

ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 92.08.26

ASSESSMENT REPORT 21853

MINING DIVISION: Omineca

PROPERTY: MM  
LOCATION: LAT 55 16 00 LONG 124 38 00  
UTM 10 6125467 396213  
NTS 093N07E  
CLAIM(S): MM 4-6  
OPERATOR(S): Dasserat Dev.  
AUTHOR(S): Arnold, R.R.  
REPORT YEAR: 1991, 177 Pages  
KEYWORDS: Triassic, Takla Group, Andesites, Tuffs, Agglomerates, Cherts, Slates  
WORK  
DONE: Geochemical, Geophysical, Geological  
GEOL 2500.0 ha  
Map(s) - 2; Scale(s) - 1:5000  
MAGG 22.3 km  
ROCK 54 sample(s) ;ME  
Map(s) - 2; Scale(s) - 1:5000  
SILT 18 sample(s) ;ME  
SOIL 718 sample(s) ;ME

RELATED

~~REPORTS: 21651~~

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ACTION:	
FILE NO:	

**GEOLOGICAL, GEOCHEMICAL AND  
GEOPHYSICAL REPORT  
on the  
MM PROPERTY**

Chuchi Lake Area  
Omineca Mining Division  
Central British Columbia

Latitude: 55° 16' North      Longitude: 124° 38' West  
NTS: 93-N/7E

**SUB-RECORDER  
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VANCOUVER, B.C.

for

**DASSERAT DEVELOPMENTS CORP.**  
920 - 609 Granville Street  
Vancouver, B.C.  
V7Y 1G5

by

Robert R. Arnold, M.Sc., P.Geol., F.G.A.C.  
**ROBERT ARNOLD & ASSOCIATES**  
1227 Caledonia Avenue  
North Vancouver, B.C.  
V7G 2B1

OCTOBER 25, 1991

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**21,853**

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## 1.0 SUMMARY

The general property area has been explored intermittently since the 1930's, but the major exploration phases took place during the last two decades. Several porphyry systems were recognized in the Chuchi Lake area. In the mid-1980's, strong gold and copper prices revived interest in alkaline porphyry deposits and in 1987 the Mount Milligan gold-copper deposit was discovered.

The MM property is located along the eastern margin of the Intermontane Tectonic Belt of the Canadian Cordillera and are underlain by volcanic rocks of the Early Mesozoic Takla Group. The volcanic, sedimentary and intrusive rocks were observed within the mapped area. Discrete to extensive pyrite mineralization was noted and pervasive alteration consisted mainly of epidote and chlorite. This alteration pattern is relatively similar to the alteration haloes described for the various deposits within the Quesnel Trough. Quartz-carbonate veins were also recognized in various portion of the mapped area, as well as east-west and northeast-southwest striking faults. The most significant fault, the "Camp Fault", which is a structure that roughly follows the grid's base line, presents a large suite of anomalous elements including As, Cu, Pb, Zn, Mo, Fe, Mn, Ni, Co, Cr, V and Sc. This fault, which has an intensive brecciation and veining zone towards its western end, may represent an important economic factor for the MM property; Mount Milligan deposit was discovered by following along strike the extension of such a mineralized structure. Arsenic is commonly found in haloes around the alkalic type of Cu-Au occurrences and is often associated with veins following structures periferal to a deposit (Hoffman, 1991).

The geochemical program, which comprised soil, rock and silt sampling, recorded very interesting gold-copper anomalies. The soil survey delineated four areas of copper accumulation, of which the major one extends on an area as great as 400 meters x 1,000 meters. The latter anomalous zone, which is yet not completely defined, has values in the range of 150 ppm to 350 ppm copper. These copper levels in soils are approximately comparable with those found at the Southern Star deposit of Mount Milligan. In addition, the copper anomalies have a positive association with magnetic anomalies. Eighteen silt samples were collected within the surveyed area and all of the samples present elevated to anomalous copper values. Two of the silt samples also show gold values of 15 ppb and 35 ppb. Fifty-four rock samples were collected and five samples present multi-elements anomalies for either gold, silver, arsenic, copper and lead. Several other rock samples show one element anomalies for gold (up to 840 ppb), copper (up to 731 ppm), arsenic, zinc and nickel.

The ground magnetometer survey noted the presence of a major east-west striking magnetic high anomaly. This anomaly, which coincides with the major gold-copper anomaly detected in the soil sampling program, is flanked to the north and to the south by two relatively large magnetic lows. These features may reflect changes in lithology or in the alteration pattern of the underlying rocks. Two other magnetic highs, which are also associated with copper

anomalies in the soil samples, were recognized in the eastern and western parts of the grid. Similar association between copper anomalies and magnetic highs have been noted in several alkalic copper-gold porphyry deposits in the Mount Milligan area.

In order to fully evaluate the mineral potential of the MM property, and to delineate more accurately the lateral extent of the geochemical anomalies established during the 1991 field work, further work is warranted and recommended by the writer. Details of the proposed two-phase follow-up work program, estimated at \$ 300,000.00, are included in this report.

## **2.0 INTRODUCTION**

### **2.1 Objectives**

Pursuant to a request by the Directors of Dasserat Developments Corp., geological examination and mapping, geochemical sampling (rock, soil and silt) and geophysical (magnetometer) surveys were carried out on the MM Property during the June and August 1991 program.

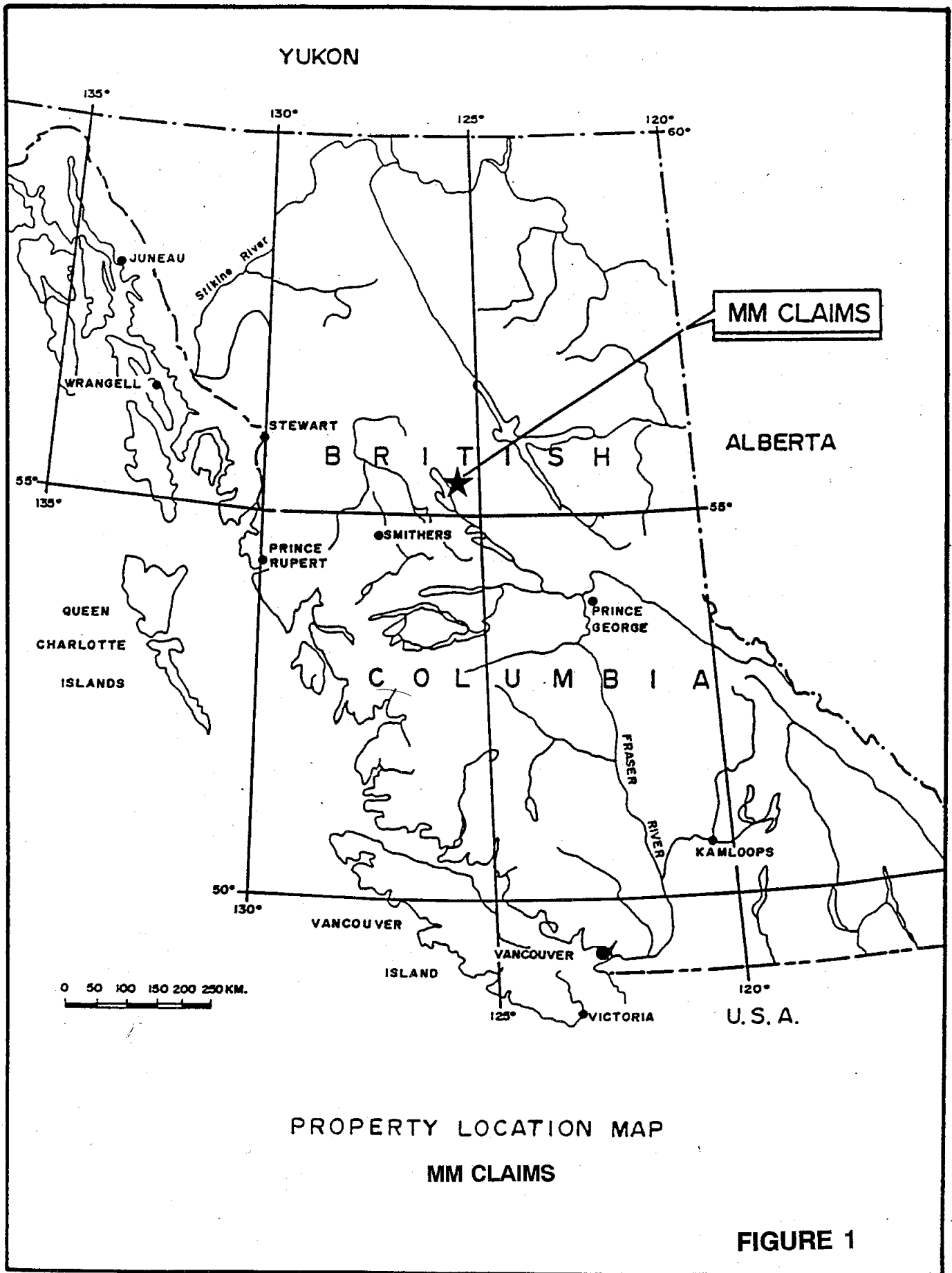
The main purpose of the present report is to evaluate the precious and base metal potential of the subject property and to propose an exploration program designed to test this potential. The 1991 field work was geared to determine areas of interest within the MM claims where gold-copper mineralization similar to the Mt. Milligan mineralization could be found.

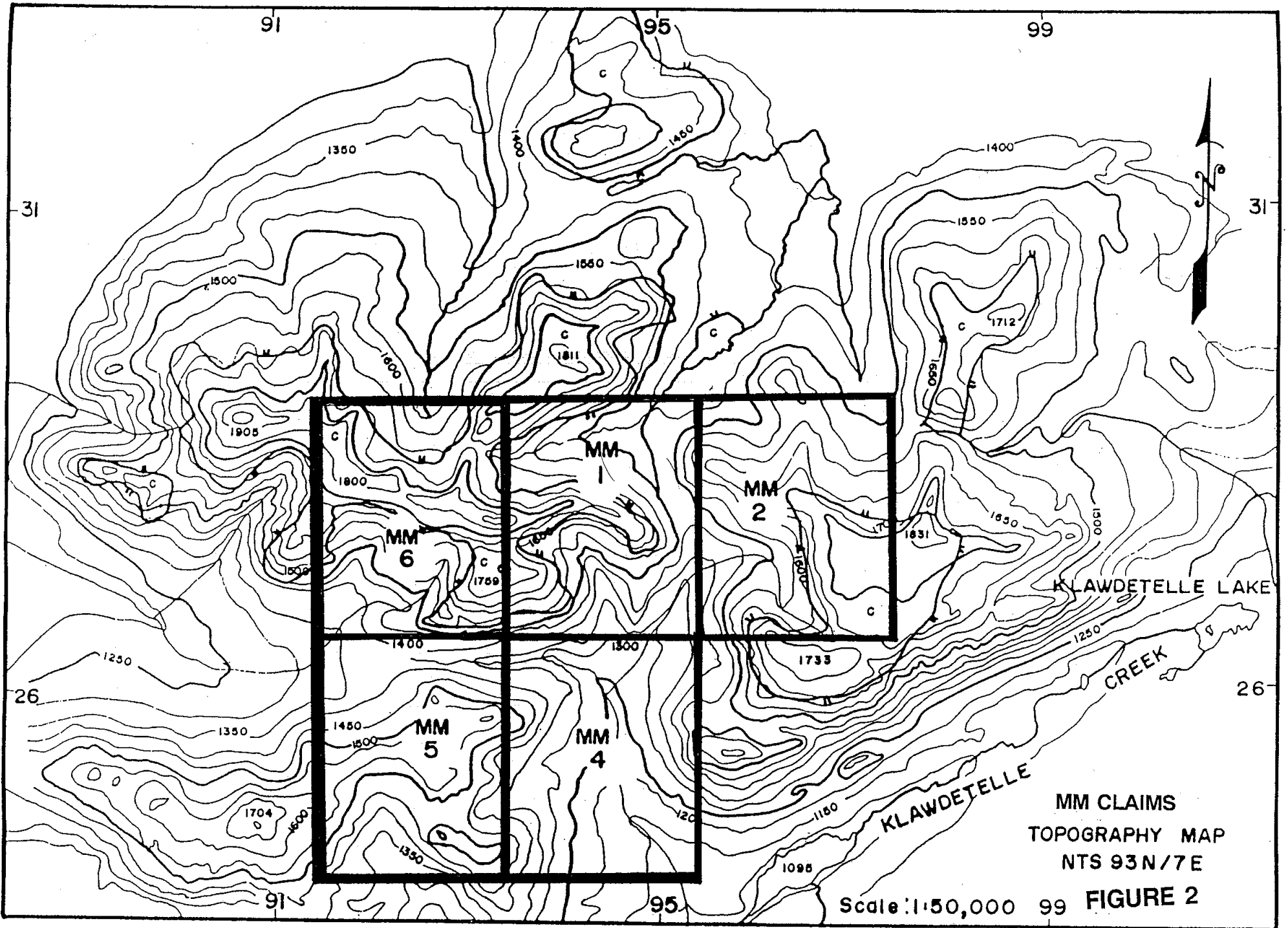
This report is based on the results of the present surveys and on the available literature pertaining to the area.

### **2.2 Location and Access**

Province:	British Columbia
Area:	Chuchi Lake
Mining Division:	Omineca
Claim Names:	MM1, MM2, MM4, MM5 and MM6
NTS:	93-N / 7E
Longitude:	124° 38' 00" West
Latitude:	55° 16' 00" North
Size of Area:	2,500 hectares (6,177.5 acres)

The MM Property is located approximately 110 road-kilometers (68.3 miles) north of Fort St. James, Central British Columbia, and 11 kilometers (6.8 miles) north of Chuchi Lake (Figures 1 and 2). The claims' northern boundary is situated about 6.5 kilometers (4 miles) south of







Klawli Lake and the eastern boundary approximately 3.5 kilometers (2.2 miles) west of Klawdetelle Lake. During the recent years several gravel roads have been extended within 1 or 2 kilometers of the MM Property.

The claims are accessed by helicopter from a helicopter base located at the eastern end of Chuchi Lake. Flying time from the helicopter base to the property is about 20 minutes. The helicopter base can be reached by an all-weather gravel road from Fort St. James, locally referred to as "The North Road".

### **2.3 Physiography and Climate**

The MM claims are situated in the Swannel Ranges of the Omineca Mountains. The area exhibits the characteristics of typical glacial physiography. These include wide U-shaped, drift-filled valleys flanked by steep rugged mountains and deeply incised V-shaped upland valleys.

Local topographic relief varies from moderate to steep with elevations ranging from 1,125 meters (3,690 feet) A.S.L. along a creek in the southeastern part of the claims to over 1,850 meters (6,070 feet) A.S.L. along an east-west ridge in the northwestern portion of the property.

Vegetation is characteristic of mountainous area of northern part of the Interior Plateau and consists mainly of widely spaced spruce, fir and pine at lower elevations whereas at higher elevations vegetation is grading into alpine growth consisting of mixed grassland and scrub brush.

Climate comprises generally long, cold and snowy winters and relatively short moderate to cool summers.

### **2.4 Operations and Communications**

The geological, geophysical and geochemical programs were conducted during the period June 16, 1991 to June 30, 1991 and during August 4, 1991 to August 19, 1991. The field crews, consisting during Phase IA of W.A. Gewargis, D. Cook and R. Arnold and of D. Cook, R. Arnold and P. Wilson during Phase IB, mobilized in Vancouver and drove to Chuchi Lake. From there, a helicopter of Northern Mountains Helicopter transported the crews to the central part of the property. The base camp was located on MM-1 claim at latitude 55° 17' North and longitude 124° 41' West. Transportation was provided by means of a van rented from Cana Rentals Ltd. for Phase IA and of a van rented from Budget Rentals for Phase IB. Radio communications were maintained with the Vancouver office and with the helicopter base on a regular basis.

## 2.5 Property Status and Ownership

The MM Property consists of five contiguous mineral claims, totalling 100 units, for an area of 2,500 hectares (6,177.5 acres), and is located in the Omineca Mining Division, Central British Columbia, under option to Dasserat Developments Corporation since December 1990.

The MM Property is shown on the Mineral Claim Map 93-N/7E and on Figure 3 of the present report.

The claims are recorded at the British Columbia Ministry of Energy, Mines and Petroleum Resources as follows:

**Table 1: Mineral Claims Summary**

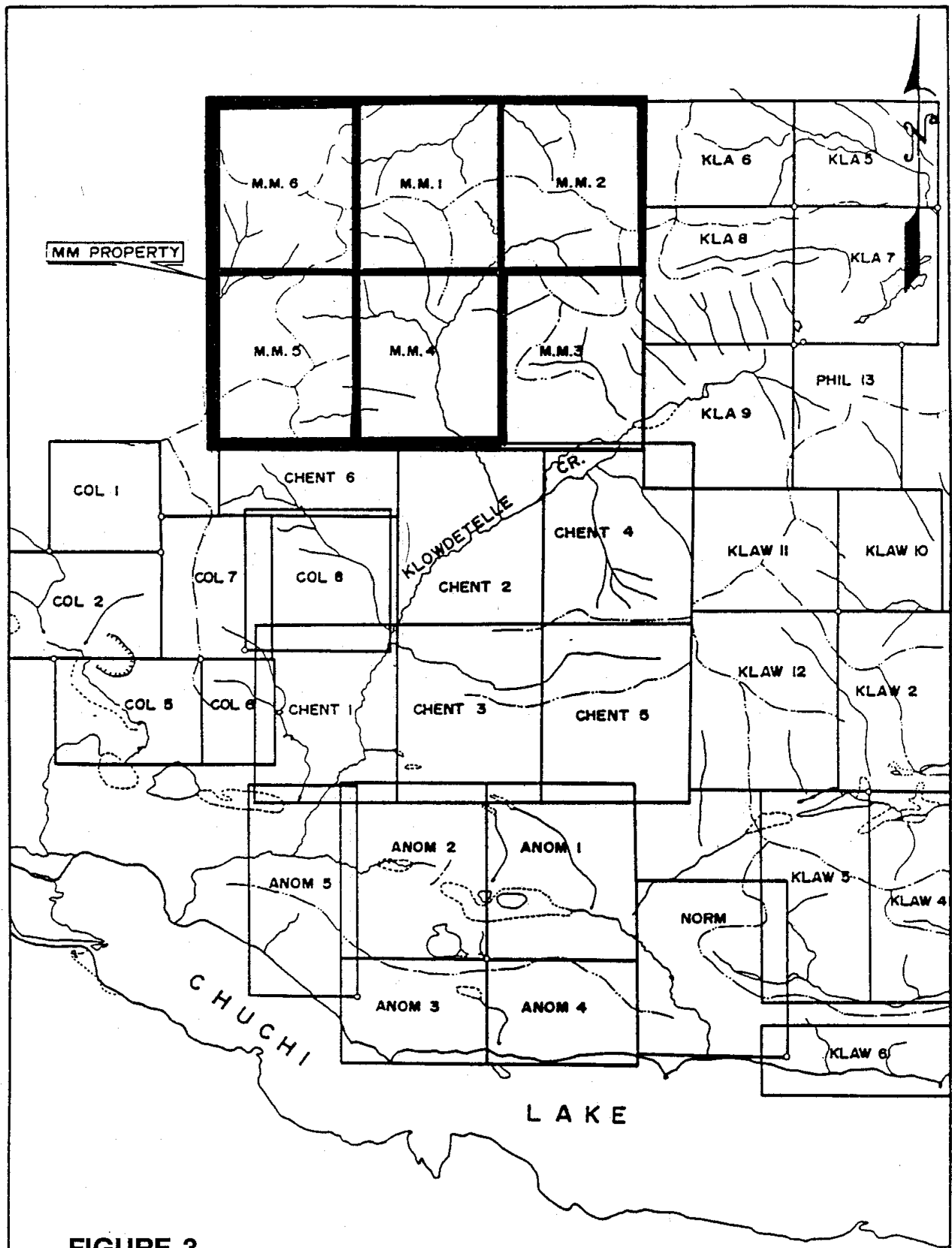
<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
MM1	20	12007	June 24, 1994
MM2	20	12008	June 24, 1994
MM4	20	12470	Aug. 27, 1991
MM5	20	12471	Aug. 27, 1991
MM6	20	12472	Aug. 27, 1991

## 3.0 HISTORY AND PREVIOUS EXPLORATION WORK

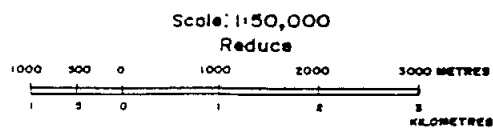
Mining activity in the area surrounding the MM mineral claims started in the second half of the 19th century when placer gold was discovered on Silver Creek, located approximately 80 kilometers northwest of the subject claims.

The remoteness of the area hindered the exploration and the area saw three main phases of porphyry copper exploration. The initial push, from 1947 to 1963 led to the discovery of the Lorraine deposit. Exploration work carried out during the 1970's concentrated mainly on deposits located in and adjacent to the Hogen Batholith. Among others, the Lorraine deposit, Takla Rainbow prospect, Mount Milligan and Col properties were explored during the 1970 to 1975 period. The third phase took place in the 1980's when strong gold and copper prices renewed the interest in the alkaline porphyry deposits.

The Mount Milligan copper-gold porphyry deposit was discovered in 1987. By the end of 1989, over 400 million tonnes of copper-gold mineralization, grading from 0.15% to 0.70% copper and



**FIGURE 3**



MM CLAIMS	
MINERAL CLAIMS MAP	
NTS 93N/7E MAP SHEET	
SCALE:	FIGURE: 3
DRAWN BY: D.G.	DATE:

from 0.17 to 2.75 g/t gold, were outlined by 406 holes totalling 96,390 meters of diamond drilling.

On the Kookaburra Gold Corp. Col property, which is located only a few kilometers southwest of the MM claims, 2 million tons grading 0.6% copper with significant gold values were reported.

Drilling programs were also carried out recently on the KLA and Klaw claims, located east and southeast of the MM claims. The provincial government conducted detailed geological mapping programs in the Mount Milligan area during the past two years and these programs are continuing in the 1991 summer field season.

No mineral showings are known on the subject claims and there is no public record of extensive prospecting or exploration on the property.

For assessment requirements purpose a report on the MM-1 and MM-2 claims has already been filed with the BC government. Results of the June 1991 work program carried out on the latter claims will be included in this report.

#### 4.0 GEOLOGY

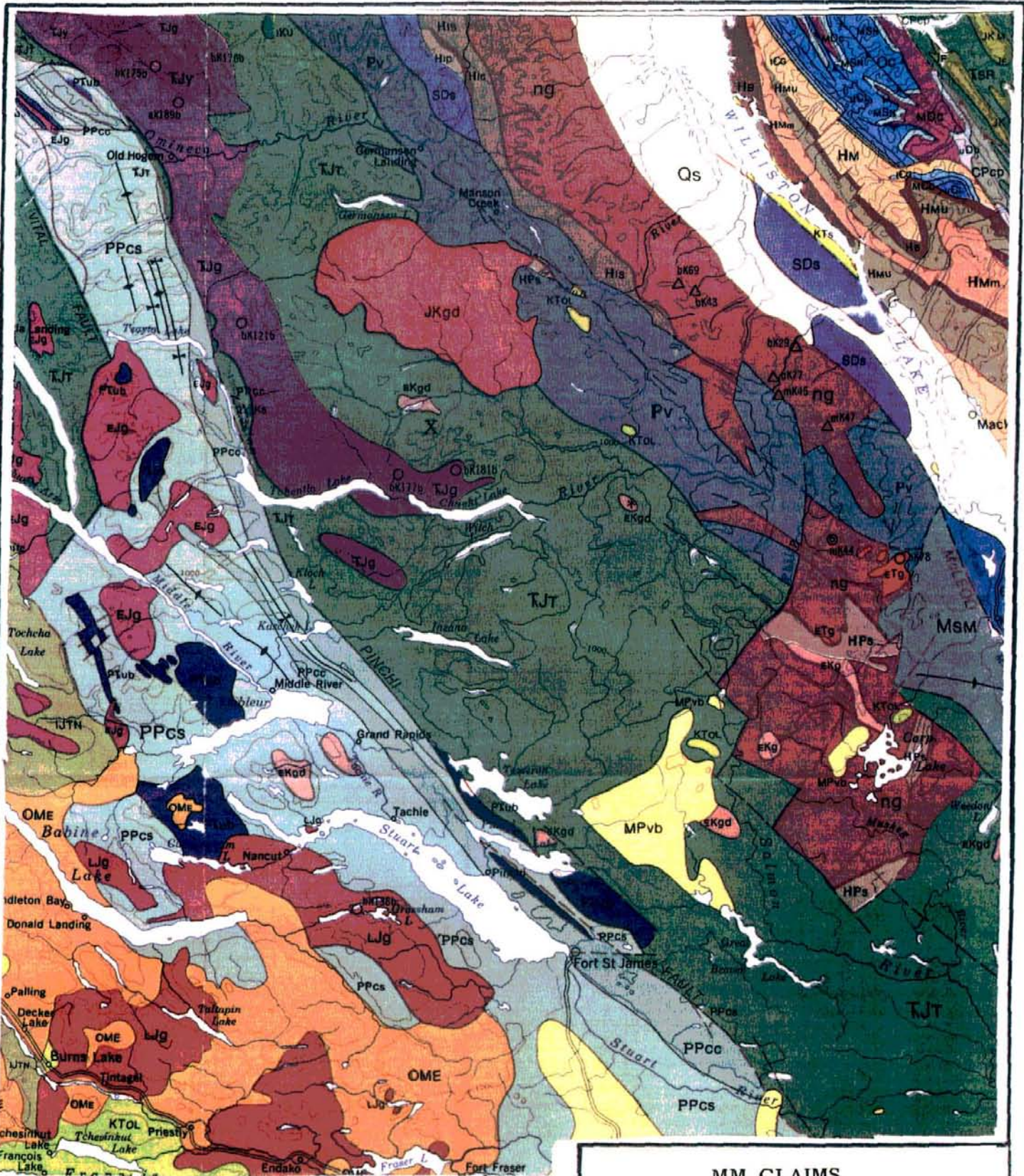
##### 4.1 Regional Geology

The MM claims lie within the Intermontane Tectonic Belt of the Canadian Cordillera (Figure 4). The regional geologic setting of the Nation Lakes area, which encompasses the Chuchi Lake area, has been described in detail by J. Nelson et al. (1991) as follows:

##### ***"The Takla Arc***

*The Nation Lakes area is predominantly underlain by Early Mesozoic Takla Group rocks of island-arc affinity. The Takla Group and its southern equivalent, the Nicola Group, define the Quesnel Terrane or Quesnellia (Monger et al., 1990). The northwest-elongated Hogem batholith is intruded into this terrane. The southern tip of this intrusion lies within the map area on the north shore of Chuchi Lake. The main phase of the Hogem batholith is dated by K-Ar methods as 176 to 212 Ma, and is considered to be an intrusive equivalent of at least part of the Takla Group (Garnett, 1978).*

*At the latitude of the map area the western border of Quesnellia is the Pinchi fault. Here the Takla Group lies in tectonic contact with oceanic rocks of the Cache Creek Terrane. The presence of Triassic blue-schists along the Pinchi fault (Paterson, 1977) suggests that a subduction zone lay west of the Takla arc. The eastern border of Quesnellia is a complex zone of faults that place lower Takla rocks against the Late Paleozoic Slide Mountain Terrane (Ferri and*



**FIGURE 4**

X APPROXIMATE LOCATION OF MM CLAIMS  
 \* MT. MILLIGAN PROPERTY

TJT: Takla Group andesite  
 TJg: Høgem Batholith  
 EKgd: Early Cretaceous granodiorite  
 JKgd: Jurassic Cretaceous granodiorite

**MM CLAIMS**

PARSNIP RIVER  
 Geological Map  
 Map No. 1424A, Sheet 93  
 Scale 1:1,000,000

Melville, in preparation) and metamorphic rocks of autochthonous North America, notably the southern Wolverine complex near Carp Lake (Struik, 1990).

Regionally, the Takla Group comprises a lower Late Triassic sedimentary unit which interfingers with and is overlain by voluminous volcanic, pyroclastic and epiclastic rocks. These rocks are intruded by coeval plutons which range up to Early Jurassic in age. Augite-phyric rocks predominate, although plagioclase and hornblende are present and can be abundant. Takla volcanics tend to be unusually potassium rich and are transitional to alkalic in their major-element chemistry (Rebagliati, 1990; Ferri and Melville, in preparation). They share this characteristic with contemporaneous arc-volcanic rocks of the Nicola Group in the Quesnel Terrane (Mortimer, 1987) and the Stuhini Group in the Stikine Terrane near Galore Creek (Logan and Koyanagi, 1989). The Stikine Terrane is separated from Quesnellia either by major faults or by the strongly allochthonous Cache Creek Terrane (Monger et al., 1990). [..]

### **Regional Structural Setting**

The Nation Lakes area lies between two regional-scale northwest-trending fault systems that probably had significant dextral offsets in Late Mesozoic to Eocene time; the Pinchi fault to the west and the Manson, McLeod and Northern Rocky Mountain Trench faults to the east. Struik (1990) has shown how transcurrent motion in this area was transferred from one fault system to the other through sets of subsidiary faults in the block between. The southern Wolverine complex, centered on Carp Lake 20 kilometres southeast of the present map area, is an uplifted horst of basement gneisses. It is bounded by a series of steep, northwest-trending dextral faults and northeast-trending low-angle normal faults (Struik, 1989, 1990). Several of the northwest-trending bounding faults project into the Nation Lakes map area. [...]

### **Stratigraphy of the Takla Group**

Mapping in the Nation Lakes area in 1990 resulted in a provisional subdivision of the Takla Group into four informal formations, the Rainbow Creek, Inzana Lake, Witch Lake and Chuchi Lake formations. A nearly complete stratigraphic succession can be seen in the broad anticline that outcrops from south of Chuchi Lake to the southern limit of mapping near Dem Lake. Epiclastic sediments of the Inzana Lake formation are overlain by augite and other porphyritic volcanics and pyroclastics of the Witch Lake formation. These in turn pass upward into polymictic lahars and subaerial flows of the Chuchi Lake formation. Elsewhere, Takla units occur in incomplete, fault-bounded panels.

#### **Rainbow Creek Formation**

The Rainbow Creek formation is a basinal package of dark grey slate with lesser siltstone and, in some exposures, epiclastic interbeds. It occurs in three fault-bounded structural blocks in the Nation Lakes map area - one north of Rainbow Creek, one near Dem Lake in the far southwest corner of the map area, and one intersected in a drillhole southeast of the Mount Milligan deposit.

The exposures north of the Rainbow Creek are divided into two sub-blocks based on different trending schistosity and distinctive lithologic suites. The northern block consists mostly of monotonous grey slate with sparse, thin siltstone interbeds and minor quartz sandstones. The southern block, next to

Rainbow Creek, is also dominated by slate, but contains some volcanic and volcanoclastic components. Near Dem Lake, the grey slate contains very common siltstone interbeds and also sedimentary breccias composed of slate interclasts. The black slate intersected in drill hole DDH-274, southeast of the Mount Milligan deposit, is limy, graphitic and soot-black.

All of these exposures are completely fault-bounded. Their original relationships to the rest of the Takla Group are not known. Regionally, the lowest unit of the Takla Group is a package of dark grey to black slates or phyllites with interbedded quartz-rich siltstones and sandstones and minor limy beds and limestones. Near Quesnel this unit is termed the "Triassic black phyllite" (Struik, 1988, Bloodgood, 1987, 1988). More locally, Ferri and Melville (in preparation) recognize dark grey slates, limy slates, siliciclastics and limestones of Late Triassic age in the Manson Creek area, which they propose to include in the lower part of the Slate Creek formation. The Rainbow Creek formation is correlated to these on lithologic grounds.

#### Inzana Lake Formation

Extensive sedimentary, epiclastic and lesser pyroclastic rocks outcrop in the map area from north of Inzana Lake to the southern map border. Due to the lithologic monotony shown by this package over large areas, and to the tight folding within it, no subdivisions were made. It consists of abundant grey, green and black siliceous argillite with lesser green to grey volcanic sandstones and siltstones, green, augite bearing crystal and lapilli tuffs, sedimentary breccia, siliceous waterlain dust tuffs, heterolithic volcanic agglomerates and rare, small limestone pods. The argillite is siliceous and poorly cleaved; it contrasts strongly with the alumina-rich grey slates of the Rainbow Creek formation. Although the sandstones tend to be thick bedded and relatively featureless, graded bedding and load casts are common within the thin-bedded siltstones. They provide extensive control on sedimentary tops. Two separate sets of flame structures, and imbricated volcanic agglomerates, indicate arc-parallel northwesterly transport into the basin, suggesting a volcanic centre to the south.

Crystal and lapilli tuffs occur mostly along the western margin of the map area. Fragments in the lapilli tuffs are characteristically sparse, less than 10 per cent in a sandy matrix. These units may represent an upward transition to the overlying augite porphyry flows and coarse pyroclastic deposits. They contain fragments of augite and lesser hornblende (plagioclase) porphyry. Fresh olivine crystals are rare but notable.

The sedimentary breccias contain mostly intrabasinal clasts of argillite, sandstone and fine-grained, green siliceous tuff. Volcanic and high-level plutonic clasts are also present, including plagioclase and pyroxene porphyry. At one exposure 300 metres east of the Fort St. James-Germansen road and 200 metres north of the Germansen-Cripple subsidiary road, a broad channel in the sedimentary breccia is filled with a slump of rounded augite porphyry clasts. These breccias attest to high-energy conditions within the basin, possibly induced by synsedimentary faulting.

The Inzana Lake formation is transitionally overlain by augite porphyry agglomerates of the Witch Lake formation on the low ridge north of Mudzenchoot Lake. Its low stratigraphic position in the Takla Group and its character as facies equivalent of the distant volcanic centres suggests that the Inzana formation correlates with Unit 7 of the Takla Group near Quesnel (Bloodgood, 1988) and with the upper part of the Slate Creek formation of the Takla Group near Germansen Lake (Ferri and Melville, in preparation).

### Witch Lake Formation

The best-known lithologies of the Takla Group are augite porphyry flows and pyroclastics. In the Nation Lakes area they are included in the Witch Lake formation, named for the thick, well-exposed sequences around Witch Lake. The Witch Lake formation has two main areas of exposure, one between Mudzenchoot and Chuchi lakes, where it is in stratigraphic continuity with the underlying Inzana Lake and overlying Chuchi Lake formations; and a fault-bounded structural panel on the eastern side of the Wittsichica Creek map sheet, which hosts the Mount Milligan deposit.

In addition to augite porphyry, a thick section dominated by plagioclase-porphyrific latites occurs in the Witch Lake formation south of Witch Lake. Acicular hornblende-plagioclase porphyries are locally abundant, particularly south of Rainbow Creek and extending southward into the northeastern corner of the Tezzeron Creek map sheet. Here hornblende porphyries are the dominant lithology in agglomerates and in heterolithic aggregates that also contain the more common augite porphyries. At one locality south of Rainbow Creek, hornblende and amphibolite clasts occur within the hornblende porphyries. One clast consists of clinopyroxenite in contact with amphibolite, reminiscent of Polaris-type ultramafic bodies (Nixon et al., 1990).

Trachyte breccia occurs near the top of the western Witch Lake formation in the headwaters of the south fork of Wittsichica Creek. In the Mount Milligan panel, two thin trachyte units can be traced over several kilometres. They are composite units that include pale-coloured flows with large, ovoid amygdules, flow breccias, and lapilli tuffs that contain deformed glass shards.

The augite porphyry suite that dominates the Witch Lake formation is typical of explosive intermediate volcanism. It includes all gradations from flows and probable hypabyssal intrusions to coarse volcanic breccias and agglomerates, lapilli and crystal-rich tuffs and thinly bedded, subaqueous epiclastic sandstones and siltstones. Both small-augite porphyry and large-augite porphyry variations are present. Plagioclase and hornblende phenocrysts are subordinate and olivines rare. In terms of composition, the augite porphyries contain between 20 and 80 per cent matrix and phenocrystic plagioclase and in rare examples, primary potassium feldspar as a matrix phase. They are classified as andesites and basaltic andesites. The abundance of potassium feldspar in the volcanic rocks at and near the Mount Milligan deposit, has led past authors (Rebagliati, 1990) to classify them as augite-porphyrific latites and banded trachytes. However, microscopic examination of andesites and derived sediments up to 4 kilometres from the MBX and Southern Star stocks shows the invasion of secondary potassium feldspar occurring as veinlets, as clumps with pyrite and epidote, as seams in plagioclase phenocrysts, and as fine-grained aggregates along bedding planes in the sediments. Such replacement distal to the deposit suggests that the highly potassic nature of the rocks within the deposit is due to wholesale replacement, converting andesites to "latites" and bedded andesitic sediments to "trachytes".

### Chuchi Lake Formation

The intermediate to felsic Chuchi Lake formation transitionally overlies the Witch Lake formation along a northwest-trending contact that can be traced for 25 kilometres south of Chuchi Lake. The best exposures are seen north of Chuchi Lake: however, in this area the basal contact with the Witch Lake formation lies north of the Wittsichica Creek map sheet. In contrast with the marine Witch Lake formation, the Chuchi Lake formation shows evidence of deposition in a partly



subaerial environment. It is dominated by polymictic plagioclase porphyry agglomerates and breccias. They are typically matrix supported and grey-green to pale maroon in colour. One of these lahars is in contact with a thin volcanic sandstone bed containing abundant wood fragments on bedding planes. Wood fragments caught up in the hot lahar are evidenced by black cores of remnant carbonaceous material with reaction rims.

The plagioclase ( $\pm$ augite $\pm$ hornblende) porphyries contain from 70 to 80 per cent plagioclase and from zero to 15 per cent matrix potassium feldspar. They are andesites and latitic-andesites.

Another characteristic lithology of the Chuchi Lake formation is dark maroon, felsic latite to trachyte flows with large, irregular, partly filled amygdules. Microscopically, the flows consist of potassium feldspar and plagioclase in varying proportions. Some are plagioclase phyrlic. The amygdules are filled with calcite and albite. A single large-plagioclase intrusion and flow unit, with individual phenocrysts averaging several centimetres long, is exposed north of Chuchi Lake. Although megacrystic intrusions are fairly common, this is the only documented volcanic occurrence of megacrystic feldspar porphyry in the map area. Farther north and down-section, a partly welded trachyte tuff-breccia is cut by the Hogem batholith.

Hornblende porphyry with acicular phenocrysts occurs as clasts in polymictic breccias at the base of Chuchi Lake formation between Witch and Chuchi lakes, and also upsection north of Chuchi Lake. This textural variant is also seen in dikes. In some exposure the acicular hornblende porphyries contain small inclusions of hornblendite and amphibolite.

The basal contact of the Chuchi Lake formation is gradational; it lies within a zone where mainly augite porphyry agglomerates of the Witch Lake formation pass upwards into polymictic agglomerates with small, abundant plagioclase phenocrysts in the clasts. As well, the dark green colours of the Witch Lake formation change to maroon, reddish and green shades. The top contact of the Chuchi Lake formation is not observed in the map area.

### **Metamorphism**

Three distinct metamorphic facies are seen in volcanic and plutonic rocks of the Takla Group. The lowest grade is subgreenschist, developed in the western and southern part of the map area. Metamorphic minerals include chlorite, carbonate, albite and rare pumpellyite. In general clinopyroxenes are fresh, and plagioclases are fresh to albitized and sericitized.

In the eastern part of the map area, including the vicinity of the Mount Milligan deposit and south to Cripple Lake, abundant clear to pale green actinolite indicates lower greenschist facies conditions. Actinolite occurs as mats of tiny acicular crystals and also as overgrowths on, and replacements of, clinopyroxene phenocrysts. This facies is developed in the megacrystic diorite south of Kalder Lake, and thus is not a contact metamorphic effect of Takla intrusions.

Near the peak of Mount Milligan, the lower greenschist passes into texturally destructive upper greenschist facies. Actinolites are more intense green. In many samples biotite and actinolite form well-oriented trains that wrap around phenocrysts and lithic fragments, and appear to develop at the expense of randomly oriented clusters. Hornfelses without visible fabric are also present. Within the Mount Milligan complex itself, there are screens of well-foliated

*granulites. The transition outwards from the Mount Milligan plutonic complex seems to be in part a thermal, and in part, a strain gradient. [...]"*

The intrusive rocks of the Nation Lakes area have been defined by the B.C. government geologists using the classification of Streckeisen (1967), and the following compositions were noted:

- 1) granite
- 2) syenite
- 3) monzonite/monzodiorite
- 4) diorite
- 5) gabbro/monzogabbro

The B.C. government geologists (J. Nelson et al., 1990) recorded the following textures for these various intrusions:

- 1) coarse-grained equigranular to somewhat porphyritic
- 2) crowded-porphyritic
- 3) porphyritic with megacrysts
- 4) porphyritic with sparse phenocrysts in a very fine-grained matrix

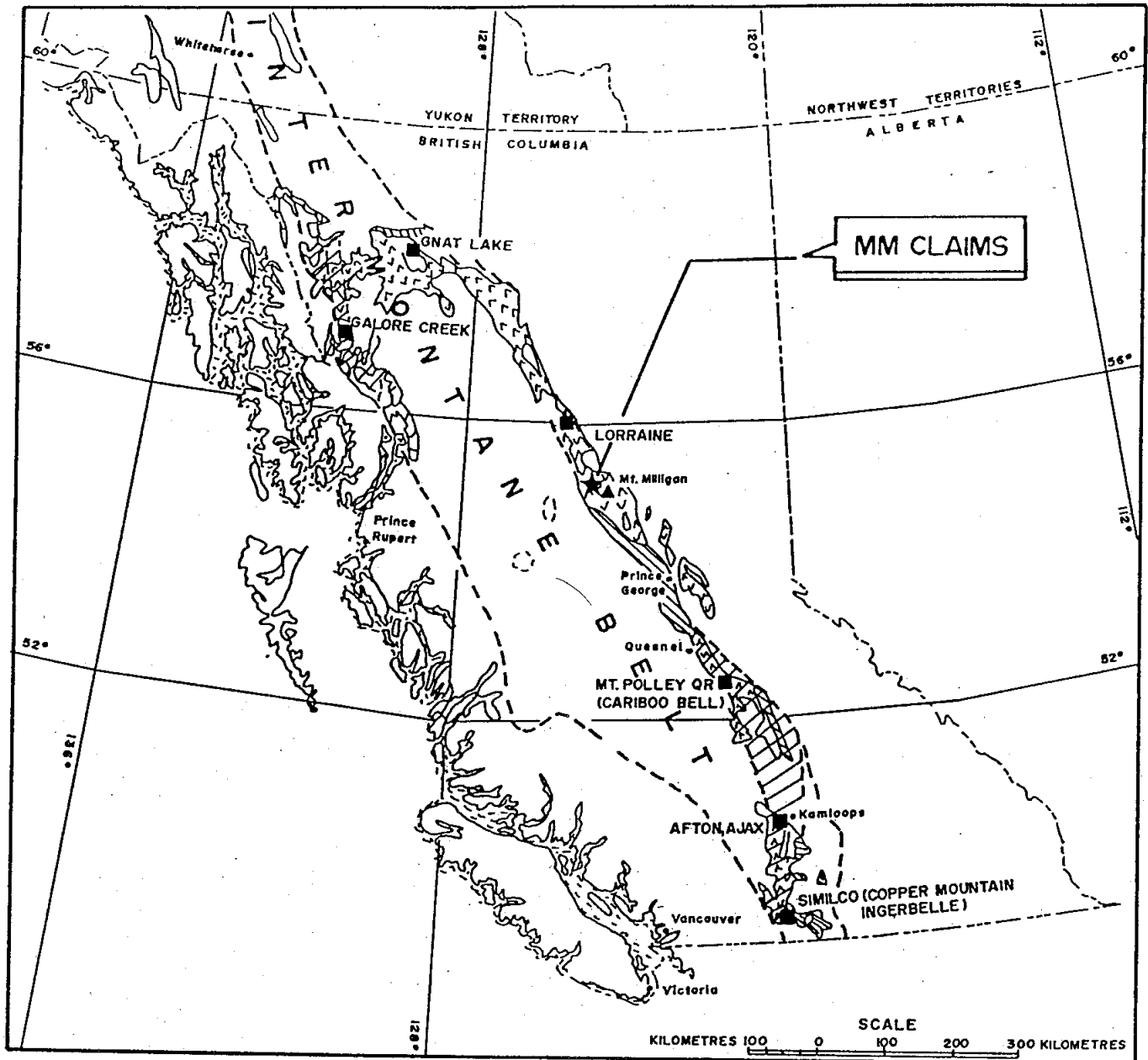
The latter, due to the abundance of fine-grained matrix material, are named using volcanic terminology:

- 1) rhyodacite/dacite
- 2) trachyte
- 3) latite/latitic andesite
- 4) andesite

## **4.2 Economic Geology**

Several major past producers and actual deposits as well as significant prospects are hosted by the Quesnel Trough, which extends in British Columbia from the US-Canada border to the Yukon border (Figure 4A). Among the most important deposits and occurrences are: Copper Mountain, Ingerbell, Afton, Ajax and Gibraltar Mines, as well as the Lorraine, Cat and Takla Rainbow deposits. During the past few years, porphyry copper-gold deposits have been identified in several other properties located in the MM claims' general area. These include the Mount Milligan, Tas, Max, Windy, Indata, Swan and Tam deposits.

Most of these deposits occur within the Takla Group volcanic rocks of Upper Triassic to Lower Jurassic age and exhibit a relationship with potassic intrusions of early Jurassic age.



UPPER TRIASSIC AND LOWER JURASSIC VOLCANIC ROCKS, SIGNIFICANT COPPER DEPOSITS AND ASSOCIATED ALKALIC PLUTONS IN THE CANADIAN CORDILLERA.

**FIGURE 4A**

Well-known Porphyry Copper-Gold Deposits within the Quesnel Trough

**MM CLAIMS**

**LEGEND**

- PROPERTY LOCATION
- ▨ ALKALIC PLUTON BELT
- ⌘ ALKALINE & CALC-ALKALINE VOLCANIC ROCKS
- ⌘ SUBALKALINE VOLCANIC ROCKS
- ⌘ ALKALINE VOLCANIC ROCKS
- ▨ MAINLY SEDIMENTARY ROCKS

The wide alteration haloes, that exist around these deposits, can be used as a exploration tool. On account of the vast glacial overburden cover, the potential of locating unknown alteration haloes in the area is still existent. These alteration haloes vary from place to place and are described in detail by J. Nelson et al. (1991). All of these alteration haloes bear the following common features:

- i) abundance of disseminated pyrite and/or pyrrhotite.
- ii) propylitic alteration which is usually represented by epidote flooding.
- iii) presence of widespread secondary potassium feldspar which is usually detected only by chemical staining or under microscope (thin sections) as hairline veinlets and spread patches.
- iv) in the heart of the haloes a pervasive, texture-destructive alteration has been observed succeeding biotite hornfels.

The exploration parameters for alkalic porphyry copper-gold deposits are summarized by J. Nelson et al. (1991) as follows:

*"One of the most important characteristics of alkaline porphyry deposits is that they tend to be spatially related to long-lived faults. Faults that control early intrusive activity are later reactivated and also control much younger features such as Eocene extensional basins. Both Copper Mountain and Afton/Ajax lie near important Eocene basin-bounding faults, which are interpreted as reactivated Triassic-Jurassic structures (V.A. Preto, personal communication, 1990).*

*The alkalic intrusive bodies associated with porphyry copper-gold deposits are typically small and high level to subvolcanic. Their textures strongly resemble those of volcanic flows. These intrusions consist of densely crowded, blocky plagioclase phenocrysts about 2 millimetres in diameter, and perhaps less abundant biotite, augite, hornblende, or orthoclase, in a dense very fine grained feldspar matrix. They are distinguished from surrounding flows by their limited areal extent, lack of volcanic features such as amygdules and pyroclastic facies, extremely crowded phenocrysts and a relatively more felsic composition. Intrusive breccias and diatremes are also an important aspect of alkaline porphyry systems (Barr et al., 1976; Sillitoe, 1990).*

*Alkalic porphyries often have associated propylitic and potassic alteration. Abundant magnetite, part of the potassic suite, makes airborne and ground magnetic surveys an important exploration tool. Extensive pyrite haloes outline the porphyry systems and can aid the prospector who does not have access to a petrographic microscope or feldspar staining apparatus. Small, high-grade veins such as the Esker veins at Mount Milligan (Rebagliati, 1990) and the gold-magnetite veins and magnetite-matrix breccias at the Cat property, may signal the presence of nearby large-tonnage, lower grade zones."*

### 4.3 Property Geology

Preliminary geological mapping of the MM property has confirmed the regional scale compilation map. The majority of the property is underlain by volcanic rocks of the Upper Triassic to Lower Jurassic age Takla Group, which are intruded by the Takla intrusives (Figure 6). The Takla Group has been temporarily subdivided into four formations (J. Nelson et al., 1990) by the B.C. government geologists, who are currently mapping the Nation Lakes area. These formations, which can be observed in a stratigraphic succession in a vast anticline that outcrops from south of Chuchi Lake to close to Dem Lake, are the Rainbow Creek, Inzana Lake, Witch Lake and Chuchi Lake formations.

The MM property is underlain by volcanic rocks, which consist mainly of volcanic tuffs, agglomerates, feldspar porphyries and augite porphyries. Interfingering sedimentary rocks (chert, slate, shale, sandstone and mudstone) were observed in several locations. In addition, a small intrusive body of porphyritic plagioclase monzonite was mapped in the northern portion of the claims.

The tuffs are generally fine-grained to coarse-grained and contain varying amounts of lithic clasts. These tuffs, in the eastern portion of the mapped area, present usually a strong epidotization as well as local chlorite alteration. Abundant pyrite mineralization and sparse carbonate veining was observed in this unit.

The volcanic agglomerates, which appears to cover most of the western and southwestern part of the mapped area, are usually of andesitic composition. The grain size of these rocks varies from fine to coarse and some monzonite clasts were sometimes recognized. Mineralization examined in this unit consisted mainly of various amounts of pyrite with rare chalcopyrite. Epidote and chlorite alteration was generally pervasive.

In the western part of the mapped area several outcrops of feldspar porphyries were recognized. No pyrite mineralization was noted in these rocks which may contain or not augite porphyroblasts. Alteration is not pronounced in this unit. In the central and eastern portions of the mapped area, the feldspar porphyries are replaced by augite porphyries. The latter have a ground mass that vary from aphanitic to medium-grained; occasionally, vesicular texture was observed presenting or not amygdules of calcite, olivine and quartz. Slight to extensive pyrite mineralization was locally observed in the augite porphyries, as well as epidote and/or chlorite alteration.

Mainly along the ridges, located north and northwest of the camp, in the north-central part of the mapped area, sedimentary rocks were observed. These sediments, consisting of mudstone, grey to black sandstone, shale and slate, are usually interfingering with the volcanics. Pyrite mineralization and discrete to extensive chlorite and epidote alteration was noted in these

rocks. Cherts, commonly noted as narrow bands interfingered with the volcanics and the sediments, were also recognized on the MM property.

Finally, a small body of porphyritic plagioclase monzonite was mapped in the northern portion of the property. This monzonite is grey-green in colour, equigranular, medium-grained and contains various amounts of hornblende. Serpentine alteration was noted in this unit.

Numerous quartz-carbonate veins and veinlets were observed locally in the different rock units as well as sparse secondary potassium feldspar alteration.

Several faults, generally east-west and northeast-southwest striking, were mapped. The most significant of them appears for the present time to be the "Camp Fault". This structure, following roughly the base line of the grid, appears to be enriched in a suite of elements including As, Cu, Pb, Zn, Mo, Fe, Mn, Co, Ni, Cr, V and Sc. This zone of anomalies, which may be independent of the main anomalous copper zone delineated by the soil sampling program, may be an important economic factor on the MM property; Mount Milligan deposit was discovered by following the extension along strike of a mineralized structure. Arsenic is commonly found in haloes around the alkalic type of Cu - Au occurrences and is often associated with veins following structures peripheral to a deposit (Hoffman, 1991). In addition, in the western portion of the "Camp Fault", a zone of intense brecciation and quartz veining was mapped.

## **5.0 GEOCHEMISTRY**

The geochemical surveys encompassed soil, silt and rock sampling. A total of 718 soil samples, 18 silt samples and 54 rock samples were collected either on the established GI grid or along prospecting/mapping traverses during Phase IA and Phase IB. All of the samples were submitted to Chemex Laboratories Limited, North Vancouver, British Columbia for 32 elements analyses by the ICP (Induced Coupled Plasma) method. In addition, gold was detected by the FA (Fire Assay) and the AA (Atomic Absorption) methods. Analytical Data for Soil, Silt and Rock Samples are included in Appendix I of Dr. S. Hoffman's report (Appendix V of this report).

### **5.1 Rock Samples Survey**

A total of 54 rock grab samples were collected within the surveyed area. A description of the rock samples can be found in Appendix II and a sample location and geochemical map (Figure 7) is located in the back pocket of the present report. Figure 6, which can also be found in the back pocket of this report, present the geochemistry results for copper, lead, zinc, gold, silver and arsenic.

Five rock samples present multi-element anomalies: sample 518001 shows a high gold value of 840 ppb, as well as elevated values in copper (224 ppm) and arsenic (30 ppm); sample 518008 has slightly above background values for gold (20 ppb), copper (209 ppm) and arsenic (30 ppm); sample 518125 presents relatively high silver value (1.2 ppm) and copper value (359 ppm); sample 518022 shows elevated gold (75 ppb) and silver (0.6 ppm) values; finally, sample 518452 has anomalous values in gold (45 ppb), silver (2.0 ppm), arsenic (50 ppm) and lead (128 ppm).

In addition to the above samples, several other samples show slightly above background values either for gold or arsenic: 50 ppb gold (518002), 40 ppb gold (518007), 35 ppm arsenic (518016, 518115 and 518125).

Copper was detected in anomalous amounts in seven other samples with values ranging from 201 ppm to 731 ppm (518108) and zinc was found in quantities exceeding 100 ppm in four samples (up to 198 ppm in sample 518018). The best nickel value located within the surveyed area is 56 ppm (sample 518127).

All of the other rock samples collected on the MM property show background values for the analyzed precious metals and base metals.

## 5.2 Soil Samples Survey

Dr. S. Hoffman, consulting geochemist, reviewed the data and generated a report, a copy of which can be found in Appendix V, as well as geochemical maps (Figure 5A through Figure 5Z) that can be found in the same appendix. This report encompasses the results of Phase IA (384 soils samples) and Phase IB (334 soils samples) sampling surveys, for a total of 707 soil samples. A detailed description of the soils results for each element can be found in Dr. Hoffman's report.

The soil samples were collected along lines established at 50 meter intervals with stations 25 meter apart during Phase IA and along lines established at 100 meter intervals with stations 50 meter apart during Phase IB. When possible the B Soil Horizon was sampled usually at depths greater than 20 cm and samplers attempted to avoid organic-rich material. A pit was dug at each location and approximately 300 to 500 grams of material was removed from each site and placed in a standard Kraft envelope.

Appendix III lists the code format for recording the field notes, as well as the field data for the soil samples.

Eleven soil samples were collected during the prospecting/mapping traverses and their location is shown on Figure 7. The description of these samples, prefixed DLC-SOS, is not included in Appendix III, however they were collected from the B Soil Horizon at depth varying from 15 to 25 centimeters. The geochemical results for these eleven samples, which were not included in Dr. S. Hoffman geochemical report, is noted on Figure 6. Only sample DLC-SOS-04 shows a very high gold anomaly of 150 ppb. No other precious metal and/or base metal anomalies were detected in these samples.

The soil sampling survey conducted on the grid comprised 707 samples. Dr. Stanley Hoffman summarizes the results of this survey as follows:

*"The study defined four areas of Cu accumulation, including a major zone of Cu enrichment, in the 150 to 350 ppm range, over an area as great as 400 m x 1,000 m, and not as yet fully delineated. Cu levels in soils are approximately comparable with those at the SOUTHERN STAR deposit of Mount Milligan, although Au values in general are lower. Cu anomalies typically have a positive association with magnetic anomalies. More sampling is still needed to fully appreciate Cu - Au zonations on MM.*

*The multi-element soil survey was well conducted and geochemical distribution patterns relate to underlying geology, as suggested by the ground magnetic map. Geochemical signatures for elements such as Fe, Ni, Mg, Cr, Zn, V and others closely correlate with magnetic character reflecting the various underlying Takla volcanic units. Such close correspondence between magnetics and geochemistry suggests glacial transport is not very great, and metal associations of distinction probably reflect underlying bedrock. For example, the survey has identified a K-Ba-Ca feature to the west of the Cu anomaly which may be the soil expression of an intrusive unit. High Mn contents periferal to the Cu anomaly is a favourable finding, as they may reflect a primary Mn halo surrounding a Cu-Au occurrence. The striking levels of P reachin up to and exceeding 1% is very unusual, and merits an explanation. P can be associated with Cu - Au mineralization.*

*A structure which follows the baseline at the center of the sampling is apparently enriched in a large suite of elements including As, Cu, Pb, Zn, Mo, Fe, Co, Ni, Cr, V, and Sc. The As association is particularly interesting, in view of the fact that As commonly halos the alkalic type of Cu - Au occurrence, and often is associated with veins following structures periferal to a deposit. Other elements whose presence is favourable include Mo, Co, and V and Pb and Zn at the margins of th Cu - Au mineralized zone. These relationships are seen here, although they may be coincidental.*



*Work thus far has indicated that the soil survey has identified components of the alkalic Cu - Au model, but additional work is needed. More sampling is necessary, at a 50 x 100 m density to fully outline currently defined Cu anomalies. Preliminary prospecting/mapping follow-up can commence simultaneously with that work, but an extensive bedrock sampling effort should await a return of additional soil data, just in case better anomalies lie nearby. A terrain analysis is recommended to identify overburden type and thickness, and problem areas for soil surveys. Knowledge of direction of glaciation would also facilitate follow-up. Prospecting the source of a K-Ba-Ca anomaly looking for a potassic-rich intrusion or alteration and examining the P-rich zones for a geologic explanation are also warranted. Sufficient interest has been generated by the initial work to recommend continued follow-up on a priority basis."*

### **5.3 Silt Samples Survey**

A total of 18 silt samples were collected on the property within the surveyed area. A sample location map and a geochemical map (Figures 6 and 7) can be found in the back pocket of the present report and Appendix IV lists the silt samples description.

Four silt samples (518012, 518033, 518034 and 518035) were collected from the east flowing Camp Creek, which runs through the Camp Fault. All of these samples present slightly above background copper values (74 ppm to 106 ppm) and two samples show slightly elevated arsenic values (30 ppm and 35 ppm). Nickel was also detected in values ranging from 102 ppm to 108 ppm in three samples (518012, 518033 and 518034). A fifth sample was collected downstream on Camp Creek (518453) and only copper values were slightly elevated in this samples (97 ppm).

Six silt samples (518011, 518024, 518025, 518026, 518027 and 518028) were collected on Mine Creek, located approximately one kilometer south of the base camp. Only sample 518025 presents a slightly above background gold value (15 ppb). All of the samples show elevated copper values (65 ppm to 100 ppm).

Three silt samples were collected in the central portion of the grid (518029, 518030 and 518031). All of these samples present anomalous copper values (102 ppm to 189 ppm). Values for the other analyzed elements are within background level.

Four other silt samples were collected on the property along prospecting/mapping traverses. Their locations and geochemical results are shown on Figures 6 and 7. Only sample DLC-SS-6 presents an anomalous precious metal value (35 ppb gold). These four samples present elevated copper values (96 ppm to 194 ppm) and samples DLC-SS-2 and DLC-SS-5 have respectively high zinc values (120 ppm and 268 ppm).

## 6.0 PROSPECTING

Several prospecting/mapping traverses were accomplished from the camp during Phase IA:

- The east-west ridge, located just north of the camp, was examined. Rocks consisted mainly of fine-grained greenish volcanic tuffs and of relatively coarse-grained agglomerates. Several sulphide-rich (pyrite) boulders and small outcrops were discovered along this traverse, as well as some small quartz-carbonates veins and veinlets. Epidote alteration was common on the ridge. The strike and dip of a thinly bedded, fine-grained, green volcanic tuff outcrop (DLC-8 on map) are N264° and 57°E. This outcrop contained some patches of sulphide mineralization (pyrite).

- A bare domed hill, located southwest of the camp, is underlain mostly by coarse-grained volcanic agglomerates. The dominant joint set in a cliff overlooking the head of Camp Creek is N206° and dipping steeply (80°) to the East. Several small quartz-carbonate veinlets and some patchy sulphide-rich outcrops were discovered along the traverse. The eastern portion of the established grid covers part of this hill.

- Traverse west and then south of camp to the east part of the southern boundary of MM6. Thence south across Mine Creek Valley into MM5 Claim to check a strong snow-filled topographic linear feature (striking approximately N155°), and then east towards a peak overlooking Mine Creek. Thence northeast and north up slope back to the camp. The majority of the rocks observed during this traverse was volcanic agglomerate. Several locations were examined and a few samples were collected. Sulphide-rich clasts within a talus of coarse-grained agglomerate were found on a southwest facing slope on top of a gully leading into Mine Creek (DLC 11 on map). Three joint sets have been measured in this location: N185°/80°W, N108°/47°E, and 112°/50°N. Downslope from DLC 11, a fine-grained, sulphide-rich, volcanic clast (1m x 1.5m) was uncovered in the agglomerate (DLC 12). At DLC 13 location, highly altered and mineralized volcanic were observed, containing rounded quartz eyes and numerous white and green multiphases stringers. Sulphides consisted mainly of pyrite and chalcopyrite with possible galena. These altered zones extend also below DLC 13 towards the west and the north.

- Traverse to examine the prominent sheared zone area located on the south slope of the domed hill southwest of camp and overlooking Mine Creek. A number of shears have created a zone of randomly shattered volcanic rocks, about 20 meters wide and trending roughly (N322°) towards the topographic linear feature located on MM5. The strike and dip of the sheared altered volcanics is N30°/65°E. Numerous small quartz-

carbonate stringers were observed in the sheared zone, as well as a pervasive, strong epidote alteration. The rocks consist of augite-porphry, however coarse-grained agglomerate are flanking the shear zone.

During Phase IB, the prospecting program was limited to several traverses and the emphasis was mainly given to geological mapping. Therefore the results of these mapping/prospecting traverses are included on the property geological map (Figure 6) and in the property geology section of the present report.

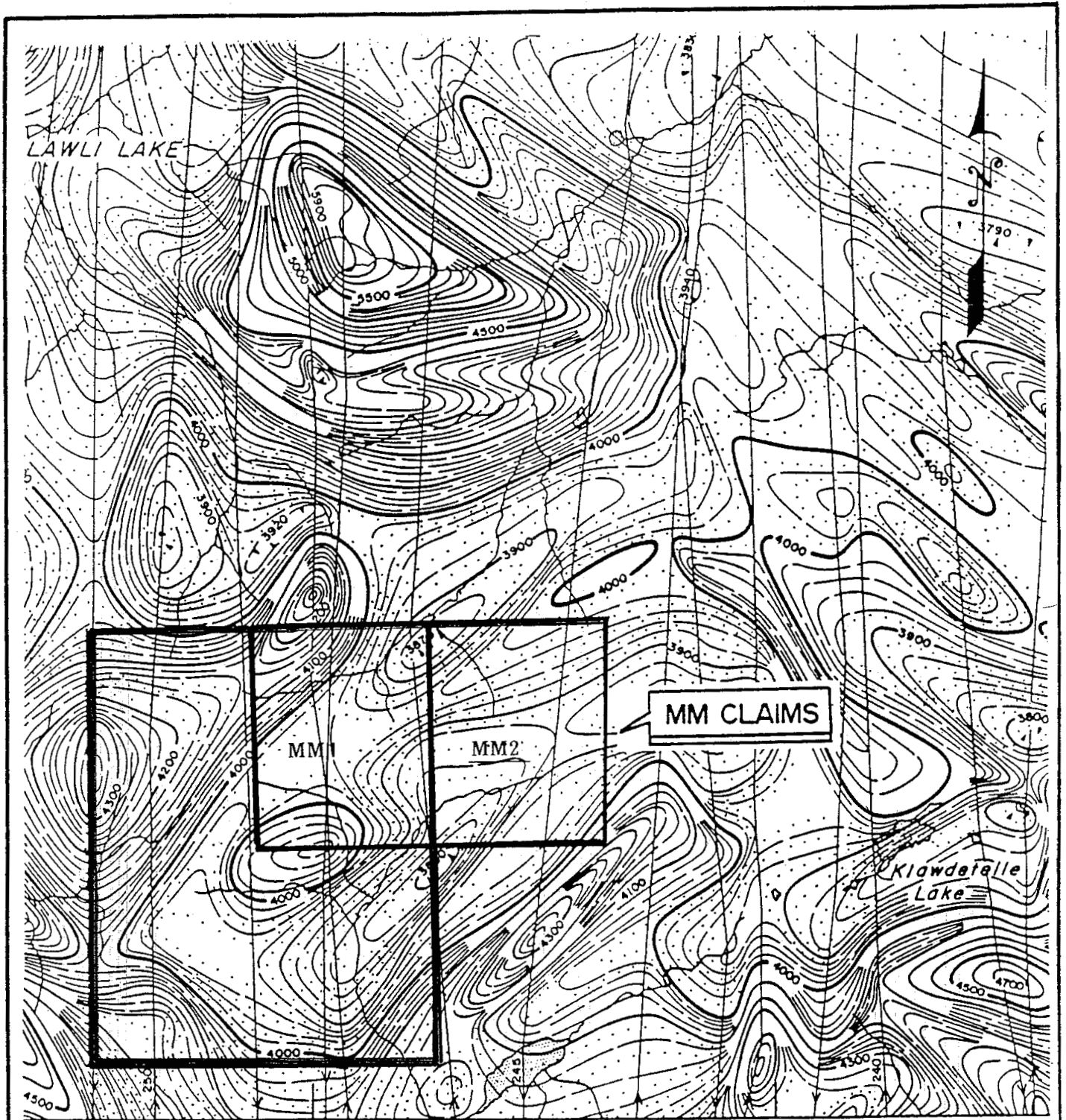
## 7.0 GEOPHYSICS

The government airborne magnetics map (Figure 8) shows that the MM property has magnetic values ranging from less than 3,800 gammas to over 4,240 gammas. The airborne map shows an oval shaped magnetic high of slightly over 4,080 gammas in the central portion of the MM property. Other similar northeast trending anomalies can be found on the northwestern and southeastern parts of the subject claims. These anomalies may suggest the presence of intrusive rocks within the property.




During Phase IB a ground magnetic survey, using a Scintrex Model MP-2 proton precession magnetometer rented in Vancouver, was carried out on the established grid (Figure 9). A total of 22.250 kilometers of grid lines were surveyed and data was collected at 25 meters intervals along lines 50 meters and 100 meters apart. A base station was installed in the grid area (10 meters south and 15 meters east of station G1-005) and readings were taken at the beginning and at the end of the day in order to correct the data for diurnal drift. In addition, to achieve finer corrections of the diurnal drift, several loops were carried out daily during the survey period.

The magnetic survey results show a relatively strong, east-west striking magnetic anomaly located in the central portion of the grid area. The magnetic high is flanked to the north and to the south by relatively broad magnetic lows. These features may reflect a change of lithology or alteration in the underlying rocks. This major magnetic high is coincident with a large copper anomaly. Two other magnetic highs, also coincident with copper anomalies, were recognized in the eastern and western grid area.

The close correlation existing between the ground magnetic and the geochemical results shows the importance of correlating the various surveys in order to delineate more accurately the mineral and economic potential of the MM property. The association between anomalous copper values in soils and magnetics highs have been noted in several deposits and occurrences in the Mount Milligan general area. Additional ground geophysical surveying, consisting mainly of magnetometer and VLF-EM surveys, is warranted and recommended.



**FIGURE 8**

-  APPROXIMATE LOCATION OF MM CLAIMS
-  500 gammas
-  100 gammas

**MM CLAIMS**

AEROMAGNETIC MAP

Klawli Lake, B.C.

Map No. 1595G

Scale 1 inch to 1 mile

## 8.0 CONCLUSIONS

The general property area has been explored intermittently since the 1930's and several copper-gold deposits and occurrences have been developed during the past two decades, especially in or near the Hogem batholith. Besides the Lorraine and Southern Star deposits, the 1987 discovery of the Mount Milligan world-class copper-gold porphyry deposit renewed exploration interests in the Nation Lakes area.

The geological examination carried out on the MM claims indicated that the property is mainly underlain by a volcanic series of the Early Mesozoic Takla Group, which is divided into the following four formations: the Rainbow Creek Formation, Inzana Lake Formation, Witch Lake Formation and Chuchi Lake Formation. The volcanics observed within the mapped area comprised tuffs, agglomerates, augite and feldspar porphyries. Sedimentary rocks, consisting of mudstone, sandstone, shale, slate and chert, were noted mainly in the northern portion of the surveyed area. In addition, a small body of porphyritic plagioclase monzonite was recognized in the northern portion of the mapped area. Discrete to extensive pyrite and sparse chalcopyrite mineralization were recognized primarily in the volcanics and more rarely in the sedimentary rocks. Pervasive epidote and chlorite alteration was noted in the surveyed area. This alteration pattern is relatively similar to the alteration haloes described for the various deposits within the Quesnel Trough. Several northeast-southwest and east-west striking faults were mapped during the 1991 work program. The most significant recognized fault, the "Camp Fault", roughly follows the base line of the grid and presents a large suite of anomalous elements including As, Cu, Pb, Zn, Mo, Fe, Mn, Ni, Co, Cr, V and Sc. This fault, which presents in its western end a zone of intense brecciation and quartz veining, may have an important economic factor; Mount Milligan deposit was discovered by following the extension along strike of a mineralized structure. Arsenic is commonly found in haloes around the alkalic type of Cu - Au occurrences and is often associated with veins following structures periferal to a deposit (Hoffman, 1991).

The geochemical sampling program, which comprised soil, silt and rock sampling, recorded very interesting copper-gold anomalies. A soil survey, totaling 718 samples, delineated four areas of copper accumulation within the grid survey area. One major anomalous copper zone, with values in the range of 150 ppm to 350 ppm, has been defined over an area as great as 400 meters x 1,000 meters and is not yet fully delineated. This copper anomaly, which copper levels in soils are approximately comparable with those at the Southern Star deposit of Mount Milligan, has a positive association with magnetic anomalies. Fifty-four rock samples were collected within the surveyed area and five samples present multi-elements anomalies for gold, silver, arsenic, copper and lead. In addition, several samples show one element above background values in gold, arsenic, copper, zinc and nickel. Eighteen silt samples were collected within the surveyed area. All of the samples present elevated to anomalous copper values. In addition, two of these samples (518025 and DLC-SS-6) show elevated gold values of respectively 15 ppb Au and 35 ppb Au.

The ground geophysical program, consisting of a proton magnetometer survey, noted the presence of a major east-west striking magnetic high anomaly. This anomaly, which is coincident with a copper anomaly in the soil sampling survey, is flanked to the north and the south by two relatively large magnetic lows. These features may reflect changes in lithology or in the alteration pattern of the underlying volcanic rocks. Two other magnetic highs, also associated with soil anomalies (mainly copper) were recognized in the western and eastern portion of the grid. The close relationship existing between the soil survey and the ground geophysics surveys shows that results of both surveys should be correlated in order to evaluate the mineral and economic potential of the MM property. Similar associations between anomalous copper values and magnetic highs have been noted in several alkalic copper-gold porphyry deposits in the Mount Milligan general area. Additional ground geophysical survey, consisting in ground magnetometer and VLF-EM surveys, is warranted and recommended.

Based on the results of the geochemical sampling, geophysical surveying and geological environment on the MM claims, the writer concludes that the subject property has the potential to host precious metal and base metal mineralization similar in nature to other alkalic Cu-Au deposits and occurrences found in the general area. Further exploration of the MM claims is therefore highly warranted and recommended by the writer.

## 9.0 RECOMMENDATIONS

In order to fully evaluate the mineral and economic potential of the MM property, a two-phase exploration program is recommended and should consist of:

### Phase I:

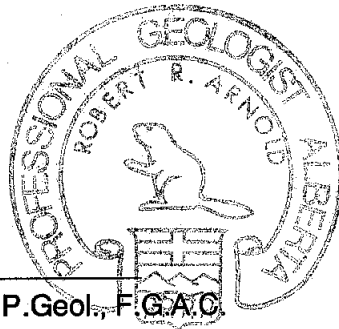
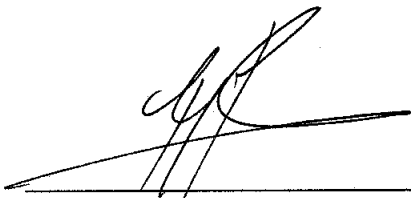
- a) the actual grid should be extended to the north, south, east and west, and additional soil sampling (approximately 500 samples) and ground geophysics (magnetometer and VLF-EM) should be conducted.
- b) the major copper-gold anomaly, located in the central portion of the grid, should be tested by trenching and/or pitting in order to sample the bedrock. A road, leading to the central claims area, should be built in order to bring in heavy equipment (excavator, cat...) to the delineated anomalies area (Camp Fault and Cu-Au soil anomaly).
- c) detailed mapping and sampling of the intersected bedrock in the pits and trenches.

