



Frontispiece. Soil sampling and prospecting crew, southern Dok Property, early August 2008.

**BC Geological Survey  
Assessment Report  
30706**

**2008 Exploration,  
Dok Property,  
Dokdaon and Strata Creeks,**

Telegraph Creek Area  
(N.T.S. 104G052 and 104G053),

Liard Mining Division, Northwestern British Columbia

Latitude 57° 33' 12" N, Longitude 131°34' 46 W"

for

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## **1.0 Summary of Field Program and Results**

In late July-early August 2008, a six person crew spent a single day soil sampling and reconnaissance prospecting and mapping at the Dok property, in the Stikine River-Telegraph Creek area of northwest B.C. The purpose of the program, aside from doing assessment work, was to continue to evaluate the Cu-Au exploration potential of the property. The results of the program, and of a more thorough compilation of previous work, which are detailed in the following pages, are very encouraging, and they suggest that the exploration potential on the Dok property for a Cu-Au-Ag deposit of significant size, remains high. As a consequence, an expanded exploration program is recommended for the property. The program should focus largely on the part of the property that appears to be the most prospective, notably the area of the “Main Showing” and its immediate surrounds, but it should also involve further reconnaissance work on the parts of the property which have not obviously been examined in previous work programs.

The Dok property is underlain primarily arc volcanic and intrusive rocks of the mid-Mesozoic Stikine terrane (Stikinia), and it lies in the mineral-rich belt within Stikinia which runs from the Tulsequah area on the north to the Iskut, Stewart, and Kitsault-Anyox areas on the south. Stratified rocks on the property include mafic to intermediate volcanic rocks and associated fine-grained clastic rocks and limestone that are correlative with the Upper Triassic Stuhini Group. The stratified rocks have been intruded by several phases of intrusions, largely of alkalic affinity, that are of probable Early to Middle Jurassic age. The alkalic intrusive rocks and their immediate wallrocks are commonly mineralized, and the results of recent programs indicates clearly that the mineralization contains significant Au and Ag values, as well as the copper which attracted earlier explorers. The geologic setting and Cu-Au mineralization suggest similarities to alkalic Cu-Au deposits common elsewhere in the accreted terranes of western British Columbia.

## **2.0 Location, Access, and Physiography**

The Dok property is located approximately 40 kilometres southwest of the village of Telegraph Creek and just 35 kilometres northwest of the Schaft Creek deposit, in northwestern British Columbia (figs. 1 and 2). The property consists of 6 contiguous Mineral Titles Online (MTO) tenures, which cover nearly 28 square kilometres (2796.07 hectares, Table I, fig. 3). The property, which was first staked by the present owners in the fall of 2004, straddles the northwest-trending ridge between Dokdaon and Strata creeks. The confluence of the creeks is a short distance downstream, where the combined flow, known as Dokdaon Creek, continues northwesterly into the Stikine River at Jackson's Landing, approximately 45 kilometres downstream from Telegraph Creek. The Stikine is navigable upstream nearly to Telegraph Creek, and so the property is only 7 km from navigable waters, and a total distance of only 130 km north-northeast, as the crow flies, of the port of Wrangell, Alaska, which is on tidewater near the mouth of the river.

Access to the property is via helicopter from a seasonal base in Telegraph Creek, about 15 minutes flight time away (fig. 2). Telegraph Creek itself may be reached in an hours drive via an all-weather, well-maintained gravel road from the town of Dease Lake, which has a large paved airstrip, and a year-round helicopter base. Dease Lake is located along a paved highway, Highway 37, which is also known as the Stewart-Cassiar Highway. Dease Lake is approximately equidistant from the communities of Smithers and Terrace, to the south, and Whitehorse, Yukon Territory, to the north, all of which are serviced daily from Vancouver by passenger airlines and which are about a six hour drive away by car. The Dok property is also less than 20 kilometres south of the Barrington River road, a four-wheel drive road which was used to provide access in the early 1990's to the Barrington River placer Au deposits. The Barrington River road was recently re-opened in

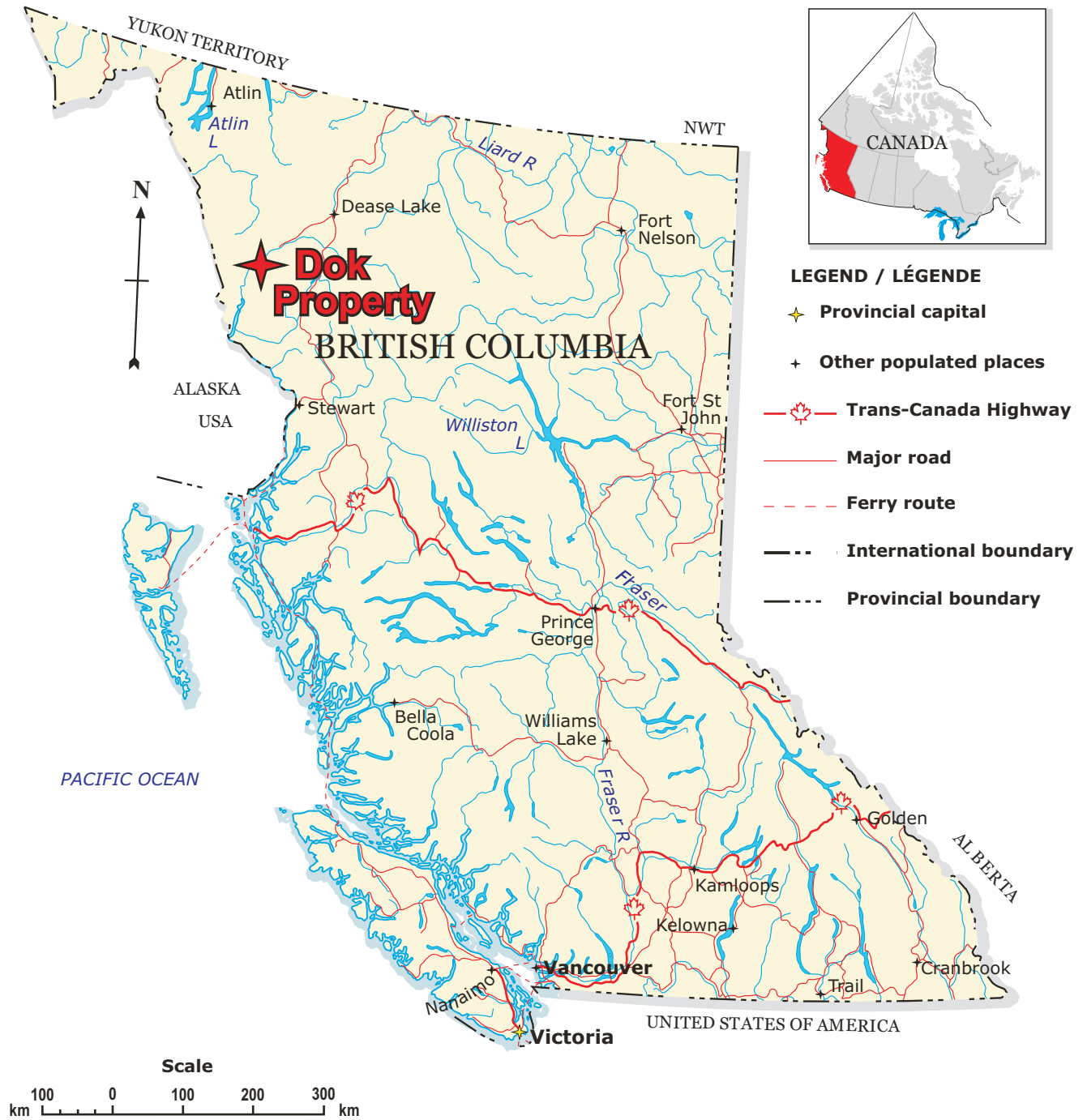


Figure 1. Location of the Dok Property, northwestern British Columbia.



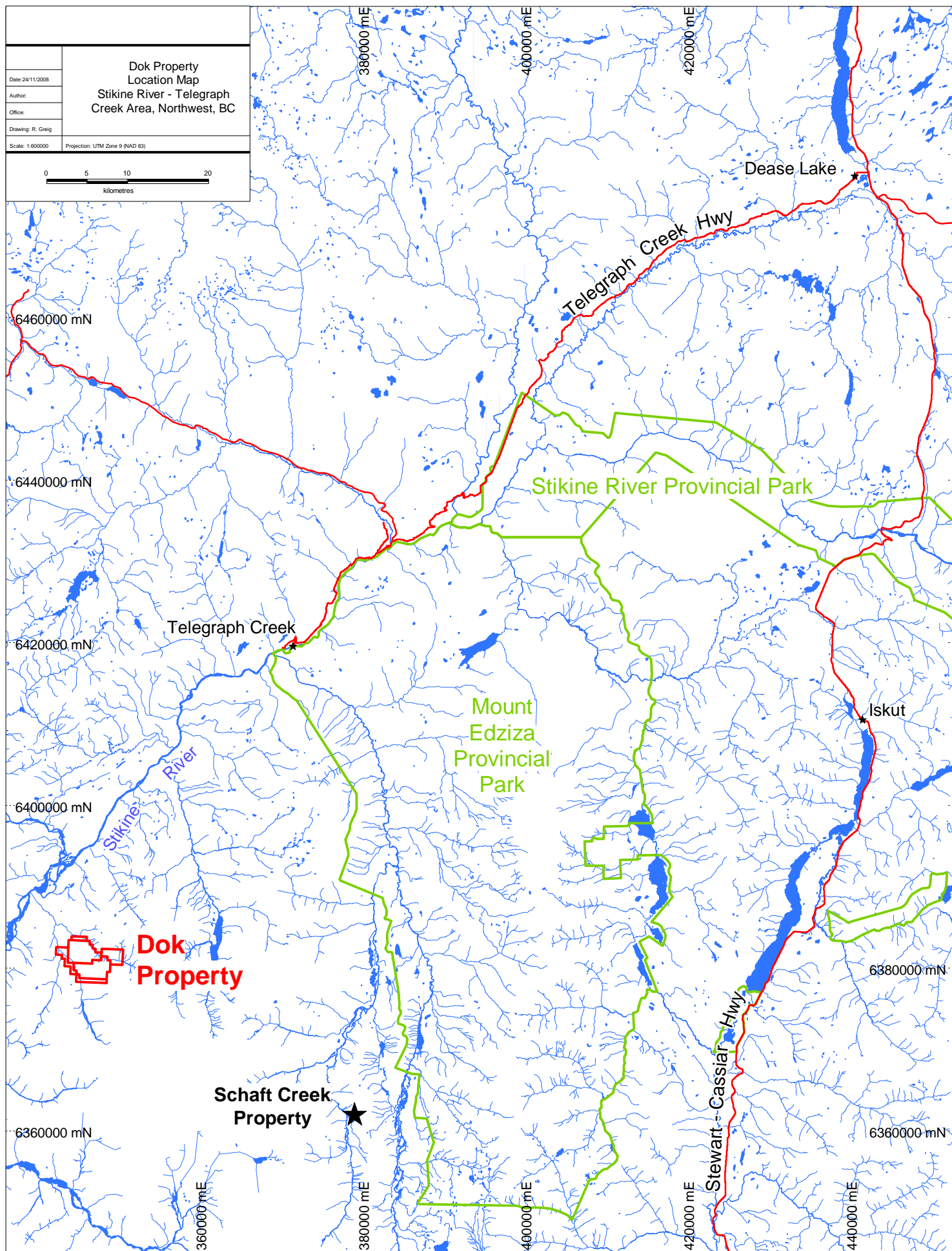


Figure 2. Location of the Dok Property in the Telegraph Creek area, northwest British Columbia.

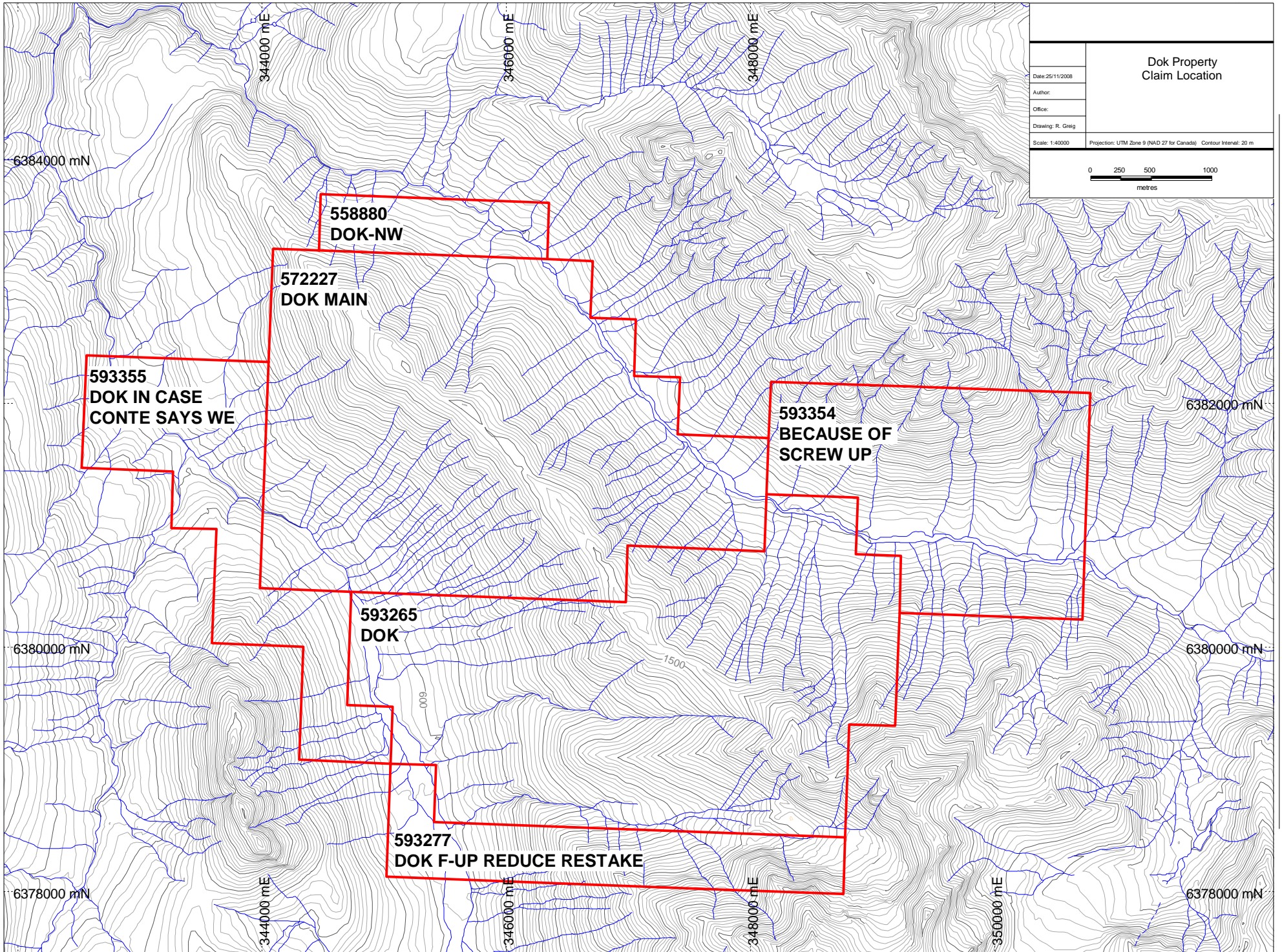


Figure 3. Dok property mineral tenures, Telegraph Creek-Stikine River area, northwest British Columbia.

| <b>Table I. List of Mineral Tenures, Dok Property</b> |                   |             |                    |
|---|-------------------|-------------|--------------------|
| <b>Claim Name</b>                                     | <b>Record No.</b> | <b>Size</b> | <b>Record Date</b> |
| DOK MAIN  | 572227            | 937.59      | 2012/oct/28        |
| DOK   | 593265            | 885.94      | 2011/oct/28        |
| BECAUSE OF SCREW UP                                   | 593354            | 399.38      | 2009/oct/24        |
| DOK IN CASE CONTE SAYS WE                             | 593355            | 295.23      | 2009/oct/24        |
| DOK F-UP REDUCE RESTAKE                               | 593277            | 191.15      | 2009/oct/23        |
| DOK-NW  | 558880            | 86.78       | 2012/oct/28        |
|   |                   | 2796.07     |                    |

order to help fight an extensive forest fire in the Barrington River drainage, and it provides good access for potential camp and drill mobilization.

The Dok property lies along the northeast margin of the rugged Coast Mountains, and although relief on the property is indeed locally rugged, the property and potential access routes share, in part, the much more subdued topographic character of the adjacent Tahltan Highlands and Telegraph Creek Lowland, which parallel the Stikine River. Relief on the Dok property is nearly 1800 metres, with the high point along the ridge between Strata and Dokdaon creeks and the low points along the creeks near the northwestern side of the property (fig. 3). Peaks near the southern boundary of the claim group reach an elevation of approximately 2200 metres. As much as a third of the property is above treeline, and permanent mountain glaciers occur not far away to the south and southeast, at somewhat higher elevations (nearly 3000 metres). Lower elevations on the property are characterized by moderately steep to gentle slopes, with thick brushy vegetation, mainly willow, and less common coniferous trees (fig. 4). Higher elevations are generally more open, although patches of thick alpine fir are locally abundant. The upper slopes of the ridges have

a number of cliffy outcrops, particularly on the northeast side of the ridge, but access by foot to all parts of the property is generally good.



Figure 4. View east-southeast across the Dok property from above the west side of Dokdaon Creek and toward Red Creek (headwaters are the rusty-weathering gossanous area in upper right corner of photo); gossan on mid- to upper left side of photo is the area of the Dok property Main Showing area, and ridgeline spanning the view is “Dok Ridge,” between Dokdaon (lower right hand corner) and Strata creeks.

### **3.0 Regional Tectonic and Geologic Setting**

The Dok property is underlain mainly by stratified and intrusive rocks of Late Triassic and Early to Middle(?) Jurassic age that are part of the Stikine terrane (Stikinia; figs. 5-7). Stikinia makes up much of the northern Intermontane Belt in this part of the northern Cordillera, and the Dok property lies near its boundary with rocks of the Coast Belt, largely plutonic, which lie immediately adjacent to the west. Rocks making up Stikinia are almost exclusively of intra-oceanic island arc

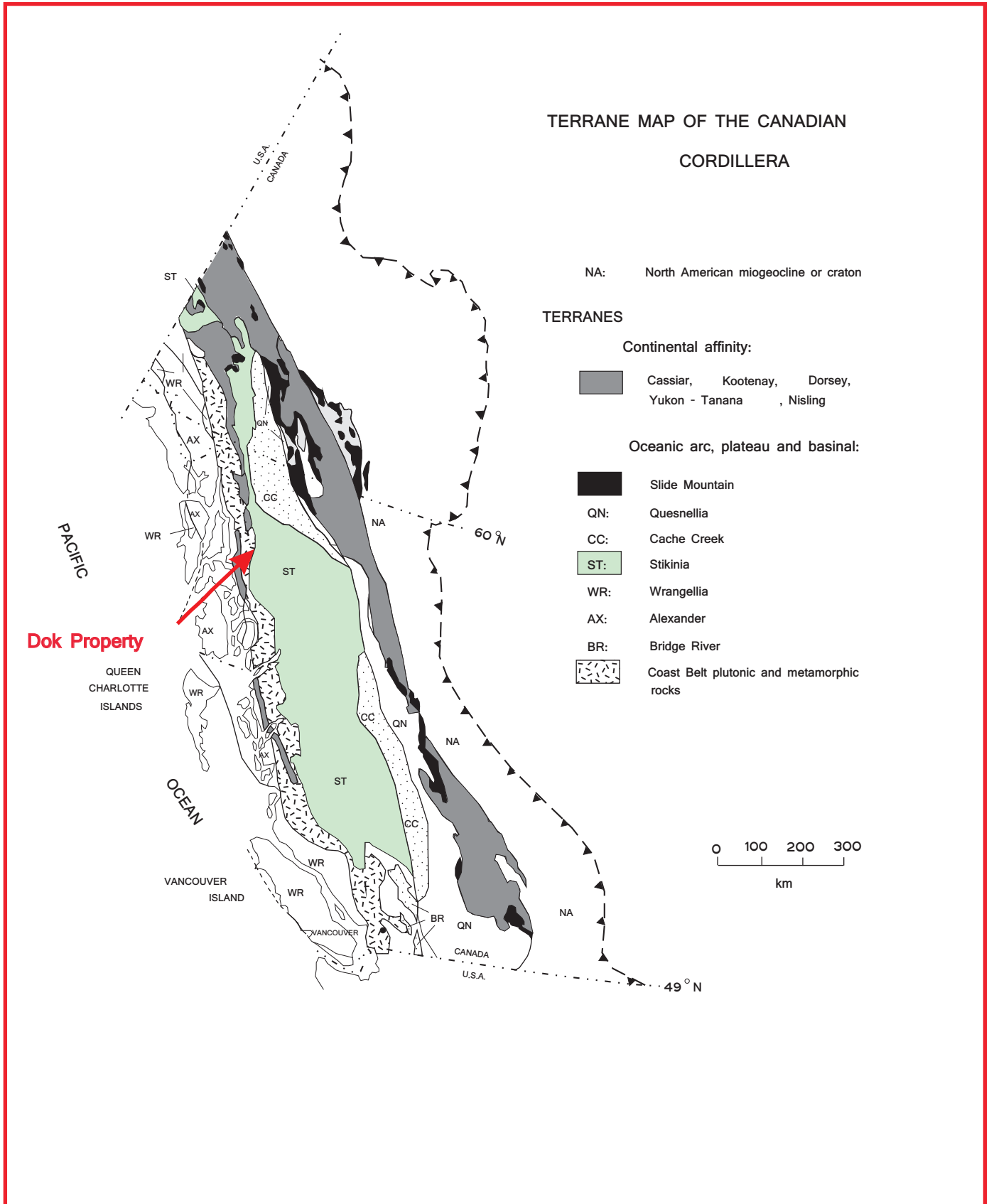


Figure 5. Tectonic setting of Dok Property in the Canadian Cordillera.

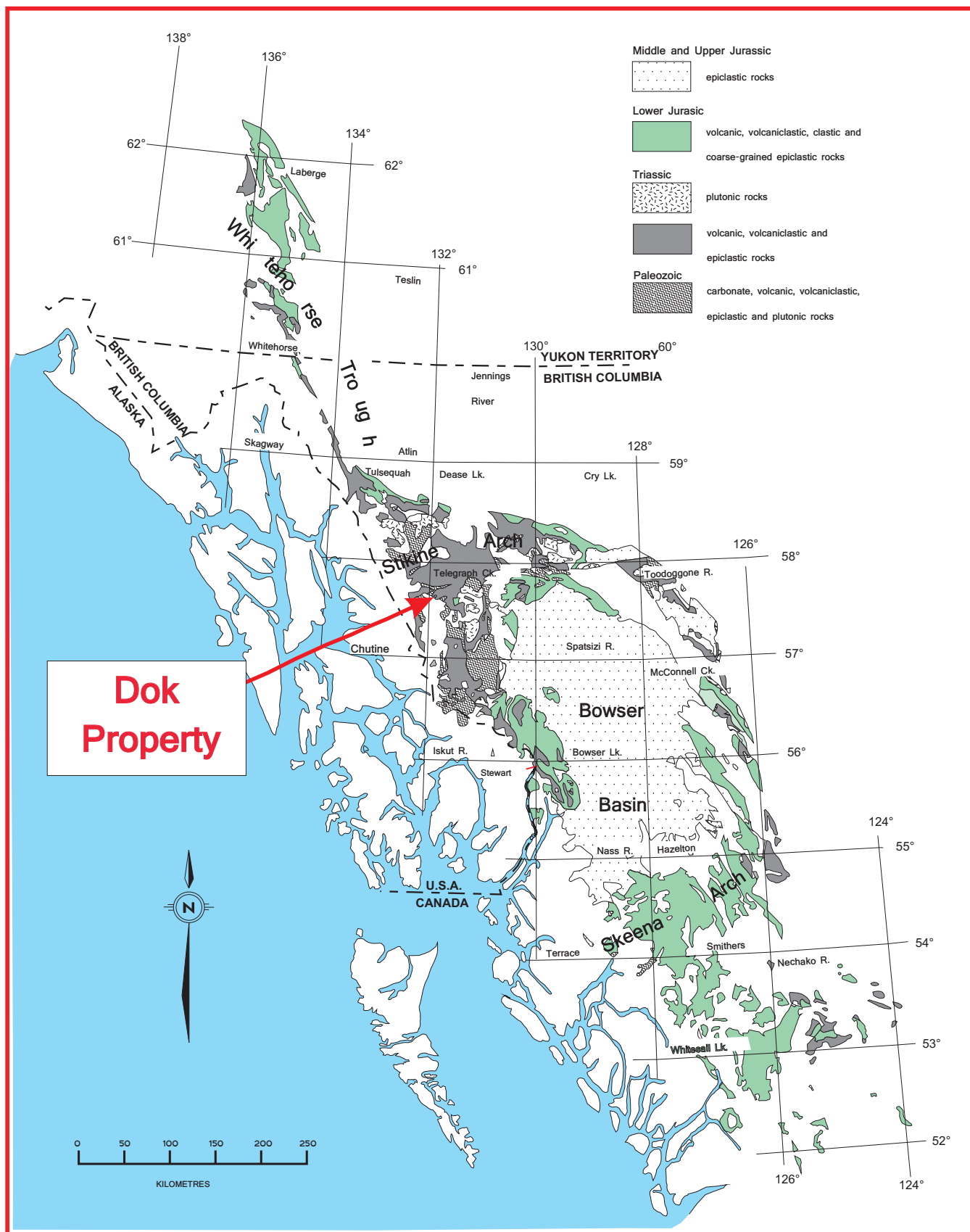


Figure 6. Regional geologic setting of Dok Property, showing Stikine terrane tectonic assemblages and regional geologic features, as well as 1:250,000 scale map areas in northwestern British Columbia.

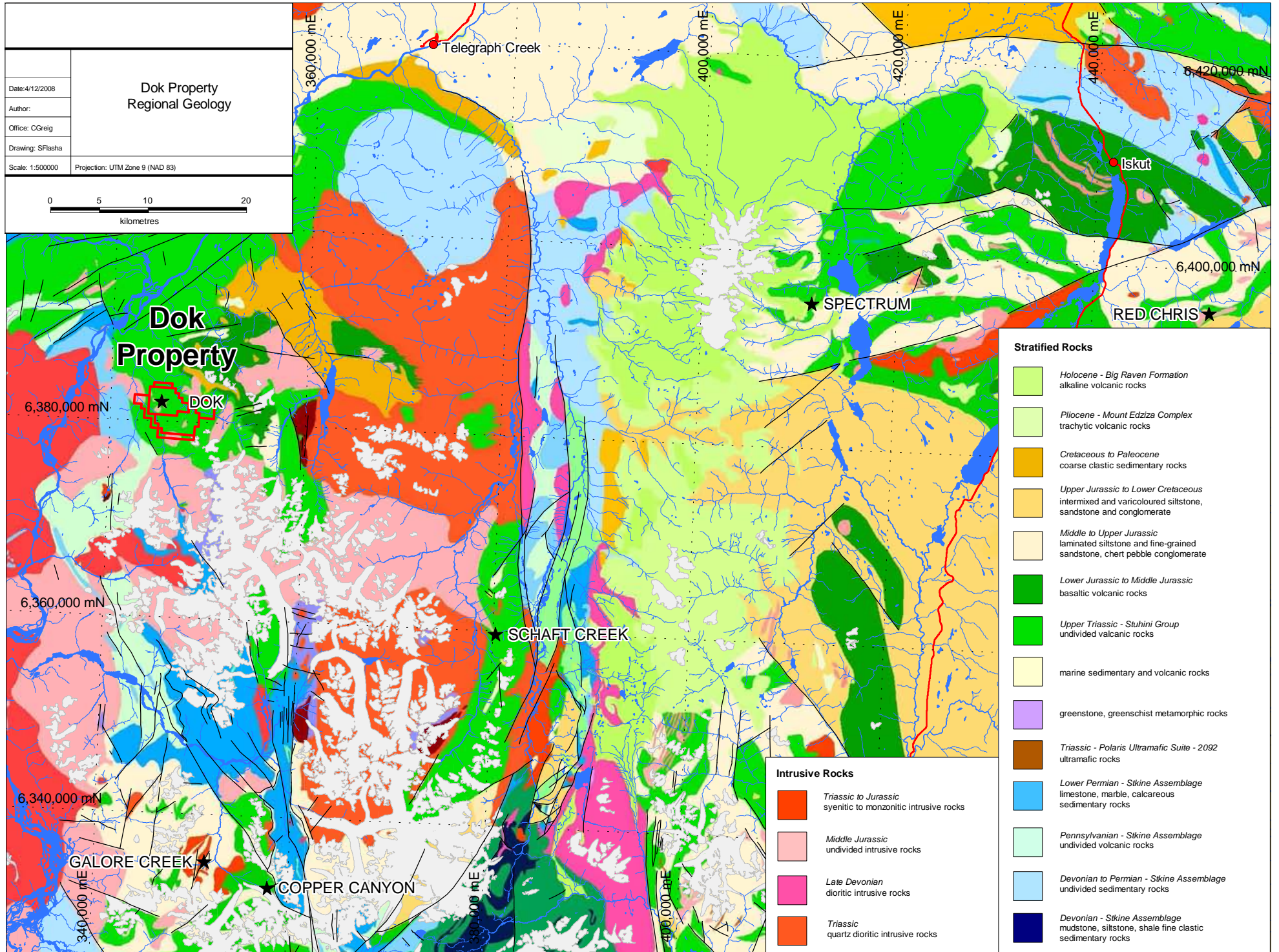


Figure 7. Regional geologic setting of the Dok Property in northwestern British Columbia (modified from B.C. Ministry of Energy, Mines and Petroleum Resources website).

affinity, and were accreted to the North American continental margin in mid-Mesozoic time.

