1981 ASSESSMENT REPORT

Geology, Geochemistry and Geophysics
on the

Ta Hoola 1 (3332), Ta Hoola 2 (3333), Ta Hoola 3 (3334)
Ta Hoola 4 (3335), Ta Hoola 5 (3336), Ta Hoola 6 (3337)
Ta Hoola 7 (3338), Ta Hoola 8 (3339), Ta Hoola 9 (3572)
Ta Hoola 10 (3856), Ta Hoola 11 (3857), Ta Hoola 12 (3858)
and Ta Hoola 13 (3859) Claims

Kamloops Mining Division

Latitude: 51° 36' N
Longitude: 120° 28' W
NTS Location: 92 P-9W/10E

Owner and Operator: SMD Mining Co. Ltd.
330-1130 West Pender St.
Vancouver, B.C. V6E 4A4

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Vancouver, B.C.

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SUMMARY

The Ta Hoola property, consisting of 13 claims comprising 190 units was staked in 1981 to cover an area of lead, silver, copper and molybdenum mineralization. The potential exists for finding any or all of the following deposit types on the Ta Hoola claims:

(1) Bulk-tonnage silver and lead ± copper deposit
(2) Gold-rich porphyry copper deposit
(3) Porphyry copper-molybdenum deposit

Field work in 1981 consisted of 154 km of line cutting, chaining and flagging; soil and rock geochemical surveys consisting of 1608 soil samples analyzed for gold, silver, copper, lead, zinc and molybdenum, and 488 rock samples analyzed, all or in part, for gold, silver, lead, copper, zinc, molybdenum, nickel, cobalt, arsenic, antimony and cadmium; 32 km of ground magnetic survey; 35 km of VLF survey; and geological mapping at 1:5 000 scale over the Ta Hoola 1-6 claims.

Geological mapping on the property has outlined the Upper Triassic (Nicola Group) and Lower to Middle Jurassic volcanic and sedimentary stratigraphy. The interbedded volcanic flows, pyroclastic and epiclastic rocks have been intruded by a syenite stock and several diorite plugs. The volcanic rocks adjacent to the syenite stock have been crackle-brecciated and altered to a biotite hornfels.

The rocks around the syenite stock and diorite plugs have undergone varying degrees of alteration and pyritization accompanied by disseminated and fracture filling chalcopyrite, galena, molybdenite, and pyrrhotite.

The rocks on the Ta Hoola 1-6 claims have been folded and block faulted. Tight, isoclinal folding with minor inclined folds is inferred from the sedimentary rocks in the northeastern part of the claims. The fold axes trend 120° to 140°, parallel to the strike of the beds, but their plunge is not known. A large fault zone trending 130° to 140°. roughly parallels the contact between the predominantly volcanic and volcanic-epiclastic facies.

Soil geochemical surveys on the Ta Hoola 1-9 claims identified four gold anomalies. One coincides

with silver, lead and zinc soil anomalies, whereas the other three are mono-element anomalies.

Soil sampling also confirmed and enhanced previously discovered silver, lead, copper and molybdenum anomalies on the Ta Hoola 1-6 claims. A copper (+ minor gold) (Cu-7) and a zinc only (Zn-3) anomaly were found on the Ta Hoola 9 claim. A low intensity, mono-element lead (Pb-5) anomaly was identified on the Ta Hoola 8 claim.

Trace element analyses of rock samples collected from outcrops on the Ta Hoola 1-6 claims indicate substantial enrichment of silver, lead, copper, molybdenum, nickel and arsenic has occurred in four main areas on the claims and reflect two styles of mineralization. These enriched zones include:

(1) Area east and southeast of the syenite stock
(2) Area along the andesite-siltstone contact
(3) Area of strong pyritization extending southwest from the andesite-siltstone contact
(4) Southwest corner of the claims

The silver and base metal enrichment in (1) and (4) above, may reflect a porphyry copper environment similar to the Afton or Cariboo-Bell copper deposits.

Precious and base metal enrichment in (2) and (3) suggest an exhalative-type environment where metals appear to have been deposited from hydrothermal fluids near a volcanic-sedimentary interface during on-going deposition of the sediments.

The soil geochemical data corroborates the theory that the metal enrichment may have resulted from processes related to the andesite-siltstone contact. In other parts of the Ta Hoola 1-6 claims, silver and base metal soil anomalies correlate with areas of silver, lead, copper and molybdenum enrichment.

The ground magnetic survey over the northern part of the Ta Hoola 1-6 claims successfully outlined the syenite stock, but was less successful in distinguishing between volcanic and sedimentary rocks, identifying fault zones or outlining strongly altered areas. This was because the magnetic data was strongly biased by the wide line spacing and close

station interval. A closer line spacing and wider station interval would resolve the problem.

The VLF orientation survey results are very noisy and produced a complex pattern of conductor axes. Five strong conductors and several weaker ones were found in an overburden covered area, possibly reflecting conductive structures and/or sulphide mineralization zones. A more detailed survey at 100 m line spacing is required.

More work is needed to further define the anomalous zones identified to date, particularly those around the syenite stock and diorite plugs, and along the volcanic-sedimentary interface. An integrated program of detailed mapping, soil and rock geochemistry and geophysics will be required to explore for precious and base metals in these zones prior to drill testing.

INTRODUCTION

General

This report describes field work undertaken on the Ta Hoola claims between May and October, 1981 to explore for bulk silver and lead deposits and to assess the potential for gold-rich copper deposits associated with syenitic intrusives.

Work carried out included: geological mapping, geochemical soil and rock sampling, ground magnetometer and VLF surveying, and line cutting. Soil sampling and line cutting were done on Ta Hoola 1-9 claims, whereas geological mapping and rock sampling were carried out only on Ta Hoola 1-6 claims. Ground magnetometer and VLF surveying were performed over the northern and southern parts respectively, of Ta Hoola 1-4 claims.

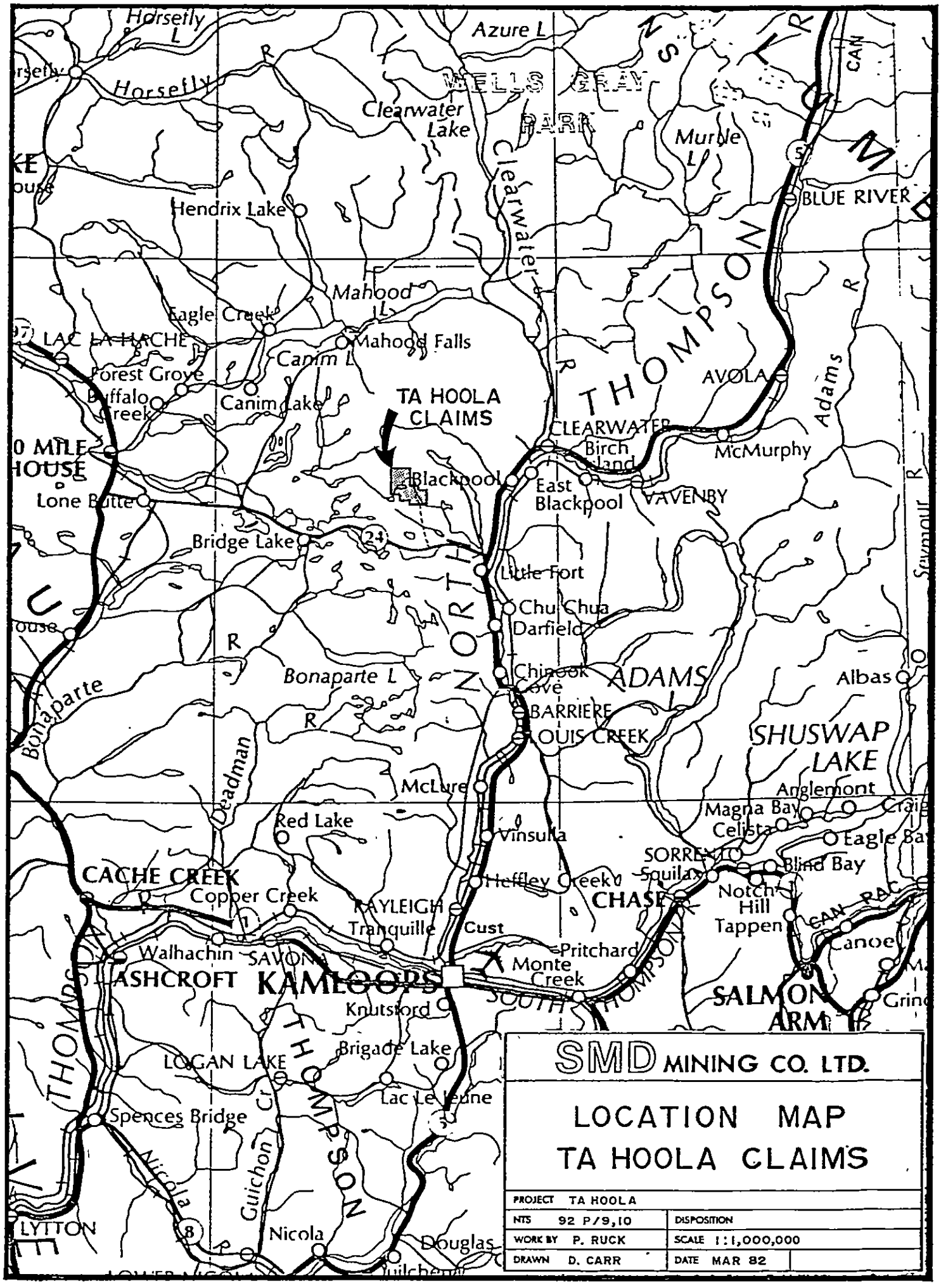
Location and Access

The Ta Hoola claims are located at latitude 51°35'N; longitude 102°27'W, 26 km northwest of Little Fort, B.C. (Fig. 1). Access to the property is via Highway No. 24 west from Little Fort for 17.6 km, then north along the Balco Logging Company road for about 16 km and continuing for another 9 km along an old drill road to Friendly Lake. A four-wheel drive vehicle is necessary in wet weather conditions.