An estimated cost for the Phase I exploration program would be in the order of \$ 100,000.00

**Phase II:**

Dependant upon positive results from the Phase I and upon a review of the data, a preliminary drilling program should be designed in order to define the geometry and grade characteristics of any identified mineralization. An estimated cost for the second phase would be in the order of \$ 200,000.00.

Respectfully submitted  
**Robert Arnold & Associates**



ROBERT R. ARNOLD, M.Sc., P.Geol., F.G.A.C.

October 25, 1991

## 10.0 REFERENCES

**Armstrong, J.E. (1946)**

Geology Map of Fort St. James, Map 907A.

**Arnold, R.R. (1991)**

Geological and Geochemical Assessment Report on the MM-1 and MM-2 Claims, Chuchi Lake Area, Omineca Mining Division, Central British Columbia; unpublished report for Dasserat Developments Corp.

**de Rosen-Spence, A.F., (1985)**

Shoshonites and Associated Rocks of Central British Columbia; B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Field 1984, Paper 1985-1, pages 426-442.

**Faulkner, E.L., et al. (1989)**

Exploration in British Columbia, Part B, pages 181-192; B.C. Ministry of Energy, Mines and Petroleum Resources.

**Gewargis, W.A. (1990)**

Mt. Milligan Area - Geological Compilation (Private Report.)

**Gewargis, W.A. (1991)**

Geological Report on the MM Property (Private Report)

**G.S.C. (1961), Geophysics Division**

Aeromagnetic Map 1595G Klawi Lake, British Columbia.

**G.S.C. (1967-69), Geophysics Division**

Aeromagnetic Map 7228G, Manson River, British Columbia.

**G.S.C. (1983)**

Open File 1001 - Map 66, Regional Geochemical Reconnaissance Survey, Central British Columbia.

**Hoffman, S. (1991)**

Report on the 1991 Soil Geochemical Survey on the MM Claims, Chuchi Lake Area, Omineca Mining Division, Central British Columbia; unpublished report for Dasserat Developments Corp.

**Lang, A.H., et al., (1940, 1941)**

Geology of Manson Creek, Map Sheet 876A.

**Monger, J.W.H., et al. (1990)**

Cordilleran Terranes; *in* The Cordilleran Orogen: Canada, Chapter 8, Upper Devonian to Middle Jurassic Assemblages; Geological Survey of Canada, Geology of Canada, Number 4.

**Nelson, J., et al., (1990)**

Geological Field Work, Paper 1991-1: Regional Geological Mapping near the Mt. Milligan Copper-Gold Deposit; British Columbia Ministry of Energy, Mines and Petroleum Resources.



**Rebagliati, C.M., et al., (1984)**

Assessment Report #13325 on Geological & Geochemical Exploration Activities on the Phil 13 Claim Group.

**Rebagliati, C.M., et al., (1985)**

Geological, Geochemical & Trenching Program on the Phil 13 Claim Group, Assessment Report 14381 for the British Columbia Ministry of Energy, Mines and Petroleum Resources.

**Streckeisen, A.L., (1967)**

Classification and Nomenclature of Igneous Rocks; Neues Jahrbuch Fur Mineralogical Abhandlungen, Volume 107, pages 144-240.

**Struik, L.C., (1989)**

Regional Geology of the MacLeod Lake Map Area; Geological Survey of Canada, Report of Activities, Paper 1989-1E, pages 109-114.

**Struik, L.C., (1990)**

Wolverine Core Complex, Transforms and Metals, McLeod Lake Map Area, Central British Columbia; Geological Association of Canada, Mineralogical Association of Canada, Program with Abstracts, Volume 15, page A126, Vancouver.

**Tipper, H.W., et al., (1974)**

Geology of Parsnip River, Map Sheet

**APPENDIX I**

**STATEMENT OF QUALIFICATIONS**

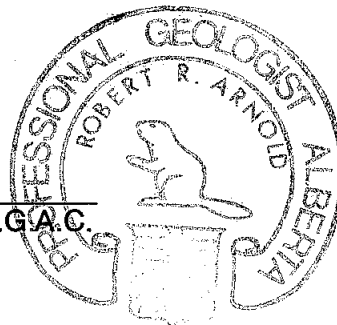
## STATEMENT OF QUALIFICATIONS

I, ROBERT R. ARNOLD, of 1227 Caledonia Avenue, in the District of North Vancouver, in the Province of British Columbia, hereby certify:

1. THAT I am a geologist residing at 1227 Caledonia Avenue, in the District of North Vancouver, in the Province of British Columbia.
2. THAT I obtained a Bachelor of Science degree in Geology from the University of Geneva, in the City of Geneva, Switzerland, in 1976, and a Master of Science degree in Geological Engineering, from the same university in 1978.
3. THAT I am a Registered Professional Geologist, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1981.
4. THAT I am a Fellow Member of the Geological Association of Canada, in good standing since 1985. That I am an associate member of the Mineralogical Association of Canada and of the Society of Economic Geologists.
5. THAT I have been practising my profession as a geologist in Western Europe, West Africa, Southeast Asia and North America, both permanently since 1978 and seasonally since 1971.
6. That this report is based upon a review of published and private reports and maps pertaining to the subject property and the surrounding area and that I have personally visited the property during the 1991 exploration program.
7. THAT I have not received, nor do I expect to receive any interests, direct or indirect, or contingent in the securities or properties of Dasserat Developments Corporation, and that I am not an insider of any company having interest in the Mineral Claims which are the subject of this report, or any other claims located within a radius of 10 kilometers.

SIGNED: \_\_\_\_\_

ROBERT R. ARNOLD, M.Sc., P.Geol., F.G.A.C.



October 25, 1991

**APPENDIX II**

**DESCRIPTION OF ROCK SAMPLES**

**Sample  
Number**

**Description**

- 518001 Float of medium-grained volcanics of andesitic composition; quartz stringers and pervasive fine-grained pyrite; manganese and hematite staining.
- 518002 Float of medium-grained volcanics of andesitic composition; quartz stringers and pervasive fine-grained pyrite; manganese and hematite staining. Outcrop of same composition with less sulphides located 10 meters southwest of sample.
- 518003 Float taken 500 meters west of camp: quartz-carbonate vein within fine volcanics of andesitic composition.
- 518004 Composite sample collected 1 kilometer west of camp: quartz-carbonate vein material, no visible sulphides.
- 518005 Grab sample from shear zone located on top of ridge
- 518006 Composite sample of shear zone collected on the southend of the shear zone, taken from the hanging wall.
- 518007 Float sample of sulphide-rich clasts collected in talus of volcanic agglomerate.
- 518008 Grab sample of a 1mx1.5m clast of sulphide-rich (fine pyrite) in a fine grained volcanics collected within an in-situ agglomerate.
- 518009 Composite sample of highly mineralized rock with rounded quartz eyes and numerous white and green multiphases stringers (pyrite, chalcopyrite, and possible galena). Sample collected from 60 meter length.
- 518010 Composite sample, highly altered and mineralized, same description as sample 518009.
- 518013 Grab sample of shear zone within an augite porphyry agglomerate.
- 518014 Grab sample of a 5 meter wide zone of brecciated volcanics within an agglomerate. Sample collected 50 meters west of claim post 2N (MM<sup>2</sup>) near the camp. Slightly magnetic and silicified with traces of pyrite.
- 518015 Grab sample from a limonitic outcrop located 20 meters south of station 001 with traces of pyrite and stringers of quartz veinlets.
- 518016 Grab sample of volcanic agglomerate with calcite veining. Sample collected along the contact between fine volcanics and agglomerate. Sample is located about 10 meters south of station 006.
- 518017 Float sample taken from an hematitic gossanous boulder located 5 meters west of station 006.
- 518018 Grab sample from a brecciated zone along the contact between volcanic agglomerate and fine grained volcanics. Sample located at station 009.

- 518019 Grab sample taken from altered gossan. Limonitic staining, slightly magnetic with traces of pyrite in a volcanic agglomerate located on the west side of the south plateau.
- 518020 Grab sample of same material and at same location as sample 518019.
- 518021 Grab sample of 0.2 meter thick oxidized zone on main shear zone to the south, with traces of pyrite in a 5 meter long outcrop.
- 518022 Grab sample taken from a hematitic, altered volcanic agglomerate, located 15 meters down slope from sample 518021.
- 518023 Grab sample from mineralized, hematitic gossaneous material with fine pyrite, chalcopyrite and magnetite. Sample located at DLC#12 location.
- 518032 Grab sample from the north shear zone, gossan showing located 35 meters south of sample 518006.
- 518101 Grab sample of pyritic clast within volcanic agglomerate
- 518102 Grab sample of volcanic brecciated agglomerate with quartz stringers and pyritic clasts. Sample collected 1 meter east of sample 518101.
- 518103 Float sample of intensely altered volcanics with quartz stringers and pyrite mineralization in ferruginous soil.
- 518104 Grab sample of pyritic tuff with manganese stains, collected in a sub-outcrop.
- 518105 Grab sample of pyritic tuff
- 518106 Composite sample of float of various altered volcanic rocks
- 518107 Grab sample of very altered vuggy agglomerate with chlorite, epidote and pyrite alteration.
- 518108 Grab sample of volcanic agglomerate containing pyrite clasts. Presence of chalcopyrite in sample.
- 518109 Grab sample of brecciated pyritic tuff.
- 518110 Grab sample of volcanic tuff with small pervasive pyrite crystals.
- 518111 Grab sample of pyritic monzonite
- 518112 Grab sample of chert breccia cemented with calcite and quartz
- 518113 Grab sample of pyritic tuff
- 518114 Grab sample of pyritic tuff
- 518115 Composite sample of gossans over an area of 100 meters: extensively altered tuff with pervasive carbonate veins and pyrite crystals. Evidence of faulting and folding. Highly chloritized.

- 518116 Grab sample of pyritic tuff with massive copper bloom; same location as BCMEMDR-91-CR-7-6-2
- 518117 Grab sample of altered carbonate within a sheared and epidotized tuff
- 518118 Grab sample of pyritized monzonitic (?) dyke within volcanic tuff striking N60° and dipping 50°NW
- 518119 Grab sample of sub-outcrop of sheared coarse-grained lithic tuff with extensive pyrite alteration.
- 518120 Grab sample of sheared coarse-grained lithic tuff with extensive pyrite alteration.
- 518121 Composite sample of large area of volcanic tuff showing extensive pyrite alteration.
- 518122 Float sample of coarse-grained lithic tuff with extensive chlorite and pyrite alteration.
- 518123 Grab sample of sub-outcrop of relatively highly altered pyritic tuff.
- 518124 Grab sample of sub-outcrop of relatively highly altered pyritic tuff.
- 518125 Grab sample of gossanous agglomerate with numerous pervasive quartz veins, some of these showing massive chalcopyrite.
- 518126 Float sample of volcanic tuff with numerous pervasive quartz veins, some of these being crystallized.
- 518127 Grab sample of pyritic volcanic agglomerate in small fault.
- 518128 Grab sample of pyrite-augite-porphyry
- 518129 Grab sample of pyritic tuff interfingering with volcanic agglomerate.
- 518451 Grab sample of fine grained tuff
- 518452 Grab sample of coarse-grained, pyritized lithic tuff; same location as BCMEMPR/91-CR-3-3
- 518454 Grab sample of highly pyritized volcanic agglomerate

**APPENDIX III**

**DESCRIPTION OF SOIL SAMPLES**



## CODE FORMAT FOR RECORDING SOIL SAMPLES DATA

### 1. Depth

Depth in centimeters to the bottom of the hole

### 2. Colour

Colour Abbreviations' Prefix:

D = Dark  
M = Medium  
L = Light

Colour Abbreviations:

RE : Red  
YE : Yellow  
BR : Brown  
GY : Grey  
RB : Red-brown  
YB : Yellow-brown  
GB : Grey-brown

### 3. % Coarse Fragments

Percentile (i.e. 10%) of rock fragments

### 4. Shape of Coarse Fragments

A : Angular  
R : Rounded  
S : Subangular - Subrounded  
M : Mixture of Above Types

### 5. Sample Texture

SSC: Sand - Silt - Clay

### 6. Soil Horizon

BF : Iron-rich B Horizon  
BH : Organic B Horizon  
AH : Organic A Horizon

**7. Site Topography**

GS : Gentle Slope  
SS : Steep Slope  
HT : Hill Top  
L : Level

**8. Approximate Slope Direction**

N : North  
S : South  
W : West  
E : East  
SW : Southwest  
SE : Southeast  
NW : Northwest  
NE : Northeast

**9. Soil Development**

PSD: Poor Soil Development  
MSD: Medium Soil Development  
GSD: Good Soil Development

Sample Number	Location		Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 001	BL	0	20 cm	MBR	20%	A	5	BF	SS	SW	PSD
GI 002	BL	25 W	5 cm	DBR	60%	A	5	AH	SS	SW	PSD
GI 003	BL	50 W	10 cm	MBR	50%	A	5	BF	SS	SW	PSD
GI 004	BL	75 W	25 cm	MRB	50%	A	5	BF	SS	SW	GS
GI 005	BL	100 W	20 cm	MRB	70%	A	5	BF	SS	SW	PSD
GI 006	BL	125 W	10 cm	LBR	80%	A	5	BF	SS	SW	PSD
GI 007	BL	150 W	30 cm	DBR	50%	A	5	BH	L	--	MS
GI 008	BL	175 W	35 cm	MBR	50%	A	5	BH	SS	SW	MS
GI 009	BL	200 W	20 cm	BRB	20%	A	5	BF	SS	SW	GS
GI 010	BL	225 W	15 cm	MRB	20%	A	5	BF	SS	W	GS
GI 011	BL	250 W	15 cm	MYB	30%	A	5	BF	L	--	GS
GI 012	BL	275 W	20 cm	DBR	20%	A	5	BH	SS	SW	GS
GI 013	BL	300 W	25 cm	MBR	50%	A	5	BF	SS	SW	MS
GI 014	BL	325 W	20 cm	DBR	30%	M	5	BH	SS	SW	GS
GI 015	BL	350 W	25 cm	MYB	10%	M	5	BF	SS	SW	GS
GI 016	BL	375 W	10 cm	MYB	50%	A	5	BF	SS	SW	PSD
GI 017	BL	400 W	25 cm	DBR	10%	M	5	BH	SS	SW	MS
GI 018	BL	425 W	20 cm	MBR	20%	M	5	BF	SS	SW	GS
GI 019	BL	450 W	20 cm	MYB	30%	M	5	BF	SS	SW	GS
GI 020	BL	475 W	10 cm	DBR	10%	M	5	BH	SS	SW	PSD
GI 021	BL	500 W	20 cm	MBR	40%	M	5	BF	SS	SW	MS
GI 022	BL	525 W	20 cm	DBR	75%	A	5	BH	SS	SW	MS
GI 023	BL	550 W	25 cm	MYB	60%	A	5	BF	SS	SW	MS
GI 024	BL	575 W	15 cm	DBR	30%	M	5	BH	SS	SW	MS
GI 025	BL	600 W	20 cm	MYB	75%	A	5	BF	SS	SW	PSD
GI 026	BL	625 W	20 cm	DBR	70%	A	5	BH	SS	SW	PSD
GI 027	BL	650 W	15 cm	DBR	50%	A	5	BH	SS	SW	PSD
GI 028	BL	675 W	10 cm	DBR	50%	A	5	BH	SS	SW	PSD
GI 029	BL	700 W	20 cm	DBR	50%	A	5	BH	L	SW	MS
GI 030	BL	725 W	5 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 031	BL	750 W	15 cm	DBR	15%	M	5	BH	SS	SW	GS
GI 032	BL	775 W	15 cm	MRB	50%	A	5	BH	SS	SW	PSD
GI 033	BL	800 W	20 cm	DBR	50%	A	5	BH	SS	SW	MS
GI 034	800 W	25 N	25 cm	MYB	30%	M	5	BF	SS	SW	GS
GI 035	800 W	50 N	20 cm	MYB	30%	M	5	BF	SS	SW	GS
GI 036	800 W	75 N	25 cm	DBR	30%	M	5	BF	SS	SW	GS

Sample Number	Location		Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 037	800 W	100 N	25 cm	DBR	20%	M	5	BH	SS	SW	PSD
GI 038	800 W	25 S	20 cm	DBR	20%	M	5	BH	SS	SW	MS
GI 039	800 W	50 S	20 cm	DBR	20%	M	5	AH	SS	SW	PSD
GI 040	800 W	75 S	25 cm	DBR	50%	A	5	BH	SS	SW	PSD
GI 041	750 W	25 N	30 cm	DBR	70%	A	5	BH	SS	SW	PSD
GI 042	750 W	50 N	20 cm	MYB	30%	M	5	BF	SS	SW	MS
GI 043	750 W	75 N	15 cm	DBR	50%	A	5	BH	SS	SW	PSD
GI 044	750 W	100 N	20 cm	MBR	5%	M	5	BH	SS	SW	GS
GI 045	750 W	125 N	30 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 046	750 W	25 S	10 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 047	750 W	50 S	10 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 048	750 W	75 S	10 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 049	700 W	25 N	5 cm	DBR	50%	A	5	AH	SS	SW	PSD
GI 050	700 W	50 N	30 cm	MYB	10%	M	5	BF	SS	SW	GS
GI 051	700 W	75 N	15 cm	DBR	25%	M	5	BH	SS	SW	MS
GI 052	700 W	100 N	25 cm	MYB	25%	M	5	BF	SS	SW	GS
GI 053	700 W	125 N	20 cm	MYB	5%	M	5	BF	SS	SW	GS
GI 054	700 W	150 N	25 cm	MYB	20%	M	5	BF	SS	SW	GS
GI 055	700 W	175 N	20 cm	MBR	15%	M	5	BF	L	--	GS
GI 056	700 W	25 S	20 cm	DBR	60%	A	5	AH	SS	SW	PSD
GI 057	700 W	50 S	20 cm	DBR	40%	M	5	AH	SS	SW	PSD
GI 058	700 W	75 S	25 cm	DBR	50%	A	5	AH	SS	SW	PSD
GI 059	650 W	25 N	30 cm	DBR	50%	A	5	BH	SS	SW	PSD
GI 060	650 W	50 N	30 cm	DBR	30%	M	5	BF	SS	SW	MS
GI 061	650 W	75 N	20 cm	MYB	20%	M	5	BF	SS	SW	GS
GI 062	650 W	100 N	35 cm	MYB	10%	M	5	BF	SS	SW	GS
GI 063	650 W	125 N	30 cm	DBR	5%	M	5	BF	SS	SW	MS
GI 064	650 W	150 N	25 cm	MRB	15%	M	5	BF	SS	SW	GS
GI 065	650 W	175 N	30 cm	MRB	5%	M	5	BF	GS	SW	GS
GI 066	650 W	200 N	20 cm	DBR	5%	M	5	BH	GS	SW	MS
GI 067	650 W	225 N	20 cm	DBR	5%	M	5	BH	L	--	PSD
GI 068	650 W	25 S	20 cm	DBR	20%	M	5	AH	SS	SW	PSD
GI 069	650 W	50 S	25 cm	DBR	5%	M	5	BH	SS	SW	PSD
GI 070	650 W	75 S	20 cm	DBR	25%	M	5	AH	SS	SW	PSD
GI 071	600 W	25 N	15 cm	DBR	25%	M	5	BH	SS	SW	MS
GI 072	600 W	50 N	10 cm	DBR	5%	M	5	AH	SS	SW	PSD

Sample Number	Location		Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 073	600 W	75 N	20 cm	DBR	15%	M	5	BH	SS	SW	MS
GI 074	600 W	100 N	20 cm	DBR	20%	M	5	BH	SS	SW	MS
GI 075	600 W	125 N	15 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 076	600 W	150 N	15 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 077	600 W	175 N	25 cm	MRB	25%	M	5	BF	SS	SW	MS
GI 078	600 W	200 N	30 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 079	600 W	225 N	10 cm	DBR	10%	M	5	AH	L	--	PSD
GI 080	600 W	25 S	30 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 081	600 W	50 S	15 cm	DBR	75%	A	5	BH	SS	SW	MS
GI 082	600 W	75 S	15 cm	MRB	25%	M	5	BF	SS	SW	MS
GI 083	550 W	25 N	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 084	550 W	50 N	20 cm	DBR	20%	M	5	BH	SS	SW	MS
GI 085	550 W	75 N	15 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 086	550 W	100 N	10 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 087	550 W	125 N	30 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 088	550 W	150 N	30 cm	MRB	15%	M	5	BF	SS	SW	GS
GI 089	550 W	175 N	30 cm	MRB	15%	M	5	BF	SS	SW	GS
GI 090	550 W	200 N	35 cm	MRB	40%	M	5	BF	SS	SW	GS
GI 091	550 W	225 N	25 cm	MRB	30%	M	5	BF	GS	SW	GS
GI 092	550 W	250 N	20 cm	DBR	20%	M	5	BH	L	--	PSD
GI 093	550 W	25 S	10 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 094	550 W	50 S	10 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 095	550 W	75 S	5 cm	DBR	35%	M	5	AH	SS	SW	PSD
GI 096	500 W	25 N	20 cm	DBR	0%	-	5	BH	SS	SW	MS
GI 097	500 W	50 N	25 cm	MRB	40%	M	5	BH	SS	SW	MS
GI 098	500 W	75 N	20 cm	MRB	50%	A	5	BF	SS	SW	MS
GI 099	500 W	100 N	15 cm	DBR	20%	M	5	BH	SS	SW	MS
GI 100	500 W	125 N	20 cm	MRB	50%	A	5	BF	SS	SW	GS
GI 101	500 W	150 N	20 cm	MRB	50%	A	5	BF	SS	SW	GS
GI 102	500 W	175 N	20 cm	DBR	15%	M	5	BH	SS	SW	GS
GI 103	500 W	200 N	30 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 104	500 W	225 N	15 cm	MYB	50%	A	5	BH	L	--	PSD
GI 105	500 W	25 S	10 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 106	500 W	50 S	15 cm	DBR	20%	M	5	BH	SS	SW	MS
GI 107	500 W	75 S	25 cm	DBR	10%	M	5	BH	SS	SW	MS
GI 108	450 W	25 N	10 cm	MRB	5%	M	5	AH	SS	SW	MS

Sample Number	Location		Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 109	450 W	50 N	20 cm	MRB	40%	M	5	BF	SS	SW	GS
GI 110	450 W	75 N	5 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 111	450 W	100 N	25 cm	MRB	35%	M	5	BF	SS	SW	GS
GI 112	450 W	125 N	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 113	450 W	150 N	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 114	450 W	175 N	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 115	450 W	200 N	15 cm	DBR	40%	M	5	AH	GS	SW	PSD
GI 116	450 W	225 N	10 cm	DBR	5%	M	5	AH	L	--	PSD
GI 117	450 W	250 N	10 cm	DBR	5%	M	5	AH	L	--	PSD
GI 118	450 W	275 N	10 cm	DBR	5%	M	5	AH	L	--	PSD
GI 119	450 W	25 S	25 cm	DBR	25%	M	5	BH	SS	SW	MS
GI 120	450 W	50 S	20 cm	MRB	30%	M	5	BH	SS	SW	MS
GI 121	450 W	75 S	25 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 122	450 W	100 S	15 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 123	450 W	125 S	15 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 124	450 W	150 S	15 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 125	450 W	175 S	25 cm	DBR	20%	M	5	BH	SS	SW	MS
GI 126	400 W	25 N	20 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 127	400 W	50 N	15 cm	DBR	10%	M	5	BH	SS	SW	MS
GI 128	400 W	75 N	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 129	400 W	100 N	15 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 130	400 W	125 N	15 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 131	400 W	150 N	20 cm	DBR	25%	M	5	BH	SS	SW	MS
GI 132	400 W	175 N	20 cm	DBR	25%	M	5	BH	SS	SW	MS
GI 133	400 W	200 N	10 cm	DBR	0%	-	5	AH	L	--	PSD
GI 134	400 W	225 N	15 cm	MYB	10%	M	5	BH	L	--	MS
GI 135	400 W	25 S	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 136	400 W	50 S	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 137	400 W	75 S	20 cm	DBR	35%	M	5	BH	SS	SW	MS
GI 138	400 W	100 S	15 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 139	400 W	125 S	10 cm	DBR	20%	M	5	AH	SS	SW	PSD
GI 140	350 W	25 N	25 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 141	350 W	50 N	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 142	350 W	75 N	5 cm	DBR	25%	M	5	AH	SS	SW	PSD
GI 143	350 W	100 N	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 144	350 W	125 N	25 cm	MRB	20%	M	5	BF	SS	SW	GS

Sample Number	Location		Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 145	350 W	150 N	20 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 146	350 W	175 N	20 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 147	350 W	200 N	25 cm	DRB	20%	M	5	BF	SS	SW	GS
GI 148	350 W	225 N	20 cm	MRB	40%	M	5	BF	SS	W	GS
GI 149	350 W	250 N	20 cm	DBR	5%	M	5	BH	SS	W	MS
GI 150	350 W	275 N	20 cm	DBR	5%	M	5	BH	SS	W	MS
GI 151	350 W	25 S	25 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 152	350 W	50 S	10 cm	DBR	50%	A	5	BH	SS	SW	MS
GI 153	350 W	75 S	20 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 154	350 W	100 S	20 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 155	350 W	125 S	20 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 156	350 W	150 S	20 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 157	300 W	25 N	25 cm	MRB	25%	M	5	BF	SS	SW	MS
GI 158	300 W	50 N	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 159	300 W	75 N	10 cm	MRB	20%	M	5	BH	SS	SW	MS
GI 160	300 W	100 N	10 cm	MRB	20%	M	5	BH	SS	SW	MS
GI 161	300 W	125 N	10 cm	MRB	20%	M	5	BH	SS	SW	MS
GI 162	300 W	150 N	30 cm	MRB	40%	M	5	BF	SS	SW	MS
GI 163	300 W	175 N	20 cm	MRB	50%	A	5	BF	SS	SW	MS
GI 164	300 W	200 N	5 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 165	300 W	225 N	5 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 166	300 W	250 N	20 cm	MRB	25%	M	5	BF	SS	SW	MS
GI 167	300 W	25 S	10 cm	DBR	20%	M	5	AH	SS	SW	PSD
GI 168	300 W	50 S	10 cm	DBR	20%	M	5	AH	SS	SW	PSD
GI 169	300 W	75 S	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 170	300 W	100 S	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 171	300 W	125 S	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 172	300 W	150 S	25 cm	MBR	20%	M	5	BH	SS	SW	MS
GI 173	300 W	175 S	10 cm	DBR	0%	-	5	AG	SS	SW	PSD
GI 174	250 W	25 N	10 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 175	250 W	25 S	30 cm	MRB	25%	M	5	BF	SS	SW	GS
GI 176	250 W	50 S	35 cm	DBR	30%	M	5	BF	SS	SW	GS
GI 177	250 W	75 S	35 cm	DBR	30%	M	5	BF	SS	SW	GS
GI 178	250 W	100 S	5 cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 179	250 W	125 S	25 cm	DBR	20%	M	5	AH	SS	SW	PSD
GI 180	250 W	150 S	20 cm	DBR	30%	M	5	BF	SS	SW	MS

Sample Number	Location		Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 181	200 W	25 N	20 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 182	200 W	50 N	20 cm	MYB	25%	M	5	BF	SS	SW	GS
GI 183	200 W	75 N	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 184	200 W	25 S	15 cm	MRB	20%	M	5	BF	SS	SW	MS
GI 185	200 W	50 S	15 cm	MRB	20%	M	5	BF	SS	SW	MS
GI 186	200 W	75 S	20 cm	DRB	20%	M	5	BH	SS	SW	MS
GI 187	200 W	100 S	20 cm	DRB	20%	M	5	BH	SS	SW	MS
GI 188	150 W	25 N	20 cm	MYB	60%	A	5	BF	SS	SW	MS
GI 189	150 W	25 S	35 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 190	150 W	50 S	20 cm	MBR	10%	M	5	BF	L	--	GS
GI 191	150 W	75 S	25 cm	MRB	30%	M	5	BF	SS	W	GS
GI 192	150 W	100 S	30 cm	MRB	35%	M	5	BF	SS	W	GS
GI 193	150 W	125 S	30 cm	MRB	35%	M	5	BF	SS	W	GS
GI 194	150 W	150 S	20 cm	MRB	20%	M	5	BF	SS	W	GS
GI 195	100 W	17 N	20 cm	DBR	50%	A	5	BH	SS	N	MS
GI 196	100 W	25 S	15 cm	DBR	20%	M	5	AH	L	--	MS
GI 197	100 W	50 S	25 cm	DBR	30%	M	5	BH	GS	W	MS
GI 198	100 W	75 S	25 cm	DBR	30%	M	5	BH	GS	W	MS
GI 199	100 W	100 S	30 cm	MRB	20%	M	5	BF	GS	W	GS
GI 200	100 W	125 S	30 cm	MBR	10%	M	5	BF	GS	W	GS
GI 201	100 W	150 S	10 cm	DBR	5%	M	5	BH	GS	W	MS
GI 202	100 W	175 S	30 cm	DBR	5%	M	5	BH	SS	W	MS
GI 203	100 W	200 S	30 cm	DBR	5%	M	5	BH	SS	W	MS
GI 204	100 W	225 S	30 cm	DBR	10%	M	5	BH	SS	W	GS
GI 205	100 W	250 S	30 cm	DBR	10%	M	5	BH	SS	W	GS
GI 206	100 W	275 S	30 cm	DBR	10%	M	5	BH	SS	W	GS
GI 207	100 W	300 S	20 cm	MRB	25%	M	5	BF	SS	W	GS
GI 208	100 W	325 S	30 cm	DBR	10%	M	5	BH	SS	W	GS
GI 209	100 W	350 S	30 cm	DBR	5%	M	5	BH	SS	W	MS
GI 210	100 W	375 S	5 cm	DBR	0%	-	5	AH	SS	W	PSD
GI 211	NBL	0	25 cm	MRB	20%	M	5	BF	L	--	GS
GI 212	NBL	25 S	20 cm	DBR	0%	-	5	BH	GS	W	GS
GI 213	NBL	50 S	25 cm	MRB	20%	M	5	BF	L	--	GS
GI 214	NBL	75 S	25 cm	MBR	5%	M	5	BF	GS	SW	GS
GI 215	NBL	100 S	25 cm	MBR	5%	M	5	BF	GS	SW	GS
GI 216	NBL	125 S	30 cm	MRB	10%	M	5	BF	GS	SW	GS



Sample Number	Location			Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.	
GI 217	NBL	150	S	30	cm	MYB	20%	M	5	BF	GS	SW	GS
GI 218	NBL	175	S	30	cm	MYB	20%	M	5	BF	GS	SW	GS
GI 219	NBL	200	S	30	cm	MYB	20%	M	5	BF	GS	SW	GS
GI 220	NBL	225	S	30	cm	MYB	20%	M	5	BF	GS	SW	GS
GI 221	NBL	250	S	25	cm	MYB	35%	M	5	BF	GS	SW	GS
GI 222	NBL	275	S	30	cm	MRB	20%	M	5	BF	GS	W	GS
GI 223	NBL	300	S	15	cm	MRB	10%	M	5	BF	GS	W	GS
GI 224	NBL	325	S	30	cm	MRB	5%	M	5	BF	GS	SW	GS
GI 225	NBL	350	S	15	cm	DBR	0%	-	5	BH	GS	SW	MS
GI 226	NBL	375	S	25	cm	MBR	10%	M	5	BF	GS	SW	GS
GI 227	NBL	400	S	20	cm	DRB	25%	M	5	BF	GS	SW	GS
GI 228	NBL	425	S	25	cm	MYB	10%	M	5	BF	GS	SW	GS
GI 229	400 S	25	W	20	cm	MRB	0%	-	5	BH	GS	W	MS
GI 230	400 S	50	W	30	cm	DBR	20%	M	5	BF	SS	W	GS
GI 231	400 S	75	W	30	cm	MYB	20%	M	5	BF	SS	W	GS
GI 232	400 S	100	W	25	cm	MBR	30%	M	5	BF	SS	W	GS
GI 233	400 S	125	W	30	cm	MRB	20%	M	5	BF	SS	W	GS
GI 234	400 S	150	W	30	cm	MRB	20%	M	5	BF	SS	W	GS
GI 235	400 S	175	W	20	cm	MYB	10%	M	5	BF	SS	W	GS
GI 236	400 S	200	W	20	cm	MYB	10%	M	5	BF	SS	W	GS
GI 237	350 S	25	E	25	cm	MBR	20%	M	5	BF	GS	SW	GS
GI 238	350 S	25	W	20	cm	MYB	10%	M	5	BF	GS	W	GS
GI 239	350 S	50	W	25	cm	MYB	25%	M	5	BF	SS	W	GS
GI 240	350 S	75	W	30	cm	MYB	10%	M	5	BF	SS	W	GS
GI 241	350 S	100	W	20	cm	DBR	10%	M	5	BH	SS	W	GS
GI 242	350 S	125	W	25	cm	MBR	15%	M	5	BH	SS	W	GS
GI 243	350 S	150	W	20	cm	DBR	10%	M	5	BH	SS	W	GS
GI 244	350 S	175	W	20	cm	DBR	10%	M	5	BH	SS	W	GS
GI 245	350 S	200	W	30	cm	DBR	40%	M	5	BH	SS	W	MS
GI 246	350 S	225	W	20	cm	DBR	5%	M	5	AH	SS	W	PSD
GI 247	300 S	25	E	20	cm	MYB	10%	M	5	BF	L	--	GS
GI 248	300 S	50	E	25	cm	MBR	30%	M	5	BH	GS	E	MS
GI 249	300 S	25	W	20	cm	MYB	15%	M	5	BF	SS	W	GS
GI 250	300 S	50	W	20	cm	MYB	15%	M	5	BF	SS	W	GS
GI 251	300 S	75	W	20	cm	MYB	15%	M	5	BF	SS	W	GS
GI 252	300 S	100	W	20	cm	MYB	15%	M	5	BF	SS	W	GS

Sample Number	Location		Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 253	300 S	125 W	40 cm	MYB	35%	M	5	BF	SS	W	GS	
GI 254	300 S	150 W	30 cm	DBR	25%	M	5	BF	SS	W	GS	
GI 255	300 S	175 W	30 cm	DBR	25%	M	5	BF	SS	W	GS	
GI 256	300 S	200 W	20 cm	DBR	30%	M	5	BH	SS	W	MS	
GI 257	300 S	225 W	20 cm	DBR	30%	M	5	BH	SS	W	MS	
GI 258	250 S	25 E	25 cm	MYB	30%	M	5	BH	GS	SW	GS	
GI 259	250 S	50 E	20 cm	MBR	35%	M	5	BH	GS	SW	MS	
GI 260	250 S	25 W	25 cm	MBR	35%	M	5	BF	GS	W	GS	
GI 261	250 S	50 W	35 cm	MBR	25%	M	5	BH	GS	W	GS	
GI 262	250 S	75 W	20 cm	MYB	10%	M	5	BF	SS	W	GS	
GI 263	250 S	100 W	30 cm	MBR	20%	M	5	BF	SS	W	GS	
GI 264	250 S	125 W	35 cm	MYB	35%	M	5	BF	SS	W	GS	
GI 265	250 S	150 W	30 cm	MRB	30%	M	5	BF	SS	W	GS	
GI 266	250 S	175 W	30 cm	MRB	30%	M	5	BF	SS	W	GS	
GI 267	250 S	200 W	25 cm	MGB	20%	M	5	BF	SS	W	GS	
GI 268	250 S	225 W	25 cm	MGB	20%	M	5	BF	SS	W	GS	
GI 269	200 S	25 E	30 cm	MRB	25%	M	5	BF	GS	SW	GS	
GI 270	200 S	50 E	30 cm	MRB	25%	M	5	BF	GS	SW	GS	
GI 271	200 S	25 W	25 cm	MYB	35%	M	5	BF	GS	W	GS	
GI 272	200 S	50 W	25 cm	MYB	35%	M	5	BF	GS	W	GS	
GI 273	200 S	75 W	20 cm	MRB	5%	M	5	BF	SS	W	GS	
GI 274	200 S	100 W	20 cm	MRB	5%	M	5	BF	SS	W	GS	
GI 275	200 S	125 W	20 cm	MRB	5%	M	5	BF	SS	W	GS	
GI 276	200 S	150 W	35 cm	MYB	25%	M	5	BF	SS	W	GS	
GI 277	200 S	175 W	20 cm	DBR	5%	M	5	BH	SS	W	MS	
GI 278	200 S	200 W	20 cm	DBR	5%	M	5	BH	SS	W	MS	
GI 279	200 S	225 W	30 cm	MGB	25%	M	5	BF	SS	W	GS	
GI 280	150 S	25 E	20 cm	MYB	20%	M	5	BF	GS	E	GS	
GI 281	150 S	50 E	35 cm	MRB	5%	M	5	BF	GS	E	GS	
GI 282	150 S	25 W	25 cm	MRB	5%	M	5	BF	GS	W	GS	
GI 283	150 S	50 W	40 cm	MRB	20%	M	5	BF	GS	W	GS	
GI 284	150 S	75 W	30 cm	MRB	25%	M	5	BF	SS	W	GS	
GI 285	150 S	100 W	30 cm	MRB	25%	M	5	BF	SS	W	GS	
GI 286	150 S	125 W	30 cm	MRB	25%	M	5	BF	SS	W	GS	
GI 287	150 S	150 W	15 cm	MRB	10%	M	5	BF	SS	W	GS	
GI 288	150 S	175 W	20 cm	MRB	20%	M	5	BF	SS	W	GS	

Sample Number	Location		Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 289	150 S	200 W	20 cm	MYB	30%	M	5	BF	SS	W	GS
GI 290	150 S	225 W	10 cm	DBR	0%	-	5	AH	SS	W	PSD
GI 291	150 S	250 W	10 cm	DBR	0%	-	5	AH	SS	W	PSD
GI 292	100 S	25 E	25 cm	MRB	20%	M	5	BF	GS	SW	GS
GI 293	100 S	50 E	25 cm	MRB	20%	M	5	BF	GS	SW	GS
GI 294	100 S	25 W	20 cm	MRB	15%	M	5	BF	GS	W	GS
GI 295	100 S	50 W	20 cm	MYB	15%	M	5	BF	GS	W	GS
GI 296	100 S	75 W	25 cm	MGB	50%	A	5	BF	SS	W	GS
GI 297	100 S	100 W	25 cm	MYB	10%	M	5	BF	SS	W	GS
GI 298	100 S	125 W	10 cm	DBR	0%	-	5	AH	SS	W	PSD
GI 299	100 S	150 W	10 cm	DBR	0%	-	5	AH	SS	W	PSD
GI 300	100 S	175 W	20 cm	MRB	40%	M	5	BF	SS	W	GS
GI 301	100 S	200 W	10 cm	DBR	0%	-	5	AH	SS	W	PSD
GI 302	100 S	225 W	25 cm	MGB	50%	A	5	BF	SS	W	GS
GI 303	100 S	250 W	20 cm	MRB	20%	M	5	BF	SS	W	GS
GI 304	50 S	25 E	25 cm	MBR	10%	M	5	BH	GS	SW	GS
GI 305	50 S	50 E	25 cm	MBR	10%	M	5	BH	GS	SW	GS
GI 306	50 S	25 W	25 cm	MRB	25%	M	5	BF	GS	W	GS
GI 307	50 S	50 W	25 cm	MRB	25%	M	5	BF	GS	W	GS
GI 308	50 S	75 W	25 cm	MRB	25%	M	5	BF	GS	W	GS
GI 309	50 S	100 W	20 cm	MBR	20%	M	5	BH	GS	W	MS
GI 310	50 S	125 W	25 cm	MYB	30%	M	5	BF	GS	W	GS
GI 311	50 S	150 W	25 cm	MYB	30%	M	5	BF	GS	W	GS
GI 312	50 S	175 W	30 cm	MBR	5%	M	5	BF	GS	W	GS
GI 313	50 S	200 W	25 cm	MBR	50%	A	5	BF	SS	W	GS
GI 314	50 S	225 W	30 cm	MBR	20%	M	5	BH	SS	W	MS
GI 315	50 S	250 W	10 cm	DBR	5%	M	5	AH	SS	W	PSD
GI 316	50 S	275 W	10 cm	DBR	5%	M	5	AH	SS	W	PSD
GI 317	0	25 E	30 cm	MYB	15%	M	5	BF	L	--	GS
GI 318	0	25 W	25 cm	MYB	30%	M	5	BF	GS	W	GS
GI 319	0	50 W	25 cm	MYB	30%	M	5	BF	GS	W	GS
GI 320	0	75 W	10 cm	MBR	5%	M	5	AH	GS	W	PSD
GI 321	0	100 W	25 cm	MYB	30%	M	5	BF	GS	W	GS
GI 322	0	125 W	15 cm	MBR	10%	M	5	BH	GS	W	GS
GI 323	0	150 W	15 cm	DBR	30%	M	5	BH	GS	W	MS
GI 324	0	175 W	5 cm	DBR	5%	M	5	AH	GS	W	PSD

Sample Number	Location			Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.		
GI 325	BL	825	W	15	cm	DBR	5%	M	5	AH	SS	SW	PSD	
GI 326	BL	850	W	25	cm	MRB	15%	M	5	BF	SS	SW	GS	
GI 327	850	W	25	N	30	cm	MRB	10%	M	5	BF	SS	SW	MS
GI 328	850	W	50	N	25	cm	MRB	20%	M	5	BF	SS	SW	GS
GI 329	850	W	75	N	25	cm	MRB	20%	M	5	BF	SS	SW	GS
GI 330	850	W	100	N	25	cm	MRB	20%	M	5	BF	SS	SW	GS
GI 331	850	W	125	N	25	cm	MRB	20%	M	5	BF	L	--	GS
GI 332	850	W	25	S	25	cm	MRB	20%	M	5	BF	SS	SW	GS
GI 333	850	W	50	S	10	cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 334	850	W	75	S	15	cm	MRB	15%	M	5	BH	SS	SW	MS
GI 335	BL	875	W	10	cm	DBR	0%	-	5	BH	SS	SW	MS	
GI 336	BL	900	W	25	cm	MRB	15%	M	5	BF	SS	SW	GS	
GI 337	900	W	25	N	20	cm	MBR	5%	M	5	BH	SS	SW	MS
GI 338	900	W	50	N	20	cm	MBR	5%	M	5	BH	SS	SW	MS
GI 339	900	W	75	N	20	cm	MBR	5%	M	5	BH	SS	SW	MS
GI 340	900	W	100	N	15	cm	MRB	10%	M	5	BF	SS	SW	GS
GI 341	900	W	125	N	15	cm	MRB	10%	M	5	BF	L	--	GS
GI 342	900	W	25	S	20	cm	MRB	10%	M	5	BH	SS	SW	GS
GI 343	900	W	50	S	5	cm	DBR	0%	-	5	AH	SS	SW	PSD
GI 344	BL	925	W	5	cm	DBR	0%	-	5	AH	SS	SW	PSD	
GI 345	BL	950	W	35	cm	MRB	45%	M	5	BF	SS	SW	GS	
GI 346	950	W	25	N	25	cm	MRB	20%	M	5	BF	SS	SW	GS
GI 347	950	W	50	N	25	cm	MBR	10%	M	5	BF	SS	SW	GS
GI 348	950	W	75	N	25	cm	DBR	10%	M	5	BH	SS	SW	GS
GI 349	950	W	100	N	5	cm	DBR	0%	-	5	AH	L	--	PSD
GI 350	950	W	25	S	35	cm	MRB	25%	M	5	BF	SS	SW	GS
GI 351	BL	975	W	15	cm	DBR	5%	M	5	BH	SS	SW	MS	
GI 352	BL	1000	W	25	cm	MRB	40%	M	5	BF	SS	SW	GS	
GI 353	1000		25	N	25	cm	MRB	40%	M	5	BF	SS	SW	GS
GI 354	1000		50	N	35	cm	MYB	20%	M	5	BF	SS	SW	GS
GI 355	1000		75	N	35	cm	MYB	20%	M	5	BF	SS	SW	GS
GI 356	1000		25	S	30	cm	DBR	30%	M	5	BH	SS	SW	MS
GI 357	BL	1025	W	25	cm	MRB	25%	M	5	BF	SS	SW	GS	
GI 358	BL	1050	W	25	cm	MRB	25%	M	5	BF	SS	SW	GS	
GI 359	1050		25	N	30	cm	MYB	20%	M	5	BF	SS	SW	GS
GI 360	1050		50	N	30	cm	MYB	20%	M	5	BF	SS	SW	GS

Sample Number	Location			Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 361	1050	75	N	30 cm	MYB	20%	M	5	BF	SS	SW	GS
GI 362	1050	25	S	30 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 363	BL	1075	W	30 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 364	BL	1100	W	30 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 365	1100	25	N	40 cm	MGB	20%	M	5	BF	SS	SW	GS
GI 366	1100	50	N	30 cm	MBR	50%	A	5	BH	SS	SW	GS
GI 367	1100	75	N	25 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 368	1100	100	N	25 cm	MRB	30%	M	5	BF	L	--	GS
GI 369	1100	25	S	20 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 370	BL	1125	W	20 cm	MBR	5%	M	5	BH	SS	SW	GS
GI 371	BL	1150	W	15 cm	MYB	10%	M	5	BF	SS	SW	GS
GI 372	1150	25	N	20 cm	DBR	10%	M	5	BH	SS	SW	GS
GI 373	1150	50	N	35 cm	MRB	40%	M	5	BF	SS	SW	GS
GI 374	1150	75	N	15 cm	MRB	10%	M	5	BF	SS	SW	GS
GI 375	1150	100	N	15 cm	DBR	5%	M	5	AH	SS	SW	PSD
GI 376	1150	125	N	25 cm	DRB	30%	M	5	BF	SS	SW	GS
GI 377	1150	25	S	20 cm	MRB	20%	M	5	BF	SS	SW	GS
GI 378	BL	1175	W	20 cm	DBR	10%	M	5	BH	SS	SW	MS
GI 379	BL	1200	W	20 cm	DBR	10%	M	5	BH	SS	SW	MS
GI 380	1200	25	N	30 cm	MRB	30%	M	5	BF	SS	SW	GS
GI 381	1200	50	N	20 cm	MRB	15%	M	5	BF	SS	SW	GS
GI 382	1200	75	N	15 cm	DBR	5%	M	5	BH	SS	SW	MS
GI 383	1200	100	N	15 cm	DBR	5%	M	5	BH	SS	SW	MS
GI 384	1200	125	N	15 cm	DBR	5%	M	5	BH	L	--	MS
GI 385	0	50	E	15 cm	MRB	10%	A	SSC	BF	GS	SE	GS
GI 386	0	100	E	20 cm	DBR	30%	A	SSC	BF	GS	SE	GS
GI 387	0	150	E	20 cm	LRB	40%	A	SSC	BF	GS	SE	GS
GI 388	0	200	E	25 cm	DRB	40%	A	SSC	BF	GS	SE	GS
GI 389	0	250	E	25 cm	LRB	20%	A	SSC	BF	GS	SE	GS

Sample Number	Location			Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 390	0	300	E	25	cm	MRB	5%	A	SSC	BF	GS	SE	GS
GI 391	100 S	100	E	15	cm	MRB	15%	A	SSC	BF	GS	SE	GS
GI 392	100 S	150	E	25	cm	LRB	5%	A	SSC	BF	GS	SE	GS
GI 393	100 S	200	E	30	cm	MRB	5%	A	SSC	BF	GS	SE	GS
GI 394	100 S	250	E	25	cm	LRB	5%	A	SSC	BF	GS	SE	GS
GI 395	100 S	300	E	30	cm	DRB	5%	A	SSC	BF	GS	SE	GS
GI 396	200 S	100	E	25	cm	MRB	5%	A	SSC	BF	GS	SE	GS
GI 397	200 S	150	E	20	cm	MRB	5%	A	SSC	BF	GS	SE	GS
GI 398	200 S	200	E	15	cm	MRB	10%	A	SSC	BF	GS	SE	GS
GI 399	200 S	250	E	15	cm	MRB	10%	A	SSC	BF	SS	SE	MS
GI 400	200 S	300	E	20	cm	MRB	5%	A	SSC	BF	SS	SE	MS
GI 401	300 S	100	E	20	cm	MRB	5%	A	SSC	BF	GS	SE	GS
GI 402	300 S	150	E	15	cm	MRB	5%	SA	SSC	BF	SS	SE	GS
GI 403	300 S	200	E	20	cm	MRB	20%	SA	SSC	BF	SS	SE	GS
GI 404	300 S	250	E	15	cm	MRB	30%	A	SSC	BF	SS	SE	GS
GI 405	300 S	300	E	20	cm	LRB	30%	A	SSC	BF	SS	SE	GS
GI 406	400 S	50	E	15	cm	DRB	25%	A	SSC	BF	SS	SE	GS
GI 407	400 S	100	E	10	cm	DRB	50%	A	SSC	BF	SS	SE	GS
GI 408	400 S	150	E	10	cm	DRB	70%	A	SSC	BF	SS	SE	GS
GI 409	400 S	200	E	20	cm	MRB	40%	A	SSC	BF	SS	SE	MS
GI 410	400 S	250	E	15	cm	MRB	40%	A	SSC	BF	SS	SE	PSD
GI 411	400 S	300	E	20	cm	MRB	30%	A	SSC	BF	SS	SE	PSD
GI 412	400 S	225	W	5	cm	MRB	90%	A	SSC	AH	SS	NW	PSD
GI 413	400 S	275	W	20	cm	DRB	0%	-	SSC	BH	SS	NW	MS
GI 414	100 W	425	S	15	cm	DBR	50%	A	SSC	BH	SS	NW	GS
GI 415	100 W	475	S	25	cm	DBR	70%	A	SSC	AH	SS	NW	GS
GI 416	100 W	525	S	15	cm	DRB	5%	A	SSC	AH	SS	NW	GS
GI 417	100 W	575	S	10	cm	DBR	15%	A	SSC	BH	SS	NW	GS
GI 418	100 W	625	S	15	cm	DRB	10%	A	SSC	BH	SS	NW	MS

Sample Number	Location		Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 419	200 W	150 S	25	cm	DBR	10%	S	SSC	BH	GS	W	GS
GI 420	200 W	200 S	20	cm	MRB	30%	A	SSC	BF	GS	W	GS
GI 421	200 W	250 S	15	cm	MRB	30%	A	SSC	BH	GS	W	GS
GI 422	200 W	300 S	10	cm	DBR	10%	R	SSC	BH	GS	W	GS
GI 423	200 W	350 S	30	cm	MRB	50%	A	SSC	BF	GS	W	MS
GI 424	200 W	400 S	25	cm	MRB	50%	A	SSC	BF	GS	NW	GS
GI 425	200 W	450 S	20	cm	DRB	0%	-	SSC	BH	SS	NW	MS
GI 426	200 W	500 S	30	cm	DBR	70%	A	SSC	BH	SS	NW	MS
GI 427	200 W	550 S	25	cm	DBR	0%	-	SSC	BH	SS	NW	MS
GI 428	200 W	600 S	15	cm	LBR	30%	R	SSC	BH	SS	NW	PSD
GI 429	200 W	650 S	20	cm	MRB	30%	A	SSC	BH	SS	NW	MS
GI 430	200 W	700 S	25	cm	DRB	30%	R	SSC	BH	SS	NW	MS
GI 431	200 W	750 S	20	cm	MRB	10%	R	SSC	BH	SS	NW	GS
GI 432	200 W	800 S	10	cm	MRB	10%	A	SSC	BH	SS	NW	PSD
GI 433	300 W	800 S	20	cm	DRB	30%	A	SSC	BH	SS	NW	MS
GI 434	300 W	750 S	20	cm	MRB	20%	A	SSC	BF	SS	NW	GS
GI 435	300 W	700 S	20	cm	MRB	30%	R	SSC	BF	SS	NW	MS
GI 436	300 W	650 S	35	cm	MRB	50%	A	SSC	BF	SS	NW	MS
GI 437	300 W	600 S	30	cm	MRB	30%	A	SSC	BF	SS	NW	MS
GI 438	300 W	550 S	30	cm	DBR	10%	S	SSC	BH	SS	NW	GS
GI 439	300 W	500 S	30	cm	MRB	10%	A	SSC	BF	SS	NW	MS
GI 440	300 W	450 S	35	cm	MRB	20%	A	SSC	BF	SS	NW	GS
GI 441	300 W	400 S	20	cm	DRB	10%	R	SSC	BH	SS	NW	GS
GI 442	300 W	350 S	15	cm	DBR	10%	R	SSC	BH	SS	NW	GS
GI 443	300 W	300 S	25	cm	DBR	20%	A	SSC	AH	SS	SW	MS
GI 444	300 W	250 S	30	cm	DBR	50%	S	SSC	AH	SS	SW	PSD
GI 445	300 W	200 S	30	cm	DBR	50%	S	SSC	AH	SS	SW	PSD
GI 446			15	cm	MBR	30%	A	SSC	AH	SS	N	PSD
GI 447			25	cm	DBR	50%	A	SSC	BH	SS	N	MS

Sample Number	Location			Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 448				30 cm	DBR	60%	A	SSC	AH	SS	N	PSD
GI 449				25 cm	DBR	50%	S	SSC	BH	SS	N	MS
GI 450				20 cm	MRB	15%	S	SSC	BF	SS	N	GS
GI 451				30 cm	LYB	20%	S	SSC	BF	SS	N	GS
GI 452				10 cm	DBR	75%	A	SSC	AH	SS	N	PSD
GI 453				20 cm	MRB	50%	S	SSC	BH	SS	N	MS
GI 454				20 cm	DYB	50%	A	SSC	BH	SS	N	MS
GI 455				30 cm	MYB	50%	A	SSC	BF	SS	N	MS
GI 456				25 cm	MRB	50%	A	SSC	BH	SS	N	MS
GI 457				30 cm	DRB	20%	A	SSC	BF	SS	N	MS
GI 458				20 cm	MRB	50%	A	SSC	BF	SS	NE	GS
GI 459				25 cm	MRB	20%	S	SSC	BF	SS	E	GS
GI 460				25 cm	MRB	20%	S	SSC	BF	SS	NE	GS
GI 461				15 cm	DRB	40%	S	SSC	BH	SS	NE	MS
GI 462				20 cm	MYB	20%	S	SSC	BF	SS	NE	MS
GI 463	200 W	125 N		15 cm	DBR	5%	R	SSC	BH	SS	SW	MS
GI 464	200 W	175 N		20 cm	DBR	5%	A	SSC	BH	SS	SW	MS
GI 465	200 W	225 N		20 cm	MRB	10%	S	SSC	BF	SS	SW	MS
GI 466	200 W	275 N		25 cm	MYB	25%	S	SSC	BF	GS	W	GS
GI 467	400 W	175 S		15 cm	DBR	25%	S	SSC	BH	GS	SW	GS
GI 468	400 W	225 S		20 cm	MRB	20%	S	SSC	BF	GS	SW	GS
GI 469	400 W	275 S		25 cm	DBR	20%	A	SSC	BH	GS	SW	GS
GI 470	400 W	325 S		20 cm	MRB	30%	A	SSC	BH	SS	SW	GS
GI 471	400 W	375 S		25 cm	LYB	50%	S	SSC	BF	GS	SE	GS
GI 472	400 W	425 S		10 cm	LGB	10%	S	SSC	AH	SS	SE	MS
GI 473	400 W	475 S		15 cm	DBR	10%	A	SSC	BH	SS	SW	MS
GI 474	400 W	525 S		20 cm	MRB	50%	A	SSC	BH	SS	SE	MS
GI 475	400 W	575 S		20 cm	MRB	20%	A	SSC	BF	SS	SE	MS
GI 476	400 W	625 S		15 cm	LRB	30%	A	SSC	BH	SS	SE	MS



Sample Number	Location		Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 477	400 W	675 S	25	cm	LRB	20%	S	SSC	BH	SS	SE	MS
GI 478	400 W	725 S	20	cm	MRB	30%	A	SSC	BF	SS	SE	MS
GI 479	400 W	775 S	25	cm	MRB	20%	S	SSC	BF	SS	SE	GS
GI 480	400 W	825 S	20	cm	MRB	15%	S	SSC	BH	SS	SE	GS
GI 481	400 W	875 S	10	cm	DBR	10%	A	SSC	AH	SS	SE	MS
GI 482	500 W	875 S	25	cm	MRB	10%	S	SSC	BF	SS	SW	GS
GI 483	500 W	825 S	25	cm	MRB	10%	S	SSC	BF	SS	SW	GS
GI 484	500 W	775 S	20	cm	MRB	20%	A	SSC	BF	SS	SW	GS
GI 485	500 W	725 S	15	cm	LYB	35%	S	SSC	BF	SS	SW	GS
GI 486	500 W	675 S	20	cm	MRB	10%	A	SSC	BF	SS	SW	GS
GI 487	500 W	625 S	20	cm	LRB	20%	S	SSC	BF	SS	SW	GS
GI 488	500 W	575 S	20	cm	MRB	50%	A	SSC	BF	SS	SE	GS
GI 489	500 W	525 S	15	cm	MRB	50%	S	SSC	BF	SS	SE	GS
GI 490	500 W	475 S	25	cm	MRB	70%	A	SSC	BF	SS	SE	MS
GI 491	500 W	425 S	20	cm	MRB	30%	A	SSC	BF	SS	SW	MS
GI 492	500 W	375 S	30	cm	MRB	20%	S	SSC	BF	SS	SE	GS
GI 493	500 W	325 S	10	cm	DBR	50%	A	SSC	AH	SS	SW	PSD
GI 494	500 W	275 S	15	cm	DBR	5%	S	SSC	BH	GS	SW	GS
GI 495	500 W	225 S	20	cm	MRB	10%	S	SSC	BF	SS	SW	GS
GI 496	500 W	175 S	15	cm	DBR	10%	A	SSC	BH	SS	SW	GS
GI 497	500 W	125 S	10	cm	DBR	0%	-	SSC	AH	SS	SW	MS
GI 498	700 W	125 S	25	cm	MRB	25%	S	SSC	BF	SS	SW	GS
GI 499	700 W	175 S	20	cm	DBR	70%	A	SSC	BH	SS	SW	MS
GI 500	700 W	225 S	10	cm	DBR	0%	-	SSC	AH	GS	SW	MS
GI 501	700 W	275 S	15	cm	DBR	0%	-	SSC	AH	GS	SW	MS
GI 502	700 W	325 S	20	cm	MRB	50%	A	SSC	BH	SS	SW	GS
GI 503	700 W	375 S	15	cm	MRB	20%	A	SSC	BH	GS	SW	MS
GI 504	700 W	425 S	20	cm	MRB	10%	S	SSC	BF	GS	SW	GS
GI 505	700 W	475 S	25	cm	MBR	30%	A	SSC	BH	SS	SW	PSD

Sample Number	Location			Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 506	700 W	525 S	S	25	cm	DBR	50%	A	SSC	BH	SS	NE	PSD
GI 507	700 W	575 S	S	15	cm	DBR	75%	A	SSC	BH	GS	SW	PSD
GI 508	700 W	625 S	S	15	cm	LRB	35%	A	SSC	BH	SS	SW	MS
GI 509	700 W	675 S	S	20	cm	LBR	25%	A	SSC	BH	SS	SW	MS
GI 510	700 W	725 S	S	15	cm	LRB	50%	A	SSC	BH	SS	SW	PSD
GI 511	700 W	775 S	S	25	cm	LRB	25%	A	SSC	BH	SS	SW	MS
GI 512	700 W	825 S	S	25	cm	LRB	50%	A	SSC	BH	SS	SW	MS
GI 513	700 W	875 S	S	25	cm	LRB	50%	A	SSC	BH	SS	SW	MS
GI 514	700 W	925 S	S	25	cm	MRB	25%	A	SSC	BF	SS	SW	MS
GI 515	600 W	875 S	S	25	cm	LRB	50%	A	SSC	BH	SS	SW	MS
GI 516	600 W	825 S	S	15	cm	LRB	50%	A	SSC	BH	SS	SW	MS
GI 517	600 W	775 S	S	15	cm	LYB	25%	A	SSC	BH	SS	SW	MS
GI 518	600 W	725 S	S	15	cm	LRB	50%	A	SSC	BH	SS	SW	MS
GI 519	600 W	675 S	S	15	cm	LYB	50%	A	SSC	BH	SS	SW	MS
GI 520	600 W	625 S	S	25	cm	MYB	25%	A	SSC	BF	SS	SW	MS
GI 521	600 W	575 S	S	15	cm	MRB	50%	A	SSC	BF	SS	SW	MS
GI 522	600 W	525 S	S	15	cm	MRB	30%	A	SSC	BF	GS	SW	MS
GI 523	600 W	475 S	S	20	cm	MYB	25%	A	SSC	BF	GS	SW	MS
GI 524	600 W	425 S	S	25	cm	DBR	60%	A	SSC	BF	SS	SW	MS
GI 525	600 W	375 S	S	15	cm	MGB	30%	A	SSC	BH	SS	SW	MS
GI 526	600 W	325 S	S	25	cm	DBR	30%	A	SSC	BH	SS	SW	GS
GI 527	600 W	275 S	S	20	cm	MYB	50%	S	SSC	BF	SS	SW	GS
GI 528	600 W	225 S	S	20	cm	MGB	30%	S	SSC	BH	GS	SW	GS
GI 529	600 W	175 S	S	20	cm	MGB	30%	S	SSC	BH	GS	SW	GS
GI 530	600 W	125 S	S	30	cm	DRB	30%	A	SSC	BF	SS	SW	MS
GI 531				10	cm	LYB	80%	A	SSC	BH	SS	SE	PSD
GI 532				10	cm	DBR	90%	A	SSC	AH	SS	SE	PSD
GI 533				10	cm	DBR	60%	A	SSC	AH	SS	SE	PSD
GI 534				10	cm	DBR	60%	A	SSC	AH	SS	SE	PSD

Sample Number	Location			Depth	Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 535				25 cm	MRB	25%	A	SSC	BF	SS	SE	MS
GI 536				25 cm	MRB	25%	A	SSC	BF	SS	SE	MS
GI 537	BL	1250	W	35 cm	DBR	10%	A	SSC	BF	SS	SW	MS
GI 538	BL	1300	W	40 cm	DBR	20%	A	SSC	BF	SS	SW	GS
GI 539	1300	50	N	25 cm	DBR	15%	A	SSC	BH	SS	SW	MS
GI 540	1300	100	N	15 cm	DRB	30%	S	SSC	BH	RT	SW	MS
GI 541	BL	1350	W	25 cm	DBR	15%	A	SSC	BF	SS	SW	MS
GI 542	BL	1400	W	20 cm	DBR	5%	A	SSC	BF	SS	SW	MS
GI 543	1400	50	N	15 cm	DBR	20%	A	SSC	BH	SS	SW	MS
GI 544	BL	1450	W	15 cm	DBR	50%	S	SSC	BH	SS	SW	MS
GI 545	BL	1500	W	20 cm	MRB	30%	S	SSC	BF	SS	SW	MS
GI 546	1500	50	N	15 cm	MRB	20%	A	SSC	BH	GS	W	PSD
GI 547	BL	1550	W	20 cm	DRB	15%	A	SSC	BH	SS	SW	MS
GI 548	BL	1600	W	35 cm	MRB	5%	S	SSC	BF	SS	SW	GS
GI 549	1600	50	N	15 cm	MRB	20%	S	SSC	BH	GS	W	PSD
GI 550	BL	1650	W	25 cm	DRB	15%	S	SSC	BF	GS	SW	MS
GI 551	BL	1700	W	20 cm	DBR	35%	S	SSC	BF	SS	SW	MS
GI 552	1700	50	N	15 cm	MRB	35%	A	SSC	BH	GS	SW	MS
GI 553	1700	100	N	25 cm	MRB	15%	S	SSC	BH	GS	E	MS
GI 554	BL	1750	W	20 cm	MRB	10%	A	SSC	BH	GS	W	MS
GI 555	BL	1800	W	10 cm	LYB	35%	A	SSC	BF	SS	W	MS
GI 556	1800	50	N	15 cm	LYB	50%	A	SSC	BF	SS	W	PSD
GI 557	1800	100	N	15 cm	LYB	50%	A	SSC	BF	SS	W	MS
GI 558	1800	150	N	20 cm	MRB	15%	A	SSC	BF	SS	W	MS
GI 559	1800	200	N	30 cm	MRB	5%	A	SSC	BF	SS	W	GS
GI 560	1800	50	S	15 cm	MBR	15%	A	SSC	BH	GS	W	PSD
GI 561	1800	100	S	15 cm	DBR	10%	A	SSC	BH	SS	SW	PSD
GI 562	1800	150	S	10 cm	DBR	0%	-	SSC	AH	SS	SW	PSD
GI 563	1800	200	S	25 cm	DBR	10%	A	SSC	BH	SS	SW	MS

Sample Number	Location			Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 564	1800	250	S	25	cm	DBR	5%	A	SSC	BH	SS	SW	MS
GI 565	1800	300	S	20	cm	MRB	10%	A	SSC	BF	SS	SW	GS
GI 566	1800	350	S	25	cm	MRB	15%	A	SSC	BF	SS	SW	GS
GI 567	1800	400	S	15	cm	MYB	50%	S	SSC	BH	GS	NE	MS
GI 568	1800	450	S	25	cm	MRB	25%	S	SSC	BF	GS	SW	GS
GI 569	1700	700	S	10	cm	DBR	20%	A	SSC	AH	GS	SW	PSD
GI 570	1700	650	S	20	cm	DBR	25%	A	SSC	BH	GS	SW	MS
GI 571	1700	600	S	25	cm	MRB	15%	A	SSC	BF	GS	E	GS
GI 572	1700	550	S	25	cm	MRB	15%	S	SSC	BF	GS	E	GS
GI 573	1700	500	S	20	cm	MRB	15%	S	SSC	BF	GS	E	GS
GI 574	1700	450	S	20	cm	MRB	25%	A	SSC	BF	GS	NE	GS
GI 575	1700	400	S	20	cm	MRB	25%	S	SSC	BF	GS	SW	MS
GI 576	1700	350	S	15	cm	DBR	20%	A	SSC	AH	SS	SW	PSD
GI 577	1700	300	S	30	cm	MRB	15%	A	SSC	BH	SS	SW	MS
GI 578	1700	250	S	25	cm	DBR	10%	S	SSC	BF	SS	SW	GS
GI 579	1700	200	S	20	cm	DRB	5%	S	SSC	BF	SS	SW	GS
GI 580	1700	150	S	25	cm	DBR	0%	-	SSC	BF	SS	SW	GS
GI 581	1700	100	S	20	cm	DBR	0%	-	SSC	BH	SS	SW	MS
GI 582	1700	50	S	20	cm	DBR	25%	A	SSC	BF	GS	SW	GS
GI 583	1600	50	S	20	cm	DBR	25%	A	SSC	BH	SS	SW	MS
GI 584	1600	100	S	20	cm	DBR	25%	A	SSC	BH	SS	SW	MS
GI 585	1600	150	S	20	cm	DBR	25%	A	SSC	BH	SS	SW	MS
GI 586	1600	200	S	25	cm	MRB	15%	A	SSC	BF	SS	SW	GS
GI 587	1600	250	S	25	cm	LRB	15%	A	SSC	BF	SS	SW	GS
GI 588	1600	300	S	25	cm	MGB	75%	A	SSC	BH	SS	SW	PSD
GI 589	1600	350	S	20	cm	LRB	75%	A	SSC	BF	SS	SW	GS
GI 590	1600	400	S	20	cm	DBR	80%	A	SSC	BH	SS	SW	MS
GI 591	1600	450	S	20	cm	MRB	25%	A	SSC	BF	GS	SW	GS
GI 592	1600	500	S	15	cm	LRB	25%	A	SSC	BH	GS	SW	PSD

Sample Number	Location			Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 593	1600	550	S	20	cm	MRB	15%	A	SSC	BF	GS	SE	MS
GI 594	1600	600	S	25	cm	MRB	15%	A	SSC	BF	GS	SE	GS
GI 595	1600	650	S	25	cm	MRB	15%	A	SSC	BF	SS	SE	GS
GI 596	1500	650	S	25	cm	LGB	50%	A	SSC	BF	SS	SE	GS
GI 597	1500	600	S	20	cm	DBR	75%	A	SSC	BH	SS	SE	MS
GI 598	1500	550	S	15	cm	MRB	50%	A	SSC	AH	SS	SE	MS
GI 599	1500	500	S	25	cm	MRB	25%	A	SSC	BF	SS	SW	GS
GI 600	1500	450	S	25	cm	MYB	75%	A	SSC	BF	SS	SE	MS
GI 601	1500	400	S	25	cm	DBR	5%	A	SSC	BF	SS	SE	GS
GI 602	1500	350	S	25	cm	MRB	15%	A	SSC	BF	SS	SW	GS
GI 603	1500	300	S	30	cm	MRB	35%	A	SSC	BF	SS	SW	MS
GI 604	1500	250	S	30	cm	MRB	35%	A	SSC	BF	SS	SW	MS
GI 605	1500	200	S	30	cm	MRB	50%	S	SSC	BF	SS	SW	GS
GI 606	1500	150	S	30	cm	MRB	15%	A	SSC	BF	SS	SW	GS
GI 607	1500	100	S	30	cm	MRB	15%	A	SSC	BF	SS	SW	GS
GI 608	1500	50	S	30	cm	DBR	25%	A	SSC	BF	SS	SW	MS
GI 609	100 N	250	E	15	cm	MRB	10%	S	SSC	BF	SS	SE	MS
GI 610	100 N	300	E	30	cm	MRB	20%	S	SSC	BF	SS	SE	MS
GI 611	100 N	350	E	15	cm	DBR	75%	A	SSC	BH	SS	SE	PSD
GI 612	100 N	400	E	25	cm	MRB	25%	A	SSC	BF	SS	SE	MS
GI 613	100 N	450	E	25	cm	MRB	25%	A	SSC	BF	SS	SE	MS
GI 614	100 N	500	E	20	cm	MRB	55%	A	SSC	BF	SS	SE	MS
GI 615	100 N	550	E	20	cm	MRB	55%	A	SSC	BF	SS	SE	MS
GI 616	100 N	600	E	20	cm	MGB	30%	A	SSC	BH	SS	SE	PSD
GI 617	0	600	E	20	cm	MRB	75%	A	SSC	BH	SS	SE	PSD
GI 618	0	550	E	20	cm	MRB	75%	A	SSC	BH	SS	SE	PSD
GI 619	0	500	E	20	cm	MRB	75%	A	SSC	BH	SS	SE	PSD
GI 620	0	450	E	20	cm	LBR	30%	A	SSC	BH	SS	SE	PSD
GI 621	0	400	E	35	cm	MRB	15%	S	SSC	BF	SS	SE	GS

Sample Number	Location			Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 622	0	350	E	15	cm	MRB	75%	A	SSC	BH	SS	SE	PSD
GI 623	900 W	100	S	10	cm	DBR	50%	A	SSC	AH	SS	SW	PSD
GI 624	900 W	150	S	10	cm	DBR	50%	A	SSC	AH	SS	SW	PSD
GI 625	900 W	200	S	10	cm	DBR	50%	A	SSC	AH	SS	SW	PSD
GI 626	900 W	250	S	25	cm	DYB	10%	A	SSC	BF	SS	SW	MS
GI 627	900 W	300	S	30	cm	MRB	30%	A	SSC	BF	SS	SW	GS
GI 628	900 W	350	S	20	cm	MRB	15%	A	SSC	BF	SS	SW	GS
GI 629	900 W	400	S	20	cm	DBR	30%	A	SSC	BH	SS	SW	MS
GI 630	900 W	450	S	25	cm	DBR	15%	A	SSC	BF	SS	SW	GS
GI 631	900 W	500	S	25	cm	MRB	5%	A	SSC	BF	SS	SW	GS
GI 632	900 W	550	S	25	cm	LRB	25%	A	SSC	BF	SS	SW	GS
GI 633	900 W	600	S	25	cm	LRB	25%	A	SSC	BF	SS	SW	GS
GI 634	800 W	600	S	25	cm	DRB	15%	A	SSC	BF	SS	SW	GS
GI 635	800 W	550	S	30	cm	DBR	55%	A	SSC	BH	SS	SW	MS
GI 636	800 W	500	S	20	cm	MRB	50%	A	SSC	BF	SS	SW	GS
GI 637	800 W	450	S	25	cm	MRB	15%	A	SSC	BF	SS	NW	GS
GI 638	800 W	400	S	25	cm	MRB	75%	A	SSC	BF	SS	NW	GS
GI 639	800 W	350	S	20	cm	MYB	75%	A	SSC	BH	SS	NW	MS
GI 640	800 W	300	S	20	cm	DBR	15%	A	SSC	BH	SS	NW	MS
GI 641	800 W	250	S	25	cm	DBR	50%	A	SSC	BH	SS	SW	MS
GI 642	800 W	200	S	25	cm	MRB	25%	A	SSC	BH	SS	SW	GS
GI 643	800 W	150	S	25	cm	DBR	75%	A	SSC	BH	SS	SW	MS
GI 644	800 W	100	S	20	cm	MRB	75%	A	SSC	BH	SS	SW	MS
GI 645	1400	50	S	20	cm	MRB	25%	A	SSC	BH	SS	SW	MS
GI 646	1400	100	S	20	cm	MRB	25%	A	SSC	BH	SS	SW	MS
GI 647	1400	150	S	30	cm	MRB	25%	A	SSC	BF	SS	SW	GS
GI 648	1400	200	S	25	cm	MRB	15%	A	SSC	BF	SS	SW	MS
GI 649	1400	250	S	15	cm	MRB	50%	A	SSC	BH	SS	SW	MS
GI 650	1300	250	S	25	cm	DBR	75%	A	SSC	BH	SS	SW	MS

Sample Number	Location			Depth		Colour	Coarse Frag.	Frag. Shape	Text	Horizon	Slope	Slope Dir	Soil Dev.
GI 651	1300	200	S	25	cm	MRB	25%	A	SSC	BF	SS	SW	GS
GI 652	1300	150	S	15	cm	DBR	50%	A	SSC	BH	SS	SW	PSD
GI 653	1300	100	S	20	cm	MRB	5%	A	SSC	BH	SS	SW	MS
GI 654	1300	50	S	20	cm	MRB	50%	A	SSC	BH	SS	SW	MS
GI 655	1000	50	S	30	cm	DBR	75%	A	SSC	BH	SS	SW	PSD
GI 656	1000	100	S	30	cm	MRB	50%	A	SSC	BF	SS	SW	MS
GI 657	1000	150	S	25	cm	MRB	50%	A	SSC	BF	SS	SW	GS
GI 658	1000	200	S	25	cm	DBR	10%	A	SSC	AH	SS	SW	PSD
GI 659	1000	250	S	25	cm	DBR	15%	A	SSC	AH	SS	SW	MS
GI 660	1000	300	S	15	cm	DBR	75%	A	SSC	AH	SS	SW	PSD
GI 661	1000	350	S	25	cm	MRB	15%	A	SSC	BH	SS	SW	GS
GI 662	1000	400	S	25	cm	MRB	15%	A	SSC	BH	SS	SW	GS
GI 663	1000	450	S	20	cm	DBR	0%	-	SSC	AH	SS	SW	MS
GI 664	1100	450	S	25	cm	MRB	50%	A	SSC	BH	SS	SW	MS
GI 665	1100	400	S	25	cm	MRB	50%	A	SSC	BH	SS	SW	MS
GI 666	1100	350	S	15	cm	DBR	15%	A	SSC	AH	SS	SW	MS
GI 667	1100	300	S	15	cm	DBR	15%	A	SSC	AH	SS	SW	MS
GI 668	1100	250	S	20	cm	DBR	75%	A	SSC	BH	SS	SW	MS
GI 669	1100	200	S	30	cm	MGB	75%	A	SSC	BF	SS	SW	GS
GI 670	1100	150	S	30	cm	MGB	75%	A	SSC	BF	SS	SW	GS
GI 671	1100	100	S	30	cm	MGB	75%	A	SSC	BF	SS	SW	GS
GI 672	1100	50	S	35	cm	MRB	75%	A	SSC	BH	SS	SW	MS
GI 673	1200	50	S	20	cm	MRB	25%	A	SSC	BF	SS	SW	GS
GI 674	1200	100	S	20	cm	MRB	25%	A	SSC	BF	SS	SW	GS
GI 675	1200	150	S	30	cm	DRB	25%	A	SSC	BF	SS	SW	GS
GI 676	1200	200	S	30	cm	MYB	75%	A	SSC	BF	SS	SW	GS
GI 677	1200	250	S	30	cm	MYB	75%	A	SSC	BF	SS	SW	GS

**APPENDIX IV**

**DESCRIPTION OF SILT SAMPLES**



## DESCRIPTION OF SILT SAMPLES

<u>Sample Number</u>	<u>Description</u>
518011	Silt Sample taken from Mine Creek at 1305 meters elevation.
518012	Silt Sample taken from Camp Creek at the camp.
518024	Silt sample on Mine Creek approximately 944 meters west from the claim line.
518025	Silt sample on Mine Creek approximately 235 meters east of sample 518024.
518026	Silt sample on Mine Creek approximately 375 meters east of sample 518024.
518027	Silt sample on Mine Creek approximately 630 meters east of sample 518024.
518028	Silt sample on Mine Creek approximately 1 kilometer east of sample 518024, 56 meters east of the claim line.
518029	Silt Sample on Grid I Area Creek
518030	Silt Sample on Grid I Area Creek
518031	Silt Sample on Grid I Area Creek
518033	Silt sample on Camp Creek, 100 meters east of camp.
518034	Silt sample on Camp Creek, 250 meters east of camp.
518035	Silt sample on Camp Creek, 350 meters east of camp.
518453	Silt sample on Camp Creek, approximately 1,350 meters southeast of the camp.
DLC-SS-2	Silt sample collected on an easterly flowing creek, approximately 900 meters north of camp.
DLC-SS-4	Silt sample collected on a southerly flowing creek, approximately 900 meters southwest of camp.
DLC-SS-5	Silt sample collected on a westerly flowing creek, approximately 3,300 meters east-southeast of camp.
DLC-SS-6	Silt sample collected on a westerly flowing creek, approximately 3,200 meters east-southeast of camp.

