SCN + ARS + PF Cover: PLA

PHOTOS

Den93-4(21.9m)/96016/12/DAY/3X/EYS ALTERED ANDESITE showing typical appearance of cataclastic brecciation in hand specimen.

Den93-4(21.9m)/96018/06/XPL/28X/EYS ALTERED ANDESITE showing typical appearance of fine seriate texture.

Den93-4(21.9m)/96018/07/XPL/114X/EYS ALTERED ANDESITE showing typical appearance of secondary clinopyroxene (I17) in a vein of K-feldspar + ferroan calcite + plagioclase + clinopyroxene.

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SAMPLE # # Den93-4(42.4m) June 25, 1996

ROCK NAME ALTERED ANDESITE -- probably formed by cataclastic brecciation and hydrothermal alteration (secondary phlogopite + clinozoisite + actinolite + weakly ferroan dolomitic calcite + sphene + opaques + quartz) of a fine grained seriate andesite shallow intrusion.

MINERALS Plagioclase (39%) + phlogopite (25%) + clinozoisite (10%) + actinolite (10%) + weakly ferroan dolomitic calcite (10%) + sphene (3%) + opaques (2%) + quartz (1%).

TEXTURES Phaneritic, holocrystalline, seriate, hypidiomorphic, fine grained, non-directed fabric.

ALTERATION The following alteration features are present but of indeterminate relative ages: (1) weak cataclasis (?); (2) veins of weakly ferroan dolomitic calcite + phlogopite + quartz + clinozoisite; (3) plagioclase moderately altered to clinozoisite + actinolite + phlogopite; and (4) hornblende (?) completely altered to actinolite + weakly ferroan dolomitic calcite.

SECTIONING Format: 27 x 46 mm Finish: STD Stains: SCN + ARS + PF Cover: PLA

PHOTOS

Den93-4(42.4m)/96016/13/DAY/3X/EYS ALTERED ANDESITE showing typical appearance of hand specimen.

Den93-4(42.4m)/96018/08/XPL/28X/EYS ALTERED ANDESITE showing typical appearance of seriate texture with veins of weakly ferroan dolomitic calcite + phlogopite + quartz + clinozoisite.

Den93-4(42.4m)/96018/09/PPL/114X/EYS ALTERED ANDESITE showing typical appearance of secondary actinolite (H16) + phlogopite (H12).

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SAMPLE # # Den93-4(54.2m) June 25, 1996

ROCK NAME ALTERED ANDESITE -- probably formed by cataclastic brecciation and hydrothermal alteration (secondary chlorite + sericite + ferroan calcite + quartz + leucoxene + opaques + apatite + phlogopite) of a fine grained seriate andesite shallow intrusion.

MINERALS Plagioclase (24%) + chlorite (24%) + sericite (24%) + ferroan calcite (15%) + quartz (5%) + leucoxene (5%) + opaques (2%) + apatite (1%) + phlogopite (<1%). Green mineral in vein is chlorite.

TEXTURES Phaneritic, holocrystalline, seriate, hypidiomorphic, fine grained, non-directed fabric. Fragmental textures were not observed.

ALTERATION The following alteration features are present but of indeterminate relative ages: (1) veins of chlorite + ferroan calcite; (2) veins of ferroan calcite + chlorite + quartz + opaques with a light-colored ferroan calcite-rich selvage; (3) plagioclase strongly altered to sericite; and (4a) hornblende (?) completely altered to [phlogopite strongly altered to chlorite + sericite] + leucoxene away from veins of Type 2 (above); and (4b) hornblende (?) completely altered to [[chlorite + sericite] strongly altered to ferroan calcite] + leucoxene in light-colored selvage of Type 2 veins (above)

SECTIONING Format: 27 x 46 mm Finish: STD Stains: SCN + ARS + PF Cover: PLA

PHOTOS

Den93-4(54.2m)/96016/14/DAY/3X/EYS ALTERED ANDESITE showing typical appearance of hand specimen with veins of ferroan calcite (F7) + chlorite (G4) + quartz + opaques with a light-colored ferroan calcite-rich chlorite-poor selvage (L15).

Den93-4(54.2m)/96018/10/XPL/28X/EYS ALTERED ANDESITE showing typical appearance of seriate texture.

Den93-4(54.2m)/96018/11/XPL/114X/EYS ALTERED ANDESITE showing typical appearance of a vein of ferroan calcite + chlorite (N13-T16) + quartz + opaques.

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APPENDIX 2

ROCK AND MOSS MAT SAMPLE GEOCHEMISTRY

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60167
Sample Receipt : 6/11/96
Date of Report : 6/21/96
No. of Samples : 75 Rock
P.O. No. :SKARN
Page 1 of 4

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
23994		10	<.1	<10	<10	4	38	13	21
23995		26	.1	<10	<10	4	70	11	21
23996		8	<.1	<10	<10	<2	11	7	3
23997		16	.2	<10	28	19	70	15	40
23998		6	.1	<10	25	15	37	11	63
23999		<5	.1	<10	24	14	77	24	66
24000		23	.2	12	<10	26	130	35	14
24501		24	.1	<10	19	8	33	20	8
24502		10	.2	17	<10	20	91	29	<2
24503		6	.2	<10	23	15	110	18	250
24504		<5	<.1	<10	25	19	61	31	5
24505		13	.2	14	37	17	110	35	27
24506		19	.1	33	<10	14	48	24	12
24507		9	<.1	<10	18	18	59	17	3
24508		188	1.4	350	<10	23	140	140	29
24509		9	.1	<10	26	6	59	17	26
24510		6	.1	<10	<10	62	190	15	31
24511		15	.6	52	<10	31	130	160	3
24512		114	.7	10	37	8	980	17	<2
24513		99	.1	17	22	14	220	20	<2
24514		257	.4	27	10	38	700	15	<2
24515		<5	<.1	<10	<10	<2	47	14	<2
24516		247	.1	13	39	9	200	20	<2
24517		78	.1	<10	28	6	150	15	<2
24518		118	.1	<10	17	23	290	15	10
24519		96	.2	<10	20	18	270	13	3
24520		18	<.1	35	20	17	110	28	12
24521		52	.9	130	<10	4	31	97	<2
24522		24	.5	99	<10	16	58	64	<2
24523		77	.2	48	<10	17	52	30	<2
24524		<5	<.1	12	<10	16	57	30	<2
24525		25	.6	61	<10	17	75	31	<2
24526		33	.1	12	12	<2	19	15	<2
24527		16	.4	17	<10	18	69	28	3
24528		14	.3	<10	<10	11	53	18	4
24529		14	.1	41	<10	5	18	24	<2
24530		26	.4	18	11	6	31	25	10
24531		69	<.1	<10	47	9	39	56	<2
24532		40	.2	<10	23	6	52	63	8
24533		11	.2	36	<10	<2	7	69	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60167
Sample Receipt : 6/11/96
Date of Report : 6/21/96
No. of Samples : 75 Rock
P.O. No. :SKARN
Page 2 of 4

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Au	Ag	As	Bi	Co	Cu	Pb	Mo
	Units : ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Method: FA+AA	FA+AA	ICP	ICP	ICP	ICP	ICP	ICP
24534	202	.2	<10	<10	18	150	8	3
24535	32	.1	<10	<10	8	65	16	<2
24536	23	1.0	21	20	73	1100	18	<2
24537	22	.7	13	<10	11	43	26	8
24538	24	.4	120	<10	15	100	140	<2
24539	41	.2	100	<10	13	120	55	14
24540	37	.4	74	<10	5	42	45	23
24541	1304	.5	730	<10	<2	41	32	<2
24542	46	.1	670	<10	<2	28	21	<2
24543	12	<.1	18	58	11	48	50	<2
24544	32	.3	13	<10	<2	25	46	7
24545	201	3.7	65	<10	5	82	97	9
24546	57	.6	100	<10	9	76	26	20
24547	30	.8	45	<10	19	96	64	12
24548	1134	1.6	760	<10	15	140	74	<2
24549	39	.1	35	<10	14	76	43	<2
24550	27	<.1	<10	36	4	15	43	<2
SMM1	29	.6	<10	22	18	130	62	4
SMM2	21	.5	19	37	10	60	82	<2
SMM3	70	.5	17	34	10	52	82	<2
SMM4	101	.4	48	55	15	84	130	<2
SMM5	132	.3	36	59	17	46	93	<2
SMM6	209	.3	30	36	15	45	84	<2
SMM7	55	.4	30	97	19	600	89	17
SMM8	60	.3	17	25	15	75	67	<2
SMM9	30	.3	18	21	12	64	81	<2
SMM10	25	.3	17	20	16	65	80	<2
SMM11	22	.4	12	21	11	73	79	<2
SMM12	158	.4	27	20	12	55	71	<2
SMM13	24	.4	<10	22	8	57	78	<2
SMM14	16	.2	17	21	14	57	76	<2
SMM15	31	.3	32	24	13	49	57	2
SMM16	21	.2	24	39	14	55	60	<2
SMM17	20	.3	35	20	14	50	58	4
SMM18	20	.4	29	31	13	56	71	2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60167
Sample Receipt : 6/11/96
Date of Report : 6/21/96
No. of Samples : 75 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Zn ppm ICP	Ba ppm ICP
23994		17	32
23995		12	660
23996		6	46
23997		29	43
23998		19	24
23999		35	29
24000		90	82
24501		21	13
24502		85	30
24503		33	20
24504		32	48
24505		66	58
24506		61	60
24507		22	17
24508		36	21
24509		12	12
24510		15	25
24511		88	37
24512		35	56
24513		34	45
24514		17	150
24515		48	71
24516		21	63
24517		22	28
24518		12	24
24519		11	29
24520		53	32
24521		34	130
24522		61	45
24523		63	40
24524		47	100
24525		38	190
24526		19	76
24527		230	57
24528		130	51
24529		49	23
24530		230	140
24531		30	200
24532		24	97
24533		24	43

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60167
Sample Receipt : 6/11/96
Date of Report : 6/21/96
No. of Samples : 75 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Zn ppm ICP	Ba ppm ICP
24534		26	18
24535		39	15
24536		37	48
24537		27	66
24538		280	130
24539		370	130
24540		190	160
24541		86	30
24542		100	24
24543		74	200
24544		42	150
24545		460	44
24546		430	41
24547		78	95
24548		390	44
24549		79	50
24550		100	110
SMM1		250	79
SMM2		72	180
SMM3		85	140
SMM4		170	230
SMM5		92	190
SMM6		92	170
SMM7		64	300
SMM8		63	140
SMM9		78	200
SMM10		81	120
SMM11		60	150
SMM12		110	130
SMM13		79	160
SMM14		85	140
SMM15		250	160
SMM16		310	150
SMM17		320	220
SMM18		270	180

Reviewed By: C Williams Date: 6/21/96 Charges : $1,193.25

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60209
Sample Receipt : 7/18/96
Date of Report : 7/30/96
No. of Samples : 66 Rock
P.O. No. :SKARN
Page 1 of 4

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROBERT FREDERICKS

CLIENT SAMPLE ID	Test : Au	Ag	Ag	As	Bi	Co	Cu	Pb
	Units : ppb	ppm	oz/t	ppm	ppm	ppm	ppm	ppm
	Method: FA+AA	FA+AA	FA	ICP	ICP	ICP	ICP	ICP
24551	40	.2		39	<10	17	45	50
24552	15	.4		18	13	25	180	37
24553	6	.1		21	<10	22	46	38
24554	21	1.3		11	33	23	1500	24
24555	5	.1		<10	50	19	120	22
24556	<5	.1		<10	74	11	600	22
24557	5	.1		<10	45	7	23	28
24558	<5	<.1		<10	<10	10	37	17
24559	<5	<.1		<10	<10	<2	20	7
24560	<5	<.1		<10	<10	<2	7	6
24561	<5	.1		<10	42	19	95	24
24562	<5	.1		<10	<10	<2	30	17
24563	<5	.1		<10	68	15	37	37
24564	<5	.1		17	71	13	34	48
24565	<5	.2		19	19	8	30	30
24566	547	>25	4.00	13700	<10	19	91	>20000
24567	45	1.0		160	17	9	41	570
24568	83	4.7		1700	<10	5	39	2400
24569	956	11.9		2100	<10	26	110	2700
24570	141	.6		53	<10	16	29	230
24571	748	.9		1000	<10	9	28	510
24572	21	.6		120	<10	5	30	150
24573	13	.1		<10	34	8	68	48
24574	17	.6		11	24	25	140	100
24575	8	.1		13	50	21	110	38
24576	5	.1		<10	<10	2	37	23
SMM19	48	.1		17	38	17	52	34
SMM20	2278	.7		31	26	23	58	33
SMM21	1357	.4		16	36	15	55	40
SMM22	131	.2		15	45	17	86	38
SMM23	144	.2		24	20	19	89	31
SMM24	167	.2		20	32	15	86	33
SMM25	438	.3		33	17	18	55	30
SMM26	<5	.5		<10	26	9	42	48
SMM27	163	.1		14	24	17	52	34
SMM28	59	<.1		<10	48	11	38	41
SMM29	19	.9		<10	49	14	77	74
SMM30	6	.5		<10	24	9	61	50
SMM31	94	.1		17	26	17	48	29
SMM32	31	1.5		<10	28	9	210	66

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60209
Sample Receipt : 7/18/96
Date of Report : 7/30/96
No. of Samples : 66 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROBERT FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Au ppb FA+AA	Ag ppm FA+AA	Ag oz/t FA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP
SMM33		43	1.3		<10	23	8	260	78
SMM34		56	.4		16	27	16	97	38
SMM35		86	.3		19	38	18	74	53
SMM36		95	.3		18	31	19	69	54
SMM37		248	.3		19	32	14	62	47
SMM38		86	.2		20	33	17	69	40
SMM39		181	.3		17	32	17	71	52
SMM40		106	.3		15	27	13	42	47
SMM41		30	.4		<10	23	8	46	40
SMM42		13	.5		<10	34	13	66	49
SMM43		113	.3		<10	25	12	63	41
SMM44		21	.8		<10	41	11	76	73
SMM45		53	.8		33	44	14	54	110
SMM46		98	.3		23	37	14	35	69
SMM47		142	.3		22	36	13	35	53
SMM48		97	.5		22	39	11	46	64
SMM49		1201	.5		18	37	13	34	60
SMM50		92	.2		15	31	12	31	51
SMM51		91	.5		20	37	12	37	66
SMM52		56	.1		13	40	13	41	69
SMM53		8	.5		19	34	12	38	68
SMM54		92	.7		13	30	21	320	45
SMM55		66	.5		15	23	14	130	33
SMM56		118	.9		12	44	15	180	43
SMM57		6	.3		13	32	14	71	49
SMM58		311	.1		19	27	14	57	34

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60209
Sample Receipt : 7/18/96
Date of Report : 7/30/96
No. of Samples : 66 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROBERT FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Mo ppm ICP	Zn ppm ICP	Ba ppm ICP
24551		2	97	59
24552		<2	84	79
24553		<2	71	45
24554		<2	47	95
24555		<2	45	45
24556		8	25	91
24557		3	32	250
24558		6	50	28
24559		3	8	37
24560		<2	50	48
24561		<2	56	65
24562		<2	15	21
24563		<2	71	290
24564		<2	110	400
24565		<2	130	120
24566		<2	>20000	14
24567		<2	440	110
24568		<2	1200	41
24569		<2	1400	15
24570		<2	490	90
24571		<2	210	45
24572		<2	110	140
24573		<2	19	86
24574		<2	31	47
24575		<2	30	130
24576		3	20	31
SMM19		<2	49	75
SMM20		<2	60	66
SMM21		<2	65	68
SMM22		<2	64	82
SMM23		<2	66	74
SMM24		<2	58	80
SMM25		<2	68	69
SMM26		<2	53	50
SMM27		<2	51	68
SMM28		<2	53	110
SMM29		<2	76	210
SMM30		3	90	56
SMM31		<2	52	57
SMM32		<2	140	100

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60209
Sample Receipt : 7/18/96
Date of Report : 7/30/96
No. of Samples : 66 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROBERT FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Mo ppm ICP	Zn ppm ICP	Ba ppm ICP
SMM33		<2	250	100
SMM34		<2	65	56
SMM35		<2	120	87
SMM36		<2	130	80
SMM37		<2	110	77
SMM38		3	130	81
SMM39		<2	110	80
SMM40		<2	110	75
SMM41		<2	43	92
SMM42		<2	59	88
SMM43		<2	82	88
SMM44		<2	290	92
SMM45		<2	180	260
SMM46		<2	89	150
SMM47		<2	82	140
SMM48		<2	81	130
SMM49		<2	94	170
SMM50		<2	83	150
SMM51		<2	110	190
SMM52		<2	120	190
SMM53		<2	110	140
SMM54		2	69	120
SMM55		<2	57	80
SMM56		<2	68	110
SMM57		6	140	78
SMM58		2	140	82

Reviewed By: C Williams Date: 8/1/96 Charges : $972.70

Stewart

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60237
Sample Receipt : 8/02/96
Date of Report : 8/14/96
No. of Samples : 21 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
24577		7042	.8	<10	24	<2	73	18	<2
24578		55	.7	78	<10	150	2000	50	140
24579		2830	.9	<10	21	10	1500	21	28
24580		15	.2	<10	28	4	100	12	420
24581		947	.1	<10	11	10	45	20	7
24582		<5	<.1	<10	64	8	23	24	<2
24583		198	.2	<10	53	8	150	16	<2
24584		348	.3	<10	17	9	150	26	<2
24585		166	.1	<10	76	9	150	24	<2
24586		233	.2	<10	100	16	140	29	<2
24587		1006	.2	22	55	23	130	16	<2
24588		196	.1	<10	11	5	75	9	<2
24589		172	.2	<10	17	3	150	13	2
24590		447	.4	<10	<10	4	210	10	10
24591		231	.1	10	<10	14	61	16	3
24592		104	.1	<10	20	4	39	15	<2
24593		141	.1	360	23	6	75	23	<2
24594		183	.2	14	31	15	140	25	<2
SMM:59		103	.6	<10	22	7	66	45	<2
SMM:60		74	.6	<10	23	6	110	42	<2
SMM:61		162	.2	17	44	13	110	42	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60237
Sample Receipt : 8/02/96
Date of Report : 8/14/96
No. of Samples : 21 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Zn Units : ppm Method: ICP	Ba ppm ICP
24577	12	31
24578	37	6
24579	27	13
24580	12	7
24581	77	51
24582	52	94
24583	43	110
24584	44	120
24585	29	40
24586	36	120
24587	11	22
24588	13	20
24589	22	27
24590	23	19
24591	28	25
24592	18	44
24593	31	51
24594	33	50
SMM:59	49	81
SMM:60	52	110
SMM:61	59	100

Reviewed By:_____ Date:_____ Charges : $341.25

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60284
Sample Receipt : 9/05/96
Date of Report : 9/13/96
No. of Samples : 11 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Au Units : ppb Method: FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
24595	16	.2	52	<10	11	58	20	<2
24596	<5	<.1	19	13	10	13	16	<2
24597	16	.1	16	<10	16	140	9	3
24598	23	.1	33	<10	21	120	8	<2
24599	<5	.1	24	<10	10	71	13	<2
24600	11	.1	<10	<10	8	78	7	<2
24601	5	.1	64	14	13	140	15	<2
24602	250	<.1	<10	<10	6	20	<5	<2
24603	<5	.2	24	<10	7	90	10	<2
24604	26	.1	27	<10	23	150	10	5
24605	20	1.8	120	<10	37	270	1100	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60284
Sample Receipt : 9/05/96
Date of Report : 9/13/96
No. of Samples : 11 Rock
P.O. No. :SKARN
Page 2 of 2

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Zn Units : ppm Method: ICP	Ba ppm ICP
24595	57	180
24596	55	270
24597	13	21
24598	17	26
24599	23	28
24600	48	97
24601	22	43
24602	16	44
24603	16	28
24604	27	42
24605	3400	120

Reviewed By: C Williams Date: 9/13/96 Charges : $184.25

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60299
Sample Receipt : 9/17/96
Date of Report :10/02/96
No. of Samples : 29 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
24606		31	<.1	<10	<10	9	65	25	<2
24607		21	<.1	<10	<10	14	37	18	<2
24608		147	.3	24	<10	20	120	17	<2
24609		26	<.1	13	<10	10	97	14	<2
24610		51	<.1	<10	<10	9	34	8	<2
24611		117	.2	23	<10	16	160	22	<2
24612		63	.1	<10	<10	8	92	6	<2
24613		8	.1	<10	<10	7	44	8	<2
24614		17	.1	<10	<10	11	58	12	<2
24615		14	<.1	<10	<10	5	24	10	<2
24616		75	.2	15	<10	11	36	18	<2
24617		155	.9	<10	<10	12	480	14	<2
24618		45	.2	<10	<10	7	88	23	<2
24619		22	<.1	13	<10	24	39	26	<2
24620		<5	<.1	13	<10	13	5	16	<2
24621		36	.2	<10	<10	14	170	14	<2
24622		23	.1	<10	<10	6	42	9	<2
24623		13	.1	14	<10	8	93	9	<2
24624		563	.4	16	<10	17	300	21	<2
24625		78	.2	<10	<10	7	190	6	<2
24626		31	.1	14	<10	19	42	19	<2
24627		91	.1	<10	<10	5	54	<5	<2
24628		41	.2	15	<10	7	130	10	<2
24629		74	.2	<10	<10	2	97	<5	<2
24630		22	.1	<10	<10	5	33	11	<2
24631		555	.2	<10	<10	4	69	5	<2
24632		2720	.6	19	<10	9	95	9	<2
24633		142	.2	13	<10	13	130	14	<2
24634		48	.1	<10	<10	5	8	7	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60299
Sample Receipt : 9/17/96
Date of Report :10/02/96
No. of Samples : 29 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Zn Units : ppm Method: ICP	Ba ppm ICP
24606	70	110
24607	53	270
24608	59	90
24609	67	36
24610	49	20
24611	56	83
24612	29	29
24613	32	29
24614	65	160
24615	54	27
24616	74	55
24617	69	27
24618	63	85
24619	37	120
24620	92	200
24621	47	81
24622	20	32
24623	22	35
24624	68	120
24625	34	22
24626	54	490
24627	15	23
24628	20	79
24629	10	18
24630	20	48
24631	18	20
24632	23	42
24633	41	90
24634	33	40

Reviewed By: C Williams Date: 10/2/96 Charges : $485.75

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60307
Sample Receipt : 9/26/96
Date of Report :10/07/96
No. of Samples : 63 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
24635		<5	<.1	<10	<10	15	97	9	<2
24636		26	<.1	<10	<10	9	110	10	<2
24637		17	.4	<10	<10	<2	6	59	3
24638		13	.1	20	<10	19	64	11	<2
24639		47	4.5	32	<10	12	110	870	2
24640		30	.3	57	<10	9	8	22	<2
24641		25	.1	19	<10	18	180	14	<2
24642		6680	13.0	100	<10	<2	230	2500	<2
24643		2167	22.1	110	<10	3	340	2400	2
24644		44	.2	<10	<10	7	45	34	32
24645		56	.1	<10	<10	5	31	9	<2
24646		15	.1	18	<10	20	40	9	<2
24647		61	.1	11	<10	14	85	5	<2
24648		50	.1	<10	<10	23	110	8	<2
24649		31	.4	10	<10	11	62	<5	<2
24650		65	.2	38	<10	20	150	7	<2
24651		285	.2	<10	<10	17	240	7	9
24652		64	.1	17	<10	14	81	<5	3
24653		18	<.1	<10	<10	9	37	<5	<2
24654		6	.1	61	<10	12	82	7	3
24655		43	.1	37	<10	9	84	11	2
24656		24	.2	12	<10	7	100	6	4
24701		1697	.2	10	<10	19	180	7	<2
24702		268	<.1	12	<10	14	43	8	<2
24703		1626	.3	23	<10	31	260	10	<2
24704		47	.2	<10	<10	6	40	9	<2
24705		71	.1	26	<10	21	100	6	<2
24706		89	.3	<10	<10	8	80	<5	4
24707		114	.1	<10	<10	15	250	<5	<2
24708		303	.4	<10	<10	2	330	10	<2
24709		28	<.1	<10	<10	7	74	6	<2
24710		122	.1	<10	<10	8	120	<5	<2
24711		34	.1	<10	<10	6	87	<5	<2
24712		288	.3	<10	<10	3	180	<5	5
24713		40	.1	<10	<10	3	64	7	<2
24714		16	.1	<10	<10	10	46	6	<2
24715		13	.1	11	<10	7	33	8	<2
24716		8	.1	<10	<10	<2	22	10	<2
24717		25	.1	20	<10	11	120	9	<2
24718		132	.2	22	<10	21	190	<5	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60307
Sample Receipt : 9/26/96
Date of Report :10/07/96
No. of Samples : 63 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : / Units : / Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
24719		76	.1	12	<10	12	140	7	2
24720		93	.2	20	<10	12	170	9	<2
24721		231	.3	12	<10	6	150	14	<2
24722		117	.2	<10	<10	6	200	<5	<2
24723		183	.2	<10	<10	5	91	<5	<2
24724		26	.1	<10	<10	8	210	<5	<2
24725		216	.2	<10	<10	5	150	<5	<2
24726		20	.1	<10	<10	19	47	14	<2
24727		69	.1	<10	<10	9	85	<5	<2
24728		152	.2	11	<10	20	170	7	<2
24729		33	.1	<10	<10	5	38	5	<2
24730		37	.2	<10	<10	9	89	9	5
24731		14	.1	44	<10	12	58	12	12
24732		532	.2	45	<10	19	96	6	<2
24733		45	.3	18	<10	10	110	12	<2
24734		72	.2	18	<10	17	120	6	<2
24735		109	<.1	11	<10	8	30	6	<2
24736		45	.1	260	<10	6	20	20	<2
SMM:62		<5	.4	25	<10	11	45	30	2
SMM:63		147	.7	24	<10	12	60	58	<2
SMM:64		14	.5	42	<10	15	67	47	<2
SMM:65		6	.5	21	<10	11	45	53	<2
SMM:66		118	.5	49	<10	14	64	49	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60307
Sample Receipt : 9/26/96
Date of Report :10/07/96
No. of Samples : 63 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Zn Units : ppm Method: ICP	Ba ppm ICP
24635	56	190
24636	37	74
24637	29	23
24638	71	64
24639	2200	22
24640	76	42
24641	60	76
24642	2400	31
24643	3600	36
24644	190	57
24645	24	44
24646	53	32
24647	19	82
24648	14	25
24649	36	57
24650	11	36
24651	14	13
24652	21	31
24653	13	140
24654	16	12
24655	13	13
24656	9	20
24701	11	12
24702	21	36
24703	13	17
24704	16	23
24705	16	41
24706	17	53
24707	21	84
24708	10	16
24709	17	33
24710	11	51
24711	11	26
24712	11	16
24713	21	13
24714	75	80
24715	16	64
24716	16	22
24717	20	51
24718	15	43

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60307
Sample Receipt : 9/26/96
Date of Report :10/07/96
No. of Samples : 63 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Zn Units : ppm Method: ICP	Ba ppm ICP
24719	11	15
24720	20	15
24721	21	22
24722	34	32
24723	17	20
24724	38	40
24725	15	17
24726	61	220
24727	19	180
24728	18	29
24729	27	26
24730	9	12
24731	31	40
24732	41	18
24733	27	31
24734	9	13
24735	21	36
24736	41	42
SMM:62	230	130
SMM:63	160	130
SMM:64	250	110
SMM:65	87	97
SMM:66	220	110

Reviewed By: C Williams Date: 10/7/96 Charges : $1,037.75

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60325
Sample Receipt :10/08/96
Date of Report :10/21/96
No. of Samples : 59 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Au	Ag	As	Bi	Co	Cu	Pb	Mo
	Units : ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Method: FA+AA	FA+AA	ICP	ICP	ICP	ICP	ICP	ICP
24737	39	.2	<10	<10	<2	45	6	23
24738	22	.1	<10	<10	17	230	7	70
24739	11	.3	<10	<10	<2	31	<5	3
24740	16	.2	<10	<10	23	390	9	63
24741	19	.1	<10	<10	9	100	<5	<2
24742	32	.1	17	<10	10	260	9	11
24743	21	.1	<10	<10	6	120	<5	<2
24744	5	<.1	<10	<10	10	110	<5	<2
24745	15	.1	<10	<10	28	170	7	<2
24746	16	<.1	<10	<10	13	40	7	<2
24747	151	.1	<10	<10	14	97	9	<2
24748	16	<.1	<10	<10	15	74	11	<2
24749	18	<.1	<10	<10	14	64	10	<2
24750	118	<.1	<10	<10	8	73	13	<2
24751	71	<.1	<10	<10	8	73	14	<2
24752	203	<.1	<10	<10	14	110	10	<2
24753	12	<.1	<10	<10	12	66	15	<2
24754	50	.1	<10	<10	13	57	13	<2
24755	31	<.1	<10	<10	14	73	12	<2
24756	28	.2	<10	<10	22	85	27	<2
24757	<5	<.1	<10	<10	12	61	9	16
24758	20	.1	15	<10	26	51	15	2
24759	14	<.1	<10	<10	9	29	10	<2
24760	54	<.1	<10	<10	11	45	8	<2
24761	8696	.7	47	<10	40	230	17	9
24762	59	<.1	<10	<10	12	17	7	<2
24763	25	.1	<10	<10	13	120	6	<2
24764	33	.1	20	<10	25	47	7	<2
24765	47	<.1	<10	<10	19	45	9	<2
24766	177	<.1	22	<10	30	140	12	<2
24767	50	<.1	<10	<10	32	55	15	<2
24768	36	<.1	<10	<10	19	140	5	<2
24769	18	.3	<10	<10	27	130	18	<2
24657	68	.1	<10	<10	7	160	<5	<2
24658	46	.1	<10	<10	17	280	5	2
24659	35	.1	<10	<10	48	440	12	<2
24660	160	.2	<10	<10	25	410	5	6
24661	71	<.1	<10	<10	4	58	<5	<2
24662	1144	.2	11	<10	5	92	<5	<2
24663	412	<.1	11	<10	5	49	<5	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60325
Sample Receipt :10/08/96
Date of Report :10/21/96
No. of Samples : 59 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
24664		57	<.1	<10	<10	3	68	<5	<2
24665		2661	17.2	<10	<10	21	3200	10	<2
24666		40	<.1	<10	<10	22	24	14	<2
24667		49	.1	<10	<10	16	220	11	<2
24668		154	.9	47	<10	29	530	12	27
24669		181	.2	23	<10	14	230	6	<2
24670		19	<.1	<10	<10	24	110	10	<2
24671		<5	<.1	<10	<10	8	41	6	<2
24672		<5	<.1	<10	<10	7	37	<5	<2
24673		<5	<.1	<10	<10	8	27	5	<2
24674		108	<.1	<10	<10	8	55	5	<2
24675		14	<.1	<10	<10	14	57	6	<2
24676		31	<.1	20	<10	12	150	6	<2
24677		161	.3	20	<10	26	340	11	<2
24678		209	.3	<10	<10	31	290	10	<2
24679		83	.1	<10	<10	14	92	6	<2
24680		587	.3	<10	<10	38	260	10	<2
24681		264	.1	<10	<10	28	170	8	<2
24682		29	.1	<10	<10	20	180	6	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60325
Sample Receipt :10/08/96
Date of Report :10/21/96
No. of Samples : 59 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Zn Units : ppm Method: ICP	Ba ppm ICP
24737	7	60
24738	23	77
24739	5	100
24740	16	17
24741	29	27
24742	7	18
24743	17	14
24744	41	20
24745	28	190
24746	24	170
24747	25	110
24748	19	58
24749	28	190
24750	29	140
24751	23	37
24752	27	130
24753	40	91
24754	49	63
24755	22	24
24756	33	130
24757	45	72
24758	30	69
24759	32	45
24760	22	69
24761	33	19
24762	27	26
24763	9	33
24764	76	37
24765	32	31
24766	24	72
24767	49	79
24768	24	70
24769	61	170
24657	29	30
24658	9	69
24659	36	190
24660	16	12
24661	9	19
24662	17	32
24663	20	37

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60325
Sample Receipt :10/08/96
Date of Report :10/21/96
No. of Samples : 59 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Zn Units : ppm Method: ICP	Ba ppm ICP
24664	23	19
24665	70	67
24666	67	1100
24667	37	150
24668	44	170
24669	25	32
24670	31	130
24671	42	56
24672	27	49
24673	42	56
24674	37	60
24675	25	210
24676	16	63
24677	34	150
24678	12	14
24679	15	60
24680	16	8
24681	15	13
24682	17	33

Reviewed By: C Williams Date: 10/21/96 Charges : $988.25

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60350
Sample Receipt :10/24/96
Date of Report :11/07/96
No. of Samples : 7 Rock
P.O. No. :SKARN
Page 1 of 2

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

CLIENT SAMPLE ID	Test : / Units : / Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
24683		215	.2	<10	65	15	130	<5	<2
24684		115	.1	<10	44	25	210	<5	<2
24685		85	.1	<10	35	21	160	<5	<2
24686		153	<.1	<10	34	19	72	<5	<2
24687		63	.2	<10	33	25	150	<5	<2
24688		35	.5	<10	28	8	290	<5	4
24689		64	.3	<10	46	6	160	<5	<2

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X60350
Sample Receipt :10/24/96
Date of Report :11/07/96
No. of Samples : 7 Rock
P.O. No. :SKARN

Page 2 of 2

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

CLIENT SAMPLE ID	Test : / Units : / Method:	Zn ppm ICP	Ba ppm ICP
24683		11	17
24684		12	38
24685		14	23
24686		17	15
24687		15	15
24688		39	39
24689		22	22

Reviewed By: C Williams Date: 11/7/96 Charges : $117.25

stewart

SVL ANALYTICAL, INC.	REPORT OF ANALYTICAL RESULTS
SVL Job Number :X60371	Client: PAUL DIRCKSEN
Sample Receipt :11/12/96	ORVANA RESOURCES
Date of Report :11/21/96	1755 SILVER BEACH LOOP
No. of Samples :7 Pulp	COEUR D'ALENE ID 83814
Charges :$26.25	
NOTE: As requested from X60350	

TEST	Bi
UNITS	ppm
METHOD	ICP
24683	44
24684	30
24685	22
24686	19
24687	26
24688	19
24689	36

Stewart

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X50299
Sample Receipt :10/17/95
Date of Report :10/27/95
No. of Samples : 49 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
23951		14	.5	40	<10	3	33	<5	<2
23952		113	.3	24	<10	15	160	<5	2
23953		28	<.1	21	<10	18	99	<5	5
23954		90	.1	12	<10	22	220	<5	38
23955		<5	.1	34	<10	23	41	<5	<2
23956		5	<.1	17	<10	9	120	<5	3
23957		<5	<.1	22	<10	14	75	<5	<2
23958		121	1.2	100	<10	<2	8	130	4
23959		7	.5	29	<10	15	88	<5	8
23960		1803	2.0	15600	<10	12	78	21	<2
23961		2499	>25	590	160	80	1300	19200	<2
23962		41	1.1	200	<10	7	47	60	7
23963		18	.5	75	<10	15	100	27	<2
23964		9	1.0	56	<10	4	51	10	18
23965		8	1.7	720	<10	15	170	14	32
23966		11	.1	42	<10	10	47	<5	<2
23967		232	5.3	4800	<10	13	170	120	3
23968		20	.1	78	<10	11	44	<5	<2
23969		<5	.1	30	<10	7	34	<5	8
23970		22	.2	56	<10	25	73	<5	<2
23971		660	.3	21	<10	24	170	<5	<2
23972		18	<.1	17	<10	13	81	<5	<2
23973		49	4.3	24	<10	3	92	<5	<2
23974		103	.1	18	<10	8	88	<5	3
23975		8	<.1	27	<10	9	11	<5	<2
23976		20	.1	16	<10	17	170	<5	<2
23977		83	.2	28	<10	9	130	<5	12
23978		58	.1	17	<10	20	140	<5	<2
23979		59	.2	25	<10	8	45	<5	14
23980		20	1.6	71	<10	24	250	16	<2
23981		261	.1	21	<10	9	41	<5	8
23982		118	.2	27	<10	12	140	<5	5
23983		65	1.7	110	<10	22	230	460	9
23984		226	.1	51	<10	9	35	<5	<2
23985		<5	.7	34	<10	18	110	<5	2
23986		39	>25	1700	<10	11	310	>20000	17
23987		72	19.7	14	110	15	130	530	10
23988		61	2.6	16	<10	7	79	80	2
23989		1169	19.2	530	82	16	120	550	27
23990		404	1.2	43	<10	<2	10	19	4

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X50299
Sample Receipt :10/17/95
Date of Report :10/27/95
No. of Samples : 49 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : / Units : / Method:	Au ppb FA+AA	Ag ppm FA+AA	As ppm ICP	Bi ppm ICP	Co ppm ICP	Cu ppm ICP	Pb ppm ICP	Mo ppm ICP
23991		83	.5	1100	<10	<2	24	43	4
23992		28	.3	150	<10	<2	20	25	2
23993		8	.2	120	<10	5	85	5	2
EDBM 1		14	.2	32	<10	14	51	<5	4
EDBM 2		16	.2	32	<10	13	45	<5	<2
MK95-15 (EXTRA)		1999	.9	930	<10	3	32	30	<2
MK95-17 (EXTRA)		9	.7	44	<10	22	330	<5	38
MK95-18 (EXTRA)		5	.8	140	<10	8	52	<5	7
MK95-19 (EXTRA)		<5	1.0	24	<10	26	140	<5	39

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X50299
Sample Receipt :10/17/95
Date of Report :10/27/95
No. of Samples : 49 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Zn ppm ICP	Ba ppm ICP	Ag oz/t FA
23951		18	51	
23952		19	33	
23953		20	27	
23954		9	18	
23955		64	290	
23956		18	35	
23957		55	33	
23958		45	23	
23959		360	52	
23960		39	47	
23961		>20000	13	3.64
23962		140	43	
23963		130	37	
23964		180	97	
23965		690	62	
23966		160	40	
23967		140	51	
23968		27	120	
23969		40	110	
23970		45	63	
23971		12	6	
23972		19	28	
23973		31	29	
23974		24	21	
23975		76	800	
23976		23	16	
23977		23	25	
23978		14	10	
23979		150	82	
23980		87	96	
23981		36	24	
23982		48	20	
23983		1200	82	
23984		38	44	
23985		230	23	
23986		>20000	9	7.18
23987		9300	5	
23988		330	20	
23989		460	18	
23990		50	3	

SVL ANALYTICAL, INC.
REPORT OF ANALYTICAL RESULTS

SVL Job Number :X50299
Sample Receipt :10/17/95
Date of Report :10/27/95
No. of Samples : 49 Rock
P.O. No. :SKARN

Client: PAUL DIRCKSEN
ORVANA RESOURCES
1755 SILVER BEACH LOOP
COEUR D'ALENE ID 83814

ATTN: ROB FREDERICKS

CLIENT SAMPLE ID	Test : Units : Method:	Zn ppm ICP	Ba ppm ICP	Ag oz/t FA
23991		140	32	
23992		84	30	
23993		190	100	
EDBM 1		250	90	
EDBM 2		350	93	
MK95-15 (EXTRA)		110	19	
MK95-17 (EXTRA)		16	30	
MK95-18 (EXTRA)		350	22	
MK95-19 (EXTRA)		52	40	

Reviewed By: C Williams Date: 10/27/95 Charges : $828.15

APPENDIX 3

ROCK SAMPLE DESCRIPTIONS

Resources Corp
onwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 23994 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Qtz Cr

LOCATION Creek bottom, by old rd down ck from Fresno showing 5458030N 483650E

KIND OF SAMPLE grab

DESCRIPTION Syenite? Monzonite? Coarse-grained felsic intrusive (looks Nelson per Jack). Don't see any qtz. 1-5% dissem po >> py + minor py clots. Minor gained on fx, otherwise, not much alteration

Au	Ag	As	Cu	Pb	Zn
10ppb	<1ppm	<10ppm	38ppm	13ppm	17ppm

Mo: 21ppm

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 23995 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Qtz Cr

LOCATION Fresno Mn showing across ck (N) of drill collar 5458060N 483540E

KIND OF SAMPLE grab

DESCRIPTION Coarse-grained qtz monzonite - very felsic, only 5-10% visible qtz crystals. 5% pyrite veinlet 3mm thick. Trace dissem. py

Au	Ag				
2t	0.1	<10	70	11	12

Mo: 21

Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 23996 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Qtz Cr

LOCATION same as 995 5458060N 483542E

KIND OF SAMPLE grab

DESCRIPTION Coarse-grained qtz monzonite w/ 40% pale grey quartz veinlets 1/4-2cm thick. Common. Not any fresh sulphide. Exposure highly fractured

Au	Ag				Mo
8	<.1	<10	11	7	3

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 23997 SAMPLED BY RTF/JD

OWNER OR CLAIM Stewart - Qtz Cr

LOCATION Qtz Cr rd. to Windgap 5457550N 483090E

KIND OF SAMPLE grab

DESCRIPTION Mafic volcanic, mottled + bleached w/ 10% pyrite as veinlets, clots and dissem. Weakly magnetic. Bleaching as pyx? selvages along fx. Rock fairly massive, looks distictly sheared in places.

Au	Ag				Mo
16	0.2	<10	70	15	40

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 23998 SAMPLED BY RTF/JD

OWNER OR CLAIM Stewart - Qtz Cr/Windgap

LOCATION Same as #997 5457550N 483090E

KIND OF SAMPLE character

DESCRIPTION Mafic volcanic w/ veinlets of quartz + K-spar + pyrite. Also pale green selvages of pyx (different orientation) 30% vein material. Weakly magnetic

Au	Ag				Mo
6	0.1	<10	37	11	63

ORVANA

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 23999 SAMPLED BY RTF/JD

OWNER OR CLAIM Stewart - Windgap

LOCATION Old cat cut on WindGap rd 5457330N 483150E

KIND OF SAMPLE grab

DESCRIPTION Mafic volcanic, veined w/ qtz and pyrite. Common bleached selvages. Rock is sheared @ 340° -60° NE.

Au	Ag				Mo
<5	0.1	<10	77	24	66

ORVANA

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24000 SAMPLED BY RTF/JD

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Trench / rd getting close to 5457130N 483030E

KIND OF SAMPLE grab

DESCRIPTION Highly fractured limonite stained mafic volcanic w/ bleached selvages + minor dissem sulphide (mainly on fx / units - oxidized).

Au	Ag	As	Cu	Pb	Mo
23ppb	0.2ppm	12ppm	130ppm	35ppm	14ppm

ORVANA

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24501 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Windgap

LOCATION Copper Horn trench (cat) W of pass, 5457110N 482900E

KIND OF SAMPLE grab

DESCRIPTION Mafic volcanic w/ qtz-py veinlets & bleached selvages. Epidote along fx.

Au	Ag	As	Cu	Pb	Mo
24ppb	0.1ppm	<10ppm	33ppm	20ppm	8ppm

ORVANA

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Coeur d'Alene, Idaho 83814
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DATE May 15, 1996

№ 24502 SAMPLED BY RTF/JD

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Dozer trenching or rd around from #501 toward pass. 5457060N 482980E

KIND OF SAMPLE grab

DESCRIPTION Strongly bleached mafic volcanic w/ 5-10% py on fx + some dissem

Au	Ag				
10	0.2	17	91	29	<2

ORVANA

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 13, 1996

№ 24503 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Prospect on small ridge on NE side of road, 5456990N 483040E

KIND OF SAMPLE dump grab

DESCRIPTION Mafic volcanic w/ strong bleached selvages w/ ~5% py on fx + minor dissem. Also minor qtz veinlets. Very strong rusty weathering. Some bull qtz on dump w/ py.

Au	Ag				Mo
6	0.2	<10	110	18	250

ORVANA

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2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24504 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Decline shaft @ end of old rd, 5456870N 483100E

KIND OF SAMPLE dump grab

DESCRIPTION Mafic volcanic w/ 5% pyrite stringers & dissemations. Minor qtz veinlets. White bull qtz vein w/ pyrite & minor dark grey soft sulphide (bismuthinite?) Bull # 2 sx

Au	Ag				Mo
<5	<0.1	<10	61	31	5

Bi: [illegible]

ORVANA

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24505 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Small prospect on E side of pass, above old rd dropping down. 5457070N 483350E

KIND OF SAMPLE grab

DESCRIPTION Mafic volcanic w/ bleached selvages + pyrite veinlets. Strong rusty stain, on fx + weather surfaces.

Au	Ag				
13	0.2	14	110	35	27

Bi: [illegible]

ORVANA

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24506 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION approx 35m SW of #505 5457070N 483450E

KIND OF SAMPLE grab from prospect

DESCRIPTION Bleached tuffaceous volcanic w/ strong FeOx + minor dissem. & veinlet pyrite. Possible bedding @ 360° 65°E

Au	Ag				
19	0.1	23	48	24	12

Bi: <10

ORVANA

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24507 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Prospect on S side of gap. 5456920N 483260E

KIND OF SAMPLE grab

DESCRIPTION Mafic volcanic w/ bleached selvages & 5-10% dissem + fx controlled pyrite. Prospect is on white bull qtz vein w/ pyrite >> bismuthinite. Vein @ 030° ~ 90°.

Au	Ag	As	Cu	Pb	Mo
9ppb	<0.1ppm	<10ppm	59ppm	17ppm	3ppm

Bi: [illegible]

ORVANA

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(206) 667-6000

DATE May 15, 1996

№ 24508 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Hand trench on S side of gap. 5456830N 483230E

KIND OF SAMPLE grab

DESCRIPTION Bleached, brecciated mafic volcanic w/ strong disseminated & clotty pyrite, some coarse-grained clots. Bull #5 sx

Au	Ag				
188	1.4	350	140	140	29

Bi: <10

e Resources Corp
. Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24516 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Several hundred meters SSE of pass, 5456620N 483320E

KIND OF SAMPLE grab from subcrop

DESCRIPTION Bleached matic volcanic w/ very strong limonite and pyrite on fractures. From rusty outcrop on finger ridge above hollow.

Au	Ag				
9	0.1	<10	59	17	3

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24517 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Gap

LOCATION Appox 500m SE of pass, 5456480N 483420E ~1050m el

KIND OF SAMPLE grab

DESCRIPTION Mafic volcanic, highly fractured & bleached w/ strong pyrite on fs & dissem. From small prospect digging down gully.

Au	Ag				
6	0.1	<10	190	15	31

Mo

Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE May 15, 1996

№ 24518 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Wind Pass

LOCATION On crest S side of hill E of pass, approx 5456760N 483720E ~1065m el

KIND OF SAMPLE grab - subcrop

DESCRIPTION Thin - bedded banded hornfels, pale green & grey w/ 3-5% dissem. pyrite.

Au	Ag				
15	0.6	52	130	160	3

Mo

Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24519 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION S side of creek / ridge ~200m NE of small d. ~1530m el 5458700N 475640E

KIND OF SAMPLE grab from OC

DESCRIPTION Fine-grained equigranular biotite diorite (probably subvolcanic) mod-str. magnetic w/ fr. selvages of epidote → albite? Not very altered except moderate biotite → chlorite. No sulphide or FeOx.

Au	Ag	As	Cu	Pb	
114ppb	0.7ppm	10ppm	980	17ppm	

Orvana R Corp
2005 Ironw arkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24520 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Up hill of #512, 120' up from bottom end of old rd at 5458880N 475680E

KIND OF SAMPLE float 1610m el

DESCRIPTION Fine-grained equigranular diorite / subvolcanic intrusive. Pervasive epidote + chlorite + 10-15% dissem. fg. magnetite. Minor epidote veinlets w/ tr chalcopyrite. Strongly magnetic. No limonite.

Au	Ag				
99	0.1	17	220	20	

ORVANA

#3
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24514 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION ~150 up trench from #513, 5458820N 475630E ~1630m el

KIND OF SAMPLE Float

DESCRIPTION Med.-grained dk brk/sub-volcanic w/ augite crystals (mafic) Weakly magnetic 3-5% clots of fg py + mt 1-2cm diam. Wk dk org/brn limonite on fx. Not very altered.

Au	Ag				
257	0.4	27	700	15	

ORVANA

#4
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24515 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION NE of #514 ~200m, similar elevation 5458950N 475820E 1620m

KIND OF SAMPLE Float.

DESCRIPTION Fine-grained weakly porphyritic felsic intrusive, possibly syenite. Filled w/ 5-10% ogt/brn earthy limonite. No veins or sulphides. Not altered. Mod. stg. dull FeOx on weath. surfaces. Not magnetic.

Au	Ag				
<5	<0.1	<10	47	14	

ORVANA

#5
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24516 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION NE of #515 ~200m, top end of gully, W side, 5459090N 476000E ~5150m el

KIND OF SAMPLE Float

DESCRIPTION Weakly porph. volcanic/sub-volcanic intrusive diorite. Bleached w/ vague pink zones - 2ndary k-spar? 3% fg. dissem. magnetite & common mt. veinlets. Feldspars white + sugary (sericite?) Biotite → chlorite. Possibly Nelson intrusive?

Au	Ag				
247	0.1	13	200	20	

ORVANA

#6
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24517 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Appox 40m below #516, 5459030N 476050E ~5050' el

KIND OF SAMPLE Float

DESCRIPTION Monzonite? intrusive breccia (subvolcanic bx?). Common stringers of qtz, chlorite epidote, minor mt. Minor dissem fg. mt in matrix. Bleached & matted w/ sugary white feldspars. From small nose in gully head.

Au	Ag				
78	0.1	<10	150	15	

ORVANA

#7
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24518 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Approx. 30m on az 120° from #517 5459030N 476090E 5020'

KIND OF SAMPLE grab

DESCRIPTION Leuch. fine-grained andesite volcanic w/ very sty. med. dk org/brn limonite on fx. 5% dissem. fg>py. Weakly magnetic. Only mod. bleaching.
NE side of gully head, right by bottom.

Au	Ag				
118	0.1	<10	290	15	

ORVANA

#8
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24519 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Appox 50m E of #518 + a bit downhill 5459000N 476140E ~5000'

KIND OF SAMPLE Subcrop grab

DESCRIPTION Andesite. Bleached porphyritic (hornblende phenos) volcanic. 5-8% dissem py (replacement of mafics). Minor py vlts. Not magnetic. Stg. dk org/brn limonite on all fx. Scabby ridge nose.

Au	Ag	As	Cu	Pb	
91	0.2	<10	270	13	

ORVANA

#9
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 4, 1996

№ 24520 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Appox 70m downhill of #519 5458930N 476220E

KIND OF SAMPLE subcrop / float

DESCRIPTION Porphyritic basalt / mafic andesite. Phenos of augite + some plagioclase. Veinlets + dissem. po > py. Weakly magnetic. Not very altered. Stg. FeOx on fx.

Au	Ag				
16	<0.1	35	110	26	

ORVANA

#15
Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 5, 1996

№ 24526 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Rest Cr

LOCATION Houlton, ridge nose ~1500m el. 5453400N 477930E

KIND OF SAMPLE Float

DESCRIPTION Felsic fg. volcanic/rhyolite white to light cream color. Common fx w/ stg med - dk org/brn limonite coatings. Probably tuffaceous sediment. No qtz veining.

Au	Ag				
77	0.1	12	19	15	9

ORVANA

#16
Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 5, 1996

№ 24527 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Rest Cr

LOCATION Houlton ~80m up ridge from #526, 5453430N 478000E

KIND OF SAMPLE Grab - prospect pit.

DESCRIPTION Hornfelsed lt-dk grey tuffaceous sediment w/ 5% disc. vf-fg. py. Stg dk org/brn FeOx on surfaces. Fissile bedding @ 020° 80°SE

Au	Ag				Zn
16	0.4	17	89	25	230

ORVANA

#17
Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 5, 1996

№ 24528 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Rest Cr

LOCATION Houlton ~5200 Fd. up ridge from #527, 5453600N 478200E

KIND OF SAMPLE Float

DESCRIPTION DK grey tuffaceous sediment w/ 2-3% dissem. fg pyrite + minor qtz veinlets. Strong dark org/brn FeOx on all surfaces On float.

Au	Ag				Zn
141	0.7	<10	53	15	130

#18

Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 5, 1996

№ 24529 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Rest Cr

LOCATION Houlton N side of ridge 5453480N 477950E

KIND OF SAMPLE Prospect

DESCRIPTION Bleached m.g. diorite or monzonite intrusive, some fldspr fldtop rhombs bleached pale khaki 3-5% dissem. m.g. clots of po. Weakly magnetic. No veins. ~70m off ridge line. Bidon shovel blade

Au	Ag
14	0.1

As	Cu	Pb	Zn
41	18	24	49

#19

Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 5, 1996

№ 24530 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Rest Cr

LOCATION Houlton - 450'el. N side of ridge 5453430N 477840E

KIND OF SAMPLE Prospect

DESCRIPTION Dark grey to black tuffaceous sediments w/ stg. org. + red/brn limonite on all surfaces fv? - too fine-grained to see. No veining. Bedding @ 010° 80°E.

Au	Ag	As	Cu	Pb	Zn
26ppb	0.4ppm	18ppm	31ppm	25ppm	230ppm

#23

Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 6, 1996

№ 24534 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Up old rd on N fk Capt. Cr. 5460E60N 476750E

KIND OF SAMPLE Float

DESCRIPTION Skarn, med. brown garnet grey pyroxene +/- amphibole? Trace dissem. pyrite w/ minor amt on fx Stg med org/brn limonite on fx. Minor white qtz. Very weakly magnetic.

Au	Ag	As	Cu
202ppb	0.2ppm	40ppm	150ppm

#24

Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 6 1996

№ 24535 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Same as #534

KIND OF SAMPLE float - not common

DESCRIPTION Skarn w/o sulphides Mod fld, 30% dk. red/brn garnet 30% M-med green pervasive pyroxene + 30% black pervasive amphibole? Probably fragmental andesite? No FeOx, veining, or selvages. Not magnetic

Au	Ag
32	0.1

As	Cu	Pb	Zn
<10	65	16	

#25

Orvana Resources Corp
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 6, 1996

№ 24536 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Same as #534

KIND OF SAMPLE Float

DESCRIPTION Sandy, gritty, granular lt. grey rock (Tuff?) w/ foliation + 5% dissem clots of py. Looks siliceous, like f.g. qtzite, but has volcanic component. Stg. dk. red org/brn on fx + surfaces. Mod veining. Not magnetic.

Au	Ag	Zn
23	1.0	37ppm

As	Cu	Pb
21	1100	18

ORVANA

#26

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 26 1996

№ 24537 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Gold Hill

LOCATION ~50m W of Gold Hill adit along road, 5453810N 476490E

KIND OF SAMPLE subcrop

DESCRIPTION Bleached light grey gritty altered tuff. 5-10% dissem py + minor aspy No veining. Very stg med-dk org/brn FeOx. Some rock is limy, others not. Siliceous + Sugary looking

Au	Ag
22	0.7

As	Cu	Pb	Zn
13	43	26	27

#27

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 7, 1996

№ 24538 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Gold Hill

LOCATION ~270m W of cabin on middle road wide spot 5453820N 476190E

KIND OF SAMPLE float

DESCRIPTION Strongly serc. fc porph/aph. volcanic, matrix is light cream to white. Remnant phenos of mica + fldspar. 5% dissem med-gr. cubic FeOx after py. Stg dk red org/brn stain. No veining.

Au	Ag
24	0.4

As	Cu	Pb	Zn
120	100	140	280

#28

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 7, 1996

№ 24539 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Gold Hill

LOCATION same as #538

KIND OF SAMPLE float

DESCRIPTION Brecciated, sheared argillite. Med - dk grey color w/ weak phyllitic fabric, Minor bleaching + sericite Strong med-dk org/brn FeOx No veining.

Au	Ag
41ppb	0.2ppm

As	Cu	Pb	Zn
100ppm	120ppm	55ppm	370ppm

#29

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 7, 1996

№ 24540 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Gold Hill

LOCATION Appx 60m N of #539 dump road 5453830N 476140E

KIND OF SAMPLE grab

DESCRIPTION Black argillite, thin to medium-bedded. Minor FeOx on fx + breciation. No veining.

Au	Ag
37	0.4

As	Cu	Pb	Zn
74	42	45	190

#30

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 7, 1996

№ 24541 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Au Hill

LOCATION Upper Au Hill Rd, 70m from W end of adit dump right above rd, 5454135N, 476110E

KIND OF SAMPLE dump character

DESCRIPTION Tan rhyolite porphyry w/ feldspar phenocrysts + 30% white grey qtz veins w/ open space filling texture + mod. org/brn FeOx staining. Rock is siliceous.

Au	Ag	As
1304ppb	0.5ppm	730ppm

Cu	Pb	Zn
41ppm	32ppm	86ppm

#31

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 7, 1996

№ 24542 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Au Hill

LOCATION Same as #541

KIND OF SAMPLE dump

DESCRIPTION Light tan rhyolite, porphyritic/aphanitic w/o qtz veins 1-3% dissem. blebs of pyrite. Mod org/brn FeOx on fx Argillic crops out 30m W (020° 70°E)

Au	Ag
46	0.1

As	Cu	Pb	Zn
670	28	21	100

#32

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 7, 1996

№ 24543 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Gold Hill

LOCATION 20m from W end of upper road, 5454160N 476090E

KIND OF SAMPLE subcrop grab

DESCRIPTION Porphyritic very fine - grained brown volcanic (brown because of 2nd'ary biotite?). 3% dissem. blebs of pyrite. No veining or alteration. Not magnetic.

Au	Ag
12	<1

As	Cu	Pb	Zn
18	48	50	74

#33

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 7, 1996

№ 24544 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Gold Hill

LOCATION 20m W of big dozer track near W end of upper road 5454110N 476130E

KIND OF SAMPLE grab fm road cut

DESCRIPTION Argillite, black, fissile w/ stg org/brn + yellow FeOx on fx. Minor brecciation. Bedding @ 00° 10°SE Some talcaceous beds look like volcanic component (near Disc Hill contact?). Not limy.

Au	Ag
32	0.3

As	Cu	Pb	Zn
13	25	46	42

#34

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 8, 1996

№ 24545 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Au Hill

LOCATION Dump of road adit on upper road 5454080N 476550E

KIND OF SAMPLE dump

DESCRIPTION Vein material. Coarse-grained white quartz and calcite + dk grey argillite wall rock Minor dk org/brn earthy FeOx after sulphides Looks zney. Tr malachite stain.

Au	Ag
201	3.7

As	Cu	Pb	Zn
65	82	97	410

#35

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE June 8, 1996

№ 24546 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Au Hill

LOCATION Same as #545

KIND OF SAMPLE dump

DESCRIPTION Limey tuffaceous argillite (?) mudstone. Minor bedding - looks pretty massive. Very limy 3% dissem. mg. blebs of pyrite. Tr. calcite veining No FeOx stain. Possible Zn oxide/carbonate (white) coating.

Au	Ag	As	Cu	Pb	Zn
57ppb	0.6ppm	109ppm	76ppm	24ppm	1330ppm

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№ 24547
DATE June 8, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart - Au Hill
LOCATION Caved adit ~100m NE of cabin on middle switchback 5453910N 476550E
KIND OF SAMPLE 3m chip off W rib
DESCRIPTION Limy light grey crystal? tuff - can see feldspar planes. Could be alt. volcanic. Very stg dk org/brn FeOx. No veining. Grdmass is weakly gritty (possible sericite). 2% dissem py. Not magnetic.

Au	Ag				
30	0.8	45	96	64	78

2005 Ironwood Parkway
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(208) 667-6000

№ 24548
DATE June 8, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart - Au Hill
LOCATION Main adit dump on lower road 5453815N 476530E
KIND OF SAMPLE dump
DESCRIPTION Qtz-calcite veins in bleached tuff, which is H-med green and tan. Veins are up to 1 cm thick, + have 2-3% scattered py. Also dissem py. Mod. FeOx stain. Looks similar to stuff on Trixi V dump.

Au	Ag	As	Cu	Pb	Zn
1134ppb	1.6ppm	760ppm	140ppm	74ppm	390ppm

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№ 24549
DATE June 8, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart - Au Hill
LOCATION Same as #548
KIND OF SAMPLE dump - very common
DESCRIPTION Tuff w/ volcanic texture (can see f.g. feldspar hash in grdmass). Somewhat limy - mostly calcite on fx. 2% dissem m.g. py. Not magnetic. Pale green color.

Au	Ag				
39	0.1	35	76	43	79

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№ 24550
DATE June 8, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart - Au Hill
LOCATION Same as #549
KIND OF SAMPLE dump
DESCRIPTION Andesitic volcanic, weakly porphyritic (feldspar phenos). Lt/med. grey, + speckled - could be subvolc. intrusive or even tuff. Weakly limy. Biotites weakly alt. to chlorite. No sulphides. Minor FeOx.

Au	Ag				
27	<.1	<10	15	43	100

Zoned K-spar?
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2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

№ 24551
DATE July 11, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION N Fk Craigtown, ~120m E of 2nd bridge 5,459,950N 475080E 1250m
KIND OF SAMPLE Float in stream bed not common
DESCRIPTION Sheared, brecciated, veined, altered andesitic? volcanic / tuff. Stg. pervasive qtz/calcite flooding (cream color to grey) w/ 50% dk brownish biotite-altered clasts. Not magnetic. 1-2% dissem blebs py. Minor ble grey qtz vlts. Stg. med org/brn FeOx.

Au	Ag	As	Cu	Pb
40ppb	0.2ppm	39ppm	45ppm	56ppm

ORVANA

50m W of Someday SMM#23 location

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№ 24552
DATE July 11, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION N Fk Craigtown Cr, ~450m E of 2nd bridge, 5459920N 475300E 1285m
KIND OF SAMPLE float in creek bed
DESCRIPTION Sheared dk grey andesitic rock - tuff? (aphanitic). Pervasive calcite, minor veinlets. Very stg med. org/brn FeOx. 1-3% dissem blebs pyrite. Boulder.

Au	Ag				
15	0.4	18	180	37	

ORVANA

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№ 24553
DATE July 11, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION 20m W of SMM25, N Fk Craigtown ~700m W of 2nd bridge, 5459970N 475620E 1315m
KIND OF SAMPLE Float - stream bed
DESCRIPTION Breccia. Andesitic volcanics, bleached + mottled H-med grey + green, w/ pervasive calcite (stg) + veinlets, 5% dissem + bands of v.f.g. py. No FeOx stain. Not uncommon.

Au	Ag				
6	0.1	21	46	38	

ORVANA

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№ 24554
DATE July 11, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION 5m E of #553
5459970N 475625E 1315m
KIND OF SAMPLE Float - stream bed
DESCRIPTION Sheared, foliated, K-alt (biotite) volcanic. Very stg. med. org/brn FeOx stain. 5-8% dissem + foliation parallel py. Tr cpy. Mottled H-dk grey + brown. No veining. Weakly magnetic.

Au	Ag				
21	1.3	11	1500	24	

ORVANA

1210m el.

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№ 24555
DATE July 11, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Same as SMM30, small trib of N Fk Craigtown (from S) 5459750N 474230E
KIND OF SAMPLE float - stream; very common
DESCRIPTION Altered volcanic + tuff. Mottled to banded H-med grey to brown, faint green. 5% clots + dissem po, py + tr cpy, parallel bands. No veining or calcite. Very stg red org/brn FeOx.

Au	Ag				
5	0.1	<10	120	22	

ORVANA

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№ 24556
DATE July 11, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Erie Cr Rd by Hattie Mdy, 1km N of Grassy Cr Rd jct. 5456250N 471800E
KIND OF SAMPLE grab
DESCRIPTION Pyritic contact altered volcanic? - biotite (K) and sericite alteration (brown to almost white grainy f.g. rock). Contact w/ rhyolite porph. dike. Very stg. FeOx. Jurassic w/ leached sulphides.