Regionally, Stikinia consists of mid-Paleozoic to Middle Jurassic oceanic volcano-sedimentary successions and coeval plutons that are commonly subdivided into Paleozoic, Triassic and Jurassic tectonic assemblages (Anderson 1993; fig. 6). In the vicinity of the Dok property, and in the Telegraph Creek area in general, rocks of all three assemblages are present as well as abundant (Brown *et al.* 1996; fig 7).

### **3.1 Stratified Rocks**

The oldest stratified rocks in Stikinia are Paleozoic and are referred to as the Stikine Assemblage. Near the Dok Property, they underlie a north- to northwest-trending belt not far to the southwest, where they are apparently overlain unconformably by Upper Triassic volcanic rocks continuous with those occurring on the property (Brown *et al.* 1996). The Paleozoic rocks consist mainly of volcanic and thin-bedded clastic sedimentary rocks of Carboniferous to Lower Permian age, and are characterized by the presence of a foliation that is typically absent in younger rocks. The thick and distinctive white to pale grey cliff-forming limestone, which characterizes the Stikine Assemblage in many places elsewhere in northwestern British Columbia, does not occur in the immediate vicinity of the Dok property, but does crop out in abundance not far away, such as to the south, in their type area around Ambition Mountain, and to the northwest, along the Stikine River near Jackson's Landing.

Upper Triassic Stuhini Group rocks in the vicinity of the Dok property consist mainly of massive to thick-bedded mafic volcanic rocks, with subordinate interbedded and generally thin-bedded fine-grained clastic rocks which are themselves interbedded locally with relatively thin and discontinuous limestone bodies. Stuhini Group volcanic rocks in the Telegraph Creek area have not



been studied in great detail, but in general they consist of subaqueous mafic flows (locally pillowed) and tuffs, as well as similar but subordinate rocks of intermediate composition; rare felsic rocks also occur. Pyroxene-phyric rocks are perhaps the most abundant lithology, but pyroxene- and plagioclase-phyric rocks, as well as local amygdaloidal lithologies may also be common locally. While plagioclase phenocrysts are commonly of tabular habit, pyroxene phenocrysts typically occur as stubby or blocky prisms. The presence of abundant dark green and massive pyroxene-phyric flows or fragmentals is so common within the Stuhini Group regionally, that their presence is generally taken as a reasonable clue as to their age. Volcanic rocks of intermediate composition also occur within the overlying Hazelton Group, and so some caution must be exercised in this regard. Within the Hazelton Group, however, pyroxene-phyric rocks are typically richer in phenocrysts, and more commonly contain both plagioclase and hornblende, and in many cases occur in sequences in which many rocks are maroon in colour. As mentioned above, sedimentary rocks in general represent a subordinate part of the Stuhini Group in the Telegraph Creek area, although they are locally abundant not far east of the Dok property, near the headwaters of Strata Creek. At that place, they are of late Upper Triassic, Norian, age, and consist of dark grey to black siltstone, green and pale grey litharenite, and local black shale and pale grey discontinuous micritic to bioclastic limestone.

Although geochemical data for the Stuhini Group in the Telegraph Creek area is somewhat limited, analytical data presented by Brown *et al.* (1996) suggest that the volcanic rocks are tholeiitic to calc-alkaline, medium- to high-potassium, subduction-related volcanic arc rocks. Although mainly of Upper Triassic age, rocks of the Stuhini Group may also include rare Lower and Middle Triassic strata. In general they lack a foliation, although local exceptions do exist. Local exposures of the relatively rare well-bedded sedimentary sections, together with the existence

of common steep and highly variable bedding attitudes within of the generally less well-studied and more massive volcanic sections, indicate that Stuhini Group rocks have been tightly folded and locally faulted, along with the rocks of the underlying Stikine Assemblage (Brown *et al.* 1996).

The typical good exposures in the part of the Telegraph Creek area surrounding the Dok property suggest that Stuhini Group rocks on the property lie not far below the sub-Jurassic unconformity. Less than five kilometres to the east and northeast, and centered on Helveker Creek, is an area of approximately 100 square kilometres in which Lower Jurassic and younger volcanic and sedimentary rocks overlie the Stuhini Group unconformably (fig. 7). The unconformity is spectacularly well-exposed at the headwaters of Strata Creek, about ten kilometres east of the Dok Property. There, gently-dipping Lower to Middle Jurassic Hazelton Group tuffaceous rocks and flows rest unconformably on tightly-folded sub-vertical Upper Triassic clastic rocks (figs. 8 and 9).



Figure 8. View, looking west-northwestward, of angular unconformity between gently dipping Lower to Middle Jurassic Hazelton Group volcanic rocks (above) and steeply dipping folded Upper Triassic sedimentary rocks (below); approximately 10 km east of Dok Property, at the divide between Strata and Quattrin creeks.

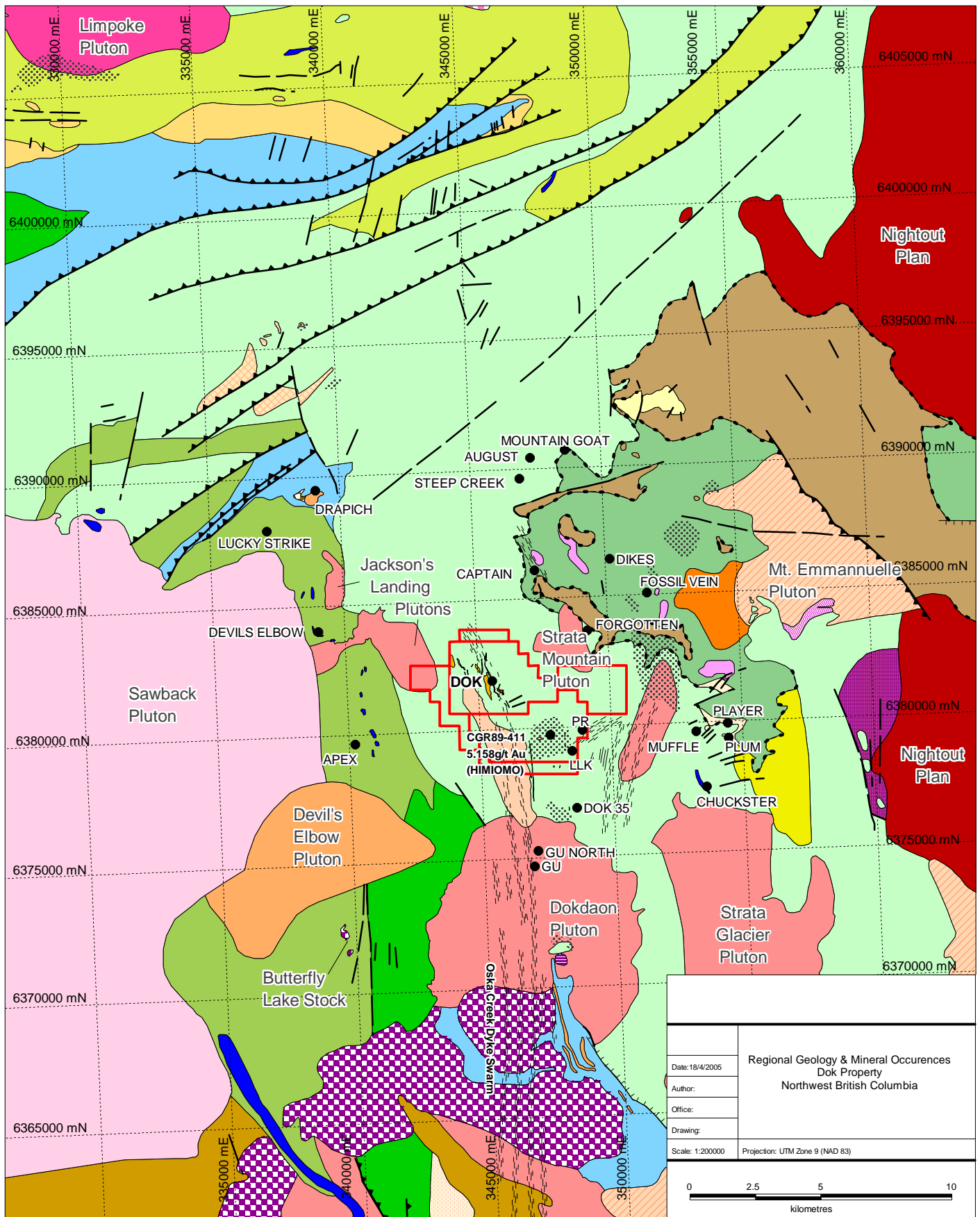


Figure 9a. Geologic setting of the Dok property, modified from Brown et al. (1996), and showing location of B.C. Minfile mineral occurrences local to the property.



Figure 9b. Legend for the geologic setting of the Dok property.

Not far away, the unconformable contact, which is generally characterized by high relief, is marked by locally very thick and very coarse-grained polymict boulder conglomerate beds that include many Paleozoic as well as Triassic lithologies. Still farther east, the shallow marine to subaerial alkaline volcanic and associated clastic rocks of the Hazelton Group rest nonconformably on foliated Late Triassic rocks of the Nightout pluton, indicating that the area was affected by intense deformation, uplift, and erosion at the end of the Triassic or in earliest Jurassic time, and that uplift was great enough to unroof even Late Triassic plutonic rocks. This profound tectonic event appears to have affected all of Stikinia, but is perhaps best expressed in this area, which is the northwestern-most extent of the overlying Hazelton Group recognized to date (Brown *et al.* 1996).

As mentioned above, Hazelton Group rocks, while locally resembling those of the Stuhini Group, can generally be distinguished on the basis of their compositional variability, more variable colouration, and their geologic context. Volcanic rocks range in composition from basalt to rhyolite and while they are apparently subduction-related, like the Stuhini Group, they are generally subalkaline rather than tholeiitic to calc-alkaline (Brown *et al.* 1996).

Regionally, Lower and Middle Jurassic volcanic rocks of the Hazelton Group are conformably overlain by clastic strata of the Middle to Upper Jurassic Bowser Lake Group, a predominantly turbiditic overlap succession which in part records the accretion of Stikinia to western North America. In the immediate vicinity of Telegraph Creek and the Dok property, however, the Bowser Lake Group is not preserved, although it is preserved about twenty kilometres farther east (fig. 7). Instead, rocks of the Hazelton Group are overlain unconformably to disconformably by relatively coarse-grained conglomeratic and arenitic clastic rocks, as well as subordinate fine tuff and rare flows, of the Upper Cretaceous(?) to Paleogene Sustut and Eocene Sloko groups, which in most parts of northwestern British Columbia overlie the Bowser Lake

Group. It is rocks of the Sustut Group, which, in excellent exposures immediately northeast of the Dok property, lend their well-bedded character to the names of “Strata Mountain” and “Strata Creek” (figs. 7, 9, and 10). While Bowser Lake Group rocks may have been eroded in this part of the Telegraph Creek area, their regional significance is worthwhile noting, mainly because of the implications for structural geology, both regionally and on the property itself. In the northern Cordillera, strata comprising the Bowser Basin (mainly the Bowser Lake Group; figs. 6-7), along with underlying fine-grained Middle Jurassic clastic rocks of the uppermost Hazelton Group (Salmon River formation), outline a number of structural culminations marking the western margin of the Cretaceous-Early Tertiary Skeena Fold Belt. Shortening of between 40 and 50% within this relatively young fold belt records the final stages of contraction and consolidation of the North American margin that post-dated the accretion of Stikinia, and which coincided in large part with



Figure 10. View southerly toward Strata Mountain (skyline), showing well-bedded, relatively flat-lying Tertiary clastic rocks that are about 5 km northeast of Dok Property.

the arrival of the more westerly Alexander and Wrangellia terranes, outward of the Coast Belt (Evenchick 1991a, b). To the south of the Telegraph Creek area, the crests of the structural culminations in the Skeena fold belt are typically underlain and upheld by the relatively resistant volcanic rocks of the Hazelton Group, and as such they correspond with many of the higher ranges and icefields in the region. This is not so much the case farther in the Telegraph Creek area, although it should be borne in mind that the Jurassic and older rocks which underlie the area surrounding the Dok property must have experienced the same degree of Cretaceous structural shortening as the overlying strata.

As is apparent from the exposures of Sustut Group rocks on Strata Mountain (fig. 10), it seems clear that the younger Cretaceous(?) and Tertiary rocks did not experience the same deformation and shortening which affected the Bowser Lake Group rocks regionally, and it seems that a likely reason for the absence of Bowser Lake Group rocks beneath the Sustut Group is that the area lay in the structural hinterland of the Skeena Fold Belt during the Cretaceous (and early Tertiary?) period of deformation, and was probably uplifted and eroded immediately prior to the deposition of the Sustut and Sloko groups.

### **3.2 Plutonic Rocks**

Plutonic rocks of a wide variety of compositions and ages are abundant on, and in the vicinity of, the Dok property, although none on the property itself have been age-dated. In the region, perhaps most obvious in terms of volume are the Tertiary plutons of the Coast Belt to the west of the Dok property (e.g., Sawback pluton), but very large Late Triassic bodies to the east, such as the Nightout and Hickman plutons, also occur (figs. 7 and 9). In addition, many generally smaller intrusions appear to span Jurassic time. A number of these have been dated by Brown *et al.* (1996)

or by previous workers, and most, including those on the Dok property, were assigned to various regional suites by Brown *et al.* (1996). The basis of assignment, aside from age-dates, was on composition, and it must be noted that with little compositional data and no dating, correlation of plutonic rocks on the Dok property with regional suites must be regarded, at best, as preliminary. As such, the assignment by Brown *et al.* (1996) of what they referred to as the “Dok stocks” to the Middle Jurassic “Three Sisters” plutonic suite was little more than an educated guess, and the stocks may well be correlative with plutons of older or even younger regional suites, with which they share some similarities, as is discussed below.

Among the Jurassic plutons of known age in the Telegraph Creek area are examples of the Late Triassic-Early Jurassic (210-195 Ma) “Copper Mountain suite” intrusions, which are characterized by the presence of alkaline ultramafic and syenitic phases. These plutonic rocks are significant in that they bear an important regional association with Cu-Au deposits (*c.f.* Barr *et al.* 1976, Panteleyev 1995), such as at Galore Creek and Schaft Creek(?) in northwestern British Columbia, at Kemess, Lorraine, Mt. Polley, and Mt. Milligan in north-central to central British Columbia, and at Copper Mountain, Afton, and Katie in southern British Columbia. Examples of this suite in the Telegraph Creek area, aside from the rocks at Galore, include the Rugged Mountain and Latimer Lake plutons to the north of the Dok property, and the Butterfly Lake stock to the south.

Early Jurassic plutons in the Telegraph Creek area may also include phases of alkaline-affinity (syenite, monzonite, or monzodiorite) or contain common coarse-grained potassium feldspar. These rocks are generally somewhat younger than plutons of the Copper Mountain suite (189-195 Ma *vs.* 210-195 Ma), and are known as the Texas Creek plutonic suite. Examples of this suite in the Telegraph Creek area include the Limpoke, Brewery, and Pogue plutons to the north of



the Dok property, and the Oksa Creek and Pereleshin plutons to the south (Brown *et al.* 1996). Like their older counterparts, regionally these rocks may also bear a close spatial and genetic association with economically-significant mineralization, such as at the Silbak-Premier Mine near Stewart.

The suite of plutons to which intrusive rocks on Dok property were assigned by Brown *et al.* (1996), and which appear to be associated with similar syenitic rocks to those on the Dok property elsewhere in the Telegraph Creek area, is known as the Middle Jurassic Three Sisters plutonic suite. Emplacement ages for plutons in this suite typically lie in the range of 177 to 170 Ma, and local examples include the relatively large and distinctive (pink-weathering) Yehiniko pluton, east-southeast of the Dok property, and what Brown *et al.* (1996) refer to as the Saffron pluton, which lies to the northeast and which was previously known as, and is more properly referred to, as the Mt. Emanuelle pluton (fig. 9). The Mt. Emanuelle pluton was interpreted by Brown *et al.* (1996) to be correlative with both the “Dok stocks” and with abundant pink-weathering dykes which commonly intrude Stuhini Group rocks outcropping between the two plutons in the valley of Strata Creek. The Dok property stocks and the Mt. Emanuelle pluton may also be correlative with pink-weathering syenitic(?) dykes which are common on the steep slopes of Gertrude Mountain, immediately south of the Dok property.

A final suite of Jurassic plutons in the Telegraph Creek area is also worthy of mention. It is the Late Early Jurassic (187-180 Ma) Cone Mountain suite, and is of note because plutons of the suite essentially surround the Dok property. These include the relatively voluminous Devil’s Elbow, Dokdaon, and Strata Glacier plutons south of the property, as well as the considerably smaller Jackson’s, Strata Mountain, and Shebou plutons, which are closer to the Dok property than the larger Cone Mountain suite intrusions (fig. 9; Brown *et al.* 1996).

## **4.0 Metallogenic Setting and Mineral Occurrences**

### **4.1 Metallogenic Setting**

The Dok property lies within a mineral-rich belt of Stikine terrane rocks which flanks the Coast Mountains in northwest British Columbia. This very well-endowed and very prospective belt stretches from the Stewart-Kitsault-Anyox areas on the south, to the Muddy Lake, Tulsequah and Atlin areas on the north, and is centred on the Iskut River area, not far south of the Dok property (fig. 6), where rich precious and base metals deposits such as Eskay Creek, Snip, Sulphurets, and Granduc occur. This part of British Columbia has a long and successful history of mining and mineral exploration, in spite of the rugged terrain, inclement weather, and relatively difficult access. The only recently-producing mine was Barrick's Eskay Creek mine, which closed last year and was an extremely rich Au-Ag deposit. However, a number of large-scale base and precious metals mining projects in the area are in the advanced stages of exploration or mine planning. They include several projects in relatively close proximity to the Dok property, including the Schaft Creek project of Copper Fox Metals Inc., NovaGold's Galore Creek project, Imperial Metal's Red-Chris project, as well as Canadian Gold Hunter's GJ/Kinaskan project, and Western Keltic's Kutcho Creek project.

In the immediate area of Telegraph Creek, really only the Galore and Schaft creek properties have reached a highly advanced stage of exploration, with enough diamond drilling to outline reserves or resources. Like Galore Creek and Schaft Creek, the Dok property was originally targeted as a porphyry Cu deposit, and only since the early to mid-1980's, with improved Au prices, has their precious metals potential come to be appreciated.

## 4.2 Local Mineral Occurrences

A considerable number of mineral occurrences exist in the vicinity of the Dok property (fig. 9). They encompass a variety of styles of mineralization and are recorded and summarized in the British Columbia Government's "Minfile;" they have also been summarized by Brown *et al.* (1996; see fig. 9 for locations). In addition to the Dok occurrence, the PR and LLK occurrences are covered, at least in part, by the Dok property claims. They appear to be hosted by rocks similar to the those described on the Dok property, and they are marked by well-developed sulphide gossans, in which oxidization of pyrite-altered stratified rocks have yielded large, bright, reddish-brown, limonite-rich gossans. At the PR occurrence, the mineralization, which consists in part of zoned chalcopyrite-pyrite veins of up to 15cm width, is reported to be genetically-related to syenitic intrusions (BC Minfile). At the LLK occurrence, a similar setting is described, but local molybdenite-bearing quartz veins yielding both base and precious metals values are also reported.

That this eastern part of the Dok property has Au potential is also clearly indicated by the fact that sample CGR89-411 (see fig. 9), which was collected by the lead author during a regional mapping program in 1989, carried 5158 ppb Au, yet was collected from silicified and potassically(?) altered plutonic rock lacking visible copper mineralization (Brown *et al.* 1996).

To the east-southeast and south of the Dok Property, near the headwaters of Strata and Dokdaon creeks, a number of base- and precious-metals bearing quartz and/or carbonate vein showings have been documented within Stuhini Group volcanic and sedimentary rocks. These were mainly located and recorded during regional reconnaissance mapping and include the following Minfile occurrences: Muffle, Forgotten, August, Mountain Goat, Steep Creek, Player, Plum, Dikes, Fossil Vein, Chuckster, Gu, and Gu North (Brown *et al.* 1996). While these occurrences have locally yielded bonanza Au grades (*e.g.*, 136,390 ppb Au at the Chuckster occurrence), in general

they appear to represent narrow, widely-spaced, and discontinuous mineralization with limited economic potential.

To the west of the Dok property, in the Devil's Elbow area, Au-bearing skarn mineralization occurs within Carboniferous limestone of the Stikine Assemblage at the Devil's Elbow, Lucky Strike, Drapich, and Apex occurrences, but, in general, the tenor and continuity of mineralization has been found lacking.

## **5.0 Previous Exploration Work**

Although a sizeable and apparently systematic exploration program was undertaken on the Dok property in 1971 (Ulrich 1971, pers. communication 2009), and also apparently in 1972 (including and IP survey and up to five diamond drillholes and a total of 2680 ft. of drilling; GEM 1972), the focus for that work was on Cu and Mo and not on precious metals. While the 1971 work was well documented (Ulrich 1971), the 1972 work was either not documented or the documentation has been lost. For example, no data for the IP survey or drill hole location maps exist, and there are no diamond drill logs, at least not in the public record. Since the early seventies, very little systematic property-scale exploration work has been undertaken directly on the Dok Property. In the 1980's, however, the sharp increase in the price of Au led to examination of the area for Au potential (*e.g.*, Shear 1990). In spite of this, and in spite of the fact that the Dok property was apparently held in good standing for much of this time, little concerted effort appears to have been made to establish its potential for hosting a precious metals-rich Cu deposit.

The 1971 exploration program on the Dok property was conducted by contractors for the Swiss Aluminium Mining Company of Canada Ltd. The work included line-cutting, grid soil sampling, ground geophysics (magnetometer), geologic mapping, prospecting, hand-pitting, and

trenching (blasting and hand excavation; Ulrich 1971). According to Ulrich (pers. communication 2009) the property was first discovered, like many northern properties by Kennco Western, who were following-up stream sediment geochemical anomalies. Although some very positive results were obtained in the 1971 program, such as chip samples of 0.66% Cu across 125 ft, 0.32% Cu across 75 ft, and 0.72% Cu over 50 ft, in the “Main Showing” area, and although an impressive Cu soil anomaly was outlined, the results of the follow-up work are assumed to have been negative, since they were not reported and little or no work was done on the property thereafter. According to Annual Reports of the British Columbia Minister of Mines, the drilling may have totaled up to 817 metres (2680 ft.) in five diamond drillholes (GEM 1972), although geology maps in the report by Ulrich (1971) show collars for only two drill holes, and Shear (1990) reports that only three holes were drilled. It should be noted that Shear (1990), in a brief examination of what core remained at the early 1970's campsite, was unable to reconstruct the footage intervals on the badly weathered core boxes—he collected one sample from what core remained, but no significant assays were returned from the weakly mineralized rocks.

As mentioned above, one of the most impressive results of early exploration on the Dok property was the large-scale Cu-in-soil geochemical anomaly outlined. The anomaly, defined by a +250 ppm Cu contour, was in part coincident with strongly anomalous Pb-in-soils, and occurs in an area with less than 5% bedrock exposure. The northwest trending anomaly is greater than 1600 metres long, and is open along strike in both directions, being parallel in long dimension, more or less, to the hillslope above Dokdaon Creek. In the original survey, nearly 500 soil samples were collected, with greater than 20% of the samples yielding 400 ppm Cu or higher, and with a significant number of soil samples exceeded the upper detection limit of 2000 ppm Cu.

In 1990, Shear (1990), working for Continental Gold Corp., demonstrated that the 1971 Cu-in-soil anomaly was indeed real, and that it was also anomalous in Au and Ag. In a program which was very much reconnaissance in nature, and which amounted to a total of less than ten man-days of work, fifteen soil samples and ten rock samples were collected from what was then referred to as the main part of the Dok property (Shear 1990). Most of the soil samples were collected along a contour soil line through the core of the 1971 soil anomaly described above. The average Cu value of the thirteen samples collected from that line was 1241 ppm, with five samples yielding greater than 1000 ppm Cu, and two yielding greater than 4000 ppm Cu (Shear 1990). The lowest Cu value was 131 ppm, but it was collected from the opposite side of the ridge separating Dokdaon and Strata creeks. As mentioned above, the soil samples were also anomalous in Au and Ag. Four yielded between 100 and 300 ppb Au, one sample yielded more than 1.0 ppm Ag, and one sample yielded greater than 1 oz/t Ag (Shear 1990). Continental Gold Corp. also undertook a relatively limited prospecting program, with values in rock returning up to 220 ppb gold, along with copper values ranging up to 2.6% (Shear 1990). On the basis of this work, Shear (1990) recommended that the company continue with work on the property, and he suggested a program of line-cutting, detailed soil sampling, re-mapping, IP work, and follow-up diamond drilling.

In 2004, the present property owners, prospector Bernie Kreft and geologist Charlie Greig, along with the assistance of geologist Darwin Green, undertook a prospecting and soil sampling program of several days duration at the Dok property, under a grubstake agreement with Strategic Metals Ltd. Rock and soil samples collected during that program (Greig 2005) confirmed the Cu-Au-Ag potential of the Dok property, in spite of the fact that not much systematic prospecting and mapping was undertaken. A total of 56 rock samples, including 31 chip and 25 grab samples, were collected in the program, and chip samples collected from the area of the “Main Showing” typically

yielded on the order of 100 to 200 ppb Au, 2 to 5 ppm Ag, and 2000 to 9000 ppm Cu, although a sequence of three chip samples across 4.5 metres near the northeastern side of Main showing area yielded an average of nearly 0.9% Cu, 0.4 g/t Au, and 5 g/t Ag. One other 1.5 m chip sample contained 85.5 ppm Ag and 6840 ppm Cu, as well as 149 ppb Au, and grab samples from the area yielded up to 2.55 g/t Au, 6.01% Cu, and 16.5 ppm Ag. The sampling also showed a strong correlation among Cu, Au, and Ag (Greig 2005).

Greig (2005) also noted that quartz-sulphide (pyrite, chalcopyrite) stockwork-veined and altered host rocks in the Main Showing area appeared to have potassium feldspar-rich alkalic intrusive protoliths. He considered this is an intriguing observation, given that one of the more obvious relationships between mineralization and host geology, as was apparent from geologic maps of the property, was that most copper showings on the property were hosted by Stuhini Group volcanic rocks. Greig (2005) took this apparent contradiction to suggest, in general, that syenitic rocks were more common on the property than was previously indicated, particularly in the area of the Main Showing, and Greig (2005) suggested further that Ulrich's (1971) postulation that the property may be underlain by a mineralizing, and possibly mineralized, intrusive, may in fact be correct.

One of the principal aims of the 2004 program was to show that the extensive Cu-in-soil anomaly defined in the 1971 work (Ulrich 1971) also returned precious metals values that would merit follow-up (Greig 2005). In order to do this, a crude grid with a hand-cut baseline for control and access was laid out, and a total of 119 soil geochemical samples were collected using a hand-held GPS for control. Many of the soil samples were indeed anomalous in both base and precious metals, and it became clear that the 1971 Cu-in-soil soil anomaly was at least as extensive as was indicated (Greig 2005). Greig (2005) also concluded that some of the anomalies on the lower slope

were probably not solely related to downslope physical transport, and that their precious metals contents suggested instead that were in fact more likely to be very close to source. Furthermore, Greig (2005) noted that highly anomalous Cu, Au, and Ag values occurred in a number of places at the extremities of lines, and in places beyond the limits of the 1971 +250 ppm Cu-in-soil anomaly. He recommended that further soil sampling was merited beyond the limits of the 1971 Main Grid, and that previous results suggested that it was also merited over the gossanous areas on the southern part of the property. Greig (2005) suggested that a comparison of the soil geochemistry and geology provided an indication that mineralization at Main Showing area, and probably also on the southern part of the property, was genetically-related to the emplacement of syenite intrusions, because the northwest-trending soil anomalies appeared to parallel, more or less, the trends of the intrusions.

Finally, Greig (2005) agreed with Shear (1990) in recommending further grid-based soil and rock sampling (prospecting), detailed geologic remapping, and ground geophysics (IP, perhaps with Mag and EM work) on the Dok property. As Shear (1990) had recommended, he suggested that the work should initially be focused in the vicinity of the “Main Showing,” and that it be undertaken as a preliminary step to diamond drilling. Greig (2005) also recommended that the grid work be supplemented by reconnaissance work on other parts of the property, and to some extent in the areas immediately surrounding the property.

