# Technical Report on the Double-R Project

**Omineca Mining Division**
**Tenure Numbers:**
**312670, 312671, 1004182, 1023137**

**NTS: 093M/01**

BC Geological Survey
Assessment Report
34488

**Latitude 55°13'N**
**Longitude 126°23'W**

**UTM Zone 09 (NAD 83)**
**Easting 667100**
**Northing 6121900**

Work performed August 9-14, 2013

by

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**For**
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## Table of Contents

### TITLE

**List of Illustrations**



**List of Tables**



**List of Photographs**

## Item 1: Summary

The Double R property consists of four claims (including two historical four-post claims, one Mineral Cell Title and one fractional claim) totaling approximately 414ha on the west shore of Morrison Lake, in the Omineca Mining Division in north-central British Columbia. The Property is centred at 667100E, 6121900N, UTM zone 9 (Nad 83) and is located approximately 38km north-northwest of the village of Granisle and 70km northeast of the regional centre of Smithers. The claims are accessible from spring to fall, by float plane landing on Morrison Lake; alternatively, the Property is accessible year round by helicopter from Smithers.

The project area lies on the northwest side of the Skeena Arch within the Intermontane tectonic belt of west-central British Columbia. The Babine Lake area is underlain principally by Mesozoic layered rocks, the most widespread in this area being volcanic and sedimentary rocks of the Jurassic Hazelton and Bowser Lake Groups. These are intruded by plutonic rocks of various ages including lower Jurassic Topley intrusions, Omineca intrusions of early Cretaceous age, late Cretaceous rhyolite and granodiorite porphyries and Babine intrusions of early Tertiary age. Deformation consists of moderate folding, trans-current boundary faults, thrusting and normal faulting. Younger early Cretaceous Skeena Group undivided sedimentary rocks and subvolcanic rhyolite domes are preserved in a large cauldera setting roughly 24km in diameter that sits between the West Arm and Fisheries Arm of Babine Lake. The Double R property lies on the northern edge of this large cauldera.

The Babine Lake district has witnessed prospecting interest since early in the 20th Century. The region is host to numerous porphyry copper-gold deposits and prospects that lie adjacent to the Property. The past-producing Bell Copper and Granisle Mines located near the village of Granisle were major producers of copper and gold. The Morrison-Hearne Hill project lies 2.5km southeast of the Property and hosts similar style mineralization.

Bell Copper Mine, located on Newman Peninsula in Babine Lake, 24km southeast of the Property, was operated as an open pit from 1972 to 1992. Total production was 77.2 million tonnes, yielding 303,277 tonnes copper, 12,794 kg gold and 27,813 kg silver (Dirom et al, 1995). The Bell deposit is a classic high-level porphyry copper-gold deposit with symmetrical alteration shells. Principal sulphides are pyrite and chalcopyrite, occurring as disseminations, fracture fillings and in quartz stockworks.

The Granisle mine was located on MacDonald Island in Babine Lake, 32km southeast of the Property. It was operated as an open pit from 1966 to 1982. The mine produced 214,300 tonnes copper, 6833 kg gold, 69,753 kg silver and 6582 kg molybdenum, from 52.7 million tonnes ore (Dirom et al, 1995). The Granisle deposit also exhibits strong alteration zoning. Principal sulphides are chalcopyrite, bornite and pyrite.

The Morrison-Hearne Hill project is currently undergoing the British Columbia Environmental Office review process. The measured/indicated mineral resource estimated for Morrison deposit (Simpson, 2007) is 206,869,000 tonnes grading 0.39% Cu, 0.20g Au/t and 0.005% Mo. The contained metal is 1,787,780,000 lbs Cu, 1,306,300 oz Au and 20,676,000 lbs Mo. The Hearne Hill breccia pipe, interpreted as root to the Morrison deposit, contains indicated resource of 143,000 tonnes grading 1.73% Cu and 0.8 g/t Au (Ogryzlo et al, 1995). The Morrison deposit is also considered a classic porphyry copper-gold deposit, with strongly-zoned alteration.

The deposits are associated with intrusive rocks of a Tertiary continental magmatic arc known as Babine Igneous Suite. This suite is formed of the remnants of volcanoes built on the Stikine Terrane in Eocene time. Tertiary extension and trans-tensional faulting produced northwest-trending grabens, including the Morrison Graben, hosting Morrison Lake and Hatchery Arm. Dykes and plugs of felsic to intermediate calcalkaline porphyritic intrusive rocks were emplaced along these faults and splays. Extrusive equivalents were preserved in grabens. One such Eocene BFP dyke is mapped immediately to the west of the Double R property. The dyke trends to the east northeast and may be responsible for some of the anomalous humus identified in the 2013 Ah sampling program.

Regional geologic mapping by Geological Survey of Canada and BC Department of Mines (later as BC Geological Survey) had been done as early as 1969 (Carter and Kirkham, 1969), and maps refined by further mapping as late as 2001 (MacIntyre, 2001, and MacIntyre and Villeneuve, 2001). Regional stream geochemistry surveys (RGS) have been completed between 1984 and 1996; and airborne geophysics have been performed over the past three decades by provincial and federal governments. Deep glacial and glaciofluvial deposits over much of the Property, and region-wide, have hampered usefulness of all these techniques. Down ice dispersion of geochemical anomalies, complicated to some degree by change in ice-flow direction, demand careful interpretation of anomalies. In 1995 and 1996, BC Geological Survey, in concert with Geological Survey of Canada, undertook till sampling in areas of deep glacial cover, including the central part of the Property.

Studies funded by Geoscience BC over the Kwanika and Mt. Milligan deposits compared various soil geochemical methods and assessed their usefulness in detecting blind mineralization. It was found that sampling the humus Ah horizon produced the most convincing, high to moderate contrast apical or rabbit-ear responses for Cu, Au, Ag, W, As, Sb and Ca over mineralization down to depths of up to 300m at Kwanika (Heberlein and Samson, 2010).

The 2013 humus sampling program at the Double R followed the methodologies outlined in GBC 2010-03 and outlined a number of multi-element anomalies that appear to trend to the northeast. Response Ratios are moderate to strong in Mo, Cu, Au and Ag as well as other elements.

With the results of the 2013 Ah-sampling program, it is the author's opinion that high potential exists for significant porphyry-style Cu-Mo-Au mineralization on the Property. Additional humus sampling is required to adequately outline these anomalies. Evidence of similarities in the Property to significant Porphyry deposits include: existence of nearby dykes and plugs of biotite-feldspar porphyry host rocks, through-going structure related to major deposits, magnetic high features, and significant multi-element, humus-Ah anomalies.

Consequently a two-stage exploration program is recommended to test the potential of the property. Permitting and re-establishment of the existing roads on the property will allow ground access through most of the property and the construction of a temporary camp for the season's exploration programs. Comprehensive mapping at 1:10,000 scale and prospecting should be undertaken in parts of the property where airphoto analysis has identified outcrop coincident with northwest and northeast trending structures. Additional humus-Ah geochemical sampling is recommended over the entire property to expand upon and infill the 2013 geochemical survey. Sample spacing should be reduced to 50m on lines spaced 100m apart to accurately define anomalies. Geochemical and geophysical (magnetic and IP) surveys should be completed on a cut grid to expedite the timely completion of the surveys. The grid should have its baseline oriented E/W and lines run N/S to cross both northeast and northwest trending structures. A second stage program would consist of drilling of coincident geochemical and geophysical targets.

## Item 2: Introduction

This report is being prepared by the author for the purposes of filing assessment on the Double-R property and to create a base from which further exploration will be completed.

### 2.1 Qualified Person and Participating Personnel

Mr. Kenneth D. Galambos P.Eng. supervised and conducted the current exploration program and completed the evaluation and interpretation of data to focus further exploration expected to be completed during the 2014 exploration season, and to make recommendations to test the economic potential of the area. The author was assisted by Shawn Turford and Ralph Keefe for the field portion of the program.

This report describes the property in accordance with the guidelines specified in National Instrument 43-101 and is based on a 2013 geochemical sampling program completed on the Property, historical information and an examination and interpretation of technical data covering the property. This evaluation was completed by the author over a time period from August 9 - November 5, 2013.

## 2.2 Terms, Definitions and Units

- All costs contained in this report are denominated in Canadian dollars.
- Distances are primarily reported in metres (m) and kilometers (km) and in feet (ft) when reporting historical data.
- GPS refers to global positioning system.
- Minfile showing refers to documented mineral occurrences on file with the British Columbia Geological Survey.
- The term ppm refers to parts per million, equivalent to grams per metric tonne (g/t).
- ppb refers to parts per billion.
- The abbreviation oz/t refers to troy ounces per imperial short ton.
- The symbol % refers to weight percent unless otherwise stated. 1% is equivalent to 10,000ppm.
- Elemental and mineral abbreviations used in this report include: arsenic (As), cerium (Ce), copper (Cu), gold (Au), iron (Fe), lanthanum (La), lead (Pb), molybdenum (Mo), silver (Ag), chalcopyrite (Cpy), pyrite (Py), and rare earth elements (REE).

## 2.3 Source Documents

Sources of information are detailed below and include the available public domain information and private company data.

- Research of the Minfile data available for the area at http://www.empr.gov.bc.ca/Mining/Geoscience/MINFILE/Pages/default.aspx
- Research of mineral titles at https://www.mtonline.gov.bc.ca/mtov/home.do
- Review of company reports and annual assessment reports filed with the government at http://www.empr.gov.bc.ca/Mining/Geoscience/ARIS/Pages/default.aspx
- Review of geological maps and reports completed by the British Columbia Geological Survey at http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace/MainMaps/Pages/default.aspx .
- Published scientific papers on the geology and mineral deposits of the region and on mineral deposit types.

## 2.4 Limitations, Restrictions and Assumptions

The author has assumed that the previous documented work in the area of the Property is valid and has not encountered any information to discredit such work. The author directly supervised the field work on the project from August 9-14, 2013.

### 2.5 Scope
This report describes geology, the 2013 exploration program, previous exploration history and mineral potential of the Double-R Project including an interpretation of the Quest West surveys. Research included a review of the historical work that related to the immediate and surrounding areas including that related to the Bell and Granisle mines and the Morrison deposit. Regional geological data and current exploration information have been reviewed to determine the geological setting of the mineralization and to obtain an indication of the level of industry activity in the area.

## Item 3: Reliance on Other Experts
Some data referenced in the preparation of this report was compiled by geologists employed by various companies in the mineral exploration field. These individuals would be classified as "qualified persons" today, although that designation did not exist when some of the historic work was done. The author believes the work completed and results reported historically to be accurate but assumes no responsibility for the interpretations and inferences made by these individuals prior to the inception of the "qualified person" designation.

## Item 4: Property Description and Location
The Double-R property consists of four mineral tenures, totalling approximately 414ha located on the west shore of Morrison Lake, in north-central British Columbia. The Property is centred at 667100E, 6121900N, UTM zone 9 (Nad 83) and is located approximately 38km north-northwest of the village of Granisle and 70km northeast of the regional centre of Smithers. The claims are registered in the names of Ronald Hugh McMillan and Ralph Raymond Keefe, however the property ownership is divided as R.H. McMillan (55%) and R.R. Keefe (45%). For a location map of the project, see Figure 1 located in pocket.

A listing of the tenures covering the Double-R project is contained in Table 1 below. Upon acceptance of this report for assessment purposes, the highlighted tenures will have their expiry date moved to August 8, 2018 and 2019 as indicated below. The property is situated in the Omineca Mining Division. For a claim map of the Double R property, see Figure 2 located in pocket.

**Table 1: Claim Data**

| Tenure # | Claim name | Issue date | Expiry date | Registered Owner |
|---|---|---|---|---|
| 312670 | Double R #1 | 1992/Aug/18 | 2019/Aug/8 | McMillan, Ronald H. 100% |
| 312671 | Double R #2 | 1992/Aug/18 | 2019/Aug/8 | McMillan, Ronald H. 100% |
| 1004182 | RR | 2012/Jun/28 | 2018/Aug/8 | Keefe, Ralph R. 100% |
| 1023137 | RR | 2013/Oct/17 | 2018/Aug/8 | Keefe, Ralph R. 100% |

The Claims comprising the Property as listed above are being held as an exploration target for possible hardrock mining activities which may or may not be profitable. Any exploration completed will be subject to the application and receipt of necessary Mining Land Use Permits for the activities recommended in this report. There is no guarantee that this application process will be successful.

The Claims lie in the Traditional territories of a number of local First Nations and to date no dialog has been initiated with these First Nations regarding the Property. There is no guarantee that approval for the proposed exploration will be received.

**Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography**

Historic access into the property from the provincial highway system was obtained by private barge from Topley Landing to the east shore of Babine Lake and then by a network of radio controlled private logging roads. These roads are usable during spring to fall, but are not reliably maintained when snow-covered or when not in use by the various logging companies. Alternatively, the Property is accessible year-round by helicopter from Smithers, Houston or Burns Lake and seasonally by float plane landing on Morrison Lake.

Climate in the region is continental, periodically modified by maritime influences. Summers are cool and moist, and winters cold. Following climate statistics from Environment Canada are for Burns Lake, the town with climate most analogous to Babine Lake region. Mean January temperature is -10.5°C, and for July is 14.3°C. Extreme winter temperature may fall below -30°C for brief periods. Annual rainfall is 291.4mm and annual snowfall is 189.1mm, with mean snow accumulation of 45cm. Anecdotal evidence indicates that the Babine Lake area can retain more than a metre of snow depth. Snow-free field operations season for exploration spans May through October, dependant on elevation and aspect relative to the sun.

The Property occupies the northern part of the Nechako Plateau, within the Intermontane Belt of north-central British Columbia. Topography consists of rolling to locally steep hills, with a low central valley. Relief on the property is approximately 320m from Morrison Lake, which lies immediately to the east with an elevation of 740m to the summit of Saddle Hill, at 1070m. Vegetation is dominated by boreal mixed forest of coniferous (spruce and pine) and deciduous (alder, poplar and birch) trees, with undergrowth of willow, berry bushes, and thick

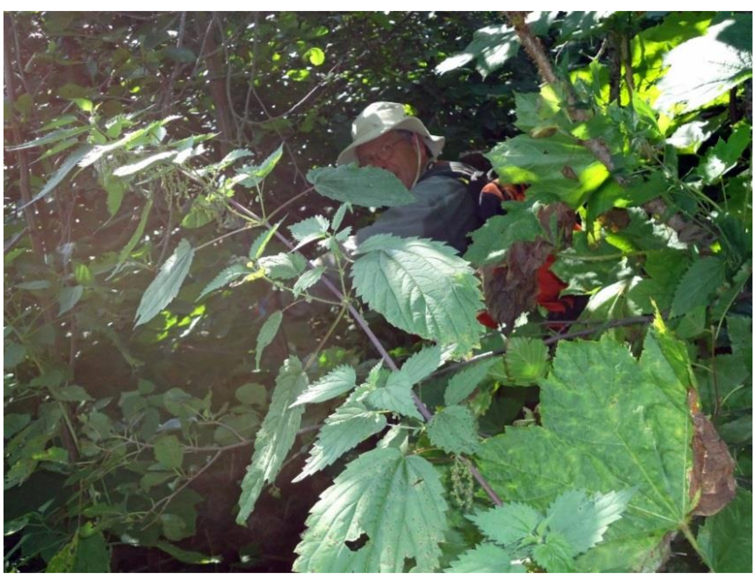

Plate 1: Dense undergrowth on wetter slopes.

fields of devil's club often mixed with stinging nettles. Historic reports document the presence of an old burn with associated windfall, but little evidence of these events remains. Historic drill roads throughout the property are thickly overgrown with alder and devils club. Logging of the surrounding areas occurred over the past 3 decades and provides excellent potential access routes into the general area.

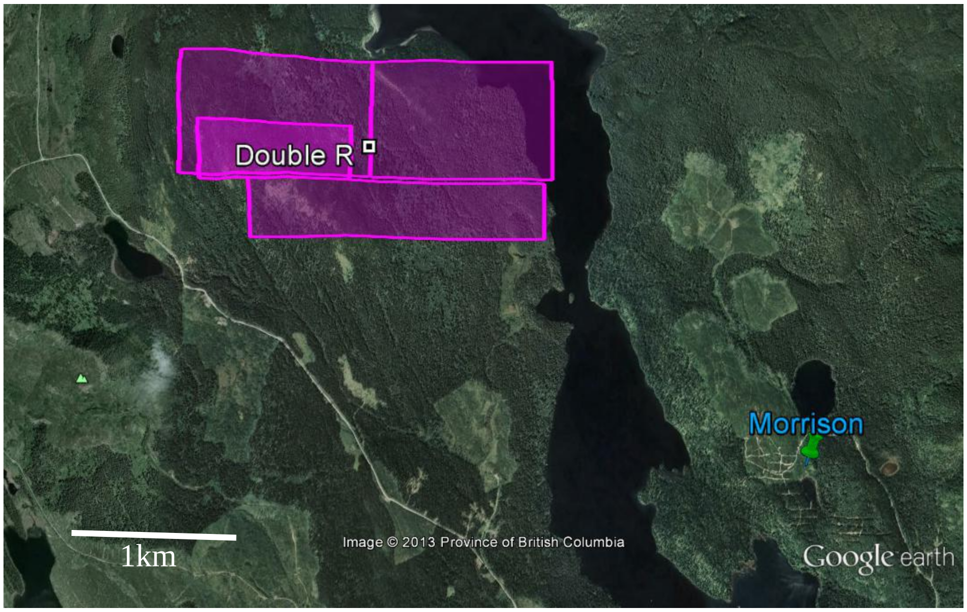

Plate 2: Satellite image of the Double-R project relative to the Morrison deposit.

Infrastructure adequate for mine development is present in the region. A residential capacity power line exists along the west shore of Babine Lake 8km west of the Property. During operations of the Bell Copper and Granisle open pit mines, power was conducted from the Granisle substation via lake-bottom power cables. Similar infrastructure could be installed for mine development on the Double R property. Morrison Lake is able to supply any quantity of water needed for property development. The lower-relief areas on or near the property contain adequate space for concentrator site, tailing ponds or waste dumps required in any contemplated mine operation. The village of Granisle, originally constructed to serve the Granisle open-pit mine, contains adequate accommodation and basic services to support a mining operation. The communities of Northwestern British Columbia contain industrial and consumer suppliers, and a pool of labour skilled in mining trades and professions.

**Item 6: History**

The Babine/Takla Lakes area has been explored since the discovery of copper mineralization on McDonald Island in 1913. Extensive exploration has occurred since the mid 1960's following the recognition of the potential of porphyry copper mineralization and the Granisle, Bell and Morrison deposits.

The earliest recorded work in the area was by Riocanex who obtained a THM anomaly during a regional survey in 1955, but did not conduct follow-up work.

The Bee 1-32 Mineral Claims were staked by Fred Chow and Tom Ralston on the 28th of March, 1965. They were recorded on April 7, 1965. Kerr Addison Mines Limited began a preliminary study of the group in September 1965 at which time prospecting and stream silt sampling was done. During January and February of 1966, electromagnetic and magnetic work was done over the entire claim group which outlined a large EM conductor near Morrison Lake. Trenching revealed low grade Cu and Mo in a body of granodiorite (Sirola, 1966).

The claims lapsed in April, 1967and were re-staked by Pete Bland as agent for Tro-Buttle Exploration Limited (N.P.L.) as the Wolf claims. That summer, the company collected 525 samples (B-horizon soil including several silt samples) over an area 3.8km N/S by 2.8km E/W which were analyzed for Cu and Mo. Six trenches were dug in October of 1967 using a TD20 bulldozer while a ground magnetic survey was completed between March 1-April 11, 1968 (Dirome, 1968). The east/west trending anomaly was defined by an area of +800 gammas with areas of higher magnetism at both ends with the central portion slightly less magnetic.

Canadian Superior Exploration Limited optioned the property and completed a program of IP geophysics and diamond drilled five AX diamond drill holes totalling 183.49m (602 feet) on the EM conductor outlined by Kerr Addison. No core was sent for analysis (Kahlert and Fawley, 1968). The company completed geologic mapping and a follow-up of IP anomalies in 1969.

City Service Minerals Corporation conducted a total of 19 line-km of IP geophysics on their EW and WW claims covering the same area (DePaoli, 1976.)

Noranda Exploration re-staked the property and completed geochemical surveys over an EM anomaly detected during an airborne EM/magnetometer survey conducted in the Morrison Lake-Babine Lake region by the company in 1974. A total of 73 soil samples were collected at 100m intervals on lines 125m apart, mostly over the intrusive stock (Fraser, 1980). In 1980, Noranda drilled one angled diamond drill hole to a depth of 152.4m to test anomalous magnetics and IP targets characteristic of Babine type porphyry mineralization. The drill hole intersected 4.2% Cu over 1.1m in biotite-feldspar-porphyry (Leahey, 1980).The company completed a one day sampling program in 1988 where a crew of four collected 74 soil samples, nineteen rock samples and four silt samples in an effort to locate anomalous precious metals on the property (Myers, 1988)

Phelps Dodge Corporation of Canada Limited, obtained an option on the property after it was staked by McMillan and Keefe in 1992. The company completed 141 line-km of airborne magnetic/VLF surveys and 781m in six vertical diamond drill holes. The best intersection of the program was 0.24% Cu over 15.9m from SH93-1 (Fox, 1993).

In 2008, the property was optioned to G4 Oil Corp. As part of the property examination by G4, Gerald Ray completed one day visit to resample the Phelps Dodge core stored on site. A total of ten core samples were selected to determine the precious and base metal values including rhenium (Re) present. maximum values of 3290ppm Cu, 178ppm Mo, 2.4ppm Ag, 0.42ppm Au were returned from the sampling.

In 2011, Ralph Keefe and Shawn Turford conducted a two day prospecting and sampling program on the property and collected 4 rock samples. Best results of the program were returned from an intrusive rock with visible sulphides that contained 1791ppm Cu.

## Item 7: Geological Setting and Mineralization

### 7.1 Regional Geology

The project area lies on the northwest side of the Skeena Arch within the Intermontane tectonic belt of west-central B C. It occurs within a thick series of Mesozoic Takla and Hazelton Group sedimentary and volcanic rocks. The Takla Group and Hazelton Group succession of interbedded sedimentary and volcanic rocks range in age from Late Triassic to Lower Cretaceous. The older Takla Group rocks consist of fine to coarse clastic sedimentary rocks including conglomerate turbidites. Hazelton Group sedimentary rocks include undivided marine sedimentary rocks, while the volcanic rocks include andesite, dacite, rhyolite and basaltic lavas, tuffs and breccia. Younger early Cretaceous Skeena Group undivided sedimentary rocks and subvolcanic rhyolite domes are preserved in a large cauldera setting roughly 24km in diameter that sits between the West Arm and Fisheries Arm of Babine Lake. Of most importance in the Babine area are the late dykes and small plugs of feldspar porphyry that cut most other rock units in the northern Babine area. They are of important economic significance as they are the major host rock of known copper deposits in the area. The porphyries are usually emplaced along northeasterly-trending tensional faults which cut across the regional fold trend (Kahlert and Fawley, 1968).

The most conspicuous structural features are the steep northwesterly, northerly to north-northeasterly and easterly trending normal faults, often expressed as major topographic lineaments, which have acted to segment the region into numerous small blocks. Within the Babine Lake-Morrison Lake-Nakinilerak Lake area, at least a dozen porphyry deposits are known to occur. All are associated with Middle Tertiary biotite-feldspar intrusions and are localized at or near intersections of northeasterly trending and regional, northwesterly trending faults. The major occurrences are the Bell Copper, Granisle Copper and the undeveloped Morrison Lake deposit.

The direction of movement of ice from the last advance of the cordilleran ice sheet in this area was southeasterly along the major valleys (Fraser, 1980). A Regional Geology map, Figure 3 is located in pocket.

## 7.2 Property Geology

(Excerpt from Fox, 1993)
Siltstones and pyritic hornfels of the Jurassic Hazelton Group Smithers Formation lie along the western parts of the grid area west of the Morrison fault. Andesitic rocks and gossanous rhyolite units of the Jurassic Hazelton Group Saddle Hill Formation lie to the east along the shores of Morrison Lake. Intrusive rocks of the Tertiary Babine Plutonic Suite underlie the central portion of the property. This stock is a composite of biotite granodiorite cut by dikes of biotite feldspar porphyry (BFP). A faulted segment of the stock appears to underlie a small area of the grid near Morrison Lake in the vicinity of hole 68A.

***Jurassic Hazelton Group Smithers Formation Siltstone and Hornfels***

These rocks are very fine grained maroon and black siltstone, greywacke, and mudstone consisting of dark brown biotite, fine grained disseminated pyrite and trace amounts of chalcopyrite. Chalcopyrite is fine grained and occurs as disseminated grains on fracture surfaces and infilling quartz and calcite veins.

***Jurassic Hazelton Group Saddle Hill Formation Rhyolite-Andesite***

Rhyolite and andesite are exposed in a ten-metre high scarp along the Morrison Fault on the east side of the property. Andesite is dark green, fine grained typically with chlorite on fracture surfaces. Rhyolite occurs as tan-coloured, fine to very fine grained siliceous members within the andesite. Trace amounts of disseminated pyrite occur throughout both units.