Property

SMD Mining Co. Ltd. staked 13 mineral claims comprising 190 units in 1981. Ta Hoola 1-8 mineral claims were staked in March, Ta Hoola 9 claim was staked in June and Ta Hoola 10-13 claims were staked in September, (Figure 2). The claim names, record numbers, recording dates and number of units are as follows:

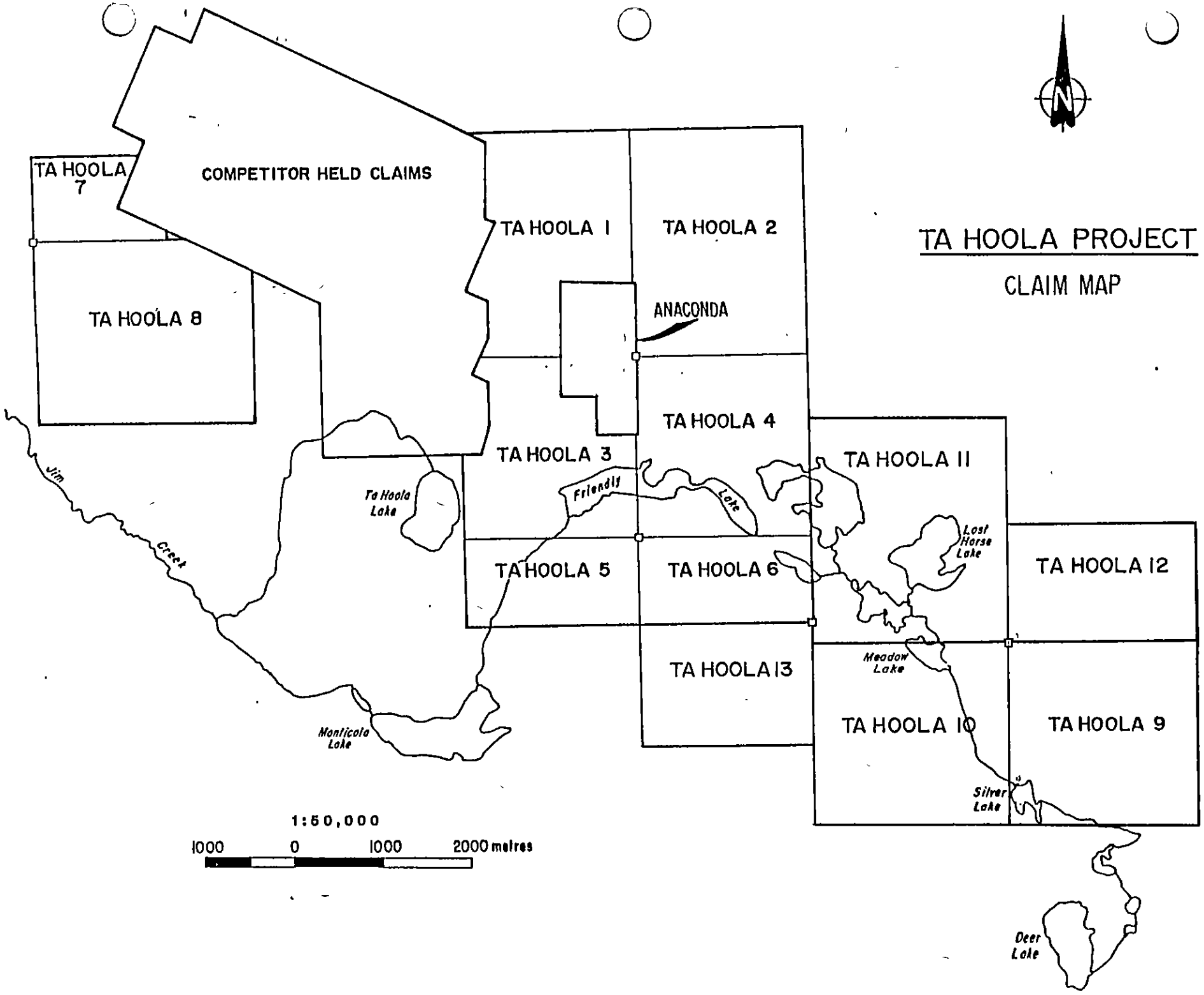
Name	Record No.	Date of Recording	No. of Units
Ta Hoola 1	3332	81/03/17	20
Ta Hoola 2	3333	81/03/17	20
Ta Hoola 3	3334	81/03/17	16
Ta Hoola 4	3335	81/03/17	16



SMD MINING CO. LTD.

LOCATION MAP
TA HOOLA CLAIMS

PROJECT TA HOOLA	
NTS 92 P/9,10	DISPOSITION
WORK BY P. RUCK	SCALE 1:1,000,000
DRAWN D. CARR	DATE MAR 82


TA HOOLA PROJECT
CLAIM MAP
COMPETITOR HELD CLAIMS
TA HOOLA 7
TA HOOLA 8
TA HOOLA 1
TA HOOLA 2
ANACONDA
TA HOOLA 4
TA HOOLA 3
TA HOOLA 11
TA HOOLA 5
TA HOOLA 6
TA HOOLA 12
TA HOOLA 13
TA HOOLA 10
TA HOOLA 9
Ta Hoola Lake
Friendly Lake
Lost Horse Lake
Meadow Lake
Silver Lake
Deer Lake
Monticola Lake
Jim Creek
1:50,000
1000 0 1000 2000 metres

Name	Record No.	Date of Recording	No. of Units
Ta Hoola 5	3336	81/03/17	8
Ta Hoola 6	3337	81/03/17	8
Ta Hoola 7	3338	81/03/17	6
Ta Hoola 8	3339	81/03/17	20
Ta Hoola 9	3572	81/06/10	16
Ta Hoola 10	3856	81/10/16	16
Ta Hoola 11	3857	81/10/16	20
Ta Hoola 12	3858	81/10/16	12
Ta Hoola 13	3859	81/10/16	12

These claims are located in the Kamloops Mining Division.

Ownership and Tenure

The 13 Ta Hoola claims are owned outright by SMD Mining Co. Ltd. The property was acquired by staking, according to the modified grid system.

Previous Work

Previous exploration activity by former owners comprised geological, geochemical (stream sediments, soils and trenching), and geophysical surveys, and percussion and diamond drilling. Minor copper, molybdenum and lead-silver mineralization reflecting, respectively, disseminated or stockwork-type and vein network deposits were discovered peripheral to the borders of several small syenite stocks located north and northwest of Friendly Lake.

The area was mapped by the G.S.C. in 1963-1965 and the B.C. Department of Mines and Petroleum Resources in 1970.

The property and adjoining ground has been held and subsequently dropped by Anaconda American Brass Ltd. (1965-68), United Copper Corporation (1966-68), Imperial Oil Ltd. (1972-73), Prism Resources (1972), Barrier Reef Resources (1972-73), Cities Service Minerals Corp. (1973-75), Meridian Resources (1977) and Commonwealth Mining (1979-81).

Physiography, Climate and Vegetation

The claims lie within the Thompson Plateau, a subdivision of the Interior Plateau. The region is characterized by rounded hills, rolling uplands and numerous small lakes. The Thompson Plateau, in the claim area, is underlain by folded and block faulted Mesozoic volcanic, sedimentary and intrusive rocks. The differing resistance to erosion of these rocks has resulted in a moderately disected, irregular surface between 1067 and 1525 m elevation. Local elevation can be as much as 1830 m above sea level.

A layer of glacial overburden from 0.5 to 5 m thick obscures much of the bedrock.

Climate is typical of the B.C. central interior. Winter temperatures range between -40° and 0°C; summer temperatures range between 2° and 38°C. Precipitation averages 45 cm at Little Fort, with about twice that amount in the property area. Accumulated snow fall can range from 2 to 4 m.

Vegetation consists mainly of spruce, fir, balsam and jack pine, with some poplar. Underbrush is moderate to thick and consists of tag alder, willow and small conifers.

GEOLOGY

Regional Setting

The Ta Hoola claims are located within the Quesnel Trough, a 2000 km long, elongate, north-trending belt of predominantly early Mesozoic volcanic and derived sedimentary rocks situated between the Proterozoic and Paleozoic strata of the Omineca Geanticline to the east and the Pinchi Geanticline to the west (Fig. 3) (Campbell and Tipper, 1971). The Quesnel Trough in Late Triassic time was the site of widespread volcanism, accompanied by the emplacement of granodiorite to diorite plutons. A brief period of quiescence at the end of the Triassic was followed by renewed volcanism and sedimentation in the Early Jurassic.

