

**Report on Field Investigations** 

Iuxta Claim Group

NTS: 103H .063, .064, .073, .074 Skeena Mining Division

Prepared by:

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For:

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> GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT

November 20

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#### 1.0 Location, Access and Physiography

The Iuxta Property is located approximately 60 kilometres southwest of the village of Kitimat in north-western BC, on NTS map sheets: 103H .063 .064 .073 .074. The Iuxta 1-16 mineral claims (Fig 5) cover a 15 by 5 kilometre northwest-to-southeast trending area centred on the south-easterly draining Quaal River which enters the Douglas Channel at Kitkiata Inlet.

Access to the property is by helicopter from Kitimat or Terrace, or by riverboat up the Quaal River in the south-eastern sector of the claims, which is 5 kilometres from deep tidewater. Kitimat is an all weather-accessed town of 11,000 inhabitants with a large ice-free ocean port that services the Alcan aluminium smelter and small airport. Scheduled air service into the area from Vancouver is to Terrace BC, located 55 kilometres by road north of Kitimat. Rail service is available to Kitimat.

Relief on the Iuxta project ranges from 25m in the broad glaciated Quaal River valley to 1041m above tree line in the Iuxta 16 claim in the north-western portion of the property. The terrain is moderately rugged, with steep hillsides heavily forested by first growth fir, hemlock and cedar, with slide alder and devil's club in clearings. Rainfall is heavy, typical of western coastal areas. Annual precipitation averages 200cm with several metres of snow accumulating in the higher elevations in winter. Winters are moderate and summers are cool and damp.



#### 2.0 Claim Status

The Iuxta Property consists of the Iuxta 1-16 mineral claims located in the Skeena Mining Division (fig. 3). CSS Explorations Inc. of Delta, British Columbia is the registered title holder of the claims. The claims were staked in May and June of 2001. Table 1 shows the list of claims and legal description.

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#### **Expiry** date **Record Number** Claim Name Number of Units 2003/05/23 8 386508 **Iuxta** 1 20 2003/05/23 386509 Iuxta 2 386510 20 2003/05/22 **Iuxta 3** 386511 8 2003/05/23 **Juxta 4** 20 2003/05/23 Iuxta 5 386512 2003/05/22 386513 20 Iuxta 6 386514 20 2003/05/23 **Iuxta** 7 Iuxta 8 386515 20 2003/05/23 386516 6 2003/05/23 **Juxta** 9 2003/05/23 Iuxta 10 386517 10 12 2003/06/10 387557 Iuxta 12 387558 15 2003/06/09 Iuxta 13 20 2003/06/10 Iuxta 14 387559 387560 20 2003/06/10 Iuxta 15 387561 18 2003/06/09 Iuxta 16 TOTAL 237

#### Table 1: List of Claims



### 3.0 Regional Geological Setting

The property is mainly underlain by rocks of what is referred to as the Ecstall Belt that extends 80 kilometres from the Skeena River in the northwest to the Douglas Channel in the southeast. The Ecstall Belt is comprised of volcanic and gneissic rocks of the more regionally extensive Central Gneissic Belt, sandwiched between sections of the younger intrusive Coast Plutonic Belt (CPB).

The Coast Plutonic Belt consists of various intrusive suites ranging in age from Silurian to Eocene with the ages younging progressively eastward. Compositionally the CPB ranges from granite to gabbros, but 70% of the intrusions are tonalite-quartz diorite-diorite.

Metamorphic rocks of the Central Gneissic Belt (CGB) occur as pendants or screens surrounded and intruded by the plutonic rocks. The CGB is composed of rocks ranging from Proterozoic to Paleozoic age. The regional metamorphic grade of middle to upper amphibolite facies is overprinted by thermal metamorphic aureoles of Cretaceous to Tertiary age. The Devonian metavolcanic arc rocks that comprise the Ecstall Belt were developed along a paracratonic setting. The deposition of Devonian aged metavolcanic and metasedimentary rocks and comagmatic intrusions was followed by three phases of deformation and three well-dated plutonic episodes. The Jurassic plutonic and metamorphic events are consistent with a model of east dipping subduction beneath an allocthonous Alexander- Wrangellia-Stikinia superterraine emplaced on to North America in Middle Jurassic time (Aldrick and Gallagher, 2000).