***Tertiary Babine Plutonic Suite Biotite Granodiorite and Biotite Feldspar Porphyry***

Biotite granodiorite forms an elongate stock 700m in diameter in the central part of the Double-R 1 claim. The matrix is light to medium grey, medium to coarse grained and weakly to moderately magnetic. Clear to white euhedral coarse grained feldspar phenocrysts occupy 40% to 60% of the rock mass. Dark green to black coarse grained biotite and medium to coarse euhedral hornblende phenocrysts form 5% to 10% of the rock. Trace to 2% pyrite occurs disseminated throughout the matrix. Chalcopyrite occurs as disseminations and fracture coatings in amounts up to 3%.

Biotite feldspar porphyry (BFP) occurs as dikes and sills intruding the biotite granodiorite and nearby hornfels units within the grid area. BFP is light to medium grey, fine grained, with conspicuous phenocrysts of biotite and euhedral plagioclase. Mafic minerals consist of phenocrysts of dark green biotite and hornblende. Trace to 1% very fine to fine grained chalcopyrite occurs as disseminations and fracture coatings throughout the BFP dikes.

***Mineralization***

Mineralization is associated with dikes of biotite feldspar porphyry where chalcopyrite occurs as fine grained disseminations, fracture coatings, quartz veins and rarely as sulphide-rich veinlets to 3mm thick in both the BFP dikes and nearby biotite granodiorite.

Quartz veins occur throughout the biotite granodiorite and BFP dikes. Veins range from subparallel 1cm to 3cm thick white quartz veins to weakly developed stockworks of white, grey and banded quartz-chalcedony veinlets. Chalcopyrite, molybdenite and pyrite occur disseminated within quartz veins, as well as in sulphide-rich veinlets 3mm thick.

***Alteration***

Weak to intense argillic alteration occurs in zones up to ten metres wide throughout the biotite granodiorite and to a lesser extent in BFP dikes. The zones occur adjacent to gouge zones, fractures and quartz veins and are evident as chalk white, soft kaolinitic feldspar pseudomorphs in a tan-coloured matrix. Original biotite and hornblende phenocrysts are indiscernible. Sericite is present along fracture surfaces and locally throughout the matrix.

Copper mineralization is associated with secondary biotite that, in weakly altered rocks, forms partial replacements of hornblende. In the bottom of hole SH93-1 and BFP dikes in SH93-5, secondary biotite replaces all of the primary hornblende and forms bundles and aggregates of felty brown biotite throughout the matrix.

## Item 8.0: Deposit Types

The most important mineral occurrences in the area of the Property are gold-bearing porphyry copper deposits associated with the Eocene Babine intrusions and the Late Cretaceous Bulkley intrusions. The nearby, formerly producing Bell and Granisle mines and many major prospects are located in the same assemblage of rocks as the Double R property. Other intrusion related models that may be significant are the subvolcanic copper/gold/silver model, and the polymetallic silver/lead/zinc model. The most important focus for exploration on the Property is for calcalkaline porphyry copper-gold deposits.

### 8.1 Porphyry copper/molybdenum deposits

The porphyry Copper/Molybdenum target is the main deposit type thought to be associated with the Double R property. Panteleyev, (1995) describes the Porphyry Cu+/-Mo+/-Au model in Selected British Columbia Mineral Deposit Profiles, Volume 1 - Metallics and Coal, Open File 1995-20, pages 87-92 as a Calcalkaline porphyry Cu, Cu-Mo, Cu-Au deposit type. Classic British Columbia examples include: Brenda (092HNE047), Berg (093E 046), Huckleberrry (093E 037) and Schaft Creek (104G 015); while others include Casino (Yukon, Canada), Inspiration, Morenci, Ray, Sierrita-Experanza, Twin Buttes, Kalamazoo and Santa Rita (Arizona, USA), Bingham (Utah, USA),El Salvador, (Chile), Bajo de la Alumbrera (Argentina).

Host intrusions vary from coarse-grained phaneritic to porphyritic stocks, batholiths and dike swarms, with compositions that range from quartz diorite to granodiorite and quartz monzonite. There are commonly multiple emplacements of intrusive phases and a wide variety of breccias that modify the stock geometry. The deposits usually exhibit a lateral outward zoning of alteration and sulphide minerals from a potassic (K-feldspar and biotite) altered core through phyllic (quartz-sericite-pyrite) alteration to propylitic (chlorite-epidote-calcite). Less commonly argillic and in the uppermost parts of some ore deposits, advanced argillic (kaolinite-pyrophyllite) alteration occur.

Characteristics of this deposit type have large zones, up to 10 $km^2$ in size, of hydrothermally altered rock containing stockworks of quartz veins and veinlets, closely spaced fractures and breccia zones containing pyrite and chalcopyrite +/- molybdenite, bornite and magnetite. Disseminated sulphide minerals are present but in minor amounts. Deposit boundaries are determined by economic factors that outline ore zones within larger areas of low-grade, concentrically zoned mineralization.

Ore controls include igneous contacts with the surrounding wallrocks and internal contacts between intrusive phases; cupolas and the uppermost, bifurcating parts of stocks, dike swarms, early formed intrusive breccias and hydrothermal breccias. Ore minerals are chalcopyrite; molybdenite, lesser bornite and rare (primary) chalcocite. Subordinate minerals are tetrahedrite/tennantite, enargite and minor gold, electrum and arsenopyrite. In many deposits late veins commonly contain galena and sphalerite in a gangue of quartz, calcite and barite.

Two main periods of deposit formation occurred in the Canadian Cordillera during the Triassic/Jurassic (210-180 Ma) and Cretaceous/Tertiary (85-45 Ma). Elsewhere deposits are mainly Tertiary, but range from Archean to Quaternary.

British Columbia porphyry Cu/Mo ± Au deposits range from <50 to >900 Mt with 0.2 to 0.5% Cu, 0.0 to 0.04% Mo, <0.1 to 0.6gm/t Au, and 1 to 3gm/t Ag. Median values for 40 B.C. deposits with reported reserves are: 115 Mt with 0.37% Cu, 0.01% Mo, 0.3gm/t Au and 1.3gm/t Ag.

Porphyry deposits contain the largest reserves of Cu, significant Mo resources and close to 50% of Au reserves in British Columbia.

### 8.1.1 Babine Lake District Porphyry Cu-Au Deposits

Common features shared by porphyry copper-gold deposits in the Babine Lake district include porphyritic host lithology, concentric alteration, pyrite halo, polymetallic peripheral veins and coincident north to northwest trending regional faults. Associated biotite-feldspar, hornblende-feldspar, or feldspar porphyry plugs and dikes are commonly less than one square kilometre. They are ubiquitously mineralized with magnetite. The cores of the deposits show a potassic alteration that is dominated by biotite, and commonly contains magnetite. Annular phyllic (quartz-sericite-pyrite) alteration surrounds the core sections. Pyrite halos surrounding deposits are up to 300 metres wide. Mineralization is principally chalcopyrite and pyrite, with lesser bornite, and possibly molybdenite, occurring as disseminations, fracture coatings and in fine stockworks of quartz.

Exploration guides are summarized:
1. Ubiquitous magnetite in the host intrusive, and common magnetite in the central potassic alteration zone make an excellent target for magnetic surveys.
2. Pyrite halos provide a broad target for which induced polarization (IP) technique is very effective.
3. Copper signature in soil samples ranges from 100ppm to 500ppm for individual deposits.
4. Zinc signature in soils is effective in detecting the outer margin of the pyrite halo.
5. Target grades for economic deposits are 0.45% Cu and 0.23 g/t Au.

(Carter et al, 1995)

Panteleyev (1995) indicates that central zones with Cu commonly have coincident Mo, Au and Ag with possibly Bi, W, B and Sr anomalies. Peripheral enrichment in Pb, Zn, Mn, V, Sb, As, Se, Te, Co, Ba, Rb and possibly Hg is documented.

**8.2 Subvolcanic copper/gold/silver veins**
Significant British Columbia examples are Equity Silver (093L 001) and the Thorn prospect (104K031, 116).

Panteleyev (1995) describes this transitional or intrusion-related (polymetallic) stockwork and vein model as pyritic veins, stockworks and breccias in subvolcanic intrusive bodies with stratabound to discordant massive pyritic replacements, veins, stockworks, disseminations and related hydrothermal breccias in country rocks. These deposits are located near or above porphyry Cu hydrothermal systems and commonly contain pyritic auriferous polymetallic mineralization with Ag sulphosalt and other As and Sb-bearing minerals. Extensional tectonic regimes allow high-level emplacement of the intrusions. Rhyodacite and dacite flow-dome complexes with fine to coarse-grained quartz-phyric intrusions are common. Dike swarms and other small subvolcanic intrusions are likely to be present.

These deposits represent a transition from porphyry copper to epithermal conditions with a combination of porphyry and epithermal characteristics. Mineralization is related to hydrothermal systems derived from porphyritic, subvolcanic intrusions and occurs in strongly fractured to crackled zones in cupolas and internal parts of intrusions and flow-dome complexes and along faulted margins of high-level intrusive bodies. Stockworks and closely-spaced to sheeted sets of sulphide-bearing veins occur within intrusions and as structurally controlled and stratabound or bedding plane replacements along permeable units and horizons in surrounding country rock. Veins and stockworks form in transgressive hydrothermal fluid conduits that can pass into pipe-like and planar breccias. Breccia bodies are commonly tens of metres and, rarely, hundreds metres in size. Massive sulphide zones can pass outward into auriferous pyrite-quartz-sericite veins and replacements. Multiple generations of veining and hydrothermal breccias are common. Pyrite is dominant and quartz is minor to absent in veins. The vein and replacement style deposits can be separated from the deeper porphyry Cu mineralization by 200 to 700 m. Ore mineralogy consists of pyrite, commonly as auriferous pyrite, chalcopyrite, tetrahedrite/tennantite; enargite/luzonite, covellite, chalcocite, bornite, sphalerite, galena, arsenopyrite, argentite, sulphosalts, gold, stibnite, molybdenite, wolframite or scheelite, pyrrhotite, marcasite, realgar, hematite, tin and bismuth minerals. Depth zoning is commonly evident with pyrite-rich deposits containing enargite near surface, passing downwards into tetrahedrite/tennantite + chalcopyrite and then chalcopyrite in porphyry intrusions at depth.

The deposits can be quite large such as those at Equity Silver where the bulk mineable reserves were approximately 30Mt grading 0.25% Cu, 86gm/t Ag and 1gm/t Au. International examples include the Recsk deposit in Hungary where a shallow breccia-hosted Cu-Au ores overlie a porphyry deposit containing ~1000 Mt with 0.8% Cu. The closely spaced pyritic fracture and vein systems at Kori Kollo, La Joya district, Bolivia contained 10 Mt oxide ore with 1.62 gm/t Au and 23.6 gm/t Ag and had sulphide ore reserves of 64 Mt at 2.26 gm/t Au and 13.8 gm/t Ag.

**8.3 Polymetallic silver/lead/zinc veins**

Lefebure and Church (1996) describe the deposit type as sulphide-rich veins containing sphalerite, galena, silver and sulphosalt minerals in a quartz and carbonate gangue. The deposit type is analogous to silver/base metal epithermal deposits and can host significant Ag, Pb, Zn (Cu, Au, Mn).

British Columbia examples include: Wellington (082ESE192) and Highland Lass-Bell (082ESW030, 133), Beaverdell camp; Silver Queen (093L 002), Duthie (093L 088), Cronin (093L 127), Porter-Idaho (103P 089), Indian (104B 031)

Veins occur in country rock marginal to an intrusive stock. The veins typically crosscut volcanic or meta-sedimentary sequences and follow pre-existing volcano-tectonic structures, such as caldera ring-faults or radial faults. In some cases the veins cut older intrusions. In many districts there is a close association to felsic to intermediate intrusive bodies. Mafic igneous rocks are less common. Many veins are associated with dikes that follow the same structures. Veins are typically narrow, steeply dipping, tabular or splayed and occur as sets of parallel or offset veins. Individual veins can vary from centimetres up to more than 3 m wide and can be traced from a few hundred metres to more than 1000m in length and depth. Veins can widen to tens of metres in stockwork or breccia zones. Mineralization occurs as fine-grained disseminations or coarse-grained sulphides as patches and pods and is generally confined to the veins.

Regional structures are important to ground preparation but, veins are typically associated with smaller, second order structures. In igneous rocks the faults may relate to volcanic centers. Significant deposits are restricted to competent lithologies that are more susceptible to brittle failure. Dikes are often emplaced along the same faults and at some locations are believed to be roughly contemporaneous with mineralization. Some polymetallic veins are found surrounding intrusions with porphyry deposits or prospects. Ore mineralogy is comprised of galena, sphalerite, tetrahedrite-tennantite and other sulphosalts including pyrargyrite, stephanite, bournonite and acanthite, native silver, chalcopyrite, pyrite, arsenopyrite, stibnite. Silver minerals often occur as inclusions in galena. Native gold and electrum occurs in some deposits yet Au grades are normally low for the amount of sulphides present. Vein gangue mineralogy is composed of primarily quartz and carbonate and may contain specular hematite, hematite, barite and fluorite. Alteration is usually limited to a few metres, but in volcanic and intrusive hostrocks the alteration assemblage is argillic, sericitic or chloritic and may be quite extensive.

British Columbian deposits are mainly Cretaceous to Tertiary in age but can date back as old as the Proterozoic. Individual vein systems can range from several hundred to several million tonnes grading from 5 to 1500gm/t Ag, 0.5 to 20% Pb and 0.5 to 8% Zn. In British Columbia, for deposits larger than 20,000 tonnes, the average is 161,000 tonnes with grades of 304gm/t Ag, 3.47% Pb and 2.66% Zn. Copper and gold are reported in less than half the occurrences, with average grades of 0.09% Cu and 4gm/t Au. Polymetallic veins are the most common deposit type in British Columbia with over 2,000 occurrences and were a significant source of Ag, Pb and Zn until the 1960s. They have declined in importance as industry focused more on syngenetic massive sulphide deposits. Larger polymetallic vein deposits are still attractive because of their high grades and relatively easy benefication.

## Item 9: Exploration

### 9.1 Current Evaluation Program

The 2013 exploration program consisted of the collection of 47 humus Ah samples and 5 rock samples. Humus was collected with 100m sample spacing on lines 250m apart. Lines were oriented north/south to test portions of the +1000 gamma magnetic anomaly outlined from the 1993 airborne survey completed by Phelps Dodge Corporation of Canada, Limited. The airborne anomaly correlated closely to an east/west trending ground magnetic anomaly outlined by ground geophysical surveys in 1968. Much of the lower areas on the property is blanked with glacial till of undetermined thickness. Humus Ah sampling was chosen as a means of trying to see through the quaternary cover and determine areas of possible metal enrichment associated with the suspected blind intrusion. The program was hampered somewhat by extreme temperatures reported up to 34°C and thick underbrush, devils club and stinging nettles. A total of five lines were sampled over a one kilometer strike length of the magnetic anomaly, with the furthest east line positioned vertically over the 1.1m of 4.2% Cu intersected in Noranda's SD-80-1 drill hole.

Where sulphide mineralization was encountered as float or in outcrop, a representative sample was collected for analysis. GPS coordinates were recorded at each humus and rock sample site. Sample descriptions are located in Table 3

The program was completed from a road accessible camp located on Babine Lake, immediately south of Huston Forest Products' Morrison Logging Camp. Daily flights to the property utilized a Cessna 185 fixed wing aircraft, with flight times generally less than 10 minutes.

**Table 2: Sample Descriptions**

| Sample # | UTM easting | UTM northing | Sample type | Sample Description |
|---|---|---|---|---|
| 1043451 | 667330 | 6122753 | Ah | humus |
| 1043452 | 667323 | 6122666 | Ah | humus |
| 1043453 | 667328 | 6122552 | Ah | humus |
| 1043454 | 667330 | 6122450 | Ah | humus |
| 1043455 | 667336 | 6122357 | Ah | humus |
| 1043456 | 667329 | 6122248 | Ah | humus |
| 1043457 | 667330 | 6122151 | Ah | humus |
| 1043458 | 667329 | 6122043 | Ah | humus |
| 1043459 | 667332 | 6121951 | Ah | humus |
| 1043460 | 667331 | 6121951 | Ah | duplicate |
| 1043461 | | | | standard |
| 1043462 | 667327 | 6121851 | Ah | humus |
| 1043463 | 667342 | 6121744 | Ah | humus |
| 1043464 | 667326 | 6121657 | Ah | humus |
| 1043465 | 667077 | 6121662 | Ah | humus |
| 1043466 | 667088 | 6121763 | Ah | humus |
| 1043467 | 667081 | 6121861 | Ah | humus |
| 1043468 | 667087 | 6121977 | Ah | humus |
| 1043469 | 667078 | 6122059 | Ah | humus |
| 1043470 | 667076 | 6122150 | Ah | humus |

| | | | | |
|---|---|---|---|---|
| 1043471 | 667085 | 6122244 | Ah | humus |
| 1043472 | 667085 | 6122353 | Ah | humus |
| 1043473 | 667065 | 6122451 | Ah | humus |
| 1043474 | 667079 | 6122551 | Ah | humus |
| 1043475 | 667081 | 6122651 | Ah | humus |
| 1043476 | 666831 | 6122449 | Ah | humus |
| 1043477 | 666829 | 6122350 | Ah | humus |
| 1043478 | 666830 | 6122250 | Ah | humus |
| 1043479 | 666824 | 6122150 | Ah | humus |
| 1043480 | 666831 | 6122049 | Ah | humus |
| 1043481 | 666829 | 6121954 | Ah | humus |
| 1043482 | 666821 | 6121861 | Ah | humus |
| 1043483 | 666844 | 6121785 | grab outcrop | Biotite granodiorite |
| 1043484 | 666829 | 6121762 | grab float | Medium grey-brown quartzite with 1-2% disseminated Py |
| 1043485 | 666825 | 6121752 | Ah | humus |
| 1043486 | 666823 | 6121645 | Ah | humus |
| 1043487 | 666579 | 6121649 | Ah | humus |
| 1043488 | 666557 | 6121721 | grab subcrop | Fine grained biotite-granodiorite with Tr. Py |
| 1043489 | 666579 | 6121756 | Ah | humus |
| 1043490 | 666580 | 6121756 | Ah | duplicate |
| 1043491 | | | | standard |
| 1043492 | 666584 | 6121845 | Ah | humus |
| 1043493 | 666586 | 6121950 | Ah | humus |
| 1043494 | 666576 | 6122049 | Ah | humus |
| 1043495 | 666582 | 6122146 | Ah | humus |
| 1043496 | 666580 | 6122265 | Ah | humus |
| 1043497 | 666587 | 6122346 | Ah | humus |
| 1043498 | 666575 | 6122453 | Ah | humus |
| 1043499 | 666339 | 6122157 | Ah | humus |
| 1043500 | 666354 | 6122055 | grab float | Biotite-Feldspar-Porphyry with 2% tarnished Py (Cpy?) |
| 1043501 | 666317 | 6122045 | Ah | humus |
| 1043502 | 666334 | 6121946 | Ah | humus |
| 1043503 | 666330 | 6121852 | Ah | humus |
| 1043504 | 666330 | 6121850 | grab subcrop | Very rusty, siliceous Quartz-Porphyry with 0.5cm quartz vein and 2% FeO |
| 1043505 | 666325 | 6121740 | Ah | humus |
| 1043506 | 666327 | 6121653 | Ah | humus |

Copper and precious metal values were low in the limited rock sampling program with one subcrop sample returning 883.2ppm Mo from a subcrop immediately below one of the historic drill roads on the western side of the property. The sample consisted of very rusty and siliceous quartz porphyry intrusive rock with a 0.5cm quartz vein. No sulphides were noted in the sample which contained roughly 2% iron oxide.

A QAQC program included the taking of duplicate humus samples and inserting pulp Standards into the sample stream at a ratio of approximately 1:20. Two humus duplicates and two pulp Standards were analyzed as part of the program. Rock sample certificates are found in Appendix A. Humus sample certificates are found in Appendix B.

Results of the humus survey were very encouraging with the identification of a number of northeast trending multi-element anomalies. Molybdenum values ranged from 0.29-15.96ppm, Cu from 7.16-773.78ppm, As from <0.1-41.2ppm, Ag from 17-881ppb and Au from <0.2-5.8ppb. Humus and rock location maps and elemental plots are located in pocket.

Response ratios are an efficient method of handling trace and ultra-trace data where absolute values are often meaningless. Calculated background for the various elements (1$^{st}$ Quartile) were 0.99ppm for Mo, 14.2ppm for Cu, 0.6ppm for As, 86ppb for Ag and 0.1ppb for Au. Stacked profiles offer a visual picture of areas that are considered anomalous compared to background values. The following charts offer transects across the property at a number of locations. The data is presented from the east transects to the west with all charts having south to the left and north to the right. (ie. looking west).

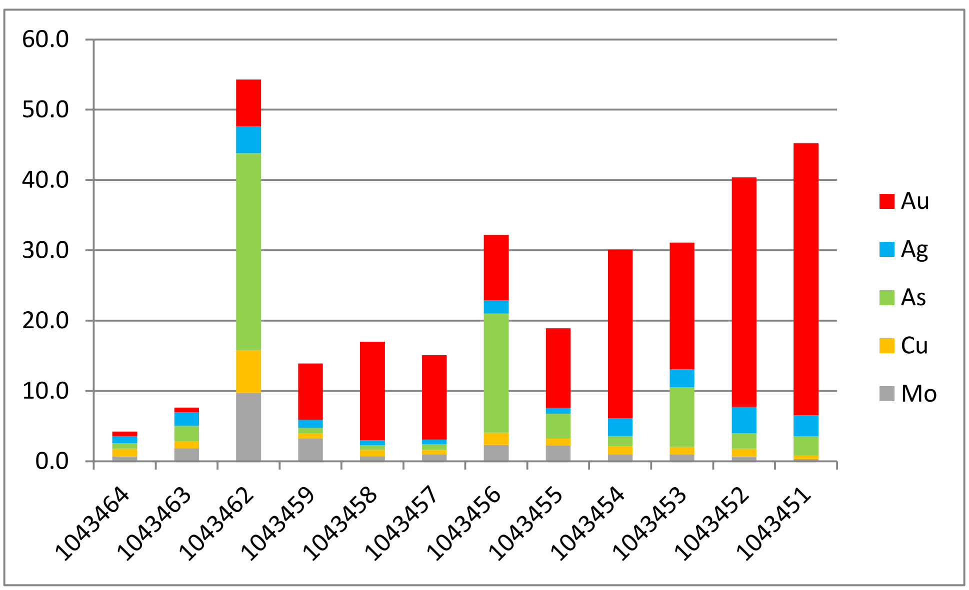


Figure 4: Stacked Response Ratios Line 667330E

The easternmost line was positioned to cross known mineralization from the 1980 drill program where 1.1m averaging 4.2% Cu was intersected at a down hole depth of 140m (~100m vertical depth) in SD-80-1. No mention is made in the Noranda drill report of any gold analyses being completed on the drill core. Glacial till depth at this location is approximately 20m. The mineralization surface projection is located roughly midway between samples1043459 and 1043462. Response Ratios show an increase in Mo, Cu, As and Ag values immediately south of the drill intersection and a marked increase in Au to the north of this point +/- anomalous As, Ag, (Mo). Response Ratios reach a high of 38.7 x background for Au in sample 1043451.

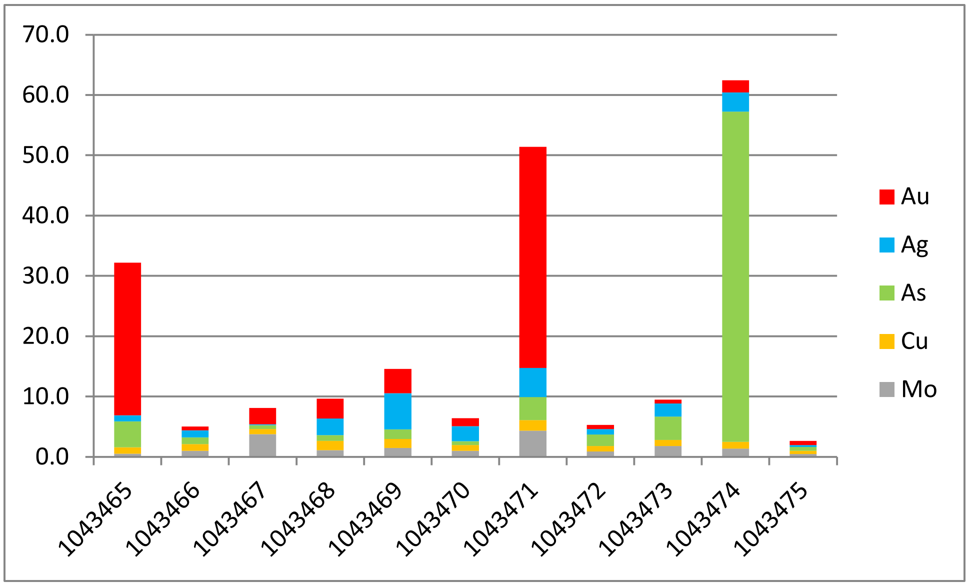


Figure 5: Stacked Response Ratios Line 667080E

Response Ratios suggest the presence of three Au anomalies the southernmost being possibly open ended beyond the area of sampling. Au RRs peak at 25.3 x background at sample 1043465 with As RRs of 4.3 x background. A second Au/Ag/As/Mo anomaly is present at sample 1043471. Here RRs are 36.7 for Au, 4.8 for Ag, 3.8 for As and 4.3 x background for Mo. Sample 1043467 also returned moderately anomalous Mo with a RR of 3.8 x background and 2.7 x background for Au. Precious metals in humus increase to the north over a distance of 200m to sample 1043469 with RRs of 6 for Ag and 4 x background for Au. An As/Ag anomaly, with minor Au, is seen to build to the north from sample 1043472 to 1043474. RRs build to a peak of 54.7 x background for As and 3.2 for Ag.