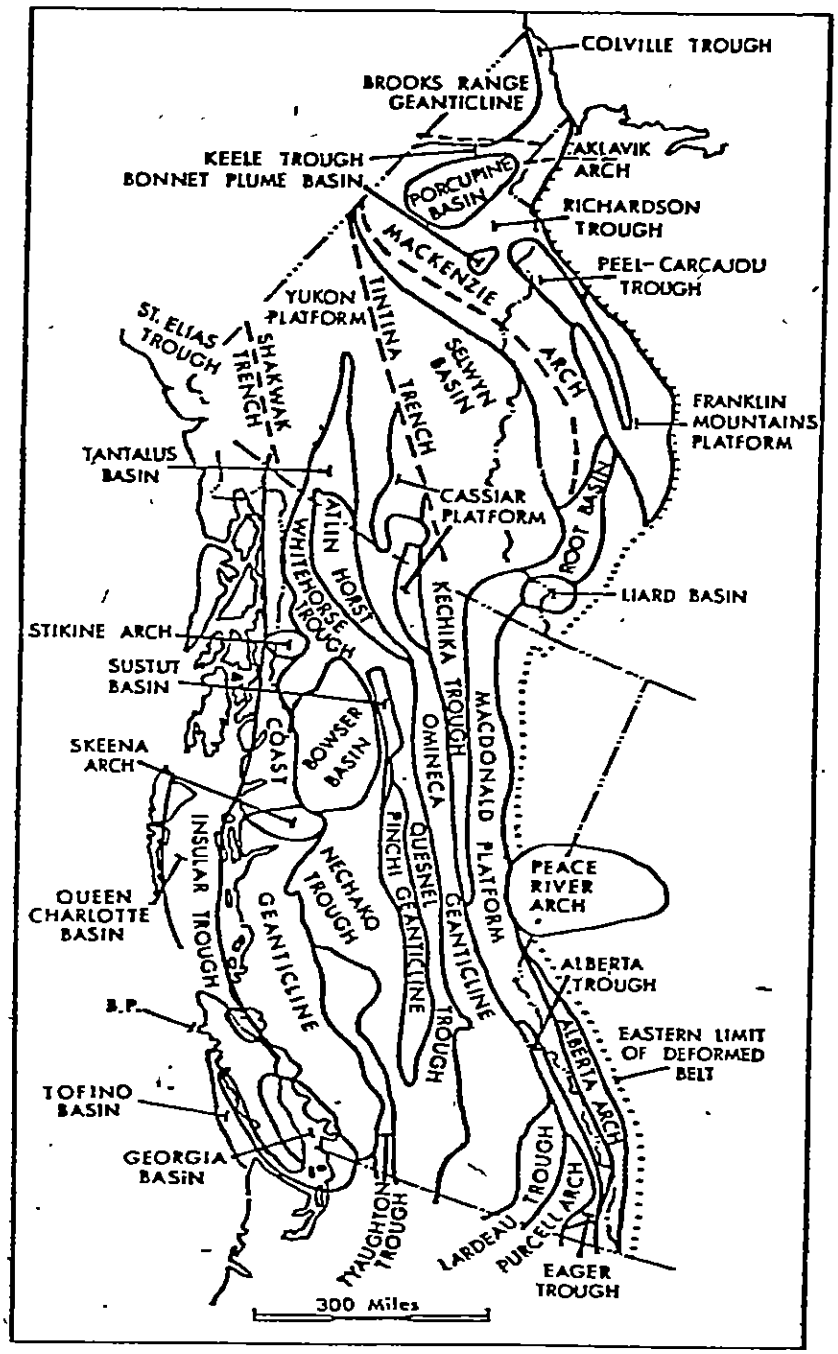


Figure 3: Tectonic Framework of the Canadian Cordillera.
(after Wheeler et al., 1972)

Following the culmination of the Columbian orogeny in the Middle Jurassic, the Quesnel Trough became a positive feature which has subsequently been eroded.

Two later periods of volcanism generated extensive volcanic cover over much of the western and central parts of the Quesnel Trough. Felsic volcanic rocks of the Skull Hill Formation characterized the Late Cretaceous-Early Tertiary period, whereas extrusion of olivine plateau basalts typified the Late Tertiary (Campbell and Tipper, 1971).

Reconnaissance mapping by the Geological Survey of Canada during 1963-65 (Campbell and Tipper, 1971) indicated that the property area is underlain by Upper Triassic volcanic and sedimentary rocks of the Nicola Group (Dawson, 1879). In a subsequent, more detailed study of the area, Preto (1970) recognized the presence of considerable quantities of intrusive rocks of probable Upper Triassic-Lower Jurassic age. These rocks vary compositionally between diorite to syenite.

The volcanic lithofacies consist of alkaline and calc-alkaline basalts and andesites erupted from subaqueous fissures associated with regional block faulting.

Epiclastic and pyroclastic rocks with plutonic fragments, intrusive breccias and small plutons or stocks of diorite, monzonite and syenite mark the development of volcanic centres during the waning stages of volcanism. The plutons, in part, intrude their own volcanic material. A late fumarolic or hydrothermal stage, related to the intrusion of the plutons introduced volatiles and various metals into the vent areas and extensively altered and mineralized large volumes of shattered volcanic rocks.

The Copper Mountain, Cariboo Bell, Afton copper deposits and many other porphyry occurrences and subvolcanic stockwork or disseminated sulphide deposits are directly associated with this late fumarolic activity.

Local Geology

An extensive sequence of andesitic pyroclastic rocks and interbedded flows, epiclastic sediments, and intrusive rocks is indicated by geological mapping on the Ta Hoola 1-6 claims. Locally, block faulting is common.

The sedimentary rocks appear to have been tightly folded along northwest-trending axes.

The property was mapped on a scale of 1:5 000 by direct mapping on a grid as well as using a variety of other methods such as topographic base maps, air-photographs and pace and compass tie-ins to the grid.

A pre-existing grid was cleared and rechained. Two baselines were established at 100+00E and 129+00E and east-west crosslines were spaced at intervals of 240 m. Drawings TA1-1 and TA1-2 (in map pocket) show the extent of the grid established on the Ta Hoola 1-6 claims.

Outcrop exposure is 5 to 10% and unevenly distributed, providing a corresponding uncertainty in interpretation.

The Nicola Group rocks which outcrop on the property have been divided into 4 main units on the basis of lithology.

Upper Triassic Volcanic Facies (Proximal)

Map Unit 1:

This unit comprises mainly fine to coarse grained andesitic pyroclastic rocks and minor andesite and porphyritic augite andesite flows. It has been divided into five sub-units, briefly described below.

Sub-unit 1a - Andesite flows. This rock outcrops immediately west of Friendly Lake and in the northwest corner of the porperty. These rocks are generally dark green, massive, fine to medium grained and frequently contain tiny phenocrysts of plagioclase and/or augite. Less commonly they may be amygdaloidal and contain very fine grained magnetite.

The flows appear to be unaltered or only slightly altered. The plagioclase phenocrysts have been weakly saussuritized and rocks locally contain silica-epidote-carbonate stringers.

Pyrite content is less than 1% and commonly disseminated. Locally it can vary up to 3 to 5%, occurring in small fractures or as medium to coarse grained disseminated clots.

Sub-unit 1b - Andesite tuff-breccia. These rocks occur south and west of Friendly Lake, are massive, and consist of a fine grained, dark green (tuffaceous?) andesitic matrix containing subangular to subrounded predominantly andesite with subordinate syenite, and

diorite fragments, 2 to 5 cm in size. The coarse fragments comprise 20 to 30% of the rock. The plutonic fragments are derived from subvolcanic plutons and indicate the proximity of a volcanic centre. Locally it is thinly interbedded with either lapilli tuff, tuff or porphyritic augite andesite flows.

This unit has not been pervasively altered. However, where it has been strongly fractured, it has undergone moderate to strong epidote, carbonate, silica and chlorite alteration along the fractures.

The pyrite content can vary from 3 to 7% but is commonly less than 1%.

Sub-unit 1c - Andesite crystal and/or lithic tuff. This is the dominant lithology on the property, occurring north, west and south of Friendly Lake. These rocks are commonly massive, dark green or greyish-green, aphanitic to fine grained and may contain up to 5% broken plagioclase and augite phenocrysts, and rock fragments 2 to 4 mm in size.

In the northwest part of the claims, the tuff is occasionally finely laminated and interbedded with lapilli tuff and tuff-breccia.

Towards the central to northeastern part of the property, they are interbedded with siliceous ash tuff and siltstone. South of Friendly Lake the tuff is commonly weakly schistose and locally sheared.

This rock unit has been weakly propyllitized over a large area south of Friendly Lake. North of Friendly Lake, this unit has been extensively crackled, hornfelsed and metasomatized by the intrusion of a large syenite stock. The alteration is discussed in more detail under "Alteration".

The pyrite content of the tuff is variable, ranging from almost nil to about 10% locally. It is generally finely disseminated but also occurs as disseminated coarse grained clots or as fracture fillings.

Sub-unit 1d - Porphyritic augite andesite. This unit occurs either as flows or dykes, ranging in size from 50 cm to hundreds of metres across, and interlayered with or intruding the other volcanic and

sedimentary rocks found on the property. Their ubiquity suggests they were formed intermittently thoughout the volcanic cycle.