**APPENDIX V**

**GEOCHEMICAL REPORT BY Dr. S. HOFFMAN**

**REPORT ON THE 1991 SOIL GEOCHEMICAL SURVEY**

on the

**MM CLAIMS**

Chuchi Lake Area  
Omineca Mining Division  
Central British Columbia

Latitude  $55^{\circ}17'$  North Longitude  $124^{\circ}39'$  West  
NTS 93-N/7E

for

**DASSERAT DEVELOPMENTS CORP.**

920 - 609 Granville Street  
Vancouver, B.C. V7Y 1G5

by

Stan Hoffman, Ph.D, P.Geo.  
**PRIME GEOCHEMICAL METHODS LTD.**

**OCTOBER 21, 1991**

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### APPENDICES

<b>Appendix I</b>	<b>Analytical Data</b>
<b>Appendix II</b>	<b>Laboratory Preparation and Analytical Procedures</b>
<b>Appendix III</b>	<b>Method of Histogram Interpretation</b>
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**PRIME GEOCHEMICAL METHODS LTD.**

**GEOCHEMICAL REPORT - DATA INTERPRETATION  
THE MM PROPERTY, MT. MILLIGAN, B.C.  
DATED OCTOBER 21, 1991**

**SUMMARY**

A soil survey comprising 718 samples was conducted in 1991 to evaluate the alkalic Cu-Au potential of the MM Claims. The study defined four areas of Cu accumulation, including a major zone of Cu enrichment, in the 150 to 350 ppm range, over an area as great as 400m x 1000m, and not as yet fully delineated. **Cu levels in soils are approximately comparable with those at the SOUTHERN STAR deposit of Mount Milligan, although Au values in general are lower.** Cu anomalies typically have a positive association with magnetic anomalies. More sampling is still needed to fully appreciate Cu - Au zonations on MM.

The multi-element soil survey was well conducted and geochemical distribution patterns relate to underlying geology, as suggested by the ground magnetic map. Geochemical signatures for elements such as Fe, Ni, Mg, Cr, Zn, Ti, V and others closely correlate with magnetic character reflecting the various underlying Takla volcanic units. Such close correspondence between magnetics and geochemistry suggests glacial transport is not very great, and metal associations of distinction probably reflect underlying bedrock. For example, the survey has identified a K-Ba-Ca feature to the west of the Cu anomaly which may be the soil expression of an intrusive unit or alteration associated with an intrusive unit. High Mn contents periferal to the Cu anomaly is a favourable finding, as they may reflect a primary Mn halo surrounding a Cu - Au occurrence. The striking levels of P reaching up to and exceeding 1% is very unusual, and merits an explanation. P can be associated with Cu -Au mineralization.

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THE MM PROPERTY, MT. MILLIGAN, B.C.  
DATED OCTOBER 21, 1991**

A structure which follows the baseline at the center of the sampling is apparently enriched in a large suite of elements including As, Cu, Pb, Zn, Mo, Fe, Mn, Co, Ni, Cr, V, and Sc. The As association is particularly interesting, in view of the fact that As commonly halos the alkalic type of Cu - Au occurrence, and often is associated with veins following structures peripheral to a deposit. Other elements whose presence is favourable include Mo, Co, and V and Pb and Zn at the margins of the Cu - Au mineralized zone. These relationships are seen here, although they may be coincidental.

Work thus far has indicated that the soil survey has identified components of the alkalic Cu - Au model, but additional work is needed. More sampling is necessary, at a 50 x 100 m density to fully outline currently defined Cu anomalies. Preliminary prospecting/mapping follow-up can commence simultaneously with that work, but an extensive bedrock sampling effort should await a return of additional soil data, just in case better anomalies lie nearby. A terrain analysis is recommended to identify overburden type and thickness, and problem areas for soil surveys. Knowledge of direction of glaciation would also facilitate follow-up. Prospecting the source of a K-Ba-Ca anomaly looking for a potassic-rich intrusion or alteration and examining the P-rich zones for a geologic explanation are also warranted. Sufficient interest has been generated by the initial work to recommend continued follow-up on a priority basis.

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**RECOMMENDATIONS**

1. A knowledge of overburden types and thicknesses and direction of glaciation would be a definite benefit to follow-up and continued exploration. A terrain analysis costing about \$500.00 is highly recommended to accomplish these objectives.
2. The current survey has not fully outlined anomalous conditions, and the grid should be extended to the west, south, north and east of the eastern grid. A sample interval of 50 m along lines 100 m apart would be optimum. More detailed sampling at a 25 m interval along lines 50 m apart would be appropriate in attempting to locate sub-outcropping mineral occurrences in thin till or residual soil environments as a second phase of exploration.
3. One major and three other significant Cu geochemically anomalous areas have been defined which merit an explanation. This can be accomplished by prospecting outcrops and a program of bedrock chip sampling. The sequencing for this program would be most advantageous after each soil anomaly is fully outlined.
4. The soil survey has defined distinctive geochemical units which relate closely to ground magnetic signatures and presumably to underlying bedrock. These need to be followed-up by geological mapping and prospecting.
5. The relationship between geochemical results and ground magnetics is direct. This suggests continued use of ground magnetic surveying should be mandatory, and areas of interest defined by synthesizing results once sufficient data are available.

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**RECOMMENDATIONS (Cont...)**

6. Anomaly follow-up should begin once results for about a 4 km area are available (at present about a 1.5 km area has been evaluated). At a 50m x 100m density, about 500 samples still need to be collected to accomplish this objective.
7. The existing Cu-Au anomaly should be followed up by a program of road building and trenching/pitting to search for bedrock sources of mineralization. Intersected bedrock would be sampled at 3 m intervals. If bedrock was not intersected, deep overburden sampling would be conducted. The trenching/pitting follow-up would precede a program of diamond drilling (using the same roads) to test the prospective areas defined by anomalous results derived from the trenching program.
8. The baseline base metal anomaly can also be evaluated using the excavator. Intersected bedrock would be chip sampled. If overburden is too deep, basal overburden samples would be taken to establish the position of the mineralized fault which would subsequently be drill tested.



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**SAMPLE COLLECTION AND ANALYSIS**

Available resources necessitated that soil sampling be limited to one portion of the MM claim group, with a grid using a 50 m line spacing. Sample interval was 25 m. Two grids were positioned to evaluate a fault zone and area of altered volcanic rocks. A soil sample location map is provided as Figure 3A.

A total of 384 soil samples were collected. All sample stations were flagged. Field notes were recorded at each station and are included in Appendix 1.

Approximately 500 gm of material were collected in a wet strength Kraft paper envelope and labelled on site. Samples were trucked to Vancouver, B.C., where they were oven dried by Chemex, sieved to minus 80-mesh and analyzed for Au on a 10 gm split using an aqua regia digestion and for a suite of 32 aqua regia leachable elements on a second 0.5 gm split. Analytical data are reported in Appendix 1 and analytical procedures are summarized in Appendix 2.

**METHOD OF DATA EVALUATION**

Geochemical data were summarized on histograms (Figure 4). Method of interpretation of the histograms is given in Appendix III. The interpretation permits assignment of different size-coded dots to represent the data on the geochemical maps of Figure 5.

**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****DESCRIPTION OF RESULTS****1. Cu (Figure 5A)**

One large, high contrast zone of Cu accumulation is outlined in the east-central portion of the grid, associated with a fine grained volcanic unit. The zone is up to 400 m wide and 1000 m long, open to the northeast and southwest, and is associated with a major magnetic anomaly. **Maximum values are in the 150 to 350 ppm range which compares favourably to soil geochemical results over the Southern Star deposit of Mt. Milligan.** Additional Cu anomalies have been outlined in the extreme east and extreme west exhibiting similar maximum Cu levels and associations with positive magnetic anomalies. Anomalous zones require delineation by additional sampling. Backgrounds are at levels below 100 ppm Cu, with lowest values seen in the north central portion of the grid.

**2. Au (Figure 5B)**

Most Au values are at detection limits of < 5 ppb. Anomaly threshold a 10 ppb defines five multi-sample anomalies associated with the large Cu-rich zone over the center of the property. Maximum Au contents are in the 50 to 500 ppb range and these are typically associated with magnetic anomalies.

**3. As (Figure 5C)**

Six areas of As enhancement are outlined, each separated by about 600m. The most outstanding As-rich zone follows a fault within the volcanics over the center of the sampling. Three anomalies are found over the western portion of the grid whereas two zones lie in the east. Maximum As contents are in the 40 to 400 ppm range. The largest As-rich zone is about 100 m across, periferal to the largest Cu anomaly, but

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accompanied by weak Cu enrichment. The zone lies within a magnetic low.

**4. Sb (Figure 5D)**

All Sb values are at detection limits.

**5. Bi (Figure 5E)**

Most Bi values are at detection limits. One weak Bi-rich zone is outlined over the south central portion of the grid.

**6. Mo (Figure 5F)**

Mo has accumulated with the largest As and moderate-strength Cu anomaly along the baseline.

**7. Pb (Figure 5G)**

The distribution of anomalous Pb values follows a very narrow train along the baseline, coinciding with a fault zone. The laboratory has confirmed the validity of the results (i.e., high values do not represent systematic analytical error. The zone, exhibiting maximum values of 10 to 30 ppm, probably reflects the fault. The major Cu anomaly is essentially devoid of Pb. Pb accumulation to the 10 to 20 ppm range also characterizes the grid in the east and in the west. A relationship is not seen between the Pb distribution and magnetic character. The full extent of the Pb-rich zones needs definition by additional sampling.

**8. Ag (Figure 5H)**

Multi-sample Ag anomalies are not outlined.

**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****9. Zn (Figure 5I)**

The distribution of Zn is homogeneous, with enhanced values of 110 to 250 ppm found over the center of the grid. Highest Zn values correlate with maximum As, Pb and Mo concentrations and a magnetic low. An area of elevated Zn backgrounds characterizes the main Cu anomaly. Zn levels over much of the eastern and western sampling fluctuates at values below 90 ppm.

**10. Cd (Figure 5J)**

Enhanced Cd is found in those samples exhibiting maximum As, Mo, Zn and Pb.

**11. Fe (Figure 5K)**

The character of the Fe distribution often reflects on the quality of the soil survey. A large number of randomly high or randomly low values indicates a poor survey, but this is not the case here. The Fe distribution is homogeneous. High values of 4.6 to 8.5% cluster into zones along the baseline where values of As, Mo, Pb and Zn are at their maxima. Fe-rich zones are prominent in the east and south central portion of the grid whereas the major Cu anomaly is reflected by an average Fe content of 3.6 to 4.6%. The Fe distribution likely reflects conditions in underlying bedrock, both reflected by positive and negative magnetic characteristics.

**12. Mn (Figure 5L)**

Mn, like Fe, can be adversely affected by sampling improperly, and some evidence exists to suggest the odd sample might have been better collected. Mn anomaly threshold of 1600 ppm is unusually high, but Mn accumulation typifies the central and western portions of the survey. Some correlation is seen between Mn and Zn, suggesting Zn has been scavenged by Mn oxides from groundwater. The main Cu-anomaly is not affected by Mn scavenging. The Mn pattern probably reflects high Mn contents in underlying geology and many of the Mn anomalies correlate with magnetically low areas.

**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****13. Co (Figure 5M)**

Co is often scavenged by Mn, and similarities are evident in comparison of the two distributions of these two elements. A cross over Co anomalies associated with high Mn (exceeding 3500 ppm) is shown on Figure 5M. Most anomalous Co values are in the 22 to 40 ppm range, not particularly unusual. The As-Mo-Pb-Zn feature along the baseline by comparison is reflected by Co values between 50 and 120 ppm, definitely anomalous for this element. Co appears to be a key element in the alkalic Au-Cu porphyry suite.

**14. Ni (Figure 5N)**

The Ni distribution is very homogeneous and indicates how soil geochemistry can facilitate mapping of underlying geology in thin overburden environments. Major blocks of Ni-rich (17 to 30 ppm) soils are noted, with the As-Mo anomaly exhibiting higher values at the 50 to 90 ppm level. Most of these are underlain by negative magnetic features. Low backgrounds of less than 10 ppm characterize the main Cu anomaly area whereas backgrounds are elevated to the 14 to 30 ppm within a belt 200 to 300 m wide trending east-northeast across the sampling.

**15. Cr (Figure 5O)**

Cr basically follows Ni. Cr is enriched to a greater extent northwest of the baseline fault anomaly. Enhanced Cr contents are in the 37 to 80 ppm range, with the As-Mo area showing some high values between 125 to 175 ppm. The Cu-rich area is reflected by the lowest Cr contents of the survey at less than 25 ppm. The main Cu anomaly is also surrounded to the southeast by Cr enrichment. The same pattern as was seen for Ni.

**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****16. V (Figure 5P)**

V generally follows Fe but the V distribution is more homogeneous. Maximum V contents of 175 to 300 ppm characterize the baseline where As-Mo-Pb-Zn-Fe and other elements are enriched and magnetics are low. V contents are uniformly elevated in association with the main Cu anomaly where magnetics are high. V enhanced backgrounds of 150 to 220 ppm are common in the east and at a lower background of 140 to 175 ppm over the south central portion of the grid. Low V contents of less than 75 ppm are also homogeneously distributed, suggesting V patterns will assist mapping of underlying geology.

**17. Ba (Figure 5Q)**

Ba accumulation is most extreme over the south central portion of the grid, where values exceed a threshold of 225 ppm, reaching maxima of 400 to 700 ppm in a number of northwesterly trending zones. Ba enhancement flanks the main Cu anomaly. Ba enrichment to anomalous conditions is common in the west, which contrasts to lower values, below 175 ppm, in the east and north central portions of the claims. The Ba distribution exhibits some heterogeneity and resembles that of Mn and negative features on the ground magnetic map.

**18. Sr (Figure 5R)**

Sr is often an indicator of seepage areas, and some Sr-rich zones are indeed in base of slope regions beside creeks. The Sr distribution is dominated by a high contrast anomalies widely distributed across the grid. Maximum values exceed a threshold of 110 ppm to 700 ppm. Sr accumulation is greatest in the south and east, and a high contrast anomaly outlines the baseline-fault Pb-Zn anomaly at the center of the grid. The main Cu anomaly is associated with a moderate to strongly elevated Sr values.

**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****19. Ca (Figure 5S)**

Ca is an element which can reflect poor sampling if values exceeding about 1% are randomly distributed over the grid. This is not the case here. Ca accumulation is homogeneous over the center and west centre of the grid, generally reaching 1 to 2% values, but locally approaching 4% in the same zone as was Ba-enriched. Ca anomalies generally are found associated with magnetically low areas. The Cu anomaly by contrast is an area of low Ca, generally less than 0.7% and not within a range where Cu accumulation (would be predicted to be faulty as a consequence of sampling organic material). The Ca distribution appears to be reflecting underlying bedrock.

**20. Mg (Figure 5T)**

Mg has accumulated in association with the main Cu anomaly and with the baseline-fault anomaly. The Mg pattern is somewhat heterogeneous, although this may be a function of small scale of the survey (i.e., a well-defined Mg pattern may emerge once the survey area is expanded). Mg anomalies are commonly seen in magnetically anomalous areas.

**21. Al (Figure 5U)**

Al enhancement is most common in association with base metal anomalies. For example, the main Cu anomaly is associated with Al-rich soils, as is the Pb-Zn baseline feature. Al contents are not sufficiently high or erratic to suggest scavenging by clay minerals (reflected by Al) are adversely affecting geochemical responses of other elements, but rather the Al pattern relates to underlying bedrock which is probably clay-rich (alteration?). Average Al contents are 1.9% to 2.9%.

**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****19. Ca (Figure 5S)**

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**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****22. K (Figure 5V)**

The K distribution is dominated by a zone of enrichment at the center of the grid where maximum values exceed a 0.1% threshold to 0.2%, correlating with Ba and Ca-rich zones and magnetic low south of the baseline base metal anomaly. The core of the Cu anomaly is also K-rich at 0.1% to 0.15%. The K distribution is homogeneous, suggesting it reflects underlying geology.

**23. P (Figure 5W)**

The P distribution is homogeneous, indicating patterns are probably reflecting underlying geology. P enrichment factors are outstanding, typically exceeding 4000 ppm to over 15,000 ppm (1.5%). The largest zone correlates with the west side of the main Cu anomaly. A second large area of enhancement correlates with the west central portion of the grid and a third anomaly lies in the far west. Each zone is 600 to 700 m long. Low value of less than 1250 ppm are also homogeneously distributed, to the east of the Cu anomaly, and over the northern and southern portions of the western grid. P anomalies generally correlate with magnetic highs.

**24. Ti (Figure 5X)**

The Ti distribution resembles that of Fe and V. High values exceeding 0.13% cluster along the baseline, in the extreme west, and over southern portions of the grid. Ti levels are weakly elevated in the 0.07 and 0.13% over the central portion of the Cu anomaly. Low values of less than 0.03% are homogeneously distributed through the center of the sampled area and surrounding the main Cu anomaly. The Ti distribution appears geologically controlled.

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begins. Follow-up in areas of anomalous conditions can justify a soil grid density of 25m x 50m where overburden cover is thin or residual in origin. A terrain analysis would compliment the soil survey, enabling interpretation of bedrock source locations for existing or new anomalies and assisting the positioning of grid orientation. A terrain analysis would also facilitate determination of where to recommend a soil survey and where soil sampling would be ineffective.

In view of the fact the Cu anomaly of interest is up to 400m x 1000m in dimensions and unclosed, and has a Au association, it is probably premature to become heavily involved in geological follow-up involving extensive trenching or bedrock chip sampling without first completing the soil survey. Some prospecting is in order, but the bulk of the detailed work should await interpretation of results of a more extensive soil survey. A ground magnetic survey should also be conducted prior to extensive geological follow-up.

Work to date suggests the MM claims have alkalic Cu-Au porphyry potential. Follow-up is highly recommended.

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Other signatures defined at Mount Milligan, Cat Mountain and QR include As as a halo element, Mo near the center of geochemical activity, Co, V and Fe associated with the ore elements and Pb and Zn periferal to the mineralization. Sampling on MM is limited, but strong As, Mo, Fe, Co, V, Pb and Zn anomalies lie in the north-central portion of the survey area associated with a fault zone. Although the fault zone may be an independent feature, discovery of Mount Milligan occurred by following a mineralized structure (the Esker Vein System) along strike.

Distributions of elements such as Fe, Mn, Ca, Sr, and Al describe patterns which are homogeneous, indicating the soil survey is of high quality. That being the case, patterns for these elements reflect geology. This can be seen by reference to the ground magnetic map which also suggests glacial dispersion is probably minimal (with a few hundred metres). High values for Mn and Ca are interesting and possibility of a Mn halo associated with the Cu anomaly and carbonate alteration, respectively, may be indicated. Multi-element signatures for Ni, Cr, Mg, Al, Zn, V, Ti, Sr and other elements suggest soil patterns are probably indicating changes in underlying volcanic stratigraphy. Geologic follow-up will undoubtedly document the geological significance of the different geochemical signatures. For example, a pattern of K-Ca-Ba near the center of the grid may be due to an alkalic intrusion or alteration signature related to an alkalic intrusion. It is located within a magnetically lower area surrounded by magnetic highs. The very high P values, many exceeding 0.5%, are also worthy of an explanation. They appear to correlate with magnetic highs, complimenting Cu.

The current survey covers a small fraction of the claim group and clearly needs to be extended, to the west, south, east and north of the eastern grid. A sample interval of 50 m along lines 100 m apart is suggested to enable coverage of a large area economically. Completion of about a 4 km area or the collection of an additional 500 samples is suggested before detailed follow-up

**PRIME GEOCHEMICAL METHODS LTD.****GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.****25. Be (Figure 5Y)**

The odd sample is enriched above 0.6 ppm in Be, with one two-point anomaly on the eastern grid. Lowering the threshold to 0.4 ppm defines a number of two-point features over the central portion of the grid.

**26. Ga (Figure 5Z)**

Ga backgrounds are enhanced associated with the Cu and baseline base metal anomalies.

**DISCUSSION OF RESULTS**

Exploration for the Mount Milligan deposit type, the alkalic Cu-Au porphyry, has proceeded either by follow-up aeromagnetic anomalies or geochemical anomalies (streams, soils, and rocks). The latter method is a less expensive approach, and thus far all major significant alkalic Cu-Au porphyry prospects have outstanding Cu and/or Au anomalies associated with them, including Mount Milligan (Placer Dome), Chuchi Lake (BP-Digger), Cat Mountain (Lysander - BP), Lorraine (Kennecott), Boundary (Major General), QR (Rae Gold) and Mount Polly (Imperial Metals). Preliminary studies on the MM claims indicate porphyry potential by virtue of one strong Cu anomaly comparable in magnitude to the Southern Star zone at Mount Milligan and several second order Cu anomalies elsewhere on the grid. Significant Au enhancement accompanies the major Cu zone. The close association of Cu and a magnetic highs is a favourable finding, and is consistent to what is seen at the above alkalic Au-Cu porphyry properties.

**APPENDIX I**

**ANALYTICAL DATA**

**PRIME GEOCHEMICAL METHODS LTD.**

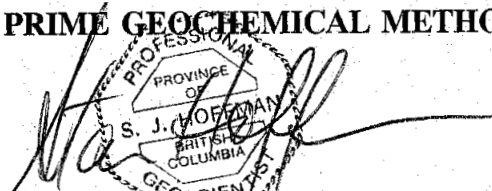
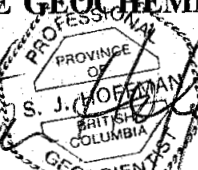
**GEOCHEMICAL REPORT ON THE MM PROPERTY, MT. MILLIGAN, B.C.**

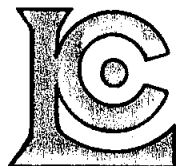
**CONCLUSIONS**

A soil survey conducted on the MM claims in 1991 defined one large Cu anomaly having a Au association and three additional areas of Cu accumulation. The anomalous zones are open in all directions and thus full delineation has been recommended as a priority. Good multi-element geochemical signatures suggest geologic trends, environments, and alteration are being reflected by soil survey results which correlate closely with ground magnetic survey patterns. The MM property deserves additional exploration and follow-up searching for components of the alkalic Cu-Au porphyry model.

Respectfully submitted,

**PRIME GEOCHEMICAL METHODS LTD.,**

  
  
Stanley J. Hoffman, Ph.D, P. Geo.  
Consulting Geochemist



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number :1-A  
 Total Pages :5  
 Certificate Date:09-JUL-91  
 Invoice No. :19117272  
 P.O. Number :NONE

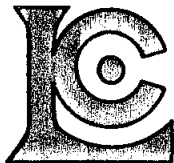
Project :  
 Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117272

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
			FA+AA																		
G1-001	201	238	< 5	< 0.2	2.90	5	170	< 0.5	< 2	0.49	< 0.5	20	62	67	4.82	10	< 1	0.05	10	0.79	1110
G1-002	203	205	< 5	< 0.2	2.86	25	120	< 0.5	< 2	0.93	1.0	29	126	76	5.43	20	< 1	0.06	10	1.85	1205
G1-003	201	238	< 5	< 0.2	4.30	< 5	320	< 0.5	< 2	0.89	0.5	65	178	117	7.07	20	< 1	0.02	< 10	2.56	2460
G1-004	201	238	< 5	< 0.2	3.48	380	200	< 0.5	< 2	0.17	< 0.5	67	54	121	8.53	10	< 1	0.05	10	1.10	2700
G1-005	201	238	< 5	0.4	1.57	90	150	< 0.5	< 2	0.77	1.5	48	16	101	7.34	10	< 1	0.08	20	0.47	2840
G1-006	201	238	< 5	0.2	2.57	105	270	< 0.5	< 2	1.07	1.5	119	54	128	6.78	10	< 1	0.09	20	1.25	4730
G1-007	203	205	10	< 0.2	3.64	25	80	< 0.5	< 2	0.84	< 0.5	21	63	89	5.32	20	< 1	0.04	10	1.05	815
G1-008	201	238	< 5	< 0.2	4.47	10	390	< 0.5	< 2	0.66	1.0	24	53	95	5.80	20	< 1	0.03	10	0.99	1130
G1-009	201	238	< 5	< 0.2	2.77	15	310	< 0.5	2	0.84	< 0.5	24	36	93	4.36	10	< 1	0.07	20	0.81	980
G1-010	201	238	< 5	< 0.2	3.12	5	170	< 0.5	< 2	0.35	< 0.5	14	37	58	5.33	10	< 1	0.02	< 10	0.63	405
G1-011	201	238	< 5	0.2	3.52	5	100	< 0.5	2	0.36	0.5	15	41	58	5.11	10	< 1	0.02	10	0.65	440
G1-012	201	238	< 5	< 0.2	3.32	10	100	< 0.5	< 2	0.54	< 0.5	17	45	63	4.94	10	< 1	0.05	10	0.68	750
G1-013	203	205	< 5	< 0.2	3.40	15	140	< 0.5	< 2	0.98	< 0.5	21	90	61	5.88	30	< 1	0.05	10	1.33	1150
G1-014	201	238	< 5	< 0.2	3.02	10	120	< 0.5	< 2	0.39	< 0.5	15	54	44	4.86	20	< 1	0.03	10	0.71	1030
G1-015	201	238	< 5	< 0.2	3.35	15	150	< 0.5	< 2	0.62	< 0.5	18	45	67	4.77	20	< 1	0.03	20	0.87	495
G1-016	201	238	15	< 0.2	3.16	20	120	< 0.5	< 2	0.27	< 0.5	41	23	114	5.01	10	< 1	0.11	10	0.82	1635
G1-017	201	238	< 5	< 0.2	3.27	5	90	< 0.5	< 2	0.43	< 0.5	16	24	79	4.35	10	< 1	0.03	10	0.72	670
G1-018	201	238	10	< 0.2	3.19	< 5	100	< 0.5	2	0.52	0.5	17	25	83	3.87	10	< 1	0.02	10	0.70	530
G1-019	201	238	< 5	< 0.2	2.43	10	70	< 0.5	< 2	0.61	< 0.5	14	28	64	4.30	10	< 1	0.03	10	0.67	595
G1-020	201	238	< 5	< 0.2	1.54	< 5	270	< 0.5	< 2	0.78	< 0.5	17	16	31	3.04	10	< 1	0.10	< 10	0.21	5030
G1-021	201	238	< 5	< 0.2	2.22	5	110	< 0.5	< 2	0.75	< 0.5	12	19	50	3.52	10	< 1	0.05	< 10	0.41	920
G1-022	203	205	< 5	< 0.2	3.44	< 5	90	< 0.5	< 2	1.63	< 0.5	22	43	90	4.76	20	< 1	0.08	< 10	1.03	1150
G1-023	203	205	< 5	< 0.2	3.16	< 5	50	< 0.5	< 2	1.54	< 0.5	21	36	81	4.33	20	< 1	0.08	< 10	1.06	870
G1-024	201	238	< 5	< 0.2	3.30	5	90	< 0.5	< 2	0.62	< 0.5	17	19	83	4.04	10	< 1	0.03	10	0.72	965
G1-025	201	238	< 5	< 0.2	3.20	< 5	70	< 0.5	< 2	0.94	< 0.5	22	28	88	4.26	10	< 1	0.04	10	0.85	1185
G1-026	203	205	< 5	< 0.2	3.51	< 5	110	< 0.5	< 2	1.90	< 0.5	26	32	74	4.40	20	< 1	0.07	< 10	0.97	2530
G1-027	201	238	< 5	< 0.2	2.90	< 5	70	< 0.5	< 2	0.70	0.5	18	28	73	4.18	10	< 1	0.05	10	0.70	1480
G1-028	201	238	< 5	< 0.2	2.07	5	150	< 0.5	< 2	0.80	< 0.5	14	30	38	3.69	10	< 1	0.08	< 10	0.34	2230
G1-029	201	238	5	< 0.2	2.80	10	90	< 0.5	< 2	0.60	< 0.5	14	28	58	4.00	10	< 1	0.04	< 10	0.64	900
G1-030	201	238	< 5	< 0.2	1.58	5	110	< 0.5	< 2	0.62	0.5	3	17	25	1.13	< 10	< 1	0.07	< 10	0.12	275
G1-031	201	238	< 5	< 0.2	3.19	10	90	< 0.5	< 2	0.56	0.5	9	29	74	2.48	< 10	< 1	0.05	10	0.34	695
G1-032	203	205	< 5	< 0.2	3.28	< 5	150	< 0.5	< 2	1.99	< 0.5	26	55	55	5.23	10	< 1	0.06	< 10	1.02	2340
G1-033	201	238	< 5	< 0.2	2.73	5	130	< 0.5	< 2	1.10	< 0.5	18	48	95	4.78	10	< 1	0.05	< 10	0.59	1970
G1-034	201	238	< 5	< 0.2	2.77	5	100	< 0.5	< 2	1.01	< 0.5	17	42	57	4.03	10	< 1	0.04	< 10	0.70	855
G1-035	201	238	< 5	< 0.2	2.44	5	90	< 0.5	< 2	0.84	< 0.5	15	38	59	3.88	10	< 1	0.04	< 10	0.58	1045
G1-036	201	238	5	< 0.2	2.41	5	130	< 0.5	< 2	0.73	< 0.5	14	37	49	3.96	10	< 1	0.04	< 10	0.55	1130
G1-037	201	238	< 5	< 0.2	2.16	< 5	200	< 0.5	< 2	0.83	< 0.5	13	28	44	3.47	< 10	< 1	0.05	< 10	0.36	1400
G1-038	201	238	< 5	< 0.2	2.67	< 5	100	< 0.5	< 2	0.66	< 0.5	14	27	62	3.70	< 10	< 1	0.04	10	0.54	960
G1-039	201	238	< 5	< 0.2	1.73	5	130	< 0.5	< 2	0.70	< 0.5	9	22	42	2.11	< 10	< 1	0.05	< 10	0.14	1610
G1-040	203	205	< 5	< 0.2	3.34	< 5	120	< 0.5	< 2	1.74	< 0.5	32	84	78	5.01	10	< 1	0.11	< 10	1.26	2040

CERTIFICATION: \_\_\_\_\_

*B. Coughlin*



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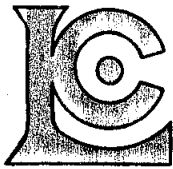
## CERTIFICATE OF ANALYSIS A9117272

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
G1-001	201 238	1	0.01	30	2640	28	5	2	81	0.04	< 10	< 10	141	10	134
G1-002	203 205	< 1	0.04	64	1830	14	< 5	10	63	0.27	< 10	< 10	192	< 10	152
G1-003	201 238	< 1	0.02	90	1700	16	5	15	506	0.22	< 10	< 10	309	< 10	188
G1-004	201 238	9	0.01	55	2240	30	10	19	25	0.02	< 10	< 10	203	< 10	216
G1-005	201 238	3	0.01	24	1920	40	5	19	20	< 0.01	< 10	< 10	111	< 10	242
G1-006	201 238	8	0.01	62	1570	34	10	31	24	< 0.01	< 10	< 10	165	< 10	172
G1-007	203 205	1	0.02	31	1870	12	5	9	42	0.27	< 10	< 10	192	< 10	154
G1-008	201 238	< 1	0.02	37	1780	12	5	14	353	0.20	< 10	< 10	220	< 10	204
G1-009	201 238	< 1	0.01	27	1550	10	5	12	66	0.06	< 10	< 10	112	< 10	90
G1-010	201 238	1	0.01	18	1880	10	5	3	141	0.09	< 10	< 10	178	< 10	112
G1-011	201 238	3	0.01	28	1580	16	5	4	48	0.10	< 10	< 10	141	< 10	114
G1-012	201 238	< 1	0.01	22	2170	8	5	5	73	0.12	< 10	< 10	151	< 10	98
G1-013	203 205	1	0.03	37	1280	14	5	10	60	0.40	< 10	< 10	227	< 10	150
G1-014	201 238	< 1	0.01	26	1280	10	5	6	59	0.22	< 10	< 10	195	< 10	136
G1-015	201 238	< 1	0.01	30	1580	8	5	6	91	0.16	< 10	< 10	162	< 10	100
G1-016	201 238	6	0.01	24	1970	24	5	3	46	0.03	< 10	< 10	97	< 10	90
G1-017	201 238	2	0.01	24	2120	14	< 5	2	76	0.07	< 10	< 10	126	< 10	104
G1-018	201 238	< 1	0.01	21	1770	10	< 5	2	78	0.07	< 10	< 10	113	< 10	94
G1-019	201 238	< 1	0.01	16	1470	8	< 5	2	44	0.10	< 10	< 10	125	< 10	88
G1-020	201 238	< 1	0.01	8	2230	12	< 5	1	128	0.05	< 10	< 10	102	< 10	90
G1-021	201 238	< 1	0.01	10	1660	8	< 5	2	63	0.09	< 10	< 10	128	< 10	96
G1-022	203 205	< 1	0.03	16	2380	6	< 5	5	74	0.16	< 10	< 10	151	< 10	118
G1-023	203 205	< 1	0.03	13	1780	8	< 5	6	48	0.19	< 10	< 10	146	< 10	98
G1-024	201 238	1	0.01	14	1790	8	5	2	50	0.07	< 10	< 10	137	< 10	86
G1-025	201 238	< 1	0.01	16	2580	8	< 5	5	66	0.13	< 10	< 10	143	< 10	82
G1-026	203 205	< 1	0.03	11	1940	10	< 5	4	76	0.14	< 10	< 10	149	< 10	110
G1-027	201 238	< 1	0.01	15	2740	6	< 5	2	59	0.08	< 10	< 10	122	< 10	78
G1-028	201 238	1	0.01	11	3490	6	< 5	1	65	0.04	< 10	< 10	137	< 10	106
G1-029	201 238	< 1	0.01	13	1870	4	< 5	2	38	0.09	< 10	< 10	114	< 10	88
G1-030	201 238	< 1	0.01	6	9890	4	< 5	< 1	58	< 0.01	10	< 10	35	< 10	56
G1-031	201 238	1	0.01	18	8180	< 2	< 5	1	67	< 0.01	< 10	< 10	94	< 10	86
G1-032	203 205	< 1	0.03	16	2200	8	5	5	46	0.14	< 10	< 10	152	< 10	130
G1-033	201 238	< 1	0.01	16	3700	10	< 5	2	59	0.05	< 10	< 10	130	< 10	100
G1-034	201 238	1	0.01	16	2890	6	< 5	1	74	0.05	< 10	< 10	126	< 10	106
G1-035	201 238	< 1	0.01	14	2360	8	< 5	2	67	0.06	< 10	< 10	134	< 10	80
G1-036	201 238	< 1	0.01	14	2300	6	< 5	1	64	0.05	10	< 10	130	< 10	86
G1-037	201 238	1	0.01	12	3480	6	< 5	< 1	70	0.02	< 10	< 10	111	< 10	92
G1-038	201 238	< 1	0.01	13	2980	6	< 5	1	61	0.03	< 10	< 10	122	< 10	82
G1-039	201 238	1	0.01	8	7060	10	< 5	< 1	72	< 0.01	< 10	< 10	79	< 10	64
G1-040	203 205	< 1	0.03	26	2650	12	5	9	120	0.20	< 10	< 10	163	< 10	108

CERTIFICATION:

*B. Coughlin*





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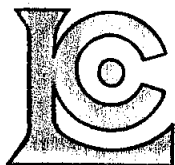
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A9117272

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
			FA+AA																		
G1-041	203	205	< 5	< 0.2	4.12	< 5	80	< 0.5	< 2	1.57	< 0.5	23	51	102	4.80	10	< 1	0.06	< 10	1.02	1625
G1-042	203	205	< 5	< 0.2	2.70	20	90	< 0.5	< 2	0.44	< 0.5	13	69	63	4.00	< 10	< 1	0.07	< 10	0.71	940
G1-043	203	205	< 5	< 0.2	3.01	15	100	0.5	< 2	0.62	0.5	20	72	60	4.67	10	< 1	0.07	< 10	0.63	2380
G1-044	201	238	< 5	< 0.2	3.36	5	120	< 0.5	< 2	0.43	1.0	21	81	77	5.72	10	< 1	0.03	10	0.87	1075
G1-045	201	238	< 5	< 0.2	2.47	15	140	< 0.5	< 2	0.53	0.5	17	75	65	5.56	10	< 1	0.02	< 10	0.75	950
G1-046	203	205	< 5	< 0.2	2.21	5	230	0.5	< 2	0.70	< 0.5	18	38	35	2.30	< 10	< 1	0.06	< 10	0.22	2900
G1-047	203	205	< 5	< 0.2	1.94	5	230	< 0.5	< 2	0.58	< 0.5	31	24	36	2.57	< 10	< 1	0.07	10	0.16	4290
G1-048	203	205	< 5	< 0.2	1.30	< 5	210	< 0.5	< 2	1.57	0.5	17	85	21	1.32	< 10	< 1	0.12	< 10	0.26	2250
G1-049	217	238	< 5	< 0.2	1.45	5	240	< 0.5	< 2	1.21	0.5	19	45	28	1.75	< 10	< 1	0.08	< 10	0.31	5320
G1-050	203	205	5	< 0.2	2.56	< 5	80	< 0.5	< 2	0.72	< 0.5	14	33	55	3.98	10	< 1	0.02	10	0.72	740
G1-051	201	238	< 5	< 0.2	2.43	< 5	160	< 0.5	< 2	0.86	< 0.5	16	44	46	3.98	< 10	< 1	0.05	< 10	0.47	1335
G1-052	201	238	< 5	< 0.2	2.23	5	70	< 0.5	< 2	0.46	< 0.5	11	32	44	3.69	< 10	< 1	0.01	10	0.60	495
G1-053	201	238	< 5	< 0.2	2.79	5	80	0.5	< 2	0.54	< 0.5	12	40	51	4.14	< 10	< 1	0.02	10	0.62	490
G1-054	201	238	< 5	< 0.2	2.57	10	70	< 0.5	< 2	0.87	0.5	16	56	63	4.79	10	< 1	0.02	< 10	0.80	645
G1-055	201	238	< 5	< 0.2	3.10	40	90	< 0.5	< 2	0.54	< 0.5	21	62	85	6.07	10	< 1	0.03	10	0.78	1080
G1-056	203	205	< 5	< 0.2	2.19	5	160	< 0.5	< 2	0.99	< 0.5	21	81	52	3.03	< 10	< 1	0.08	< 10	0.44	2590
G1-057	203	205	< 5	< 0.2	1.79	5	160	0.5	< 2	0.68	< 0.5	19	48	45	2.93	< 10	< 1	0.07	< 10	0.46	2670
G1-058	201	238	< 5	< 0.2	2.39	< 5	120	< 0.5	< 2	0.52	< 0.5	12	33	65	3.77	< 10	< 1	0.03	10	0.62	685
G1-059	201	238	< 5	< 0.2	2.87	5	50	0.5	< 2	0.62	< 0.5	14	21	72	3.66	< 10	< 1	0.03	10	0.70	1235
G1-060	201	238	< 5	< 0.2	2.22	< 5	90	< 0.5	< 2	0.40	0.5	8	23	47	3.40	< 10	< 1	0.04	< 10	0.43	555
G1-061	201	238	< 5	< 0.2	2.33	< 5	100	< 0.5	2	0.65	< 0.5	12	34	51	4.15	< 10	< 1	0.03	< 10	0.63	720
G1-062	201	238	< 5	< 0.2	2.46	< 5	80	< 0.5	< 2	0.50	< 0.5	11	31	47	3.83	< 10	< 1	0.02	< 10	0.58	710
G1-063	201	238	< 5	< 0.2	2.78	5	50	< 0.5	< 2	0.43	< 0.5	10	33	53	3.78	< 10	< 1	0.02	< 10	0.62	430
G1-064	201	238	< 5	< 0.2	2.49	5	80	< 0.5	< 2	0.41	< 0.5	12	44	55	4.90	< 10	< 1	0.02	< 10	0.71	520
G1-065	201	238	< 5	< 0.2	2.61	10	70	< 0.5	< 2	0.42	< 0.5	12	42	56	4.10	< 10	< 1	0.02	< 10	0.64	610
G1-066	201	238	< 5	< 0.2	2.67	55	130	< 0.5	< 2	0.60	0.5	15	44	74	5.44	< 10	< 1	0.03	< 10	0.62	1060
G1-067	201	238	< 5	< 0.2	1.40	5	130	< 0.5	< 2	0.39	0.5	8	30	43	3.63	< 10	< 1	0.04	< 10	0.15	700
G1-068	203	205	< 5	< 0.2	1.23	< 5	140	< 0.5	< 2	0.90	< 0.5	11	51	32	2.31	< 10	< 1	0.08	< 10	0.30	1490
G1-069	201	238	< 5	< 0.2	2.96	< 5	100	< 0.5	< 2	0.44	< 0.5	9	28	55	3.63	< 10	< 1	0.04	< 10	0.47	605
G1-070	201	238	< 5	< 0.2	2.09	< 5	100	< 0.5	< 2	0.38	< 0.5	6	21	39	3.29	< 10	< 1	0.04	< 10	0.29	520
G1-071	201	238	< 5	< 0.2	2.40	< 5	60	< 0.5	< 2	0.63	< 0.5	10	24	57	3.63	< 10	< 1	0.03	< 10	0.66	400
G1-072	217	238	< 5	< 0.2	2.64	< 5	50	< 0.5	< 2	0.35	< 0.5	4	21	48	1.25	< 10	< 1	0.06	< 10	0.15	275
G1-073	201	238	< 5	< 0.2	2.59	< 5	130	< 0.5	< 2	0.57	< 0.5	11	25	57	3.65	< 10	< 1	0.06	< 10	0.39	1305
G1-074	201	238	< 5	< 0.2	2.05	< 5	160	< 0.5	< 2	0.63	0.5	7	26	37	3.06	< 10	< 1	0.05	< 10	0.24	730
G1-075	201	238	< 5	< 0.2	2.60	< 5	110	< 0.5	2	0.60	< 0.5	11	34	54	4.13	10	< 1	0.04	10	0.64	595
G1-076	217	238	< 5	< 0.2	1.08	< 5	530	< 0.5	4	0.79	1.0	28	23	18	1.53	< 10	< 1	0.08	< 10	0.13	5700
G1-077	201	238	< 5	< 0.2	2.58	< 5	120	< 0.5	< 2	0.81	< 0.5	12	31	52	4.17	< 10	< 1	0.03	< 10	0.60	800
G1-078	201	238	< 5	< 0.2	2.91	< 5	70	< 0.5	2	1.10	< 0.5	12	35	63	4.47	10	< 1	0.02	< 10	0.76	495
G1-079	217	238	< 5	< 0.2	2.18	< 5	190	< 0.5	< 2	1.33	< 0.5	16	44	44	3.52	< 10	< 1	0.08	< 10	0.51	2120
G1-080	201	238	< 5	< 0.2	3.02	< 5	60	< 0.5	< 2	0.47	< 0.5	11	26	65	4.10	< 10	< 1	0.02	10	0.66	500

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

Page Number :2-B  
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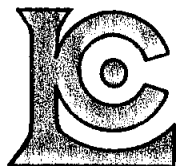
Project :  
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117272

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
G1-041	203	205	< 1	0.03	12	2510	6	< 5	5	93	0.15	< 10	< 10	146	< 10	136
G1-042	203	205	1	0.02	21	2110	8	< 5	2	47	0.09	< 10	< 10	137	< 10	118
G1-043	203	205	1	0.02	16	2720	4	< 5	2	43	0.11	< 10	< 10	135	< 10	110
G1-044	201	238	1	0.01	30	1820	8	< 5	5	43	0.12	< 10	< 10	198	< 10	192
G1-045	201	238	1	0.01	25	1500	8	< 5	3	59	0.10	< 10	< 10	191	< 10	114
G1-046	203	205	1	0.01	10	7700	6	< 5	< 1	72	< 0.01	< 10	< 10	81	< 10	84
G1-047	203	205	1	0.01	8	7430	10	< 5	1	91	0.01	< 10	< 10	78	< 10	80
G1-048	203	205	1	0.02	8	6100	2	< 5	< 1	134	< 0.01	< 10	< 10	39	< 10	140
G1-049	217	238	1	0.02	8	3770	6	< 5	1	88	0.01	< 10	< 10	59	< 10	140
G1-050	203	205	< 1	0.01	16	1250	6	< 5	4	55	0.12	< 10	< 10	116	< 10	72
G1-051	201	238	< 1	0.02	11	2380	8	< 5	1	76	0.03	< 10	< 10	136	< 10	96
G1-052	201	238	< 1	0.01	15	990	4	< 5	2	46	0.08	< 10	< 10	109	< 10	64
G1-053	201	238	1	0.01	15	1350	6	< 5	2	62	0.09	< 10	< 10	127	< 10	78
G1-054	201	238	< 1	0.01	19	1710	4	< 5	4	96	0.13	< 10	< 10	153	< 10	84
G1-055	201	238	3	0.01	29	1650	8	< 5	4	75	0.12	< 10	< 10	183	< 10	144
G1-056	203	205	1	0.02	8	3060	6	< 5	2	63	0.07	< 10	< 10	105	< 10	76
G1-057	203	205	< 1	0.02	11	2630	8	< 5	1	52	0.03	< 10	< 10	80	< 10	90
G1-058	201	238	< 1	0.01	18	1190	6	< 5	2	153	0.06	< 10	< 10	104	< 10	86
G1-059	201	238	< 1	0.01	11	2250	4	< 5	1	56	0.03	< 10	< 10	105	< 10	80
G1-060	201	238	< 1	0.01	8	1830	4	< 5	< 1	45	0.02	< 10	< 10	100	< 10	70
G1-061	201	238	< 1	0.01	14	1260	4	< 5	2	50	0.10	< 10	< 10	118	< 10	96
G1-062	201	238	< 1	0.01	12	1110	4	< 5	2	45	0.07	< 10	< 10	110	< 10	62
G1-063	201	238	1	0.01	14	1050	2	< 5	2	48	0.07	< 10	< 10	104	< 10	64
G1-064	201	238	1	0.01	17	810	6	< 5	3	51	0.11	< 10	< 10	137	< 10	92
G1-065	201	238	1	0.01	17	1020	8	< 5	2	44	0.06	< 10	< 10	114	< 10	76
G1-066	201	238	1	0.01	20	1670	4	< 5	1	59	0.07	< 10	< 10	165	< 10	98
G1-067	201	238	2	0.01	15	2600	4	< 5	< 1	47	0.01	10	< 10	117	< 10	80
G1-068	203	205	1	0.01	7	2010	6	< 5	< 1	79	0.02	10	< 10	77	< 10	112
G1-069	201	238	< 1	0.01	11	1680	2	< 5	1	41	0.06	< 10	< 10	107	< 10	88
G1-070	201	238	1	0.01	7	1690	2	< 5	< 1	54	0.02	< 10	< 10	111	< 10	68
G1-071	201	238	< 1	0.01	9	1230	4	< 5	2	70	0.11	< 10	< 10	113	< 10	68
G1-072	217	238	1	0.01	6	9290	2	< 5	< 1	44	< 0.01	< 10	< 10	34	< 10	68
G1-073	201	238	< 1	0.01	13	3300	6	< 5	< 1	61	0.02	< 10	< 10	98	< 10	116
G1-074	201	238	1	0.01	8	2260	4	< 5	< 1	66	0.02	< 10	< 10	109	< 10	76
G1-075	201	238	< 1	0.01	13	1370	6	< 5	1	67	0.06	< 10	< 10	124	< 10	92
G1-076	217	238	2	0.01	6	5360	10	< 5	< 1	83	< 0.01	< 10	< 10	52	< 10	110
G1-077	201	238	< 1	0.01	13	1530	2	< 5	1	67	0.06	< 10	< 10	132	< 10	84
G1-078	201	238	1	0.01	13	1030	2	< 5	3	78	0.13	< 10	< 10	142	< 10	74
G1-079	217	238	< 1	0.02	7	1850	2	< 5	2	80	0.09	< 10	< 10	126	< 10	98
G1-080	201	238	< 1	0.01	12	1300	< 2	< 5	3	53	0.11	< 10	< 10	122	< 10	72

CERTIFICATION:

*B. Coughlin*



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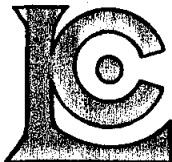
Project :  
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117272

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
			FA+AA																		
G1-081	203	205	< 5	< 0.2	4.05	< 5	100	< 0.5	2	1.40	0.5	19	56	76	4.86	10	< 1	0.07	< 10	1.03	1195
G1-082	201	238	< 5	< 0.2	2.93	< 5	60	< 0.5	2	0.44	0.5	12	31	58	3.31	10	< 1	0.03	10	0.50	475
G1-083	217	238	< 5	< 0.2	1.64	< 5	320	< 0.5	< 2	1.22	< 0.5	24	21	41	2.00	< 10	< 1	0.13	< 10	0.33	5860
G1-084	201	238	< 5	< 0.2	2.32	< 5	90	< 0.5	< 2	0.51	0.5	8	19	50	3.13	< 10	< 1	0.03	< 10	0.45	530
G1-085	217	238	< 5	< 0.2	3.38	< 5	120	< 0.5	< 2	1.26	0.5	19	60	80	4.70	< 10	< 1	0.07	< 10	1.30	1300
G1-086	201	238	< 5	< 0.2	1.56	< 5	510	0.5	< 2	0.52	0.5	12	13	25	1.18	< 10	1	0.07	< 10	0.11	6070
G1-087	201	238	< 5	< 0.2	2.31	< 5	190	< 0.5	< 2	0.58	0.5	9	25	44	3.29	< 10	< 1	0.05	< 10	0.49	825
G1-088	201	238	< 5	< 0.2	2.81	< 5	80	< 0.5	< 2	0.66	< 0.5	11	33	64	4.19	< 10	< 1	0.02	10	0.70	440
G1-089	201	238	10	< 0.2	2.99	< 5	90	< 0.5	< 2	0.66	0.5	12	32	70	4.63	< 10	< 1	0.03	10	0.77	550
G1-090	201	238	< 5	< 0.2	2.66	< 5	110	< 0.5	< 2	0.60	< 0.5	12	31	62	4.41	< 10	< 1	0.03	10	0.70	630
G1-091	201	238	< 5	< 0.2	3.00	< 5	110	< 0.5	< 2	0.50	0.5	10	28	63	3.65	< 10	< 1	0.02	10	0.49	625
G1-092	201	238	< 5	< 0.2	2.28	< 5	140	< 0.5	2	0.40	< 0.5	7	18	38	2.86	< 10	< 1	0.02	< 10	0.33	740
G1-093	217	238	< 5	< 0.2	1.83	< 5	120	< 0.5	< 2	1.02	< 0.5	14	19	41	1.62	< 10	< 1	0.11	10	0.34	2950
G1-094	217	238	< 5	< 0.2	3.11	< 5	100	< 0.5	< 2	0.92	< 0.5	17	44	82	4.43	10	< 1	0.08	< 10	0.77	1200
G1-095	201	238	< 5	< 0.2	4.40	< 5	180	< 0.5	< 2	0.71	0.5	20	25	96	5.44	10	< 1	0.04	< 10	0.71	1190
G1-096	201	238	< 5	< 0.2	2.04	< 5	100	< 0.5	< 2	0.61	< 0.5	6	18	50	2.20	< 10	< 1	0.06	10	0.15	1125
G1-097	217	238	< 5	< 0.2	3.80	< 5	90	< 0.5	< 2	1.99	< 0.5	21	43	92	5.13	< 10	< 1	0.10	< 10	1.26	1305
G1-098	217	238	< 5	< 0.2	3.46	< 5	50	< 0.5	< 2	0.97	< 0.5	18	24	88	4.57	< 10	< 1	0.07	< 10	1.30	1195
G1-099	201	238	10	< 0.2	2.62	< 5	110	< 0.5	< 2	0.59	< 0.5	12	23	69	3.85	< 10	< 1	0.04	10	0.68	1055
G1-100	201	238	< 5	< 0.2	2.73	< 5	120	< 0.5	< 2	0.48	< 0.5	11	26	71	4.03	< 10	< 1	0.03	10	0.69	580
G1-101	201	238	< 5	< 0.2	2.68	< 5	130	< 0.5	2	0.48	< 0.5	11	24	68	4.00	< 10	< 1	0.04	10	0.67	565
G1-102	217	238	< 5	< 0.2	2.42	< 5	140	< 0.5	2	0.56	< 0.5	8	18	45	2.18	< 10	< 1	0.09	< 10	0.47	715
G1-103	201	238	5	< 0.2	2.76	< 5	100	< 0.5	< 2	0.53	< 0.5	11	32	59	4.03	< 10	< 1	0.04	10	0.72	510
G1-104	201	238	< 5	< 0.2	2.98	< 5	110	< 0.5	< 2	0.33	< 0.5	7	19	47	2.53	< 10	< 1	0.04	< 10	0.36	430
G1-105	217	238	< 5	< 0.2	2.42	< 5	120	< 0.5	< 2	1.45	< 0.5	26	30	57	3.24	< 10	< 1	0.14	< 10	0.78	4500
G1-106	201	238	< 5	< 0.2	2.97	< 5	90	< 0.5	< 2	0.80	< 0.5	11	15	71	2.11	< 10	< 1	0.08	20	0.32	1655
G1-107	201	238	< 5	0.6	3.41	< 5	80	< 0.5	< 2	0.30	0.5	9	27	58	3.44	< 10	< 1	0.05	10	0.45	495
G1-108	203	205	< 5	< 0.2	2.34	< 5	120	< 0.5	< 2	0.97	0.5	12	39	47	3.16	10	< 1	0.09	< 10	0.46	1385
G1-109	217	238	< 5	< 0.2	3.31	< 5	80	< 0.5	< 2	1.22	0.5	18	41	79	4.73	< 10	< 1	0.09	< 10	0.97	1580
G1-110	217	238	< 5	< 0.2	0.75	< 5	320	< 0.5	< 2	0.73	< 0.5	33	28	23	1.37	< 10	< 1	0.11	< 10	0.13	8360
G1-111	203	205	< 5	< 0.2	2.53	< 5	100	< 0.5	< 2	0.82	1.0	14	49	74	4.10	10	< 1	0.07	< 10	0.85	1155
G1-112	217	238	< 5	< 0.2	2.57	< 5	90	< 0.5	< 2	0.99	0.5	17	24	72	4.13	10	< 1	0.06	< 10	1.03	1055
G1-113	201	238	< 5	< 0.2	1.80	< 5	130	< 0.5	< 2	0.39	0.5	5	11	40	2.02	< 10	< 1	0.04	< 10	0.15	580
G1-114	201	238	< 5	< 0.2	3.21	< 5	140	< 0.5	< 2	0.79	< 0.5	17	21	114	4.72	10	< 1	0.04	10	0.91	745
G1-115	217	238	< 5	< 0.2	3.57	< 5	100	< 0.5	< 2	1.54	0.5	20	60	79	5.56	20	< 1	0.07	< 10	1.69	1345
G1-116	217	238	< 5	< 0.2	1.80	< 5	240	< 0.5	2	0.70	< 0.5	7	31	41	2.11	< 10	1	0.06	< 10	0.26	535
G1-117	201	238	< 5	< 0.2	1.63	< 5	140	< 0.5	2	0.35	0.5	2	7	29	1.04	< 10	< 1	0.03	< 10	0.09	125
G1-118	201	238	< 5	0.2	1.50	< 5	140	< 0.5	< 2	0.33	< 0.5	2	9	30	1.09	< 10	< 1	0.04	< 10	0.07	95
G1-119	217	238	< 5	< 0.2	3.82	< 5	70	< 0.5	< 2	1.58	0.5	27	20	101	4.73	10	< 1	0.07	< 10	1.22	1030
G1-120	217	238	< 5	< 0.2	3.47	< 5	90	< 0.5	< 2	1.20	0.5	24	25	90	4.79	20	< 1	0.12	< 10	1.33	1565

CERTIFICATION:

*B. Cough*



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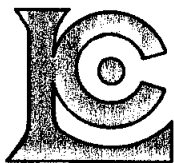
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## CERTIFICATE OF ANALYSIS

### A9117272

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
G1-081	203	205	1	0.03	19	1650	8	< 5	5	71	0.20	< 10	< 10	159	< 10	120
G1-082	201	238	1	0.01	17	1640	10	< 5	1	78	0.05	< 10	< 10	108	< 10	78
G1-083	217	238	1	0.01	6	3090	10	< 5	< 1	53	0.02	< 10	< 10	63	< 10	120
G1-084	201	238	< 1	0.01	7	1460	6	< 5	1	51	0.04	< 10	< 10	98	< 10	84
G1-085	217	238	< 1	0.02	19	2110	4	< 5	4	55	0.11	< 10	< 10	147	< 10	126
G1-086	201	238	2	0.01	6	6010	6	< 5	< 1	57	< 0.01	< 10	< 10	53	< 10	82
G1-087	201	238	1	0.01	10	2830	2	< 5	< 1	62	0.01	< 10	< 10	100	< 10	90
G1-088	201	238	< 1	0.01	14	1230	4	< 5	3	53	0.09	< 10	< 10	124	< 10	66
G1-089	201	238	< 1	0.01	15	1120	2	< 5	3	59	0.10	< 10	< 10	137	< 10	78
G1-090	201	238	< 1	0.01	13	1260	6	< 5	1	63	0.06	< 10	< 10	131	< 10	68
G1-091	201	238	< 1	0.01	12	1930	2	< 5	< 1	43	0.03	< 10	< 10	108	< 10	68
G1-092	201	238	1	0.01	8	2510	4	< 5	< 1	37	0.01	< 10	< 10	80	< 10	80
G1-093	217	238	1	0.01	6	5250	< 2	< 5	< 1	72	< 0.01	< 10	< 10	53	< 10	78
G1-094	217	238	< 1	0.03	12	1500	4	< 5	4	134	0.16	< 10	< 10	128	< 10	118
G1-095	201	238	3	0.01	24	2440	10	< 5	2	83	0.07	< 10	< 10	143	< 10	124
G1-096	201	238	1	0.01	6	4220	8	< 5	< 1	67	< 0.01	< 10	< 10	79	< 10	72
G1-097	217	238	< 1	0.03	14	1620	4	< 5	7	107	0.22	< 10	< 10	164	< 10	112
G1-098	217	238	< 1	0.02	10	1830	2	< 5	4	26	0.12	< 10	< 10	146	< 10	108
G1-099	201	238	1	0.01	10	1680	4	< 5	1	60	0.04	< 10	< 10	126	< 10	102
G1-100	201	238	< 1	0.01	12	1230	4	< 5	1	55	0.05	< 10	< 10	124	< 10	70
G1-101	201	238	< 1	0.01	11	1480	6	< 5	1	56	0.04	< 10	< 10	116	< 10	78
G1-102	217	238	< 1	0.01	7	4040	4	< 5	< 1	41	< 0.01	< 10	< 10	77	< 10	78
G1-103	201	238	< 1	0.01	15	1450	4	< 5	2	55	0.09	< 10	< 10	117	< 10	74
G1-104	201	238	1	0.01	8	3010	2	< 5	< 1	39	0.01	< 10	< 10	75	< 10	60
G1-105	217	238	1	0.02	7	2260	12	< 5	3	62	0.10	< 10	< 10	108	< 10	104
G1-106	201	238	1	0.01	8	6130	8	< 5	< 1	89	< 0.01	< 10	< 10	95	< 10	72
G1-107	201	238	1	0.01	12	1640	10	< 5	1	46	0.05	< 10	< 10	117	< 10	58
G1-108	203	205	1	0.02	8	1850	10	< 5	1	71	0.06	< 10	< 10	113	< 10	94
G1-109	217	238	< 1	0.03	11	1410	8	< 5	5	71	0.17	< 10	< 10	152	< 10	110
G1-110	217	238	1	0.01	4	2590	16	< 5	< 1	40	0.02	< 10	< 10	41	< 10	140
G1-111	203	205	< 1	0.03	12	1120	6	< 5	3	66	0.09	< 10	< 10	127	< 10	100
G1-112	217	238	< 1	0.02	8	1060	2	< 5	3	44	0.13	< 10	< 10	130	< 10	84
G1-113	201	238	1	0.01	5	3470	4	< 5	< 1	45	< 0.01	< 10	< 10	76	< 10	52
G1-114	201	238	< 1	0.01	14	1700	4	< 5	5	73	0.09	< 10	< 10	143	< 10	76
G1-115	217	238	< 1	0.03	20	1430	4	< 5	8	57	0.29	< 10	< 10	177	< 10	124
G1-116	217	238	< 1	0.02	7	3760	6	< 5	< 1	72	0.01	< 10	< 10	86	< 10	74
G1-117	201	238	< 1	0.01	4	5660	< 2	< 5	< 1	42	< 0.01	< 10	< 10	30	< 10	58
G1-118	201	238	< 1	0.01	4	4540	2	< 5	< 1	47	< 0.01	< 10	< 10	33	< 10	50
G1-119	217	238	1	0.02	20	1870	4	< 5	5	69	0.15	< 10	< 10	149	< 10	106
G1-120	217	238	1	0.03	22	1830	6	< 5	8	45	0.23	< 10	< 10	167	< 10	112

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

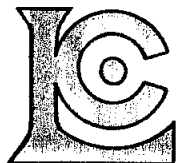
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Invoice No. :19117272  
P.O. Number :NONE

Project :  
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117272

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As 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
G1-121	201 238	< 5	< 0.2	2.18	< 5	110	< 0.5	< 2	0.42	< 0.5	6	20	44	2.16	< 10	< 1	0.11	< 10	0.25	340
G1-122	203 205	15	< 0.2	2.65	< 5	110	< 0.5	< 2	0.80	< 0.5	12	49	92	3.26	10	< 1	0.14	10	0.59	975
G1-123	217 238	< 5	< 0.2	2.35	< 5	90	< 0.5	< 2	1.16	< 0.5	21	48	104	4.46	20	< 1	0.15	10	1.01	1560
G1-124	201 238	< 5	< 0.2	1.78	< 5	410	< 0.5	< 2	1.96	0.5	7	13	60	1.35	< 10	< 1	0.09	< 10	0.25	1330
G1-125	217 238	< 5	< 0.2	2.12	< 5	270	0.5	< 2	1.12	< 0.5	18	38	102	4.19	10	< 1	0.13	< 10	0.87	1440
G1-126	201 238	< 5	< 0.2	2.88	< 5	110	< 0.5	< 2	0.43	< 0.5	13	22	84	3.86	< 10	< 1	0.04	10	0.69	775
G1-127	201 238	< 5	< 0.2	2.58	< 5	70	< 0.5	< 2	0.45	< 0.5	10	21	69	3.60	10	< 1	0.04	< 10	0.35	280
G1-128	217 238	< 5	< 0.2	2.42	5	110	0.5	< 2	0.94	< 0.5	24	60	70	2.96	< 10	< 1	0.09	< 10	0.42	2400
G1-129	217 238	< 5	< 0.2	2.88	< 5	160	0.5	< 2	0.78	< 0.5	20	33	78	3.80	10	< 1	0.15	< 10	0.78	1395
G1-130	201 238	< 5	< 0.2	2.97	< 5	90	< 0.5	< 2	0.45	< 0.5	11	28	68	3.99	10	< 1	0.04	10	0.70	645
G1-131	217 238	< 5	< 0.2	2.55	< 5	130	< 0.5	< 2	0.73	< 0.5	13	36	64	3.50	< 10	< 1	0.11	< 10	0.80	1240
G1-132	217 238	< 5	< 0.2	3.13	< 5	120	< 0.5	< 2	0.90	< 0.5	15	36	75	4.41	10	< 1	0.09	< 10	1.01	865
G1-133	217 238	< 5	< 0.2	2.76	< 5	180	< 0.5	< 2	1.15	< 0.5	19	28	57	3.90	20	< 1	0.13	< 10	1.18	1775
G1-134	201 238	< 5	< 0.2	3.22	< 5	100	< 0.5	< 2	0.64	< 0.5	11	21	82	3.79	10	< 1	0.04	10	0.68	375
G1-135	201 238	< 5	0.2	2.96	< 5	190	< 0.5	< 2	0.54	< 0.5	13	34	77	4.06	10	< 1	0.07	10	0.64	515
G1-136	217 238	< 5	< 0.2	1.78	< 5	420	< 0.5	< 2	0.57	< 0.5	31	31	60	3.67	10	< 1	0.17	< 10	0.52	>10000
G1-137	217 238	< 5	< 0.2	2.83	< 5	120	< 0.5	< 2	1.27	0.5	26	52	77	5.12	20	1	0.20	< 10	1.35	2410
G1-138	217 238	< 5	< 0.2	0.24	< 5	260	< 0.5	< 2	3.17	1.0	6	9	27	0.41	< 10	< 1	0.11	< 10	0.11	1090
G1-139	217 238	< 5	< 0.2	1.94	< 5	180	< 0.5	< 2	1.50	< 0.5	20	40	119	3.62	10	< 1	0.11	< 10	1.03	2640
G1-140	201 238	< 5	< 0.2	2.75	< 5	130	< 0.5	< 2	0.48	< 0.5	13	39	56	4.48	10	1	0.03	< 10	0.67	630
G1-141	203 205	< 5	< 0.2	2.75	< 5	130	< 0.5	< 2	0.50	0.5	13	84	65	5.45	20	< 1	0.05	10	0.93	465
G1-142	217 238	< 5	< 0.2	1.99	< 5	300	< 0.5	< 2	1.30	< 0.5	18	45	66	3.07	10	< 1	0.09	< 10	0.73	2790
G1-143	201 238	10	< 0.2	2.92	< 5	130	< 0.5	< 2	0.47	< 0.5	12	29	87	5.05	10	< 1	0.07	10	0.57	635
G1-144	201 238	< 5	< 0.2	3.11	< 5	90	< 0.5	< 2	0.50	0.5	15	37	87	4.81	10	< 1	0.05	10	0.77	650
G1-145	201 238	< 5	< 0.2	2.99	< 5	110	< 0.5	< 2	0.53	< 0.5	15	41	73	4.58	10	< 1	0.05	10	0.81	715
G1-146	201 238	< 5	< 0.2	2.77	< 5	100	< 0.5	2	0.41	0.5	11	24	73	3.55	10	1	0.04	10	0.52	415
G1-147	201 238	< 5	< 0.2	3.28	< 5	100	< 0.5	< 2	0.45	0.5	11	35	66	3.71	10	< 1	0.03	10	0.63	485
G1-148	201 238	< 5	0.2	3.23	< 5	110	< 0.5	2	0.44	< 0.5	11	22	78	4.05	10	< 1	0.04	10	0.56	400
G1-149	201 238	< 5	0.4	2.50	< 5	100	< 0.5	< 2	0.19	0.5	5	18	38	1.74	< 10	< 1	0.03	10	0.20	280
G1-150	217 238	< 5	0.2	1.79	< 5	120	< 0.5	2	0.36	0.5	6	20	32	1.57	< 10	< 1	0.07	< 10	0.22	630
G1-151	201 238	< 5	< 0.2	2.68	< 5	150	< 0.5	< 2	1.34	< 0.5	25	39	95	4.79	20	< 1	0.19	< 10	1.27	2250
G1-152	217 238	< 5	0.4	2.48	5	320	< 0.5	< 2	0.35	< 0.5	12	21	66	4.34	10	< 1	0.10	< 10	0.62	970
G1-153	217 238	< 5	< 0.2	1.34	< 5	280	< 0.5	2	1.70	< 0.5	16	25	52	2.60	10	< 1	0.19	< 10	0.46	2090
G1-154	217 238	< 5	< 0.2	1.06	< 5	360	< 0.5	< 2	2.29	< 0.5	20	17	37	1.67	< 10	< 1	0.16	< 10	0.30	1935
G1-155	217 238	< 5	< 0.2	0.21	< 5	170	< 0.5	2	3.63	< 0.5	2	8	11	0.35	< 10	< 1	0.09	< 10	0.11	90
G1-156	217 238	< 5	< 0.2	0.94	< 5	240	< 0.5	< 2	2.66	1.0	7	13	37	0.92	< 10	< 1	0.13	< 10	0.19	1500
G1-157	201 238	< 5	< 0.2	3.31	< 5	120	< 0.5	< 2	0.57	0.5	24	53	77	5.48	10	< 1	0.05	10	0.82	1495
G1-158	217 238	< 5	< 0.2	2.26	< 5	270	< 0.5	< 2	1.45	1.5	36	47	53	4.08	10	< 1	0.14	< 10	0.79	4660
G1-159	201 238	< 5	< 0.2	2.50	< 5	110	< 0.5	< 2	0.51	0.5	18	39	54	4.20	20	< 1	0.06	10	0.58	1400
G1-160	201 238	< 5	< 0.2	2.15	< 5	100	< 0.5	< 2	0.44	< 0.5	12	41	57	4.15	10	< 1	0.05	10	0.48	855