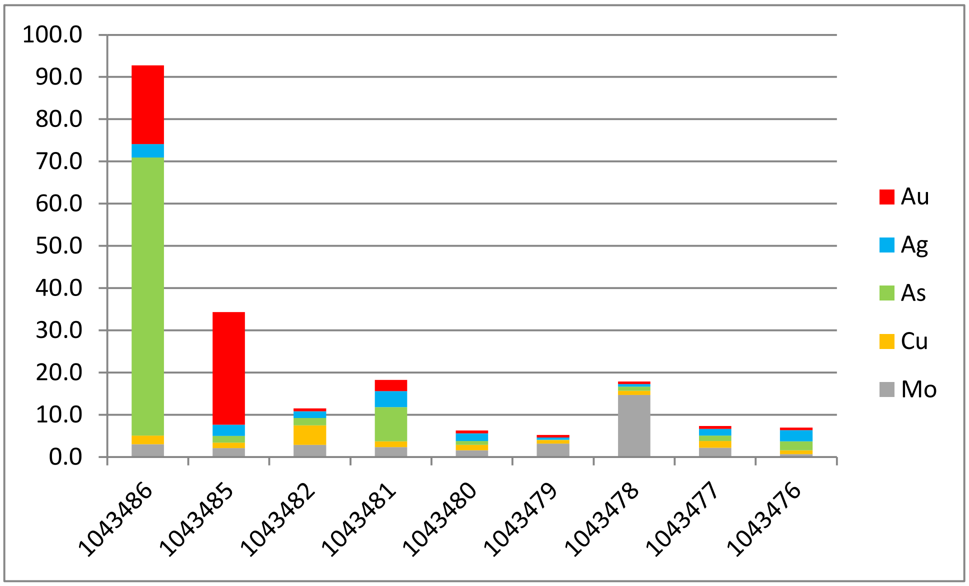


Figure 6: Stacked Response Ratios Line 666830E

Response Ratios on line 666830 suggest possibly two base metal anomalies. A 200m wide Mo anomaly is present from samples 1043479 to 1043477. Response Ratios peak at 14.7 x background for Mo. The area does not seem to have any precious metal enhancement at this point on the grid. A second, 300m wide, weak to moderate Mo/Cu anomaly is centred at sample 1043482. This site has anomalous Cu with RRs of 4.7 x background. Precious metals and As build strongly to the south with RRs for Au peaking at 26.7, 3.1 for Ag and 65.9 x background for As.

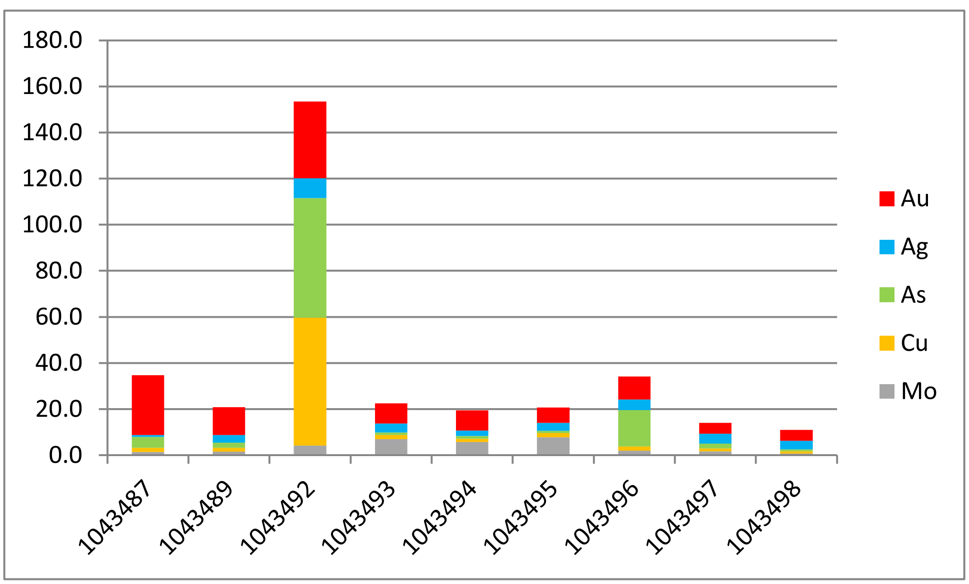


Figure 7: Stacked Response Ratios Line 666580E

Response Ratios for line 666580 show a marked increase in base metal values. A broad, +300m wide Mo/Cu anomaly is present from sample 1043492 to 1043495. The anomaly is moderately to strongly anomalous in Mo, with RRs between 4.2 and 7.8 x background. The southern end of the anomaly is strongly anomalous in Cu, RR of 55.5, As with a RR of 51.8, Ag with a RR of 8.6 and Au with a RR of 33.3 x background. The entire line is anomalous in Au with RRs between 4.7 and 33.3 x background.

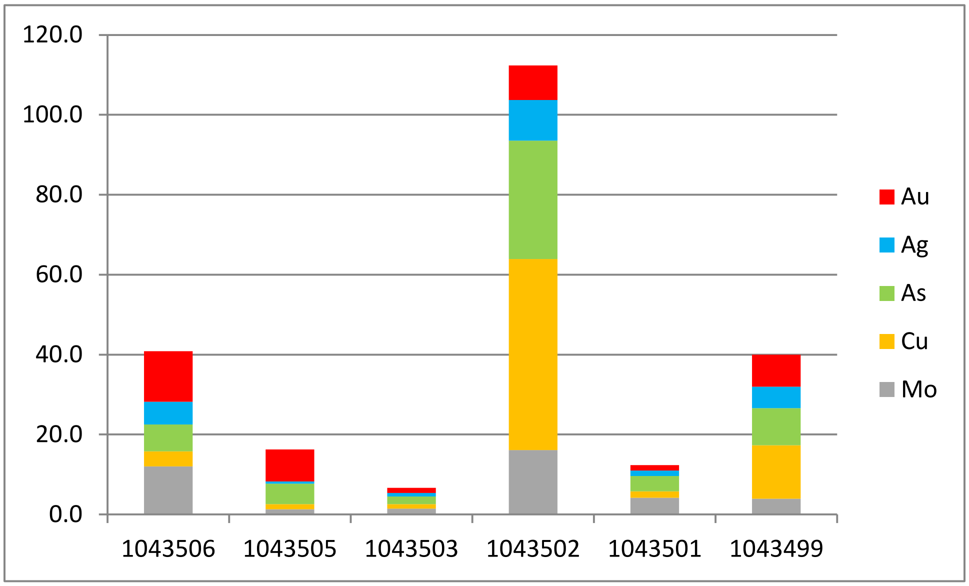


Figure 8: Stacked Response Ratios Line 666330E

Response Ratios for the westernmost line completed suggest open ended base and precious metal anomalies both to the north and south of areas sampled. Values increase to the south of sample 1043505 and peak with RRs of 12.1 for Mo, 3.8 for Cu, 6.7 for As, 5.7 for Ag and 12.7 x background for Au. Sample 1043502 is part of a three sample open-ended Mo anomaly over a +200m width. Sampling returned highly anomalous RRs of between 4 and 16.1 for Mo, 1.6 and 47.8 for Cu, 3.8 and 29.6 for As, 1.4 and 10.2 for Ag and between 1.3 and 8.7 x background for Au. Rock sample 1043504 (883ppm Mo) was collected 2m south of humus sample 1043503.

**Item 10: Drilling**

No drilling was completed as part of the exploration program.

**Item 11: Sample Preparation, Analyses and Security**

All rock samples were placed in clean 12x20 poly bags with a sample tag and tied closed with flagging tape. The samples were transported to Francois Lake where they were placed into a woven rice bag and sealed with a zip tie. Samples were then shipped via Greyhound to the ACME Prep Laboratory facilities in Smithers, BC.

Rocks were prepared using R200-250 methods where the sample was crushed to 80% passing 10 mesh. A 250g sub-sample was split and pulverized to 85% passing 200 mesh. Rock samples were analyzed for 36 elements plus gold. 30g splits were leached in hot (95˚C) Aqua Regia prior to elemental determination using ICP-ES (1DX3). Gold determinations were completed using a Fire Assay of a 30g split (G601).

Humus samples were collected in new 12x20 poly bags, placed in woven rice bags for delivery to the ACME prep lab in Smithers. Samples were prepared using the SS80 code whereby the samples were sieved to -80 mesh. The resulting sample was analyzed for 53 elements plus gold. 30g splits were leached in hot (95˚C) Aqua Regia prior to elemental determination using ICP-ES (1F06).

## Item 12: Data Verification

No data verification was completed as part of the exploration program.

## Item 13: Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical testing was completed as part of the exploration program.

## Item 14: Mineral Resource Estimates

No mineral resource estimates were completed as part of the exploration program

## Item 15: Adjacent Properties

Porphyry copper-gold deposits and occurrences in the Babine district, located approximately 9km to the southwest, described below, serve as analogues to the exploration model applied to the Property. The table below lists resources and production from major deposits in the district. The values from Bell and Granisle pre-date NI 43-101 reporting standards and should not be considered reliable. They are included as geological information only.

**Table 3: Resources and Production of major Babine Porphyry Deposits**

| Property | Mineral Resource | | | Mined | | | Reference | Category |
|---|---|---|---|---|---|---|---|---|
| | Million Tonnes | Cu % | Au g/t | Million Tonnes | Cu % | Au g/t | | |
| Bell | 296 | 0.46 | 0.20 | 77.2 | 0.47 | 0.26 | Carter et al, 1995 | non NI 43-101 compliant |
| Granisle | 119 | 0.41 | 0.15 | 52.7 | 0.47 | 0.20 | Carter et al, 1995 | non NI 43-101 compliant |
| Morrison | 207 | 0.39 | 0.2 | | | | Simpson, 2007 | measured+ indicated |
| Hearne Hill | 0.14 | 1.73 | 0.8 | | | | Simpson, 2008 | indicated |

The author has been unable to verify the information on mineral occurrences and deposits detailed below. Mineralization style and metal grades described are not necessarily representative of mineralization that may exist on the subject

Property, and are included for geological illustration only. The mine and mineral occurrence descriptions described as follows are modified after the BC MINFILE occurrence descriptions and BC ARIS assessment report files.

**15.1 Bell Copper Mine (Minfile 093M 01, rev. McMillan, 1991)**

The Bell mine is a porphyry copper deposit hosted primarily in a biotite-feldspar porphyry (BFP) stock of the Eocene Babine Intrusions. The stock is crosscut by the northwest trending Newman fault which juxtaposes the two groups that host the intrusion. These groups are the Lower Jurassic Telkwa Formation (Hazelton Group) and the Lower Cretaceous Skeena Group. Telkwa Formation rocks are primarily fine grained tuffs and andesites and the younger Skeena Group rocks are mostly fine grained greywackes. The deposit overlaps onto both of these assemblages. The mineralization has been dated at 51.0 million years (Bulletin 64).

Chalcopyrite and lesser bornite occur as disseminations in the rock matrix, in irregular quartz lenses and in a stockwork of 3 to 6- millimetre quartz veinlets which cut the feldspar porphyries and the siltstones. Molybdenite is rare, and occurs in the feldspar porphyry in the northern part of the mineralized zone. Gold occurs as electrum associated with the copper mineralization. Specular hematite and magnetite are common in quartz veinlets and hairline fractures. There is also significant supergene enrichment with chalcocite coating chalcopyrite. A supergene chalcocite zone capped the deposit and extended to depths of 50 to 70 metres. Some gypsum together with copper-iron sulphate minerals and iron oxides were also present (Open File 1991-15).

The ore zone has pervasive potassic (mainly biotitization) alteration with a surrounding concentric halo of chlorite and sericite-carbonate alteration (propylitic and argillic) which corresponds to the two kilometre pyrite halo which surrounds the deposit. A late quartz-sericite-pyrite-chalcopyrite alteration has been superimposed on part of the earlier biotite-chalcopyrite ore at the western part of the ore body. A number of late-stage breccia pipes cut the central part of the ore zone near the Newman fault and alteration associated with their intrusion has apparently depleted the copper grades in the area of the pipes. Veinlets of gypsum are present in the upper part of the ore body. Anhydrite is a significant component in the biotite chalcopyrite zone but is not present in other alteration facies. Monominerallic veinlets of anhydrite are rare (Open File 1991-15).

The copper mineralization occurs in a crescent-shaped zone along the western contact of the porphyry plug. Better grades of copper mineralization are contained in a 60 by 90-metre thick flat-lying, blanket-like deposit which is connected to a central pipe-like zone, centred on the western contact of the intrusive. The pipe-like zone of copper mineralization is 150 metres in diameter and extends to a depth of at least 750 metres.

Reserves in the open pit and in the Extension zone were (in 1990) 71,752,960 tonnes grading 0.23 gram per tonne gold, 0.46 per cent copper and 0.48 gram per tonne silver (Noranda Inc. Annual Report 1990).

**15.2 Granisle Mine (Minfile 093L 146, rev. Duffett, 1987)**

MacDonald Island is underlain by Lower-Middle Jurassic Telkwa Formation (Hazelton Group) volcanics comprised of green to purple waterlain andesite tuffs and breccias with minor intercalated chert pebble conglomerates in the central and eastern part of the island. These rocks strike northerly and dip at moderate angles to the west and are overlain in the western part of the island by massive and amygdaloidal andesitic flows and thin bedded shales.

Copper mineralization at the Granisle mine is associated with a series of Eocene Babine Intrusions which occur in the central part of the island. The oldest is an elliptical plug of dark grey quartz diorite approximately 300 by 500 metres in plan. The most important intrusions are biotite-feldspar porphyries of several distinct phases which overlap the period of mineralization. The largest and oldest is a wide north easterly trending dike which is intrusive into the western edge of the quartz diorite pluton. The contact is near vertical and several small porphyry dikes radiate from the main dike. Several of the phases of the porphyry intrusions are recognized within the pit area. Potassium-argon age determinations on four biotite samples collected in and near the Granisle ore body yielded the mean age of 51.2 Ma plus or minus 2 Ma (Minister of Mines Annual Report 1971).

The wide porphyry dike which strikes northeast is bounded by two parallel northwest striking block faults. The westernmost crosses the island south of the mine and the eastern fault extends along the channel separating the island from the east shore of Babine Lake.

An oval zone of potassic alteration is coincident with the ore zone. The main alteration product is secondary biotite. This potassic alteration zone is gradational outward to a quartz-sericite- carbonate-pyrite zone which is roughly coaxial with the ore zone. Within this zone, the intrusive and volcanic rocks are weathered to a uniform buff colour with abundant fine-grained quartz. Mafic minerals are altered to sericite and carbonate with plagioclase clouded by sericite. Pyrite occurs as disseminations or as fracture-fillings. Beyond the pyrite halo, varying degrees of propylitic alteration occurs in the volcanics with chlorite, carbonate and epidote in the matrix and carbonate-pyrite in fractured zones. Clay mineral alteration is confined to narrow gouge in the fault zones.

The principal minerals within the ore zone are chalcopyrite, bornite and pyrite. Coarse-grained chalcopyrite is widespread, occurring principally in quartz-filled fractures with preferred orientations of 035 to 060 degrees and 300 to 330 degrees with near vertical dips. Bornite is widespread in the southern half of the ore zone with veins up to 0.3 metres wide hosting coarse-grained bornite, chalcopyrite, quartz, biotite and apatite.

Gold and silver are recovered from the copper concentrates. Molybdenite occurs within the ore zone, most commonly in drusy quartz veinlets which appear to be later than the main stage of mineralization. Magnetite and specularite are common in the north half of the ore zone where they occur in fractures with chalcopyrite and pyrite. Pyrite occurs in greatest concentrations peripheral to the orebody as blebs, stringers and disseminations.

Mining at Granisle was suspended in mid-1982. Production from 1966 to 1982 totalled 52,273,151 tonnes yielding 69,752,525 grams of silver, 6,832,716 grams of gold, 214,299,455 kilograms of copper and 6,582 kilograms molybdenum.

Unclassified reserves are 14,163,459 tonnes grading 0.442 per cent copper (Noranda Mines Ltd. Annual Report 1984).

Remaining in situ reserves, as modelled in 1992 using a 0.30 per cent copper cutoff, are estimated to be 119 million tonnes grading 0.41 per cent copper and 0.15 grams per tonne gold (CIM Special Volume 46, page 254).

**15.3 Morrison–Hearne Hill Project (From Simpson, 2007)**

The Morrison deposit is a calc-alkaline copper-gold porphyry hosted by a multi-phase Eocene intrusive body intruding Middle to Upper Jurassic Ashman Formation siltstones and greywackes. Copper-gold mineralization consists primarily of chalcopyrite and minor bornite concentrated in a central zone of potassic alteration. A pyrite halo is developed in the chlorite-carbonate altered wall rock surrounding the copper zone.

Sulphide mineralization at Morrison shows strong spatial relationships with the underlying biotite-feldspar porphyry (BFP) plug and associated alteration zones. The central copper-rich core is hosted mainly within a potassically altered BFP plug with intercalations of older siltstone. This plug was initially intruded into the siltstone unit as a near-vertical sub-circular intrusion approximately 700 m in diameter. It was subsequently disrupted by the East and West faults and now forms an elongated body extending some 1500 metres in the northwest direction.

Chalcopyrite is the primary copper-bearing mineral and is distributed as fine grained disseminations in the BFP and siltstone, as fracture coatings or in stockworks of quartz. Minor bornite occurs within the higher grade copper zones as disseminations and associated with the quartz-sulphide stockwork style of mineralization.

Alteration is concentrically zoned with a central biotite (potassic) alteration core surrounded by a chlorite-carbonate zone. No well-developed phyllic zone has been identified.

Hearne Hill deposit lies two km southeast of Morrison. The Hearne Hill Property has been extensively explored, and a comparatively small but high grade copper-gold resource has been defined in two breccia pipes within a larger porphyry system.

**15.4 Fireweed (Minfile 093M 151, rev. Payie, 2009)**

The Fireweed occurrence is located on the south side of Babine Lake, approximately 54km northeast of Smithers. In the occurrence area, Upper Cretaceous marine to non-marine clastic sediments, of Skeena group are found adjacent to volcanic rocks of the Rocky Ridge Formation. Interbedded mudstones, siltstones and sandstones of a thick deltaic sequence, appear to underlie much of the area and were originally thought to belong to the Kisum Formation of the Lower Cretaceous Skeena Group. They are now assigned to the Red Rose Formation. The sediments commonly strike 070 to 080 degrees and dip sub-vertically. Locally the strike varies to 020-030 degrees at the discovery outcrop, the MN showing. Several diamond-drill holes have intersected sills of strongly altered feldspar porphyritic latite.

Skeena Group sediments are dominantly encountered in diamond drilling. The sediments are dark and medium to light grey and vary from mudstone and siltstone to fine and coarse-grained sandstone. Bedding can be massive, of variable thickness, changing gradually or abruptly to finely laminated. Bedding features such as rip-up clasts, load casts and cross-bedding are common. The beds are cut by numerous faults, many of them strongly graphitic. Drilling indicates Skeena Group sediments are in fault contact with Hazelton Group volcanic rocks. Strongly sericitized and carbonatized latite dikes cut the sediments.

Mineralization generally occurs in one of three forms: 1) breccia zones are fractured or brecciated sediments infilled with fine to coarse-grained massive pyrite-pyrrhotite and lesser amounts of sphalerite, chalcopyrite and galena 2) disseminated sulphides occur as fine to very fine grains which are lithologically controlled within coarser grained sandstones, pyrite, marcasite, sphalerite, galena and minor tetrahedrite are usually found interstitial to the sand grains and 3) massive sulphides, which are finegrained, commonly banded, containing rounded quartz-eyes and fine sedimentary fragments, occur as distinct bands within fine-grained sediments. The massive sulphides generally contain alternating bands of pyrite/ pyrrhotite and sphalerite/galena. They are associated with the breccia zones and are commonly sandwiched between altered quartz latite dikes.

Alteration in the sediments occurs in the groundmass and appears associated with the porous, coarse sandstones. Common secondary minerals are quartz, ankerite, sericite, chlorite and kaolinite.

Three main zones have been identified by geophysics (magnetics, induced polarization) and are named the West, East and South zones. Three other zones identified are the 1600, 3200 and Jan zones.

**15.5 Equity Silver (Minfile 093L 001, rev. Robinson, 2009)**
Silver, copper and gold were produced from the Equity Silver deposit, located to the southeast of the Property.

The mineral deposits are located within an erosional window of uplifted Cretaceous age sedimentary, pyroclastic and volcanic rocks near the midpoint of the Buck Creek Basin. Strata within the inlier strike 015 degrees with 45 degree west dips and are in part correlative with the Lower-Upper Skeena(?) Group. Three major stratigraphic units have been recognized. A lower clastic division is composed of basal conglomerate, chert pebble conglomerate and argillite. A middle pyroclastic division consists of a heterogeneous sequence of tuff, breccia and reworked pyroclastic debris. This division hosts the main mineral deposits. An upper sedimentary-volcanic division consists of tuff, sandstone and conglomerate. The inlier is flanked by flat-lying to shallow dipping Eocene andesitic to basaltic flows and flow breccias of the Francois Lake Group (Goosly Lake and Buck Creek formations).

Intruding the inlier is a small granitic intrusive (57.2 Ma) on the west side, and Eocene Goosly Intrusions gabbro-monzonite (48 Ma) on the east side.

The chief sulphides at the Equity Silver mine are pyrite, chalcopyrite, pyrrhotite and tetrahedrite with minor amounts of galena, sphalerite, argentite, minor pyrargyrite and other silver sulphosalts. These are accompanied by advanced argillic alteration clay minerals, chlorite, specularite and locally sericite, pyrophyllite, andalusite, tourmaline and minor amounts of scorzalite, corundum and dumortierite. The three known zones of significant mineralization are referred to as the Main zone, the Southern Tail zone and the more recently discovered Waterline zone. The ore mineralization is generally restricted to tabular fracture zones roughly paralleling stratigraphy and occurs predominantly as veins and disseminations with massive, coarse-grained sulphide replacement bodies present as local patches in the Main zone. Main zone ores are fine-grained and generally occur as disseminations with a lesser abundance of veins. Southern Tail ores are coarse-grained and occur predominantly as veins with only local disseminated sulphides. The Main zone has a thickness of 60 to 120 metres while the Southern Tail zone is approximately 30 metres thick. An advanced argillic alteration suite includes andalusite, corundum, pyrite, quartz, tourmaline and scorzalite. Other zones of mineralization include a zone of copper-molybdenum mineralization in a quartz stockwork in and adjacent to the quartz monzonite stock and a large zone of tourmaline-pyrite breccia located to the west and northwest of the Main zone.

Alteration assemblages in the Goosly sequence are characterized by minerals rich in alumina, boron and phosphorous, and show a systematic spatial relationship to areas of mineral deposits. Aluminous alteration is characterized by a suite of aluminous minerals including andalusite, corundum, pyrophyllite and scorzalite. Boron-bearing minerals consisting of tourmaline and dumortierite occur within the ore zones in the hanging wall section of the Goosly sequence. Phosphorous-bearing minerals including scorzalite, apatite, augelite and svanbergite occur in the hanging wall zone, immediately above and intimately associated with sulphide minerals in the Main and Waterline zones. Argillic alteration is characterized by weak to pervasive sericite-quartz replacement. It appears to envelope zones of intense fracturing, with or without chalcopyrite/tetrahedrite mineralization.

The copper-silver-gold mineralization is epigenetic in origin. Intrusive activity resulted in the introduction of hydrothermal metal-rich solutions into the pyroclastic division of the Goosly sequence. Sulphides introduced into the permeable tuffs of the Main and Waterline zones formed stringers and disseminations which grade randomly into zones of massive sulphide. In the Southern Tail zone, sulphides formed as veins, fracture-fillings and breccia zones in brittle, less permeable tuff. Emplacement of post-mineral dikes into the sulphide-rich pyroclastic rocks has resulted in remobilization and concentration of sulphides adjacent to the intrusive contacts. Remobilization, concentration and contact metamorphism of sulphides occurs in the Main and Waterline zones at the contact with the postmineral gabbro-monzonite complex.