#### 3.1 Metavolcanic Rocks

The northeast younging metavolcanic rocks of the Ecstall Belt host all the known mineral occurrences. The sequence is up to four kilometres thick and consists of a normal upward differentiating sequence of mafic to felsic lithologies overlain by a siliciclastic sequence of metasedimentary rocks.

The lower volcanic member is comprised of lower mafic metavolcanic hornblende-biotite schist constituting 70% of the interval, being locally several hundred meters thick. Discontinuous carbonate lenses appear to be primary indicating a sub-aqueous depositional environment. This unit is coeval with the Big Falls Orthogneiss, which is a metamorphosed Devonian meta-tonalite intrusive.

Overlying the mafic rocks is a 200m thickness of hornblende-diopside-biotite-quartzplagioclase schist. The lithology is interpreted to be an intermediate volcanic or volcaniclastic rock.

The upper member in the volcanic cycle is a fissile, recessive weathering pyritic quartzmuscovite schist and may be interbedded with lenses of quartz rich sedimentary rocks. The lithology is roughly 100m thick and is pyritic with an average of 10%-15%.

The rock displays relict textures indicating flows, tuffs and fragmental rocks deposited in a sub-aqueous setting. This upper volcanic member hosts several of the known volcanogenic massive sulphide deposits of interest in the Skeena mining camp.

#### 3.2 Metasedimentary Rocks

Quartz rich siliciclastic rocks overly the metavolcanic members. The lowest is a quartzite and quartz schist member that may be up to two kilometres thick hosted within the upper gneissic unit. This resistant rock consists of 95% quartz with laminations of muscovite, pyrite and graphitic bands.

Above the quartzitic rocks is an un-subdivided member containing highly metamorphosed sediments. Metamorphic grades have reached granulite facies.

#### 3.3 Gneissic Rocks

Gneissic rocks are exposed along the western margin of the belt and are comprised of two separate lithologies. The Intermediate gneiss is layered at 15cm and is composed of 40% chlorite and biotite with 60% quartz and minor plagioclase. The homogenous, black to green biotite-hornblende-plagioclase gneiss occurs as a northwest trending belt with a thickness averaging two kilometres.

The gneissic rocks lack any relic igneous textures and are interpreted to represent an intermediate to mafic metavolcanic or immature metasedimentary protolith. Regional Geology



#### 4.0 Summary of 2002 Field Investigations

Between November 4th and November 9th, 2002, Rio Minerals Ltd. personnel conducted a property scale reconnaissance prospecting survey on behalf of CSS Explorations Inc. on the company's 100% owned Iuxta claim Group. The claim group is located 60 kilometres southwest of Kitimat, BC. The program was intended to focus on priority areas identified previously as being areas for follow-up sampling. During the five day helicopter assisted sampling program a total of 26 rock samples and one silt sample were collected (Fig.1). Assay results are compiled in (Appendix II).

The Ecstall Belt is known to host Palaeozoic aged volcanogenic massive sulphide deposits. The purpose of the program was to enhance the potential for the discovery of new mineral deposits south of the known areas of mineralization in the region. The distribution and limited density of stream sampling completed to date confirm the claims are under explored given their indicated potential. The results of this program, detailed in this report, suggest a strong possibility to discover previously undetected volcanic associated base metal mineralization. Further stream sediment and soil sampling, concurrent with prospecting and reconnaissance geological mapping is warranted and recommended.

The majority of the reconnaissance sampling undertaken was restricted to topographic high locations within the aggregate centre of the claim block. This factor has pertinence when interpreting the results of the rock assays to the previous silt samples, and also the primary structural geologic knowledge of the property to date; this being that the rocks of the Ecstall Belt are highly deformed and are characterized by northwest striking, steeply dipping foliation parallel to compositional layering and cleavage. Coaxial upright F1 and F2 isoclinal folds and open F3 folds have steeply north plunging axis. The folds have thickened noses and attenuated limbs. If the topographic higher regions indeed represent the attenuated limbs, there is potential for increased mineralization down slope (in the plunging direction).

Of the outcroppings observed during sampling traverses, all were moderately to highly schistose, steeply dipping, with bedding-cleavage trending north-south to northwest. Of the folds observed all were north to northeast plunging.