The southern part of the property, south of the Main Showing area, has also been worked to various degrees in previous programs, and like the part to the north, the most concerted efforts were made in the early 1970's, and since that time, only relatively limited prospecting, and soil and stream sediment geochemical sampling programs have been undertaken. On this part of the property, variably altered and at least locally heavily pyritized Stuhini Group rocks are apparently



intruded by local Early to Middle Jurassic syenitic rocks. Extensive gossans have been formed, and they in part appear to be coincident with soil geochemical anomalies which have been outlined on a number of reconnaissance and grid soil geochemical lines run in separate programs (e.g., Veitch 1970, Wengzynowski 2006). Wengzynowski (2006) felt that this gossanous area was where the highest potential for bulk tonnage copper-gold mineralization on the property lay, in part because of ownership constraints during previous periods of exploration. The work described by Wengzynowski (2006) was carried out in 2005 by the author and two senior field assistants, who conducted grid soil geochemical sampling (94 samples), geological mapping, and prospecting (15 rock samples), most of which was focused in the northern part of the gossanous area. He noted that measured bedding orientations throughout the area mapped varied dramatically, and were suggestive of strong deformation. Also noted was the fact that the gossan zone was associated with a steeply-dipping, northerly trending fracture system which was intersected by several sets of secondary fractures and shears, the most predominant of which had an easterly trend. Wengzynowski (2006) further noted that the gossan reflected weak to moderate pyritization of the host volcanic rocks, and that areas of intense oxidation and clay alteration were developed preferentially within particular stratigraphic horizons that were characterized by strong pyritization and manganese staining. Wengzynowski (2006) also noted that where chalcopyrite was present, it was typically associated with secondary quartz veining. Wengzynowski (2006) concluded that although zones of anomalous response were obtained in the soil geochemical survey, the size and intensity of the anomaly was not reflective of the dimensions expected for a significant porphyry-style target in the geomorphological setting of the Dok property. He suggested that the intermittent nature and linear shape of the anomalies were more likely associated with narrow structural corridors within the volcanic rocks, and that they had limited size potential.

## 6.0 Property Geology

The geology of the Dok property (figs. 11 and 12) is relatively poorly documented, and the styles of mineralization and their controls remain incompletely understood. However, some aspects of the geology and mineralization seem clear: that folded and faulted, variably altered and mineralized Upper Triassic Stuhini Group volcanic and sedimentary rocks play host to a number of syenitic stocks, dykes, and sills that appear to be intimately associated with mineralization. The syenitic rocks have not been dated, and no fossil control exists on the property for the host stratified rocks, but regional correlations are suggestive of a Late Triassic age for the volcano-sedimentary host rocks and the syenitic rocks are most probably of Early or Middle Jurassic age (see Regional Geologic Setting, above). In addition, both the stocks and their host rocks are cut by northerly-trending siliceous and potassic dykes which are likely part of the Oksa Creek dyke swarm, of probable Tertiary age. Rocks on the property are described below in order of interpreted age, from oldest to youngest.

### 6.1 Stratified Rocks: Upper Triassic Stuhini Group

According to Ulrich (1971), the stratified rocks underlying the Dok property consist predominantly of andesitic to basaltic flows, breccias (flow-breccias?), and tuffs, with subordinate interbedded sedimentary rocks. The rocks were considered to be Permian or Triassic in age by Ulrich (1971), but were correlated with the Upper Triassic Stuhini Group by Brown *et al.* (1996). Ulrich (1971) suggested that the generally north-northwest trending, moderately to steeply dipping stratified rocks made up a volcanic-sedimentary section that was almost 7000 ft thick, although bedding attitudes (fig. 12) suggest that a more likely scenario is that the rocks are folded. The latter alternative is also more in accord with the regional structural style (Brown *et al.* 1996). The most common volcanic

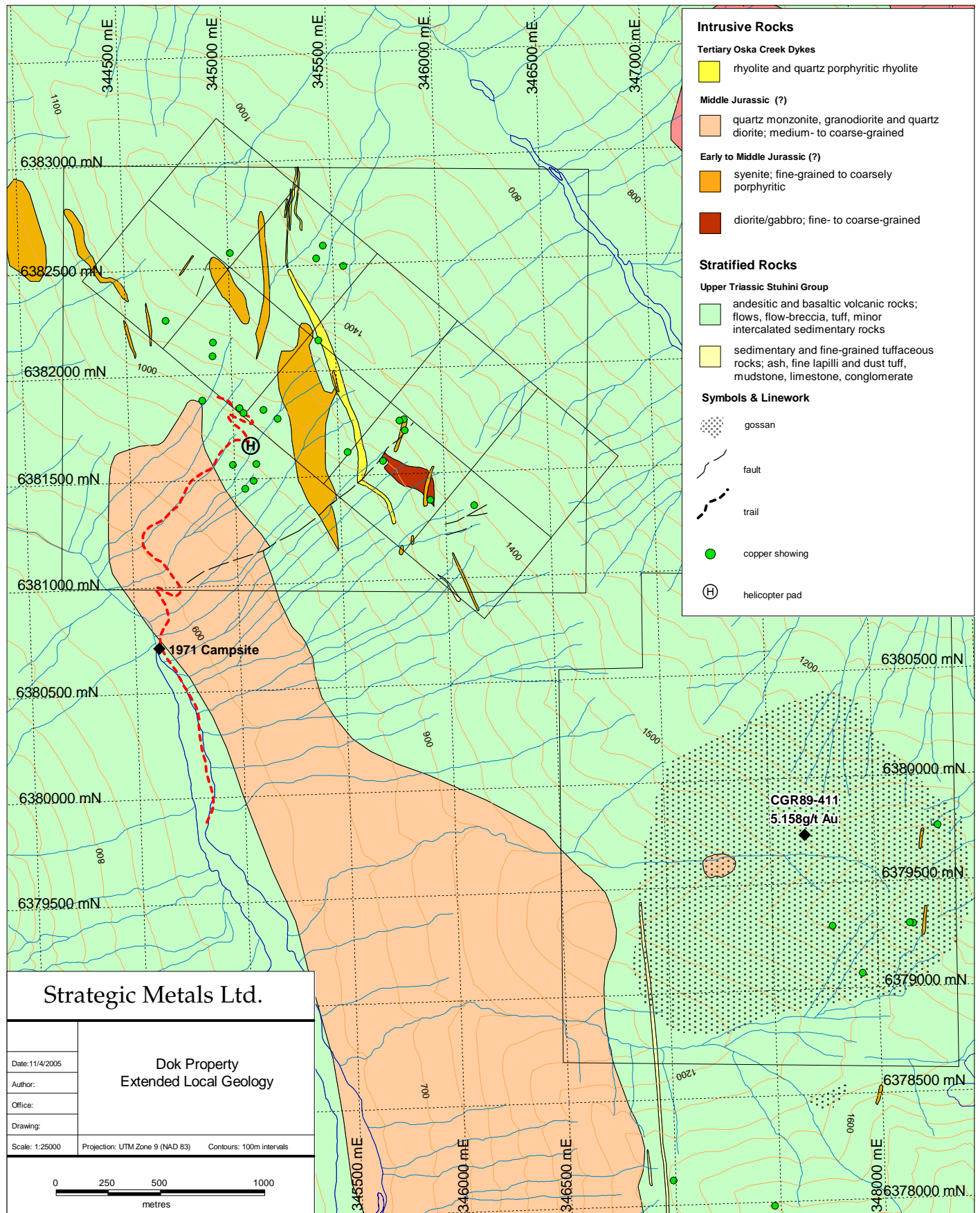


Figure 11. Property geology, Dok property, after Ulrich (1971) and Veitch (1971).

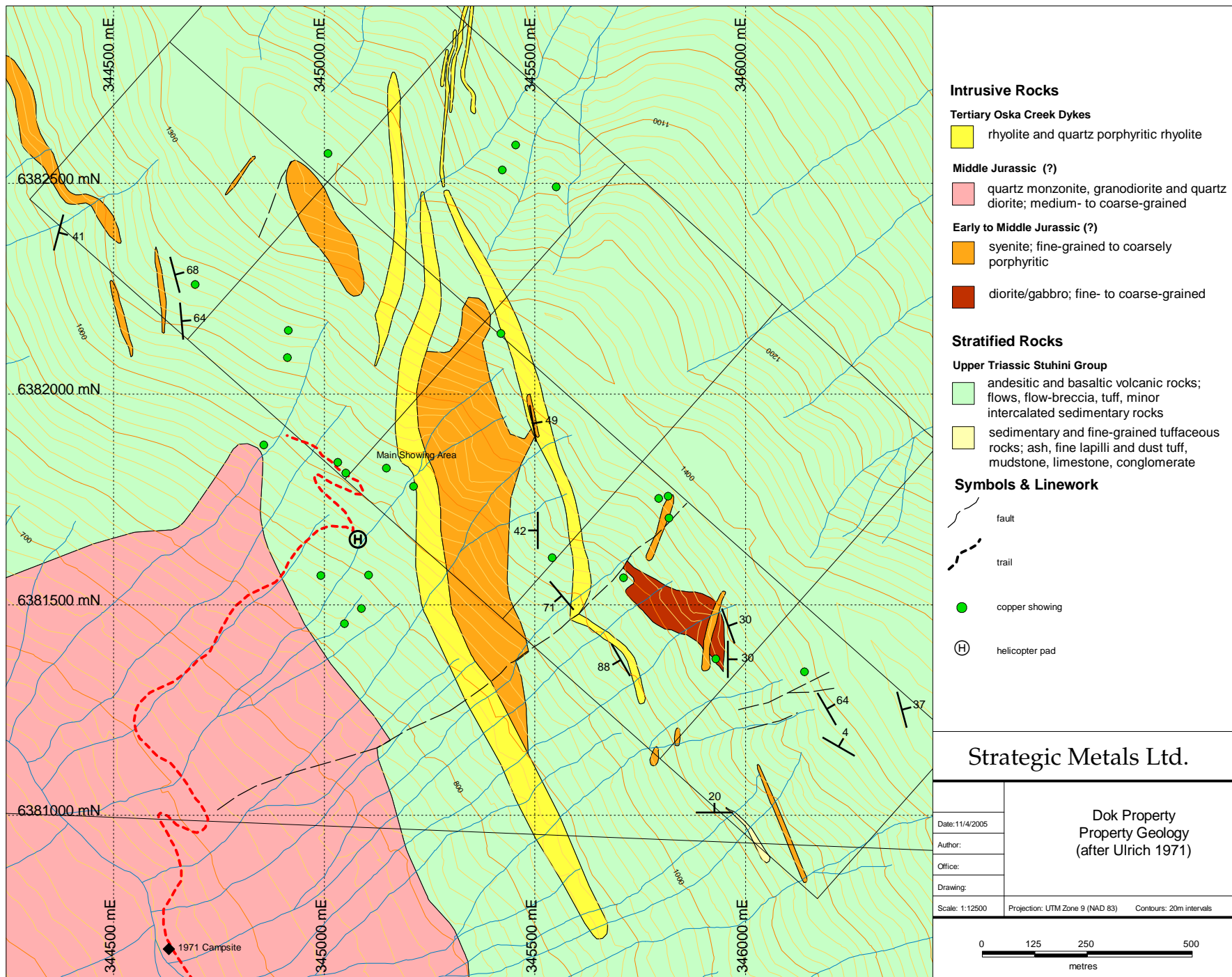


Figure 12. Property geology, Main Showing area, northern Dok property, after Ulrich (1971).

lithology within the Stuhini Group section on the property is apparently plagioclase feldspar-rich pyroxene-plagioclase basaltic(?) andesite (Ulrich 1971). Staining of some of these rocks by Greig (2005) suggests that their calcium-rich composition is in sharp contrast to that of the potassium feldspar-rich intrusive rocks common on the property. The volcanic rocks also appear to be characterized by a ubiquitous 'propylitic' alteration assemblage of chlorite, epidote, calcite, and local pyrite. Where pyrite is more abundant, the rocks, when weathered, develop deep red gossans, such as in several areas on the southern part of the property (fig. 11) and in several areas, not shown in Figures 11 and 12, on the northeast side of the ridge between Dokdaon and Strata creeks. Stuhini Group sedimentary rocks on the property consist of mainly of siltstone, with subordinate mudstone, limestone, and local conglomerate or breccia; many of the clastic components are apparently of clear tuffaceous origin (Ulrich 1971).

## **6.2 Intrusive Rocks**

### **6.2.1 Late Triassic to Early or Middle Jurassic diorite and(or) gabbro**

Ulrich (1971) describes medium- to coarse-grained diorite and(or) gabbro as a fairly common component of the Upper Triassic stratified section, and he regarded these mesocratic to melanocratic rocks as metamorphosed equivalents of the mafic volcanic rocks on the property. While this scenario is considered unlikely, it is probable that the mafic intrusive rocks are amongst the oldest intrusive rocks on the Dok property. The only dioritic or gabbroic body of appreciable extent occurs near the ridgetop east of the Main Dok showings (figs. 11-12).

### 6.2.2 Late Triassic to Middle Jurassic syenite

Rocks of syenitic affinity are common on the property, where they form many dyke- or sill-like bodies and several stock-like intrusions whose contacts are, in general, rather ill-defined (figs. 11-12). The syenitic rocks are commonly typified by subtle pink hues on broken and locally on weathered surfaces, and are characterized by abundant potassium feldspar. Quartz content and the abundance of mafic minerals, typically hornblende, appears to vary quite widely. The rocks vary considerably in texture, and range from common aphanitic and porphyritic phases (fig. 13), to less common, but larger, bodies of fine- to medium-grained monzosyenite (fig. 14), through to local coarsely porphyritic (potassium feldspar megacrystic) varieties (Greig 2005). In addition, Ulrich (1971) also mentioned the occurrence of pegmatitic syenitic rocks. In general, the syenitic bodies appear to have been emplaced more or less parallel to the structural-stratigraphic grain on the property, which exhibits north or northwest trends. Locally, however, such as along the ridgetop, northeast-trending, gently to moderately northwest-dipping, metre-scale potassium feldspar megacrystic dykes occur (Greig 2005). In addition, to the west of the property, on Gertrude Mtn., which is between Dokdaon and Brydon creeks, massive to locally well-stratified Stuhini Group(?) rocks appear to have been intruded by common pinkish-weathering, steeply-dipping syenite(?) dykes that also appear to trend northeasterly.

Although Ulrich (1971) suggested that the syenitic intrusions were younger than the “rhyolites” assigned below (and by Brown *et al.* 1996) to the Tertiary Oksa Creek dyke swarm (he noted that the syenites were seen to cut the Oksa Creek dykes in two places), the syenitic rocks are commonly closely associated with mineralization, while the distinctive flaggy-weathering “Oksa” dykes, which are readily traceable across the property and well beyond, are rarely, if ever, mineralized, and although they too are potassium feldspar-rich (e.g., fig. 15), they are interpreted



Figure 13. Slabbed and stained (left) sample of feldspar porphyry syenite dyke/sill; Red Creek area, southern Dok property.

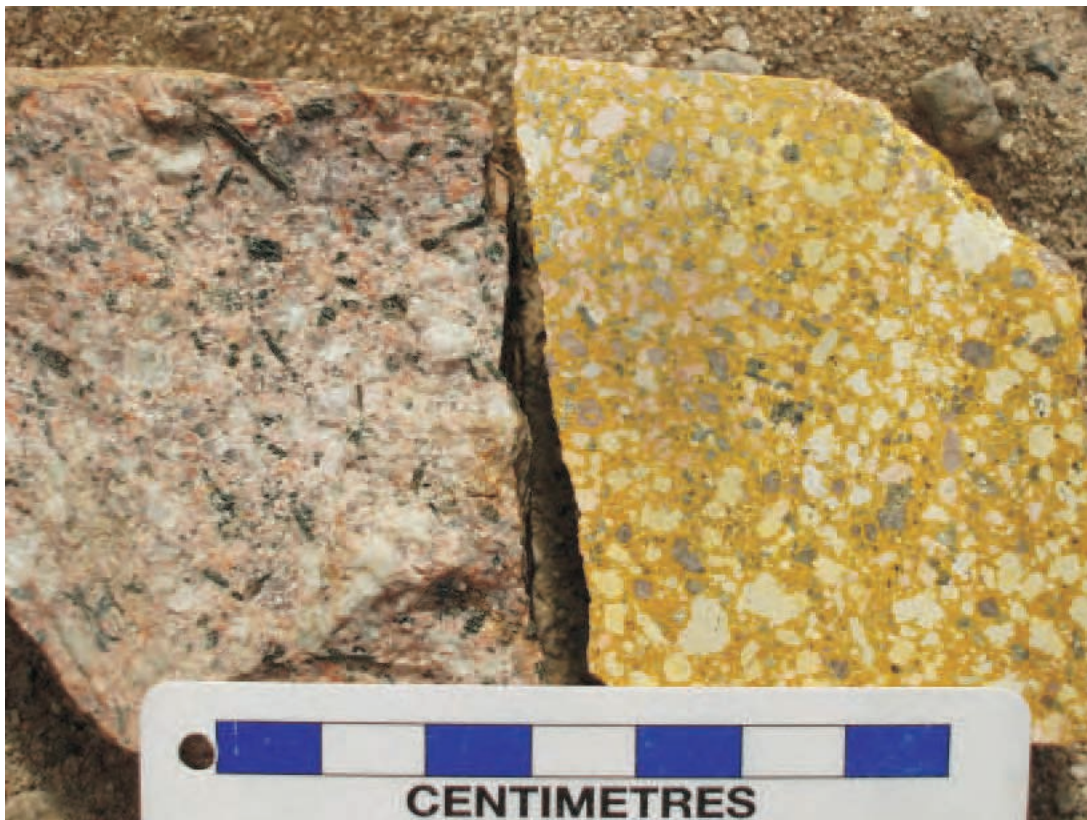


Figure 14. Stained (right) and fresh broken surface (left) of sample from hornblende quartz (grey) plagioclase feldspar (white) bearing monzosyenite dyke/sill with potassium feldspar rich matrix; Red Creek area, southern Dok property.



Figure 15. Fine-grained syenite or monzosyenite dyke of the Oksa Creek dyke swarm; Red Creek area, southern Dok property.

herein to be younger than the syenitic rocks. One possible explanation for this apparent conundrum may be the similarity between Oksa Creek dykes and aphanitic and fine-grained phases of the Early Jurassic syenitic suite. The possibility that there may be several phases of syenitic rocks is not inconsistent with the abundance of textural varieties noted, nor with the high level intrusive setting interpreted for these rocks.

### **6.2.3 Middle Jurassic biotite hornblende granodiorite**

Medium-grained biotite hornblende granodiorite(?) apparently underlies much of the lowermost slopes in the valley of Dokdaon Creek (Ulrich 1971; Veitch 1970; fig. 11). Its western contacts, its continuity between the northern and southern parts of the property, and even its composition, remain speculative.



#### 6.2.4 Oksa Creek Dyke Swarm

Distinctive pale-weathering, buff coloured, steeply-dipping dacite, latite, or rhyodacite(?) dykes are part of the northerly-trending Tertiary Oksa Creek dyke swarm (Brown *et al.* 1996; figs. 9, 11, 12, and 15). The dykes traverse the property, commonly with little interruption, and they appear to be near the northern extent of the Oksa Creek swarm, which can be traced for at least 35 km, from the Scud River on the south, to near the confluence of Dokdaon and Strata creeks on the north. On the southwest-facing slopes above Dokdaon Creek, the dykes, as shown on Figures 11 and 12, are likely exaggerated in thickness. This is because of the combination of their relatively resistant nature and their flaggy- to platy-weathering character. Downslope dispersion of the platy dyke float in talus and scree tends to give the impression that the dykes are much thicker and/or more common than they truly are. Although Ulrich (1971) suggested that the dykes were “interbedded” with the host volcanic rocks (and therefore more correctly called sills), the patterns defined by their contacts, and the relationships of the contacts to bedding measurements in the host stratified rocks, suggest that in general they probably represent relatively late, subvertical dykes which cut a relatively tightly-folded sequence of variably stratified Stuhini Group rocks.

#### 6.3 Structural Geology

In general, the structural style of the Dok property is poorly understood, although the style of deformation in the region (*e.g.*, Brown *et al.* 1996) and the relatively low metamorphic rank of the host Upper Triassic Stuhini Group rocks, which is at sub-greenschist to perhaps lowermost greenschist grade, suggest that the most common structures are folds and brittle faults. While Ulrich (1971) interpreted the Stuhini Group section to be intact, bedding attitudes around the property (fig. 12), while somewhat limited in number, do exhibit some consistency within what appear to be

northerly trending “dip domains.” Furthermore, the dip domains appear to be opposed, and may therefore be taken to suggest that the rocks have been folded across relatively tight, north- to north-northwest trending upright folds, which perhaps plunge gently northward. This structural style is consistent with that noted by Brown *et al.* (1996) for Upper Triassic strata immediately beneath the sub-Early Jurassic unconformity, approximately 10 km due east of the Dok property (fig. 8).

## **7.0 Mineralization, Alteration, and Rock Geochemical Sampling**

Early workers on the Dok property clearly identified the potential for “Porphyry Cu” style mineralization, which is best characterized by mineral occurrences in the area of the “Main Showing.” The mineralization in that area consists of sulphides in disseminations, patches, blebs, and fracture fillings, as well as local quartz-carbonate-sulphide veins and vein stockworks (fig. 16). The mineralization appears to occur within, and in close association with, high-level syenitic intrusive rocks and may occur across appreciable widths (Ulrich 1971, Greig 2005). In addition to noting the intrusive association, Ulrich (1971) noted at least local evidence for relatively high temperature alteration assemblages (biotite, magnetite, and possibly potassium feldspar). In 2004, Greig (2005) collected a number of samples of aphanitic rocks from the Main Showing area, in addition to samples of variably mineralized and altered wallrocks which in the field appeared to be of an uncertain protolith. The rocks were submitted for geochemical analysis and also slabbed and stained. In general the rocks were strongly though variably Fe carbonate altered, even when only weakly mineralized. In addition, and almost without exception, they were also potassium feldspar-rich, and most likely represent a variety of syenitic dykes and/or sills (figs. 17-20). This also appears to be the association at the Kreggo zone, a newly-identified zone along and northeast of the ridgetop above the Main Showing (e.g., fig. 21), where the mineralization occurs mainly within



Figure 16. View of typical limonitic and locally malachite-stained outcrop in the “Main Showing” area, Dok property; two chip samples from this area returned 0.68% Cu, 85.5 ppm Ag, 149 ppb Au, 69 ppm Mo, and 0.36% Cu, 10.6 ppm Ag, 174 ppb Au, and 15 ppm Mo (CGDK04R003 and 004; Greig 2005).

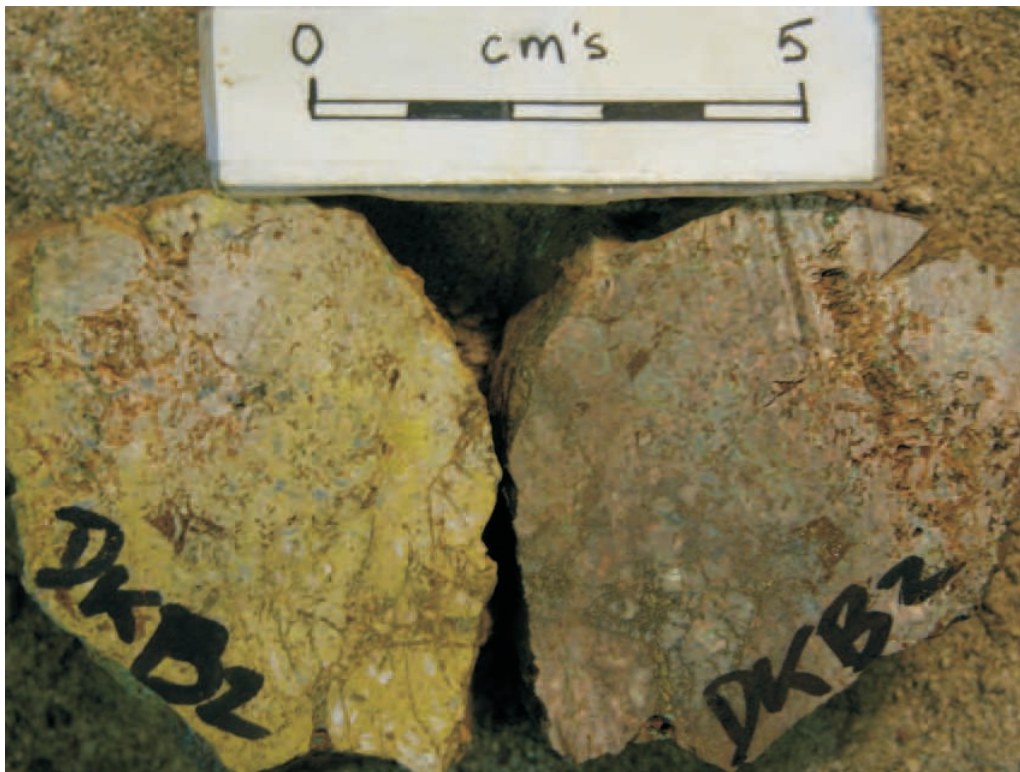


Figure 17. Slabbed and stained grab sample of limonitic, malachite-stained and crackle-brecciated potassic intrusive rock, Main Showing area, Dok property; 1.855 g/t Au; 4.69% Cu; 14.4 ppm Ag.

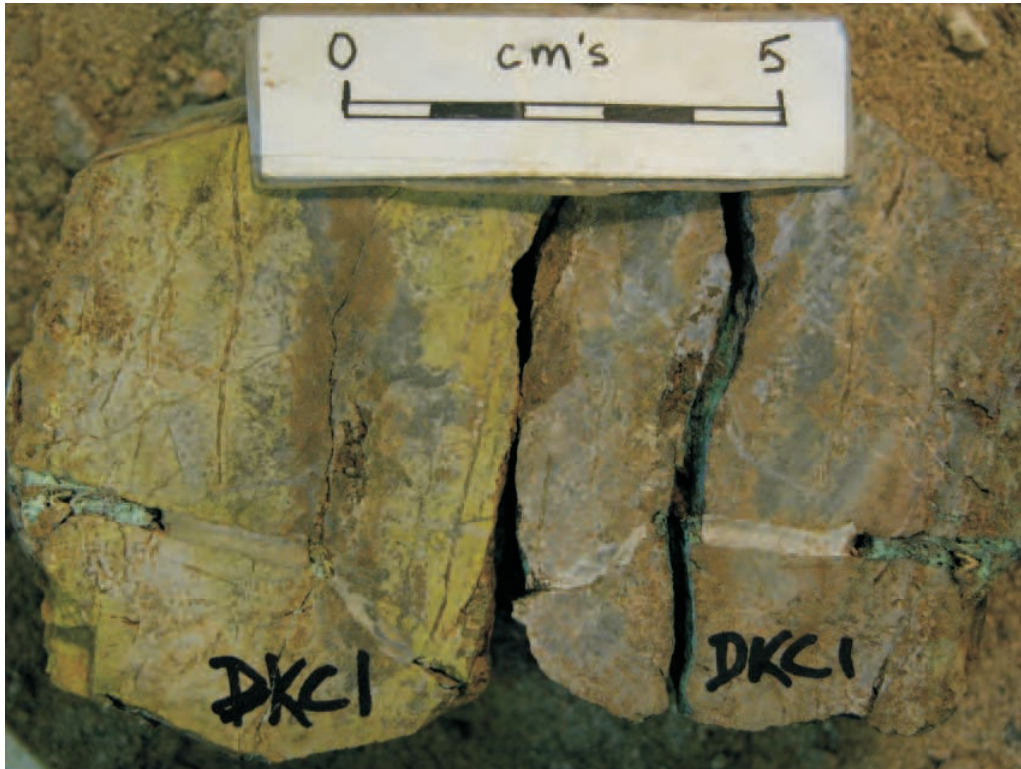


Figure 18. Slabbed and stained grab sample from quartz-pyrite-chalcopyrite veined and variably Fe carbonate altered syenite containing disseminated sulphides, Main Showing area, Dok property; 0.304 g/t Au; 3.24% Cu; 7.0 ppm Ag.