The Southern Tail deposit has been mined out to the economic limit of an open pit. With its operation winding down, Equity Silver Mines does not expect to continue as an operating mine after current reserves are depleted. Formerly an open pit, Equity is mined from underground at a scaled-down rate of 1180 tonnes-per-day. Proven and probable ore reserves at the end of 1992 were about 286,643 tonnes grading 147.7 grams per tonne silver, 4.2 grams per tonne gold and 0.46 per cent copper, based on a 300 grams per tonne silver-equivalent grade. Equity has also identified a small open-pit resource at the bottom of the Waterline pit which, when combined with underground reserves, should provide mill feed through the first two months of 1994 (Northern Miner - May 10, 1993).

Equity Silver Mines Ltd. was British Columbia's largest producing silver mine and ceased milling in January 1994, after thirteen years of open pit and underground production. Production totaled 2,219,480 kilograms of silver, 15,802 kilograms of gold and 84,086 kilograms of copper, from over 33.8 Million tonnes mined at an average grade of 0.4 per cent copper, 64.9 grams per tonne silver and 0.46 gram per tonne gold.

**Item 16: Other Relevant Data and Information**

There is no other relevant data or information other than that included in this report.

## Item 17: Interpretation and Conclusions

The area is predominantly till covered and limited surface exploration in the area has proven difficult. Humus anomalies identified in 2013 are generally located up ice of historic B-horizon soils and there are many historic anomalies that remain unexplained. Many of these anomalous historic soil samples are located up ice from the 1000 gamma magnetic anomaly identified from the 1993 Phelps Dodge airborne survey. Humus Response Ratios correlate only loosely to the magnetic anomaly and appear to trend to the northeast sub-parallel to and along strike from a BFP dyke mapped by government geologists to the southwest of the present property boundaries. Many of the known mineralized Babine intrusions are located at or near the intersection of northeast and regional northwest structures. The Morrison fault is a major northwest trending fault that traverses the eastern part of the property near the shores of Morrison Lake. Drilling on the higher elevations well away from the Morrison Fault has intersected highly anomalous copper values (0.24% over 15.9m in drillhole SH-93-1).

Humus sampling completed in 2013 identified a number of moderate to high contrast apical responses for Mo, Cu, Au, Ag, As and lesser Sb. La and Ce produced both apical and rabbit-ear anomalies and are thought to indicate the presence of underlying acid intrusive rocks. Base and precious metal responses were often open beyond the limit of sampling.

It is the author's opinion that the Double R property is a property that has significant potential for new discoveries and as such is a property of merit, worthy of further exploration expenditures.

## Item 18: Recommendations

The Double R property should be expanded to the west and southwest to cover the mapped BFP dyke, parallel structures and historic access roads into the property. A minimum of 24 cells would be required to cover the area of prime interest.

Comprehensive mapping at 1:10,000 scale and prospecting should be undertaken in parts of the property where airphoto analysis has identified outcrop coincident with northwest and northeast trending structures. Additional humus sampling is required to outline and expand the anomalies identified in the 2013 sampling program. These surveys should be on N/S oriented lines that would adequately cut both northeast and northwest trending structures and should cover the entire claim group. Sample spacing should be reduced to 50m on lines spaced 100m apart on the existing claims to accurately define anomalies. Modern geophysical surveys should be completed on the same cut grid including magnetometer and 3D-IP surveys.

A second stage program would consist of drilling of coincident geochemical and geophysical targets. The program should initially include the diamond drilling of 1000m in 4 to 5 holes.

<u>Phase 1</u>

| | | |
|---|---|---|
| Project Geologist (25 days @ 600/day) | | 15,000 |
| Prospector/sampler (25 days @ $400/day) x 4 | | 40,000 |
| Cook/first aid person (25 days @ $500/day) | | 12,500 |
| Line-cutting (62km @ $500/km) | | 31,000 |
| Geochemical Ah surveys (1300 samples @ $50/sample) | | 65,000 |
| Geophysical surveys mag/IP (62km @ $2500/km) | | 155,000 |
| Mob/demob and vehicle rental | | 10,000 |
| Room and board (325 person days @ $125/day) | | 40,625 |
| Reporting | | 10,000 |
| | subtotal | $379,125 |
| Contingency (15%) | | 56,869 |
| | Phase 1 Total | $435,994 |

Contingent on the results obtained from these surveys, additional trenching or diamond drilling should target favorable anomalies.

<u>Phase 2</u>

| | | |
|---|---|---|
| Project Geologist (30 days @ $600/day) | | 18,000 |
| Geologist (30 days @ $500/day) | | 15,000 |
| Cook/first aid person (30 days @ $500/day) | | 15,000 |
| Core splitter (30 days @ $300/day) | | 9,000 |
| Drilling (1000m @ $120/m) | | 120,000 |
| Assaying (500 core samples @ $55/sample) | | 27,500 |
| Room and Board (270 person days @ $125/day) | | 33,750 |
| Mob/demob | | 20,000 |
| Reporting | | 20,000 |
| | subtotal | $278,250 |
| Contingency (15%) | | 50,963 |
| | Phase 2 Total | $329,213 |

Respectfully submitted,
“Signed and Sealed”

Ken Galambos P.Eng.
KDG Exploration Services

Victoria, BC. November 5, 2013

**Item 19: References**

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**Item 20: Date and Signature Page**

1) I, Kenneth Daryl Galambos of 1535 Westall Avenue, Victoria, British Columbia am self-employed as a consultant geological engineer, authored and am responsible for this report entitled “Technical Report on the Double-R Project”, dated November 6, 2013.

2) I am a graduate of the University of Saskatchewan in Saskatoon, Saskatchewan with a Bachelor’s Degree in Geological Engineering (1982). I began working in the mining field in 1974 and have more than 28 years mineral exploration and production experience, primarily in the North American Cordillera. Highlights of this experience include the discovery and delineation of the Brewery Creek gold deposit, near Dawson City, Yukon for Noranda Exploration Ltd.

3) I am a registered member of the Association of Professional Engineers of Yukon, registration number 0916 and have been a member in good standing since 1988. I am a registered Professional Engineer with APEGBC, license 35364, since 2010.

4) This report is based upon the author’s personal knowledge of the region and a review of additional pertinent data.

5) As stated in this report, in my professional opinion the property is of potential merit and further exploration work is justified.

6) To the best of my knowledge this report contains all scientific and technical information required to be disclosed so as not to be misleading.

7) I hold no interest in the Double R property, nor will I be receiving any interest as a result of writing this report. My professional relationship is as an arm’s length consultant, and I have no expectation that this relationship will change.

8) I consent to the use of this report by Hugh Madden and Quadra Coastal for such assessment and/or regulatory and financing purposes deemed necessary, but if any part shall be taken as an excerpt, it shall be done only with my approval.

Dated at Victoria, British Columbia this 6th day of November, 2013.
“Signed and Sealed”

Ken Galambos, P.Eng. (APEY Reg. No. 0916, APEGBC license 35364)
KDG Exploration Services
1535 Westall Ave.
Victoria, British Columbia V8T 2G6

## Item 21: Statement of Expenditures

| | |
|---|---|
| **August 9-14, 2013** | |
| Ken Galambos (5 days @ $630/day) | 3,150.00 |
| Ralph Keefe (3 days @ $350/day, 2 days @ $50/day ) | 1,150.00 |
| Shawn Turford (3 days @ $300/day) | 900.00 |
| | |
| **Transportation and Camp costs** | |
| Cessna 185 aircraft (4.2 hrs @ $500/hr) | 2,100.00 |
| 4x4 truck (5 days @ $100/day) x 2 | 500.00 |
| Truck fuel | 89.76 |
| Camp trailer (5 days @ $50/day) | 250.00 |
| Food (5 days @ $60/day) | 300.00 |
| Field supplies | 50.00 |
| | |
| **September 30, 2013** | |
| **Return Trip Francois Lake to Victoria** | |
| Ken Galambos (2 days @ $630/day) | 1260.00 |
| F350 truck (2 days @ $105/day) | 210.00 |
| Truck fuel | 277.34 |
| BC Ferries | 66.75 |
| Food | 55.00 |
| | |
| **Assaying** | |
| rock (5 rocks @ $49.81/sample) | 249.05 |
| humus (47 samples @ $37.66/sample) | 1770.25 |
| shipping | 35.24 |
| | |
| **Report** | |
| Report (7 days @ $630/day) | 3,150.00 |
| maps | 682.50 |
| | |
| Total | $16,245.89 |

## Item 22: Software used in the Program

Microsoft Windows 7
Microsoft Office 2010
Adobe Reader 8.1.3
Adobe Acrobat 9
Internet Explorer
Google Earth
Manifold

**Item 23.0**
**Appendices**

# Appendix A

# Assay Certificates
# Rock

AcmeLabs™
A Bureau Veritas Group Company

www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

| | |
|---|---|
| Submitted By: | Ken Galambos |
| Receiving Lab: | Canada-Smithers |
| Received: | August 21, 2013 |
| Report Date: | September 09, 2013 |
| Page: | 1 of 2 |

# CERTIFICATE OF ANALYSIS SMI13000221.1

## CLIENT JOB INFORMATION

| | |
|---|---|
| Project: | Double R |
| Shipment ID: | RR-02 |
| P.O. Number | |
| Number of Samples: | 5 |

## SAMPLE DISPOSAL

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

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

Invoice To: KDG Exploration Services
1535 Westall Ave.
Victoria BC V8T 2G6
CANADA

CC:

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| R200-250 | 5 | Crush, split and pulverize 250 g rock to 200 mesh | | | SMI |
| G601 | 5 | Lead Collection Fire - Assay Fusion - AAS Finish | 30 | Completed | VAN |
| 1DX3 | 5 | 1:1:1 Aqua Regia digestion ICP-MS analysis | 30 | Completed | VAN |

## ADDITIONAL COMMENTS

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
Country Manager - Canada

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

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www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 09, 2013



# CERTIFICATE OF ANALYSIS SMI13000221.1

| | Method | WGHT | G6 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Wgt | Au | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| | Unit | kg | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % |
| | MDL | 0.01 | 0.005 | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 |
| 1043483 | Rock | 1.03 | <0.005 | 0.3 | 20.3 | 1.2 | 65 | <0.1 | 29.7 | 9.1 | 186 | 1.99 | 0.9 | <0.5 | 5.4 | 26 | 0.2 | <0.1 | <0.1 | 72 | 0.48 |
| 1043484 | Rock | 1.64 | <0.005 | 1.5 | 64.1 | 10.6 | 150 | <0.1 | 8.9 | 5.0 | 410 | 1.93 | 10.3 | 2.2 | 0.8 | 10 | 0.8 | 0.3 | <0.1 | 29 | 0.58 |
| 1043488 | Rock | 1.41 | <0.005 | 0.7 | 34.9 | 0.7 | 29 | <0.1 | 29.8 | 13.0 | 255 | 2.08 | 2.5 | 1.4 | 4.7 | 34 | 0.1 | 0.1 | 0.3 | 73 | 0.82 |
| 1043500 | Rock | 1.18 | <0.005 | 1.4 | 66.8 | 0.8 | 29 | <0.1 | 29.0 | 11.3 | 260 | 2.49 | 2.2 | 1.1 | 5.9 | 55 | <0.1 | <0.1 | <0.1 | 80 | 0.68 |
| 1043504 | Rock | 1.25 | 0.006 | 883.2 | 23.4 | 3.1 | 20 | 0.1 | 4.2 | 3.1 | 127 | 0.43 | 62.5 | 1.8 | 0.9 | 14 | 0.7 | 0.7 | 0.7 | <2 | 0.16 |

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

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Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 09, 2013



# CERTIFICATE OF ANALYSIS SMI13000221.1

| | Method | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | Unit | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | MDL | 0.001 | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 | 0.2 |
| 1043483 | Rock | 0.140 | 14 | 61 | 0.74 | 511 | 0.231 | 2 | 0.87 | 0.085 | 0.68 | <0.1 | 0.01 | 2.2 | 0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1043484 | Rock | 0.029 | 5 | 10 | 0.26 | 34 | 0.077 | 2 | 0.41 | 0.062 | 0.04 | <0.1 | 0.02 | 5.9 | <0.1 | 0.59 | 2 | 1.0 | <0.2 |
| 1043488 | Rock | 0.145 | 15 | 61 | 0.92 | 286 | 0.198 | 2 | 0.93 | 0.081 | 0.50 | 1.0 | 0.01 | 3.1 | 0.2 | 0.05 | 5 | <0.5 | <0.2 |
| 1043500 | Rock | 0.130 | 16 | 57 | 0.67 | 784 | 0.155 | 1 | 0.70 | 0.088 | 0.42 | <0.1 | <0.01 | 3.0 | <0.1 | 0.06 | 5 | <0.5 | <0.2 |
| 1043504 | Rock | 0.007 | 8 | 3 | <0.01 | 43 | <0.001 | 4 | 0.21 | 0.036 | 0.14 | 0.8 | <0.01 | 0.3 | <0.1 | <0.05 | <1 | <0.5 | <0.2 |

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

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Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 09, 2013



# QUALITY CONTROL REPORT SMI13000221.1

| | Method | WGHT | G6 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Wgt | Au | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| | Unit | kg | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % |
| | MDL | 0.01 | 0.005 | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 1043504 | Rock | 1.25 | 0.006 | 883.2 | 23.4 | 3.1 | 20 | 0.1 | 4.2 | 3.1 | 127 | 0.43 | 62.5 | 1.8 | 0.9 | 14 | 0.7 | 0.7 | 0.7 | <2 | 0.16 |
| REP 1043504 | QC | | | 835.7 | 23.1 | 2.8 | 19 | 0.1 | 3.5 | 2.5 | 125 | 0.43 | 57.7 | 5.6 | 0.9 | 14 | 0.6 | 0.8 | 0.5 | <2 | 0.15 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS9 | Standard | | | 12.0 | 114.1 | 134.1 | 316 | 2.1 | 43.5 | 7.8 | 583 | 2.35 | 23.3 | 114.4 | 6.3 | 72 | 2.3 | 5.6 | 6.6 | 40 | 0.74 |
| STD OXC109 | Standard | | 0.199 | | | | | | | | | | | | | | | | | | |
| STD OXI96 | Standard | | 1.882 | | | | | | | | | | | | | | | | | | |
| STD OXL93 | Standard | | 6.046 | | | | | | | | | | | | | | | | | | |
| STD OXC109 Expected | | | 0.201 | | | | | | | | | | | | | | | | | | |
| STD OXI96 Expected | | | 1.802 | | | | | | | | | | | | | | | | | | |
| STD OXL93 Expected | | | 5.841 | | | | | | | | | | | | | | | | | | |
| STD DS9 Expected | | | | 12.84 | 108 | 126 | 317 | 1.83 | 40.3 | 7.6 | 575 | 2.33 | 25.5 | 118 | 6.38 | 69.6 | 2.4 | 4.94 | 6.32 | 40 | 0.7201 |
| BLK | Blank | | <0.005 | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | <0.005 | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <2 | <0.01 |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | |
| G1-SMI | Prep Blank | | <0.005 | <0.1 | 2.4 | 2.6 | 47 | <0.1 | 4.0 | 4.3 | 580 | 1.94 | 0.6 | 4.4 | 4.9 | 49 | <0.1 | <0.1 | <0.1 | 37 | 0.41 |

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

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PHONE (604) 253-3158

**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 09, 2013



# QUALITY CONTROL REPORT    SMI13000221.1

| | Method | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 | 1DX30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | Unit | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | MDL | 0.001 | 1 | 1 | 0.01 | 1 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.01 | 0.1 | 0.1 | 0.05 | 1 | 0.5 | 0.2 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | |
| 1043504 | Rock | 0.007 | 8 | 3 | <0.01 | 43 | <0.001 | 4 | 0.21 | 0.036 | 0.14 | 0.8 | <0.01 | 0.3 | <0.1 | <0.05 | <1 | <0.5 | <0.2 |
| REP 1043504 | QC | 0.006 | 8 | 3 | <0.01 | 42 | <0.001 | 4 | 0.20 | 0.036 | 0.14 | 0.9 | 0.01 | 0.4 | <0.1 | <0.05 | <1 | <0.5 | <0.2 |
| Reference Materials | | | | | | | | | | | | | | | | | | | |
| STD DS9 | Standard | 0.084 | 15 | 123 | 0.61 | 298 | 0.119 | 3 | 0.96 | 0.086 | 0.41 | 3.2 | 0.23 | 2.6 | 5.1 | 0.17 | 4 | 3.7 | 5.7 |
| STD OXC109 | Standard | | | | | | | | | | | | | | | | | | |
| STD OXI96 | Standard | | | | | | | | | | | | | | | | | | |
| STD OXL93 | Standard | | | | | | | | | | | | | | | | | | |
| STD OXC109 Expected | | | | | | | | | | | | | | | | | | | |
| STD OXI96 Expected | | | | | | | | | | | | | | | | | | | |
| STD OXL93 Expected | | | | | | | | | | | | | | | | | | | |
| STD DS9 Expected | | 0.0819 | 13.3 | 121 | 0.6165 | 295 | 0.1108 | | 0.9577 | 0.0853 | 0.395 | 2.89 | 0.2 | 2.5 | 5.3 | 0.1615 | 4.59 | 5.2 | 5.02 |
| BLK | Blank | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | | | | | | | | | | | | | | | | | |
| BLK | Blank | <0.001 | <1 | <1 | <0.01 | <1 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.01 | 0.1 | <0.1 | <0.05 | <1 | <0.5 | <0.2 |
| Prep Wash | | | | | | | | | | | | | | | | | | | |
| G1-SMI | Prep Blank | 0.084 | 9 | 7 | 0.56 | 229 | 0.119 | 3 | 0.90 | 0.067 | 0.49 | <0.1 | <0.01 | 2.5 | 0.3 | <0.05 | 5 | <0.5 | <0.2 |

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

# Appendix B

## Assay Certificates
## Humus

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PHONE (604) 253-3158

**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Submitted By: Ken Galambos
Receiving Lab: Canada-Smithers
Received: August 21, 2013
Report Date: September 06, 2013


# CERTIFICATE OF ANALYSIS   SMI13000222.1

## CLIENT JOB INFORMATION

| | |
|---|---|
| Project: | Double R |
| Shipment ID: | RR-01 |
| P.O. Number | |
| Number of Samples: | 51 |

## SAMPLE DISPOSAL

| | |
|---|---|
| DISP-PLP | Dispose of Pulp After 90 days |
| DISP-RJT-SOIL | Immediate Disposal of Soil Reject |

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

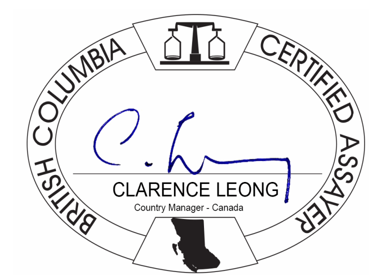
## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| Dry at 60C | 51 | Dry at 60C | | | SMI |
| SS80 | 49 | Dry at 60C sieve 100g to -80 mesh | | | SMI |
| 1F06 | 51 | 1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis | 30 | Completed | VAN |

## ADDITIONAL COMMENTS

Invoice To: KDG Exploration Services
1535 Westall Ave.
Victoria BC V8T 2G6
CANADA

CC:




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

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PHONE (604) 253-3158

**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 06, 2013



# CERTIFICATE OF ANALYSIS SMI13000222.1

| | Method | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 | 0.001 |
| 1043451 | Humus | 0.29 | 7.16 | 1.15 | 76.6 | 262 | 1.9 | 0.7 | 1183 | 0.08 | 1.7 | <0.1 | 5.8 | <0.1 | 155.2 | 0.43 | 0.07 | 0.07 | <2 | 2.68 | 0.059 |
| 1043452 | Humus | 0.67 | 15.25 | 1.52 | 326.2 | 321 | 3.0 | 1.3 | 3119 | 0.27 | 1.4 | <0.1 | 4.9 | <0.1 | 134.2 | 0.98 | 0.08 | 0.05 | 5 | 3.65 | 0.101 |
| 1043453 | Humus | 1.00 | 14.50 | 6.07 | 122.4 | 222 | 9.9 | 4.9 | 5171 | 1.18 | 5.3 | <0.1 | 2.7 | <0.1 | 51.9 | 0.70 | 0.32 | 0.09 | 20 | 1.13 | 0.123 |
| 1043454 | Humus | 0.95 | 16.42 | 3.80 | 321.6 | 220 | 8.4 | 2.8 | 9627 | 0.19 | 0.9 | <0.1 | 3.6 | <0.1 | 171.8 | 1.19 | 0.10 | 0.04 | 3 | 3.87 | 0.135 |
| 1043455 | Humus | 2.18 | 14.32 | 4.80 | 143.4 | 71 | 6.3 | 4.2 | 2816 | 0.86 | 2.2 | <0.1 | 1.7 | <0.1 | 93.1 | 0.97 | 0.22 | 0.08 | 13 | 1.97 | 0.114 |
| 1043456 | Humus | 2.30 | 24.16 | 2.46 | 140.6 | 161 | 3.2 | 2.6 | 765 | 0.39 | 10.6 | <0.1 | 1.4 | <0.1 | 183.2 | 0.80 | 0.18 | 0.04 | 5 | 3.42 | 0.115 |
| 1043457 | Humus | 0.99 | 8.69 | 1.30 | 12.0 | 59 | 2.2 | 0.7 | 196 | 0.07 | 0.5 | 0.4 | 1.8 | <0.1 | 229.6 | 1.14 | 0.16 | 0.02 | <2 | 3.53 | 0.070 |
| 1043458 | Humus | 0.72 | 12.39 | 2.25 | 92.8 | 66 | 2.1 | 1.0 | 1134 | 0.13 | 0.4 | <0.1 | 2.1 | <0.1 | 163.0 | 0.84 | 0.07 | 0.09 | 3 | 2.78 | 0.089 |
| 1043459 | Humus | 3.23 | 10.00 | 1.41 | 136.6 | 97 | 2.9 | 0.7 | 1331 | 0.10 | 0.5 | <0.1 | 1.2 | <0.1 | 354.9 | 1.09 | 0.03 | 0.03 | 2 | 3.94 | 0.075 |
| 1043460 | Humus | 3.78 | 10.55 | 2.34 | 95.7 | 116 | 4.4 | 1.3 | 739 | 0.48 | 1.4 | <0.1 | 1.1 | <0.1 | 272.5 | 0.93 | 0.12 | 0.05 | 13 | 2.62 | 0.061 |
| 1043461 | Rock Pulp | 0.36 | 28.56 | 8.48 | 40.8 | 58 | 8.6 | 13.5 | 451 | 4.79 | 2.1 | 0.7 | <0.2 | 2.4 | 30.6 | 0.08 | <0.02 | 0.17 | 164 | 0.31 | 0.051 |
| 1043462 | Humus | 9.62 | 85.16 | 5.19 | 145.0 | 328 | 29.2 | 9.0 | 3562 | 2.64 | 17.5 | 1.0 | 1.0 | 0.6 | 97.5 | 1.72 | 0.77 | 0.12 | 40 | 1.27 | 0.100 |
| 1043463 | Humus | 1.82 | 13.68 | 1.79 | 221.4 | 164 | 3.7 | 1.4 | 1595 | 0.27 | 1.4 | <0.1 | <0.2 | <0.1 | 233.6 | 1.67 | 0.07 | 0.03 | 5 | 3.33 | 0.106 |
| 1043464 | Humus | 0.65 | 15.64 | 2.17 | 210.1 | 86 | 1.9 | 0.7 | 3149 | 0.06 | 0.5 | <0.1 | <0.2 | <0.1 | 87.6 | 1.37 | 0.05 | <0.02 | <2 | 2.32 | 0.096 |
| 1043465 | Humus | 0.52 | 14.46 | 4.16 | 189.9 | 87 | 3.4 | 2.4 | 3064 | 0.37 | 2.7 | <0.1 | 3.8 | <0.1 | 84.1 | 2.63 | 0.11 | 0.04 | 6 | 2.79 | 0.099 |
| 1043466 | Humus | 0.99 | 15.28 | 1.60 | 262.6 | 100 | 2.6 | 0.5 | 1452 | 0.05 | 0.7 | <0.1 | <0.2 | <0.1 | 97.8 | 1.92 | 0.04 | <0.02 | <2 | 2.76 | 0.108 |
| 1043467 | Humus | 3.74 | 11.30 | 1.49 | 357.2 | 17 | 1.2 | 0.2 | 294 | 0.03 | 0.4 | <0.1 | 0.4 | <0.1 | 107.4 | 0.51 | 0.02 | <0.02 | <2 | 1.50 | 0.073 |
| 1043468 | Humus | 1.12 | 20.85 | 2.02 | 256.2 | 238 | 4.4 | 0.8 | 3521 | 0.06 | 0.6 | <0.1 | 0.5 | <0.1 | 157.8 | 0.73 | 0.04 | <0.02 | <2 | 4.03 | 0.172 |
| 1043469 | Humus | 1.44 | 20.76 | 3.26 | 109.3 | 522 | 6.8 | 2.0 | 1367 | 0.27 | 1.0 | <0.1 | 0.6 | <0.1 | 69.4 | 1.65 | 0.10 | 0.03 | 5 | 1.19 | 0.136 |
| 1043470 | Humus | 0.99 | 13.22 | 2.17 | 106.7 | 217 | 5.3 | 2.1 | 833 | 0.07 | 0.4 | <0.1 | 0.2 | <0.1 | 240.2 | 2.35 | 0.04 | <0.02 | <2 | 3.25 | 0.128 |
| 1043471 | Humus | 4.30 | 24.20 | 4.81 | 60.1 | 416 | 11.9 | 2.8 | 570 | 0.72 | 2.4 | 0.2 | 5.5 | <0.1 | 129.2 | 1.62 | 0.20 | 0.06 | 19 | 0.82 | 0.059 |
| 1043472 | Humus | 0.89 | 12.27 | 2.16 | 151.9 | 79 | 4.3 | 1.9 | 1051 | 0.32 | 1.2 | <0.1 | <0.2 | <0.1 | 240.0 | 1.99 | 0.12 | <0.02 | 8 | 3.05 | 0.101 |
| 1043473 | Humus | 1.78 | 14.21 | 2.68 | 140.5 | 188 | 2.1 | 1.3 | 1566 | 0.15 | 2.4 | <0.1 | <0.2 | <0.1 | 149.2 | 1.05 | 0.16 | 0.04 | <2 | 2.86 | 0.116 |
| 1043474 | Humus | 1.36 | 15.65 | 7.50 | 207.0 | 277 | 10.0 | 4.7 | 3297 | 1.31 | 34.2 | <0.1 | 0.3 | 0.1 | 53.9 | 2.00 | 0.59 | 0.07 | 19 | 1.16 | 0.118 |
| 1043475 | Humus | 0.45 | 7.84 | 2.16 | 12.4 | 27 | 1.2 | 0.3 | 59 | 0.08 | 0.4 | <0.1 | <0.2 | <0.1 | 76.5 | 0.24 | 0.10 | <0.02 | <2 | 0.96 | 0.061 |
| 1043476 | Humus | 0.65 | 13.43 | 2.61 | 334.9 | 227 | 6.8 | 1.7 | 1791 | 0.25 | 1.3 | <0.1 | <0.2 | <0.1 | 161.6 | 5.19 | 0.09 | 0.02 | 5 | 3.22 | 0.098 |
| 1043477 | Humus | 2.18 | 21.82 | 4.94 | 294.7 | 141 | 6.8 | 1.9 | 8187 | 0.19 | 0.8 | <0.1 | <0.2 | <0.1 | 96.7 | 2.31 | 0.12 | 0.03 | 3 | 1.96 | 0.149 |
| 1043478 | Humus | 14.53 | 14.27 | 1.29 | 27.2 | 50 | 1.6 | 0.2 | 72 | 0.04 | 0.6 | <0.1 | <0.2 | <0.1 | 98.7 | 0.17 | 0.04 | <0.02 | <2 | 0.82 | 0.056 |
| 1043479 | Humus | 3.12 | 12.06 | 0.88 | 144.8 | 42 | 2.0 | 0.5 | 1143 | 0.03 | <0.1 | <0.1 | <0.2 | <0.1 | 289.6 | 0.65 | 0.02 | <0.02 | <2 | 3.59 | 0.092 |
| 1043480 | Humus | 1.57 | 17.65 | 2.30 | 177.0 | 154 | 5.7 | 1.1 | 2327 | 0.11 | 0.6 | <0.1 | <0.2 | <0.1 | 363.6 | 1.58 | 0.08 | <0.02 | <2 | 3.80 | 0.103 |