These rocks comprise a massive, greyish-green to dark green, very fine grained, holocrystalline groundmass, containing 10 to 50% black augite phenocrysts varying from 2 to 5 mm in size. Up to 10% plagioclase phenocrysts may be present.

Alteration is common along fractures and varies in intensity and type. In the centre of the property, near the syenite stock, they are moderately to strongly altered and host stringers of carbonate-epidote-chlorite-silica and sometimes a blue amphibole (glaucophane?). Elsewhere they are less altered and occasionally are epidotized and/or carbonatized along fractures. The plagioclase phenocrysts have been weakly saussuritized. Their pyrite content is less than 1% throughout, except in the more intensely fractured and altered locales. There, it can range up to 5% in coarse grained disseminations or in fractures.

Sub-unit 1e - Basalt. This unit was only observed in trenches north-east of the east end of Friendly Lake. The extent of this rock type is unknown due to lack of outcrop exposure.

The rock is massive, fine grained, dark green and often amygdaloidal. The amygdules are filled with epidote and carbonate. Magnetite is abundant locally.

Alteration is generally weak and consists of weak, patchy carbonatization and infrequent epidote clots. In the southernmost trench, the unit is cut by a 15 to 30 cm wide carbonate vein.

Pyrite is finely disseminated and usually less than 1%.

Upper Triassic - Lower Jurassic Sedimentary-Volcanic Facies (Distal)

Map Unit 2:

This unit marks the transition from predominantly volcanic to sedimentary rocks. Interbedded lapilli tuff, ash tuff and ash tuff-breccia, and siltstone-argillite and siltstone-argillite conglomerate or breccia comprise this unit. They are generally gradational into one another on a

large scale, although locally they exhibit sharp interfingering contacts. Thin porphyritic augite andesite flows or dykes outcrop locally. Six sub-units have been identified and are briefly described.

Sub-unit 2a - Lapilli tuff. This rock type occurs as thin beds of massive, dark grey, medium to coarse grained rock interbedded with and gradational to ash tuff in the northeastern part of the property. In the extreme northeastern area of the claims, this unit is interlayered with greywacke and augite andesite agglomerate.

The fragments are subangular to subrounded, 4 to 15 mm in size, composed of tuffaceous material and comprise 30 to 40% of the rock. The matrix is fine-grained and tuffaceous.

This rock type appears to be unaltered. Locally fractures have been filled with silica and minor amounts of carbonate. Pyrite was seldom observed.

Sub-unit 2b - Ash tuff (massive, laminated, crystal and/or lithic). Thinly bedded, aphanitic to fine-grained, light greenish-grey to dark grey and siliceous ash tuff predominate in the northeastern part of the claims, as well as in an area east of Friendly Lake. They are also interbedded with andesite tuff in the central part of the claims.

Locally, tiny plagioclase phenocrysts, 1 to 2 mm in size, are present. Elsewhere, in slightly coarser units, angular to subangular lithic fragments up to 3 mm can be observed.

Silica-carbonate and occasionally epidote stringers occur locally in fractures.

Pyrite content varies between 0.5 to 7% locally, and is present as finely disseminated grains or massive fracture fillings. Pyrrhotite occurs in minor amounts (1 to 2%) in a few of the outcrops.

Sub-unit 2c - Ash tuff-breccia (siliceous). Observed in the southeastern part of Ta Hoola 2 claim, it occurs as greenish-grey beds sharply interfingering with ash tuff and andesite tuff. It comprises 60 to 70% angular to subangular tuff fragments, 1 to 4 cm, in a very fine-grained, compact siliceous matrix.

Alteration consists of silica and carbonate fracture fillings.

Pyrite content is generally 1 to 2% but can range up to 7% locally. It occurs as either disseminated grains in the matrix or as massive stringers in fractures.

Sub-unit 2d - Siltstone (massive, laminated). This unit is found in the southern part of Ta Hoola 2 claim and is commonly interbedded with argillite, forming sub-unit 2e.

This rock type occurs as light to dark grey, fine-grained, massive and laminated thin beds. It closely resembles an ash tuff, but is slightly coarser grained and less siliceous.

Alteration is not apparent, except locally where weak carbonate fracture filling has occurred.

Pyrite content of this unit is variable, but it is generally less than 0.5% and occurs as finely disseminated grains.

Sub-unit 2e - Argillite-siltstone (interbedded). This rock unit outcrops in the northeastern part of the claims as thin lenses interbedded with ash tuff and greywacke. The argillite is very fine grained, dark grey to black, fissile and thinly but discontinuously interbedded with fine-grained massive and laminated siltstone (similar to sub-unit 2d).

The argillite is often recessive in outcrop.

The siltstone, which comprises about 60 to 70% of the rock type, weathers more prominently. It has often slumped into the argillite layers, producing soft sediment deformation structures which are useful in determining stratigraphic tops.

No alteration was observed.

Pyritization is very weak, though some argillite bands are highly pyritiferous.

Sub-unit 2f - Siltstone-argillite conglomerate/breccia. The conglomerate-breccia is very limited in the sedimentary sequence, and was only observed in the northeastern part of the claims. It is massive, dark greyish-brown and comprises 60 to 70% subangular clasts of siltstone and argillite, 3 to 10 mm in size, supported in a fine

to medium grained matrix of similar composition. It is probably derived from the erosion of siltstone and siltstone-argillite sub-units.

It is weakly carbonatized, however this could be of either primary or diagenetic origin, rather than related to hydrothermal processes.

Pyrite content is generally less than 0.5%

Lower Jurassic Sedimentary Facies

Map Unit 3:

Unit 3 consists mainly of epiclastic rocks comprising volcanic conglomerate interbedded with tuffwacke. They probably formed from mud flows or lahars produced during tectonic activity in a volcanic environment. The volcanic conglomerate is often gradational to the tuffwacke, although locally their contacts can be sharp and erosional.

Unit 3 rocks are interbedded with Unit 2 rocks throughout the north-eastern part of the property, reflecting a dynamic sedimentary environment.

Sub-unit 3a - Volcanic conglomerate. This rock type frequently occurs in small lenses in the sedimentary sequence. It is massive, dark grey, and is composed of subrounded clasts consisting of about 30% siltstone, 20% argillite and 20 to 30% tuff in a fine-grained matrix. It differs from Sub-unit 2f in that it contains tuff fragments and the clasts are more rounded.

Alteration is not evident

Pyrite content ranges between 0.5 to 1% and occurs as finely disseminated euhedral to subhedral grains in the matrix.

Sub-unit 3b - Tuffwacke. This is the second most abundant lithology in the sedimentary sequence. The tuffwacke is a massive, dark grey, medium to coarse-grained rock composed of 80% angular to subangular siltstone, argillite and tuff fragments, 2 to 8 mm in size. Locally fragments as large as 25 mm were observed. It is readily distinguished by its angular, black argillite fragments.

No alteration was observed.

Pyrite occurs sporadically as finely disseminated grains and overall is less than 0.5%.

Map Unit 4:

White to buff, massive, medium-grained, crystalline dolomite laced with thin chert ribbons was found in only one outcrop on Line 107+32N near 126+50E. It probably represents a brief reef-building episode in the geological succession.

No other occurrences of this rock have been reported in the area.

Map Unit 5:

Dark green, massive, medium to coarse-grained diorite outcrops in several places on the property. Because of limited exposures the mode of occurrence of this unit is not well known, other than it appears to be as dykes or small stocks intrusive into the rocks of Units 1, 2 and 3. It could also be the result of "dioritization" of intrusive andesite.

The rock is composed of 30 to 40% mafics, comprising subhedral to euhedral augite and hornblende, and 60 to 70% anhedral plagioclase. Locally the diorite may be porphyritic, containing augite phenocrysts up to 5 mm in size.

Alteration is not prevalent in all the diorite outcrops. Locally the plagioclase has been saussuritized and the augite partially replaced by hornblende.

Pyrite content is generally less than 1%.

Map Unit 6:

Medium to coarse-grained, massive leucosyenite porphyry (locally equigranular) occurs in the central part of Ta Hoola 1 and is approximately 1000 m in diameter.

The K-spar phenocrysts are subhedral to euhedral, 2 to 4 mm in size, often zoned and perthitic and comprise about 60% of the rock. The groundmass is a fine-grained granular aggregate of K-spar, plagioclase and quartz. Mafic minerals are rare and where present, consist of fine-grained anhedral grains of either hornblende or biotite.

The syenite stock exhibits slight textural variation. It is only slightly coarser grained in its central part. Some quartz flooding has

occurred, indicated by small quartz veins occupying dilational fractures in the syenite.

No alteration was observed. However, this might be obscured by the deep weathering the rock has suffered.

Pyrite was seldom observed, although the syenite contains rusty grains which may have been pyrite or hematite.

Several outcrops of syenite occur peripheral to the main stock at distances between 200 and 1000 m. These may be dykes, but the lack of exposure precludes the establishment of their structural relationship to the country rocks.

Middle Jurassic

Map Unit 7:

Unit 7 rocks have been divided into two sub-units comprising augite andesite agglomerate and greywacke. They are coarsely interlayered with minor lapilli and ash tuff. These rocks occupy the extreme northern corner of the property.