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: DASSERAT DEVELOPMENTS LTD. \*\*

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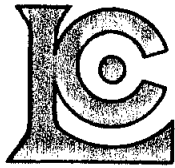
Project :  
 Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS

### A9117272

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
G1-121	201 238	2	0.01	8	3220	< 2	< 5	< 1	36	< 0.01	< 10	< 10	66	< 10	84
G1-122	203 205	1	0.03	10	2780	2	< 5	1	94	0.03	< 10	< 10	117	< 10	88
G1-123	217 238	< 1	0.03	10	2150	4	< 5	4	141	0.13	< 10	< 10	137	< 10	114
G1-124	201 238	< 1	0.01	5	7360	< 2	< 5	2	83	0.01	< 10	< 10	38	< 10	70
G1-125	217 238	< 1	0.02	11	2000	< 2	5	4	80	0.08	< 10	< 10	112	< 10	128
G1-126	201 238	1	0.01	15	1530	4	< 5	1	46	0.04	< 10	< 10	111	< 10	96
G1-127	201 238	3	0.01	21	1150	6	< 5	1	50	0.06	< 10	< 10	114	< 10	78
G1-128	217 238	3	0.02	16	2820	8	< 5	< 1	45	0.02	< 10	< 10	98	< 10	92
G1-129	217 238	1	0.02	12	2180	6	< 5	1	59	0.06	< 10	< 10	105	< 10	114
G1-130	201 238	< 1	0.01	12	1180	< 2	< 5	2	49	0.06	< 10	< 10	110	< 10	80
G1-131	217 238	< 1	0.03	8	2210	2	< 5	1	49	0.03	< 10	< 10	117	< 10	98
G1-132	217 238	< 1	0.02	13	1290	< 2	< 5	4	57	0.11	< 10	< 10	143	< 10	102
G1-133	217 238	< 1	0.03	9	1640	2	< 5	5	50	0.15	< 10	< 10	139	< 10	114
G1-134	201 238	1	0.01	13	1620	4	< 5	2	66	0.05	< 10	< 10	118	< 10	68
G1-135	201 238	1	0.01	19	1600	4	< 5	2	82	0.08	< 10	< 10	113	< 10	94
G1-136	217 238	1	0.02	8	1850	10	< 5	3	85	0.08	< 10	< 10	115	< 10	118
G1-137	217 238	< 1	0.04	14	1840	6	< 5	10	115	0.24	< 10	< 10	165	< 10	110
G1-138	217 238	2	0.03	2	1680	2	< 5	< 1	74	< 0.01	< 10	< 10	19	< 10	102
G1-139	217 238	1	0.03	10	2260	4	< 5	5	97	0.15	< 10	< 10	115	< 10	144
G1-140	201 238	1	0.01	18	1840	6	< 5	1	68	0.04	< 10	< 10	132	< 10	118
G1-141	203 205	1	0.02	29	1010	4	< 5	5	66	0.18	< 10	< 10	161	< 10	118
G1-142	217 238	< 1	0.03	15	1600	4	< 5	3	95	0.10	< 10	< 10	103	< 10	122
G1-143	201 238	1	0.01	14	1630	2	5	1	54	0.04	< 10	< 10	135	< 10	110
G1-144	201 238	1	0.01	18	1290	2	< 5	5	41	0.11	< 10	< 10	141	< 10	110
G1-145	201 238	1	0.01	20	1440	4	< 5	5	67	0.10	< 10	< 10	153	< 10	108
G1-146	201 238	1	0.01	13	1960	6	< 5	1	46	0.03	< 10	< 10	105	< 10	70
G1-147	201 238	1	0.01	16	2260	2	< 5	1	60	0.03	< 10	< 10	107	< 10	76
G1-148	201 238	< 1	0.01	11	1640	2	< 5	2	48	0.04	< 10	< 10	124	< 10	66
G1-149	201 238	1	0.01	7	3940	< 2	< 5	< 1	29	< 0.01	< 10	< 10	59	< 10	64
G1-150	217 238	1	0.01	7	3960	2	< 5	< 1	35	< 0.01	< 10	< 10	50	< 10	80
G1-151	201 238	1	0.03	12	1730	8	5	9	139	0.25	< 10	< 10	154	< 10	118
G1-152	217 238	1	0.01	14	3030	2	< 5	< 1	121	0.01	< 10	< 10	110	< 10	142
G1-153	217 238	4	0.02	8	2780	2	< 5	1	59	0.04	< 10	< 10	70	< 10	118
G1-154	217 238	2	0.01	6	3630	< 2	< 5	1	60	0.02	< 10	< 10	50	< 10	78
G1-155	217 238	3	0.02	2	1380	< 2	< 5	< 1	78	< 0.01	< 10	< 10	11	< 10	70
G1-156	217 238	1	0.01	4	5410	2	< 5	3	75	0.01	< 10	< 10	25	< 10	112
G1-157	201 238	2	0.01	28	1590	6	< 5	6	88	0.14	< 10	< 10	199	< 10	148
G1-158	217 238	1	0.02	16	2280	6	< 5	5	89	0.16	< 10	< 10	138	< 10	180
G1-159	201 238	1	0.01	21	1650	6	< 5	4	66	0.10	< 10	< 10	159	< 10	120
G1-160	201 238	2	0.01	19	1530	2	< 5	1	56	0.05	< 10	< 10	153	< 10	104

CERTIFICATION: B. Coughlin



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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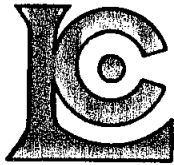
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 Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117272

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	FA+AA																				
G1-161	203	205	< 5	< 0.2	2.57	5	120	< 0.5	< 2	0.57	< 0.5	13	63	79	4.34	10	< 1	0.11	10	0.42	845
G1-162	201	238	< 5	< 0.2	2.51	< 5	90	< 0.5	< 2	0.51	< 0.5	15	44	71	4.22	20	< 1	0.05	10	0.67	640
G1-163	203	205	5	< 0.2	2.39	< 5	140	< 0.5	< 2	0.54	< 0.5	14	42	86	3.74	10	< 1	0.11	< 10	0.39	705
G1-164	217	238	< 5	< 0.2	0.47	< 5	200	< 0.5	< 2	2.18	1.5	10	14	24	0.91	< 10	< 1	0.13	< 10	0.33	1260
G1-165	201	238	< 5	0.2	1.30	< 5	130	< 0.5	< 2	0.49	0.5	3	13	29	1.37	< 10	< 1	0.06	10	0.11	235
G1-166	201	238	< 5	< 0.2	2.21	< 5	120	< 0.5	< 2	0.31	0.5	17	23	61	3.07	< 10	< 1	0.05	< 10	0.32	1210
G1-167	217	238	< 5	< 0.2	1.90	5	150	< 0.5	< 2	1.28	0.5	15	44	40	3.28	< 10	< 1	0.11	< 10	0.56	1745
G1-168	203	205	< 5	< 0.2	1.68	< 5	350	< 0.5	< 2	0.82	1.0	24	66	59	4.02	< 10	< 1	0.24	10	0.36	3550
G1-169	217	238	< 5	< 0.2	1.12	< 5	370	< 0.5	< 2	1.80	< 0.5	12	19	35	2.24	< 10	< 1	0.21	< 10	0.43	1215
G1-170	217	238	< 5	< 0.2	0.20	< 5	550	< 0.5	< 2	2.89	< 0.5	2	9	13	0.33	< 10	< 1	0.11	< 10	0.07	255
G1-171	217	238	< 5	< 0.2	0.21	< 5	550	< 0.5	< 2	4.07	< 0.5	2	8	22	0.31	< 10	< 1	0.09	< 10	0.13	495
G1-172	203	205	< 5	< 0.2	1.54	< 5	310	< 0.5	< 2	0.98	< 0.5	9	64	52	2.65	< 10	< 1	0.16	10	0.39	835
G1-173	201	238	10	< 0.2	1.92	< 5	390	< 0.5	< 2	1.88	0.5	12	28	162	3.22	10	< 1	0.11	10	0.80	535
G1-174	203	205	< 5	< 0.2	1.49	5	140	< 0.5	< 2	1.17	0.5	16	22	30	1.67	< 10	< 1	0.08	10	0.28	905
G1-175	201	238	< 5	< 0.2	2.78	15	110	< 0.5	< 2	0.14	< 0.5	21	39	109	7.32	< 10	< 1	0.21	< 10	0.28	580
G1-176	203	205	10	< 0.2	2.17	< 5	230	< 0.5	< 2	0.51	< 0.5	15	29	60	4.43	10	< 1	0.08	10	0.52	2130
G1-177	201	238	< 5	< 0.2	2.20	< 5	260	< 0.5	< 2	0.67	< 0.5	11	24	65	4.07	10	< 1	0.10	10	0.51	900
G1-178	217	238	< 5	< 0.2	0.59	< 5	490	< 0.5	< 2	2.17	2.0	9	13	28	1.08	< 10	< 1	0.15	< 10	0.19	3130
G1-179	217	238	< 5	< 0.2	1.87	< 5	310	< 0.5	< 2	1.24	< 0.5	23	38	106	3.89	< 10	< 1	0.18	< 10	0.68	2360
G1-180	203	205	< 5	< 0.2	1.70	< 5	280	< 0.5	< 2	0.44	< 0.5	16	71	49	2.77	10	< 1	0.13	10	0.28	3400
G1-181	217	238	< 5	< 0.2	1.57	< 5	180	< 0.5	< 2	2.07	2.0	18	26	81	2.82	< 10	< 1	0.08	< 10	0.54	840
G1-182	201	238	< 5	< 0.2	3.95	10	160	< 0.5	< 2	1.07	1.0	40	49	78	4.57	10	< 1	0.12	10	1.15	1390
G1-183	203	205	< 5	< 0.2	4.00	< 5	200	< 0.5	< 2	1.23	0.5	29	67	85	5.52	10	< 1	0.14	10	1.30	1280
G1-184	203	205	< 5	0.4	1.80	< 5	250	< 0.5	< 2	0.38	< 0.5	8	48	36	2.90	10	< 1	0.08	< 10	0.13	545
G1-185	203	205	< 5	< 0.2	1.90	< 5	240	< 0.5	< 2	0.27	< 0.5	11	39	42	4.23	10	< 1	0.12	< 10	0.25	1915
G1-186	217	238	< 5	< 0.2	2.01	< 5	100	< 0.5	< 2	0.82	< 0.5	13	37	64	3.96	10	< 1	0.14	< 10	0.83	820
G1-187	217	238	< 5	< 0.2	2.31	< 5	200	< 0.5	< 2	1.26	< 0.5	26	35	67	4.61	10	< 1	0.14	< 10	0.94	3210
G1-188	203	205	< 5	< 0.2	4.37	< 5	220	< 0.5	< 2	1.19	0.5	31	68	93	6.05	10	< 1	0.06	10	1.39	1470
G1-189	201	238	15	< 0.2	2.58	< 5	220	< 0.5	< 2	0.17	< 0.5	14	35	58	4.72	< 10	< 1	0.06	< 10	0.51	1350
G1-190	201	238	< 5	0.2	2.09	< 5	130	< 0.5	< 2	0.10	0.5	4	17	29	1.59	< 10	< 1	0.04	< 10	0.15	195
G1-191	203	205	< 5	< 0.2	2.36	< 5	110	< 0.5	< 2	0.42	< 0.5	11	65	75	4.62	< 10	< 1	0.10	< 10	0.57	470
G1-192	203	205	< 5	< 0.2	2.79	< 5	150	< 0.5	< 2	0.42	< 0.5	13	54	78	4.87	10	< 1	0.09	10	0.64	725
G1-193	203	205	< 5	< 0.2	2.08	< 5	140	< 0.5	< 2	0.28	< 0.5	9	52	57	3.11	< 10	< 1	0.08	< 10	0.34	1235
G1-194	201	238	< 5	< 0.2	1.91	< 5	100	< 0.5	< 2	0.40	< 0.5	10	25	78	3.92	< 10	< 1	0.07	< 10	0.56	400
G1-195	203	205	< 5	< 0.2	2.10	30	130	< 0.5	< 2	0.18	< 0.5	20	51	45	4.38	10	< 1	0.06	< 10	0.71	1870
G1-196	203	205	< 5	< 0.2	2.25	< 5	110	< 0.5	< 2	0.38	0.5	11	39	95	3.32	< 10	< 1	0.08	10	0.80	510
G1-197	201	238	< 5	< 0.2	2.07	< 5	130	< 0.5	< 2	0.18	< 0.5	7	15	66	3.15	< 10	< 1	0.04	< 10	0.38	460
G1-198	201	238	10	0.4	1.79	< 5	200	< 0.5	< 2	0.42	< 0.5	7	16	46	2.83	10	< 1	0.07	< 10	0.38	500
G1-199	201	238	10	0.2	2.62	< 5	140	< 0.5	< 2	0.29	< 0.5	9	21	104	3.64	< 10	< 1	0.06	< 10	0.56	920
G1-200	201	238	< 5	0.6	1.79	< 5	170	< 0.5	< 2	0.30	< 0.5	7	19	55	2.44	< 10	< 1	0.08	10	0.24	1175

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

Page Number :5-B  
Total Pages :5  
Certificate Date: 09-JUL-91  
Invoice No. :19117272  
P.O. Number :NONE

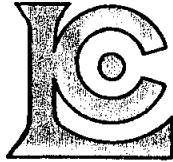
Project :  
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117272

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
G1-161	203	205	< 1	0.02	18	1930	2	< 5	2	53	0.05	< 10	< 10	161	< 10	104
G1-162	201	238	1	0.01	22	1160	4	< 5	4	57	0.10	< 10	< 10	137	< 10	94
G1-163	203	205	1	0.02	17	2360	4	< 5	1	51	0.02	< 10	< 10	129	< 10	94
G1-164	217	238	< 1	0.01	4	2070	2	< 5	1	141	0.03	< 10	< 10	30	< 10	230
G1-165	201	238	< 1	0.01	7	5170	2	< 5	< 1	49	< 0.01	< 10	< 10	50	< 10	60
G1-166	201	238	< 1	0.01	10	2370	6	< 5	< 1	45	0.02	< 10	< 10	103	< 10	80
G1-167	217	238	2	0.02	13	2270	2	< 5	3	69	0.10	< 10	< 10	116	< 10	146
G1-168	203	205	2	0.03	11	2090	12	< 5	2	94	0.05	< 10	< 10	124	< 10	154
G1-169	217	238	1	0.02	6	2060	2	< 5	2	53	0.05	< 10	< 10	67	< 10	102
G1-170	217	238	2	0.01	2	1470	2	< 5	< 1	64	< 0.01	< 10	< 10	5	< 10	66
G1-171	217	238	2	0.02	3	1420	2	< 5	< 1	80	< 0.01	< 10	< 10	11	< 10	92
G1-172	203	205	1	0.02	10	1990	6	< 5	1	75	0.04	< 10	< 10	82	< 10	130
G1-173	201	238	< 1	0.01	11	2140	< 2	< 5	9	99	0.11	< 10	< 10	103	< 10	96
G1-174	203	205	1	0.01	9	3180	< 2	< 5	2	151	0.03	< 10	< 10	44	< 10	66
G1-175	201	238	3	0.02	24	2300	4	5	7	27	< 0.01	< 10	< 10	88	< 10	144
G1-176	203	205	< 1	0.01	13	2410	6	< 5	2	76	0.05	< 10	< 10	120	< 10	122
G1-177	201	238	1	0.01	11	2030	8	< 5	1	78	0.04	< 10	< 10	113	< 10	110
G1-178	217	238	3	0.01	5	3170	4	< 5	1	67	0.01	< 10	< 10	23	< 10	158
G1-179	217	238	1	0.03	9	2100	4	< 5	5	115	0.15	< 10	< 10	123	< 10	112
G1-180	203	205	< 1	0.02	7	1410	6	< 5	1	73	0.04	< 10	< 10	104	< 10	86
G1-181	217	238	1	0.01	12	1660	< 2	< 5	5	253	0.14	< 10	< 10	95	< 10	146
G1-182	201	238	< 1	0.02	30	980	4	< 5	15	436	0.22	< 10	< 10	150	< 10	140
G1-183	203	205	< 1	0.02	25	1600	< 2	< 5	13	295	0.29	< 10	< 10	208	< 10	154
G1-184	203	205	1	0.02	8	1360	6	< 5	1	82	0.03	< 10	< 10	115	< 10	88
G1-185	203	205	2	0.02	8	2380	8	< 5	< 1	55	0.01	< 10	< 10	121	< 10	92
G1-186	217	238	< 1	0.03	10	1550	2	< 5	5	39	0.15	< 10	< 10	126	< 10	96
G1-187	217	238	< 1	0.02	10	1580	4	5	6	42	0.19	< 10	< 10	152	< 10	102
G1-188	203	205	< 1	0.05	30	1280	4	5	13	352	0.30	< 10	< 10	213	< 10	160
G1-189	201	238	< 1	0.01	15	1910	< 2	< 5	1	36	0.02	< 10	< 10	125	< 10	134
G1-190	201	238	< 1	0.01	4	2180	2	< 5	< 1	31	0.01	< 10	< 10	49	< 10	50
G1-191	203	205	< 1	0.02	11	1670	2	< 5	2	58	0.06	< 10	< 10	125	< 10	84
G1-192	203	205	< 1	0.02	11	1490	2	< 5	2	62	0.06	< 10	< 10	138	< 10	114
G1-193	203	205	< 1	0.02	6	2080	2	< 5	< 1	50	0.02	< 10	< 10	109	< 10	70
G1-194	201	238	< 1	0.01	10	1370	2	< 5	1	56	0.04	< 10	< 10	113	< 10	100
G1-195	203	205	2	0.03	15	1710	4	< 5	1	37	0.02	< 10	< 10	147	< 10	148
G1-196	203	205	< 1	0.03	8	1550	4	< 5	2	47	0.05	< 10	< 10	118	< 10	72
G1-197	201	238	< 1	0.01	6	2230	2	< 5	< 1	36	0.01	< 10	< 10	106	< 10	58
G1-198	201	238	< 1	0.01	4	1210	6	< 5	< 1	69	0.03	< 10	10	114	< 10	76
G1-199	201	238	< 1	0.01	8	1720	< 2	< 5	1	49	0.03	< 10	< 10	116	< 10	92
G1-200	201	238	< 1	0.01	6	2150	4	< 5	< 1	59	0.02	< 10	< 10	92	< 10	64

CERTIFICATION:





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
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Project :

Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

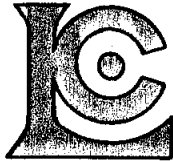
## CERTIFICATE OF ANALYSIS

## A9117273

SAMPLE DESCRIPTION	PREP CODE	Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
		FA+AA	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%
G1-201	201 238	< 5	0.8	1.06	< 5	150	< 0.5	< 2	0.62	0.5	4	4	63	1.18	< 10	< 1	0.09	10	0.13	565
G1-202	201 238	5	< 0.2	1.90	< 5	150	< 0.5	< 2	1.15	0.5	16	12	143	3.12	10	< 1	0.11	10	0.78	2150
G1-203	201 238	< 5	0.4	1.97	< 5	150	< 0.5	2	0.48	< 0.5	10	13	95	2.66	< 10	< 1	0.08	10	0.50	1550
G1-204	201 238	15	0.2	2.96	< 5	110	< 0.5	< 2	0.86	0.5	10	17	260	3.52	10	< 1	0.05	30	0.82	785
G1-205	201 238	15	< 0.2	2.77	< 5	160	< 0.5	< 2	0.66	0.5	16	15	226	4.00	10	< 1	0.06	10	0.96	1855
G1-206	201 238	10	< 0.2	2.33	< 5	140	< 0.5	< 2	0.59	< 0.5	11	16	125	3.33	10	< 1	0.08	10	0.76	955
G1-207	201 238	< 5	< 0.2	1.56	< 5	160	< 0.5	< 2	0.57	< 0.5	7	10	67	3.02	< 10	< 1	0.09	< 10	0.46	695
G1-208	201 238	< 5	< 0.2	2.65	< 5	250	< 0.5	< 2	0.72	< 0.5	13	14	158	3.09	< 10	< 1	0.08	10	0.86	1925
G1-209	201 238	< 5	0.2	2.10	< 5	120	< 0.5	2	0.32	< 0.5	6	9	88	1.88	< 10	< 1	0.04	< 10	0.42	310
G1-210	201 238	< 5	0.4	1.16	< 5	100	< 0.5	< 2	0.27	< 0.5	4	7	58	1.53	< 10	< 1	0.06	10	0.08	565
G1-211	201 238	15	< 0.2	3.07	< 5	190	< 0.5	< 2	0.38	< 0.5	10	14	110	4.25	10	< 1	0.06	10	0.74	650
G1-212	201 238	< 5	0.2	2.16	< 5	200	< 0.5	< 2	0.29	< 0.5	6	10	46	2.82	10	< 1	0.06	10	0.18	1295
G1-213	201 238	< 5	< 0.2	3.27	< 5	120	< 0.5	< 2	0.47	< 0.5	10	16	100	3.63	10	< 1	0.06	10	0.76	500
G1-214	201 238	< 5	< 0.2	1.84	< 5	230	< 0.5	< 2	0.29	< 0.5	4	8	45	2.17	< 10	< 1	0.05	< 10	0.13	370
G1-215	201 238	5	< 0.2	2.90	< 5	140	< 0.5	2	0.39	< 0.5	10	16	112	3.98	< 10	< 1	0.04	10	0.79	545
G1-216	201 238	< 5	< 0.2	2.54	< 5	130	< 0.5	< 2	0.24	< 0.5	7	18	66	2.99	10	< 1	0.05	< 10	0.50	510
G1-217	201 238	< 5	< 0.2	2.67	< 5	130	< 0.5	2	0.33	< 0.5	10	21	89	3.30	10	< 1	0.05	10	0.72	495
G1-218	201 238	< 5	< 0.2	3.06	< 5	110	< 0.5	< 2	0.50	< 0.5	13	26	114	4.40	< 10	< 1	0.05	10	1.04	570
G1-219	201 238	< 5	< 0.2	2.91	< 5	110	< 0.5	< 2	0.34	< 0.5	9	21	84	3.50	< 10	< 1	0.05	10	0.77	485
G1-220	201 238	15	< 0.2	2.75	< 5	80	< 0.5	2	0.33	0.5	9	25	69	3.13	< 10	< 1	0.04	10	0.73	440
G1-221	201 238	< 5	< 0.2	3.32	< 5	100	< 0.5	< 2	0.63	< 0.5	14	29	142	4.52	10	< 1	0.07	10	1.22	725
G1-222	201 238	< 5	< 0.2	2.76	< 5	140	< 0.5	< 2	0.34	0.5	8	23	69	3.20	< 10	< 1	0.05	10	0.63	605
G1-223	201 238	< 5	< 0.2	2.81	< 5	100	< 0.5	< 2	0.33	< 0.5	10	23	77	3.38	< 10	< 1	0.06	10	0.89	465
G1-224	201 238	5	< 0.2	2.54	< 5	140	< 0.5	< 2	0.52	< 0.5	13	34	92	3.96	10	< 1	0.05	10	0.91	600
G1-225	201 238	< 5	< 0.2	1.66	< 5	110	< 0.5	< 2	0.24	< 0.5	5	32	46	1.99	< 10	< 1	0.06	< 10	0.37	165
G1-226	201 238	10	< 0.2	2.97	< 5	150	< 0.5	< 2	0.36	< 0.5	11	30	68	3.90	10	< 1	0.07	10	0.84	705
G1-227	201 238	< 5	< 0.2	3.14	< 5	170	< 0.5	< 2	0.37	< 0.5	12	38	73	4.01	< 10	< 1	0.07	10	0.83	735
G1-228	201 238	< 5	< 0.2	2.22	< 5	160	< 0.5	< 2	0.17	0.5	8	28	43	3.49	< 10	< 1	0.03	10	0.54	280
G1-229	201 238	< 5	< 0.2	2.41	< 5	230	< 0.5	< 2	0.38	0.5	10	31	84	3.61	< 10	< 1	0.04	< 10	0.83	635
G1-230	201 238	< 5	< 0.2	3.06	< 5	260	< 0.5	< 2	0.26	0.5	10	26	85	3.72	< 10	< 1	0.04	< 10	0.78	885
G1-231	201 238	< 5	< 0.2	2.72	< 5	100	< 0.5	< 2	0.37	< 0.5	11	22	105	4.15	< 10	< 1	0.04	10	0.98	600
G1-232	201 238	< 5	< 0.2	2.55	< 5	110	< 0.5	< 2	0.29	< 0.5	8	16	73	3.09	< 10	< 1	0.05	< 10	0.67	530
G1-233	201 238	< 5	< 0.2	2.62	< 5	100	< 0.5	< 2	0.23	< 0.5	7	15	95	2.85	< 10	< 1	0.05	< 10	0.54	415
G1-234	201 238	10	< 0.2	2.62	< 5	180	< 0.5	< 2	0.36	< 0.5	9	18	134	3.31	< 10	< 1	0.08	10	0.62	1065
G1-235	201 238	< 5	< 0.2	3.10	< 5	130	< 0.5	< 2	0.67	< 0.5	13	19	145	4.96	< 10	< 1	0.07	10	1.07	710
G1-236	201 238	5	< 0.2	2.73	< 5	230	< 0.5	< 2	0.59	0.5	10	14	125	3.78	< 10	< 1	0.12	10	0.63	1030
G1-237	201 238	< 5	< 0.2	2.53	< 5	180	< 0.5	< 2	0.44	< 0.5	9	32	67	3.65	< 10	< 1	0.06	10	0.86	475
G1-238	201 238	< 5	< 0.2	2.05	< 5	160	< 0.5	< 2	0.25	< 0.5	6	20	45	2.84	< 10	< 1	0.07	< 10	0.34	470
G1-239	201 238	< 5	< 0.2	3.05	< 5	210	< 0.5	< 2	0.42	< 0.5	11	25	94	4.16	10	< 1	0.05	10	0.96	735
G1-240	201 238	< 5	< 0.2	2.81	< 5	140	< 0.5	< 2	0.36	< 0.5	9	22	87	3.34	10	< 1	0.05	10	0.77	575

CERTIFICATION:

*B. Coughlin*



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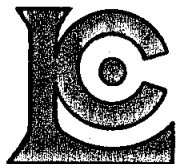
## CERTIFICATE OF ANALYSIS

A9117273

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
G1-201	201	238	< 1	0.01	3	7210	6	< 5	< 1	78	< 0.01	< 10	< 10	47	< 10	78
G1-202	201	238	< 1	0.01	5	4910	4	< 5	1	118	< 0.01	< 10	< 10	123	< 10	116
G1-203	201	238	< 1	0.01	5	3210	6	< 5	< 1	85	0.01	< 10	< 10	118	< 10	80
G1-204	201	238	< 1	0.01	6	3430	4	< 5	1	111	0.01	< 10	< 10	148	< 10	78
G1-205	201	238	< 1	0.01	6	3060	4	< 5	1	122	0.02	< 10	< 10	157	< 10	96
G1-206	201	238	< 1	0.01	6	2940	6	< 5	< 1	94	0.02	< 10	< 10	118	< 10	88
G1-207	201	238	< 1	0.01	4	1730	6	< 5	< 1	109	0.05	< 10	< 10	111	< 10	74
G1-208	201	238	< 1	0.01	7	4790	6	< 5	1	120	< 0.01	< 10	< 10	101	< 10	120
G1-209	201	238	< 1	0.01	4	3360	< 2	< 5	< 1	74	< 0.01	< 10	< 10	57	< 10	56
G1-210	201	238	< 1	0.01	3	4240	8	< 5	< 1	54	< 0.01	10	< 10	62	< 10	30
G1-211	201	238	< 1	0.01	6	1440	8	< 5	1	89	0.07	< 10	< 10	153	< 10	74
G1-212	201	238	1	0.01	3	2060	6	< 5	< 1	64	0.02	< 10	< 10	113	< 10	74
G1-213	201	238	< 1	0.01	7	1400	2	< 5	2	84	0.09	10	< 10	124	< 10	64
G1-214	201	238	1	0.01	4	2460	2	< 5	< 1	70	< 0.01	< 10	< 10	92	< 10	52
G1-215	201	238	< 1	0.01	8	1190	4	< 5	2	78	0.09	< 10	< 10	136	< 10	76
G1-216	201	238	< 1	0.01	6	1390	< 2	< 5	< 1	54	0.04	< 10	< 10	99	< 10	66
G1-217	201	238	< 1	0.01	8	1250	4	< 5	1	55	0.05	< 10	< 10	103	< 10	62
G1-218	201	238	< 1	0.01	12	1620	< 2	< 5	3	62	0.11	< 10	< 10	136	< 10	74
G1-219	201	238	< 1	0.01	8	1200	4	< 5	2	53	0.08	< 10	< 10	103	< 10	76
G1-220	201	238	< 1	0.01	9	1210	4	< 5	1	53	0.07	< 10	< 10	99	< 10	58
G1-221	201	238	< 1	0.01	13	1850	2	< 5	3	82	0.12	< 10	< 10	147	< 10	90
G1-222	201	238	< 1	0.01	8	1840	4	< 5	< 1	59	0.03	< 10	< 10	104	< 10	62
G1-223	201	238	< 1	0.01	10	1380	6	< 5	1	62	0.06	< 10	< 10	109	< 10	68
G1-224	201	238	< 1	0.01	16	1000	2	< 5	4	93	0.14	10	< 10	109	< 10	70
G1-225	201	238	< 1	0.01	10	1370	4	< 5	< 1	56	0.04	< 10	< 10	69	< 10	50
G1-226	201	238	< 1	0.01	11	1250	2	< 5	2	81	0.09	10	< 10	127	< 10	84
G1-227	201	238	< 1	0.01	16	1630	4	5	1	92	0.04	< 10	< 10	114	< 10	88
G1-228	201	238	< 1	0.01	17	1010	4	< 5	< 1	79	0.03	< 10	< 10	83	< 10	82
G1-229	201	238	< 1	0.01	13	1230	2	< 5	< 1	89	0.05	< 10	< 10	99	< 10	90
G1-230	201	238	< 1	0.01	10	1390	< 2	< 5	< 1	79	0.04	10	< 10	114	< 10	86
G1-231	201	238	< 1	0.01	11	1090	2	< 5	2	57	0.10	< 10	< 10	133	< 10	68
G1-232	201	238	< 1	0.01	6	1460	< 2	< 5	1	52	0.05	< 10	< 10	99	< 10	62
G1-233	201	238	< 1	0.01	5	1520	4	< 5	< 1	43	0.03	10	< 10	86	< 10	62
G1-234	201	238	< 1	0.01	7	2230	2	< 5	< 1	78	0.03	10	< 10	122	< 10	72
G1-235	201	238	< 1	0.01	7	1420	4	< 5	4	112	0.16	10	< 10	167	< 10	82
G1-236	201	238	< 1	0.01	6	1980	6	< 5	1	157	0.08	10	< 10	123	< 10	84
G1-237	201	238	< 1	0.01	12	1080	2	< 5	2	122	0.10	< 10	< 10	111	< 10	76
G1-238	201	238	< 1	0.01	6	1740	< 2	< 5	< 1	60	0.03	10	< 10	97	< 10	56
G1-239	201	238	< 1	0.01	10	1240	4	< 5	2	92	0.10	< 10	< 10	137	< 10	76
G1-240	201	238	< 1	0.01	9	1350	4	< 5	2	63	0.08	< 10	< 10	109	< 10	72

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
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Page Number :2-A  
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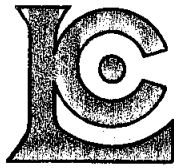
Project :  
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117273

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As 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
G1-241	201 238	< 5	< 0.2	2.73	5	640	< 0.5	< 2	0.54	< 0.5	11	22	113	2.86	10	< 1	0.10	10	0.61	895
G1-242	201 238	< 5	< 0.2	2.95	< 5	300	< 0.5	< 2	0.35	0.5	12	21	145	3.43	10	< 1	0.08	10	0.73	1060
G1-243	201 238	10	0.2	3.00	< 5	230	< 0.5	< 2	0.61	0.5	13	20	490	3.04	10	< 1	0.09	20	0.67	990
G1-244	201 238	< 5	1.2	2.02	< 5	170	< 0.5	< 2	0.39	< 0.5	7	13	85	2.46	10	< 1	0.11	10	0.33	950
G1-245	201 238	< 5	< 0.2	2.11	< 5	330	< 0.5	< 2	0.64	0.5	11	54	86	2.15	10	< 1	0.13	10	0.27	1910
G1-246	201 238	< 5	< 0.2	1.94	< 5	200	< 0.5	< 2	0.58	0.5	7	9	80	1.75	< 10	< 1	0.11	10	0.21	925
G1-247	201 238	< 5	< 0.2	2.46	< 5	110	< 0.5	< 2	0.45	< 0.5	15	32	112	4.02	20	< 1	0.04	10	0.92	720
G1-248	201 238	< 5	< 0.2	2.82	< 5	100	< 0.5	< 2	0.34	< 0.5	16	33	108	4.01	20	< 1	0.07	10	0.85	1030
G1-249	201 238	< 5	< 0.2	2.86	< 5	90	< 0.5	< 2	0.71	< 0.5	15	35	120	3.93	20	< 1	0.06	10	1.15	555
G1-250	201 238	20	< 0.2	3.15	< 5	90	< 0.5	< 2	0.42	< 0.5	16	60	94	4.72	20	< 1	0.05	10	1.16	585
G1-251	201 238	10	< 0.2	3.04	< 5	130	< 0.5	< 2	0.45	0.5	12	23	116	3.61	20	< 1	0.07	10	0.96	550
G1-252	201 238	< 5	< 0.2	2.90	< 5	160	< 0.5	4	0.54	< 0.5	14	19	138	4.65	20	< 1	0.07	10	1.05	625
G1-253	203 205	10	< 0.2	3.37	< 5	160	< 0.5	< 2	0.63	< 0.5	16	42	165	4.48	20	< 1	0.12	10	1.06	795
G1-254	201 238	< 5	< 0.2	2.76	< 5	130	< 0.5	< 2	0.29	< 0.5	9	16	120	3.03	10	< 1	0.08	10	0.48	930
G1-255	201 238	< 5	< 0.2	3.46	< 5	190	< 0.5	< 2	0.56	< 0.5	15	17	182	4.19	20	< 1	0.07	10	1.15	850
G1-256	203 205	< 5	< 0.2	2.15	< 5	230	< 0.5	< 2	0.43	< 0.5	15	32	82	3.48	10	< 1	0.14	10	0.55	3000
G1-257	201 238	15	0.2	2.72	< 5	250	< 0.5	< 2	0.50	< 0.5	10	14	152	2.41	10	< 1	0.08	10	0.73	785
G1-258	203 205	< 5	< 0.2	3.38	< 5	110	< 0.5	< 2	0.64	< 0.5	14	57	98	4.29	20	< 1	0.11	10	0.99	755
G1-259	203 205	< 5	< 0.2	2.65	< 5	110	< 0.5	< 2	1.10	< 0.5	21	53	100	4.55	20	< 1	0.17	10	1.38	2220
G1-260	201 238	< 5	< 0.2	3.19	< 5	170	< 0.5	< 2	0.50	< 0.5	18	58	118	4.40	20	< 1	0.05	10	1.44	715
G1-261	201 238	< 5	< 0.2	2.72	< 5	200	< 0.5	< 2	0.29	< 0.5	11	18	105	2.77	20	< 1	0.06	10	0.60	495
G1-262	201 238	< 5	< 0.2	3.14	10	220	< 0.5	< 2	0.37	< 0.5	14	13	154	3.79	20	< 1	0.05	10	1.08	640
G1-263	201 238	< 5	< 0.2	3.25	< 5	330	< 0.5	< 2	0.36	< 0.5	15	17	144	3.97	30	< 1	0.08	10	0.88	1245
G1-264	201 238	< 5	< 0.2	2.88	< 5	170	< 0.5	< 2	0.47	< 0.5	15	15	151	4.26	20	< 1	0.09	10	0.94	735
G1-265	201 238	< 5	< 0.2	3.42	< 5	130	< 0.5	< 2	0.53	< 0.5	13	16	140	4.10	10	< 1	0.06	10	0.95	640
G1-266	203 205	< 5	0.6	3.63	< 5	150	< 0.5	< 2	0.67	< 0.5	16	36	189	4.32	20	< 1	0.11	10	1.00	950
G1-267	201 238	< 5	0.4	3.40	< 5	240	< 0.5	< 2	0.65	< 0.5	13	15	293	3.39	10	< 1	0.09	20	0.95	785
G1-268	201 238	< 5	< 0.2	2.79	10	180	< 0.5	< 2	0.77	< 0.5	14	14	145	3.51	10	< 1	0.08	10	0.91	945
G1-269	201 238	< 5	< 0.2	2.66	< 5	150	< 0.5	< 2	0.33	< 0.5	11	19	72	3.78	10	< 1	0.04	< 10	0.71	480
G1-270	201 238	< 5	< 0.2	1.98	< 5	180	< 0.5	< 2	0.33	< 0.5	16	17	49	3.60	10	< 1	0.05	< 10	0.48	2510
G1-271	201 238	< 5	< 0.2	3.61	< 5	150	< 0.5	< 2	0.66	< 0.5	17	24	166	4.49	20	< 1	0.06	10	1.18	660
G1-272	201 238	< 5	< 0.2	3.07	< 5	130	< 0.5	< 2	0.41	0.5	10	18	101	3.13	10	< 1	0.05	10	0.72	495
G1-273	201 238	< 5	< 0.2	2.79	< 5	300	< 0.5	< 2	0.48	< 0.5	7	18	110	2.49	10	< 1	0.09	10	0.44	565
G1-274	203 205	10	< 0.2	3.01	5	210	< 0.5	< 2	0.45	< 0.5	14	39	96	3.74	10	< 1	0.14	10	0.68	1760
G1-275	201 238	< 5	< 0.2	2.90	5	270	< 0.5	< 2	0.50	< 0.5	14	12	117	4.00	10	< 1	0.07	10	0.93	820
G1-276	201 238	20	< 0.2	3.01	< 5	210	< 0.5	< 2	0.58	< 0.5	17	17	180	4.87	10	< 1	0.09	10	1.18	920
G1-277	201 238	< 5	< 0.2	3.19	< 5	350	< 0.5	2	0.76	0.5	14	16	217	2.88	10	< 1	0.10	10	0.75	2920
G1-278	201 238	< 5	< 0.2	1.93	< 5	190	< 0.5	< 2	0.48	< 0.5	7	12	61	2.23	< 10	< 1	0.08	< 10	0.30	860
G1-279	201 238	15	< 0.2	2.50	< 5	160	< 0.5	< 2	0.55	< 0.5	13	13	115	3.94	10	< 1	0.05	10	0.89	910
G1-280	201 238	< 5	< 0.2	2.91	< 5	120	< 0.5	< 2	0.39	< 0.5	13	28	89	3.83	10	< 1	0.04	10	1.02	535

CERTIFICATION:

*B. Coughlin*



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To: DASSERAT DEVELOPMENTS LTD. \*\*

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Project :

Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

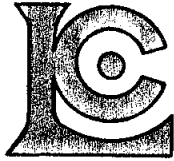
## CERTIFICATE OF ANALYSIS

### A9117273

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
G1-241	201	238	< 1	0.01	9	4880	< 2	< 5	1	98	< 0.01	< 10	< 10	110	< 10	92
G1-242	201	238	< 1	0.01	9	2640	2	< 5	1	66	0.03	< 10	< 10	120	< 10	96
G1-243	201	238	< 1	0.01	8	3210	6	< 5	1	108	0.02	< 10	< 10	128	< 10	80
G1-244	201	238	< 1	0.01	6	2810	2	< 5	< 1	86	0.02	< 10	< 10	107	< 10	78
G1-245	201	238	< 1	0.02	6	4940	2	< 5	< 1	134	0.01	< 10	< 10	108	< 10	124
G1-246	201	238	< 1	0.01	5	6120	2	< 5	< 1	114	< 0.01	< 10	< 10	79	< 10	88
G1-247	201	238	< 1	0.01	15	1130	6	< 5	3	64	0.13	< 10	< 10	131	< 10	70
G1-248	201	238	< 1	0.01	17	1650	6	< 5	2	55	0.09	< 10	< 10	122	< 10	100
G1-249	201	238	< 1	0.01	17	2150	2	< 5	3	83	0.11	< 10	< 10	141	< 10	64
G1-250	201	238	< 1	0.01	24	1000	2	< 5	4	79	0.14	< 10	< 10	156	< 10	86
G1-251	201	238	< 1	0.01	12	1220	4	5	3	78	0.11	< 10	< 10	133	< 10	82
G1-252	201	238	< 1	0.01	9	1380	2	< 5	4	102	0.16	< 10	< 10	165	< 10	90
G1-253	203	205	< 1	0.03	10	1660	6	< 5	4	125	0.14	< 10	< 10	172	< 10	88
G1-254	201	238	< 1	0.01	5	2390	4	< 5	1	69	0.05	< 10	< 10	119	< 10	78
G1-255	201	238	< 1	0.01	9	1910	8	< 5	3	105	0.11	< 10	< 10	158	< 10	100
G1-256	203	205	< 1	0.02	6	3060	8	< 5	1	89	0.05	< 10	< 10	140	< 10	94
G1-257	201	238	< 1	0.01	7	4990	< 2	< 5	< 1	99	< 0.01	< 10	< 10	100	< 10	80
G1-258	203	205	< 1	0.02	11	1680	6	< 5	3	106	0.15	< 10	< 10	167	< 10	86
G1-259	203	205	< 1	0.04	9	1720	4	< 5	5	165	0.22	< 10	< 10	183	< 10	94
G1-260	201	238	< 1	0.01	28	1070	6	< 5	4	91	0.15	< 10	< 10	137	< 10	74
G1-261	201	238	< 1	0.01	9	1610	8	< 5	1	60	0.05	< 10	< 10	106	< 10	64
G1-262	201	238	< 1	0.01	7	1270	4	< 5	3	94	0.13	< 10	< 10	147	< 10	98
G1-263	201	238	< 1	0.01	9	1850	6	< 5	2	81	0.09	< 10	< 10	157	< 10	100
G1-264	201	238	< 1	0.01	7	1440	8	5	3	104	0.11	< 10	< 10	164	< 10	88
G1-265	201	238	< 1	0.01	9	1760	4	< 5	3	94	0.12	< 10	< 10	151	< 10	78
G1-266	203	205	< 1	0.02	7	1750	4	< 5	3	140	0.12	< 10	< 10	192	< 10	82
G1-267	201	238	< 1	0.01	7	3620	8	< 5	2	121	0.03	< 10	< 10	146	< 10	82
G1-268	201	238	< 1	0.01	8	2040	8	< 5	2	130	0.09	< 10	< 10	159	< 10	92
G1-269	201	238	< 1	0.01	8	1250	2	< 5	1	65	0.09	< 10	< 10	138	< 10	64
G1-270	201	238	< 1	0.01	5	1880	6	< 5	< 1	53	0.06	< 10	< 10	148	< 10	76
G1-271	201	238	< 1	0.01	13	1910	8	< 5	4	98	0.15	< 10	< 10	165	< 10	90
G1-272	201	238	< 1	0.01	8	1360	4	< 5	2	83	0.09	< 10	< 10	121	< 10	66
G1-273	201	238	< 1	0.02	6	3790	6	< 5	< 1	93	0.01	< 10	< 10	116	< 10	82
G1-274	203	205	< 1	0.02	7	2130	4	< 5	2	94	0.10	< 10	< 10	150	< 10	98
G1-275	201	238	< 1	0.01	7	1920	4	< 5	1	94	0.08	< 10	< 10	148	< 10	104
G1-276	201	238	< 1	0.01	8	1730	4	5	6	110	0.12	< 10	< 10	176	< 10	98
G1-277	201	238	1	0.01	7	7160	6	< 5	1	114	< 0.01	< 10	< 10	147	< 10	108
G1-278	201	238	< 1	0.01	4	4400	2	< 5	< 1	91	< 0.01	< 10	< 10	99	< 10	78
G1-279	201	238	< 1	0.01	5	1720	2	< 5	2	100	0.08	< 10	< 10	160	< 10	84
G1-280	201	238	< 1	0.01	14	1190	4	< 5	2	59	0.10	< 10	< 10	136	< 10	90

CERTIFICATION:

*B. Coughlin*



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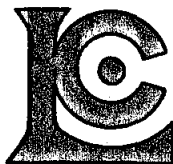
Project :  
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117273

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	FA+AA		ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	
G1-281	201	238	< 5	< 0.2	3.02	< 5	120	< 0.5	2	0.36	< 0.5	14	25	95	4.02	20	< 1	0.07	10	0.95	710
G1-282	201	238	< 5	< 0.2	2.85	< 5	140	< 0.5	< 2	0.42	< 0.5	14	21	121	4.22	20	< 1	0.05	10	0.81	585
G1-283	201	238	< 5	< 0.2	2.92	< 5	140	< 0.5	< 2	0.31	< 0.5	10	17	115	3.15	10	< 1	0.06	10	0.64	470
G1-284	201	238	< 5	< 0.2	3.65	< 5	160	< 0.5	< 2	0.39	< 0.5	14	17	126	4.24	20	< 1	0.08	10	0.91	770
G1-285	201	238	< 5	< 0.2	3.36	< 5	160	< 0.5	2	0.42	< 0.5	15	18	126	4.43	20	< 1	0.08	10	0.99	800
G1-286	201	238	< 5	< 0.2	3.07	< 5	170	< 0.5	2	0.47	< 0.5	16	19	116	4.35	20	< 1	0.09	10	0.88	1405
G1-287	201	238	< 5	< 0.2	3.15	< 5	150	< 0.5	2	0.48	< 0.5	13	18	107	3.80	20	< 1	0.10	10	0.90	865
G1-288	201	238	< 5	< 0.2	1.80	< 5	120	< 0.5	< 2	0.27	< 0.5	4	8	46	1.57	< 10	< 1	0.06	< 10	0.15	300
G1-289	201	238	10	< 0.2	3.14	5	110	< 0.5	2	0.46	< 0.5	13	18	126	3.67	10	< 1	0.05	10	0.91	705
G1-290	201	238	< 5	< 0.2	1.85	< 5	140	< 0.5	< 2	0.31	< 0.5	2	9	82	1.03	< 10	< 1	0.05	10	0.06	110
G1-291	201	238	10	< 0.2	1.12	< 5	130	< 0.5	< 2	0.36	< 0.5	1	4	52	0.45	< 10	< 1	0.06	< 10	0.05	30
G1-292	201	238	< 5	< 0.2	2.51	< 5	180	< 0.5	4	0.37	< 0.5	9	19	72	3.25	10	< 1	0.07	10	0.55	545
G1-293	201	238	< 5	< 0.2	2.56	< 5	140	< 0.5	< 2	0.37	< 0.5	9	22	66	3.06	10	< 1	0.05	10	0.61	415
G1-294	201	238	< 5	< 0.2	3.46	< 5	170	< 0.5	2	0.78	< 0.5	19	19	211	4.86	20	< 1	0.07	10	1.11	755
G1-295	201	238	15	< 0.2	3.41	5	150	< 0.5	< 2	0.62	< 0.5	16	18	168	4.50	10	< 1	0.08	10	1.01	725
G1-296	201	238	30	< 0.2	3.19	< 5	160	< 0.5	< 2	0.61	0.5	16	18	181	4.39	20	< 1	0.07	10	1.05	720
G1-297	203	205	10	< 0.2	3.24	< 5	180	< 0.5	2	0.29	0.5	22	26	145	4.57	20	< 1	0.12	< 10	0.99	2280
G1-298	203	205	< 5	< 0.2	2.69	< 5	730	< 0.5	4	0.43	< 0.5	31	25	84	3.00	10	< 1	0.12	10	0.28	5030
G1-299	201	238	< 5	< 0.2	1.30	< 5	130	< 0.5	< 2	0.19	0.5	3	12	65	1.26	< 10	< 1	0.07	< 10	0.07	325
G1-300	201	238	< 5	< 0.2	4.12	< 5	150	< 0.5	< 2	0.60	0.5	18	20	203	4.47	20	< 1	0.04	10	1.10	1040
G1-301	201	238	< 5	< 0.2	1.83	< 5	90	1.0	< 2	0.21	< 0.5	1	12	103	0.62	< 10	< 1	0.05	10	0.05	85
G1-302	203	205	< 5	< 0.2	2.93	< 5	130	< 0.5	< 2	0.66	< 0.5	16	31	134	4.57	20	< 1	0.09	10	1.11	1485
G1-303	201	238	< 5	< 0.2	1.87	< 5	360	1.0	< 2	0.74	< 0.5	2	8	80	0.94	< 10	< 1	0.07	10	0.13	360
G1-304	201	238	< 5	< 0.2	2.77	< 5	120	< 0.5	< 2	0.33	< 0.5	9	19	105	3.74	10	< 1	0.05	< 10	0.62	505
G1-305	201	238	< 5	< 0.2	2.67	< 5	130	< 0.5	2	0.36	< 0.5	9	22	81	3.10	10	< 1	0.05	10	0.70	450
G1-306	201	238	< 5	< 0.2	2.92	< 5	170	< 0.5	2	0.38	< 0.5	10	16	103	3.44	10	< 1	0.06	10	0.72	765
G1-307	201	238	< 5	< 0.2	3.00	< 5	130	< 0.5	2	0.33	< 0.5	10	16	130	3.09	10	< 1	0.08	10	0.67	530
G1-308	201	238	< 5	< 0.2	3.25	< 5	120	< 0.5	< 2	0.39	< 0.5	11	19	121	3.82	10	< 1	0.07	10	0.85	635
G1-309	203	205	< 5	< 0.2	3.12	5	160	< 0.5	2	0.39	< 0.5	16	30	109	4.17	10	< 1	0.12	10	0.87	1620
G1-310	201	238	< 5	< 0.2	3.60	< 5	130	< 0.5	2	0.43	< 0.5	13	24	124	4.25	20	< 1	0.07	10	1.01	1090
G1-311	201	238	< 5	< 0.2	5.58	< 5	710	< 0.5	4	0.40	< 0.5	18	28	208	4.81	10	< 1	0.15	< 10	1.15	3510
G1-312	201	238	< 5	< 0.2	2.08	5	150	< 0.5	2	0.36	< 0.5	8	14	58	2.38	10	< 1	0.09	10	0.38	925
G1-313	201	238	< 5	< 0.2	2.50	5	140	0.5	2	0.41	< 0.5	7	11	100	3.64	20	< 1	0.07	10	0.43	605
G1-314	201	238	< 5	< 0.2	1.89	5	160	0.5	2	0.44	0.5	11	12	117	2.92	< 10	< 1	0.07	< 10	0.43	1155
G1-315	201	238	< 5	< 0.2	1.52	< 5	350	< 0.5	2	0.32	< 0.5	6	12	63	2.58	< 10	< 1	0.10	< 10	0.32	730
G1-316	201	238	< 5	< 0.2	1.70	10	380	< 0.5	2	0.30	< 0.5	12	12	67	2.84	< 10	< 1	0.09	< 10	0.26	1655
G1-317	201	238	< 5	< 0.2	2.97	< 5	140	< 0.5	2	0.76	< 0.5	14	20	145	4.55	20	< 1	0.08	10	0.99	660
G1-318	201	238	15	< 0.2	3.09	< 5	140	1.0	2	0.59	< 0.5	11	17	115	4.29	20	< 1	0.08	10	0.85	515
G1-319	201	238	10	< 0.2	3.12	< 5	130	1.5	4	0.53	< 0.5	10	20	114	4.29	20	< 1	0.09	10	0.81	490
G1-320	201	238	< 5	< 0.2	1.62	< 5	210	0.5	< 2	0.34	< 0.5	6	11	38	2.16	< 10	< 1	0.10	< 10	0.20	995

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
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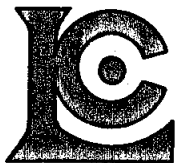
Project :  
 Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117273

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
G1-281	201 238	< 1	0.01	11	1340	2	< 5	3	68	0.13	< 10	< 10	156	< 10	88
G1-282	201 238	< 1	0.01	10	1330	6	< 5	2	88	0.10	< 10	< 10	165	< 10	66
G1-283	201 238	< 1	0.01	7	1550	4	< 5	1	76	0.07	< 10	< 10	126	< 10	66
G1-284	201 238	< 1	0.01	8	1690	8	< 5	3	98	0.13	< 10	< 10	170	< 10	90
G1-285	201 238	< 1	0.01	9	1550	4	< 5	4	83	0.12	< 10	< 10	165	< 10	92
G1-286	201 238	< 1	0.01	9	1830	10	< 5	4	94	0.14	< 10	< 10	171	< 10	106
G1-287	201 238	< 1	0.01	9	2120	6	< 5	3	106	0.10	< 10	< 10	147	< 10	90
G1-288	201 238	< 1	0.01	4	3620	4	< 5	< 1	70	< 0.01	< 10	< 10	69	< 10	50
G1-289	201 238	< 1	0.01	8	1720	8	5	2	86	0.10	< 10	< 10	160	< 10	74
G1-290	201 238	< 1	0.01	3	8080	4	< 5	< 1	61	< 0.01	< 10	< 10	33	< 10	34
G1-291	201 238	< 1	0.01	4	6350	2	< 5	< 1	55	< 0.01	< 10	< 10	10	< 10	38
G1-292	201 238	< 1	0.01	8	1490	6	< 5	1	80	0.08	< 10	< 10	125	< 10	72
G1-293	201 238	< 1	0.01	7	1250	10	< 5	1	75	0.08	< 10	< 10	118	< 10	58
G1-294	201 238	< 1	0.01	9	2000	8	< 5	5	118	0.19	< 10	< 10	187	< 10	82
G1-295	201 238	2	0.01	8	1940	4	5	3	113	0.13	< 10	< 10	172	< 10	88
G1-296	201 238	< 1	0.01	8	2010	12	< 5	4	100	0.13	< 10	< 10	172	< 10	80
G1-297	203 205	< 1	0.01	8	2240	2	< 5	3	66	0.09	< 10	< 10	161	< 10	108
G1-298	203 205	1	0.01	7	7990	6	< 5	1	76	< 0.01	10	< 10	136	< 10	80
G1-299	201 238	1	0.01	3	4180	2	< 5	< 1	39	< 0.01	10	< 10	48	< 10	50
G1-300	201 238	< 1	0.01	9	2450	10	5	5	108	0.18	< 10	< 10	172	< 10	100
G1-301	201 238	< 1	0.01	3	7950	< 2	< 5	< 1	48	< 0.01	< 10	< 10	19	< 10	44
G1-302	203 205	< 1	0.02	7	2240	6	< 5	3	103	0.14	< 10	< 10	185	< 10	96
G1-303	201 238	< 1	0.01	3	>10000	< 2	< 5	1	140	< 0.01	< 10	< 10	33	< 10	60
G1-304	201 238	< 1	0.01	6	1340	2	< 5	1	72	0.07	< 10	< 10	145	< 10	64
G1-305	201 238	< 1	0.01	7	1110	4	< 5	1	100	0.08	< 10	< 10	121	< 10	64
G1-306	201 238	< 1	0.01	6	1450	4	< 5	1	86	0.09	< 10	< 10	140	< 10	72
G1-307	201 238	< 1	0.01	6	1890	2	< 5	< 1	69	0.04	< 10	< 10	112	< 10	64
G1-308	201 238	< 1	0.01	7	1780	4	< 5	2	72	0.08	< 10	< 10	139	< 10	82
G1-309	203 205	< 1	0.02	7	2150	6	< 5	2	73	0.11	< 10	< 10	163	< 10	112
G1-310	201 238	< 1	0.01	8	1840	2	< 5	4	78	0.11	< 10	< 10	166	< 10	88
G1-311	201 238	2	0.02	13	6060	6	5	2	76	0.01	< 10	< 10	197	< 10	152
G1-312	201 238	< 1	0.02	4	3240	2	< 5	< 1	76	0.02	< 10	< 10	104	< 10	78
G1-313	201 238	< 1	0.01	4	2230	2	< 5	1	123	0.08	< 10	< 10	173	< 10	64
G1-314	201 238	< 1	0.02	4	3900	6	< 5	< 1	80	0.01	< 10	< 10	111	< 10	88
G1-315	201 238	< 1	0.02	3	3800	< 2	< 5	< 1	70	< 0.01	< 10	< 10	106	< 10	58
G1-316	201 238	< 1	0.01	4	3220	2	< 5	< 1	66	0.01	< 10	< 10	122	< 10	62
G1-317	201 238	< 1	0.01	8	1370	2	< 5	5	127	0.18	< 10	< 10	181	< 10	68
G1-318	201 238	< 1	0.01	6	1410	2	< 5	4	107	0.15	< 10	< 10	175	< 10	76
G1-319	201 238	< 1	0.01	6	1460	2	< 5	4	100	0.13	< 10	< 10	171	< 10	74
G1-320	201 238	< 1	0.01	3	3300	< 2	< 5	< 1	63	< 0.01	< 10	< 10	99	< 10	50

CERTIFICATION:

*B. Coughlin*



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To: DASSERAT DEVELOPMENTS LTD. \*\*

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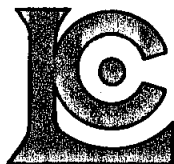
Project :  
 Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117273

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	FA+AA																				
G1-321	201	238	< 5	< 0.2	2.57	< 5	150	< 0.5	2	0.35	< 0.5	9	17	89	3.64	10	< 1	0.06	10	0.66	435
G1-322	201	238	< 5	< 0.2	2.05	5	220	0.5	2	0.29	< 0.5	8	17	77	4.00	10	< 1	0.07	< 10	0.36	1045
G1-323	201	238	< 5	< 0.2	1.85	< 5	250	< 0.5	< 2	0.52	< 0.5	12	14	80	2.97	< 10	< 1	0.09	10	0.46	1295
G1-324	201	238	< 5	< 0.2	0.99	< 5	470	< 0.5	< 2	0.59	0.5	11	12	40	1.34	< 10	< 1	0.09	< 10	0.12	2740
G1-325	201	238	< 5	< 0.2	2.03	< 5	240	1.0	2	1.15	< 0.5	18	27	58	3.55	< 10	< 1	0.10	10	0.44	3410
G1-326	201	238	< 5	< 0.2	2.88	5	100	< 0.5	< 2	0.91	< 0.5	16	45	80	4.87	20	< 1	0.04	10	0.96	1275
G1-327	201	238	< 5	< 0.2	2.28	< 5	140	< 0.5	< 2	0.63	< 0.5	6	32	42	2.65	< 10	< 1	0.06	10	0.27	405
G1-328	201	238	< 5	< 0.2	2.48	5	100	< 0.5	< 2	0.74	< 0.5	9	28	59	3.54	10	< 1	0.03	10	0.48	450
G1-329	201	238	< 5	< 0.2	2.29	< 5	100	< 0.5	< 2	0.57	< 0.5	11	39	54	4.23	10	< 1	0.04	10	0.62	630
G1-330	201	238	< 5	< 0.2	2.76	< 5	120	< 0.5	2	0.62	< 0.5	14	38	72	4.31	10	< 1	0.04	10	0.85	705
G1-331	201	238	< 5	< 0.2	2.54	< 5	70	< 0.5	< 2	0.77	< 0.5	15	34	87	4.49	20	< 1	0.04	10	0.99	620
G1-332	201	238	< 5	< 0.2	1.81	< 5	160	< 0.5	< 2	0.53	< 0.5	7	24	43	2.32	< 10	< 1	0.05	10	0.27	360
G1-333	201	238	< 5	< 0.2	1.95	< 5	130	< 0.5	< 2	0.44	< 0.5	8	23	59	2.68	< 10	< 1	0.06	10	0.25	815
G1-334	203	205	< 5	< 0.2	1.43	5	140	< 0.5	2	0.58	< 0.5	8	25	31	2.62	10	< 1	0.07	10	0.24	1160
G1-335	201	238	< 5	< 0.2	1.46	5	190	< 0.5	2	0.80	< 0.5	5	20	27	1.92	< 10	< 1	0.07	10	0.17	315
G1-336	201	238	< 5	< 0.2	2.26	15	80	< 0.5	< 2	0.82	< 0.5	12	42	62	4.36	20	< 1	0.05	10	0.76	465
G1-337	201	238	< 5	< 0.2	2.45	5	130	0.5	< 2	0.67	< 0.5	9	27	74	2.77	10	< 1	0.06	10	0.39	775
G1-338	201	238	< 5	< 0.2	1.53	< 5	170	< 0.5	2	0.64	< 0.5	13	27	31	2.56	10	< 1	0.10	10	0.31	1395
G1-339	203	205	< 5	< 0.2	2.04	5	210	< 0.5	< 2	0.78	< 0.5	13	27	52	3.59	10	< 1	0.08	10	0.54	1445
G1-340	201	238	< 5	< 0.2	2.61	< 5	110	< 0.5	< 2	0.77	< 0.5	17	47	61	3.73	10	< 1	0.05	10	0.70	570
G1-341	201	238	< 5	< 0.2	2.84	< 5	100	0.5	2	0.55	< 0.5	12	42	63	4.48	< 10	< 1	0.05	10	0.68	745
G1-342	203	238	< 5	< 0.2	1.96	< 5	180	< 0.5	2	0.74	< 0.5	11	26	54	2.48	10	< 1	0.07	10	0.46	1145
G1-343	201	238	< 5	< 0.2	2.10	< 5	250	0.5	< 2	0.97	0.5	18	26	58	2.83	< 10	< 1	0.08	10	0.40	2600
G1-344	201	238	< 5	< 0.2	1.25	< 5	270	< 0.5	< 2	0.51	0.5	4	21	21	1.36	< 10	< 1	0.09	< 10	0.10	685
G1-345	201	238	< 5	< 0.2	2.60	< 5	80	1.5	< 2	0.88	< 0.5	12	47	64	4.18	< 10	< 1	0.03	10	0.75	520
G1-346	201	238	< 5	< 0.2	2.18	< 5	110	< 0.5	< 2	0.69	< 0.5	11	39	57	4.23	< 10	1	0.07	10	0.76	620
G1-347	201	238	< 5	< 0.2	2.08	< 5	120	< 0.5	< 2	0.42	0.5	10	29	56	3.75	< 10	1	0.04	< 10	0.49	790
G1-348	203	205	10	< 0.2	2.41	< 5	100	< 0.5	< 2	0.79	< 0.5	13	42	74	4.67	< 10	< 1	0.05	10	0.96	615
G1-349	201	238	< 5	< 0.2	1.05	< 5	440	< 0.5	< 2	0.73	0.5	15	20	25	1.91	< 10	< 1	0.07	< 10	0.14	2490
G1-350	201	238	< 5	< 0.2	2.69	< 5	110	< 0.5	< 2	0.76	< 0.5	12	44	70	4.30	10	< 1	0.06	10	0.71	810
G1-351	217	238	< 5	< 0.2	2.46	5	120	< 0.5	< 2	1.22	< 0.5	18	84	59	4.82	< 10	< 1	0.12	10	1.03	1820
G1-352	217	238	< 5	< 0.2	3.67	< 5	70	< 0.5	< 2	1.57	0.5	20	58	92	5.36	< 10	< 1	0.10	10	1.23	1145
G1-353	201	238	< 5	< 0.2	2.66	< 5	100	< 0.5	< 2	0.66	< 0.5	13	38	66	4.61	< 10	< 1	0.06	10	0.84	785
G1-354	201	238	< 5	< 0.2	2.72	< 5	140	< 0.5	< 2	0.62	< 0.5	11	37	85	4.15	< 10	< 1	0.05	10	0.70	800
G1-355	201	238	< 5	< 0.2	3.00	< 5	110	< 0.5	< 2	0.61	< 0.5	14	46	85	4.42	< 10	< 1	0.05	10	0.81	930
G1-356	217	238	< 5	< 0.2	2.97	10	70	< 0.5	< 2	1.47	< 0.5	19	69	96	4.90	< 10	1	0.10	10	1.38	845
G1-357	201	238	< 5	< 0.2	2.62	< 5	110	< 0.5	< 2	0.47	< 0.5	10	33	63	4.04	< 10	< 1	0.05	10	0.73	545
G1-358	201	238	< 5	< 0.2	2.30	< 5	110	< 0.5	< 2	0.41	< 0.5	8	29	56	3.03	< 10	< 1	0.05	10	0.59	455
G1-359	201	238	< 5	< 0.2	2.54	< 5	110	< 0.5	< 2	0.41	0.5	10	33	69	3.34	< 10	< 1	0.06	10	0.64	885
G1-360	201	238	< 5	< 0.2	2.21	< 5	90	< 0.5	< 2	0.40	< 0.5	8	28	49	3.46	< 10	< 1	0.03	10	0.59	415

CERTIFICATION:

*B. Coughlin*



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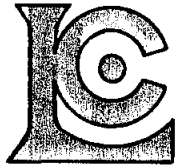
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SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
G1-321	201 238	< 1	0.01	6	1560	6	< 5	< 1	82	0.04	< 10	< 10	138	< 10	66
G1-322	201 238	< 1	0.01	6	2340	4	< 5	< 1	72	0.05	< 10	< 10	171	< 10	60
G1-323	201 238	< 1	0.01	5	3430	4	< 5	< 1	89	0.02	< 10	< 10	119	< 10	82
G1-324	201 238	< 1	0.01	4	5850	2	< 5	< 1	108	< 0.01	< 10	< 10	51	< 10	80
G1-325	201 238	1	0.01	10	5700	6	< 5	1	85	0.02	< 10	< 10	99	< 10	120
G1-326	201 238	< 1	0.01	17	2180	< 2	< 5	6	83	0.15	< 10	< 10	143	< 10	94
G1-327	201 238	< 1	0.01	7	2620	< 2	< 5	< 1	76	0.01	< 10	< 10	96	< 10	62
G1-328	201 238	< 1	0.01	11	1650	< 2	< 5	< 1	71	0.05	< 10	< 10	118	< 10	70
G1-329	201 238	< 1	0.01	15	1490	2	< 5	1	62	0.07	< 10	< 10	133	< 10	80
G1-330	201 238	< 1	0.01	15	1310	< 2	< 5	2	73	0.07	< 10	< 10	133	< 10	80
G1-331	201 238	< 1	0.01	14	1400	< 2	< 5	4	87	0.14	< 10	< 10	153	< 10	76
G1-332	201 238	< 1	0.01	6	2450	< 2	< 5	< 1	63	< 0.01	< 10	< 10	83	< 10	52
G1-333	201 238	< 1	0.01	8	3920	< 2	< 5	< 1	56	< 0.01	< 10	< 10	88	< 10	50
G1-334	203 205	1	0.01	7	1720	2	< 5	< 1	62	0.03	< 10	< 10	98	< 10	66
G1-335	201 238	< 1	0.01	6	2530	2	< 5	< 1	87	0.01	< 10	< 10	75	< 10	68
G1-336	201 238	< 1	0.01	14	1210	< 2	< 5	3	79	0.12	< 10	< 10	145	< 10	78
G1-337	201 238	< 1	0.01	11	2940	< 2	< 5	< 1	78	0.01	< 10	< 10	101	< 10	84
G1-338	201 238	1	0.01	8	2400	2	< 5	< 1	82	0.02	< 10	< 10	88	< 10	68
G1-339	203 205	< 1	0.01	10	1810	2	< 5	1	96	0.08	< 10	< 10	126	< 10	102
G1-340	201 238	< 1	0.01	24	1330	8	< 5	4	83	0.14	10	< 10	105	< 10	78
G1-341	201 238	< 1	0.01	13	1320	4	< 5	1	67	0.07	< 10	< 10	131	< 10	84
G1-342	203 238	< 1	0.01	10	2670	2	< 5	< 1	59	< 0.01	< 10	< 10	71	< 10	78
G1-343	201 238	< 1	0.01	10	4580	6	< 5	< 1	71	< 0.01	< 10	< 10	75	< 10	108
G1-344	201 238	1	0.01	5	6310	2	< 5	< 1	56	< 0.01	< 10	< 10	43	< 10	64
G1-345	201 238	< 1	0.01	19	1630	4	< 5	3	58	0.12	< 10	< 10	112	< 10	78
G1-346	201 238	< 1	0.01	12	1600	2	< 5	2	81	0.09	< 10	< 10	122	< 10	94
G1-347	201 238	1	0.01	9	1940	4	< 5	< 1	71	0.02	< 10	< 10	120	< 10	108
G1-348	203 205	< 1	0.01	12	1290	6	5	3	97	0.12	< 10	< 10	142	< 10	104
G1-349	201 238	< 1	0.01	6	3310	4	< 5	< 1	89	< 0.01	< 10	10	65	< 10	74
G1-350	201 238	< 1	0.01	14	1870	2	< 5	2	79	0.10	< 10	< 10	126	< 10	88
G1-351	217 238	< 1	0.04	17	1990	4	5	5	122	0.21	< 10	< 10	154	< 10	106
G1-352	217 238	< 1	0.03	18	1380	6	5	6	100	0.24	< 10	< 10	149	< 10	114
G1-353	201 238	< 1	0.01	12	1480	4	< 5	2	107	0.10	< 10	< 10	133	< 10	100
G1-354	201 238	< 1	0.01	11	1570	4	< 5	3	124	0.11	< 10	< 10	133	< 10	72
G1-355	201 238	< 1	0.01	14	1250	< 2	< 5	2	135	0.10	< 10	< 10	150	< 10	74
G1-356	217 238	< 1	0.03	21	1880	4	5	8	88	0.24	< 10	< 10	136	< 10	94
G1-357	201 238	< 1	0.01	11	1170	8	< 5	1	94	0.08	< 10	< 10	118	< 10	88
G1-358	201 238	< 1	0.01	10	1490	4	< 5	< 1	79	0.03	< 10	< 10	89	< 10	68
G1-359	201 238	< 1	0.01	12	1790	2	< 5	1	68	0.07	< 10	< 10	89	< 10	94
G1-360	201 238	< 1	0.01	11	1010	6	< 5	1	64	0.07	< 10	< 10	97	< 10	64

CERTIFICATION:

*B. Coughlin*





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number :5-A  
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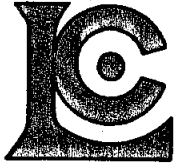
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 Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117273