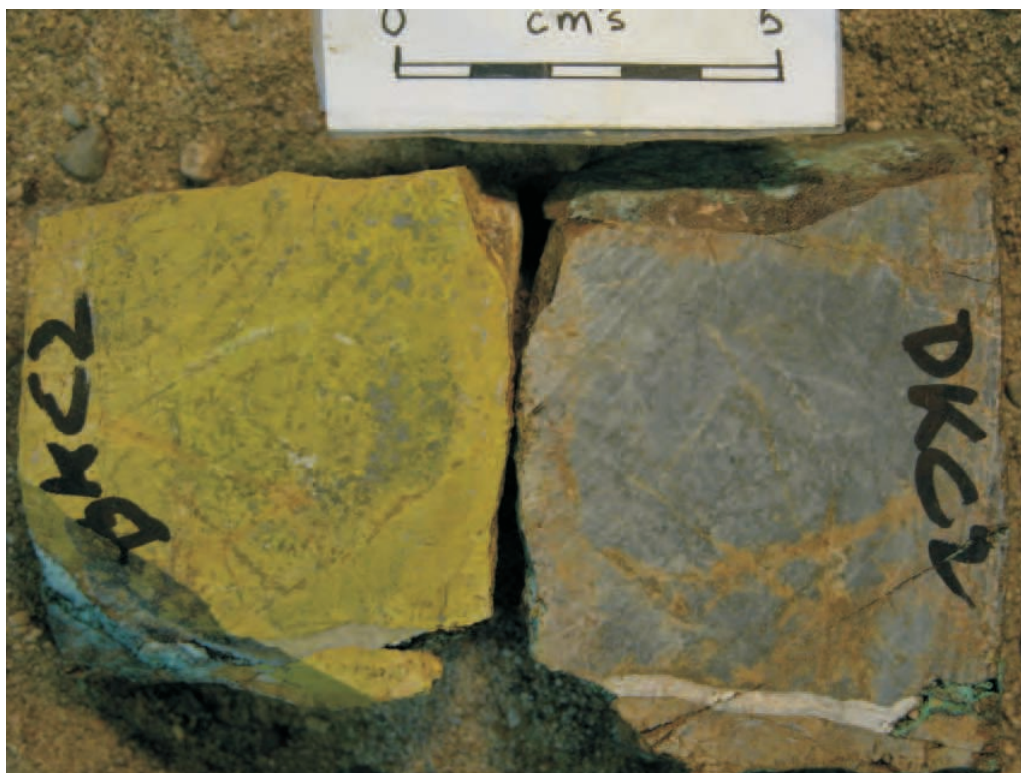


Figure 19. Slabbed and stained grab sample from extremely potassic dyke(?), Main Showing area, Dok property; 0.376 g/t Au; 2.99% Cu; 7.0 ppm Ag.

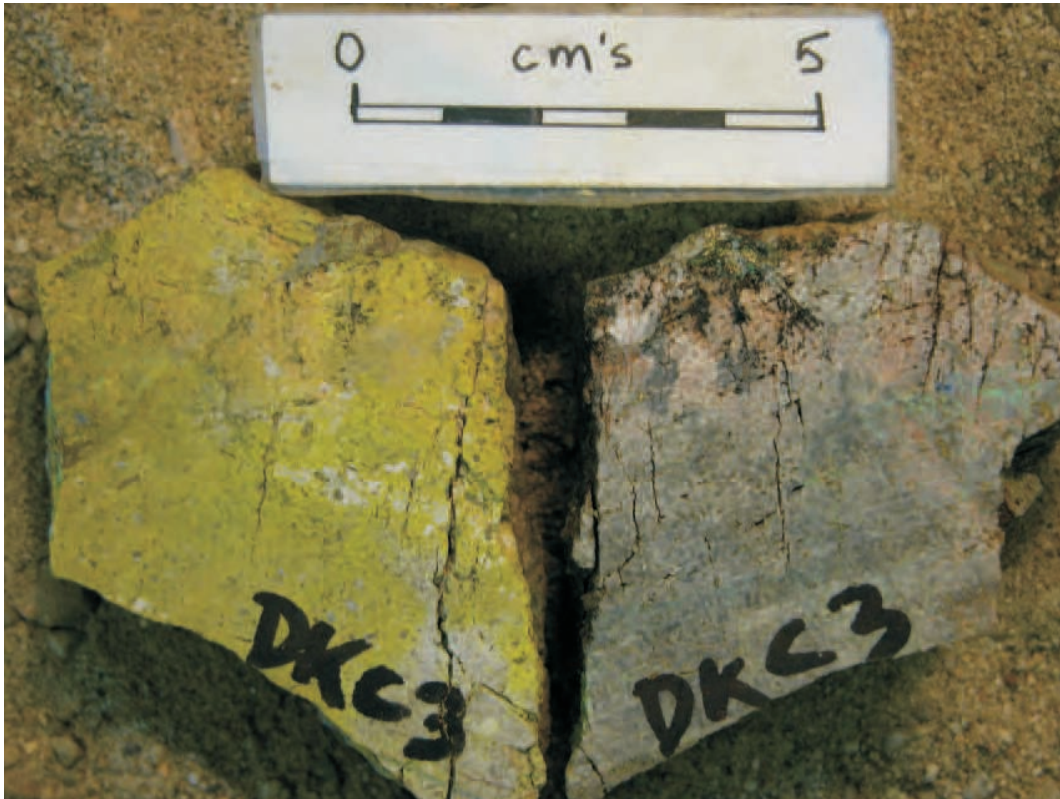


Figure 20. Slabbed and stained grab sample from plagioclase feldspar-phyric extremely potassic dyke(?) rock, veined by quartz, pyrite, and chalcopyrite, Main Showing area, Dok property; 0.303 g/t Au; 2.19% Cu; 4.2 ppm Ag.



Figure 21. Slabbed and stained (left) sample of potassium feldspar porphyritic alkalic dyke, cut by quartz-pyrite-(chalcopyrite) veinlets, Krego zone, Dok property (59 ppb Au, 572 Cu).

alkalic intrusive rocks (although also within limey sedimentary rocks adjacent to the intrusions).

Where this is the case there commonly appears to be a close association between copper, gold, and silver. In contrast, copper mineralization to the south, where hosted by volcanic rocks of the Stuhini Group, appears to show less of an association with gold, although good values in silver may still be present (figs. 22 and 23).

Rock and soil samples collected during the present program have certainly helped to confirm the Cu-Au-Ag potential of the Dok property, in spite of the fact that not much systematic prospecting, sampling, and mapping was undertaken. In addition, our work has shown that quartz-sulphide vein and pod-like massive to semi-massive replacement-style sulphide mineralization (pyrite, chalcopyrite, commonly partially oxidized to limonite and malachite), as well as local base and precious metals-rich Ag-Pb-Cu-Au veins and stockworks also occur, and that this mineralization locally appears to be hosted in brittle shear fractures.

A total of 34 rock samples, including 11 chip or panel samples, and 23 grab samples, were collected for analysis (fig. 24, Appendices I and II). Chip samples collected from the area of the “Kreggo Zone” were somewhat disappointing given the strong soil geochemical response, but a 2.0 m chip yielded 0.664 g/t Au with only 325 Cu and the zone remains open, with much more prospecting remaining to be done. Samples collected from the Red Creek area on the southeastern part of the property were similarly somewhat disappointing, yielding only anomalous values in Au, Ag, Cu, Pb, and Zn, although the pyrite-rich alteration of the host volcanic rocks, and the geochemical signature, clearly suggest that in the Red Creek area we are on the margins of a hydrothermal system, the center of which may be closer to the area of the Main Showing.

In the most heavily-mineralized zones in the area of the Main Showing, quartz-sulphide (pyrite, chalcopyrite) veins and vein stockworks show evidence for open space filling and have



Figure 22. Slabbed and stained quartz calcite pyrite chalcopyrite vein cutting chlorite-epidote altered Stuhini Group volcanic rocks, south of Red Creek, southeastern Dok property; >40% Cu, 4.8 ppm Ag, only 13 ppb Au.

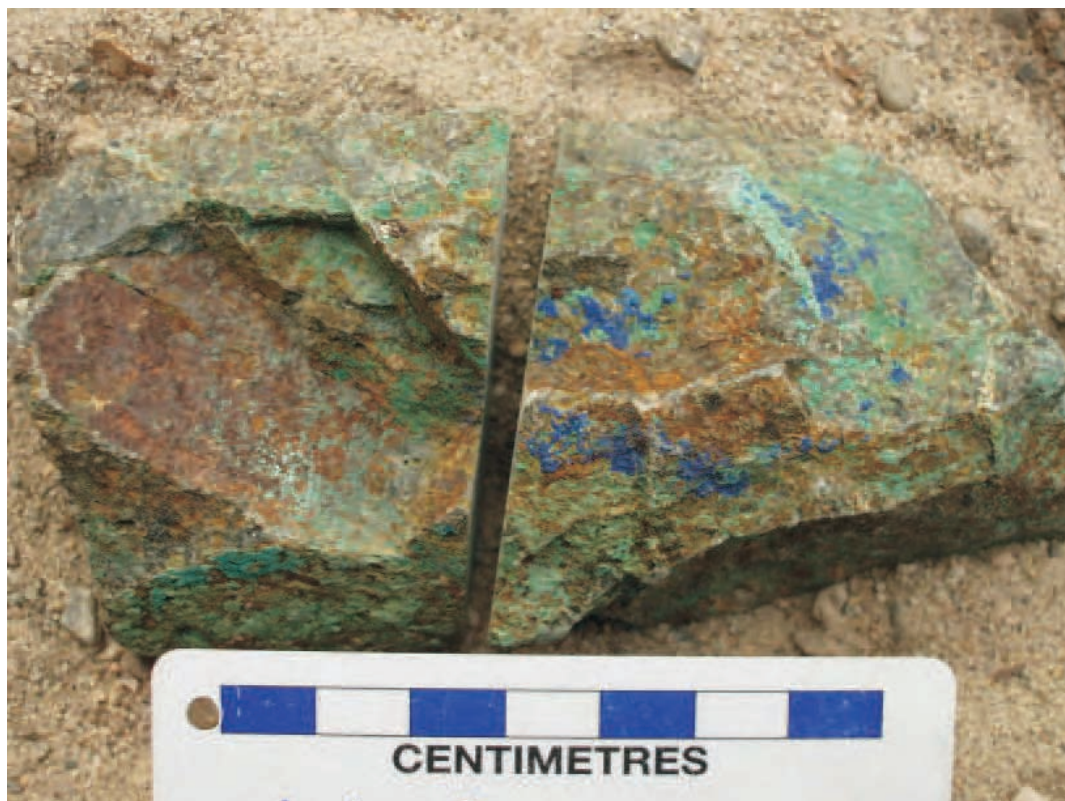


Figure 23. Malachite-, limonite-, and azurite-stained fracture surfaces on sample of mineralized Stuhini Group volcanic rocks, south of Red Creek, southeastern Dok property; 2.4% Cu, but only 6 ppb Au.

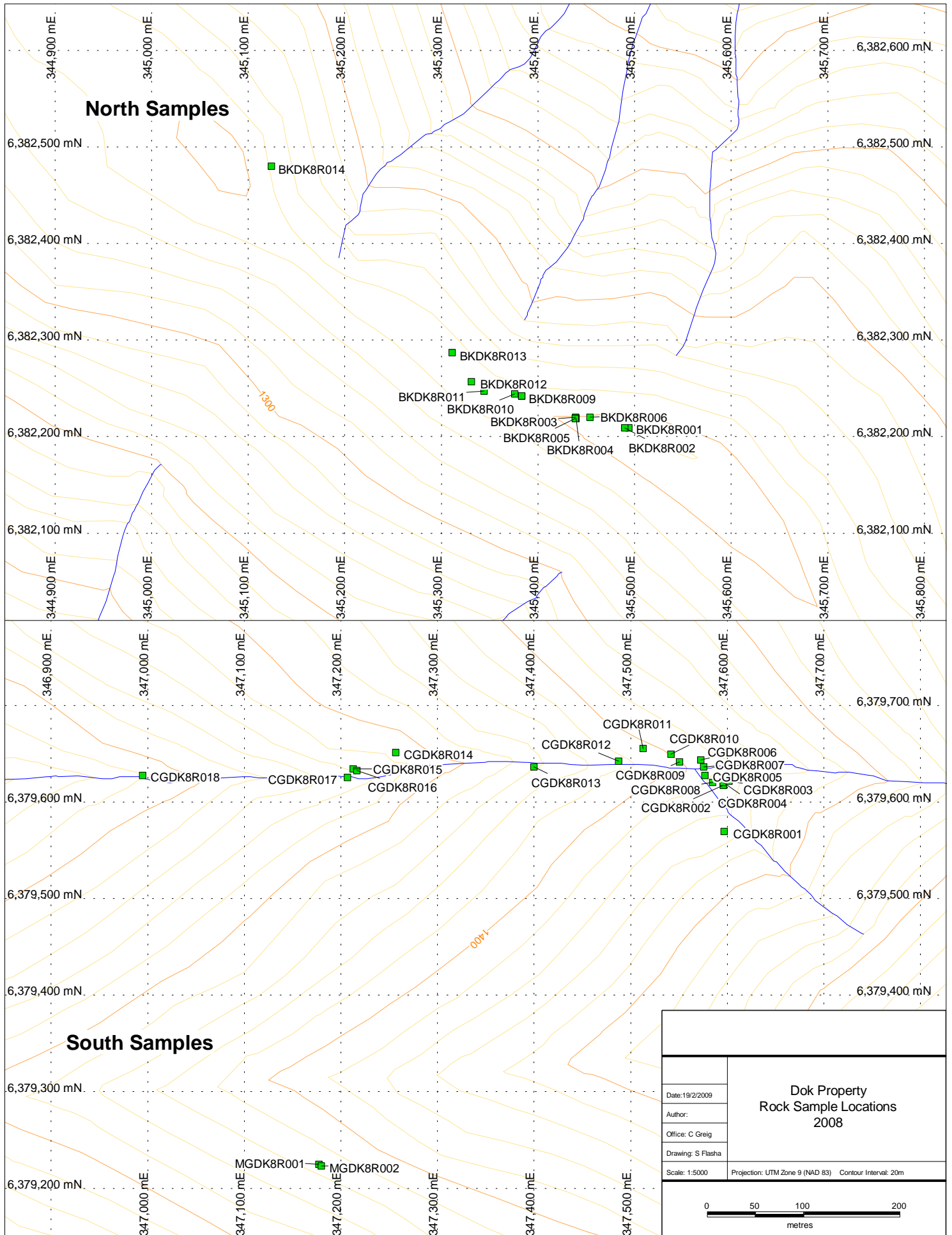


Figure 24. 2008 Dok property rock geochemical sample location map.



associated relatively intense Fe carbonate alteration. Host rocks are typically fine-grained, and the slabbed and stained samples are indicative of potassium feldspar-rich alkalic intrusive protoliths. This is an intriguing observation, given that one of the more obvious relationships between mineralization and host geology, as is apparent from Figure 12, which shows both geology and Cu occurrences, is that previous mapping shows that most of the copper occurrences on the property were hosted by Stuhini Group rocks. This apparent contradiction may suggest, in general, that syenitic rocks are more common on the property than previously indicated, such as in the area of the Main Showing, and that Ulrich's (1971) suggestion that the property may be underlain by a mineralizing, and possibly mineralized, intrusive, may in fact be correct.

### **7.1 Rock Geochemical Sampling Procedure & Analytical Techniques**

Rock geochemical samples collected in the field were placed in strong, well-labelled plastic bags, which were sealed with flagging tape. As with the soil samples, sample sites were marked with flagging tape labelled with sample numbers. Because of the limited number of samples, no blanks were submitted with the rock samples, which were analyzed at ALS Chemex Laboratories in North Vancouver, British Columbia. The internal lab standards from ALS Chemex suggests that the data from the laboratory is reproducible and of good quality.

## **8.0 Soil Geochemistry**

### **8.1 Introduction**

Since one of the aims of this and more recent programs was to demonstrate the potential for a bulk-tonnage Cu-Au-Ag deposit on the Dok property, an attempt was made in this report to better illustrate the extensive Cu- and Au-in-soil anomalies on the property, and to see how they compared

to the rock geochemical sampling. To do this, the 138 samples collected during the one-day 2008 soil geochemical sampling program (fig. 25; Appendix III), which was focussed on the Kregg Zone to the north of the Main Showing, and on the area immediately south of Red Creek, was combined with previous soil geochemical sampling. Figures 26 to 29 show the Cu, Au, Ag, and Mo values in soils for the combined datasets, respectively (note, however, that samples in some of the earlier programs were not analyzed for all elements). Figures 30 and 31 show the contoured soil geochemistry for copper and gold, respectively, but once again it should be noted that for the gold data, there is a relative paucity of data. Finally, figures 32 to 35 show rock geochemical sampling highlights overlain on the contoured copper- or gold-in-soil geochemical data.

## **8.2 Discussion of Soil Geochemistry**

A number of things are notable from the soil and rock geochemical figures. First of all, many of the soil samples are anomalous in both base and precious metals, and it is clear from the contouring, which was purposely biased toward the northerly orientations of mineralized alkalic dykes, that many of the anomalies, whether on the Main grid, at the Kregg zone, or even in the southern areas, remain open. The overall size of the anomalies, and the trends within them, anomalies can only be fully established with further sampling. It is clear from the sampling that anomalies on the lower slopes of the Main grid are probably not solely related to downslope physical transport, and in fact, given the tenor of some of the samples (*e.g.*, three consecutive samples with >4,000 ppm Cu on one line) and given that the high copper values are also accompanied by highly anomalous precious metals values (gold being 156, 213, and 288 ppb) they may be very close to their source. It should also be noted that while downslope dispersion of Cu-mineralized rock in talus and scree certainly does occur on the relatively steep slopes of the Main grid area, and that some dispersion of Cu and

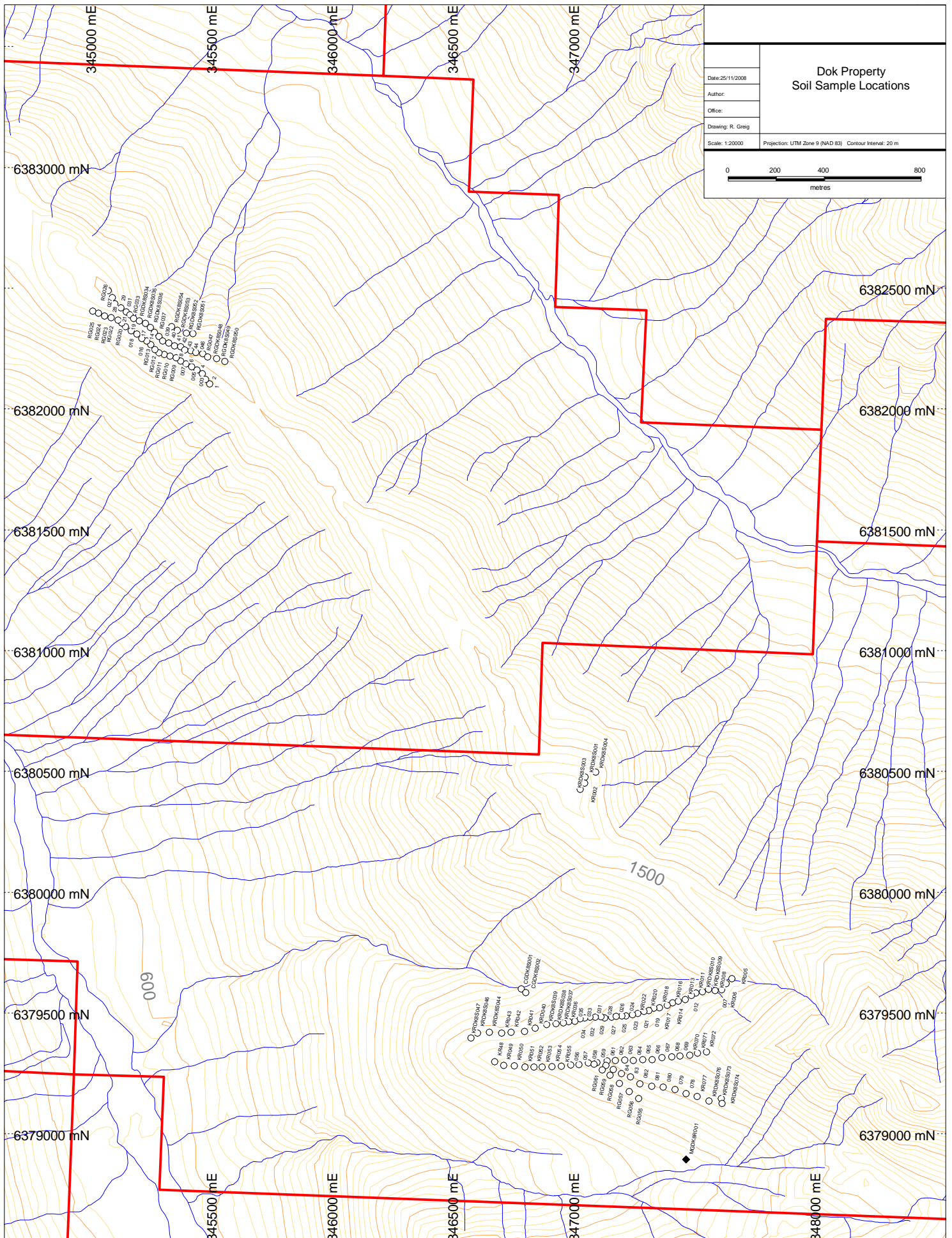


Figure 25. 2008 Dok property soil geochemical sample location map.

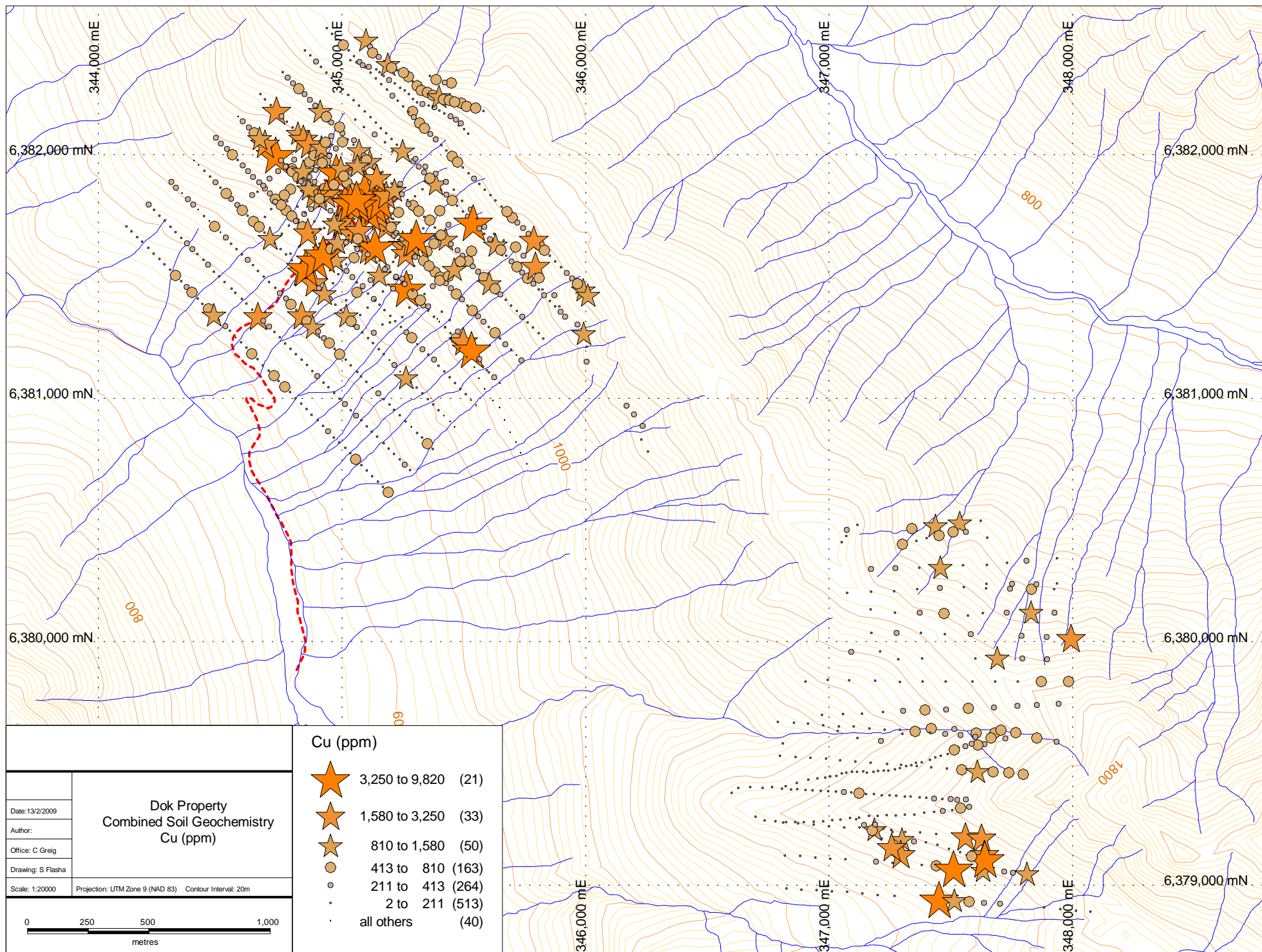


Figure 26. Cu-in-soil geochemical compilation map, Dok property.

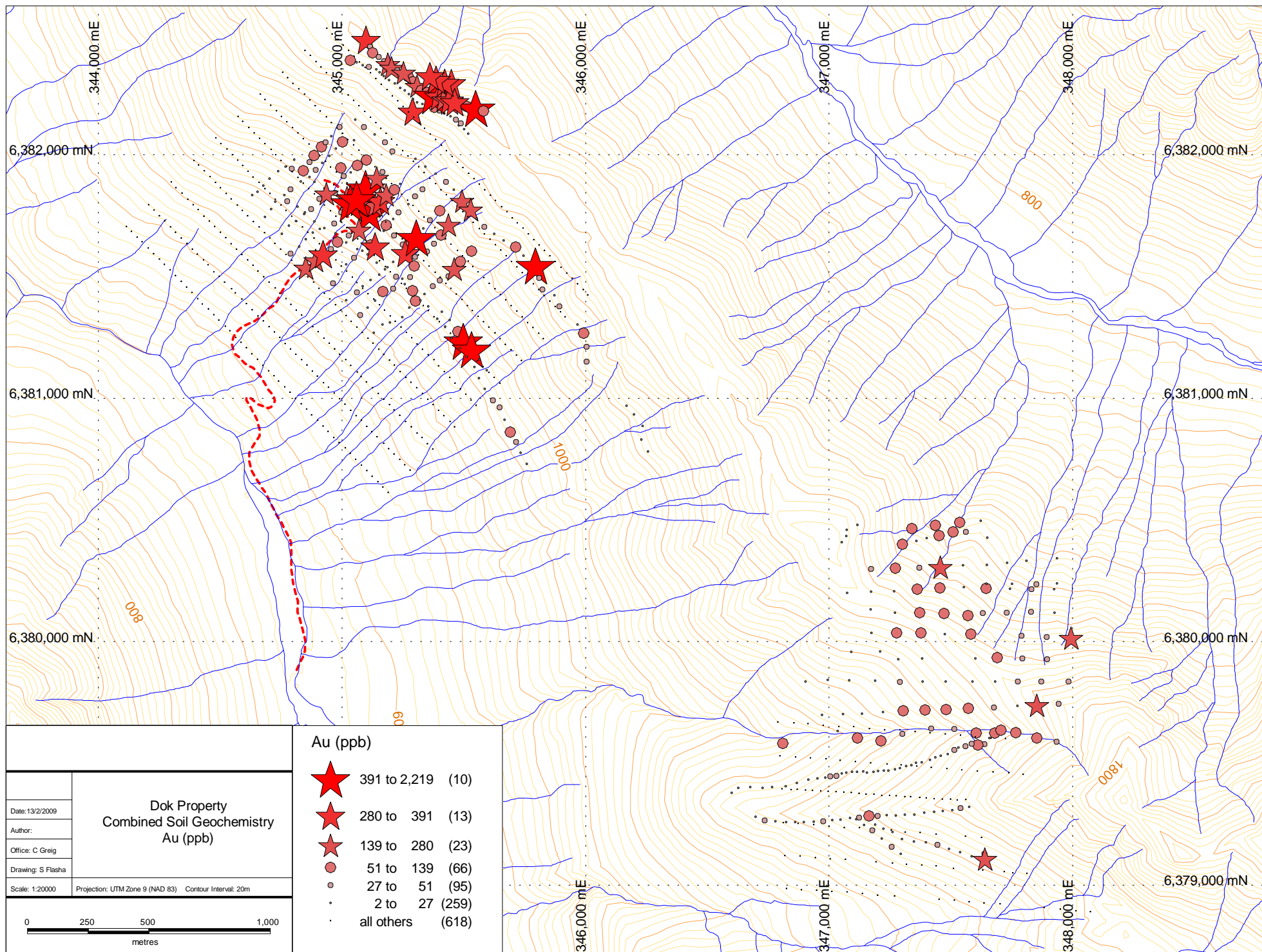


Figure 27. Au-in-soil geochemical compilation map, Dok property.