Au	Ag				Mo
<5	0.1	<10	600	22	8ppm

ORVANA

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№ 24557
DATE July 11, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Erie Cr Rd, 1km N of Rest Cr, 5453100N 474000E
KIND OF SAMPLE grab
DESCRIPTION Hornfelsed tuff? / shale. Grey to brown (biotite). Very stg org/brn FeOx on fx + weath. surfaces. Tr qtz veinlets.

Au	Ag	As	Cu	Pb	Mo
5ppb	0.1ppm	<10ppm	23ppm	28ppm	3ppm

ORVANA

Same loc. as SMM35

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№ 24558
DATE July 12, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION E Fk S Fk Craigtown, 250m from confluence, 5457350N 475830E 1230m
KIND OF SAMPLE float - stream
DESCRIPTION Hornfelsed porph. volcanic or feldspar porphyry? Primary biotite alt., cut by bleached lt. grey green, + pink selvages. 5% dissem + blebs py. Very stg. FeOx. No vlts. Fairly common.

Au	Ag				
<5	<.1	<10	37	17	6

ORVANA

Same loc. as SMM38

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№ 24559
DATE July 12, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION S Fk Craigtown Cr. 30m N of confl. w/ E trib, 5457560N 475650E
KIND OF SAMPLE Float - creek bed
DESCRIPTION Breccia. Clasts are angular, red greyish brown, f.g. - tuff or volc.? Matrix is cream f.-v.c.g. (pegmatitic) K-feldspar, w/ minor dissem black hornblende. Tr py, Stg. FeOx stain. More than 1 piece seen.

Au	Ag				
<5	<.1	<10	20	7	

ORVANA

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№ 24560
DATE July 12, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Same as #559
KIND OF SAMPLE Float - stream bed
DESCRIPTION Porphyritic lt. tan/grey rock w/ intense qtz +/- K-spar flooding + stockwork qtz veinlets + later K-spar? veinlets. Intense flooding. Tr dissem py. Minor black fresh hornblende dissem. 2 pieces found. No FeOx.

Au	Ag				
<5	<.1	<10	7	6	

ORVANA

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№ 24561
DATE July 12, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION S Fk Craigtown, next trib W of #560 ~300m, 5457450N 475300E 1190m
KIND OF SAMPLE Float - stream bed
DESCRIPTION Hornfelsed volcanic. Mottled brown, grey + green, w/ 8% dissem po. Wkly magnetic. Not veined. Selvages Stg FeOx. Common.

Au	Ag				
<5	0.1	<10	95	24	

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DATE July 12, 1996
№ 24562 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION S Fk Cagtaun, S bank, 15m from ck 5457500N 4747755E
KIND OF SAMPLE Prospect grab
DESCRIPTION Rhyolite, 10% eye porph, lt grey (cream when weathered) 5% dissem fig. py. No veining. From big N-trending dike.

Au	Ag				
<5	0.1	<10	30	17	

Orvana Resources Corp.
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DATE July 17, 1996
№ 24576 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Base of S Fk Cagtaun Trib. between Primary grids, 5458170N 476400E.
KIND OF SAMPLE Float - stream bed
DESCRIPTION Granite, med-grained, porphyritic, w/ 1-2% dissem. po and 7% clear grey qtz veinlet stockwork. Stg. FeOx stain. Similar to material seen further down creek.

Au	Ag				
5	0.1	<10	37	23	

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DATE July 24, 1996
№ 24577 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 90+50N 52+00E
KIND OF SAMPLE Subcrop grab
DESCRIPTION Highly altered - bleached andesite. Stg silicification + some FeOx. Trace lt grey qtz.

Au	Ag	As	Cu	Pb	Mo
7042	0.8	<10	73	18	<2

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DATE July 24, 1996
№ 24578 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 90+50N 50+20E
KIND OF SAMPLE select - dump
DESCRIPTION Massive sulphide vein material; vein @ 040° 70°NW. Sulphide is mostly pyrrhotite (only moderately magnetic) w/ minor py, cpy + a bit of qtz. Vein 2-8" wide.

Au	Ag	As	Cu	Pb	Mo
55	0.7	78	2000	50	140

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(208) 667-6000

DATE July 24, 1996
№ 24579 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Same as #578, just E of vein 90+85N 50+19E
KIND OF SAMPLE grab from wall
DESCRIPTION Volcanic, both porph basalt + fg. andesite. 5x across zone of stg. NW striking fractures. Not very altered. Stg dk limonite on all fx. Fx trend generally 335° 90°.

Au	Ag	As	Cu	Pb	Mo
2830	0.9	<10	1500	21	28

ORVANA

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DATE July 25, 1996
№ 24580 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Same as #578, E wall, grid 90+85N 50+21E Grid
KIND OF SAMPLE grab
DESCRIPTION Andesite fine-grained, chloritic + leached (sulphide → FeOx). 5x from zone of fx @ 090 80°N, 1m E of sulphide vein. Stg FeOx.

Au	Ag	As	Cu	Pb	Mo
15	0.2	<10	100	12	420

hard 5x

DATE July 25, 1996
№ 24581 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 85N 59+70E
KIND OF SAMPLE float - common.
DESCRIPTION Altered feldspar porphyry w/ 3% dissem fg. pyrrhotite. Very minor wk qtz veinlets. Mod. FeOx. Bleached lt. tannish grey - silic? Very wkly magnetic.

Au	Ag	As	Cu	Pb	Mo
947	0.1	<10	45	20	7

Orvana Resources Corp.
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DATE July 25, 1996
№ 24582 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 85N 59+40E
KIND OF SAMPLE o.c. grab
DESCRIPTION Andesite breccia, tectonic w/ fault @ 320° 90° + lots of chlorite-magnetite veinlets + stringers (some dissem). No FeOx, or sulphides.

Au	Ag	As	Cu	Pb	Mo
<5	<0.1	<10	23	24	<2

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(208) 667-6000

DATE July 25, 1996
№ 24583 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 85N 59+20E
KIND OF SAMPLE grab (o.c.)
DESCRIPTION Andesite breccia - possibly intrusive bx? not + dk chlorite dissem + veinlets - stg magnetic. No sulphide.

Au	Ag	As	Cu	Pb	Mo
198	0.2	<10	150	14	<2

Shear N-S 80°E

DATE July 25, 1996
№ 24584 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 84N 61+20E
KIND OF SAMPLE grab
DESCRIPTION Sheared altered Fg. med grey/green/white andesite? Calcite pervasive + vlts w/chlorite. Brick hematite orange of fx. Tr py. Also qtz (pervasive +/- vlts). Glooty feldspar phenos in grungy groundmass

Au	Ag	As	Cu	Pb	Mo
348	0.3	<10	450	24	<2

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DATE July 27, 1996
№ 24585 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 88N 62+00E
KIND OF SAMPLE float - minor
DESCRIPTION Andesite w/ wispy magnetic veinlets + 5% Andesite fg. porph (amph/pyx?) + mod. altered w/ epidote +/- chlorite pervas. + selvages along fx.

Au	Ag	As	Cu	Pb	Mo
166	0.1	415	150	24	<2

hard 5x

DATE July 27, 1996
№ 24586 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 88+80N, 66+70E
KIND OF SAMPLE grab - subcrop
DESCRIPTION Mafic andesite, porph w/ pyx phenos. Med gry/green 1-2% dissem blebs po + py, Not magnetic. Very stg py/fx FeOx + some gypsum on fx. No veining.

Au	Ag	As	Cu	Pb	Mo
233	0.2	<10	140	29	<2

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DATE July 27, 1996
№ 24587 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 88+30N 63+00E
KIND OF SAMPLE float / subcrop grab
DESCRIPTION Andesite fault (banded to f.g. massive) w 2-4% dissem po = py, Mod. altered - px + biotite? Various med. green, grey + brownish tints. No veining. Very common. Very stg fracturing.

Au	Ag	As	Cu	Pb	Mo
1006	0.2	22	135	16	<2

hard 5x

DATE July 27, 1996
№ 24588 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION W across dk from #587 Grid 88+20N 61+70E
KIND OF SAMPLE float grab - common
DESCRIPTION Felsic, monzonite, fine - med. grained, w/ 5% mt veinlets, Matrix chloritized. No other vein material.

Au	Ag	As	Cu	Pb	Mo
196	0.1	<10	75	9	<2

hard 5x

DATE July 29, 1996
№ 24589 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 84N 60+80E
KIND OF SAMPLE float
DESCRIPTION Fine-grained med. tannish grey monzonite w/ 8% veinlets of sugary grey qtz replacement (selvage-like). Mod. magnetic, not much mt in veinlets. Matrix are chloritic, also chloritic fx. Groundmass not too altered.

Au	Ag	As	Cu	Pb	Mo
172	0.2	<10	150	13	2

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Nº 24590
DATE July 29, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 89N 60+95E
KIND OF SAMPLE grab (o.c.) common
DESCRIPTION Fine-grained monzonite w/ spidery magnetite +/- epidote veinlets - no qtz. Gndmass not very altered; mafics somewhat chl/ep. Mod FeOx on fx. Tr py in some vlts. Possibly f.g. feldspar porph?

Au	Ag	As	Cu	Pb	Mo
447	0.4	<10	210	10	10

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Nº 24591
DATE July 29, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 89+05N 63+35E
KIND OF SAMPLE grab
DESCRIPTION Brecciated dk greenish grey andesite porphyry (blk pyx phenos). Milky qtz vlts in some of the bx, filling cavities. No sulphide. Not much altered. Lots of fx @ 330° 90°

Au	Ag	As	Cu	Pb	Mo
231	0.1	10	61	16	3

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Nº 24592
DATE July 29, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 8905N 65+10E
KIND OF SAMPLE Float - ubiquitous
DESCRIPTION Diorite intrusive w/ mod-stg. trachytic white feldspars. Minor qtz-py veinlets + 2% clots of f.g. pyrite. Not very altered. Not magnetic. Mod FeOx stain.

Au	Ag	As	Cu	Pb	Mo
104	0.1	<10	39	15	<2

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hand sx

Nº 24593
DATE July 29, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 8915N 65+90E
KIND OF SAMPLE float - very common
DESCRIPTION Very altered dioritic/andesitic intrusive? w/ dissem + veinlet py → goethite ~ 5%. No qtz. Leached xenoliths or clasts, sericitic. Very stg FeOx

Au	Ag	As	Cu	Pb	Mo
141	0.1	360	75	23	<2

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Nº 24594
DATE July 29, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 87.60N 65+70E
finger nose
KIND OF SAMPLE rubble
DESCRIPTION Bleached, altered andesite? or possibly intrusive, 5% dissem po>>py>>cpy. No veining. Very stg FeOx. Not magnetic.

Au	Ag	As	Cu	Pb	Mo
183	0.2	14	140	25	<2

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Nº 24595
DATE 8/6/96
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION 9495N 6540E 1720m
KIND OF SAMPLE 1x1 meter grab from float
DESCRIPTION rusty weathering greenish gray to bleached fragmental volcanic (poss. crd. tuff); some of darker frags are completely pyritized to gossany after pyrite; rx are pervasively chloritized + locally bleached; magn after py; rusty on fracs + exposed surfaces; noted 1 or 2 v. small qtz vnlts on

Au	Ag	As	Cu		
16 ppb	0.2 ppm	52 ppm	58 ppm		

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Nº 24596
DATE 8/9/96
SAMPLED BY PLK
OWNER OR CLAIM Stewart/Dog
LOCATION 86N 6032E 1700m
KIND OF SAMPLE grab from v. small oc
DESCRIPTION green gray, mod to strong chlor alt plag andesite tuff; mafic xtals <5%; <5% dissem py; numerous mm size qtz veinlets w/abd FeOx in vnlts and on frac surfaces - orig textures partially obliterated

Au	Ag				
<5	<.1	19	13		

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Nº 24597
DATE 8/15/96
SAMPLED BY PLK
OWNER OR CLAIM Stewart/Dog
LOCATION 91N 6170
KIND OF SAMPLE grab from float 3x3 m
DESCRIPTION rusty weathering porph (plag phenos) andesite; gray green color; silicified after chloritization; abd py, po up to 5% dissem in blebs fragmental or tectonic bx? large (5-10 cm) angular frags

Au	Ag				
16	0.1	16	140		

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Nº 24598
DATE 8/27/96
SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 92+70N 62+70E
KIND OF SAMPLE subcrop
DESCRIPTION Porphyritic (augite) andesite (flow?). Wkly magnetic w/ 2% po on fx + dissem. Minor bleached tan selvages. Rusty.

Au	Ag				
23	0.1	33	120		

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Nº 24599
DATE Aug. 27, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 9300N 6485E
KIND OF SAMPLE O.C. grab
DESCRIPTION Andesitic agglomerate w/ mod-stg red org/brn limonite staining. Mod. bleaching + selvages; doesn't look too altered (silic +/- sericite). Tr dissem py. Not magnetic.

Au	Ag				
<5	0.1	24	71		

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Nº 24600
DATE Aug. 28, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 9100N 57+70E
KIND OF SAMPLE o.c. grab
DESCRIPTION Sheared, mod. altered subvolcanic diorite? Fine-grained, phenos and crystals indistinct. Mod. streaky silicification. Mod. magnetic. Wk dk limonite stains on some fx. Shear fabric @ 340°, 90°

Au	Ag				
11	0.1	<10	78		

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Nº 24601
DATE Aug. 29, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 93+50N 63+80E
Grid 6350
KIND OF SAMPLE select grab from small knob
DESCRIPTION Andesitic agglomerate w/ tr - 2% po as dissem + on fx. Mod silic +/- biotite? alteration. Mod dk limonite stain. No veining. Not magnetic.

Au	Ag	As	Cu	Pb	Zn
5 ppb	0.1 ppm	64 ppm	140 ppm	15 ppm	22 ppm

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Nº 24602
DATE Aug. 29, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION approx grid 9900N 6900E
KIND OF SAMPLE grab from small oc
DESCRIPTION Skarn. Pyroxene (green) + med brown garnet + minor black amphibole. Not magnetic. No sulphides.

Au	Ag				
250	<.1	<10	20	<5	16

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hand sx

Nº 24603
DATE Aug. 30 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 90+80N 52+00E @ Dog Saddle (same as 7 g/t Au sx #24577)
KIND OF SAMPLE subcrop grab
DESCRIPTION Andesite, altered. Porph (augite) andesite w/ mod-stg. white sericite + bleaching. Minor casts after dissem py. No veining. Minor epidote. No carbonate.

Au	Ag				
<5	0.2	24	90	10	16

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Nº 24604
DATE Aug 30, 1996
SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 90+80N 52+20E Dog saddle
KIND OF SAMPLE float (close)
DESCRIPTION Porphyritic mafic andesite w/ augite phenocrysts. Dk green w/ minor bleaching (along fx, w/ silic +/- sericite?). Basically pretty fresh but w/ v. stg limonite on fx + tr dissem py, cpy. Not magnetic.

Au	Ag				
26	0.1	27	150	10	27

DATE Aug 30 1996
№ 24605 SAMPLED BY RTF
OWNER OR CLAIM Stewart - Dog
LOCATION ~50m down rd N of Dog Saddle, grid 9100N 5230E grid
KIND OF SAMPLE float - common
DESCRIPTION Altered tuff? w/ very str. bright orange earthy FeOx. Possible carbonate alt. Can't see much of original rock texture. Brecciated.

Au	Ag
20	1.8

As	Cu	Pb	Zn
120	270	1100	3400

(208) 667-6000
DATE Sept. 10, 1996
№ 24606 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8200N 5870E grid
KIND OF SAMPLE Grab from o.c.
DESCRIPTION Monzonite or monzodiorite med-grained, weakly brecciated & altered (mafics bleached, epidote on fx). Tr FeOx. No sulphide. Wk-mod. magnetic. No veining, looks pretty dull.

Au	Ag
31ppb	<1ppm

As	Cu	Pb	Zn
<10ppm	65ppm	25ppm	70ppm

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(208) 667-6000
DATE Sept. 10, 1996
№ 24607 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8200N 5580E
KIND OF SAMPLE grab from o.c.
DESCRIPTION Basalt? Weakly porphyritic (cubical white feldspars 2-3mm) in dk grey v.f.g. groundmass. Some float of same material near by has chill margin & tr disseminated py. No FeOx or veining. Very weakly magnetic.

Au	Ag
21	<.1

As	Cu	Pb	Zn
<10	37	18	53

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DATE Sept. 10, 1996
№ 24608 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid NW 8175N 5875E
KIND OF SAMPLE float - uncommon
DESCRIPTION Altered veined monzonite? Mafics bleached, mod. bx & veinlets (K-Fspar) of qtz & earthy FeOx after sulfide? or sulphides? No magnetite. 5% vein material. Mod. limonite on fx

Au	Ag
147	0.3

As	Cu	Pb	Zn
24	120	17	59

Coeur d'Alene, Idaho 83814
(208) 667-6000
DATE Sept. 10 1996
№ 24609 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8170N 5830E
KIND OF SAMPLE grab 2x2m
DESCRIPTION Med. grained monzonite highly fractured @ 030° 80° NW (shears). Minor py cpy vnlts parallel fx w/ malachite. Rock is altered w/ all mafics gone to epidote. Weakly magnetic. Also some Hem gloves @ 010° 30° SE

Au	Ag
26	<.1

As	Cu	Pb	Zn
13	97	14	67

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DATE Sept. 10, 1996
№ 24610 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8165N 5830E, Prospect below #609
KIND OF SAMPLE Prospect dump
DESCRIPTION Same as #609. Altered m.g. monzonite, mafics → epidote chlorite or fx, + mod. red/maroon hematite on fx (some w/ slides). Wk-mod magnetic, No veining. Tr disseminated py.

Au	Ag
51	<.1

As	Cu	Pb	Zn
<10	34	8	49

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DATE Sept. 10, 1996
№ 24611 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8195N 5580E
KIND OF SAMPLE till? from 1/2 m depth
DESCRIPTION Sand granules & pebbles - looks like mostly weathered & altered f-m.g. monzonite. Some minor epidote veinlets, cobbles on surface are various intrusives.

Au	Ag
117	0.2

As	Cu	Pb	Zn
23	160	22	56

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DATE Sept. 10 1996
№ 24612 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 8500N 5730E
KIND OF SAMPLE float - common
DESCRIPTION Equigranular diorite, f-m.g., w/ wk selvages of epidote along fx. Very wk FeOx. Mod. magnetic, Epidote veinlets. Mafics still pretty fresh. Dull.

Au	Ag
63ppb	.1ppm

As	Cu	Pb	Zn
<10ppm	92ppm	6ppm	29ppm

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DATE Sept. 10, 1996
№ 24613 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 8295N 5760E
KIND OF SAMPLE grab along 4m
DESCRIPTION Monzonite med-grained, equigranular. Weakly altered (mafics) & minor epidote selvages No FeOx. Mod. magnetic. Dull

Au	Ag
8	0.1

As	Cu	Pb	Zn
<10	44	8	32

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DATE Sept. 10 1996
№ 24614 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8305N 5910E
KIND OF SAMPLE Grab from small o.c. + rubble
DESCRIPTION Brecciated moderately silicified monzonite? Possibly andesite No FeOx. Minor vague qtz selvages Some open spaces, Wk-mod magnetic Strongly fractured @ 360° 90°,

Au	Ag
17	0.1

As	Cu	Pb	Zn
<10	58	12	65

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DATE Sept. 11, 1996
№ 24615 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8600N 5635E
KIND OF SAMPLE grab from o.c. + rubble
DESCRIPTION Monzonite med-grained, w/ blotchy pink feldspars. Mafics → epidote + chlorite. Minor ep/chlor on fx. Mod. magnetic (dissem mt). No sulphides. Minor FeOx on fx. Microdiorite rubble 5m W.

Au	Ag
14	<.1

As	Cu	Pb	Zn
<10	24	10	54

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DATE Sept. 11, 1996
№ 24616 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8600N 8015N 5610E
KIND OF SAMPLE grab 2x1 5m
DESCRIPTION Brecciated med-grained monzonite w/ fx @ 020° 90° and 340° 90°. Minor FeOx in NW zones, Not magnetic. Minor vague white qtz veinlets. All mafics chloritized.

Au	Ag
75	.2

As	Cu	Pb	Zn
15	36	18	74

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hand sx
DATE Sept. 11, 1996
№ 24617 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Approx grid 7880N 5620E, E side of gully ~30m
KIND OF SAMPLE grab from o.c.
DESCRIPTION Monzonite? or possibly andesite, highly fractured (bx) & altered (chlorite/epidote, minor sericite qtz). A few white qtz veinlets w/ open spaces. Fx coated w/ py cpy, CuO_2. Mod-wk magnetic. Fx @ 350° 85°SW and 040°/90°.

Au	Ag
155	0.9

As	Cu	Pb	Zn
<10	480	14	69

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DATE Sept. 11, 1996
№ 24618 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Appox 50m down main Craigmont Rd ridge rise 30m E of gully, grid 7800N 5700E
KIND OF SAMPLE Grab from small o.c.
DESCRIPTION Altered monzonite or andesite? Med-dk grey, ghost feldspar crystals Mafics → chlorite. Mod. silicification + minor white qtz veinlets, some w/ clots of cpy. Mod. lim/hem. staining. Weakly magnetic

Au	Ag
45 ppb	0.2 ppm

As	Cu	Pb	Zn
<10 ppm	88 ppm	23 ppm	63 ppm

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DATE Sept. 12 1996
№ 24619 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8930N 6075E
W bank of NE striking swale/ridge
KIND OF SAMPLE grab over 2m
DESCRIPTION Andesite. Dk grey, f.g. equigranular. Mod org/lim breccia stain on fx Tr disseminated py. Weakly magnetic. Not altered or veined.

Au	Ag
22	<.1

As	Cu	Pb	Zn
13	39	26	37

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DATE Sept. 12, 1996
№ 24620 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8840N 6125E
KIND OF SAMPLE grab from subcrop
DESCRIPTION Andesite. Med grey w/ ... black phenos / clots of mafics ... ... fabric. Mod org/brn limonite fx. Tr dissem py. Dry-looking w/ minor crusty qtz druse.

Au	Ag				
5	<.1	13	5	16	92

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DATE Sept 12, 1996
№ 24621 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8500N 6060E
KIND OF SAMPLE grab from o.c.
DESCRIPTION Andesite. Fine-grained med grey, chlorite + fractured. Qtz calcite veinlets + tr cpy. Chlorite alt. Wk-mod magnetic. Mod. red-brn limonite on fx.

Au	Ag				
36	0.2	<10	170	14	47

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DATE Sept. 12, 1996
№ 24622 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8510N 5960E, 10m uphill of #24581
KIND OF SAMPLE float - common (not predominant)
DESCRIPTION Porphyritic syenite 30-40% feldspar phenos (lt. grey/tan) ½-¾ cm in lt. grey gndmass of grey/green f.g. mafics + lt. grey feldspars. Very weakly altered mafics. Not magnetic. No veining. Tr dissem py. Mod-stg FeOx

Au	Ag				
23	0.1	<10	42	9	20

hand sx

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DATE Sept 12 1996
№ 24623 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION 2m E of #622, grid 8510N 5962E
KIND OF SAMPLE float - less common than #622
DESCRIPTION Same porphyritic syenite as #622 but fractured + veined w/ limonite after pyrite and whitish grey qtz veinlets. Also dissem py → FeOx. Stg org/brn FeOx on fx. Gndmass altered + bleached (minor sericite?). Not magnetic.

Au	Ag				
13	.1	14	93	9	22

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DATE Sept 12 1996
№ 24624 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8500N 5900E
KIND OF SAMPLE grab from subcrop
DESCRIPTION Andesite. Dk grey aphanitic, unaltered. Minor calcite > qtz veinlets, Tr - 2% dissem vf.g. py, Moderately magnetic.

Au	Ag	As	Cu	Pb	Zn
563 ppb	0.4 ppm	16 ppm	300 ppm	21 ppm	68 ppm

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DATE Sept. 12, 1996
№ 24625 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8610N 5860E
KIND OF SAMPLE grab from small o.c.
DESCRIPTION Monzodiorite. Medium-grained, unaltered except for minor ... dark selvages. Wk-mod magnetic. No veining. Taken just uphill of ... ppb Au soil which was collected in ... bottom.

Au	Ag				
78	0.2	<10	190	6	34

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DATE Sept. 12 1996
№ 24626 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8830N 6015E
KIND OF SAMPLE Float - not common
DESCRIPTION Basalt. Dk grey aphanitic, weakly fractured w/ 2% dissem vf.g. py. No veining. Mod-stg org/red/brn limonite on fx. Not magnetic.

Au	Ag				
31	0.1	14	42	19	54

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DATE Sept. 12 1996
№ 24627 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8833N 6014E, next to #626
KIND OF SAMPLE float - very common
DESCRIPTION Diorite or andesite fine-grained, lt. grey. Mafics chloritic. Equigranular. Wk-mod magnetic (dissem mt). Mod FeOx on fx. Minor dissem py (tr). Quite felsic.

Au	Ag				
91	0.1	<10	54	<5	15

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DATE Sept. 12 1996
№ 24628 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8740N 6130E
KIND OF SAMPLE float - not common
DESCRIPTION Andesite. Fine-grained porphyritic (mafics) w/ light grey groundmass. Minor dissem FeOx clots in vugs. No veining. Mod. FeOx on fx. Not magnetic. Not much alt. (bleached a bit).

Au	Ag				
41	0.2	15	130	10	20

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DATE Sept. 12 1996
№ 24629 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8720N 6140E
KIND OF SAMPLE Float - ubiquitous
DESCRIPTION Andesite porphyry w/ milky feldspar phenos. Fine-grained bleached greyish green to tan gndmass. mafics → chlorite epidote. Minor fracturing. No FeOx, veining or sulphides. Not magnetic.

Au	Ag				
74	0.2	<10	97	<5	10

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DATE Sept. 12 1996
№ 24630 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8630N 6210E
KIND OF SAMPLE float - not common
DESCRIPTION Porphyritic syenite. Feldspar phenos, ≤.4 cm in lt-med ... grey gndmass. Not much altered. Not magnetic. No veining or sulphides. Mod. FeOx on fx.

Au	Ag	As	Cu	Pb	Zn
22 ppb	0.1 ppm	<10 ppm	33 ppm	11 ppm	20 ppm

hand sx

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DATE Sept. 12 1996
№ 24631 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8550N 6210E, small ridge nose ~20m down end of skid rd
KIND OF SAMPLE float - ubiquitous; not selective
DESCRIPTION Trachyte / rhyolite. Porphyritic, variably w/ K-spar? lathes up to ½-3cm long, and round qtz eyes. Some brecciation, w/ greenish qtz filling. Tr dissem py. Not magnetic. Minor mafics are chloritized.

Au	Ag				
555	0.2	19	~~95~~ 69	~~9~~ 5	18

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DATE Sept. 12 1996
№ 24632 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Same as #631
KIND OF SAMPLE float - common
DESCRIPTION Qtz veins in trachyrhyolite (#631) w/ very stg dk green chlorite skins. Qtz is greyish white + has common open spaces w/ a parallel (shear?) fabric, wk-mod limonite stain. Gossy + oxidized.

Au	Ag				
2720	0.1	19	95	9	23

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DATE Sept. 12 1996
№ 24633 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8520N 6230E, @ end of skid trail, below #632
KIND OF SAMPLE float - ubiquitous
DESCRIPTION Light grn/grey Andesite? breccia. Porphyritic w/ feldspar phenos. Altered (sericite?, chlorite), + veined w/ greenish grey qtz vlts + minor sulphide → FeOx (cpy?). Wk-mod magnetic. Ditto FeOx. Hard to know - Tressland or later intrusive?

Au	Ag				
142	0.2	13	130	14	41

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DATE Sept. 17 1996
№ 24644 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8800N 6750E
KIND OF SAMPLE float - not common
DESCRIPTION Argillaceous tuff. Dk brownish grey w/ bleached lt. grey selvage along fx. 2% dissem vf.g. po. Minor calcite + gypsum vlts. Stg FeOx on fx. Not magnetic. Matrix not calcareous.

Au	Ag	As	Cu	Mo
44 ppb	0.2 ppm	<10 ppm	45 ppm	32 ppm

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DATE Sept 17 1996
№ 24645 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Grid 8820N 6620E

KIND OF SAMPLE float - not common (very rare?)
DESCRIPTION Feldspar porphyry w/ dk grey qtz & tan feldspar? xtls and fr dissem blebs (1/2-2mm) of py. Not magnetic. Stg FeOx on fx. Unaltered.

Au	Ag				
5	0.1	<10	31		

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DATE Sept. 17 1996
№ 24646 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 8820N 6615E

KIND OF SAMPLE float boulder (not common)
DESCRIPTION Brecciated andesite w/ very stg. pervasive calcite. Fr dissem py. Looks like tectonic breccia. Heterolithic. Not magnetic.

Au	Ag				
15	0.1	18	40		

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DATE Sept 17 1996
№ 24647 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 8760N 6600E

KIND OF SAMPLE float/subcrop - dk grey/brown
DESCRIPTION Porphyritic altered mafic andesite. Mottled brown & dk grn/grey (grading biotite). 5% dissem fg py. Not magnetic. Very stg FeOx on fx. No veining. Clastic (agglomerate?) texture in some pieces.

Au	Ag				
61	0.1	11	85		

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DATE Sept 17 1996
№ 24648 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 8750N 6575E
finger ridge

KIND OF SAMPLE grab from o.c.
DESCRIPTION Mafic porphyritic andesite/basalt w/ dissem. fg py to 5% v.fg. Mottled dk green/grey w/ minor brown. Silicified. No veining. Very stg FeOx. Not magnetic. Minor clots of py 3-5mm.

Au	Ag	As	Cu		
50ppb	0.1ppm	<10ppm	110ppm		

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DATE Sept. 17 1996
№ 24649 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 8830N 6450E

KIND OF SAMPLE subcrop / common float
DESCRIPTION Fragmental andesite, agglomerate? Massive to pebble frag'l w/ hornblende phenocrysts, fine chlorite/epidote alt. Nil - 1% dissem clots of pyrite. No veining. No magnetic

Au	Ag				
31	0.4	10	62		

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DATE Sept. 17 1996
№ 24650 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION Grid 8808N 5320E

KIND OF SAMPLE grab from o.c.
DESCRIPTION Altered pyritic andesite, pyritize w/ both feldspar & mafic minos. Mottled green, grey. Silicified & not magnetic. Minor calcite on fx. Very stg FeOx. No veining. Pretty massive. Fx @ 060° 80°SE, 360° 70°E

Au	Ag				
5	0.2	38	150		

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DATE 9/17/96
№ 24651 SAMPLED BY Pu K
OWNER OR CLAIM Stewart/Dog
LOCATION 9670N 5760E (approx) grid

KIND OF SAMPLE grab from float on road
DESCRIPTION rusty weathering pervasively silicified coarse grained grey mafic andesite; groundmass of dk mins + fsper, up to 10% mafic (hbl?) phenos; broadly strongly fractured; up to 5-10% dissem fg sulfides; strong FeOx on all fracs + exposed sulfides

Au	Ag	As	Cu		
285ppb	0.2ppm	<10ppm	24ppm		

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DATE 9/17/96
№ 24652 SAMPLED BY Pu K
OWNER OR CLAIM Stewart/Dog
LOCATION 9725N 5815E (approx)
mostly float; one small subcrop

KIND OF SAMPLE grab over 5m of rockbank
DESCRIPTION same as 24651

N20W/vert, N65W/55N frac

Au	Ag				
64	0.1	17	81		

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DATE 9/20/96
№ 24653 SAMPLED BY Pu K
OWNER OR CLAIM Stewart/Dog
LOCATION approx 9345N 5550E

KIND OF SAMPLE grab from large boulders
DESCRIPTION grey green fine grained ~~mafic~~ or mafic dike w/ abd dissem pyrite (up to 5%) epidote veins, pase. silic, very hard w/ strong sulfurous smell

Au	Ag				
18	<.1	<10	37		

approx N15E from rd jct.

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DATE 9/24/96
№ 24654 SAMPLED BY Pu K
OWNER OR CLAIM Stewart/Dog
LOCATION small prospect on ridge top above Cameco drilling in small notch 7485E 10150N
KIND OF SAMPLE grab 2x2 m²
DESCRIPTION rusty weathering silicified grey green strongly chloritized equigranular intrusive(?); dissem py up to 5%

fractures N20E/vert; N40-55W/V strong weaker

Au	Ag				
6	0.1	61	82		

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DATE 9/24/96
№ 24655 SAMPLED BY Pu K
OWNER OR CLAIM Stewart
LOCATION Minnove north grid 950N 4[illegible]E 10260N 7675E

KIND OF SAMPLE grab from 1x1 m oc
DESCRIPTION Grey green pervasively silicified stkwk py mineralized, strongly fractured, rusty weathering (and reconsolidated) fine intrusive (fsper prph) equig texture gone; dissem, clumpy py total to 5-10%

Au	Ag				
43	0.1	37	84		

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DATE 9/24/96
№ 24656 SAMPLED BY Pu K
OWNER OR CLAIM Stewart/Dog
LOCATION Minnove 950N 400E
7665E 10260N

KIND OF SAMPLE 1x1 m grab from oc
DESCRIPTION ~~as~~ as previous sample. (may be silic hbl monzonite)

Au	Ag				
24	0.2	12	100		

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DATE 10/2/96
№ 24657 SAMPLED BY Pu K
OWNER OR CLAIM Stewart
LOCATION on road between 94N5540 and 95N5510 5550E 6490N

KIND OF SAMPLE grab from float
DESCRIPTION propylitized fine to med. equigranular granodio/diorite - appears somewhat bleached; v. abd stkwk epidote vns/vnlts to 3-5cm wide (the most <1 cm to 1mm); 0-1% dissem py

Au	Ag	As	Cu		
65ppb	0.1ppm	<10ppm	160ppm		

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DATE 10/2/96
№ 24658 SAMPLED BY Pu K
OWNER OR CLAIM Stewart
LOCATION 94N 5583

KIND OF SAMPLE grab from float
DESCRIPTION pyritic granodiorite/diorite (origin unknown, tho may have been moved during road building); rusty weathering; bleached/mod chlor alt

Au	Ag				
46	0.1	<10	280		

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DATE 10/2/96
№ 24659 SAMPLED BY Pu K
OWNER OR CLAIM Stewart
LOCATION 94N 5583
same loc as previous

KIND OF SAMPLE grab
DESCRIPTION strongly pyritic fine grained mafic dike (?) material

Au	Ag				
35	0.1	<10	440		

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DATE 10/2/96
Nº 24660 SAMPLED BY PLK
OWNER OR CLAIM Stewart
LOCATION same as 24551
5760E 9670N
KIND OF SAMPLE higrade grab
DESCRIPTION same as 24551 but with abd dissem Cu sulfides - cpy, brn

Au	Ag		
160	0.2	<10	410

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DATE 10/3/96
Nº 24661 SAMPLED BY RF
OWNER OR CLAIM Stewart
LOCATION top of skid road north of 8EN 6270; same loc as 24633 (8520 N, 6290 E)
KIND OF SAMPLE grab from float
DESCRIPTION white, milky qtz vn/vnlt material in host greenish chlor altered andesite; qtz is vuggy; tr py

Au	Ag	As	Cu
71ppb	<.1ppm	<10ppm	58ppm

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DATE 10/3/96
Nº 24662 SAMPLED BY RF
OWNER OR CLAIM Stewart
LOCATION same as 24631
6210E 8550N
KIND OF SAMPLE grab from float
DESCRIPTION trachyte/rhyolite

Au	Ag		
1144	0.2	11	92

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DATE 10/3/96
Nº 24663 SAMPLED BY PLK
OWNER OR CLAIM Stewart
LOCATION 10m uphill from 24662 (west of 662) 6200E 8550N
KIND OF SAMPLE grab from float
DESCRIPTION fspar porph. - some fspars up to 10cm; propyl alt locally v.abd qtz vnlt stockwork, strong FeOx on some fracs

Au	Ag	As	Cu
412ppb	<.1ppm	11ppm	49ppm

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DATE 10/3/96
Nº 24664 SAMPLED BY RF
OWNER OR CLAIM Stewart
LOCATION ~15 N10E from 24663
6203E 8561N
KIND OF SAMPLE grab of nonveined float
DESCRIPTION fspar porph/rhyolite porph/aphanitic; mod fractured w/weak FeOx; nonveined material

Au	Ag		
57	<.1	<10	68

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DATE 10/3/96
Nº 24665 SAMPLED BY PLK
OWNER OR CLAIM Stewart
LOCATION 86N 6150E is about 25 meters to N30E 6145E 8580N
KIND OF SAMPLE grab from float
DESCRIPTION vuggy, brecciated, stkwk qtz veined/vnlt unid possibly intrus rx w/ frags of andesite; mod magnetic orange, ochre, oxides; trace malachite; strong MnOx

Au	Ag		
2661	17.2	<10	3200

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DATE Oct. 3, 1996
Nº 24666 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION grid 8605N 6155E in gully bottom
KIND OF SAMPLE grab from small o.c.
DESCRIPTION Feldspar phorphyry w/ very sty biotite (2ndary?). Biotite is dissem m.g. @ all angles. Gndmass is dk grey/brn. Feldspar phenos seem to have f.g. biotite growths inside. Mod. magnetic. Wk FeOx. No veining, sulphide.

Au	Ag		
40	<.1	40	24

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hand sx

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DATE Oct. 3, 1996
Nº 24667 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION grid 8640N 6190E
KIND OF SAMPLE float - very common
DESCRIPTION Andesite, probably tuff. Med green/grey, fine-grained. Mod. fx, w/ very minor py + FeOx on fx. Mod-sty magnetic

Au	Ag		
49	0.1	<10	220

---

hand sx.

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DATE Oct. 3, 1996
Nº 24668 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8635N 6190E
KIND OF SAMPLE float - not common
DESCRIPTION Veined-up felsic intrusive + minor andesite (which is chloritized). Grey qtz veins w/ open, toothy structure + mod. FeOx (earthy). Similar to sx #24632. Not magnetic.

Au	Ag		
154	0.9	47	530

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DATE Oct. 3 1996
Nº 24669 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION grid 8615N 6180E
KIND OF SAMPLE float - very common
DESCRIPTION Brecciated felsic intrusive (very fine-grained) w/ qtz +/- chlorite veinlets. Possible K-spar flooding. ~10% veinlets. Not magnetic. Very wk FeOx on some fx.

Au	Ag	As	Cu
181ppb	0.2ppm	23ppm	230ppm

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DATE Oct. 3 1996
Nº 24670 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION grid 8600N 6195E
KIND OF SAMPLE float - common
DESCRIPTION Tuffaceous andesite like #667, w/ common fx + qtz-epidote/chlorite veinlets w/ tr py => FeOx + minor mt Mod magnetic.

Au	Ag		
19	<.1	<10	110

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DATE 10/3/96
Nº 24671 SAMPLED BY PLK
OWNER OR CLAIM Stewart
LOCATION ~30 m south of 80N 5520E approx 8?40N 5550E
KIND OF SAMPLE grab from float
DESCRIPTION weakly chlor/ep alt diorite with epidote vnlt stkwk; Mn/Fe ox on fracs

Au	Ag		
<5	<.1	<10	41

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DATE 10/3/96
Nº 24672 SAMPLED BY PLK
OWNER OR CLAIM Stewart
LOCATION main road just south of 82N line 8190N/6140E
KIND OF SAMPLE 1m chip
DESCRIPTION dusty, weath, mod chlor/ep alt, pyritic andesite; fracturing evident, numerous magnetite vnlts and sec qtz vnlt; noticed rusty clicks in some float
N15W 60E fracture

Au	Ag		
<5	<.1	<10	37

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DATE 10/3/96
Nº 24673 SAMPLED BY PLK
OWNER OR CLAIM Stewart
LOCATION same as 24672
8190N 6140E
KIND OF SAMPLE 1m chip
DESCRIPTION same as 24672

Au	Ag		
<5	<.1	<10	27

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DATE 10/3/96
Nº 24674 SAMPLED BY PLK
OWNER OR CLAIM Stewart
LOCATION same as 24672
8190N 6140E
KIND OF SAMPLE 1m chip
DESCRIPTION same as 24672

Au	Ag		
108	<.1	<10	55

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DATE 10/3/96
№ 24675
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION on main road close to 8310
6210E 6215E 8315 N
KIND OF SAMPLE 2m grab from pit below outcrop
DESCRIPTION fine grained porph andesite w/ chlor alt; pervasive dissem py (0-2%); occ qtz vnlt; weakly magnetic

Au	Ag	As	Cu
14ppb	<.1ppm	<10ppm	57ppm

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DATE 10/3/96
№ 24676
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION along road
5230N 6160E
KIND OF SAMPLE grab from float, subcrop
DESCRIPTION rusty weathering fine grained intrusive rk. w/ abd chlor/ep. occ qtz vnlt and strong FeOx on all fracs – rock appears granitic or monzonitic

Au	Ag		
31	<.1	20	150

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DATE 10/3/96
№ 24677
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION same as 24676
KIND OF SAMPLE grab from float
DESCRIPTION brecciated, pyritic mod to strongly altered andesite(?); strong FeOx, stkwk qtz vnlts; not magnetic tho swirly dk vein like textures are common
formerly porph andesite?

Au	Ag		
161	03	20	340

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DATE 10/4/96
№ 24678
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION Minnova South Grid
~ 14S 685W [approx 7910 N 6580 E]
KIND OF SAMPLE grab from float
DESCRIPTION fine to med grey green andesite w/ dissem py, pyritic vnlts and very strong FeOx on all weathered surfaces and fractures

Au	Ag		
209	0.3	<10	290

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DATE 10/4/96
№ 24679
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION ~ 14S 655W on Minnova South Grid [~6580 E ~7910 N]
KIND OF SAMPLE grab of float
DESCRIPTION med to crse grained fspar porph andesite, gray green color; very rusty weathering, dissem py to 1-2%; occ pyritic vnlt

Au	Ag		
83	0.1	<10	92

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UTM
6540 E
7900 N

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DATE 10/4/96
№ 24680
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION about 10m uphill from 23971 close to Minnova 14S 730 or 725 W
KIND OF SAMPLE grab from float
DESCRIPTION v. rusty, strongly pyritic med grained gray green porph and. – mod to strong prop alt; strongly fractured, local qtz vnlts

Au	Ag		
587	0.3	<10	260

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UTM
7930 N
6445 E

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DATE 10/4/96
№ 24681
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION ~~555E~~ 515E from notch from road jct; between 1350S/800W and 1400S 825 W
~ 35 m S35W from 1350S/800 W
KIND OF SAMPLE ~~grab over 3m from outcrop~~
DESCRIPTION v. rusty, heavily fractured; pervasively locally silic mafic andesite; rocks appear to have been orig. strongly chloritized (propyl) then later silicified or pyrite dissem/on fracs, up to 5-7% total; FeOx ranges from black red to orange and local ochre colors

Au	Ag	As	Cu
264ppb	0.1ppm	<10ppm	170ppm

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DATE 10/4/96
№ 24682
SAMPLED BY PWK
OWNER OR CLAIM Stewart
LOCATION Minnova 1350S/825W
UTM 6437E 7960N
KIND OF SAMPLE grab over 1m oc
DESCRIPTION v. rusty, pyrite-rich, silic. porphyritic andesite; textures generally obliterated but can see fspar phenos and occas. mafic pheno

Au	Ag		
29	0.1	<10	180

~20m S12W from Minnova 1350S 775W

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DATE 10/17/96
№ 24683
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION top of outcrop - v. close to 23977 (~15 m N15W) 7940N 6490E
KIND OF SAMPLE 1x1m grab
DESCRIPTION silicified very rusty weathering grey green fragmental pyrrhotite/pyrite up to 5% dissem; v. strong FeOx on fracs + all weathered surfaces
N15-20E/vert fracs

Au	Ag	As	Cu	Bi
215ppb	0.2ppm	<10ppm	130ppm	6.5ppm

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DATE 10/17/96
№ 24684
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION 3m N30E of previous
7940 N 6490 E
KIND OF SAMPLE 1x1 m grab
DESCRIPTION same as 24683

Au	Ag			
115	0.1	<10	210	44

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DATE 10/17/96
№ 24685
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION 2m N50W from 24683 (about 2m downhill) 7940N 6490E
KIND OF SAMPLE 1x1m grab
DESCRIPTION same as 24683

Au	Ag			
85	0.1	<10	160	35

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DATE 10/17/96
№ 24686
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION ~4m N60W from 24683
7940 N 6490E
KIND OF SAMPLE 1x1 m grab
DESCRIPTION same as 24683
strong N15-20E fracturing

Au	Ag			
153	<.1	<10	72	34

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DATE 10/17/96
№ 24687
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION ~10 m NOW from 24683
7940 N 6490E
KIND OF SAMPLE 1x1 m grab from oc.
DESCRIPTION same as 24683

Au	Ag	As	Cu	Bi
13ppb	0.2ppm	<10ppm	150ppm	33ppm

ORVANA

UTM
7565 E
9835 N

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DATE 10/17/96
№ 24688
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION ~ 80m E of DH
Minnova n. grid ~530N 300E
KIND OF SAMPLE 1x1 m grab from oc
DESCRIPTION rusty weath, silicified porphyritic andesite(?) – v. abd py/pyrrho – up to 3-5% clotty dissem

Au	Ag			
35	0.5	<10	290	28

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UTM

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DATE 10/17/96
№ 24689
SAMPLED BY PWK
OWNER OR CLAIM Stewart/Dog
LOCATION Minnova N 450N 250E
9755 N 7515 E
KIND OF SAMPLE 1x1 grab from outcrop
DESCRIPTION propyl alt porphyritic andesite – up to 5% dissem py; locally silicified

Au	Ag			
64	0.3	<10	160	46

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DATE Sept 17 1996
№ 24701 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Same as #24587
Grid 8830N 6300E
KIND OF SAMPLE subcrop - float
DESCRIPTION Andesitic tuff same as sx #24587. Porphyritic in some pieces (variable) 3-5% dissem po > py. Not magnetic. Minor py veinlets. Mottled grn, grey to brownish. Stg FeOx. Minor fragmental, most could pass for andesite porph flows.

Au	Ag	As	Cu
1697ppb	0.2ppm	10ppm	180ppm

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DATE Sept. 17 1996
№ 24702 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION 3m uphill of #701
grid 8880N ~~6305~~ 6297E
KIND OF SAMPLE out from oc
DESCRIPTION Andesite, probably a tuff. Fine to med grained porphyritic (augites). Dk green/grey. Tr-2% dissem py, minor stringers. Not too altered. Not magnetic. Mod FeOx on fx.

Au	Ag		
268	<.1	12	43

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DATE Sept. 17 1996
№ 24703 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Up W side of swale from #702
grid 8850N 6280E
KIND OF SAMPLE Float - common (close to source)
DESCRIPTION Porphyritic andesite, variable grain sizes w/ 2-4% dissem py > po. Phenocrysts of mafics. Wk silicification. Med greenish grey. No veining. Stg FeOx. Could be tuff? but frags not apparent.

Au	Ag		
1626	0.3	23	260

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DATE Sept. 17 1996
№ 24704 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION 8830N 6245E
KIND OF SAMPLE float - uncommon
DESCRIPTION Feldspar porphyry w/ 3% dissem v.f.g. po. No veining, not much altered. Lineation in phenos. Stg FeOx stain.

Au	Ag		
47	0.2	<10	40

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DATE Sept. 17 1996
№ 24705 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION E side of gully bottom
grid 8745N 6340E
KIND OF SAMPLE subcrop
DESCRIPTION Porphyritic basalt w/ augite phenos + 2% dissem + fx coating po + py. Not much altered.

Au	Ag		
71	0.1	26	100

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DATE Sept. 18 1996
№ 24706 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8730N 6230E
KIND OF SAMPLE Float - not too common
DESCRIPTION Brecciated andesite + possibly monzonite. Epidote alt. is pervasive. 1% dissem v.f.g. py, and 3% mt veinlets. Mod. FeOx stain. Most rock is various propylitic andesite, minor mz/dio.

Au	Ag		
89	0.3	<10	80

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DATE Sept 18 1996
№ 24707 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8810N 6160E
KIND OF SAMPLE Float - not common
DESCRIPTION Andesite w/ mt vlts + tr-4% dissem py. Magnetic. Rock is propylitic tr-mod silicified? Mod. FeOx.

Au	Ag	As	Cu
114ppb	0.1ppm	<10ppm	250ppm

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hand sx

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DATE Sept. 18 1996
№ 24708 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8800N 6140E
KIND OF SAMPLE Float - not common
DESCRIPTION Porphyritic monzonite w/ epidote > py > cpy veinlets; malachite stain. Rock may be K-spar altered (feldspar phenos are pinkish). Only moderately magnetic (no mt in veinlets). Groundmass is v.f.g., med greenish grey.

Au	Ag		
303	0.4	<10	330

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DATE Sept. 18 1996
№ 24709 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8850N 6100E
KIND OF SAMPLE Float - ubiquitous
DESCRIPTION Fine-grained porphyritic monzonite w/ minor mt veinlets + common epidote (chlorite on fx + in matrix. Dissem earthy orange clots - weathered ferrodolomite? Also minor py w/ vlts of ep, mt. Groundmass practically aphanitic. Mod magnetic.

Au	Ag		
28	<.1	<10	74

---

hand sx

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DATE Sept. 18 1996
№ 24710 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8885N 6090E
KIND OF SAMPLE Float - common
DESCRIPTION Andesitic tuff fine-med grained + crystalline, w/ minor magnetite veinlets. Lt-dk grey + massive, weak alt. (propylitic). Mod. FeOx on fx. Mod. magnetic. Also tr-1% dissem py in bands.

Au	Ag	As	Cu
122	0.1	<10	120

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DATE Sept. 18 1996
№ 24711 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid ~~88 8983N~~
8893N 6090E
KIND OF SAMPLE Float - fairly common
DESCRIPTION Porphyritic monzonite w/ mt veinlets, spidery @ various angles. Mafics chloritized. Red tan-ish grey. Mod. magnetic.

Au	Ag		
34	0.1	<10	87

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DATE Sept 18 1996
№ 24712 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8925N 6080E
KIND OF SAMPLE Float - common
DESCRIPTION Felsic monzonite porphyritic w/ minor mt veinlets + 1-3% dissem m.g. blebs of py. Bleached greyish tan. Mafics weakly sil'z. Wk-med magnetic. Mod FeOx stain. Various mz intrusive types in float.

Au	Ag		
288	0.3	<10	182

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DATE Sept. 18 1996
№ 24713 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Grid 8708N 6145E
KIND OF SAMPLE Subcrop
DESCRIPTION Subvolcanic intrusive or diorite w/ inclusions of more mafic volcanic. Stg magnetic. No veining; dissem mt. Mod propylitic alt. Fairly felsic.

Au	Ag	As	Cu
4ppb	0.1ppm	<10ppm	64ppm

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DATE Sept. 20 1996
№ 24714 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Approx grid 8970N 6800E
KIND OF SAMPLE Subcrop grab
DESCRIPTION Andesite. Grungy, fractured, w/ calcite veinlets + pervasive propylitic alt (only tr py). Not magnetic.

Au	Ag		
16	0.1	<10	46

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DATE Sept. 20 1996
№ 24715 SAMPLED BY RTF
OWNER OR CLAIM Stewart / Dog
LOCATION Approx grid 8980N 6720E
5m E of swale
KIND OF SAMPLE Float - common
DESCRIPTION Feldspar porphyry w/ 5% dissem v.f.g. py > po. Minor py veinlets. Very stg FeOx. Not magnetic.
Some rhyolite around in float.

Au	Ag		
13	0.1	11	33

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DATE Sept. 20 1996

№ 24716 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Somewhere at near grid 9050N 6530E

KIND OF SAMPLE float - common

DESCRIPTION white vein qtz w/ vuggy spaces & vuggy areas +/- brick red FeOx. Wall rock is chloritized andesite that looks pretty dead.

Au	Ag				
8	0.1	<10	22		

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DATE Sept. 20 1996

№ 24717 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Grid 9190N 6420E

KIND OF SAMPLE grab

DESCRIPTION Brecciated andesite + diorite, possibly an intrusive breccia. Silicified, with 1-3% dissem. py. Not magnetic.

Au	Ag				
25	0.1	20	120		

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DATE Sept. 20 1996

№ 24718 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9215N 6230E

KIND OF SAMPLE float in road

DESCRIPTION Porphyritic basalt w/ augite phenocrysts. Cloth of dissem. po, Mod. silicified. Not magnetic.

Au	Ag				
132	0.2	22	190		

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DATE Sept. 20 1996

№ 24719 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9170N 6150E

KIND OF SAMPLE grab from rubble

DESCRIPTION Altered porphyritic andesite. Bleached & mod. silicified, w/ 2-4% dissem. fg. py > py. Weakly magnetic, Moderately fractured V. stg FeOx. Approx 50m east of NW trending notch. Mafic phenos.

Au	Ag	As	Cu		
76ppb	0.1ppm	12ppm	140ppm		

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DATE Sept. 20 1996

№ 24720 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION Short adit @ grid 9150N 6165E

KIND OF SAMPLE grab - E rib @ portal

DESCRIPTION Bleached, silicified porph. andesite. Lt. grey to tan. 2-3% dissem py > py. Not magnetic. Stg Fx @ 290° 90°, 340° 90°, 060° 90°. Very stg FeOx. Adit ~3m deep, goes NW.

Au	Ag				
93	0.2	20	170		

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DATE Sept. 20 1996

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№ 24721 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9100N 6055E

KIND OF SAMPLE float - exceptional

DESCRIPTION Andesite w/ 25% magnetite veinlets, 1-10mm. Pinkish selvages along veins of K-spar? Rock seems propylitic alt., greenish grey. Weakly porphyritic w/ hornblende phenocrysts.

Au	Ag				
231	0.3	12	150		

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DATE Sept. 20 1996

№ 24722 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION same as #721 grid 9100N 6057

KIND OF SAMPLE float - not common

DESCRIPTION Volcanic - andesitic tuff? Strongly fractured w/ veinlets & selvages of qtz & possibly K-spar? Mod. stg magnetic

Au	Ag	As	Cu		
117	0.2	<10	200		

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DATE Sept. 20 1996

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№ 24723 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9110N 5980E

KIND OF SAMPLE Float - common & close

DESCRIPTION Porphyritic fg. monzonite, locally fractured. Stg. magnetite veinlets (1-5%) & selvages of K-spar epidote & qtz; almost pervasive flooding. Strongly magnetic

low - K-spar?

Au	Ag		Cu		
183	0.2	<10	91		

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DATE Sept. 20 1996

№ 24724 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9125N 5965E

KIND OF SAMPLE grab from o.c.

DESCRIPTION Fine-grained diorite w/ 5% dissem. magnetite. Minor epidote selvages, mod propylitic alt.

low high

Au	Ag		Cu		
26	0.1	<10	210		

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DATE Sept. 20 1996

№ 24725 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9035N 5985E

KIND OF SAMPLE float - common

DESCRIPTION Fine-grained diorite / monzonite altered & bleached green to pink. Magnetic veinlets & qtz-K-spar stringers along fx. Brecciated. Stg. magnetic.

Au	Ag	As	Cu		
216ppb	0.2ppm	<10ppm	150ppm		

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DATE Sept. 20 1996

№ 24726 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9005N 6070E

KIND OF SAMPLE float - common

DESCRIPTION Porphyritic hornblende phyre w/ biotite books. Pervasive hematite.

Au	Ag				
20	0.1	<10	47		

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DATE Sept. 20 1996

№ 24727 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9000N 6065E

KIND OF SAMPLE float - common

DESCRIPTION Altered, brecciated andesite or fg. diorite Tr dissem py, stg FeOx. Chloritic alt. Mod - stg magnetic

Au	Ag				
69	0.1	<10	85		

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DATE Sept. 24 1996

№ 24728 SAMPLED BY RTF PK

OWNER OR CLAIM Stewart

LOCATION Minora grid, 20m from E end of drill rd ~ 77615 E 59950 N

KIND OF SAMPLE float - not common

DESCRIPTION Brecciated, altered andesite, possibly fragmental. Bleached & mottled light grey, silicified. Fine breccia matrix filling of pyrite w/ box texture. Very stg limonite. Not magnetic.

Au	Ag				
152	0.2	11	170		

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DATE Sept. 24 1996

№ 24729 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION 50m uphill from E end of Cavers drill rd 77615 E [redacted] N 59990 N

KIND OF SAMPLE float - some around

DESCRIPTION Feldspar porphyry w/ common veinlets of grey qtz @ a couple angles. Tr-1% dissem fg. py. Mod-stg limonite, partly silicified; not very altered. Not magnetic.

Au	Ag	As	Cu		
33	0.1	<10	38		

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DATE Sept. 24 1996

№ 24730 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION Ridge crest straight uphill from E end of Cavers drill rd, Minora grid 8+70N 77615 E 60080 N 3+50E

KIND OF SAMPLE Grab

DESCRIPTION Feldspar porphyry, mod silicified w/ common dissem py > po (~5%) & veinlets of py. Very stg limonite. Occurs along narrow (~1m) fx zones @ 340° 90°, & to lesser extent 080° 90°. Not magnetic. Matrix green.

Au	Ag				
37	0.2	<10	89		

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DATE Sept. 24 1996

№ 24731 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION N side Creighton ridge on Minnova anomaly Minnova grid 9+80N 4+50E 77315 E 60490N

KIND OF SAMPLE float - common

DESCRIPTION Tuff. Hornfelsy, banded grey to greenish w/ parallel bands of heavy po py disem. Also py veinlets. No magnetic. Bleached + mod. silicified. V. stg limonite

Au	Ag	As	Cu		
14ppb	0.1ppm	44ppm	58ppm		

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DATE Sept 24 1996

№ 24732 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION Minnova grid 9+80N 3+20E 77585 E 60490 N

KIND OF SAMPLE float - rot rusty

DESCRIPTION Altered volcanic or possible sediment. Grey to tan w/ rusty oxides w/ 2-3% disem clots of po (m.g.) + probable sulfide veinlets → FeOx. Mod FeO alt + silicification. Not magnetic

Au	Ag				
532	0.2	45	96		

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DATE Sept 24 1996

№ 24733 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION Minnova grid 9+35N 3+25E 77590E 60245N

KIND OF SAMPLE subcrop grab

DESCRIPTION Fine-grained feldspar porphyry? Med grey to tan w/ minor feldspar phenos (<5%) + aphan. groundmass. 5% disem fg. po + minor py veinlets. Stg FeOx Not magnetic.

Au	Ag				
45	0.3	18	110		

hard sx

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DATE Sept. 24 1996

№ 24734 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION Minnova grid 9+60N 3+35E 77600E 60220N

KIND OF SAMPLE float - very common

DESCRIPTION Dacite? 5-10% hornblende needles in lt. grey, bleached, silic groundmass w/ 5% disem po + minor veinlets. Very stg dk limonite Not magnetic. Also crusty limonite after sulphide veinlets

Au	Ag				
72	0.2	18	120		

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DATE Sept 24 1996

№ 24735 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION Affton Minnova grid 5+90N 0+60E 77325E 59900N

KIND OF SAMPLE float - fairly common

DESCRIPTION Fe feldspar porphyry w/ qtz veinlets w/ sl. accomp. dec. py - 3% disem + clots of po. Not magnetic.

Au	Ag				
109	<.1	11	30		

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DATE Sept. 24 1996

№ 24736 SAMPLED BY RTF

OWNER OR CLAIM Stewart

LOCATION Affton Minnova grid 5+50N 0+50E 77315 E 59860N

KIND OF SAMPLE float - not common

DESCRIPTION Quartz vein in altered bleached feldspar porphyry. Vuggy w/ leached open spaces + minor remnant py. Stg FeOx

Au	Ag	As	Cu		
45	0.1	260	20		

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hard sx

DATE Oct. 2 1996

№ 24737 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9620N 5860E, altered - in skid rd

KIND OF SAMPLE float - not common

DESCRIPTION Strongly silicified + bleached diorite? Or possibly andesite. Clots of py → FeOx yellow to org/brn FeOx. No veining. Not magnetic

Au	Ag	As	Cu	Mo	
39ppb	0.2ppm	<10ppm	45ppm	23ppm	

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hard sx

DATE Oct. 2, 1996

№ 24738 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9620N 5880E - same as # 737

KIND OF SAMPLE float - not common

DESCRIPTION Andesitic tuff. Fine-grained, weakly banded dk brownish grey (dissem 2nd ary biotite?). 5% disem v.fg. py/po. Very weakly magnetic Stg dk org/brn FeOx on surfaces. No veining. Silicified.

Au	Ag			Mo	
22	0.1	<10	230	70	

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DATE Oct. 2, 1996

№ 24739 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9615N 5870E, old skid trail.

KIND OF SAMPLE float - common

DESCRIPTION Sericite altered, fine-grained, weakly porphyritic monzodiorite? Groundmass + feldspars are mod. sericitized. Minor but fairly abundant xenoliths of volcanic + clots of biotite aggregates, mafics → chlorite. Stg med org/brn FeOx on surfaces + pervasive. No sulphides left. No veining.

Au	Ag			Mo	
11	0.3	<10	31	3	

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hard sx

DATE Oct. 2 1996

№ 24740 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9600N 5885E skid trail

KIND OF SAMPLE float - very common

DESCRIPTION Fine-grained, weakly porphyritic diorite or monzodiorite, w/ 3% disem fg py > po. Very stg dk FeOx on surf. No veining. Silicified. Not magnetic.

Au	Ag			Mo	
16	0.2	<10	390	63	

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DATE Oct. 2 1996

№ 24741 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9570N 5900E

KIND OF SAMPLE float - fairly common

DESCRIPTION Fine-grained diorite or monzodiorite w/ common magnetite vlts epidote k-spar + qtz veinlets. Not too altered. Strong magnetic.

Au	Ag			Mo	
19	0.1	<10	100	<2	

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DATE Oct. 2 1996

№ 24742 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9610N 5820E old skid trail, 15m downhill (270° az) from # 743

KIND OF SAMPLE float - not common

DESCRIPTION Phyllic altered fg. diorite / monzodio. Bleached lt. grey, w/ sericitic alt. of feldspars. 5% disem v.fg. py or dk grey sulphide Not magnetic. Minor py on fx. Not veined.

Au	Ag			Mo	
32	0.1	17	260	11	

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(208) 667-6000

DATE Oct. 2 1996

№ 24743 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9615N 5830E edge of altered skid rd

KIND OF SAMPLE float - common

DESCRIPTION Fine-grained monzodiorite w/ common veinlets of qtz ksp + epidote. Tr. malachite on fx Also minor zones of magnetite ; only wk-mod magnetic overall. Siliceous, mafics chloritized.

Au	Ag	As	Cu	Mo	
21ppb	0.1ppm	<10ppm	12ppm	<2ppm	

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DATE Oct. 2, 1996

№ 24744 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9500N 5770E old altered logging rd

KIND OF SAMPLE float - ubiquitous

DESCRIPTION Fine-grained mafic diorite equigranular w/ minor calvages / vlts of epidote qtz + fr sulphide → FeOx. Mod magnetic (disseminated mt). Hardly altered.

Au	Ag				
5	<.1	<10	110	<2	

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DATE Oct. 2 1996

№ 24745 SAMPLED BY RTF

OWNER OR CLAIM Stewart / Dog

LOCATION grid 9625N 5500E, logging rd

KIND OF SAMPLE float - common

DESCRIPTION Andesitic tuff? Mod. porphyritic (mafics) w/ fine-grained aphanitic + med grey to brownish (2nd ary biotite?). 2-3% disem fg. py. Not magnetic.

Au	Ag				
15	0.1	<10	170		

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DATE Oct. 2, 1996
№ 24746 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 9720N 5520E old logging rd.
KIND OF SAMPLE rubble
DESCRIPTION Andesite Porphyritic (f.g. matrix) + prisibly biotite altered as groundmass has brown tint. Minor chlorite veinlets; not very altered looking. Not magnetic. No sulphide.