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Report Date: September 06, 2013



# CERTIFICATE OF ANALYSIS SMI13000222.1

| Method | | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga | Cs | Ge | Hf |
| Unit | | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| MDL | | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 | 0.02 | 0.1 | 0.02 |
| 1043451 | Humus | <0.5 | 2.2 | 0.14 | 340.8 | 0.002 | 21 | 0.06 | 0.002 | 0.17 | <0.1 | 0.7 | 0.06 | 0.16 | 429 | 0.3 | <0.02 | 0.1 | 0.25 | <0.1 | <0.02 |
| 1043452 | Humus | <0.5 | 2.3 | 0.13 | 717.5 | 0.004 | 39 | 0.08 | 0.003 | 0.06 | <0.1 | 0.7 | 0.03 | 0.19 | 523 | 0.3 | <0.02 | 0.5 | 0.20 | <0.1 | <0.02 |
| 1043453 | Humus | 3.4 | 7.9 | 0.17 | 469.0 | 0.009 | 7 | 0.48 | 0.003 | 0.09 | <0.1 | 0.9 | 0.15 | 0.12 | 379 | 0.2 | <0.02 | 1.9 | 0.64 | <0.1 | <0.02 |
| 1043454 | Humus | 0.6 | 2.6 | 0.14 | 1317 | 0.004 | 27 | 0.15 | 0.002 | 0.17 | <0.1 | 0.9 | 0.17 | 0.17 | 602 | 0.3 | 0.03 | 0.5 | 0.30 | <0.1 | <0.02 |
| 1043455 | Humus | 2.0 | 5.8 | 0.15 | 424.4 | 0.008 | 12 | 0.29 | 0.003 | 0.18 | 0.1 | 0.6 | 0.04 | 0.11 | 245 | 0.2 | <0.02 | 1.5 | 0.33 | <0.1 | <0.02 |
| 1043456 | Humus | 0.8 | 4.3 | 0.28 | 520.1 | 0.002 | 26 | 0.12 | 0.001 | 0.07 | <0.1 | 0.6 | 0.06 | 0.19 | 173 | 0.1 | <0.02 | 0.4 | 0.22 | <0.1 | <0.02 |
| 1043457 | Humus | <0.5 | 2.2 | 0.44 | 138.2 | 0.002 | 11 | 0.06 | 0.003 | 0.03 | <0.1 | 0.4 | 0.02 | 0.21 | 147 | 0.7 | <0.02 | 0.2 | 0.11 | <0.1 | <0.02 |
| 1043458 | Humus | 0.6 | 2.6 | 0.14 | 337.9 | 0.003 | 17 | 0.10 | 0.002 | 0.17 | <0.1 | 0.9 | <0.02 | 0.17 | 332 | 0.2 | <0.02 | 0.4 | 0.14 | <0.1 | <0.02 |
| 1043459 | Humus | <0.5 | 2.3 | 0.16 | 369.5 | 0.003 | 26 | 0.05 | 0.002 | 0.14 | <0.1 | 0.5 | 0.02 | 0.18 | 278 | 0.2 | <0.02 | 0.2 | 0.07 | <0.1 | <0.02 |
| 1043460 | Humus | 1.3 | 6.8 | 0.16 | 294.3 | 0.011 | 18 | 0.19 | 0.003 | 0.15 | <0.1 | 0.8 | 0.03 | 0.15 | 152 | 0.3 | <0.02 | 1.1 | 0.21 | <0.1 | <0.02 |
| 1043461 | Rock Pulp | 13.8 | 19.7 | 0.44 | 75.8 | 0.432 | <1 | 5.57 | 0.061 | 0.02 | 0.1 | 15.9 | 0.20 | <0.02 | 43 | <0.1 | 0.06 | 12.9 | 1.19 | 0.2 | 0.80 |
| 1043462 | Humus | 7.7 | 23.7 | 0.31 | 432.7 | 0.008 | 5 | 1.60 | 0.005 | 0.22 | <0.1 | 5.1 | 0.10 | 0.08 | 130 | 0.3 | <0.02 | 4.5 | 0.57 | <0.1 | 0.03 |
| 1043463 | Humus | 0.6 | 3.1 | 0.23 | 462.5 | 0.005 | 24 | 0.19 | 0.005 | 0.19 | <0.1 | 0.6 | 0.02 | 0.20 | 631 | 0.2 | <0.02 | 0.6 | 0.14 | <0.1 | <0.02 |
| 1043464 | Humus | <0.5 | 1.8 | 0.09 | 273.3 | 0.001 | 25 | 0.04 | 0.002 | 0.05 | <0.1 | 0.4 | 0.08 | 0.24 | 538 | 0.2 | <0.02 | 0.2 | 0.08 | <0.1 | <0.02 |
| 1043465 | Humus | 0.8 | 3.0 | 0.14 | 239.2 | 0.009 | 14 | 0.23 | 0.003 | 0.17 | 0.1 | 0.6 | 0.15 | 0.17 | 455 | 0.2 | <0.02 | 0.9 | 1.57 | <0.1 | <0.02 |
| 1043466 | Humus | <0.5 | 1.8 | 0.15 | 362.4 | 0.001 | 23 | 0.06 | 0.001 | 0.16 | <0.1 | 0.3 | 0.02 | 0.21 | 474 | 0.2 | <0.02 | 0.1 | 0.15 | <0.1 | <0.02 |
| 1043467 | Humus | <0.5 | 2.0 | 0.15 | 318.5 | <0.001 | 15 | 0.02 | 0.002 | 0.08 | <0.1 | 0.4 | <0.02 | 0.18 | 177 | <0.1 | <0.02 | <0.1 | 0.06 | <0.1 | <0.02 |
| 1043468 | Humus | <0.5 | 1.7 | 0.12 | 500.2 | 0.002 | 29 | 0.15 | 0.002 | 0.12 | <0.1 | 0.8 | <0.02 | 0.17 | 471 | 0.2 | <0.02 | 0.2 | 0.07 | <0.1 | <0.02 |
| 1043469 | Humus | 2.2 | 3.2 | 0.11 | 299.4 | 0.004 | 8 | 0.27 | 0.002 | 0.15 | <0.1 | 0.6 | <0.02 | 0.15 | 331 | 0.2 | <0.02 | 0.5 | 0.13 | <0.1 | <0.02 |
| 1043470 | Humus | 1.0 | 2.1 | 0.22 | 445.1 | 0.002 | 17 | 0.05 | 0.001 | 0.11 | <0.1 | 0.4 | <0.02 | 0.21 | 164 | 0.1 | <0.02 | 0.2 | 0.06 | <0.1 | <0.02 |
| 1043471 | Humus | 2.9 | 7.3 | 0.07 | 215.2 | 0.007 | 7 | 0.33 | 0.004 | 0.06 | <0.1 | 1.1 | 0.02 | 0.13 | 127 | 0.2 | <0.02 | 1.8 | 0.40 | <0.1 | <0.02 |
| 1043472 | Humus | 0.9 | 4.0 | 0.21 | 384.1 | 0.004 | 29 | 0.13 | 0.002 | 0.11 | <0.1 | 0.4 | <0.02 | 0.17 | 200 | 0.3 | <0.02 | 0.7 | 0.11 | <0.1 | <0.02 |
| 1043473 | Humus | 0.6 | 2.3 | 0.25 | 197.9 | 0.002 | 28 | 0.05 | 0.002 | 0.16 | <0.1 | 0.5 | 0.09 | 0.19 | 314 | 0.2 | <0.02 | 0.2 | 0.22 | <0.1 | <0.02 |
| 1043474 | Humus | 2.1 | 10.9 | 0.15 | 256.0 | 0.005 | 7 | 0.55 | 0.002 | 0.09 | <0.1 | 1.4 | 0.07 | 0.11 | 262 | 0.2 | 0.02 | 1.8 | 0.45 | <0.1 | <0.02 |
| 1043475 | Humus | <0.5 | 2.6 | 0.10 | 160.1 | 0.002 | 8 | 0.05 | 0.002 | 0.08 | <0.1 | 0.6 | <0.02 | 0.16 | 250 | 0.4 | <0.02 | 0.1 | 0.07 | <0.1 | <0.02 |
| 1043476 | Humus | 1.1 | 3.1 | 0.18 | 479.7 | 0.004 | 18 | 0.18 | 0.003 | 0.17 | <0.1 | 0.5 | <0.02 | 0.18 | 245 | 0.1 | <0.02 | 0.5 | 0.19 | <0.1 | <0.02 |
| 1043477 | Humus | 0.6 | 3.9 | 0.12 | 510.8 | 0.003 | 11 | 0.24 | 0.002 | 0.13 | <0.1 | 0.8 | <0.02 | 0.15 | 433 | 0.2 | <0.02 | 0.4 | 0.14 | <0.1 | <0.02 |
| 1043478 | Humus | <0.5 | 1.9 | 0.10 | 195.9 | <0.001 | 3 | 0.03 | 0.001 | 0.05 | <0.1 | 0.5 | <0.02 | 0.17 | 184 | 0.1 | <0.02 | <0.1 | 0.05 | <0.1 | <0.02 |
| 1043479 | Humus | <0.5 | 1.7 | 0.15 | 478.4 | <0.001 | 29 | 0.02 | 0.001 | 0.29 | <0.1 | 0.6 | <0.02 | 0.17 | 248 | 0.2 | <0.02 | 0.1 | 0.03 | <0.1 | <0.02 |
| 1043480 | Humus | 1.0 | 2.0 | 0.17 | 666.4 | 0.002 | 21 | 0.08 | 0.002 | 0.10 | <0.1 | 0.5 | <0.02 | 0.20 | 260 | 0.2 | <0.02 | 0.2 | 0.11 | <0.1 | <0.02 |

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Project: Double R
Report Date: September 06, 2013



# CERTIFICATE OF ANALYSIS SMI13000222.1

| | Method | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Nb | Rb | Sn | Ta | Zr | Y | Ce | In | Re | Be | Li | Pd | Pt |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppb | ppb |
| | MDL | 0.02 | 0.1 | 0.1 | 0.05 | 0.1 | 0.01 | 0.1 | 0.02 | 1 | 0.1 | 0.1 | 10 | 2 |
| 1043451 | Humus | 0.03 | 2.3 | <0.1 | <0.05 | 0.2 | 0.22 | 0.6 | <0.02 | <1 | <0.1 | 0.2 | <10 | <2 |
| 1043452 | Humus | 0.12 | 2.4 | <0.1 | <0.05 | 0.2 | 0.25 | 1.0 | <0.02 | <1 | <0.1 | 0.3 | <10 | <2 |
| 1043453 | Humus | 0.32 | 6.4 | 0.2 | <0.05 | 0.1 | 0.97 | 8.6 | <0.02 | 1 | 0.1 | 3.3 | <10 | <2 |
| 1043454 | Humus | 0.07 | 5.5 | <0.1 | <0.05 | 0.1 | 0.33 | 1.4 | <0.02 | <1 | <0.1 | 0.4 | <10 | <2 |
| 1043455 | Humus | 0.39 | 4.3 | 0.2 | <0.05 | 0.1 | 0.62 | 4.2 | <0.02 | <1 | <0.1 | 1.6 | <10 | <2 |
| 1043456 | Humus | 0.09 | 1.4 | <0.1 | <0.05 | 0.1 | 0.62 | 1.5 | <0.02 | <1 | <0.1 | 1.7 | <10 | <2 |
| 1043457 | Humus | 0.05 | 0.7 | <0.1 | <0.05 | 0.4 | 0.36 | 0.5 | <0.02 | 6 | <0.1 | 0.1 | <10 | <2 |
| 1043458 | Humus | 0.06 | 3.1 | <0.1 | <0.05 | 0.3 | 0.37 | 1.1 | <0.02 | <1 | <0.1 | 0.3 | <10 | <2 |
| 1043459 | Humus | 0.06 | 1.7 | <0.1 | <0.05 | 0.1 | 0.17 | 0.6 | <0.02 | <1 | <0.1 | 0.1 | <10 | <2 |
| 1043460 | Humus | 0.28 | 4.2 | 0.1 | <0.05 | 0.4 | 0.40 | 2.5 | <0.02 | <1 | <0.1 | 0.7 | <10 | <2 |
| 1043461 | Rock Pulp | 0.42 | 3.2 | 1.2 | <0.05 | 51.0 | 19.62 | 46.8 | 0.06 | 2 | 0.9 | 7.2 | <10 | <2 |
| 1043462 | Humus | 0.82 | 13.3 | 0.4 | <0.05 | 1.2 | 7.67 | 22.7 | 0.03 | <1 | 0.5 | 9.6 | <10 | <2 |
| 1043463 | Humus | 0.15 | 4.8 | <0.1 | <0.05 | 0.2 | 0.27 | 1.3 | <0.02 | <1 | <0.1 | 0.8 | <10 | <2 |
| 1043464 | Humus | 0.03 | 0.8 | <0.1 | <0.05 | <0.1 | 0.20 | 0.4 | <0.02 | <1 | <0.1 | 0.1 | <10 | <2 |
| 1043465 | Humus | 0.28 | 10.1 | <0.1 | <0.05 | <0.1 | 0.36 | 1.6 | <0.02 | <1 | <0.1 | 1.7 | <10 | <2 |
| 1043466 | Humus | <0.02 | 3.5 | <0.1 | <0.05 | <0.1 | 0.16 | 0.3 | <0.02 | 1 | <0.1 | 0.2 | <10 | <2 |
| 1043467 | Humus | <0.02 | 1.8 | <0.1 | <0.05 | <0.1 | 0.11 | 0.2 | <0.02 | <1 | <0.1 | <0.1 | <10 | <2 |
| 1043468 | Humus | 0.02 | 1.3 | <0.1 | <0.05 | <0.1 | 0.24 | 0.6 | <0.02 | <1 | <0.1 | 0.2 | <10 | <2 |
| 1043469 | Humus | 0.14 | 2.4 | <0.1 | <0.05 | 0.2 | 1.16 | 5.0 | <0.02 | <1 | <0.1 | 0.7 | <10 | <2 |
| 1043470 | Humus | 0.03 | 1.3 | <0.1 | <0.05 | <0.1 | 0.60 | 1.5 | <0.02 | <1 | <0.1 | 0.2 | <10 | <2 |
| 1043471 | Humus | 0.41 | 4.5 | 0.2 | <0.05 | 0.2 | 1.72 | 6.0 | <0.02 | <1 | <0.1 | 0.9 | <10 | <2 |
| 1043472 | Humus | 0.12 | 2.0 | <0.1 | <0.05 | 0.1 | 0.33 | 1.8 | <0.02 | 2 | <0.1 | 0.6 | <10 | <2 |
| 1043473 | Humus | 0.03 | 2.0 | <0.1 | <0.05 | 0.1 | 0.30 | 1.1 | <0.02 | <1 | <0.1 | 0.2 | <10 | <2 |
| 1043474 | Humus | 0.34 | 3.2 | 0.2 | <0.05 | 0.2 | 1.19 | 5.2 | <0.02 | 1 | 0.2 | 3.8 | <10 | <2 |
| 1043475 | Humus | 0.04 | 1.2 | <0.1 | <0.05 | 0.2 | 0.51 | 0.7 | <0.02 | <1 | <0.1 | 0.2 | <10 | <2 |
| 1043476 | Humus | 0.12 | 2.3 | <0.1 | <0.05 | 0.1 | 0.64 | 2.0 | <0.02 | <1 | <0.1 | 0.6 | <10 | <2 |
| 1043477 | Humus | 0.04 | 1.4 | <0.1 | <0.05 | <0.1 | 0.37 | 1.4 | <0.02 | 1 | <0.1 | 0.6 | <10 | <2 |
| 1043478 | Humus | <0.02 | 0.7 | <0.1 | <0.05 | <0.1 | 0.12 | 0.2 | <0.02 | 2 | <0.1 | <0.1 | <10 | <2 |
| 1043479 | Humus | <0.02 | 2.1 | <0.1 | <0.05 | <0.1 | 0.09 | 0.2 | <0.02 | <1 | <0.1 | 0.1 | <10 | <2 |
| 1043480 | Humus | 0.05 | 2.7 | <0.1 | <0.05 | 0.2 | 1.04 | 1.8 | <0.02 | <1 | <0.1 | 0.3 | <10 | <2 |

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

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Project: Double R
Report Date: September 06, 2013



# CERTIFICATE OF ANALYSIS SMI13000222.1

| | Method | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 | 0.001 |
| 1043481 | Humus | 2.35 | 18.40 | 4.94 | 81.9 | 325 | 9.7 | 4.1 | 1003 | 0.85 | 5.1 | <0.1 | 0.4 | <0.1 | 52.5 | 1.26 | 0.31 | 0.05 | 14 | 0.70 | 0.100 |
| 1043482 | Humus | 2.81 | 65.22 | 1.09 | 133.5 | 134 | 5.5 | 0.6 | 380 | 0.13 | 1.1 | 0.7 | <0.2 | <0.1 | 120.0 | 0.50 | 0.11 | <0.02 | 2 | 1.98 | 0.105 |
| 1043485 | Humus | 2.11 | 18.06 | 4.68 | 208.8 | 230 | 6.4 | 1.9 | 1508 | 0.24 | 1.0 | <0.1 | 4.0 | <0.1 | 125.0 | 2.22 | 0.14 | 0.10 | 3 | 2.62 | 0.156 |
| 1043486 | Humus | 3.01 | 28.01 | 12.84 | 326.0 | 270 | 14.2 | 6.0 | 3253 | 1.97 | 41.2 | 0.1 | 2.8 | <0.1 | 39.6 | 4.21 | 1.12 | 0.10 | 29 | 1.04 | 0.134 |
| 1043487 | Humus | 1.43 | 24.43 | 6.97 | 75.1 | 64 | 8.0 | 2.7 | 796 | 0.91 | 3.0 | <0.1 | 3.9 | <0.1 | 14.3 | 0.22 | 0.22 | 0.10 | 17 | 0.37 | 0.124 |
| 1043489 | Humus | 1.50 | 24.14 | 2.52 | 246.6 | 288 | 7.5 | 2.0 | 2008 | 0.17 | 1.4 | <0.1 | 1.8 | <0.1 | 131.2 | 4.06 | 0.12 | 0.05 | 3 | 3.17 | 0.106 |
| 1043490 | Humus | 2.04 | 29.71 | 3.24 | 308.6 | 294 | 9.2 | 2.2 | 2287 | 0.16 | 0.9 | <0.1 | 1.6 | <0.1 | 141.8 | 4.31 | 0.09 | 0.03 | 2 | 3.60 | 0.113 |
| 1043491 | Rock Pulp | 0.31 | 27.65 | 7.67 | 41.7 | 57 | 7.2 | 13.0 | 426 | 4.54 | 2.3 | 0.6 | 0.5 | 2.1 | 26.2 | 0.10 | 0.03 | 0.15 | 165 | 0.29 | 0.047 |
| 1043492 | Humus | 4.18 | 773.8 | 14.47 | 881.6 | 742 | 46.5 | 9.3 | 812 | 1.93 | 32.4 | 5.9 | 5.0 | 0.5 | 104.8 | 5.17 | 1.71 | 0.12 | 30 | 1.83 | 0.154 |
| 1043493 | Humus | 6.91 | 24.88 | 1.97 | 363.0 | 336 | 5.7 | 1.7 | 955 | 0.09 | 0.7 | <0.1 | 1.3 | <0.1 | 205.1 | 2.41 | 0.07 | 0.03 | <2 | 3.40 | 0.133 |
| 1043494 | Humus | 5.70 | 18.45 | 2.76 | 204.3 | 206 | 6.2 | 1.8 | 1445 | 0.20 | 0.8 | <0.1 | 1.3 | <0.1 | 140.4 | 1.20 | 0.08 | 0.03 | 3 | 2.63 | 0.167 |
| 1043495 | Humus | 7.68 | 26.66 | 1.54 | 191.8 | 293 | 3.5 | 0.8 | 2196 | 0.07 | 0.6 | <0.1 | 1.0 | <0.1 | 115.4 | 1.50 | 0.04 | <0.02 | <2 | 2.95 | 0.107 |
| 1043496 | Humus | 1.93 | 26.40 | 10.83 | 203.7 | 403 | 14.3 | 7.0 | 5069 | 1.11 | 9.8 | 0.1 | 1.5 | <0.1 | 82.2 | 3.09 | 0.47 | 0.08 | 17 | 1.37 | 0.180 |
| 1043497 | Humus | 1.69 | 17.09 | 3.41 | 105.3 | 379 | 3.9 | 0.9 | 398 | 0.14 | 1.3 | <0.1 | 0.7 | <0.1 | 108.5 | 0.87 | 0.13 | <0.02 | <2 | 1.03 | 0.120 |
| 1043498 | Humus | 0.65 | 15.37 | 1.62 | 342.9 | 325 | 2.9 | 0.5 | 1198 | 0.10 | 0.5 | <0.1 | 0.7 | <0.1 | 241.6 | 3.68 | 0.06 | <0.02 | <2 | 5.49 | 0.134 |
| 1043499 | Humus | 3.93 | 186.1 | 3.90 | 367.3 | 465 | 19.6 | 5.5 | 2351 | 1.11 | 5.8 | 1.8 | 1.2 | 0.5 | 224.4 | 3.34 | 0.64 | 0.06 | 18 | 3.60 | 0.253 |
| 1043501 | Humus | 4.14 | 21.94 | 2.44 | 121.1 | 121 | 7.6 | 3.2 | 1157 | 0.48 | 2.4 | <0.1 | 0.2 | <0.1 | 247.9 | 0.93 | 0.18 | 0.04 | 9 | 3.36 | 0.132 |
| 1043502 | Humus | 15.96 | 666.5 | 10.24 | 165.1 | 881 | 44.2 | 14.3 | 1458 | 3.00 | 18.5 | 2.9 | 1.3 | 0.7 | 77.7 | 1.66 | 1.11 | 0.23 | 59 | 1.17 | 0.132 |
| 1043503 | Humus | 1.45 | 15.24 | 2.26 | 209.8 | 76 | 5.5 | 3.9 | 1439 | 0.31 | 1.2 | <0.1 | 0.2 | <0.1 | 83.7 | 1.65 | 0.12 | <0.02 | 6 | 1.60 | 0.123 |
| 1043505 | Humus | 1.26 | 17.82 | 5.46 | 54.2 | 51 | 9.7 | 4.4 | 592 | 1.03 | 3.2 | <0.1 | 1.2 | <0.1 | 23.0 | 0.22 | 0.21 | 0.07 | 18 | 0.41 | 0.107 |
| 1043506 | Humus | 11.93 | 52.65 | 4.50 | 79.8 | 491 | 13.9 | 5.3 | 2066 | 1.18 | 4.2 | 0.2 | 1.9 | <0.1 | 38.4 | 0.64 | 0.51 | 0.09 | 27 | 0.81 | 0.120 |