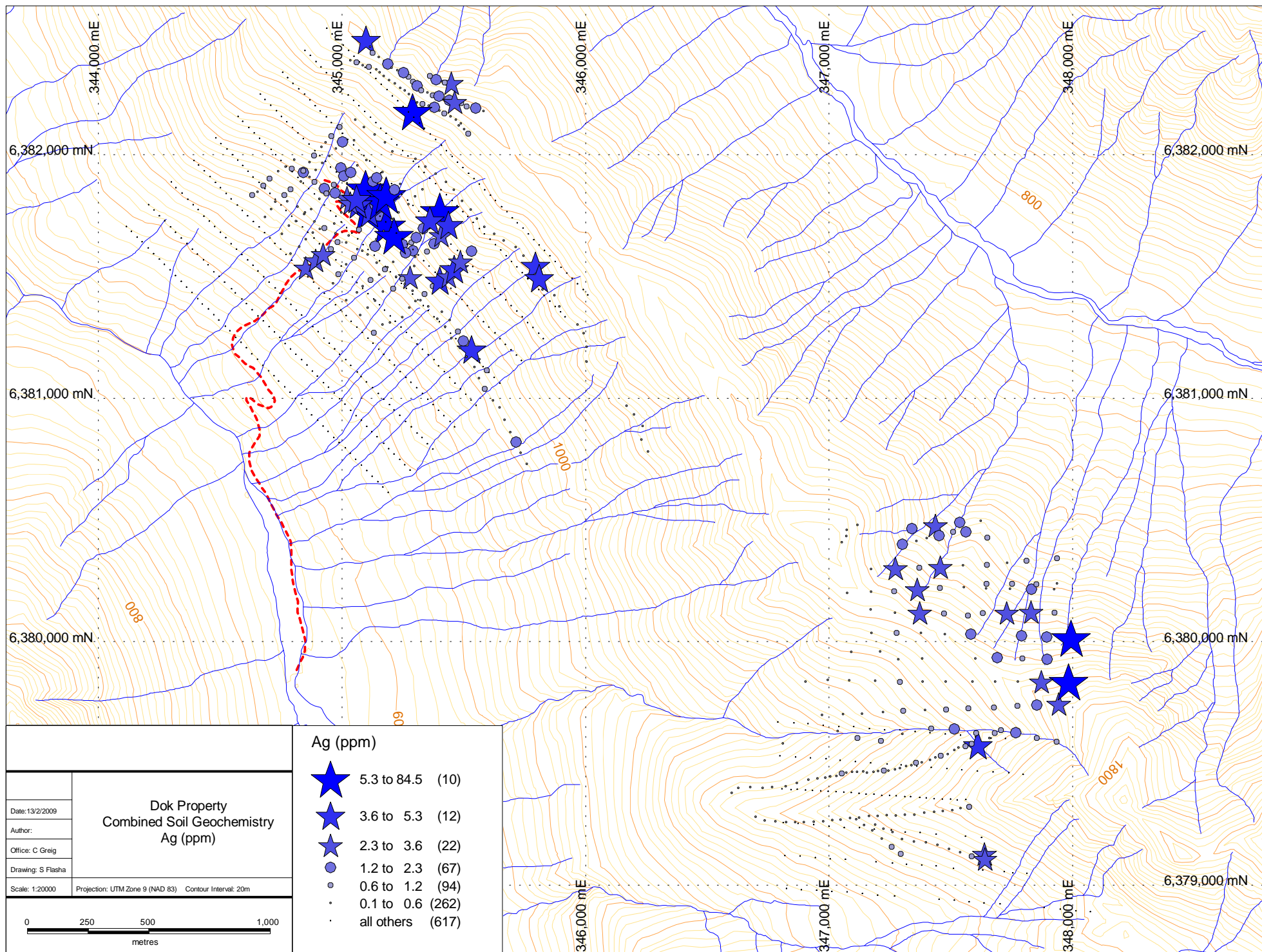


Figure 28. Ag-in-soil geochemical compilation map, Dok property.

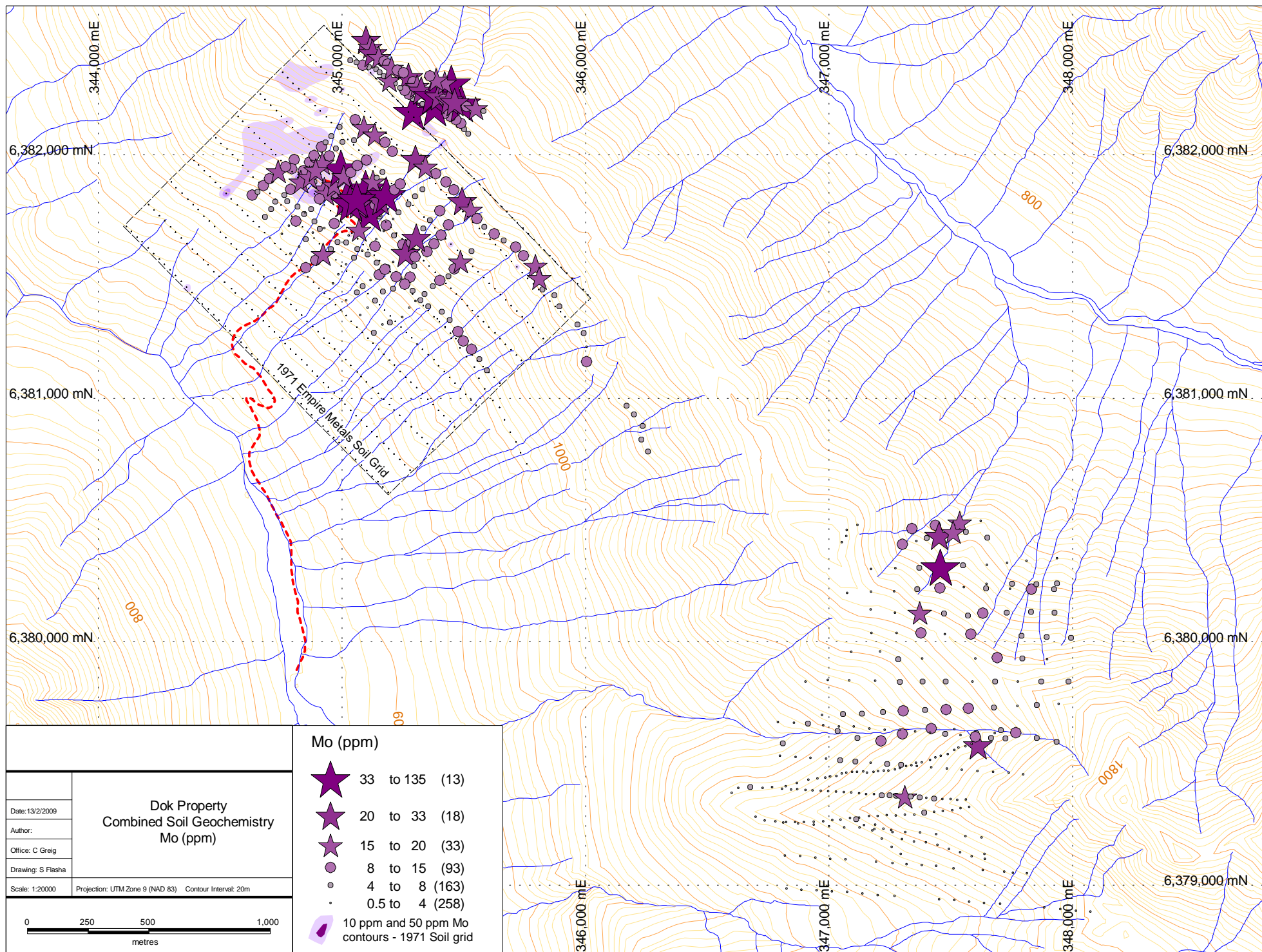


Figure 29. Mo-in-soil geochemical compilation map, Dok property.

-50-

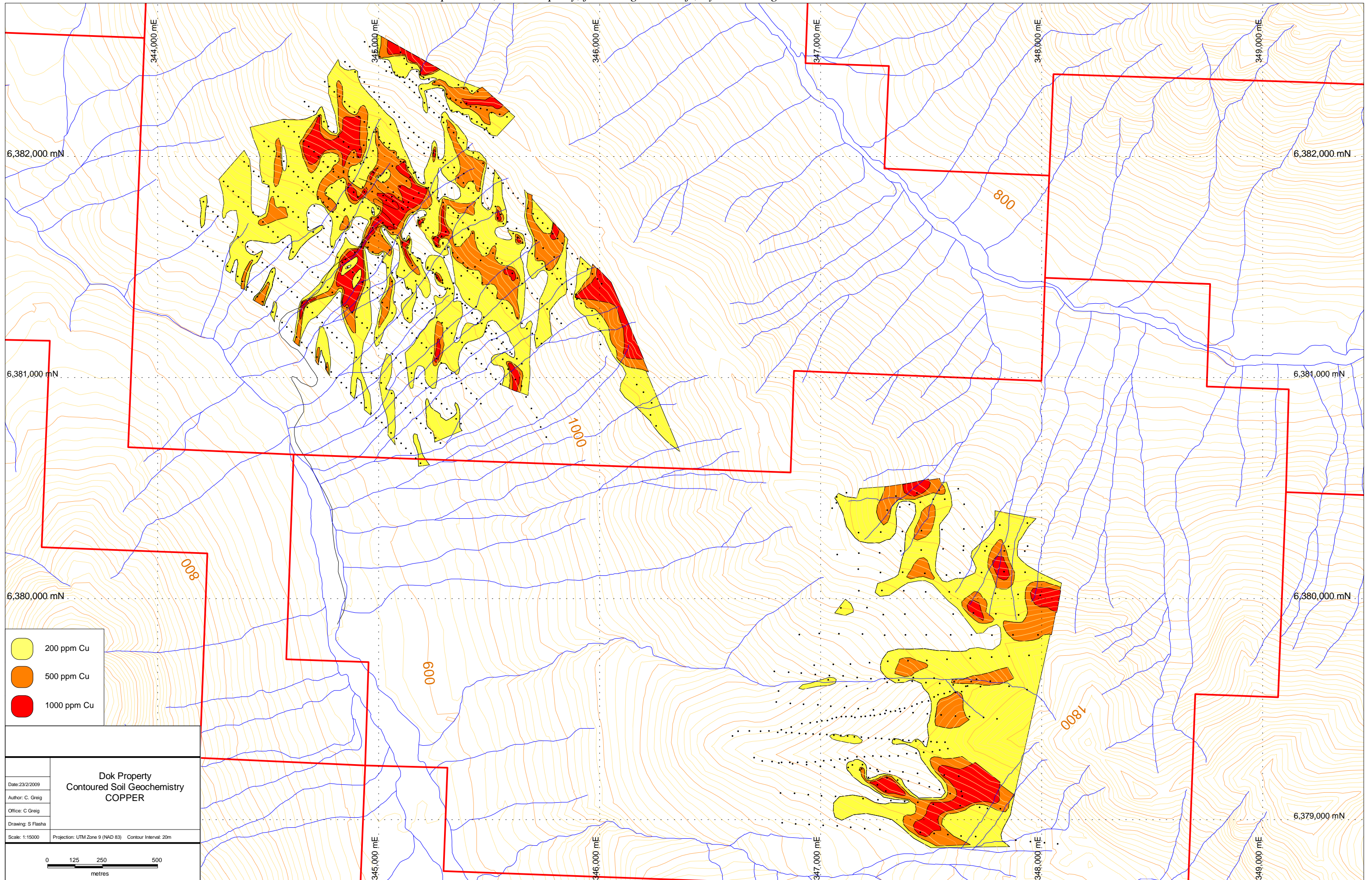


Figure 30. Colour contoured Cu-in-soil geochemical compilation map, Dok property.



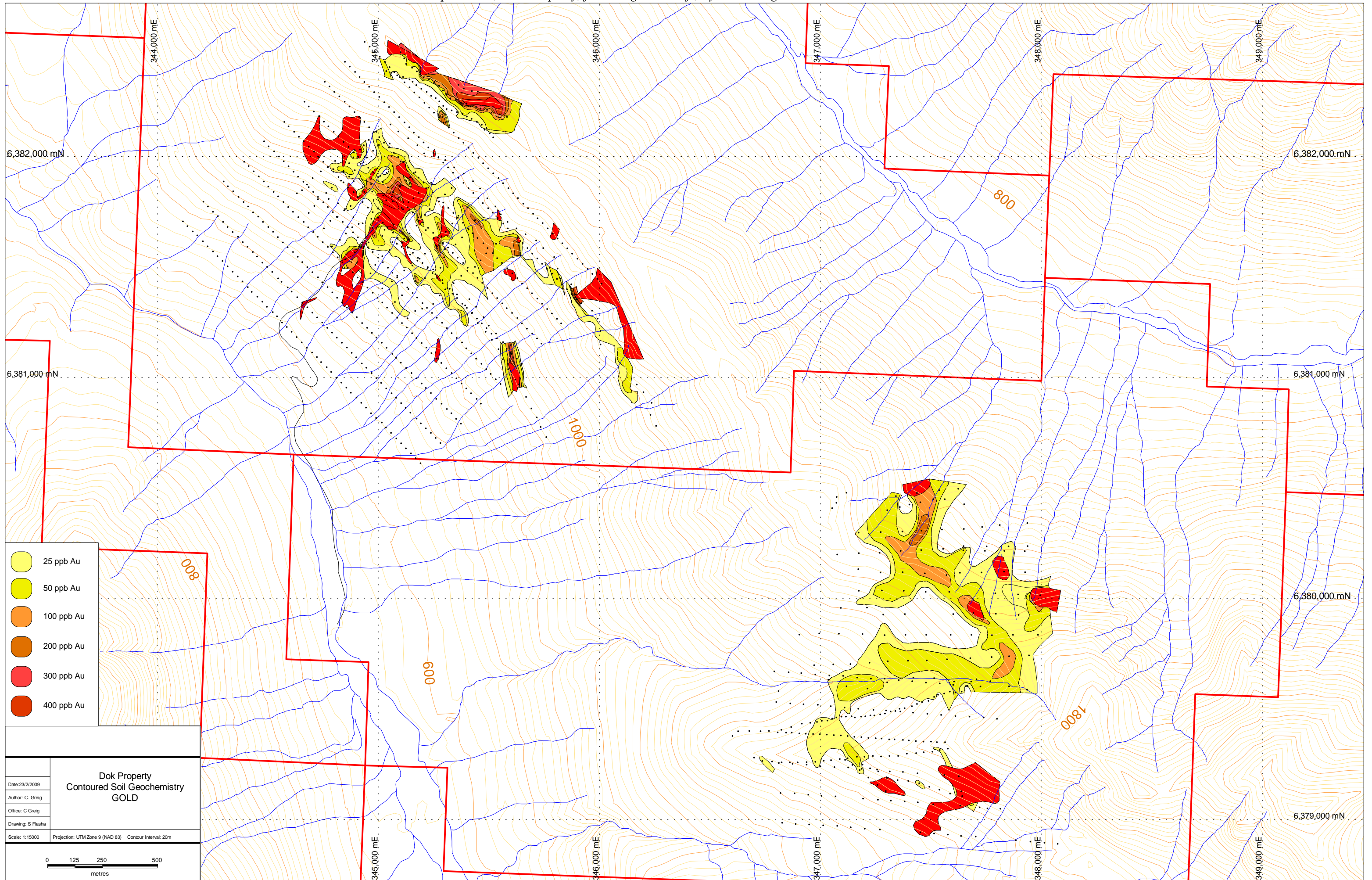


Figure 31. Colour contoured Au-in-soil geochemical compilation map, Dok property.

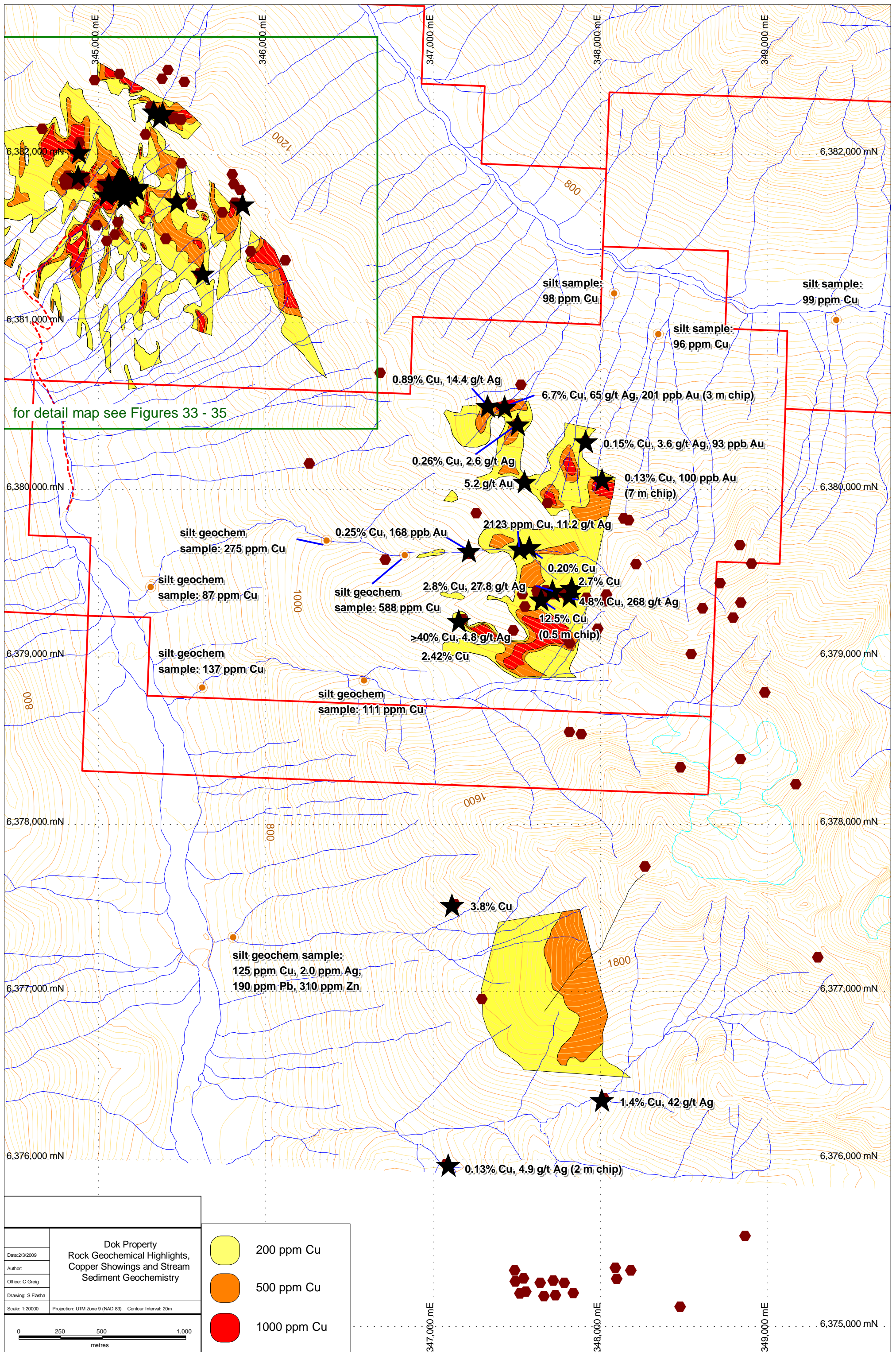


Figure 32. Southern Dok property (and beyond); rock geochemical highlights, copper showings, stream sediment sampling, and colour contoured Cu-in-soil geochemical compilation.

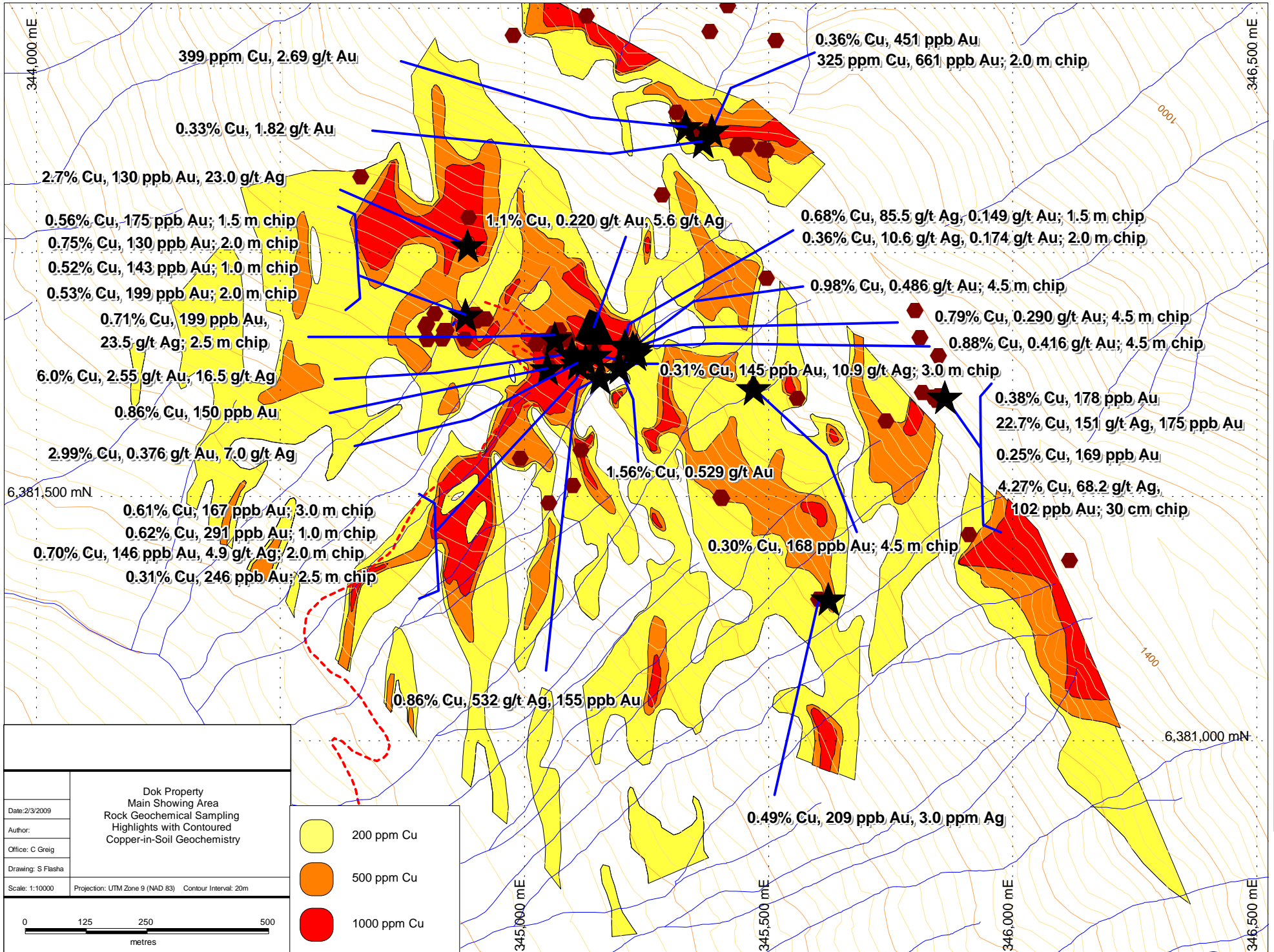


Figure 33. "Main Showing" area, Dok property; rock geochemical highlights, copper showings, and colour contoured Cu-in-soil geochemical compilation.

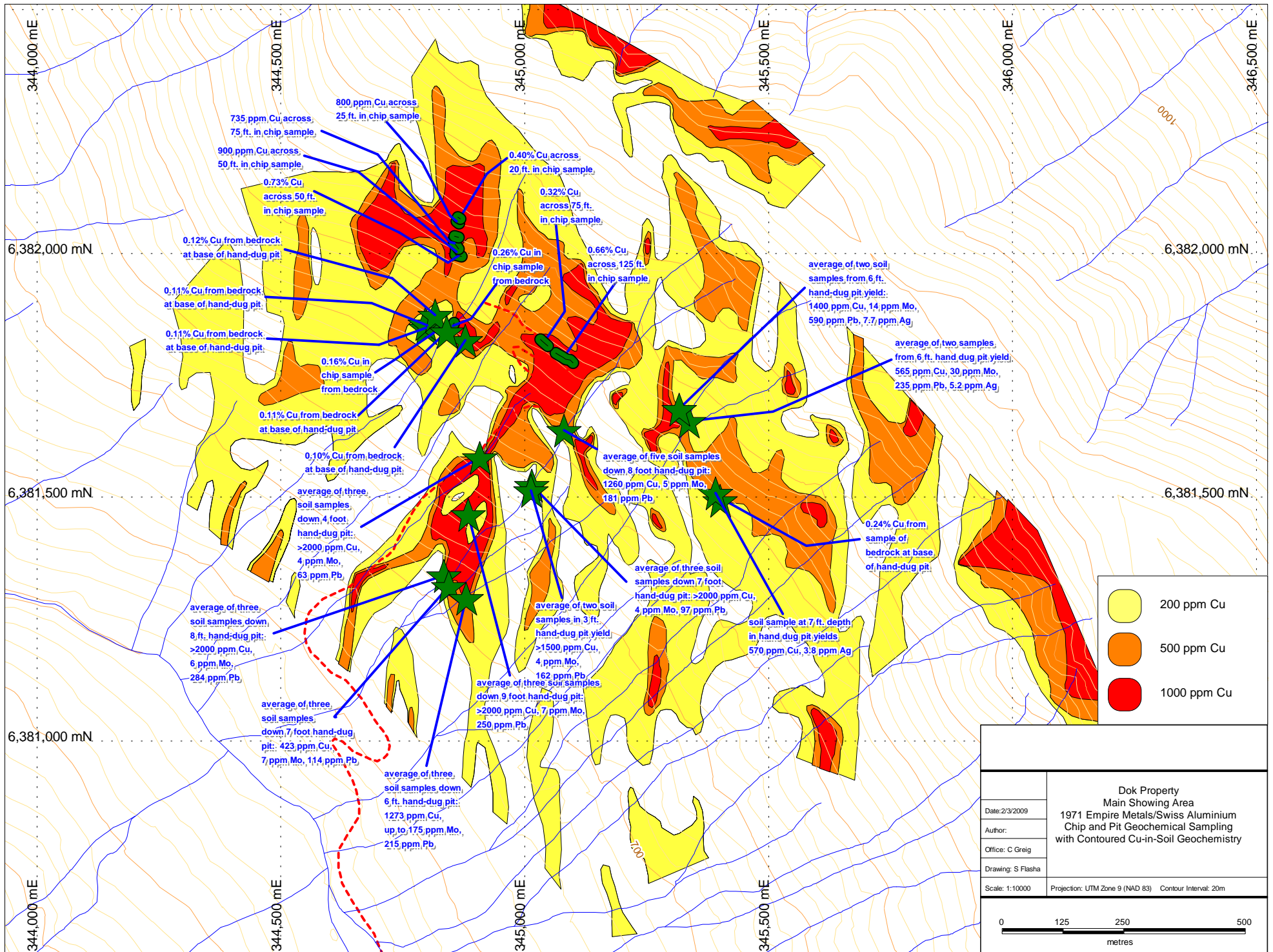


Figure 34. "Main Showing" area, Dok property; 1971 Empire Metals/Swiss Aluminium chip and pit geochemical sampling highlights, and colour contoured Cu-in-soil geochemical compilation.

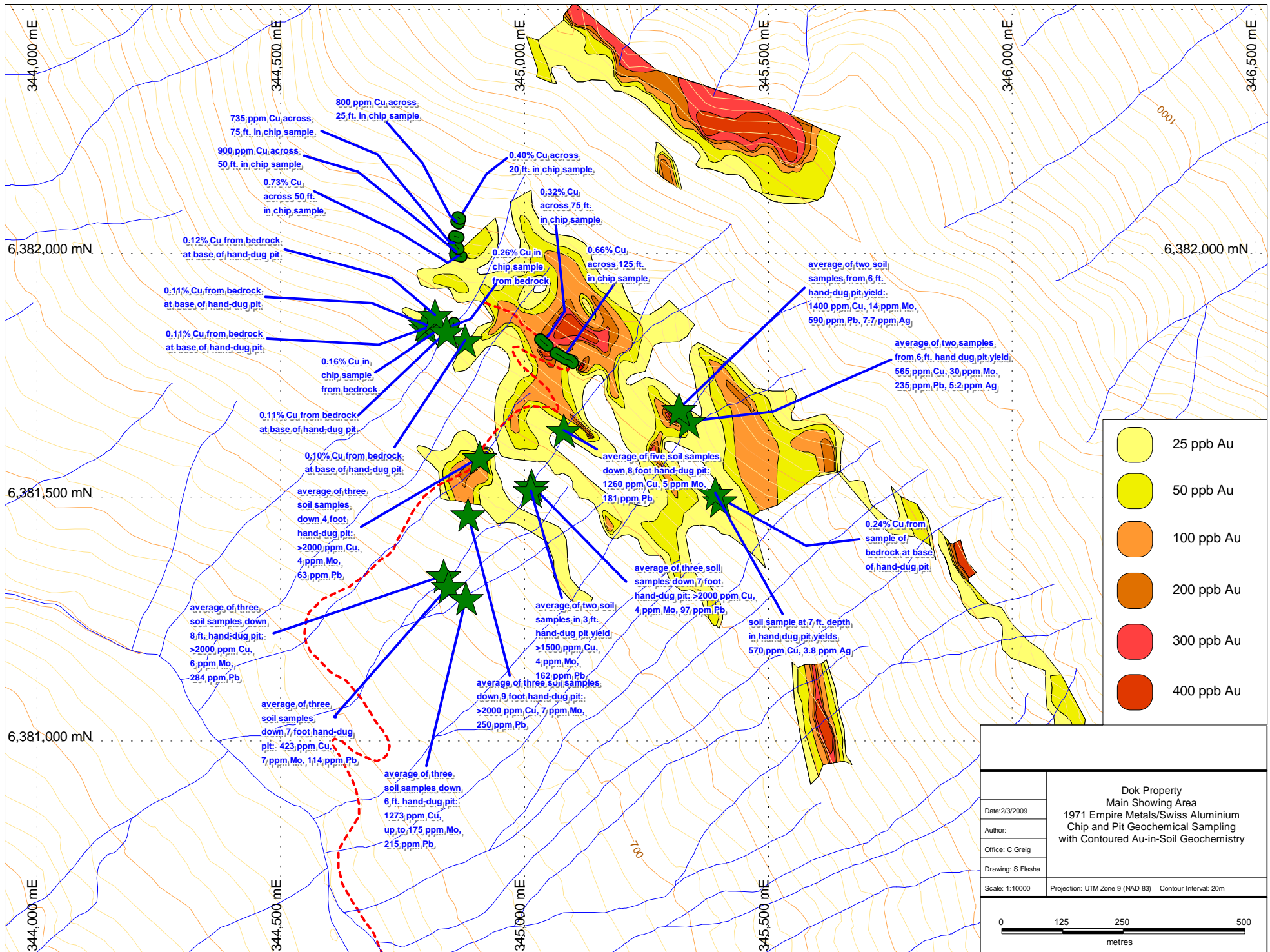


Figure 35. "Main Showing" area, Dok property; 1971 Empire Metals/Swiss Aluminium chip and pit geochemical sampling highlights, and colour contoured Au-in-soil geochemical compilation.