Au	Ag				
16	<.1	<10	40		

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DATE Oct. 3, 1996
№ 24747 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8220N 6605E
KIND OF SAMPLE grab
DESCRIPTION Andesite. Med-dk grey, minor brown tints. Porphyritic + grungy w/ minor biotite phenos. Grungy 1-3% dissem + clots v.f.g. py. Not magnetic. Very stg red dk org/brn FeOx.

Au	Ag				
151	0.1	<10	97		

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DATE Oct. 3, 1996
№ 24748 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8210N 6600E
KIND OF SAMPLE grab
DESCRIPTION Andesite, mafic +/- augite phenocrysts, 2-4% dissem py, po; po replaces mafics. No veining. Very stg red-dk org-red brn FeOx. Weak silicification. Wk magnetic.

Au	Ag				
16	<.1	<10	74		

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DATE Oct. 3, 1996
№ 24749 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8220N 6670E
KIND OF SAMPLE grab
DESCRIPTION Agglomerate, andesitic. Fairly mafic w/ some augite phenos, wk silicified, w/ 2-3% dissem v.f.g. py. Very stg dk red/org/brn FeOx on all surfaces. Dk mottled grey color. No veining.

Au	Ag				
18	<.1	<10	64		

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DATE Oct. 3, 1996
№ 24750 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8190N 6770E
KIND OF SAMPLE grab over 2m
DESCRIPTION Andesitic agglomerate w/ 2-3% dissem f.g. py, wk silicification. Stg fx set @ 040° 90°; weaker @ 310° 90°. Stg. dk org/brn FeOx. No veining. Fairly mafic.

Au	Ag	As	Cu		
116ppb	<.1ppm	<10ppm	73ppm		

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DATE Oct. 3, 1996
№ 24751 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8195N 6700E
KIND OF SAMPLE grab
DESCRIPTION Andesitic agglomerate w/ common augite phenocrysts + tr-3% dissem. f.g. pyrrhotite. Very stg dk org/brn FeOx, no veining. Weak silicif. + bleaching. Stg fx @ 050° 90°; minor fx @ 315° 90°. Highly fx.

Au	Ag	As	Cu		
71ppb	<.1ppm	<10ppm	73ppm		

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DATE Oct. 3, 1996
№ 24752 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8200N 6690E
KIND OF SAMPLE grab
DESCRIPTION Mafic andesitic agglomerate. Weakly silicified, strongly fractured + tr-4% dissem. py > po. No veining. Very stg dk org/brn FeOx. Fx sets @ 000-020° 90° and 090° 90°. Highly fractured. Grey

Au	Ag				
203	<.1	<10	110		

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DATE Oct. 3, 1996
№ 24753 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8180N 6725E
KIND OF SAMPLE grab, small o.c.
DESCRIPTION Porphyritic andesite w/ 4% dissem clots of pyrrhotite. Weakly silicified Feldspar phenocrysts. Weakly magnetic. No veining. Very stg dk org/brn FeOx. Highly fx.

Au	Ag				
12	<.1	<10	66		

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DATE Oct. 3, 1996
№ 24754 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION 8175N 6720E
KIND OF SAMPLE float - common
DESCRIPTION Blamish f.g. tuff weakly porphyritic, w/ 4% dissem f.g. po (minor po on fx) Weakly magnetic, weakly silicified. Very stg. red dk org/brn FeOx No veining. Fractured.

Au	Ag				
50	0.1	<10	57		

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hand sx
DATE Oct. 3, 1996
№ 24755 SAMPLED BY RTF
OWNER OR CLAIM Stewart/Dog
LOCATION grid 8190N 5690E
KIND OF SAMPLE grab
DESCRIPTION Bleached, silicified lt. grey to tan andesite w/ 3% dissem f.g. py. Highly fractured w/ sets @ 040° 90°, 010° 90°. Not magnetic. No veining. Very stg dk org/brn FeOx.

Au	Ag				
31	<.1	<10	73		

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DATE Oct. 4, 1996
№ 24756 SAMPLED BY RTF PK
OWNER OR CLAIM Stewart
LOCATION Minova S grid 15+50N 5+40W ~~6725E~~ ~~7760N~~
KIND OF SAMPLE float - common
DESCRIPTION Fine-grained, equigranular lt. flamish grey andesite / tuff, w/ 5% dissem po > py, + minor py on fx. Very stg red-dk org/brn FeOx. Weakly magnetic. Vague brownish tint - biotite?

Au	Ag				
28	0.2	<10	85		

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DATE Oct. 4, 1996
№ 24757 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Same as # 756
~~6725E~~ ~~7760N~~
KIND OF SAMPLE float
DESCRIPTION Fine-grained pyroxene porphyritic mafic andesite (+/- biotite) Dissem. 1-2% po, py (v.f.g.) Not magnetic. Med-dk org/brn FeOx. Wk pervasive propyll. alt. No veining

Au	Ag	As	Cu		
<5ppb	<.1ppm	<10ppm	61ppm		

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DATE Oct. 4, 1996
№ 24758 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minova S grid 15+25S 5+40W
~~6705E~~ ~~7785N~~
KIND OF SAMPLE grab - small o.c.
DESCRIPTION Andesite. Variably bleached to lt-med tarnish grey. Porphyritic w/ variable mafic + feldspar phenos. Highly fractured, w/ sets @ 010° 90°, 320° 90° (steep), + 050° 90°. Wk-med silic. 1-2% dissem po > py. Not magnetic. v. stg red-dk org/brn FeOx.

Au	Ag				
20	0.1	15	51		

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DATE Oct. 4, 1996
№ 24759 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Same as # 758
6705E 7785N
KIND OF SAMPLE grab - small o.c.
DESCRIPTION Feldspar porphyry. Weakly bleached + silicified. V. stg dk red/brn FeOx. Tr dissem sulphide. Mafics chloritized. Not magnetic. Stg fx @ 050° 85°NW. No veining

Au	Ag				
14	<.1	<10	29		

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hand sx
DATE Oct. 4, 1996
№ 24760 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Same as # 759
6705E 7785N
KIND OF SAMPLE float - common
DESCRIPTION Augite porphyritic basalt. Variable fine - coarse grained augite phenos in dk grn/grey groundmass. Tr - 2% dots of py (f.g.). Not magnetic. Very stg dk org-red/brn FeOx. Highly fx.

Au	Ag				
54	<.1	<10	45		

hand Sx

2005 Iron[illegible]rkway
Coeur d'Ale[illegible]io 83814
(208) 66[illegible]-6000

DATE Oct. 4, 1996
№ 24761 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minnova S grid 15+00S, 6+00W
6665E 7810N
KIND OF SAMPLE character from small o.c.
DESCRIPTION Porphyritic pyroxenite or basalt. Coarse grained - 3-5mm black augites that are both phenos + aggregate clots. Dk greenish black Pyrtz. Clots + vague stringers of py (not in fiber material) 10% of sx. Seems to be along 020° zone, only ~5cm wide, stg FeOx.

Au	Ag	As	Cu		
869ppb	0.7ppm	47ppm	230ppm	___	___

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 4, 1996
№ 24762 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Same as # 761
6665E 7810N
KIND OF SAMPLE grab from small o.c.
DESCRIPTION Porphyritic augite pyroxenite or basalt w/ coarse crystal aggregates - same as # 761 but w/o py. Not magnetic. Not very fx. Mod FeOx.

Au	Ag				
59	<.1	<10	17	___	___

[illegible]Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 4, 1996
№ 24763 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minnova S grid 15+30S 6+15W
(same as DENB-5030, 5031) 6650E 7780N
KIND OF SAMPLE float - several pieces
DESCRIPTION Subvolcanic intrusive diorite w/ feldspar crystal lineation, med grained, weakly porph (feldspar) 2% dissem m.g. pyrite. Lt. grey, moderately silicified. Stg med-dk org/brn FeOx. Not magnetic. No veining.

Au	Ag				
25	0.1	<10	120	___	___

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 4, 1996
№ 24764 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minnova S grid 14+90S 6+50W
6685E 7820N
KIND OF SAMPLE grab from small o.c.
DESCRIPTION Augite porphyritic mafic andesite. Dk greenish/grey w/ 20% augite phenos 3-4mm diam in fg. groundmass. Minor clots of py (<1%). Stg. FeOx (+ possible py → FeOx) along 340° 90° fx. Otherwise, wk fx, FeO. Not magnetic.

Au	Ag				
33	0.1	20	47	___	___

2005 Ironw[illegible]way
Coeur d'Alene, [illegible]o 83814
(208) 667-6000

DATE Oct. 4, 1996
№ 24765 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minnova grid 14+50S 6+60W
6605E 7860N
KIND OF SAMPLE float - several pcs
DESCRIPTION Porphyritic mafic andesite (augite phenos ~ 20%). Some fragmental texture w/ finer grained groundmass. Tr dissem py clots + tr po. Not magnetic. Mod, med. org/brn FeOx on fx. Wk crystalline dearth grey vlts - ?Tension?

Au	Ag				
47	<.1	<10	45	___	___

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DATE Oct. 4, 1996
№ 24766 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minnova grid 14+40S 6+35W
6630E 7880N
KIND OF SAMPLE float - common
DESCRIPTION Augite porphyritic basalt w/ 2-8% m.g. clots of euhedral pyrite, some almost in veins. Not magnetic. FeOx stain. Minor epidote alt as pervasive patches, otherwise pretty fresh.

Au	Ag	As	Cu		
177ppb	<.1ppm	22ppm	140ppm	___	___

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DATE Oct. 4, 1996
№ 24767 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION next to #766, grid 14+38S, 6+35W
6630E 7868N
KIND OF SAMPLE grab from small oc.
DESCRIPTION Porphyritic (augite) basalt w/ calcite fx coatings + veinlets. Wk FeOx. No sulph. Fx @ 330°, 90°, 280° 90°

Au	Ag				
50	<.1	<10	55	___	___

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DATE Oct. 4, 1996
№ 24768 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minnova grid 15+40S 4+60W
10m from landing e end of road 6805E 7770N
KIND OF SAMPLE float
DESCRIPTION Porphyritic augite mafic andesite/basalt. Dk green w/ black augite phenos, mt altered (wk chloritic?), 1% - 2% dissem fg. + blebs of m.g. pyrite. No veins. Not magnetic. Mod. FeOx stain.

Au	Ag				
36	<.1	<10	140	___	___

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DATE Oct. 4, 1996
№ 24769 SAMPLED BY RTF
OWNER OR CLAIM Stewart
LOCATION Minnova grid 15+60S 4+60W
6805E 7750N
KIND OF SAMPLE float - several pieces
DESCRIPTION Andesite flt? Dk brn grey, equigranular + fine grained. 5% dissem po >py (fg). No veinlets. Wk silicification. Stg dk org/brn FeOx on surfaces.

Au	Ag	As	Cu		
18ppb	0.3ppm	<10ppm	130ppm	___	___

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 6, 1995

№ 23951 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION ~100m up skid rd, N branch, across creek from end of lower logging rd.

KIND OF SAMPLE Subcrop - ripped open by rd.

DESCRIPTION Rhyolite - possibly tuff, Lt-med. tannish grey, looks bleached & altered (rather soft, not silicified), Disseminated fg. py ~5% (leached). Stg med-dk org/brn FeOx on fx + some disseminated, minor qtz evens. Adjacent to E-W running dry gully.

Au	Ag	As	Cu	Pb	Zn
14ppb	0.5ppm	110ppm	33ppm	<5ppm	18ppm

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 6, 1995

№ 23952 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Same as #953, 5m south

KIND OF SAMPLE grab

DESCRIPTION Fine-grained light brown equigranular monzonite? or latite? 5% disseminated fg. pyrrhotite. Mod. fx w/ stg lt-med. org/brn limonite. Weakly magnetic. Very little matrix component.

Au	Ag	As	Cu	Pb	Zn
113	0.3	24	160	<5	19

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

weakly magnetic

DATE Oct. 6, 1995

№ 23953 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Main grid @ o.c. past anomalous stream (N side of valley)

KIND OF SAMPLE grab

DESCRIPTION Porphyritic andesite or subvolcanic intrusive. Mottled dk green/grey w/ brown speckles, probably a flow. 1% disseminated fg pyrite dots. Stg med-dk limonite fractures @ 300°, 85°SW, 050°, 85°SE, and 310° 45°SW.

Au	Ag	As	Cu	Pb	Zn
26	<.1	21	99	<5	20

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

Weakly magnetic

DATE Oct. 6, 1995

№ 23954 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Same as #953, 5m north

KIND OF SAMPLE grab

DESCRIPTION Andesitic tuff, has lamellar look, med greenish grey & mottled. Bedding @ 310° 85°SW. 3% disseminated v.f.g. po >> py. Stg med-dk limonite on fx. Bedding @ 350° 50°NE

Au	Ag	As	Cu	Pb	Zn
90	.1	12	220	<5	9

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 8, 1995

№ 23968 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION S.th soil anomaly, grid 7+00W 10+40S, bare patch

KIND OF SAMPLE grab / rubble

DESCRIPTION Mafic porphyritic andesite, mod. fx, w/ py along fx + disseminated. Mod-stg med org/brn FeOx on fx. Very minor qtz veinlets. Open knob w/ o.c.

Au	Ag	As	Cu	Pb	Zn
20ppb	1ppm	76ppm	44ppm	<5ppm	27ppm

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2005 Ironwood Parkway
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(208) 667-6000

DATE Oct. 8, 1995

№ 23969 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Grid 6+90W 14+00S Prospect

KIND OF SAMPLE prospect colluvium / float

DESCRIPTION Felsic med. tan/brn aph/peoph volcanic w/ 3% disseminated py, some cubic. Possible minor qtz crusts along fx. Some mafic peoph/aph volcs also (not sx).

Au	Ag	As	Cu	Pb	Zn
<5	.1	30	34	<5	40

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(208) 667-6000

DATE Oct. 9, 1995

№ 23970 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Grid 8+60W 16+80S N side of ridge crest then 2 cks.

KIND OF SAMPLE float - not common

DESCRIPTION Mafic porphyritic andesite - basalt. Augite & feldspar phenos. Tr disseminated py. Minor veinlets of K-spar > qtz. Mod dk org/brn FeOx on fx surfaces.

Au	Ag	As	Cu	Pb	Zn
22	.2	56	73	<5	45

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(208) 667-6000

DATE Oct. 9, 1995

№ 23971 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Grid 9+00W 14+40S, S soil anomaly

KIND OF SAMPLE grab

DESCRIPTION Rusty bleached porphyritic andesite. Propylitized w/ pyrite on fx + disseminated. Also, dk gray sulphide coating some fx - fg. + greasy / soft. Stg FeOx. No qtz veining.

Au	Ag	As	Cu	Pb	Zn
660	.3	21	170	<5	12

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DATE Oct. 10, 1995

№ 23972 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION S anomaly grid 8+00W 13+80S

KIND OF SAMPLE float

DESCRIPTION Aphyritic andesite? Parallel hornblende phenos 1-3mm long. Not altered. 2% disseminated fg. pyrite. Mod-stg med org/brn limonite on surfaces. No qtz veining.

Au	Ag	As	Cu	Pb	Zn
18	<.1	17	81	<5	19

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(208) 667-6000

not magnetic

DATE Oct. 11, 1995

№ 23973 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Our grid 10+00W, 14+00S

KIND OF SAMPLE Subcrop

DESCRIPTION Andesitic volcanic / lapilli tuff. Dk green to grey w/ light patchy bleached (common), leached feldspars in some lapilli & phenocrysts. Stg med-dk org/brn FeOx on all fx. No qtz veining. Minor vuggy texture (leached).

Tr disseminated py

Au	Ag	As	Cu	Pb	Zn
49	43	24	94	<5	31

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(208) 667-6000

Not magnetic

DATE Oct. 11, 1995

№ 23974 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION S. grid, our 10+00W, 14+10S

KIND OF SAMPLE float - common (close)

DESCRIPTION Andesitic crystal lapilli tuff. Mod-stg bleaching assoc w/ fx, pretty hard. Vuggy weathered zones after py or possibly lapilli clasts. Stg limonite on fx, some gossanous crusts. No qtz veining. Mod. fx.

Au	Ag	As	Cu	Pb	Zn
163ppb	.1ppm	18ppm	88ppm	<5ppm	24ppm

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(208) 667-6000

not magnetic

DATE Oct. 11, 1995

№ 23975 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION S. grid, N side of ridge near crest, our 10+00W 15+80S

KIND OF SAMPLE prospect rubble

DESCRIPTION Volcanic conglomerate, 3% well rounded clasts of volcanic and sedimentary rock (incl. white quartzite) in dk grey/black fg sparkly matrix (fg. feldspar + biotite crystals??). Wk limonite on fx. No py.

Au	Ag	As	Cu	Pb	Zn
8	<.1	27	11	<5	76

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(208) 667-6000

weakly magnetic

DATE Oct. 11, 1995

№ 23976 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION S. grid, our 8+50W 14+30S

KIND OF SAMPLE float - close / common

DESCRIPTION Porphyritic andesite, augite & feldspar phenos, med-dk green/grey, groundmass looks silicified, but not much bleached. Mod. fx. w/ stg limonite. Bleached narrow selvages along some fx. 3% disseminated fg. py, probably more on fx (oxidized).

Au	Ag	As	Cu	Pb	Zn
20	.1	16	170	<5	23

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(208) 667-6000

not magnetic

DATE Oct. 11, 1995

№ 23977 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION S. Grid, our 9+30W 14+10S.

KIND OF SAMPLE float common (close)

DESCRIPTION Pyritic porphyritic (augite) andesite, med-lt. green/grey, wk-med. bleached. Py (3%) is clotty, possibly leached after fx. Mod. fx. w/ heavy limonite along fx + surfaces. Some vuggy leached zones (lapilli? or leached py?).

Au	Ag	As	Cu	Pb	Zn
83	.2	28	130	<5	23

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(208) 667-6000

not magnetic

DATE Oct. 11, 1995

№ 23978 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION S. Grid, our 9+20W 13+50S.

KIND OF SAMPLE float - common (close)

DESCRIPTION Pyritic andesitic clastic, probably crystal lapilli tuff, med green/grey, med. bleached, hard. Augite & feldspar phenos not much altered. 1-2% disseminated fg. py. No qtz veining. Stg limonite on fx surfaces.

Au	Ag	As	Cu	Pb	Zn
58	.1	17	140	<5	14

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 12, 1995

№ 23979 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION ~ 300m W of saddle w/ Stewart Cr. in rd bank

KIND OF SAMPLE grab

DESCRIPTION Black shale @ 020° 35° SE. Rusty limonite on fx. Mostly fine-gr. Probably siliceous - gr. ltg.

Au	Ag	As	Cu	Pb	Zn
59	.2	25	45	<5	150

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 12, 1995

№ 23980 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION lowest long leg of Cameco drill rd, 70m S of switchback, 1500m el.

KIND OF SAMPLE float in till - quite common

DESCRIPTION Rhyolite? Fine-grained lt. greyish tan equigranular rock, 1-3% py as stringers + clots, some dissem. One qtz stringer stg. lt-med brn/org FeOx is pervasive.

Au	Ag	As	Cu	Pb	Zn
20	1.6	71	250	16	87

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Coeur d'Alene, Idaho 83814
(208) 667-6000

not magnetic

DATE Oct. 12, 1995

№ 23981 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION 50m up rd from 2nd switchback, Cameco drill rd, 1560m el.

KIND OF SAMPLE float in till - character

DESCRIPTION Crowded plagioclase (25%) andesite porphyry, med greenish grey. Tr dissem f.g. py > py. 5% fuggy, clayey leached qtz veinlets (sulphides gone). Weak propylitic alteration. Not common (w/ qtz vlts).

Au	Ag	As	Cu	Pb	Zn
261	.1	21	41	<5	36

2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

Not magnetic

DATE Oct. 12, 1995

№ 23982 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION First Cameco drill site (southernmost), el. 1580m

KIND OF SAMPLE float - in road fill

DESCRIPTION Andesite volcanic, grungy, probably a lapilli tuff, frittied, vaguely look w/ 1-5% py + po both along fx + dissem. No vein qtz. Stg limonite. Fairly common here.

Au	Ag	As	Cu	Pb	Zn
118ppb	.2ppm	27ppm	140ppm	<5ppm	48ppm

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(208) 667-6000

DATE Oct. 12, 1995

№ 23983 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Cameco drill rd @ 1650m el, 50m past start of recontoured work

KIND OF SAMPLE character

DESCRIPTION Andesite, probably f.g. lapilli tuff. Sampled along 340° 80°SW fracture set that has mod-stg med brn/org limonite selvage. Another stg fx set @ 040° 80°SE (not sx).

Au	Ag	As	Cu	Pb	Zn
65	1.7	110	230	460	1200

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(208) 667-6000

not magnetic

DATE Oct. 12, 1995

№ 23984 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Cameco drill rd, ~1620m el.

KIND OF SAMPLE float

DESCRIPTION Rhyolite. Greyish tan weakly porphyritic, highly fx w/ qtz crusts + veinlets in fx. Vuggy texture, indicates sulphides leached from vlts. Minor clots of py. Pervasive med brn/org FeOx.

Fx in bank (andesite) @ 360 85°W, 300° 80°NE.

Au	Ag	As	Cu	Pb	Zn
226	.1	51	35	<5	30

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(208) 667-6000

DATE Oct. 13, 1995

№ 23987 SAMPLED BY RTF/ED

OWNER OR CLAIM Stewart - Craigtown

LOCATION S. grid, adit on S creek bank ~150m up ck from lower rd

KIND OF SAMPLE dump

DESCRIPTION Quartz - sulphide vein material. Milky white qtz, 10% c.g. pyrite, 5-10% dk sphalerite, + some soft dk grey sulphide.

Au	Ag	As	Cu	Pb	Zn
72	19.7ppm	14	130	530	9300

ORVANA

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 13, 1995

№ 23988 SAMPLED BY RTF

OWNER OR CLAIM Stewart - Craigtown

LOCATION Same as #987

KIND OF SAMPLE dump

DESCRIPTION Skarny volcanic + monzonitic intrusive? Green epidote pervasive. Cut by qtz/py stringers + hvy dissem py. Possibly wall rock to vein

Au	Ag	As	Cu	Pb	Zn
61	2.6	16	79	80	330

ORVANA

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 13, 1995

№ 23989 SAMPLED BY ED/RTF

OWNER OR CLAIM Stewart - Au Hill

LOCATION Cat strip ~50m above rd above 2nd switchback on E side

KIND OF SAMPLE character

DESCRIPTION Mostly qtz vein material w/ deep brick orange earthy FeOx - Pb/Zn? Minor volcanic porph (Rhyolite?) wall rock.

Au	Ag	As	Cu	Pb	Zn
1169	19.2	530	120	550	460

ORVANA

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE Oct. 13, 1995

№ 23990 SAMPLED BY RTF/ED

OWNER OR CLAIM Stewart - West Moly

LOCATION Between road on S side of summit, old bisted trench ~ 200m N of switchback

KIND OF SAMPLE dump

DESCRIPTION Bull qtz w/ b.g cg clots of pyrite. B.g vuggy leached boxworks mod-stg limonite. Blast cut is near snug, wall rock are qtz monzonite.

Au	Ag	As	Cu	Pb	Zn
404	1.2	43	10	19	50

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DATE 10/16/95

№ 23991 SAMPLED BY Pete Kaufman

OWNER OR CLAIM Stewart - Au Hill

LOCATION El. 4400' Trench

KIND OF SAMPLE

DESCRIPTION Light tannish white rhyolite, silicified, aphanitic. Cut by qtz veinlets w/ open spaces (leached sulphide?). Minor coarse-grained pyrite assoc. w/ box zones.

Au	Ag	As	Cu	Pb	Zn
83ppb	0.5ppm	110ppm	24ppm	43ppm	140ppm

ORVANA

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Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE 10/16/95

№ 23992 SAMPLED BY Mr Kaufman

OWNER OR CLAIM Stewart - Gold Hill

LOCATION El. 4480' Trench

KIND OF SAMPLE

DESCRIPTION Rhyolite, both aphanitic + silicified (almost white), and lt. grey weakly banded w/ f.g. qtz eyes in aphanitic groundmass. Light rhyolite is mod fx w/ minor qtz/limonite crusts.

Au	Ag	As	Cu	Pb	Zn
28	0.3	150	20	25	84

ORVANA

Orvana Resources Corp.
2005 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 667-6000

DATE 10/16/95

№ 23993 SAMPLED BY Mr Kaufman

OWNER OR CLAIM Stewart - Gold Hill

LOCATION Gold Hill Trench El. 4480'

KIND OF SAMPLE

DESCRIPTION Andesitic lapilli tuff or volcanic breccia. Very strong med-dk org/brn limonite, probably lots of dissem f.g. pyrite that's oxidized.

Au	Ag	As	Cu	Pb	Zn
8	0.2	120	85	5	190

APPENDIX 4

SOIL SAMPLE GEOCHEMISTRY

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Orvana Minerals Corp. File # 96-3358 Page 1

710 - 1177 W. Hastings St, Vancouver BC V6E 2K3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
89N 60+00E	2	389	14	120	.3	18	17	720	5.47	<2	<5	<2	2	44	<.2	2	<2	131	.46	.267	9	39	1.15	266	.18	<3	3.58	.01	.12	<2	<5	<1	65
89N 60+30E	1	314	10	103	.3	38	19	934	4.88	5	<5	<2	<2	39	<.2	2	<2	131	.45	.087	8	83	1.38	241	.26	4	3.80	.01	.17	<2	<5	<1	34
89N 60+60E	1	484	6	86	.8	27	21	586	4.89	<2	<5	<2	2	35	.2	4	<2	139	.38	.115	8	54	1.60	205	.29	<3	4.82	.02	.24	<2	8	<1	80
89N 60+90E	2	499	6	99	.3	23	26	645	5.25	<2	<5	<2	2	29	<.2	2	3	149	.28	.135	7	41	1.53	167	.25	<3	4.65	.01	.15	<2	<5	<1	62
89N 61+20E	3	1266	9	92	<.3	33	52	522	5.75	<2	<5	<2	2	43	<.2	3	3	170	.37	.172	11	37	2.00	234	.27	<3	6.11	.01	.38	<2	7	<1	117
89N 61+50E	1	85	6	109	<.3	35	23	1500	3.68	3	<5	<2	2	29	.6	3	4	73	.31	.476	9	54	.71	308	.20	<3	5.70	.02	.13	<2	5	1	30
89N 61+80E	1	165	8	99	<.3	60	38	830	5.00	13	<5	<2	2	34	.3	<2	<2	115	.36	.123	10	101	1.47	111	.24	<3	4.24	.02	.20	<2	<5	2	227
89N 62+10E	2	196	5	104	<.3	65	41	1026	5.22	12	<5	<2	<2	47	<.2	2	3	125	.49	.102	10	113	1.57	157	.23	<3	3.95	.02	.24	<2	<5	<1	73
89N 62+40E	1	163	13	92	<.3	52	28	1075	4.99	12	<5	<2	<2	43	<.2	<2	<2	123	.45	.108	8	98	1.50	124	.21	<3	3.46	.02	.21	<2	<5	<1	74
89N 62+70E	<1	128	9	114	<.3	63	33	1519	5.41	14	<5	<2	2	48	.2	4	<2	128	.47	.127	8	117	1.80	216	.23	<3	4.11	.01	.29	<2	5	<1	68
89N 63+00E	<1	129	9	109	<.3	43	29	902	5.91	9	<5	<2	<2	69	.3	3	2	149	.39	.113	8	72	1.88	182	.23	3	4.26	.01	.28	<2	6	<1	14
89N 63+30E	<1	150	3	145	<.3	140	43	1215	5.49	9	<5	<2	2	35	<.2	3	<2	119	.40	.217	6	240	2.37	180	.24	<3	4.69	.03	.54	<2	6	<1	30
89N 63+60E	<1	108	5	101	.3	29	25	1163	4.67	5	<5	<2	2	35	<.2	<2	7	109	.28	.139	10	48	1.14	152	.22	<3	3.94	.02	.18	<2	<5	<1	32
89N 63+90E	1	123	7	99	<.3	34	26	919	4.89	3	<5	<2	2	44	<.2	<2	<2	116	.40	.145	9	60	1.41	134	.21	<3	3.73	.02	.19	<2	<5	<1	18
89N 64+20E	<1	84	10	146	<.3	37	25	1076	4.56	4	<5	<2	<2	45	.5	<2	<2	96	.40	.235	8	63	1.29	235	.19	<3	3.47	.02	.18	<2	<5	<1	18
89N 64+50E	<1	102	3	137	<.3	33	26	1564	4.80	3	<5	<2	2	48	.7	<2	<2	114	.42	.233	11	57	1.28	219	.20	<3	3.83	.02	.18	<2	<5	1	65
89N 64+80E	2	146	13	144	<.3	27	32	1530	5.44	18	<5	<2	2	37	.5	2	2	133	.30	.133	9	43	1.68	201	.25	6	5.10	.01	.25	<2	6	1	46
89N 65+10E	<1	132	4	135	<.3	21	48	1338	5.52	10	<5	<2	<2	50	.4	<2	<2	137	.44	.190	7	29	2.09	243	.29	<3	5.15	.02	.35	<2	<5	<1	10
89N 65+40E	1	92	12	103	<.3	26	21	724	4.39	8	<5	<2	2	39	.3	2	4	103	.32	.140	10	41	1.08	144	.22	3	3.99	.02	.17	<2	5	<1	33
89N 65+70E	<1	119	7	77	<.3	32	20	519	4.47	9	<5	<2	<2	72	<.2	<2	<2	107	.62	.163	7	51	1.41	100	.17	<3	2.95	.02	.17	<2	<5	<1	35
89N 66+00E	1	117	12	180	<.3	30	34	847	6.09	46	<5	<2	2	41	.2	2	<2	148	.36	.257	7	45	2.10	181	.22	<3	4.79	.02	.56	<2	7	2	22
RE 89N 66+00E	1	122	9	183	<.3	29	36	863	6.20	42	<5	<2	2	42	.4	3	2	152	.36	.261	6	46	2.13	188	.22	<3	4.91	.02	.58	<2	7	<1	40
89N 66+30E	1	106	9	202	<.3	31	33	931	4.94	13	<5	<2	2	32	1.1	4	<2	115	.31	.158	7	40	1.68	214	.26	3	5.08	.02	.28	<2	6	1	20
89N 66+60E	1	160	6	245	<.3	43	33	967	5.62	25	<5	<2	2	40	1.7	3	<2	131	.48	.101	9	60	2.05	133	.31	3	5.27	.03	.39	<2	7	<1	366
89N 66+90E	<1	103	3	257	<.3	37	33	1046	5.33	13	<5	<2	2	31	1.2	3	<2	120	.28	.258	9	50	1.67	272	.28	3	5.34	.02	.32	<2	7	<1	34
89N 67+20E	1	93	8	202	<.3	31	26	1038	5.37	10	<5	<2	3	31	.6	3	<2	125	.34	.369	7	52	1.85	255	.23	<3	5.02	.03	.27	<2	<5	<1	21
89N 67+50E	1	102	9	231	<.3	35	23	1017	5.07	6	<5	<2	2	32	.7	2	2	118	.37	.331	5	58	2.11	297	.25	<3	4.65	.02	.20	<2	<5	<1	5
88N 52+20E	1	111	22	173	.3	41	15	623	3.89	9	<5	<2	2	21	.2	4	3	90	.19	.216	9	69	.91	86	.13	<3	3.45	.02	.10	<2	<5	<1	20
88N 55+50E	1	94	9	101	.4	35	15	868	3.89	<2	<5	<2	2	24	<.2	3	<2	100	.23	.106	8	64	1.27	157	.22	4	4.72	.02	.14	<2	<5	1	22
88N 55+80E	1	60	11	71	<.3	21	8	457	2.74	<2	5	<2	3	16	<.2	6	2	64	.14	.138	7	36	.59	84	.21	<3	5.32	.03	.08	<2	8	1	16
88N 56+10E	1	54	9	89	.7	18	11	1798	3.25	<2	<5	<2	3	19	<.2	3	3	77	.17	.161	6	31	.51	147	.24	<3	4.73	.03	.11	<2	<5	<1	12
88N 56+40E	1	89	8	85	1.4	21	15	834	3.78	<2	<5	<2	2	25	<.2	6	5	100	.23	.190	9	36	.53	116	.23	<3	4.89	.03	.08	<2	<5	<1	30
88N 56+70E	<1	113	5	104	.3	21	18	748	5.18	<2	<5	<2	3	44	<.2	3	<2	141	.42	.270	8	30	.69	160	.24	<3	4.40	.02	.10	<2	<5	<1	7
88N 57+00E	1	260	6	122	.3	38	27	750	6.02	<2	<5	<2	2	45	.2	3	2	182	.57	.261	10	56	1.26	178	.26	<3	4.24	.03	.13	<2	5	1	19
88N 57+30E	<1	241	9	118	<.3	27	29	1658	7.32	<2	<5	<2	<2	49	<.2	2	<2	235	.59	.268	8	49	1.29	215	.24	<3	3.14	.02	.12	<2	<5	<1	28
STANDARD C2/AU-S	20	57	38	143	6.2	75	35	1241	4.05	39	20	8	34	51	20.3	18	20	73	.55	.096	41	66	1.04	193	.08	26	2.08	.06	.15	11	<5	3	44

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 1 1996 DATE REPORT MAILED: Aug 14/96 SIGNED BY. C. Leong .TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

File Copy

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
88N 57+60E	<1	318	8	119	<.3	31	27	781	7.47	4	<5	<2	2	56	.4	<2	6	244	.72	.258	9	55	1.45	147	.24	<3	3.11	.02	.19	<2	<5	<1	23
88N 57+90E	<1	216	12	130	<.3	33	28	1421	6.45	<2	<5	<2	<2	58	<.2	<2	<2	199	.76	.265	8	58	1.32	207	.22	3	3.09	.02	.17	<2	<5	<1	33
88N 58+20E	1	226	9	109	<.3	27	23	936	6.33	<2	<5	<2	2	46	.3	<2	2	197	.56	.267	9	49	1.25	150	.23	<3	3.72	.02	.18	<2	<5	2	36
88N 58+50E	1	190	7	120	<.3	18	22	1072	6.93	<2	<5	<2	2	62	<.2	<2	3	193	.52	.245	9	31	1.36	161	.20	<3	3.63	.02	.20	<2	<5	1	40
88N 58+80E	1	124	10	127	<.3	16	18	1520	5.80	<2	<5	<2	2	37	<.2	<2	8	163	.41	.248	10	28	.98	162	.22	4	3.91	.02	.15	<2	<5	<1	18
88N 59+10E	1	170	<3	121	.3	14	21	1165	5.89	<2	<5	<2	2	44	.6	<2	6	180	.56	.265	12	16	1.55	270	.20	3	4.09	.02	.40	<2	<5	1	48
88N 59+40E	1	225	9	140	.4	20	22	1293	6.15	<2	<5	<2	2	50	<.2	2	5	179	.66	.304	10	27	1.49	296	.21	4	3.69	.02	.21	<2	<5	1	12
88N 59+70E	1	260	9	137	<.3	21	21	1567	5.47	<2	<5	<2	<2	41	<.2	<2	6	139	.63	.318	13	30	1.15	395	.15	<3	3.74	.02	.15	<2	<5	<1	52
88N 60+00E	2	222	11	113	<.3	17	17	1276	4.79	<2	<5	<2	2	38	<.2	<2	4	117	.38	.224	8	32	.87	219	.14	<3	3.11	.02	.13	<2	<5	<1	77
88N 60+30E	1	125	6	90	.4	15	11	777	4.13	<2	<5	<2	2	32	<.2	<2	3	98	.30	.225	8	26	.61	183	.18	<3	3.85	.02	.11	<2	<5	<1	21
RE 88N 60+30E	1	131	7	93	.6	13	12	818	4.16	2	<5	<2	2	33	<.2	<2	4	99	.32	.232	8	26	.64	179	.18	<3	4.06	.02	.11	<2	<5	1	31
88N 60+60E	1	162	13	89	<.3	19	12	984	4.00	<2	<5	<2	3	28	<.2	<2	7	96	.28	.198	9	35	.71	247	.20	<3	4.22	.02	.09	<2	<5	<1	289
88N 60+90E	1	240	10	102	<.3	62	29	1040	4.81	11	<5	<2	2	42	<.2	<2	2	119	.43	.289	8	100	1.33	172	.19	<3	3.75	.02	.19	<2	<5	2	76
88N 61+20E	<1	669	3	98	<.3	34	16	672	4.89	2	<5	<2	2	43	<.2	<2	5	134	.33	.174	8	56	1.89	252	.18	<3	4.71	.01	.31	<2	<5	1	63
88N 61+50E	<1	623	7	130	.3	24	17	891	4.63	<2	<5	<2	2	33	<.2	<2	5	115	.32	.334	6	42	1.40	197	.21	<3	4.63	.01	.16	<2	<5	1	33
88N 61+80E	<1	427	6	158	<.3	21	17	1593	4.84	<2	<5	<2	2	39	.3	<2	2	113	.34	.270	6	42	1.18	321	.21	<3	3.40	.02	.14	<2	<5	<1	33
88N 62+10E	1	128	8	128	<.3	36	30	1188	4.52	12	<5	<2	2	40	<.2	<2	3	101	.40	.308	9	64	1.32	192	.18	3	3.89	.02	.24	<2	<5	<1	31
88N 62+40E	1	127	10	103	<.3	43	28	1096	4.61	7	<5	<2	2	38	.4	<2	4	104	.35	.147	10	71	1.26	164	.19	<3	3.98	.02	.18	<2	<5	<1	379
88N 62+70E	1	133	9	96	<.3	41	27	645	4.88	6	<5	<2	2	42	.2	<2	<2	119	.39	.089	10	85	1.49	128	.22	<3	3.81	.02	.18	<2	<5	1	32
88N 63+00E	1	157	12	146	<.3	45	29	1278	5.41	14	<5	<2	2	44	<.2	<2	4	132	.36	.115	13	70	1.67	247	.21	3	4.17	.02	.20	<2	<5	1	30
88N 63+30E	1	149	28	176	<.3	73	36	1582	5.15	39	<5	<2	3	35	.6	<2	7	113	.33	.303	9	84	1.54	270	.17	<3	4.26	.02	.17	<2	<5	<1	33
88N 63+60E	1	131	7	120	<.3	42	28	837	5.51	3	<5	<2	<2	57	<.2	<2	6	140	.45	.093	9	71	1.84	203	.24	<3	3.89	.01	.27	<2	<5	1	19
88N 63+90E	1	72	9	147	<.3	32	24	2778	4.30	2	<5	<2	2	37	<.2	<2	<2	94	.35	.189	9	54	1.00	210	.19	<3	3.80	.02	.13	<2	<5	<1	25
88N 64+20E	1	74	12	156	.4	38	22	1013	4.61	2	<5	<2	2	44	.4	<2	3	102	.37	.211	11	58	1.20	207	.20	3	4.01	.02	.16	<2	<5	2	95
88N 64+50E	1	80	10	143	.3	37	23	956	4.42	2	<5	<2	3	47	.3	2	7	99	.44	.232	9	60	1.20	197	.19	<3	4.24	.02	.14	<2	<5	1	15
88N 64+80E	1	101	12	139	<.3	41	22	630	4.45	4	<5	<2	3	49	<.2	<2	5	102	.40	.168	9	54	1.16	157	.21	<3	4.02	.01	.15	<2	<5	1	21
88N 65+10E	1	126	9	139	<.3	110	36	1034	5.06	21	<5	<2	<2	46	.3	<2	<2	112	.45	.140	7	207	2.44	233	.24	<3	3.89	.02	.47	<2	<5	<1	20
88N 65+40E	2	114	14	147	<.3	31	18	700	5.00	20	<5	<2	2	43	<.2	<2	6	117	.38	.074	8	48	1.67	145	.21	<3	3.07	.01	.23	<2	<5	<1	32
88N 65+70E	1	95	13	125	<.3	27	21	777	4.35	9	<5	<2	2	38	<.2	<2	2	96	.31	.206	9	42	1.00	144	.18	<3	3.40	.02	.11	<2	<5	1	40
88N 66+00E	1	94	15	215	<.3	31	23	1097	4.51	12	<5	<2	3	36	1.2	<2	2	91	.30	.246	11	38	.93	199	.18	<3	3.72	.02	.12	<2	<5	<1	97
88N 66+30E	2	135	21	202	.7	37	21	800	4.80	16	<5	<2	3	39	.3	<2	4	103	.35	.182	15	40	1.26	190	.18	<3	4.16	.01	.20	<2	<5	1	626
88N 66+60E	2	136	13	222	<.3	42	23	831	5.30	13	<5	<2	2	40	.8	<2	7	126	.39	.153	11	50	1.76	227	.20	5	4.09	.01	.30	<2	<5	<1	132
88N 66+90E	1	89	14	160	.4	27	28	1404	5.00	15	<5	<2	2	33	<.2	<2	4	112	.30	.273	7	37	1.37	218	.22	<3	5.07	.02	.18	<2	<5	<1	30
88N 67+20E	1	89	10	174	.3	22	24	1121	4.60	9	<5	<2	2	31	.3	<2	<2	104	.32	.236	8	34	1.40	217	.22	<3	5.11	.01	.22	<2	5	2	26
88N 67+50E	1	104	9	138	.7	25	21	781	4.40	14	<5	<2	2	38	.7	<2	2	102	.45	.181	14	39	1.36	115	.22	<3	5.12	.02	.27	<2	<5	<1	19
STANDARD C2/AU-S	20	57	37	144	6.4	74	35	1179	4.06	43	20	7	36	52	20.2	18	20	73	.54	.096	42	65	1.03	206	.08	27	2.08	.07	.15	12	<5	1	49

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
88N 67+80E	1	124	11	137	<.3	29	22	779	5.06	13	<5	<2	2	43	.4	<2	5	118	.49	.229	9	47	1.85	165	.21	<3	3.93	.01	.44	<2	<5	<1	160
88N 68+10E	1	93	8	142	<.3	27	16	1373	4.65	9	<5	<2	<2	26	.3	<2	<2	108	.25	.213	10	47	1.41	150	.22	<3	6.54	.02	.32	<2	<5	1	35
88N 68+40E	2	81	12	141	.4	25	15	784	4.06	6	<5	<2	<2	29	.6	<2	2	90	.26	.379	10	38	1.03	177	.16	<3	5.68	.02	.17	2	<5	<1	17
87N 60+00E	1	220	14	121	.3	53	25	1332	5.34	14	<5	<2	2	54	<.2	<2	5	126	.55	.179	11	92	1.41	275	.16	<3	3.58	.01	.26	<2	<5	<1	119
87N 60+30E	1	281	9	126	.6	48	21	1037	5.03	17	<5	<2	2	49	<.2	<2	7	123	.47	.209	13	75	1.36	301	.18	<3	4.18	.01	.26	<2	<5	1	95
87N 60+60E	1	158	10	99	<.3	110	39	1368	5.12	24	<5	<2	<2	55	<.2	<2	<2	125	.71	.119	5	237	2.23	206	.21	<3	3.34	.02	.68	<2	<5	2	87
87N 60+90E	1	171	8	102	<.3	98	33	825	5.26	44	<5	<2	2	44	<.2	<2	<2	130	.47	.109	8	181	1.87	133	.20	<3	3.38	.02	.43	<2	<5	<1	154
87N 61+20E	1	97	13	109	<.3	65	26	1616	4.34	18	<5	<2	<2	43	<.2	<2	2	95	.45	.134	8	116	1.26	222	.18	<3	2.92	.02	.17	<2	<5	<1	49
87N 61+50E	1	192	8	101	<.3	47	19	1114	4.20	9	<5	<2	2	35	<.2	<2	6	96	.35	.230	7	81	1.10	166	.18	<3	3.28	.01	.14	<2	<5	1	52
87N 61+80E	1	538	10	92	.7	26	18	804	4.82	4	<5	<2	2	48	.2	<2	2	138	.34	.176	5	40	1.59	200	.25	<3	3.96	.02	.34	<2	5	1	18
87N 62+10E	1	432	11	118	.3	29	16	1126	3.81	2	<5	<2	3	33	<.2	<2	3	96	.28	.235	6	54	1.20	215	.22	<3	4.73	.02	.15	<2	5	1	22
87N 62+40E	1	187	9	119	<.3	34	20	687	3.51	<2	<5	<2	4	28	.6	<2	<2	79	.27	.223	11	50	.78	176	.22	<3	6.34	.02	.15	<2	8	2	50
87N 62+70E	1	104	6	135	.3	36	22	711	4.83	8	<5	<2	2	49	.5	<2	2	110	.44	.245	8	52	1.25	184	.20	<3	4.13	.02	.18	<2	<5	<1	45
87N 63+00E	1	192	11	176	.3	137	26	1154	4.95	29	<5	<2	2	38	.5	<2	3	113	.47	.157	10	123	1.39	181	.24	<3	4.96	.02	.21	<2	<5	<1	118
87N 63+30E	<1	73	9	109	<.3	31	21	1531	4.50	2	<5	<2	<2	54	<.2	<2	8	110	.41	.128	7	56	1.27	242	.20	<3	2.87	.02	.13	<2	<5	<1	54
87N 63+60E	1	70	10	94	.3	33	15	745	3.81	4	<5	<2	3	30	<.2	<2	2	85	.23	.168	9	47	.82	147	.22	3	4.88	.02	.11	<2	<5	1	58
87N 63+90E	1	111	16	189	<.3	44	20	997	4.60	12	<5	<2	3	35	.3	<2	2	105	.26	.159	9	61	1.22	187	.20	<3	4.35	.02	.17	<2	<5	1	20
87N 64+20E	1	70	14	144	.3	32	18	996	3.95	6	<5	<2	3	42	<.2	<2	<2	87	.32	.215	8	45	.87	142	.20	<3	3.89	.02	.13	<2	<5	<1	14
87N 64+50E	1	111	10	166	.4	36	18	770	4.20	7	<5	<2	3	45	.6	<2	5	97	.37	.174	13	46	1.07	166	.20	<3	4.15	.01	.16	<2	<5	<1	27
87N 64+80E	2	127	25	245	<.3	32	18	1598	4.34	19	<5	<2	2	51	1.3	2	2	96	.38	.132	10	44	1.25	242	.14	<3	2.77	.02	.16	<2	<5	1	490
87N 65+10E	2	101	24	266	<.3	37	18	1071	4.53	29	<5	<2	2	31	1.2	<2	<2	96	.28	.255	12	42	1.03	202	.14	<3	3.74	.02	.14	<2	<5	1	68
87N 65+40E	1	124	14	210	.5	39	24	840	5.17	12	<5	<2	3	38	.6	<2	<2	118	.34	.227	10	44	1.39	213	.20	<3	4.19	.02	.18	2	<5	<1	82
RE 87N 65+40E	1	122	15	204	.5	36	23	822	5.05	15	<5	<2	3	37	.9	<2	3	115	.33	.222	9	43	1.35	204	.19	<3	4.12	.01	.18	<2	<5	1	162
87N 65+70E	1	69	18	270	.3	27	22	995	5.06	16	<5	<2	2	33	.9	<2	3	108	.29	.274	8	38	1.18	266	.19	<3	3.70	.02	.15	<2	<5	<1	55
87N 66+00E	1	64	11	243	.3	26	16	666	4.00	10	5	<2	3	22	1.1	<2	5	85	.21	.355	8	30	.81	169	.18	<3	5.48	.02	.11	<2	5	1	35
87N 66+30E	2	50	11	190	.5	22	16	794	4.74	9	<5	<2	3	23	.3	<2	6	108	.19	.123	8	38	.97	151	.23	<3	4.13	.02	.11	<2	<5	1	13
87N 66+60E	2	85	9	128	<.3	27	19	579	4.49	16	<5	<2	2	27	.3	<2	4	106	.21	.147	8	37	1.25	163	.23	<3	4.85	.01	.22	<2	<5	1	23
87N 66+90E	1	104	7	128	<.3	24	17	537	4.68	15	<5	<2	2	25	.2	<2	<2	114	.21	.109	8	40	1.55	142	.25	<3	4.70	.02	.26	<2	5	2	22
87N 67+20E	1	90	26	157	.4	27	19	1241	4.41	13	<5	<2	2	38	.4	2	4	106	.43	.177	10	41	1.37	191	.21	<3	3.83	.02	.35	<2	<5	2	15
87N 67+50E	1	37	5	71	<.3	12	6	388	2.54	<2	<5	<2	<2	16	.4	<2	<2	51	.16	.149	8	19	.52	90	.17	4	5.80	.02	.13	<2	8	1	6
87N 67+80E	5	77	17	281	.4	34	17	1186	4.69	15	<5	<2	<2	55	1.2	<2	4	127	.66	.105	12	57	1.36	107	.13	<3	2.94	.03	.14	<2	<5	<1	540
87N 68+10E	3	91	16	238	.4	37	17	1234	4.33	9	<5	<2	<2	46	1.3	<2	<2	126	.42	.123	9	55	1.11	206	.15	<3	2.97	.02	.17	<2	<5	<1	15
87N 68+40E	3	45	9	245	<.3	27	12	620	3.92	3	<5	<2	<2	47	.6	<2	<2	95	.49	.272	9	38	.76	165	.15	3	5.18	.03	.10	<2	5	1	4
87N 68+70E	3	59	11	262	.4	33	12	775	3.91	4	<5	<2	<2	37	1.2	<2	4	109	.44	.148	11	49	.91	138	.15	<3	4.50	.02	.12	<2	<5	<1	6
87N 69+00E	3	59	15	225	.4	29	14	1260	4.29	12	<5	<2	2	28	1.5	<2	2	98	.22	.213	11	40	.67	163	.15	3	3.80	.02	.09	<2	<5	1	4
STANDARD C2/AU-S	20	59	40	138	6.2	75	32	1154	3.94	40	21	7	36	52	19.5	15	24	72	.54	.103	41	63	1.00	195	.08	24	2.07	.07	.15	11	<5	2	48

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

Orvana Minerals Corp. FILE # 96-3358

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
86N 55+20E	2	135	12	128	<.3	44	16	1102	4.76	<2	<5	<2	3	35	<.2	<2	4	133	.31	.209	10	73	1.33	241	.23	<3	4.54	.02	.21	<2	<5	1	14
86N 55+50E	1	111	14	130	.4	57	18	826	4.29	<2	<5	<2	2	35	.2	<2	<2	121	.32	.149	8	95	1.43	226	.24	<3	4.55	.02	.22	<2	<5	<1	9
86N 55+80E	1	115	16	164	.3	33	17	728	4.27	<2	<5	<2	2	36	.5	<2	3	123	.38	.122	9	61	1.07	199	.24	3	4.36	.02	.17	<2	<5	<1	16
86N 56+10E	1	166	6	128	<.3	31	19	814	5.08	<2	<5	<2	2	49	.4	<2	<2	142	.50	.312	8	58	1.15	241	.19	4	3.61	.02	.19	<2	<5	<1	52
86N 56+40E	1	244	13	116	.4	42	19	940	4.61	<2	<5	<2	<2	50	<.2	<2	<2	138	.46	.231	7	85	1.18	246	.21	<3	3.78	.02	.21	<2	<5	<1	32
86N 56+70E	<1	319	<3	138	.3	27	28	844	7.44	<2	<5	<2	<2	95	<.2	<2	<2	222	1.10	.392	12	34	1.70	269	.21	<3	3.00	.01	.45	<2	<5	<1	36
86N 57+00E	2	323	9	111	.3	28	27	868	7.22	<2	<5	<2	<2	75	<.2	2	<2	240	.90	.240	11	55	1.72	162	.22	<3	3.51	.02	.46	<2	<5	<1	80
86N 57+30E	1	179	22	135	.4	30	18	858	5.09	<2	<5	<2	2	45	<.2	<2	9	136	.41	.283	9	54	.93	234	.19	<3	3.57	.02	.18	<2	<5	<1	35
86N 57+60E	1	285	12	154	.4	22	23	1081	7.45	<2	<5	<2	2	57	<.2	<2	<2	218	.63	.417	8	43	1.27	189	.21	3	3.44	.02	.22	<2	<5	<1	40
86N 57+90E	1	146	13	124	.3	26	18	1068	5.60	<2	<5	<2	2	42	<.2	<2	3	154	.47	.324	9	50	.95	206	.20	<3	3.73	.02	.13	<2	<5	<1	14
86N 58+20E	2	294	10	123	<.3	23	22	1632	6.50	<2	<5	<2	<2	68	<.2	<2	2	177	.70	.218	10	47	1.30	288	.17	3	2.63	.02	.24	<2	<5	<1	74
86N 58+50E	2	339	13	111	.9	28	22	1360	7.41	<2	<5	<2	<2	74	<.2	2	<2	218	.83	.139	15	52	1.50	282	.19	<3	3.54	.02	.36	<2	<5	<1	1550
RE 86N 58+80E	2	284	10	115	<.3	36	24	1102	5.99	2	<5	<2	2	50	<.2	<2	4	161	.51	.244	14	58	1.33	231	.18	<3	3.59	.02	.28	<2	<5	<1	80
86N 58+80E	2	279	8	112	<.3	35	24	1090	5.89	4	<5	<2	2	50	.3	<2	<2	158	.50	.242	14	58	1.30	229	.18	3	3.57	.02	.28	<2	<5	<1	358
86N 59+10E	1	322	12	108	<.3	102	37	919	5.64	20	<5	<2	2	53	<.2	<2	<2	152	.50	.137	8	165	1.92	143	.21	<3	3.78	.02	.47	<2	5	1	51
86N 59+40E	1	200	10	106	<.3	38	21	790	5.42	4	<5	<2	2	48	<.2	<2	<2	147	.49	.179	9	64	1.16	191	.17	<3	2.81	.02	.20	<2	<5	<1	101
86N 59+70E	1	180	13	92	.3	54	24	1001	5.01	13	<5	<2	2	56	.2	<2	<2	127	.52	.128	8	93	1.32	191	.19	<3	2.89	.02	.20	<2	<5	1	431
86N 60+00E	2	216	24	197	<.3	43	24	1512	5.57	8	<5	<2	2	46	.6	<2	<2	138	.45	.149	10	68	1.24	243	.19	<3	3.67	.02	.19	<2	<5	<1	45
85N 55+20E	1	183	28	195	<.3	34	20	1405	5.64	10	<5	<2	3	45	.2	<2	<2	150	.49	.256	12	56	1.46	314	.20	3	4.04	.01	.21	<2	<5	<1	146
85N 55+50E	1	212	67	219	<.3	70	27	958	6.01	27	<5	<2	3	51	.3	<2	<2	163	.60	.265	14	97	1.70	208	.15	<3	3.83	<.01	.18	<2	<5	<1	39
85N 55+80E	1	357	10	167	<.3	42	20	898	5.97	<2	<5	<2	<2	61	<.2	<2	<2	182	.62	.105	9	58	1.40	154	.25	<3	3.15	.01	.20	<2	<5	<1	27
85N 56+10E	1	139	19	137	<.3	31	20	1161	4.93	7	<5	<2	2	49	<.2	<2	<2	136	.50	.139	9	52	1.10	254	.20	<3	3.40	.01	.16	<2	<5	<1	12
85N 56+40E	1	176	16	149	.3	36	23	1312	5.74	5	<5	<2	2	48	<.2	<2	<2	158	.50	.164	10	61	1.13	233	.19	<3	3.01	.02	.20	<2	<5	<1	20
85N 56+70E	1	154	18	143	.3	41	20	1086	5.10	5	<5	<2	2	52	<.2	<2	2	139	.52	.215	11	63	1.26	275	.21	<3	3.56	.01	.28	<2	<5	<1	23
85N 57+00E	1	134	14	118	.4	37	18	998	5.03	3	<5	<2	2	59	<.2	<2	2	136	.60	.289	9	60	1.11	292	.20	<3	3.65	.02	.20	<2	<5	<1	12
85N 57+30E	1	223	14	136	<.3	33	23	1311	6.68	<2	<5	<2	<2	63	<.2	<2	2	195	.71	.366	11	64	1.38	311	.20	4	3.39	.01	.32	<2	<5	<1	95
85N 57+60E	1	176	15	151	.8	20	20	2109	5.51	<2	<5	<2	2	51	.6	<2	<2	142	.48	.398	12	39	.97	365	.18	<3	3.37	.02	.19	<2	<5	<1	18
85N 57+90E	2	277	10	110	.3	23	20	818	6.62	<2	<5	<2	2	61	<.2	<2	<2	203	.62	.201	11	41	1.43	151	.21	<3	3.25	.02	.24	<2	<5	<1	55
85N 58+20E	1	236	16	91	.4	22	20	851	6.78	<2	<5	<2	<2	53	<.2	<2	<2	187	.51	.201	10	40	1.06	185	.18	<3	2.89	.02	.18	<2	<5	<1	51
85N 58+50E	1	217	12	120	.4	22	20	769	6.65	<2	<5	<2	<2	52	<.2	<2	<2	184	.54	.277	10	44	1.04	195	.16	<3	2.73	.01	.20	<2	<5	<1	80
85N 58+80E	1	254	19	234	.5	22	26	1796	6.97	<2	<5	<2	3	58	.2	<2	<2	215	.66	.366	11	30	1.95	339	.27	<3	4.17	.01	.49	<2	5	<1	230
85N 59+10E	1	209	16	184	.4	28	21	1462	5.78	7	<5	<2	2	65	.8	<2	2	164	.75	.225	11	46	1.51	248	.21	<3	3.64	.02	.38	<2	<5	<1	50
85N 59+40E	2	206	14	182	<.3	34	22	1316	5.19	8	<5	<2	2	38	.4	<2	<2	120	.43	.332	9	50	1.43	247	.18	<3	4.05	.02	.24	<2	<5	<1	35
85N 59+70E	1	149	18	175	.4	43	21	914	5.28	14	<5	<2	2	51	<.2	<2	<2	126	.41	.100	11	67	1.23	208	.18	<3	3.42	.01	.21	<2	<5	<1	59
85N 60+00E	1	114	10	93	.5	35	20	645	5.03	6	<5	<2	2	41	<.2	<2	2	125	.38	.197	8	60	.96	171	.17	<3	3.06	.02	.13	<2	<5	<1	76
STANDARD C2/AU-S	21	58	37	144	6.1	73	35	1180	3.98	40	20	7	36	52	19.5	17	21	72	.54	.105	41	66	1.01	214	.08	27	2.07	.06	.15	12	<5	3	45

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
85N 60+30E	1	120	23	187	<.3	27	17	1461	4.88	3	<5	<2	2	31	.5	<2	<2	114	.32	.244	7	44	1.01	299	.16	<3	2.93	.02	.14	<2	<5	<1	53
85N 60+60E	2	309	15	179	<.3	28	26	1569	6.02	<2	<5	<2	2	38	.2	<2	<2	147	.46	.136	7	43	1.32	328	.14	<3	2.95	.02	.14	<2	<5	<1	126
85N 60+90E	1	128	12	170	<.3	34	17	1255	4.28	<2	<5	<2	2	40	<.2	<2	2	97	.43	.193	9	45	.94	254	.16	<3	3.48	.02	.14	<2	<5	2	46
85N 61+20E	1	242	10	135	.6	38	20	855	5.00	<2	<5	<2	2	29	<.2	<2	<2	117	.35	.154	10	55	1.22	193	.17	<3	3.48	.02	.15	<2	5	<1	83
85N 61+50E	1	139	5	125	.3	24	18	1320	4.50	<2	<5	<2	<2	30	.2	<2	5	106	.36	.165	9	49	1.04	254	.14	5	2.68	.01	.11	<2	<5	1	73
85N 61+80E	1	194	9	106	.5	26	15	905	6.45	<2	<5	<2	<2	37	<.2	<2	<2	108	.37	.141	7	44	.88	163	.16	<3	2.90	.02	.11	<2	<5	<1	65
85N 62+10E	1	306	9	114	<.3	30	19	940	4.54	3	<5	<2	2	41	<.2	2	<2	116	.46	.147	9	49	1.36	190	.17	<3	2.87	.02	.15	<2	<5	2	104
RE 85N 62+10E	1	319	5	118	.3	30	20	969	4.67	<2	<5	<2	2	43	<.2	<2	<2	120	.48	.151	10	50	1.41	194	.18	<3	2.95	.02	.15	<2	<5	<1	72
85N 62+40E	1	79	13	115	.4	19	13	1265	3.92	<2	<5	<2	2	27	<.2	<2	<2	88	.24	.340	6	44	.62	210	.16	<3	2.77	.02	.09	<2	<5	<1	16
85N 62+70E	1	373	4	114	<.3	44	23	609	5.47	8	<5	<2	2	37	.4	<2	3	138	.42	.125	10	92	1.61	206	.17	<3	3.25	.02	.23	<2	<5	<1	68
85N 63+00E	2	189	11	135	<.3	31	20	1259	5.14	7	<5	<2	2	31	.2	<2	5	117	.30	.160	9	68	1.04	204	.17	<3	2.93	.02	.16	<2	<5	<1	51
85N 63+30E	1	30	9	67	.6	13	8	707	2.58	<2	<5	<2	2	17	<.2	<2	<2	45	.21	.261	6	19	.25	108	.20	<3	4.12	.03	.06	<2	8	1	6
85N 63+60E	2	50	12	120	<.3	27	15	659	3.40	4	<5	<2	2	18	<.2	<2	<2	67	.19	.314	5	46	.55	139	.20	<3	4.68	.03	.08	<2	9	1	8
85N 63+90E	2	107	7	88	.4	31	16	405	4.04	4	<5	<2	<2	31	<.2	<2	5	88	.39	.122	5	58	.72	113	.21	<3	2.93	.02	.08	<2	<5	<1	76
85N 64+20E	2	126	52	163	<.3	36	21	1074	4.48	13	<5	<2	2	39	1.0	2	<2	108	.39	.164	8	55	1.23	211	.18	<3	2.95	.03	.13	<2	<5	<1	53
85N 64+50E	3	86	13	149	<.3	30	23	1175	4.69	3	<5	<2	2	30	.4	<2	<2	100	.26	.211	7	55	1.09	176	.17	<3	2.96	.02	.12	<2	<5	<1	37
85N 64+80E	4	372	16	226	.6	89	44	1846	4.48	19	<5	<2	<2	81	1.3	<2	4	105	1.28	.113	11	100	1.29	189	.14	3	3.39	.02	.25	<2	<5	<1	23
85N 65+10E	3	106	19	164	.3	40	23	1265	4.31	14	<5	<2	<2	54	1.0	<2	<2	93	.51	.145	12	65	1.15	150	.15	3	3.52	.03	.20	<2	6	<1	24
85N 65+40E	2	76	14	165	<.3	41	22	755	4.84	8	<5	<2	<2	53	.9	<2	<2	106	.60	.091	8	78	1.30	127	.23	<3	3.64	.03	.17	<2	6	1	16
85N 65+70E	1	98	19	172	.4	41	25	1237	4.73	13	<5	<2	<2	74	1.7	<2	<2	105	.85	.112	13	73	1.22	145	.19	<3	3.76	.03	.19	<2	<5	1	12
85N 66+00E	4	60	17	159	.4	19	10	791	4.38	4	<5	<2	<2	48	1.6	<2	3	105	.53	.091	8	32	.61	198	.17	6	1.82	.02	.11	<2	<5	<1	3
85N 66+30E	3	68	10	213	<.3	27	15	614	4.09	4	<5	<2	<2	27	.7	<2	<2	108	.30	.214	7	43	.96	139	.14	<3	3.72	.02	.10	<2	<5	2	7
85N 66+60E	2	50	10	155	<.3	22	12	509	4.50	<2	<5	<2	2	23	<.2	<2	3	117	.24	.149	6	38	.80	140	.21	<3	3.42	.02	.08	<2	<5	<1	4
85N 66+90E	2	64	8	139	<.3	21	13	592	4.38	<2	<5	<2	2	26	.3	<2	2	112	.25	.165	6	35	1.11	121	.21	5	3.37	.02	.12	<2	<5	<1	5
85N 67+20E	1	59	6	134	.3	21	22	1576	4.23	<2	<5	<2	<2	32	.5	<2	3	106	.32	.146	6	29	1.26	188	.23	<3	3.75	.03	.16	<2	<5	1	5
85N 67+50E	1	60	11	147	<.3	21	19	1109	4.43	<2	<5	<2	<2	54	.3	<2	<2	118	.50	.198	6	36	1.35	219	.20	3	3.47	.02	.19	<2	5	<1	7
85N 67+80E	1	50	8	115	<.3	21	17	843	3.92	<2	<5	<2	<2	32	.2	2	3	100	.32	.137	6	36	1.00	188	.20	3	3.00	.02	.12	<2	5	1	6
85N 68+10E	1	64	13	126	<.3	24	17	1028	4.07	4	<5	<2	<2	39	<.2	2	<2	104	.54	.145	5	48	1.39	211	.20	3	2.87	.03	.21	<2	6	1	4
85N 68+40E	1	71	14	147	<.3	23	15	1834	3.94	2	<5	<2	<2	33	.2	<2	3	102	.36	.144	6	44	1.33	287	.19	3	3.10	.02	.22	<2	<5	<1	5
85N 68+70E	1	73	10	144	<.3	26	18	814	4.33	<2	<5	<2	2	31	.4	<2	<2	114	.41	.131	7	56	1.43	180	.21	<3	3.16	.02	.27	<2	<5	1	7
85N 69+00E	2	48	9	117	.5	17	13	1169	3.69	<2	<5	<2	<2	23	<.2	<2	2	80	.23	.149	9	31	.83	148	.18	4	3.18	.02	.15	<2	<5	<1	4
84N 55+20E	1	103	13	92	<.3	29	16	749	4.21	<2	<5	<2	<2	31	<.2	<2	3	105	.31	.126	6	51	.81	126	.17	<3	2.76	.02	.10	<2	<5	<1	72
84N 55+50E	1	115	10	134	.6	29	17	717	3.80	<2	<5	<2	2	36	<.2	<2	<2	90	.37	.236	7	50	.76	169	.17	<3	3.37	.02	.11	<2	5	<1	28
84N 55+80E	1	126	9	82	<.3	31	20	670	4.44	2	<5	<2	<2	37	<.2	<2	<2	116	.35	.112	7	57	.84	144	.15	<3	2.67	.02	.10	<2	<5	<1	43
84N 56+10E	1	111	12	123	<.3	25	18	758	4.99	5	<5	<2	2	48	<.2	<2	<2	137	.54	.249	8	42	.98	197	.17	<3	3.26	.02	.14	<2	5	<1	32
STANDARD C2/AU-S	20	56	39	139	6.8	70	34	1217	3.97	38	19	7	35	50	19.7	17	20	71	.54	.103	41	65	1.01	199	.08	26	2.02	.06	.14	12	<5	1	48