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			FA+AA																		
G1-361	201	238	< 5	0.2	2.54	5	120	< 0.5	< 2	0.50	< 0.5	12	32	71	4.21	< 10	< 1	0.05	10	0.77	750
G1-362	201	238	< 5	< 0.2	2.66	< 5	90	< 0.5	< 2	0.55	< 0.5	9	35	57	3.97	< 10	< 1	0.05	10	0.70	520
G1-363	201	238	< 5	< 0.2	2.98	< 5	100	< 0.5	< 2	0.71	< 0.5	11	34	70	4.32	< 10	< 1	0.06	10	0.90	545
G1-364	201	238	< 5	< 0.2	2.96	< 5	110	< 0.5	< 2	0.78	< 0.5	14	33	93	5.08	< 10	< 1	0.06	10	1.03	710
G1-365	201	238	< 5	0.2	3.25	5	110	< 0.5	6	0.63	< 0.5	13	30	90	4.58	< 10	< 1	0.04	10	0.87	810
G1-366	203	205	< 5	< 0.2	2.82	15	100	< 0.5	< 2	0.96	< 0.5	20	37	104	4.76	< 10	< 1	0.07	10	1.27	1230
G1-367	201	238	< 5	0.2	2.71	5	110	< 0.5	< 2	0.53	< 0.5	13	28	72	4.25	< 10	< 1	0.03	10	0.73	900
G1-368	201	238	< 5	< 0.2	2.42	< 5	120	< 0.5	2	0.51	< 0.5	13	31	66	4.66	< 10	< 1	0.05	10	0.73	760
G1-369	201	238	< 5	< 0.2	2.95	< 5	130	< 0.5	< 2	0.59	< 0.5	11	26	77	4.18	< 10	< 1	0.04	10	0.84	495
G1-370	203	205	< 5	< 0.2	2.59	< 5	120	< 0.5	2	0.61	< 0.5	17	55	88	4.54	< 10	< 1	0.08	10	0.94	1410
G1-371	201	238	< 5	< 0.2	2.34	< 5	90	< 0.5	< 2	0.55	< 0.5	11	25	73	4.50	< 10	< 1	0.05	10	0.81	640
G1-372	201	238	< 5	< 0.2	2.25	10	180	< 0.5	2	0.50	< 0.5	9	19	63	3.44	< 10	< 1	0.05	10	0.45	715
G1-373	201	238	< 5	< 0.2	2.21	< 5	110	< 0.5	4	0.62	< 0.5	13	26	95	4.37	< 10	< 1	0.05	10	0.86	655
G1-374	201	238	< 5	< 0.2	2.67	< 5	160	< 0.5	< 2	0.40	< 0.5	13	23	87	3.97	< 10	< 1	0.05	10	0.80	1345
G1-375	203	205	< 5	0.4	1.66	< 5	140	< 0.5	< 2	0.45	0.5	9	16	58	2.41	< 10	< 1	0.07	10	0.29	770
G1-376	201	238	< 5	< 0.2	2.63	< 5	150	0.5	< 2	0.51	< 0.5	15	26	95	4.61	< 10	< 1	0.04	10	0.90	825
G1-377	201	238	< 5	< 0.2	2.70	< 5	90	< 0.5	< 2	0.47	< 0.5	12	24	75	3.99	< 10	< 1	0.05	10	0.82	770
G1-378	203	205	< 5	< 0.2	2.24	< 5	130	< 0.5	< 2	0.64	0.5	15	36	98	3.98	< 10	< 1	0.08	10	0.84	1380
G1-379	203	205	< 5	< 0.2	2.50	5	140	0.5	< 2	0.57	< 0.5	20	32	88	4.57	< 10	< 1	0.07	10	0.98	1505
G1-380	201	238	< 5	< 0.2	2.47	< 5	130	< 0.5	< 2	0.51	< 0.5	10	21	86	3.47	< 10	< 1	0.05	10	0.59	815
G1-381	201	238	< 5	< 0.2	2.77	< 5	140	< 0.5	< 2	0.38	< 0.5	11	20	85	3.90	< 10	< 1	0.03	10	0.76	595
G1-382	201	238	< 5	0.2	2.12	< 5	110	< 0.5	2	0.28	< 0.5	8	13	93	3.39	< 10	< 1	0.03	10	0.22	555
G1-383	201	238	< 5	0.6	1.87	< 5	170	1.0	2	0.44	< 0.5	9	18	59	3.28	< 10	< 1	0.06	10	0.46	605
G1-384	201	238	< 5	0.4	1.73	< 5	180	< 0.5	< 2	0.48	< 0.5	9	20	53	2.80	< 10	< 1	0.07	10	0.32	920

CERTIFICATION:

*B. Coughlin*



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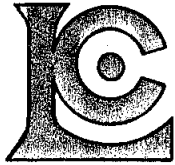
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## CERTIFICATE OF ANALYSIS

### A9117273

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
G1-361	201	238	< 1	0.01	11	1650	4	< 5	2	86	0.08	10	< 10	122	< 10	78
G1-362	201	238	< 1	0.01	9	1090	12	< 5	2	101	0.12	< 10	< 10	124	< 10	86
G1-363	201	238	< 1	0.01	12	1300	4	< 5	4	117	0.15	10	< 10	125	< 10	102
G1-364	201	238	< 1	0.01	11	1300	4	< 5	5	125	0.17	< 10	< 10	157	< 10	98
G1-365	201	238	< 1	0.01	12	1480	4	< 5	3	101	0.12	< 10	< 10	151	< 10	92
G1-366	203	205	< 1	0.02	14	1450	10	5	5	131	0.18	< 10	< 10	168	< 10	104
G1-367	201	238	1	0.01	11	1340	4	< 5	2	85	0.09	< 10	< 10	138	< 10	78
G1-368	201	238	< 1	0.01	11	1320	6	< 5	2	83	0.09	< 10	< 10	161	< 10	72
G1-369	201	238	1	0.01	11	1310	2	< 5	2	104	0.09	< 10	< 10	132	< 10	94
G1-370	203	205	< 1	0.02	14	1530	6	< 5	1	84	0.08	< 10	< 10	152	< 10	106
G1-371	201	238	< 1	0.01	10	1280	2	< 5	2	79	0.09	< 10	< 10	158	< 10	82
G1-372	201	238	< 1	0.01	7	2040	< 2	< 5	< 1	90	0.03	< 10	< 10	133	< 10	80
G1-373	201	238	< 1	0.01	12	1650	4	< 5	2	93	0.08	< 10	< 10	140	< 10	92
G1-374	201	238	1	0.01	8	1730	4	< 5	< 1	106	0.03	< 10	< 10	131	< 10	90
G1-375	203	205	< 1	0.01	5	3000	4	< 5	< 1	93	< 0.01	< 10	< 10	87	< 10	70
G1-376	201	238	1	0.01	11	1190	10	< 5	3	110	0.11	< 10	< 10	161	< 10	84
G1-377	201	238	< 1	0.01	10	1380	< 2	< 5	2	72	0.09	< 10	< 10	125	< 10	94
G1-378	203	205	< 1	0.02	8	1940	6	< 5	1	86	0.07	< 10	< 10	133	< 10	94
G1-379	203	205	< 1	0.02	9	1440	2	< 5	2	96	0.10	< 10	< 10	154	< 10	106
G1-380	201	238	< 1	0.01	7	2970	4	< 5	< 1	86	0.01	< 10	< 10	118	< 10	70
G1-381	201	238	< 1	0.01	9	1290	6	< 5	1	105	0.07	< 10	< 10	130	< 10	68
G1-382	201	238	< 1	0.01	6	2660	4	< 5	< 1	104	0.03	< 10	< 10	160	< 10	60
G1-383	201	238	< 1	0.01	6	1640	2	< 5	< 1	94	0.03	< 10	< 10	115	< 10	82
G1-384	201	238	< 1	0.01	5	2630	2	< 5	< 1	102	0.01	10	< 10	107	< 10	52

CERTIFICATION:



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British Columbia, Canada V7J 2C1  
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To: DASSERAT DEVELOPMENTS LTD. \*\*

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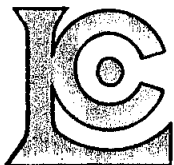
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## CERTIFICATE OF ANALYSIS A9117289

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	FA+AA																				
TS-01	201	238	< 5	< 0.2	2.57	15	100	< 0.5	< 2	0.40	< 0.5	8	27	51	3.89	< 10	< 1	0.07	10	0.83	600
TS-02	201	238	< 5	< 0.2	2.89	5	130	< 0.5	< 2	0.34	< 0.5	9	21	56	3.61	< 10	< 1	0.06	10	0.99	560
TS-03	217	238	< 5	< 0.2	3.51	25	190	< 0.5	< 2	0.80	< 0.5	16	33	174	4.86	< 10	< 1	0.09	< 10	1.41	950
TS-04	201	238	30	< 0.2	2.52	5	140	< 0.5	< 2	0.25	< 0.5	9	22	56	3.73	< 10	< 1	0.06	10	0.68	785
TS-05	201	238	< 5	< 0.2	2.15	< 5	190	< 0.5	< 2	0.41	< 0.5	8	24	88	3.47	< 10	< 1	0.06	< 10	0.66	570
TS-06	201	238	< 5	< 0.2	2.02	< 5	170	< 0.5	< 2	0.30	< 0.5	9	22	64	3.54	< 10	< 1	0.07	10	0.64	790
TS-07	201	238	5	< 0.2	2.03	5	160	< 0.5	< 2	0.39	< 0.5	10	20	64	3.50	< 10	< 1	0.07	10	0.82	700
TS-08	201	238	10	< 0.2	2.20	< 5	120	< 0.5	< 2	0.51	< 0.5	11	18	78	4.03	< 10	< 1	0.07	10	1.01	775
TS-09	201	238	< 5	< 0.2	1.63	< 5	220	< 0.5	< 2	0.34	< 0.5	8	16	51	3.37	< 10	< 1	0.07	< 10	0.55	560
TS-10	201	238	< 5	< 0.2	1.66	5	230	< 0.5	< 2	0.38	< 0.5	9	16	80	3.17	< 10	< 1	0.08	10	0.44	1305
TS-11	201	238	< 5	< 0.2	1.48	< 5	240	< 0.5	< 2	0.28	< 0.5	4	16	46	2.63	< 10	< 1	0.10	10	0.30	500
TS-12	201	238	< 5	< 0.2	2.13	10	210	< 0.5	< 2	0.51	< 0.5	12	22	114	3.95	< 10	< 1	0.11	10	0.87	895
TS-13	201	238	< 5	< 0.2	2.35	< 5	100	< 0.5	< 2	0.91	< 0.5	15	20	133	4.32	< 10	< 1	0.08	10	1.06	785
TS-14	201	238	< 5	< 0.2	2.11	< 5	170	< 0.5	< 2	0.37	< 0.5	8	20	77	3.48	< 10	< 1	0.09	10	0.60	960
TS-15	217	238	< 5	< 0.2	1.89	5	250	< 0.5	< 2	0.58	< 0.5	19	34	63	3.86	< 10	< 1	0.19	< 10	0.65	2690
TS-16	217	238	< 5	< 0.2	1.49	5	350	< 0.5	< 2	0.75	< 0.5	17	30	54	3.15	< 10	< 1	0.15	< 10	0.65	4640
TS-17	201	238	< 5	< 0.2	2.24	5	200	< 0.5	< 2	0.23	< 0.5	10	22	52	3.69	< 10	< 1	0.11	10	0.64	610
TS-18	203	205	< 5	< 0.2	2.05	< 5	220	< 0.5	< 2	0.44	< 0.5	12	54	63	3.64	< 10	< 1	0.13	< 10	0.62	1215
TS-19	217	238	< 5	< 0.2	1.91	15	250	< 0.5	< 2	0.58	< 0.5	15	28	42	3.62	< 10	< 1	0.15	< 10	0.92	2020
TS-20	201	238	< 5	< 0.2	1.99	< 5	180	< 0.5	< 2	0.23	< 0.5	14	23	49	3.53	< 10	< 1	0.06	< 10	0.42	1510
TS-21	203	205	< 5	< 0.2	1.88	5	360	< 0.5	< 2	0.41	< 0.5	15	38	65	2.66	< 10	< 1	0.11	< 10	0.27	2780
TS-22	201	238	< 5	< 0.2	2.47	5	140	< 0.5	< 2	0.42	< 0.5	9	25	75	3.80	< 10	< 1	0.05	10	0.85	615

CERTIFICATION:

*B. Coughlin*



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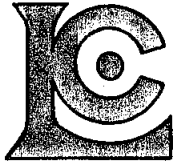
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## CERTIFICATE OF ANALYSIS

### A9117289

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
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TS-01	201	238	< 1	0.01	9	1260	12	< 5	2	77	0.09	< 10	< 10	107	< 10	76
TS-02	201	238	< 1	0.01	9	1520	12	< 5	1	53	0.06	< 10	< 10	93	< 10	76
TS-03	217	238	< 1	0.02	10	1570	16	< 5	8	104	0.19	< 10	< 10	157	< 10	70
TS-04	201	238	< 1	0.01	8	1440	16	< 5	< 1	53	0.04	< 10	< 10	97	< 10	70
TS-05	201	238	< 1	0.01	8	1660	14	< 5	1	87	0.05	< 10	< 10	100	< 10	60
TS-06	201	238	< 1	0.01	9	1320	16	< 5	< 1	58	0.03	< 10	< 10	90	< 10	58
TS-07	201	238	< 1	0.01	9	1410	4	< 5	1	63	0.05	< 10	< 10	91	< 10	70
TS-08	201	238	< 1	0.01	7	1690	16	< 5	1	87	0.08	< 10	< 10	127	< 10	80
TS-09	201	238	< 1	0.01	7	1450	8	< 5	< 1	75	0.03	< 10	< 10	100	< 10	78
TS-10	201	238	< 1	0.01	7	1670	14	5	< 1	73	0.03	< 10	< 10	98	< 10	68
TS-11	201	238	< 1	0.01	3	1420	12	< 5	< 1	61	0.03	< 10	< 10	74	< 10	62
TS-12	201	238	< 1	0.01	11	1750	18	< 5	2	77	0.07	< 10	< 10	101	< 10	88
TS-13	201	238	< 1	0.01	9	2230	14	< 5	4	120	0.18	< 10	< 10	144	< 10	72
TS-14	201	238	1	0.01	7	2010	10	< 5	< 1	72	0.03	< 10	< 10	104	< 10	70
TS-15	217	238	< 1	0.02	7	2080	22	< 5	1	100	0.07	< 10	< 10	135	< 10	82
TS-16	217	238	< 1	0.02	3	1920	10	< 5	1	113	0.06	< 10	< 10	105	< 10	94
TS-17	201	238	< 1	0.01	7	1260	8	< 5	< 1	42	0.03	< 10	< 10	92	< 10	60
TS-18	203	205	< 1	0.02	9	1450	6	< 5	< 1	95	0.04	< 10	< 10	116	< 10	72
TS-19	217	238	< 1	0.02	8	1560	8	< 5	1	94	0.05	< 10	< 10	96	< 10	84
TS-20	201	238	< 1	0.01	8	1920	6	< 5	< 1	60	0.02	< 10	< 10	108	< 10	46
TS-21	203	205	1	0.02	5	3790	8	< 5	< 1	78	< 0.01	< 10	< 10	89	< 10	74
TS-22	201	238	< 1	0.01	9	1410	6	< 5	2	74	0.08	< 10	< 10	107	< 10	56

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Project :

Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

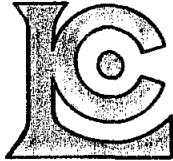
## CERTIFICATE OF ANALYSIS

A9117291

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	FA+AA																				
518036	205	294	< 5	< 0.2	3.24	10	70	< 0.5	< 2	2.40	< 0.5	12	25	151	4.61	10	< 1	0.10	10	1.48	1275

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

Page Number :1-B  
Total Pages :1  
Certificate Date: 11-JUL-91  
Invoice No. :19117291  
P.O. Number :NONE

Project :

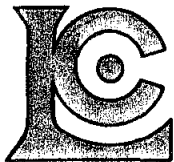
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS

A9117291

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
518036	205	294	< 1	0.04	7	1740	36	5	6	112	0.29	< 10	< 10	200	< 10	82

CERTIFICATION:



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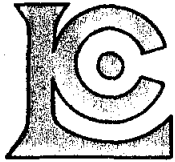
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 Invoice No. :I9117276  
 P.O. Number :NONE

Project :  
 Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117276

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	205	294	FA+AA																		
518001	205	294	840	< 0.2	1.69	30	210	< 0.5	4	0.78	< 0.5	11	25	224	4.32	10	< 1	0.16	10	1.18	565
518002	205	294	50	< 0.2	2.05	5	140	< 0.5	< 2	0.91	< 0.5	13	25	63	6.24	< 10	< 1	0.05	10	1.77	425
518003	205	294	35	< 0.2	1.27	25	10	< 0.5	< 2	>15.00	< 0.5	7	106	252	1.69	40	< 1	0.12	10	1.36	1330
518004	205	294	35	< 0.2	1.07	5	70	< 0.5	< 2	>15.00	1.0	6	32	25	1.77	50	< 1	0.04	20	0.66	875
518005	205	294	15	< 0.2	1.07	5	30	< 0.5	< 2	0.67	< 0.5	6	51	54	4.91	< 10	< 1	0.05	10	0.52	380
518006	205	294	10	< 0.2	2.74	< 5	60	< 0.5	< 2	1.38	< 0.5	13	13	58	5.12	10	< 1	0.11	10	1.03	1200
518007	205	294	40	< 0.2	2.24	15	70	< 0.5	< 2	2.17	< 0.5	13	19	121	4.66	10	< 1	0.26	10	0.74	495
518008	205	294	20	< 0.2	2.57	30	140	< 0.5	< 2	1.56	< 0.5	18	17	209	7.24	10	< 1	0.26	10	1.56	935
518009	205	294	10	< 0.2	1.35	15	780	< 0.5	< 2	4.23	< 0.5	14	17	349	4.24	20	< 1	0.56	20	1.08	965
518010	205	294	< 5	< 0.2	1.61	< 5	60	< 0.5	< 2	0.57	< 0.5	14	24	272	5.37	10	< 1	0.42	10	0.48	675
518013	205	294	< 5	< 0.2	3.12	5	270	< 0.5	< 2	1.47	< 0.5	20	173	112	5.11	10	< 1	0.11	10	2.27	805
518014	205	294	< 5	< 0.2	2.64	10	90	< 0.5	< 2	6.63	< 0.5	14	32	78	4.18	20	< 1	0.18	20	1.36	1010
518015	205	294	35	< 0.2	0.66	< 5	150	< 0.5	< 2	6.66	< 0.5	14	20	134	4.29	20	< 1	0.22	20	0.49	1010
518016	205	294	< 5	< 0.2	2.16	35	150	< 0.5	< 2	12.80	< 0.5	16	39	80	3.64	30	< 1	0.08	10	1.30	870
518017	205	294	< 5	< 0.2	3.02	5	330	< 0.5	< 2	1.68	< 0.5	15	62	75	5.61	10	< 1	0.06	10	1.38	1115
518018	205	294	< 5	< 0.2	2.68	5	350	< 0.5	< 2	8.55	< 0.5	16	33	86	3.71	20	< 1	0.14	10	1.50	880
518019	205	294	15	< 0.2	2.38	5	640	< 0.5	< 2	1.33	< 0.5	13	22	165	4.31	10	< 1	0.17	10	1.52	650
518020	205	294	< 5	< 0.2	2.21	10	220	< 0.5	< 2	1.44	< 0.5	12	25	129	4.25	10	< 1	0.12	10	1.33	640
518021	205	294	< 5	< 0.2	1.80	< 5	3260	< 0.5	< 2	5.61	< 0.5	14	16	121	3.63	20	< 1	0.62	20	0.66	1040
518022	205	294	75	0.6	1.22	20	330	< 0.5	< 2	0.79	< 0.5	5	17	75	4.13	< 10	< 1	0.23	10	0.44	225
518023	205	294	< 5	< 0.2	1.71	< 5	60	< 0.5	< 2	1.14	< 0.5	18	20	140	6.25	< 10	< 1	0.12	10	1.08	730
518032	205	294	< 5	< 0.2	2.40	20	60	< 0.5	< 2	0.90	< 0.5	15	40	57	5.69	10	< 1	0.08	20	1.19	910

CERTIFICATION: *B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
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To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

Page Number :1-B  
Total Pages :1  
Certificate Date: 11-JUL-91  
Invoice No. :19117276  
P.O. Number :NONE

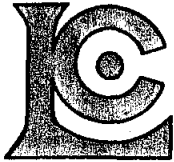
Project :  
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS A9117276

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518001	205 294	3	0.10	4	1760	44	< 5	7	127	0.33	< 10	< 10	193	< 10	28
518002	205 294	1	0.02	8	1740	14	< 5	10	47	0.43	< 10	< 10	256	< 10	28
518003	205 294	< 1	0.01	20	330	14	5	4	513	< 0.01	< 10	< 10	54	< 10	16
518004	205 294	< 1	0.01	7	480	6	5	4	266	< 0.01	< 10	< 10	67	10	120
518005	205 294	7	0.09	3	2090	18	< 5	8	23	0.36	< 10	< 10	207	< 10	58
518006	205 294	< 1	0.06	4	2100	22	5	7	42	0.31	< 10	< 10	172	< 10	86
518007	205 294	< 1	0.08	5	2170	22	< 5	8	125	0.42	< 10	< 10	216	< 10	40
518008	205 294	< 1	0.04	2	2160	16	< 5	11	83	0.36	< 10	< 10	286	< 10	68
518009	205 294	< 1	0.04	3	1920	20	5	10	131	< 0.01	< 10	< 10	102	< 10	50
518010	205 294	3	0.04	5	1700	12	< 5	7	44	< 0.01	< 10	< 10	82	< 10	54
518013	205 294	< 1	0.06	44	1640	< 2	< 5	6	271	0.27	< 10	< 10	175	< 10	62
518014	205 294	< 1	0.05	11	1430	12	< 5	10	99	0.20	< 10	< 10	133	< 10	64
518015	205 294	1	0.01	4	1480	18	5	5	64	< 0.01	< 10	< 10	73	< 10	66
518016	205 294	< 1	0.03	14	1100	18	5	9	148	0.21	< 10	< 10	147	< 10	58
518017	205 294	< 1	0.05	33	1380	18	< 5	10	46	0.51	< 10	< 10	225	< 10	106
518018	205 294	< 1	0.05	16	1290	4	5	8	198	0.22	< 10	< 10	124	< 10	198
518019	205 294	< 1	0.04	6	1820	10	< 5	7	212	0.31	< 10	< 10	179	< 10	78
518020	205 294	< 1	0.06	5	1580	10	5	6	192	0.25	< 10	< 10	209	< 10	60
518021	205 294	< 1	0.02	3	2180	10	5	6	278	< 0.01	< 10	< 10	74	< 10	46
518022	205 294	3	0.03	3	2060	42	< 5	8	113	0.40	< 10	< 10	172	< 10	24
518023	205 294	< 1	0.05	4	1820	20	< 5	8	65	0.31	< 10	< 10	247	< 10	58
518032	205 294	5	0.04	14	2620	7	< 5	5	104	0.32	< 10	< 10	205	< 10	90

CERTIFICATION:





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number :1-A  
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 Certificate Date: 10-JUL-91  
 Invoice No. :19117275  
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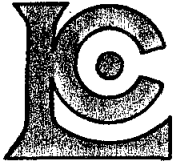
Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS

## A9117275

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
			FA+AA																		
518011	203	205	< 5	< 0.2	2.25	5	140	< 0.5	2	0.99	< 0.5	17	47	100	4.65	10	< 1	0.17	10	1.12	1070
518012	203	205	< 5	< 0.2	2.90	10	150	< 0.5	< 2	0.86	0.5	24	101	106	6.08	10	< 1	0.05	10	1.75	1675
518024	203	205	< 5	< 0.2	1.93	< 5	130	0.5	< 2	0.82	< 0.5	16	38	67	4.76	10	< 1	0.13	10	1.02	930
518025	203	205	15	< 0.2	1.91	5	100	< 0.5	< 2	0.88	< 0.5	15	40	65	4.28	10	< 1	0.12	10	1.15	905
518026	203	205	< 5	< 0.2	2.02	5	100	< 0.5	< 2	0.81	< 0.5	16	38	78	4.74	10	< 1	0.14	10	1.22	825
518027	203	205	< 5	< 0.2	2.04	< 5	100	< 0.5	< 2	0.88	< 0.5	17	37	92	5.07	10	< 1	0.13	10	1.19	965
518028	203	205	< 5	< 0.2	2.10	5	110	< 0.5	< 2	0.92	< 0.5	17	43	93	4.88	10	< 1	0.14	10	1.16	980
518029	201	238	< 5	< 0.2	1.86	10	190	< 0.5	2	1.11	< 0.5	15	77	102	4.25	10	< 1	0.07	10	0.87	590
518030	203	205	< 5	< 0.2	2.16	< 5	140	< 0.5	< 2	0.96	0.5	17	43	102	4.43	10	< 1	0.09	10	1.17	1005
518031	203	205	< 5	< 0.2	2.57	< 5	110	< 0.5	< 2	0.78	< 0.5	30	34	189	4.84	10	< 1	0.14	10	1.13	2750
518033	203	205	< 5	< 0.2	2.45	35	130	< 0.5	< 2	0.82	< 0.5	22	92	74	6.05	< 10	1	0.06	10	1.64	1345
518034	203	205	10	< 0.2	2.67	30	130	< 0.5	< 2	0.95	< 0.5	23	70	102	5.48	10	1	0.07	10	1.62	1745
518035	203	205	< 5	< 0.2	2.42	< 5	110	< 0.5	< 2	1.00	< 0.5	17	65	105	4.83	10	< 1	0.12	10	1.35	900

CERTIFICATION: B. Coughlin



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD. \*\*

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

Page Number :1-B  
Total Pages :1  
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Project :

Comments: ATTN: DIL GUJRAL CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS

### A9117275

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
518011	203	205	< 1	0.03	11	1420	6	< 5	7	152	0.16	< 10	< 10	163	< 10	88
518012	203	205	1	0.02	42	1190	10	< 5	7	50	0.22	< 10	< 10	207	< 10	104
518024	203	205	< 1	0.02	9	1290	10	< 5	6	93	0.12	< 10	< 10	164	< 10	86
518025	203	205	1	0.02	10	1420	10	< 5	5	109	0.15	< 10	< 10	140	< 10	84
518026	203	205	< 1	0.03	9	1500	4	5	6	99	0.13	< 10	< 10	149	< 10	84
518027	203	205	< 1	0.02	10	1500	6	< 5	6	110	0.16	< 10	< 10	175	< 10	86
518028	203	205	< 1	0.03	10	1490	6	5	6	127	0.16	< 10	< 10	168	< 10	88
518029	201	238	< 1	0.01	16	2430	6	< 5	7	96	0.12	< 10	< 10	146	< 10	58
518030	203	205	< 1	0.03	10	1140	< 2	< 5	5	102	0.18	< 10	< 10	147	< 10	88
518031	203	205	< 1	0.02	7	1460	6	< 5	6	89	0.17	< 10	< 10	161	< 10	96
518033	203	205	< 1	0.02	41	1140	4	5	5	41	0.25	< 10	< 10	201	< 10	102
518034	203	205	1	0.02	31	1400	8	5	7	66	0.22	< 10	< 10	188	< 10	108
518035	203	205	< 1	0.02	22	1330	8	< 5	6	107	0.21	< 10	< 10	164	< 10	88

CERTIFICATION:



# Chemex Labs Ltd.

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212 Brooksbank Ave., North Vancouver  
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PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

Page Number :1-A  
Total Pages :5  
Certificate Date: 27-AUG-91  
Invoice No. :19120210  
P.O. Number :

Project : MM PROPERTY  
Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
			FA+AA																		
DLC-SOS-01	201	298	< 5	< 0.2	4.79	< 5	650	< 0.5	< 2	0.60	0.5	59	29	215	5.39	10	< 1	0.17	20	1.65	4050
DLC-SOS-02	201	298	< 5	< 0.2	3.69	< 5	200	< 0.5	< 2	0.46	< 0.5	20	34	98	4.69	10	< 1	0.11	10	1.03	1185
DLC-SOS-03	201	298	< 5	< 0.2	3.55	< 5	260	< 0.5	< 2	0.67	0.5	27	37	132	5.18	10	< 1	0.10	10	1.37	1405
DLC-SOS-04	201	298	150	< 0.2	2.88	< 5	180	< 0.5	< 2	0.36	0.5	22	31	71	5.19	< 10	< 1	0.07	10	0.88	1105
DLC-SOS-05	201	298	20	< 0.2	3.19	< 5	190	< 0.5	< 2	0.40	< 0.5	21	37	72	4.74	< 10	< 1	0.09	10	1.04	830
DLC-SOS-06	201	298	< 5	< 0.2	2.42	< 5	140	< 0.5	< 2	0.24	0.5	13	32	49	4.04	< 10	< 1	0.04	< 10	0.79	660
DLC-SOS-07	201	298	< 5	< 0.2	3.78	< 5	90	< 0.5	< 2	0.41	0.5	24	40	169	5.64	< 10	< 1	0.04	10	1.64	900
DLC-SOS-08	201	298	< 5	< 0.2	3.68	< 5	280	< 0.5	< 2	0.49	< 0.5	18	42	102	5.99	< 10	< 1	0.07	10	1.03	550
DLC-SOS-09	201	298	< 5	< 0.2	3.20	< 5	210	< 0.5	< 2	0.37	< 0.5	15	35	82	6.59	< 10	< 1	0.10	< 10	0.80	675
DLC-SOS-10	201	298	20	< 0.2	2.40	< 5	290	< 0.5	< 2	0.74	0.5	25	40	171	6.29	< 10	< 1	0.13	10	0.99	1265
DLC-SOS-11	201	298	15	< 0.2	2.30	< 5	190	< 0.5	< 2	0.46	0.5	25	37	168	6.27	< 10	< 1	0.11	10	0.79	1155
GI-385	201	298	< 5	< 0.2	2.80	< 5	160	< 0.5	< 2	0.30	< 0.5	12	19	128	3.99	< 10	< 1	0.05	< 10	0.83	765
GI-386	201	298	< 5	< 0.2	2.86	< 5	170	< 0.5	< 2	0.36	< 0.5	15	26	109	4.36	< 10	< 1	0.04	10	0.91	1195
GI-387	201	298	< 5	< 0.2	2.41	< 5	140	< 0.5	< 2	0.39	< 0.5	12	26	94	4.08	< 10	< 1	0.05	10	0.83	900
GI-388	201	298	< 5	< 0.2	2.73	< 5	130	< 0.5	< 2	0.49	< 0.5	16	25	129	5.04	< 10	1	0.18	10	1.40	1125
GI-389	201	298	< 5	< 0.2	2.37	< 5	110	< 0.5	< 2	0.28	< 0.5	12	31	78	3.79	< 10	< 1	0.04	< 10	0.90	695
GI-390	201	298	< 5	< 0.2	2.21	< 5	80	< 0.5	< 2	0.45	< 0.5	12	36	66	3.84	< 10	< 1	0.05	10	0.93	580
GI-391	201	298	< 5	< 0.2	1.73	< 5	200	< 0.5	< 2	0.33	< 0.5	5	17	40	1.91	< 10	< 1	0.08	10	0.22	610
GI-392	201	298	< 5	< 0.2	2.59	< 5	200	< 0.5	< 2	0.44	0.5	12	24	115	3.49	< 10	< 1	0.06	10	0.80	840
GI-393	201	298	20	< 0.2	2.31	< 5	150	< 0.5	< 2	0.51	0.5	11	34	74	4.04	< 10	< 1	0.09	10	0.84	725
GI-394	201	298	< 5	< 0.2	2.21	< 5	130	< 0.5	< 2	0.44	< 0.5	12	39	76	3.89	< 10	< 1	0.05	10	0.95	815
GI-395	201	298	< 5	< 0.2	2.30	< 5	100	< 0.5	< 2	0.34	< 0.5	10	42	60	3.62	< 10	< 1	0.04	10	0.79	515
GI-396	201	298	< 5	< 0.2	2.11	< 5	170	< 0.5	< 2	0.33	< 0.5	10	24	65	3.27	< 10	< 1	0.08	< 10	0.72	690
GI-397	201	298	60	< 0.2	2.44	< 5	160	< 0.5	< 2	0.48	< 0.5	12	31	101	3.43	< 10	< 1	0.05	10	1.04	675
GI-398	201	298	< 5	< 0.2	1.72	< 5	220	< 0.5	< 2	0.40	< 0.5	7	24	48	2.70	< 10	< 1	0.06	< 10	0.48	975
GI-399	201	298	< 5	< 0.2	2.39	< 5	170	< 0.5	< 2	0.39	< 0.5	12	41	66	3.82	< 10	< 1	0.04	10	0.96	670
GI-400	201	298	< 5	< 0.2	2.04	< 5	110	< 0.5	< 2	0.30	< 0.5	9	29	55	3.54	< 10	< 1	0.04	10	0.65	740
GI-401	201	298	< 5	< 0.2	2.68	< 5	110	< 0.5	< 2	0.30	< 0.5	11	27	74	3.77	< 10	< 1	0.05	10	0.82	630
GI-402	201	298	< 5	< 0.2	1.86	< 5	180	< 0.5	< 2	0.28	< 0.5	6	24	51	2.75	< 10	< 1	0.05	10	0.40	750
GI-403	201	298	< 5	< 0.2	3.01	< 5	90	< 0.5	< 2	0.62	< 0.5	17	78	80	4.47	< 10	< 1	0.06	10	1.33	825
GI-404	201	298	< 5	< 0.2	2.66	< 5	150	< 0.5	< 2	0.75	0.5	15	56	98	4.39	< 10	< 1	0.07	10	1.23	880
GI-405	201	298	< 5	< 0.2	2.63	< 5	120	< 0.5	< 2	0.59	0.5	14	51	99	4.51	< 10	< 1	0.06	10	1.24	585
GI-406	201	298	< 5	< 0.2	2.62	< 5	150	< 0.5	< 2	0.31	< 0.5	16	116	97	4.40	< 10	< 1	0.05	10	1.08	980
GI-407	201	298	< 5	< 0.2	2.59	< 5	160	< 0.5	< 2	0.45	< 0.5	14	66	78	4.23	< 10	< 1	0.07	10	1.08	840
GI-408	201	298	< 5	< 0.2	1.89	< 5	360	< 0.5	< 2	1.06	1.0	15	41	64	3.67	< 10	< 1	0.09	< 10	0.86	2000
GI-409	201	298	< 5	< 0.2	2.31	< 5	120	< 0.5	< 2	0.45	< 0.5	15	32	121	3.84	< 10	< 1	0.05	10	1.02	820
GI-410	201	298	< 5	< 0.2	2.38	< 5	140	< 0.5	< 2	0.44	< 0.5	17	29	126	4.12	< 10	< 1	0.05	10	1.04	1230
GI-411	201	298	< 5	< 0.2	2.35	< 5	220	< 0.5	< 2	0.57	< 0.5	16	26	104	3.76	< 10	< 1	0.10	10	0.96	1520
GI-412	201	298	< 5	< 0.2	2.18	< 5	250	< 0.5	< 2	0.40	< 0.5	11	9	83	2.55	< 10	< 1	0.10	10	0.47	1365
GI-413	201	298	< 5	< 0.2	2.78	< 5	420	< 0.5	< 2	0.46	< 0.5	10	15	140	3.46	< 10	< 1	0.07	10	0.51	1210

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number : 1-B  
 Total Pages : 5  
 Certificate Date: 27-AUG-91  
 Invoice No. : I9120210  
 P.O. Number :

Project : MM PROPERTY  
 Comments : CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
DLC-SOS-01	201 298	3	0.01	20	1990	10	< 5	15	694	0.13	< 10	40	118	< 10	90
DLC-SOS-02	201 298	< 1	0.01	16	2260	12	< 5	8	169	0.15	< 10	10	115	< 10	102
DLC-SOS-03	201 298	1	0.01	21	2060	8	5	9	369	0.18	< 10	10	137	< 10	92
DLC-SOS-04	201 298	4	0.01	20	1290	22	< 5	5	163	0.12	< 10	20	110	< 10	100
DLC-SOS-05	201 298	< 1	0.01	19	1370	10	5	6	124	0.14	< 10	10	110	< 10	98
DLC-SOS-06	201 298	< 1	0.01	12	1220	6	< 5	3	98	0.10	< 10	10	96	< 10	74
DLC-SOS-07	201 298	< 1	0.01	20	1650	4	5	10	125	0.14	< 10	10	171	< 10	82
DLC-SOS-08	201 298	1	0.01	20	2070	6	5	7	107	0.10	< 10	10	158	< 10	104
DLC-SOS-09	201 298	< 1	0.01	13	2600	6	5	4	69	0.07	< 10	10	183	< 10	92
DLC-SOS-10	201 298	1	0.01	25	1850	12	5	15	73	0.09	< 10	< 10	141	< 10	104
DLC-SOS-11	201 298	1	< 0.01	25	1860	6	< 5	10	54	0.07	< 10	< 10	120	< 10	94
GI-385	201 298	< 1	0.01	9	1440	10	5	1	55	0.05	< 10	10	130	< 10	100
GI-386	201 298	< 1	< 0.01	12	1530	6	< 5	1	55	0.04	< 10	< 10	136	< 10	82
GI-387	201 298	< 1	< 0.01	11	1840	6	< 5	1	55	0.05	< 10	< 10	122	< 10	98
GI-388	201 298	< 1	0.01	13	1440	2	5	2	65	0.09	< 10	< 10	184	< 10	108
GI-389	201 298	< 1	< 0.01	13	1460	6	< 5	1	45	0.05	< 10	< 10	118	< 10	86
GI-390	201 298	< 1	0.01	18	1310	4	5	4	54	0.11	< 10	< 10	117	< 10	76
GI-391	201 298	< 1	< 0.01	4	2130	2	< 5	< 1	64	0.01	< 10	< 10	80	< 10	56
GI-392	201 298	< 1	0.01	11	1900	4	< 5	1	76	0.03	< 10	< 10	129	< 10	78
GI-393	201 298	< 1	< 0.01	13	1510	2	< 5	1	84	0.05	< 10	< 10	128	< 10	96
GI-394	201 298	< 1	0.01	16	1400	2	< 5	2	61	0.08	< 10	< 10	112	< 10	88
GI-395	201 298	< 1	< 0.01	15	1140	< 2	< 5	1	62	0.06	< 10	< 10	113	< 10	82
GI-396	201 298	< 1	0.01	9	1480	4	< 5	< 1	58	0.04	< 10	< 10	104	< 10	88
GI-397	201 298	< 1	< 0.01	15	1800	12	< 5	2	65	0.06	< 10	< 10	104	< 10	102
GI-398	201 298	< 1	< 0.01	9	2190	6	< 5	< 1	55	0.01	< 10	< 10	80	< 10	110
GI-399	201 298	< 1	< 0.01	16	1260	4	< 5	1	54	0.08	< 10	< 10	108	< 10	116
GI-400	201 298	< 1	< 0.01	11	1220	6	< 5	1	56	0.06	< 10	< 10	114	< 10	76
GI-401	201 298	< 1	< 0.01	11	1300	4	< 5	1	52	0.07	< 10	< 10	115	< 10	82
GI-402	201 298	< 1	< 0.01	8	1690	6	< 5	< 1	52	0.02	< 10	< 10	87	< 10	78
GI-403	201 298	< 1	0.01	32	1700	2	5	4	82	0.14	< 10	< 10	115	< 10	92
GI-404	201 298	< 1	0.01	20	2090	8	< 5	3	107	0.13	< 10	< 10	122	< 10	122
GI-405	201 298	< 1	0.01	19	1580	4	< 5	3	79	0.14	< 10	< 10	121	< 10	98
GI-406	201 298	< 1	0.01	33	2220	2	< 5	< 1	59	0.02	< 10	< 10	131	< 10	88
GI-407	201 298	< 1	0.01	26	1890	2	< 5	1	70	0.04	< 10	< 10	116	< 10	90
GI-408	201 298	< 1	< 0.01	15	2240	6	< 5	1	124	0.04	< 10	< 10	112	< 10	232
GI-409	201 298	< 1	< 0.01	16	1320	34	5	2	52	0.08	< 10	< 10	105	< 10	74
GI-410	201 298	< 1	< 0.01	12	1580	22	< 5	3	51	0.08	< 10	< 10	125	< 10	92
GI-411	201 298	< 1	< 0.01	11	2260	6	< 5	3	68	0.09	< 10	< 10	107	< 10	98
GI-412	201 298	< 1	0.01	6	4040	2	5	< 1	154	0.01	< 10	< 10	86	< 10	106
GI-413	201 298	< 1	0.01	5	3020	6	< 5	< 1	313	0.01	< 10	< 10	118	< 10	80

CERTIFICATION: \_\_\_\_\_

*B. Campbell*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number : 2-A  
 Total Pages : 5  
 Certificate Date: 27-AUG-91  
 Invoice No. : 19120210  
 P.O. Number :

Project : MM PROPERTY  
 Comments : CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As 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
GI-414	203 205	480	< 0.2	2.73	< 5	150	< 0.5	2	0.48	< 0.5	13	31	84	3.52	< 10	< 1	0.22	10	0.87	1420
GI-415	203 205	325	< 0.2	2.72	< 5	190	< 0.5	< 2	0.72	< 0.5	16	71	126	3.44	< 10	< 1	0.29	10	0.86	1820
GI-416	203 205	55	< 0.2	1.72	< 5	200	< 0.5	< 2	0.36	< 0.5	7	34	94	2.24	< 10	< 1	0.11	10	0.35	805
GI-417	201 298	< 5	< 0.2	2.52	< 5	160	< 0.5	< 2	0.47	< 0.5	13	17	237	3.63	< 10	< 1	0.05	10	0.83	695
GI-418	201 298	< 5	< 0.2	2.92	< 5	320	< 0.5	< 2	0.57	< 0.5	12	23	194	4.03	< 10	< 1	0.07	10	0.80	515
GI-419	201 298	< 5	0.2	3.51	10	200	< 0.5	< 2	0.74	< 0.5	8	24	64	3.24	< 10	< 1	0.10	10	0.56	405
GI-420	201 298	< 5	< 0.2	2.37	< 5	160	< 0.5	< 2	0.33	< 0.5	13	9	109	4.73	< 10	< 1	0.09	< 10	0.74	1085
GI-421	201 298	< 5	< 0.2	1.57	< 5	180	< 0.5	< 2	0.40	< 0.5	12	18	105	4.19	< 10	< 1	0.11	< 10	0.34	2030
GI-422	201 298	< 5	< 0.2	1.53	< 5	110	< 0.5	< 2	0.69	< 0.5	8	9	111	1.64	< 10	< 1	0.08	10	0.23	1145
GI-423	201 298	< 5	< 0.2	2.56	< 5	270	< 0.5	< 2	0.47	< 0.5	15	13	108	3.73	< 10	< 1	0.14	< 10	0.67	1770
GI-424	201 298	15	< 0.2	2.43	5	200	< 0.5	2	0.64	< 0.5	11	11	147	3.66	< 10	1	0.11	10	0.72	775
GI-425	201 298	< 5	0.8	2.96	< 5	440	< 0.5	< 2	1.18	0.5	9	19	383	2.89	10	< 1	0.10	30	0.63	865
GI-426	201 298	< 5	< 0.2	1.79	< 5	130	< 0.5	< 2	0.26	< 0.5	8	17	48	2.93	< 10	< 1	0.07	< 10	0.31	745
GI-427	201 298	< 5	0.2	1.77	< 5	190	< 0.5	< 2	0.36	< 0.5	5	10	139	1.55	< 10	< 1	0.06	10	0.22	350
GI-428	201 298	< 5	< 0.2	3.08	< 5	810	< 0.5	< 2	0.87	< 0.5	14	18	193	3.70	10	< 1	0.11	10	0.85	1000
GI-429	201 298	< 5	< 0.2	2.31	< 5	170	< 0.5	< 2	0.60	< 0.5	11	12	100	4.00	< 10	< 1	0.09	< 10	0.72	695
GI-430	201 298	< 5	< 0.2	2.64	< 5	930	< 0.5	< 2	0.66	< 0.5	9	9	110	3.15	< 10	< 1	0.16	< 10	0.47	475
GI-431	201 298	< 5	< 0.2	2.41	< 5	170	< 0.5	< 2	0.41	< 0.5	10	17	63	4.66	< 10	< 1	0.09	10	0.62	395
GI-432	201 298	< 5	< 0.2	1.42	< 5	310	< 0.5	< 2	0.68	< 0.5	8	9	55	3.09	< 10	< 1	0.18	10	0.34	710
GI-433	201 298	< 5	< 0.2	1.03	< 5	220	< 0.5	< 2	0.60	< 0.5	6	10	45	2.35	< 10	< 1	0.07	10	0.15	870
GI-434	201 298	< 5	< 0.2	2.07	< 5	190	< 0.5	< 2	0.58	0.5	10	17	61	3.43	< 10	< 1	0.08	10	0.67	465
GI-435	201 298	< 5	< 0.2	2.51	< 5	170	< 0.5	< 2	0.47	< 0.5	10	14	69	4.69	< 10	< 1	0.06	10	0.65	495
GI-436	201 298	< 10	< 0.2	2.50	< 5	260	< 0.5	< 2	0.55	< 0.5	19	12	105	3.90	< 10	< 1	0.12	10	0.65	3030
GI-437	201 298	< 5	< 0.2	2.21	< 5	70	< 0.5	< 2	0.97	< 0.5	18	22	137	4.49	< 10	< 1	0.08	10	0.99	855
GI-438	201 298	< 5	< 0.2	2.55	< 5	90	< 0.5	< 2	0.54	< 0.5	11	20	122	3.66	< 10	< 1	0.06	10	0.69	435
GI-439	201 298	< 5	< 0.2	1.61	< 5	140	< 0.5	< 2	0.41	< 0.5	7	18	55	3.00	< 10	< 1	0.05	10	0.41	330
GI-440	201 298	< 10	< 0.2	1.76	< 5	230	< 0.5	< 2	0.56	< 0.5	12	20	84	3.92	< 10	< 1	0.10	10	0.46	1405
GI-441	201 298	< 5	< 0.2	2.23	< 5	120	< 0.5	< 2	0.36	< 0.5	9	18	77	3.41	< 10	< 1	0.04	< 10	0.56	430
GI-442	201 298	< 5	< 0.2	1.70	< 5	150	< 0.5	< 2	0.24	< 0.5	5	15	49	1.93	< 10	< 1	0.06	< 10	0.27	355
GI-443	201 298	< 5	< 0.2	3.03	< 5	340	< 0.5	< 2	0.79	0.5	9	24	128	2.79	< 10	< 1	0.11	10	0.74	385
GI-444	201 298	< 10	< 0.2	1.87	< 5	410	< 0.5	< 2	1.09	0.5	13	23	103	3.41	< 10	< 1	0.14	10	0.43	1145
GI-445	201 298	< 5	< 0.2	1.67	< 5	240	< 0.5	< 2	0.71	< 0.5	9	19	43	2.62	< 10	< 1	0.10	10	0.42	865
GI-446	201 298	< 10	< 0.2	1.18	< 5	440	< 0.5	< 2	0.31	< 0.5	31	9	85	2.48	< 10	< 1	0.11	< 10	0.19	5110
GI-447	201 298	< 5	< 0.2	2.98	< 5	200	< 0.5	< 2	0.56	0.5	21	18	324	5.13	< 10	< 1	0.10	10	1.22	1220
GI-448	201 298	< 25	< 0.2	1.45	< 5	320	< 0.5	2	0.67	< 0.5	28	8	155	2.92	< 10	< 1	0.10	10	0.39	3180
GI-449	201 298	< 5	< 0.2	2.59	< 5	270	< 0.5	< 2	0.28	< 0.5	15	23	326	3.85	< 10	< 1	0.05	10	0.95	905
GI-450	201 298	< 5	< 0.2	2.46	< 5	140	< 0.5	< 2	0.42	< 0.5	13	21	184	3.97	< 10	1	0.06	10	1.05	740
GI-451	201 298	< 5	< 0.2	2.31	< 5	100	< 0.5	< 2	0.40	< 0.5	12	23	107	4.32	< 10	< 1	0.04	10	0.82	1280
GI-452	201 298	< 5	< 0.2	3.05	5	110	< 0.5	< 2	0.53	< 0.5	23	31	177	5.32	< 10	1	0.11	10	1.79	2270
GI-453	201 298	35	< 0.2	2.78	< 5	260	< 0.5	< 2	0.40	0.5	19	35	181	4.44	< 10	< 1	0.05	10	1.29	1495

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
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Page Number :2-B  
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 Certificate Date: 27-AUG-91  
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Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
GI-414	203 205	< 1	0.05	5	2600	4	< 5	1	118	0.06	< 10	< 10	126	< 10	94
GI-415	203 205	< 1	0.05	6	2400	8	< 5	1	148	0.06	< 10	< 10	110	< 10	96
GI-416	203 205	< 1	0.02	4	2690	< 2	< 5	< 1	100	0.01	< 10	< 10	90	< 10	58
GI-417	201 298	1	0.01	9	1570	12	< 5	2	112	0.11	< 10	< 10	124	< 10	78
GI-418	201 298	< 1	0.01	10	1160	< 2	< 5	2	220	0.10	< 10	< 10	134	< 10	70
GI-419	201 298	1	0.01	13	4690	6	5	1	61	0.01	< 10	< 10	87	< 10	134
GI-420	201 298	< 1	0.01	5	2280	8	< 5	1	55	0.03	< 10	< 10	167	< 10	110
GI-421	201 298	< 1	0.01	6	2000	6	< 5	2	48	0.04	< 10	< 10	139	< 10	104
GI-422	201 298	< 1	0.01	3	1580	4	< 5	< 1	90	0.02	< 10	< 10	85	< 10	40
GI-423	201 298	< 1	0.01	7	2130	< 2	< 5	1	239	0.07	< 10	< 10	112	< 10	90
GI-424	201 298	1	0.01	7	2570	8	5	1	122	0.02	< 10	< 10	126	< 10	106
GI-425	201 298	< 1	0.01	6	4490	6	< 5	3	396	0.02	< 10	< 10	117	< 10	58
GI-426	201 298	< 1	< 0.01	7	2240	2	< 5	< 1	49	0.02	< 10	< 10	86	< 10	74
GI-427	201 298	< 1	0.01	6	3500	2	< 5	< 1	83	< 0.01	< 10	< 10	56	< 10	50
GI-428	201 298	< 1	0.01	7	1880	2	< 5	3	657	0.09	< 10	< 10	119	< 10	70
GI-429	201 298	< 1	0.01	6	1860	6	< 5	1	101	0.05	< 10	< 10	136	< 10	94
GI-430	201 298	< 1	0.02	4	1670	6	< 5	< 1	715	0.04	< 10	< 10	134	< 10	84
GI-431	201 298	< 1	0.01	6	1250	6	< 5	2	110	0.09	< 10	< 10	164	< 10	78
GI-432	201 298	< 1	0.01	3	2430	4	< 5	< 1	95	0.01	< 10	< 10	118	< 10	80
GI-433	201 298	< 1	0.01	4	1120	4	< 5	< 1	79	0.01	< 10	< 10	90	< 10	78
GI-434	201 298	< 1	0.01	7	1370	4	< 5	1	99	0.06	< 10	< 10	113	< 10	78
GI-435	201 298	< 1	0.01	6	1280	6	< 5	2	134	0.09	< 10	< 10	162	< 10	72
GI-436	201 298	< 1	0.01	7	1830	8	< 5	1	91	0.05	< 10	< 10	115	< 10	114
GI-437	201 298	< 1	0.01	13	2480	8	< 5	5	102	0.17	< 10	< 10	152	< 10	62
GI-438	201 298	< 1	0.01	11	2150	8	5	3	80	0.07	< 10	< 10	107	< 10	68
GI-439	201 298	< 1	< 0.01	7	1130	6	< 5	< 1	88	0.03	< 10	< 10	100	< 10	50
GI-440	201 298	< 1	0.01	7	1970	8	< 5	1	90	0.03	< 10	< 10	129	< 10	84
GI-441	201 298	< 1	0.01	8	1500	8	5	1	89	0.06	< 10	< 10	114	< 10	62
GI-442	201 298	< 1	0.01	5	2040	2	< 5	< 1	63	0.01	< 10	< 10	62	< 10	52
GI-443	201 298	< 1	0.01	11	3340	6	5	2	72	0.02	< 10	< 10	78	< 10	180
GI-444	201 298	1	0.01	8	3730	6	< 5	1	70	0.02	< 10	< 10	96	< 10	110
GI-445	201 298	1	0.01	8	2140	6	< 5	< 1	67	0.03	< 10	< 10	89	< 10	80
GI-446	201 298	2	< 0.01	4	4850	18	< 5	1	40	< 0.01	< 10	< 10	82	< 10	78
GI-447	201 298	< 1	0.01	10	2540	14	< 5	3	71	0.05	< 10	< 10	169	< 10	98
GI-448	201 298	1	< 0.01	4	5540	12	< 5	4	42	0.01	< 10	< 10	83	< 10	86
GI-449	201 298	< 1	< 0.01	11	1920	12	< 5	1	78	0.03	< 10	< 10	126	< 10	82
GI-450	201 298	1	< 0.01	10	2800	10	5	2	60	0.06	< 10	< 10	124	< 10	80
GI-451	201 298	< 1	0.01	7	1440	10	< 5	3	65	0.12	< 10	< 10	162	< 10	68
GI-452	201 298	1	0.01	15	2370	12	10	7	55	0.15	< 10	< 10	157	< 10	100
GI-453	201 298	< 1	0.01	13	1800	6	< 5	3	102	0.07	< 10	< 10	137	< 10	80

CERTIFICATION: \_\_\_\_\_

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number :3-A  
 Total Pages :5  
 Certificate Date: 27-AUG-91  
 Invoice No. :19120210  
 P.O. Number :

Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As 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
GI-454	201 298	< 5	< 0.2	2.84	< 5	280	< 0.5	< 2	0.42	< 0.5	11	22	131	4.22	< 10	< 1	0.06	< 10	1.24	915
GI-455	201 298	< 5	< 0.2	2.87	< 5	110	< 0.5	< 2	0.63	< 0.5	13	28	143	5.05	< 10	< 1	0.05	10	1.32	755
GI-456	201 298	< 5	< 0.2	2.58	< 5	190	< 0.5	< 2	0.47	< 0.5	13	28	121	5.18	< 10	< 1	0.06	< 10	1.41	1075
GI-457	201 298	< 5	< 0.2	2.79	5	220	< 0.5	< 2	0.56	< 0.5	15	31	124	4.74	< 10	< 1	0.04	10	0.98	800
GI-458	201 298	< 5	< 0.2	2.34	< 5	110	< 0.5	< 2	0.25	< 0.5	8	34	64	4.03	< 10	< 1	0.04	10	0.64	730
GI-459	201 298	< 5	< 0.2	2.87	5	80	< 0.5	< 2	0.48	< 0.5	10	39	86	5.00	< 10	< 1	0.03	10	0.96	455
GI-460	201 298	< 5	< 0.2	2.39	< 5	100	< 0.5	< 2	0.29	1.5	8	39	59	3.32	< 10	< 1	0.05	10	0.71	580
GI-461	201 298	< 5	< 0.2	2.67	10	110	< 0.5	< 2	0.31	< 0.5	12	29	78	3.89	< 10	< 1	0.03	10	0.67	740
GI-462	201 298	< 5	< 0.2	2.56	< 5	110	< 0.5	< 2	0.32	< 0.5	13	33	113	4.02	< 10	< 1	0.04	10	0.75	460
GI-463	201 298	< 5	< 0.2	2.08	< 5	160	< 0.5	< 2	0.81	1.0	15	26	59	2.97	< 10	< 1	0.06	20	0.50	2300
GI-464	201 298	< 5	< 0.2	1.87	< 5	130	< 0.5	< 2	0.34	0.5	6	23	61	3.17	< 10	< 1	0.08	10	0.25	615
GI-465	201 298	< 5	< 0.2	2.36	< 5	130	< 0.5	< 2	0.29	< 0.5	8	31	94	4.32	< 10	< 1	0.04	< 10	0.49	615
GI-466	201 298	< 5	< 0.2	2.91	< 5	120	< 0.5	< 2	0.22	< 0.5	8	25	92	4.16	< 10	< 1	0.04	10	0.45	570
GI-467	201 298	< 5	< 0.2	1.52	5	170	< 0.5	< 2	0.39	< 0.5	7	24	61	3.17	< 10	< 1	0.09	10	0.27	855
GI-468	201 298	< 5	< 0.2	1.87	< 5	110	< 0.5	< 2	0.31	< 0.5	7	20	62	2.87	< 10	< 1	0.06	10	0.54	690
GI-469	201 298	< 5	< 0.2	2.13	< 5	290	< 0.5	< 2	0.91	1.0	8	15	90	2.99	< 10	< 1	0.12	10	0.53	1420
GI-470	201 298	< 5	< 0.2	1.28	< 5	140	< 0.5	< 2	0.56	< 0.5	8	17	79	3.05	< 10	< 1	0.11	10	0.38	680
GI-471	201 298	< 10	< 0.2	1.90	5	210	< 0.5	< 2	0.21	< 0.5	7	15	82	5.07	< 10	< 1	0.06	< 10	0.50	805
GI-472	201 298	< 10	< 0.2	1.53	< 5	170	< 0.5	< 2	0.51	< 0.5	6	15	42	3.37	< 10	< 1	0.07	10	0.37	955
GI-473	201 298	< 5	< 0.2	1.28	< 5	220	< 0.5	< 2	0.35	< 0.5	5	13	62	3.22	< 10	< 1	0.07	< 10	0.19	320
GI-474	201 298	< 5	< 0.2	1.65	< 5	160	< 0.5	4	0.60	< 0.5	8	16	45	4.39	< 10	< 1	0.12	< 10	0.41	520
GI-475	201 298	< 5	< 0.2	2.20	10	150	< 0.5	4	0.61	< 0.5	11	16	66	4.53	< 10	< 1	0.11	< 10	0.68	775
GI-476	201 298	< 5	< 0.2	1.99	< 5	150	< 0.5	6	0.54	< 0.5	12	18	53	4.62	< 10	< 1	0.07	10	0.45	1200
GI-477	201 298	< 5	< 0.2	2.04	5	190	< 0.5	8	0.51	< 0.5	13	17	58	4.91	< 10	< 1	0.06	10	0.65	1445
GI-478	201 298	< 5	< 0.2	1.37	< 5	130	< 0.5	6	0.31	< 0.5	6	14	30	3.90	< 10	< 1	0.03	< 10	0.26	290
GI-479	201 298	< 5	< 0.2	2.66	< 5	180	< 0.5	4	0.68	< 0.5	18	20	98	5.23	< 10	< 1	0.09	10	0.79	1625
GI-480	201 298	< 10	< 0.2	2.11	< 5	130	< 0.5	4	0.72	< 0.5	14	17	78	4.38	< 10	< 1	0.08	10	0.57	1290
GI-481	201 298	< 5	< 0.2	0.87	< 5	940	< 0.5	2	1.18	< 0.5	24	11	55	2.86	< 10	< 1	0.11	< 10	0.18	>10000
GI-482	201 298	< 10	< 0.2	1.77	< 5	130	< 0.5	6	0.38	< 0.5	10	16	51	4.61	< 10	< 1	0.06	< 10	0.49	670
GI-483	201 298	45	< 0.2	2.34	10	170	< 0.5	4	0.60	< 0.5	14	18	78	4.65	< 10	< 1	0.06	10	0.66	1215
GI-484	201 298	< 5	< 0.2	2.54	10	100	< 0.5	6	0.61	< 0.5	13	20	103	5.10	< 10	< 1	0.07	10	0.79	670
GI-485	201 298	< 5	< 0.2	2.56	< 5	100	< 0.5	6	0.43	< 0.5	11	19	74	4.73	< 10	< 1	0.04	10	0.74	520
GI-486	201 298	< 5	< 0.2	1.98	5	170	< 0.5	6	0.54	< 0.5	12	16	61	4.41	< 10	< 1	0.05	< 10	0.62	820
GI-487	201 298	< 5	< 0.2	1.82	< 5	130	< 0.5	6	0.57	< 0.5	10	18	69	4.34	< 10	< 1	0.06	10	0.35	1025
GI-488	201 298	< 5	< 0.2	2.83	5	120	< 0.5	4	0.48	< 0.5	12	30	94	5.07	< 10	< 1	0.05	10	0.89	675
GI-489	201 298	< 5	< 0.2	2.02	< 5	130	0.5	2	0.43	< 0.5	8	18	59	3.93	< 10	< 1	0.05	< 10	0.56	420
GI-490	201 298	< 5	< 0.2	2.42	10	80	1.5	2	0.28	< 0.5	11	21	132	4.77	< 10	< 1	0.03	< 10	0.76	595
GI-491	201 298	< 5	< 0.2	2.33	5	170	< 0.5	2	0.28	< 0.5	14	18	87	4.45	< 10	< 1	0.07	< 10	0.78	1505
GI-492	201 298	< 5	< 0.2	2.40	10	160	< 0.5	< 2	0.21	< 0.5	9	17	97	4.03	< 10	< 1	0.04	< 10	0.63	895
GI-493	201 298	< 5	< 0.2	1.40	10	210	< 0.5	4	0.31	< 0.5	12	12	114	3.25	< 10	1	0.06	< 10	0.40	2760

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number :3-B  
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 P.O. Number :

Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
GI-454	201 298	< 1	0.01	8	1730	8	< 5	2	110	0.08	< 10	< 10	122	< 10	88
GI-455	201 298	< 1	0.01	11	1700	4	5	4	76	0.17	< 10	< 10	147	< 10	80
GI-456	201 298	1	< 0.01	12	1910	6	5	2	75	0.09	< 10	< 10	152	< 10	90
GI-457	201 298	1	0.01	16	1590	10	5	5	80	0.15	< 10	< 10	148	< 10	80
GI-458	201 298	< 1	< 0.01	12	1180	4	< 5	2	44	0.08	< 10	< 10	121	< 10	56
GI-459	201 298	1	< 0.01	15	1740	8	5	4	53	0.14	< 10	< 10	135	< 10	66
GI-460	201 298	< 1	< 0.01	12	1450	6	< 5	< 1	51	0.04	< 10	< 10	89	< 10	76
GI-461	201 298	< 1	< 0.01	15	1250	4	< 5	2	37	0.08	< 10	< 10	124	< 10	74
GI-462	201 298	< 1	< 0.01	19	1020	6	5	4	31	0.11	< 10	< 10	102	< 10	74
GI-463	201 298	1	< 0.01	13	2440	2	< 5	1	92	0.02	< 10	< 10	94	< 10	56
GI-464	201 298	1	< 0.01	9	2470	2	5	< 1	55	0.01	< 10	< 10	101	< 10	66
GI-465	201 298	1	< 0.01	14	990	6	< 5	1	42	0.06	< 10	< 10	117	< 10	94
GI-466	201 298	1	< 0.01	11	1420	4	< 5	1	37	0.02	< 10	< 10	112	< 10	66
GI-467	201 298	1	< 0.01	7	1720	6	< 5	< 1	52	0.02	< 10	< 10	80	< 10	94
GI-468	201 298	< 1	< 0.01	8	1610	2	< 5	< 1	41	0.03	< 10	< 10	72	< 10	78
GI-469	201 298	1	0.01	7	3780	8	5	1	67	0.01	< 10	< 10	75	< 10	148
GI-470	201 298	< 1	< 0.01	5	2140	6	< 5	< 1	65	0.02	< 10	< 10	84	< 10	94
GI-471	201 298	< 1	< 0.01	4	1500	8	< 5	1	52	0.04	< 10	< 10	165	< 10	84
GI-472	201 298	< 1	< 0.01	5	1280	8	< 5	3	81	0.11	< 10	< 10	135	< 10	74
GI-473	201 298	< 1	< 0.01	5	1150	6	< 5	< 1	80	0.03	< 10	< 10	114	< 10	98
GI-474	201 298	< 1	0.01	6	1030	6	< 5	3	82	0.13	< 10	< 10	156	< 10	86
GI-475	201 298	< 1	0.01	8	1310	4	5	2	105	0.09	< 10	< 10	155	< 10	98
GI-476	201 298	< 1	0.01	6	1430	6	< 5	3	64	0.10	< 10	< 10	158	< 10	88
GI-477	201 298	< 1	0.01	10	1500	8	5	4	56	0.11	< 10	< 10	150	< 10	96
GI-478	201 298	< 1	0.01	5	700	4	< 5	2	45	0.09	< 10	< 10	141	< 10	56
GI-479	201 298	1	0.01	10	1610	8	< 5	3	73	0.07	< 10	< 10	163	< 10	114
GI-480	201 298	< 1	0.01	10	1340	10	< 5	3	64	0.07	< 10	< 10	132	< 10	106
GI-481	201 298	1	0.01	8	1160	10	< 5	1	83	0.04	< 10	< 10	88	< 10	206
GI-482	201 298	1	< 0.01	8	1240	12	< 5	3	42	0.10	< 10	< 10	145	< 10	94
GI-483	201 298	1	0.01	9	1250	8	< 5	4	110	0.12	< 10	< 10	155	< 10	94
GI-484	201 298	1	0.01	10	1220	8	5	3	122	0.09	< 10	< 10	153	< 10	80
GI-485	201 298	< 1	0.01	10	1980	10	< 5	4	85	0.12	< 10	< 10	137	< 10	74
GI-486	201 298	< 1	0.01	8	1240	6	< 5	4	90	0.13	< 10	< 10	140	< 10	86
GI-487	201 298	< 1	0.01	6	1200	6	< 5	3	86	0.12	< 10	< 10	157	< 10	94
GI-488	201 298	< 1	0.01	12	2220	4	< 5	5	123	0.15	< 10	10	141	< 10	108
GI-489	201 298	< 1	< 0.01	7	1230	6	< 5	1	81	0.07	< 10	< 10	122	< 10	72
GI-490	201 298	1	0.01	9	1690	8	5	2	48	0.06	< 10	10	134	< 10	80
GI-491	201 298	< 1	< 0.01	9	2060	8	< 5	2	96	0.06	< 10	< 10	140	< 10	100
GI-492	201 298	< 1	0.01	7	2490	4	< 5	< 1	51	0.01	< 10	< 10	114	< 10	86
GI-493	201 298	< 1	< 0.01	5	2200	8	< 5	< 1	38	0.01	< 10	< 10	96	< 10	98

CERTIFICATION:

*B. Coughlin*





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: DASSERAT DEVELOPMENTS LTD.