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

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Project: Double R
Report Date: September 06, 2013



# CERTIFICATE OF ANALYSIS SMI13000222.1

| Method | | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga | Cs | Ge | Hf |
| Unit | | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| MDL | | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 | 0.02 | 0.1 | 0.02 |
| 1043481 | Humus | 2.4 | 7.7 | 0.12 | 228.0 | 0.009 | 7 | 0.36 | 0.003 | 0.11 | <0.1 | 0.9 | 0.03 | 0.11 | 226 | 0.2 | <0.02 | 1.3 | 0.24 | <0.1 | <0.02 |
| 1043482 | Humus | 2.7 | 3.0 | 0.11 | 380.4 | 0.003 | 21 | 0.09 | 0.001 | 0.11 | <0.1 | 0.9 | 0.02 | 0.19 | 218 | 0.2 | <0.02 | 0.2 | 0.35 | <0.1 | <0.02 |
| 1043485 | Humus | 3.4 | 3.3 | 0.18 | 443.2 | 0.004 | 26 | 0.14 | 0.002 | 0.19 | <0.1 | 0.6 | 0.04 | 0.19 | 304 | 0.3 | <0.02 | 0.4 | 0.40 | <0.1 | <0.02 |
| 1043486 | Humus | 3.4 | 12.2 | 0.14 | 218.3 | 0.013 | 6 | 0.85 | 0.005 | 0.13 | 0.1 | 1.1 | 0.17 | 0.10 | 192 | 0.3 | <0.02 | 3.5 | 2.23 | <0.1 | <0.02 |
| 1043487 | Humus | 1.8 | 8.4 | 0.07 | 109.9 | 0.005 | 4 | 0.62 | 0.004 | 0.11 | <0.1 | 0.5 | 0.07 | 0.09 | 157 | 0.2 | <0.02 | 2.2 | 0.55 | <0.1 | <0.02 |
| 1043489 | Humus | 0.9 | 2.7 | 0.14 | 446.2 | 0.003 | 25 | 0.11 | 0.002 | 0.16 | <0.1 | 0.6 | 0.02 | 0.17 | 234 | 0.2 | <0.02 | 0.4 | 0.94 | <0.1 | <0.02 |
| 1043490 | Humus | 0.8 | 2.9 | 0.15 | 562.8 | 0.003 | 32 | 0.10 | 0.002 | 0.17 | <0.1 | 0.6 | <0.02 | 0.18 | 304 | 0.2 | <0.02 | 0.3 | 0.90 | <0.1 | <0.02 |
| 1043491 | Rock Pulp | 12.5 | 16.8 | 0.41 | 70.6 | 0.399 | <1 | 5.34 | 0.047 | 0.02 | 0.1 | 14.7 | 0.19 | <0.02 | 46 | 0.2 | 0.07 | 12.2 | 1.11 | 0.1 | 0.88 |
| 1043492 | Humus | 41.2 | 20.7 | 0.32 | 429.1 | 0.009 | 5 | 1.45 | 0.001 | 0.10 | 0.2 | 3.3 | 0.13 | 0.17 | 263 | 0.4 | <0.02 | 2.9 | 2.98 | <0.1 | 0.03 |
| 1043493 | Humus | 1.2 | 2.2 | 0.22 | 813.2 | 0.002 | 29 | 0.07 | 0.002 | 0.27 | <0.1 | 0.6 | 0.05 | 0.16 | 222 | 0.1 | <0.02 | 0.2 | 0.13 | <0.1 | <0.02 |
| 1043494 | Humus | 1.0 | 3.5 | 0.14 | 468.7 | 0.004 | 21 | 0.11 | 0.002 | 0.15 | <0.1 | 0.7 | 0.03 | 0.17 | 186 | <0.1 | <0.02 | 0.5 | 0.17 | <0.1 | <0.02 |
| 1043495 | Humus | <0.5 | 1.9 | 0.17 | 412.6 | 0.002 | 19 | 0.06 | 0.002 | 0.26 | <0.1 | 0.6 | <0.02 | 0.19 | 538 | 0.3 | <0.02 | 0.2 | 0.07 | <0.1 | <0.02 |
| 1043496 | Humus | 4.2 | 8.3 | 0.14 | 532.1 | 0.005 | 12 | 0.52 | 0.002 | 0.15 | <0.1 | 0.7 | 0.07 | 0.16 | 475 | 0.2 | <0.02 | 1.9 | 0.37 | <0.1 | <0.02 |
| 1043497 | Humus | 0.6 | 3.1 | 0.09 | 243.4 | 0.002 | 8 | 0.07 | 0.002 | 0.06 | <0.1 | 0.5 | <0.02 | 0.24 | 207 | <0.1 | <0.02 | 0.3 | 0.08 | <0.1 | <0.02 |
| 1043498 | Humus | 2.3 | 2.0 | 0.17 | 526.6 | 0.002 | 37 | 0.07 | 0.002 | 0.20 | <0.1 | 0.6 | <0.02 | 0.18 | 268 | 0.2 | <0.02 | 0.2 | 0.13 | <0.1 | <0.02 |
| 1043499 | Humus | 12.4 | 11.7 | 0.23 | 1042 | 0.013 | 21 | 0.76 | 0.004 | 0.48 | 0.1 | 3.6 | 0.06 | 0.17 | 422 | 0.3 | <0.02 | 2.0 | 1.15 | <0.1 | 0.03 |
| 1043501 | Humus | 1.2 | 6.1 | 0.19 | 639.0 | 0.007 | 36 | 0.16 | 0.002 | 0.20 | <0.1 | 0.5 | <0.02 | 0.17 | 203 | 0.2 | 0.02 | 0.8 | 0.45 | <0.1 | <0.02 |
| 1043502 | Humus | 15.5 | 37.1 | 0.33 | 379.1 | 0.034 | 3 | 1.53 | 0.003 | 0.31 | 0.2 | 3.7 | 0.10 | 0.09 | 117 | <0.1 | 0.03 | 6.5 | 2.73 | <0.1 | 0.02 |
| 1043503 | Humus | 0.9 | 5.7 | 0.11 | 333.9 | 0.008 | 6 | 0.19 | 0.002 | 0.11 | <0.1 | 0.9 | <0.02 | 0.15 | 142 | 0.5 | <0.02 | 0.6 | 0.47 | <0.1 | <0.02 |
| 1043505 | Humus | 2.1 | 9.4 | 0.10 | 156.0 | 0.009 | 3 | 0.71 | 0.002 | 0.09 | 0.1 | 0.7 | 0.06 | 0.09 | 150 | 0.3 | <0.02 | 2.5 | 0.67 | <0.1 | <0.02 |
| 1043506 | Humus | 2.4 | 17.9 | 0.19 | 193.1 | 0.027 | 6 | 0.57 | 0.002 | 0.14 | 0.2 | 1.0 | 0.06 | 0.11 | 164 | <0.1 | <0.02 | 2.9 | 0.96 | <0.1 | <0.02 |

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**Client:** **KDG Exploration Services**
1535 Westall Ave.
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Project: Double R
Report Date: September 06, 2013



# CERTIFICATE OF ANALYSIS SMI13000222.1

| | Method | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Nb | Rb | Sn | Ta | Zr | Y | Ce | In | Re | Be | Li | Pd | Pt |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppb | ppb |
| | MDL | 0.02 | 0.1 | 0.1 | 0.05 | 0.1 | 0.01 | 0.1 | 0.02 | 1 | 0.1 | 0.1 | 10 | 2 |
| 1043481 | Humus | 0.29 | 2.8 | <0.1 | <0.05 | 0.2 | 1.71 | 6.0 | <0.02 | <1 | <0.1 | 2.3 | <10 | <2 |
| 1043482 | Humus | 0.05 | 4.2 | <0.1 | <0.05 | 0.3 | 2.93 | 1.5 | <0.02 | <1 | <0.1 | 0.7 | <10 | <2 |
| 1043485 | Humus | 0.07 | 3.9 | 0.1 | <0.05 | 0.2 | 0.98 | 7.5 | <0.02 | 2 | <0.1 | 0.5 | <10 | <2 |
| 1043486 | Humus | 0.59 | 14.7 | 0.5 | <0.05 | <0.1 | 1.73 | 7.8 | <0.02 | 1 | 0.1 | 7.8 | <10 | <2 |
| 1043487 | Humus | 0.43 | 6.6 | 0.3 | <0.05 | <0.1 | 0.53 | 3.7 | <0.02 | <1 | 0.1 | 2.0 | <10 | <2 |
| 1043489 | Humus | 0.09 | 6.5 | <0.1 | <0.05 | 0.2 | 0.34 | 1.5 | <0.02 | <1 | <0.1 | 0.5 | <10 | <2 |
| 1043490 | Humus | 0.08 | 7.0 | <0.1 | <0.05 | 0.2 | 0.35 | 1.5 | <0.02 | <1 | <0.1 | 0.4 | <10 | <2 |
| 1043491 | Rock Pulp | 0.64 | 2.8 | 1.1 | <0.05 | 50.5 | 18.39 | 44.9 | 0.06 | 1 | 1.1 | 6.1 | 41 | <2 |
| 1043492 | Humus | 0.70 | 28.8 | 0.2 | <0.05 | 0.7 | 39.83 | 44.2 | <0.02 | 3 | 0.6 | 12.4 | <10 | <2 |
| 1043493 | Humus | 0.04 | 4.6 | <0.1 | <0.05 | 0.1 | 0.98 | 1.4 | <0.02 | 1 | <0.1 | 0.4 | <10 | <2 |
| 1043494 | Humus | 0.09 | 2.1 | 0.1 | <0.05 | 0.2 | 0.72 | 1.5 | <0.02 | 1 | <0.1 | 0.4 | <10 | <2 |
| 1043495 | Humus | 0.03 | 2.0 | <0.1 | <0.05 | <0.1 | 0.59 | 0.7 | <0.02 | <1 | <0.1 | 0.2 | <10 | <2 |
| 1043496 | Humus | 0.29 | 6.6 | 0.2 | <0.05 | <0.1 | 3.00 | 13.0 | <0.02 | <1 | 0.2 | 2.5 | <10 | <2 |
| 1043497 | Humus | 0.07 | 1.0 | <0.1 | <0.05 | 0.1 | 0.28 | 1.0 | <0.02 | <1 | <0.1 | 0.3 | <10 | <2 |
| 1043498 | Humus | 0.03 | 2.6 | <0.1 | <0.05 | 0.1 | 3.31 | 1.4 | <0.02 | <1 | <0.1 | 0.4 | <10 | <2 |
| 1043499 | Humus | 0.57 | 16.8 | 0.1 | <0.05 | 1.1 | 10.10 | 12.3 | 0.02 | <1 | 0.2 | 4.9 | <10 | <2 |
| 1043501 | Humus | 0.21 | 7.8 | <0.1 | <0.05 | <0.1 | 0.52 | 2.9 | <0.02 | <1 | <0.1 | 1.0 | <10 | <2 |
| 1043502 | Humus | 1.42 | 48.5 | 0.4 | <0.05 | 0.6 | 7.55 | 28.3 | 0.05 | <1 | 0.5 | 12.9 | <10 | <2 |
| 1043503 | Humus | 0.20 | 4.1 | 0.1 | <0.05 | 0.2 | 0.45 | 1.7 | <0.02 | <1 | <0.1 | 0.9 | <10 | <2 |
| 1043505 | Humus | 0.39 | 7.9 | 0.3 | <0.05 | <0.1 | 0.97 | 4.6 | <0.02 | <1 | 0.2 | 3.6 | <10 | <2 |
| 1043506 | Humus | 0.51 | 19.6 | 0.2 | <0.05 | <0.1 | 0.79 | 5.3 | <0.02 | <1 | 0.1 | 4.2 | <10 | <2 |

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**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 06, 2013



# QUALITY CONTROL REPORT SMI13000222.1

| | Method | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 | 0.001 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 1043471 | Humus | 4.30 | 24.20 | 4.81 | 60.1 | 416 | 11.9 | 2.8 | 570 | 0.72 | 2.4 | 0.2 | 5.5 | <0.1 | 129.2 | 1.62 | 0.20 | 0.06 | 19 | 0.82 | 0.059 |
| REP 1043471 | QC | 4.20 | 24.26 | 4.85 | 62.0 | 418 | 12.1 | 2.9 | 572 | 0.71 | 2.6 | 0.2 | <0.2 | <0.1 | 135.0 | 1.75 | 0.21 | 0.06 | 18 | 0.85 | 0.063 |
| 1043480 | Humus | 1.57 | 17.65 | 2.30 | 177.0 | 154 | 5.7 | 1.1 | 2327 | 0.11 | 0.6 | <0.1 | <0.2 | <0.1 | 363.6 | 1.58 | 0.08 | <0.02 | <2 | 3.80 | 0.103 |
| REP 1043480 | QC | 1.73 | 20.04 | 2.65 | 208.4 | 214 | 5.8 | 1.1 | 2333 | 0.11 | 1.1 | <0.1 | <0.2 | <0.1 | 390.1 | 1.73 | 0.08 | <0.02 | <2 | 3.79 | 0.117 |
| 1043499 | Humus | 3.93 | 186.1 | 3.90 | 367.3 | 465 | 19.6 | 5.5 | 2351 | 1.11 | 5.8 | 1.8 | 1.2 | 0.5 | 224.4 | 3.34 | 0.64 | 0.06 | 18 | 3.60 | 0.253 |
| REP 1043499 | QC | 3.91 | 174.8 | 4.02 | 342.2 | 454 | 19.2 | 5.7 | 2313 | 1.08 | 5.8 | 1.9 | 1.0 | 0.5 | 219.3 | 3.34 | 0.61 | 0.06 | 18 | 3.58 | 0.242 |
| 1043506 | Humus | 11.93 | 52.65 | 4.50 | 79.8 | 491 | 13.9 | 5.3 | 2066 | 1.18 | 4.2 | 0.2 | 1.9 | <0.1 | 38.4 | 0.64 | 0.51 | 0.09 | 27 | 0.81 | 0.120 |
| REP 1043506 | QC | 11.84 | 53.33 | 4.81 | 85.1 | 536 | 15.9 | 4.8 | 2049 | 1.19 | 4.6 | 0.2 | 2.1 | <0.1 | 38.2 | 0.61 | 0.50 | 0.08 | 27 | 0.81 | 0.119 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS9 | Standard | 13.27 | 104.2 | 126.1 | 320.8 | 1815 | 36.6 | 6.7 | 588 | 2.37 | 26.5 | 2.7 | 128.0 | 6.3 | 77.6 | 2.38 | 5.92 | 7.56 | 42 | 0.76 | 0.083 |
| STD DS9 | Standard | 13.32 | 108.0 | 128.8 | 336.6 | 1865 | 39.3 | 7.8 | 586 | 2.36 | 25.9 | 2.8 | 117.1 | 6.3 | 73.8 | 2.50 | 5.78 | 7.49 | 40 | 0.71 | 0.085 |
| STD DS9 Expected | | 12.84 | 108 | 126 | 317 | 1830 | 40.3 | 7.6 | 575 | 2.33 | 25.5 | 2.69 | 118 | 6.38 | 69.6 | 2.4 | 4.94 | 6.32 | 40 | 0.7201 | 0.0819 |
| BLK | Blank | <0.01 | <0.01 | <0.01 | <0.1 | 3 | <0.1 | <0.1 | <1 | <0.01 | <0.1 | <0.1 | <0.2 | <0.1 | <0.5 | <0.01 | <0.02 | <0.02 | <2 | <0.01 | <0.001 |
| BLK | Blank | <0.01 | <0.01 | <0.01 | <0.1 | <2 | <0.1 | <0.1 | <1 | <0.01 | 0.1 | <0.1 | <0.2 | <0.1 | <0.5 | <0.01 | <0.02 | <0.02 | <2 | <0.01 | <0.001 |

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**Client:** **KDG Exploration Services**
1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 06, 2013



# QUALITY CONTROL REPORT SMI13000222.1

| | Method | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga | Cs | Ge | Hf |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| | MDL | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 | 0.02 | 0.1 | 0.02 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 1043471 | Humus | 2.9 | 7.3 | 0.07 | 215.2 | 0.007 | 7 | 0.33 | 0.004 | 0.06 | <0.1 | 1.1 | 0.02 | 0.13 | 127 | 0.2 | <0.02 | 1.8 | 0.40 | <0.1 | <0.02 |
| REP 1043471 | QC | 2.9 | 7.3 | 0.07 | 217.0 | 0.007 | 7 | 0.33 | 0.004 | 0.06 | <0.1 | 1.0 | 0.02 | 0.13 | 147 | <0.1 | <0.02 | 1.9 | 0.42 | <0.1 | <0.02 |
| 1043480 | Humus | 1.0 | 2.0 | 0.17 | 666.4 | 0.002 | 21 | 0.08 | 0.002 | 0.10 | <0.1 | 0.5 | <0.02 | 0.20 | 260 | 0.2 | <0.02 | 0.2 | 0.11 | <0.1 | <0.02 |
| REP 1043480 | QC | 1.1 | 2.4 | 0.18 | 706.7 | 0.002 | 24 | 0.10 | 0.002 | 0.11 | <0.1 | 0.7 | <0.02 | 0.21 | 333 | 0.2 | <0.02 | 0.4 | 0.14 | <0.1 | <0.02 |
| 1043499 | Humus | 12.4 | 11.7 | 0.23 | 1042 | 0.013 | 21 | 0.76 | 0.004 | 0.48 | 0.1 | 3.6 | 0.06 | 0.17 | 422 | 0.3 | <0.02 | 2.0 | 1.15 | <0.1 | 0.03 |
| REP 1043499 | QC | 12.9 | 12.0 | 0.22 | 1023 | 0.013 | 21 | 0.74 | 0.004 | 0.47 | 0.1 | 3.7 | 0.06 | 0.16 | 400 | 0.2 | <0.02 | 2.0 | 1.15 | <0.1 | 0.05 |
| 1043506 | Humus | 2.4 | 17.9 | 0.19 | 193.1 | 0.027 | 6 | 0.57 | 0.002 | 0.14 | 0.2 | 1.0 | 0.06 | 0.11 | 164 | <0.1 | <0.02 | 2.9 | 0.96 | <0.1 | <0.02 |
| REP 1043506 | QC | 2.6 | 18.7 | 0.19 | 196.1 | 0.027 | 7 | 0.59 | 0.002 | 0.14 | 0.1 | 1.1 | 0.07 | 0.11 | 175 | 0.2 | 0.05 | 2.6 | 0.98 | <0.1 | <0.02 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS9 | Standard | 15.8 | 119.9 | 0.62 | 289.7 | 0.106 | 3 | 1.01 | 0.095 | 0.41 | 3.0 | 3.0 | 5.52 | 0.16 | 216 | 5.4 | 5.19 | 5.0 | 2.45 | <0.1 | 0.07 |
| STD DS9 | Standard | 14.8 | 116.3 | 0.64 | 320.5 | 0.110 | 3 | 0.98 | 0.087 | 0.40 | 3.2 | 2.8 | 5.47 | 0.16 | 183 | 5.8 | 5.28 | 5.1 | 2.55 | 0.2 | 0.11 |
| STD DS9 Expected | | 13.3 | 121 | 0.6165 | 295 | 0.1108 | | 0.9577 | 0.0853 | 0.395 | 2.89 | 2.5 | 5.3 | 0.1615 | 200 | 5.2 | 5.02 | 4.59 | 2.37 | 0.1 | 0.08 |
| BLK | Blank | <0.5 | <0.5 | <0.01 | <0.5 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.1 | <0.02 | <0.02 | <5 | <0.1 | <0.02 | <0.1 | <0.02 | <0.1 | <0.02 |
| BLK | Blank | <0.5 | <0.5 | <0.01 | <0.5 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.1 | <0.02 | <0.02 | <5 | <0.1 | <0.02 | <0.1 | <0.02 | <0.1 | <0.02 |

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1535 Westall Ave.
Victoria BC V8T 2G6 CANADA

Project: Double R
Report Date: September 06, 2013

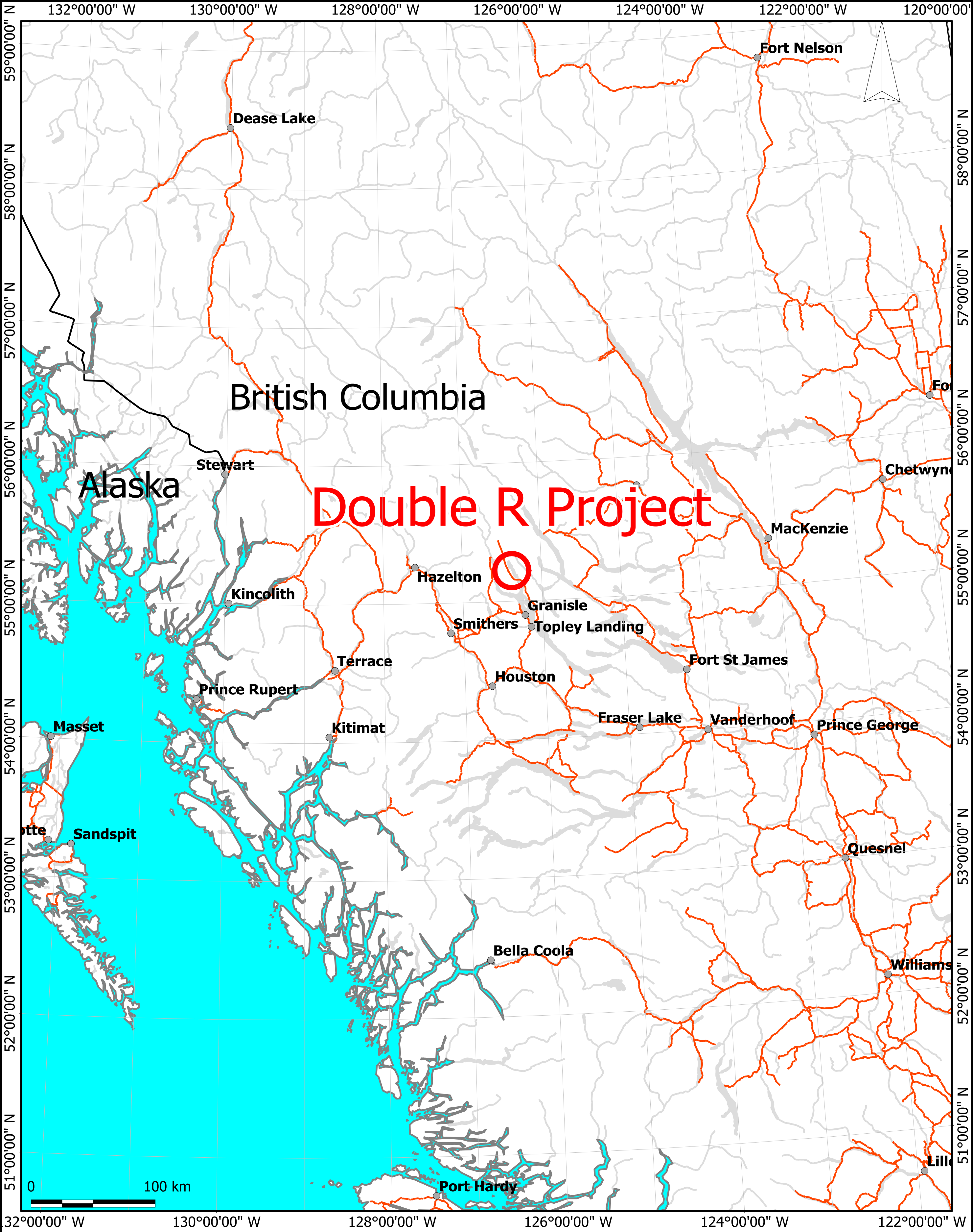


# QUALITY CONTROL REPORT SMI13000222.1

| | Method | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 | 1F30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Nb | Rb | Sn | Ta | Zr | Y | Ce | In | Re | Be | Li | Pd | Pt |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppb | ppb |
| | MDL | 0.02 | 0.1 | 0.1 | 0.05 | 0.1 | 0.01 | 0.1 | 0.02 | 1 | 0.1 | 0.1 | 10 | 2 |
| Pulp Duplicates | | | | | | | | | | | | | | |
| 1043471 | Humus | 0.41 | 4.5 | 0.2 | <0.05 | 0.2 | 1.72 | 6.0 | <0.02 | <1 | <0.1 | 0.9 | <10 | <2 |
| REP 1043471 | QC | 0.41 | 4.5 | 0.2 | <0.05 | 0.2 | 1.70 | 5.8 | <0.02 | <1 | <0.1 | 0.9 | <10 | <2 |
| 1043480 | Humus | 0.05 | 2.7 | <0.1 | <0.05 | 0.2 | 1.04 | 1.8 | <0.02 | <1 | <0.1 | 0.3 | <10 | <2 |
| REP 1043480 | QC | 0.03 | 3.1 | <0.1 | <0.05 | 0.2 | 0.98 | 1.8 | <0.02 | <1 | <0.1 | 0.3 | <10 | <2 |
| 1043499 | Humus | 0.57 | 16.8 | 0.1 | <0.05 | 1.1 | 10.10 | 12.3 | 0.02 | <1 | 0.2 | 4.9 | <10 | <2 |
| REP 1043499 | QC | 0.56 | 15.8 | 0.1 | <0.05 | 1.0 | 9.83 | 12.7 | 0.02 | <1 | 0.3 | 5.2 | <10 | <2 |
| 1043506 | Humus | 0.51 | 19.6 | 0.2 | <0.05 | <0.1 | 0.79 | 5.3 | <0.02 | <1 | 0.1 | 4.2 | <10 | <2 |
| REP 1043506 | QC | 0.47 | 20.9 | 0.3 | <0.05 | <0.1 | 0.75 | 5.3 | <0.02 | <1 | 0.1 | 4.8 | <10 | <2 |
| Reference Materials | | | | | | | | | | | | | | |
| STD DS9 | Standard | 1.39 | 34.5 | 6.9 | <0.05 | 1.7 | 6.69 | 30.7 | 2.27 | 70 | 5.7 | 25.4 | 131 | 375 |
| STD DS9 | Standard | 1.42 | 34.1 | 7.0 | <0.05 | 1.7 | 6.55 | 30.5 | 2.43 | 73 | 5.4 | 27.3 | 129 | 374 |
| STD DS9 Expected | | 1.33 | 33.8 | 6.4 | 0.004 | 2 | 5.97 | 25.4 | 2.2 | 61 | 5.4 | 25.2 | 120 | 350 |
| BLK | Blank | <0.02 | <0.1 | <0.1 | <0.05 | <0.1 | <0.01 | <0.1 | <0.02 | <1 | <0.1 | <0.1 | <10 | <2 |
| BLK | Blank | <0.02 | <0.1 | <0.1 | <0.05 | <0.1 | <0.01 | <0.1 | <0.02 | <1 | <0.1 | <0.1 | <10 | <2 |