The dominant rock type encountered during the traverses is a muscovite (+/- biotite), sericite schist. This occurs in all areas visited during the program, and can be both mineralized or barren. It occurs as finely laminated (Gneissic) in texture, with sulphides confined to the foliation plane to highly oxidized, crumbly and void of observable mineralization.

Felsic (banded rhyolites), and intermediate to mafic volcanics as well as mudstones may also occur within this unit. Contact relationships were difficult to determine due to the lack of primary textures and metamorphic overprinting.

Felsic rocks observed are dominantly banded rhyolites which are yellow-brown to green in colour. All exhibit a degree of schistosity with mineralization paralleling. No folding was observed in these units. The large gossanous showing on southeast Iuxta 16 block is comprised of a stack of felsic volcanics, intermediate volcanics, and mudstones. This bedding parallel gossanous occurrence was sampled returning encouraging Cu and Zn values (Fig 1 and 2). The showing has an estimated down slope exposure of 350+m and a width of 200+m (see assay tables). If regional structural interpretations are correct, there is a potential for increased mineralization down slope. Sulphide mineralization is pervasive in almost all of the rock units encountered during the program.

Areas within the Iuxta claims have at least reached Amphibolite facies. Observations were made in the field of hornfels amphibolite (mafic volcanics) that are garnet bearing and associated kyanite-bearing metapellites. The observations were made in the vicinity of sample 119517.

A complete list of sample descriptions and locations are included in Appendix I.



#### 5.0 Discussion and Results

All rock and silt samples were analyzed with 30 element ICP plus Au by Acme Laboratories of Vancouver for consistency of data comparison. The results by sample number are compiled in Appendix II and III.

Gold values obtained were at the detection limit for all the samples, <2ppm. For the purpose of plotting results and for comparison to previous work (silt sampling), values in the ppb range were used. The most concentrated and better results came from the mineralized occurrence in the southern Iuxta 16 claim, with Zn values peaking at 3513ppm, and elevated copper values to 374ppm. There has been negligible prior sampling (silts) for comparison in the areas where the concentrations of rock samples were taken during the program

The reconnaissance-sampling program has generated new data to be considered and interpreted. It is also important to note that none of the gold anomalies from previous silt sampling have been sourced to date, with significant values recovered in previous silt – soil samples by both government and CSS contracted staff.

#### 6.0 Recommendations

The Ecstall Belt is host to a number of documented VMS deposits north of the Iuxta claims. Systematic exploration has focused on the known areas. Recent government RGS surveys and government mapping has indicated further potential within the southern section of the belt. The potential for different styles of mineralization such as intrusive related gold or base metal deposits should not be ignored.

The Iuxta property as a whole remains undersampled. To realize the properties potential for either economic base metal or precious and base metal deposits, a methodical program of combined silt or soil sampling and prospecting-geology must be undertaken.

The priority areas identified by Kuran require more work, and remain valid target areas. A combined program designed to collect as much as 150 silt samples, and an equal amount of prospecting (outcrop) samples should be undertaken prior to geophysical surveying.

The Iuxta properties remain under explored with insufficient data to compliment geophysical interpretation. The data generated from further silt and rock sampling, as well as mapping, will prioritize focus areas within the claim area and is a logical progression of exploration. This proposed program would serve to identify mineralized zones by mapping their nature and extent, with the initial assay values serving to categorize them in a priority scheme. This would be a more cost-effective assessment method than an airborne survey followup. Prospecting and mapping will provide the base layer of information necessary for any geophysical interpretation. The follow-up evaluation of the results from this sampling may direct any geophysical survey work by concentrating it to developed target areas.

From the information realized through rock type identification during property prospecting and reconnaissance mapping, a better understanding of locally controlled structure and its relationship to mineralization can be ascertained. Increased geochemistry data and sample density is necessary to accurately devise future exploration models.

All mineral deposits have uniqueness unto themselves. Until there is sufficient spatial distribution of samples throughout the property, pathfinder element relevance should not be completely relied on until there is statistical coverage to determine the magnitude of the anomalies.

D. Kuran previously outlined target areas within the Iuxta blocks, which still remain largely untested, and are still valid. Future silt – soil sampling and prospecting should be focused around and within these areas, which are illustrated in Figure 1, and summarized as follows:

Area A contains a high percentage of silt samples returning anomalous values in Au, As Zn and Cu. Systematic prospecting and soil sampling should be completed.