Au in the soil geochemistry must also occur, some of the lowest outcrops on the slopes above Dokdaon Creek are mineralized with Cu, and a number of deep pits lower on the Main grid yield high copper values even at their depths (Ulrich 1971).

Highly anomalous Cu, Au, and Ag values occur in a number of places at the extremities of the geochemical sample lines run in 2005 (Greig 2005), and these areas are in several cases beyond the limits of the 1971 Main grid +250 ppm Cu anomaly. This suggests strongly that further soil sampling is merited beyond the limits of the present grid in the Main Showing area. In addition, the lack of comprehensive soil geochemical coverage over the gossanous areas on the south part of the property, between Red Creek and the Main grid (fig. 36), suggests that grid geochemical sampling and other work should be considered on that part of the property, too. As for identifying mineralized trends and the controls on such trends, comparison of the soil geochemistry and



Figure 36. View northwesterly toward Main Showing area from south of Red Creek, showing extensive cover downslope of, and southerly from, the showing; note also the local gossans on slopes in the middle ground.

geology provides a fairly good indication that mineralization at Main Showing area, and probably also at the southern part of the property, is genetically-related to the emplacement of syenite intrusions, because the northerly-trending soil anomalies appear to parallel, more or less, the trends of the intrusions.

### **8.3 Soil Geochemical Sampling Procedure & Analytical Techniques**

Where possible, soil samples were collected from the B horizon, at an average depth of approximately 10 to 15 centimetres. A mattock was used to dig the holes, and the soil was placed by hand into standard Kraft paper soil sample bags that were labelled with sample numbers. Control on locations was provided by hand-held GPS, and sample sites were marked with flagging tape labelled with sample numbers. The soil samples were analyzed at ALS Chemex Laboratories in Vancouver, British Columbia. To evaluate reproducibility, 8 blank soil samples were collected from a common location, inserted in the sample sequence, and sent to ALS Chemex along with the samples collected from the property (Appendix IV). The blank samples show very little variability, and even where there is some, such as with gold, the values are still below threshold values. Therefore, the results of the blank sampling, along with the internal lab standards, suggest that the data from ALS Chemex is generally of excellent quality.

### **9.0 Mineral Potential**

The Dok property was staked in large part because of its outward similarities to alkalic intrusive-related Cu-Au deposits. The geochemical signature (Cu, Au, Ag,  $\pm$ Mo), and the very close association of Cu-Au mineralization (commonly ore-grade) with Jurassic syenitic intrusive rocks in the Main Showing area and at the newly-discovered Krego Zone, all within the confines of a broad

and coincident Cu-Au-Ag soil geochemical anomaly, argue strongly for continued exploration. In addition, the presence of numerous open Cu- and Au-in-soil geochemical anomalies, copper showings, and large-scale gossanous alteration zones, such as on the southern part of the property, on the Strata Creek side of the ridge between Dokdaon and Strata creeks, and across Strata Creek to the north (fig. 37), all suggest the mineralizing system centered on the Dok property is extensive, and the potential for discovery of a substantial Cu-Au-Ag deposit within it remains high.

### **10.0 Recommendations for Exploration**

As has been recommended previously by Shear (1990) and Greig (2005), the next phase of work on the Dok property should include continued grid-based soil and rock sampling (prospecting), detailed geologic mapping, and, in particular, ground geophysics (IP, with Ground Magnetometer



Figure 37. View north-northeasterly across Strata Creek toward Strata Mountain area from the Dok property, showing extensive gossans in Stuhini Group(?) rocks.



and perhaps EM work). This should initially be focused in the vicinity of the “Main Showing,” but should definitely extend outward from that area, such as to the south and southeast of the Main Zone (between there and Red Creek and perhaps a little beyond), and in the vicinity of the Krego Zone, along the steep northeast-facing slope above Strata Creek.

The proposed work should be undertaken as a preliminary step to diamond drilling, and could be undertaken largely from a base camp on the property, perhaps at the site of the camp established on a bar on Dokdaon Creek for the 1971 work. The grid work should also be supplemented by work on other parts of the property, and perhaps by more widely-spaced “reconnaissance” grid lines outward from the core area of the property. To a lesser extent, truly reconnaissance work, such as stream sediment sampling, prospecting, and contour soil geochemical sampling, should be undertaken in the areas surrounding the property—this work would have to be helicopter supported and could initially be focussed in areas such as those northward and northeastward across Strata Creek and southwestward across Dokdaon Creek.

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## **Appendix I. Rock Sample Locations and Descriptions**

| Sample Number | Easting | Northing | Sample Type         | Sample Description   |
|---------------|---------|----------|---------------------|--|
| BKDK8R001     | 345494  | 6382209  | representative grab | weakly potassic altered intrusive pyrite, trace cpy, minor diss hematite   |
| BKDK8R002     | 345490  | 6382209  | representative grab | pyritic feldspar rich intrusive, py to 1%, trace cpy, trace diss hematite  |
| BKDK8R003     | 345439  | 6382220  | representative grab | feldspar granitic intrusive with malachite   |
| BKDK8R004     | 345439  | 6382220  | 2.5m chip           | as above   |
| BKDK8R005     | 345439  | 6382220  | 3.5m chip           | as above   |
| BKDK8R006     | 345454  | 6382220  | representative grab | feldspar granitic intrusive at contact with pale dyke  |
| BKDK8R007     | 345383  | 6382242  | 3.5m chip           | feldspar granitic intrusive py to 1%, trace cpy, sulphides along fractures paralleling pale dykes  |
| BKDK8R008     | 345383  | 6382242  | 2.0m chip           | as above   |
| BKDK8R009     | 345383  | 6382242  | select grab         | select grab best chalco min sample at above two sites  |
| BKDK8R010     | 345376  | 6382244  | representative grab | feldspar granitic intrusive py to 1%, trace cpy, sulphides along fractures paralleling pale dykes  |
| BKDK8R011     | 345344  | 6382247  | 3m x 7m panel       | feldspar granitic intrusive py to 1%, trace cpy, sulphides along fractures paralleling pale dykes  |
| BKDK8R012     | 345329  | 6382255  | representative grab | pyritic sed? rock  |
| BKDK8R013     | 345311  | 6382287  | 3.0m chip           | ? Rock, sed?, fine grained intrusive?  |
| BKDK8R014     | 345124  | 6382480  | 1.0m chip           | rusty pyritic weakly carb altered ?rock  |
| MGDK8R001     | 347588  | 6378695  | grab                | limonite-, malachite-, and azurite-stained quartz-cpy-cb(?) -ep veins cutting volcanic rocks   |
| MGDK8R002     | 347588  | 6378695  | grab                | limonite-, malachite-, and azurite-stained quartz-cpy-cb(?) -ep veins cutting volcanic rocks   |
| CGDK8R001     | 347694  | 6379388  | grab                | pyrite seams and disseminations in Fe cb altered and calcite veined rocks marginal to basalt/andesite dyke swarm   |
| CGDK8R002     | 347693  | 6379436  | float               | pyrite seams and disseminations (heavier than last place) in Fe cb altered and calcite veined rocks marginal to basalt/andesite dyke swarm   |
| CGDK8R003     | 347699  | 6379440  | grab-chip           | 20 cm grab-chip across rusty-weathering limonitic and pyritic zone in bleached zone in mafic volcanic rocks  |
| CGDK8R004     | 347693  | 6379439  | grab                | more or less same place as R003; drusy open space quartz in bleached zone; quartz across 10-15 cm  |
| CGDK8R005     | 347674  | 6379446  | grab                | rusty-weathering but still relatively "fresh" hb (monzo?) dioritic rocks; moderate pyrite as disseminations and associated with microveinlets  |
| CGDK8R006     | 347670  | 6379462  | float               | quartz carbonate chalcopyrite vein   |
| CGDK8R007     | 347673  | 6379455  | float               | quartz carbonate vein-breccia with sphalerite and pyrite; local drusy open space   |
| CGDK8R008     | 347682  | 6379439  | chip                | across 1 m; up the gully and on west bank up a tad from creek; brittle shear fracture and associated bleaching   |
| CGDK8R009     | 347648  | 6379460  | float               | Fe cb-cc-qz (locally chalcedonic) veining with pyrite and local galena; blocks to 0.5 m  |
| CGDK8R010     | 347639  | 6379468  | float               | heavily pyrite-altered (approx. 10%) pyroxene porphyry with yellowish limonite stain   |
| CGDK8R011     | 347610  | 6379474  | float               | 0.4-0.5 m by 1m block of Fe cb-cc-qz veined rocks with abundant pyrite, very local galena, and chalcopyrite, possible sphalerite, and possible arsenopyrite  |
| CGDK8R012     | 347585  | 6379461  | float               | another py-altered block with qz-cb veinlets and associated py (+possible cpy (tarnished py?) and sphalerite)  |
| CGDK8R013     | 347497  | 6379455  | grab                | qz-py veinlets with dissem py in walls cutting qz monzosyenite(?) or syenomonzonite  |
| CGDK8R014     | 347354  | 6379470  | chip                | 0.5m chip across contact-parallel rusty-weathering brittle shear fracture zone at contact of alkalic intrusion; limonite, some clay, or hornfelsed and/or py-chl-ep-silica in bleached altered green wallrocks |
| CGDK8R015     | 347310  | 6379453  | float               | limonite green "hornfelsed" rocks with drusy open space  |
| CGDK8R016     | 347314  | 6379451  | float               | pyritized pyroxene-phyric rocks with local qz veinlets and one fracture with sparse malachite  |
| CGDK8R017     | 347304  | 6379444  | chip                | 25 cm chip of heaviest limonite in altered country rocks   |
| CGDK8R018     | 347092  | 6379446  | float               | rusty-weathering bleached intermediate to mafic wallrocks with abundant pyrite and local qz veining(??); close-to-home block   |

## **Appendix II. Rock Sample Geochemistry**

| Sample Number | Au ppm | Ag ppm | Al % | As ppm | B ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Cu % | Fe % | Ga ppm | Hg ppm | K %   | La ppm | Mg % | Mn ppm | Mo ppm | Na %  | Ni ppm | P ppm | Pb ppm | S %  | Sb ppm | Sc ppm | Sr ppm | Th ppm | Ti %  | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------------|--------|--------|------|--------|-------|--------|--------|--------|------|--------|--------|--------|--------|------|------|--------|--------|-------|--------|------|--------|--------|-------|--------|-------|--------|------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|
| BKDK8R001     | 0.047  | 0.2    | 0.6  | <2     | <10   | 1100   | 0.6    | <2     | 3.81 | <0.5   | 4      | 2      | 345    |      | 2.21 | <10    | <1     | 0.22  | 20     | 0.4  | 860    | 1      | 0.05  | 3      | 1160  | 4      | 0.14 | <2     | 4      | 232    | <20    | <0.01 | <10    | <10   | 67    | <10   | 47     |
| BKDK8R002     | 0.055  | 0.2    | 1.1  | <2     | <10   | 360    | 0.7    | <2     | 4.18 | <0.5   | 9      | 2      | 450    |      | 3.46 | 10     | <1     | 0.16  | 20     | 0.8  | 1200   | <1     | 0.04  | 23     | 1310  | 3      | 0.47 | <2     | 4      | 136    | <20    | 0.01  | <10    | <10   | 122   | <10   | 88     |
| BKDK8R003     | 0.228  | 0.3    | 0.9  | <2     | <10   | 180    | 0.6    | <2     | 3.73 | <0.5   | 7      | 2      | 605    |      | 2.39 | <10    | <1     | 0.17  | 30     | 0.6  | 1050   | 1      | 0.03  | 3      | 990   | <2     | 0.04 | 12     | 5      | 151    | <20    | 0.01  | <10    | <10   | 90    | <10   | 64     |
| BKDK8R004     | 0.057  | <0.2   | 1.2  | <2     | <10   | 120    | 0.8    | <2     | 3.05 | <0.5   | 7      | 6      | 307    |      | 2.87 | 10     | <1     | 0.16  | 20     | 0.9  | 1035   | <1     | 0.03  | 3      | 1080  | 2      | 0.03 | <2     | 5      | 128    | <20    | 0.05  | <10    | <10   | 128   | <10   | 74     |
| BKDK8R005     | 0.056  | 0.2    | 1.1  | <2     | <10   | 160    | 0.8    | <2     | 2.8  | <0.5   | 8      | 4      | 448    |      | 3.06 | <10    | <1     | 0.18  | 30     | 0.8  | 947    | <1     | 0.03  | 2      | 2180  | 4      | 0.04 | <2     | 4      | 108    | <20    | 0.01  | <10    | <10   | 139   | <10   | 75     |
| BKDK8R006     | 0.023  | 0.3    | 0.5  | 13     | <10   | 140    | 1      | <2     | 4.58 | <0.5   | 6      | 2      | 421    |      | 3.74 | <10    | <1     | 0.29  | 20     | 0.4  | 919    | <1     | 0.02  | 2      | 1420  | 4      | 0.23 | <2     | 5      | 219    | <20    | <0.01 | <10    | <10   | 87    | <10   | 94     |
| BKDK8R007     | 0.038  | 0.6    | 0.5  | 5      | <10   | 340    | 0.8    | <2     | 3.4  | <0.5   | 7      | 1      | 326    |      | 2.78 | <10    | <1     | 0.24  | 20     | 0.3  | 1085   | 6      | 0.03  | <1     | 1190  | 9      | 0.65 | 2      | 4      | 99     | <20    | <0.01 | <10    | <10   | 40    | <10   | 64     |
| BKDK8R008     | 0.664  | 0.7    | 0.5  | 58     | <10   | 290    | 0.7    | <2     | 2.83 | <0.5   | 7      | 3      | 325    |      | 2.63 | <10    | <1     | 0.26  | 30     | 0.1  | 778    | 17     | 0.03  | 2      | 1300  | 9      | 0.31 | <2     | 4      | 87     | <20    | 0.01  | <10    | <10   | 59    | <10   | 57     |
| BKDK8R009     | 0.451  | 1.9    | 0.4  | <2     | <10   | 520    | 0.5    | <2     | 4.3  | <0.5   | 4      | 1      | 3590   |      | 3.35 | <10    | <1     | 0.21  | 40     | 0.1  | 1020   | 3      | 0.04  | 1      | 1870  | 6      | 0.32 | 3      | 3      | 160    | <20    | 0.01  | <10    | <10   | 158   | <10   | 63     |
| BKDK8R010     | 0.033  | 0.3    | 0.8  | 7      | <10   | 320    | 0.9    | <2     | 4.41 | <0.5   | 8      | 3      | 349    |      | 2.95 | <10    | <1     | 0.27  | 30     | 0.5  | 1155   | 1      | 0.03  | 2      | 1430  | 3      | 0.15 | <2     | 5      | 133    | <20    | 0.01  | <10    | <10   | 86    | <10   | 80     |
| BKDK8R011     | 0.023  | 0.4    | 0.4  | <2     | <10   | 530    | 1      | <2     | 3.47 | <0.5   | 7      | 2      | 444    |      | 2.58 | <10    | <1     | 0.24  | 30     | 0.4  | 1080   | 1      | 0.03  | 1      | 1190  | 9      | 0.33 | <2     | 4      | 185    | <20    | <0.01 | <10    | <10   | 64    | <10   | 57     |
| BKDK8R012     | 2.69   | 1.5    | 0.2  | 273    | <10   | 60     | <0.5   | <2     | 10.4 | 0.5    | 8      | 1      | 399    |      | 2.99 | <10    | <1     | 0.18  | 10     | 0.1  | 823    | 14     | 0.01  | 2      | 1100  | 33     | 3.32 | 84     | 4      | 237    | <20    | <0.01 | <10    | <10   | 37    | <10   | 111    |
| BKDK8R013     | 0.103  | 0.8    | 0.3  | 16     | <10   | 180    | 0.5    | <2     | 6.08 | 0.7    | 6      | 1      | 602    |      | 2.33 | <10    | <1     | 0.22  | 20     | 0.1  | 787    | 7      | 0.02  | 2      | 1180  | 23     | 1.37 | 3      | 4      | 141    | <20    | <0.01 | <10    | <10   | 31    | <10   | 127    |
| BKDK8R014     | 0.059  | 0.4    | 0.6  | 217    | <10   | 70     | 0.9    | <2     | 6.67 | <0.5   | 18     | 6      | 572    |      | 5.16 | <10    | <1     | 0.39  | 30     | 1.7  | 1585   | <1     | 0.01  | 8      | 3240  | 12     | 1.8  | 10     | 13     | 494    | <20    | <0.01 | <10    | <10   | 57    | <10   | 200    |
| MGDK8R001     | 0.013  | 4.8    | 0.5  | 44     | <10   | 10     | <0.5   | <2     | 0.04 | 2.1    | 1      | <1     | >10000 | >40  | 4.6  | <10    | 1      | 0.01  | <10    | 0    | 67     | 3      | <0.01 | 2      | 50    | 431    | 5.07 | 29     | 9      | 3      | 20     | <0.01 | <10    | <10   | 3     | 20    | 206    |
| MGDK8R002     | 0.006  | 0.4    | 3.8  | <2     | <10   | 30     | <0.5   | <2     | 0.42 | <0.5   | 38     | 131    | >10000 | 2.4  | 9.37 | 20     | 1      | 0.04  | 10     | 3.6  | 1825   | <1     | 0.05  | 39     | 1750  | 5      | 0.1  | <2     | 22     | 12     | <20    | 0.01  | <10    | <10   | 221   | <10   | 151    |
| CGDK8R001     | 0.006  | 0.3    | 0.5  | 3      | <10   | 90     | <0.5   | <2     | 4.65 | <0.5   | 31     | 4      | 2050   |      | 3.7  | <10    | <1     | 0.37  | <10    | 1.4  | 1010   | <1     | 0.01  | 21     | 1190  | 8      | 1.55 | <2     | 20     | 70     | <20    | <0.01 | <10    | <10   | 37    | <10   | 32     |
| CGDK8R002     | 0.048  | 1.8    | 1.1  | 113    | <10   | 20     | <0.5   | 2      | 0.35 | <0.5   | 74     | 18     | 751    |      | 24.1 | 10     | 1      | 0.08  | <10    | 0.7  | 277    | 4      | 0.04  | 98     | 1120  | 126    | 5.73 | <2     | 7      | 69     | <20    | 0.27  | 10     | <10   | 204   | <10   | 57     |
| CGDK8R003     | 0.039  | 3.6    | 1.3  | 14     | <10   | 120    | <0.5   | 2      | 0.09 | <0.5   | 30     | 7      | 502    |      | 11.7 | <10    | <1     | 0.21  | <10    | 1    | 354    | 1      | 0.02  | 16     | 1390  | 119    | 0.8  | <2     | 10     | 23     | <20    | <0.01 | <10    | <10   | 60    | <10   | 98     |
| CGDK8R004     | 0.022  | 1.6    | 0.3  | 2      | <10   | 260    | <0.5   | 3      | 0.07 | <0.5   | 6      | 9      | 79     |      | 2.06 | <10    | <1     | 0.1   | <10    | 0.1  | 69     | 2      | 0.04  | 4      | 300   | 45     | 0.39 | <2     | 2      | 23     | <20    | 0.01  | <10    | <10   | 18    | <10   | 5      |
| CGDK8R005     | 0.016  | <0.2   | 1.8  | 13     | <10   | 20     | <0.5   | <2     | 0.92 | <0.5   | 9      | 17     | 223    |      | 5.08 | 10     | <1     | 0.08  | <10    | 1.5  | 365    | <1     | 0.07  | 12     | 1020  | 5      | 0.64 | <2     | 4      | 45     | <20    | 0.31  | <10    | <10   | 146   | <10   | 42     |
| CGDK8R006     | 0.006  | 0.8    | 1.8  | 12     | <10   | 20     | <0.5   | 4      | 4.38 | <0.5   | 10     | 42     | 1950   |      | 3.94 | <10    | <1     | <0.01 | <10    | 1.7  | 2160   | <1     | 0.01  | 15     | 620   | 5      | 0.73 | <2     | 12     | 200    | <20    | 0.16  | <10    | <10   | 115   | <10   | 91     |
| CGDK8R007     | 0.016  | 3.6    | 1    | 17     | <10   | 400    | <0.5   | <2     | 7.7  | 1.1    | 21     | 23     | 216    |      | 4.53 | <10    | <1     | 0.06  | <10    | 3.8  | 1340   | 4      | 0.01  | 22     | 230   | 64     | 0.68 | 4      | 7      | 131    | <20    | <0.01 | <10    | <10   | 89    | <10   | 144    |
| CGDK8R008     | 0.058  | <0.2   | 1.8  | 20     | <10   | 90     | <0.5   | <2     | 0.31 | <0.5   | 5      | 18     | 73     |      | 8.99 | 10     | <1     | 0.2   | <10    | 1.5  | 568    | 2      | 0.05  | 7      | 1070  | 17     | 0.74 | 2      | 10     | 78     | <20    | 0.24  | <10    | <10   | 175   | <10   | 53     |
| CGDK8R009     | 0.018  | 8.1    | 0.2  | 17     | <10   | 150    | <0.5   | 4      | 9.33 | 4.1    | 22     | 27     | 205    |      | 5.09 | <10    | <1     | 0.08  | <10    | 2    | 4780   | 14     | 0.01  | 29     | 400   | 3250   | 0.62 | 21     | 8      | 172    | <20    | <0.01 | <10    | <10   | 90    | <10   | 370    |
| CGDK8R010     | 0.021  | <0.2   | 0.8  | 11     | <10   | 20     | <0.5   | <2     | 0.84 | <0.5   | 38     | 37     | 144    |      | 8.33 | <10    | <1     | 0.03  | <10    | 1    | 271    | 1      | 0.07  | 36     | 1460  | 24     | 8.36 | 2      | 9      | 35     | <20    | 0.29  | <10    | <10   | 133   | <10   | 29     |
| CGDK8R011     | 0.027  | 11.2   | 0.3  | 19     | <10   | 60     | <0.5   | <2     | 8.32 | 14     | 41     | 32     | 212    |      | 5.9  | <10    | 1      | 0.18  | <10    | 3.7  | 4780   | <1     | 0.01  | 42     | 1010  | 1030   | 3.61 | 29     | 19     | 129    | <20    | <0.01 | <10    | <10   | 58    | <10   | 1140   |
| CGDK8R012     | 0.015  | 0.2    | 0.7  | 7      | <10   | 70     | <0.5   | <2     | 8.8  | 0.8    | 26     | 40     | 57     |      | 4.92 | <10    | 1      | 0.19  | <10    | 2.7  | 5210   | <1     | 0.02  | 45     | 1070  | 29     | 1.41 | <2     | 16     | 133    | <20    | <0.01 | <10    | <10   | 69    | <10   | 143    |
| CGDK8R013     | 0.007  | <0.2   | 0.4  | <2     | <10   | 110    | <0.5   | 2      | 0.12 | <0.5   | 1      | 3      | 32     |      | 1.48 | <10    | <1     | 0.16  | 20     | 0.2  | 120    | 3      | 0.02  | <1     | 280   | 42     | 0.23 | <2     | 1      | 18     | <20    | <0.01 | <10    | <10   | 10    | <10   | 12     |
| CGDK8R014     | 0.021  | <0.2   | 0.6  | 5      | <10   | 620    | <0.5   | 2      | 0.03 | <0.5   | 5      | 5      | 160    |      | 4.07 | <10    | <1     | 0.19  | 10     | 0.3  | 178    | 3      | 0.06  | <1     | 470   | 27     | 0.36 | <2     | 3      | 39     | <20    | <0.01 | <10    | <10   | 39    | <10   | 35     |
| CGDK8R015     | 0.008  | <0.2   | 1.2  | 2      | <10   | 20     | <0.5   | <2     | 0.04 | <0.5   | 11     | 18     | 64     |      | 2.7  | <10    | <1     | 0.07  | <10    | 0.8  | 295    | 4      | 0.01  | 15     | 410   | 9      | 0.08 | 2      | 4      | 7      | <20    | 0.05  | <10    | <10   | 59    | <10   | 45     |
| CGDK8R016     | 0.168  | 2.4    | 1.9  | 13     | <10   | 60     | <0.5   | <2     | 3.13 | <0.5   | 24     | 165    | 2470   |      | 5.58 | 10     | <1     | 0.04  | <10    | 2.8  | 1295   | <1     | 0.08  | 47     | 1030  | 14     | 3.37 | 2      | 11     | 64     | <20    | 0.15  | <10    | <10   | 150   | <10   | 104    |
| CGDK8R017     | 0.015  | 0.9    | 3.6  | 6      | <10   | 240    | <0.5   | 3      | 0.03 | <0.5   | 12     | 31     | 66     |      | 12.1 | 10     | 1      | 0.14  | <10    | 3.6  | 1700   | 4      | 0.01  | 8      | 2360  | 5      | 0.61 | <2     | 11     | 14     | <20    | <0.01 | <10    | <10   | 202   | <10   | 127    |
| CGDK8R018     | 0.016  | <0.2   | 1.1  | <2     | <10   | 140    | <0.5   | 2      | 0.04 | <0.5   | 1      | 1      | 55     |      | 8.89 | <10    | <1     | 0.15  | <10    | 0.8  | 397    | 3      | 0.04  | <1     | 790   | 35     | 0.34 | <2     | 2      | 11     | <20    | <0.01 | <10    | <10   | 106   | <10   | 38     |