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
84N 56+40E	<1	219	27	169	<.3	22	25	1560	7.32	<2	<5	<2	<2	77	.9	<2	<2	223	.88	.270	10	36	1.34	182	.21	<3	2.78	.02	.22	<2	<5	<1	10
84N 56+70E	<1	158	22	112	<.3	25	19	917	7.04	<2	<5	<2	<2	66	.3	<2	<2	200	.76	.241	11	46	1.02	183	.17	<3	2.69	.02	.13	<2	<5	<1	49
84N 57+00E	<1	153	25	102	.3	18	16	887	6.27	<2	<5	<2	2	56	<.2	<2	3	177	.59	.249	10	36	.90	165	.17	<3	3.12	.01	.13	<2	<5	<1	29
84N 57+30E	<1	250	11	117	<.3	21	23	1055	7.15	2	<5	<2	<2	69	<.2	<2	<2	204	.75	.352	10	41	1.33	269	.17	<3	3.11	.01	.23	<2	<5	<1	48
84N 57+60E	<1	163	12	111	<.3	21	19	618	6.73	<2	<5	<2	<2	53	<.2	<2	2	185	.55	.209	8	38	.98	139	.19	4	2.82	.02	.17	<2	<5	<1	325
84N 57+90E	<1	126	16	114	<.3	27	17	692	5.70	<2	<5	<2	2	42	<.2	<2	<2	155	.44	.252	9	44	.79	154	.18	<3	3.12	.02	.13	<2	<5	3	20
84N 58+20E	1	216	12	105	<.3	38	21	682	5.33	11	<5	<2	2	48	<.2	<2	<2	144	.59	.320	11	67	1.26	195	.17	<3	3.66	.02	.23	<2	<5	<1	42
84N 58+50E	1	226	82	186	.6	46	25	3030	6.46	4	<5	<2	2	53	.6	<2	4	195	.60	.246	14	60	1.72	313	.21	<3	3.97	.02	.26	<2	<5	<1	38
RE 84N 58+50E	1	214	78	176	.5	44	25	2898	6.38	4	<5	<2	2	51	.7	2	<2	191	.57	.236	14	58	1.64	304	.21	<3	3.78	.03	.25	<2	<5	<1	37
84N 58+80E	1	212	15	160	.3	24	22	1985	5.97	<2	<5	<2	2	40	.4	<2	2	177	.46	.188	13	41	1.44	224	.24	<3	4.15	.02	.25	<2	<5	<1	19
84N 59+10E	<1	207	12	97	<.3	25	19	692	6.19	<2	<5	<2	2	53	<.2	<2	<2	169	.55	.276	8	45	1.18	150	.19	<3	3.08	.02	.21	<2	<5	<1	37
84N 59+40E	1	151	19	136	<.3	27	21	1680	5.83	<2	<5	<2	2	48	.6	<2	<2	145	.47	.288	11	55	1.10	222	.18	5	3.51	.01	.17	<2	<5	<1	66
84N 59+70E	1	191	8	141	<.3	26	22	926	5.80	<2	<5	<2	<2	56	<.2	<2	<2	156	.56	.213	10	37	1.41	203	.22	<3	3.59	.02	.21	<2	<5	<1	19
84N 60+00E	1	169	7	149	.6	35	20	853	4.83	3	<5	<2	<2	52	.6	<2	<2	131	.41	.110	8	48	1.44	176	.20	<3	3.54	.02	.21	<2	<5	<1	30
84N 60+30E	1	90	11	114	.8	30	17	736	4.18	<2	<5	<2	2	41	<.2	<2	2	102	.36	.166	9	46	.91	163	.19	<3	3.97	.02	.12	<2	<5	<1	53
84N 60+60E	1	99	9	140	.5	28	16	1203	3.99	4	<5	<2	2	44	.4	<2	<2	95	.31	.205	12	41	.75	176	.19	<3	4.13	.02	.12	<2	<5	<1	39
84N 60+90E	1	186	15	108	.5	31	23	1687	5.73	6	<5	<2	<2	49	.3	<2	<2	163	.53	.137	10	53	1.31	217	.18	<3	2.89	.02	.20	<2	<5	1	54
84N 61+20E	1	224	11	117	.3	34	18	818	4.87	<2	<5	<2	2	38	<.2	<2	<2	124	.37	.104	9	59	1.21	223	.19	<3	3.29	.02	.15	<2	<5	<1	37
84N 61+50E	1	182	10	110	.6	35	18	1002	4.59	4	<5	<2	2	36	.3	<2	2	110	.34	.216	9	57	1.05	191	.18	<3	3.82	.02	.14	<2	<5	<1	54
84N 61+80E	1	231	9	99	.3	26	15	602	4.30	3	<5	<2	3	39	<.2	<2	<2	105	.41	.188	10	38	1.00	160	.18	<3	4.11	.02	.13	<2	<5	<1	53
84N 62+10E	1	189	7	103	1.0	32	16	777	4.51	2	<5	<2	3	35	.2	<2	3	111	.35	.142	10	60	1.12	160	.21	<3	4.15	.02	.15	<2	<5	<1	40
84N 62+40E	1	176	14	127	.3	29	15	1028	4.14	4	<5	<2	3	40	.3	2	<2	99	.46	.216	10	40	.90	193	.19	3	4.36	.03	.11	<2	<5	1	42
84N 62+70E	1	232	10	107	.5	25	21	635	4.28	<2	<5	<2	3	37	.5	<2	<2	104	.32	.187	10	36	1.06	136	.20	<3	4.00	.02	.11	<2	<5	1	74
84N 63+00E	1	184	12	132	.3	31	16	1189	4.60	<2	<5	<2	2	30	.4	<2	4	107	.32	.123	8	53	.88	227	.20	4	4.24	.02	.13	<2	<5	1	51
84N 63+30E	1	730	15	130	.4	49	24	1342	5.44	<2	<5	<2	3	39	.5	<2	<2	139	.37	.107	20	93	1.50	268	.19	<3	4.72	.02	.22	<2	<5	<1	94
84N 63+60E	1	79	7	116	.9	26	15	1582	3.20	<2	<5	<2	3	18	.7	<2	<2	70	.16	.190	8	43	.57	160	.21	<3	5.04	.03	.07	<2	6	<1	37
84N 63+90E	1	73	10	78	.7	21	12	839	3.15	<2	<5	<2	3	15	.2	<2	<2	68	.14	.278	7	39	.46	99	.20	3	4.93	.03	.06	2	7	1	13
84N 64+20E	1	56	11	70	.9	23	13	1197	2.98	6	<5	<2	3	14	<.2	<2	2	64	.12	.217	6	42	.51	90	.20	4	4.96	.02	.06	<2	5	<1	12
84N 64+50E	2	102	13	103	<.3	27	16	1434	4.31	7	<5	<2	2	21	<.2	<2	2	96	.20	.321	6	58	.78	108	.19	<3	3.25	.02	.08	<2	<5	<1	54
84N 64+80E	3	385	16	172	.6	72	35	1388	4.88	17	<5	<2	<2	67	1.5	<2	<2	124	.91	.104	13	105	1.48	159	.18	<3	3.88	.03	.29	<2	5	<1	45
84N 65+10E	2	268	26	170	.4	58	28	1314	4.81	17	<5	<2	<2	59	1.4	<2	<2	119	.70	.096	12	89	1.32	161	.15	<3	3.67	.02	.27	<2	<5	1	25
84N 65+40E	3	119	29	180	.5	38	22	912	4.59	16	<5	<2	<2	36	.5	<2	3	122	.41	.157	10	58	1.36	142	.16	<3	3.24	.03	.23	<2	<5	2	12
84N 65+70E	3	60	22	183	.3	21	14	1125	4.25	8	<5	<2	<2	27	.8	<2	5	106	.24	.161	8	36	.80	154	.18	<3	2.77	.03	.11	<2	<5	<1	5
84N 66+00E	2	63	12	144	.4	26	16	771	3.86	7	<5	<2	2	23	.6	<2	2	94	.22	.164	9	31	.77	129	.19	<3	5.11	.03	.11	<2	<5	<1	4
84N 66+30E	3	86	42	308	.5	29	22	924	5.14	12	<5	<2	2	31	.7	2	<2	127	.33	.087	8	34	1.04	149	.24	<3	3.66	.02	.13	<2	<5	1	38
STANDARD C2/AU-S	21	62	38	135	6.6	75	36	1242	4.11	42	20	8	38	55	20.9	16	18	76	.57	.097	44	69	1.05	199	.09	27	2.17	.07	.15	11	<5	1	49

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
84N 66+60E	2	85	70	254	.3	25	20	1403	4.72	10	<5	<2	2	38	.7	2	<2	122	.39	.142	8	36	1.10	242	.24	<3	3.27	.02	.11	<2	<5	<1	6
84N 66+90E	2	54	32	289	<.3	25	20	2025	4.76	3	<5	<2	2	33	1.1	<2	5	121	.31	.156	9	40	1.01	280	.24	<3	3.51	.02	.14	<2	<5	<1	17
84N 67+20E	1	46	26	259	<.3	26	15	1540	3.83	13	<5	<2	2	68	1.2	<2	<2	87	.53	.171	8	34	.76	209	.22	<3	4.03	.03	.12	<2	<5	<1	3
84N 67+50E	1	75	33	223	<.3	30	20	1836	4.61	22	<5	<2	2	49	.8	<2	4	113	.46	.153	10	47	1.14	228	.25	<3	3.60	.02	.17	<2	<5	<1	3
84N 67+80E	<1	71	36	360	<.3	44	23	2343	5.22	12	<5	<2	<2	50	.9	<2	3	135	.50	.166	7	96	1.66	300	.26	<3	3.56	.03	.20	<2	<5	<1	2
84N 68+10E	1	46	24	237	.5	22	17	2137	3.87	<2	<5	<2	2	24	.7	<2	5	84	.20	.359	7	36	.77	247	.20	<3	3.72	.03	.11	<2	<5	<1	1
84N 68+40E	<1	84	27	234	.3	24	23	2547	4.39	14	<5	<2	<2	44	1.1	<2	3	110	.42	.196	5	42	1.41	390	.24	<3	3.15	.03	.29	2	<5	<1	3
84N 68+70E	1	65	30	212	.9	26	16	1407	4.16	10	<5	<2	<2	32	.3	<2	3	99	.32	.173	8	42	1.11	234	.20	<3	3.60	.04	.13	<2	<5	<1	10
84N 69+00E	1	66	19	161	<.3	22	15	1355	4.65	9	<5	<2	2	40	<.2	<2	<2	107	.37	.397	7	36	1.32	367	.18	<3	4.12	.02	.17	2	<5	<1	1
83N 55+20E	<1	182	11	117	<.3	23	18	837	6.12	<2	<5	<2	<2	62	<.2	<2	2	192	.66	.221	10	37	1.50	126	.23	<3	3.44	.02	.22	<2	5	<1	9
83N 55+50E	<1	139	22	118	<.3	28	18	1075	6.38	<2	<5	<2	2	56	<.2	<2	<2	183	.54	.192	12	48	1.01	126	.20	<3	2.98	.02	.15	<2	<5	<1	20
RE 83N 55+50E	1	142	15	122	<.3	29	19	1102	6.39	<2	<5	<2	2	58	.2	<2	<2	184	.54	.195	12	49	1.03	125	.20	<3	3.07	.02	.15	<2	<5	1	45
83N 55+80E	1	131	17	116	<.3	26	20	1168	6.32	6	<5	<2	<2	53	<.2	<2	<2	181	.52	.248	8	43	.91	231	.20	<3	3.10	.02	.13	<2	<5	<1	1055
83N 56+10E	1	157	13	105	<.3	31	21	1108	6.82	7	<5	<2	<2	56	<.2	<2	<2	202	.52	.129	10	51	.98	165	.20	<3	3.18	.02	.15	<2	<5	<1	43
83N 56+40E	<1	141	24	98	<.3	30	21	1231	6.93	4	<5	<2	<2	59	<.2	<2	<2	210	.58	.209	11	55	1.11	164	.18	<3	2.59	.02	.13	<2	<5	<1	22
83N 56+70E	<1	190	8	103	<.3	23	17	765	6.59	<2	<5	<2	2	77	<.2	<2	3	198	.75	.274	13	30	1.09	204	.21	<3	3.51	.02	.17	2	<5	<1	38
83N 57+00E	<1	204	9	113	.3	23	18	946	7.49	<2	<5	<2	2	69	<.2	<2	<2	227	.70	.280	13	37	1.24	199	.21	<3	3.27	.02	.16	<2	<5	1	36
83N 57+30E	1	144	33	116	<.3	60	19	650	5.79	7	<5	<2	2	57	<.2	<2	<2	163	.54	.292	12	104	1.33	258	.17	<3	3.37	.02	.13	2	<5	1	40
83N 57+60E	<1	128	26	100	<.3	33	18	1166	6.47	9	<5	<2	<2	62	<.2	<2	4	191	.61	.174	10	60	1.04	178	.16	<3	2.28	.01	.13	<2	<5	<1	140
83N 57+90E	1	122	22	116	<.3	29	18	1219	6.14	3	<5	<2	2	55	<.2	<2	<2	165	.54	.290	11	51	1.03	283	.16	<3	2.53	.02	.15	<2	<5	1	51
83N 58+20E	1	149	23	136	.5	28	16	967	6.39	<2	<5	<2	2	53	<.2	<2	<2	177	.53	.175	14	55	.96	137	.19	<3	2.91	.02	.13	<2	<5	<1	64
83N 58+50E	1	135	25	134	.4	35	19	1104	7.20	4	<5	<2	2	60	<.2	<2	<2	195	.54	.245	10	61	1.01	228	.18	<3	2.97	.02	.16	<2	<5	<1	35
83N 58+80E	3	227	14	162	<.3	45	21	949	5.69	21	<5	<2	2	55	.4	<2	<2	151	.54	.118	17	74	1.95	150	.21	<3	3.16	.01	.43	2	<5	1	97
83N 59+10E	2	250	22	215	.8	33	23	1740	6.21	6	<5	<2	3	53	.3	<2	6	145	.55	.320	15	53	1.87	300	.22	<3	5.19	.02	.41	2	5	<1	95
83N 59+40E	1	142	14	219	<.3	32	19	1895	5.02	5	<5	<2	2	46	.6	<2	<2	120	.48	.258	9	49	1.38	261	.18	<3	3.89	.02	.18	<2	<5	<1	37
83N 59+70E	1	265	5	189	<.3	30	19	1444	4.84	<2	<5	<2	2	38	.3	<2	<2	124	.35	.199	11	39	1.40	266	.21	<3	6.03	.02	.22	<2	<5	<1	23
83N 60+00E	1	274	15	140	<.3	29	23	1491	5.58	3	<5	<2	<2	43	.3	2	2	148	.40	.173	8	44	1.46	256	.20	3	3.32	.01	.22	<2	<5	<1	19
83N 60+30E	1	165	8	104	.4	32	19	541	5.25	9	<5	<2	2	41	<.2	2	4	132	.37	.136	11	51	1.04	151	.17	<3	3.06	.02	.16	<2	<5	<1	38
83N 60+60E	<1	85	18	248	.3	30	19	2978	4.33	5	<5	<2	2	70	1.3	<2	<2	96	.49	.258	11	44	.91	445	.15	<3	3.20	.02	.16	<2	<5	1	41
83N 60+90E	1	101	18	187	.3	25	17	2208	4.23	7	<5	<2	<2	52	.9	2	<2	97	.39	.191	11	40	.91	242	.14	<3	2.76	.02	.14	<2	<5	<1	23
83N 61+20E	1	154	17	157	.3	30	18	1334	4.71	7	<5	<2	2	48	<.2	<2	<2	115	.41	.167	9	46	1.28	231	.17	<3	3.10	.02	.20	<2	<5	<1	29
83N 61+50E	2	144	17	200	.3	32	16	828	4.63	7	<5	<2	3	35	<.2	<2	2	112	.34	.210	8	44	1.25	188	.19	<3	3.67	.02	.18	<2	<5	1	44
83N 61+80E	2	136	341	414	.4	27	14	2064	4.81	3	<5	<2	3	36	1.0	2	2	87	.43	.459	17	41	1.06	607	.13	<3	4.11	.02	.17	<2	<5	<1	24
83N 62+10E	<1	407	12	115	<.3	29	20	1129	5.28	<2	<5	<2	2	43	<.2	<2	<2	142	.40	.172	8	50	1.80	237	.23	<3	3.47	.01	.20	2	<5	<1	68
83N 62+40E	1	120	10	156	<.3	32	20	1010	4.60	2	<5	<2	2	34	<.2	<2	<2	101	.37	.342	9	51	.99	254	.16	5	3.46	.02	.11	<2	<5	<1	33
STANDARD C2/AU-S	21	58	37	145	6.2	72	34	1194	4.02	36	20	8	36	52	19.8	16	18	74	.55	.105	41	66	1.03	210	.08	24	2.05	.07	.14	11	<5	2	48

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
83N 62+70E	1	101	11	121	<.3	23	18	1030	4.91	<2	<5	<2	2	34	<.2	<2	<2	117	.36	.165	8	46	.99	168	.20	3	3.33	.02	.11	<2	<5	<1	70
83N 63+00E	2	165	14	155	.3	24	15	2065	4.74	<2	<5	<2	<2	22	<.2	<2	5	112	.22	.227	8	55	.93	150	.18	<3	4.00	.03	.10	<2	<5	<1	49
83N 63+30E	2	660	16	155	.6	47	24	2504	5.95	<2	<5	<2	<2	44	<.2	<2	<2	153	.49	.104	19	94	1.53	286	.18	<3	4.51	.02	.18	<2	<5	<1	82
83N 63+60E	1	292	10	134	.6	38	16	694	5.74	<2	<5	<2	2	33	<.2	<2	<2	141	.40	.164	13	87	1.41	168	.15	<3	3.37	.02	.17	<2	<5	<1	109
83N 63+90E	1	68	18	132	.4	23	15	724	4.11	2	<5	<2	3	18	<.2	<2	2	89	.19	.327	7	47	.59	129	.22	<3	4.09	.03	.09	<2	<5	<1	48
83N 64+20E	3	95	15	160	.4	27	13	773	4.83	4	<5	<2	<2	22	<.2	<2	2	110	.22	.131	8	65	.86	82	.21	3	3.13	.03	.12	<2	<5	<1	28
83N 64+50E	4	104	64	233	.5	35	15	1167	3.44	9	<5	<2	<2	107	4.9	<2	4	92	1.99	.111	11	58	1.09	128	.10	<3	2.16	.05	.12	<2	<5	<1	11
83N 64+80E	3	65	20	121	.6	45	14	792	4.32	<2	<5	<2	<2	26	.4	<2	<2	103	.25	.125	7	151	1.15	88	.13	<3	2.91	.03	.13	<2	<5	<1	16
83N 65+10E	4	72	17	132	.3	28	10	723	4.74	<2	<5	<2	<2	27	.3	<2	<2	125	.31	.153	9	49	.81	120	.16	<3	3.86	.02	.10	<2	<5	<1	33
83N 65+40E	3	67	24	195	<.3	34	17	1511	4.53	2	<5	<2	2	37	.5	<2	5	118	.38	.151	10	49	.97	141	.18	<3	3.92	.03	.12	<2	<5	<1	42
83N 65+70E	2	93	35	216	.3	41	23	1482	6.89	5	<5	<2	2	32	.9	<2	2	122	.32	.184	15	72	1.18	250	.21	<3	3.99	.03	.18	<2	<5	<1	23
83N 66+00E	3	120	42	236	<.3	38	27	1563	5.57	52	<5	<2	2	36	.8	<2	<2	141	.39	.144	8	54	1.51	257	.23	<3	4.43	.03	.23	<2	<5	2	26
83N 66+30E	2	102	18	153	.3	34	21	799	4.72	3	<5	<2	2	48	<.2	<2	<2	122	.50	.140	7	40	1.35	253	.23	<3	4.57	.03	.21	<2	<5	<1	8
83N 66+60E	2	78	47	134	<.3	27	18	801	4.18	4	<5	<2	2	28	<.2	<2	2	103	.27	.111	7	37	1.00	172	.22	3	4.56	.03	.14	<2	6	<1	7
83N 66+90E	2	82	56	314	.3	33	29	1087	5.28	56	<5	<2	2	40	<.2	<2	3	123	.43	.206	7	40	1.15	166	.23	<3	4.55	.03	.13	<2	5	<1	6
83N 67+20E	2	113	30	186	<.3	35	34	1083	6.35	98	<5	<2	2	37	<.2	<2	<2	163	.35	.128	9	50	1.64	273	.31	<3	4.34	.03	.20	2	<5	1	77
83N 67+50E	2	81	35	186	<.3	32	25	858	4.89	21	<5	<2	2	36	<.2	<2	<2	125	.38	.100	8	43	1.31	250	.25	<3	4.20	.03	.14	<2	<5	<1	14
83N 67+80E	2	69	49	201	<.3	31	22	1195	4.91	11	<5	<2	2	28	<.2	<2	9	120	.30	.142	8	47	1.23	153	.22	<3	4.02	.03	.11	<2	<5	2	26
83N 68+10E	2	70	45	188	.6	28	18	984	5.04	10	<5	<2	2	29	<.2	<2	<2	121	.28	.102	8	50	1.19	197	.25	<3	4.27	.03	.12	<2	<5	1	31
83N 68+40E	2	104	49	205	.3	37	26	1198	5.19	22	<5	<2	2	33	<.2	<2	<2	131	.33	.091	11	57	1.49	208	.24	<3	4.66	.03	.13	<2	5	<1	19
83N 68+70E	1	72	36	282	<.3	29	23	1382	5.46	8	<5	<2	2	40	.2	<2	2	132	.40	.196	8	48	1.50	331	.24	<3	3.65	.03	.15	<2	<5	1	10
83N 69+00E	2	114	77	180	<.3	29	26	1706	5.53	38	<5	<2	2	35	.2	<2	5	133	.35	.180	7	46	1.53	207	.22	<3	3.73	.03	.18	<2	<5	<1	22
RE 83N 69+00E	2	115	78	185	<.3	30	27	1803	5.66	41	<5	<2	2	36	.2	<2	<2	136	.36	.185	8	47	1.58	210	.22	<3	3.81	.04	.18	<2	<5	<1	42
82N 55+20E	1	117	16	138	<.3	35	21	1773	5.18	<2	<5	<2	<2	80	<.2	<2	6	134	.62	.232	11	57	1.12	286	.16	<3	3.56	.02	.17	<2	<5	<1	13
82N 55+50E	1	164	13	133	<.3	37	20	1443	5.62	<2	<5	<2	<2	80	<.2	<2	<2	157	.65	.164	11	59	1.26	264	.19	4	3.71	.02	.22	<2	<5	<1	25
82N 55+80E	1	147	16	106	.5	27	20	1449	5.87	2	<5	<2	2	54	<.2	<2	5	160	.52	.174	10	51	1.05	196	.18	<3	3.15	.02	.15	<2	<5	<1	26
82N 56+10E	1	239	16	117	<.3	34	22	996	6.94	<2	<5	<2	2	62	<.2	<2	<2	207	.65	.204	12	56	1.46	160	.21	<3	3.38	.02	.32	<2	<5	1	64
82N 56+40E	1	127	16	110	<.3	23	19	1324	6.03	<2	<5	<2	<2	59	<.2	<2	6	163	.63	.231	10	41	1.04	181	.18	<3	2.99	.03	.18	<2	<5	<1	21
82N 56+70E	1	175	48	168	.8	59	24	1799	6.43	<2	<5	<2	2	67	.4	<2	<2	173	.69	.388	16	80	1.68	388	.17	<3	4.29	.02	.28	<2	<5	<1	27
82N 57+00E	1	173	7	126	<.3	23	20	1947	6.74	<2	<5	<2	2	52	<.2	<2	<2	185	.52	.229	12	35	1.19	282	.20	<3	3.60	.02	.16	<2	<5	<1	30
82N 57+30E	1	194	19	154	.4	27	19	1641	6.05	<2	<5	<2	2	53	<.2	<2	<2	166	.52	.242	13	37	1.43	200	.19	<3	4.65	.02	.21	<2	<5	<1	24
82N 57+60E	2	209	10	177	.4	38	22	1058	5.66	2	<5	<2	2	58	.5	<2	3	143	.53	.205	12	57	1.45	248	.19	<3	3.84	.02	.24	<2	<5	<1	34
82N 57+90E	1	146	12	141	<.3	24	18	1295	6.40	<2	<5	<2	<2	62	<.2	<2	<2	172	.60	.208	11	39	1.27	213	.20	<3	3.32	.02	.21	<2	<5	<1	30
82N 58+20E	1	203	13	94	<.3	29	18	930	6.58	<2	<5	<2	3	51	<.2	<2	5	180	.51	.160	13	52	1.23	139	.20	<3	3.15	.02	.22	<2	<5	<1	79
82N 58+50E	1	180	13	121	.3	41	24	933	5.67	2	<5	<2	2	61	.4	<2	5	146	.50	.098	11	68	1.29	153	.20	<3	3.24	.02	.20	<2	<5	<1	127
STANDARD C2/AU-S	21	62	36	148	6.2	75	36	1214	4.12	35	20	7	36	52	20.7	17	21	75	.57	.095	42	65	1.04	199	.09	29	2.12	.06	.15	11	<5	2	47

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
82N 58+80E	1	149	11	140	.4	37	22	1630	5.19	8	<5	<2	<2	52	<.2	<2	<2	128	.45	.190	11	64	1.22	159	.15	<3	3.17	.02	.17	<2	<5	<1	60
82N 59+10E	1	168	18	142	.4	30	15	828	5.16	<2	<5	<2	2	45	.4	<2	<2	133	.48	.122	15	46	1.05	126	.21	3	4.48	.02	.15	<2	5	1	30
82N 59+40E	1	274	10	120	<.3	32	19	704	6.22	<2	<5	<2	2	67	<.2	<2	<2	181	.84	.324	12	52	1.62	190	.20	<3	3.26	.02	.23	<2	<5	1	91
82N 59+70E	2	193	15	140	.5	27	16	1358	5.60	4	<5	<2	2	76	.5	2	<2	152	.89	.213	12	51	1.08	148	.20	5	3.55	.02	.19	<2	<5	2	30
82N 60+00E	1	146	9	149	.4	30	19	716	4.57	7	<5	<2	2	36	.7	<2	2	111	.32	.153	12	44	1.25	169	.19	<3	3.46	.02	.16	<2	<5	1	22
82N 60+30E	1	117	9	139	.3	31	17	677	4.50	<2	<5	<2	2	33	.3	<2	2	111	.31	.218	8	44	1.06	196	.19	5	3.69	.03	.13	<2	<5	1	47
82N 60+60E	<1	123	10	95	.3	32	21	896	4.86	3	<5	<2	2	45	<.2	<2	2	121	.39	.187	8	50	1.13	190	.18	<3	3.19	.02	.13	<2	<5	<1	75
82N 60+90E	1	91	11	125	<.3	26	18	2134	6.44	2	<5	<2	2	39	<.2	<2	3	106	.33	.179	8	44	.96	200	.17	3	2.61	.02	.12	<2	<5	<1	59
82N 61+20E	1	86	18	143	<.3	26	18	1489	4.30	4	<5	<2	<2	42	.2	<2	<2	98	.35	.181	7	42	.99	171	.16	<3	2.42	.02	.13	<2	<5	<1	51
82N 61+50E	1	158	16	133	.4	29	19	916	4.64	6	<5	<2	2	46	<.2	<2	<2	117	.43	.142	7	50	1.25	137	.19	<3	2.83	.02	.14	<2	<5	<1	37
82N 61+80E	1	308	26	123	<.3	27	17	1114	4.42	12	<5	<2	<2	46	<.2	<2	<2	116	.47	.149	12	44	1.43	172	.17	<3	2.68	.02	.34	<2	<5	<1	77
82N 62+10E	1	85	10	175	.6	23	15	1382	3.95	<2	<5	<2	2	21	.2	<2	<2	87	.22	.395	8	42	.74	161	.17	<3	4.74	.02	.10	<2	<5	<1	16
82N 62+40E	1	441	17	290	.8	39	21	2731	5.33	<2	<5	<2	<2	51	1.0	<2	3	140	.48	.151	17	66	1.57	534	.17	4	3.98	.02	.22	<2	<5	<1	37
82N 62+70E	2	147	19	196	.9	27	17	2151	5.26	<2	<5	<2	<2	43	.3	<2	<2	128	.46	.257	8	49	1.09	321	.16	<3	3.22	.03	.16	<2	<5	<1	65
82N 63+00E	4	146	23	235	.5	27	21	2210	5.08	<2	<5	<2	<2	30	.7	<2	2	127	.33	.145	9	52	1.23	182	.19	<3	4.24	.04	.17	<2	<5	<1	60
82N 63+60E	9	126	55	298	.4	31	22	1974	4.66	7	<5	<2	<2	81	3.0	3	<2	118	1.23	.141	10	49	1.29	146	.16	<3	3.29	.05	.29	<2	<5	1	5
82N 63+90E	4	95	30	205	.8	27	18	914	4.42	<2	<5	<2	<2	50	.2	<2	<2	105	.51	.198	9	40	1.09	149	.16	<3	4.67	.03	.29	<2	<5	1	5
RE 82N 63+90E	4	97	36	209	.6	26	18	933	4.53	2	<5	<2	<2	51	.3	<2	2	108	.53	.203	9	41	1.12	147	.16	<3	4.58	.03	.29	<2	<5	1	4
82N 64+20E	2	48	35	154	.7	15	13	1429	3.97	<2	<5	<2	<2	31	<.2	<2	<2	92	.27	.165	7	23	.69	137	.16	<3	3.13	.02	.11	<2	<5	<1	1
82N 64+50E	3	48	19	151	.6	14	11	1651	3.92	<2	<5	<2	<2	21	.5	<2	4	85	.19	.210	7	23	.52	104	.14	<3	3.84	.03	.08	<2	<5	<1	<1
82N 64+80E	3	84	11	243	.5	42	19	913	4.64	7	<5	<2	2	32	1.0	<2	3	132	.38	.169	10	72	1.36	176	.20	4	4.56	.03	.14	<2	<5	1	5
82N 65+10E	2	60	17	262	.4	32	18	1240	4.35	2	<5	<2	2	26	.6	<2	<2	112	.26	.260	8	67	1.09	151	.18	3	3.91	.03	.09	<2	<5	1	6
82N 65+40E	2	59	32	219	<.3	35	21	1353	4.51	10	<5	<2	2	29	.6	<2	4	110	.27	.187	9	66	1.03	153	.21	<3	4.15	.03	.12	<2	<5	<1	8
82N 65+70E	1	67	63	195	.6	46	24	1014	4.85	5	<5	<2	2	31	.5	<2	4	116	.30	.135	9	85	1.17	164	.23	<3	3.68	.03	.13	<2	<5	2	7
82N 66+00E	<1	78	194	530	.3	32	27	2352	5.35	5	<5	<2	2	32	.7	<2	<2	133	.37	.195	8	48	1.38	238	.28	3	3.89	.03	.15	<2	<5	1	9
82N 66+30E	1	230	44	250	<.3	62	29	919	5.72	<2	<5	<2	3	30	.2	<2	<2	165	.37	.100	7	50	1.99	218	.32	<3	5.68	.04	.27	2	<5	1	105
82N 66+60E	1	139	90	344	<.3	46	42	2175	5.19	11	<5	<2	2	33	.8	<2	4	124	.36	.090	8	43	1.21	242	.28	5	4.18	.04	.16	<2	<5	1	178
82N 66+90E	2	172	171	326	<.3	42	50	2336	5.89	15	<5	<2	2	34	.6	<2	<2	146	.39	.119	7	58	1.63	167	.24	<3	3.78	.02	.23	2	<5	1	75
82N 67+20E	2	199	120	266	.3	40	23	673	5.22	12	<5	<2	2	36	<.2	<2	4	146	.38	.090	8	62	1.73	150	.24	<3	4.31	.02	.19	<2	7	1	72
82N 67+50E	1	75	50	234	.3	29	27	1101	4.67	<2	<5	<2	2	26	.6	<2	<2	115	.26	.083	9	42	.97	180	.25	<3	4.07	.03	.11	<2	5	<1	13
82N 67+80E	1	55	46	199	<.3	27	22	2289	4.49	7	<5	<2	2	33	.2	<2	4	111	.29	.166	7	36	.94	267	.23	3	4.08	.03	.13	<2	<5	1	40
82N 68+10E	2	69	33	162	<.3	26	30	1112	4.70	6	<5	<2	2	32	.2	<2	<2	118	.31	.112	7	36	1.16	187	.26	<3	4.81	.03	.14	<2	<5	1	13
82N 68+40E	1	78	39	163	.3	25	24	772	4.94	12	<5	<2	2	34	<.2	<2	<2	121	.35	.104	8	39	1.22	184	.26	<3	4.18	.03	.15	<2	10	1	8
82N 68+70E	<1	73	32	186	.3	23	24	2414	4.55	4	<5	<2	2	29	<.2	<2	3	113	.26	.163	7	38	1.18	266	.24	<3	3.63	.03	.14	<2	<5	<1	20
82N 69+00E	1	54	37	194	<.3	20	21	1608	4.41	5	<5	<2	2	30	.2	<2	<2	102	.28	.280	7	36	1.02	240	.20	<3	3.81	.03	.12	<2	<5	<1	8
STANDARD C2/AU-S	20	59	37	144	6.6	74	34	1222	4.01	42	19	7	36	52	19.5	17	19	73	.54	.105	41	67	1.02	213	.08	26	2.09	.06	.15	10	<5	2	50

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

ACME AI TICAL LABORATORIES LTD. 852 E. HASTINGS ST. V. OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604) 1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Orvana Minerals Corp. PROJECT STEWART File # 96-3755 Page 1

710 - 1177 W. Hastings St, Vancouver BC V6E 2K3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
95N 6000	2	119	<3	82	.7	11	11	709	4.76	2	<5	<2	<2	20	.5	<2	<2	109	.18	.412	7	24	.51	72	.16	<3	4.04	.02	.07	<2	<5	1	21
95N 6030	3	174	3	80	.8	15	16	1087	4.76	16	<5	<2	<2	28	.6	<2	<2	123	.25	.136	6	26	.91	111	.16	<3	2.61	.02	.16	<2	<5	1	86
95N 6060	2	161	8	95	1.2	19	17	2002	4.53	3	<5	<2	<2	32	.7	<2	<2	109	.29	.166	8	35	.93	169	.13	<3	2.36	.02	.14	<2	<5	<1	25
95N 6090	2	159	5	98	.5	21	15	691	4.20	12	<5	<2	<2	35	.5	<2	<2	101	.31	.173	8	31	.97	128	.14	<3	3.12	.02	.17	<2	<5	1	30
95N 6120	1	101	7	96	.3	21	14	459	4.07	16	<5	<2	<2	24	<.2	<2	2	99	.23	.123	8	40	.85	106	.17	<3	3.24	.02	.11	<2	<5	1	38
95N 6150	1	45	18	96	.3	11	9	884	3.21	9	<5	<2	<2	14	.4	<2	<2	57	.11	.222	6	22	.26	100	.17	3	3.45	.03	.05	<2	<5	<1	4
RE 95N 6150	1	45	14	101	.4	11	9	877	3.23	8	<5	<2	<2	14	.3	<2	<2	59	.12	.220	6	23	.27	100	.17	<3	3.44	.03	.05	<2	<5	<1	3
95N 6180	1	42	16	98	<.3	17	13	998	4.11	11	<5	<2	<2	39	<.2	<2	<2	92	.31	.204	7	29	.85	96	.20	<3	2.43	.02	.08	<2	5	<1	49
95N 6210	1	85	12	131	.7	40	15	713	5.13	52	<5	<2	<2	28	.6	<2	2	112	.26	.138	6	48	1.01	79	.21	<3	3.24	.02	.12	<2	<5	1	10
95N 6240	1	49	7	113	.5	36	14	820	3.84	15	<5	<2	<2	26	.3	<2	<2	81	.27	.310	6	71	.90	127	.17	<3	2.84	.02	.09	<2	5	<1	24
95N 6270	1	62	4	112	<.3	47	15	806	4.58	16	<5	<2	<2	28	.5	<2	<2	96	.30	.221	6	108	1.14	89	.21	<3	2.93	.02	.11	<2	5	2	12
95N 6300	1	37	8	108	.3	30	14	540	4.34	10	<5	<2	<2	39	.4	<2	<2	84	.33	.282	6	70	.88	87	.19	<3	3.00	.02	.08	<2	<5	1	3
95N 6330	1	30	4	86	.5	15	10	623	3.72	5	<5	<2	<2	36	.2	<2	<2	80	.29	.194	6	31	.54	93	.19	<3	2.90	.02	.08	<2	6	1	2
95N 6360	1	39	<3	107	.6	16	11	1544	3.98	10	<5	<2	<2	34	.2	<2	<2	85	.25	.305	7	26	.69	93	.16	<3	3.48	.02	.08	<2	<5	<1	15
95N 6390	2	56	<3	99	.4	13	11	642	4.36	2	<5	<2	2	25	.6	<2	<2	92	.21	.166	6	21	.92	72	.24	<3	4.15	.02	.14	<2	8	1	3
95N 6420	1	20	6	74	<.3	12	6	370	3.77	6	<5	<2	2	18	<.2	2	<2	80	.12	.133	5	25	.50	75	.20	<3	4.07	.02	.06	<2	<5	1	3
95N 6450	1	55	4	96	<.3	20	14	1178	4.53	3	<5	<2	<2	39	<.2	<2	<2	104	.29	.132	7	34	1.02	110	.19	<3	3.48	.02	.10	<2	<5	<1	6
95N 6480	2	32	15	88	.3	15	10	767	3.98	7	<5	<2	2	14	.7	2	<2	76	.11	.330	8	30	.43	63	.19	<3	4.49	.02	.07	<2	9	<1	2
95N 6510	1	52	3	90	.3	17	12	570	4.01	4	<5	<2	2	22	<.2	<2	<2	88	.20	.197	5	30	.81	78	.20	<3	4.38	.02	.10	<2	6	2	3
95N 6540	1	68	7	107	1.1	19	18	909	4.76	10	<5	<2	<2	20	<.2	<2	<2	97	.17	.178	8	26	.48	131	.17	<3	3.76	.03	.10	<2	<5	1	15
95N 6570	1	72	<3	125	.7	18	10	816	3.49	17	<5	<2	2	17	<.2	<2	2	76	.15	.249	5	26	.54	118	.21	<3	4.85	.02	.07	2	8	3	283
95N 6600	2	37	5	72	<.3	14	5	312	3.91	<2	<5	<2	3	11	<.2	<2	<2	80	.10	.175	7	28	.50	62	.23	3	4.93	.02	.07	<2	8	2	4
95N 6630	1	57	12	105	<.3	38	15	724	4.13	3	<5	<2	<2	23	<.2	<2	<2	95	.20	.229	8	53	.90	155	.19	<3	3.42	.02	.08	<2	<5	<1	6
95N 6660	1	65	4	87	.5	29	15	391	3.66	5	<5	<2	3	20	<.2	<2	<2	82	.19	.141	8	48	.77	111	.24	<3	4.40	.03	.08	<2	10	2	5
95N 6690	1	31	7	141	.5	20	11	1315	3.72	5	<5	<2	<2	23	<.2	<2	2	81	.26	.202	6	44	.49	104	.18	<3	3.28	.03	.07	<2	<5	<1	4
95N 6720	1	48	4	111	.5	25	13	895	3.75	5	<5	<2	<2	41	<.2	<2	<2	89	.37	.145	7	45	.79	144	.22	<3	2.33	.02	.09	<2	8	<1	4
95N 6750	3	64	11	116	.9	19	13	1325	3.84	7	<5	<2	<2	27	.2	<2	2	86	.24	.188	5	42	.81	113	.15	<3	2.39	.02	.09	<2	<5	<1	7
93N 5010	1	37	9	70	<.3	16	6	696	3.65	<2	<5	<2	<2	14	.3	<2	<2	83	.19	.238	5	32	.39	70	.20	<3	3.68	.03	.06	<2	<5	<1	1
93N 5040	1	31	13	78	<.3	20	6	548	3.15	<2	<5	<2	<2	20	<.2	2	<2	82	.31	.093	5	35	.49	95	.21	<3	2.80	.04	.07	<2	10	1	2
93N 5070	1	88	5	65	<.3	39	15	324	3.27	<2	<5	<2	<2	35	<.2	<2	2	88	.48	.124	7	57	.96	80	.16	<3	3.38	.03	.09	<2	<5	<1	6
93N 5100	2	62	<3	118	<.3	29	12	537	3.19	4	<5	<2	<2	23	.3	<2	<2	73	.28	.158	7	45	.58	102	.16	<3	4.27	.03	.06	<2	<5	2	1
93N 5130	2	56	13	156	.3	28	17	1994	3.48	2	<5	<2	<2	27	.3	<2	<2	71	.34	.187	8	49	.53	156	.17	<3	2.43	.03	.08	<2	<5	1	3
93N 5160	2	105	4	154	.3	37	24	2855	4.18	4	<5	<2	<2	26	.2	<2	<2	110	.31	.155	7	60	.72	153	.20	<3	3.33	.03	.09	<2	<5	1	3
93N 5190	1	87	<3	98	.5	39	17	978	3.87	3	<5	<2	<2	27	<.2	<2	<2	104	.33	.075	5	82	1.21	107	.21	<3	3.07	.03	.09	<2	6	1	3
93N 5220	1	32	8	80	.8	20	10	422	3.32	11	<5	<2	<2	15	<.2	<2	<2	67	.15	.176	5	52	.51	69	.20	<3	3.79	.03	.07	<2	<5	1	<1
STANDARD C2/AU-S	19	54	35	140	5.9	70	34	1125	3.79	40	17	7	33	50	19.8	16	20	72	.57	.101	39	63	.99	191	.08	26	1.95	.06	.14	14	<5	2	50

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 19 1996 DATE REPORT MAILED: Aug 29/96 SIGNED BY ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
93N 5250	1	60	10	104	.5	32	17	866	3.67	7	<5	<2	<2	22	.4	<2	2	89	.23	.126	5	65	.73	117	.22	<3	3.03	.03	.09	<2	8	<1	1
93N 5280	1	47	7	104	.3	22	15	726	3.66	5	<5	<2	2	20	<.2	<2	3	85	.20	.232	5	40	.50	132	.21	<3	4.18	.03	.08	<2	5	1	1
93N 5310	1	47	7	93	.3	23	13	449	4.08	7	<5	<2	2	25	<.2	<2	3	103	.25	.104	5	38	.68	107	.26	<3	3.75	.03	.11	<2	6	1	2
93N 5340	2	86	4	167	<.3	30	21	3132	3.95	7	<5	<2	<2	25	.5	<2	<2	100	.24	.200	7	46	.69	147	.19	<3	3.61	.03	.11	<2	<5	2	2
93N 5370	2	56	<3	160	<.3	21	14	1022	3.13	6	<5	<2	<2	26	.4	<2	<2	75	.25	.133	6	34	.58	94	.18	<3	3.80	.03	.08	<2	5	<1	4
93N 5400	3	82	5	144	<.3	25	16	672	4.11	9	<5	<2	<2	50	.6	<2	<2	95	.51	.125	8	43	.79	73	.17	<3	3.21	.03	.16	<2	6	1	3
93N 5430	3	126	12	111	.3	38	19	1324	4.10	6	<5	<2	<2	76	.9	<2	<2	101	.69	.360	7	72	.79	133	.16	<3	2.28	.03	.21	<2	7	1	15
93N 5460	2	110	<3	90	.3	30	17	778	3.95	10	<5	<2	<2	43	.6	<2	<2	105	.49	.143	10	55	.99	120	.15	<3	2.92	.03	.16	<2	7	1	14
93N 5490	2	68	4	88	.4	20	16	1410	3.92	9	<5	<2	<2	32	.7	2	<2	102	.35	.135	7	37	.65	113	.14	<3	2.62	.03	.11	<2	7	<1	8
93N 5520	2	101	8	87	.7	24	20	1276	4.43	6	<5	<2	<2	29	.6	<2	<2	120	.33	.083	9	39	.72	155	.18	<3	2.31	.04	.12	<2	5	1	6
93N 5550	1	102	11	105	<.3	30	19	1045	4.53	10	<5	<2	<2	66	.5	<2	<2	129	.88	.134	5	52	.99	152	.18	<3	2.38	.04	.13	<2	7	1	12
93N 5580	1	96	6	114	<.3	20	17	979	4.91	7	<5	<2	<2	45	.3	<2	<2	138	.55	.266	5	32	.92	129	.19	<3	2.46	.04	.15	<2	5	1	8
93N 5610	1	136	<3	114	<.3	13	17	558	5.46	5	<5	<2	<2	44	.5	<2	<2	160	.62	.285	7	18	.93	86	.22	<3	3.26	.05	.17	<2	5	1	12
93N 5640	1	107	7	122	.3	11	17	715	5.59	7	<5	<2	<2	45	<.2	<2	<2	166	.60	.196	6	16	.83	91	.23	<3	2.24	.05	.13	<2	<5	2	19
93N 5670	1	40	9	104	<.3	10	10	602	5.03	5	<5	<2	<2	38	.2	<2	<2	140	.45	.175	6	17	.50	89	.22	<3	1.64	.04	.10	<2	7	1	9
93N 5700	1	57	<3	87	.5	11	11	771	3.94	2	<5	<2	<2	27	.4	<2	<2	104	.36	.195	7	16	.49	87	.18	<3	3.58	.04	.08	<2	<5	<1	2
93N 5730	1	43	9	69	.7	8	7	1232	3.72	<2	<5	<2	<2	25	.3	<2	<2	102	.28	.142	5	15	.36	85	.17	<3	2.00	.04	.07	2	5	1	8
93N 5760	2	44	22	89	.4	11	8	636	4.04	8	<5	<2	<2	27	.4	<2	<2	106	.30	.142	7	22	.47	99	.19	<3	1.48	.03	.09	<2	8	<1	7
93N 5790	2	88	12	92	.3	21	12	952	4.44	3	<5	<2	<2	24	.3	<2	3	109	.25	.184	6	53	.61	103	.22	<3	2.30	.03	.09	<2	9	1	8
93N 5820	2	116	<3	96	.4	15	15	1028	5.27	<2	<5	<2	<2	27	<.2	<2	<2	139	.28	.207	7	29	.89	108	.21	<3	3.44	.03	.11	<2	<5	1	21
93N 5850	1	70	<3	91	.4	10	12	728	5.24	3	<5	<2	<2	28	.3	<2	<2	137	.28	.187	6	21	.75	87	.20	<3	2.80	.02	.10	<2	<5	1	8
93N 5880	2	82	4	93	.3	24	13	654	4.74	4	<5	<2	2	25	.2	<2	<2	118	.22	.228	6	63	.80	70	.20	<3	3.99	.02	.08	<2	<5	1	17
93N 5910	<1	83	16	135	.4	33	20	2029	5.21	3	<5	<2	<2	42	.4	<2	<2	139	.38	.389	6	85	1.15	244	.26	<3	2.46	.02	.19	<2	<5	1	13
93N 5940	1	80	5	108	.3	21	14	970	4.78	9	<5	<2	<2	33	<.2	<2	<2	116	.25	.312	6	46	.76	135	.20	<3	2.94	.02	.08	<2	<5	2	25
RE 93N 5940	1	73	9	100	.3	18	13	896	4.46	7	<5	<2	<2	30	.2	<2	<2	108	.23	.286	5	43	.71	123	.18	<3	2.69	.02	.07	<2	5	2	54
93N 5970	1	100	9	126	.6	17	12	1038	4.68	<2	<5	<2	<2	19	<.2	<2	2	101	.18	.172	10	26	.78	160	.17	<3	2.87	.02	.09	<2	<5	<1	8
93N 6000	2	134	5	100	1.1	16	12	497	4.31	8	<5	<2	2	17	.2	<2	<2	95	.14	.212	8	31	.82	139	.17	<3	4.02	.02	.11	<2	<5	<1	47
91N 6000	2	213	13	116	<.3	16	15	1415	4.64	6	<5	<2	<2	27	<.2	<2	<2	124	.24	.170	6	32	.73	184	.20	<3	2.91	.01	.09	<2	5	1	98
91N 6030	2	449	6	97	.4	24	24	837	5.32	3	<5	<2	<2	30	<.2	<2	<2	162	.34	.165	5	52	.95	121	.23	<3	3.22	.01	.11	<2	<5	<1	134
91N 6060	3	269	11	94	<.3	29	25	1216	5.03	21	<5	<2	<2	41	.4	<2	<2	143	.44	.136	5	65	1.07	157	.20	<3	2.66	.02	.14	<2	<5	1	84
91N 6090	4	317	17	110	.3	37	31	730	5.36	15	<5	<2	<2	41	<.2	<2	<2	152	.44	.140	5	65	1.20	118	.21	<3	2.99	.01	.20	<2	<5	<1	78
91N 6120	5	288	19	121	.6	56	34	642	5.64	25	<5	<2	2	35	<.2	<2	<2	134	.29	.177	7	66	1.30	109	.21	<3	3.70	.01	.12	<2	5	<1	99
91N 6150	5	178	13	104	.3	37	24	559	4.53	11	<5	<2	<2	21	<.2	2	<2	92	.16	.190	8	40	.64	107	.21	<3	4.49	.02	.09	<2	9	<1	38
91N 6180	2	123	15	121	<.3	39	25	1168	4.28	25	<5	<2	<2	25	<.2	2	<2	93	.22	.229	9	55	.96	131	.19	<3	3.40	.02	.10	<2	<5	<1	42
91N 6210	2	142	9	119	.3	71	31	734	4.81	30	<5	<2	2	40	<.2	<2	3	106	.32	.215	9	100	1.40	122	.20	<3	3.60	.01	.13	<2	<5	<1	55
STANDARD C2/AU-S	20	56	39	141	6.3	73	35	1164	3.83	44	20	8	34	51	20.1	18	19	72	.54	.105	40	64	.97	194	.08	27	1.94	.06	.14	14	<5	1	55

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
91N 6240	1	121	3	127	<.3	90	32	1156	5.10	30	<5	<2	<2	43	.2	2	<2	112	.50	.207	6	171	1.73	132	.22	3	3.64	.02	.18	<2	<5	1	55
91N 6270	1	51	6	119	.3	36	23	1180	4.35	15	<5	<2	<2	53	<.2	<2	2	94	.48	.188	7	66	1.11	133	.18	<3	2.70	.01	.11	<2	<5	2	38
91N 6300	1	78	5	101	<.3	66	35	1085	4.68	22	<5	<2	<2	39	<.2	<2	<2	105	.45	.124	5	146	1.59	92	.20	4	3.02	.02	.15	<2	<5	<1	27
91N 6330	1	102	6	124	<.3	43	36	1293	5.20	15	<5	<2	<2	46	<.2	<2	2	122	.47	.197	5	87	1.64	109	.19	<3	3.27	.02	.24	<2	<5	2	11
91N 6360	1	61	47	118	<.3	26	26	1678	4.64	18	<5	<2	<2	51	.9	<2	<2	113	.54	.098	6	46	1.21	167	.20	<3	2.83	.01	.16	<2	<5	1	10
91N 6390	<1	100	<3	127	.3	30	30	1237	5.27	14	<5	<2	<2	47	.2	<2	2	128	.44	.185	8	49	1.62	142	.21	<3	3.66	.01	.19	<2	<5	1	7
91N 6420	1	59	17	132	.3	25	24	1097	4.60	8	<5	<2	<2	39	.2	<2	3	99	.36	.275	8	37	1.07	173	.20	<3	3.37	.01	.14	<2	<5	<1	11
91N 6450	1	74	8	112	<.3	22	27	1482	4.66	11	<5	<2	<2	39	.2	<2	2	109	.35	.192	8	36	1.05	122	.18	<3	3.08	.01	.13	<2	<5	1	10
91N 6480	1	81	10	120	<.3	28	27	1289	5.11	13	<5	<2	<2	47	.2	<2	<2	123	.41	.221	9	49	1.39	143	.19	<3	3.25	.01	.14	<2	<5	1	10
91N 6510	1	95	8	120	<.3	32	30	1375	5.25	9	<5	<2	<2	42	<.2	<2	<2	122	.38	.190	9	53	1.44	197	.21	<3	3.47	.01	.17	<2	<5	<1	17
91N 6540	1	118	6	117	<.3	33	32	1092	5.25	21	<5	<2	<2	45	.2	<2	<2	129	.45	.155	9	52	1.55	163	.22	<3	3.72	.01	.25	<2	<5	1	64
91N 6570	<1	100	19	137	<.3	39	31	1905	5.33	17	<5	<2	<2	46	.3	<2	<2	128	.44	.197	10	56	1.65	272	.24	<3	3.93	.01	.26	<2	<5	<1	31
91N 6600	1	79	14	145	<.3	34	30	1476	4.52	14	<5	<2	<2	57	.9	<2	2	98	.52	.322	7	53	1.27	268	.23	<3	3.96	.02	.25	<2	7	2	7
91N 6630	<1	87	5	137	<.3	32	31	1036	5.05	15	<5	<2	<2	44	.8	<2	<2	111	.42	.299	6	50	1.58	229	.25	<3	4.30	.02	.27	<2	5	<1	12
91N 6660	<1	90	15	199	<.3	30	33	1696	5.95	9	<5	<2	<2	45	.2	<2	2	139	.41	.272	6	37	2.14	398	.31	<3	4.57	.02	.34	<2	7	1	7
91N 6690	<1	83	22	263	<.3	25	27	3116	4.93	9	<5	<2	<2	55	1.7	<2	<2	107	.48	.319	6	39	1.20	377	.20	<3	3.65	.02	.31	<2	<5	<1	21
91N 6720	1	98	8	132	.3	23	19	1078	3.97	13	<5	<2	<2	58	.5	<2	<2	86	.45	.243	6	30	.97	232	.15	<3	2.73	.01	.15	<2	<5	<1	9
91N 6750	1	88	18	251	<.3	28	46	2165	5.48	22	<5	<2	<2	46	.5	<2	<2	122	.47	.275	6	40	1.65	489	.21	<3	3.73	.02	.28	<2	<5	1	7
90N 5520	1	31	11	80	.4	13	7	384	3.04	3	<5	<2	<2	17	<.2	2	2	74	.21	.090	5	26	.40	105	.21	<3	2.74	.02	.08	<2	6	<1	9
90N 5550	1	83	<3	87	.3	34	12	338	4.50	7	<5	<2	2	18	<.2	<2	<2	140	.21	.119	5	72	1.31	81	.26	<3	3.03	.02	.10	<2	<5	<1	8
90N 5580	1	121	13	86	<.3	20	14	1584	4.77	10	<5	<2	<2	33	<.2	2	<2	147	.40	.140	5	50	.82	116	.24	<3	2.12	.02	.09	<2	8	3	26
90N 5610	2	229	<3	107	.9	17	16	510	4.90	3	<5	<2	<2	37	<.2	<2	<2	136	.56	.431	5	28	.80	126	.20	<3	3.66	.02	.06	<2	<5	1	18
90N 5640	2	195	<3	123	.4	15	19	425	6.84	2	<5	<2	<2	51	<.2	<2	<2	214	.63	.207	7	21	.90	89	.32	<3	3.27	.02	.08	<2	7	1	5
90N 5670	1	142	4	99	.6	11	13	482	5.45	2	<5	<2	<2	24	.2	<2	<2	166	.29	.144	4	17	.73	85	.27	<3	3.84	.02	.10	<2	6	<1	11
RE 90N 5670	1	145	6	101	.6	11	13	488	5.05	<2	<5	<2	<2	23	<.2	<2	<2	151	.27	.149	5	17	.73	85	.27	<3	4.01	.02	.10	<2	7	2	43
90N 5700	3	139	<3	105	.7	12	13	538	5.12	7	<5	<2	<2	25	<.2	<2	<2	133	.28	.291	6	22	.61	76	.22	<3	4.74	.02	.09	<2	7	2	13
90N 5730	2	178	11	131	.3	12	16	1295	5.49	6	<5	<2	<2	30	<.2	<2	<2	161	.36	.281	6	15	.78	104	.22	<3	3.65	.02	.12	<2	<5	<1	16
90N 5760	1	140	12	129	<.3	13	18	1020	6.41	<2	<5	<2	<2	31	<.2	<2	<2	193	.43	.204	6	20	1.17	88	.25	<3	2.89	.02	.14	<2	<5	1	44
90N 5790	2	98	5	122	<.3	12	11	1394	3.91	9	<5	<2	<2	19	<.2	2	<2	97	.21	.229	6	16	.52	84	.19	<3	5.36	.02	.09	<2	6	1	7
90N 5820	1	68	13	152	.3	14	18	1586	6.01	<2	<5	<2	<2	23	.3	<2	<2	160	.32	.211	7	23	.92	153	.22	<3	2.89	.02	.12	<2	<5	2	25
90N 5850	2	262	15	172	<.3	22	27	2144	6.44	4	<5	<2	<2	23	<.2	<2	<2	169	.31	.221	11	38	1.26	193	.21	<3	3.74	.01	.14	<2	<5	1	29
90N 5880	2	151	23	163	.6	17	17	1688	3.92	9	<5	<2	<2	14	.3	<2	<2	84	.15	.324	6	23	.39	224	.15	<3	3.22	.02	.07	<2	<5	<1	25
90N 5910	2	312	16	146	<.3	32	22	1832	5.24	5	<5	<2	<2	18	<.2	<2	<2	126	.20	.163	9	80	.84	257	.12	<3	3.40	.01	.10	<2	<5	<1	46
90N 5940	1	169	10	140	<.3	16	23	2081	6.16	3	<5	<2	<2	40	<.2	<2	<2	179	.42	.192	9	26	1.21	249	.21	<3	2.99	.01	.13	<2	<5	<1	32
90N 5970	1	368	27	138	<.3	18	21	2210	5.35	3	<5	<2	<2	34	.2	<2	<2	142	.36	.162	9	29	1.09	274	.19	<3	3.13	.01	.16	<2	<5	<1	49
STANDARD C2/AU-S	20	56	37	142	6.2	73	35	1095	3.83	44	21	7	34	51	20.0	16	19	72	.56	.101	40	62	.99	202	.08	27	1.97	.06	.14	13	<5	1	45