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

**Pocket**




| | |
|---|---|
| Figure 1<br>Quadra Coastal Resources Ltd<br>Location Map - Double R Project<br>1:4000000 | Universal Transverse Mercator - Zone 09 (N)<br>Drawn by: John Grabavac<br>Printed at: 12/10/2013 |

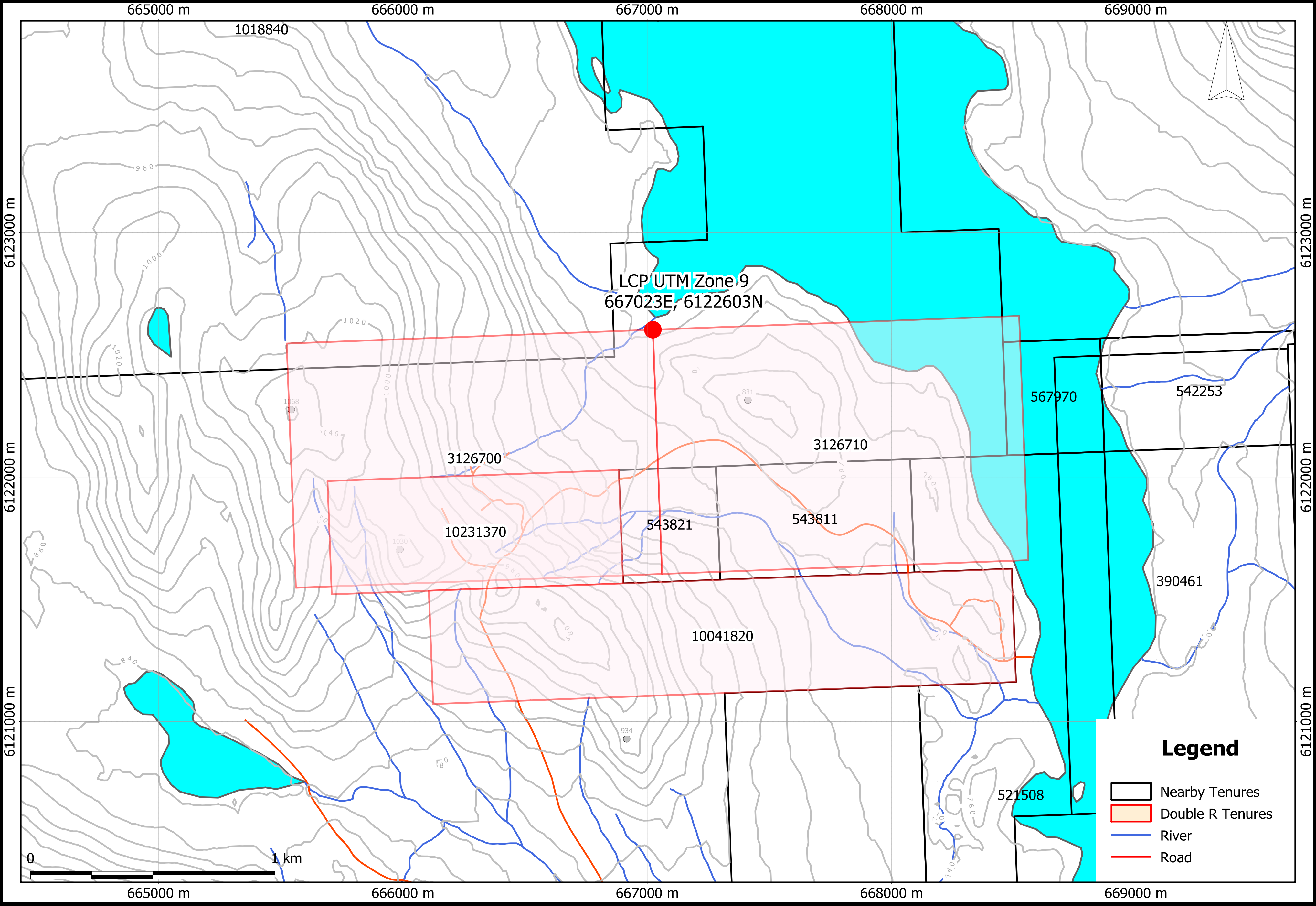



Figure 2
Quadra Coastal Resources Ltd
Claim Map - Double-R Property
1:20000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 20/10/2013

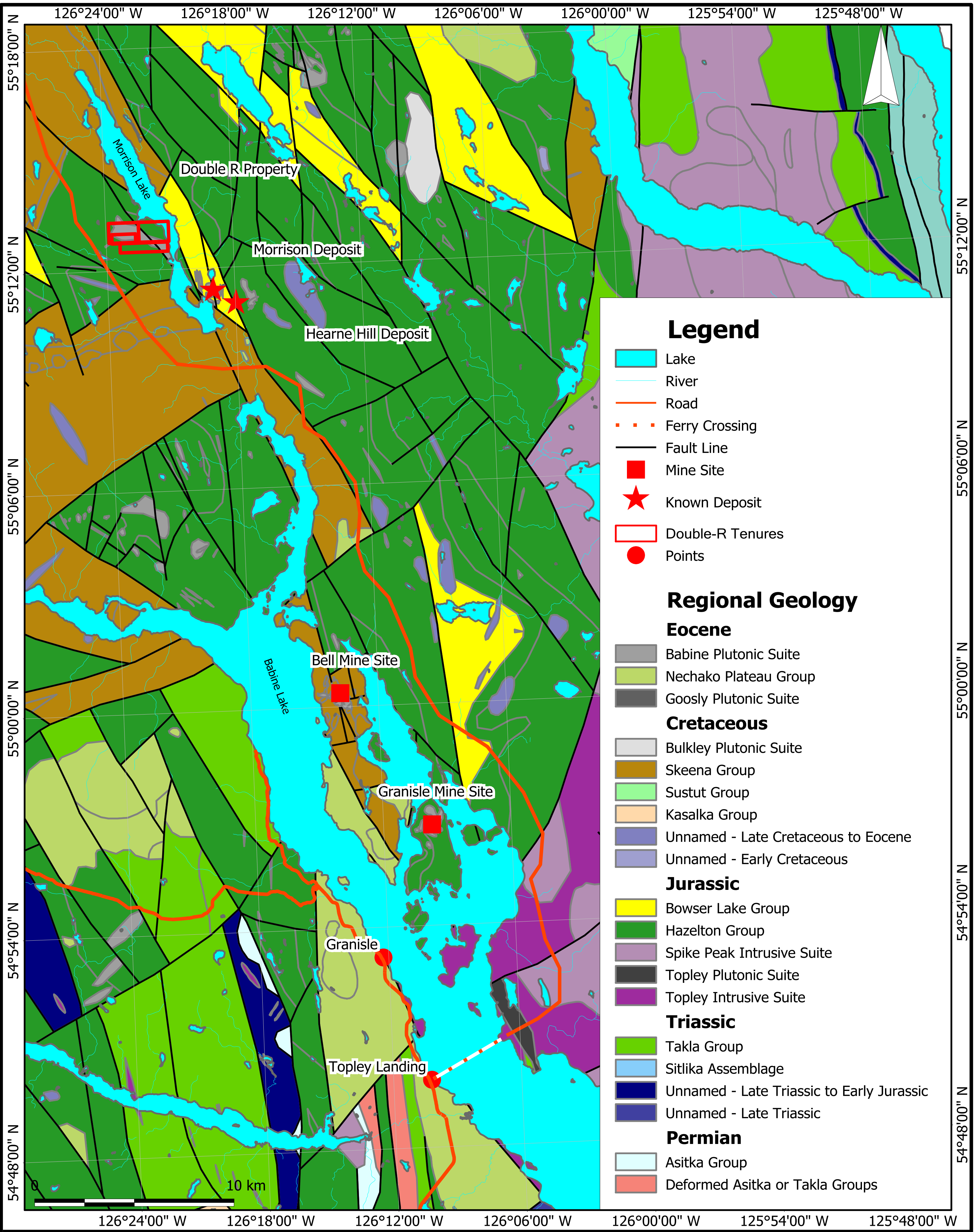



Figure 3
Quadra Coastal Resources Ltd
Regional Geology Map - Double R Property
1:250000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 20/10/2013

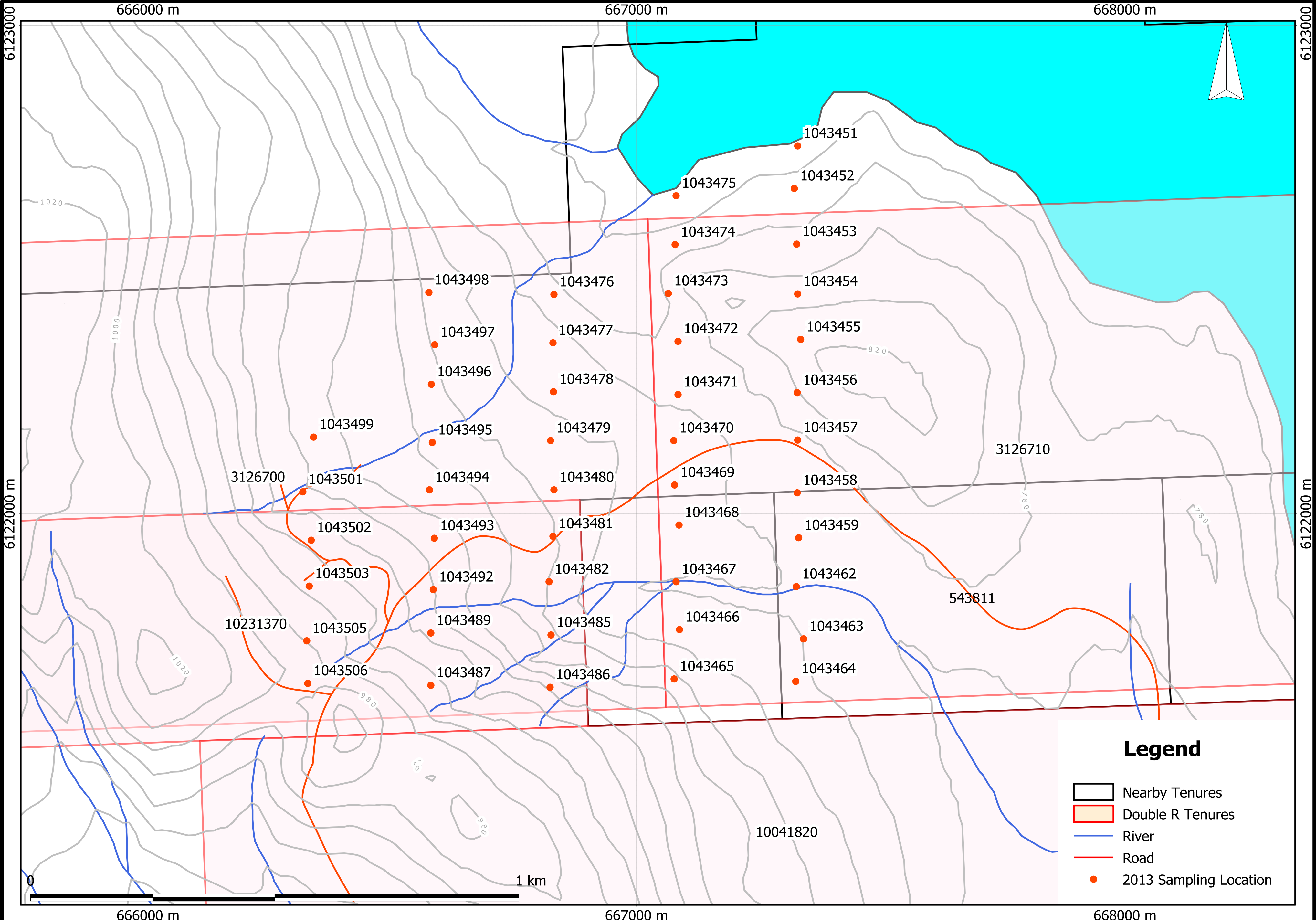



Figure 9
Quadra Coastal Resources Ltd
Double R 2013 Humus Sample Location Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

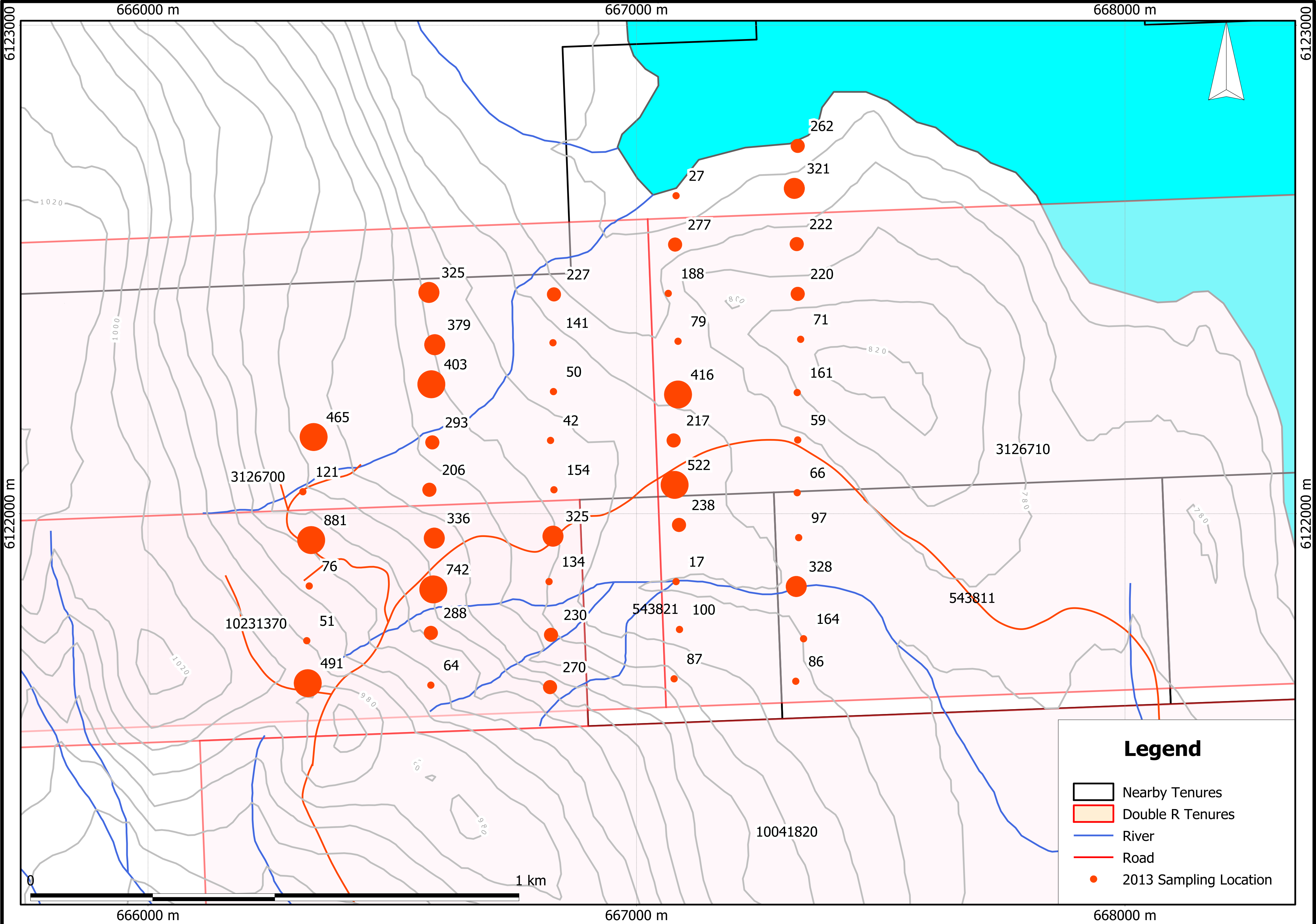



Figure 10
Quadra Coastal Resources Ltd
Double R 2013 Humus Ag ppb Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

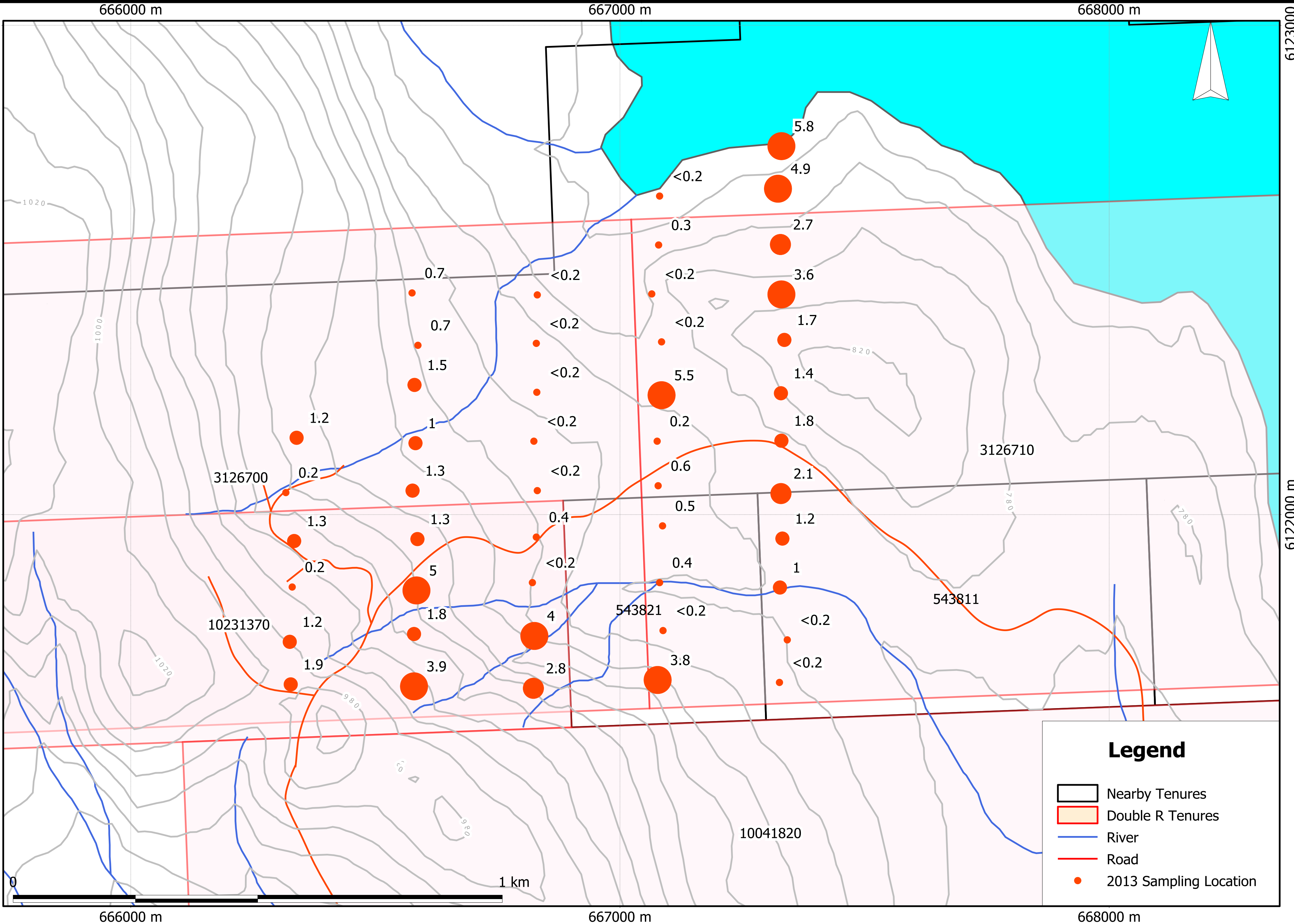



Figure 11
Quadra Coastal Resources Ltd
Double R 2013 Humus Au ppb Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

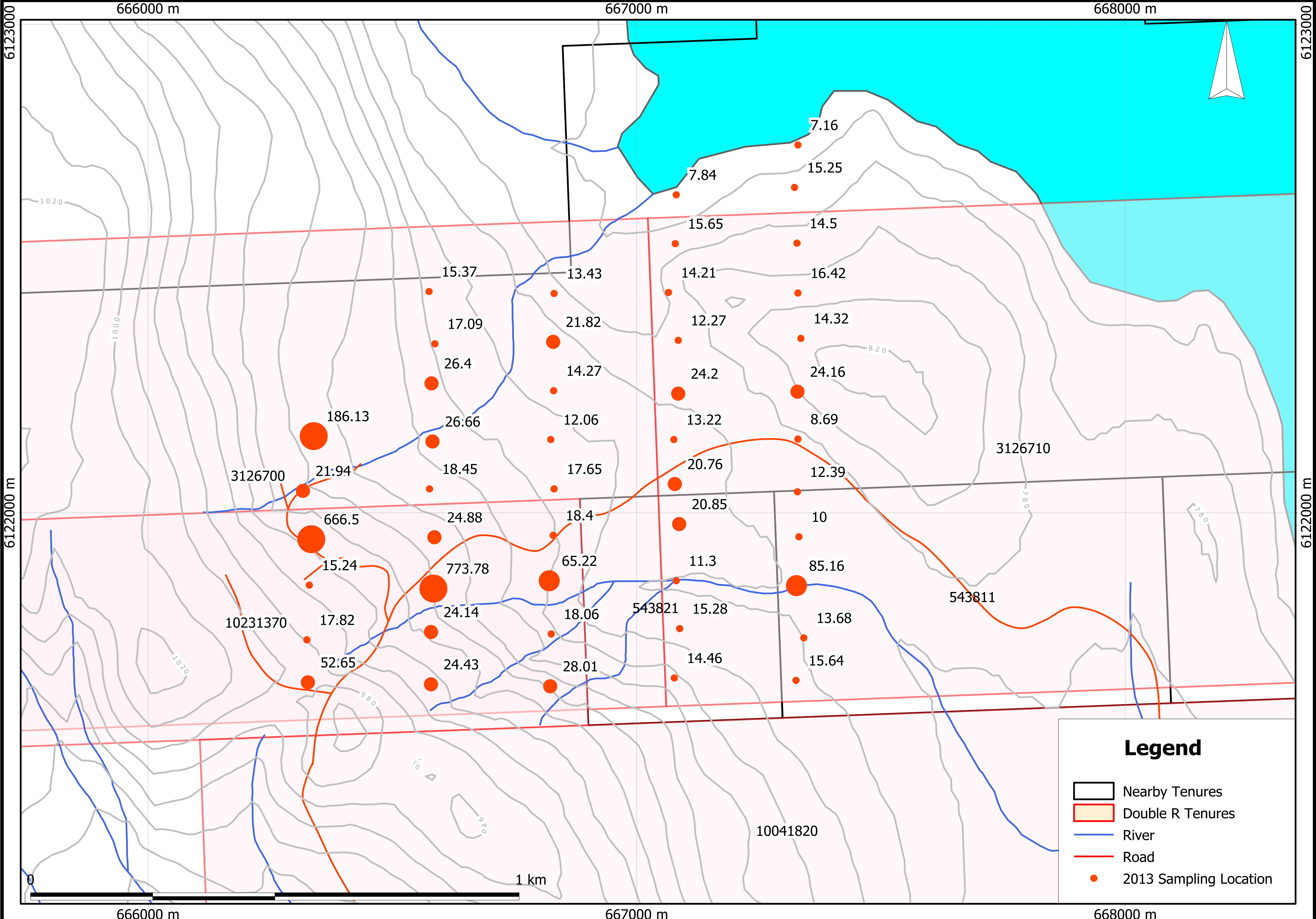



Figure 12
Quadra Coastal Resources Ltd
Double R 2013 Humus Cu ppm Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