Area B is also anomalous in these elements.

The drainage covered by Area C is anomalous in Cu. Further sampling may produce further anomalies.

Area D covers two linear drainages that may represent regional structures. The drainages contain a very low sampling density and are highlighted by very anomalous values in Au, As, Zn and Cu at the lower limits of the drainages and are a high priority for follow-up silt sampling.

Anomaly E is described by a low sample density and anomalous in Zn values and needs a higher sample density to focus further work.

Further downslope prospecting and mapping of the showing sampled on the Iuxta 16 block should be undertaken to test for increased mineralization and structural deformation, as well as accurately define its surface expression. The results for copper and zinc at this location are orders of magnitude higher than anything recovered in silt samples to date and enhances the "D" and "C" areas outlined by Kuran.



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**Rock Geochemistry** 

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Appendix I

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## SAMPLE DESCRIPTION TABLES

|        | Location | NAD 83   | Location | NAD 27   |  |        |        |        |        |        |        |
|--------|----------|----------|----------|----------|--|--------|--------|--------|--------|--------|--------|
| Sample | Easting  | Northing | Easting  | Northing | Description  | Cu ppm | Pb ppm | Zn ppm | Ag ppm | As ppm | Au ppb |
|        |          |          | <b>_</b> |          | Banded felsic volcanics (rhyolite), (244/65),>2% sulphides (py,      |        |        |        |        |        |        |
| 119514 | 476026   | 5952332  | 476146   | 5952139  | <br>cp).   | 225    | 36     | 131    | 0.4    | 4      | 3      |
|        |          |          |          |          | <br>Intermediate to mafic metavolcanic (amphibolite), garnetiferous, |        |        |        |        |        |        |
| 119515 | 469775   | 5952710  | 469883   | 5952516  | trace sulphides (py).  | 63     | 6      | 76     | <0.3   | 4      | 3      |
| 119516 | 471398   | 5954843  | 471505   | 5954648  | Chip sample, quartz vein, minor pyrite.                              | 31     | 6      | < 0.3  | <2     | <2     |        |
| 119517 | 470189   | 5952557  | 470296   | 5952363  | Garnetiferous (Amphibolite) metavolcanics, trace sulphides.          | 6      | 10     | 45     | <0.3   | <0.2   | 2      |
| 119518 | 471224   | 5854631  | 471330   | 5954439  | Chip sample, quartz vein, trace sulphides.                           | . 9    | 3      | 12     | <0.3   | <0.2   | <0.2   |
|        |          |          |          |          | Fine grained biotite, sericite schist, up to 2% sulphides in         |        |        |        |        |        |        |
| 119519 | 472669   | 5949087  | 472776   | 5948893  | foliation plane.   | 20     | 7      | 199    | <0.3   | 2      | <2     |
| 119520 | 468018   | 5953280  | 468125   | 5953086  | <br>Med grained biotite, sericite schist, trace sulphides.           | 11     | 11     | 94     | < 0.3  | <2     | <2     |
|        |          | 1        |          |          | Feldspar phyric, fine grained mafic schist, fine sulphides in        |        |        |        |        |        |        |
| 119521 | 472387   | 5949015  | 472494   | 5948821  | foliation plane.   | 52     | 4      | 19     | < 0.3  | 2      | 2      |
|        |          |          |          |          | Quartz carbonate vein within silicious volcanics, highly altered,    |        |        |        |        |        |        |
| 119522 | 468280   | 5953063  | 468387   | 5953086  | sulphides to 20%, dominantly Py.                                     | 8      | 4      | 45     | <0.3   | 2      | 6      |
|        |          |          |          |          | Musccovite-sericite schist, gneissic texture, sulphides in foliation |        |        |        |        |        |        |
| 119523 | 468298   | 5953035  | 468405   | 5952841  | plane.   | 4      | 7      | 57     | <0.3   | <2     | 2      |
|        |          |          |          |          | Muscovite (+/-) biotite schist, lesser sericite, 2% sulphides (Py,   |        |        |        |        |        |        |
| 119524 | 468510   | 5953095  | 468617   | 5952901  | Po) in foliation plane.  | 50     | 39     | 668    | <0.3   | 3      | 6      |
|        |          |          |          |          | Quartz, muscovite, feldspar, weakly schistose, small mafic dyke      |        |        |        |        |        |        |
| 119525 | 468644   | 5953005  | 468751   | 5952811  | proximal, 2-5% disseminated sulphides.                               | 70     | 6      | 22     | <0.3   | 2      |        |
|        | 1        |          |          |          | Quartz vein chip sample, 30 - 50cm wide, within quartzitic schist    |        |        |        |        |        |        |
| 119526 | 468850   | 5952790  | 468957   | 5952596  | unit.  | 37     | 7      | 23     | <0.3   | <2     |        |
|        |          | 1        | 1        |          | Banded-laminated rhyolite, weakly schistose, fine silphide           |        |        |        |        |        |        |
| 119527 | 476338   | 5949356  | 476445   | 5949162  | layering, unit altered to a fuchsite green.                          | 8      | <3     | 48     | <0.3   | 2      |        |
|        |          | 1        | '        |          | Intermediate mixed volcanics, sheared, brecciated and chlorite       |        |        |        |        |        |        |
| 119528 | 471010   | 5953861  | 471117   | 5953667  | altered. Intruded by granodiorite veins.                             | 57     | <3     | 22     | <0.3   | 2      |        |
|        |          | 1        | 1        |          | Mixed volcanics, more felsic, pink weathering, highly strained,      |        |        | ſ      |        |        |        |
| 119529 | 470970   | 5953842  | 470177   | 5953648  | 2% sulphides.  | 174    | <3     | 51     | <0.3   | 3 4    |        |
|        |          |          |          |          | Intermediate volcanics, sulphide mineralization parallel             | ]      |        |        |        |        |        |
| 119530 | 470931   | 5953791  | 471039   | 5953597  | cleavage, py, po.  | 102    | <3     | 45     | <0.3   | s <2   |        |
|        | 1        |          |          |          |  |        |        |        |        |        |        |
| 119531 | 470754   | 5953701  | 470861   | 5953507  | Quartz vein chip sample, 20 cm wide, disseminated sulphides.         | 176    | 3      | 7      | <0.3   | 6      | )      |
|        |          |          |          |          | Altered intermediate volcanics (poss. Pillowed unit?), py, po, +/-   |        |        |        |        |        |        |
| 119532 | 470754   | 5953701  | 470861   | 5953507  | ср.  | 165    | <3     | 71     | <0.3   | sj <2  |        |