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
90N 6000	2	409	5	104	.5	22	21	1148	5.75	<2	<5	<2	<2	37	<.2	<2	2	162	.33	.067	7	62	1.28	145	.24	<3	2.83	.01	.14	<2	<5	<1	148
90N 6030	2	492	3	106	.5	27	25	801	5.85	2	<5	<2	<2	39	<.2	<2	<2	165	.41	.181	8	58	1.37	180	.21	5	3.64	.01	.21	<2	<5	<1	173
90N 6060	2	481	<3	130	<.3	25	33	1504	4.97	6	<5	<2	<2	57	.4	<2	<2	138	.59	.285	8	36	1.21	350	.20	5	3.96	.02	.21	<2	8	1	91
90N 6090	3	576	<3	101	.3	25	37	779	5.15	9	<5	<2	<2	51	.5	<2	3	153	.46	.179	7	38	1.40	318	.20	5	4.17	.01	.24	<2	9	2	157
RE 90N 6090	3	565	<3	97	<.3	24	36	768	5.13	7	<5	<2	<2	51	.2	<2	<2	153	.46	.177	6	36	1.37	311	.20	4	4.09	.01	.24	<2	6	1	183
90N 6120	3	471	6	123	.3	51	49	1298	5.32	21	<5	<2	<2	56	.5	<2	<2	130	.55	.238	5	124	1.60	199	.21	4	4.36	.01	.20	<2	9	2	166
90N 6150	1	131	7	112	<.3	60	35	1607	4.41	17	<5	<2	<2	47	.6	<2	<2	102	.51	.133	8	109	1.26	183	.17	3	2.99	.02	.15	<2	<5	1	53
90N 6180	1	188	<3	97	<.3	83	37	1172	4.95	25	<5	<2	<2	53	.3	<2	2	122	.53	.065	8	145	1.71	142	.23	3	3.29	.02	.19	<2	6	1	57
90N 6210	2	181	5	96	.3	56	29	858	4.72	23	<5	<2	<2	42	<.2	<2	<2	121	.44	.114	8	93	1.26	128	.22	3	3.14	.02	.14	<2	<5	1	143
90N 6240	1	111	4	125	<.3	56	30	922	4.90	20	<5	<2	<2	50	.3	<2	2	107	.44	.251	8	99	1.34	168	.21	4	3.29	.02	.15	<2	7	2	31
90N 6270	<1	97	10	109	<.3	55	33	1427	5.05	21	<5	<2	<2	58	.2	<2	3	118	.53	.122	7	107	1.61	158	.21	3	3.20	.02	.23	<2	<5	<1	24
90N 6300	1	108	<3	106	<.3	36	32	1426	5.50	12	<5	<2	<2	51	<.2	<2	<2	136	.44	.125	5	68	1.72	175	.22	<3	3.55	.01	.24	<2	5	<1	16
90N 6330	1	96	3	200	<.3	93	38	1270	5.10	28	<5	<2	<2	37	.8	<2	<2	109	.55	.257	6	170	1.62	240	.23	5	3.79	.03	.19	<2	8	<1	37
90N 6360	1	102	<3	149	<.3	46	30	961	5.22	20	<5	<2	<2	44	.2	<2	2	124	.44	.152	10	83	1.58	159	.24	3	3.79	.02	.22	<2	11	1	34
90N 6390	<1	92	<3	124	<.3	44	28	1326	5.23	6	<5	<2	<2	59	.4	<2	2	132	.45	.130	9	72	1.64	222	.25	3	3.15	.01	.26	<2	<5	2	16
90N 6420	1	58	4	215	<.3	29	28	3883	4.55	9	<5	<2	<2	82	.9	<2	<2	97	.69	.175	9	42	1.12	437	.17	5	3.22	.02	.18	<2	<5	1	11
90N 6450	1	86	22	126	<.3	28	29	2200	4.91	12	<5	<2	<2	52	.7	<2	<2	114	.41	.163	8	47	1.18	267	.20	4	3.23	.01	.19	<2	<5	<1	31
90N 6480	1	96	14	113	<.3	31	29	1951	4.95	15	<5	<2	<2	44	.4	<2	<2	120	.35	.176	8	52	1.22	201	.21	3	3.35	.01	.17	<2	5	<1	22
90N 6510	1	111	<3	108	<.3	31	29	1597	4.65	18	<5	<2	<2	43	<.2	<2	<2	115	.33	.141	9	48	1.26	220	.23	<3	3.77	.02	.17	<2	5	<1	307
90N 6540	1	97	<3	106	<.3	29	29	1141	4.79	30	<5	<2	<2	36	.3	2	2	115	.31	.130	8	37	1.30	215	.27	3	4.50	.02	.18	<2	16	2	21
90N 6570	1	111	7	151	<.3	21	28	1575	6.21	12	<5	<2	<2	45	<.2	<2	<2	147	.26	.176	6	31	1.37	262	.31	3	3.45	.02	.16	<2	14	<1	5
90N 6600	<1	45	<3	154	<.3	34	47	1421	6.01	19	<5	<2	<2	59	<.2	<2	2	141	.49	.158	12	56	1.87	442	.29	3	3.78	.02	.28	<2	12	1	6
90N 6630	<1	153	<3	161	<.3	30	37	1783	4.91	6	<5	<2	<2	52	.4	<2	3	110	.49	.136	2	50	2.04	325	.32	3	3.92	.01	.26	<2	17	<1	4
90N 6660	<1	107	<3	157	<.3	32	33	1276	5.07	20	<5	<2	<2	45	<.2	<2	<2	113	.44	.256	7	48	1.72	333	.29	4	4.59	.02	.28	<2	14	2	9
90N 6690	1	109	<3	162	<.3	23	33	2607	5.53	17	<5	<2	<2	48	1.0	<2	3	126	.47	.148	7	36	1.96	406	.30	4	4.30	.02	.33	<2	13	3	5
90N 6720	<1	85	<3	127	<.3	29	22	909	5.06	9	<5	<2	<2	36	.4	<2	<2	124	.39	.151	3	53	1.76	212	.28	3	3.69	.02	.39	<2	14	2	21
90N 6750	<1	80	<3	172	<.3	30	24	2143	4.74	9	<5	<2	<2	38	.4	<2	<2	113	.36	.259	5	49	1.63	305	.25	3	3.76	.02	.23	<2	11	<1	18
89N 5010	1	91	20	138	.4	36	26	1393	3.96	6	<5	<2	<2	51	<.2	<2	<2	97	.44	.192	5	63	.68	119	.20	4	3.04	.02	.09	<2	8	2	3
89N 5040	2	105	21	119	<.3	36	23	852	3.83	11	<5	<2	<2	25	.3	2	<2	95	.30	.312	6	61	.70	80	.17	4	3.76	.02	.09	<2	<5	<1	5
89N 5070	1	96	23	122	<.3	40	24	1607	3.87	8	<5	<2	<2	34	.3	<2	<2	97	.38	.237	6	70	.75	118	.17	3	3.38	.02	.09	<2	<5	<1	5
89N 5100	1	49	23	111	.4	27	17	637	3.83	2	<5	<2	<2	31	.2	<2	<2	94	.29	.114	7	56	.57	83	.19	3	2.77	.02	.09	<2	8	<1	5
89N 5130	2	70	229	167	.6	33	15	427	3.70	28	<5	<2	8	22	.3	<2	<2	86	.28	.143	8	58	.68	71	.16	3	3.65	.02	.09	<2	<5	<1	8
89N 5160	3	93	25	152	.4	50	21	1220	3.74	4	<5	<2	<2	51	.6	<2	2	114	.64	.052	9	93	.89	66	.17	<3	3.11	.03	.08	<2	10	1	7
89N 5190	1	50	15	120	<.3	35	17	971	3.33	13	<5	<2	<2	27	<.2	<2	<2	82	.26	.162	6	53	.61	135	.20	3	3.43	.02	.09	<2	6	<1	5
89N 5220	1	36	15	88	<.3	23	10	607	3.51	9	<5	<2	<2	19	<.2	<2	<2	80	.18	.193	6	42	.47	99	.21	<3	2.77	.02	.08	<2	10	<1	134
STANDARD C2/AU-S	20	57	37	144	6.4	73	35	1167	3.89	43	23	8	34	52	20.2	17	17	74	.55	.098	44	65	1.00	203	.09	31	2.00	.06	.14	14	<5	3	42

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
89N 5250	1	32	11	96	<.3	37	15	984	3.22	7	<5	<2	<2	16	<.2	<2	<2	75	.18	.160	4	56	.59	94	.22	5	3.92	.02	.07	<2	8	1	4
89N 5280	1	43	15	92	<.3	31	15	972	3.24	<2	<5	<2	<2	32	<.2	<2	<2	82	.37	.102	6	52	.72	159	.22	3	3.32	.03	.10	<2	15	<1	4
89N 5310	1	37	9	93	.5	25	15	861	2.96	2	<5	<2	<2	20	<.2	<2	<2	67	.23	.107	5	39	.46	87	.19	3	4.32	.02	.07	<2	7	<1	12
89N 5340	1	27	19	101	<.3	20	9	2195	2.63	2	<5	<2	<2	19	.2	<2	2	56	.22	.168	4	30	.28	105	.18	3	4.04	.02	.07	<2	5	2	2
89N 5370	1	33	6	80	.6	18	10	785	2.56	3	<5	<2	<2	13	<.2	<2	<2	51	.15	.183	5	31	.30	64	.16	3	4.21	.02	.05	<2	5	<1	2
89N 5400	1	59	31	128	1.4	18	10	1350	3.10	6	<5	<2	<2	14	.2	2	<2	72	.13	.197	5	32	.29	108	.12	<3	2.71	.02	.06	<2	8	1	46
89N 5430	1	54	21	89	<.3	21	10	843	3.62	<2	<5	<2	<2	13	<.2	<2	2	80	.13	.282	4	45	.58	71	.20	<3	4.89	.02	.09	<2	12	1	20
89N 5460	<1	90	9	110	.6	25	12	653	3.19	<2	<5	<2	<2	24	.4	<2	<2	75	.27	.098	7	46	1.07	153	.19	3	4.08	.02	.14	<2	5	<1	50
89N 5490	1	60	17	114	1.2	19	12	1087	2.91	9	<5	<2	<2	21	.4	<2	2	65	.18	.191	5	35	.57	161	.16	<3	4.12	.02	.08	<2	7	1	10
89N 5520	1	51	15	115	.9	28	13	1213	3.34	<2	<5	<2	<2	16	.3	<2	3	83	.17	.096	5	55	.66	138	.19	<3	3.83	.02	.07	<2	8	1	7
89N 5550	1	126	17	77	1.6	19	13	669	3.36	<2	<5	<2	2	15	<.2	<2	2	80	.15	.071	4	36	.69	93	.21	3	4.39	.02	.07	<2	<5	<1	10
89N 5580	1	88	11	91	.6	24	14	664	3.71	<2	<5	<2	<2	16	<.2	<2	<2	97	.16	.112	5	47	.90	94	.22	<3	4.17	.02	.09	<2	<5	1	16
89N 5610	1	42	11	80	.8	14	12	801	2.83	<2	<5	<2	<2	12	<.2	<2	2	59	.12	.195	5	25	.32	87	.19	<3	5.31	.02	.06	<2	14	<1	4
89N 5640	1	64	10	95	.8	16	15	1170	3.82	<2	<5	<2	<2	16	<.2	<2	2	95	.18	.219	5	30	.44	91	.20	3	4.20	.02	.07	<2	6	<1	4
89N 5670	1	123	9	122	<.3	21	16	888	4.44	3	<5	<2	<2	22	<.2	<2	<2	122	.27	.340	5	38	.74	103	.24	<3	4.60	.02	.09	<2	17	4	4
89N 5700	1	81	10	96	.4	14	13	727	3.56	6	<5	<2	2	16	<.2	<2	3	91	.16	.305	5	26	.52	102	.22	<3	5.05	.02	.07	<2	15	1	3
89N 5730	1	120	19	95	<.3	20	15	1117	4.85	<2	<5	<2	<2	26	.2	<2	2	141	.31	.256	6	41	.63	101	.23	3	4.00	.02	.09	<2	9	1	9
89N 5760	2	213	10	116	<.3	22	19	691	5.85	<2	<5	<2	<2	37	<.2	<2	<2	178	.49	.230	9	41	1.17	99	.24	<3	3.70	.02	.18	<2	6	<1	24
RE 89N 5760	1	216	4	118	<.3	23	19	695	5.79	<2	<5	<2	<2	37	<.2	<2	<2	176	.49	.230	9	38	1.19	99	.24	3	3.73	.02	.18	<2	11	<1	21
89N 5790	1	115	7	131	<.3	17	21	1147	7.55	4	<5	<2	<2	46	.3	<2	<2	235	.60	.238	7	30	1.37	157	.26	<3	2.83	.02	.17	<2	9	2	18
89N 5820	1	169	9	122	<.3	21	21	1317	6.23	<2	<5	<2	<2	36	.3	<2	<2	183	.45	.197	9	28	1.17	203	.25	<3	3.85	.02	.15	<2	13	1	27
89N 5850	1	69	11	137	<.3	13	13	3076	4.44	<2	<5	<2	<2	34	<.2	<2	2	110	.34	.352	6	18	.55	212	.21	3	3.75	.02	.09	<2	<5	<1	20
89N 5880	1	94	7	149	<.3	13	19	2690	4.78	3	<5	<2	<2	36	.4	<2	<2	137	.40	.208	7	15	1.02	256	.23	<3	3.81	.02	.12	<2	11	2	17
89N 5910	1	212	22	177	<.3	17	30	2583	7.06	<2	<5	<2	<2	59	<.2	<2	<2	212	.64	.216	7	20	1.55	387	.21	<3	3.41	.01	.25	<2	7	2	28
89N 5940	2	322	48	216	<.3	25	36	4303	6.30	3	<5	<2	<2	55	1.7	<2	2	113	.73	.297	12	25	.61	873	.06	<3	2.50	.01	.23	<2	<5	1	24
89N 5970	3	316	20	140	<.3	22	27	2021	5.92	3	<5	<2	<2	29	<.2	2	<2	122	.29	.118	11	29	.80	328	.10	<3	2.84	.01	.14	<2	<5	1	48
87N 5010	1	99	26	193	<.3	31	19	1779	4.03	<2	<5	<2	<2	52	.7	<2	<2	105	.63	.235	8	47	.64	216	.16	3	2.78	.02	.12	<2	6	<1	8
87N 5040	3	133	27	177	.3	50	24	1050	4.42	9	<5	<2	<2	34	.4	<2	3	115	.37	.145	11	92	1.01	68	.12	<3	2.98	.02	.17	<2	<5	<1	8
87N 5070	1	98	24	146	<.3	46	23	935	4.34	9	<5	<2	<2	43	.4	<2	<2	109	.49	.154	11	84	1.16	69	.11	<3	2.77	.02	.17	<2	5	<1	6
87N 5100	2	77	17	133	<.3	44	22	759	4.16	9	<5	<2	<2	36	.4	<2	3	104	.37	.154	8	78	.98	119	.16	3	2.81	.02	.12	<2	5	<1	14
87N 5130	2	94	41	131	<.3	52	27	938	3.89	11	<5	<2	<2	45	.4	2	2	105	.54	.130	5	105	1.08	123	.17	<3	2.31	.02	.21	<2	10	1	19
87N 5160	1	59	32	169	<.3	35	21	1739	3.81	<2	<5	<2	<2	53	.6	<2	<2	98	.48	.169	6	66	.78	239	.18	<3	2.28	.02	.14	<2	8	1	33
87N 5190	1	115	25	145	<.3	54	23	1310	4.69	12	<5	<2	<2	37	.2	<2	<2	139	.42	.142	7	83	1.44	278	.25	3	3.38	.02	.16	<2	5	<1	14
87N 5220	1	149	3	116	<.3	50	23	715	4.82	<2	<5	<2	<2	30	<.2	<2	2	160	.35	.130	5	74	1.69	171	.29	<3	3.85	.02	.26	<2	15	<1	12
87N 5250	1	198	9	110	<.3	61	23	900	4.41	2	<5	<2	<2	34	<.2	<2	3	147	.40	.064	4	89	1.66	251	.30	<3	3.45	.02	.23	<2	15	1	10
STANDARD C2/AU-S	19	55	42	138	6.1	71	34	1073	3.77	43	19	8	31	49	19.6	15	17	70	.56	.101	39	61	.97	184	.08	27	1.90	.06	.14	14	<5	1	47

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
87N 5280	1	158	15	117	<.3	68	20	1207	4.23	8	<5	<2	2	49	.5	<2	<2	122	.45	.095	7	92	1.47	209	.25	3	4.09	.02	.17	<2	<5	1	46
RE 87N 5280	1	161	22	120	<.3	70	21	1222	4.33	8	<5	<2	<2	49	.5	<2	<2	125	.47	.098	7	96	1.50	212	.25	<3	4.15	.02	.17	<2	<5	4	42
87N 5310	1	161	25	116	.6	62	24	759	4.41	8	<5	<2	2	30	.3	<2	<2	118	.27	.114	8	76	1.20	144	.23	3	4.15	.01	.13	<2	<5	<1	25
87N 5340	1	160	73	269	<.3	62	23	1034	4.48	7	<5	<2	<2	48	.8	<2	<2	129	.52	.132	8	97	1.56	237	.23	<3	3.76	.02	.17	<2	<5	<1	32
87N 5370	2	230	359	372	<.3	58	25	1748	4.92	13	<5	<2	<2	36	.8	<2	<2	156	.40	.153	8	106	2.00	229	.24	<3	4.18	.01	.16	<2	12	1	54
87N 5400	1	207	49	148	.3	47	25	1411	4.68	8	<5	<2	<2	32	.4	<2	<2	140	.35	.144	5	94	1.45	220	.24	<3	3.52	.01	.12	<2	<5	<1	178
87N 5430	1	147	31	120	<.3	47	21	721	4.23	11	<5	<2	2	30	.3	<2	<2	116	.32	.123	8	83	1.47	196	.23	<3	3.66	.01	.13	<2	<5	1	17
87N 5460	1	140	38	176	<.3	62	27	2246	4.31	10	<5	<2	2	38	.8	<2	<2	110	.40	.169	9	103	1.42	339	.19	<3	3.14	.02	.17	<2	<5	2	63
87N 5490	1	183	40	135	<.3	58	24	1429	4.92	11	<5	<2	<2	41	.7	<2	<2	151	.44	.115	5	108	1.64	265	.24	<3	3.23	.02	.20	<2	<5	2	13
87N 5520	1	123	24	135	<.3	49	21	1595	4.29	7	<5	<2	<2	30	.2	2	<2	116	.35	.189	6	89	1.31	184	.22	3	3.74	.01	.15	<2	5	<1	14
87N 5550	1	91	20	127	<.3	36	21	964	4.62	8	<5	<2	<2	32	.3	<2	<2	127	.34	.131	6	71	1.17	206	.24	<3	3.65	.01	.10	<2	<5	1	23
87N 5580	1	112	16	136	<.3	29	20	1891	4.16	8	<5	<2	<2	50	.4	<2	<2	111	.52	.122	7	53	1.06	240	.20	<3	3.53	.02	.14	<2	<5	1	72
87N 5610	1	118	21	264	.3	27	23	1517	4.68	5	<5	<2	<2	56	.6	<2	<2	123	.60	.391	7	47	1.10	290	.18	<3	3.90	.02	.17	<2	<5	<1	45
87N 5640	1	211	29	167	.4	29	29	1555	5.85	6	<5	<2	<2	47	.6	<2	<2	186	.55	.216	7	52	1.44	251	.24	<3	3.58	.01	.24	<2	<5	1	47
87N 5670	1	297	19	158	<.3	35	31	1587	6.41	7	<5	<2	<2	53	.6	<2	2	200	.68	.318	7	79	1.48	252	.23	<3	3.32	.01	.16	<2	<5	3	89
87N 5700	1	206	10	116	.6	29	23	1248	5.58	11	<5	<2	<2	47	<.2	<2	<2	172	.56	.155	6	56	1.15	139	.20	<3	2.84	.01	.23	<2	<5	2	48
87N 5730	1	163	18	131	.3	30	24	1508	5.26	12	<5	<2	<2	62	.3	<2	<2	152	.68	.234	6	56	1.08	269	.20	<3	3.15	.02	.19	<2	<5	2	99
87N 5760	1	213	18	123	.3	30	28	1087	6.81	5	<5	<2	<2	63	.8	<2	2	223	.73	.144	5	53	1.44	196	.25	<3	3.05	.02	.26	<2	<5	3	39
87N 5790	1	242	15	129	<.3	22	28	1378	7.06	6	<5	<2	<2	66	.6	<2	<2	209	.75	.212	7	36	1.47	227	.22	<3	3.37	.02	.30	<2	<5	<1	44
87N 5820	1	331	11	125	.3	25	29	1183	6.81	5	<5	<2	<2	63	<.2	<2	<2	202	.72	.267	11	43	1.43	298	.19	<3	3.63	.01	.30	<2	5	2	56
87N 5850	1	274	12	151	<.3	24	28	1838	6.32	5	<5	<2	<2	61	.5	<2	<2	179	.75	.227	11	42	1.23	379	.17	<3	3.28	.02	.24	<2	<5	2	46
87N 5880	1	395	8	176	<.3	22	29	2278	6.37	5	<5	<2	<2	65	.6	<2	<2	177	.63	.261	8	39	1.46	363	.17	<3	3.49	.01	.27	<2	<5	<1	51
87N 5910	1	248	17	118	<.3	19	24	1905	6.25	5	<5	<2	<2	56	<.2	<2	<2	175	.64	.240	9	37	1.07	291	.15	<3	2.77	.01	.19	<2	<5	1	50
87N 5940	1	184	20	141	.7	21	21	1222	5.28	2	<5	<2	<2	50	.4	<2	<2	136	.64	.260	8	32	1.00	226	.18	<3	3.72	.02	.18	<2	<5	<1	23
87N 5970	1	216	19	127	.3	29	24	1349	5.72	7	<5	<2	<2	65	.6	<2	<2	155	.70	.179	7	36	1.14	238	.18	<3	3.25	.02	.21	<2	<5	<1	47
86N 6000	1	144	28	189	<.3	31	23	1653	4.73	17	<5	<2	<2	42	.8	<2	<2	114	.45	.178	7	50	.96	259	.17	3	2.97	.01	.15	<2	6	<1	27
86N 6030	1	118	30	230	<.3	29	24	3103	4.68	9	<5	<2	<2	58	.9	<2	<2	102	.63	.322	8	56	.86	509	.15	<3	2.69	.02	.21	<2	<5	<1	139
86N 6060	1	127	22	138	.3	39	22	2091	4.23	15	<5	<2	<2	48	.5	<2	<2	92	.55	.212	10	66	.90	248	.14	<3	3.00	.02	.16	<2	5	<1	31
86N 6090	<1	104	19	137	<.3	49	26	1887	4.10	19	<5	<2	<2	60	.9	<2	<2	92	.63	.175	6	109	1.13	312	.17	<3	2.68	.02	.14	<2	9	<1	106
86N 6120	1	223	18	119	<.3	44	27	611	4.93	28	<5	<2	2	40	.3	<2	<2	122	.42	.126	10	81	1.51	119	.20	<3	3.39	.01	.26	<2	<5	2	52
86N 6150	1	785	11	182	.6	28	25	1257	5.64	8	<5	<2	<2	37	.3	<2	<2	159	.45	.254	7	47	1.50	202	.18	<3	3.39	.01	.24	<2	<5	2	110
86N 6180	1	1090	15	146	.3	28	32	1257	5.09	11	<5	<2	<2	46	.4	<2	<2	145	.53	.196	6	36	1.77	358	.25	<3	4.15	.02	.30	<2	<5	2	143
86N 6210	<1	147	14	153	.3	29	22	1067	3.81	16	<5	<2	<2	40	.7	<2	<2	85	.41	.218	9	41	.91	203	.19	3	3.51	.02	.13	<2	5	<1	17
86N 6240	<1	120	11	152	<.3	57	26	1544	4.67	16	<5	<2	<2	45	.5	2	2	116	.51	.155	6	103	1.53	209	.22	<3	3.53	.02	.15	<2	<5	1	49
86N 6270	1	106	15	159	<.3	38	25	1911	4.30	15	<5	<2	<2	40	.9	<2	<2	98	.40	.336	6	81	1.04	200	.17	<3	3.12	.01	.12	<2	<5	<1	33
STANDARD C2/AU-S	19	57	39	134	5.8	69	34	1071	3.65	45	20	7	32	48	19.3	16	18	68	.56	.099	38	62	.91	190	.08	26	1.93	.06	.13	13	<5	2	46

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
86N 6300	1	152	10	171	.5	29	23	1017	3.81	6	<5	<2	2	38	.6	<2	<2	80	.62	.551	8	41	.66	250	.20	<3	4.56	.02	.12	<2	<5	<1	41
86N 6330	1	52	17	161	.3	23	20	815	3.84	10	<5	<2	2	26	.8	<2	4	79	.33	.417	6	39	.65	135	.19	<3	3.94	.02	.08	<2	<5	<1	13
86N 6360	1	51	13	132	.4	23	20	1043	4.20	5	<5	<2	2	26	.5	<2	3	94	.26	.190	8	42	.74	153	.22	<3	3.49	.02	.08	<2	<5	1	25
86N 6390	1	50	10	151	.4	28	18	879	3.66	2	<5	<2	<2	26	.6	2	2	81	.27	.160	7	38	.62	170	.21	<3	4.13	.02	.09	<2	<5	<1	47
86N 6420	1	83	14	159	.5	32	27	3390	4.27	5	<5	<2	<2	46	.8	2	5	107	.37	.118	13	55	1.01	137	.23	<3	3.50	.02	.13	<2	<5	<1	27
86N 6450	1	63	17	136	.4	23	16	1128	3.54	6	<5	<2	<2	30	1.0	<2	<2	76	.31	.253	7	36	.58	151	.19	<3	3.68	.02	.07	<2	<5	<1	25
86N 6480	1	77	18	219	.6	35	21	1107	4.14	14	<5	<2	<2	33	1.4	<2	3	91	.37	.352	7	42	.87	176	.17	<3	4.16	.02	.10	<2	<5	<1	283
86N 6510	2	67	24	232	.4	29	20	769	4.39	18	<5	<2	<2	27	1.7	3	<2	107	.24	.162	8	45	.79	132	.18	<3	2.93	.01	.09	2	<5	1	24
86N 6540	1	63	16	213	.5	30	21	1147	3.78	11	<5	<2	<2	29	1.8	2	2	80	.37	.268	6	54	.89	162	.17	3	3.46	.02	.14	<2	<5	<1	21
86N 6570	1	94	15	157	.3	46	27	1079	4.58	17	<5	<2	<2	33	.9	<2	3	104	.39	.231	7	86	1.25	170	.21	<3	3.81	.02	.19	<2	<5	<1	36
86N 6600	1	60	10	301	.4	33	24	2405	4.43	17	<5	<2	<2	26	1.8	<2	<2	104	.30	.197	7	64	.95	225	.19	<3	3.72	.02	.09	<2	<5	1	13
86N 6630	1	29	32	98	.4	16	8	536	3.65	6	<5	<2	<2	22	.8	2	<2	87	.29	.175	5	38	.55	152	.22	<3	1.75	.01	.11	<2	<5	<1	15
86N 6660	1	40	10	146	.4	12	11	623	3.63	6	<5	<2	<2	17	.9	3	<2	73	.15	.239	6	21	.47	152	.16	<3	2.94	.01	.06	<2	<5	<1	35
86N 6690	2	126	<3	151	<.3	33	27	842	4.80	17	<5	<2	<2	37	1.0	<2	<2	118	.44	.118	9	59	1.64	147	.19	<3	3.67	.01	.32	<2	<5	<1	11
86N 6720	4	91	9	173	.4	21	18	767	4.17	6	<5	<2	<2	21	.8	<2	<2	104	.29	.178	7	32	.79	100	.12	<3	3.96	.02	.12	<2	<5	<1	17
86N 6750	4	91	13	231	.3	29	18	909	4.68	9	<5	<2	<2	35	1.0	<2	<2	133	.53	.242	7	42	.90	144	.14	<3	3.58	.02	.14	2	<5	<1	6
86N 6780	2	67	6	205	<.3	26	19	903	4.06	5	<5	<2	<2	24	1.0	2	<2	109	.35	.110	7	43	.89	124	.20	<3	3.72	.02	.10	<2	<5	1	3
86N 6810	3	81	14	194	<.3	33	20	984	4.57	5	<5	<2	<2	29	.5	<2	<2	139	.44	.105	8	47	1.07	166	.19	<3	3.62	.02	.12	<2	<5	<1	8
86N 6840	2	55	10	193	<.3	27	19	618	4.47	9	<5	<2	<2	26	.7	<2	<2	116	.35	.286	6	40	.93	148	.16	<3	3.88	.02	.12	<2	<5	<1	9
RE 86N 6840	2	57	13	194	.3	27	18	624	4.44	17	<5	<2	<2	26	.5	2	4	115	.34	.289	7	40	.93	147	.15	3	3.88	.02	.12	<2	<5	1	7
86N 6870	2	61	10	201	.4	27	20	1216	4.64	6	<5	<2	2	32	.3	<2	<2	124	.41	.166	7	43	1.07	230	.19	<3	3.35	.02	.17	<2	<5	1	19
86N 6900	3	58	11	217	.6	28	18	1214	4.36	8	<5	<2	<2	23	.6	<2	2	115	.27	.187	10	42	.88	160	.18	<3	4.33	.02	.11	<2	<5	<1	3
STANDARD C2/AU-S	18	57	34	136	5.8	68	33	1046	3.60	36	17	7	32	44	18.6	15	17	68	.53	.099	38	62	.91	183	.08	24	1.91	.06	.12	13	<5	1	45

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

ACME A /TICAL LABORATORIES LTD. 852 E. HASTINGS ST. V OUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604). -1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Orvana Minerals Corp. PROJECT STEWART File # 96-4126 Page 1

710 - 1177 W. Hastings St, Vancouver BC V6E 2K3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L101N 54+90E	<1	57	6	118	.3	41	24	1193	4.50	17	<5	<2	2	59	.5	<2	<2	100	.49	.232	7	63	1.35	214	.18	<3	3.15	.01	.14	<2	<5	<1	43
L101N 55+20E	1	79	6	152	.3	72	34	2759	4.68	28	<5	<2	4	71	.8	2	<2	109	.68	.265	7	99	1.89	533	.21	<3	4.19	.02	.21	<2	<5	1	10
L101N 55+50E	<1	122	<3	172	<.3	69	35	2268	6.07	20	<5	<2	3	45	.6	<2	<2	162	.49	.205	6	82	2.68	486	.29	<3	4.81	.02	.48	<2	<5	<1	3
L101N 55+80E	<1	143	11	183	<.3	65	37	2238	7.33	20	<5	<2	3	42	.7	<2	2	247	.52	.137	2	159	4.02	394	.35	<3	5.01	.01	1.04	<2	<5	<1	1
L101N 56+10E	<1	97	<3	136	<.3	53	28	1730	5.07	15	<5	<2	3	39	<.2	<2	2	140	.41	.135	7	108	2.11	382	.24	<3	4.36	.01	.19	<2	<5	<1	12
L101N 56+40E	<1	76	5	141	.3	57	26	927	4.66	12	<5	<2	2	40	.2	<2	<2	113	.45	.194	6	106	1.72	250	.22	<3	4.31	.02	.15	<2	<5	<1	3
L101N 56+70E	1	91	9	125	<.3	62	27	1086	4.40	14	<5	<2	2	43	.5	<2	<2	104	.52	.171	6	135	1.71	216	.19	<3	3.71	.02	.16	<2	<5	<1	11
L101N 57+00E	1	103	<3	149	.3	65	31	942	4.78	16	<5	<2	3	43	<.2	<2	<2	108	.47	.181	8	96	1.89	209	.23	<3	4.29	.02	.23	<2	<5	<1	9
L101N 57+30E	1	67	<3	110	.4	38	24	1281	4.24	11	<5	<2	3	47	.2	<2	<2	97	.41	.141	8	74	1.39	188	.20	<3	3.73	.02	.15	<2	<5	<1	9
L101N 57+60E	<1	52	5	119	<.3	40	23	1331	4.42	12	<5	<2	2	59	.4	<2	<2	93	.54	.225	8	89	1.35	255	.17	<3	3.03	.01	.11	<2	<5	<1	3
RE L101N 57+60E	<1	52	4	119	<.3	40	23	1322	4.45	13	<5	<2	3	59	.6	4	2	93	.54	.223	7	91	1.35	254	.17	<3	3.02	.01	.10	<2	<5	1	3
L101N 57+90E	1	89	5	128	.3	59	28	1125	5.06	14	<5	<2	2	40	.2	<2	<2	117	.41	.168	7	156	1.97	171	.21	<3	3.43	.01	.13	<2	<5	<1	13
L101N 58+20E	<1	105	<3	118	.9	52	28	884	5.64	20	<5	<2	3	49	<.2	<2	<2	144	.43	.172	12	89	2.19	142	.20	<3	4.86	.02	.24	<2	<5	<1	9
L101N 58+50E	1	71	<3	102	.5	37	23	1010	4.52	14	<5	<2	3	42	<.2	<2	<2	101	.38	.105	10	75	1.33	161	.20	<3	3.65	.02	.11	<2	<5	<1	5
L101N 58+80E	1	61	4	141	.4	43	24	1102	4.87	13	<5	<2	3	44	<.2	<2	<2	112	.35	.176	8	65	1.56	274	.21	<3	4.02	.02	.13	<2	<5	<1	73
L101N 59+10E	<1	44	6	138	.3	34	20	1774	4.21	11	<5	<2	4	37	.2	<2	<2	91	.36	.247	7	56	1.18	221	.17	<3	3.57	.02	.11	<2	<5	<1	2
L101N 59+40E	<1	72	<3	94	.3	39	22	639	4.45	14	<5	<2	3	47	<.2	<2	2	100	.42	.148	8	66	1.43	134	.19	<3	3.77	.01	.14	<2	<5	1	6
L101N 59+70E	<1	36	16	148	.3	28	18	2212	3.81	18	<5	<2	3	31	.6	<2	<2	74	.25	.317	6	43	.84	249	.19	<3	3.05	.02	.10	<2	<5	<1	7
L101N 60+00E	1	93	8	107	.6	35	24	909	4.53	16	<5	<2	3	44	<.2	2	<2	106	.41	.184	8	64	1.42	120	.17	<3	3.43	.01	.11	<2	<5	<1	14
L101N 60+30E	<1	58	15	123	.4	27	21	1243	4.14	13	<5	<2	2	44	.3	<2	<2	90	.38	.175	8	47	1.02	186	.17	<3	3.24	.02	.09	<2	<5	<1	8
L101N 60+60E	1	50	33	115	.4	31	20	1942	4.15	11	<5	<2	2	38	.2	2	<2	91	.36	.169	7	51	1.10	192	.19	<3	3.34	.07	.12	<2	<5	<1	6
L101N 60+90E	1	30	26	114	.5	21	13	1049	3.57	11	5	<2	2	31	.2	2	<2	70	.26	.245	7	33	.64	150	.18	<3	3.75	.02	.08	<2	<5	<1	1
L101N 61+20E	<1	87	5	106	<.3	40	23	729	5.37	14	<5	<2	2	48	<.2	<2	<2	130	.40	.162	6	75	1.88	108	.20	<3	3.18	.01	.11	<2	<5	1	2
L101N 61+50E	<1	43	7	125	.4	25	16	1014	4.24	12	<5	<2	3	31	<.2	3	<2	88	.23	.230	7	47	.99	109	.16	<3	3.69	.02	.06	<2	<5	<1	5
L101N 61+80E	1	37	24	129	.3	22	19	2027	4.41	11	<5	<2	2	33	<.2	<2	2	91	.28	.207	7	46	.75	165	.17	<3	2.78	.01	.07	<2	<5	<1	3
L101N 62+10E	<1	52	13	111	.5	30	19	1806	4.85	13	<5	<2	2	42	.2	<2	<2	115	.34	.129	5	62	1.21	124	.17	<3	2.57	.07	.07	<2	<5	<1	1
L101N 62+40E	<1	68	<3	103	.6	30	20	1316	4.75	13	<5	<2	<2	43	<.2	<2	2	116	.36	.103	10	63	1.23	167	.18	<3	2.93	.02	.07	<2	<5	1	18
L101N 62+70E	1	39	9	119	.4	23	16	1475	4.59	10	<5	<2	2	33	<.2	<2	<2	93	.25	.319	8	48	.83	151	.17	<3	3.51	.02	.07	<2	<5	<1	4
L101N 63+00E	1	68	3	158	.4	28	22	1704	4.73	9	<5	<2	<2	58	.5	<2	3	102	.51	.286	9	53	1.29	268	.15	<3	3.03	.01	.10	<2	<5	<1	4
L101N 63+30E	<1	62	7	147	.4	29	20	1834	4.96	16	<5	<2	2	45	<.2	<2	<2	111	.37	.208	7	58	1.17	177	.16	<3	3.30	.01	.08	<2	<5	<1	3
L101N 63+60E	1	69	16	174	.7	23	20	2870	4.53	13	<5	<2	2	54	.7	<2	2	101	.44	.179	12	47	.95	272	.14	<3	2.75	.02	.10	<2	<5	<1	3
L101N 63+90E	<1	67	30	166	.4	21	19	2212	4.12	12	<5	<2	<2	54	.6	<2	<2	90	.44	.170	12	39	.92	216	.14	<3	2.95	.02	.08	<2	<5	<1	31
L101N 64+20E	1	37	14	166	1.0	14	14	2049	3.27	13	<5	<2	<2	40	.8	<2	<2	61	.33	.252	8	24	.47	176	.11	<3	2.86	.02	.07	<2	<5	<1	2
L101N 64+50E	<1	79	<3	97	.3	21	20	572	5.05	17	<5	<2	<2	80	.2	<2	3	108	.73	.245	9	43	1.15	171	.16	<3	2.62	.01	.10	<2	<5	<1	4
L101N 64+80E	<1	74	35	190	.7	19	18	1608	3.98	14	<5	<2	<2	95	1.0	<2	<2	79	.98	.281	9	34	.86	348	.11	<3	2.54	.02	.11	<2	<5	1	5
STANDARD C2/AU-S	20	58	33	140	7.4	75	36	1117	3.91	45	20	8	36	53	20.9	16	20	73	.52	.106	40	67	.96	197	.08	26	1.97	.06	.14	14	<5	3	47

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 3 1996 DATE REPORT MAILED: Sept 10/96 SIGNED BY .....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L101N 65+10E	1	147	15	134	1.2	21	21	1436	4.36	26	<5	<2	<2	56	.8	<2	<2	83	.55	.153	28	37	.69	180	.13	<3	3.53	.02	.10	<2	<5	<1	2
L101N 65+40E	1	124	20	196	1.0	23	20	2435	4.06	16	<5	<2	<2	82	1.1	<2	<2	82	.91	.208	17	40	.90	315	.11	<3	2.88	.02	.13	<2	<5	<1	7
L101N 65+70E	2	187	12	107	1.5	28	21	1050	4.93	33	9	<2	<2	69	<.2	<2	3	115	.58	.103	22	81	.91	233	.13	<3	4.82	.03	.13	<2	<5	<1	37
L101N 66+00E	1	101	12	157	.5	24	19	1494	4.19	24	<5	<2	<2	50	.8	<2	2	92	.42	.166	16	40	1.06	120	.10	<3	3.08	.02	.13	<2	<5	<1	12
L101N 66+30E	1	98	14	185	.8	22	20	2016	4.07	21	<5	<2	<2	63	.9	<2	2	88	.59	.141	15	36	.99	175	.11	<3	3.03	.02	.15	<2	<5	1	5
RE L101N 66+30E	1	97	16	186	.8	22	21	2031	4.12	20	<5	<2	<2	64	.9	<2	<2	88	.61	.140	15	39	1.00	175	.11	<3	3.05	.02	.15	<2	<5	<1	4
L101N 66+60E	1	72	10	165	1.1	17	17	2119	3.71	11	5	<2	<2	55	.9	<2	<2	76	.57	.249	8	29	.70	205	.11	<3	2.34	.02	.10	<2	<5	<1	2
L101N 66+90E	1	127	12	136	.8	25	23	1387	4.31	15	<5	<2	<2	69	.6	<2	<2	105	.57	.139	16	52	1.29	166	.15	<3	3.19	.02	.12	<2	<5	1	9
L101N 67+20E	1	49	22	149	.7	15	13	1207	3.72	9	<5	<2	2	43	.6	<2	3	80	.33	.173	9	27	.66	156	.13	<3	2.40	.02	.08	<2	<5	<1	4
L101N 67+50E	2	47	19	162	.5	18	15	1593	3.86	28	<5	<2	2	35	.6	<2	2	79	.31	.248	9	27	.62	162	.12	<3	3.10	.02	.07	<2	<5	<1	12
L99N 50+10E	1	72	6	106	<.3	38	19	538	4.10	18	<5	<2	3	44	<.2	<2	<2	98	.48	.198	11	70	1.23	140	.18	<3	3.36	.02	.14	<2	<5	<1	6
L99N 50+40E	1	85	5	90	<.3	49	23	471	5.50	13	<5	<2	2	45	<.2	<2	<2	133	.53	.188	6	160	1.83	81	.21	<3	2.61	.01	.09	<2	<5	<1	1
L99N 50+70E	1	37	13	107	.3	19	13	668	4.41	19	<5	<2	3	34	<.2	<2	<2	101	.29	.199	7	46	.69	119	.16	<3	2.54	.02	.05	<2	<5	<1	15
L99N 51+00E	1	57	12	122	.3	24	18	1253	3.90	18	<5	<2	<2	45	<.2	<2	<2	91	.42	.167	8	47	.91	178	.15	<3	2.86	.02	.08	<2	<5	<1	7
L99N 51+30E	1	85	11	166	.7	34	21	901	4.44	32	<5	<2	4	46	.4	<2	<2	98	.51	.297	10	53	1.12	161	.16	<3	4.01	.02	.13	<2	<5	<1	7
L99N 51+60E	1	71	14	144	.4	27	22	993	4.55	40	<5	<2	<2	72	.7	<2	<2	109	.89	.109	13	55	1.30	103	.12	<3	2.31	.03	.10	<2	<5	<1	48
L99N 51+90E	1	76	15	107	<.3	26	19	820	3.94	20	<5	<2	2	62	.4	<2	2	99	.67	.122	11	50	1.25	106	.13	<3	2.15	.02	.17	<2	<5	<1	20
L99N 52+20E	1	86	12	152	<.3	30	23	1284	4.53	37	<5	<2	2	71	.8	<2	2	112	.66	.122	12	65	1.33	151	.13	<3	2.61	.02	.12	<2	<5	1	23
L99N 52+50E	1	64	31	120	.3	20	16	1585	3.56	11	5	<2	<2	46	1.2	2	<2	85	.54	.209	7	43	.79	160	.13	<3	2.15	.02	.13	<2	<5	<1	7
L99N 52+80E	1	106	10	102	<.3	31	22	856	4.37	19	<5	<2	2	71	.2	2	<2	111	.71	.154	13	62	1.45	137	.17	<3	2.37	.02	.20	<2	<5	<1	16
L99N 53+10E	1	112	7	124	.4	32	21	666	4.61	13	<5	<2	<2	51	.2	<2	<2	112	.53	.181	8	63	1.49	181	.15	<3	3.02	.02	.21	<2	<5	<1	27
L99N 53+40E	1	117	15	115	.7	34	24	647	4.86	24	<5	<2	<2	51	<.2	<2	<2	122	.48	.139	8	64	1.45	140	.16	<3	3.04	.02	.13	<2	<5	<1	10
L99N 53+70E	<1	103	6	107	<.3	32	22	661	4.71	22	<5	<2	<2	53	<.2	<2	<2	120	.56	.159	8	64	1.47	151	.17	<3	2.69	.02	.14	<2	<5	<1	14
L99N 54+00E	<1	98	<3	139	.3	35	23	838	5.14	11	<5	<2	2	26	<.2	<2	2	142	.38	.202	5	70	1.62	197	.23	<3	3.20	.02	.28	<2	<5	<1	3
L99N 54+30E	1	56	12	135	.5	31	20	782	4.28	16	<5	<2	2	35	<.2	<2	<2	97	.36	.263	7	61	1.08	123	.16	<3	3.41	.02	.10	<2	<5	<1	8
L99N 54+60E	1	49	10	157	.4	35	21	919	4.59	18	<5	<2	<2	39	.2	<2	<2	102	.36	.250	8	71	1.16	154	.16	<3	3.63	.02	.10	<2	<5	1	1
L99N 54+90E	1	79	8	116	<.3	35	22	950	4.52	19	<5	<2	2	58	<.2	<2	<2	114	.61	.143	8	78	1.47	159	.16	<3	2.41	.02	.12	<2	<5	<1	8
L99N 55+20E	1	68	10	152	.4	34	22	2918	4.30	15	<5	<2	<2	49	1.1	<2	<2	111	.58	.148	9	72	1.27	194	.16	<3	2.94	.02	.13	<2	<5	<1	3
L99N 55+50E	<1	84	3	106	<.3	34	19	725	4.32	20	<5	<2	2	46	<.2	<2	<2	106	.43	.123	9	79	1.37	94	.17	<3	2.97	.02	.13	<2	<5	<1	10
L99N 55+80E	1	75	21	128	<.3	24	19	823	3.90	26	<5	<2	<2	66	.5	<2	<2	98	.75	.111	13	45	1.19	111	.12	<3	2.29	.03	.09	<2	<5	<1	24
L99N 56+10E	1	81	21	122	.3	27	22	982	4.23	27	<5	<2	<2	73	.8	<2	<2	103	.89	.141	13	49	1.25	121	.12	<3	2.15	.03	.17	<2	<5	<1	107
L99N 56+40E	1	144	24	102	.6	17	18	952	4.82	11	<5	<2	<2	66	.8	<2	<2	147	.98	.153	11	33	.91	110	.14	<3	2.06	.03	.25	<2	<5	<1	24
L99N 56+70E	1	63	7	98	.3	24	18	897	4.03	29	<5	<2	<2	45	.2	<2	<2	95	.40	.131	7	48	1.11	62	.11	<3	2.11	.02	.12	<2	<5	<1	48
L99N 57+00E	1	75	8	77	<.3	25	13	431	3.79	19	<5	<2	<2	46	.2	<2	2	92	.43	.130	6	51	1.01	82	.13	<3	2.46	.02	.09	<2	<5	<1	11
L99N 57+30E	2	56	13	73	<.3	25	15	593	4.16	20	<5	<2	<2	43	.2	<2	<2	99	.43	.053	7	56	.83	77	.18	<3	2.22	.02	.07	<2	<5	<1	41
STANDARD C2/AU-S	18	56	35	131	7.2	68	32	1043	3.61	41	20	8	34	49	18.9	18	18	68	.54	.101	38	62	.89	188	.08	27	1.85	.06	.15	15	<5	2	54

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L99N 57+60E	1	62	<3	89	.3	32	15	694	4.15	25	<5	<2	<2	35	<.2	2	<2	102	.34	.084	5	63	1.24	106	.18	<3	2.28	.02	.12	<2	<5	<1	26
L99N 57+90E	2	97	13	113	<.3	43	23	1305	4.33	31	<5	<2	<2	74	.8	<2	<2	107	.80	.104	13	66	1.43	138	.15	<3	2.78	.02	.19	<2	<5	<1	25
L99N 58+20E	2	48	9	104	.6	26	17	1011	3.97	27	<5	<2	<2	37	<.2	2	<2	85	.37	.123	7	42	.73	88	.14	3	2.31	.02	.10	<2	<5	<1	35
L99N 58+50E	2	100	8	142	.4	49	21	878	5.04	62	<5	<2	<2	37	<.2	<2	<2	113	.31	.194	9	68	1.33	153	.12	<3	3.38	.02	.17	<2	<5	<1	46
L99N 58+80E	2	48	5	70	.5	20	10	340	4.31	20	<5	<2	2	17	<.2	<2	<2	97	.13	.081	6	44	.55	77	.20	<3	2.67	.02	.08	<2	<5	<1	20
L99N 59+10E	4	52	4	95	.3	25	14	880	4.09	31	<5	<2	<2	22	<.2	<2	<2	84	.20	.075	7	46	.60	78	.18	<3	3.46	.02	.08	<2	<5	<1	38
L99N 59+40E	1	60	3	114	.5	43	18	601	3.95	35	<5	<2	<2	24	<.2	<2	<2	85	.23	.119	8	49	.94	140	.16	<3	4.66	.02	.11	<2	<5	<1	52
L99N 59+70E	2	37	<3	99	<.3	31	15	616	3.43	20	<5	<2	<2	16	<.2	<2	<2	64	.17	.215	6	38	.53	131	.15	<3	5.31	.02	.07	<2	<5	1	14
L99N 60+00E	1	59	21	119	.4	38	16	640	3.72	25	<5	<2	<2	31	.5	<2	<2	80	.34	.130	6	53	.98	116	.15	<3	3.96	.02	.12	<2	<5	1	20
L99N 60+30E	1	58	25	127	.3	28	24	2845	3.67	20	<5	<2	<2	30	.6	<2	2	77	.37	.118	6	42	.78	125	.13	<3	2.32	.02	.14	<2	<5	<1	17
L99N 60+60E	2	65	<3	112	.5	43	20	786	4.83	31	<5	<2	<2	42	.7	<2	<2	122	.56	.158	5	84	1.49	126	.16	<3	2.99	.02	.19	<2	<5	<1	14
L99N 60+90E	1	66	12	171	.4	27	19	1004	4.58	37	<5	<2	<2	33	.4	<2	2	104	.28	.177	10	35	1.24	164	.10	<3	3.53	.02	.13	<2	<5	<1	19
L99N 61+20E	1	57	9	144	1.0	21	19	1581	4.38	18	<5	<2	<2	32	.5	<2	<2	93	.24	.171	7	36	.96	155	.10	<3	2.95	.02	.09	<2	<5	<1	14
L99N 61+50E	1	57	<3	141	.8	27	22	1522	4.66	18	<5	<2	<2	29	.5	2	<2	104	.24	.151	7	50	1.09	145	.15	<3	3.09	.02	.12	<2	<5	<1	37
L99N 61+80E	1	105	4	96	.3	37	25	1141	5.15	20	<5	<2	<2	46	<.2	<2	<2	133	.46	.100	9	64	1.81	144	.17	<3	3.88	.02	.31	<2	<5	1	15
L99N 62+10E	1	72	15	136	.4	25	22	1918	4.56	17	<5	<2	<2	32	.2	<2	2	99	.25	.126	9	45	1.10	132	.13	<3	3.62	.02	.14	<2	<5	<1	6
L99N 62+40E	1	99	8	130	.3	29	25	1529	5.08	24	<5	<2	<2	41	<.2	<2	<2	119	.44	.091	9	54	1.31	157	.17	<3	4.05	.02	.18	<2	<5	<1	6
L99N 62+70E	1	49	<3	100	.3	19	19	1299	4.59	17	<5	<2	<2	28	<.2	<2	<2	93	.22	.310	6	34	.97	108	.15	<3	3.64	.02	.08	<2	<5	<1	3
L99N 63+00E	1	36	7	115	.3	14	15	3049	3.91	14	<5	<2	<2	29	<.2	<2	<2	83	.20	.206	8	27	.62	145	.15	<3	2.94	.02	.08	<2	<5	<1	3
L99N 63+30E	1	37	10	95	.6	11	11	1116	4.03	13	<5	<2	<2	22	.6	<2	<2	84	.16	.166	7	23	.41	81	.17	<3	2.46	.02	.07	<2	6	<1	1
L99N 63+60E	1	23	<3	106	<.3	10	7	1088	2.93	10	<5	<2	<2	14	<.2	<2	2	47	.14	.329	5	16	.18	97	.17	<3	4.93	.02	.05	<2	<5	1	1
L99N 63+90E	1	21	<3	59	<.3	7	6	641	2.53	10	<5	<2	<2	11	<.2	<2	<2	43	.08	.180	7	12	.17	69	.16	<3	4.83	.03	.04	<2	<5	1	<1
L99N 64+20E	2	29	8	66	.4	10	5	389	3.70	10	<5	<2	2	21	<.2	<2	<2	70	.16	.138	7	23	.32	87	.19	<3	3.02	.02	.06	<2	6	<1	10
L99N 64+50E	1	28	10	76	.4	11	9	1294	3.45	7	<5	<2	<2	27	<.2	<2	<2	72	.17	.121	7	20	.38	101	.16	<3	2.20	.02	.06	<2	<5	<1	1
RE L99N 64+50E	1	27	8	75	.4	11	8	1280	3.45	11	<5	<2	<2	26	<.2	<2	2	71	.17	.122	6	20	.38	100	.16	<3	2.17	.01	.06	<2	5	<1	18
L99N 64+80E	1	42	<3	103	.9	12	12	1345	3.83	11	<5	<2	<2	24	.2	2	<2	73	.16	.233	7	26	.53	89	.14	<3	3.18	.02	.07	<2	<5	1	8
L99N 65+10E	1	38	4	88	.9	16	10	1051	3.99	9	<5	<2	<2	24	<.2	<2	2	80	.14	.116	8	28	.53	121	.18	<3	3.16	.02	.08	<2	5	1	3
L99N 65+40E	1	29	16	90	.3	14	12	1984	3.87	11	<5	<2	<2	39	.2	<2	<2	77	.38	.197	6	27	.61	167	.13	<3	2.58	.02	.08	<2	<5	<1	11
L99N 65+70E	1	49	<3	91	.4	14	12	873	3.72	11	<5	<2	<2	33	<.2	<2	<2	79	.24	.172	8	25	.65	95	.15	<3	3.00	.02	.07	<2	<5	<1	113
L99N 66+00E	1	32	13	95	<.3	12	10	1104	3.81	8	<5	<2	<2	30	<.2	<2	<2	77	.21	.158	8	22	.44	133	.16	<3	2.59	.02	.06	<2	<5	<1	6
L99N 66+30E	1	23	6	85	.7	11	6	506	3.29	11	<5	<2	2	20	<.2	<2	3	56	.16	.165	7	21	.28	111	.17	<3	3.46	.02	.06	<2	<5	<1	3
L99N 66+60E	1	38	11	110	<.3	16	10	2295	3.38	7	<5	<2	<2	40	.4	<2	<2	74	.34	.217	7	27	.52	151	.16	<3	2.53	.02	.09	<2	<5	<1	6
L99N 66+90E	1	27	11	111	<.3	14	10	1328	3.56	9	<5	<2	<2	30	<.2	<2	3	79	.23	.162	8	24	.54	116	.16	<3	3.12	.02	.08	<2	<5	<1	4
L99N 67+20E	1	35	17	98	.6	14	11	1390	3.78	15	<5	<2	<2	33	.2	2	3	84	.24	.189	8	25	.51	111	.15	<3	2.65	.02	.07	<2	<5	1	62
L99N 67+50E	2	43	10	114	.9	14	9	758	4.19	20	<5	<2	2	29	<.2	<2	<2	87	.19	.162	11	27	.59	95	.14	<3	3.18	.01	.08	<2	5	1	4
STANDARD C2/AU-S	20	57	36	138	8.0	75	35	1129	3.88	47	19	10	35	52	21.1	16	18	72	.51	.106	39	65	.96	198	.08	25	1.93	.06	.14	13	<5	3	47

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L97N 50+10E	1	53	15	155	.3	31	19	1476	3.71	13	<5	<2	3	28	<.2	<2	<2	87	.27	.139	7	53	.90	157	.21	<3	3.49	.02	.09	<2	<5	<1	<1
L97N 50+40E	1	54	11	106	.3	38	21	1062	3.52	14	<5	<2	<2	28	<.2	<2	<2	87	.33	.089	5	53	.81	117	.21	<3	3.26	.03	.09	<2	<5	<1	1
L97N 50+70E	1	33	26	141	.3	31	16	555	3.09	23	<5	<2	3	23	<.2	<2	<2	61	.25	.253	5	36	.44	92	.19	3	4.17	.03	.06	<2	<5	1	1
L97N 51+00E	1	20	19	95	.4	17	12	289	3.44	15	<5	<2	2	16	<.2	2	<2	67	.16	.112	5	24	.21	110	.24	<3	3.52	.02	.07	<2	<5	<1	<1
L97N 51+30E	1	43	13	113	.3	29	18	1154	3.62	14	<5	<2	2	29	.2	2	<2	77	.33	.281	6	51	.78	90	.16	<3	2.84	.03	.09	<2	<5	<1	6
L97N 51+60E	1	29	11	110	.6	19	16	939	3.26	13	<5	<2	2	19	<.2	<2	<2	68	.19	.179	5	35	.43	109	.17	<3	3.06	.02	.06	<2	<5	1	4
L97N 51+90E	1	131	20	119	.4	29	32	1294	4.08	27	<5	<2	<2	55	.4	<2	<2	89	.64	.175	5	55	.74	87	.12	<3	2.69	.03	.09	<2	<5	1	255
L97N 52+20E	1	44	15	122	.3	29	17	452	3.69	18	<5	<2	2	22	.3	<2	<2	87	.22	.202	5	53	.68	85	.19	<3	3.37	.03	.08	<2	<5	<1	4
L97N 52+50E	1	23	18	100	.4	20	13	639	3.33	10	<5	<2	2	19	<.2	2	<2	75	.20	.116	5	41	.50	94	.19	<3	2.03	.02	.07	<2	<5	<1	2
L97N 52+80E	1	46	14	107	.5	31	18	805	3.86	20	<5	<2	2	25	.4	2	<2	84	.26	.084	6	51	.72	92	.19	<3	2.78	.03	.08	<2	<5	1	11
RE L97N 53+10E	1	52	16	114	.7	31	17	625	3.75	17	<5	<2	2	20	.3	<2	<2	85	.20	.183	6	62	.76	98	.19	<3	3.06	.02	.08	<2	<5	<1	8
L97N 53+10E	1	51	14	111	.5	30	17	616	3.67	17	<5	<2	2	20	.3	<2	2	83	.20	.180	5	60	.75	96	.19	<3	2.99	.02	.08	<2	<5	<1	33
L97N 53+40E	1	51	9	122	.4	36	21	687	3.83	18	<5	<2	2	26	.2	<2	4	88	.30	.136	6	67	.77	130	.18	<3	3.72	.02	.09	<2	<5	<1	21
L97N 53+70E	1	61	9	125	.4	36	22	830	4.12	21	<5	<2	<2	28	<.2	<2	<2	100	.31	.193	5	73	.92	106	.18	<3	2.85	.02	.09	<2	<5	<1	7
L97N 54+00E	1	90	9	120	.4	35	22	1379	4.05	14	<5	<2	<2	30	.3	<2	<2	99	.35	.146	6	66	1.01	110	.16	<3	2.53	.03	.15	<2	<5	<1	6
L97N 54+30E	1	38	9	107	.3	29	16	1328	3.90	19	<5	<2	2	22	<.2	<2	<2	95	.23	.339	5	67	.73	112	.17	<3	3.57	.03	.08	<2	<5	<1	16
L97N 54+60E	1	49	11	129	.4	35	19	1078	4.08	22	<5	<2	2	50	<.2	<2	<2	94	.39	.241	6	58	.96	115	.16	<3	3.21	.02	.11	<2	<5	<1	17
L97N 54+90E	1	60	17	122	.5	46	20	725	4.35	17	<5	<2	<2	34	<.2	<2	<2	115	.37	.079	6	82	1.28	124	.22	<3	3.13	.03	.15	<2	<5	<1	45
L97N 55+20E	1	42	13	86	.3	41	16	730	3.69	19	<5	<2	2	22	<.2	<2	<2	92	.23	.073	6	73	.87	138	.23	<3	3.90	.03	.08	<2	<5	<1	153
L97N 55+50E	1	33	12	88	.4	30	14	1036	3.48	17	<5	<2	2	22	<.2	<2	<2	81	.19	.153	6	59	.64	147	.19	<3	3.88	.03	.07	<2	<5	<1	17
L97N 55+80E	1	37	9	89	<.3	30	14	461	3.40	16	<5	<2	<2	38	<.2	<2	<2	72	.43	.180	6	50	.68	128	.17	<3	4.53	.03	.09	<2	<5	1	10
L97N 56+10E	1	70	9	96	.4	39	18	614	4.24	14	<5	<2	<2	37	<.2	<2	<2	102	.37	.155	7	71	1.06	192	.20	<3	3.46	.02	.12	<2	<5	<1	11
L97N 56+40E	1	50	15	84	.4	31	18	1298	3.41	15	<5	<2	<2	51	.4	<2	<2	82	.51	.103	10	59	.78	168	.14	<3	2.42	.03	.14	<2	<5	<1	7
L97N 56+70E	1	100	4	69	<.3	46	21	394	4.03	19	<5	<2	<2	38	<.2	<2	<2	107	.43	.156	11	79	1.35	155	.16	<3	3.35	.02	.29	<2	<5	<1	52
L97N 57+00E	2	67	10	74	.6	27	13	531	3.68	14	<5	<2	<2	32	<.2	<2	<2	87	.35	.107	14	53	.72	102	.15	3	3.71	.03	.11	<2	<5	<1	8
L97N 57+30E	4	93	16	117	.6	25	19	1192	4.12	19	<5	<2	<2	55	1.1	<2	<2	89	.63	.105	13	38	.67	100	.12	<3	2.65	.03	.12	<2	<5	<1	24
L97N 57+60E	2	80	15	120	.3	27	19	737	3.86	22	<5	<2	2	33	.4	<2	<2	84	.31	.212	10	36	.80	104	.15	<3	3.56	.02	.11	<2	<5	<1	126
L97N 57+90E	2	109	3	78	<.3	44	22	429	3.78	45	<5	<2	2	27	.2	2	<2	84	.22	.104	7	38	.76	82	.19	<3	4.30	.02	.10	2	<5	<1	98
L97N 58+20E	2	65	29	101	.3	31	15	1131	4.23	31	<5	<2	2	34	.2	2	2	100	.30	.122	7	45	.82	123	.19	<3	2.64	.02	.09	<2	<5	<1	50
L97N 58+50E	1	50	11	117	.4	27	16	1541	3.66	18	<5	<2	<2	26	<.2	<2	2	91	.22	.101	6	41	.76	104	.19	<3	2.85	.02	.08	<2	<5	<1	18
L97N 58+80E	2	50	21	87	.4	29	14	597	4.66	28	<5	<2	2	32	<.2	<2	<2	99	.26	.225	6	48	.68	107	.19	<3	3.94	.02	.08	<2	<5	<1	16
L97N 59+10E	2	90	15	84	.4	23	13	540	3.57	31	<5	<2	<2	16	<.2	<2	3	75	.14	.125	7	40	.57	68	.15	<3	4.47	.02	.07	<2	<5	<1	13
L97N 59+40E	3	97	14	86	.6	20	17	819	3.57	27	<5	<2	2	16	<.2	<2	<2	76	.13	.161	8	40	.54	79	.14	<3	4.63	.02	.07	<2	<5	1	8
L97N 59+70E	2	171	16	80	1.0	33	30	1904	4.38	31	<5	<2	<2	77	.7	<2	<2	115	.92	.101	11	71	1.16	200	.12	<3	3.41	.03	.17	<2	<5	<1	29
L97N 60+00E	2	126	43	130	1.1	37	29	2082	4.55	33	<5	<2	<2	76	1.8	<2	<2	121	1.00	.121	16	74	1.41	151	.12	<3	3.27	.03	.19	<2	<5	<1	16
STANDARD C2/AU-S	20	55	43	136	6.9	70	35	1065	3.74	41	18	7	35	51	20.1	16	20	70	.52	.102	41	63	.92	191	.08	26	1.89	.06	.14	15	<5	3	47