Sub-unit 7a - Augite andesite agglomerate is commonly massive, coarse grained, grey to greenish-grey and consists of large sub-rounded fragments and bombs of scoriaceous and amygdaloidal augite andesite in a finer grained tuffaceous matrix of similar composition. The fragments range in size between 4 to 15 cm and comprise 20 to 50% of the rock.

Alteration consists of moderate to strong pervasive carbonatization and weak chloritization.

Pyrite content is very low.

Sub-unit 7b - Greywacke is massive, medium to coarse grained, grey to dark grey and composed of subangular to subrounded clasts of agglomerate, tuff, siltstone and argillite. Locally it contains interfingering layers of polymictic conglomerate consisting of subrounded clasts of siltstone, tuff and augite andesite agglomerate in a compact, fine-grained matrix. The conglomerate layers appear to be thin, both vertically and laterally.

Alteration consists primarily of carbonate, chlorite and minor sericite.

Pyrite was seldom observed.

Structural Geology

The Ta Hoola 1-6 claims lie within a belt of complexly folded and regionally block faulted rocks. Poor outcrop exposure and the lack of marker beds hinder structural interpretation.

Folds:

The entire claim area has probably been folded, but only in the sedimentary rocks in the northeastern part of the claims can folding be inferred. Structural data show that the folds are tight and isoclinal. Overturned bedding, recognized in a few outcrops indicates the folds are also inclined. The fold axes are closely spaced, 25 to 300 m apart, and their general trend is parallel to bedding which strikes 120° to 140°. The plunge of the fold axes is not known.

Faults:

Block faulting of the rocks on the claims is inferred from air-photograph interpretation because poor outcrop exposure prevents direct observation. Some of the topographic lineaments observed on the air-photographs are taken as reflections of block faulting for the following reasons.

(1) The lineaments coincide with abrupt changes in lithology, alteration and structure.
(2) Rocks of different ages are juxtaposed along these lineaments.
(3) Shearing, slickensiding on joint surfaces and narrow breccia or strong fracture zones are present in outcrops exposed along or near these lineaments.

Where slickensides were observed, the movement appears to have been vertical with virtually no rotational component. No fault surfaces were sufficiently exposed to ascertain the relative movements of the fault blocks.

Schistosity:

South of Friendly Lake, the volcanic rocks have developed a weak to moderate schistosity which commonly trends 110° to 130° and dips south 55° to 90°. One shear zone 2 m wide, striking 130° and dipping 80° NE, was observed locally. The cause of the foliation in this area is not apparent.

North of Friendly Lake, the volcanic rocks within 200 m of the syenite stock are weakly to strongly schistose. The schistosity parallels the stock margin and dips between 30° and 80° away from the intrusion.

Elsewhere on the property, the volcanic rocks possess a variable schistosity with steep dips.

Joints:

Joints are present in many outcrops, as moderate to steeply dipping conjugate sets. However, insufficient data and poor outcrop exposure preclude an evaluation of their relationship to the folds and faults.

Glacial Geology

Approximately 70% of the claim area is covered by glacial overburden ranging between 1 to 10 m in thickness. The direction of the last ice movement was from north-northwest to south-southeast. This was deduced from the few glacial striae that were found in scattered outcrops on the claims.

The glacial overburden consists of a thin discontinuous layer of lodgement till overlain by outwash deposits. Glacial erratics are common.

MINERALIZATION

Target Definition

The exploration targets are bulk-tonnage base and precious metal deposits. The potential exists for finding any or all of the following types of deposits in the property area:

(1) Bulk-tonnage silver and lead ± copper deposit
(2) Gold-rich porphyry copper deposit
(3) Porphyry copper-molybdenum deposit.

Sulphide Mineralization

Sulphide mineralization on Ta Hoola 1-6 claims consists of galena, chalcopyrite, molybdenite, pyrrhotite and pyrite occurring as fine to coarse-gained disseminations or as thin fracture fillings.

The syenite stock appears to be barren of sulphides. A 4 mm clot of galena and chalcopyrite was seen in one hand specimen.

Pyrite was rarely observed in the syenite, although grains of rusty weathered material are common. These may have been pyrite, but could also have been hematite.

Sulphides are common in the volcanic rocks near the syenite contact. Pyrite is ubiquitous in a 200 to 300 m wide zone peripheral to the stock margin and commonly ranges up to 1%. Trace to minor amounts of disseminated chalcopyrite and galena are found in scattered outcrops within this zone (Drawing TA1-1). Virtually all of the volcanic rocks adjacent to the stock contain minor amounts of magnetite, which can vary between 3% and 5% locally. The ground magnetometer survey clearly identifies these concentrations. Trace to minor amounts of disseminated pyrrhotite, occurring with pyrite, were observed in a few outcrops.

Sporadically disseminated chalcopyrite and galena occur in the volcanic rocks (Drawing TA1-1 and TA1-2) probably reflecting the irregularly mineralized character of the andesitic volcanics rather than a specific mineralizing process.

Numerous strongly fractured or sheared zones in the central to eastern parts of the 1-4 claims contain disseminated and/or fracture filling chalcopyrite, galena, molybdenite and pyrite mineralization.

Many of these occurrences are exposed in old trenches and lie within a broad area of crackled and glaucophane ± chalcedony veins, epidote and carbonate altered volcanic rocks.

In the southeastern part of Ta Hoola 2 claim, within the sedimentary-volcanic (Map Unit 2) rocks, several locales of strong pyritization and pyrrhotization associated with epidote and strong carbonate alteration have been identified in highly siliceous rocks. It is not certain if the high silica content is primary or related to hydrothermal processes.

In the sedimentary rocks (Map Unit 3), the pyrite content is generally low and no other mineralization was observed.

Crackle Breccia

The rocks in the central part of the Ta Hoola 1-4 claims and peripheral to the syenite stock exhibit a distinctive crackled or brecciated appearance. The crackle breccia is characterized by its angular fragments, 5 to 50 mm in size, and their lack of apparent rotation.

The crackle breccia is of particular interest because it is frequently the most altered rock and also hosts significant silver-lead mineralization and minor amounts of copper and molybdenum.

The crackle breccia occurs in irregular zones throughout the broad area shown on Drawing TA1-3 (in map pocket). A lack of outcrop prevents a better interpretation of its distribution.

Alteration

The strongest alteration is restricted to the andesitic pyroclastics and flows outcropping on Ta Hoola 1-6 claims. Four types of alteration are considered (Drawings TA1-3 and TA1-4).

Biotite Hornfels This alteration is most evident in a 200 to 300 m wide zone adjacent to the syenite stock. However, it has been identified in outcrops up to 2 km away from the stock. Drawing TA1-3 shows the general limits of the hornfelsing. The hornfelsed area is probably more restricted than is shown, however limited outcrop exposure precludes a more detailed interpretation.

The hornfels is characterized by the formation of very fine-

grained biotite (and possibly hornblende) which lends a very dark green to black colour to the rock. The hornfelsing is produced by contact metamorphism related to the intrusion of the syenite stock. The close correlation between the distribution of the hornfels and the crackle breccia suggests that both formed synchronously with the intrusion of the syenite.

Some bleaching is evident along the margins of the hornfelsed fragments in the crackle breccia, indicating that metasomatism occurred after the hornfelsing. The leached selvages are composed mainly of chlorite, silica and minor amounts of carbonate, epidote and possibly feldspar.

Blue Fibrous Amphibole ± Chalcedony Veins The identity of this blue fibrous mineral has not been positively established. Past reports refer to it as glaucophane (Hill, 1972), or blue antigorite (Preto, 1972). Thin sections and X.R.D. specimens are being prepared to identify it.

The extensive blue fibrous amphibole alteration is believed to be unique to the Ta Hoola claim area. No other occurrences have been reported from elsewhere in the Quesnel Trough.

This alteration coincides with the crackle breccia and hornfelsed zones and occurs as fracture fillings or coatings on sheared surfaces. Commonly pale yellow and white, amorphous to botryoidal chalcedony veins and patches are associated with this blue mineral.

The blue fibrous amphibole alteration is frequently associated with massive calcite and massive to vuggy quartz veins and lead-silver mineralization. It appears to be one of the later alteration stages in the claim area and is probably the result of hydrothermal activity.

Carbonatization Although most of the volcanic rocks on the claims contain some carbonate, strongly carbonatized areas have restricted occurrence (Drawing TA1-3 and TA1-4). Carbonatization is strong in all the areas outlined on Drawing TA1-3 and is present both as pervasive as well as fracture filling alteration.

Four areas of strong carbonatization are found within the broad

crackle-breccia, hornfels and blue fibrous amphibole zones. Five other carbonate zones coincide with areas 3 to 7% pyrite. Five remaining zones do not appear to correlate with any other alteration.

South of Friendly Lake, a broad zone of pervasive carbonatization is present (Drawing TA1-4). The cause of the alteration is not readily apparent, although there is a prominent northeast-trending topographic lineament (possibly reflecting a fault) present. The andesitic tuffs in this region are also foliated and sheared in many places. The alteration could be related to these structural features in some way.

Carbonate alteration is locally associated with lead, silver, copper or molybdenum mineralization. There appears to be two generations of carbonate alteration; an early open space-filling stage contemporaneous with sulphide mineralization, and a younger vein stage containing vuggy quartz.