### Rock sample descriptions and locations, luxta claims, November, 2002.

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|--------|----------|----------|----------|----------|---|----------|--------|--------|--------|--------|--------|
|        | Location | NAD 83   | Location | NAD 27   |   | <u> </u> |        |        |        |        |        |
| Sample | Easting  | Northing | Easting  | Northing | Description   | Cu ppm   | Pb ppm | Zn ppm | Ag ppm | As ppm | Au ppb |
| 119533 | 470535   | 5953369  | 470642   | 5953174  | Intermediate to mafic volcanics, possibly tuffaceous, 2-5% sulphides in cleavage plane.       | 38       | <3     | 20     | 0.3    | 3      | 6      |
| 119534 | 470279   | 5953047  | 470386   | 5952853  | Felsic volcanics with intermediate volcanic rafts, py, po mineralization.                     | 89       | 3      | 25     | <0.3   | 2      | 6      |
| 119535 | 469726   | 5953229  | 469834   | 5953035  | Mudstone, >3m wide, 500+m along strike , very dense, 5+% sulphides.                           | 116      | 5      | 3515   | <0.3   | 2      | 14     |
| 119536 | 469713   | 5953315  | 469821   | 5953121  | Mixed felsic volcanics and mudstones,<br>mineralized to 5%, py, po, +/- cp.                   | 374      | <3     | 18     | <0.3   | 5      | 10     |
| 119537 | 469815   | 5953270  | 469919   | 5953060  | ? Volcaniclastic sediment, dark grey at contact<br>with felsics, fine disseminated sulphides. | 43       | <3     | 39     | <0.3   | <2     | 4      |
| 119538 | 469815   | 5953270  | 469919   | 5953060  | Sample of felsic unit at contact with 119537.   | 64       | 99     | 776    | 0.9    | 3      | 5      |
| 119539 | 469766   | 5953306  | 469873   | 5953111  | Mudstone, very dense, high SG, py, po.  | 114      | 10     | 1397   | 0.4    | 2      | 7      |