### **Appendix III. Soil Sample Geochemistry**



| Sample Number | Easting | Northing | Au ppm | Ag ppm | Al % | As ppm | B ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe %  | Ga ppm | Hg ppm | K %  | La ppm | Mg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S %  | Sb ppm | Sc ppm | Sr ppm | Th ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------------|---------|----------|--------|--------|------|--------|-------|--------|--------|--------|------|--------|--------|--------|--------|-------|--------|--------|------|--------|------|--------|--------|------|--------|-------|--------|------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| KRDK8S001     | 347073  | 6380460  | 0.009  | 0.2    | 2.79 | 13     | <10   | 160    | 1.3    | 5      | 0.93 | 2.1    | 63     | 100    | 214    | 5.96  | 10     | 1      | 0.07 | 20     | 1.73 | 4870   | 2      | 0.02 | 43     | 2330  | 80     | 0.19 | <2     | 8      | 50     | <20    | 0.09 | <10    | <10   | 143   | <10   | 231    |
| KRDK8S002     | 347071  | 6380434  | 0.008  | <0.2   | 1.5  | 5      | <10   | 560    | 0.6    | 4      | 2.59 | 2.6    | 23     | 28     | 106    | 3.41  | <10    | <1     | 0.09 | 10     | 0.78 | 2160   | 1      | 0.02 | 20     | 1830  | 50     | 0.23 | <2     | 3      | 108    | <20    | 0.05 | <10    | <10   | 79    | <10   | 180    |
| KRDK8S003     | 347053  | 6380409  | 0.006  | 0.4    | 1.68 | 9      | <10   | 390    | 0.7    | 4      | 1.66 | 2.1    | 32     | 32     | 120    | 3.93  | 10     | <1     | 0.08 | 10     | 1.1  | 2420   | 1      | 0.02 | 22     | 2290  | 39     | 0.24 | <2     | 4      | 68     | <20    | 0.05 | <10    | <10   | 80    | <10   | 203    |
| KRDK8S004     | 347117  | 6380479  | 0.007  | <0.2   | 2.68 | 9      | <10   | 150    | 0.8    | 5      | 0.26 | 0.8    | 33     | 61     | 111    | 5.8   | 10     | <1     | 0.06 | 10     | 1.38 | 2230   | 1      | 0.02 | 27     | 1170  | 51     | 0.07 | 3      | 8      | 28     | <20    | 0.18 | <10    | <10   | 147   | <10   | 181    |
| KRDK8S005     | 347681  | 6379625  | 0.071  | 0.8    | 2.3  | 36     | <10   | 90     | 0.6    | 6      | 0.44 | 1.5    | 81     | 30     | 552    | 13.7  | 10     | <1     | 0.21 | 10     | 1.29 | 1075   | 3      | 0.03 | 49     | 3060  | 69     | 0.19 | <2     | 12     | 84     | <20    | 0.18 | <10    | <10   | 199   | <10   | 160    |
| KRDK8S006     | 347658  | 6379604  | 0.022  | 0.5    | 2.47 | 16     | <10   | 150    | 0.6    | 5      | 0.62 | 1.1    | 60     | 79     | 326    | 8.02  | 10     | <1     | 0.09 | 10     | 1.91 | 1585   | 1      | 0.03 | 53     | 1610  | 53     | 0.1  | 2      | 13     | 47     | <20    | 0.2  | <10    | <10   | 172   | <10   | 139    |
| KRDK8S007     | 347639  | 6379579  | 0.03   | 1.1    | 2.06 | 14     | <10   | 190    | 0.6    | 5      | 0.96 | 1.3    | 96     | 50     | 341    | 6.89  | <10    | 1      | 0.08 | 10     | 1.21 | 1745   | 2      | 0.02 | 53     | 1730  | 47     | 0.18 | 2      | 8      | 66     | <20    | 0.11 | <10    | <10   | 135   | <10   | 123    |
| KRDK8S008     | 347611  | 6379575  | 0.071  | 3.6    | 1.23 | 129    | <10   | 1450   | 1.3    | 6      | 0.36 | 5.6    | 337    | 14     | 505    | 16.6  | <10    | <1     | 0.11 | 10     | 0.54 | 11800  | 23     | 0.02 | 144    | 1800  | 499    | 0.12 | 53     | 28     | 31     | <20    | 0.03 | <10    | <10   | 140   | <10   | 484    |
| KRDK8S009     | 347585  | 6379580  | 0.042  | 0.8    | 3.09 | 19     | <10   | 170    | 0.7    | 6      | 0.59 | 2      | 99     | 43     | 363    | 10.55 | 10     | <1     | 0.14 | 10     | 2.06 | 2060   | 2      | 0.03 | 47     | 1980  | 85     | 0.13 | 2      | 19     | 58     | <20    | 0.24 | <10    | <10   | 239   | <10   | 215    |
| KRDK8S010     | 347560  | 6379571  | 0.031  | 0.8    | 2.76 | 19     | <10   | 250    | 0.7    | 5      | 0.54 | 1.2    | 99     | 43     | 316    | 9.51  | 10     | <1     | 0.14 | 10     | 1.85 | 2560   | 2      | 0.03 | 45     | 1800  | 52     | 0.1  | <2     | 18     | 44     | <20    | 0.19 | <10    | <10   | 201   | <10   | 169    |
| KRDK8S011     | 347532  | 6379566  | 0.021  | 0.2    | 2.4  | 11     | <10   | 130    | 0.6    | 5      | 0.29 | 0.5    | 63     | 54     | 203    | 6.61  | 10     | <1     | 0.06 | 10     | 1.34 | 1605   | 2      | 0.03 | 29     | 1350  | 35     | 0.14 | <2     | 7      | 35     | <20    | 0.13 | <10    | <10   | 162   | <10   | 104    |
| KRDK8S012     | 347514  | 6379555  | 0.046  | 0.3    | 3.51 | 30     | <10   | 150    | 0.7    | 6      | 0.49 | 0.5    | 80     | 51     | 414    | 11.5  | 10     | <1     | 0.08 | 10     | 1.69 | 1375   | 3      | 0.03 | 43     | 2530  | 31     | 0.11 | <2     | 15     | 62     | <20    | 0.2  | <10    | <10   | 210   | <10   | 112    |
| KRDK8S013     | 347488  | 6379538  | 0.02   | 0.2    | 1.48 | 6      | <10   | 110    | 0.5    | 5      | 0.27 | 0.6    | 22     | 31     | 106    | 4.44  | 10     | <1     | 0.06 | 10     | 0.54 | 1260   | 3      | 0.03 | 14     | 1610  | 28     | 0.19 | <2     | 2      | 28     | <20    | 0.05 | <10    | <10   | 111   | <10   | 66     |
| KRDK8S014     | 347459  | 6379532  | 0.025  | 0.6    | 0.96 | 6      | <10   | 50     | <0.5   | 5      | 0.11 | 0.7    | 5      | 22     | 56     | 2.58  | <10    | <1     | 0.05 | 10     | 0.33 | 169    | 2      | 0.02 | 9      | 1060  | 26     | 0.09 | <2     | 1      | 18     | <20    | 0.04 | <10    | <10   | 77    | <10   | 40     |
| KRDK8S015     | blank   |          | 0.006  | <0.2   | 1.81 | 6      | <10   | 330    | 0.7    | 3      | 1.02 | 0.8    | 16     | 48     | 46     | 3.64  | <10    | <1     | 0.14 | 10     | 0.78 | 1220   | <1     | 0.02 | 54     | 1760  | 6      | 0.03 | <2     | 7      | 44     | <20    | 0.12 | <10    | <10   | 70    | <10   | 186    |
| KRDK8S016     | 347436  | 6379524  | 0.015  | 0.4    | 1.33 | 5      | <10   | 90     | <0.5   | 3      | 0.13 | 0.5    | 10     | 32     | 69     | 4.21  | 10     | <1     | 0.05 | 10     | 0.43 | 422    | 2      | 0.03 | 12     | 1040  | 26     | 0.11 | 2      | 2      | 22     | <20    | 0.12 | <10    | <10   | 117   | <10   | 52     |
| KRDK8S017     | 347414  | 6379514  | 0.022  | 0.4    | 0.62 | <2     | <10   | 40     | <0.5   | 4      | 0.13 | <0.5   | 2      | 13     | 23     | 1.03  | <10    | <1     | 0.05 | 10     | 0.08 | 62     | 1      | 0.01 | 3      | 1070  | 18     | 0.08 | <2     | <1     | 16     | <20    | 0.02 | <10    | <10   | 30    | <10   | 15     |
| KRDK8S018     | 347381  | 6379504  | 0.014  | 0.5    | 1.6  | 6      | <10   | 110    | <0.5   | 5      | 0.13 | <0.5   | 7      | 24     | 61     | 3.82  | 10     | 1      | 0.04 | 10     | 0.32 | 407    | 3      | 0.02 | 8      | 910   | 34     | 0.09 | 2      | 1      | 23     | <20    | 0.11 | <10    | <10   | 122   | <10   | 48     |
| KRDK8S019     | 347357  | 6379502  | 0.011  | 0.6    | 1.52 | 5      | <10   | 70     | <0.5   | 5      | 0.13 | <0.5   | 8      | 27     | 57     | 5.07  | 10     | <1     | 0.05 | 10     | 0.31 | 868    | 3      | 0.01 | 7      | 1230  | 33     | 0.08 | 3      | 2      | 22     | <20    | 0.17 | <10    | <10   | 148   | <10   | 52     |
| KRDK8S020     | 347338  | 6379492  | 0.019  | 0.4    | 1.83 | 6      | <10   | 130    | 0.6    | 5      | 0.18 | <0.5   | 11     | 28     | 80     | 3.98  | 10     | 1      | 0.06 | 10     | 0.56 | 484    | 2      | 0.01 | 14     | 1160  | 24     | 0.11 | <2     | 2      | 23     | <20    | 0.12 | <10    | <10   | 98    | <10   | 57     |
| KRDK8S021     | 347317  | 6379489  | 0.015  | 0.4    | 1.83 | 6      | <10   | 70     | <0.5   | 5      | 0.12 | <0.5   | 11     | 33     | 72     | 4.03  | 10     | <1     | 0.04 | 10     | 0.58 | 511    | 3      | 0.01 | 11     | 870   | 21     | 0.08 | 2      | 2      | 20     | <20    | 0.12 | <10    | <10   | 116   | <10   | 51     |
| KRDK8S022     | 347291  | 6379480  | 0.017  | 0.5    | 1.09 | 2      | <10   | 50     | <0.5   | 4      | 0.08 | <0.5   | 2      | 17     | 39     | 1.76  | <10    | 1      | 0.03 | 10     | 0.11 | 58     | 1      | 0.01 | 3      | 730   | 20     | 0.06 | <2     | 1      | 12     | <20    | 0.07 | <10    | <10   | 51    | <10   | 14     |
| KRDK8S023     | 347270  | 6379476  | 0.016  | 0.4    | 1.04 | 2      | <10   | 40     | <0.5   | 4      | 0.08 | <0.5   | 2      | 16     | 33     | 1.39  | <10    | <1     | 0.03 | 10     | 0.1  | 62     | 1      | 0.01 | 3      | 640   | 20     | 0.05 | <2     | 1      | 13     | <20    | 0.05 | <10    | <10   | 45    | <10   | 11     |
| KRDK8S024     | 347243  | 6379471  | 0.009  | 0.5    | 2.5  | 6      | <10   | 50     | <0.5   | 6      | 0.12 | <0.5   | 11     | 40     | 76     | 5.45  | 10     | <1     | 0.03 | 10     | 0.59 | 595    | 2      | 0.01 | 13     | 1140  | 17     | 0.08 | <2     | 3      | 17     | <20    | 0.17 | <10    | <10   | 114   | <10   | 55     |
| KRDK8S025     | 347225  | 6379471  | 0.018  | 0.9    | 0.8  | 2      | <10   | 50     | <0.5   | 4      | 0.12 | <0.5   | 2      | 15     | 31     | 1.86  | <10    | <1     | 0.04 | 10     | 0.08 | 103    | 1      | 0.01 | 3      | 900   | 23     | 0.06 | <2     | 1      | 15     | <20    | 0.06 | <10    | <10   | 54    | <10   | 12     |
| KRDK8S026     | 347202  | 6379468  | 0.006  | 0.5    | 2.48 | 8      | <10   | 60     | 0.5    | 5      | 0.12 | <0.5   | 11     | 38     | 77     | 5.4   | 10     | 1      | 0.04 | 10     | 0.57 | 532    | 2      | 0.01 | 11     | 1240  | 18     | 0.09 | 3      | 2      | 18     | <20    | 0.17 | <10    | <10   | 121   | <10   | 58     |
| KRDK8S027     | 347183  | 6379466  | 0.014  | 0.4    | 2.14 | 5      | <10   | 50     | <0.5   | 5      | 0.13 | <0.5   | 8      | 28     | 55     | 3.94  | 10     | <1     | 0.03 | 10     | 0.36 | 387    | 2      | 0.01 | 7      | 950   | 19     | 0.07 | <2     | 2      | 19     | <20    | 0.15 | <10    | <10   | 99    | <10   | 39     |
| KRDK8S028     | 347155  | 6379462  | 0.016  | 0.4    | 1.39 | 8      | <10   | 60     | <0.5   | 4      | 0.14 | <0.5   | 10     | 25     | 46     | 5.57  | 10     | <1     | 0.05 | 10     | 0.43 | 553    | 2      | 0.02 | 11     | 1550  | 20     | 0.08 | <2     | 2      | 23     | <20    | 0.18 | <10    | <10   | 136   | <10   | 47     |
| KRDK8S029     | 347140  | 6379467  | 0.023  | 0.2    | 1.22 | 4      | <10   | 50     | <0.5   | 4      | 0.14 | <0.5   | 5      | 21     | 37     | 3     | 10     | <1     | 0.04 | 10     | 0.32 | 297    | 2      | 0.02 | 6      | 770   | 18     | 0.05 | <2     | 1      | 21     | <20    | 0.1  | <10    | <10   | 92    | <10   | 31     |
| KRDK8S030     | blank   |          | 0.015  | <0.2   | 1.79 | 3      | <10   | 320    | 0.7    | 4      | 1.01 | 0.8    | 16     | 47     | 45     | 3.63  | <10    | <1     | 0.14 | 10     | 0.77 | 1185   | <1     | 0.02 | 52     | 1720  | 7      | 0.03 | <2     | 7      | 45     | <20    | 0.12 | <10    | <10   | 71    | <10   | 182    |
| KRDK8S031     | 347115  | 6379466  | 0.018  | 0.3    | 1.34 | 6      | <10   | 60     | <0.5   | 3      | 0.2  | <0.5   | 9      | 24     | 59     | 4.91  | 10     | <1     | 0.05 | 10     | 0.48 | 575    | 3      | 0.02 | 13     | 1440  | 21     | 0.08 | <2     | 1      | 25     | <20    | 0.1  | <10    | <10   | 130   | <10   | 44     |
| KRDK8S032     | 347094  | 6379466  | 0.013  | 0.3    | 1.45 | 3      | <10   | 50     | <0.5   | 3      | 0.13 | <0.5   | 6      | 22     | 41     | 2.9   | 10     | <1     | 0.04 | 10     | 0.38 | 227    | 2      | 0.02 | 7      | 780   | 17     | 0.07 | <2     | 1      | 22     | <20    | 0.09 | <10    | <10   | 86    | <10   | 31     |
| KRDK8S033     | 347071  | 6379463  | 0.026  | 0.5    | 2.09 | 8      | <10   | 80     | <0.5   | 4      | 0.19 | <0.5   | 15     | 25     | 76     | 6.04  | 10     | 1      | 0.06 | 10     | 0.89 | 603    | 2      | 0.02 | 16     | 1650  | 20     | 0.11 | <2     | 3      | 32     | <20    | 0.11 | <10    | <10   | 145   | <10   | 61     |
| KRDK8S034     | 347053  | 6379458  | 0.019  | 0.6    | 2.12 | 5      | <10   | 100    | <0.5   | 3      | 0.16 | <0.5   | 12     | 32     | 78     | 4.57  | 10     | <1     | 0.06 | 10     | 0.86 | 545    | 2      | 0.02 | 18     | 1070  | 25     | 0.12 | <2     | 2      | 28     | <20    | 0.07 | <10    | <10   | 111   | <10   | 57     |
| KRDK8S035     | 347031  | 6379449  | 0.031  | 0.5    | 1.21 | 2      | <10   | 70     | <0.5   | 5      | 0.17 | <0.5   | 4      | 21     | 34     | 2.57  | 10     | <1     | 0.04 | 10     | 0.21 | 185    | 1      | 0.01 | 5      | 830   | 23     | 0.07 | <2     | 1      | 22     | <20    | 0.1  | <10    | <10   | 75    | <10   | 25     |
| KRDK8S036     | 347005  | 6379448  | 0.029  | <0.2   | 1.41 | 6      | <10   | 70     | <0.5   | 4      | 0.15 | <0.5   | 8      | 28     | 48     | 5.09  | 10     | 1      | 0.04 | 10     | 0.32 | 315    | 2      | 0.02 | 8      | 830   | 23     | 0.08 | <2     | 1      | 24     | <20    | 0.14 | <10    | <10   | 146   | <10   | 40     |
| KRDK8S037     | 346984  | 6379442  | 0.026  | 0.3    | 2.17 | 8      | <10   | 110    | <0.5   | 3      | 0.18 | <0.5   | 12     | 32     | 72     | 5.55  | 10     | 1      | 0.04 | 10     | 0.94 | 491    | 1      | 0.02 | 17     | 1100  | 31     |      |        |        |        |        |      |        |       |       |       |        |

| Sample Number | Easting | Northing | Au ppm | Ag ppm | Al % | As ppm | B ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K %  | La ppm | Mg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S %  | Sb ppm | Sc ppm | Sr ppm | Th ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------------|---------|----------|--------|--------|------|--------|-------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|--------|------|--------|-------|--------|------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| KRDK8S057     | 347048  | 6379269  | <0.005 | <0.2   | 2.24 | 4      | <10   | 390    | 0.8    | 2      | 1.04 | 0.8    | 24     | 32     | 84     | 4.52 | 10     | <1     | 0.14 | 10     | 1.15 | 1610   | <1     | 0.03 | 22     | 2620  | 13     | 0.22 | <2     | 4      | 69     | <20    | 0.08 | <10    | <10   | 95    | <10   | 67     |
| KRDK8S058     | 347087  | 6379275  | 0.009  | <0.2   | 2.56 | 6      | <10   | 300    | 0.7    | 2      | 1.29 | 0.7    | 32     | 33     | 94     | 4.34 | 10     | <1     | 0.09 | 10     | 1.17 | 1750   | 1      | 0.02 | 29     | 2360  | 12     | 0.2  | <2     | 5      | 68     | <20    | 0.07 | <10    | <10   | 86    | <10   | 62     |
| KRDK8S059     | 347123  | 6379278  | 0.041  | <0.2   | 2.71 | 6      | <10   | 480    | 0.8    | 2      | 1.23 | 0.7    | 25     | 51     | 100    | 4.63 | 10     | <1     | 0.19 | 20     | 1.62 | 1575   | 1      | 0.02 | 39     | 1600  | 18     | 0.14 | <2     | 9      | 48     | <20    | 0.05 | <10    | <10   | 91    | <10   | 82     |
| KRDK8S060     | blank   |          | 0.007  | <0.2   | 1.81 | 6      | <10   | 360    | 0.7    | 3      | 0.91 | 1      | 15     | 48     | 45     | 3.65 | <10    | <1     | 0.14 | 10     | 0.76 | 1320   | <1     | 0.02 | 53     | 1880  | 6      | 0.02 | <2     | 7      | 45     | <20    | 0.12 | <10    | <10   | 71    | <10   | 196    |
| KRDK8S061     | 347164  | 6379284  | 0.056  | <0.2   | 1.61 | 5      | <10   | 560    | 0.6    | 4      | 2    | 1      | 22     | 29     | 168    | 3.53 | 10     | <1     | 0.1  | 10     | 0.85 | 1370   | 1      | 0.02 | 21     | 2580  | 18     | 0.26 | <2     | 3      | 80     | <20    | 0.04 | <10    | <10   | 65    | <10   | 73     |
| KRDK8S062     | 347199  | 6379285  | 0.038  | <0.2   | 0.36 | <2     | 10    | 660    | <0.5   | <2     | 2.51 | 0.6    | 5      | 9      | 42     | 0.75 | <10    | 1      | 0.13 | 10     | 0.28 | 826    | <1     | 0.02 | 6      | 1880  | 4      | 0.3  | <2     | 1      | 65     | <20    | 0.01 | <10    | <10   | 13    | <10   | 64     |
| KRDK8S063     | 347237  | 6379288  | 0.007  | 0.4    | 1.65 | 9      | <10   | 1030   | 1.1    | 3      | 0.56 | 0.8    | 20     | 23     | 73     | 4.08 | <10    | <1     | 0.16 | 30     | 0.61 | 1710   | 3      | 0.02 | 13     | 2020  | 44     | 0.24 | <2     | 3      | 57     | <20    | 0.03 | <10    | <10   | 50    | <10   | 57     |
| KRDK8S064     | 347274  | 6379286  | <0.005 | <0.2   | 1.19 | 4      | <10   | 930    | 0.7    | 2      | 1.4  | 1      | 13     | 19     | 61     | 2.41 | <10    | <1     | 0.14 | 20     | 0.54 | 1870   | 2      | 0.02 | 13     | 2080  | 18     | 0.25 | <2     | 4      | 50     | <20    | 0.01 | <10    | <10   | 37    | <10   | 76     |
| KRDK8S065     | 347312  | 6379289  | 0.006  | <0.2   | 1.86 | 10     | <10   | 650    | 1      | 2      | 0.4  | <0.5   | 21     | 19     | 109    | 4.19 | 10     | <1     | 0.16 | 20     | 0.86 | 1380   | 3      | 0.01 | 12     | 1180  | 25     | 0.1  | <2     | 4      | 32     | <20    | 0.05 | <10    | <10   | 62    | <10   | 51     |
| KRDK8S066     | 347351  | 6379289  | 0.008  | 0.2    | 1.41 | 8      | <10   | 930    | 0.6    | 3      | 0.68 | 0.7    | 17     | 23     | 99     | 3.11 | <10    | <1     | 0.11 | 10     | 0.69 | 2150   | 2      | 0.03 | 15     | 1760  | 15     | 0.2  | <2     | 2      | 50     | <20    | 0.04 | <10    | <10   | 53    | <10   | 59     |
| KRDK8S067     | 347391  | 6379298  | 0.009  | <0.2   | 1.77 | 11     | <10   | 890    | 0.8    | 3      | 0.72 | 0.6    | 16     | 31     | 101    | 3.67 | 10     | <1     | 0.06 | 10     | 0.75 | 1215   | 5      | 0.02 | 18     | 2260  | 23     | 0.24 | <2     | 2      | 53     | <20    | 0.04 | <10    | <10   | 68    | <10   | 58     |
| KRDK8S068     | 347432  | 6379301  | 0.013  | 0.3    | 2.5  | 11     | <10   | 560    | 0.8    | 5      | 0.88 | 0.7    | 31     | 24     | 155    | 5.48 | 10     | 1      | 0.13 | 20     | 1.17 | 1595   | 2      | 0.03 | 18     | 1850  | 32     | 0.2  | <2     | 7      | 66     | <20    | 0.07 | <10    | <10   | 114   | <10   | 97     |
| KRDK8S069     | 347467  | 6379305  | 0.019  | 0.3    | 2.92 | 10     | <10   | 240    | 0.9    | 2      | 0.62 | <0.5   | 33     | 61     | 301    | 5.94 | 10     | 1      | 0.07 | 20     | 1.77 | 1390   | 1      | 0.02 | 44     | 1110  | 23     | 0.1  | <2     | 10     | 50     | <20    | 0.15 | <10    | <10   | 135   | <10   | 90     |
| KRDK8S070     | 347506  | 6379308  | 0.009  | 0.2    | 2.43 | 11     | <10   | 330    | 0.6    | 2      | 1.24 | 0.8    | 61     | 31     | 209    | 5.3  | 10     | <1     | 0.08 | 10     | 1.27 | 2130   | 1      | 0.02 | 27     | 2810  | 23     | 0.24 | <2     | 7      | 87     | <20    | 0.06 | <10    | <10   | 122   | <10   | 84     |
| KRDK8S071     | 347539  | 6379316  | 0.036  | 0.2    | 3.05 | 13     | <10   | 170    | 0.6    | 3      | 1.1  | 0.6    | 64     | 50     | 467    | 9.82 | 10     | <1     | 0.11 | 10     | 1.98 | 1550   | 1      | 0.02 | 43     | 2290  | 18     | 0.16 | <2     | 16     | 78     | <20    | 0.16 | <10    | <10   | 202   | <10   | 111    |
| KRDK8S072     | 347576  | 6379321  | 0.015  | 0.7    | 2.4  | 9      | <10   | 200    | 0.7    | 4      | 1.32 | 0.7    | 39     | 74     | 270    | 6.61 | 10     | <1     | 0.1  | 10     | 1.91 | 1360   | 1      | 0.02 | 48     | 1680  | 21     | 0.14 | <2     | 11     | 57     | <20    | 0.14 | <10    | <10   | 149   | <10   | 96     |
| KRDK8S073     | 347637  | 6379129  | 0.034  | 3.5    | 2.39 | 16     | <10   | 80     | 0.7    | <2     | 0.75 | 0.5    | 36     | 128    | 2800   | 6.73 | 10     | <1     | 0.09 | 10     | 2.18 | 1505   | 1      | 0.02 | 66     | 1490  | 41     | 0.09 | 4      | 14     | 32     | <20    | 0.19 | <10    | <10   | 166   | <10   | 165    |
| KRDK8S074     | 347640  | 6379108  | 0.173  | 3      | 2.92 | 13     | <10   | 120    | 0.8    | <2     | 0.75 | 0.8    | 56     | 129    | 3250   | 8.08 | 10     | 1      | 0.06 | 10     | 2.71 | 2600   | 1      | 0.02 | 63     | 1330  | 55     | 0.04 | 5      | 16     | 38     | <20    | 0.22 | <10    | <10   | 189   | <10   | 146    |
| KRDK8S075     | blank   |          | 0.005  | 0.3    | 1.77 | 5      | <10   | 330    | 0.7    | <2     | 0.85 | 0.8    | 15     | 48     | 88     | 3.46 | 10     | <1     | 0.13 | 10     | 0.73 | 1255   | 1      | 0.02 | 50     | 1730  | 8      | 0.02 | <2     | 6      | 42     | <20    | 0.12 | <10    | <10   | 71    | <10   | 189    |
| KRDK8S076     | 347586  | 6379118  | NSS    | 0.6    | 1.54 | 5      | <10   | 160    | 0.6    | <2     | 1.46 | 1      | 32     | 58     | 518    | 3.23 | 10     | <1     | 0.09 | 10     | 1.04 | 2240   | 2      | 0.02 | 33     | 2430  | 20     | 0.25 | <2     | 4      | 44     | <20    | 0.05 | <10    | <10   | 70    | <10   | 62     |
| KRDK8S077     | 347537  | 6379136  | 0.005  | 0.3    | 0.31 | <2     | <10   | 300    | <0.5   | <2     | 3.47 | <0.5   | 6      | 10     | 137    | 0.62 | <10    | <1     | 0.08 | <10    | 0.48 | 538    | 1      | 0.02 | 7      | 1240  | 3      | 0.18 | <2     | 1      | 81     | <20    | 0.01 | <10    | <10   | 14    | <10   | 39     |
| KRDK8S078     | 347492  | 6379149  | <0.005 | 0.5    | 1.13 | 4      | <10   | 360    | 0.6    | <2     | 2.22 | 0.8    | 13     | 24     | 121    | 1.97 | 10     | <1     | 0.09 | 10     | 0.57 | 1655   | 2      | 0.03 | 15     | 2840  | 15     | 0.26 | <2     | 2      | 70     | <20    | 0.03 | <10    | <10   | 41    | <10   | 39     |
| KRDK8S079     | 347446  | 6379165  | 0.029  | 0.4    | 0.73 | 3      | <10   | 390    | <0.5   | <2     | 2.14 | 0.9    | 9      | 13     | 83     | 1.16 | <10    | <1     | 0.09 | 10     | 0.41 | 1130   | 2      | 0.03 | 11     | 2010  | 10     | 0.25 | <2     | 1      | 85     | <20    | 0.02 | <10    | <10   | 22    | <10   | 39     |
| KRDK8S080     | 347397  | 6379175  | <0.005 | 0.4    | 1.03 | 3      | <10   | 640    | 0.5    | <2     | 1.85 | 1.2    | 11     | 19     | 107    | 1.52 | <10    | <1     | 0.06 | 10     | 0.35 | 2130   | 2      | 0.03 | 12     | 3730  | 11     | 0.28 | <2     | 2      | 81     | <20    | 0.02 | <10    | <10   | 28    | <10   | 93     |
| KRDK8S081     | 347349  | 6379179  | <0.005 | 0.4    | 0.9  | 2      | <10   | 750    | <0.5   | <2     | 2.61 | 0.7    | 11     | 20     | 302    | 1.85 | <10    | <1     | 0.07 | 10     | 0.52 | 1405   | 1      | 0.03 | 14     | 2120  | 10     | 0.25 | <2     | 2      | 92     | <20    | 0.03 | <10    | <10   | 35    | <10   | 100    |
| KRDK8S082     | 347300  | 6379190  | 0.01   | 0.5    | 2.95 | 10     | <10   | 370    | 0.7    | <2     | 0.68 | <0.5   | 29     | 60     | 1060   | 6.08 | 10     | <1     | 0.13 | 10     | 1.66 | 1305   | 2      | 0.02 | 37     | 1120  | 18     | 0.08 | 3      | 11     | 35     | <20    | 0.05 | <10    | <10   | 133   | <10   | 84     |
| KRDK8S083     | 347260  | 6379219  | <0.005 | 0.3    | 0.52 | 2      | 10    | 1380   | <0.5   | <2     | 2.68 | 0.6    | 5      | 10     | 101    | 0.96 | <10    | <1     | 0.11 | 10     | 0.32 | 1215   | 2      | 0.05 | 8      | 2700  | 7      | 0.31 | <2     | 1      | 88     | <20    | 0.01 | <10    | <10   | 16    | <10   | 84     |
| KRDK8S084     | 347224  | 6379232  | 0.006  | 0.5    | 0.81 | 5      | <10   | 1380   | 0.5    | <2     | 2.28 | 1      | 8      | 14     | 68     | 1.42 | <10    | <1     | 0.12 | 10     | 0.36 | 1910   | 2      | 0.05 | 10     | 3180  | 9      | 0.31 | <2     | 2      | 62     | <20    | 0.02 | <10    | <10   | 23    | <10   | 60     |
| KRDK8S085     | 347189  | 6379249  | 0.008  | 0.3    | 1.98 | 4      | <10   | 510    | 0.7    | <2     | 1.73 | 0.6    | 23     | 50     | 270    | 3.64 | 10     | <1     | 0.1  | 10     | 1.12 | 1585   | 2      | 0.03 | 28     | 2260  | 21     | 0.21 | <2     | 5      | 59     | <20    | 0.06 | <10    | <10   | 76    | <10   | 82     |
| CGDK8S001     | 346810  | 6379582  | 0.051  | 0.5    | 1.4  | 22     | <10   | 140    | <0.5   | 3      | 0.05 | <0.5   | 50     | 24     | 184    | 11.6 | 10     | <1     | 0.07 | <10    | 0.41 | 1670   | 4      | 0.01 | 24     | 2340  | 10     | 0.24 | <2     | 21     | 10     | <20    | 0.01 | <10    | <10   | 157   | <10   | 63     |
| RGDK8S001     | 345519  | 6382087  | 0.01   | 0.7    | 1.41 | 12     | <10   | 1120   | 1      | <2     | 1.3  | 3.7    | 22     | 26     | 125    | 3.61 | 10     | 1      | 0.13 | 10     | 0.49 | 5620   | 5      | 0.03 | 24     | 2590  | 211    | 0.13 | <2     | 1      | 65     | <20    | 0.06 | <10    | <10   | 79    | <10   | 207    |
| RGDK8S002     | 345502  | 6382105  | 0.018  | 0.4    | 1.77 | 21     | <10   | 530    | 1.3    | 2      | 0.55 | 2.5    | 18     | 25     | 201    | 4.87 | 10     | 1      | 0.1  | 20     | 0.6  | 3090   | 7      | 0.01 | 15     | 1200  | 78     | 0.05 | 2      | 3      | 36     | <20    | 0.09 | <10    | <10   | 101   | <10   | 274    |
| RGDK8S003     | 345488  | 6382129  | 0.05   | 0.3    | 1.72 | 20     | <10   | 770    | 1.8    | 2      | 0.84 | 1.4    | 18     | 19     | 388    | 4.51 | 10     | 1      | 0.18 | 20     | 0.59 | 4480   | 10     | 0.02 | 13     | 1880  | 35     | 0.08 | <2     | 4      | 43     | <20    | 0.07 | <10    | <10   | 87    | <10   | 199    |
| RGDK8S004     | 345467  | 6382144  | 0.037  | 0.4    | 1.73 | 30     | <10   | 740    | 1.8    | 3      | 0.92 | 1.8    | 19     | 19     | 386    | 4.88 | 10     | <1     | 0.14 | 30     | 0.56 | 3840   | 12     | 0.02 | 14     | 2240  | 58     | 0.11 | 4      | 4      | 45     | <20    | 0.08 | <10    | <10   | 81    | <10   | 278    |
| RGDK8S005     | 345445  | 6382157  | 0.024  | 0.3    | 1.87 | 26     | <10   | 730    | 1.6    | 2      | 0.63 | 1      | 20     | 22     | 272    | 5.1  | 10     | 1      | 0.17 | 20     | 0.52 | 4020   | 11     | 0.02 | 13     | 1970  | 47     | 0.09 | 5      | 3      | 31     | <20    | 0.08 | <10    | <10   | 93    | <10   | 183    |
| RGDK8S006     | 345420  | 6382170  | 0.026  | 0.7    | 1.69 | 38     | <10   | 560    | 1.3    | 2      | 0.54 | 1.8    | 16     | 24     | 206    | 5.04 | 10     | <1     | 0.09 | 20     | 0.48 | 2580   | 12     | 0.02 | 13     | 1430  | 45     | 0.07 | 5      | 3      | 30     | <20    | 0.1  | <10    | <10   | 102   | <10   | 290    |
| RGDK8S007     | 345399  | 6382181  | 0.032  | 0.2    | 1.6  | 20     | <10   | 290    | 0.8    | 2      | 0.3  | 0.5    | 11     | 23     | 98     | 4    | 10     | <1     | 0.13 | 10     | 0    |        |        |      |        |       |        |      |        |        |        |        |      |        |       |       |       |        |