Epidotization Several small zones of relatively strong epidotization (up to 5% of the total rock) were identified (Drawings TA1-3 and TA1-4). The epidote frequently occurs in clots, patches or in fractures. Only one outcrop is pervasively epidotized.

Epidotization is spatially associated with zones of 3 to 7% pyrite, carbonatization and copper anomalies in soils and rocks.

Other Alteration

All the rocks in the claim area exhibit weak to moderate, pervasive chloritization and silicification, probably the result of regional metamorphism.

Chlorite and silica stringers are present in fractured outcrops of volcanic rocks, especially within the crackle breccia zone. This alteration may be related to hydrothermal activity and locally can be intense.

Alteration Sequence

A possible sequence of alteration for the Ta Hoola 1-6 claims is as follows:

(1) Low grade regional metamorphism resulting in chlorite-silica-carbonate alteration.

(2) Crackle-brecciation preceded by biotite hornfelsing of the volcanic rocks during the intrusion of the syenite stock.

(3) Epidote ± chlorite ± silica alteration in patches and fractures in crackle breccia during subsequent hydrothermal activity.

(4) Blue fibrous amphibole ± chalcedony veins - carbonate open space filling in crackle breccia.

(5) Carbonate-quartz veining (in part vuggy) along fractures.

(6) Late stage (bull) quartz flooding along dilational fractures in the syenite and volcanic rocks adjacent to the stock.

GEOCHEMISTRY

Soil

Soil samples collected on the Ta Hoola 1-9 claims were analyzed for gold and, in certain areas, for silver, lead, zinc, copper, molybdenum and arsenic. The results of the soil geochemical survey are shown on Drawings TA1-5 to TA1-31 (in map pockets). The assay certificates are included in Appendix A.

A total of 1608 soil samples were collected mainly on the grids at 100 m intervals, although some samples were also taken along compass lines and roads throughout the property. (Drawings TA1-32 to TA1-35, in map pockets).

The samples, weighing approximately 450 g, were collected in numbered wet-strength kraft paper bags from the "B" horizon. Notes pertaining to the sample location and drainage direction were made at each sample site. The soil samples were dried prior to shipment to Acme Analytical Laboratories Ltd. in Vancouver, where they were screened

to minus 80 mesh and split into 10 g samples for analysis. Gold analyses were performed using atomic absorption spectrometry (A.A.S.) and the other elements were analyzed by A.A.S. or induced couple plasma spectrometry (I.C.P.). The sample pulps have been retained for future use. The analyses were supervised by Mr. D. Toye, B.Sc, Certified B.C. Assayer.

Results

The soil anomalies found in the Ta Hoola claims are partially summarized in Table 1. The tabulation includes all of the previous metal soil anomalies with or without coincidental base metal anomalies, as well as mono-element and multi-element base metal anomalies.

The anomalies have been rated according to their strength (magnitude and intensity), intensity of associated alteration and the presence of structure. A priority has been assigned to each anomaly within its group (Au, Ag, etc.) (Table 1) based on several criteria: its rating with the group; past exploration activity (eg. drilling); location (on or off-property); and the presence of mineralization in adjacent outcrops, so that exploration activity can be focussed on a priority basis. Number one priority anomalies are immediate interest; number three anomalies are of least or minimal interest.

The soil anomalies are briefly described below:

Gold:

The results for gold on the Ta Hoola 1-9 claims are depicted in Drawings TA1-5, 6, 17 and 23.

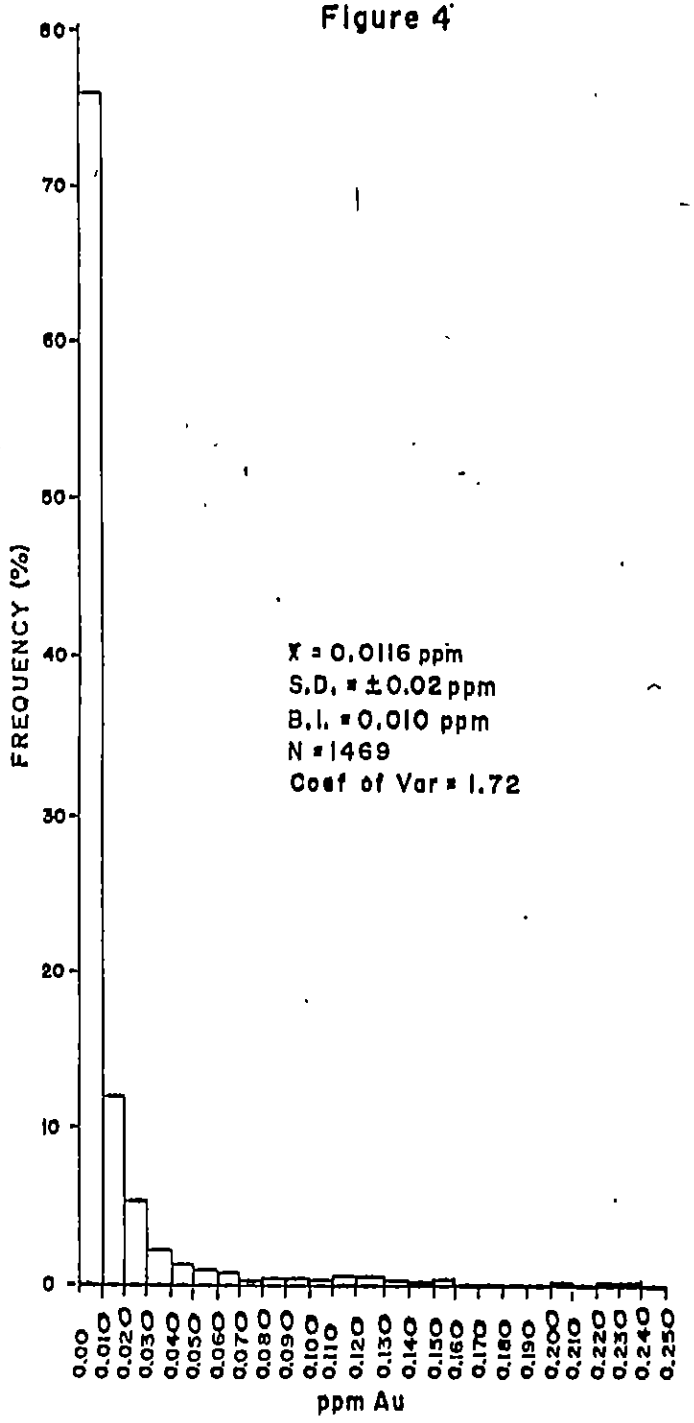
Statistical treatment of the data (Figures 4 and 5) shows a positively skewed, lognormal distribution for the gold. The cumulative frequency distribution curve (Figure 5) is divided into two main populations (A and B) by an inflection point at the 1.5 percentile. Thresholds were assumed at the lower 1 percentile of Population A (0.077 ppm) and the upper 1 percentile of Population B (0.074 ppm). Values greater than 0.074 are considered anomalous because 99.4 percent of the Population A values occur above this threshold. A 0.074 ppm threshold corresponds to the upper 1 percent of the total sample population (Figure 5).