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L97N 60+30E	2	102	20	114	.9	27	24	1741	4.12	35	<5	<2	<2	63	1.4	<2	<2	102	.75	.111	13	53	.97	101	.13	<3	3.05	.02	.14	<2	7	<1	30
L97N 60+60E	2	94	27	127	.5	30	22	1238	4.02	30	<5	<2	<2	66	1.2	<2	<2	95	.82	.114	12	50	.90	116	.17	<3	2.97	.02	.14	<2	<5	1	32
L97N 60+90E	2	80	36	119	1.3	25	18	1469	4.35	28	<5	<2	<2	44	.4	<2	<2	93	.51	.193	6	45	.80	117	.09	<3	2.69	.02	.11	<2	<5	<1	14
L97N 61+20E	1	62	22	105	.5	27	19	1552	4.01	25	<5	<2	<2	56	.7	<2	<2	95	.84	.111	6	43	.99	154	.12	<3	3.08	.02	.12	<2	<5	<1	9
L97N 61+50E	1	65	19	103	.6	22	14	631	4.16	30	<5	<2	2	26	<.2	2	<2	96	.20	.157	7	41	.92	92	.14	<3	3.76	.02	.10	<2	<5	<1	24
L97N 61+80E	1	38	14	79	.6	17	11	634	3.92	18	<5	<2	<2	27	.5	<2	<2	88	.18	.133	6	33	.73	66	.15	<3	2.06	.02	.08	<2	<5	<1	27
L97N 62+10E	1	36	9	81	.4	15	12	688	3.86	24	<5	<2	<2	24	.2	<2	<2	83	.21	.224	5	33	.62	98	.16	<3	3.02	.02	.09	<2	<5	1	18
L97N 62+40E	1	31	6	59	.9	11	8	410	4.00	26	<5	<2	<2	19	<.2	<2	<2	84	.13	.121	6	27	.50	70	.19	<3	3.10	.02	.06	<2	<5	<1	29
L97N 62+70E	1	28	12	54	.5	11	6	1216	2.43	11	<5	<2	<2	15	<.2	<2	<2	63	.10	.102	6	20	.33	77	.15	<3	1.71	.02	.09	<2	<5	<1	5
L97N 63+00E	1	33	8	77	1.0	12	9	522	4.08	21	<5	<2	<2	20	<.2	3	<2	82	.13	.229	6	26	.45	85	.17	<3	2.96	.02	.06	<2	<5	<1	2
L97N 63+30E	1	47	4	90	.6	18	12	754	4.06	22	<5	<2	<2	42	.3	2	<2	99	.42	.086	8	35	.90	97	.19	<3	2.48	.02	.10	<2	<5	<1	3
L97N 63+60E	1	25	18	101	1.3	10	8	885	3.28	23	<5	<2	2	21	.4	<2	2	60	.19	.298	5	16	.32	135	.19	<3	3.24	.02	.07	<2	<5	<1	<1
L97N 63+90E	1	28	8	72	.7	9	9	935	3.13	16	<5	<2	<2	21	<.2	<2	<2	62	.14	.171	6	17	.30	96	.15	<3	2.72	.02	.04	<2	<5	<1	2
L97N 64+20E	1	34	11	79	.5	11	9	549	3.67	23	<5	<2	<2	40	<.2	2	2	76	.25	.233	6	21	.61	83	.14	<3	2.80	.02	.06	<2	<5	<1	3
L97N 64+50E	1	37	10	111	.7	13	10	912	3.58	24	<5	<2	2	27	<.2	<2	<2	76	.20	.203	7	23	.62	126	.17	<3	3.94	.02	.09	<2	<5	<1	2
L97N 64+80E	1	37	10	92	1.0	12	10	950	3.65	16	<5	<2	<2	36	.3	<2	<2	90	.24	.101	6	22	.57	98	.15	<3	2.20	.01	.06	<2	<5	1	8
L97N 65+10E	1	31	6	86	.4	14	8	486	4.32	21	<5	<2	2	36	.2	<2	<2	91	.21	.157	7	24	.60	80	.16	<3	2.60	.02	.07	<2	<5	<1	2
L97N 65+40E	1	35	6	111	.6	15	10	1038	3.19	26	<5	<2	<2	32	<.2	<2	<2	68	.24	.149	8	23	.58	91	.13	<3	3.58	.02	.06	<2	<5	1	16
L97N 65+70E	1	40	11	107	.5	15	11	706	4.29	27	<5	<2	<2	39	.6	<2	<2	88	.25	.185	8	25	.83	71	.14	<3	2.59	.02	.08	<2	<5	1	2
RE L97N 65+70E	1	40	18	107	.5	16	11	695	4.25	29	<5	<2	2	40	.4	2	<2	88	.25	.184	8	25	.83	69	.14	<3	2.55	.02	.08	<2	<5	<1	3
L97N 66+00E	1	32	13	116	.6	17	10	711	3.39	29	<5	<2	2	25	<.2	<2	2	69	.18	.186	9	25	.55	87	.13	<3	4.28	.02	.07	<2	<5	1	7
L97N 66+30E	1	48	12	82	.7	15	10	1405	3.38	19	<5	<2	3	25	<.2	<2	<2	75	.16	.187	10	23	.43	119	.16	<3	2.78	.02	.07	<2	<5	<1	3
L97N 66+60E	1	51	36	122	.8	15	9	1000	3.23	24	<5	<2	<2	27	<.2	<2	<2	68	.19	.163	9	21	.54	108	.11	<3	3.21	.02	.06	<2	<5	<1	7
L97N 66+90E	1	25	13	88	.7	8	7	862	3.51	20	<5	<2	<2	12	<.2	<2	<2	62	.08	.245	8	20	.24	77	.15	<3	3.25	.02	.06	2	<5	2	228
L97N 67+20E	1	26	10	109	.4	11	7	688	3.04	23	<5	<2	<2	20	<.2	<2	<2	54	.23	.250	6	21	.33	77	.12	<3	3.43	.02	.07	<2	<5	1	6
L97N 67+50E	1	33	9	130	.6	14	10	1071	3.20	19	<5	<2	<2	20	<.2	<2	2	66	.14	.175	7	27	.39	105	.14	<3	3.19	.02	.05	<2	<5	<1	3
L95N 50+10E	1	53	6	85	.9	23	14	264	3.30	23	<5	<2	<2	18	<.2	<2	<2	67	.21	.110	4	28	.35	71	.19	<3	4.14	.02	.07	<2	<5	<1	4
L95N 50+40E	1	48	17	74	.5	20	12	361	3.17	19	<5	<2	<2	16	<.2	3	<2	75	.19	.150	4	45	.39	66	.18	<3	2.67	.02	.05	<2	<5	<1	8
L95N 50+70E	1	41	9	75	.4	23	11	317	3.00	19	<5	<2	<2	19	<.2	<2	2	73	.25	.106	3	39	.51	62	.21	<3	3.28	.02	.07	<2	<5	<1	6
L95N 51+00E	1	26	12	107	.4	16	11	1104	3.10	19	<5	<2	<2	16	<.2	<2	<2	65	.14	.364	4	26	.32	122	.18	<3	3.00	.02	.07	<2	<5	<1	3
L95N 51+30E	1	31	10	205	.5	20	12	1637	3.13	24	<5	<2	2	21	<.2	2	<2	61	.20	.312	6	29	.41	173	.16	<3	3.81	.02	.07	<2	8	1	19
L95N 51+60E	2	74	14	82	.4	30	19	1177	3.75	17	<5	<2	<2	42	.6	<2	<2	98	.42	.069	10	62	.57	89	.20	<3	2.43	.02	.09	<2	<5	<1	7
L95N 51+90E	1	58	26	102	.5	23	13	1022	3.18	19	<5	<2	<2	60	1.1	<2	2	67	.73	.199	8	42	.56	97	.11	<3	1.83	.02	.10	<2	<5	1	5
L95N 52+20E	1	62	16	133	.6	27	16	1091	3.41	19	<5	<2	<2	40	.3	<2	<2	78	.44	.135	9	46	.63	158	.16	<3	2.98	.02	.08	<2	<5	<1	3
L95N 52+50E	1	40	16	125	.4	25	15	1053	3.54	20	<5	<2	<2	26	<.2	<2	<2	82	.29	.178	6	44	.66	142	.17	<3	3.30	.02	.06	<2	<5	<1	5
STANDARD C2/AU-S	19	56	39	137	7.0	71	35	1074	3.71	45	18	6	35	51	19.8	12	18	70	.52	.101	39	61	.91	191	.08	23	1.87	.06	.14	13	<5	2	43

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L95N 52+80E	1	34	16	175	2.6	23	15	864	3.20	7	<5	<2	2	23	<.2	<2	3	66	.20	.154	7	34	.49	114	.18	3	4.13	.02	.06	<2	<5	<1	2
L95N 53+10E	1	33	15	128	.7	19	12	511	3.37	11	<5	<2	<2	19	<.2	<2	<2	72	.18	.115	5	34	.43	75	.19	<3	3.72	.02	.06	<2	<5	<1	3
L95N 53+40E	<1	48	13	142	.4	31	19	1045	3.65	10	<5	<2	3	26	.2	<2	2	79	.23	.185	7	50	.69	118	.19	<3	4.00	.02	.08	<2	<5	1	29
L95N 53+70E	1	55	19	133	.6	27	20	1522	4.03	6	6	<2	<2	53	.2	<2	3	89	.57	.129	6	47	.76	172	.15	<3	3.07	.03	.09	<2	<5	<1	7
L95N 54+00E	1	68	6	104	.4	26	15	573	4.04	11	<5	<2	<2	31	.2	<2	3	100	.28	.122	7	49	.95	110	.16	<3	3.31	.02	.12	<2	<5	<1	8
L95N 54+30E	2	80	15	156	.5	37	22	1187	3.95	10	<5	<2	2	30	.5	<2	<2	94	.28	.169	11	70	.96	151	.17	<3	3.76	.03	.19	<2	<5	<1	9
L95N 54+60E	2	107	20	178	1.2	53	32	1845	4.71	13	<5	<2	<2	35	.5	2	3	117	.35	.146	8	90	1.19	186	.17	<3	3.07	.03	.18	<2	<5	<1	103
L95N 54+90E	2	96	10	82	.3	62	28	395	4.56	9	<5	<2	3	25	<.2	<2	<2	117	.23	.103	6	96	1.26	144	.24	<3	4.01	.03	.11	<2	5	1	19
L95N 55+20E	1	101	3	68	<.3	49	22	326	4.16	9	<5	<2	3	30	<.2	<2	<2	110	.29	.093	6	95	1.36	158	.22	<3	3.58	.03	.17	<2	<5	1	21
L95N 55+50E	1	58	11	77	.8	33	20	495	3.66	7	<5	<2	3	25	<.2	<2	2	91	.22	.091	9	60	.82	134	.24	<3	3.99	.03	.09	<2	<5	1	15
L95N 55+80E	1	33	8	85	.6	20	15	808	3.40	5	<5	<2	2	21	<.2	<2	<2	76	.21	.140	5	38	.43	164	.20	<3	3.59	.03	.05	<2	<5	<1	18
L95N 56+10E	1	50	20	163	.9	24	19	2607	3.68	8	<5	<2	2	33	.3	<2	2	84	.32	.170	7	39	.65	204	.18	<3	3.09	.02	.08	<2	<5	<1	22
L95N 56+40E	1	62	18	116	1.1	23	15	1028	3.84	13	<5	<2	2	20	.4	<2	<2	90	.16	.118	7	38	.64	99	.16	<3	2.96	.02	.08	<2	<5	<1	12
L95N 56+70E	1	70	19	143	.8	25	17	1475	4.28	18	<5	<2	2	37	.2	2	<2	103	.30	.154	7	40	.94	147	.14	<3	2.95	.02	.09	<2	<5	<1	39
L95N 57+00E	1	92	14	109	.6	21	17	1041	4.33	20	<5	<2	2	34	.2	<2	<2	107	.29	.204	6	37	.79	102	.14	<3	2.55	.02	.10	<2	<5	<1	15
L95N 57+30E	1	132	17	112	.5	15	19	1490	5.37	9	<5	<2	<2	72	.7	<2	<2	153	.90	.110	8	25	.74	130	.16	<3	2.04	.03	.18	<2	<5	<1	13
L95N 57+60E	2	140	13	107	.8	15	18	1168	4.97	12	<5	<2	2	51	.5	<2	<2	130	.63	.166	12	25	.61	97	.18	<3	3.12	.03	.10	<2	<5	<1	18
L95N 57+90E	3	379	18	112	1.0	15	23	1034	6.09	12	<5	<2	2	58	<.2	<2	<2	175	.81	.263	6	23	.84	134	.20	<3	2.76	.03	.11	<2	<5	1	129
L95N 58+20E	1	872	6	106	1.1	17	25	614	6.87	8	<5	<2	2	51	.2	<2	<2	209	.67	.202	10	26	1.46	106	.22	<3	2.85	.02	.35	<2	<5	<1	106
RE L95N 58+20E	1	890	5	108	1.2	18	24	633	6.84	13	<5	<2	2	52	<.2	<2	<2	210	.68	.204	11	26	1.50	109	.22	<3	2.92	.02	.37	<2	<5	<1	161
L95N 58+50E	2	195	17	94	.8	13	14	735	5.05	12	<5	<2	3	24	<.2	2	2	131	.18	.270	7	22	.56	94	.22	<3	2.98	.02	.09	<2	<5	<1	25
L95N 58+80E	1	126	9	79	1.0	11	8	317	4.47	9	<5	<2	3	20	<.2	<2	<2	103	.15	.328	6	22	.43	77	.18	<3	4.01	.02	.05	<2	<5	<1	34
L95N 59+10E	1	301	10	109	.7	13	13	551	4.66	7	<5	<2	<2	27	<.2	<2	<2	115	.21	.243	7	24	.62	85	.13	<3	3.74	.02	.08	<2	<5	<1	54
L95N 59+40E	2	200	12	77	1.4	15	13	571	4.43	8	<5	<2	<2	31	<.2	2	<2	114	.24	.127	7	31	.60	76	.16	<3	2.77	.02	.07	<2	<5	<1	54
L95N 59+70E	1	303	8	80	.8	16	16	505	4.98	7	<5	<2	3	29	<.2	<2	<2	139	.20	.112	9	27	.82	94	.18	<3	3.66	.02	.09	<2	<5	<1	50
L94N 60+00E	2	71	25	97	.9	12	10	1955	4.45	9	<5	<2	3	20	.2	<2	<2	91	.20	.180	7	25	.45	90	.15	<3	3.09	.01	.11	<2	<5	<1	15
L94N 60+30E	3	253	<3	104	1.0	18	14	1138	4.58	8	<5	<2	<2	38	<.2	<2	<2	124	.46	.155	6	39	1.37	195	.19	<3	3.59	.02	.33	<2	<5	1	76
L94N 60+60E	3	94	17	113	.6	19	13	582	3.96	22	<5	<2	2	22	<.2	<2	<2	91	.18	.153	6	28	.65	143	.19	<3	3.95	.02	.10	<2	<5	1	23
L94N 60+90E	2	54	17	95	.7	17	11	451	4.02	16	<5	<2	2	24	<.2	<2	<2	98	.19	.092	6	30	.64	84	.19	<3	2.79	.01	.07	<2	<5	<1	20
L94N 61+20E	2	63	58	126	.3	21	13	642	4.24	29	<5	<2	2	27	.6	3	<2	92	.24	.186	9	33	.64	73	.17	<3	3.50	.01	.11	<2	<5	<1	12
L94N 61+50E	2	62	27	89	.4	18	12	451	4.41	26	<5	<2	2	23	.2	3	<2	94	.15	.260	5	31	.61	73	.18	<3	3.50	.01	.07	<2	<5	1	19
L94N 61+80E	2	130	17	97	.6	21	11	318	4.52	159	<5	<2	4	26	<.2	<2	<2	101	.17	.157	8	33	.73	75	.17	<3	3.56	.01	.07	<2	<5	<1	81
L94N 62+10E	1	55	13	97	.7	43	16	490	4.47	24	<5	<2	2	19	<.2	2	<2	109	.16	.089	6	89	.99	88	.26	<3	3.62	.02	.09	<2	<5	1	16
L94N 62+40E	1	62	10	121	.3	66	24	839	4.81	48	<5	<2	2	19	<.2	2	<2	121	.18	.112	6	154	1.60	87	.22	<3	3.88	.01	.11	<2	<5	<1	24
L94N 62+70E	1	81	12	105	.3	55	19	770	5.01	103	<5	<2	2	27	.2	<2	<2	131	.23	.088	7	148	1.53	87	.23	<3	2.99	.01	.10	<2	<5	<1	35
STANDARD C2/AU-S	21	59	40	144	7.5	75	37	1177	3.99	42	24	9	38	54	21.1	19	18	76	.55	.099	43	65	.99	202	.09	27	2.05	.06	.16	15	<5	2	43

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L94N 63+00E	1	94	8	86	.4	55	20	504	4.65	17	<5	<2	<2	31	.2	<2	2	115	.29	.058	4	163	1.65	71	.24	<3	3.10	.01	.14	<2	<5	<1	27
L94N 63+30E	1	44	6	92	.5	23	13	334	3.78	11	<5	<2	3	14	<.2	<2	<2	74	.12	.172	7	44	.55	67	.18	<3	4.66	.02	.09	<2	<5	<1	4
L94N 63+60E	2	59	10	96	.3	34	17	422	4.36	12	<5	<2	4	25	<.2	<2	<2	95	.20	.158	7	73	1.02	87	.25	<3	4.06	.02	.19	<2	<5	1	5
L94N 63+90E	2	96	10	75	<.3	22	14	339	4.20	22	<5	<2	2	21	.5	<2	<2	93	.16	.158	7	36	.86	65	.21	<3	4.53	.01	.09	<2	<5	1	8
L94N 64+20E	2	22	13	39	.3	8	4	985	2.21	<2	<5	<2	3	7	<.2	<2	<2	37	.05	.195	4	12	.14	37	.15	<3	5.60	.02	.04	<2	<5	<1	2
L94N 64+50E	2	37	16	58	.6	10	6	585	2.48	3	<5	<2	3	8	<.2	<2	<2	47	.05	.219	4	17	.24	52	.17	<3	4.76	.02	.05	<2	<5	<1	2
L94N 64+80E	2	21	14	55	<.3	12	5	198	3.19	<2	<5	<2	4	8	<.2	<2	4	61	.05	.166	6	19	.35	50	.18	<3	5.46	.02	.06	<2	<5	<1	1
L94N 65+10E	1	56	9	86	.4	21	14	578	3.70	9	<5	<2	4	14	<.2	2	2	75	.10	.220	7	30	.55	76	.19	<3	5.43	.02	.09	<2	<5	3	2
L94N 65+40E	1	62	11	98	.8	21	15	754	3.58	8	<5	<2	3	16	.3	3	<2	70	.12	.375	7	27	.52	86	.17	<3	4.24	.02	.09	<2	<5	<1	7
L94N 65+70E	1	53	12	90	.7	21	13	446	4.03	8	<5	<2	2	19	.7	2	<2	92	.15	.168	7	37	.72	78	.21	<3	3.33	.02	.10	<2	<5	1	9
L94N 66+00E	1	76	8	106	.7	34	19	616	4.05	9	<5	<2	3	29	<.2	2	3	94	.21	.186	11	46	.93	109	.20	<3	3.79	.02	.10	<2	<5	<1	20
L94N 66+30E	1	116	14	97	.4	27	20	845	3.99	7	<5	<2	3	33	.4	<2	<2	93	.24	.118	10	37	.95	129	.21	<3	3.60	.02	.12	<2	<5	1	11
L94N 66+60E	1	70	13	88	.4	36	15	484	3.41	<2	<5	<2	3	18	.2	<2	<2	77	.15	.167	9	49	.71	108	.20	<3	4.14	.02	.09	<2	<5	1	5
L94N 66+90E	1	51	16	110	.6	26	13	492	3.79	9	<5	<2	3	24	<.2	2	3	84	.23	.252	8	48	.61	100	.19	<3	3.83	.02	.09	<2	<5	2	4
L94N 67+20E	1	58	12	139	.6	33	16	546	3.71	8	<5	<2	3	28	.3	2	<2	91	.33	.164	11	60	.68	100	.16	<3	3.18	.02	.10	<2	<5	<1	10
L94N 67+50E	2	151	9	155	.5	44	20	450	4.28	5	<5	<2	3	34	.7	<2	<2	112	.30	.105	9	60	1.37	127	.22	<3	3.42	.02	.14	<2	<5	<1	8
L93N 60+30E	2	134	23	100	1.3	16	14	650	3.86	7	<5	<2	3	20	<.2	<2	<2	90	.18	.237	5	34	.59	85	.19	<3	4.36	.02	.10	<2	<5	1	72
L93N 60+60E	4	141	23	92	.7	21	15	372	3.88	17	<5	<2	3	19	<.2	2	<2	88	.13	.453	7	31	.58	76	.18	<3	4.81	.02	.09	<2	<5	<1	34
L93N 60+90E	3	99	14	75	1.0	21	13	466	4.03	12	<5	<2	3	22	<.2	<2	3	96	.16	.184	6	36	.55	64	.21	<3	3.92	.02	.08	<2	<5	<1	13
L93N 61+20E	2	54	16	72	1.7	14	12	575	3.03	12	<5	<2	2	18	<.2	<2	<2	67	.11	.125	6	24	.33	72	.19	<3	4.84	.02	.06	<2	<5	2	30
L93N 61+50E	2	62	21	85	1.4	16	14	466	3.42	9	<5	<2	4	24	<.2	<2	<2	75	.13	.181	9	26	.52	73	.23	<3	5.51	.02	.08	<2	<5	1	17
L93N 61+80E	2	80	63	126	.6	25	17	674	4.06	20	<5	<2	4	16	<.2	<2	2	93	.15	.189	6	44	.65	84	.23	<3	5.60	.02	.09	<2	<5	<1	18
L93N 62+10E	2	112	34	170	.5	75	21	1079	4.57	25	<5	<2	2	19	<.2	2	<2	116	.17	.161	6	142	1.43	99	.25	<3	5.28	.02	.12	<2	<5	<1	34
L93N 62+40E	2	179	11	115	1.0	87	26	815	5.45	57	<5	<2	2	14	<.2	<2	2	138	.15	.127	4	176	1.78	83	.25	<3	4.42	.02	.10	2	<5	<1	184
RE L93N 62+40E	2	187	11	120	1.0	87	27	836	5.66	59	<5	<2	2	14	<.2	<2	<2	144	.15	.133	4	185	1.87	86	.26	<3	4.59	.02	.10	3	<5	1	501
L93N 62+70E	2	141	18	107	.6	68	40	772	4.16	58	<5	<2	3	21	<.2	<2	2	84	.15	.118	10	89	.84	103	.20	<3	3.90	.02	.10	<2	<5	1	75
L93N 63+00E	1	79	10	93	.9	54	25	660	3.82	36	<5	<2	2	21	.5	2	<2	83	.21	.117	6	135	1.03	86	.21	<3	3.87	.02	.10	<2	<5	1	25
L93N 63+30E	1	66	9	76	.4	26	17	543	3.32	73	<5	<2	3	17	<.2	2	<2	70	.13	.185	8	42	.58	71	.20	<3	4.45	.02	.09	<2	<5	2	53
L93N 63+60E	1	35	9	69	.7	21	12	968	2.56	6	<5	<2	3	14	<.2	2	<2	53	.14	.155	5	36	.36	64	.18	<3	4.00	.03	.06	<2	<5	1	4
L93N 63+90E	1	100	7	95	.3	31	23	446	4.71	12	<5	<2	3	37	<.2	<2	<2	110	.28	.159	6	47	1.09	75	.24	<3	3.82	.01	.12	<2	<5	<1	55
L93N 64+20E	1	74	28	116	.3	22	19	734	3.99	17	<5	<2	3	30	.3	<2	<2	92	.22	.181	7	30	.76	84	.20	<3	3.69	.02	.10	<2	<5	<1	6
L93N 64+50E	1	100	10	90	.5	25	22	612	4.16	8	<5	<2	4	27	<.2	<2	2	99	.18	.192	8	34	.91	100	.24	<3	4.60	.02	.12	<2	<5	1	15
L93N 64+80E	1	126	11	86	<.3	27	21	530	4.39	11	<5	<2	4	29	<.2	<2	<2	111	.18	.201	9	40	1.08	73	.23	<3	3.84	.01	.15	<2	<5	<1	18
L93N 65+10E	2	129	9	100	<.3	29	26	480	4.53	18	<5	<2	4	24	<.2	<2	<2	113	.15	.202	10	38	1.01	75	.24	<3	4.57	.01	.18	<2	<5	1	30
L93N 65+40E	1	95	12	111	.4	24	28	675	4.73	13	<5	<2	3	28	.4	<2	4	108	.22	.206	8	34	.92	104	.22	<3	3.57	.01	.12	<2	<5	<1	20
STANDARD C2/AU-S	19	56	38	139	7.2	72	34	1104	3.76	41	19	7	35	52	20.0	18	19	71	.51	.101	40	64	.92	195	.08	23	1.94	.06	.14	15	<5	1	45

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L93N 65+70E	1	86	7	99	.5	30	36	1022	4.85	29	<5	<2	2	34	<.2	<2	2	118	.36	.091	9	45	1.20	117	.22	<3	3.45	.02	.14	<2	<5	<1	12
L93N 66+00E	1	92	4	105	.4	30	24	844	4.47	20	<5	<2	3	32	.3	<2	<2	111	.29	.176	9	48	1.29	138	.23	<3	3.56	.02	.17	<2	<5	<1	19
L93N 66+30E	1	54	12	134	.7	29	22	1495	4.08	15	<5	<2	2	38	.6	3	<2	92	.33	.257	10	48	.85	195	.16	<3	3.39	.02	.10	<2	7	1	29
L93N 66+60E	1	61	8	105	.4	29	23	916	4.05	14	<5	<2	<2	50	.4	<2	<2	93	.49	.330	7	50	.96	135	.15	<3	3.05	.02	.13	<2	<5	<1	15
L93N 66+90E	1	103	12	112	.6	35	27	1393	4.51	15	<5	<2	<2	55	.4	<2	4	112	.50	.187	12	60	1.23	118	.16	<3	2.98	.02	.19	<2	<5	<1	13
L93N 67+20E	1	107	6	132	.5	34	25	1083	4.32	18	<5	<2	<2	56	.6	<2	2	103	.49	.249	8	50	1.13	178	.16	<3	3.26	.02	.16	<2	<5	<1	18
L93N 67+50E	1	171	8	113	<.3	45	26	702	4.79	21	<5	<2	<2	64	.2	<2	<2	128	.58	.179	7	73	1.71	111	.18	<3	3.27	.01	.25	<2	<5	<1	35
L92N 55+20E	2	149	36	169	.5	26	18	1127	4.79	22	<5	<2	<2	28	.4	<2	<2	129	.33	.312	12	38	.87	231	.15	<3	3.39	.03	.15	<2	<5	<1	13
L92N 55+50E	2	140	8	147	1.2	33	22	1194	5.12	21	<5	<2	2	32	.2	<2	<2	153	.40	.184	10	38	1.12	176	.23	<3	3.43	.03	.21	<2	<5	<1	11
L92N 55+80E	1	103	7	128	.6	15	14	984	4.29	12	<5	<2	2	33	.2	2	<2	120	.40	.277	7	23	.71	126	.18	<3	3.58	.03	.13	<2	<5	<1	13
L92N 56+10E	1	173	8	112	.9	11	17	981	5.34	13	<5	<2	<2	32	.2	<2	2	167	.38	.173	6	18	.91	111	.23	<3	3.57	.03	.22	<2	<5	<1	54
L92N 56+40E	1	187	12	103	1.2	13	16	1017	5.24	13	<5	<2	<2	27	<.2	<2	<2	165	.37	.161	6	21	.85	77	.22	<3	3.52	.03	.12	<2	<5	<1	32
L92N 56+70E	2	105	13	92	1.1	12	13	668	4.66	9	<5	<2	2	20	<.2	<2	2	133	.24	.184	6	18	.61	75	.21	<3	3.27	.03	.09	<2	<5	<1	34
L92N 57+00E	2	198	43	130	.5	14	20	835	5.30	20	<5	<2	2	27	.4	2	3	152	.31	.149	11	18	1.04	122	.20	<3	4.72	.02	.21	<2	<5	<1	22
L92N 57+30E	2	201	6	112	.3	15	15	929	5.04	12	<5	<2	2	33	<.2	<2	<2	138	.36	.283	8	22	.81	96	.20	<3	3.54	.03	.15	<2	<5	<1	23
L92N 57+60E	2	108	10	99	.6	11	15	1126	5.60	14	<5	<2	2	32	<.2	<2	3	156	.44	.396	6	17	.71	103	.21	<3	3.23	.02	.12	<2	<5	<1	34
L92N 57+90E	1	219	7	97	1.0	13	19	918	5.53	19	<5	<2	3	25	<.2	2	<2	168	.28	.134	7	15	1.10	151	.25	<3	3.69	.02	.22	<2	<5	<1	46
L92N 58+20E	1	292	8	144	.6	13	21	807	5.42	14	<5	<2	<2	57	<.2	<2	2	155	.71	.196	7	20	1.14	100	.23	<3	3.23	.03	.14	<2	<5	<1	222
RE L92N 58+20E	1	292	4	145	.7	14	21	813	5.42	13	<5	<2	<2	57	.5	<2	<2	153	.71	.196	7	20	1.14	100	.23	<3	3.24	.03	.13	<2	<5	<1	88
L92N 58+50E	2	111	14	118	.8	12	14	1064	4.14	15	<5	<2	2	24	<.2	<2	2	105	.24	.284	7	20	.63	104	.18	<3	4.17	.02	.09	<2	<5	<1	30
L92N 58+80E	1	217	3	102	.7	39	24	869	5.15	11	<5	<2	2	22	<.2	<2	<2	141	.24	.127	7	101	1.58	123	.22	<3	4.13	.01	.10	<2	<5	<1	24
L92N 59+10E	2	158	8	120	.8	24	19	937	5.28	16	<5	<2	<2	21	<.2	<2	<2	144	.23	.166	6	69	1.32	123	.22	<3	3.50	.02	.10	<2	<5	<1	49
L92N 59+40E	2	150	11	135	.7	14	13	1723	3.64	11	<5	<2	<2	12	<.2	<2	<2	63	.10	.204	12	19	.35	210	.11	<3	3.85	.02	.07	<2	<5	<1	28
L92N 59+70E	2	241	9	122	.9	14	17	1003	5.17	11	<5	<2	2	26	<.2	<2	<2	127	.22	.231	8	25	.92	109	.19	<3	3.94	.01	.11	<2	<5	<1	36
L92N 60+00E	2	272	15	82	.8	15	9	730	4.79	11	<5	<2	2	18	<.2	<2	<2	118	.16	.255	6	29	.65	59	.20	<3	3.04	.01	.09	<2	<5	<1	43
L92N 60+30E	2	107	17	83	.8	13	9	836	3.49	12	<5	<2	3	13	.2	<2	<2	82	.10	.288	4	29	.42	74	.19	<3	4.00	.01	.08	<2	<5	<1	58
L92N 60+60E	7	264	11	85	2.2	17	15	842	3.50	16	6	<2	3	19	<.2	3	<2	87	.21	.276	4	32	.43	96	.22	<3	5.04	.02	.10	<2	<5	<1	49
L92N 60+90E	3	185	17	117	1.7	19	22	853	4.01	11	<5	<2	2	21	<.2	<2	<2	108	.22	.220	4	41	.62	91	.20	<3	3.44	.01	.10	<2	<5	<1	26
L92N 61+20E	3	235	15	97	2.2	39	22	636	4.19	38	<5	<2	3	28	<.2	<2	<2	103	.24	.171	4	58	.97	92	.21	<3	3.86	.02	.12	<2	<5	<1	58
L92N 61+50E	2	91	26	89	.7	20	16	785	3.98	27	<5	<2	3	25	<.2	<2	3	85	.18	.185	5	28	.52	64	.20	<3	4.03	.01	.06	<2	<5	<1	16
L92N 61+80E	1	58	25	117	.3	48	18	1490	3.73	24	<5	<2	4	13	.3	<2	<2	79	.13	.193	5	66	.64	80	.21	<3	4.09	.01	.08	<2	<5	1	67
L92N 62+10E	1	80	11	106	.3	55	22	739	3.89	20	<5	<2	2	25	<.2	<2	<2	86	.22	.198	6	90	.97	93	.21	<3	3.99	.02	.09	<2	<5	<1	79
L92N 62+40E	2	102	16	108	.3	54	27	1396	4.67	59	<5	<2	4	22	<.2	<2	<2	105	.19	.236	8	104	1.10	91	.20	<3	3.47	.01	.10	<2	<5	<1	39
L92N 62+70E	5	162	8	95	.4	85	32	556	5.06	151	<5	<2	2	32	<.2	2	<2	105	.36	.130	8	135	1.37	95	.20	<3	3.70	.02	.15	<2	<5	<1	420
L92N 63+00E	1	134	10	91	<.3	68	29	515	4.66	51	<5	<2	3	37	<.2	<2	<2	106	.33	.181	7	135	1.57	82	.20	<3	3.84	.01	.15	<2	<5	1	116
STANDARD C2/AU-S	19	56	34	138	7.5	72	34	1084	3.70	44	20	7	34	50	19.0	15	18	71	.52	.101	39	64	.93	184	.08	24	1.87	.06	.14	12	<5	1	45

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L92N 63+30E	1	81	15	123	<.3	33	26	1632	4.46	29	<5	<2	3	34	<.2	2	<2	99	.31	.225	5	68	1.07	110	.19	<3	3.30	.01	.12	<2	<5	<1	39
L92N 63+60E	1	44	18	115	.3	34	23	826	4.30	26	<5	<2	3	33	.4	2	2	89	.30	.227	6	69	.97	88	.18	<3	3.07	.01	.09	<2	<5	1	16
L92N 63+90E	1	63	12	92	<.3	23	20	762	4.22	22	<5	<2	3	32	<.2	<2	2	93	.24	.236	7	38	.88	91	.18	<3	3.67	.01	.09	<2	<5	1	20
L92N 64+20E	1	90	13	92	<.3	24	23	684	4.24	15	<5	<2	3	31	.2	<2	2	97	.22	.180	8	35	.95	91	.19	<3	3.69	.01	.12	<2	<5	<1	13
L92N 64+50E	1	65	16	105	.4	23	19	838	4.56	19	<5	<2	3	30	.3	<2	<2	100	.24	.247	7	37	.95	102	.19	<3	3.31	.01	.11	<2	<5	<1	21
L92N 64+80E	1	90	12	107	.3	28	25	581	4.38	28	<5	<2	3	27	<.2	<2	<2	98	.21	.205	8	40	.96	110	.20	<3	3.81	.01	.12	<2	<5	<1	6
L92N 65+10E	1	83	13	91	.4	27	26	1012	4.59	16	<5	<2	2	36	<.2	<2	<2	105	.29	.131	8	39	1.12	114	.18	<3	3.25	.01	.11	<2	<5	1	48
L92N 65+40E	1	68	10	107	<.3	26	25	1415	4.45	18	<5	<2	3	38	.2	<2	<2	101	.34	.221	10	44	1.05	138	.16	<3	3.33	.01	.11	<2	<5	<1	12
L92N 65+70E	<1	69	7	99	.4	27	24	1307	4.18	21	<5	<2	4	34	.5	<2	<2	98	.33	.186	8	43	1.05	144	.19	<3	3.24	.01	.12	<2	<5	<1	14
L92N 66+00E	<1	78	16	112	.4	43	28	1617	4.77	15	<5	<2	2	66	.5	<2	<2	115	.52	.252	15	65	1.41	309	.19	<3	3.19	.01	.19	<2	<5	<1	15
L92N 66+30E	<1	87	10	117	<.3	36	29	1476	4.83	18	<5	<2	2	46	<.2	<2	<2	117	.40	.257	7	63	1.42	216	.18	<3	3.28	.01	.22	<2	<5	<1	36
L92N 66+60E	<1	88	5	114	.3	29	30	1694	4.83	15	<5	<2	3	51	.4	<2	2	116	.46	.215	7	60	1.31	215	.18	<3	3.16	.01	.19	<2	<5	1	55
L92N 66+90E	1	103	12	97	.5	28	26	1284	4.32	19	<5	<2	3	52	.3	<2	<2	103	.45	.142	8	51	1.21	141	.16	<3	3.09	.01	.21	<2	<5	<1	41
L92N 67+20E	<1	72	17	119	.3	27	24	1287	4.26	18	<5	<2	3	51	.3	<2	4	93	.47	.298	6	46	1.12	187	.14	<3	2.87	.01	.14	<2	<5	<1	684
L92N 67+50E	1	99	24	212	.4	27	28	2646	4.93	30	<5	<2	2	58	.8	<2	<2	103	.54	.245	9	40	1.32	329	.13	<3	3.01	.01	.20	<2	<5	<1	49
L91N 50+10E	1	48	11	98	<.3	24	15	775	3.07	11	<5	<2	3	18	<.2	<2	3	66	.21	.266	5	34	.43	82	.18	<3	5.36	.03	.05	<2	<5	1	4
L91N 50+40E	2	52	9	102	.4	34	18	1598	3.16	11	<5	<2	3	19	<.2	<2	<2	76	.23	.116	7	48	.54	98	.20	<3	4.20	.03	.06	<2	<5	<1	2
L91N 50+70E	4	63	9	120	.3	28	15	1091	3.37	10	<5	<2	3	23	<.2	<2	2	78	.23	.195	7	43	.50	95	.19	3	4.13	.03	.08	<2	<5	1	3
L91N 51+00E	2	39	13	112	.8	18	16	1249	2.98	8	<5	<2	4	17	<.2	<2	<2	64	.15	.295	4	26	.36	97	.17	<3	4.07	.02	.06	<2	<5	<1	1
L91N 51+30E	2	60	9	117	.4	33	16	713	3.25	8	<5	<2	3	24	<.2	<2	<2	79	.25	.110	8	41	.63	103	.19	<3	3.96	.02	.07	<2	<5	1	5
L91N 51+60E	2	133	11	207	.8	50	35	738	4.48	10	<5	<2	<2	26	.2	<2	<2	121	.34	.081	4	82	1.07	103	.24	<3	3.87	.03	.11	<2	<5	<1	2
L91N 51+90E	2	76	10	176	.9	28	21	875	3.44	9	<5	<2	3	18	.5	<2	<2	84	.22	.131	6	44	.49	99	.21	<3	3.71	.03	.08	<2	<5	1	1
L91N 52+20E	2	82	12	164	.4	43	22	580	4.06	12	<5	<2	2	24	<.2	<2	<2	102	.29	.100	5	81	.77	110	.21	<3	3.43	.03	.08	<2	<5	<1	1
L91N 52+50E	2	56	15	169	.4	34	17	1116	3.94	10	<5	<2	3	22	.2	2	<2	95	.27	.181	6	77	.68	103	.19	<3	3.04	.03	.09	<2	<5	<1	2
RE L91N 52+50E	2	57	19	169	.4	35	18	1111	3.93	12	<5	<2	2	22	.3	<2	2	96	.27	.180	7	76	.69	103	.19	<3	3.03	.03	.08	<2	<5	<1	5
L91N 52+80E	3	51	8	161	.4	35	18	829	3.25	11	<5	<2	3	21	.2	<2	<2	72	.33	.141	6	73	.62	88	.18	<3	4.04	.03	.08	<2	<5	1	1
L91N 53+10E	3	72	19	111	.5	24	11	524	3.40	14	<5	<2	2	13	<.2	<2	<2	69	.12	.177	8	54	.41	80	.14	<3	3.89	.02	.06	<2	<5	1	3
L91N 53+40E	3	114	27	144	.8	45	19	413	3.81	9	<5	<2	2	23	<.2	<2	4	91	.30	.075	9	87	.76	91	.16	<3	4.42	.02	.08	<2	<5	1	5
L91N 53+70E	2	79	13	89	.5	30	14	528	3.54	14	<5	<2	2	18	<.2	<2	2	80	.16	.106	7	48	.57	80	.16	<3	3.94	.02	.06	<2	<5	<1	16
L91N 54+00E	2	76	16	93	.4	24	16	1077	3.18	14	<5	<2	2	16	<.2	<2	<2	72	.14	.093	6	31	.43	107	.17	<3	3.62	.02	.06	<2	<5	<1	13
L91N 54+30E	1	51	20	83	.5	21	14	704	3.42	7	<5	<2	2	15	<.2	<2	<2	76	.13	.128	6	42	.40	101	.17	<3	2.75	.02	.06	<2	<5	<1	10
L91N 54+60E	1	58	12	46	1.0	16	9	551	2.75	8	<5	<2	2	12	<.2	<2	2	65	.10	.101	6	28	.34	73	.19	<3	3.52	.02	.06	2	<5	1	11
L91N 54+90E	1	70	12	89	.5	25	16	1094	3.85	13	5	<2	2	28	<.2	<2	<2	102	.34	.150	6	57	.75	121	.18	<3	2.97	.02	.10	<2	<5	1	20
L91N 55+20E	2	201	12	104	.8	28	20	1455	5.18	17	<5	<2	<2	79	.5	<2	<2	176	.87	.118	15	80	.89	164	.15	<3	2.49	.04	.15	<2	<5	<1	81
L91N 55+50E	2	160	22	139	.9	30	17	1185	4.45	13	<5	<2	2	27	<.2	<2	<2	118	.29	.197	9	34	.90	188	.18	<3	3.57	.03	.12	<2	<5	<1	16
STANDARD C2/AU-S	19	57	37	133	7.0	70	34	1083	3.74	44	19	8	36	51	19.8	18	21	69	.52	.103	40	66	.92	188	.08	26	1.90	.06	.15	14	<5	3	46

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L91N 55+80E	2	84	6	104	.7	20	15	706	4.32	<2	<5	<2	3	27	.3	<2	<2	116	.28	.116	7	50	.76	137	.24	<3	3.91	.03	.11	<2	<5	<1	9
L91N 56+10E	1	147	6	106	.8	12	16	796	5.78	9	<5	<2	2	32	.5	<2	<2	176	.37	.337	6	20	.88	116	.23	<3	3.53	.04	.14	<2	5	<1	7
L91N 56+40E	2	100	12	86	.8	10	14	1679	4.28	7	<5	<2	4	25	<.2	3	<2	111	.25	.265	5	18	.57	87	.19	<3	4.48	.03	.12	2	<5	<1	6
L91N 56+70E	1	99	<3	102	.6	13	11	1109	4.02	9	<5	2	3	20	.3	3	<2	108	.19	.173	7	19	.61	124	.23	<3	5.39	.03	.15	2	<5	2	5
L91N 57+00E	2	127	9	103	.6	12	17	1157	5.20	7	<5	<2	3	28	.4	<2	2	147	.27	.245	6	17	.67	90	.21	<3	4.00	.03	.11	<2	<5	<1	13
L91N 57+30E	2	220	6	99	.4	12	14	719	4.89	4	<5	<2	3	26	.2	<2	<2	144	.27	.181	7	14	.86	88	.24	<3	4.79	.03	.15	<2	<5	1	21
L91N 57+60E	1	86	<3	64	.3	9	11	737	4.36	3	<5	<2	3	17	<.2	<2	<2	108	.16	.139	6	15	.45	81	.22	<3	4.76	.02	.08	<2	<5	1	8
L91N 57+90E	4	253	<3	104	.6	12	17	1397	5.52	7	<5	<2	4	28	<.2	<2	2	150	.26	.189	8	17	.77	105	.22	<3	3.61	.02	.13	<2	<5	<1	39
L91N 58+20E	3	299	<3	92	.4	15	16	657	4.84	11	<5	<2	3	28	.8	2	2	130	.27	.139	14	23	.93	82	.22	<3	3.80	.02	.12	3	7	2	39
L91N 58+50E	2	217	3	172	1.1	18	26	1520	6.22	11	<5	<2	4	25	.4	<2	<2	162	.25	.292	9	25	1.37	176	.24	<3	4.70	.02	.20	2	5	<1	24
L91N 58+80E	2	117	4	94	.8	13	11	1388	3.23	4	<5	<2	4	14	<.2	<2	<2	65	.13	.188	8	18	.37	110	.20	<3	5.71	.03	.07	<2	<5	1	136
L91N 59+10E	1	92	4	133	.9	14	14	1720	4.22	7	<5	<2	4	17	.2	<2	<2	98	.17	.276	7	17	.53	133	.20	<3	4.69	.02	.08	<2	<5	<1	7
L91N 59+40E	1	149	7	154	.6	17	23	1401	6.26	12	<5	<2	3	30	.3	3	<2	177	.30	.163	8	21	1.33	139	.25	<3	3.96	.02	.12	2	<5	1	13
L91N 59+70E	1	714	<3	117	.3	22	18	529	5.35	7	<5	<2	4	25	.2	<2	<2	140	.20	.197	10	42	1.04	114	.21	<3	4.58	.01	.13	<2	<5	2	42
L90N 50+10E	3	81	9	83	<.3	37	17	521	3.43	6	<5	<2	3	18	<.2	3	<2	84	.20	.143	6	59	.63	68	.21	<3	4.91	.03	.08	2	<5	<1	3
L90N 50+40E	2	42	9	117	.3	37	19	735	2.94	5	<5	<2	2	19	<.2	<2	<2	63	.22	.119	5	41	.36	77	.19	<3	4.70	.02	.06	<2	<5	<1	1
L90N 50+70E	2	36	10	79	.7	19	10	935	2.70	4	<5	<2	2	15	<.2	<2	<2	58	.15	.102	5	23	.23	67	.20	<3	4.63	.03	.05	<2	<5	<1	1
L90N 51+00E	2	37	5	70	.5	19	15	613	2.95	<2	<5	<2	3	11	<.2	<2	<2	60	.12	.142	6	29	.26	69	.20	<3	5.43	.02	.06	2	<5	<1	2
L90N 51+30E	5	107	5	89	<.3	35	17	523	3.75	5	<5	<2	2	16	.3	<2	2	84	.17	.187	7	48	.53	63	.19	<3	4.76	.02	.07	2	<5	2	1
L90N 51+60E	2	93	7	176	<.3	52	21	1164	4.13	3	<5	<2	3	24	<.2	<2	<2	104	.27	.141	9	67	.89	96	.23	<3	4.31	.02	.12	<2	<5	<1	3
L90N 51+90E	1	133	<3	211	<.3	98	36	954	4.92	7	<5	<2	2	38	.5	<2	3	132	.52	.053	4	210	1.93	192	.28	<3	3.80	.03	.15	<2	<5	1	1
L90N 52+20E	2	52	10	167	1.9	34	18	1805	3.49	7	<5	<2	2	17	.4	<2	2	73	.18	.152	6	57	.48	121	.20	<3	4.47	.03	.06	<2	<5	<1	3
RE L90N 52+20E	2	53	7	169	1.7	36	18	1848	3.49	9	<5	<2	<2	17	.3	<2	3	74	.18	.153	7	55	.47	123	.20	<3	4.47	.03	.07	<2	<5	<1	1
L90N 52+50E	2	60	5	104	.4	31	13	564	3.38	<2	<5	<2	2	16	<.2	<2	<2	76	.16	.116	6	53	.48	83	.21	<3	4.61	.03	.07	<2	<5	<1	2
L90N 52+80E	1	87	6	149	.3	73	26	638	4.09	4	<5	<2	2	32	<.2	<2	<2	97	.28	.141	6	84	1.03	142	.23	<3	5.01	.03	.10	2	<5	1	10
L90N 53+10E	1	71	33	167	.4	56	19	688	4.26	6	<5	<2	5	43	.2	<2	<2	101	.36	.175	16	73	1.13	201	.22	<3	4.91	.03	.13	<2	<5	<1	4
L90N 53+40E	1	49	39	169	.4	32	14	884	3.18	6	<5	<2	3	21	.4	2	2	75	.17	.148	8	46	.66	124	.19	<3	3.95	.03	.08	<2	<5	1	3
L90N 53+70E	1	53	11	108	.6	90	21	544	4.56	2	<5	<2	3	19	.3	<2	<2	113	.15	.087	10	150	1.49	194	.25	<3	3.68	.02	.11	<2	<5	<1	11
L90N 54+00E	1	50	13	80	.7	27	13	522	3.32	3	<5	<2	<2	14	<.2	<2	<2	73	.12	.112	5	42	.45	80	.17	<3	4.46	.02	.07	<2	<5	<1	8
L90N 54+30E	1	153	7	87	<.3	49	18	502	4.30	9	<5	<2	2	22	<.2	<2	<2	114	.20	.145	5	86	1.14	112	.23	<3	4.31	.02	.13	<2	<5	<1	23
L90N 54+60E	2	56	9	69	.4	23	11	370	3.47	5	<5	<2	<2	18	<.2	2	3	85	.17	.076	5	47	.52	103	.20	<3	4.09	.02	.07	3	<5	<1	10
L90N 54+90E	2	89	8	89	.7	34	16	500	4.86	8	<5	<2	<2	22	.2	<2	2	138	.17	.050	5	78	1.10	109	.25	<3	3.42	.02	.09	<2	<5	<1	26
STANDARD C2/AU-S	21	61	37	147	7.5	77	37	1193	4.06	43	18	8	39	56	22.2	18	18	77	.56	.099	44	67	1.03	208	.09	29	2.14	.06	.16	14	<5	1	48

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

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Orvana Minerals Corp. PROJECT STEWART File # 96-5077 Page 1

710 - 1177 W. Hastings St, Vancouver BC V6E 2K3

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L96N 5520E	1	62	11	75	<.3	49	20	457	3.92	7	<5	<2	3	21	.3	2	3	91	.19	.102	7	64	.96	157	.22	<3	4.29	.02	.09	<2	<5	1	29
L96N 5550E	1	58	8	92	.7	41	17	494	4.15	10	<5	<2	2	21	<.2	5	<2	97	.18	.117	6	64	1.04	128	.21	<3	3.67	.03	.10	<2	<5	<1	99
L96N 5580E	1	197	6	102	<.3	90	34	651	5.30	5	<5	<2	2	46	.4	<2	<2	141	.44	.096	6	134	1.99	215	.23	<3	4.08	.02	.25	<2	<5	<1	27
L96N 5610E	1	77	9	77	.5	38	21	605	3.50	<2	<5	<2	<2	22	<.2	<2	<2	84	.27	.157	6	72	.90	131	.19	5	3.70	.03	.09	<2	<5	<1	11
L96N 5640E	1	62	9	105	.4	27	18	744	3.30	5	<5	<2	<2	19	.4	<2	2	74	.20	.190	6	47	.75	121	.14	<3	3.40	.02	.08	<2	<5	<1	10
L96N 5670E	1	101	10	93	.3	35	20	714	3.70	7	<5	<2	<2	31	.3	<2	<2	92	.33	.135	7	62	.98	117	.14	9	2.68	.03	.18	<2	<5	<1	21
L96N 5700E	2	96	17	105	.5	27	21	1191	3.80	15	<5	<2	<2	44	1.0	<2	<2	90	.49	.110	14	43	.84	103	.14	<3	3.13	.03	.12	<2	<5	<1	20
L96N 5730E	1	209	7	97	<.3	25	22	701	5.43	11	<5	<2	<2	60	.7	2	<2	150	.76	.177	9	38	1.20	134	.17	<3	2.67	.03	.26	<2	<5	<1	22
L96N 5760E	1	249	10	122	.8	22	20	928	4.59	2	<5	<2	<2	55	.6	<2	<2	120	.69	.162	10	40	.81	93	.16	<3	3.37	.03	.12	<2	<5	<1	73
L96N 5790E	1	216	9	115	.5	18	18	1018	4.97	3	<5	<2	<2	40	.4	2	2	132	.51	.260	6	28	.76	126	.15	4	3.01	.02	.14	<2	<5	<1	390
L96N 5820E	2	179	7	96	1.0	16	18	579	4.43	7	<5	<2	2	24	.4	2	3	112	.19	.203	6	26	.64	94	.17	<3	3.16	.02	.11	<2	<5	<1	35
L96N 5850E	2	141	11	100	.9	18	18	604	4.07	14	<5	<2	<2	33	.2	<2	<2	99	.27	.256	7	24	.61	114	.17	<3	2.89	.02	.09	<2	<5	<1	17
L96N 5880E	6	276	11	99	.4	22	20	483	5.16	19	<5	<2	<2	30	.3	<2	<2	112	.19	.189	7	31	.77	93	.20	<3	3.85	.02	.11	<2	<5	<1	26
L96N 5910E	1	57	12	63	1.1	11	9	343	2.77	<2	<5	<2	<2	12	.2	<2	<2	55	.09	.187	5	15	.27	59	.16	<3	4.19	.03	.05	<2	<5	<1	7
L96N 5940E	1	91	10	88	1.5	18	13	1036	3.52	<2	<5	<2	<2	24	<.2	<2	2	86	.22	.128	6	32	.60	102	.15	5	3.15	.03	.08	<2	<5	<1	39
L96N 5970E	2	174	12	97	.6	23	18	770	4.67	11	<5	<2	<2	41	.4	<2	<2	117	.47	.169	8	39	1.00	149	.14	<3	3.08	.02	.15	<2	<5	<1	38
RE L96N 5970E	2	161	16	92	.6	22	18	726	4.32	12	<5	<2	<2	38	.4	<2	<2	108	.44	.161	7	37	.93	139	.13	<3	2.88	.02	.14	<2	<5	<1	36
L96N 6000E	2	213	7	98	.5	46	23	857	4.90	9	<5	<2	<2	26	.4	<2	<2	137	.26	.101	5	77	1.70	216	.26	<3	4.08	.02	.23	<2	<5	<1	52
L94N 5520E	2	109	12	114	.6	21	23	1840	4.03	3	<5	<2	<2	56	.9	<2	<2	113	.58	.100	16	28	.63	122	.14	4	2.10	.03	.11	<2	<5	<1	8
L94N 5550E	1	139	8	108	<.3	32	23	910	4.02	2	<5	<2	<2	46	.5	<2	<2	112	.53	.105	6	33	.71	122	.17	<3	2.56	.02	.15	<2	<5	<1	32
L94N 5580E	1	165	3	91	<.3	31	22	499	5.06	<2	<5	<2	<2	33	<.2	<2	2	149	.42	.251	3	44	1.06	121	.25	<3	2.98	.02	.13	<2	<5	<1	13
L94N 5610E	<1	104	<3	114	.3	13	19	897	5.83	6	<5	<2	<2	43	.5	<2	2	189	.38	.204	4	15	.86	151	.27	4	3.01	.03	.12	<2	<5	<1	9
L94N 5640E	1	154	7	94	.5	14	16	540	4.96	3	<5	<2	<2	32	.4	<2	<2	146	.33	.160	6	18	.69	114	.23	<3	2.91	.02	.10	<2	<5	<1	14
L94N 5670E	1	71	11	98	<.3	15	15	825	4.90	<2	<5	<2	<2	49	.5	<2	<2	140	.41	.203	8	23	.65	231	.25	<3	2.30	.03	.12	<2	<5	<1	63
L94N 5700E	1	61	13	94	<.3	12	15	1107	4.64	<2	<5	<2	<2	33	.6	<2	<2	134	.32	.094	7	18	.58	110	.24	<3	2.26	.03	.09	<2	<5	<1	3
L94N 5730E	1	69	8	152	<.3	12	16	1143	4.94	2	<5	<2	<2	37	.2	<2	<2	134	.41	.218	6	16	.67	134	.19	<3	2.15	.03	.11	<2	<5	<1	6
L94N 5760E	2	156	12	108	<.3	15	19	957	4.99	<2	<5	<2	<2	42	.3	<2	<2	148	.53	.180	6	28	.79	64	.13	8	2.11	.03	.20	<2	<5	<1	18
L94N 5790E	2	86	11	92	.3	13	13	1188	4.24	<2	<5	<2	<2	32	<.2	<2	2	106	.39	.146	6	27	.48	145	.17	6	1.67	.02	.11	<2	<5	<1	12
L94N 5820E	1	88	9	112	.3	14	16	900	4.80	5	<5	<2	<2	37	.2	<2	<2	137	.33	.263	5	25	.73	107	.18	5	2.61	.03	.10	<2	<5	<1	18
L94N 5850E	1	33	16	75	.6	9	8	844	3.70	2	<5	<2	<2	21	<.2	<2	<2	95	.18	.154	4	17	.32	101	.21	3	2.23	.02	.09	<2	<5	<1	118
L94N 5880E	1	70	14	84	.4	13	13	724	4.05	5	<5	<2	<2	22	<.2	2	2	99	.16	.317	5	24	.48	111	.19	4	3.22	.02	.08	<2	<5	<1	55
L94N 5910E	1	58	9	66	.5	11	8	626	4.00	<2	<5	<2	<2	25	.2	<2	<2	122	.19	.117	7	21	.46	70	.21	<3	1.82	.01	.07	<2	<5	<1	16
L94N 5940E	1	78	8	76	.6	13	8	509	4.11	4	<5	<2	<2	20	.3	<2	<2	105	.15	.214	4	25	.53	62	.19	<3	3.46	.01	.07	<2	<5	<1	55
L94N 5970E	1	56	11	66	.3	9	6	493	3.50	<2	<5	<2	<2	17	<.2	<2	<2	85	.13	.109	5	15	.31	83	.18	5	2.64	.02	.04	<2	<5	<1	55
L81N 5520E	1	184	86	217	<.3	44	28	3984	5.35	15	<5	<2	<2	83	2.7	<2	<2	144	.66	.215	11	59	1.02	268	.13	<3	2.59	.02	.14	<2	<5	<1	55
STANDARD C2/AU-S	20	57	38	143	6.7	73	37	1137	3.81	40	17	8	34	52	20.6	15	20	74	.52	.102	38	62	.96	194	.08	24	1.92	.06	.14	13	<5	1	48

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 7 1996 DATE REPORT MAILED: Oct 15/96 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L81N 5550E	1	349	21	170	.9	35	26	1633	6.07	12	<5	<2	<2	78	<.2	2	3	172	.65	.180	10	54	1.20	151	.16	3	3.27	.02	.16	<2	<5	<1	45
L81N 5580E	1	241	28	142	1.7	37	26	1103	6.47	13	<5	<2	<2	79	.2	4	2	214	.77	.076	20	87	1.40	115	.20	<3	3.35	.02	.21	<2	<5	<1	91
L81N 5610E	<1	133	33	179	<.3	143	39	2377	7.47	8	<5	<2	3	96	.4	2	<2	192	.74	.271	28	172	2.52	559	.20	<3	3.68	.02	.35	<2	<5	<1	30
L81N 5640E	1	104	29	214	<.3	22	20	5412	4.87	<2	<5	<2	<2	68	1.8	<2	<2	128	.54	.194	10	33	.72	465	.13	<3	2.44	.02	.14	<2	<5	<1	87
L81N 5670E	1	126	19	144	<.3	24	22	2383	5.58	8	<5	<2	<2	57	.5	<2	<2	152	.54	.254	9	38	.87	258	.16	<3	2.63	.02	.19	<2	<5	<1	301
L81N 5700E	1	100	145	192	<.3	68	24	1647	5.75	7	<5	<2	<2	61	.6	<2	<2	136	.54	.350	10	77	1.45	226	.15	<3	3.49	.02	.15	<2	<5	<1	48
L81N 5730E	1	98	24	217	.3	19	19	2000	5.61	6	<5	<2	<2	60	.4	<2	<2	138	.42	.233	8	29	1.26	212	.14	<3	3.37	.02	.24	<2	<5	<1	22
L81N 5760E	3	168	39	215	<.3	39	25	1794	5.68	11	<5	<2	<2	44	.6	<2	<2	131	.32	.342	10	41	1.13	200	.19	3	3.93	.02	.13	<2	<5	<1	165
L81N 5790E	1	187	20	154	<.3	29	21	823	4.99	8	<5	<2	<2	44	<.2	<2	<2	128	.36	.135	9	39	1.28	164	.17	<3	3.11	.01	.18	<2	<5	<1	42
L81N 5820E	1	192	14	183	.4	21	20	2015	5.20	7	<5	<2	<2	65	.4	<2	<2	120	.56	.275	8	27	1.07	223	.17	<3	3.52	.01	.16	<2	<5	<1	46
L81N 5850E	1	145	11	112	<.3	24	19	709	4.87	9	<5	<2	<2	44	<.2	<2	2	126	.38	.126	7	39	.99	105	.14	<3	2.14	.01	.10	<2	<5	<1	100
L81N 5880E	1	88	12	109	<.3	25	21	1035	5.62	6	<5	<2	<2	52	<.2	<2	<2	157	.47	.127	7	40	.83	160	.17	<3	2.42	.02	.11	<2	<5	<1	30
L81N 5910E	1	99	9	121	<.3	23	20	1720	5.28	5	<5	<2	<2	51	<.2	<2	<2	142	.44	.128	8	35	.97	169	.19	<3	2.90	.02	.12	<2	<5	<1	39
L81N 5940E	1	97	13	127	<.3	20	22	1688	5.87	4	<5	<2	<2	43	<.2	<2	2	157	.38	.250	8	39	.77	145	.15	<3	2.61	.01	.11	<2	<5	<1	42
L81N 5970E	1	208	21	146	<.3	36	28	1158	6.45	12	<5	<2	<2	57	<.2	2	4	185	.62	.190	11	65	1.28	153	.19	3	2.89	.02	.22	<2	<5	<1	51
RE L81N 5970E	1	209	22	145	<.3	37	28	1171	6.33	11	<5	<2	<2	58	.3	2	<2	181	.61	.187	12	65	1.28	154	.19	<3	2.91	.02	.22	<2	<5	<1	107
L81N 6000E	1	80	18	201	.6	23	21	1762	4.88	9	<5	<2	<2	25	.4	<2	<2	110	.25	.383	6	33	.58	182	.19	3	3.99	.02	.09	<2	<5	<1	31
L81N 6030E	1	105	16	135	.4	28	25	1291	5.31	7	<5	<2	<2	36	.4	<2	<2	141	.32	.324	7	46	.78	148	.17	<3	3.19	.02	.09	<2	<5	<1	243
L81N 6060E	1	134	20	142	.3	36	26	637	5.03	10	<5	<2	2	33	.3	2	<2	126	.31	.196	8	52	1.01	158	.19	<3	3.67	.02	.11	<2	<5	<1	51
L81N 6090E	1	79	21	154	.3	25	24	1792	4.65	9	5	<2	<2	41	.5	<2	<2	116	.38	.231	7	43	.87	179	.17	<3	2.71	.02	.14	<2	<5	<1	114
L81N 6120E	2	112	26	213	<.3	28	24	2053	4.46	11	<5	<2	<2	38	.7	2	2	108	.44	.149	7	49	1.10	163	.16	7	2.40	.02	.16	<2	<5	<1	63
L81N 6150E	2	147	19	172	<.3	27	23	1027	4.60	9	<5	<2	<2	38	.6	2	<2	108	.42	.197	8	46	1.07	109	.15	<3	2.79	.02	.15	<2	<5	<1	55
L81N 6180E	2	153	35	204	<.3	26	20	1192	4.32	9	<5	<2	<2	37	1.0	<2	2	101	.36	.177	9	46	1.01	139	.14	5	2.86	.02	.13	<2	<5	<1	35
L81N 6210E	1	100	22	184	1.1	19	16	1107	4.01	10	<5	<2	<2	29	.3	<2	<2	84	.31	.326	6	34	.74	140	.14	5	3.11	.02	.11	<2	<5	<1	48
L81N 6240E	2	136	13	189	.4	21	17	1026	4.21	2	<5	<2	<2	21	.4	<2	<2	98	.19	.270	7	38	.76	146	.16	<3	3.45	.02	.10	<2	<5	1	27
L81N 6270E	3	334	17	163	.8	46	24	1411	5.30	14	<5	<2	<2	76	.7	2	<2	120	.85	.166	11	85	1.27	185	.17	<3	4.91	.03	.23	<2	<5	<1	43
L81N 6300E	5	63	29	211	<.3	27	21	1191	5.19	17	5	<2	<2	56	.4	2	3	132	.75	.154	5	55	.96	114	.16	<3	2.56	.02	.16	<2	<5	<1	40
L81N 6330E	5	90	31	152	.4	23	21	812	5.05	9	<5	<2	<2	37	<.2	3	<2	132	.36	.100	6	32	1.15	119	.18	<3	2.89	.02	.15	2	<5	<1	29
L81N 6360E	2	31	16	121	.5	13	12	374	4.03	<2	<5	<2	<2	14	<.2	<2	<2	84	.13	.143	5	20	.46	91	.20	<3	4.47	.02	.06	<2	<5	<1	2
L81N 6390E	2	38	25	173	<.3	16	14	1519	3.82	<2	<5	<2	<2	24	<.2	<2	<2	90	.24	.100	5	29	.62	116	.17	6	2.94	.02	.08	<2	<5	<1	31
L81N 6420E	2	59	19	294	.3	22	20	3521	4.04	<2	<5	<2	<2	20	1.0	<2	<2	90	.19	.203	7	32	.70	183	.15	<3	3.55	.02	.10	<2	<5	<1	4
L81N 6450E	2	41	27	174	.6	15	15	1008	4.04	5	<5	<2	<2	29	<.2	<2	<2	92	.27	.132	5	26	.61	133	.16	<3	2.37	.02	.10	<2	<5	<1	2
L81N 6480E	4	76	30	169	.4	21	22	618	4.75	7	<5	<2	<2	36	<.2	<2	<2	110	.37	.172	7	29	.97	117	.14	<3	3.33	.02	.20	<2	<5	<1	4
L80N 5520E	1	64	23	139	<.3	23	22	1483	5.15	5	<5	<2	<2	45	<.2	<2	<2	135	.44	.261	7	40	.64	195	.15	<3	2.64	.02	.09	<2	<5	<1	16
L80N 5550E	2	78	18	98	.3	24	23	1668	5.16	10	<5	<2	<2	54	<.2	2	<2	143	.49	.134	8	38	.68	168	.15	<3	2.66	.02	.11	<2	<5	<1	40
STANDARD C2/AU-S	21	60	43	149	7.1	76	39	1189	3.95	40	19	8	35	54	21.1	16	22	76	.54	.108	40	64	.98	209	.08	24	2.01	.06	.14	14	<5	1	49