| Sample Number | Easting | Northing | Au ppm | Ag ppm | Al % | As ppm | B ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K %  | La ppm | Mg % | Mn ppm | Mo ppm | Na %  | Ni ppm | P ppm | Pb ppm | S %  | Sb ppm | Sc ppm | Sr ppm | Th ppm | Ti %  | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------------|---------|----------|--------|--------|------|--------|-------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|--------|-------|--------|-------|--------|------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|
| RGDK8S027     | 345115  | 6382444  | 0.03   | 0.5    | 1.44 | 296    | <10   | 560    | 1.6    | 4      | 0.68 | 0.8    | 24     | 19     | 341    | 5.8  | 10     | <1     | 0.09 | 20     | 0.4  | 3540   | 19     | 0.02  | 13     | 2080  | 107    | 0.15 | 5      | 2      | 54     | <20    | 0.02  | <10    | <10   | 110   | <10   | 184    |
| RGDK8S028     | 345126  | 6382419  | 0.09   | 0.8    | 2.24 | 180    | <10   | 390    | 1.8    | 3      | 0.27 | 0.8    | 27     | 24     | 482    | 6.69 | 10     | <1     | 0.08 | 30     | 0.67 | 5040   | 31     | 0.01  | 18     | 2020  | 60     | 0.04 | 9      | 6      | 40     | <20    | 0.04  | <10    | <10   | 104   | <10   | 252    |
| RGDK8S029     | 345151  | 6382402  | 0.028  | 0.4    | 1.65 | 108    | <10   | 430    | 1.6    | 2      | 0.38 | <0.5   | 13     | 15     | 291    | 5.26 | 10     | <1     | 0.09 | 20     | 0.24 | 2450   | 15     | 0.01  | 8      | 1230  | 82     | 0.08 | 6      | 1      | 27     | <20    | 0.01  | <10    | <10   | 97    | <10   | 136    |
| RGDK8S030     | blank   |          | <0.005 | 0.2    | 1.74 | 8      | <10   | 340    | 0.7    | 2      | 0.83 | 0.8    | 15     | 43     | 48     | 3.39 | 10     | <1     | 0.13 | 10     | 0.69 | 1335   | <1     | 0.02  | 53     | 1850  | 5      | 0.02 | <2     | 6      | 42     | <20    | 0.11  | <10    | <10   | 68    | <10   | 200    |
| RGDK8S031     | 345173  | 6382385  | 0.029  | 0.5    | 1.32 | 130    | <10   | 180    | 5.8    | 2      | 0.57 | 1.2    | 9      | 10     | 98     | 4.04 | <10    | 1      | 0.12 | 50     | 0.13 | 6820   | 11     | <0.01 | 10     | 2080  | 129    | 0.14 | 4      | 1      | 31     | <20    | 0.01  | <10    | <10   | 37    | <10   | 135    |
| RGDK8S032     | 345188  | 6382373  | 0.233  | 1.6    | 0.81 | 67     | <10   | 530    | 3.9    | 3      | 0.69 | 0.6    | 28     | 6      | 1100   | 10.6 | <10    | 1      | 0.12 | 130    | 0.13 | 8310   | 12     | 0.01  | 11     | 3180  | 38     | 0.22 | 2      | 13     | 57     | <20    | 0.01  | <10    | <10   | 109   | <10   | 223    |
| RGDK8S033     | 345203  | 6382357  | 0.151  | 0.5    | 1.4  | 271    | <10   | 100    | 1.4    | 3      | 0.24 | <0.5   | 18     | 18     | 418    | 6.63 | 10     | 1      | 0.07 | 20     | 0.36 | 2670   | 19     | <0.01 | 14     | 1780  | 42     | 0.11 | 16     | 2      | 18     | <20    | 0.02  | <10    | <10   | 108   | <10   | 136    |
| RGDK8S034     | 345227  | 6382348  | 0.05   | 0.2    | 1.71 | 27     | <10   | 110    | 1.6    | 2      | 0.24 | <0.5   | 12     | 18     | 154    | 2.82 | 10     | 1      | 0.13 | 20     | 0.55 | 1710   | 9      | <0.01 | 13     | 700   | 83     | 0.03 | 3      | 4      | 18     | <20    | 0.03  | <10    | <10   | 61    | <10   | 86     |
| RGDK8S035     | 345253  | 6382337  | 0.162  | 1.2    | 1.03 | 122    | <10   | 190    | 1.6    | 2      | 0.34 | 1.4    | 22     | 11     | 740    | 6.26 | <10    | 1      | 0.07 | 50     | 0.31 | 2580   | 13     | <0.01 | 14     | 2310  | 71     | 0.04 | 47     | 7      | 26     | <20    | 0.02  | <10    | <10   | 79    | <10   | 224    |
| RGDK8S036     | 345273  | 6382320  | 0.119  | 0.9    | 1.11 | 84     | <10   | 250    | 1.8    | 2      | 0.76 | 0.5    | 17     | 12     | 478    | 6.76 | <10    | 1      | 0.11 | 40     | 0.35 | 1515   | 24     | 0.01  | 11     | 2860  | 57     | 0.14 | 8      | 7      | 55     | <20    | 0.01  | <10    | <10   | 86    | <10   | 241    |
| RGDK8S037     | 345290  | 6382300  | 0.055  | 0.8    | 1.4  | 39     | <10   | 290    | 1.1    | <2     | 0.78 | 2.1    | 16     | 20     | 162    | 4.5  | <10    | <1     | 0.09 | 20     | 0.6  | 1400   | 14     | 0.01  | 14     | 1540  | 89     | 0.09 | 9      | 2      | 44     | <20    | 0.02  | <10    | <10   | 76    | <10   | 279    |
| RGDK8S038     | 345309  | 6382282  | 0.189  | 1.2    | 0.82 | 52     | <10   | 930    | 1.5    | 3      | 1.06 | 3.9    | 24     | 11     | 639    | 6.81 | <10    | <1     | 0.12 | 50     | 0.25 | 3780   | 15     | <0.01 | 12     | 2770  | 54     | 0.17 | 12     | 6      | 56     | <20    | 0.01  | <10    | <10   | 62    | <10   | 480    |
| RGDK8S039     | 345324  | 6382264  | 0.108  | 0.7    | 0.67 | 13     | <10   | 910    | 1.9    | <2     | 0.37 | 0.5    | 12     | 4      | 519    | 4.7  | <10    | <1     | 0.13 | 60     | 0.11 | 4110   | 32     | <0.01 | 5      | 1530  | 36     | 0.03 | 4      | 6      | 39     | <20    | <0.01 | <10    | <10   | 38    | <10   | 118    |
| RGDK8S040     | 345350  | 6382256  | 0.1    | 0.5    | 1.29 | 23     | <10   | 450    | 3.2    | <2     | 0.61 | 0.5    | 15     | 10     | 617    | 5.41 | <10    | <1     | 0.12 | 50     | 0.42 | 3580   | 7      | <0.01 | 8      | 2010  | 112    | 0.05 | 2      | 7      | 41     | <20    | 0.01  | <10    | <10   | 87    | <10   | 199    |
| RGDK8S041     | 345372  | 6382245  | 0.461  | 1.1    | 1.14 | 69     | <10   | 650    | 1.6    | <2     | 0.77 | 0.8    | 14     | 12     | 677    | 5.04 | <10    | <1     | 0.13 | 40     | 0.32 | 1615   | 41     | <0.01 | 9      | 2140  | 50     | 0.08 | 10     | 4      | 27     | <20    | 0.01  | <10    | <10   | 72    | <10   | 169    |
| RGDK8S042     | 345398  | 6382241  | 0.348  | 1.2    | 1.09 | 44     | <10   | 670    | 3.1    | <2     | 0.38 | 0.9    | 25     | 10     | 1510   | 6.06 | <10    | <1     | 0.13 | 50     | 0.27 | 4670   | 23     | <0.01 | 10     | 1950  | 35     | 0.02 | 3      | 7      | 29     | <20    | 0.01  | <10    | <10   | 65    | <10   | 195    |
| RGDK8S043     | 345416  | 6382227  | 0.143  | 0.4    | 0.81 | 36     | <10   | 440    | 1.6    | <2     | 0.39 | 0.5    | 14     | 12     | 515    | 4.46 | <10    | <1     | 0.13 | 20     | 0.2  | 2000   | 14     | <0.01 | 11     | 1490  | 33     | 0.04 | 27     | 5      | 17     | <20    | <0.01 | <10    | <10   | 44    | <10   | 131    |
| RGDK8S044     | 345441  | 6382224  | 0.291  | 1.3    | 1.07 | 46     | <10   | 940    | 2.8    | <2     | 0.64 | 1.2    | 20     | 7      | 661    | 5.08 | <10    | <1     | 0.15 | 50     | 0.44 | 3250   | 31     | <0.01 | 9      | 1770  | 51     | 0.04 | 12     | 8      | 38     | <20    | 0.01  | <10    | <10   | 55    | <10   | 211    |
| RGDK8S045     | blank   |          | <0.005 | 0.2    | 1.75 | 7      | <10   | 330    | 0.6    | <2     | 0.86 | 0.9    | 15     | 45     | 52     | 3.45 | 10     | <1     | 0.14 | 10     | 0.74 | 1250   | 1      | 0.01  | 52     | 1740  | 8      | 0.01 | <2     | 6      | 41     | <20    | 0.11  | <10    | <10   | 67    | <10   | 185    |
| RGDK8S046     | 345462  | 6382217  | 0.367  | 2.7    | 1.31 | 25     | <10   | 920    | 2.1    | 4      | 2.49 | 2.3    | 37     | 12     | 781    | 5.44 | <10    | <1     | 0.15 | 60     | 0.5  | 5850   | 32     | <0.01 | 11     | 2310  | 226    | 0.1  | 8      | 9      | 45     | <20    | 0.01  | <10    | <10   | 80    | <10   | 260    |
| RGDK8S047     | 345490  | 6382211  | 0.118  | 0.7    | 1.43 | 29     | <10   | 2280   | 1.7    | 3      | 0.88 | 0.6    | 21     | 7      | 693    | 3.72 | <10    | <1     | 0.09 | 40     | 0.17 | 1715   | 38     | <0.01 | 6      | 1800  | 213    | 0.09 | 4      | 7      | 64     | <20    | <0.01 | <10    | <10   | 41    | <10   | 186    |
| RGDK8S048     | 345511  | 6382198  | 0.11   | 0.8    | 2    | 19     | <10   | 570    | 1.4    | <2     | 0.31 | 0.9    | 17     | 26     | 446    | 4.41 | 10     | <1     | 0.07 | 20     | 0.73 | 2230   | 12     | <0.01 | 16     | 1070  | 76     | 0.02 | 16     | 6      | 27     | <20    | 0.06  | <10    | <10   | 96    | <10   | 134    |
| RGDK8S049     | 345548  | 6382191  | 0.415  | 1.6    | 2.05 | 48     | <10   | 390    | 1.7    | <2     | 0.34 | 0.8    | 21     | 23     | 799    | 5.41 | 10     | <1     | 0.09 | 30     | 0.74 | 2520   | 15     | 0.01  | 14     | 1620  | 87     | 0.03 | 5      | 6      | 26     | <20    | 0.03  | <10    | <10   | 107   | <10   | 161    |
| RGDK8S050     | 345581  | 6382180  | 0.055  | 0.5    | 2.52 | 15     | <10   | 80     | 0.6    | <2     | 0.24 | <0.5   | 13     | 33     | 205    | 4.5  | 10     | <1     | 0.04 | 10     | 0.87 | 954    | 4      | 0.01  | 18     | 1030  | 32     | 0.03 | 4      | 3      | 22     | <20    | 0.1   | <10    | <10   | 113   | <10   | 87     |
| RGDK8S051     | 345448  | 6382295  | 0.369  | 2.8    | 0.62 | 51     | <10   | 770    | 1.9    | 3      | 0.69 | 7.9    | 31     | 4      | 722    | 6.17 | <10    | <1     | 0.12 | 40     | 0.21 | 3550   | 47     | <0.01 | 9      | 1730  | 209    | 0.13 | 34     | 5      | 55     | <20    | <0.01 | <10    | <10   | 45    | <10   | 659    |
| RGDK8S052     | 345422  | 6382296  | 0.328  | 0.8    | 0.78 | 45     | <10   | 250    | 2.5    | <2     | 0.36 | 1.5    | 9      | 5      | 219    | 2.87 | <10    | <1     | 0.14 | 40     | 0.18 | 4250   | 17     | 0.01  | 6      | 550   | 381    | 0.05 | 4      | 4      | 46     | <20    | 0.01  | <10    | <10   | 33    | <10   | 250    |
| RGDK8S053     | 345385  | 6382309  | 0.335  | 1.5    | 0.86 | 170    | <10   | 450    | 2.5    | <2     | 0.51 | 0.8    | 24     | 9      | 711    | 6.98 | <10    | <1     | 0.09 | 40     | 0.18 | 2780   | 16     | <0.01 | 10     | 1980  | 81     | 0.08 | 16     | 7      | 35     | <20    | 0.01  | <10    | <10   | 70    | <10   | 224    |
| RGDK8S054     | 345361  | 6382325  | 0.327  | 1      | 1.04 | 35     | <10   | 400    | 2.3    | <2     | 0.38 | 0.6    | 8      | 7      | 199    | 2.91 | <10    | <1     | 0.12 | 30     | 0.15 | 1450   | 8      | <0.01 | 6      | 950   | 86     | 0.03 | 5      | 2      | 28     | <20    | 0.01  | <10    | <10   | 34    | <10   | 129    |
| RGDK8S055     | 347295  | 6379129  | 0.009  | 0.8    | 2.16 | 5      | <10   | 380    | 0.8    | <2     | 0.94 | 0.5    | 22     | 59     | 1745   | 4.33 | 10     | <1     | 0.08 | 10     | 1.3  | 1385   | 1      | 0.02  | 32     | 2470  | 16     | 0.14 | <2     | 7      | 42     | <20    | 0.05  | <10    | <10   | 96    | <10   | 70     |
| RGDK8S056     | 347257  | 6379157  | 0.027  | 1.1    | 1.89 | 5      | <10   | 560    | 0.8    | <2     | 1.29 | 0.7    | 24     | 53     | 1775   | 3.9  | 10     | 1      | 0.09 | 10     | 1.21 | 1945   | 1      | 0.01  | 28     | 1930  | 31     | 0.12 | <2     | 7      | 52     | <20    | 0.06  | <10    | <10   | 78    | <10   | 73     |
| RGDK8S057     | 347216  | 6379191  | <0.005 | 0.4    | 2.13 | 2      | <10   | 460    | 0.8    | <2     | 1.21 | 0.7    | 19     | 44     | 154    | 3.73 | 10     | 1      | 0.13 | 10     | 1.05 | 1535   | 1      | 0.01  | 29     | 1980  | 23     | 0.16 | <2     | 4      | 48     | <20    | 0.07  | <10    | <10   | 76    | <10   | 82     |
| RGDK8S058     | 347177  | 6379225  | 0.042  | 0.3    | 2.43 | 6      | <10   | 360    | 0.8    | <2     | 0.76 | 0.8    | 20     | 62     | 496    | 4.81 | 10     | 1      | 0.1  | 10     | 1.26 | 1020   | 1      | 0.01  | 32     | 1320  | 17     | 0.08 | <2     | 5      | 34     | <20    | 0.07  | <10    | <10   | 99    | <10   | 84     |
| RGDK8S059     | 347144  | 6379248  | 0.007  | 0.2    | 2.3  | 6      | <10   | 330    | 0.7    | <2     | 1.17 | 0.7    | 24     | 51     | 377    | 4.67 | 10     | <1     | 0.11 | 10     | 1.39 | 1405   | 2      | 0.01  | 35     | 2190  | 19     | 0.17 | <2     | 6      | 59     | <20    | 0.07  | <10    | <10   | 95    | <10   | 80     |
| RGDK8S061     | 347111  | 6379271  | 0.009  | 0.4    | 3.06 | 9      | <10   | 320    | 0.8    | <2     | 0.82 | <0.5   | 45     | 45     | 108    | 6    | 10     | <1     | 0.1  | 10     | 1.59 | 2090   | 5      | 0.01  | 38     | 1620  | 21     | 0.12 | <2     | 8      | 61     | <20    | 0.09  | <10    | <10   | 120   | <10   | 85     |

## **Appendix IV. Blank Geochemistry**

| Sample Number | Au ppm | Ag ppm | Al % | As ppm | B ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K %  | La ppm | Mg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S %  | Sb ppm | Sc ppm | Sr ppm | Th ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------------|--------|--------|------|--------|-------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|--------|------|--------|-------|--------|------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| KRDK8S015     | 0.006  | <0.2   | 1.81 | 6      | <10   | 330    | 0.7    | 3      | 1.02 | 0.8    | 16     | 48     | 46     | 3.64 | <10    | <1     | 0.14 | 10     | 0.78 | 1220   | <1     | 0.02 | 54     | 1760  | 6      | 0.03 | <2     | 7      | 44     | <20    | 0.12 | <10    | <10   | 70    | <10   | 186    |
| KRDK8S030     | 0.015  | <0.2   | 1.79 | 3      | <10   | 320    | 0.7    | 4      | 1.01 | 0.8    | 16     | 47     | 45     | 3.63 | <10    | <1     | 0.14 | 10     | 0.77 | 1185   | <1     | 0.02 | 52     | 1720  | 7      | 0.03 | <2     | 7      | 45     | <20    | 0.12 | <10    | <10   | 71    | <10   | 182    |
| KRDK8S045     | 0.016  | <0.2   | 1.8  | 6      | <10   | 320    | 0.7    | <2     | 1.02 | 0.9    | 15     | 48     | 48     | 3.6  | <10    | <1     | 0.14 | 10     | 0.78 | 1205   | <1     | 0.02 | 55     | 1710  | 6      | 0.02 | <2     | 7      | 46     | <20    | 0.11 | <10    | <10   | 69    | <10   | 173    |
| KRDK8S060     | 0.007  | <0.2   | 1.81 | 6      | <10   | 360    | 0.7    | 3      | 0.91 | 1      | 15     | 48     | 45     | 3.65 | <10    | <1     | 0.14 | 10     | 0.76 | 1320   | <1     | 0.02 | 53     | 1880  | 6      | 0.02 | <2     | 7      | 45     | <20    | 0.12 | <10    | <10   | 71    | <10   | 196    |
| KRDK8S075     | 0.005  | 0.3    | 1.77 | 5      | <10   | 330    | 0.7    | <2     | 0.85 | 0.8    | 15     | 48     | 88     | 3.46 | 10     | <1     | 0.13 | 10     | 0.73 | 1255   | 1      | 0.02 | 50     | 1730  | 8      | 0.02 | <2     | 6      | 42     | <20    | 0.12 | <10    | <10   | 71    | <10   | 189    |
| RGDK8S015     | <0.005 | 0.2    | 1.71 | 7      | <10   | 330    | 0.6    | 2      | 0.8  | 0.7    | 15     | 44     | 45     | 3.39 | 10     | <1     | 0.12 | 10     | 0.69 | 1295   | <1     | 0.02 | 52     | 1810  | 8      | 0.02 | <2     | 6      | 41     | <20    | 0.11 | <10    | <10   | 69    | <10   | 198    |
| RGDK8S030     | <0.005 | 0.2    | 1.74 | 8      | <10   | 340    | 0.7    | 2      | 0.83 | 0.8    | 15     | 43     | 48     | 3.39 | 10     | <1     | 0.13 | 10     | 0.69 | 1335   | <1     | 0.02 | 53     | 1850  | 5      | 0.02 | <2     | 6      | 42     | <20    | 0.11 | <10    | <10   | 68    | <10   | 200    |
| RGDK8S045     | <0.005 | 0.2    | 1.75 | 7      | <10   | 330    | 0.6    | <2     | 0.86 | 0.9    | 15     | 45     | 52     | 3.45 | 10     | <1     | 0.14 | 10     | 0.74 | 1250   | 1      | 0.01 | 52     | 1740  | 8      | 0.01 | <2     | 6      | 41     | <20    | 0.11 | <10    | <10   | 67    | <10   | 185    |

## **Appendix V. Cost Statement**

| <b>Exploration Work type</b>        | <b>Comment</b>  | <b>Days</b> |             |                  | <b>Totals</b>      |
|-------------------------------------|---|-------------|-------------|------------------|--------------------|
| <b>Personnel (Name)* / Position</b> | <b>Field Days (list actual days)</b>                                  | <b>Days</b> | <b>Rate</b> | <b>Subtotal*</b> |                    |
| Charlie Greig/geologist             |   | 3           | \$650.00    | \$1,950.00       |                    |
| Bernie Kreft/pro prospector         |   | 3           | \$500.00    | \$1,500.00       |                    |
| Roy Greig/soil sampler foreman      |   | 3           | \$325.00    | \$975.00         |                    |
| Mairi Greig/soil sampler            |   | 3           | \$275.00    | \$825.00         |                    |
| Kelsey Ruffiange/soil sampler       |   | 3           | \$275.00    | \$825.00         |                    |
| Kei Quinn/soil sampler              |   | 3           | \$275.00    | \$825.00         |                    |
|                                     |   |             |             | \$6,900.00       | <b>\$6,900.00</b>  |
| <b>Office Studies</b>               | <b>List Personnel (note - Office only, do not include field days)</b> |             |             |                  |                    |
| Database compilation                | Roy Greig   | 2.0         | \$300.00    | \$600.00         |                    |
| General research                    | Charlie Greig   | 8.0         | \$650.00    | \$5,200.00       |                    |
| Report preparation                  | Charlie Greig   | 3.0         | \$650.00    | \$1,950.00       |                    |
| Report GIS                          | Susan Flasha  | 4.0         | \$450.00    | \$7,750.00       |                    |
|                                     |   |             |             | \$15,500.00      | <b>\$15,500.00</b> |
| <b>Geochemical Surveying</b>        | <b>Number of Samples</b>  | <b>No.</b>  | <b>Rate</b> | <b>Subtotal</b>  |                    |
| Soil                                |   | 138         | \$25.00     | \$3,450.00       |                    |
| Rock                                |   | 34          | \$30.00     | \$1,020.00       |                    |
|                                     |   |             |             | \$4,470.00       | <b>\$4,470.00</b>  |
| <b>Transportation</b>               |   | <b>No.</b>  | <b>Rate</b> | <b>Subtotal</b>  |                    |
| truck rental                        | 55/day rental   | 3           | \$55.00     | \$165.00         |                    |
| kilometers                          | \$0.35/km   | 2400        | \$0.35      | \$840.00         |                    |
| Helicopter (hours)                  | Dease Lake to Dok: 7.1hrs   | 7.1         | \$0.00      | \$8,270.12       |                    |
| Fuel (litres/hour)                  | 809L fuel for heli - incl. Above                                      |             | \$0.00      | \$0.00           |                    |
|                                     |   |             |             | \$9,275.12       | <b>\$9,275.12</b>  |
| <b>Accommodation &amp; Food</b>     | <b>Rates per day</b>  |             |             |                  |                    |
| Hotel                               | \$100/night 3 nights  | 3.00        | \$300.00    | \$900.00         |                    |
| Meals                               | 50pp/pd   | 18.00       | \$50.00     | \$900.00         |                    |
|                                     |   |             |             | \$1,800.00       | <b>\$1,800.00</b>  |
| <b>Equipment Rentals</b>            |   |             |             |                  |                    |
| Field Gear (Specify)                | sample bags, flagging, bear spray, etc.                               |             | \$0.00      | \$350.00         |                    |
|                                     |   |             |             | \$350.00         | <b>\$350.00</b>    |
| <b>Freight, rock samples</b>        |   |             |             |                  |                    |
| ship samples                        | Greyhound, 4 parcels  |             | \$0.00      | \$105.00         |                    |
|                                     |   |             |             | \$105.00         | <b>\$105.00</b>    |
|                                     |   |             |             |                  |                    |
| <b>TOTAL Expenditures</b>           |   |             |             |                  | <b>\$38,400.12</b> |

## **Appendix VI. Statement of Qualifications**



I, Charles James Greig, of 250 Farrell St., Penticton, British Columbia, Canada, hereby certify that:

1. I am a graduate of the University of British Columbia with a B.Comm. (1981), a B.Sc. (Geological Sciences, 1985), and an M.Sc. (Geological Sciences, 1989), and have practiced my profession continuously since graduation.

2. I have been employed in the geoscience industry for over 25 years, and have explored for gold and base metals in North, Central, and South America, and Africa and Asia Minor for both senior and junior mining companies, and have a number of years of experience in regional-scale government geological mapping.

3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (license #27529).

4. I am a “Qualified Person” as defined by National Instrument 43-101.

5. I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the technical report, the omission to disclose which makes the technical report misleading.

6. I am a 50% owner of the Dok claims, in partnership with Bernard Kreft.

7. I am the author of the report entitled: “2008 Exploration, Dok Property, Strata and Dokdoan Creeks” dated March 2009. I worked on and supervised the work program reported on herein.

Dated at Penticton, British Columbia, this 5<sup>th</sup> day of March, 2009.

Respectfully submitted,

“Charles James Greig”

Charles James Greig, P.Geol

I, Susan Teresa Flasha, of 764 Government St, Penticton, British Columbia, Canada, hereby certify that:

1. I am a graduate of the Okanagan University College with a B.Sc. (Earth & Environmental Sciences, 2003), and have practiced my profession continuously since graduation.
2. I have been employed in the geoscience industry for over 5 years, and have explored for gold and base metals in Canada for junior mining companies.
3. I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the technical report, the omission to disclose which makes the technical report misleading.
4. I am an author of the report entitled; “2008 Exploration, Dok Property, Strata and Dokdoan Creeks” dated March 2009. I worked on the work program reported on herein. I have been involved with exploration on behalf of C. J. Greig & Associates Ltd. since January 2004.

Dated at Penticton, British Columbia, this 5<sup>th</sup> day of March, 2009.

Respectfully submitted,

*“Susan Teresa Flasha” - signed*

Susan Teresa Flasha, B.Sc.