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Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	FA+AA																				
GI-494	201	298	< 5	< 0.2	1.60	5	210	< 0.5	< 2	0.24	< 0.5	11	14	84	2.51	< 10	< 1	0.06	< 10	0.24	1715
GI-495	201	298	< 5	< 0.2	2.00	5	130	< 0.5	2	0.25	< 0.5	7	21	80	3.19	< 10	< 1	0.05	< 10	0.53	365
GI-496	201	298	< 10	< 0.2	2.06	10	190	0.5	2	0.25	< 0.5	11	18	97	3.01	< 10	< 1	0.06	< 10	0.39	1800
GI-497	201	298	< 5	0.2	2.72	< 5	470	0.5	4	1.23	< 0.5	8	23	76	2.46	< 10	< 1	0.08	10	0.49	585
GI-498	201	298	< 5	< 0.2	2.35	5	110	< 0.5	2	0.45	< 0.5	9	32	61	3.12	< 10	< 1	0.04	10	0.44	430
GI-499	201	298	< 10	< 0.2	1.85	5	340	< 0.5	4	0.46	< 0.5	20	32	44	3.31	< 10	< 1	0.11	< 10	0.33	6080
GI-500	201	298	< 5	< 0.2	2.21	< 5	370	< 0.5	2	0.58	0.5	7	16	98	2.56	< 10	< 1	0.05	10	0.54	585
GI-501	201	298	< 5	1.2	1.65	5	210	1.0	2	1.60	0.5	4	14	183	1.35	< 10	< 1	0.08	20	0.23	1420
GI-502	201	298	< 5	< 0.2	2.49	< 5	370	< 0.5	6	0.33	< 0.5	14	16	140	4.17	< 10	< 1	0.10	< 10	0.84	1390
GI-503	201	298	< 5	< 0.2	1.53	5	110	< 0.5	4	0.25	< 0.5	6	12	86	3.33	< 10	< 1	0.04	< 10	0.22	290
GI-504	201	298	< 5	< 0.2	2.57	10	120	< 0.5	4	0.31	< 0.5	11	24	94	3.74	< 10	< 1	0.03	< 10	0.95	570
GI-505	201	298	< 5	< 0.2	1.84	5	460	< 0.5	6	0.33	< 0.5	11	19	135	4.43	< 10	< 1	0.05	< 10	0.40	1005
GI-506	201	298	< 5	< 0.2	2.27	< 5	200	< 0.5	4	0.26	< 0.5	10	18	80	3.65	< 10	< 1	0.03	10	0.64	705
GI-507	201	298	< 5	< 0.2	2.87	10	220	0.5	< 2	0.35	< 0.5	19	18	116	5.55	< 10	< 1	0.06	< 10	1.10	2720
GI-508	201	298	< 5	< 0.2	1.79	5	200	< 0.5	2	0.38	< 0.5	12	14	75	3.98	< 10	< 1	0.06	< 10	0.68	1200
GI-509	201	298	< 5	< 0.2	2.27	< 5	70	0.5	2	0.31	< 0.5	10	16	99	3.03	< 10	< 1	0.04	< 10	0.61	465
GI-510	201	298	< 5	< 0.2	1.57	5	160	< 0.5	2	0.44	< 0.5	13	14	49	3.87	< 10	< 1	0.05	< 10	0.53	1175
GI-511	201	298	< 5	< 0.2	1.80	15	120	< 0.5	4	0.38	< 0.5	11	13	66	4.25	< 10	1	0.04	< 10	0.57	670
GI-512	201	298	< 10	< 0.2	1.31	< 5	120	< 0.5	2	0.36	< 0.5	9	16	39	3.72	< 10	< 1	0.07	< 10	0.39	765
GI-513	201	298	< 5	< 0.2	3.05	10	110	1.0	4	0.80	< 0.5	16	23	196	4.43	< 10	< 1	0.06	10	0.65	1360
GI-514	201	298	< 10	< 0.2	1.84	< 5	90	< 0.5	< 2	0.46	< 0.5	11	21	65	4.40	< 10	< 1	0.09	10	0.42	670
GI-515	201	298	< 10	< 0.2	1.73	5	210	< 0.5	< 2	0.46	< 0.5	11	14	51	5.10	< 10	< 1	0.08	< 10	0.56	670
GI-516	201	298	< 5	< 0.2	2.17	5	140	< 0.5	< 2	0.43	< 0.5	13	21	116	5.10	< 10	< 1	0.07	< 10	0.65	545
GI-517	201	298	< 5	< 0.2	1.68	< 5	160	< 0.5	< 2	0.39	< 0.5	8	15	45	4.21	< 10	< 1	0.11	< 10	0.47	855
GI-518	201	298	< 5	< 0.2	2.11	< 5	110	< 0.5	< 2	0.39	< 0.5	9	17	58	4.67	< 10	< 1	0.05	< 10	0.62	475
GI-519	201	298	< 5	< 0.2	2.77	5	200	< 0.5	< 2	0.64	< 0.5	12	22	122	4.85	< 10	< 1	0.09	< 10	0.92	935
GI-520	201	298	< 5	< 0.2	2.29	< 5	70	< 0.5	< 2	0.40	< 0.5	9	19	72	4.42	< 10	< 1	0.04	< 10	0.72	455
GI-521	201	298	< 5	< 0.2	2.88	10	120	< 0.5	< 2	0.60	< 0.5	14	22	99	4.89	< 10	< 1	0.08	10	0.97	1295
GI-522	201	298	< 5	< 0.2	2.31	< 5	120	< 0.5	< 2	0.44	< 0.5	10	21	72	4.49	< 10	< 1	0.07	< 10	0.77	770
GI-523	201	298	< 5	< 0.2	2.17	5	90	< 0.5	< 2	0.29	< 0.5	8	24	62	4.57	< 10	< 1	0.04	< 10	0.57	380
GI-524	201	298	< 5	< 0.2	2.41	10	130	< 0.5	< 2	0.33	< 0.5	8	14	136	2.92	< 10	< 1	0.06	< 10	0.61	625
GI-525	201	298	< 10	< 0.2	1.63	10	240	< 0.5	< 2	0.54	< 0.5	13	14	101	3.69	< 10	< 1	0.12	< 10	0.32	1335
GI-526	201	298	< 10	< 0.2	1.92	< 5	180	0.5	< 2	0.29	< 0.5	10	16	153	3.54	< 10	< 1	0.07	< 10	0.33	1645
GI-527	201	298	< 5	< 0.2	2.09	< 5	140	< 0.5	< 2	0.53	< 0.5	12	8	67	3.60	< 10	< 1	0.15	< 10	1.01	985
GI-528	201	298	< 5	< 0.2	1.94	< 5	330	< 0.5	< 2	0.73	< 0.5	7	19	81	2.23	< 10	< 1	0.10	10	0.50	580
GI-529	201	298	< 5	< 0.2	1.74	5	580	< 0.5	< 2	1.48	0.5	7	21	68	2.54	< 10	< 1	0.08	< 10	0.38	525
GI-530	201	298	< 5	< 0.2	3.95	< 5	660	< 0.5	< 2	0.51	< 0.5	13	21	119	3.95	< 10	< 1	0.04	10	0.85	1015
GI-531	201	298	< 5	< 0.2	2.41	50	290	< 0.5	< 2	0.74	0.5	37	80	137	6.89	< 10	< 1	0.21	10	1.23	1795
GI-532	201	298	< 10	< 0.2	1.56	< 5	210	< 0.5	< 2	1.93	0.5	22	74	57	2.84	< 10	< 1	0.07	< 10	0.96	1170
GI-533	201	298	< 5	< 0.2	2.31	5	150	< 0.5	< 2	1.54	< 0.5	36	93	96	4.74	< 10	< 1	0.03	< 10	1.86	1515

CERTIFICATION: *B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number :4-B  
 Total Pages :5  
 Certificate Date: 27-AUG-91  
 Invoice No. :19120210  
 P.O. Number :

Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
GI-494	201 298	1	0.01	5	2280	8	< 5	< 1	49	0.02	< 10	< 10	87	< 10	76
GI-495	201 298	< 1	< 0.01	9	1830	4	< 5	< 1	42	0.02	< 10	< 10	88	< 10	78
GI-496	201 298	2	0.01	9	3210	8	5	< 1	45	0.01	< 10	< 10	92	< 10	86
GI-497	201 298	1	0.01	10	4230	2	< 5	1	68	< 0.01	< 10	< 10	82	< 10	102
GI-498	201 298	1	0.01	12	1890	2	< 5	1	56	0.04	< 10	< 10	103	< 10	60
GI-499	201 298	1	< 0.01	10	2920	10	< 5	< 1	99	0.02	< 10	< 10	102	< 10	82
GI-500	201 298	< 1	0.01	7	2610	6	< 5	< 1	69	0.01	< 10	< 10	92	< 10	84
GI-501	201 298	1	0.01	6	7570	< 2	< 5	3	74	< 0.01	< 10	< 10	57	< 10	78
GI-502	201 298	< 1	< 0.01	7	2230	4	< 5	1	80	0.03	< 10	< 10	121	< 10	88
GI-503	201 298	< 1	< 0.01	4	1120	8	< 5	1	44	0.04	< 10	< 10	137	< 10	44
GI-504	201 298	1	< 0.01	11	1120	6	< 5	2	62	0.08	< 10	< 10	127	< 10	84
GI-505	201 298	1	0.01	7	1510	18	< 5	1	134	0.06	< 10	< 10	159	< 10	80
GI-506	201 298	< 1	0.01	7	1860	6	< 5	1	90	0.03	< 10	< 10	105	< 10	62
GI-507	201 298	< 1	0.01	8	2410	14	5	1	121	0.04	< 10	< 10	171	< 10	114
GI-508	201 298	< 1	< 0.01	7	1470	8	< 5	1	160	0.06	< 10	< 10	125	< 10	100
GI-509	201 298	< 1	< 0.01	6	1220	6	< 5	< 1	60	0.05	< 10	< 10	105	< 10	56
GI-510	201 298	< 1	0.01	6	1260	8	< 5	2	72	0.10	< 10	< 10	120	< 10	74
GI-511	201 298	< 1	< 0.01	8	1380	8	5	2	64	0.06	< 10	< 10	124	< 10	68
GI-512	201 298	< 1	< 0.01	6	1070	10	< 5	1	48	0.06	< 10	< 10	114	< 10	52
GI-513	201 298	< 1	0.01	9	2250	8	< 5	4	144	0.04	< 10	< 10	177	< 10	60
GI-514	201 298	< 1	< 0.01	7	1240	8	5	3	63	0.08	< 10	< 10	138	< 10	78
GI-515	201 298	< 1	0.01	5	1240	8	< 5	5	69	0.11	< 10	< 10	171	< 10	92
GI-516	201 298	< 1	0.01	9	1290	10	< 5	5	88	0.14	< 10	< 10	158	< 10	86
GI-517	201 298	< 1	< 0.01	6	1160	6	< 5	3	68	0.10	< 10	< 10	138	< 10	78
GI-518	201 298	< 1	< 0.01	7	1250	6	5	4	91	0.13	< 10	< 10	156	< 10	62
GI-519	201 298	< 1	0.01	10	2320	8	5	3	248	0.08	< 10	< 10	138	< 10	78
GI-520	201 298	< 1	0.01	8	1380	6	5	3	72	0.10	< 10	< 10	134	< 10	58
GI-521	201 298	< 1	0.01	11	1860	8	5	4	92	0.12	< 10	< 10	156	< 10	110
GI-522	201 298	< 1	0.01	7	1450	6	5	2	77	0.07	< 10	< 10	133	< 10	92
GI-523	201 298	< 1	< 0.01	8	1260	2	< 5	2	51	0.07	< 10	< 10	144	< 10	58
GI-524	201 298	2	0.01	7	3000	8	5	< 1	52	0.01	< 10	< 10	96	< 10	82
GI-525	201 298	1	< 0.01	5	2220	10	< 5	< 1	65	0.02	< 10	< 10	116	< 10	78
GI-526	201 298	1	< 0.01	5	2520	10	< 5	< 1	52	0.03	< 10	< 10	114	< 10	62
GI-527	201 298	< 1	0.01	4	950	6	< 5	1	122	0.08	< 10	< 10	137	< 10	72
GI-528	201 298	1	0.01	8	3610	4	< 5	< 1	59	0.01	< 10	< 10	58	< 10	84
GI-529	201 298	1	< 0.01	9	4190	6	< 5	2	64	0.02	< 10	< 10	53	< 10	130
GI-530	201 298	2	0.01	14	2330	14	5	2	235	0.05	< 10	< 10	108	< 10	76
GI-531	201 298	2	< 0.01	48	2010	6	10	22	107	0.05	< 10	< 10	147	< 10	138
GI-532	201 298	< 1	0.01	38	2110	6	< 5	8	80	0.07	< 10	< 10	81	< 10	96
GI-533	201 298	1	0.01	65	1110	10	5	8	185	0.21	< 10	< 10	168	< 10	128

CERTIFICATION:

*B. Coughlin*



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Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
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Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
			FA+AA																		
GI-534	201	298	< 5	< 0.2	2.73	< 5	300	< 0.5	< 2	0.84	< 0.5	35	65	77	5.40	< 10	< 1	0.14	10	1.16	2280
GI-535	201	298	< 5	< 0.2	2.96	< 5	430	< 0.5	< 2	0.46	< 0.5	24	87	73	5.66	< 10	< 1	0.06	< 10	1.10	1380
GI-536	201	298	< 5	< 0.2	2.53	< 5	170	< 0.5	< 2	0.50	< 0.5	20	124	63	5.72	< 10	< 1	0.03	< 10	1.37	1265
GI-537	201	298	< 5	< 0.2	2.41	< 5	180	< 0.5	< 2	0.43	< 0.5	9	20	90	4.02	10	< 1	0.04	< 10	0.61	995
GI-538	201	298	< 5	< 0.2	2.09	10	260	< 0.5	< 2	0.64	< 0.5	11	19	115	3.82	10	< 1	0.07	< 10	0.68	1275
GI-539	201	298	< 5	< 0.2	1.67	10	310	< 0.5	< 2	0.57	< 0.5	13	18	74	3.27	< 10	< 1	0.06	< 10	0.41	2300
GI-540	201	298	< 5	< 0.2	2.06	< 5	240	< 0.5	< 2	0.46	< 0.5	11	20	75	3.80	< 10	< 1	0.06	< 10	0.52	1425
GI-541	201	298	< 5	< 0.2	1.82	5	250	< 0.5	< 2	0.53	< 0.5	8	18	63	2.86	< 10	< 1	0.09	< 10	0.54	905
GI-542	201	298	< 5	< 0.2	1.92	5	210	< 0.5	< 2	0.38	< 0.5	8	29	97	3.28	< 10	< 1	0.06	< 10	0.52	710
GI-543	201	298	< 5	< 0.2	1.62	5	230	< 0.5	< 2	0.45	< 0.5	13	17	77	2.99	< 10	< 1	0.07	< 10	0.58	1730
GI-544	217	298	< 5	< 0.2	1.65	< 5	190	< 0.5	< 2	0.44	< 0.5	17	19	98	3.62	< 10	2	0.07	< 10	0.81	1805
GI-545	201	298	< 5	< 0.2	2.18	5	170	< 0.5	< 2	0.28	< 0.5	10	34	97	4.06	< 10	< 1	0.04	< 10	0.80	750
GI-546	201	298	< 5	< 0.2	2.28	< 5	150	< 0.5	< 2	0.25	< 0.5	13	54	122	4.59	< 10	< 1	0.02	< 10	0.84	1260
GI-547	217	298	< 5	< 0.2	0.95	< 5	270	< 0.5	< 2	0.36	< 0.5	8	12	57	1.69	< 10	< 1	0.07	< 10	0.15	1625
GI-548	201	298	< 5	< 0.2	2.73	< 5	120	< 0.5	< 2	0.34	< 0.5	12	20	128	4.26	< 10	< 1	0.04	10	0.71	845
GI-549	201	298	< 5	< 0.2	2.00	< 5	110	< 0.5	< 2	0.23	< 0.5	8	16	107	3.22	< 10	< 1	0.03	< 10	0.48	530
GI-550	201	298	40	< 0.2	2.44	5	110	< 0.5	< 2	0.38	< 0.5	12	15	151	3.96	< 10	< 1	0.04	< 10	0.65	725
GI-551	201	298	< 5	< 0.2	2.48	< 5	120	< 0.5	< 2	0.37	< 0.5	14	17	151	4.68	< 10	< 1	0.04	< 10	0.80	845
GI-552	201	298	< 5	< 0.2	1.99	< 5	170	< 0.5	< 2	0.31	< 0.5	9	12	123	3.78	< 10	< 1	0.04	< 10	0.50	930
GI-553	201	298	< 5	< 0.2	1.61	< 5	150	< 0.5	< 2	0.27	< 0.5	7	10	91	3.08	< 10	< 1	0.04	< 10	0.30	965
GI-554	201	298	< 5	< 0.2	1.53	< 5	170	< 0.5	< 2	0.24	< 0.5	5	11	69	2.23	< 10	< 1	0.06	< 10	0.15	730
GI-555	201	298	< 5	< 0.2	3.44	5	230	< 0.5	< 2	0.91	< 0.5	20	16	297	4.44	< 10	< 1	0.03	10	1.17	875
GI-556	201	298	< 5	< 0.2	2.81	< 5	90	< 0.5	< 2	0.82	< 0.5	19	11	219	4.62	< 10	< 1	0.17	10	1.51	1080
GI-557	201	298	< 5	< 0.2	1.51	< 5	260	< 0.5	< 2	0.38	< 0.5	8	4	51	2.07	< 10	< 1	0.06	< 10	0.38	1080
GI-558	201	298	< 5	< 0.2	2.35	< 5	110	< 0.5	< 2	0.94	< 0.5	15	7	106	5.04	< 10	< 1	0.20	< 10	1.38	945
GI-559	201	298	< 5	< 0.2	2.03	< 5	110	< 0.5	< 2	0.53	< 0.5	15	11	93	5.30	< 10	< 1	0.06	< 10	0.97	1010
GI-560	201	298	< 5	< 0.2	2.45	< 5	80	< 0.5	< 2	0.20	< 0.5	6	16	77	3.56	< 10	1	0.04	< 10	0.41	495
GI-561	217	298	< 5	0.2	1.08	< 5	360	< 0.5	< 2	0.43	< 0.5	17	5	92	1.37	< 10	< 1	0.08	< 10	0.14	3670
GI-562	201	298	< 5	< 0.2	1.16	< 5	560	< 0.5	< 2	0.18	< 0.5	23	8	101	2.68	< 10	< 1	0.05	< 10	0.10	4660
GI-563	217	298	< 5	0.6	1.92	15	140	< 0.5	< 2	0.39	< 0.5	10	5	130	1.17	< 10	< 1	0.07	10	0.17	770
GI-564	201	298	< 5	< 0.2	1.48	5	180	< 0.5	< 2	0.29	< 0.5	6	13	55	2.19	< 10	< 1	0.06	10	0.16	1225
GI-565	203	205	< 5	< 0.2	1.46	5	140	< 0.5	< 2	0.37	< 0.5	13	21	67	3.70	< 10	< 1	0.08	< 10	0.46	1475
GI-566	201	298	< 5	0.2	1.55	5	130	< 0.5	< 2	0.24	< 0.5	4	13	56	2.59	< 10	< 1	0.05	< 10	0.25	280
GI-567	201	298	< 5	< 0.2	2.88	15	100	< 0.5	< 2	0.47	< 0.5	12	28	133	4.47	< 10	< 1	0.04	10	0.81	465
GI-568	201	298	< 5	< 0.2	2.56	< 5	140	< 0.5	< 2	0.35	< 0.5	6	16	55	3.09	< 10	< 1	0.04	< 10	0.45	350
GI-569	201	298	< 5	< 0.2	1.52	5	180	< 0.5	< 2	0.57	< 0.5	11	11	65	3.28	< 10	< 1	0.09	< 10	0.22	1685
GI-570	201	298	< 5	< 0.2	2.45	< 5	140	< 0.5	< 2	0.28	< 0.5	8	15	86	3.57	< 10	< 1	0.05	< 10	0.38	735
GI-571	201	298	< 5	< 0.2	2.13	< 5	90	< 0.5	< 2	0.28	< 0.5	7	24	62	3.83	10	< 1	0.04	10	0.55	370
GI-572	201	298	< 5	< 0.2	2.00	< 5	160	< 0.5	< 2	0.35	< 0.5	16	19	86	4.17	< 10	< 1	0.08	< 10	0.57	2950
GI-573	201	298	< 5	< 0.2	1.72	< 5	190	< 0.5	< 2	0.27	< 0.5	9	15	54	3.17	< 10	< 1	0.07	< 10	0.40	3020

CERTIFICATION:

*B. Coughlin*



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## CERTIFICATE OF ANALYSIS A9120210

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
GI-534	201	298	< 1	< 0.01	26	2150	12	< 5	8	356	0.15	< 10	< 10	249	< 10	118
GI-535	201	298	< 1	0.01	33	1200	8	< 5	7	279	0.20	< 10	< 10	218	< 10	92
GI-536	201	298	< 1	0.01	54	1500	10	< 5	5	64	0.26	< 10	< 10	191	< 10	96
GI-537	201	298	< 1	< 0.01	8	1630	12	< 5	< 1	94	0.03	< 10	< 10	140	< 10	58
GI-538	201	298	< 1	< 0.01	8	2160	10	< 5	< 1	110	0.03	< 10	< 10	121	< 10	76
GI-539	201	298	< 1	< 0.01	6	2440	12	5	< 1	96	0.02	< 10	< 10	114	< 10	48
GI-540	201	298	< 1	< 0.01	6	1760	6	< 5	< 1	101	0.05	< 10	< 10	129	< 10	58
GI-541	201	298	< 1	< 0.01	6	2840	14	< 5	< 1	96	0.01	< 10	< 10	85	< 10	60
GI-542	201	298	< 1	< 0.01	9	1700	16	< 5	< 1	82	0.02	< 10	< 10	104	< 10	66
GI-543	201	298	< 1	< 0.01	9	1770	8	< 5	< 1	93	0.02	< 10	< 10	95	< 10	68
GI-544	217	298	< 1	0.01	8	1200	2	< 5	1	84	0.06	< 10	< 10	112	< 10	92
GI-545	201	298	< 1	< 0.01	13	1500	16	< 5	< 1	80	0.04	< 10	< 10	139	< 10	78
GI-546	201	298	< 1	< 0.01	17	1150	16	< 5	1	76	0.04	< 10	< 10	164	< 10	62
GI-547	217	298	< 1	0.01	3	3540	6	< 5	< 1	65	< 0.01	< 10	< 10	60	< 10	48
GI-548	201	298	< 1	< 0.01	9	1640	10	< 5	1	69	0.07	< 10	< 10	140	< 10	70
GI-549	201	298	< 1	< 0.01	7	1370	2	< 5	< 1	68	0.05	< 10	< 10	114	< 10	60
GI-550	201	298	< 1	< 0.01	8	1810	10	< 5	1	77	0.08	< 10	< 10	129	< 10	78
GI-551	201	298	< 1	< 0.01	9	1290	12	< 5	2	94	0.10	< 10	< 10	152	< 10	84
GI-552	201	298	< 1	0.01	3	1370	6	< 5	1	74	0.07	< 10	< 10	133	< 10	76
GI-553	201	298	< 1	< 0.01	4	2300	14	< 5	< 1	73	0.03	< 10	< 10	109	< 10	50
GI-554	201	298	1	< 0.01	5	2650	6	< 5	< 1	58	0.02	< 10	< 10	80	< 10	46
GI-555	201	298	< 1	< 0.01	8	850	4	< 5	11	136	0.16	< 10	< 10	127	< 10	82
GI-556	201	298	< 1	0.01	9	1810	4	< 5	7	135	0.23	< 10	< 10	169	< 10	78
GI-557	201	298	1	< 0.01	2	4990	6	< 5	< 1	56	< 0.01	< 10	< 10	80	< 10	54
GI-558	201	298	< 1	0.01	5	870	6	< 5	3	95	0.15	< 10	< 10	206	< 10	76
GI-559	201	298	< 1	0.01	7	930	< 2	< 5	3	95	0.15	< 10	< 10	201	< 10	62
GI-560	201	298	< 1	< 0.01	7	1770	16	< 5	1	44	0.05	< 10	< 10	129	< 10	46
GI-561	217	298	< 1	0.01	5	4110	10	< 5	< 1	103	< 0.01	< 10	< 10	50	< 10	76
GI-562	201	298	1	< 0.01	8	2830	12	< 5	< 1	42	< 0.01	< 10	< 10	100	< 10	70
GI-563	217	298	1	< 0.01	4	6860	2	5	< 1	53	< 0.01	< 10	< 10	43	< 10	26
GI-564	201	298	< 1	< 0.01	2	1880	16	< 5	< 1	54	0.02	< 10	< 10	87	< 10	50
GI-565	203	205	< 1	0.01	4	1350	2	< 5	1	70	0.07	< 10	< 10	129	< 10	74
GI-566	201	298	< 1	< 0.01	3	1470	6	< 5	< 1	54	0.01	< 10	< 10	91	< 10	56
GI-567	201	298	< 1	0.01	13	1290	6	< 5	4	57	0.12	< 10	< 10	139	< 10	60
GI-568	201	298	1	< 0.01	5	1360	12	< 5	< 1	54	0.04	< 10	< 10	116	< 10	52
GI-569	201	298	< 1	< 0.01	6	2520	14	< 5	< 1	66	0.02	< 10	< 10	138	< 10	64
GI-570	201	298	< 1	< 0.01	7	1710	8	< 5	1	54	0.07	< 10	< 10	137	< 10	66
GI-571	201	298	< 1	< 0.01	10	790	18	< 5	2	39	0.08	< 10	< 10	115	< 10	66
GI-572	201	298	1	< 0.01	6	2020	8	< 5	2	66	0.09	< 10	< 10	130	< 10	76
GI-573	201	298	< 1	< 0.01	8	1630	4	< 5	1	31	0.05	< 10	< 10	98	< 10	62

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
VANCOUVER, BC  
V7Y 1G5

Page Number :1-A  
Total Pages :4  
Certificate Date: 28-AUG-91  
Invoice No. :I9120211  
P.O. Number :

Project : MM PROPERTY  
Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120211

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
			FA+AA																		
GI-574	201	298	< 5	< 0.2	3.24	5	100	< 0.5	< 2	0.47	< 0.5	12	18	107	4.44	< 10	< 1	0.08	< 10	0.85	615
GI-575	203	205	< 5	< 0.2	2.69	< 5	120	< 0.5	< 2	0.40	< 0.5	9	38	100	4.42	< 10	< 1	0.09	10	0.70	1110
GI-576	201	298	< 5	0.4	1.19	5	490	< 0.5	< 2	0.74	< 0.5	21	10	94	2.55	< 10	< 1	0.15	10	0.24	6060
GI-577	203	205	< 5	0.2	1.93	< 5	240	< 0.5	< 2	0.86	< 0.5	11	30	128	3.30	< 10	< 1	0.14	10	0.63	1530
GI-578	201	298	< 5	< 0.2	2.67	< 5	160	< 0.5	< 2	0.93	< 0.5	10	19	192	4.36	10	< 1	0.09	10	1.00	895
GI-579	201	298	< 5	0.4	2.54	< 5	170	< 0.5	< 2	0.79	< 0.5	10	13	144	2.71	10	< 1	0.09	10	0.54	2100
GI-580	201	298	< 5	0.6	1.84	5	170	1.0	< 2	0.62	< 0.5	5	5	91	0.83	< 10	< 1	0.07	< 10	0.17	1425
GI-581	203	205	< 5	0.4	1.68	< 5	150	< 0.5	< 2	0.37	< 0.5	6	15	80	1.45	< 10	< 1	0.10	< 10	0.23	1175
GI-582	201	298	< 5	0.4	2.08	< 5	100	< 0.5	2	0.21	< 0.5	3	15	137	2.07	< 10	< 1	0.06	10	0.22	500
GI-583	203	205	< 5	0.2	1.41	< 5	300	< 0.5	< 2	0.48	< 0.5	8	18	81	1.85	< 10	< 1	0.09	< 10	0.16	3110
GI-584	203	205	< 5	< 0.2	2.01	5	150	< 0.5	< 2	0.54	< 0.5	11	23	119	3.37	< 10	< 1	0.09	10	0.59	2070
GI-585	201	298	< 5	< 0.2	2.25	< 5	240	< 0.5	< 2	0.72	< 0.5	9	17	134	3.78	10	< 1	0.10	10	0.62	1225
GI-586	201	298	< 5	< 0.2	2.66	< 5	140	< 0.5	< 2	0.55	< 0.5	11	20	168	4.42	< 10	< 1	0.08	10	0.85	820
GI-587	201	298	< 5	0.2	2.04	5	190	< 0.5	< 2	0.52	< 0.5	8	17	113	3.67	< 10	< 1	0.08	10	0.59	650
GI-588	201	298	< 5	< 0.2	2.01	5	420	< 0.5	< 2	0.68	< 0.5	27	13	136	4.04	< 10	< 1	0.10	10	0.61	5330
GI-589	203	205	< 5	< 0.2	2.29	5	120	< 0.5	< 2	0.52	< 0.5	9	57	160	3.88	< 10	< 1	0.12	10	0.57	430
GI-590	203	205	< 5	0.2	1.75	5	140	< 0.5	< 2	0.43	< 0.5	4	33	108	3.09	< 10	< 1	0.07	10	0.36	270
GI-591	201	298	< 5	< 0.2	3.27	< 5	170	< 0.5	< 2	0.53	< 0.5	8	22	120	4.82	< 10	< 1	0.09	10	0.79	495
GI-592	201	298	15	< 0.2	1.92	5	120	< 0.5	< 2	0.52	< 0.5	2	16	23	2.71	< 10	< 1	0.05	10	0.18	275
GI-593	201	298	< 5	< 0.2	3.60	5	130	< 0.5	< 2	0.79	< 0.5	11	27	131	5.05	< 10	< 1	0.11	10	0.92	690
GI-594	201	298	< 5	< 0.2	2.57	15	130	< 0.5	< 2	0.67	< 0.5	8	23	60	3.28	< 10	< 1	0.10	10	0.54	610
GI-595	201	298	< 5	< 0.2	2.61	< 5	150	< 0.5	< 2	0.57	< 0.5	4	19	51	2.58	10	< 1	0.09	10	0.34	345
GI-596	201	298	< 5	< 0.2	2.34	15	160	< 0.5	< 2	0.54	< 0.5	10	20	65	5.00	< 10	< 1	0.11	10	0.53	565
GI-597	203	205	< 5	< 0.2	2.02	< 5	230	< 0.5	< 2	0.86	< 0.5	9	35	63	4.31	< 10	< 1	0.17	10	0.43	1530
GI-598	201	298	< 5	< 0.2	1.57	5	500	< 0.5	< 2	0.43	< 0.5	35	15	55	3.37	< 10	< 1	0.07	< 10	0.28	5780
GI-599	201	298	< 5	< 0.2	2.22	10	150	< 0.5	< 2	0.58	< 0.5	10	20	78	3.41	< 10	< 1	0.07	10	0.71	685
GI-600	203	205	< 5	< 0.2	2.79	< 5	180	< 0.5	< 2	0.55	< 0.5	15	34	113	5.48	< 10	< 1	0.16	< 10	0.96	1210
GI-601	201	298	< 5	0.8	1.94	5	130	< 0.5	< 2	0.35	< 0.5	3	12	59	1.53	< 10	< 1	0.06	< 10	0.26	195
GI-602	201	298	< 5	< 0.2	2.34	10	100	< 0.5	< 2	0.30	< 0.5	7	20	119	3.62	< 10	< 1	0.06	< 10	0.62	690
GI-603	201	298	< 5	0.4	2.35	< 5	170	< 0.5	< 2	0.43	< 0.5	7	28	95	4.06	10	< 1	0.09	< 10	0.53	815
GI-604	201	298	< 5	< 0.2	2.07	15	130	< 0.5	< 2	0.64	< 0.5	8	42	119	3.59	< 10	< 1	0.08	10	0.69	485
GI-605	201	298	< 5	< 0.2	2.63	< 5	120	< 0.5	< 2	0.57	< 0.5	9	25	131	4.36	< 10	< 1	0.09	10	0.78	575
GI-606	201	298	< 5	< 0.2	2.37	15	140	< 0.5	< 2	0.45	< 0.5	7	21	110	3.42	< 10	< 1	0.08	10	0.55	675
GI-607	201	298	< 5	< 0.2	2.46	< 5	160	< 0.5	< 2	0.43	< 0.5	7	24	95	3.65	< 10	< 1	0.07	10	0.61	845
GI-608	201	298	< 5	< 0.2	1.85	< 5	180	< 0.5	< 2	0.37	< 0.5	8	20	76	3.00	< 10	< 1	0.08	< 10	0.36	1055
GI-609	201	298	< 5	< 0.2	2.69	< 5	120	< 0.5	< 2	0.35	< 0.5	11	31	109	4.47	< 10	< 1	0.06	10	1.02	750
GI-610	201	298	< 5	< 0.2	2.41	10	120	< 0.5	< 2	0.54	< 0.5	8	30	92	4.66	< 10	< 1	0.08	< 10	0.98	720
GI-611	201	217	< 5	< 0.2	2.93	15	100	< 0.5	< 2	1.45	< 0.5	18	55	104	5.62	< 10	< 1	0.17	10	1.53	1030
GI-612	201	298	< 5	< 0.2	2.38	< 5	210	< 0.5	< 2	1.24	< 0.5	16	31	88	4.09	10	< 1	0.10	10	0.73	1320
GI-613	201	298	< 5	< 0.2	2.90	10	160	< 0.5	< 2	0.51	< 0.5	15	37	94	4.84	< 10	< 1	0.06	10	0.92	1820

CERTIFICATION:



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## CERTIFICATE OF ANALYSIS A9120211

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
GI-574	201 298	1	0.01	8	1220	10	< 5	3	59	0.10	< 10	< 10	154	< 10	70
GI-575	203 205	< 1	0.02	10	1700	4	< 5	2	75	0.07	< 10	< 10	147	< 10	74
GI-576	201 298	1	0.01	3	2410	12	< 5	1	120	0.06	< 10	< 10	85	< 10	102
GI-577	203 205	< 1	0.01	7	2170	16	< 5	2	116	0.11	< 10	< 10	115	< 10	110
GI-578	201 298	< 1	0.01	9	2130	4	< 5	3	162	0.09	< 10	< 10	167	< 10	100
GI-579	201 298	< 1	0.01	5	7180	12	< 5	4	128	0.02	< 10	< 10	141	< 10	76
GI-580	201 298	1	0.01	2	9030	< 2	< 5	1	88	< 0.01	< 10	< 10	44	< 10	60
GI-581	203 205	1	0.01	4	5490	< 2	< 5	< 1	69	0.01	< 10	< 10	58	< 10	52
GI-582	201 298	< 1	< 0.01	5	2890	8	< 5	< 1	49	0.02	< 10	< 10	72	< 10	38
GI-583	203 205	1	0.01	4	4220	10	< 5	< 1	75	0.01	< 10	< 10	79	< 10	72
GI-584	203 205	< 1	0.01	6	2500	8	< 5	1	92	0.06	< 10	< 10	126	< 10	74
GI-585	201 298	< 1	0.01	6	2680	10	< 5	2	138	0.06	< 10	< 10	125	< 10	130
GI-586	201 298	< 1	0.01	11	1430	14	< 5	3	104	0.11	< 10	< 10	146	< 10	106
GI-587	201 298	< 1	0.01	7	1500	6	< 5	2	91	0.11	< 10	< 10	127	< 10	78
GI-588	201 298	1	0.01	8	2280	12	< 5	3	97	0.11	< 10	< 10	121	< 10	148
GI-589	203 205	< 1	0.02	8	1590	4	< 5	3	98	0.13	< 10	< 10	140	< 10	68
GI-590	203 205	< 1	0.01	5	1730	10	< 5	2	88	0.11	< 10	< 10	100	< 10	62
GI-591	201 298	1	0.01	12	1300	8	< 5	5	177	0.15	< 10	< 10	171	< 10	72
GI-592	201 298	< 1	0.01	3	750	14	< 5	2	82	0.14	< 10	< 10	139	< 10	34
GI-593	201 298	< 1	0.01	10	1590	8	5	6	97	0.16	< 10	< 10	168	< 10	92
GI-594	201 298	< 1	0.01	11	1430	< 2	< 5	2	88	0.10	< 10	< 10	117	< 10	70
GI-595	201 298	< 1	0.01	6	1720	10	< 5	1	84	0.06	< 10	< 10	104	< 10	54
GI-596	201 298	< 1	0.01	9	1530	6	< 5	3	71	0.13	< 10	< 10	173	< 10	62
GI-597	203 205	< 1	0.02	6	1430	16	< 5	3	129	0.14	< 10	< 10	160	< 10	90
GI-598	201 298	< 1	0.01	6	1240	2	< 5	1	68	0.04	< 10	< 10	118	< 10	56
GI-599	201 298	< 1	0.01	10	1240	6	< 5	2	61	0.10	< 10	< 10	107	< 10	70
GI-600	203 205	< 1	0.02	12	1910	< 2	< 5	3	66	0.07	< 10	< 10	149	< 10	86
GI-601	201 298	< 1	0.01	3	1330	6	< 5	< 1	60	0.04	< 10	< 10	59	< 10	40
GI-602	201 298	< 1	0.01	8	1680	8	< 5	2	56	0.09	< 10	< 10	102	< 10	82
GI-603	201 298	< 1	0.01	9	1620	12	< 5	1	116	0.08	< 10	< 10	120	< 10	76
GI-604	201 298	< 1	0.01	12	1300	6	< 5	3	102	0.12	< 10	< 10	126	< 10	68
GI-605	201 298	1	0.01	11	1450	10	< 5	4	106	0.13	< 10	< 10	136	< 10	90
GI-606	201 298	1	0.01	8	1840	4	< 5	2	99	0.08	< 10	< 10	119	< 10	72
GI-607	201 298	< 1	0.01	9	2160	2	5	1	93	0.07	< 10	< 10	120	< 10	80
GI-608	201 298	< 1	0.01	8	2690	2	< 5	< 1	83	0.02	< 10	< 10	112	< 10	70
GI-609	201 298	1	0.01	14	1210	10	< 5	3	69	0.12	< 10	< 10	158	< 10	64
GI-610	201 298	< 1	0.01	10	1470	10	< 5	3	86	0.12	< 10	< 10	175	< 10	68
GI-611	201 217	< 1	0.05	16	1920	< 2	< 5	8	93	0.39	< 10	< 10	192	< 10	102
GI-612	201 298	< 1	< 0.01	15	2680	4	< 5	2	99	0.06	< 10	< 10	125	< 10	94
GI-613	201 298	< 1	0.01	14	2090	4	< 5	4	75	0.13	< 10	< 10	152	< 10	78

CERTIFICATION:

*B. Coughlin*



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Analytical Chemists \* Geochemists \* Registered Assayers  
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SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As 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
GI-614	201 298	< 5	< 0.2	2.96	< 5	220	< 0.5	< 2	0.49	< 0.5	14	33	90	4.40	10	< 1	0.07	10	0.89	1140
GI-615	203 205	< 5	< 0.2	2.53	< 5	290	< 0.5	< 2	0.78	< 0.5	11	32	89	3.91	< 10	< 1	0.11	< 10	1.00	965
GI-616	201 298	< 5	< 0.2	1.63	< 5	210	< 0.5	< 2	0.75	< 0.5	10	22	68	4.20	10	< 1	0.11	10	0.94	830
GI-617	201 217	< 5	< 0.2	2.06	5	130	< 0.5	< 2	0.82	< 0.5	18	30	116	5.40	< 10	< 1	0.08	10	1.01	1250
GI-618	201 217	< 5	< 0.2	2.33	< 5	100	< 0.5	< 2	1.22	< 0.5	24	38	130	5.12	< 10	< 1	0.14	10	1.51	1645
GI-619	201 217	< 5	< 0.2	2.33	25	160	< 0.5	< 2	0.94	< 0.5	16	24	105	4.67	< 10	< 1	0.14	10	1.25	1685
GI-620	203 205	185	< 0.2	2.49	< 5	210	< 0.5	< 2	0.81	< 0.5	14	40	84	4.57	< 10	< 1	0.12	10	0.91	940
GI-621	201 298	< 5	< 0.2	2.92	15	100	< 0.5	< 2	0.67	< 0.5	11	38	89	4.64	< 10	< 1	0.08	10	1.11	640
GI-622	201 298	< 5	< 0.2	2.33	< 5	140	< 0.5	< 2	0.53	< 0.5	8	38	71	3.90	10	< 1	0.07	10	0.79	770
GI-623	201 217	< 5	< 0.2	1.40	< 5	110	< 0.5	< 2	0.69	< 0.5	28	35	65	3.46	< 10	< 1	0.11	< 10	0.37	1950
GI-624	201 217	< 5	< 0.2	1.41	< 5	130	< 0.5	< 2	0.67	< 0.5	10	29	41	2.61	< 10	< 1	0.10	< 10	0.22	1080
GI-625	201 217	< 5	0.6	1.36	10	380	< 0.5	< 2	0.81	< 0.5	33	27	67	3.20	< 10	< 1	0.12	< 10	0.33	8980
GI-626	201 298	< 5	< 0.2	2.62	< 5	550	< 0.5	< 2	1.53	< 0.5	11	31	118	4.21	< 10	< 1	0.08	10	0.97	640
GI-627	201 298	< 5	< 0.2	2.28	15	150	< 0.5	< 2	0.67	< 0.5	9	21	60	3.89	< 10	< 1	0.06	10	0.75	465
GI-628	201 298	< 5	< 0.2	2.55	< 5	60	< 0.5	< 2	0.43	< 0.5	9	23	60	3.89	< 10	< 1	0.04	10	0.62	315
GI-629	201 298	< 5	0.4	2.47	< 5	360	< 0.5	< 2	1.35	< 0.5	8	21	117	3.02	10	< 1	0.08	40	0.63	620
GI-630	201 298	< 5	0.2	1.58	< 5	90	< 0.5	< 2	0.32	< 0.5	3	14	29	1.76	< 10	< 1	0.06	10	0.19	175
GI-631	201 298	< 5	< 0.2	1.85	< 5	170	< 0.5	< 2	0.53	< 0.5	3	11	62	2.96	10	< 1	0.08	< 10	0.46	635
GI-632	203 205	< 5	< 0.2	2.12	5	160	< 0.5	< 2	0.62	< 0.5	12	23	61	4.95	< 10	< 1	0.09	< 10	0.92	1830
GI-633	201 298	< 5	< 0.2	2.03	< 5	80	< 0.5	< 2	0.41	< 0.5	5	17	36	3.34	< 10	< 1	0.07	10	0.42	335
GI-634	201 298	< 5	< 0.2	2.22	< 5	180	< 0.5	< 2	0.66	< 0.5	13	21	79	4.14	10	< 1	0.12	10	0.87	1500
GI-635	203 205	< 5	< 0.2	1.57	10	200	< 0.5	< 2	0.57	< 0.5	14	20	50	3.36	< 10	< 1	0.11	< 10	0.49	2280
GI-636	201 298	< 5	0.2	2.03	< 5	100	< 0.5	< 2	0.21	< 0.5	4	12	65	2.37	< 10	< 1	0.04	< 10	0.54	360
GI-637	201 298	< 5	< 0.2	2.23	15	160	< 0.5	< 2	0.38	< 0.5	6	13	79	3.33	10	< 1	0.05	< 10	0.69	480
GI-638	201 298	30	< 0.2	2.37	< 5	90	< 0.5	< 2	0.35	< 0.5	9	17	95	4.30	< 10	< 1	0.05	< 10	0.79	550
GI-639	201 298	< 5	< 0.2	1.96	< 5	570	< 0.5	< 2	0.81	< 0.5	23	5	116	5.10	< 10	< 1	0.36	< 10	1.65	8460
GI-640	201 298	< 5	< 0.2	1.88	< 5	180	< 0.5	< 2	0.88	< 0.5	5	12	91	2.88	10	< 1	0.07	10	0.57	760
GI-641	203 205	< 5	< 0.2	2.04	< 5	700	< 0.5	< 2	1.39	< 0.5	6	19	93	2.05	10	< 1	0.09	20	0.43	2160
GI-642	201 298	< 5	< 0.2	2.13	< 5	130	< 0.5	< 2	0.47	< 0.5	9	22	72	3.87	10	< 1	0.09	< 10	0.61	725
GI-643	201 298	< 5	< 0.2	2.48	< 5	120	< 0.5	4	0.54	< 0.5	9	25	73	3.60	< 10	< 1	0.06	10	0.64	765
GI-644	201 298	< 5	< 0.2	1.93	15	110	< 0.5	< 2	0.58	< 0.5	9	23	40	3.10	< 10	< 1	0.07	10	0.30	1955
GI-645	201 298	< 5	< 0.2	2.27	20	210	< 0.5	< 2	0.40	< 0.5	12	19	73	2.92	< 10	< 1	0.09	10	0.53	1755
GI-646	201 298	< 5	0.4	1.79	15	340	< 0.5	< 2	0.37	< 0.5	10	15	46	2.49	< 10	< 1	0.08	< 10	0.25	2460
GI-647	201 298	< 5	< 0.2	2.65	< 5	100	< 0.5	< 2	0.62	< 0.5	9	38	129	4.58	< 10	< 1	0.06	10	0.96	645
GI-648	201 298	< 5	< 0.2	2.11	15	270	< 0.5	< 2	0.48	< 0.5	4	20	60	2.82	< 10	< 1	0.10	10	0.48	850
GI-649	201 298	< 5	< 0.2	2.34	5	150	< 0.5	< 2	0.45	< 0.5	8	34	73	3.50	< 10	< 1	0.06	10	0.76	875
GI-650	201 298	< 5	< 0.2	2.40	5	140	< 0.5	< 2	0.70	< 0.5	12	19	150	4.26	< 10	< 1	0.10	10	0.95	990
GI-651	201 298	< 5	< 0.2	2.19	< 5	120	< 0.5	< 2	0.54	< 0.5	9	21	89	3.81	< 10	< 1	0.07	< 10	0.79	580
GI-652	201 298	< 5	< 0.2	1.44	< 5	330	< 0.5	< 2	0.54	< 0.5	7	13	58	2.28	< 10	< 1	0.08	< 10	0.23	1890
GI-653	201 298	< 5	< 0.2	1.97	15	170	< 0.5	< 2	0.41	< 0.5	5	25	62	3.25	< 10	< 1	0.09	< 10	0.57	815

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number : 2-B  
 Total Pages : 4  
 Certificate Date: 28-AUG-91  
 Invoice No. : 19120211  
 P.O. Number :

Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120211

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
GI-614	201	298	< 1	0.01	13	2070	4	< 5	2	97	0.08	< 10	< 10	141	< 10	70
GI-615	203	205	< 1	0.01	9	1830	14	< 5	2	127	0.10	< 10	< 10	129	< 10	72
GI-616	201	298	< 1	0.01	8	1610	< 2	< 5	2	80	0.06	< 10	< 10	155	< 10	82
GI-617	201	217	1	0.01	7	1410	8	< 5	7	146	0.22	< 10	< 10	208	< 10	78
GI-618	201	217	< 1	0.02	13	2090	2	< 5	9	154	0.24	< 10	< 10	171	< 10	100
GI-619	201	217	< 1	0.02	6	2030	18	< 5	9	78	0.20	< 10	< 10	187	< 10	106
GI-620	203	205	< 1	0.01	12	1870	2	< 5	4	124	0.13	< 10	< 10	158	< 10	70
GI-621	201	298	< 1	0.01	15	1740	4	< 5	5	109	0.17	< 10	< 10	155	< 10	82
GI-622	201	298	< 1	0.01	13	1610	4	< 5	2	103	0.07	< 10	< 10	136	< 10	68
GI-623	201	217	< 1	0.01	7	2540	< 2	< 5	4	81	0.14	< 10	< 10	118	< 10	46
GI-624	201	217	1	0.01	7	2380	14	< 5	< 1	80	0.03	< 10	< 10	92	< 10	48
GI-625	201	217	1	0.01	7	2180	8	< 5	2	80	0.07	< 10	< 10	100	< 10	86
GI-626	201	298	< 1	0.01	16	1520	10	< 5	10	79	0.13	< 10	< 10	132	< 10	78
GI-627	201	298	< 1	0.01	9	1230	10	< 5	2	74	0.10	< 10	< 10	123	< 10	76
GI-628	201	298	< 1	0.01	10	1470	8	< 5	2	50	0.10	< 10	< 10	115	< 10	64
GI-629	201	298	< 1	0.01	7	2940	18	< 5	3	75	0.06	< 10	< 10	124	< 10	80
GI-630	201	298	< 1	0.01	3	1190	4	< 5	< 1	65	0.02	< 10	< 10	71	< 10	34
GI-631	201	298	< 1	0.01	3	1230	12	< 5	1	129	0.07	< 10	< 10	138	< 10	62
GI-632	203	205	< 1	0.02	5	1740	< 2	< 5	4	113	0.14	< 10	< 10	208	< 10	86
GI-633	201	298	< 1	0.01	7	990	8	< 5	2	82	0.09	< 10	< 10	126	< 10	50
GI-634	201	298	< 1	0.01	10	1940	4	< 5	1	76	0.05	< 10	< 10	133	< 10	110
GI-635	203	205	1	0.01	5	1940	2	< 5	1	75	0.05	< 10	< 10	123	< 10	82
GI-636	201	298	1	< 0.01	5	1020	< 2	< 5	< 1	41	0.04	< 10	< 10	87	< 10	54
GI-637	201	298	< 1	< 0.01	7	1360	4	< 5	< 1	65	0.03	< 10	< 10	116	< 10	70
GI-638	201	298	< 1	0.01	7	1140	2	< 5	1	42	0.07	< 10	< 10	135	< 10	66
GI-639	201	298	< 1	0.01	5	1250	6	< 5	3	93	0.19	< 10	< 10	217	< 10	160
GI-640	201	298	< 1	< 0.01	6	3260	6	< 5	< 1	65	0.01	< 10	< 10	97	< 10	84
GI-641	203	205	< 1	0.01	8	5170	12	< 5	2	74	0.01	< 10	< 10	62	< 10	88
GI-642	201	298	< 1	0.01	9	1880	6	< 5	1	53	0.04	< 10	< 10	117	< 10	62
GI-643	201	298	< 1	0.01	14	1930	6	< 5	1	52	0.05	< 10	< 10	97	< 10	68
GI-644	201	298	1	< 0.01	7	3110	14	< 5	< 1	58	0.02	< 10	< 10	107	< 10	38
GI-645	201	298	< 1	< 0.01	7	2170	< 2	< 5	< 1	83	0.02	< 10	< 10	87	< 10	56
GI-646	201	298	< 1	< 0.01	4	2640	2	< 5	< 1	92	0.01	< 10	< 10	88	< 10	32
GI-647	201	298	< 1	< 0.01	14	1280	4	< 5	4	100	0.14	< 10	< 10	143	< 10	72
GI-648	201	298	< 1	< 0.01	7	1410	2	< 5	1	130	0.06	< 10	< 10	95	< 10	64
GI-649	201	298	< 1	< 0.01	12	1340	10	< 5	1	88	0.07	< 10	< 10	110	< 10	74
GI-650	201	298	1	0.01	11	1880	4	< 5	2	75	0.08	< 10	< 10	126	< 10	90
GI-651	201	298	< 1	< 0.01	11	1290	6	< 5	1	75	0.07	< 10	< 10	119	< 10	70
GI-652	201	298	1	< 0.01	4	2910	< 2	< 5	< 1	82	0.01	< 10	< 10	90	< 10	70
GI-653	201	298	< 1	< 0.01	10	1770	6	< 5	< 1	92	0.03	< 10	< 10	111	< 10	68

CERTIFICATION: *B. Coughlin*





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

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 P.O. Number :

Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120211

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	FA+AA																				
GI-654	201	298	< 5	< 0.2	1.99	< 5	220	< 0.5	< 2	0.71	< 0.5	12	22	87	3.53	< 10	< 1	0.10	10	0.72	1795
GI-655	201	298	< 5	< 0.2	1.65	10	250	< 0.5	< 2	0.65	< 0.5	12	20	64	3.08	< 10	< 1	0.08	< 10	0.34	2060
GI-656	201	298	< 5	< 0.2	2.62	< 5	110	< 0.5	< 2	0.57	< 0.5	8	27	65	3.46	< 10	< 1	0.04	10	0.59	375
GI-657	201	298	< 5	< 0.2	2.33	< 5	90	< 0.5	< 2	0.48	< 0.5	7	29	55	3.69	< 10	1	0.05	10	0.52	495
GI-658	201	217	< 5	< 0.2	0.71	5	290	< 0.5	< 2	2.08	< 0.5	9	12	53	1.31	< 10	< 1	0.13	< 10	0.34	3710
GI-659	201	298	< 5	0.2	1.25	< 5	70	< 0.5	< 2	2.31	< 0.5	5	33	34	1.57	10	< 1	0.12	10	0.37	945
GI-660	203	205	< 5	0.2	1.48	< 5	390	< 0.5	< 2	1.00	< 0.5	40	31	105	2.89	< 10	< 1	0.14	10	0.35	6330
GI-661	201	298	< 5	0.4	2.46	< 5	80	< 0.5	< 2	0.73	< 0.5	9	34	57	4.05	< 10	< 1	0.05	10	0.69	465
GI-662	201	298	< 5	< 0.2	2.14	< 5	120	< 0.5	< 2	0.54	< 0.5	9	23	55	4.08	< 10	< 1	0.07	10	0.63	650
GI-663	201	298	< 5	0.2	2.66	< 5	330	< 0.5	< 2	1.55	< 0.5	13	36	177	3.99	10	< 1	0.09	50	0.77	1105
GI-664	201	298	< 5	0.2	3.13	< 5	140	< 0.5	< 2	0.90	< 0.5	13	26	98	4.36	10	< 1	0.13	10	0.82	550
GI-665	203	205	< 5	< 0.2	2.63	5	170	< 0.5	< 2	0.95	< 0.5	16	32	61	4.10	10	< 1	0.12	10	0.72	1380
GI-666	201	217	< 5	< 0.2	0.96	5	230	< 0.5	< 2	1.86	< 0.5	12	25	90	1.61	< 10	< 1	0.15	10	0.45	1920
GI-667	201	217	< 5	0.6	0.88	5	200	< 0.5	< 2	1.87	< 0.5	4	25	78	0.83	< 10	< 1	0.15	20	0.22	1110
GI-668	203	205	< 5	0.4	1.73	< 5	350	< 0.5	< 2	1.01	< 0.5	34	57	106	3.74	< 10	< 1	0.16	10	0.47	4570
GI-669	201	298	< 5	< 0.2	2.11	5	150	< 0.5	< 2	0.72	< 0.5	11	18	111	3.65	< 10	1	0.09	10	0.74	735
GI-670	203	205	< 5	< 0.2	1.97	< 5	190	< 0.5	< 2	0.86	< 0.5	14	60	73	4.01	< 10	< 1	0.14	10	0.48	1585
GI-671	201	298	< 5	< 0.2	2.31	< 5	220	< 0.5	< 2	0.65	< 0.5	20	32	65	4.49	10	< 1	0.15	< 10	0.84	2400
GI-672	201	298	< 5	< 0.2	1.58	< 5	250	< 0.5	< 2	0.73	< 0.5	6	15	60	2.65	< 10	< 1	0.10	< 10	0.42	1230
GI-673	201	298	< 5	< 0.2	2.92	< 5	150	< 0.5	< 2	0.72	< 0.5	12	25	107	4.69	< 10	< 1	0.08	10	0.98	850
GI-674	201	298	< 5	< 0.2	2.39	< 5	130	< 0.5	< 2	0.77	< 0.5	12	26	66	4.22	10	< 1	0.08	10	0.75	805
GI-675	201	298	< 5	< 0.2	2.58	10	130	< 0.5	< 2	0.64	< 0.5	11	23	88	4.14	< 10	< 1	0.07	10	0.85	770
GI-676	201	298	< 5	< 0.2	2.50	< 5	100	< 0.5	< 2	0.60	< 0.5	12	24	133	4.70	< 10	< 1	0.06	10	0.94	665
GI-677	203	205	< 5	< 0.2	2.29	< 5	140	< 0.5	< 2	0.77	< 0.5	11	60	118	4.40	< 10	< 1	0.13	10	0.78	865
GI-678	201	298	< 5	< 0.2	2.14	< 5	170	< 0.5	< 2	0.44	< 0.5	12	28	89	5.14	< 10	< 1	0.07	10	0.68	595
GI-679	201	298	< 5	< 0.2	1.90	5	160	< 0.5	< 2	0.47	< 0.5	10	19	57	4.20	< 10	< 1	0.14	10	0.51	640
GI-680	201	298	< 5	0.2	1.98	< 5	150	< 0.5	< 2	0.49	< 0.5	9	16	89	3.20	< 10	< 1	0.05	10	0.39	795
GI-681	201	298	< 5	< 0.2	2.32	< 5	100	< 0.5	< 2	0.38	< 0.5	8	22	65	5.36	< 10	< 1	0.07	< 10	0.66	415
GI-682	203	205	< 5	< 0.2	2.10	5	150	< 0.5	2	0.65	< 0.5	9	56	54	4.34	< 10	< 1	0.14	10	0.54	645
GI-683	201	298	< 5	< 0.2	2.34	< 5	100	< 0.5	< 2	0.55	< 0.5	11	22	76	5.09	< 10	< 1	0.07	10	0.80	550
GI-684	201	298	< 5	< 0.2	1.82	20	90	< 0.5	< 2	0.51	< 0.5	9	23	49	5.12	< 10	< 1	0.06	10	0.57	650
GI-685	201	298	< 5	< 0.2	1.98	5	170	< 0.5	< 2	0.82	< 0.5	13	23	58	4.55	< 10	< 1	0.07	10	0.60	2160
GI-686	201	298	< 5	< 0.2	2.05	< 5	110	< 0.5	< 2	0.79	< 0.5	11	23	57	4.77	< 10	< 1	0.07	10	0.75	505
GI-687	203	205	< 5	< 0.2	2.19	15	140	< 0.5	< 2	1.03	< 0.5	13	59	70	4.13	< 10	< 1	0.11	10	0.53	1960
GI-688	201	298	< 5	< 0.2	3.27	< 5	210	< 0.5	< 2	0.75	< 0.5	15	36	242	5.38	10	< 1	0.11	20	0.83	1240
GI-689	201	298	< 5	< 0.2	1.78	5	110	< 0.5	< 2	0.65	< 0.5	9	31	58	5.14	< 10	< 1	0.09	10	0.52	410
GI-690	201	298	< 5	< 0.2	1.71	< 5	90	< 0.5	< 2	0.52	< 0.5	7	24	53	3.99	< 10	3	0.06	10	0.54	545
GI-691	201	298	< 5	< 0.2	1.99	< 5	120	< 0.5	< 2	0.54	< 0.5	14	27	72	3.65	< 10	< 1	0.06	10	0.44	1335
GI-692	201	217	< 5	< 0.2	1.69	< 5	120	< 0.5	< 2	1.78	< 0.5	13	66	107	3.12	< 10	< 1	0.19	10	0.97	655
GI-693	203	205	< 5	0.2	2.23	5	140	< 0.5	< 2	0.69	< 0.5	14	83	77	3.81	< 10	< 1	0.12	10	0.63	1375

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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## CERTIFICATE OF ANALYSIS A9120211

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Tl	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
GI-654	201	298	< 1	0.01	9	2550	< 2	5	1	103	0.04	< 10	< 10	111	< 10	74
GI-655	201	298	1	< 0.01	8	2590	6	< 5	< 1	73	0.02	< 10	< 10	105	< 10	88
GI-656	201	298	< 1	0.01	17	1390	< 2	< 5	1	103	0.07	< 10	< 10	93	< 10	68
GI-657	201	298	< 1	< 0.01	12	1600	10	< 5	1	55	0.08	< 10	< 10	102	< 10	82
GI-658	201	217	1	0.01	2	1970	8	< 5	1	91	0.06	< 10	< 10	43	< 10	170
GI-659	201	298	< 1	< 0.01	7	3120	2	< 5	2	85	0.04	< 10	< 10	58	< 10	86
GI-660	203	205	< 1	0.01	7	1570	12	< 5	2	115	0.08	< 10	< 10	97	< 10	86
GI-661	201	298	1	0.01	12	1470	2	< 5	3	93	0.12	< 10	< 10	132	< 10	74
GI-662	201	298	< 1	0.01	10	1490	6	< 5	1	66	0.06	< 10	< 10	125	< 10	70
GI-663	201	298	1	0.01	8	2400	12	< 5	7	84	0.07	< 10	< 10	160	< 10	78
GI-664	201	298	1	0.01	11	1310	4	< 5	3	96	0.08	< 10	< 10	157	< 10	102
GI-665	203	205	< 1	0.01	6	1650	20	< 5	3	119	0.09	< 10	< 10	162	< 10	88
GI-666	201	217	2	0.01	1	2420	6	< 5	2	149	0.06	< 10	< 10	48	< 10	94
GI-667	201	217	< 1	0.01	2	3270	18	< 5	2	122	0.02	< 10	< 10	29	< 10	98
GI-668	203	205	< 1	0.02	7	2010	6	< 5	4	134	0.12	< 10	< 10	126	< 10	100
GI-669	201	298	< 1	0.01	7	1640	12	5	3	96	0.14	< 10	< 10	122	< 10	76
GI-670	203	205	< 1	0.02	6	1560	14	< 5	4	130	0.13	< 10	< 10	144	< 10	88
GI-671	201	298	< 1	< 0.01	9	1800	12	< 5	3	88	0.09	< 10	< 10	125	< 10	102
GI-672	201	298	< 1	< 0.01	9	2280	10	< 5	1	109	0.04	< 10	< 10	87	< 10	78
GI-673	201	298	< 1	0.01	10	1600	14	< 5	4	128	0.11	< 10	< 10	163	< 10	64
GI-674	201	298	< 1	0.01	12	1660	14	< 5	3	114	0.10	< 10	< 10	141	< 10	82
GI-675	201	298	< 1	0.01	11	1590	10	< 5	2	93	0.10	< 10	< 10	138	< 10	74
GI-676	201	298	< 1	0.01	11	1550	< 2	< 5	4	85	0.14	< 10	< 10	146	< 10	74
GI-677	203	205	< 1	0.02	8	1560	8	< 5	4	116	0.14	< 10	< 10	151	< 10	72
GI-678	201	298	< 1	< 0.01	10	1210	16	< 5	5	94	0.16	< 10	< 10	182	< 10	64
GI-679	201	298	< 1	< 0.01	7	1140	16	< 5	2	92	0.10	< 10	< 10	165	< 10	52
GI-680	201	298	< 1	< 0.01	6	1350	10	< 5	2	63	0.08	< 10	< 10	129	< 10	40
GI-681	201	298	< 1	0.01	8	1880	8	< 5	4	68	0.16	< 10	< 10	189	< 10	64
GI-682	203	205	< 1	0.03	4	1220	4	< 5	5	123	0.18	< 10	< 10	178	< 10	66
GI-683	201	298	< 1	0.01	8	2480	16	< 5	6	102	0.19	< 10	< 10	191	< 10	62
GI-684	201	298	< 1	0.01	7	1840	18	< 5	5	101	0.19	< 10	< 10	207	< 10	56
GI-685	201	298	< 1	0.01	8	1170	10	< 5	5	111	0.15	< 10	< 10	187	< 10	80
GI-686	201	298	< 1	0.01	9	2180	12	< 5	6	135	0.19	< 10	< 10	186	< 10	68
GI-687	203	205	< 1	0.03	10	1190	2	< 5	6	134	0.15	< 10	< 10	173	< 10	68
GI-688	201	298	< 1	0.01	15	1420	18	< 5	14	98	0.18	< 10	< 10	197	< 10	88
GI-689	201	298	< 1	0.01	9	2210	14	< 5	5	85	0.13	< 10	< 10	178	< 10	68
GI-690	201	298	< 1	0.01	7	1030	10	< 5	4	69	0.14	< 10	< 10	146	< 10	62
GI-691	201	298	< 1	0.01	8	1780	8	< 5	3	75	0.08	< 10	< 10	126	< 10	58
GI-692	201	217	< 1	0.03	14	1410	8	< 5	5	105	0.13	< 10	< 10	108	< 10	70
GI-693	203	205	< 1	0.03	8	1470	14	< 5	4	89	0.11	< 10	< 10	127	< 10	56

CERTIFICATION:

*B. Coughlin*



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		FA+AA																		
GI-694	201 298	< 5	< 0.2	1.66	5	110	< 0.5	< 2	0.68	< 0.5	11	25	84	3.32	< 10	< 1	0.05	10	0.33	1050
GI-695	201 298	< 5	< 0.2	1.96	20	130	< 0.5	< 2	0.85	< 0.5	11	25	106	3.59	< 10	< 1	0.07	20	0.64	605
GI-696	201 298	< 5	< 0.2	3.55	< 5	250	< 0.5	< 2	0.95	< 0.5	19	37	160	5.85	10	< 1	0.13	10	1.32	1535
GI-697	203 205	< 5	< 0.2	4.30	15	220	< 0.5	< 2	0.53	< 0.5	30	56	225	6.72	10	< 1	0.17	10	1.22	1855
GI-698	203 205	< 5	< 0.2	2.68	10	150	< 0.5	< 2	0.94	< 0.5	17	53	91	5.14	< 10	< 1	0.11	10	0.94	1560
GI-699	201 298	< 5	< 0.2	3.24	15	200	< 0.5	< 2	1.22	< 0.5	15	37	203	4.99	10	< 1	0.09	20	1.27	1445
GI-700	201 298	< 5	< 0.2	2.54	< 5	110	< 0.5	< 2	1.04	< 0.5	14	24	72	4.76	< 10	< 1	0.06	10	0.88	785
GI-701	203 205	< 5	< 0.2	2.42	5	80	< 0.5	< 2	0.85	< 0.5	11	50	60	5.01	< 10	< 1	0.10	10	0.73	480
GI-702	201 298	< 5	< 0.2	2.52	10	100	< 0.5	< 2	0.66	< 0.5	11	21	77	5.13	< 10	< 1	0.08	10	0.87	545
GI-703	201 298	< 5	< 0.2	1.64	< 5	110	< 0.5	< 2	0.59	< 0.5	8	25	56	4.15	< 10	< 1	0.06	10	0.65	415
GI-704	201 298	< 5	< 0.2	3.14	< 5	180	< 0.5	< 2	0.57	< 0.5	11	21	115	5.84	10	< 1	0.07	10	0.97	455
GI-705	201 298	< 5	< 0.2	1.66	< 5	120	< 0.5	< 2	0.51	< 0.5	6	15	59	3.45	< 10	< 1	0.10	10	0.53	620
GI-706	203 205	< 5	< 0.2	2.35	< 5	160	< 0.5	< 2	0.84	< 0.5	16	48	108	5.24	< 10	< 1	0.09	10	1.03	1225
GI-707	201 298	< 5	< 0.2	2.15	5	510	< 0.5	< 2	0.67	< 0.5	15	18	108	3.96	< 10	< 1	0.15	10	0.71	2370

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

920 - 609 GRANVILLE ST.  
 VANCOUVER, BC  
 V7Y 1G5

Page Number : 4-B  
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 Certificate Date: 28-AUG-91  
 Invoice No. : I9120211  
 P.O. Number :

Project : MM PROPERTY  
 Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120211

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
GI-694	201 298	< 1	0.01	9	1300	8	< 5	2	62	0.05	< 10	< 10	117	< 10	38
GI-695	201 298	< 1	0.01	8	1070	20	< 5	5	95	0.11	< 10	< 10	143	< 10	56
GI-696	201 298	< 1	0.01	20	1340	18	< 5	11	93	0.12	< 10	< 10	195	< 10	122
GI-697	203 205	< 1	0.02	17	1490	30	< 5	11	85	0.14	< 10	< 10	243	< 10	102
GI-698	203 205	< 1	0.02	13	990	20	< 5	9	144	0.21	< 10	< 10	210	< 10	84
GI-699	201 298	< 1	0.01	15	1360	4	< 5	14	129	0.16	< 10	< 10	199	< 10	84
GI-700	201 298	< 1	0.01	8	1040	12	< 5	9	147	0.26	< 10	< 10	216	< 10	74
GI-701	203 205	< 1	0.03	6	2100	< 2	< 5	7	168	0.23	< 10	< 10	211	< 10	64
GI-702	201 298	< 1	0.01	9	2400	16	< 5	6	114	0.20	< 10	< 10	194	< 10	64
GI-703	201 298	< 1	0.01	9	1000	12	< 5	5	132	0.19	< 10	< 10	168	< 10	52
GI-704	201 298	< 1	< 0.01	7	3760	10	< 5	5	100	0.10	< 10	< 10	190	< 10	82
GI-705	201 298	< 1	< 0.01	6	1240	16	< 5	3	96	0.14	< 10	< 10	138	< 10	42
GI-706	203 205	< 1	0.02	8	1610	14	< 5	7	201	0.22	< 10	< 10	205	< 10	66
GI-707	201 298	< 1	< 0.01	8	1970	12	< 5	2	99	0.06	< 10	< 10	128	< 10	74

CERTIFICATION:

*B. Cagli*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

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Page Number : 1-A  
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Invoice No. : 19120212  
P.O. Number :

Project : MM PROPERTY  
Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120212

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	FA+AA																				
518453	203	205	< 5	< 0.2	2.09	< 5	140	< 0.5	< 2	1.23	< 0.5	13	95	97	4.12	< 10	< 1	0.12	10	0.91	1110
DLC-SS-2	201	298	< 5	< 0.2	3.46	45	60	< 0.5	< 2	1.63	< 0.5	21	77	194	5.67	< 10	< 1	0.47	10	2.01	1440
DLC-SS-4	203	205	< 5	< 0.2	2.25	< 5	130	< 0.5	< 2	2.01	< 0.5	13	72	104	4.28	< 10	< 1	0.35	10	1.42	865
DLC-SS-5	203	205	< 5	< 0.2	2.60	< 5	180	< 0.5	< 2	0.94	< 0.5	24	86	98	5.74	< 10	< 1	0.18	10	1.30	4830
DLC-SS-6	201	298	35	< 0.2	2.19	< 5	50	< 0.5	< 2	1.29	< 0.5	18	97	96	7.65	< 10	< 1	0.09	10	1.23	745

CERTIFICATION: B. Coughlin



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

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V7Y 1G5

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Total Pages : 1  
Certificate Date: 27-AUG-91  
Invoice No. : I9120212  
P.O. Number :

Project : MM PROPERTY  
Comments: CC: GEWARGIS GEOLOGICAL CONSULTING INC.

## CERTIFICATE OF ANALYSIS A9120212

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
518453	203 205	1	0.02	13	1440	4	< 5	6	100	0.11	< 10	< 10	145	< 10	62
DLC-SS-2	201 298	< 1	0.03	14	2090	4	< 5	11	177	0.30	< 10	< 10	218	< 10	120
DLC-SS-4	203 205	< 1	0.05	5	2260	8	< 5	9	235	0.23	< 10	< 10	203	< 10	54
DLC-SS-5	203 205	< 1	0.03	15	1440	16	< 5	7	121	0.17	< 10	< 10	199	< 10	268
DLC-SS-6	201 298	< 1	0.03	14	1880	16	< 5	11	155	0.23	< 10	< 10	266	< 10	94

CERTIFICATION:



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Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

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 Invoice No. : I9120459  
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Project :  
 Comments: CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS

### A9120459

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Al %	As 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
	205	294	FA+AA																		
518101	205	294	< 5	< 0.2	1.43	10	370	< 0.5	< 2	2.14	< 0.5	17	45	234	4.57	20	< 1	0.39	10	0.55	940
518102	205	294	< 5	< 0.2	0.48	< 5	1530	< 0.5	< 2	5.37	< 0.5	14	26	173	4.74	20	< 1	0.25	10	0.92	1300
518103	205	294	< 5	< 0.2	1.48	10	780	< 0.5	< 2	1.59	< 0.5	19	26	117	5.00	20	2	0.13	10	1.02	980
518104	205	294	15	< 0.2	2.60	< 5	100	< 0.5	< 2	1.03	< 0.5	20	20	182	5.84	10	< 1	0.12	10	1.92	1130
518105	205	294	< 5	< 0.2	2.96	10	130	< 0.5	< 2	0.80	< 0.5	22	20	201	6.50	20	< 1	0.15	10	2.49	1330
518106	205	294	< 5	< 0.2	1.76	< 5	110	< 0.5	< 2	1.11	< 0.5	15	26	169	3.96	10	< 1	0.13	10	1.25	600
518107	205	294	< 5	< 0.2	1.89	10	50	< 0.5	< 2	1.30	< 0.5	17	21	165	3.33	10	< 1	0.07	10	1.30	730
518108	205	294	< 5	< 0.2	2.12	< 5	510	< 0.5	< 2	1.89	< 0.5	15	16	731	4.76	20	< 1	0.16	20	1.47	1340
518109	205	294	< 5	< 0.2	2.07	15	190	< 0.5	< 2	3.62	< 0.5	14	12	142	4.66	30	< 1	0.18	20	1.58	885
518110	205	294	< 5	< 0.2	1.60	< 5	240	< 0.5	< 2	1.69	< 0.5	17	14	206	5.05	20	< 1	0.23	10	0.90	1140
518111	205	294	< 5	< 0.2	2.61	< 5	30	< 0.5	< 2	1.85	< 0.5	14	18	59	4.84	20	< 1	0.09	10	0.89	890
518112	205	294	< 5	< 0.2	2.97	20	30	< 0.5	< 2	5.95	< 0.5	18	8	148	5.07	30	< 1	0.05	10	1.55	1020
518113	205	294	< 5	< 0.2	2.09	20	20	< 0.5	< 2	1.59	< 0.5	15	19	111	4.09	10	< 1	0.09	10	1.29	635
518114	205	294	< 5	< 0.2	2.51	< 5	40	< 0.5	< 2	1.68	< 0.5	18	26	139	4.97	10	< 1	0.07	10	1.06	655
518115	205	294	< 5	< 0.2	4.36	35	10	< 0.5	< 2	3.58	< 0.5	14	21	103	5.07	20	< 1	0.05	10	1.37	540
518116	205	294	15	< 0.2	2.21	< 5	50	< 0.5	< 2	1.47	< 0.5	16	17	133	4.44	10	< 1	0.24	10	1.77	625
518117	205	294	< 5	< 0.2	1.67	20	2630	< 0.5	< 2	5.03	< 0.5	20	29	155	5.32	30	< 1	0.25	20	0.98	1130
518118	205	294	< 5	< 0.2	1.31	< 5	80	< 0.5	< 2	0.94	< 0.5	24	49	109	6.66	< 10	< 1	0.28	10	0.49	180
518119	205	294	< 5	< 0.2	1.25	< 5	690	< 0.5	< 2	0.74	< 0.5	10	37	93	3.81	10	< 1	0.42	10	0.36	595
518120	205	294	< 5	< 0.2	1.29	< 5	470	< 0.5	< 2	1.38	< 0.5	9	41	42	3.28	10	< 1	0.49	10	0.29	480
518121	205	294	< 5	< 0.2	1.01	< 5	2500	< 0.5	< 2	0.73	< 0.5	11	19	51	3.44	10	< 1	0.32	10	0.30	755
518122	205	294	< 5	< 0.2	2.72	< 5	220	< 0.5	< 2	1.40	< 0.5	18	26	136	5.03	10	< 1	0.21	10	1.37	1035
518123	205	294	< 5	< 0.2	1.52	< 5	400	< 0.5	< 2	1.48	< 0.5	19	19	138	5.46	20	< 1	0.25	10	0.87	795
518124	205	294	< 5	< 0.2	1.63	35	80	< 0.5	< 2	0.31	< 0.5	24	26	145	7.32	10	< 1	0.32	< 10	0.39	850
518125	205	294	< 5	1.2	1.71	5	140	< 0.5	< 2	1.17	< 0.5	14	23	359	4.40	10	< 1	0.32	10	0.82	530
518126	205	294	< 5	< 0.2	4.98	< 5	60	< 0.5	< 2	4.64	< 0.5	20	19	163	4.69	30	< 1	0.09	10	1.32	725
518127	205	294	< 5	< 0.2	2.43	< 5	20	< 0.5	< 2	1.81	< 0.5	23	81	121	5.30	10	< 1	0.06	10	2.18	595
518128	205	294	< 5	< 0.2	2.40	15	70	< 0.5	< 2	2.02	< 0.5	20	48	86	5.42	10	< 1	0.09	10	1.33	720
518129	205	294	< 5	< 0.2	2.26	< 5	350	< 0.5	< 2	7.36	< 0.5	24	29	144	6.63	30	< 1	0.30	10	1.04	1180
518451	205	294	< 5	< 0.2	2.90	< 5	60	< 0.5	< 2	1.27	< 0.5	20	9	135	5.08	10	< 1	0.17	10	1.57	720
518452	205	294	45	2.0	0.63	50	470	< 0.5	< 2	0.10	< 0.5	1	12	58	4.66	10	< 1	0.46	10	0.11	35
518454	205	294	< 5	< 0.2	1.81	10	80	< 0.5	< 2	0.86	< 0.5	11	17	95	4.63	10	< 1	0.09	10	1.35	555

CERTIFICATION:

*B. Coughlin*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: DASSERAT DEVELOPMENTS LTD.

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Project :  
 Comments: CC: WILSON GEWARGIS

## CERTIFICATE OF ANALYSIS

## A9120459

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
518101	205 294	< 1	0.04	21	2140	16	< 5	9	51	0.01	< 10	< 10	120	10	68
518102	205 294	< 1	0.02	10	2090	6	< 5	6	119	< 0.01	< 10	< 10	62	20	64
518103	205 294	< 1	0.02	14	1730	18	< 5	11	93	0.05	< 10	< 10	153	10	68
518104	205 294	< 1	0.02	9	2320	6	< 5	11	74	0.27	< 10	< 10	211	20	92
518105	205 294	< 1	0.02	12	2180	< 2	< 5	13	57	0.21	< 10	< 10	240	10	90
518106	205 294	< 1	0.04	11	2190	18	< 5	6	126	0.26	< 10	< 10	149	10	72
518107	205 294	< 1	0.05	7	1860	6	< 5	5	140	0.24	< 10	< 10	124	10	76
518108	205 294	< 1	0.04	7	2260	2	< 5	6	65	0.01	< 10	< 10	168	10	66
518109	205 294	< 1	0.05	10	2190	< 2	< 5	8	99	< 0.01	< 10	< 10	157	20	70
518110	205 294	< 1	0.05	7	2370	4	< 5	9	61	0.01	< 10	< 10	180	10	66
518111	205 294	< 1	0.05	7	2450	8	< 5	7	31	0.29	< 10	< 10	175	20	58
518112	205 294	< 1	0.05	10	2060	8	< 5	8	95	0.25	< 10	< 10	194	20	76
518113	205 294	< 1	0.05	6	2090	12	< 5	8	50	0.30	< 10	< 10	217	10	48
518114	205 294	< 1	0.05	10	1620	14	< 5	5	84	0.31	< 10	< 10	196	10	68
518115	205 294	12	0.04	26	1390	16	< 5	10	69	0.36	< 10	< 10	200	20	54
518116	205 294	3	0.04	7	2000	< 2	< 5	7	292	0.36	< 10	< 10	168	20	72
518117	205 294	< 1	0.04	10	1590	6	< 5	12	133	< 0.01	< 10	< 10	109	20	64
518118	205 294	4	0.05	20	1690	2	< 5	8	99	0.45	< 10	< 10	158	10	22
518119	205 294	< 1	0.04	11	1170	16	< 5	4	35	0.01	< 10	< 10	44	10	92
518120	205 294	< 1	0.04	8	1150	2	< 5	4	31	0.01	< 10	< 10	50	10	70
518121	205 294	< 1	0.03	4	1130	8	< 5	4	54	< 0.01	< 10	< 10	42	10	74
518122	205 294	< 1	0.04	8	2130	12	< 5	7	113	0.22	< 10	< 10	166	10	74
518123	205 294	< 1	0.04	10	2110	2	< 5	9	55	0.02	< 10	< 10	110	10	98
518124	205 294	< 1	0.04	28	2300	6	< 5	11	25	< 0.01	< 10	< 10	112	10	92
518125	205 294	9	0.04	7	2190	20	< 5	5	158	0.27	< 10	< 10	155	10	52
518126	205 294	1	0.05	14	1730	12	< 5	13	95	0.32	< 10	< 10	195	20	76
518127	205 294	< 1	0.08	56	1580	4	< 5	5	32	0.36	< 10	< 10	167	20	84
518128	205 294	< 1	0.06	36	1640	< 2	< 5	8	51	0.53	< 10	< 10	241	20	100
518129	205 294	< 1	0.02	18	1730	14	5	17	108	< 0.01	< 10	< 10	95	30	84
518451	205 294	< 1	0.07	13	1560	2	< 5	7	69	0.29	< 10	< 10	194	20	72
518452	205 294	6	0.13	3	900	128	< 5	3	217	0.02	< 10	< 10	52	< 10	20
518454	205 294	< 1	0.06	9	1950	14	< 5	8	104	0.30	< 10	< 10	201	10	76

CERTIFICATION: B. Coughlin



**APPENDIX II**

**LABORATORY PREPARATION AND ANALYTICAL PROCEDURES**

09/27/91 10:09

604 984 0218

CHEMEX LABS

002/007



# Chemex Labs Ltd.

*Analytical Chemists*

*Geochemists*

*Registered Assayers*

212 Brooksbank Ave  
Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221

Telex: 04-352597

Fax: (604) 984-0218

## Screening Procedure

Chemex Code: 201

Geochemical samples (soils, silts) are dried at 50 deg C and then sieved through an 80 mesh stainless steel screen. If insufficient material is obtained, the sample is sieved through a 35 mesh screen (code 203) and the -35 mesh material is ring pulverized (code 205).