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

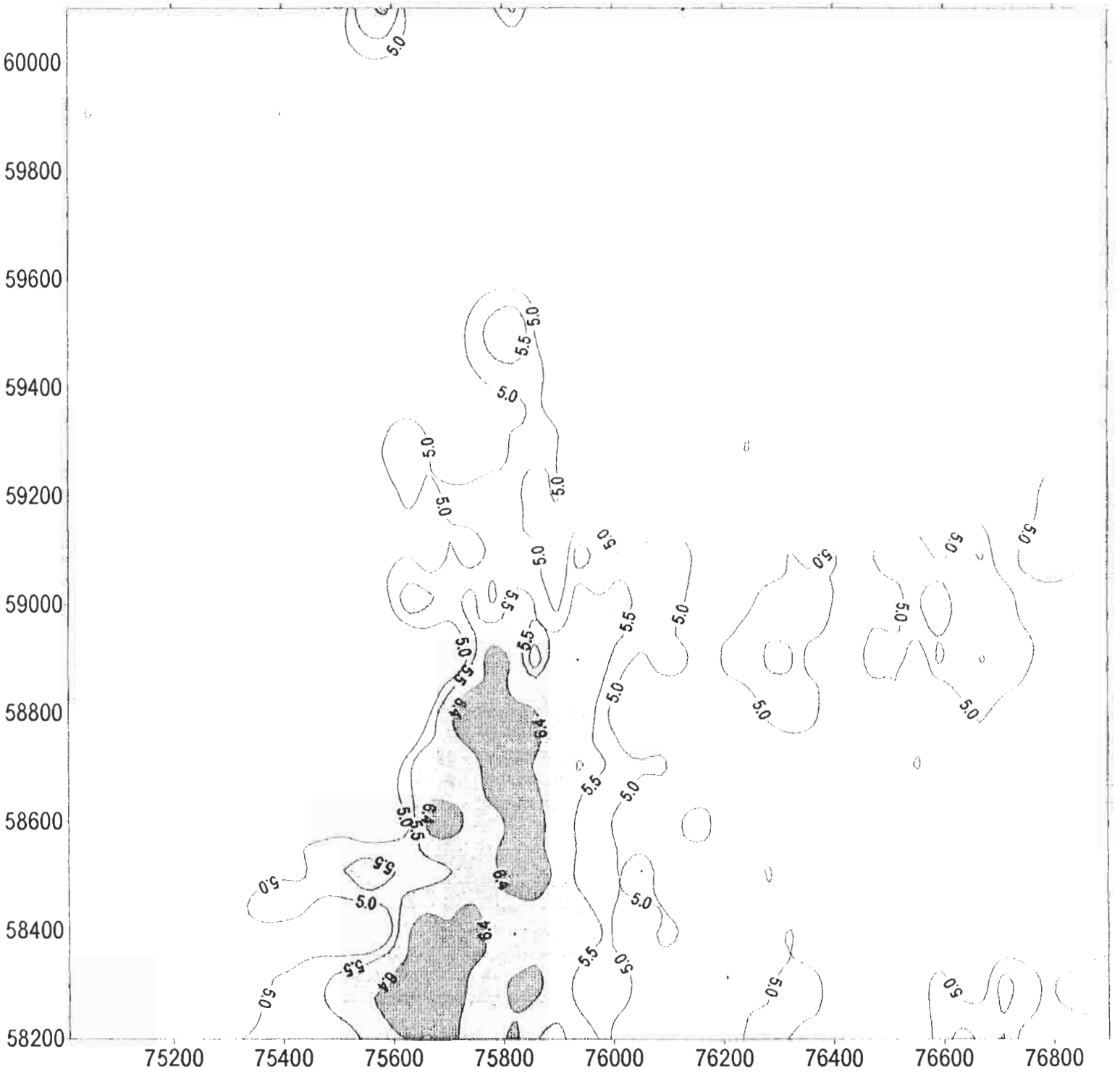
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
L80N 5580E	2	81	29	120	<.3	24	22	1663	5.35	14	<5	<2	<2	57	<.2	<2	<2	148	.55	.190	9	37	.78	199	.16	4	2.61	.02	.13	<2	<5	<1	35
L80N 5610E	4	173	45	157	.4	35	27	1846	6.37	29	<5	<2	<2	52	<.2	<2	<2	165	.52	.227	14	53	1.15	163	.15	<3	3.19	.02	.13	<2	<5	<1	64
L80N 5640E	2	141	94	237	<.3	33	24	775	6.59	17	<5	<2	<2	44	<.2	2	2	176	.39	.119	11	48	1.02	142	.21	<3	3.63	.02	.16	<2	<5	<1	58
L80N 5670E	1	90	32	197	<.3	26	24	1289	6.08	14	<5	<2	<2	49	<.2	2	<2	167	.43	.296	8	46	.83	179	.16	<3	2.45	.02	.14	<2	<5	<1	27
L80N 5700E	1	95	33	226	.3	21	23	2466	6.25	11	<5	<2	<2	59	1.3	<2	<2	170	.50	.226	8	38	.75	369	.15	<3	2.30	.02	.12	<2	<5	<1	58
L80N 5730E	1	78	36	123	<.3	22	23	1685	6.08	12	<5	<2	<2	53	<.2	<2	<2	168	.44	.207	8	39	.76	256	.14	<3	2.36	.02	.11	<2	<5	<1	107
L80N 5760E	1	137	28	120	.3	24	21	1442	6.17	10	<5	<2	<2	54	<.2	2	<2	173	.52	.263	9	42	.91	163	.16	<3	2.50	.02	.11	<2	<5	<1	108
L80N 5790E	1	70	35	105	<.3	19	22	2891	6.09	14	<5	<2	<2	69	<.2	3	2	175	.51	.171	7	38	.65	352	.14	<3	1.96	.02	.08	<2	<5	<1	55
L80N 5820E	1	79	23	156	.6	18	16	1099	4.59	14	<5	<2	2	37	<.2	<2	<2	111	.33	.365	7	27	.67	186	.16	<3	2.97	.02	.10	<2	<5	<1	45
L80N 5850E	2	84	28	173	.4	22	19	1386	4.75	13	<5	<2	<2	33	.3	<2	<2	108	.27	.331	8	33	.68	180	.18	<3	3.35	.02	.09	<2	<5	<1	23
L80N 5880E	1	85	29	184	<.3	21	20	2144	4.75	11	<5	<2	<2	40	.3	<2	<2	110	.32	.368	7	32	.77	237	.17	<3	3.00	.02	.10	<2	<5	<1	19
L80N 5910E	1	152	20	163	<.3	24	20	1146	4.98	15	<5	<2	<2	42	<.2	<2	<2	125	.42	.248	8	35	.93	166	.15	<3	2.95	.02	.11	<2	<5	<1	67
RE L80N 5910E	1	151	21	162	<.3	23	20	1143	4.85	12	<5	<2	2	42	.2	<2	2	122	.41	.249	8	34	.93	165	.15	4	2.94	.02	.11	<2	<5	<1	70
L80N 5940E	1	72	42	139	.3	15	16	2627	4.36	15	<5	<2	<2	32	.4	<2	2	104	.29	.322	7	25	.56	174	.15	<3	2.68	.02	.09	<2	<5	<1	27
L80N 5970E	1	132	27	155	.5	22	21	1936	5.54	13	<5	<2	<2	32	.2	3	2	137	.32	.284	7	34	.70	161	.19	<3	3.37	.02	.11	<2	<5	<1	83
L79N 5520E	1	61	22	118	.3	20	19	943	5.64	14	<5	<2	2	47	<.2	<2	<2	147	.41	.163	9	30	.74	125	.19	<3	2.77	.02	.10	<2	<5	<1	46
L79N 5550E	<1	50	17	86	<.3	15	20	721	5.62	13	<5	<2	<2	49	<.2	<2	<2	152	.40	.300	7	26	.63	156	.14	<3	2.30	.02	.07	<2	<5	<1	21
L79N 5580E	1	82	20	104	.3	20	20	844	5.35	13	<5	<2	<2	48	<.2	<2	<2	152	.46	.196	9	33	.78	118	.16	<3	2.72	.02	.11	<2	<5	<1	526
L79N 5610E	1	112	32	127	.3	26	22	929	6.64	17	<5	<2	2	57	<.2	<2	2	179	.61	.327	9	45	.91	143	.15	5	2.92	.02	.13	<2	<5	<1	100
L79N 5640E	1	94	78	190	.7	21	24	1626	6.80	15	<5	<2	<2	40	.2	3	<2	189	.39	.181	8	39	.80	135	.14	<3	2.34	.01	.10	<2	<5	<1	134
L79N 5670E	1	137	68	362	.4	32	23	1749	5.94	14	<5	<2	<2	40	.2	<2	<2	156	.39	.194	8	47	.92	178	.19	<3	3.43	.02	.14	<2	<5	<1	138
L79N 5700E	1	85	34	164	.6	23	19	792	5.56	15	<5	<2	<2	32	<.2	<2	<2	136	.29	.287	7	32	.65	133	.19	<3	3.55	.02	.11	<2	<5	<1	118
L79N 5730E	<1	115	23	118	<.3	22	23	689	7.20	12	<5	<2	2	49	<.2	<2	<2	212	.48	.162	7	42	.90	146	.17	<3	2.31	.01	.10	<2	<5	<1	67
L79N 5760E	<1	104	19	137	<.3	19	22	1020	6.42	12	<5	<2	<2	50	<.2	<2	<2	179	.54	.191	7	34	.83	139	.16	<3	2.42	.01	.12	<2	<5	<1	86
L79N 5790E	1	88	31	151	.7	25	22	1640	6.16	12	<5	<2	<2	41	<.2	<2	<2	171	.40	.239	9	43	.85	166	.17	<3	2.68	.02	.10	<2	<5	<1	399
L79N 5820E	1	73	33	150	.4	19	19	1262	5.31	12	<5	<2	2	37	.2	<2	<2	132	.32	.388	8	35	.62	152	.16	<3	3.09	.02	.09	<2	<5	<1	44
L79N 5850E	1	94	28	187	1.0	23	19	2142	5.20	11	<5	<2	2	25	.2	<2	<2	128	.23	.259	9	33	.81	181	.19	<3	3.29	.02	.11	<2	<5	<1	21
L79N 5880E	1	99	28	165	.3	23	16	993	5.01	11	5	<2	2	23	<.2	<2	<2	110	.23	.499	8	30	.71	144	.18	<3	4.39	.02	.11	<2	<5	<1	72
L79N 5910E	1	69	31	151	.4	19	15	796	4.95	20	<5	<2	<2	24	<.2	<2	<2	125	.18	.260	6	32	.70	104	.19	3	3.24	.01	.07	<2	<5	<1	66
L79N 5940E	1	88	24	139	.4	20	19	1031	5.43	11	<5	<2	<2	24	<.2	2	<2	128	.23	.357	7	34	.72	143	.19	<3	3.96	.02	.09	<2	<5	<1	42
L79N 5970E	1	126	20	143	.3	24	25	890	7.01	11	<5	<2	<2	34	<.2	<2	<2	191	.34	.324	7	46	.93	119	.18	<3	2.99	.01	.12	<2	<5	<1	65
L79N 6000E	1	146	13	143	.6	25	27	971	7.11	13	<5	<2	<2	46	<.2	<2	<2	210	.51	.193	6	54	1.10	119	.16	<3	2.53	.01	.14	<2	<5	<1	82
STANDARD C2/AU-S	20	57	46	142	6.7	73	37	1130	3.79	43	18	8	34	51	20.2	18	21	72	.52	.104	37	62	.95	191	.08	24	1.89	.06	.14	15	<5	3	45

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

APPENDIX 5

SOIL GEOCHEMISTRY CONTOUR PLOTS

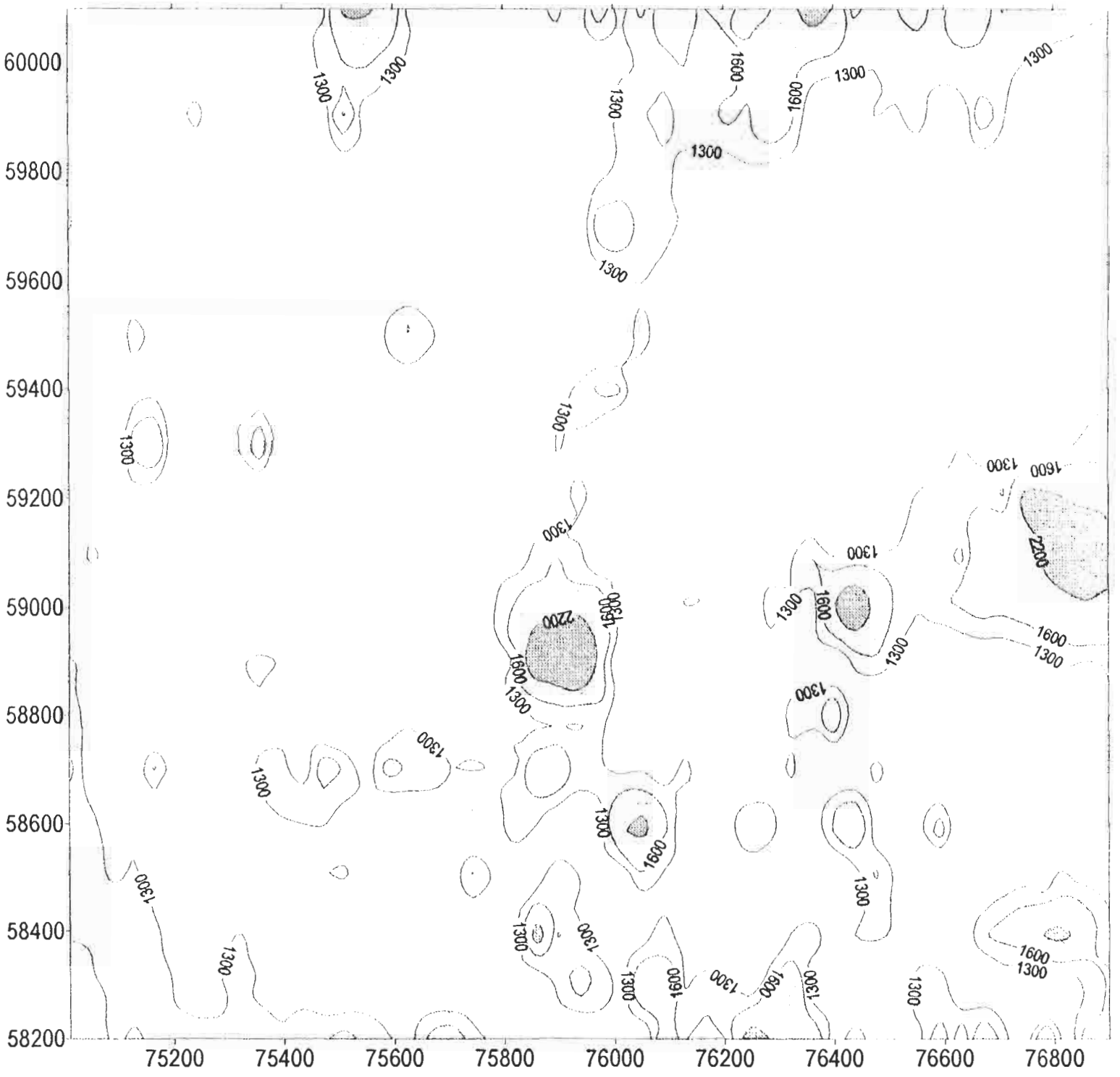
STEWART PROJECT--IRON (%)



1996 Craigtown Creek Grid - 1:10,000 Scale

ORVANA MINERALS

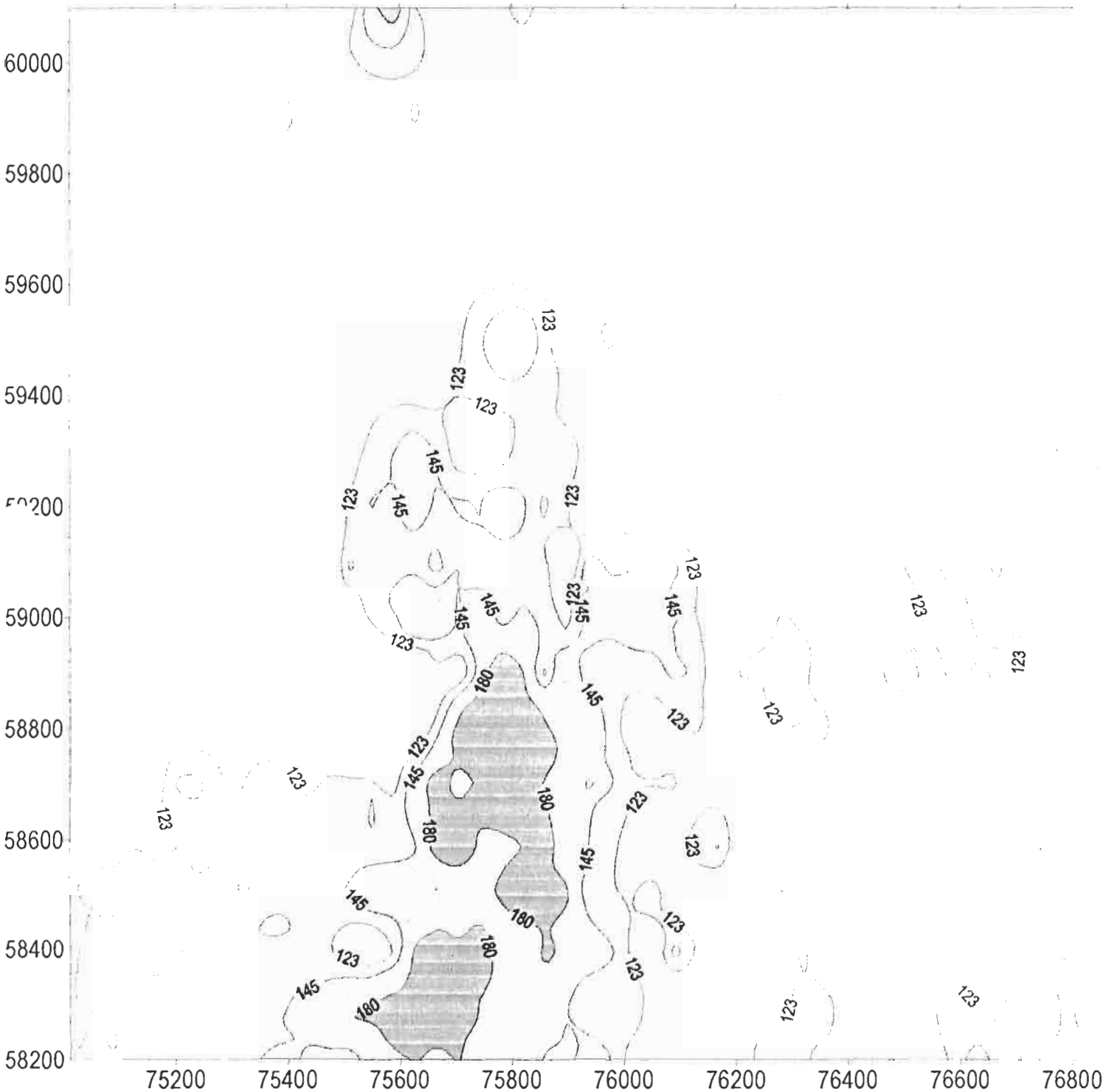
STEWART PROJECT--MANGANESE (ppm)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

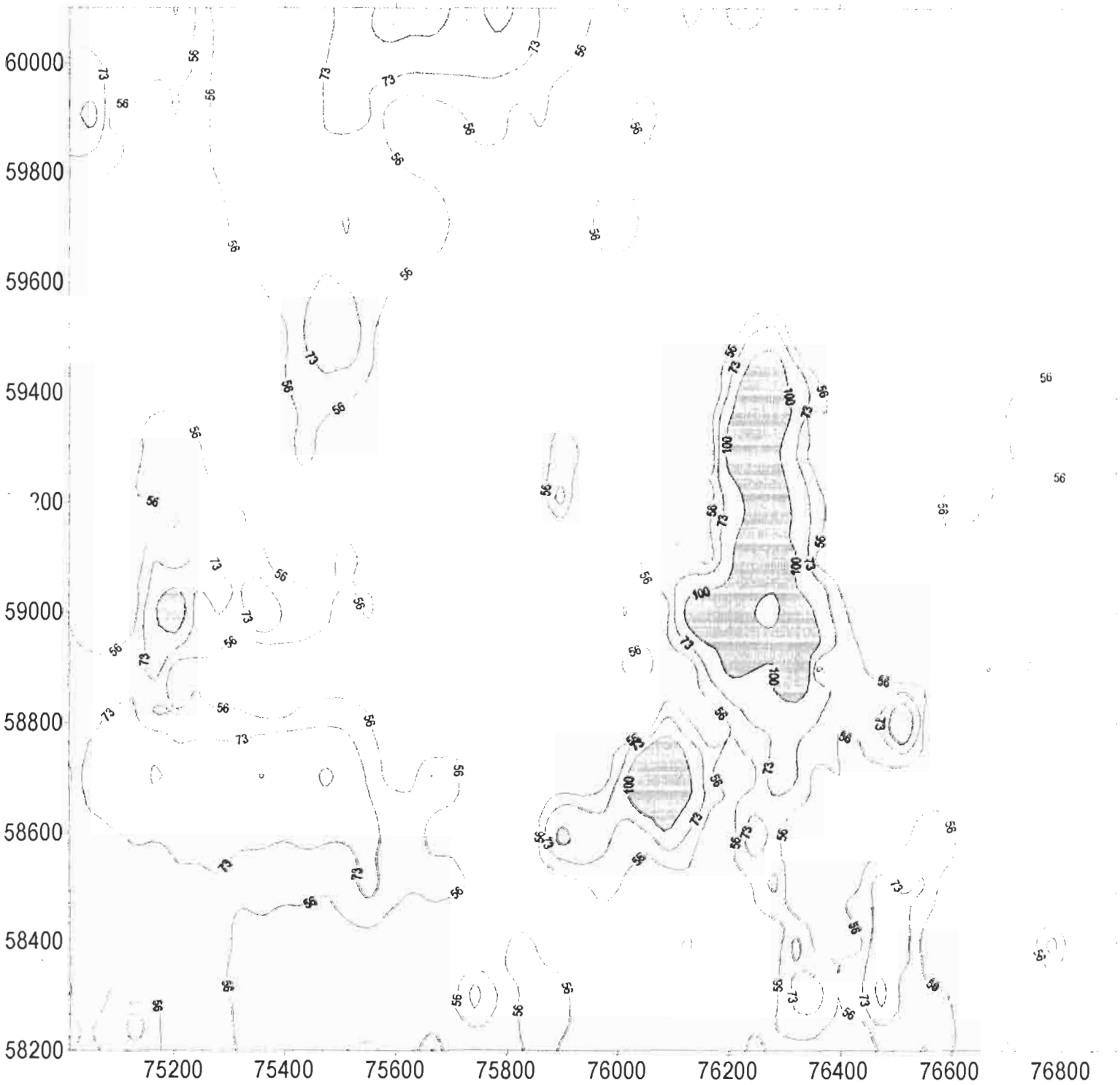
STEWART PROPERTY--VANADIUM (ppm)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

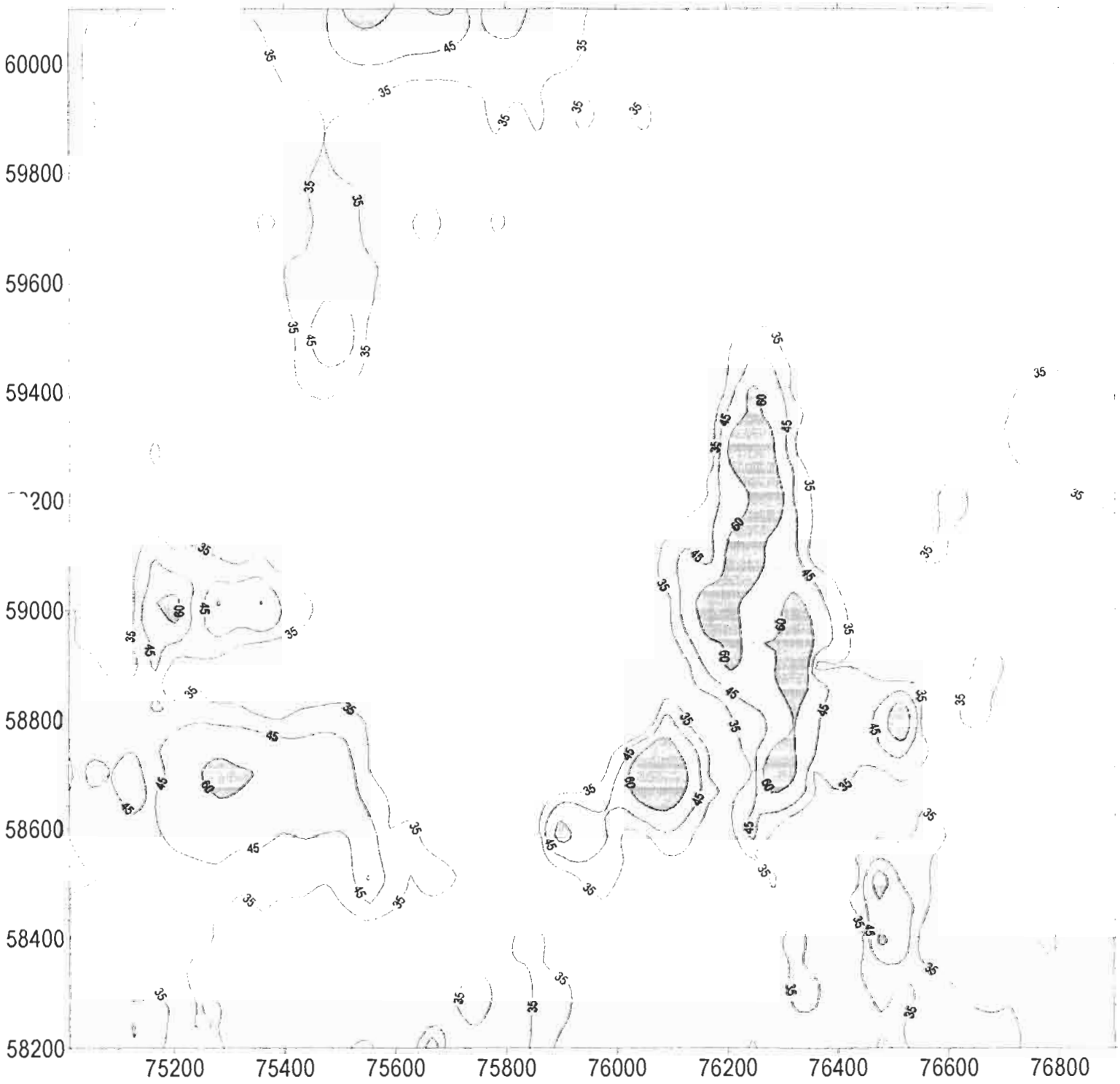
STEWART PROPERTY--CHROMIUM (ppm)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

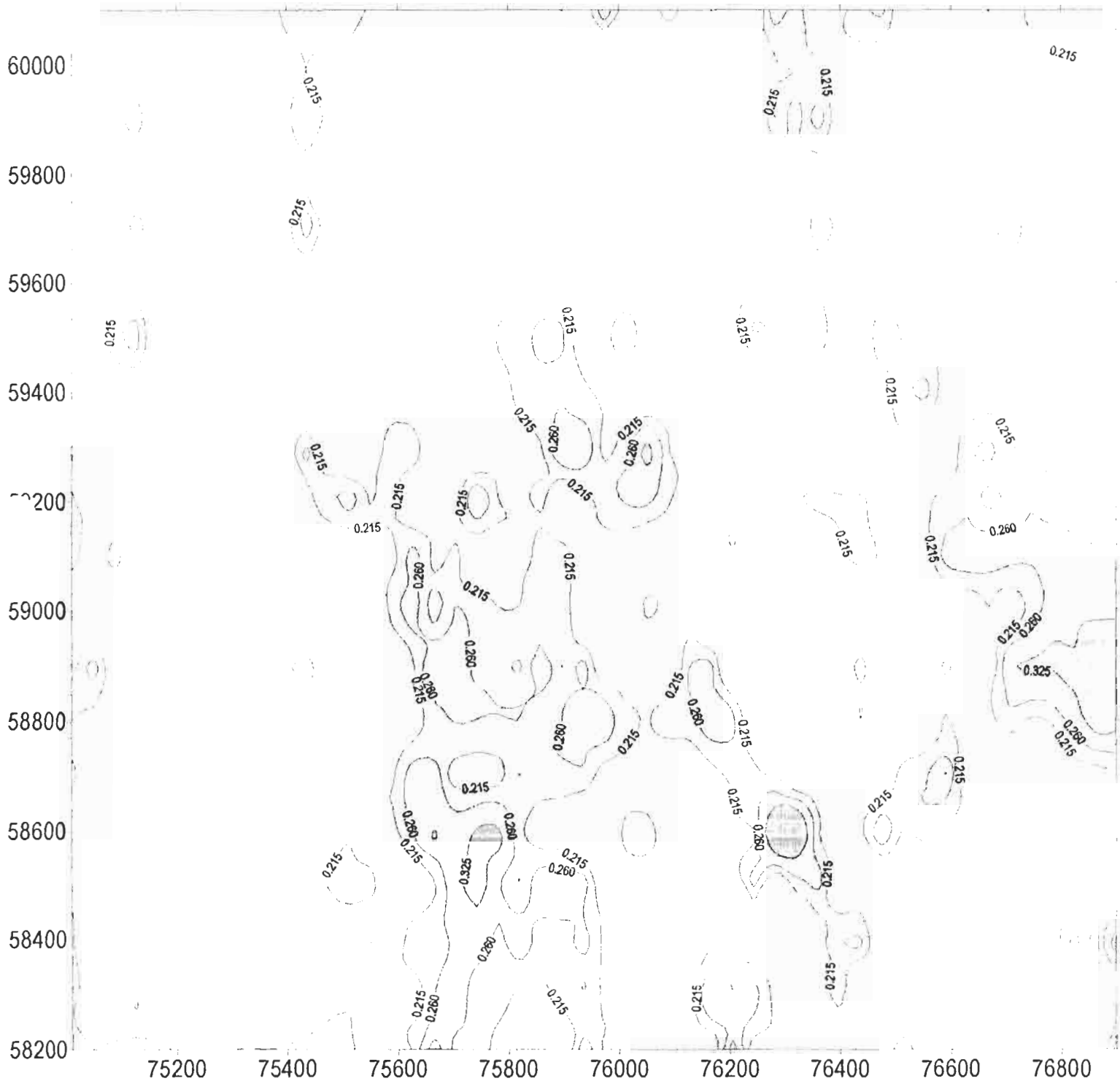
STEWART PROPERTY--NICKEL (ppm)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

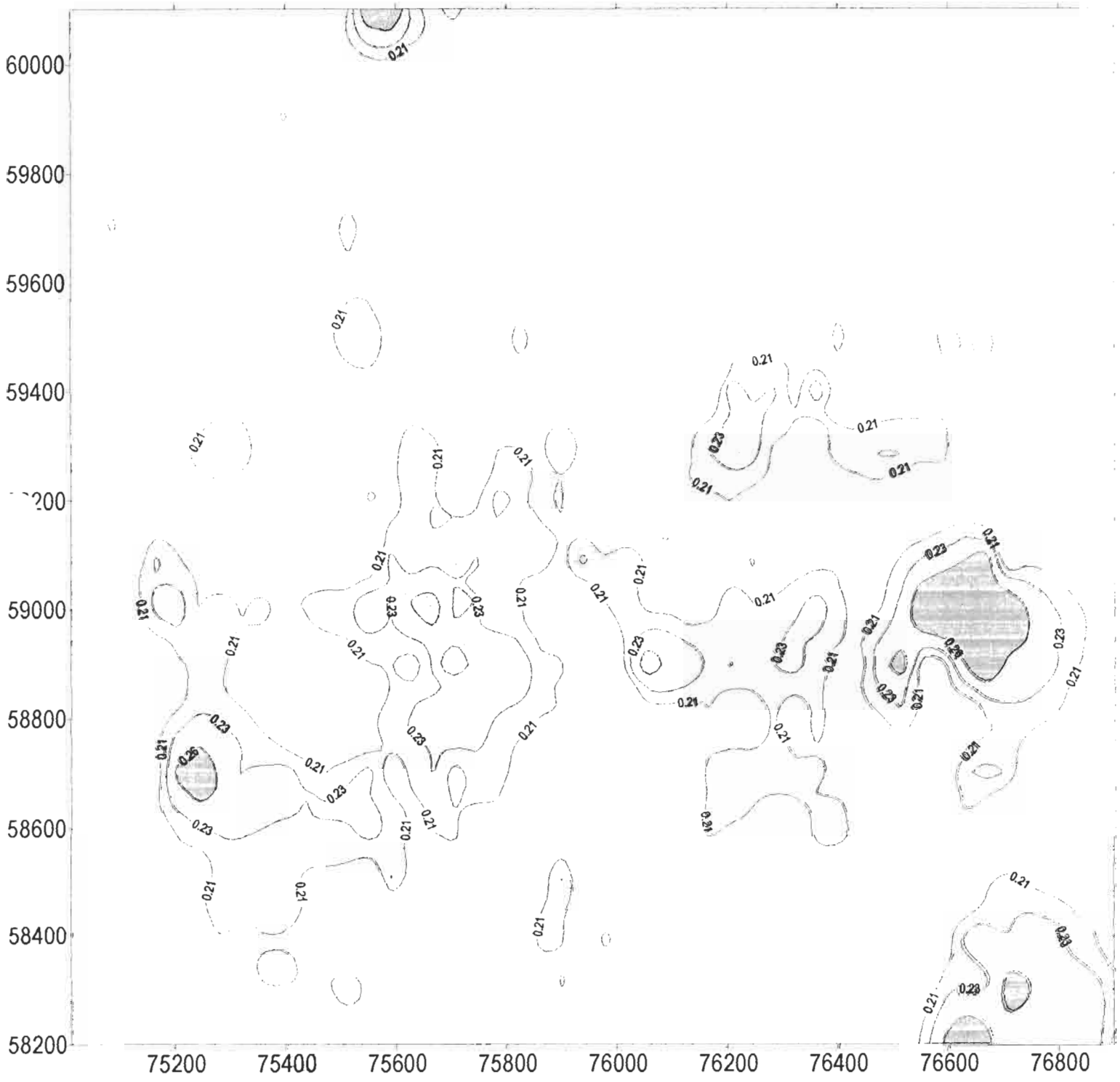
STEWART PROPERTY--PHOSPHORUS (%)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

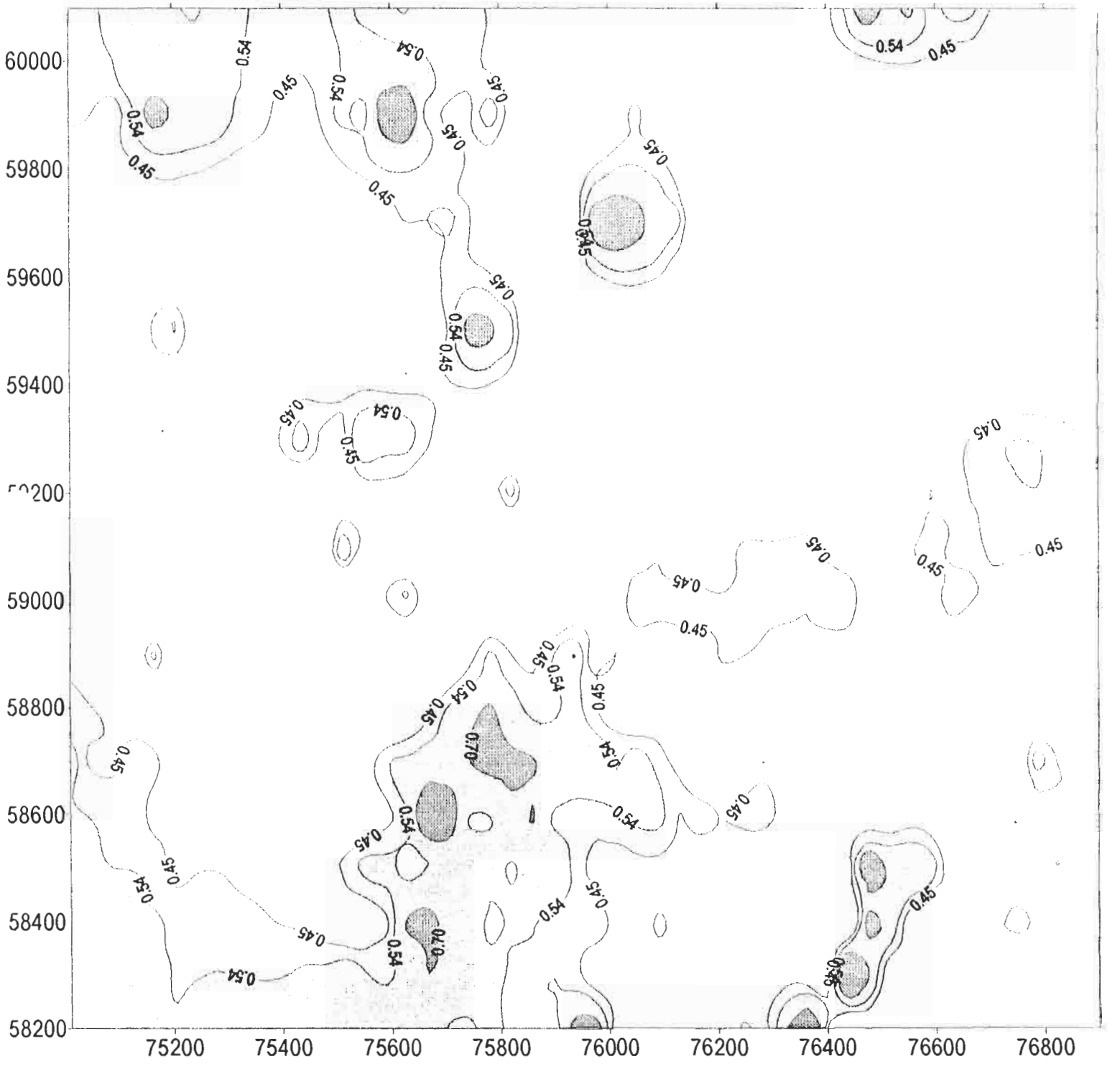
STEWART PROPERTY--TITANIUM (%)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

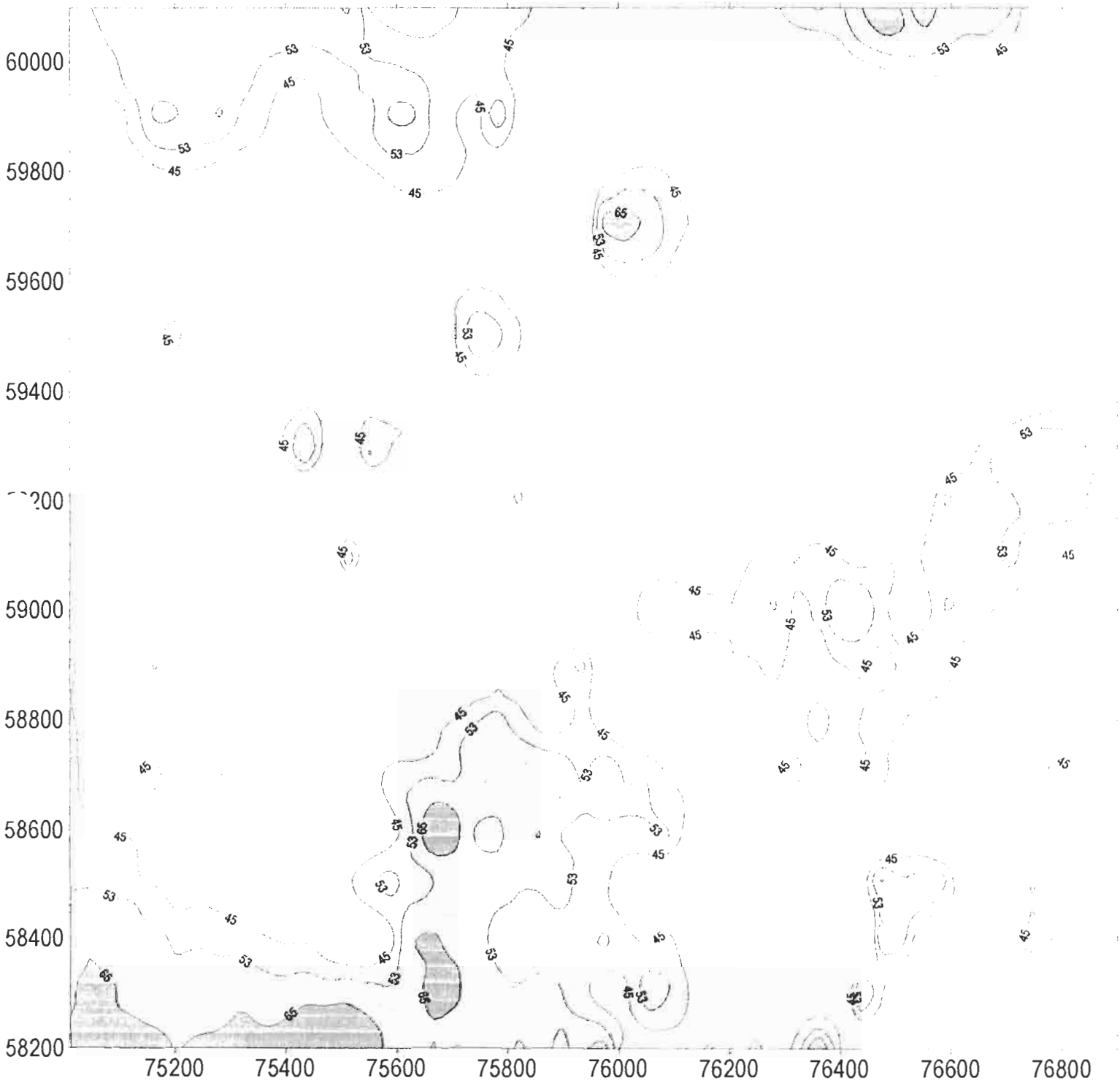
STEWART PROJECT--CALCIUM (%)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

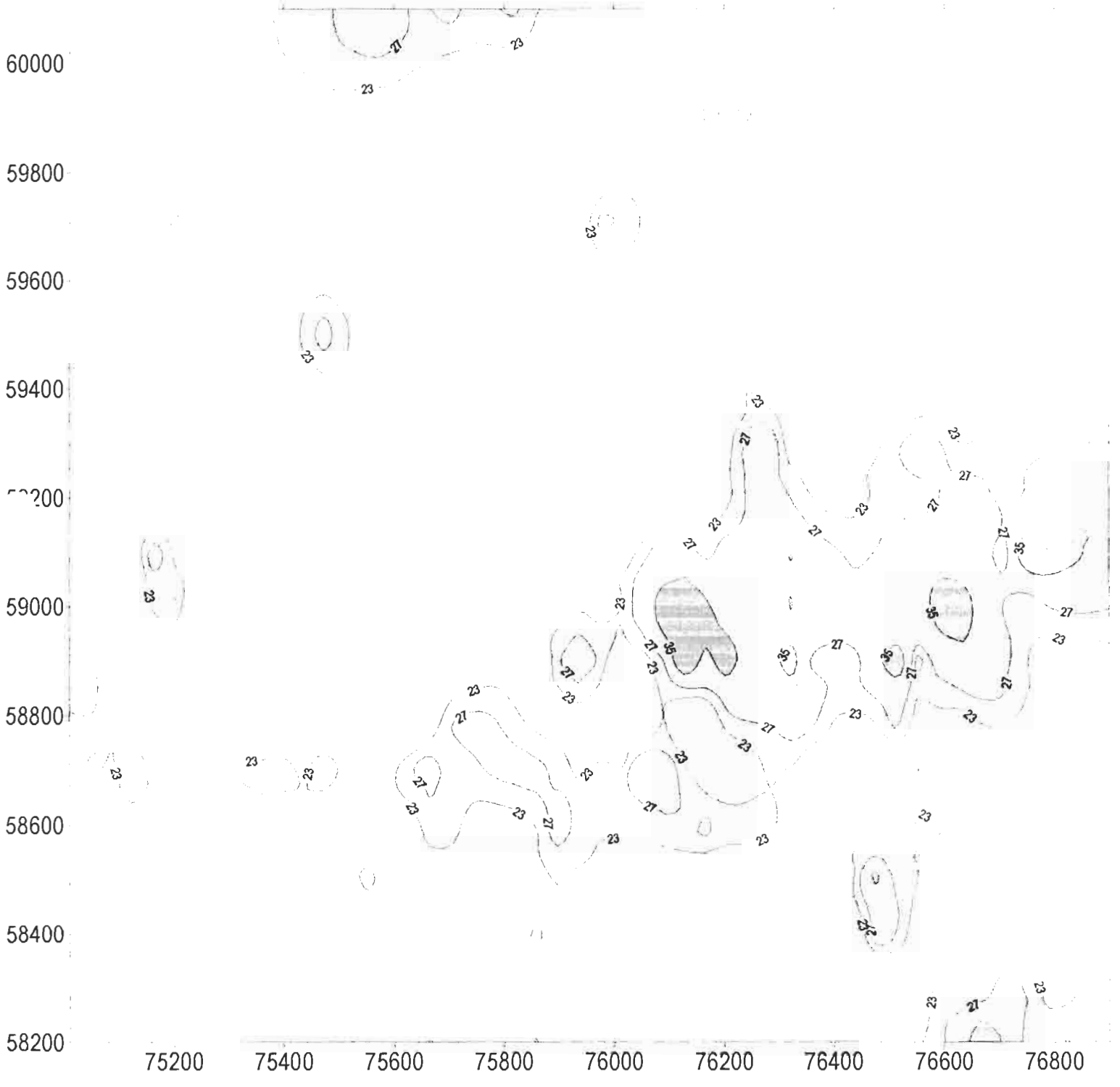
STEWART PROPERTY--STRONTIUM (ppm)



1996 Craigtown Creek Grid Soils - 1:10,000

ORVANA MINERALS

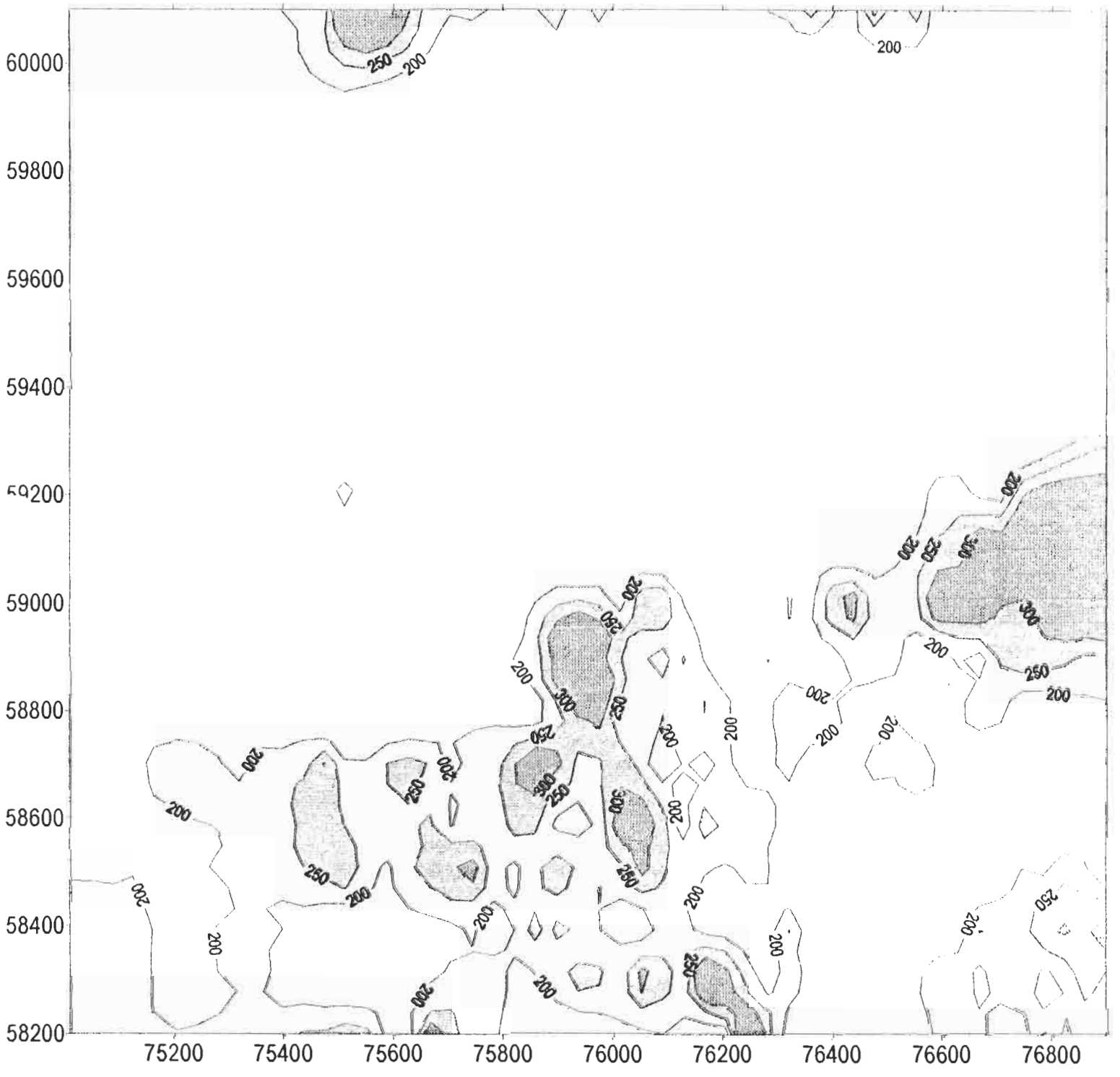
STEWART PROPERTY--COBALT (ppm)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

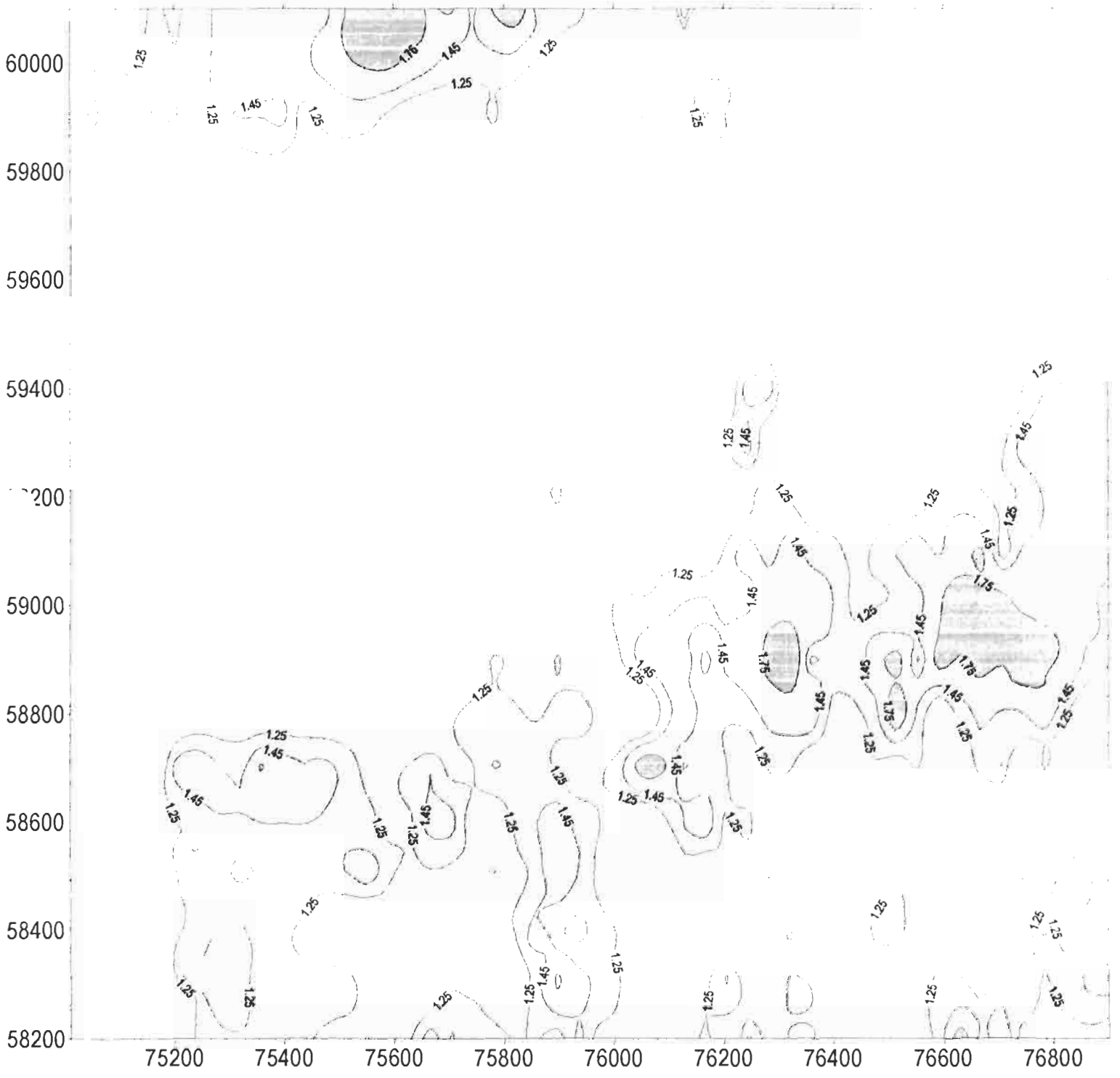
STEWART PROJECT--BARIUM (ppm)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

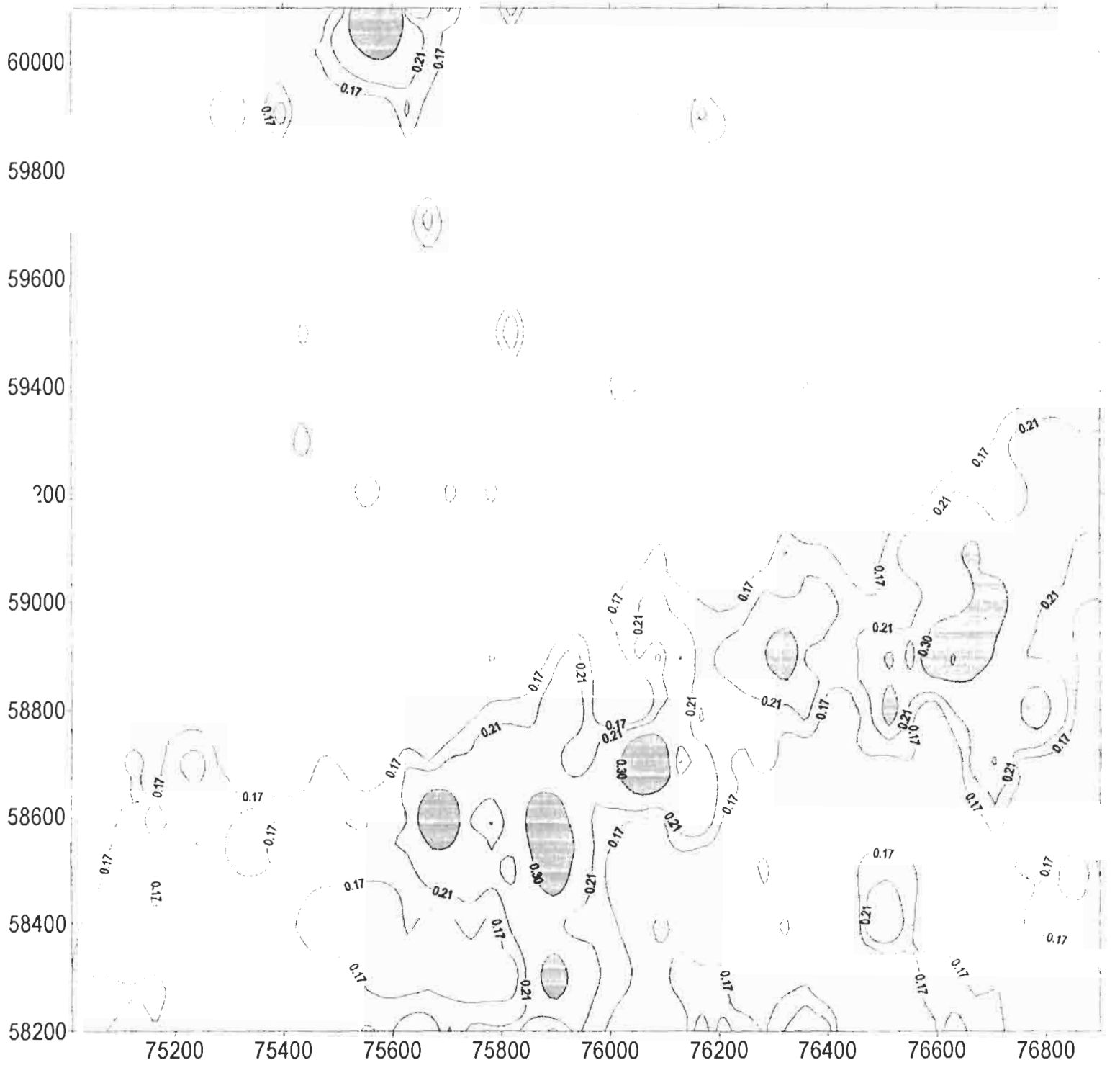
STEWART PROPERTY--MAGNESIUM (%)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

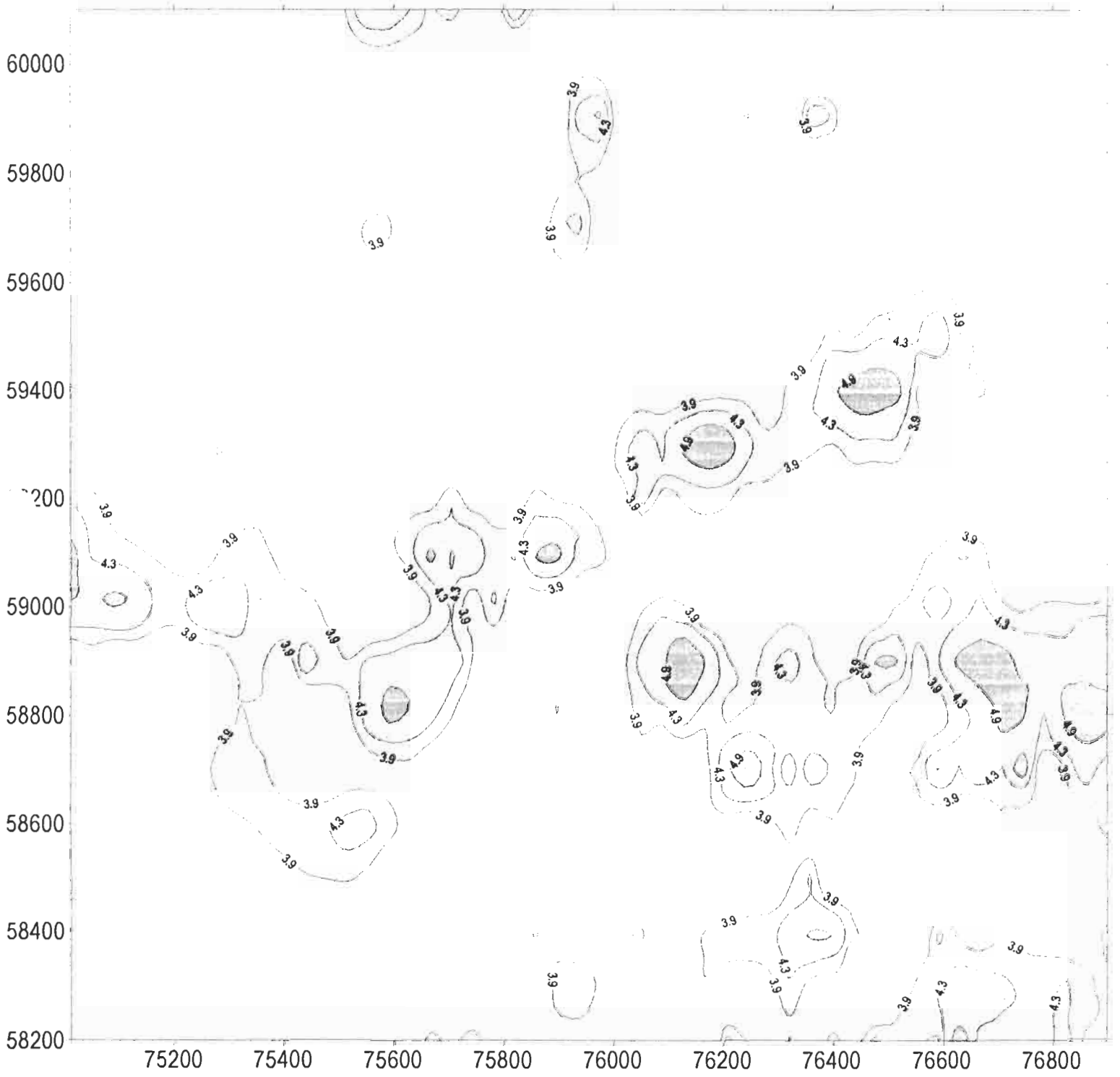
STEWART PROPERTY--POTASSIUM (%)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

ORVANA MINERALS

STEWART PROPERTY--ALUMINUM (%)



1996 Craigtown Creek Grid Soils - 1:10,000 Scale

APPENDIX 6

MAGNETIC / VLF-EM SURVEY REPORT

ORVANA RESOURCES CORP.

A GEOPHYSICAL REPORT ON A GROUND MAGNETOMETER AND VLF ELECTROMAGNETIC SURVEY ON THE STEWART PROPERTY NEAR SALMO, BRITISH COLUMBIA

NELSON MINING DIVISION

NTS 82F/

BY

S. JOHN A. CORNOCK, B.Sc.

LLOYD GEOPHYSICS INC.

OCTOBER, 1996

Lloyd Geophysics

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

From September 09 to September 22, 1996, Lloyd Geophysics Inc. carried out a ground magnetometer and VLF electromagnetic survey on the Stewart property near Salmo, British Columbia for Orvana Resources Corp.

The purpose of these surveys was to locate and identify responses typical to porphyry-style targets and to determine a possible reason for linear trends in the soil geochemistry results.

2.0 INSTRUMENT SPECIFICATIONS

The equipment used on this survey was the OMNI PLUS ground magnetometer with the VLF backpack and an *OMNI IV recording base station magnetometer both manufactured by* EDA Instruments Inc., Toronto, Canada.

The system is completely software/microprocessor controlled. A portable proton precession magnetometer measures and stores in memory the total earth's magnetic field at the touch of a key. It also identifies and stores the location and time of each measurement and computes the statistical error of the reading and stores the decay and strength of the signal being measured. Throughout each survey day a similar base station magnetometer measures and stores in memory the daily fluctuations of the earth's magnetic field. The use of two magnetometers eliminates the need for a network of bases stations on the grid. At the end of each day, the field data is merged with the base station data in the field computer and automatic diurnal corrections are applied to correct the field data, resulting in a very accurate (+/- 5nT) measurement of the earth's total magnetic field.

3.0 SURVEY SPECIFICATIONS

The ground magnetic data and VLF-EM data from the Stewart property was acquired at 15 metre station intervals on lines 50, 100 and 200 metres apart.

The VLF-EM transmitter used for this project was Lualualei, Hawaii, U.S.A. (NPM 21.4 kHz)

4.0 DATA PROCESSING

The data collected was processed in the field at the end of each survey day using a portable 386 computer and a Fujitsu printer.

In our office, the data was transferred to mylar using a Pentium P90 computer coupled to a Hewlett-Packard DJ650C colour plotter for the preparation of the final profiles and contour plan maps.

5.0 DATA PRESENTATION

The data from the surveys discussed in this report is presented on 2 stacked profile maps, 3 contour plan maps and a Compilation map as listed below:

TOTAL FIELD MAGNETIC PROFILES	96393-01
TOTAL FIELD MAGNETIC CONTOURS	96393-02
VLF-EM PROFILES	96393-03
VLF-EM FRASER FILTER CONTOURS	96393-04
MAGNETIC SUSCEPTIBITILY	96393-05
COMPILATION	96393-06

6.0 DISCUSSION OF RESULTS

The interpretation of magnetic data, which in itself is something of an art, can often be used to interpret geological structures merely by studying the contoured magnetic maps, much as one can visualize surface features from the contours of a topographic map. Unfortunately there is often a correlation between magnetics and topography as well as with buried geological structures. For example, a strong linear magnetic high, which correlates directly with a topographic feature such as a ridge, would not be nearly as interesting as a strong linear magnetic high which occurs in perfectly flat terrain.