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Appendix II

## ASSAY CERTIFICATES

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5 103 2.04 11 .09 <3 2.65 .27 .06 <2

1 131 1.52 150 .07 <3 1.52 .22 .32 <2

21 .14 121 .86 <3 .48 .11 .24

1 10 1.02 74 .06 4 2.30 .13 .74

2 10 1.43 166 .10 <3 2.27 .11 1.07

.30 58 .04 <3 .53 .04

.42 209 .15 <3 .87 .09

3 13 1.89 30 .04 <3 2.34 .08

27 .07

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6 12 .58 153 .04 <3 .84 .09

3 9 1.00 29 .14 <3 1.30 .23

.48 .091 4 107 1.04 379 .10 <3 1.75 .06 .70 <2

.56 .092 16 152 .57 137 .09 <3 1.65 .04 .16 5

.43 212 .15

15 .55 40 .08 <3 .93 .12

1 16 2.82 108 .16 <3 3.70 .08 1.23

<1 18 .24 10 .12 <3 .37 .01 .04

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6 14 1.27 179 .11 3 1.71 .09 .62 <2

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8.02 3 .23.01

10 .12 68 .01 43 .47 .16 .12 42

93 .05 <3 .85 .65

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20 .3 16 36 266 5.11

6 64 99 778 .9 <1 10 330 3.30 3 48 42

3 25 <.3 8 24 181 2.18

5 3513 <.3 111 7 213 2.24

7 118 30 151 .3 33 11 775 2.97 23

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4 374 4 18 1.4 88 16 732 13.06 5 48

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2 2 298 5,63

3 4 187 1.65

5 19 215 2.30

45 <.3 9 10 375 6.17 <2 <8

67 <.3 9 10 382 6.37 <2 <8 7 <.3 3 5 44 1.27 6 <8

3 512 1.17

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27 460 3.29

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AU\*\* GROUP 38 - 30.00 GM SANPLE ANALYSIS BY FA/ICP.

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109 114 10 1397 .4 38 6 164 1.38 2 10 <2 2 20 17.9 <3 <3 1323

ASSAY RECONNENDED FOR ROCK AND CORE SAMPLES IF CU PE ZN AS > 1X, AG > 30 PPM & AU > 1000 PPB

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Q Q 24 <.5

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42 2 18 <.5 <3</p>

~2 <2 19 <,5 <3

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6 <.5

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9 <2 4 28 5.5 6 6 74

GROUP 10 - 0.30 GR SANPLE LEACHED WITH 3 NL 2-2-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE BOUR, DILUTED TO 10 ML, AMALYSED BY ICP-ES. UPPER LIMITS - AG, AU, HE, H = 100 PPM; NO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, HI, HN, AS, V, LA, CR = 10,000 PPH.

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STOLOGISTI DOG USKONSTITUURIN (\* 118) # 23.894957 (Translitisti damo Russ), DANARO MARONA, Sami (sed by i angres doube)