If there is still insufficient material for analysis after sieving to -35 mesh, then the whole sample is recombined and ground (code 217).

09/27/91 10:09

☎604 984 0218

CHEMEX LABS

☑003/007



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*Geochemists*

*Registered Assayers*

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221

Telex: 04-352597

Fax: (604) 984-0218

## Screening Procedure

Chemex Code: 203

Geochemical samples (soils, silts) are dried at 50 deg C. and then screened through a 35 mesh stainless steel screen. The -35 mesh material is then ring pulverized using a ring mill with either a chrome steel ring set (code 205) or a zirconia ring set (code 248). If there is insufficient -35 mesh material for analysis, then the entire sample is ground (code 217).

09/27/91 10:10

☎ 604 984 0218

CHEMEX LABS

☑ 004/007



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*Registered Assayers*

212 Brooksbank Ave  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 04-352597  
Fax: (604) 984-0218

## Ring Grinding

Chemex Codes: 205 geochemical samples  
208 assay samples

A crushed sample split is ground using a ring mill pulverizer with a chrome steel ring set. The Chemex specification for this procedure is that greater than 90% of the ground material passes a 150 mesh screen. Grinding with chrome steel will impart trace amounts of iron and chromium to a sample.

09/27/91 10:10

☎604 984 0218

CHEMEX LABS

☑005/007



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*Analytical Chemists*

*Geochemists*

*Registered Assayers*

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1  
Phone: (604) 984-0221  
Telex: 04-352597  
Fax: (604) 984-0218

## Ring-Grinding

Chemex Codes: 217 geochemical samples  
268 assay samples

A sample which does not require crushing or splitting is ground using a ring mill pulverizer with a chrome steel ring set. The Chemex specification for this process is that greater than 90% of the sample will pass through a 150 mesh screen. Grinding with chrome steel will impart trace amounts of chromium and iron to a sample.



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*Analytical Chemists**Geochemists**Registered Assayers*

212 Brooksbank Ave  
Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221

Telex: 04-952597

Fax: (604) 984-0218

Gold

Fire Assay Collection/ Atomic Absorption Spectroscopy (EA-AA)

Chemex Code: 100

A 10g sample is fused with a neutral lead oxide flux inquarted with 6mg of gold-free silver and then cupelled to yield a precious metal bead.

These beads are digested for 30 mins in 0.5ml concentrated nitric acid, then 1.5ml of concentrated hydrochloric acid are added and the mixture is digested for 1 hr. The samples are cooled, diluted to a final volume of 5ml, homogenized and analyzed by atomic absorption spectroscopy.

Detection limit: 5 ppb

Upper Limit: 10,000 ppb



# Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brooksbank Ave.  
 Vancouver, B.C.  
 Canada V7J 2C1  
 Phone: (604) 984-0221  
 Telex: 04-352597  
 Fax: (604) 984-0218

## 32-Element Geochemistry Package (32-ICP)

### Inductively-Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES)

A prepared sample (0.5g) is digested with concentrated nitric and aqua regia acids at medium heat for two hours. The acid solution is diluted to 25ml with demineralized water, mixed and analyzed using a Jarrell Ash 1100 plasma spectrometer after calibration with proper standards. The analytical results are corrected for spectral inter-element interferences.

Chemex Codes	Element	Detection Limit	Upper Limit
921	* Aluminum	0.01 %	15 %
922	Silver	0.2 ppm	0.02 %
923	Arsenic	5 ppm	1 %
924	* Barium	10 ppm	1 %
925	* Beryllium	0.5 ppm	0.01 %
926	Bismuth	2 ppm	1 %
927	* Calcium	0.01 %	15 %
928	Cadmium	0.5 ppm	0.01 %
929	Cobalt	1 ppm	1 %
930	* Chromium	1 ppm	1 %
931	Copper	1 ppm	1 %
932	Iron	0.01 %	15 %
933	* Gallium	10 ppm	1 %
934	* Potassium	0.01 %	10 %
935	* Lanthanum	10 ppm	1 %
936	* Magnesium	0.01 %	15 %
937	Manganese	5 ppm	1 %
938	Molybdenum	1 ppm	1 %
939	* Sodium	0.01 %	5 %
940	Nickel	1 ppm	1 %
941	Phosphorus	10 ppm	1 %
942	Lead	2 ppm	1 %
943	Antimony	5 ppm	1 %
944	* Strontium	1 ppm	1 %
945	* Titanium	0.01 %	5 %
946	* Thallium	10 ppm	1 %
947	Uranium	10 ppm	1 %
948	Vanadium	1 ppm	1 %
949	* Tungsten	10 ppm	1 %
950	Zinc	2 ppm	1 %
951	Mercury	1 ppm	1 %
958	Scandium	1 ppm	1 %

\* Elements for which the digestion is possibly incomplete.

**APPENDIX III**

**METHOD OF HISTOGRAM INTERPRETATION**



## METHOD OF HISTOGRAM INTERPRETATION

### RULES FOR CHOICE OF SIZE CODING OR CONTOURING INTERVALS

1. Examine both arithmetic and logarithmic histograms for each geochemical survey. Choose the histogram which most closely approximates a normal (or lognormal) distribution. If several populations are present on the histograms, subjectively divide the data into a series of (overlapping?) normal or lognormal distributions. Always avoid interpreting histograms which are strongly skewed. Portions of arithmetic or logarithmic histograms may be chosen over specific metal concentration intervals, if this allows for the best portrayal of the data in graphical form.
2. Choose, as two of the coding intervals, points which represent between 90% and 95%, and 95% and 97.5% of the data; two different numbers. These choices highlight from 1 in 10 to 1 in 20 samples which are considered slightly anomalous and definitely anomalous, respectively. These limits are optimistic in that the two categories are defined to be anomalous regardless of the distribution of values on the remainder of the histograms. A rigorous statistical approach would suggest that only values above the 97.5 percentile should be considered anomalous. Choice of any of the above percentiles is entirely subjective and meant to highlight the highest values of the survey.
3. Divide the remaining portion of the histogram into recognizable populations. The dividing point of each of these populations is chosen as a coding interval. Artifacts introduced as a consequence of detection limit considerations are ignored. These artificial breaks in the histograms can be recognized by referring to the laboratory reports and scanning data results.
4. For each population, choose one or two numbers which correspond to the 90% and 95% cumulative frequencies for the population (1 in 10 and 1 in 20 samples for that population). These will also be used to represent anomalous conditions for each population. Coding intervals can be no closer than 2X the detection limit for each element being considered.
5. A maximum of six numbers can be chosen to plot symbol maps. This number is dictated by the ability to present data in graphical form with sufficiently different symbol sizes for them to be easily distinguishable, particularly if maps are to be reduced. The seven defined concentration classes are normally sufficient to represent geochemical data on a map. More intervals can be chosen if data are to be contoured. Avoid choosing arithmetic intervals without considering rules (1) and (4).

6. Maps plotted using the preceding instructions might result in two areas being distinguished from each other by a relatively uniform density of symbol sizes, yet only poor contrast anomalies are indicated. Difference between the two areas, A and B, might be due to underlying geology, overburden character, soils etc. Whatever the cause, the data are not well displayed. If the underlying control distinguishing A and B can be recognized, the data can be divided and reinterpreted following steps (1) to (5). Two sets of maps can be drawn, or both sets of interpreted data can be plotted on a single map. For such superimposed geochemical maps, symbol sizes lose their absolute meaning but assume a more important stance, that of reflecting anomalous conditions regardless of the underlying control. To illustrate, consider the case where A and B are areas underlain by very different geology. Anomalous conditions for low background rock types might be concentrations which are much lower than average values for the high background rock types. Nevertheless, anomalies defined in each area are considered significant. Reliance on absolute concentrations can be misleading in such cases.

**APPENDIX IV**


**STATEMENT OF QUALIFICATIONS**

CERTIFICATE OF QUALIFICATIONS

I, Stanley J. Hoffman of 2834 West 24th Avenue, Vancouver, British Columbia, hereby certify that:

1. I am a consulting geochemist with office at 1531 West Pender Street, Vancouver, B.C., V6G 2T1;
2. I hold the degrees of Bachelor of Science in geology and geochemistry from McGill University of Montreal (1969), a Master of Science in Geochemistry from the University of British Columbia (1972) and a Doctor of Philosophy in Geochemistry from the University of British Columbia (1976);
3. I have practised the profession of geologist/geochemist continuously since 1973.
4. My list of publications include:
  - 2 - Theses (unpublished)
  - 17 - Scientific papers in referred journals (3 in the last 3 years)
  - 1 - Published Geochemical Manual (report writing)
  - 1 - Published Directory: 1990 AEG Membership Listing and Directory of Geochemical Exploration and Environmental Services
  - 1 - Unpublished Manual - Organization of a Geochemical Symposium
  - 2 - Books (Reviews in Economic Geology - Volume 3, Writing Geochemical Reports)
  - 2 - Scientific papers in unreferred journals
5. My memberships include:
  1. Member Geological Association of Canada, since 1967; Fellow since 1986
  2. Canadian Institute of Mining and Metallurgy, since 1973
  3. Association of Exploration Geochemists, since 1972
  4. American Society of Agronomy, since 1973
  5. Geochemical Society, 1983 - 1990
  6. International Association of Geochemistry and Cosmochemistry, since 1986
  7. American Chemical Society, since 1989
6. Other qualifications include:
  1. Association of Exploration Geochemists council, (1980-1986, 1988-1990), president (1987-1988), business manager (1988-1991).
  2. Lecturer, B.C. Department of Mines Prospecting Course, (1977-1991), B.C. & Yukon Chamber of Mines (1987-1990), Short Course, Prospectors and Developers Association (1990), Short Course, Calgary MEG (1989), Short Course, AIME (1988), Short Course, Northwest Mining Association (1979, 1985, 1988), Brokers Course (1984, 1985).
  3. Chairman, GOLD-81 and GEOEXPO-86 Geochemical Exploration Symposia, Vancouver, B.C.
  4. Committee for professional registration, province of British Columbia (1980-1983, 1990 and 1991).
7. I have not visited the MM Property.
8. I have no interest in the MM Claims, or in Dasserat Development Corp.

Dated this 21 day of October, 1991, Vancouver, British Columbia

Stanley J. Hoffman  
  
PROVINCE OF  
BRITISH COLUMBIA  
GEOSCIENTIST

**APPENDIX VI**

**INSTRUMENTS SPECIFICATIONS**

## SCINTREX MODEL MP-2, PROTON PRECESSION MAGNETOMETER

Resolution:	1 gamma
Total Field Accuracy:	± 1 gamma over full operating range
Range:	20,000 to 100,000 gammas in 25 overlapping steps
Informal Measuring Program:	A reading appears 1.5 seconds after depression of the Operate Switch and remains displayed for a total of 3.7 seconds per single reading. Recycling feature permits automatic repetitive readings at 3.7 second intervals.
External Trigger:	External trigger input permits use of sampling intervals longer than 3.7 seconds.
Display:	5 digit LED (light emitting diode) readout displaying total magnetic field in gammas or normalized battery voltage.
Data Output:	Multiplied precession frequency and gate time outputs for base station recording using interfacing optionally available from Scintrex.
Gradient Tolerance:	Up to 5,000 gammas/meter
Power Source:	8 alkaline "D" cells provide up to 25,000 readings at 25 degrees under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number.
Sensor:	Omnidirectional, shielded, noise-cancelling duo coil, optimized for high gradient tolerance.
Harness:	Complete for operation with staff or backpack sensor.
Operating Temperature Range:	-35 <sup>0</sup> C to +60 <sup>0</sup> C
Size:	Console with batteries: 80mm x 160mm x 250mm Sensor: 80mm x 150mm Staff: 30mm x 1,550mm (extended) 30mm x 660mm (collapsed)
Weight:	Console with batteries: 1.8 kg Sensor: 1.3 kg Staff: 0.6 kg

**APPENDIX VII**

**STATEMENT OF COSTS**

**DASSERAT DEVELOPMENT CORPORATION – MM CLAIMS  
OMINECA MINING DIVISION, BRITISH COLUMBIA**

**STATEMENT OF COSTS**

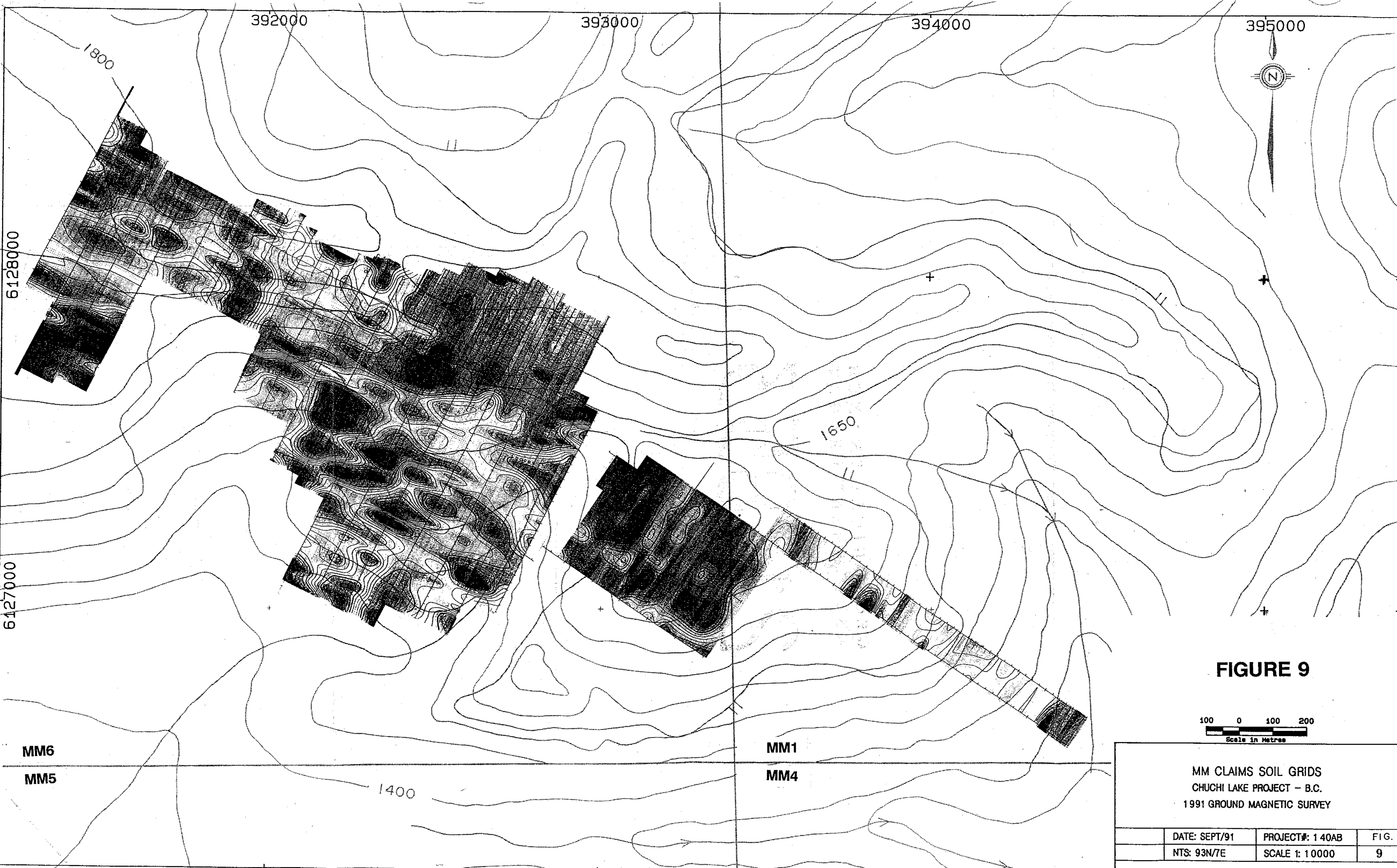
Mobilization/Demobilization		3,500.00
Truck Rental & Fuel		
25 days @ \$100.00/day		2,500.00
Domicile		
75 man-days @ \$50.00/day		3,750.00
Camp Rental		
75 man-days @ \$25.00/day		1,875.00
Helicopter & Fuel		4,803.32
Field Supplies		1,500.00
Communications		500.00
Assays		11,436.50
Geochemical Interpretation & Report		1,217.76
Magnetometer Rental		940.15
Geophysical Data Plotting		642.00
Report Compilation and Drafting		1,200.00
<b><u>Salaries</u></b>		
R. Arnold	25 days @ \$350.00/day	8,750.00
W. Gewargis	10 days @ \$350.00/day	3,500.00
D. Cook	18 days @ \$350.00/day	6,300.00
P. Wilson	15 days @ \$175.00/day	2,625.00
GST (7%)		<u>3,852.78</u>
<b>TOTAL:</b>		<b><u>58,892.51</u></b>



**DASSERAT DEVELOPMENT CORPORATION - MM-1 and MM-2 CLAIMS  
OMINECA MINING DIVISION, BRITISH COLUMBIA**

**STATEMENT OF COSTS**

Mobilization/Demobilization		750.00
Truck Rental & Fuel		
5 days @ \$100.00/day		500.00
Domicile		
15 man-days @ \$50.00/day		750.00
Camp Rental		
15 man-days @ \$25.00/day		375.00
Helicopter & Fuel		
2 hours @ \$750/hour		1,500.00
Field Supplies		200.00
Communications		100.00
Assays		
5 samples @ \$ 15.00/sample		75.00
Report Compilation and Drafting		2,000.00
<b><u>Salaries</u></b>		
R. Arnold	5 days @ \$350.00/day	1,750.00
W. Gewargis	5 days @ \$350.00/day	1,750.00
D. Cook	5 days @ \$350.00/day	1,750.00
GST (7%)		<u>790.00</u>
	<b>TOTAL</b>	<b><u>\$ 12,290.00</u></b>

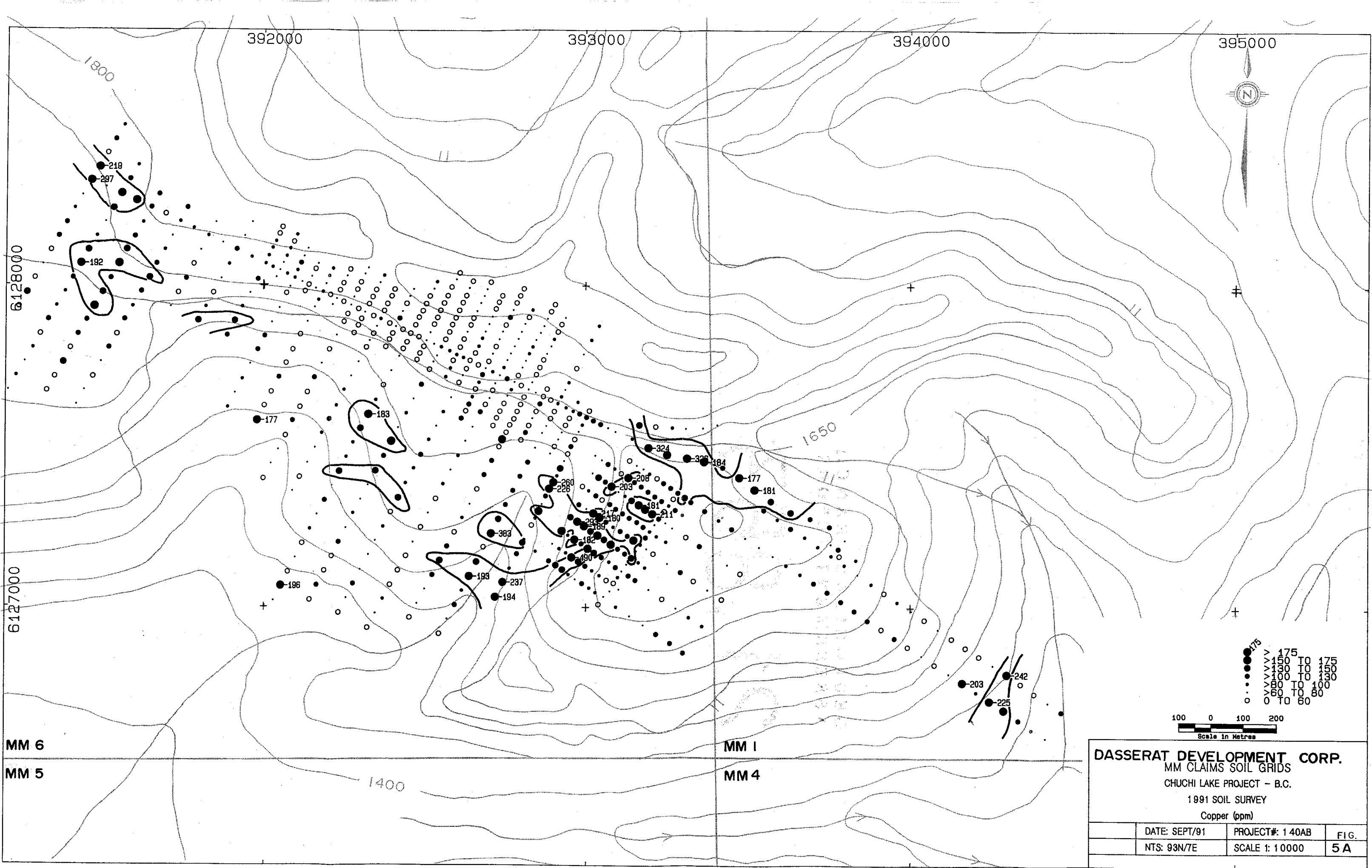


**FIGURE 9**

100 0 100 200  
Scale in Metres

MM CLAIMS SOIL GRIDS  
CHUCHI LAKE PROJECT - B.C.  
1991 GROUND MAGNETIC SURVEY

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	9

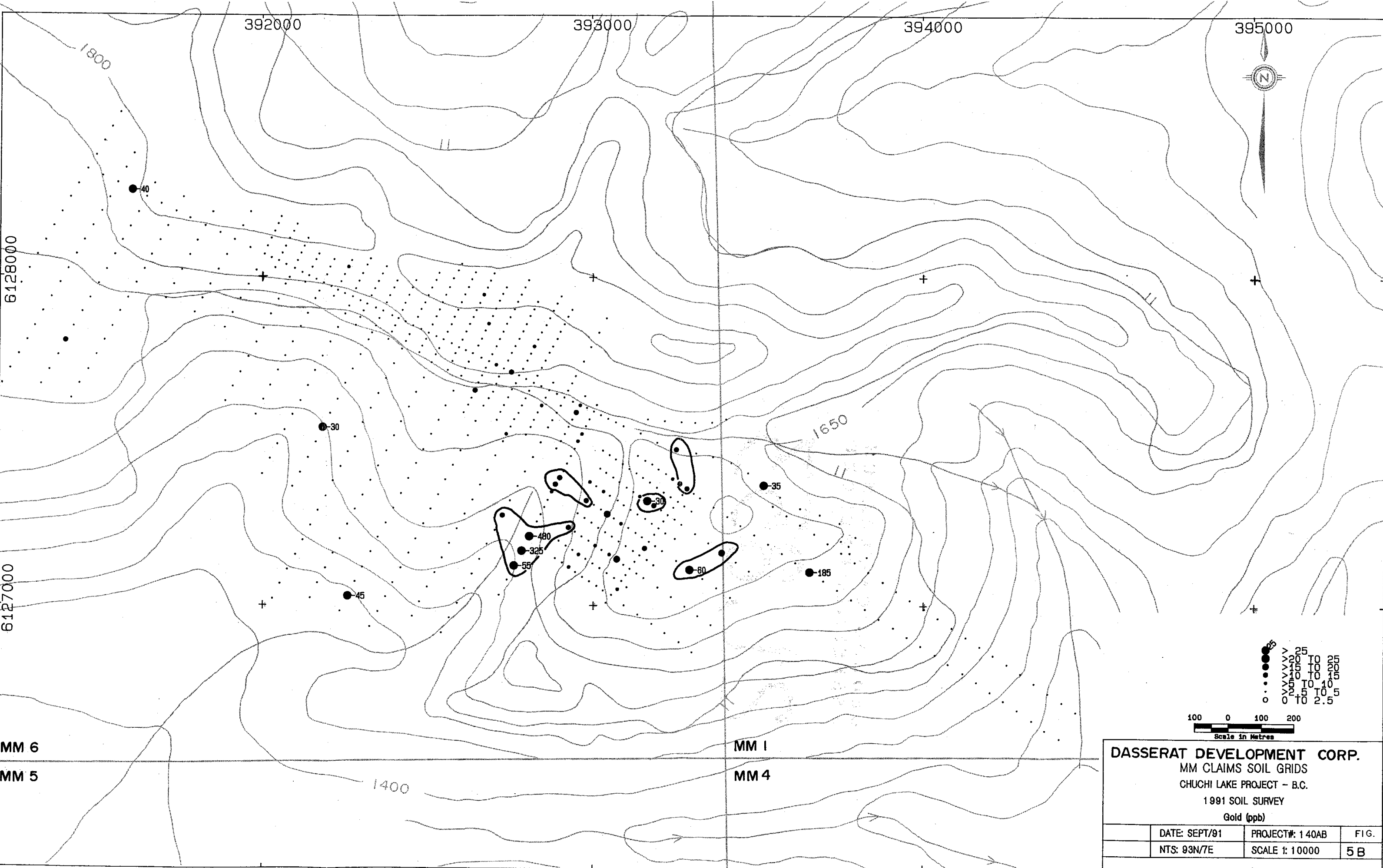


MM 6  
MM 5

MM 1  
MM 4

**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Copper (ppm)

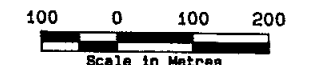
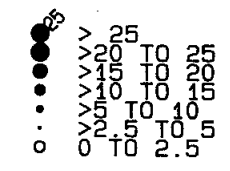
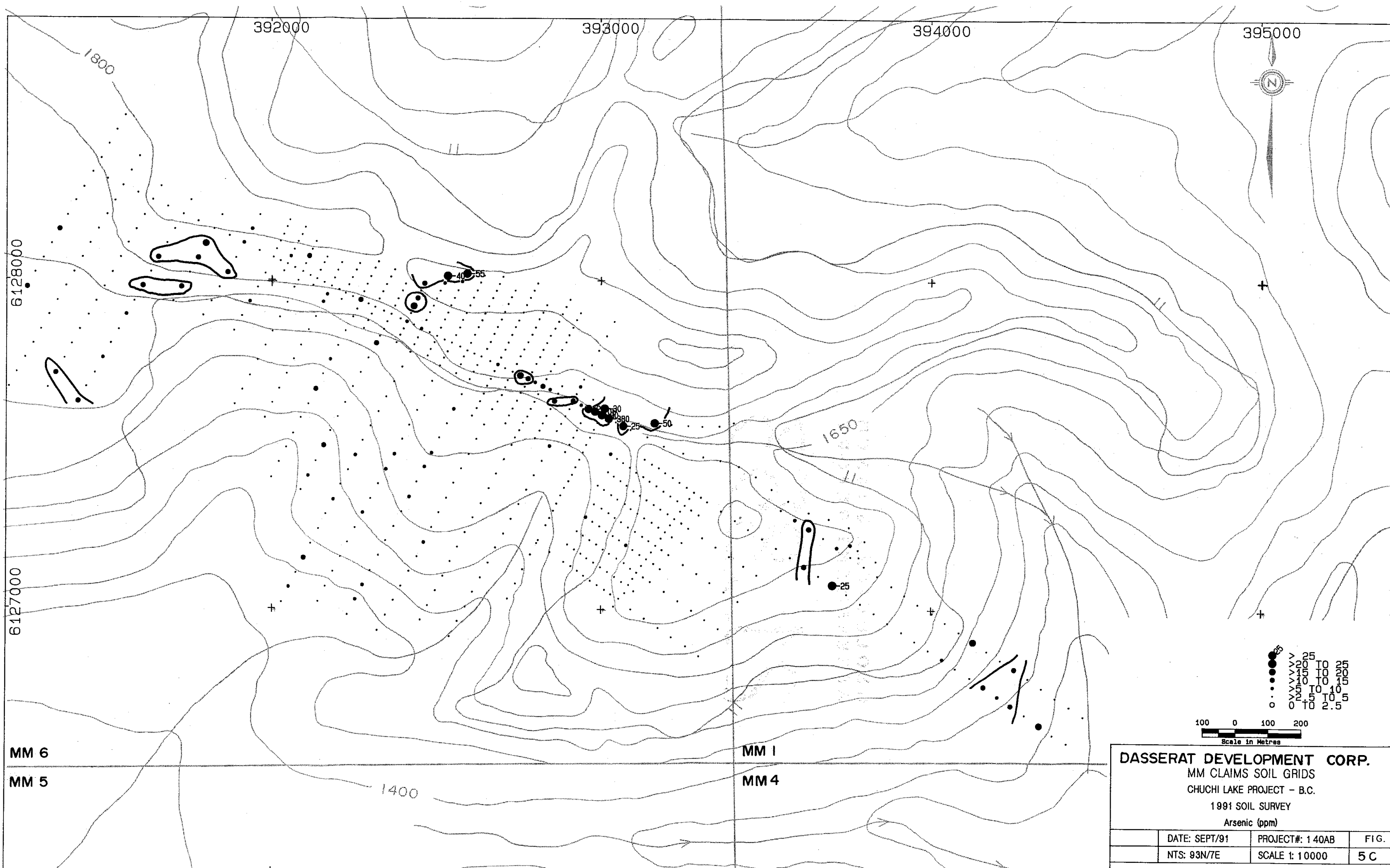
DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5A



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY

Gold (ppb)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 B

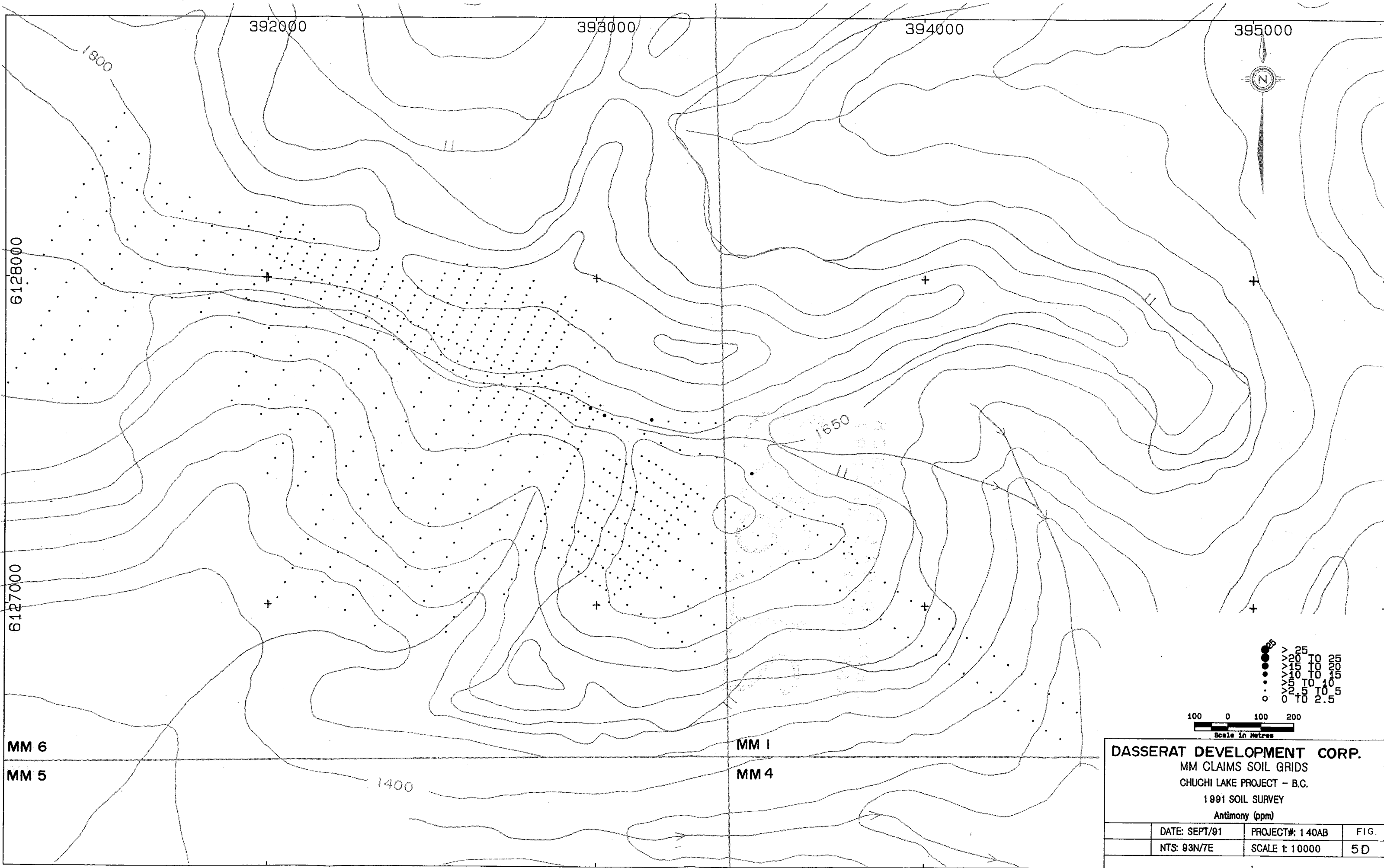


**DASSERAT DEVELOPMENT CORP.**  
MM CLAIMS SOIL GRIDS  
CHUCHI LAKE PROJECT - B.C.  
1991 SOIL SURVEY  
Arsenic (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 C

MM 6  
MM 5

MM 1  
MM 4



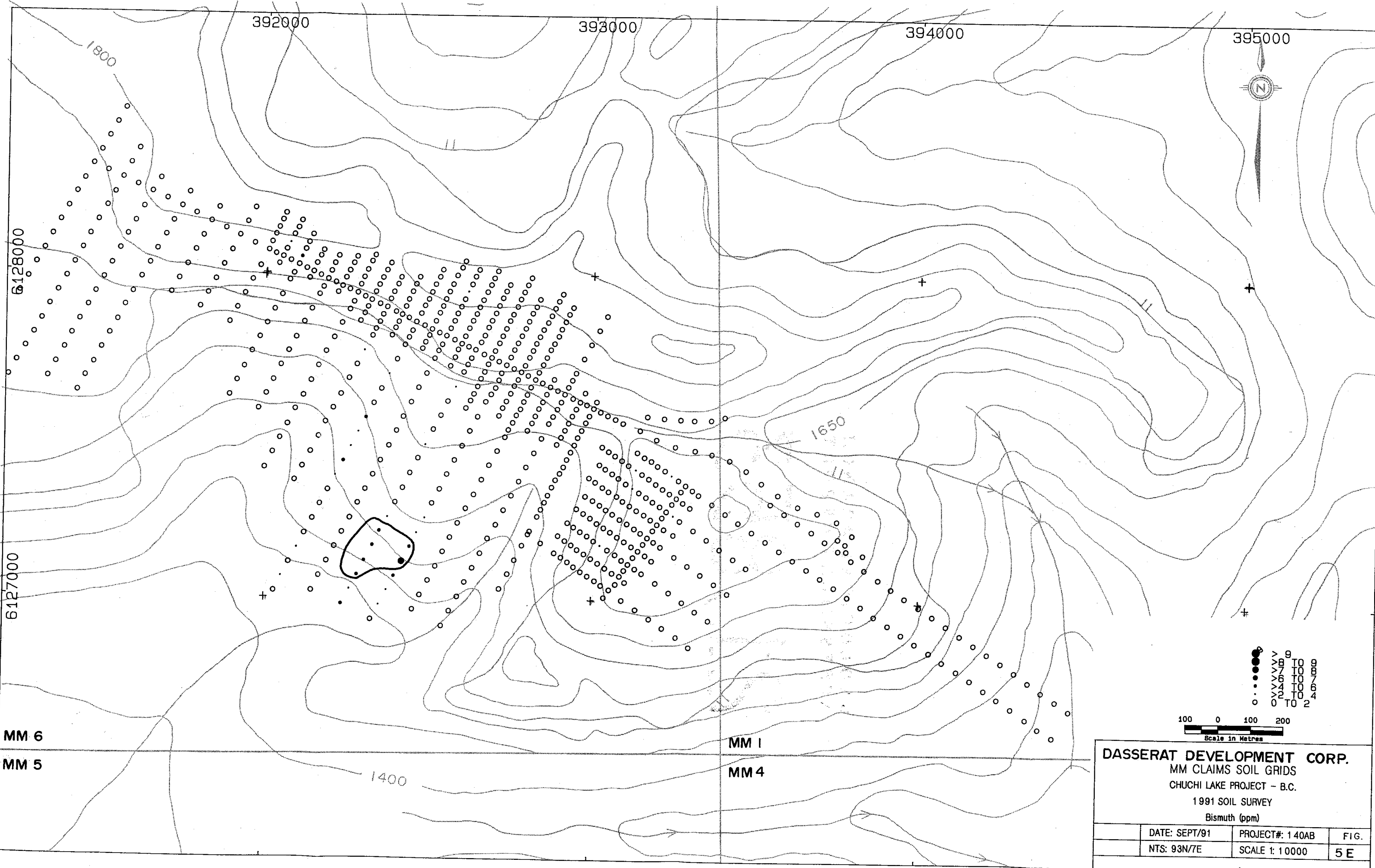
● 25 TO 25  
 ● 15 TO 25  
 ● 10 TO 15  
 ● 5 TO 10  
 ○ 2.5 TO 5

100 0 100 200  
Scale in Metres

MM 6  
MM 5  
MM 1  
MM 4

**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Antimony (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5D



MM 6

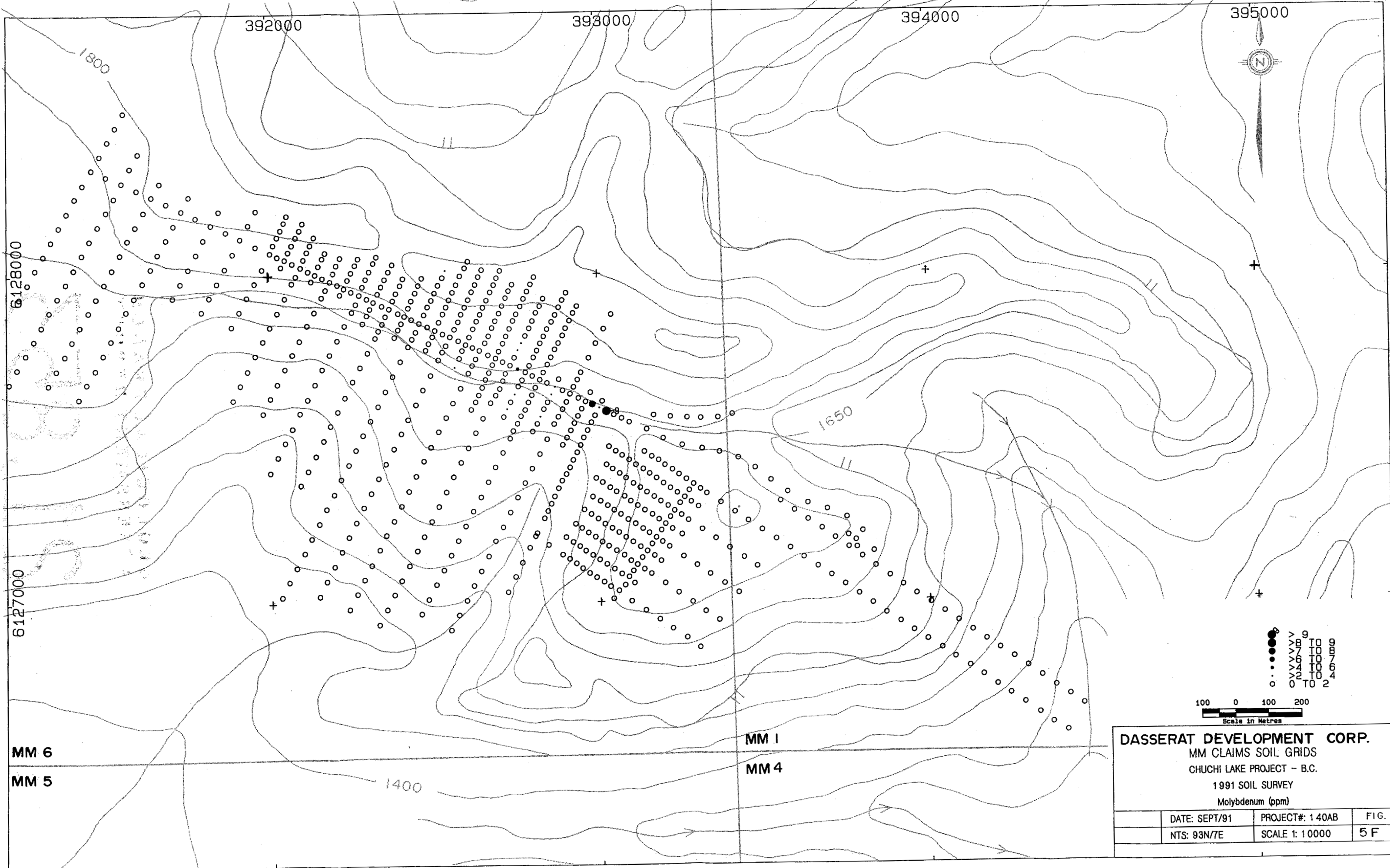
MM 5

MM 1

MM 4

**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Bismuth (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 E



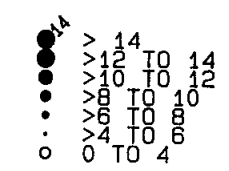
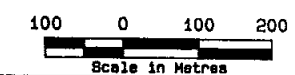
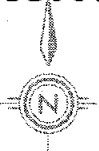
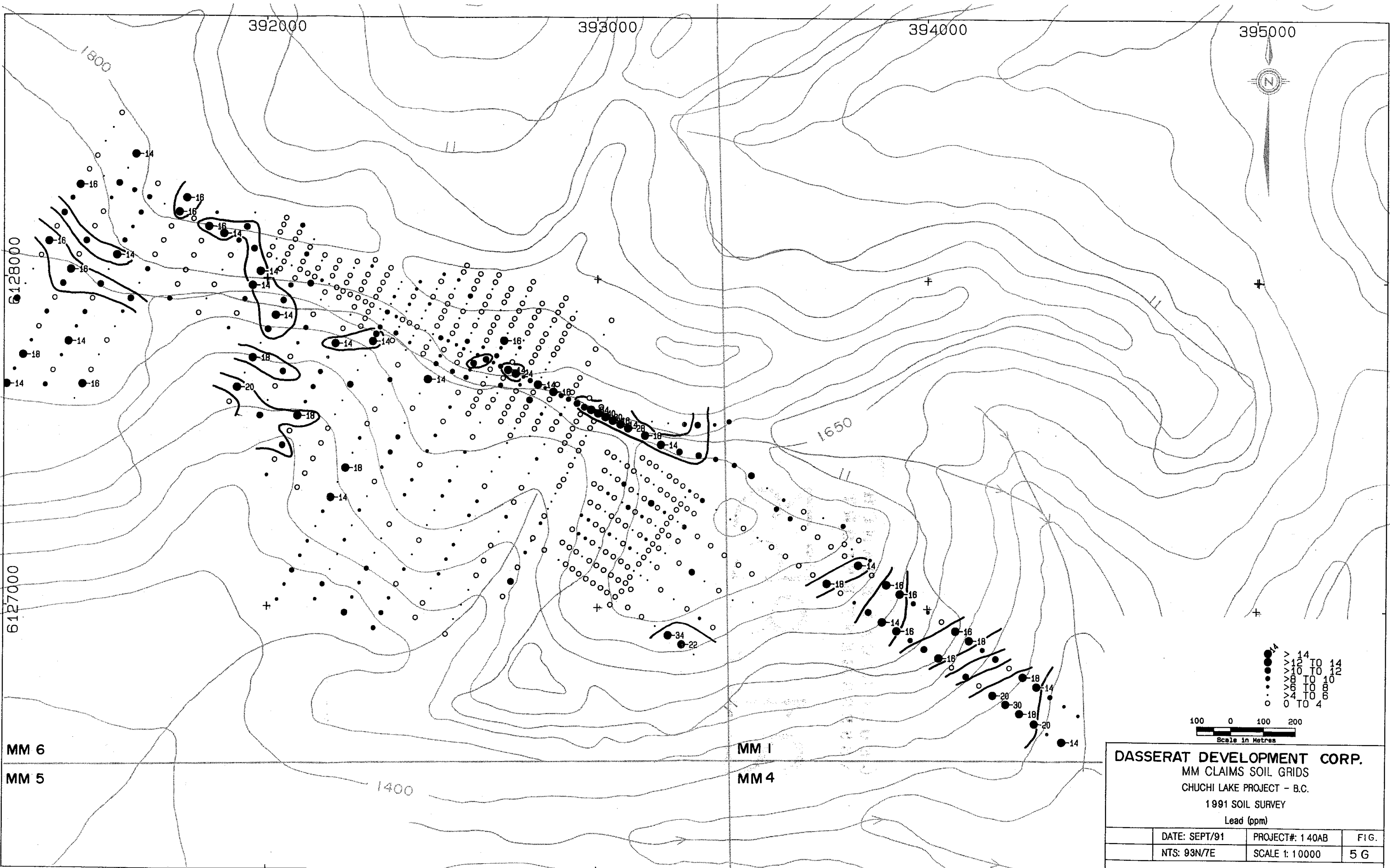
MM 6  
MM 5

MM 1  
MM 4

**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Molybdenum (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 F



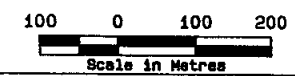
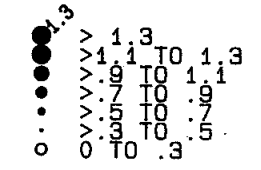
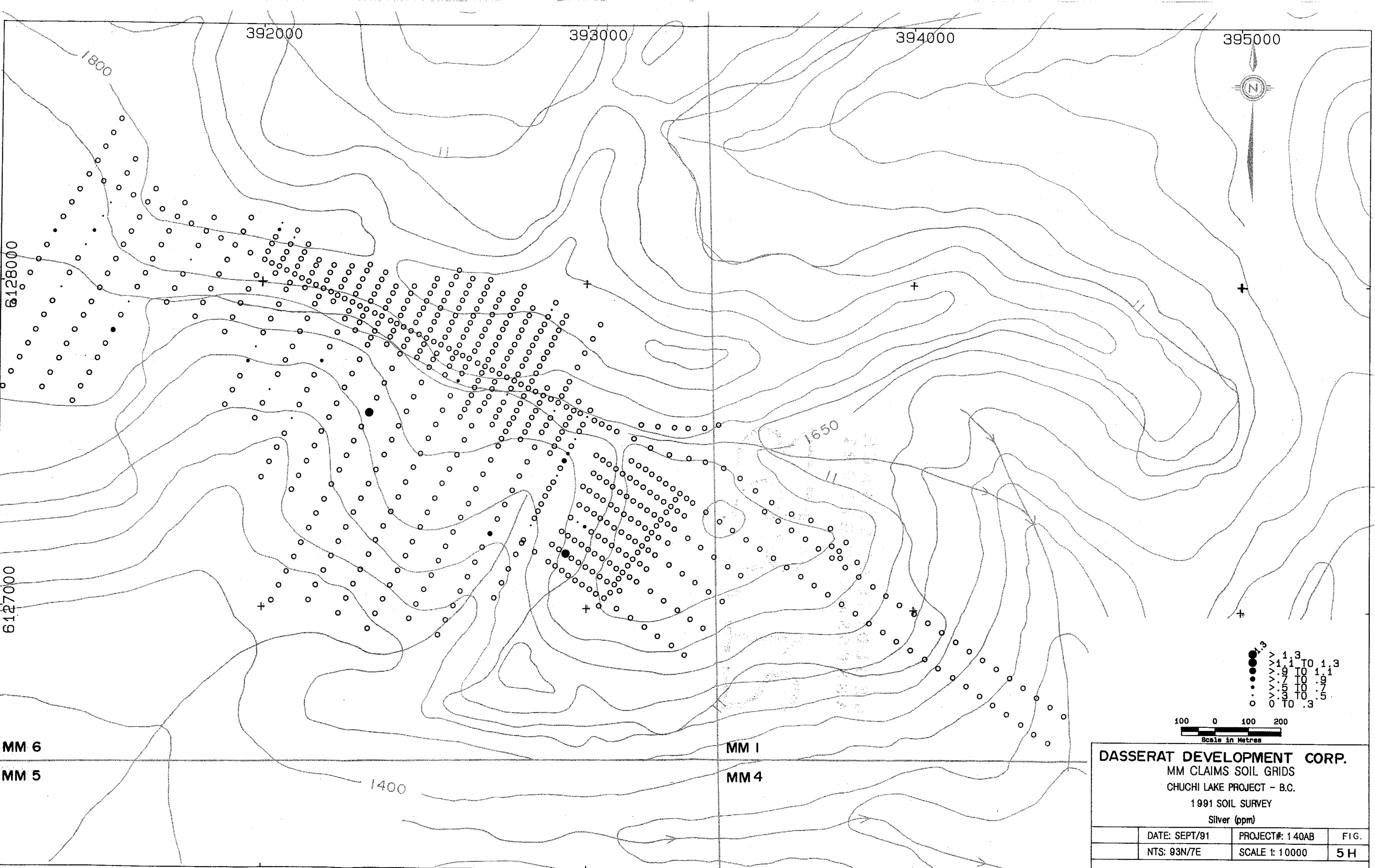


MM 6  
MM 5

MM 1  
MM 4

**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Lead (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 G



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Silver (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 H

MM 6  
MM 5

MM 1  
MM 4

392000

393000

394000

395000

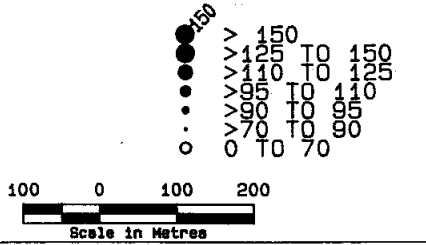
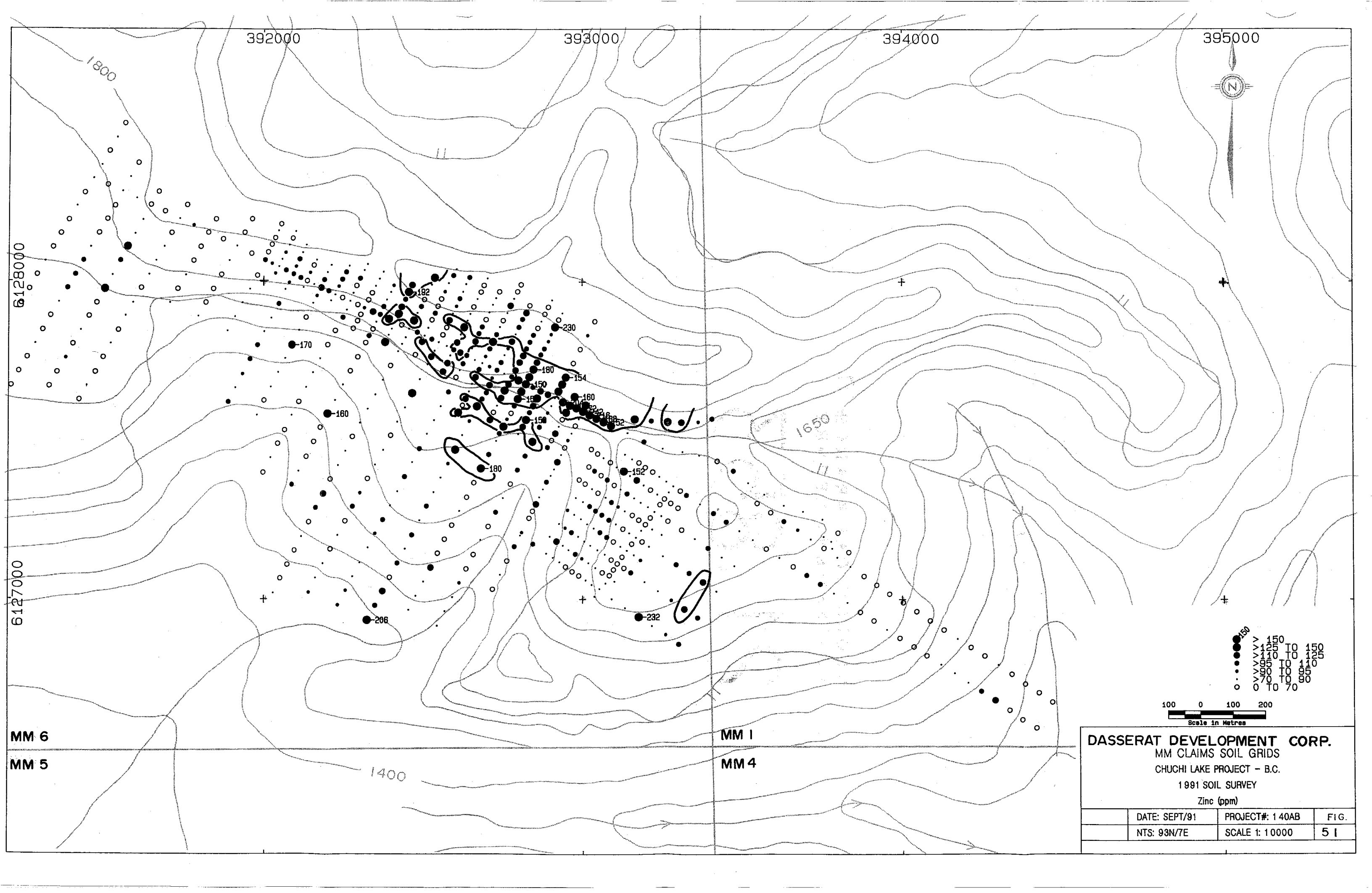
6128000

6127000

1800

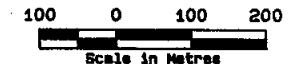
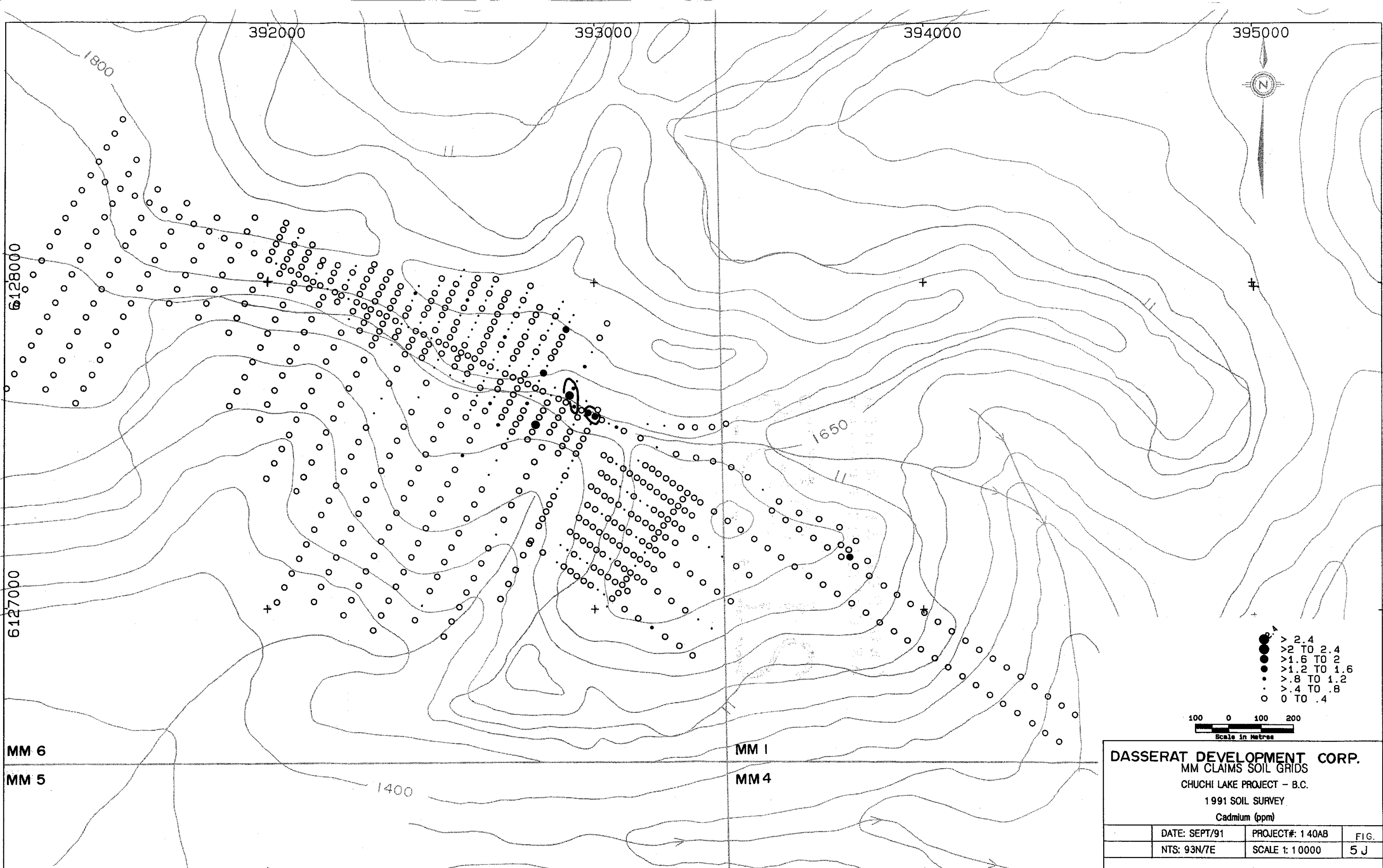
1650

1400



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Zinc (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 I



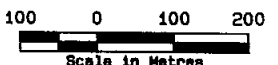
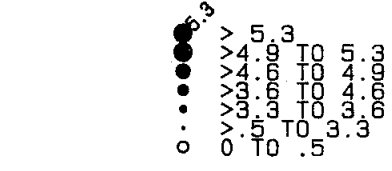
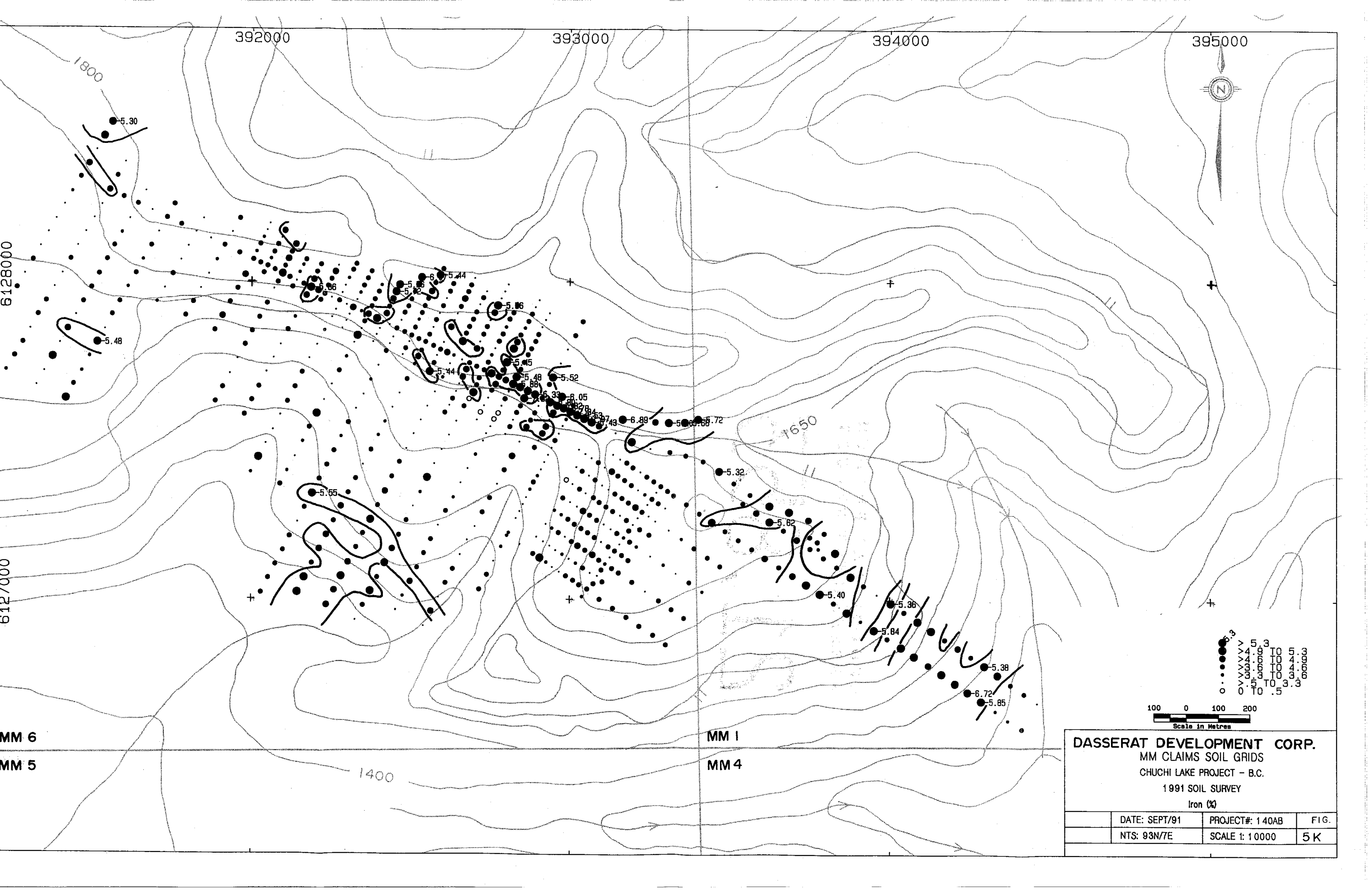
- > 2.4
- > 2 TO 2.4
- > 1.6 TO 2
- > 1.2 TO 1.6
- > .8 TO 1.2
- > .4 TO .8
- 0 TO .4

**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Cadmium (ppm)

DATE: SEPT/91	PROJECT#: 1 40AB	FIG.
NTS: 93N/7E	SCALE 1: 1 0000	5 J

MM 6  
MM 5

MM 1  
MM 4

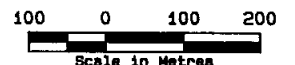
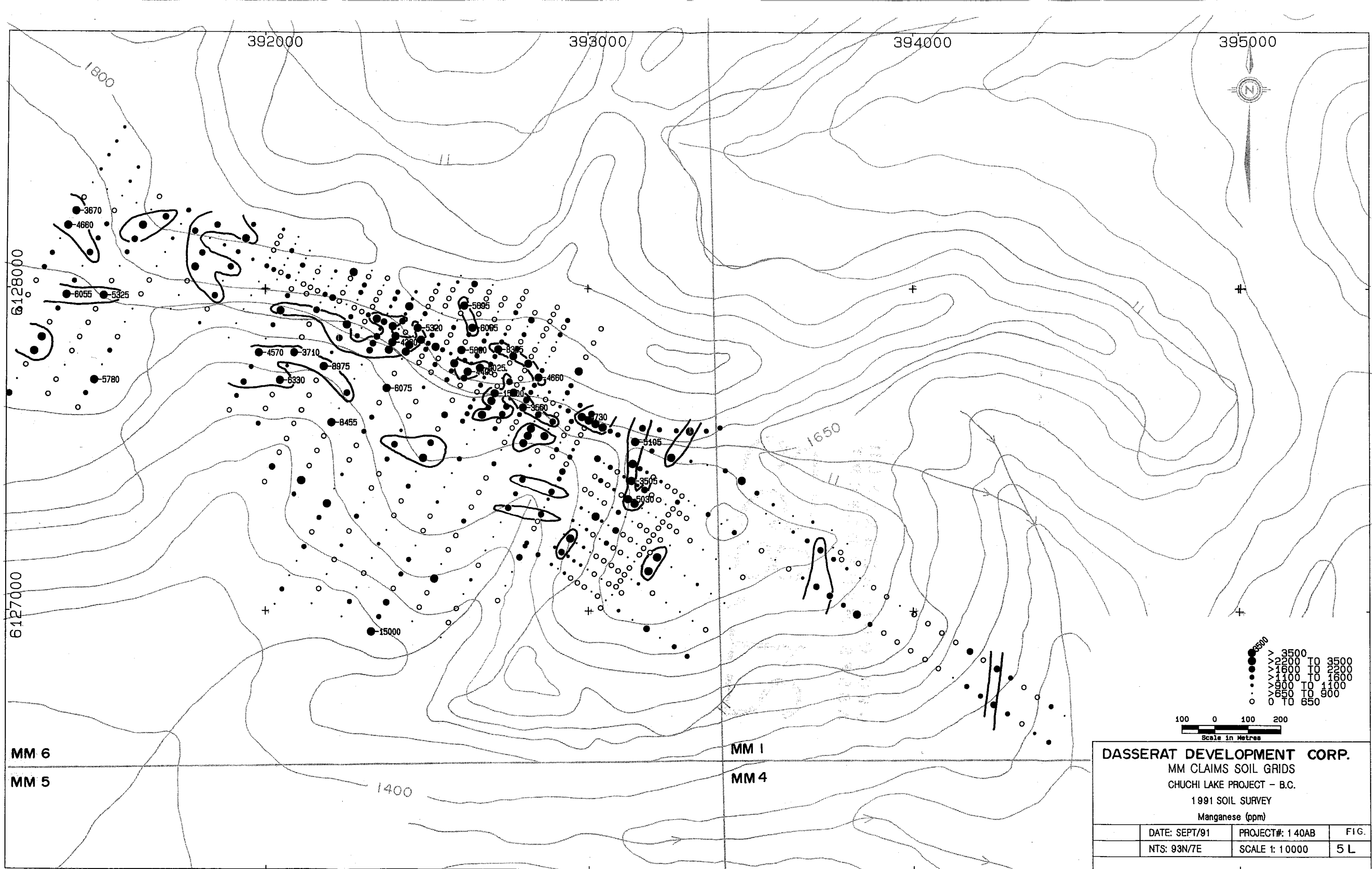


**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Iron (%)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 K

MM 6  
MM 5

MM 1  
MM 4



- > 3500
- > 2200 TO 3500
- > 1600 TO 2200
- > 1100 TO 1600
- > 900 TO 1100
- > 650 TO 900
- 0 TO 650

<b>DASSERAT DEVELOPMENT CORP.</b>		
MM CLAIMS SOIL GRIDS		
CHUCHI LAKE PROJECT - B.C.		
1991 SOIL SURVEY		
Manganese (ppm)		
DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 L

MM 6  
MM 5

MM 1  
MM 4

392000

393000

394000

395000

6128000

6127000

1800

1650

1400

3670

4660

6055

5325

4570

3710

8975

6330

6075

5895

6095

5880

8375

4200

5025

4660

15000

3560

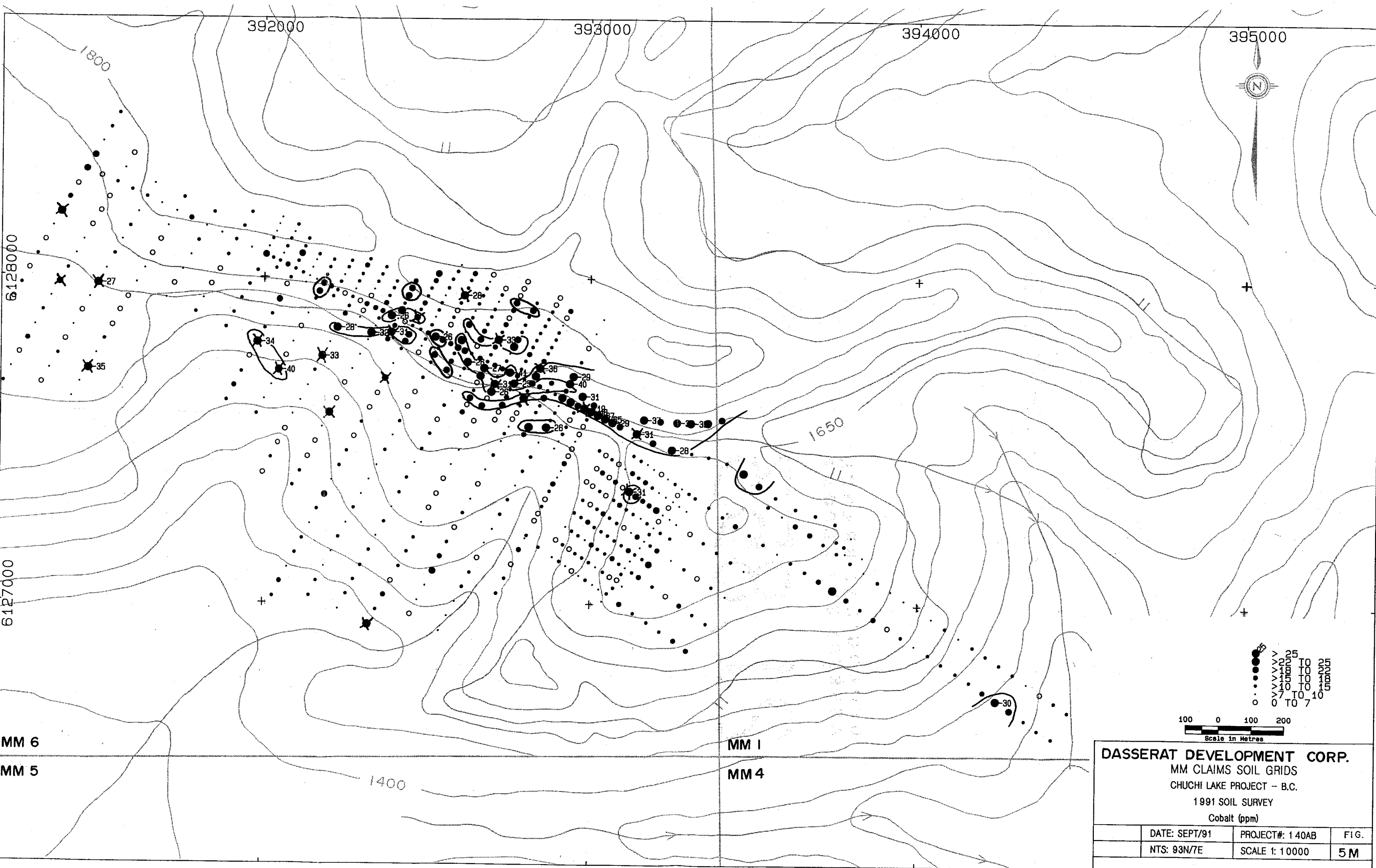
730

5105

3505

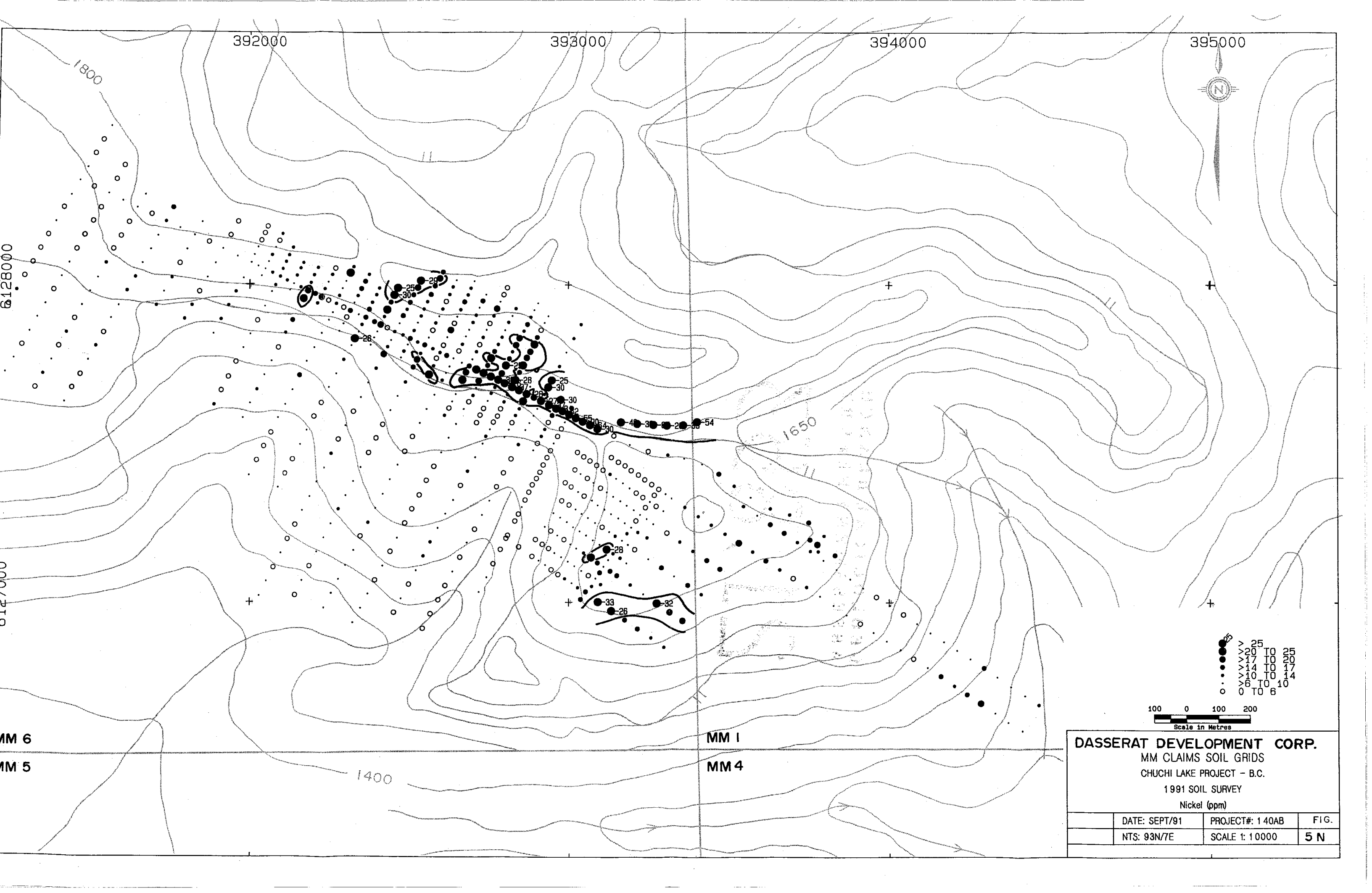
5030

15000



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Cobalt (ppm)