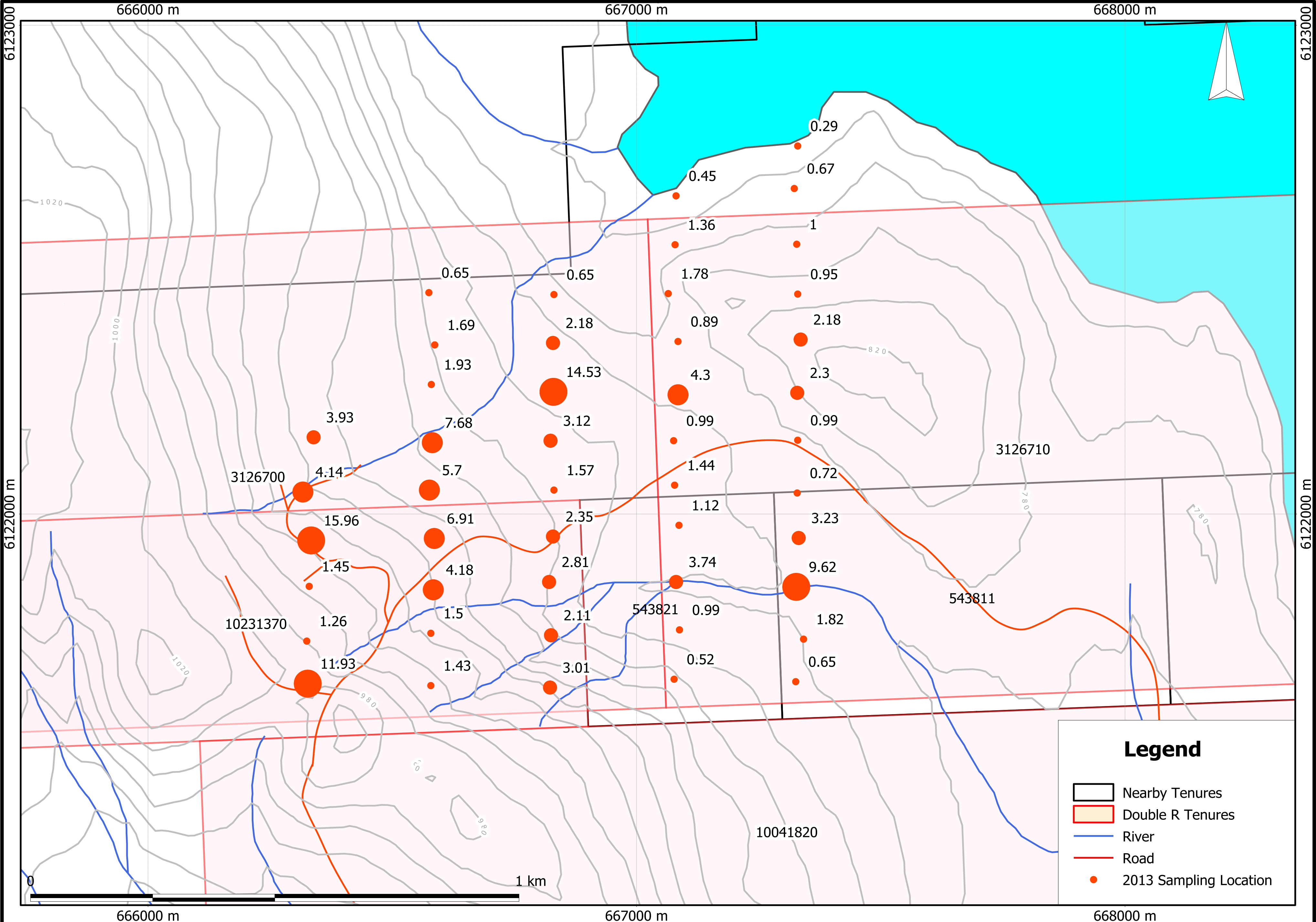



Figure 13
Quadra Coastal Resources Ltd
Double R 2013 Humus Mo ppm Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

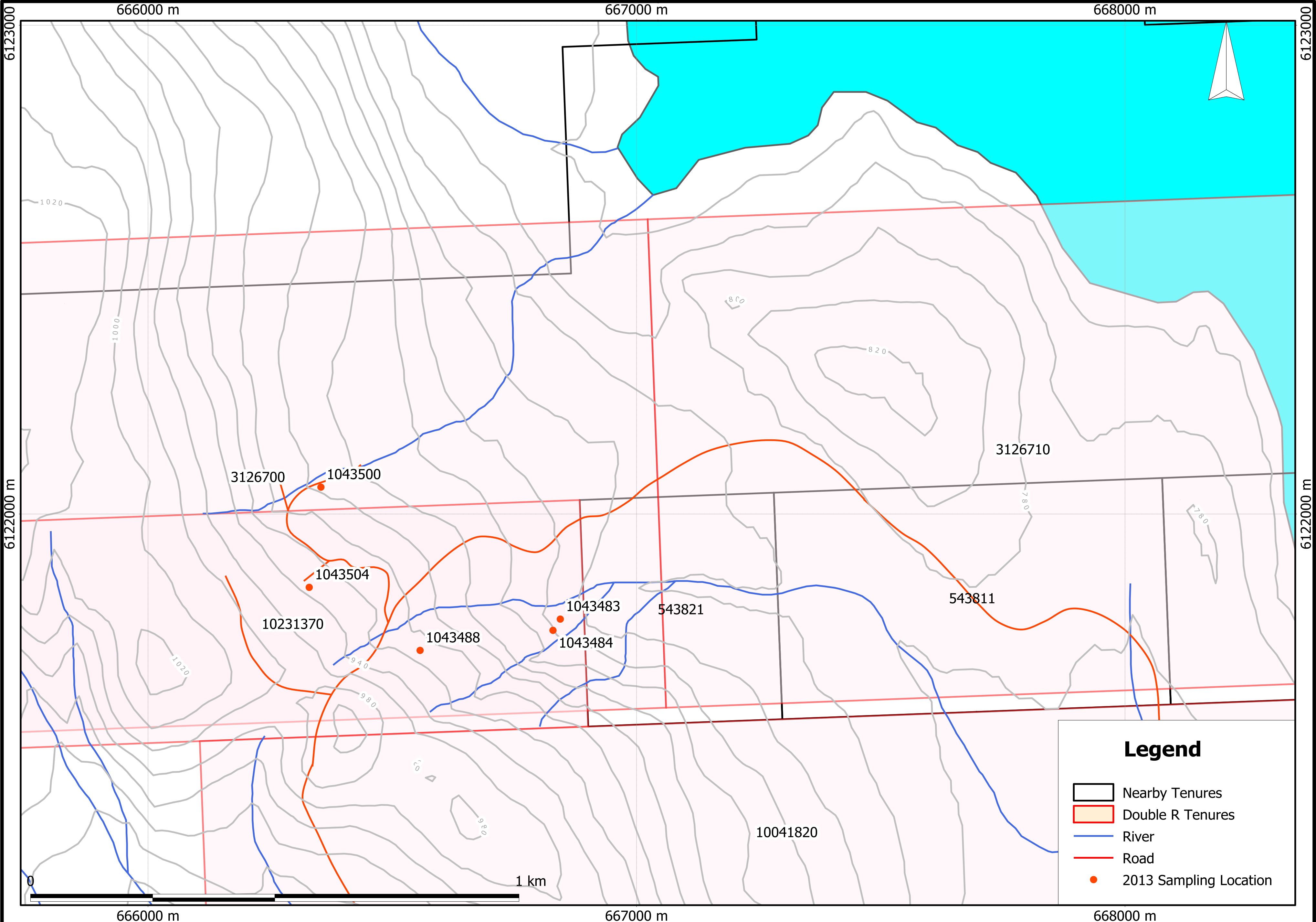



Figure 14
Quadra Coastal Resources Ltd
Double R 2013 Rock Sample Location Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

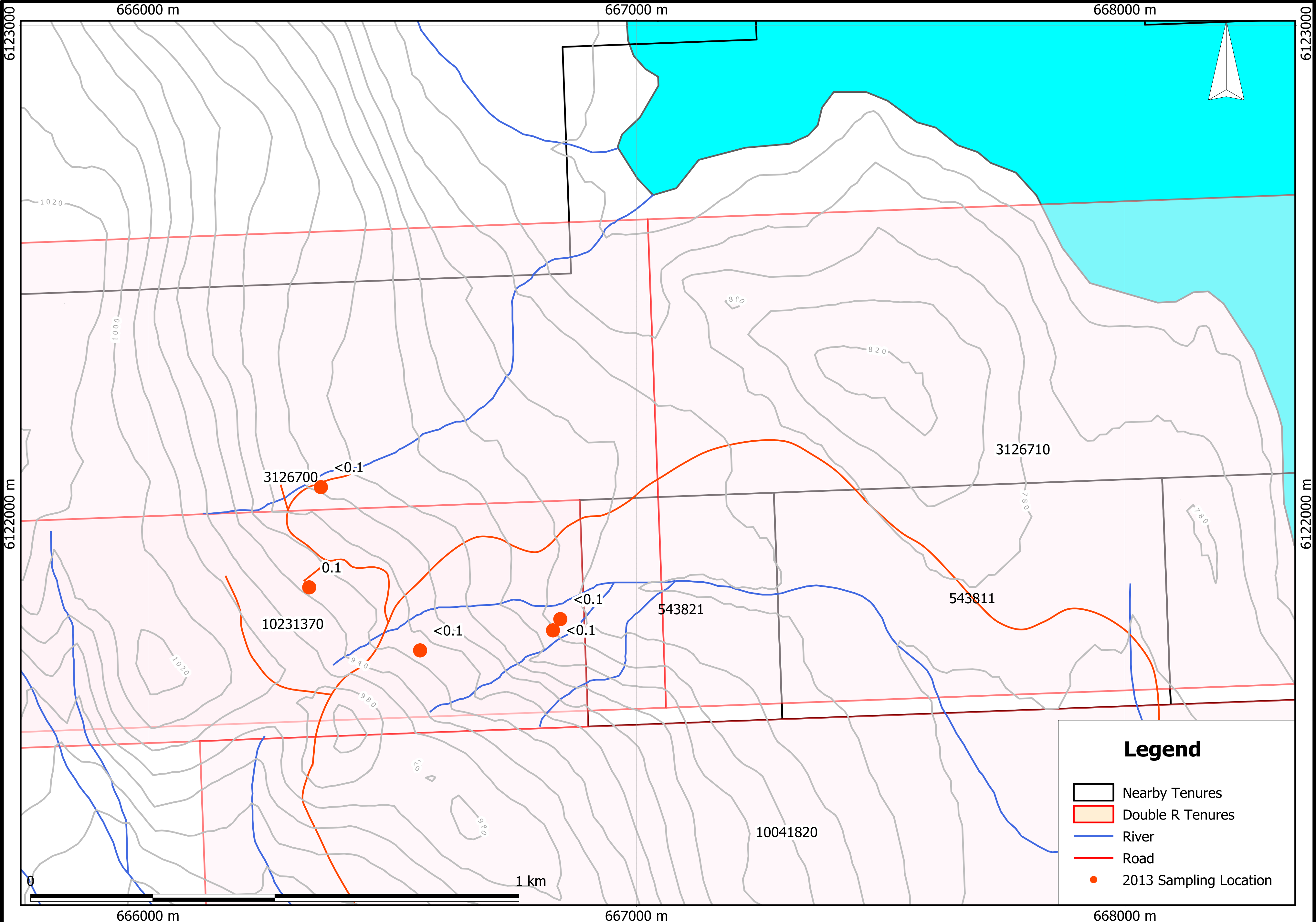



Figure 15
Quadra Coastal Resources Ltd
Double R 2013 Rock Ag ppm Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

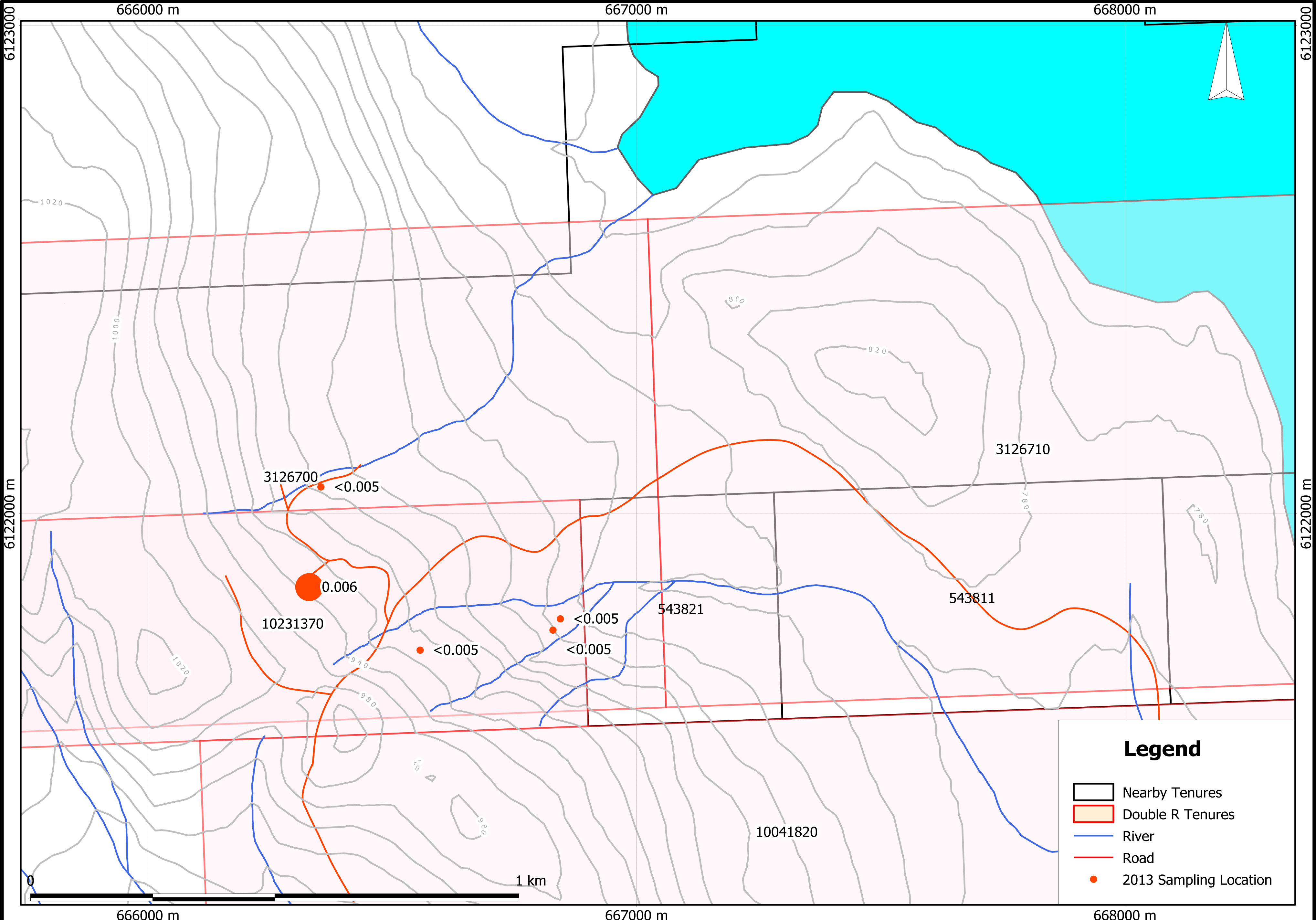



Figure 16
Quadra Coastal Resources Ltd
Double R 2013 Rock Au ppm Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

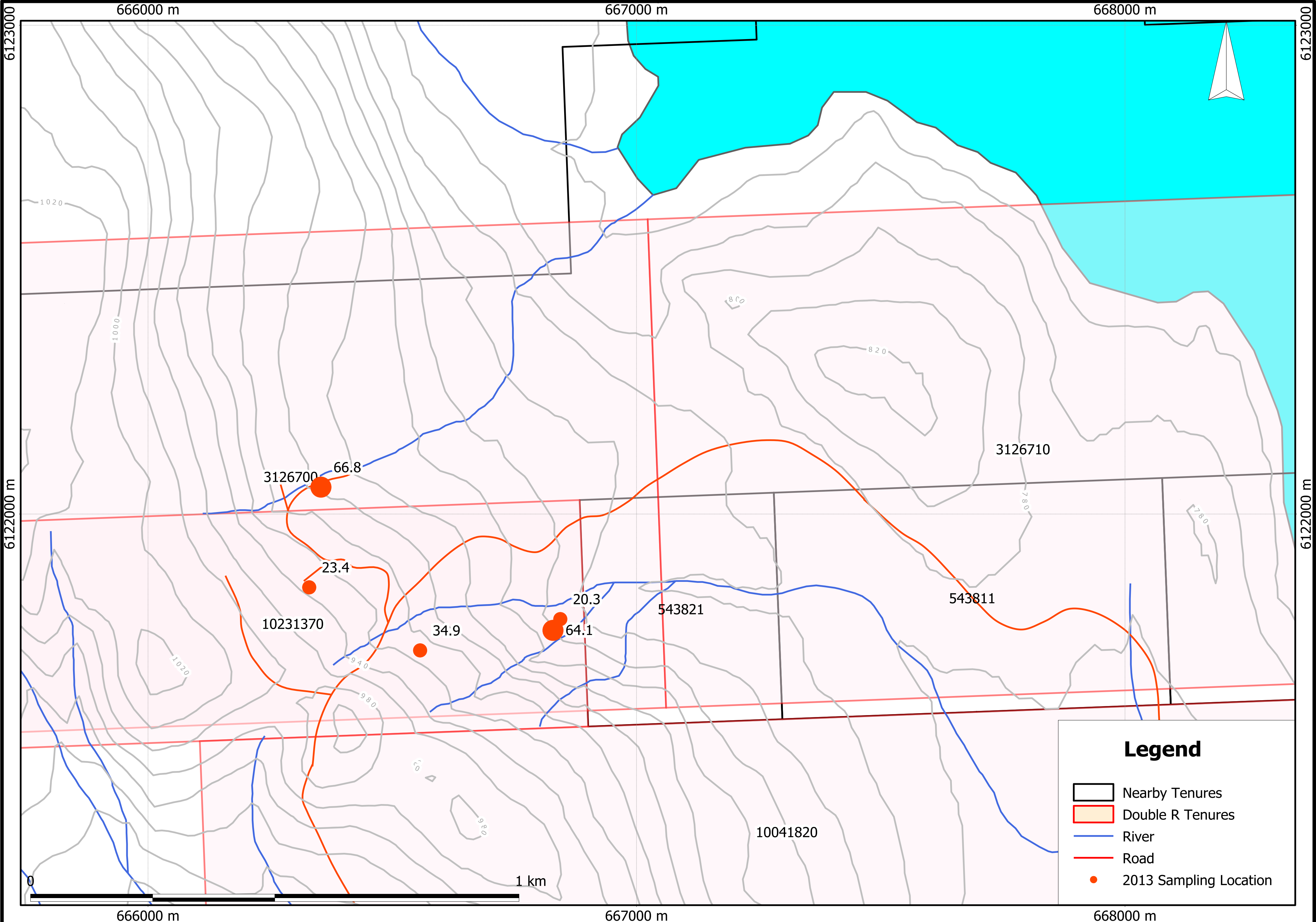



Figure 17
Quadra Coastal Resources Ltd
Double R 2013 Rock Cu ppm Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013

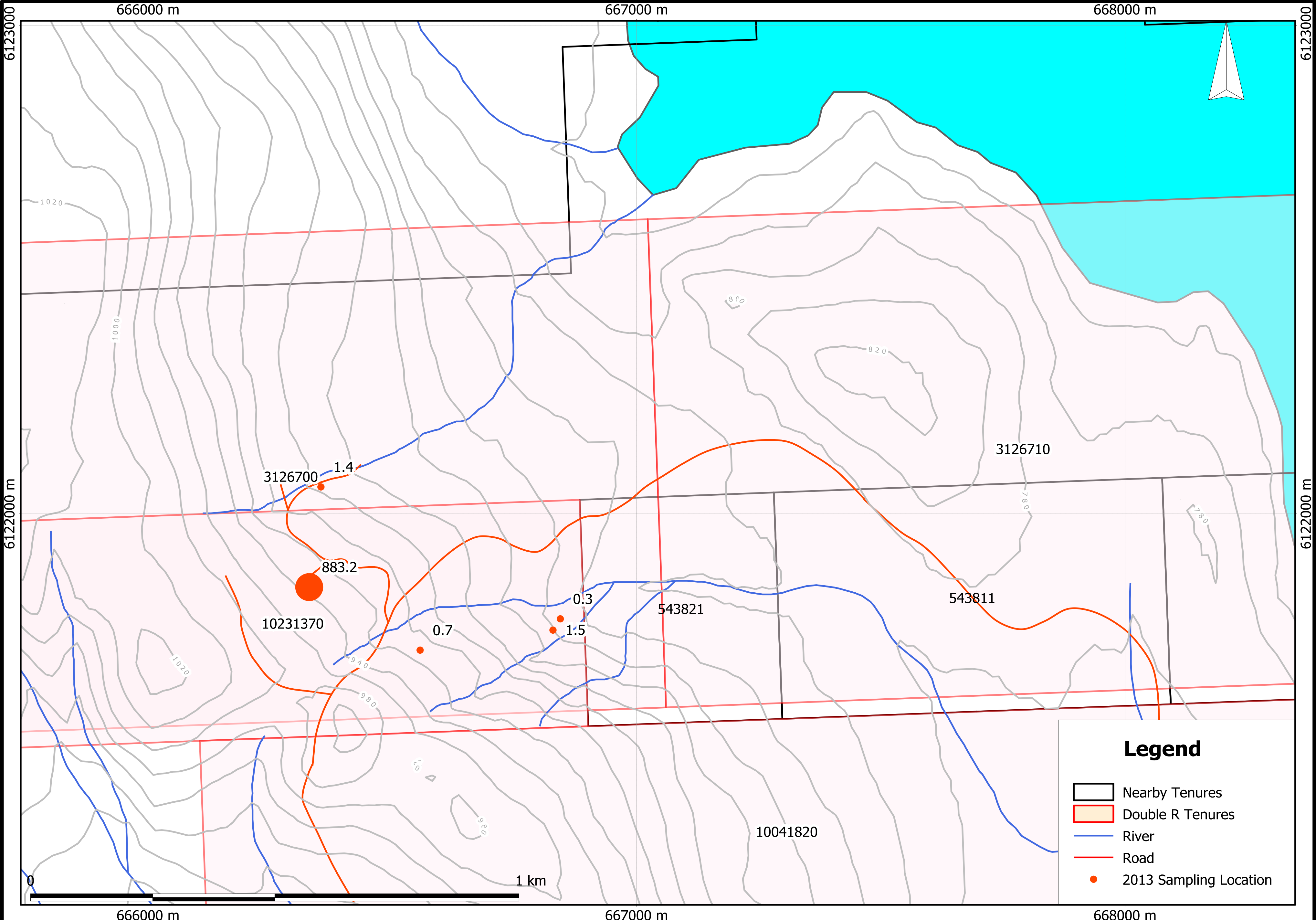



Figure 18
Quadra Coastal Resources Ltd
Double R 2013 Rock Mo ppm Map
1:10000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 11/6/2013


Figure 19
Quadra Coastal Resources Ltd
Double R Property Compilation Map
1:5000

Universal Transverse Mercator - Zone 09 (N)
Drawn by: John Grabavac
Printed at: 6/11/2013