Summary and Rating of Soil Anomalies on the Ta Hoola Claims

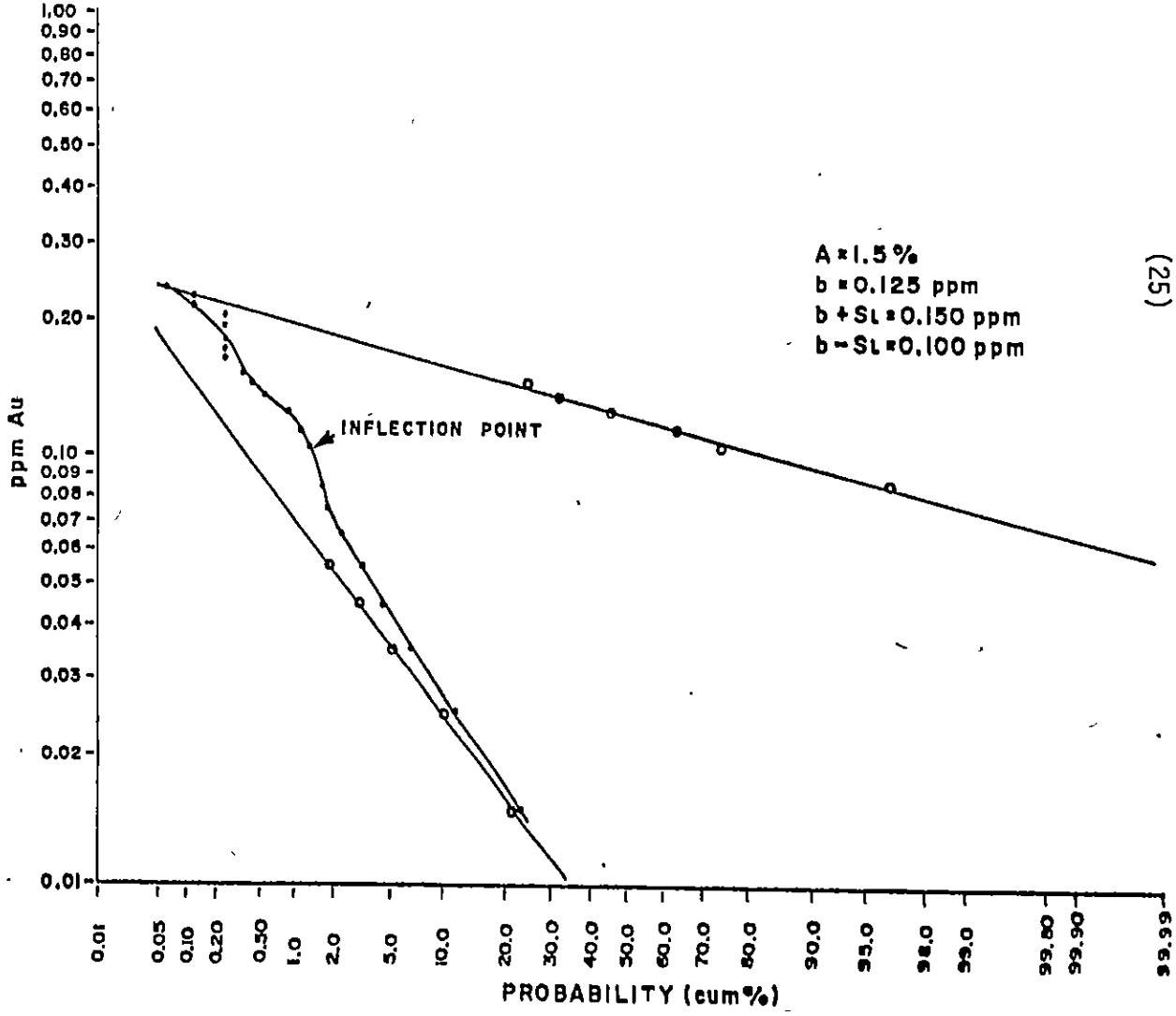
Anomaly	Au	Ag	Pb	Zn	Cu	Mo	Alteration	Structure	Rating	Priority
Au-1	2								2	2
Au-2	1						2		2	2
Au-3	2	2	1	1			N.I.	N.I.	6	1
Au-4	2						N.I.	N.I.	2	3
Ag-1		2						1	3	3
Ag-2		1						1	2	3
Ag-3		1	2	1			3	0	7	1
Ag-4		1					N.I.	N.I.	1	3
Ag-5		2	2				3	0	7	2
Ag-6		1	1		1		2	0	5	2
Ag-7		2	2		2	2	3	0	11	2
Ag-8		1	1		1		1	0	4	3
Ag-9		2	2		2		1	0	7	1
Ag-10		2						0	2	3
Ag-11		2						0	2	3
Pb-5			1				N.I.	N.I.	1	3
Zn-2	1		1	2			N.I.	N.I.	4	2
Zn-3				1			N.I.	N.I.	1	3
Cu-1			1		2		2	0	5	2
Cu-2					2		2	0	4	3
Cu-7	1				1		N.I.	N.I.	2	3
Mo-2			1		1	2	1	1	6	2

KEY: Anomaly Strength 3 - strong, 2 - medium, 1 - weak
Alteration 3 - strong, 2 - medium, 1 - weak N.I. - No information
Structure 1 - present, 0 - not present, N.I. - No information
Priority 1 - high, 2 - medium, 3 - low

ARITHMETIC HISTOGRAM - GOLD
Figure 4



LOG - PROBABILITY PLOT - GOLD
Figure 5



Elevated background has been arbitratily chosen at the 0.025 ppm level, which corresponds to the upper 12% of the sample population.

Based on these findings, four gold anomalies have been delineated.

Anomaly Au-1: Ta Hoola 2 claim, Lines 114+64N to 119+52N between 121+00E and 125+00E.

Anomaly Au-2: Ta Hoola 2 claim, Lines 109+76N to 112+20N at 129+00E.

Anomaly Au-3: Ta Hoola 9 claim, Lines 10+00E to 18+00E between 10+00N and 20+00N.

Anomaly Au-4: Ta Hoola 9 claim, Line 16+00E between 3+00N and 7+00N.

The geology underlying the Ta Hoola 9 claim has not been mapped, but from Preto's mapping (1972), the underlying rocks comprise interbedded andesitic flows and breccia and porphyritic augite andesite agglomerate.

In addition to the above anomalous areas, there are several one point soil anomalies scattered throughout the claims. These are too erratic to be interpreted.

Silver:

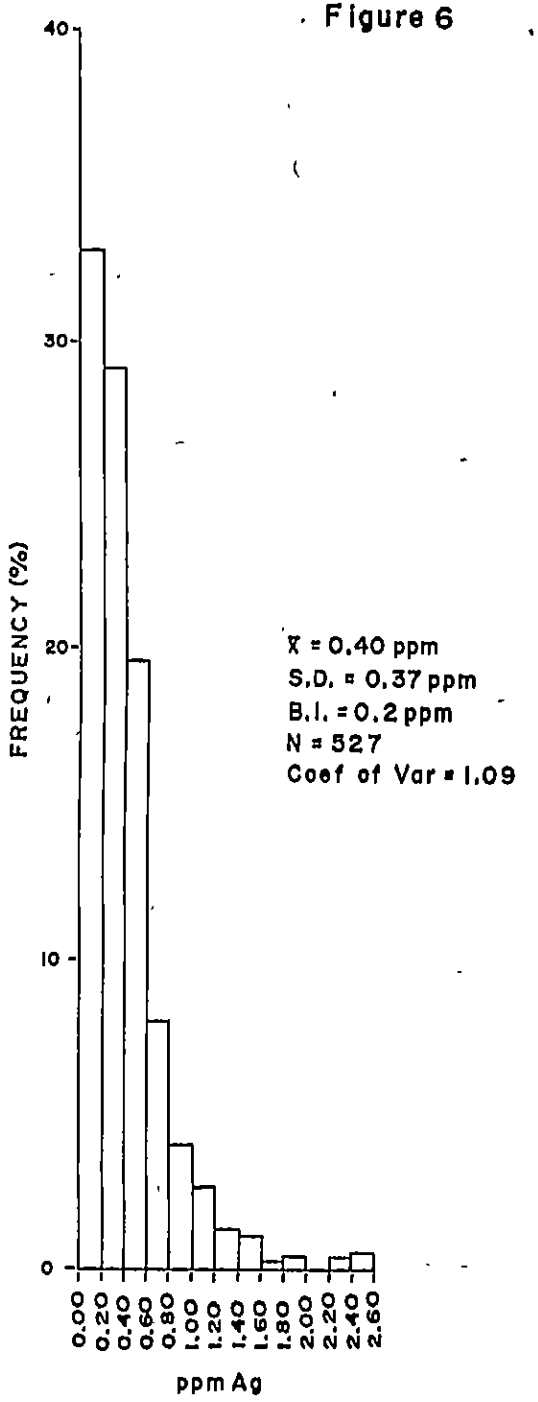
The silver content in soil samples collected on the Ta Hoola 1-9 claims is shown in Drawings TA1-7, 8, 18 and 24. Most of the data plotted on Drawings TA1-7 and 8 are from previous surveys performed by Imperial Oil Ltd. (Hill, 1972, 1973). Samples collected by SMD Mining are denoted by the smaller circles.

Statistically the data are positively skewed and lognormally distributed (Figures 6 and 7). An inflection point at the 1.4 percentile divides the sample data into two populations. Thresholds are assumed at the lower (1.6 ppm) and upper (1.7 ppm) 1 percentiles of Populations A and B respectively. Values greater than 1.70 ppm are considered anomalous. This corresponds to approximately 1.5 percent of the total sample population (Figure 7).

On the basis of the statistical analysis, several silver anomalies have been delineated on the property.