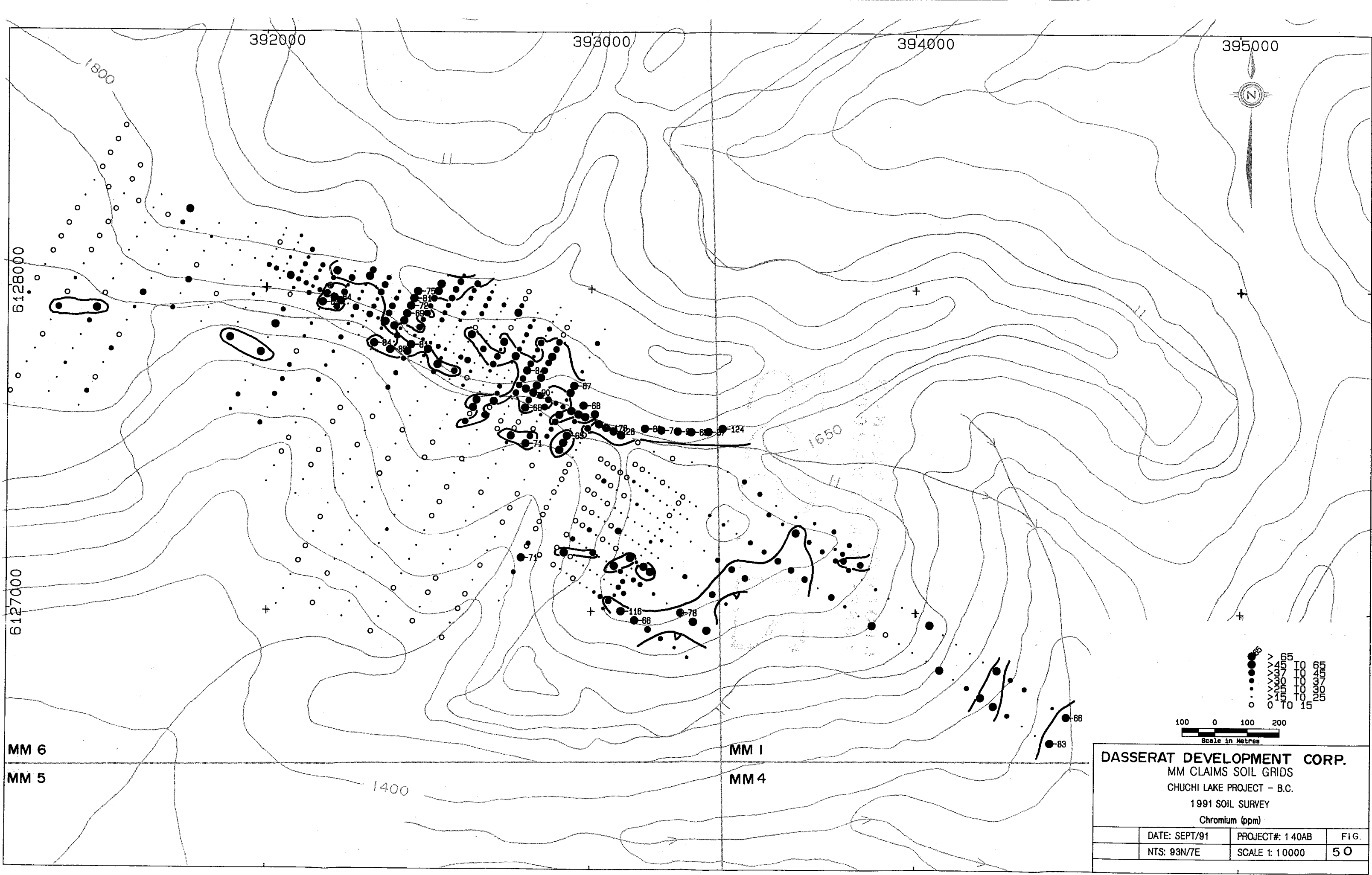
DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5M



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Nickel (ppm)

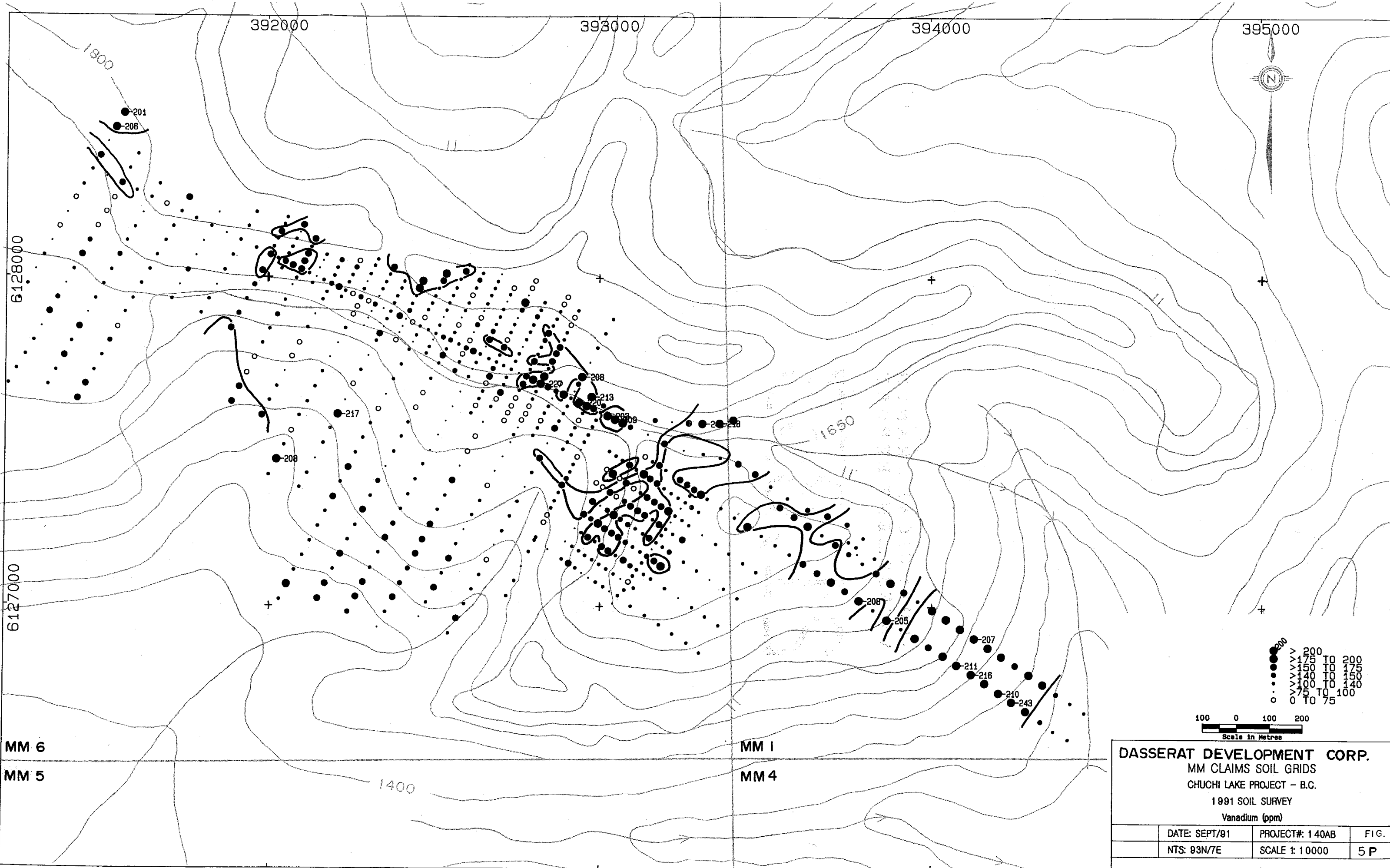
DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 N





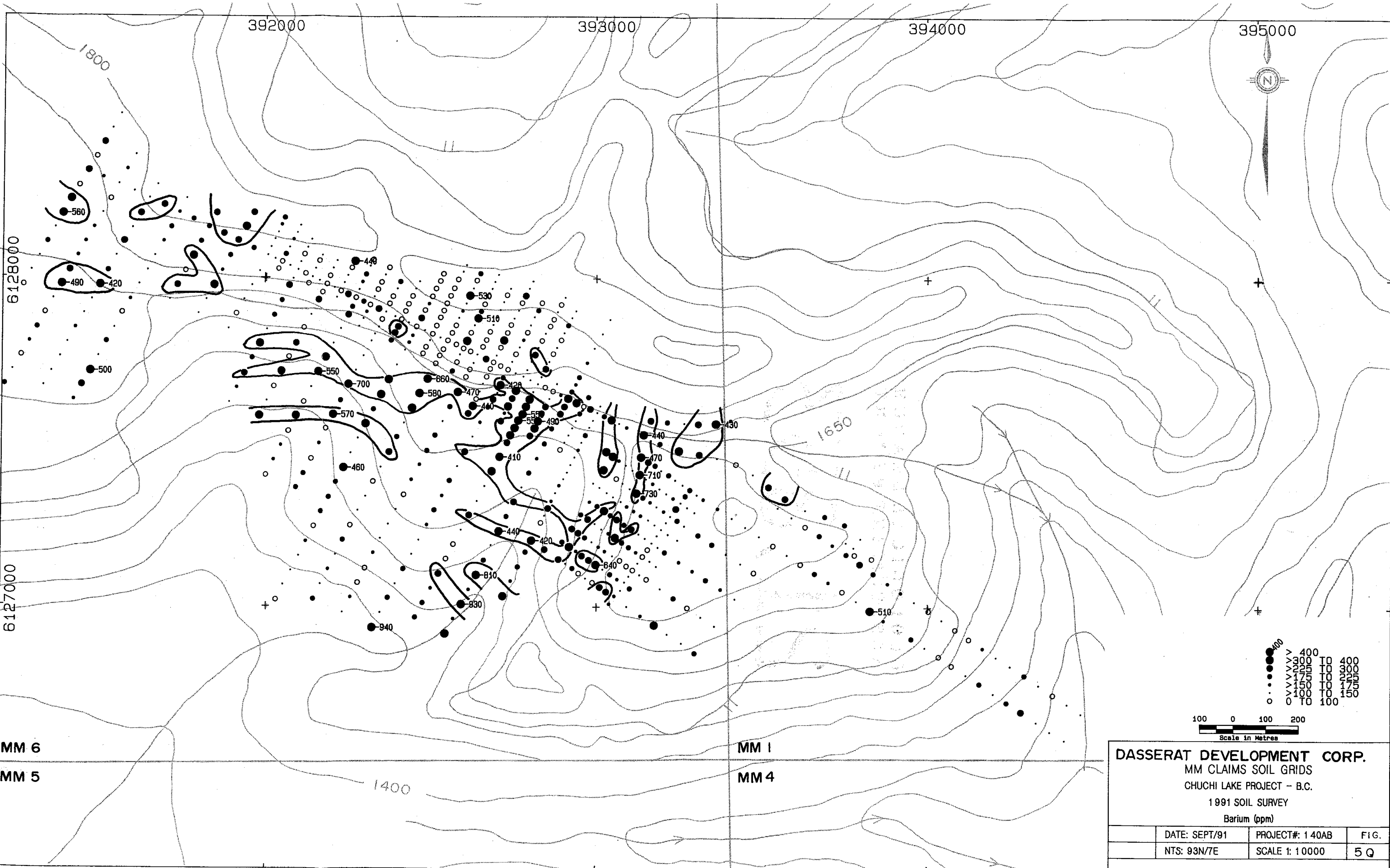
**DASSERAT DEVELOPMENT CORP.**  
MM CLAIMS SOIL GRIDS  
CHUCHI LAKE PROJECT - B.C.  
1991 SOIL SURVEY  
Chromium (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	50



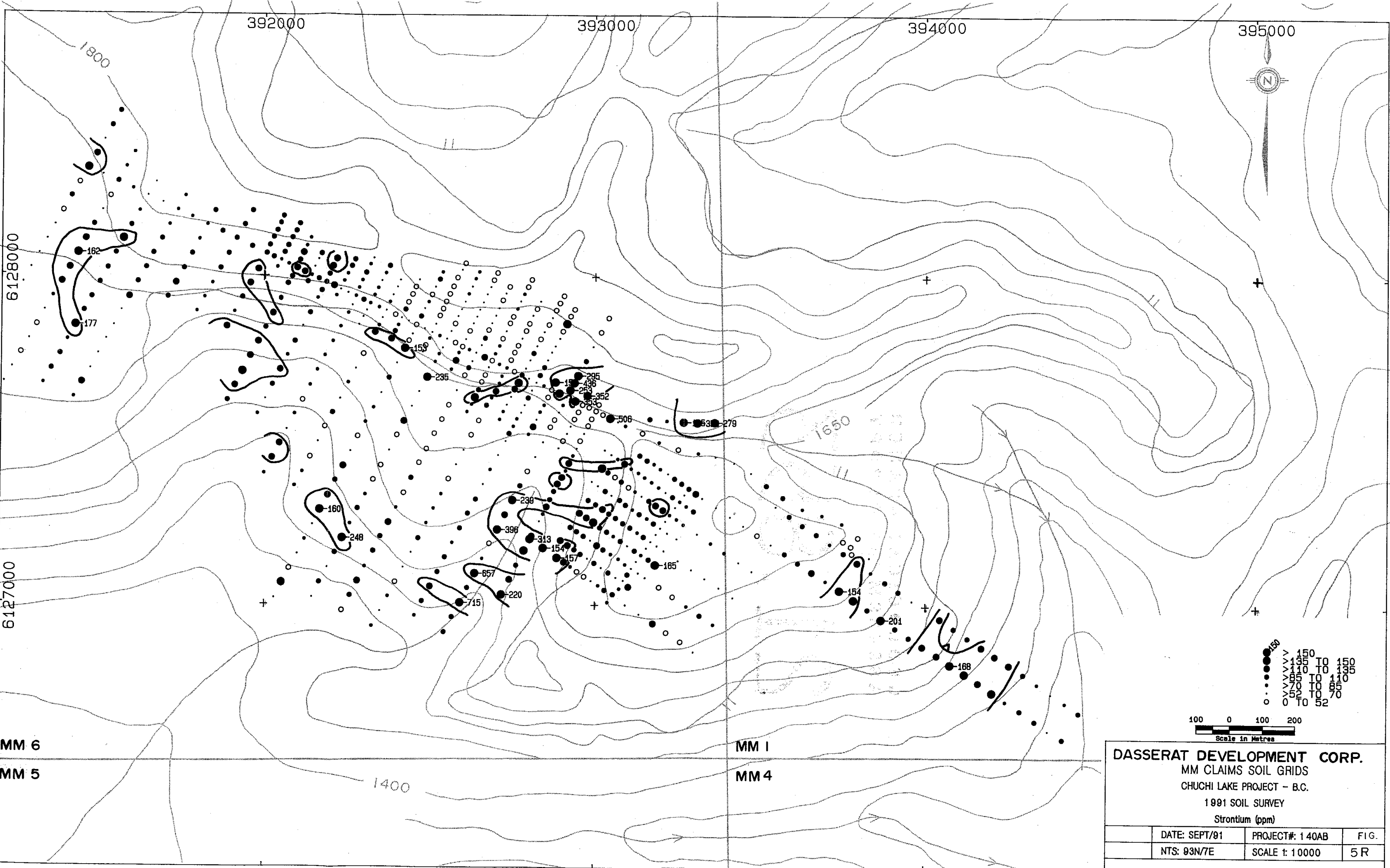
**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Vanadium (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 P



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Barium (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 Q



6128000

6127000

392000

393000

394000

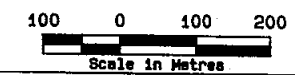
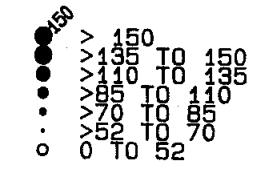
395000

MM 6

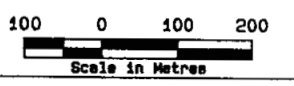
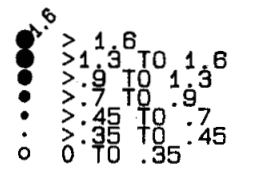
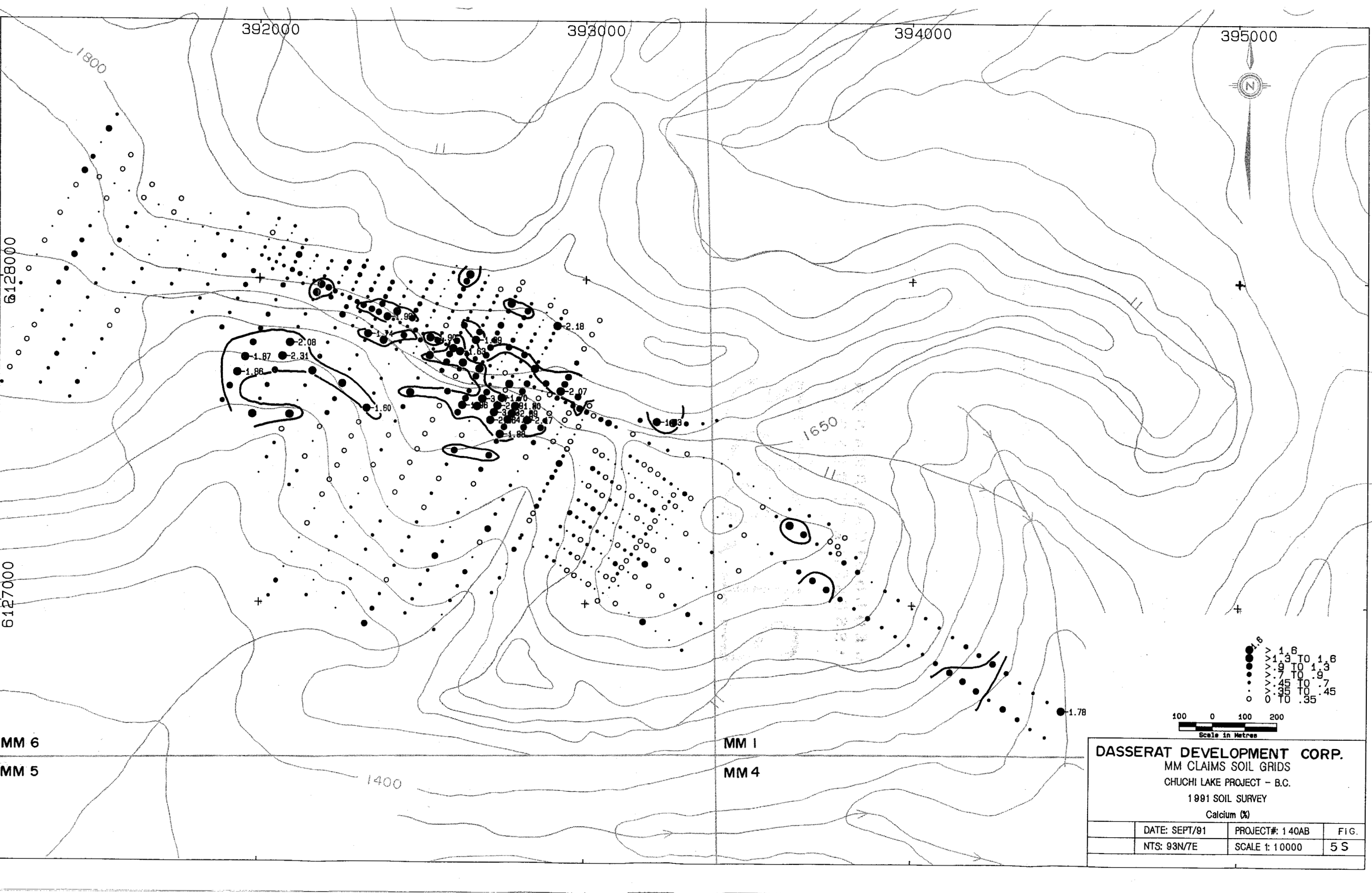
MM 5

MM 1

MM 4



<b>DASSERAT DEVELOPMENT CORP.</b>		
MM CLAIMS SOIL GRIDS		
CHUCHI LAKE PROJECT - B.C.		
1991 SOIL SURVEY		
Strontium (ppm)		
DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 R



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Calcium (%)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 S

MM 6  
MM 5

MM 1  
MM 4

392000

393000

394000

395000



6128000

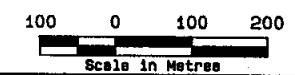
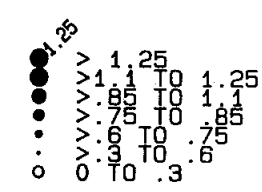
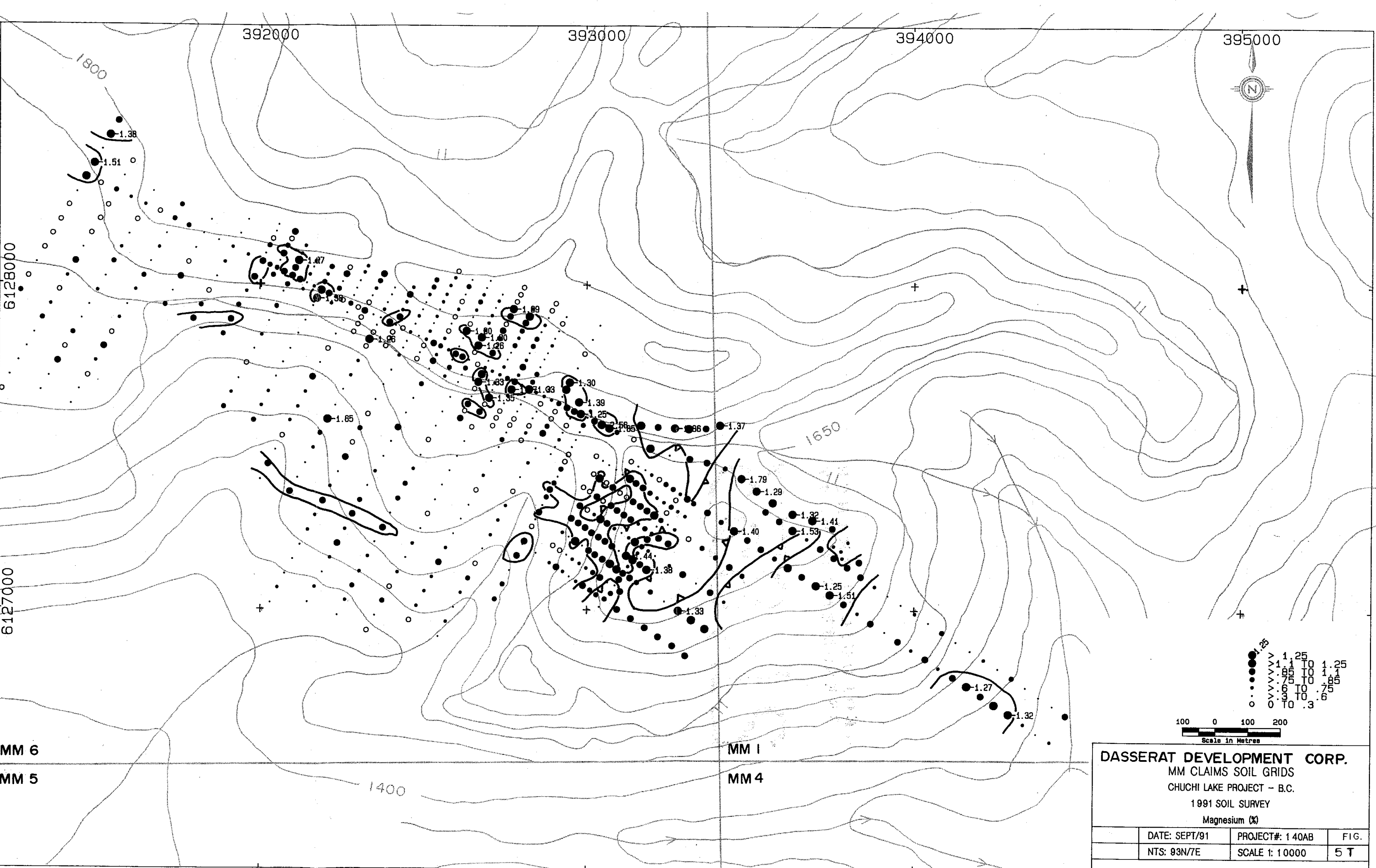
6127000

MM 6

MM 5

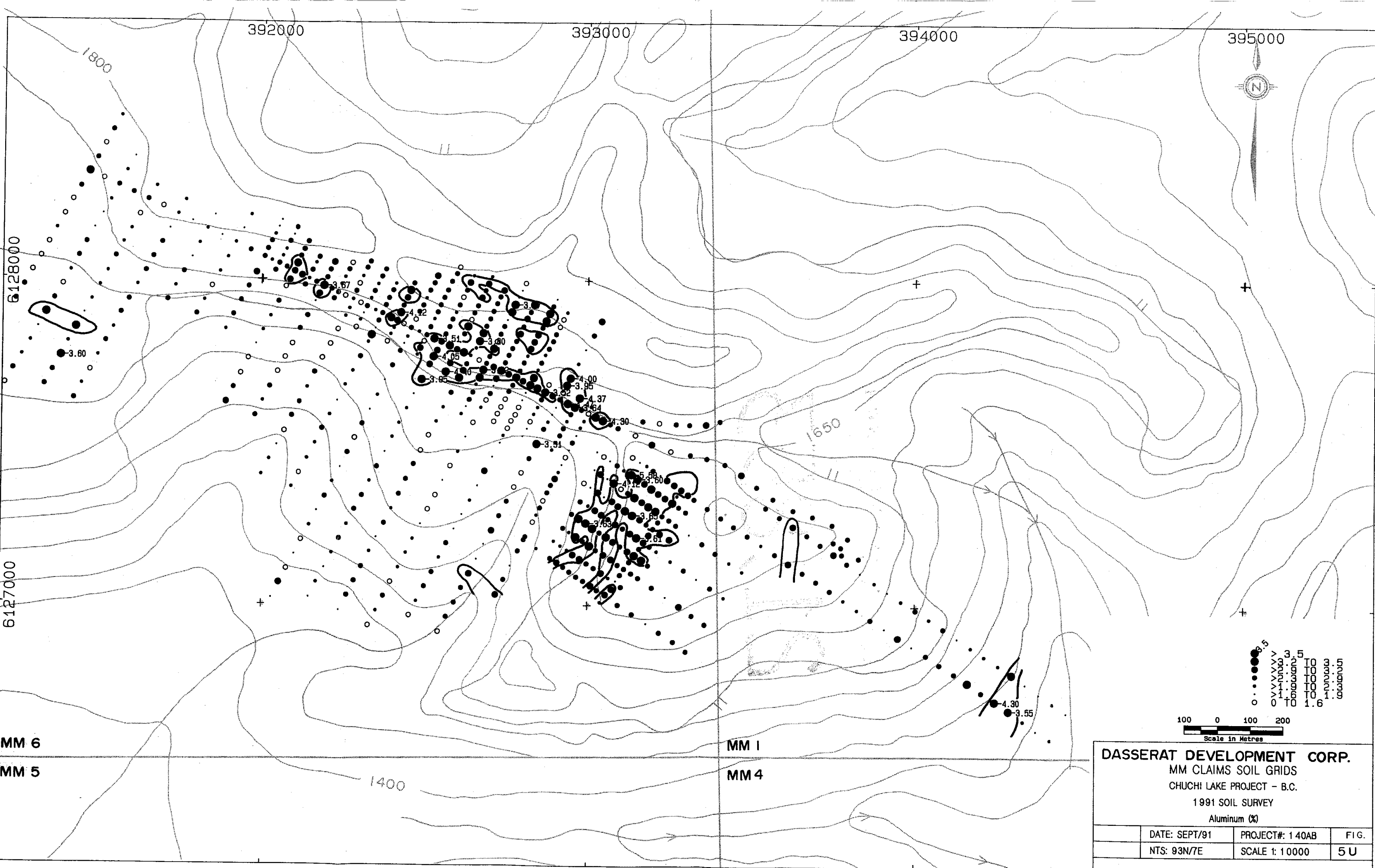
MM 1

MM 4



**DASSERAT DEVELOPMENT CORP.**  
MM CLAIMS SOIL GRIDS  
CHUCHI LAKE PROJECT - B.C.  
1991 SOIL SURVEY  
Magnesium (%)

DATE: SEPT/91	PROJECT#: 1 40AB	FIG.
NTS: 83N/7E	SCALE 1: 10000	5 T



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Aluminum (%)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5U

392000

393000

394000

395000

1800



6128000

6127000

MM 6

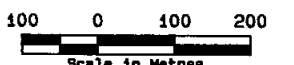
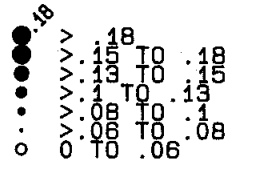
MM 5

MM 1

MM 4

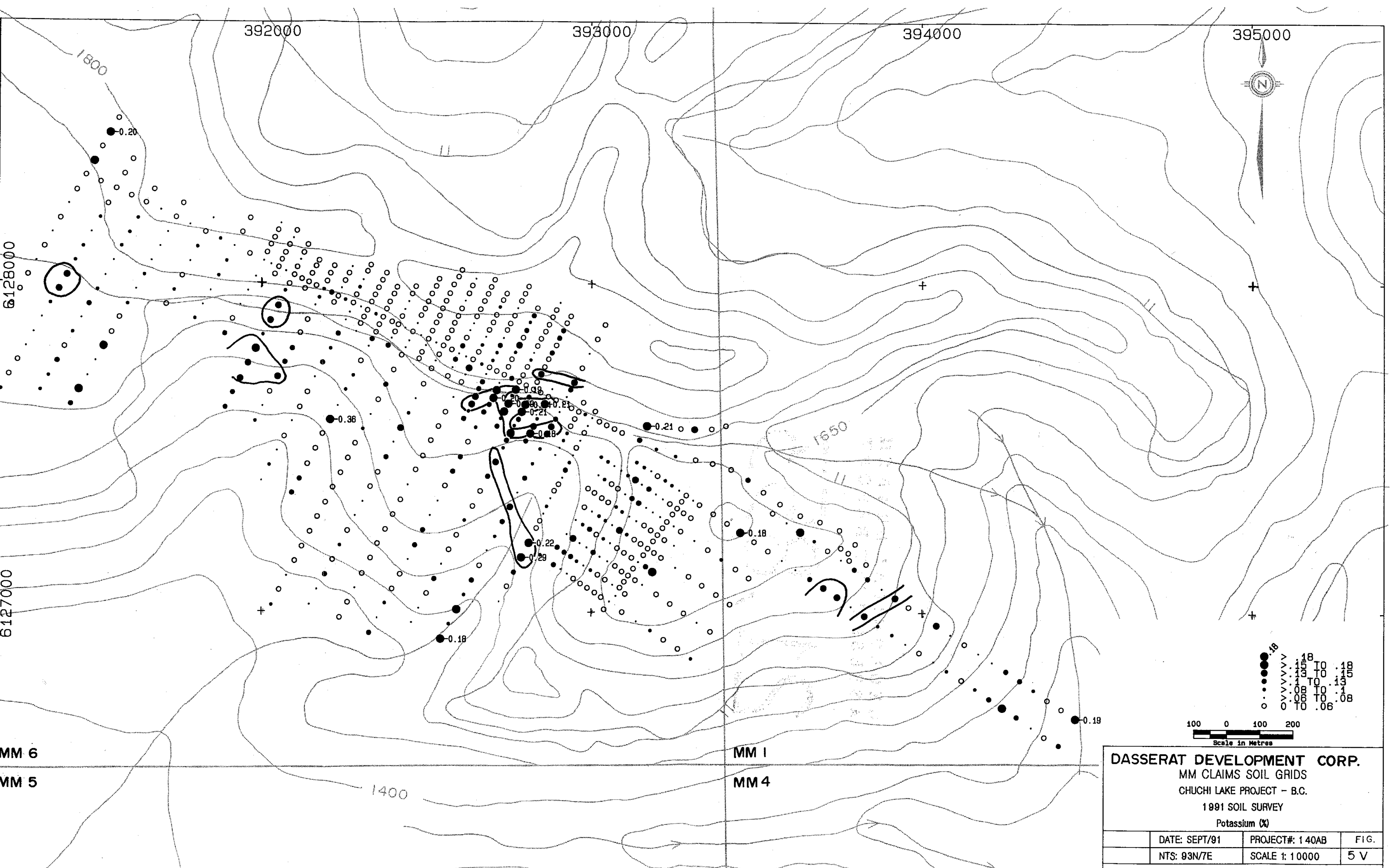
1400

1650

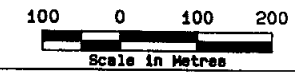
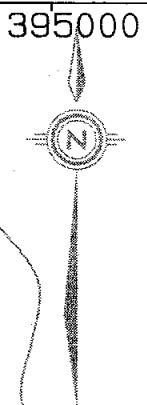
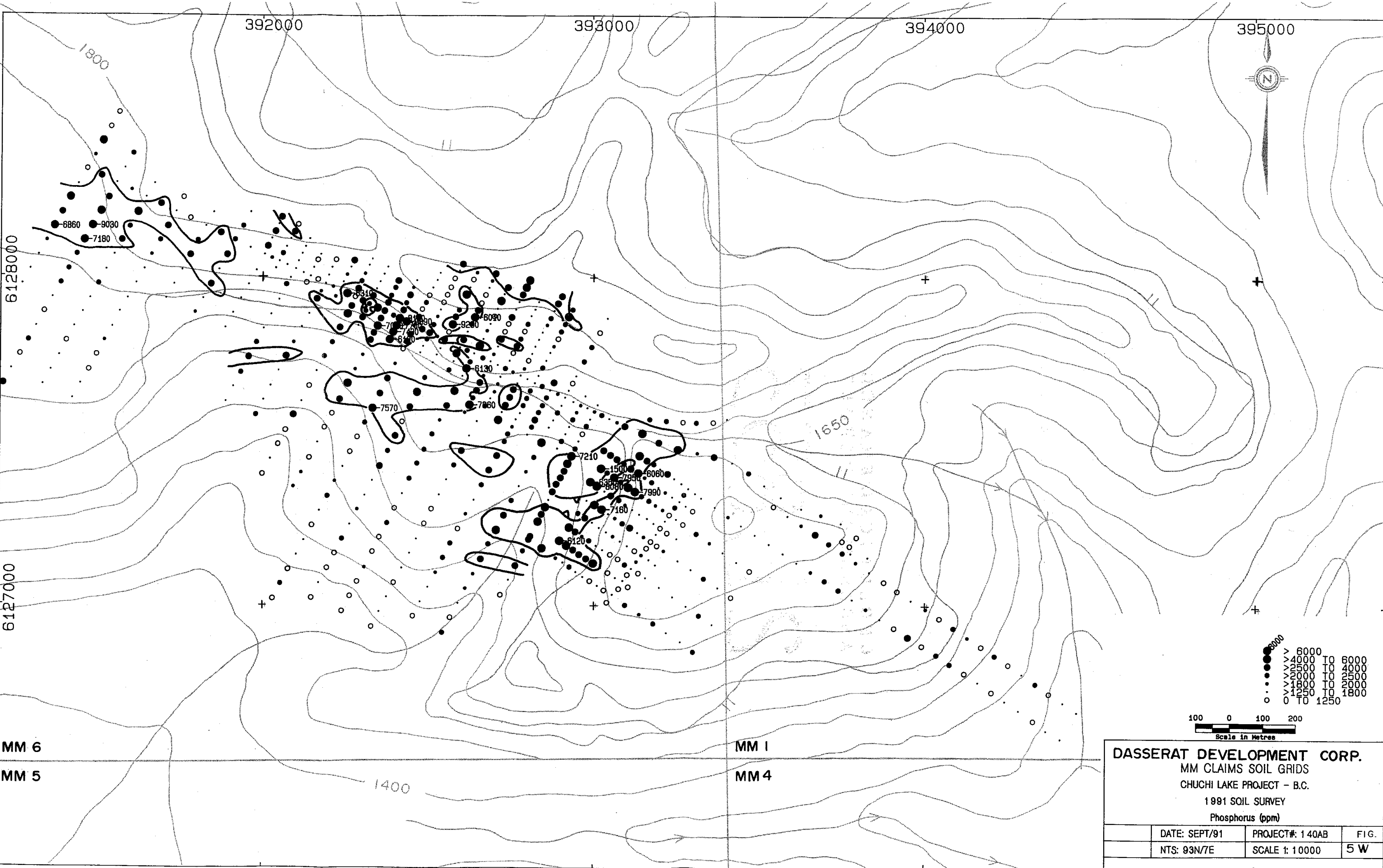


**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Potassium (%)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1:10000	5 V





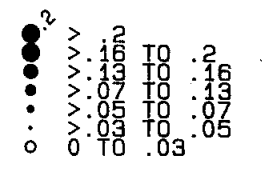
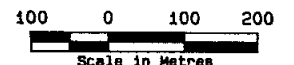
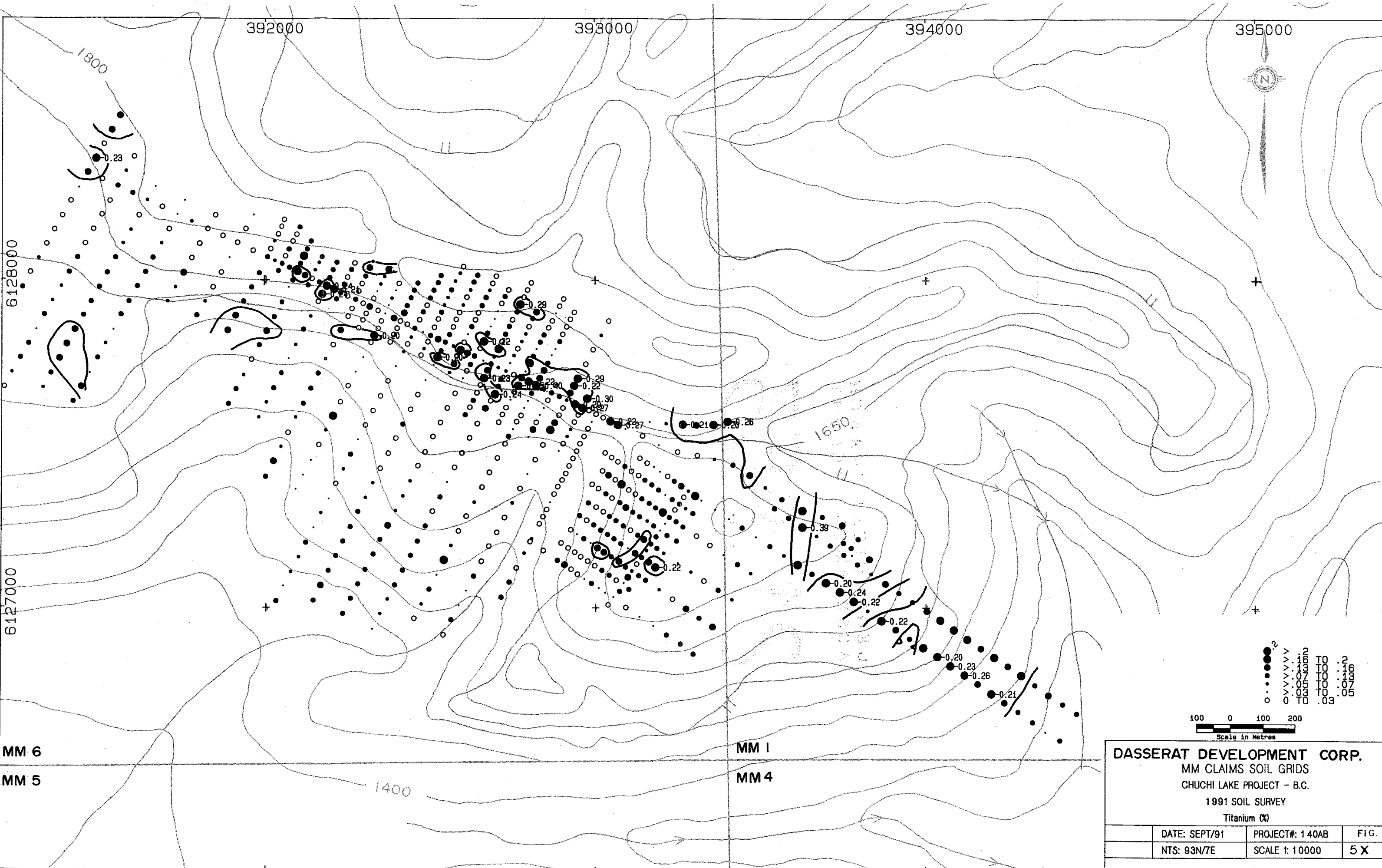


- > 6000
- V 4000 TO 6000
- V 2500 TO 4000
- V 2000 TO 2500
- V 1800 TO 2000
- V 1250 TO 1800
- 0 TO 1250

MM 6  
MM 5

MM 1  
MM 4

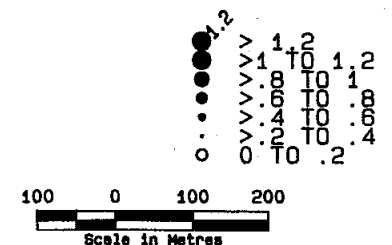
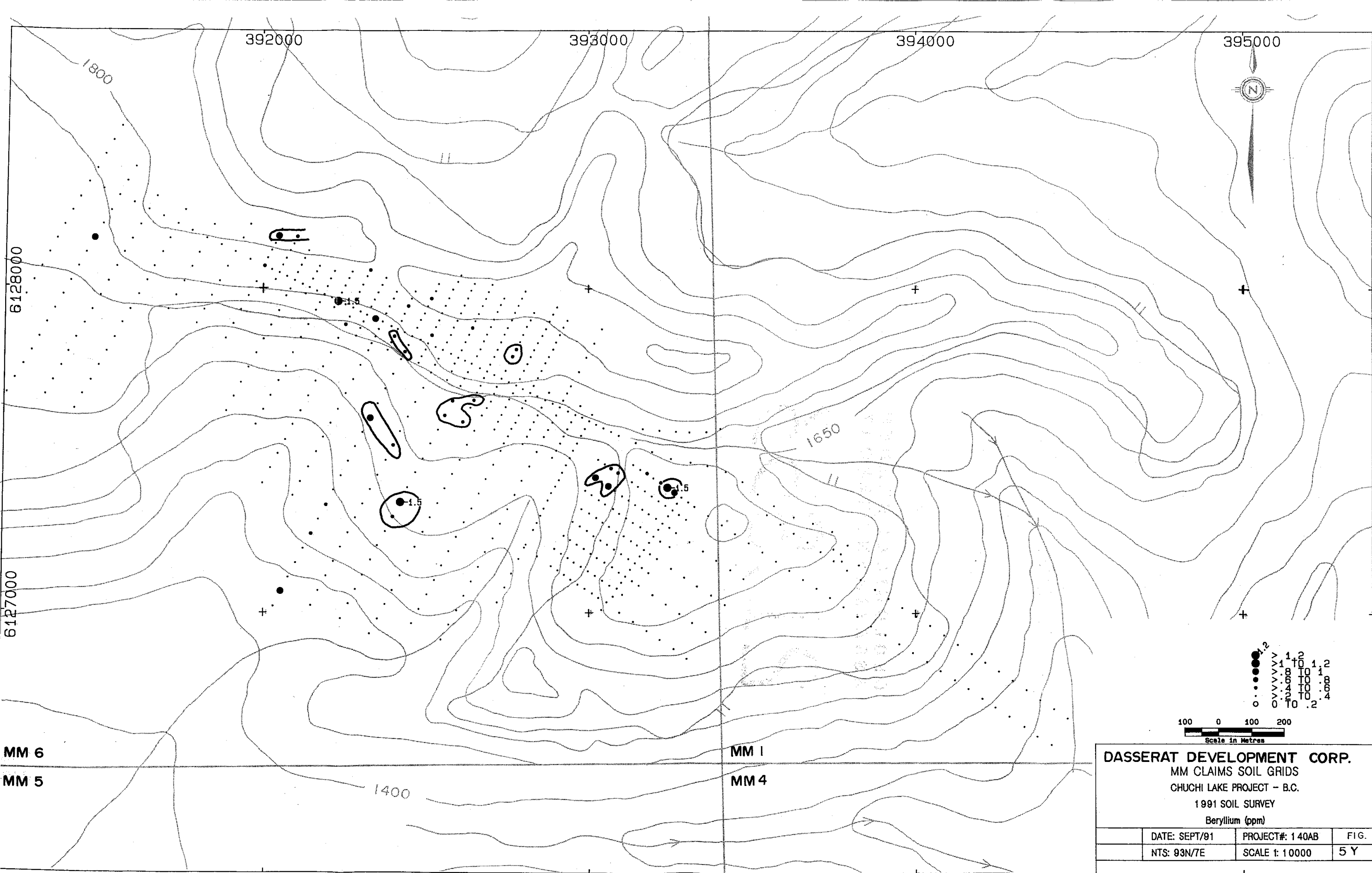
<b>DASSERAT DEVELOPMENT CORP.</b>		
MM CLAIMS SOIL GRIDS		
CHUCHI LAKE PROJECT - B.C.		
1991 SOIL SURVEY		
Phosphorus (ppm)		
DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 W



<b>DASSERAT DEVELOPMENT CORP.</b>		
MM CLAIMS SOIL GRIDS		
CHUCHI LAKE PROJECT - B.C.		
1991 SOIL SURVEY		
Titanium (%)		
DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 X

MM 6  
MM 5

MM 1  
MM 4

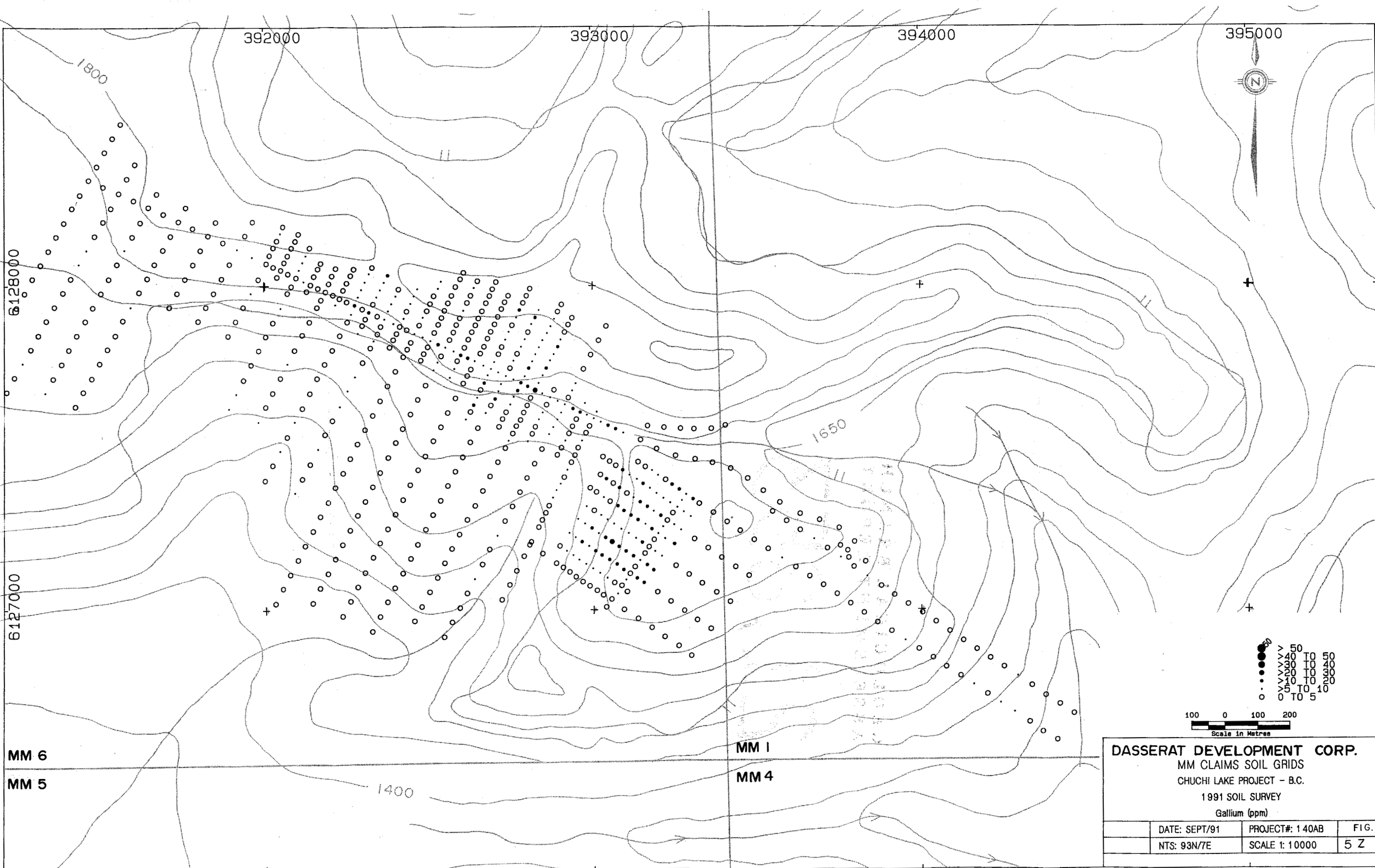


**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Beryllium (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 Y

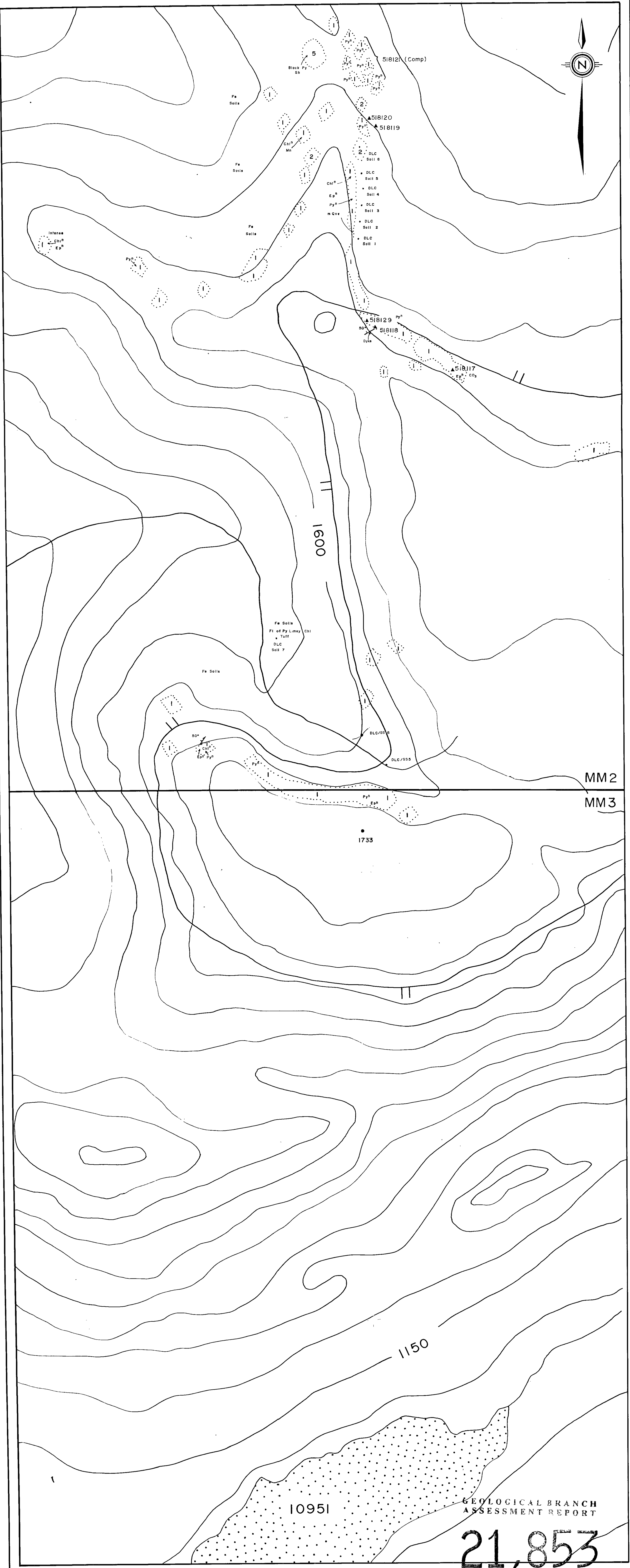
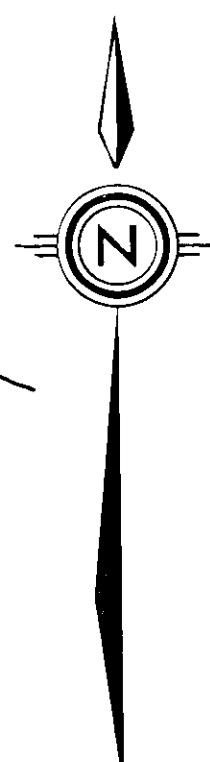
MM 6  
MM 5

MM 1  
MM 4



**DASSERAT DEVELOPMENT CORP.**  
 MM CLAIMS SOIL GRIDS  
 CHUCHI LAKE PROJECT - B.C.  
 1991 SOIL SURVEY  
 Gallium (ppm)

DATE: SEPT/91	PROJECT#: 140AB	FIG.
NTS: 93N/7E	SCALE 1: 10000	5 Z



MM2  
MM3

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

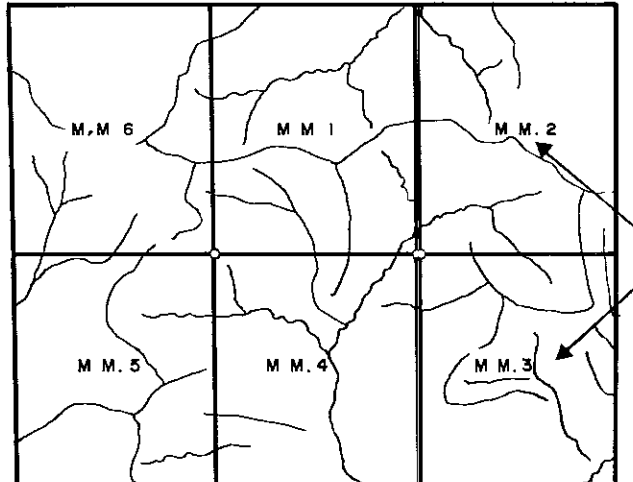
21,853

**LEGEND**

- VOLCANIC ROCKS:**
- 1 Tuff
  - 2 Agglomerate
  - 3 Feldspar Porphyry Andesite
  - 4 Augite Porphyry Andesite
- SEDIMENTARY ROCKS:**
- 5 Mudstone / Grey to Black Sandstone, Shale, Slate
  - 6 Chert (Commonly as narrow bands)
- INTRUSIVE ROCKS:**
- 7 Monzonite
- ALTERATION:**
- Fe Soils Ferruginous Soil
  - Ch<sup>n</sup> Chloritization
  - Ep<sup>n</sup> Epidotization
  - Py Pyritization
  - Mn Manganezation
  - CO Carbonatization
  - Δ Brecciation
- Other Symbols:**
- Geosyncline
  - Geological Contact
  - ⊙ Axis of Synclinal Fold

**INDEX**

MM PROPERTY  
SHEET # 2 MM 2, MM 3 OF 2



- ALTERATION:**
- 50° Strike & Dip of Flower bed
  - 70° Strike & Dip of Joint
  - 50° Strike & Dip of Stickenside (with relative movement)
  - 50° Foliation
  - 50° Strike & Dip of Fault inferred from Geology or Geochemistry
  - 50° Strike & Dip of Fault inferred from Topography
- SAMPLE LOCATION & NO.:**
- 505 \* 555 3# Soil Sample Locations
  - ▲ 518022 Rock Sample
  - DLC/SS4 X 518027 Silt Sample
  - TS/1 Thin Section

DASSERAT DEVELOPMENTS CORP

MM CLAIMS  
OMINECA MINING DIVISION  
CHUCHI LAKE, CENTRAL B.C.  
MAP SHEET 93N/7E

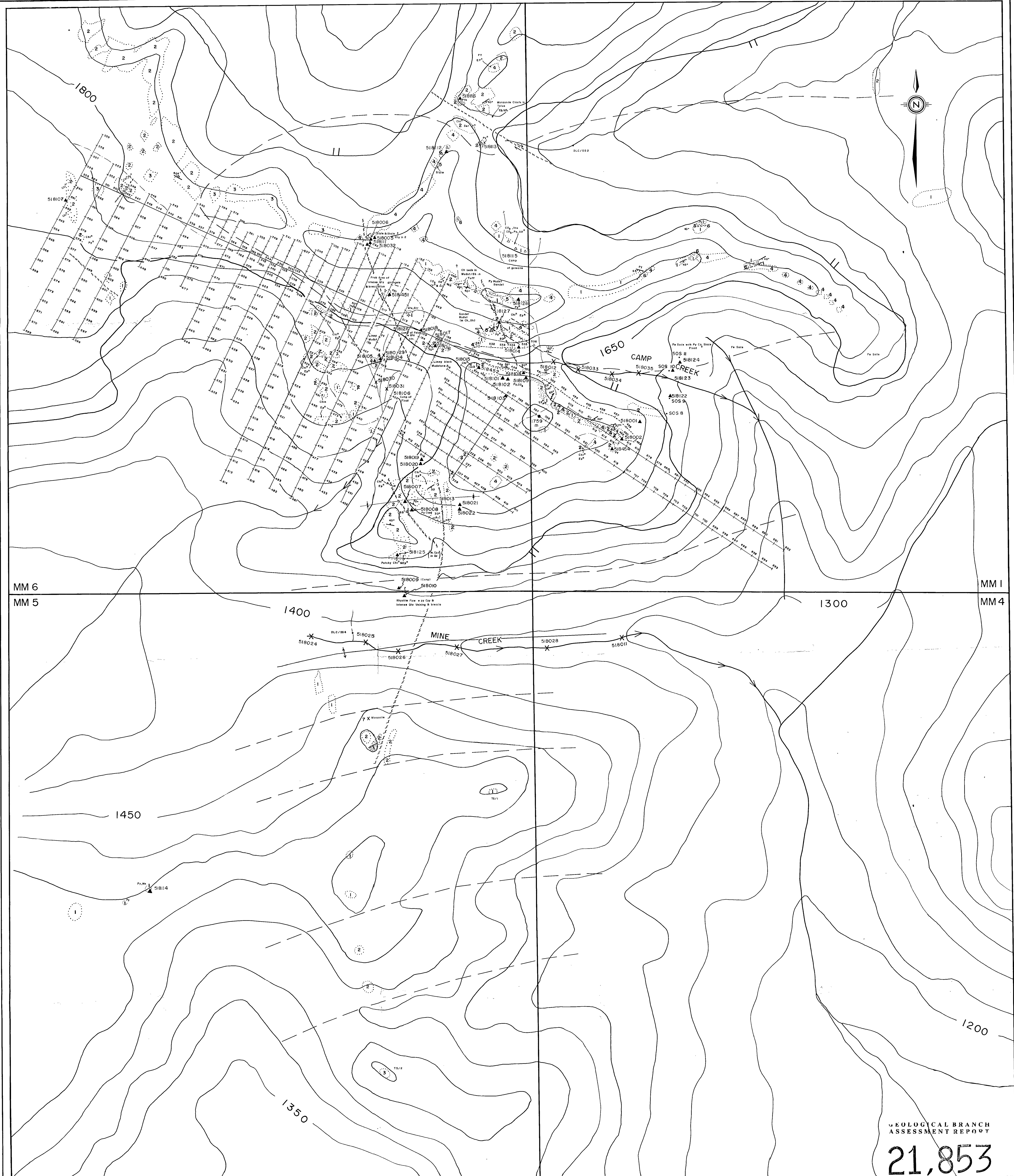
PROPERTY GEOLOGY AND SAMPLES LOCATION MAP

SCALE: 1:5,000

FIGURE: 6

DRAWN BY: D.G.

DATE: OCTOBER, 1991



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

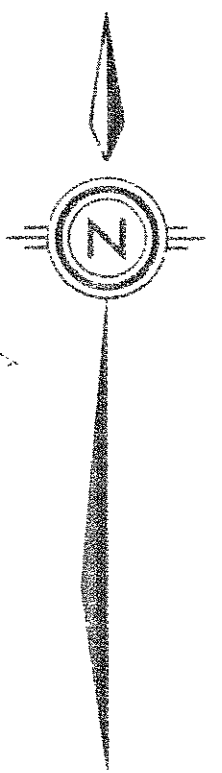
21,853

LEGEND		ALTERATION:		FOLIATION		INDEX	
<b>VOLCANIC ROCKS:</b>		Gossan		Strike & Dip of Fault inferred from Geology or Geochemistry		MM PROPERTY	
1	Tuff	Fe Stain	Ferruginous Soils	Strike & Dip of Fault inferred from Topography	SHEET #1 MM1, 4, 5, 6 OF 2		
2	Agglomerate with or without Pyritic Clasts	Chn	Chloritization	SAMPLE LOCATION & NO.			
3	Feldspar Porphyry Andesite	Ep	Epidotization	Soil Sample Locations	Rock Sample (Comp = Composite over a No. of outcrops)		
4	Augite Porphyry Andesite	Py	Pyritization	Rock Sample	Silt Sample		
<b>SEDIMENTARY ROCKS:</b>		Mn	Manganization	Thin Section			
5	Mudstone / Grey to Black Sandstone, Shale, Slate	Co	Carbonatization				
6	Chert (Commonly as narrow bands)	B	Brecciation				
<b>INTRUSIVE ROCKS:</b>		Geological Contact					
7	Monzonite	Ax	Axis of Synclinal Fold				
		F	Strike & Dip of Flow or Bed				
		J	Strike & Dip of Joint				
		S	Strike & Dip of Slickenside (with relative movement)				
		L	Limit of Alteration				

DASSERAT DEVELOPMENTS CORP

MM CLAIMS  
OMNECA MINING DIVISION  
CHUCHI LAKE, CENTRAL B.C.  
MAP SHEET 93N/7E  
PROPERTY GEOLOGY AND SAMPLES LOCATION MAP

SCALE: 1:5,000	FIGURE: 6
DRAWN BY: D.G.	DATE: OCTOBER, 1991



(5,0-2,5,51,8,74

▲(5,0-2,5,42,2,70

▲(5,0-2,5,93,16,92

• (5,0-2,5,49,6,74

• 20,0-2,5,72,10,98

• 150,0-2,5,71,22,100

• (5,0-2,5,132,8,92

• (5,0-2,5,98,12,102

• (5,0-2,5,215,10,90

▲(5,0-2,5,144,14,84

▲(5,0-2,5,109,2,22

▲(5,0-2,20,155,6,64

1600

• (5,0-2,5,169,4,82

• 35,0-2,5,96,16,94

• (5,0-2,5,98,16,268

MM 2

MM 3

1733

1150

10951

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

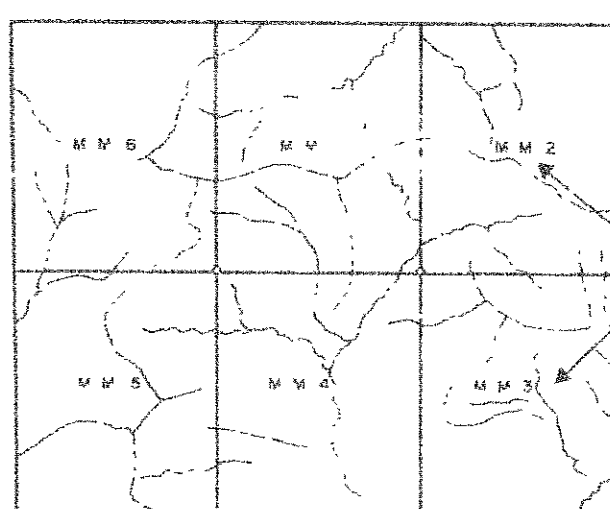
21,853

**LEGEND**

ASSAY RESULTS: Gold, Silver, Arsenic, Copper, Lead, Zinc.  
ppb, ppm, ppM, ppm, ppm, ppm.

**INDEX**

MM PROPERTY  
SHEET 2 of 2



SHEET 2

DASSERAT DEVELOPMENTS CORP

MM CLAIMS

OMINECA MINING DIVISION

CHUCHI LAKE, CENTRAL B.C.

MAP SHEET 93N/7E

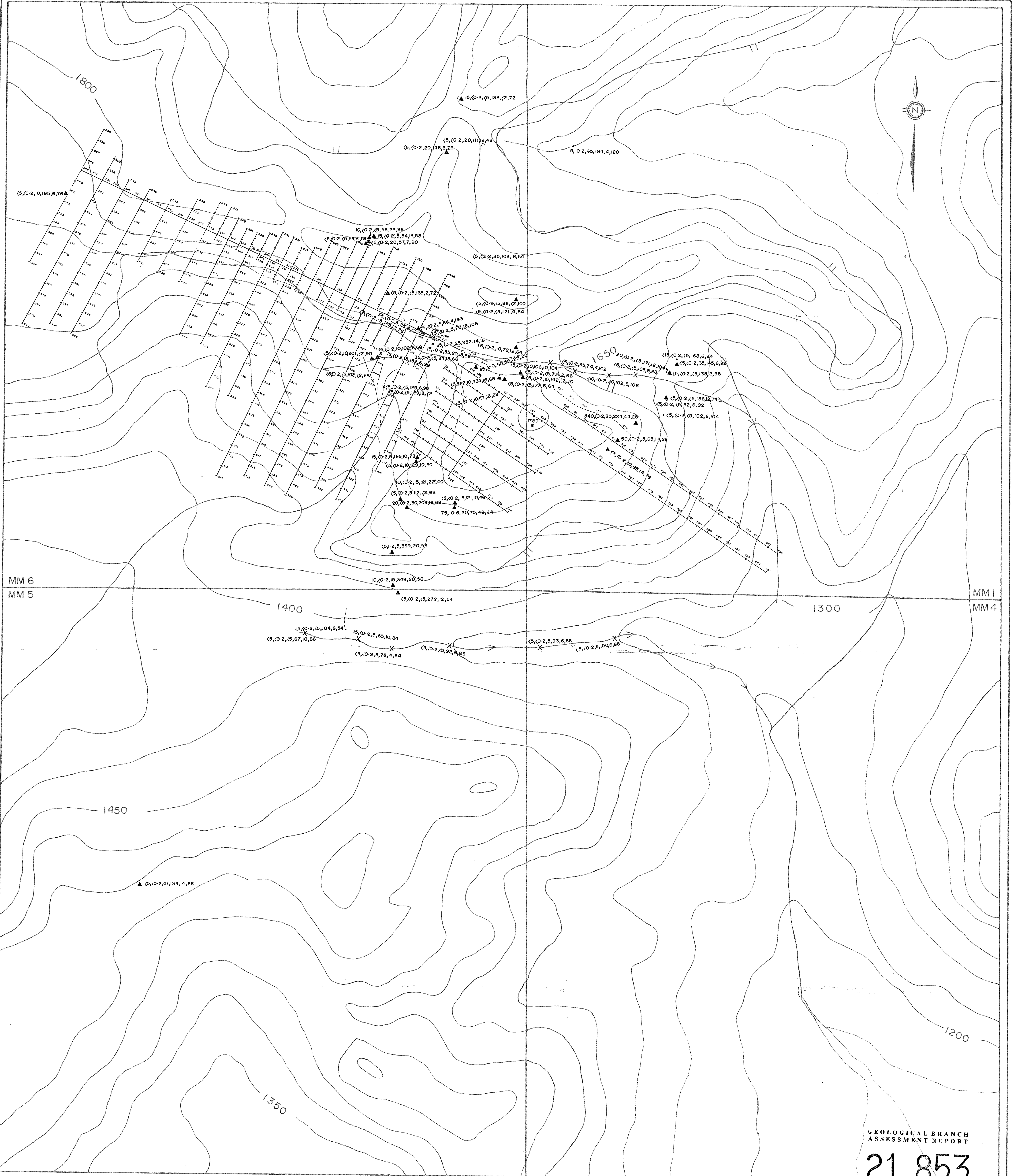
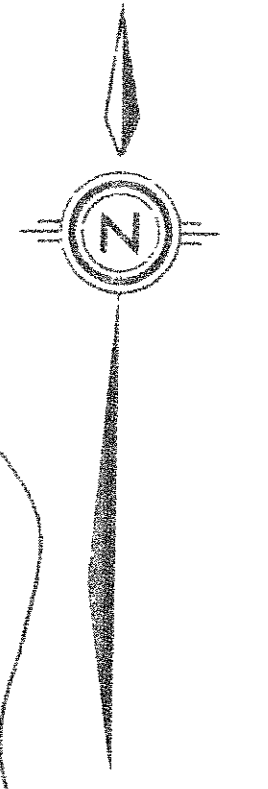
ROCK, SOIL & SILT SAMPLES LOCATION MAP AND ASSAY RESULTS

SCALE: 1:5,000

FIGURE 7

DRAWN BY: D. G.

DATE: OCTOBER, 1991



MM 6  
MM 5

MM 1  
MM 4

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

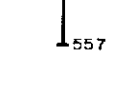
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**LEGEND**

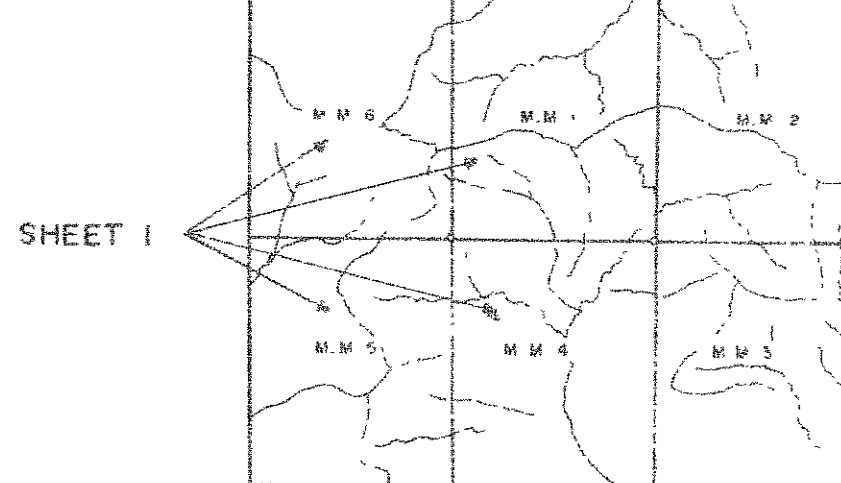
**ASSAY RESULTS:**

5, 0-2, 5, 121, 10, 46  
Gold, Silver, Arsenic, Copper, Lead, Zinc,  
ppb, ppm, ppm, ppm, ppm, ppm.

Soil Sample Results are included in the  
Oct, 1991 Report of R. Arnold.



**INDEX**  
MM PROPERTY  
SHEET 1 of 2



**DASSERAT DEVELOPMENTS CORP**

MM CLAIMS  
OMINECA MINING DIVISION  
CHUCHI LAKE, CENTRAL B.C.  
MAP SHEET 93N/7E

**ROCK, SOIL & SILT SAMPLES LOCATION MAP AND ASSAY RESULTS**

SCALE 1:5,000	FIGURE 7
DRAWN BY: D. G.	DATE: OCTOBER, 1991