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22 1.17

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P La Cr

X ppm ppm

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1 18

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<1 23

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2 14 1.09 164 .08

1 31 .69

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Data FA

وداجل فخيجته بتتابيه HE MARCOUNT HE HALL IG SHOE 2.111.1 1. 1. 1. 1. 6846830° 144 13 14 14 14 14 TEOCHEM CALLANALTHIS CEPTIFICATE DEC-17-2002 PROJECT ILLETA Falle SUCCESS CARE LANDING HOLE INC. **SANPLE#** No Cu Pb Zn Ag Ni Co Nn fe As U Au Th Sr Cd 8i Sb W. Ca 11 Ra K 14 Auto R 41 - Max than the tim the the the the the X ppm ppm ppm ppm ppm ppm ppm ppm ppm - % X ppm X DOM DOM X ppn X Χ. X poor poor TUE Q-1 1 - 3 < 44 <.3 5 4 515 1.74 Q d8 Q 5 53 <.5 <3 39 .45 .090 7 11 .58 259 .13 <3 .86 .06 .56 2 Q AS-01-02 2 39 3 49 <.3 14 11 316 2.06 6 48 42 2 25 <.5 3 3 58 .65 .193 3 27 .69 116 .11 3 1.03 .02 .25 2 34 4 29 5.1 5 5 72 .56 .090 17 159 .58 146 .09 3 1.70 .04 .17 3 492 <2 34 10:06 AM ACME ANALYTICAL LAB 7 119 31 154 .3 35 11 752 3.01 21 STANDARD D\$4/FA-10R 2 ß GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HHO3-H20 AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 NL, AMALYSED BY TCP-ES. UPPER LINITS - AG, AU, BG, W = 100 PPM; NO, CO, CD, SB, B1, TH, U & B = 2,000 PPM; CU, PB, 2N, NI, NN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: SILT SSB0 60C AUAA GROUP 3B - 30.00 GH SAMPLE ANALYSIS BY FAVICP. 1019002 BIGNED BY DATE RECEIVED: NOV 12 2002 ATLEN+ MANG: CERTIFIED B.C. ASSAYERS D. TOYE, C.LEONG, J. FAX NO. 6042531716 7 ß All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Date\_\_\_\_FA \\\.

# Appendix III

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# STATEMENT OF COSTS

### **RIO MINERALS LIMITED MINERAL EXPLORATION AND DEVELOPMENT**

209-475 Howe Street Vancouver, BC V6C 2B3 email: info@riominerals.com Phone: 604-671-2245 Fax: 604-689-3609

December 16, 2002

### Iuxta Project Statement of Costs - 2002

| Item                 | Description                  | <b>Billing Method</b> | Cost per  | Mandays/km | Total      |
|----------------------|------------------------------|-----------------------|-----------|------------|------------|
| Geologist            | Geologic mapping and         | Per day               | \$ 450.00 | 07         | \$ 3150.00 |
| ·                    | sampling                     |                       |           |            |            |
| Geologist helper     | Geologic mapping and         | Per day               | \$ 250.00 | 07         | \$ 1750.00 |
|                      | sampling                     |                       |           |            |            |
| Prospector/ helper   | Prospecting-sampling         | Per day               | \$ 250.00 | 05         | \$ 1250.00 |
| Truck Rental         | 1-4x4 truck                  | Per day               | \$ 75.00  | 07         | \$ 525.00  |
| Helicopter           | Helicopter charter           | Per hour              | -         | -          | \$10683.05 |
| Air Travel           | 3 men Van-Terrace-Van        | -                     | -         | -          | \$ 1867.48 |
| Report               | Geology Report               | -                     | -         | -          | \$ 2896.83 |
| Assays               | 26 rock, 2 silt samples      | -                     | -         | -          | \$ 542.94  |
| Food/Accom.          | 3 personnel                  | Per day               | \$ 85.00  | 19 mandays | \$ 1615.00 |
| Supplies and rentals | Bags, flagging, radios, GPS. | Per day               | \$ 35.00  | 07         | \$ 245.00  |
| Management @ 5%      | -                            | -                     | -         | -          | \$ 1226.27 |
| TOTAL                | -                            | -                     | -         | <b>–</b>   | \$25751.57 |
|                      |                              |                       |           |            | 1          |

Appendix IV

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STATEMENT OF QUALIFICATIONS

#### STATEMENT OF QUALIFICATIONS

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I, Doug Smith, of Vancouver, B.C., do hereby certify that:

- 1. I am a practicing geologist, residing at 2791 West 15<sup>th</sup> Ave, Vancouver, British Columbia, V6K 2Z7.
- 2. I majored in Geology at the University Of New Brunswick, Fredericton in economic and structural geology.
- 3. I have been employed in my profession as a geologist with government agencies and industry since 1990.
- 4. I am presently employed by Rio Minerals Ltd. of 595 Burrard Street, Vancouver, B.C. as a Contract Geologist.
- 5. That the observations, conclusions and recommendations within this report are based on work conducted on the property.
- 6. I have no direct or indirect interest in the property described herein, nor in the securities of any company associated with the property, nor do I expect to receive any.

Signed at Vancouver, British Columbia, this 11<sup>th</sup> day of December, 2002.

Doug Smith, Geologist