A qualitative interpretation is often quite adequate in distinguishing the various magnetic rock types from the non or less magnetic rock types. On the Stewart property, the intrusive rocks - diorites and monzonites - contain a high percentage of magnetite, and therefore a high magnetic relief (over 6000 nT), which makes them at least partially distinguishable from the surrounding andesitic rocks which may contain similar but often lesser amounts of magnetite.

In an effort to isolate and/or highlight subtle features, the magnetic data was filtered to remove the high frequency "noise" followed by the calculation of the magnetic susceptibility (Dwg. No. 96393-05). The magnetic susceptibility is a measurement of the concentration of magnetic minerals within the rock (mostly magnetite but also ilmenite and pyrrhotite) whereas the total field is a measurement of the distribution of the magnetic minerals. The magnetic susceptibilty on the Stewart property accentuates a number of northwest-southeast striking linear structures - one of which contains anomalous copper values in the soils (Compilation Map - Dwg. No. 96393-06). The susceptibility map also shows there to be more of a continuous trend within the andesite volcanics along the east edge of the property.

As shown on the Compilation Map (Dwg. No.: 96393-06), there are soil geochemistry anomalies which have a northeast-southwest trend as well. There is no proof however, in the magnetic or VLF data, that gives support to these trends being structurally or geologically controlled. There are just isolated "pods" along their strike where the readings are anomalous.

The VLF profiles (Dwg. No.: 96393-03) do no exhibit any interesting responses. There are only a few areas where there is a true crossover and at best can be classified as weak conductors (see Compilation Map - Dwg. No. 96393-06). A map of the VLF data which has had the Fraser Filter applied to it has been included with this summary (Dwg. No. 96393-04). It is the writer's opinion however that the application of the Fraser Filter on the data from this particular property has produced a number of "good conductors" from weak, low frequency and low amplitude crossovers. One should interpret the information on this map with a great deal of caution.

7.0 CONCLUSIONS AND RECOMMENDATIONS

From the data discussed in this report, it has been concluded that due to their high percentage of magnetite the intrusive rocks have a high magnetic relief and are therefore distinguishable from the andesite volcanics.

An effort to enhance the magnetic data through filtering and calculation of the magnetic susceptibility was somewhat successful. A number of northwest-southeast striking linear structures were defined as well as a continuous magnetic trend along the east border of the property in the andesite volcanics.

The VLF survey was not very successful in detecting any strong, continuous conductors which may account for, or are coincident with, the trends found by soil geochemistry. The conductors highlighted on the VLF Fraser Filter map should be studied with a great deal of caution as they may be interpreted as being better conductors than they really are.

As an Induced Polarization survey was previously completed on this grid, there are no other types of geophysical surveys necessary on this property at the present time.

It is recommended that a thorough compilation of the geological, geochemical and geophysical data be made in order to determine the best targets for drilling.

Respectfully submitted,

LLOYD GEOPHYSICS INC.

S. John A. Cornock, B.Sc.
Project Geophysicist

APPENDIX A

PERSONNEL EMPLOYED ON SURVEY

Name	Occupation	Address	Dates Worked
J. Cornock	Geophysicist	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Oct 14-16/96
M. Welz	Geophysicist	#455-409 Granville Street Vancouver, B.C. V6C 1T2	Sep 09-22/96

APPENDIX B

COST OF SURVEY AND REPORTING

Lloyd Geophysics Inc. contracted the acquisition of the ground magnetic and VLF-EM data on a per diem basis. Mobilization/Demobilization, truck rental, living and travelling expenses, data processing, computer plotting, interpretation and report writing were additional costs. The breakdown of these costs is as follows:

Mobilization/Demobilization		$1546.13
Living and Travelling Expenses		806.05
Data Acquisition		8100.00
Data Processing and Computer Plotting		750.00
Consumables		172.80
Interpretation and Report Writing		1155.00
	Subtotal	$12529.98
	G.S.T.	877.10
	Total Cost:	$13407.08

APPENDIX C

CERTIFICATION OF AUTHORS

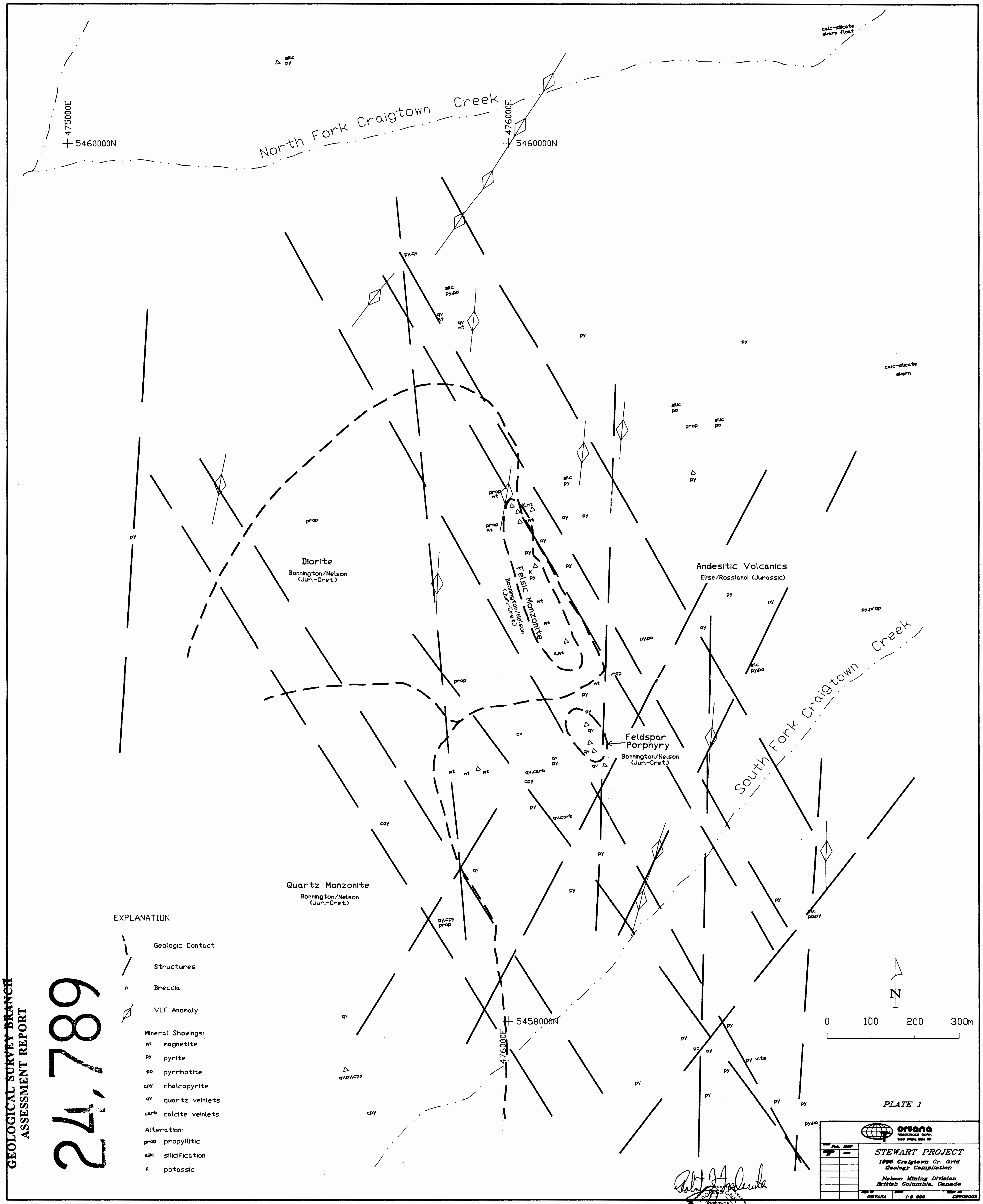
I, John A. Cornock, of #455 - 409 Granville Street, in the City of Vancouver, in the Province of British Columbia, do hereby certify that:

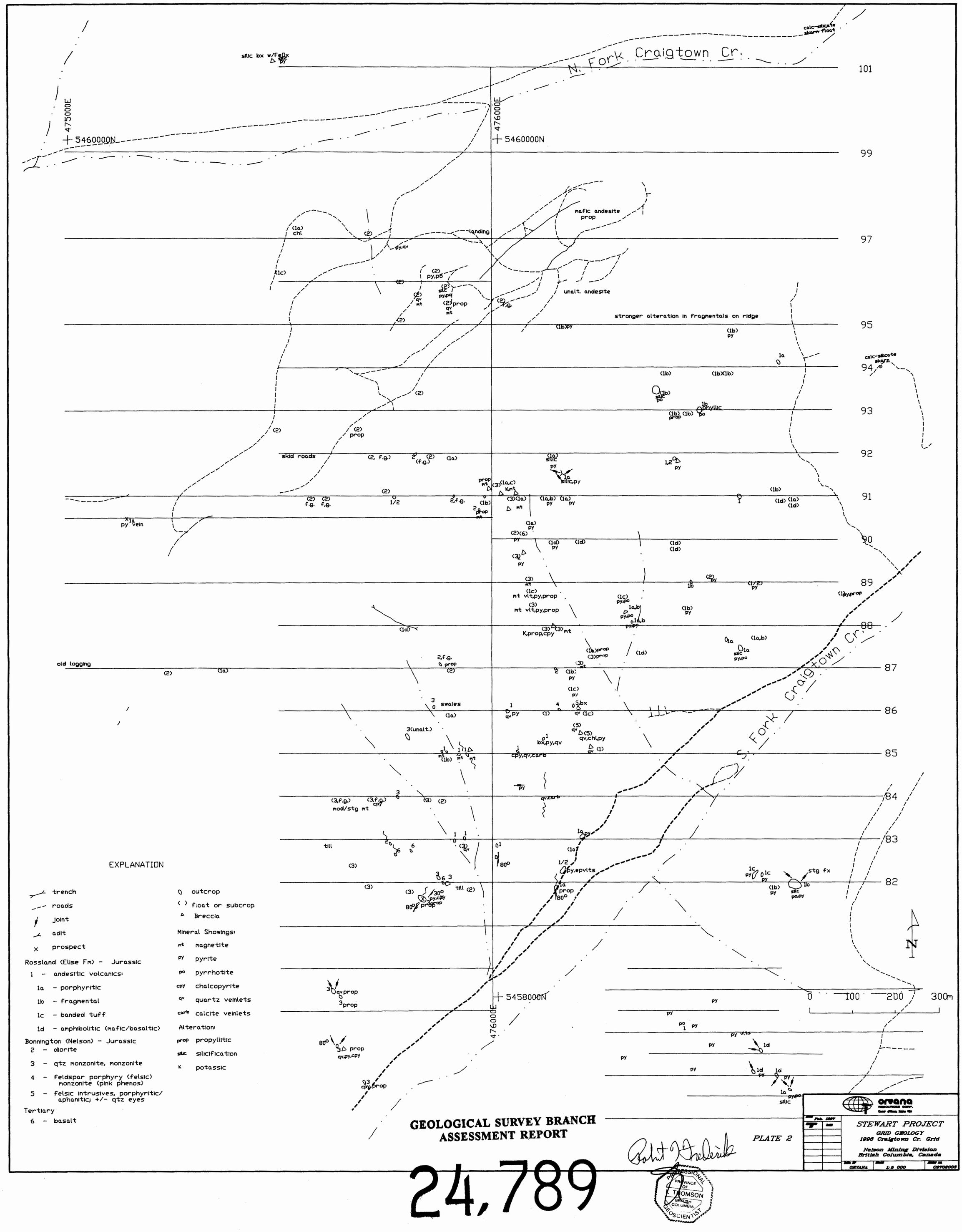
1. I graduated from the University of British Columbia in 1986 with a B.Sc. in Geology and a minor in Geophysics.

2. I am a member in good standing of the Society of Exploration Geophysicists of America, British Columbia Geophysical Society, British Columbia and Yukon Chamber of Mines and the Northwest Mining Association.

3. I have practiced my profession continuously since 1987.

Vancouver, B.C.


North Fork Craigtown Creek
South Fork Craigtown Creek
475000E
476000E
5460000N
5458000N
calc-silicate skarn float
calc-silicate skarn
Diorite
Bonnington/Nelson (Jur.-Cret.)
Felsic Monzonite
Bonnington/Nelson (Jur.-Cret.)
Andesitic Volcanics
Elise/Rossland (Jurassic)
Feldspar Porphyry
Bonnington/Nelson (Jur.-Cret.)
Quartz Monzonite
Bonnington/Nelson (Jur.-Cret.)
EXPLANATION
Geologic Contact
Structures
Breccia
VLF Anomaly
Mineral Showings:
mt magnetite
py pyrite
po pyrrhotite
cpy chalcopyrite
qv quartz veinlets
carb calcite veinlets
Alteration:
prop propyllitic
silic silicification
K potassic
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
24,789
N
0 100 200 300m
PLATE 1
orvana
STEWART PROJECT
1996 Craigtown Cr. Grid
Geology Compilation
Nelson Mining Division
British Columbia, Canada
ORVANA
1:5 000
C9702003
Feb. 1997
PROFESSIONAL
PROVINCE OF
THOMSON
BRITISH COLUMBIA
GEOSCIENTIST



EXPLANATION

- trench
- roads
- joint
- adit
- × prospect

Rossland (Elise Fm) - Jurassic

1 - andesitic volcanics:
- 1a - porphyritic
- 1b - fragmental
- 1c - banded tuff
- 1d - amphibolitic (mafic/basaltic)

Bonnington (Nelson) - Jurassic
- 2 - diorite
- 3 - qtz monzonite, monzonite
- 4 - feldspar porphyry (felsic) monzonite (pink phenos)
- 5 - felsic intrusives, porphyritic/ aphanitic; +/- qtz eyes

Tertiary
- 6 - basalt

- 0 outcrop
- ( ) float or subcrop
- Δ Breccia

Mineral Showings:
- mt magnetite
- py pyrite
- po pyrrhotite
- cpy chalcopyrite
- qv quartz veinlets
- carb calcite veinlets

Alteration:
- prop propyllitic
- silic silicification
- K potassic

GEOLOGICAL SURVEY BRANCH
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24,789

orvana RESOURCES CORP.

STEWART PROJECT
GRID GEOLOGY
1996 Craigtown Cr. Grid
Nelson Mining Division
British Columbia, Canada

Feb. 1997 | ORVANA | 1:5 000 | C97GS003

PLATE 2

Robert J. Frederiks
PROFESSIONAL GEOSCIENTIST
PROVINCE OF BRITISH COLUMBIA
THOMSON

475000m

476000m

477000m

478000m

5460000m

5459000m

5458000m

Craigtown Ck.

5000

5000

4500

5200

4000

5490

N

0 250 500 m

1:5,000

Base map adapted from 82F/6

PLATE 3

orvana RESOURCES CORP.
Coeur d'Alene, Idaho USA

DATE	April 96
REVISED BY	DATE
PK/JR	Oct. 96
PK/JR	Nov. 96
PK/JR	Feb. 97

STEWART PROJECT

CRAIGTOWN CREEK
Rock sample locations

Nelson Mining Division
British Columbia, Canada

DATA BY	SCALE	DWG NO.
ORVANA	1:5,000	C9604001A

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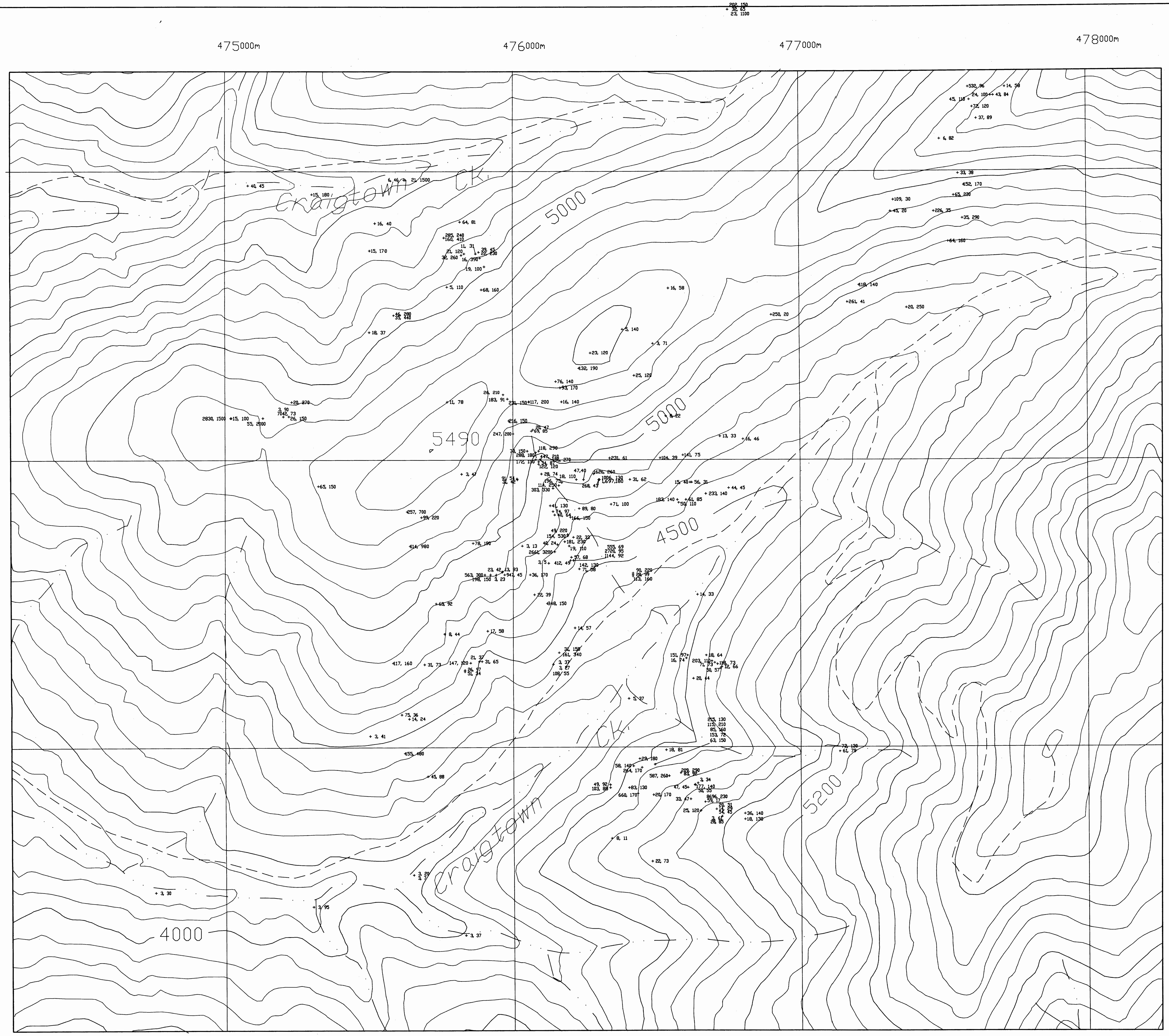
ASSESSMENT REPORT

24,789



0 250 500 m

1:5,000

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ASSESSMENT REPORT

24,789

PLATE 4

Base map adapted from 82F/6

orvana RESOURCES CORP.
Coeur d'Alene, Idaho USA

DATE	April 96
REVISED BY	DATE
PK/JR	Oct. 96
PK/JR	Nov. 96
PK/JR	Feb. 97

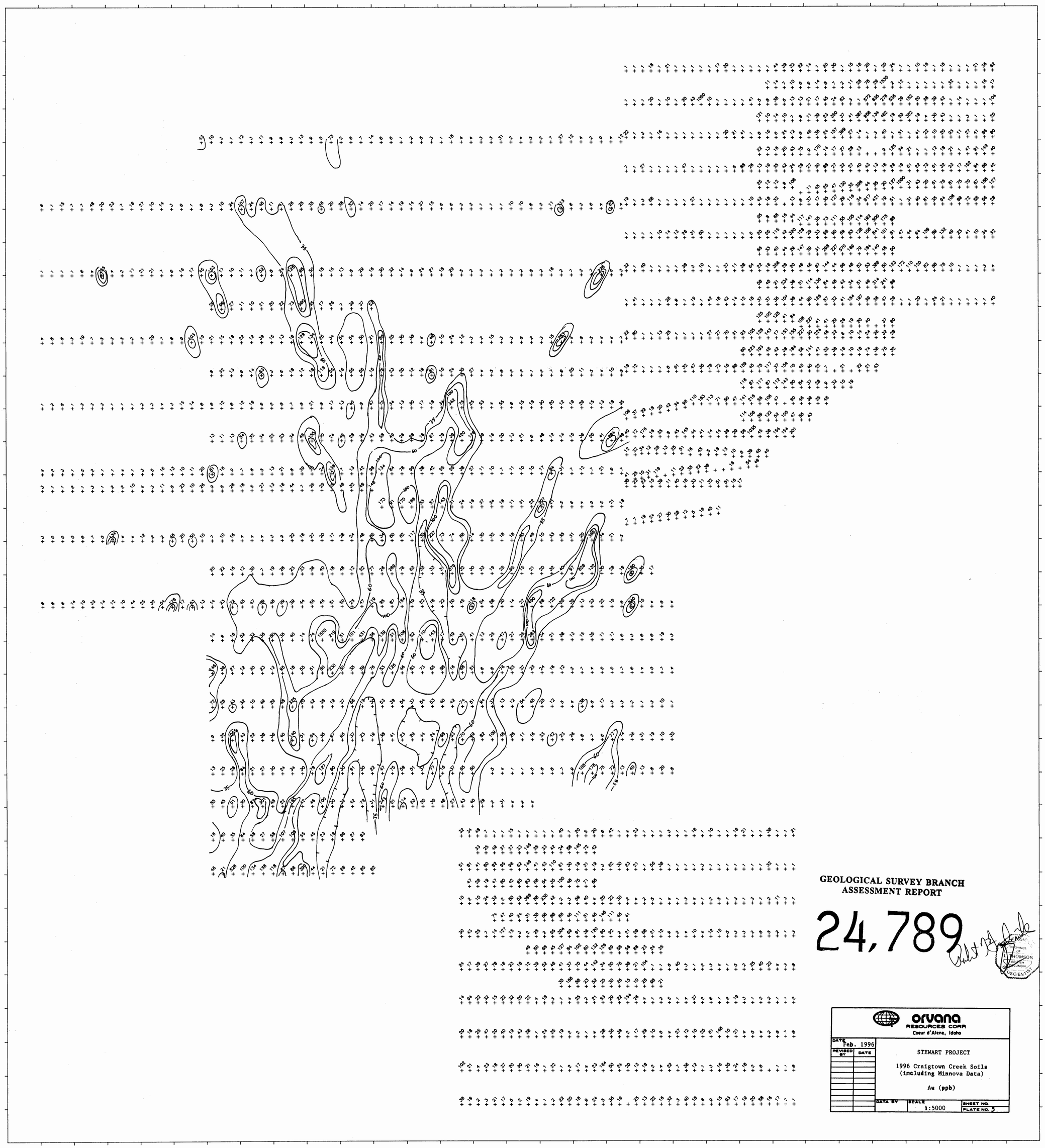
STEWART PROJECT

CRAIGTOWN CREEK
Au (ppb) and Cu (ppm) in rocks

Nelson Mining Division
British Columbia, Canada

DATA BY	SCALE	DWG NO.
ORVANA	1: 5,000	C9604001A

ORVANA MINERALS CORP. -- STEWART PROPERTY/CRAIGTOWN CREEK AREA



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ASSESSMENT REPORT

24,789

orvana RESOURCES CORP.
Coeur d'Alene, Idaho

DATE: Feb. 1996	
REVISED BY	DATE

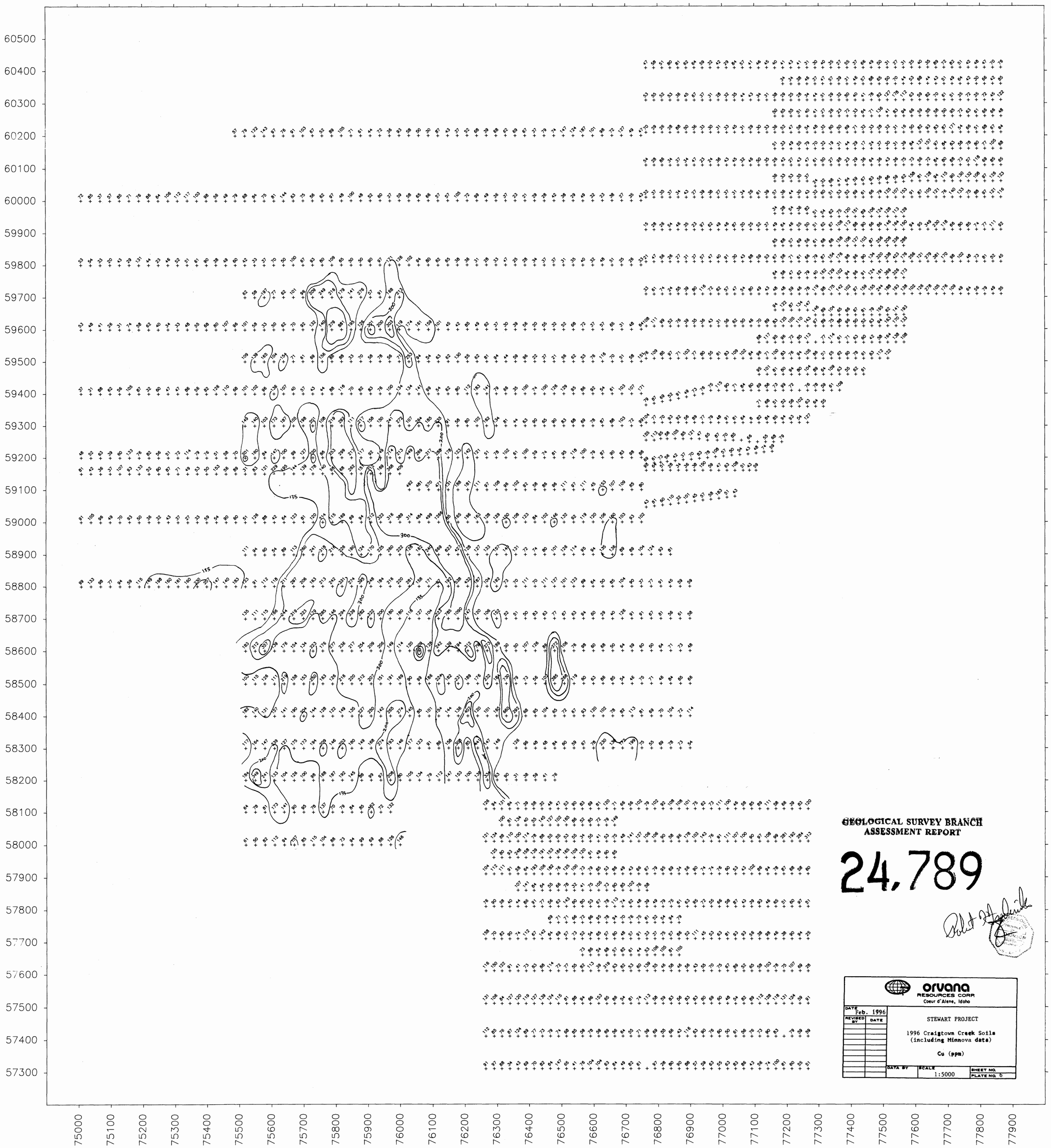
STEWART PROJECT

1996 Craigtown Creek Soils
(including Minnova Data)

Au (ppb)

DATA BY	SCALE	SHEET NO.
	1:5000	PLATE NO. 3

ORVANA MINERALS CORP.-- STEWART PROPERTY/CRAIGTOWN CREEK AREA



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

orvana RESOURCES CORP
Coeur d'Alene, Idaho

DATE	
Feb. 1996	
REVISED BY	DATE

STEWART PROJECT

1996 Craigtown Creek Soils
(including Minnova data)

Cu (ppm)

DATA BY	SCALE	SHEET NO.
	1:5000	PLATE NO. 6

ORVANA MINERALS CORP. – STEWART PROJECT/CRAIGTOWN CREEK AREA

ARSENIC (ppm)

Northing

Easting

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

orvana
RESOURCES CORP
Coeur d'Alene, Idaho

DATE	Feb. 1996
REVISED BY	DATE

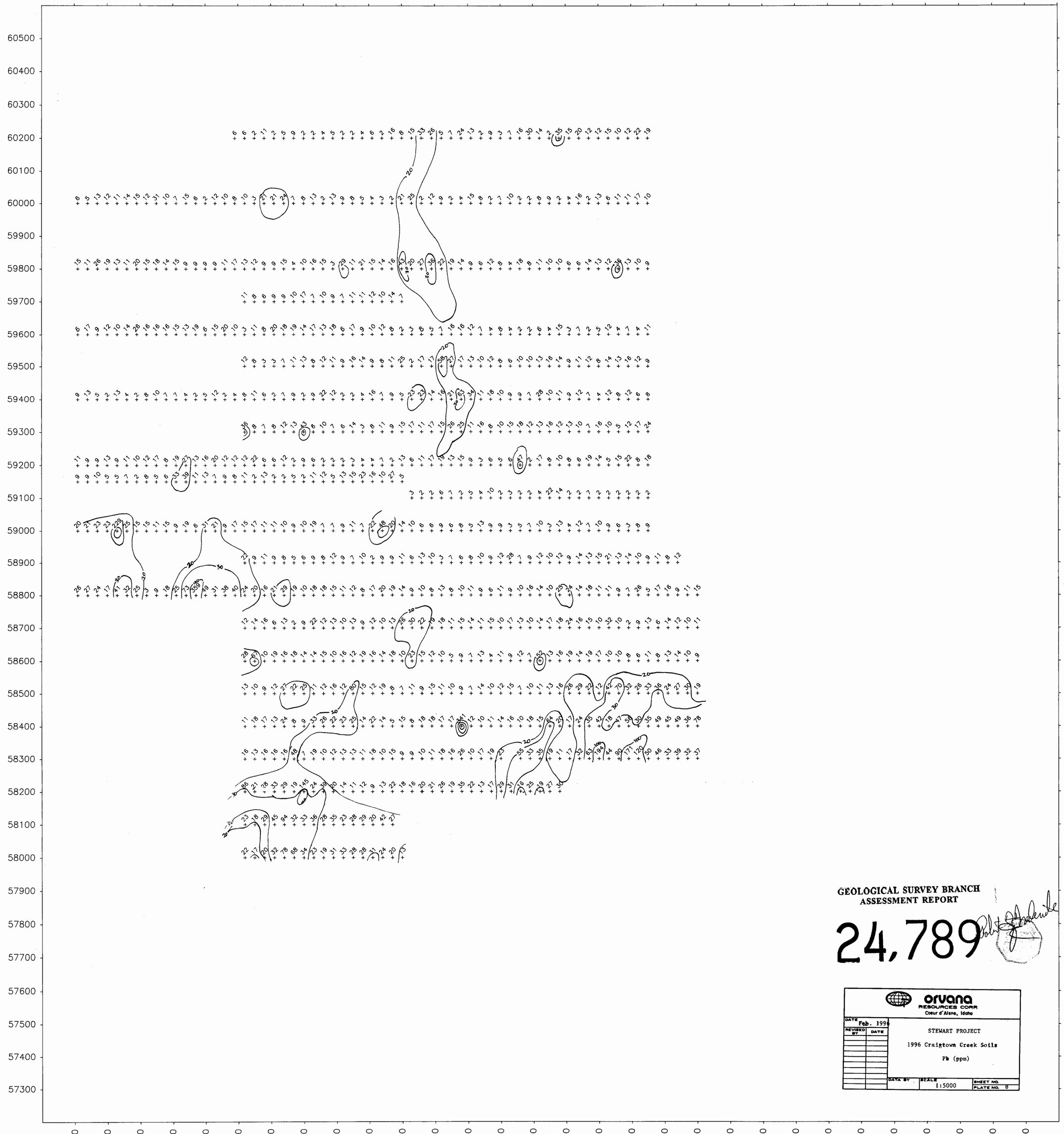
STEWART PROJECT

1996 Craigtown Creek Soils

As (ppm)

DATA BY | SCALE 1:5000 | SHEET NO. | PLATE NO. 7

ORVANA MINERALS CORP. -- STEWART PROJECT/CRAIGTOWN CREEK AREA



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

orvana
RESOURCES CORP
Coeur d'Alene, Idaho

DATE	Feb. 1996	
REVISED BY	DATE	STEWART PROJECT
		1996 Craigtown Creek Soils
		Pb (ppm)
DATA BY	SCALE 1:5000	SHEET NO. PLATE NO. 8

ORVANA MINERALS CORP. -- STEWART PROPERTY/CRAIGTOWN CREEK

Northing

Easting

ZINC (ppm)

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

I. THOMSON
BRITISH COLUMBIA
GEOSCIENTIST

orvana
RESOURCES CORP
Coeur d'Alene, Idaho

DATE Feb. 1996

REVISED BY	DATE

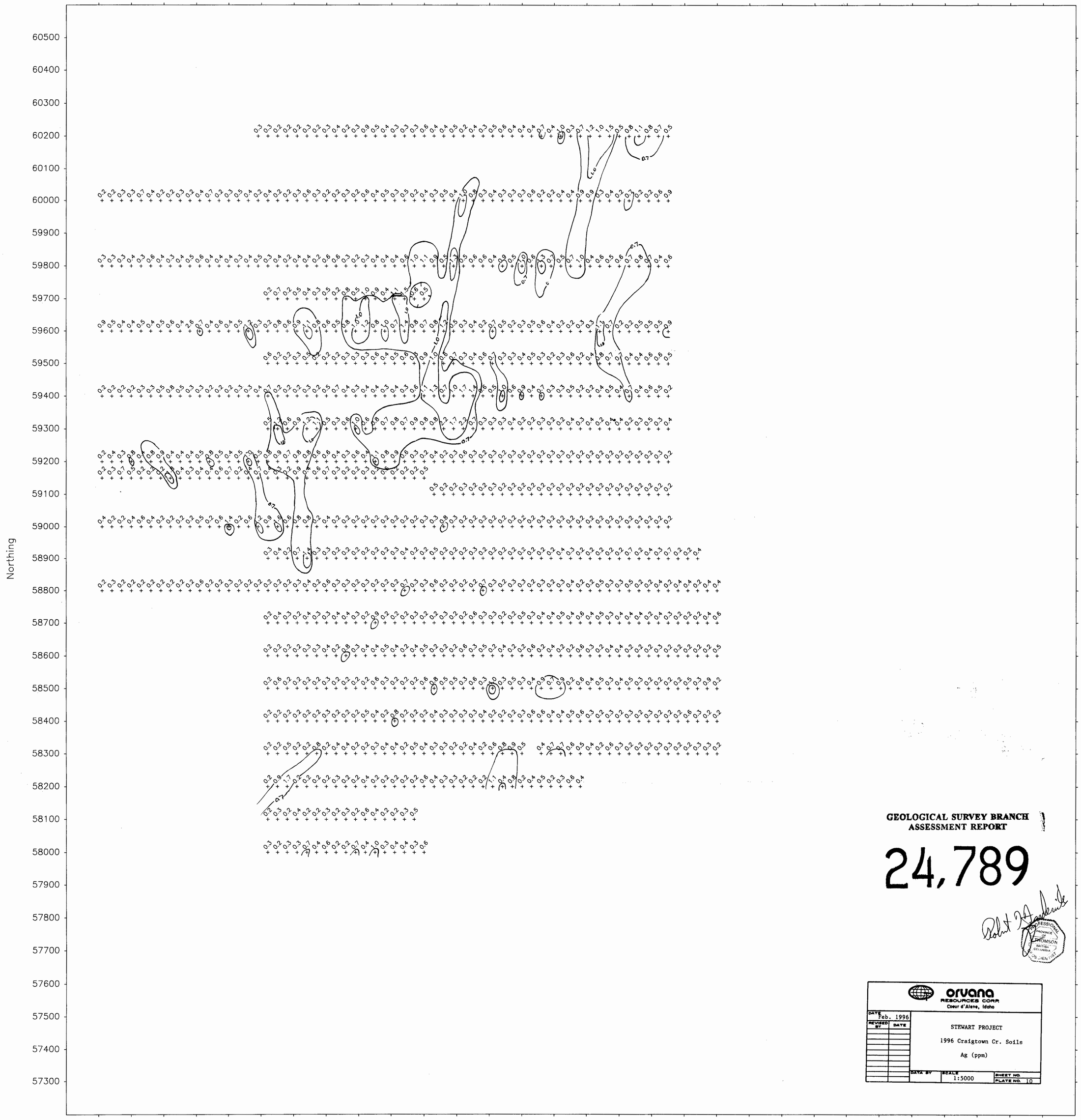
STEWART PROJECT

1996 Craigtown Creek Soils

Zn (ppm)

DATA BY | SCALE 1:5000 | SHEET NO. | PLATE NO. 9

ORVANA MINERALS CORP. -- STEWART PROPERTY/CRAIGTOWN CREEK AREA



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
THOMSON

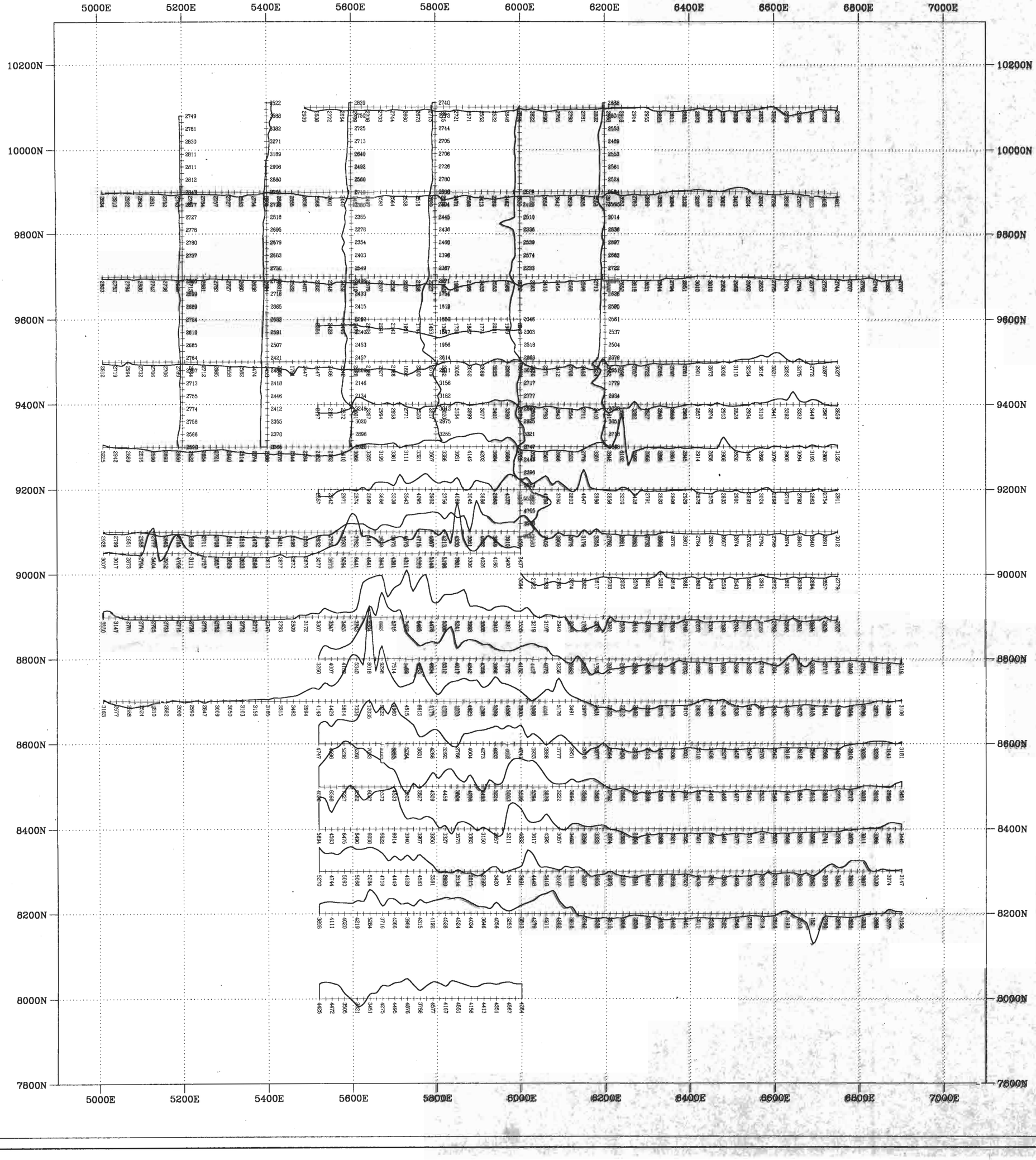
orvana RESOURCES CORP.
Coeur d'Alene, Idaho

DATE	Feb. 1996	
REVISED BY	DATE	
DATA BY	SCALE 1:5000	SHEET NO.
		PLATE NO. 10

STEWART PROJECT

1996 Craigtown Cr. Soils

Ag (ppm)



LEGEND

STATION SEPARATION: 15 METRES

BASE LEVEL OF 52000 nT REMOVED FROM POSTINGS

PROFILE SCALE : 2000 nT / cm

INSTRUMENT

EDA OMNI PLUS VLF/MAGNETOMETER SYSTEM

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

Note: For clarity only every second data point has been plotted.

Plate 11

Scale 1:5000

100 0 100 200 300
(metres)

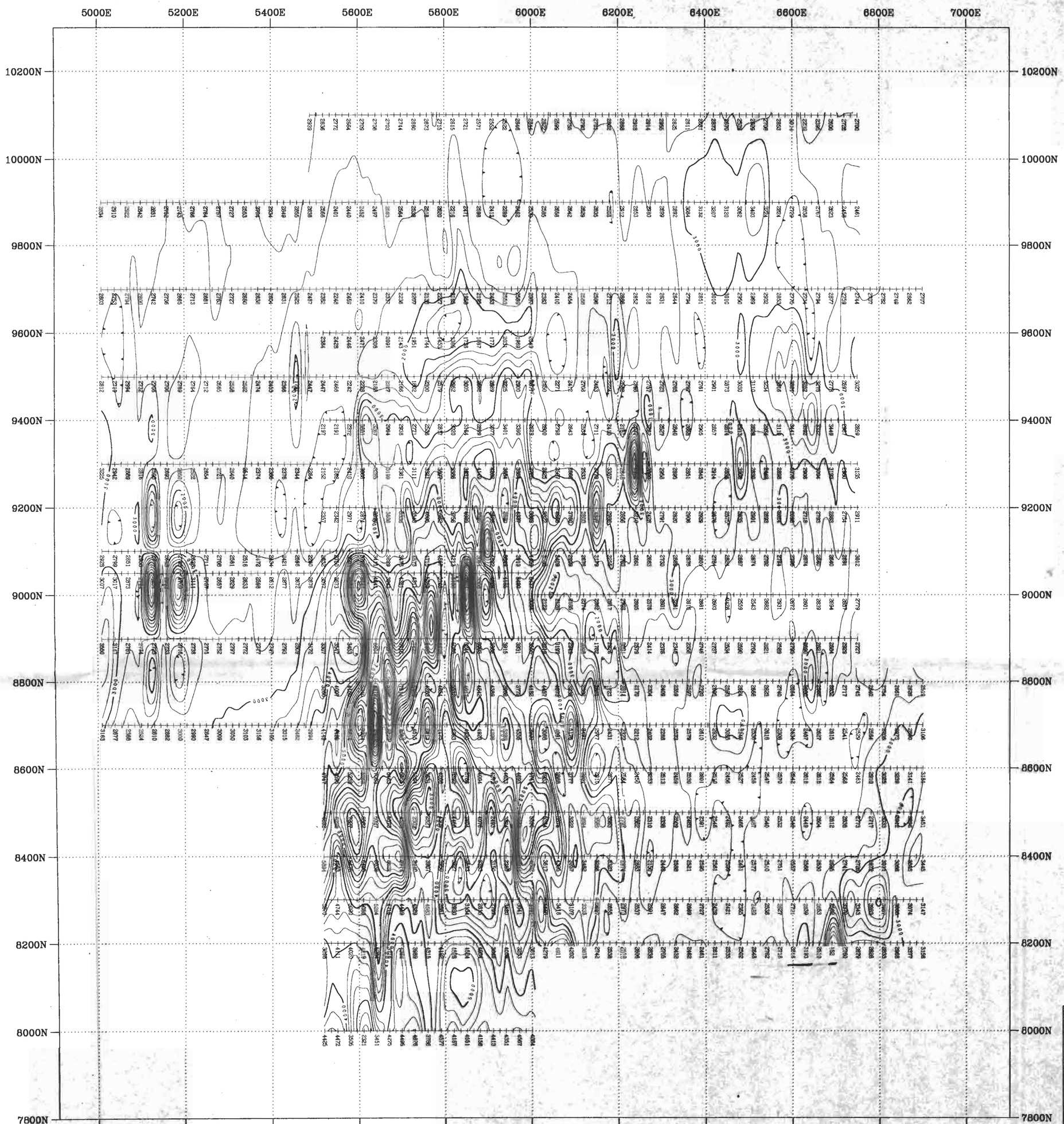
ORVANA RESOURCES CORP.

Stewart Property
Nelson Mining Division

TOTAL FIELD MAGNETIC PROFILES

Scale 1:5000 NTS 82F/ Drawing No: 98393-01

LLOYD GEOPHYSICS INC.



LEGEND

CONTOUR INTERVALS

250 nT

1000 nT

5000 nT

Station Separation: 15 metres
52000 nT removed from postings

INSTRUMENT

EDA OMNI PLUS VLF/MAGNETOMETER SYSTEM

Note: For reasons of clarity only every second data point has been plotted.

Plate 12

Scale 1:5000

100 0 100 200 300
(metres)

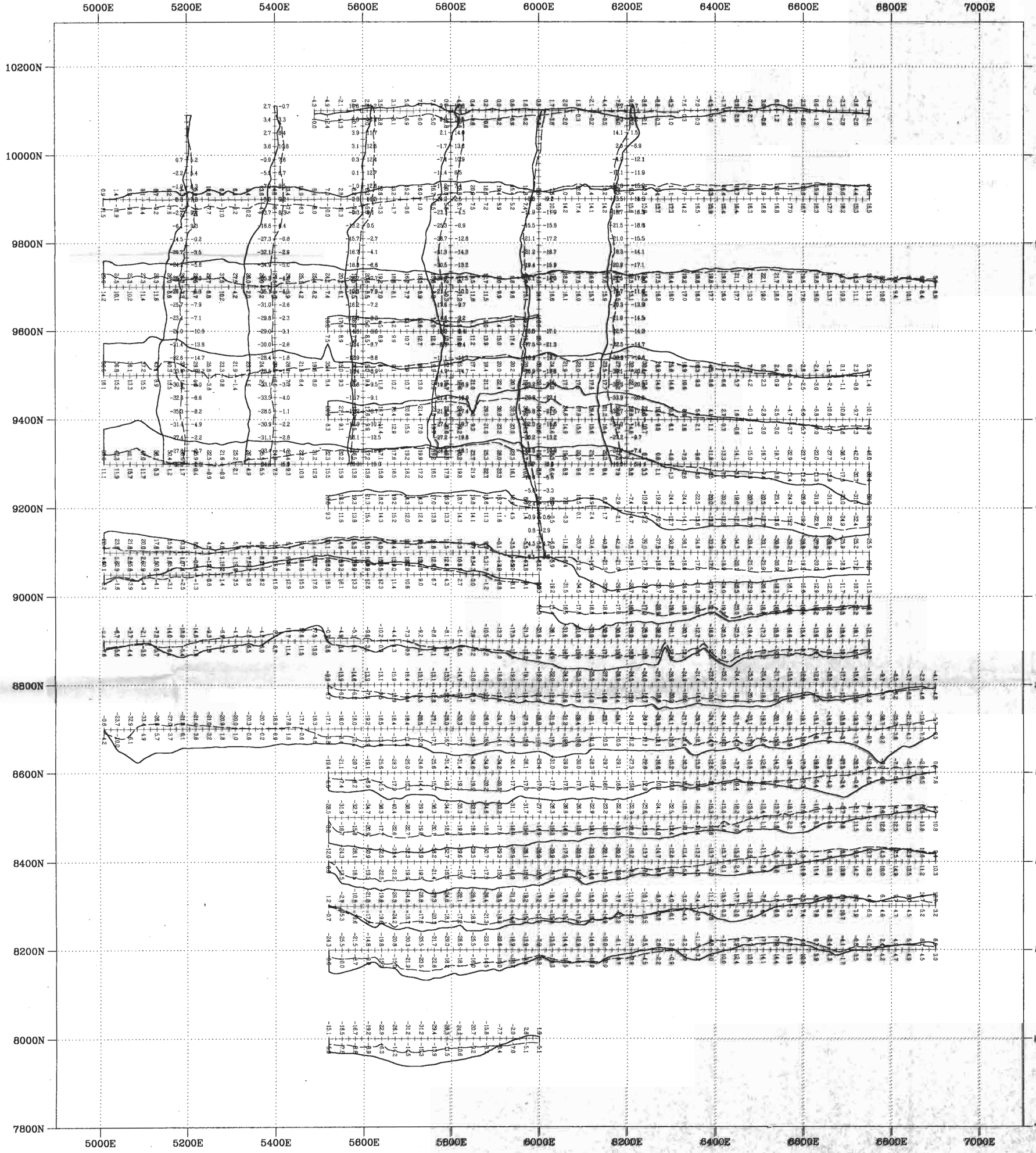
ORVANA RESOURCES CORP.

Stewart Property
Nelson Mining Division

TOTAL FIELD MAGNETIC CONTOURS

Scale 1:5000 NTS 82F/ Drawing No: 96393-02

LLOYD GEOPHYSICS INC.

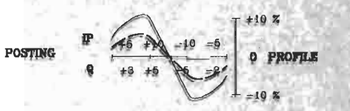


LEGEND

1 cm. = 25 %

IN PHASE

QUADRATURE



Tx Location : Lualualei, Hawaii, USA (21.4 kHz)

Station Separation: 15 metres

Instrument : EDA OMNI PLUS

(3 Orthogonal Rx. Coils, Tilt Compensated)

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

Note: For purposes of clarity only every second data point has been plotted

Plate 13

Scale 1:5000

100 0 100 200 300
(metres)

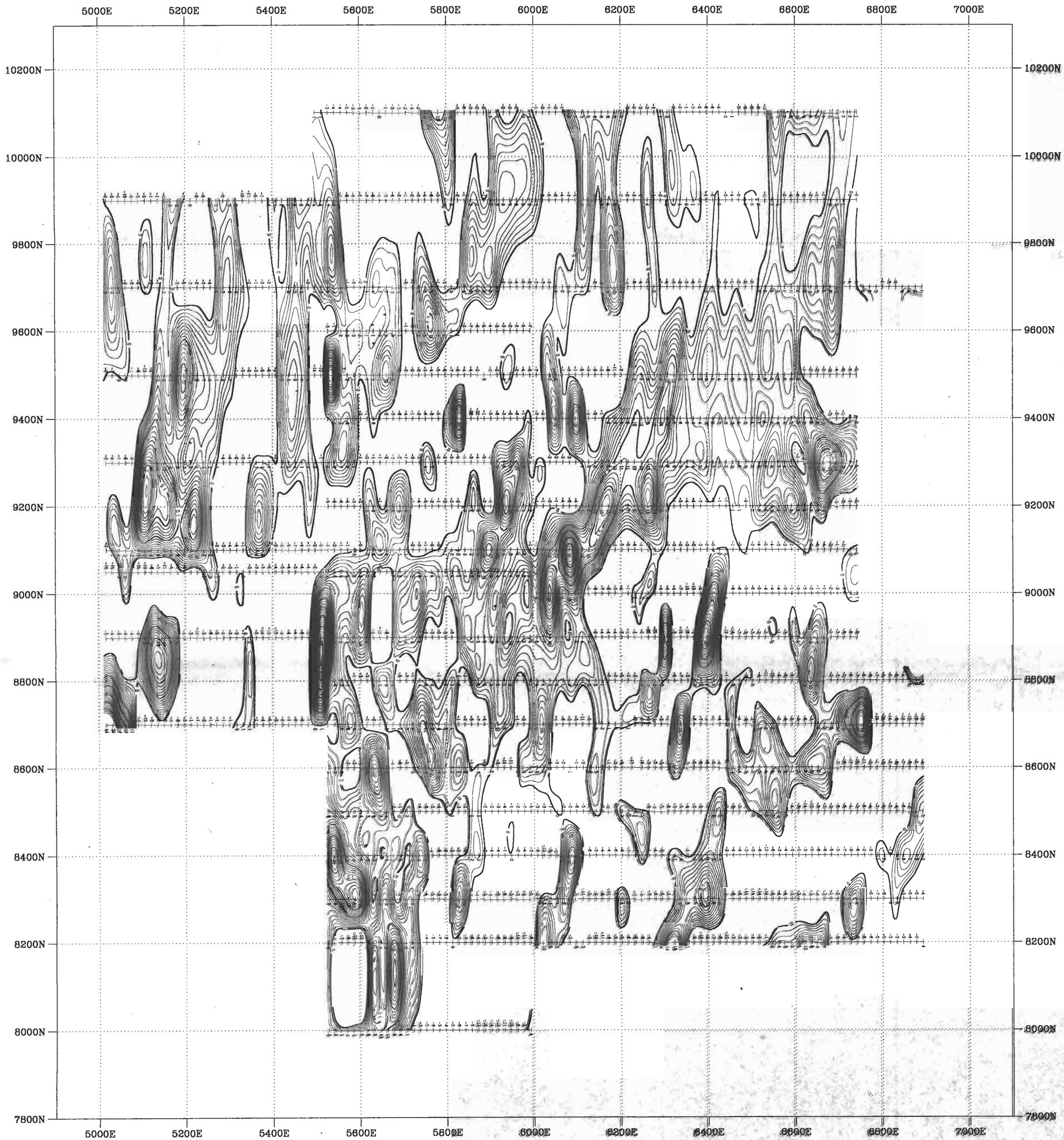
ORVANA RESOURCES CORP.

Stewart Property
Nelson Mining Division

VLF-EM PROFILES

Scale 1:5000 NTS 82F/ Drawing No: 96393-03

LLOYD GEOPHYSICS INC.



LEGEND

CONTOUR INTERVALS

1 %

5 %

25 %

Station Separation: 15 metres
Transmitter Station: Lualualei, Oahu, Hawaii
(NPM 21.4 kHz)

INSTRUMENT

EDA OMNI PLUS VLF/MAGNETOMETER SYSTEM

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

Plate 14

Scale 1:5000

100 0 100 200 300
(metres)

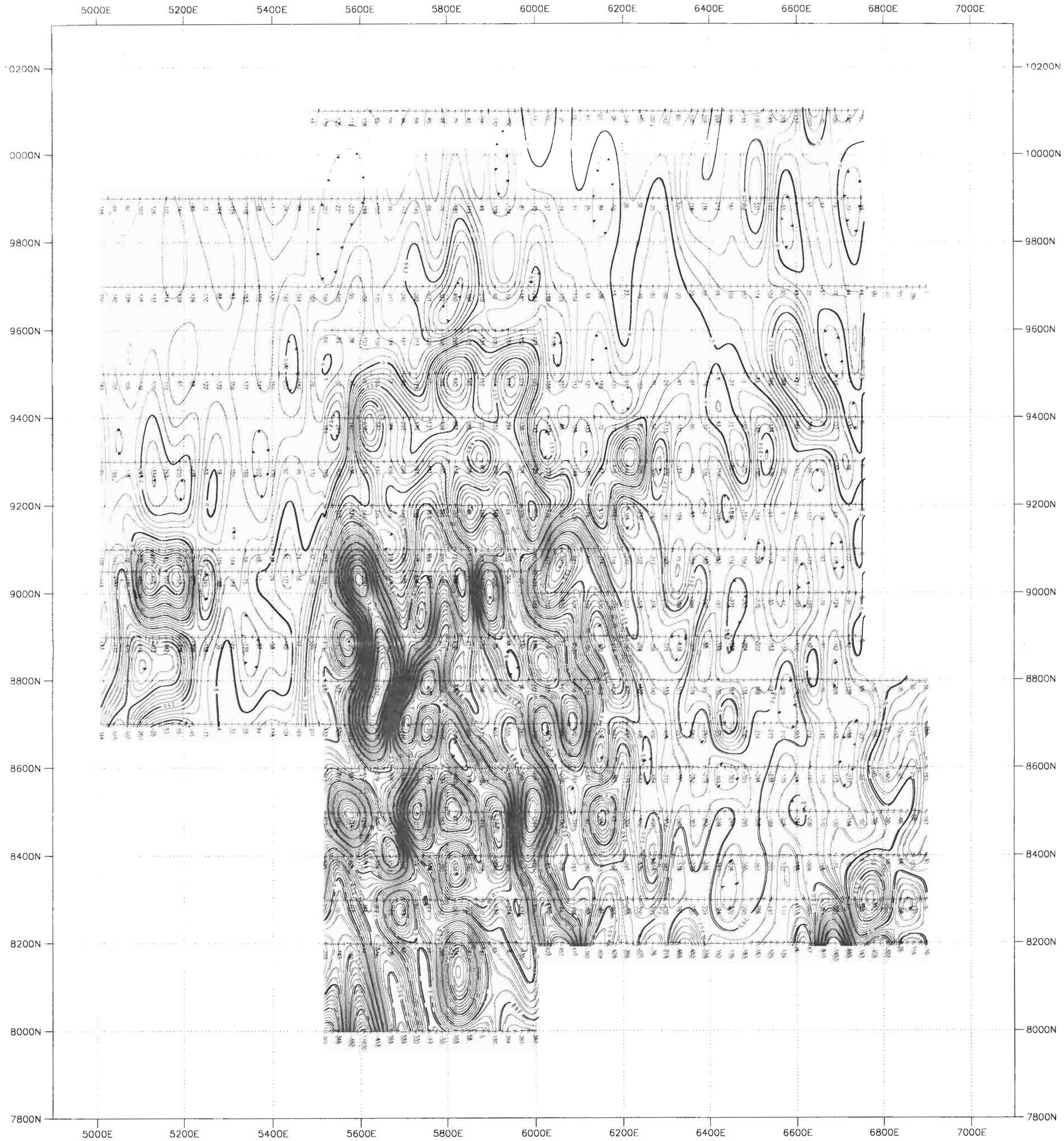
ORVANA RESOURCES CORP.

Stewart Property
Nelson Mining Division

VLF-EM
FRASER FILTER CONTOURS

Scale 1:5000 NTS 82F/ Drawing No: 96393-04

LLOYD GEOPHYSICS INC.



LEGEND

CONTOUR INTERVALS

50 x10**5 emu

250 x10**5 emu

1000 x10**5 emu

Station Separation: 15 metres

INSTRUMENT

EDA OMNI PLUS VLF/MAGNETOMETER SYSTEM

Plate 15

Scale 1:5000

100 0 100 200 300
(meters)

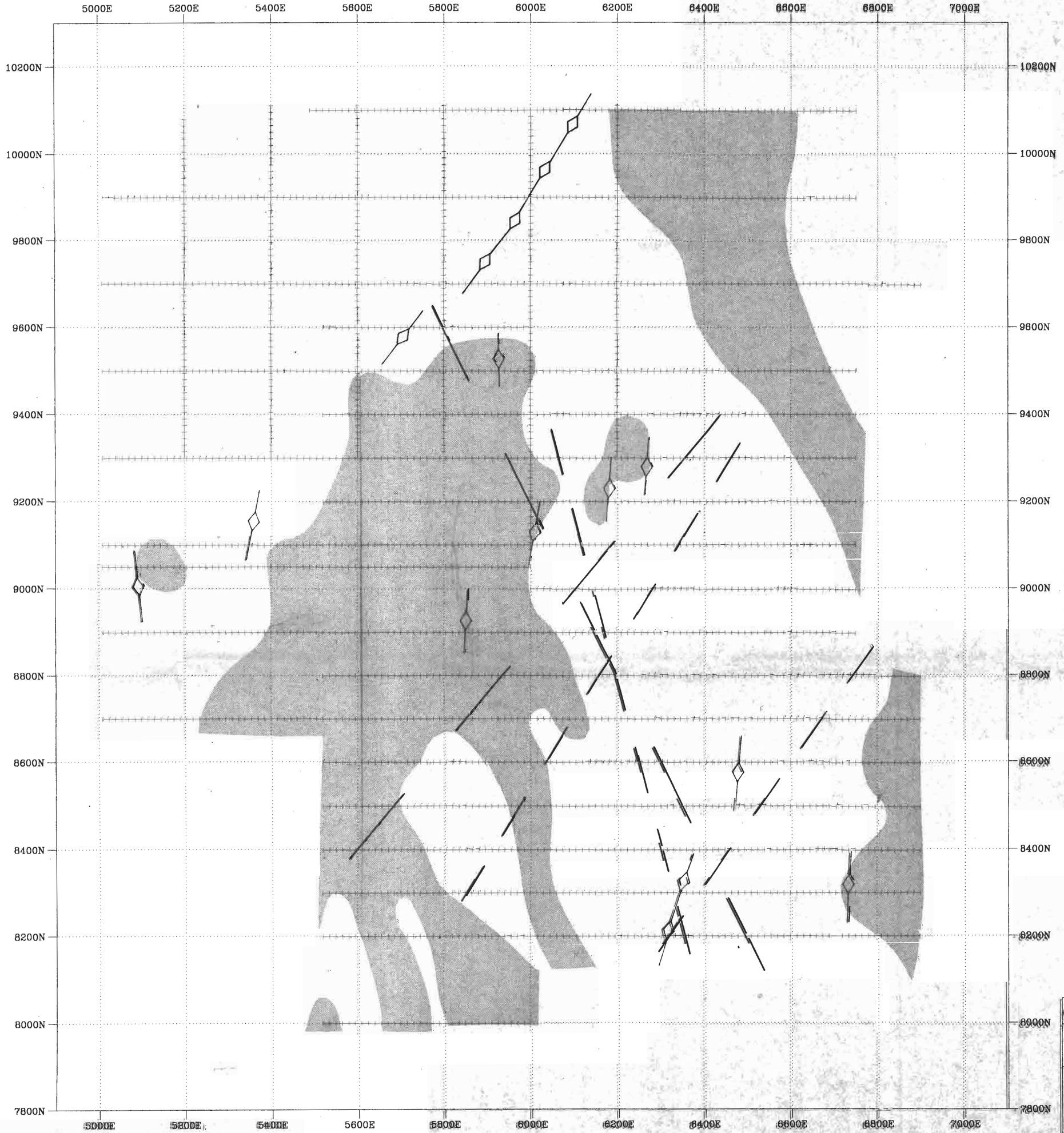
ORVANA RESOURCES CORP.

Stewart Property
Nelson Mining Division

MAGNETIC SUSCEPTIBILITY (25 METRES DEPTH)

Scale 1:5000 NTS 82F/ Drawing No: 96393-05

LLOYD GEOPHYSICS INC.



LEGEND

- Good VLF Conductor
- Fair VLF Conductor
- Poor VLF Conductor
- Zone of Increased Magnetic Response
- Cu in Soils
- Au in Soils

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,789

Plate 16.

Scale 1:5000

100 0 100 200 300
(metres)

ORVANA RESOURCES CORP.

Stewart Property
Nelson Mining Division

COMPILATION

Scale 1:5000 NTS 82F/ Drawing No: 96393-06

LLOYD GEOPHYSICS INC.