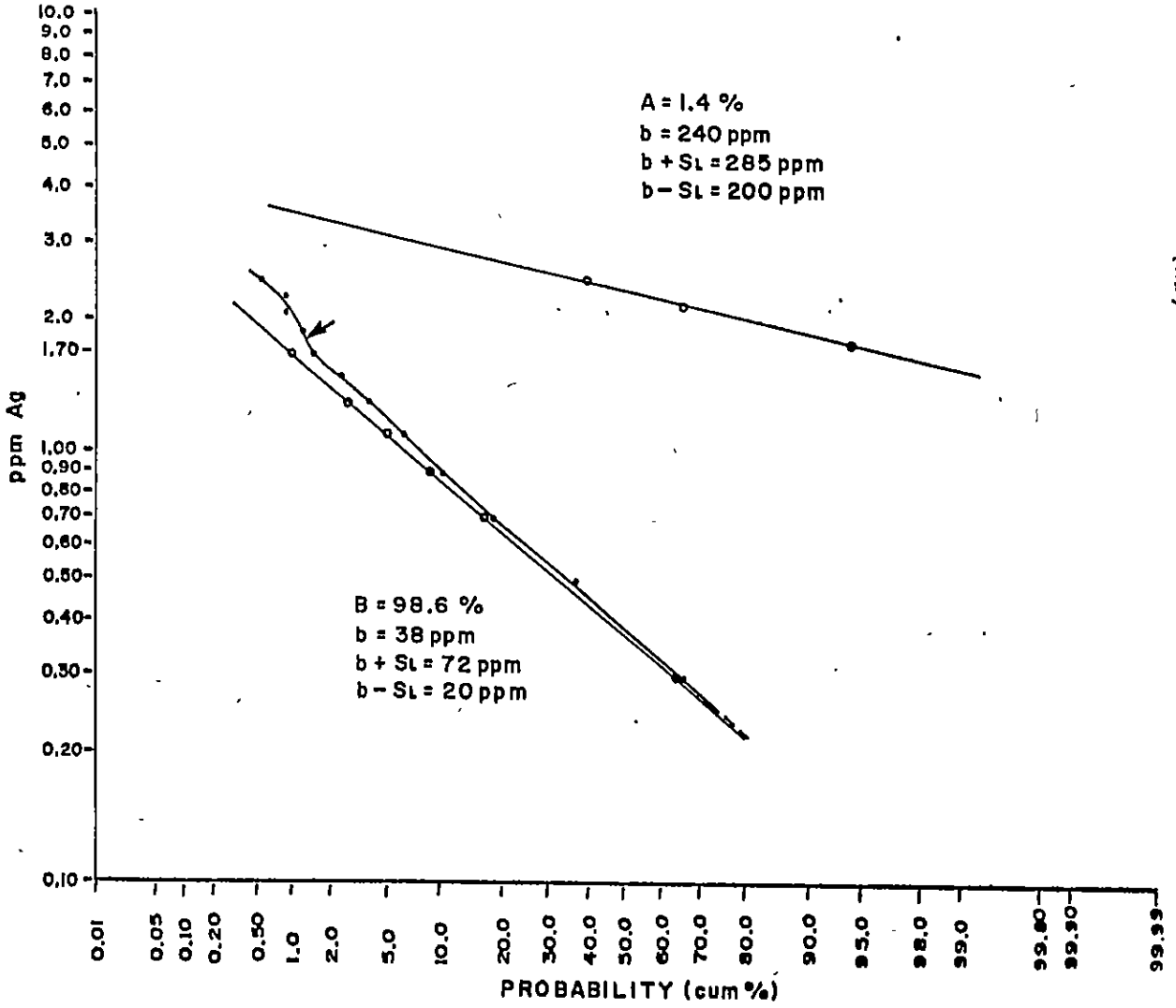
ARITHMETIC HISTOGRAM - SILVER

Figure 6



LOG - PROBABILITY PLOT - SILVER

Figure 7



Anomaly Ag-1: Northeast corner of Ta Hoola 2 claim, Lines 124+40N to 128+58N between 127+00E and 133+00E. There is no indication of mineralization in the outcrops in the anomalous areas. This is a mono-element soil anomaly.

Anomaly Ag-2: Ta Hoola 2 claim, Lines 114+64N to 117+80N between 130+00E and the eastern claim boundary. This is also a mono-element soil anomaly.

Anomaly Ag-3: Ta Hoola 2 claim, Line 107+32N between 111+50E and 116+00E. It coincides with lead and copper soil anomalies.

Anomaly Ag-4: Lines 102+44N to 107+32N between 98+00E and 102+00E.

Anomaly Ag-5: Lines 100+00N to 107+32N between 105+50E and 107+00E

Anomaly Ag-6: Ta Hoola 3 claim, Line 102+44N between 110+00E and 112+00E. Anomaly Ag-6 coincides with lead and copper soil anomalies.

Anomaly Ag-7: Ta Hoola 4 claim, Lines 101+22N to 102+44N between 115+00E and 120+00E. Anomaly Ag-7 is also anomalous in lead, copper and molybdenum.

Anomaly Ag-8: Ta Hoola 3 claim, Lines 92+68N to 95+12N between 106+00E and 110+00E. This anomaly partially coincides with lead and copper soil geochemical anomalies.

Anomaly Ag-9: Ta Hoola 3 claim, Lines 87+80N to 92+68N between 96+50E and 102+00E. It is coincident with larger lead and copper soil anomalies. A small two point anomaly occurs 200 m south.

Anomaly Ag-10: Ta Hoola 5 claim, Southern claim boundary to 80+06N between 107+00E and 111+00E. This is a mono-element soil anomaly.

Anomaly Ag-11: Ta Hoola 6 claim, Line 78+04N between 119+00E and 123+00E. There are no coincidental base metal soil anomalies.

Anomaly Ag-12: Ta Hoola 9 claim, Line 14+00E between 19+50 N and northern claim boundary. The anomaly is open to the north and coincides with lead and zinc soil anomalies which are also open to the north.

In addition to these silver anomalies, there are numerous one point soil anomalies scattered throughout the claims. They are too erratic to be interpretive.

Further investigation of silver anomalies Ag-5,6,7,9 and 12 is required because of their multi-element association.

Lead:

The results of the lead analyses in soil samples taken on the Ta Hoola 1-9 claims are illustrated in Drawings TA1-9, 10, 19 and 25. Most of the data shown on Drawings TA1-9 and 10 were compiled from surveys performed by Imperial Oil Ltd. (Hill, 1972 and 1973). Samples collected by SMD Mining are shown as small circles.

Figures 8 and 9 show the statistical character of the lead content in the soil samples. The logarithmic-cumulative frequency distribution curve (Figure 9) is divided into two populations by an inflection point at the 1 percentile level. Thresholds were assumed at the upper (47 ppm) and lower (65 ppm) 2.5 percentiles of Populations A and B respectively. Values greater than 65 ppm lead are considered anomalous and this threshold includes the upper 4 percent of the total sample population (Figure 9).

Based on this statistical evaluation, six lead soil anomalies have been delineated.

Anomaly Pb-1: Lines 114+64N to 119+52N between the western claim boundary and 95+00E.

Anomaly Pb-2: Ta Hoola 2 and 4 claims, Lines 101+22N to 114+64N between 112+00E and 126+50E. It coincides with silver (Anomalies Ag-3 and 7), copper and molybdenum soil anomalies.

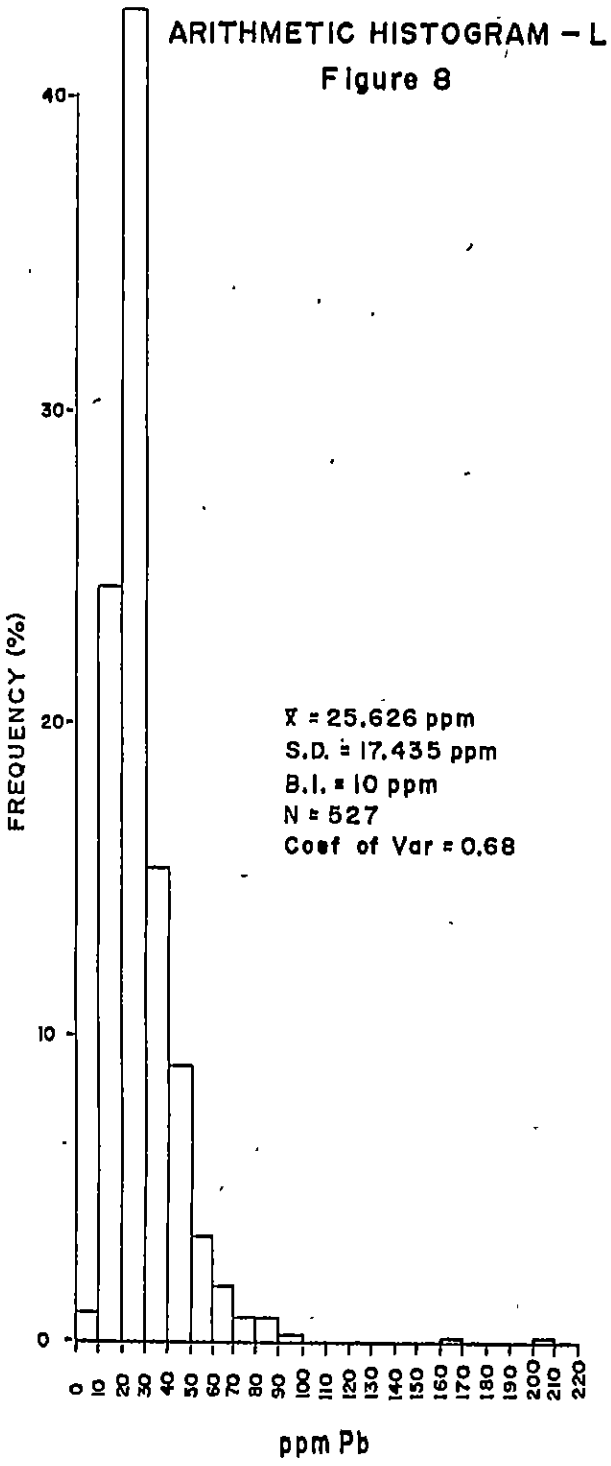
Anomaly Pb-3: Ta Hoola 3 and 5 claims, Lines 80+06N to 104+88N between 96+00E and 115+00E. Silver (Anomalies Ag-5, 6, 8 and 9) and copper soil anomalies occur within this large anomaly.

Anomaly Pb-4: Ta Hoola 4 claim, Lines 89+02N to 90+24N between 121+00E and 124+00E. The anomaly is enclosed by copper and molybdenum soil anomalies.

Anomaly Pb-5: Ta Hoola 8 claim, Lines 88+00N to 92+00N between 100+00E and 104+00E. This is a mono-element anomaly.

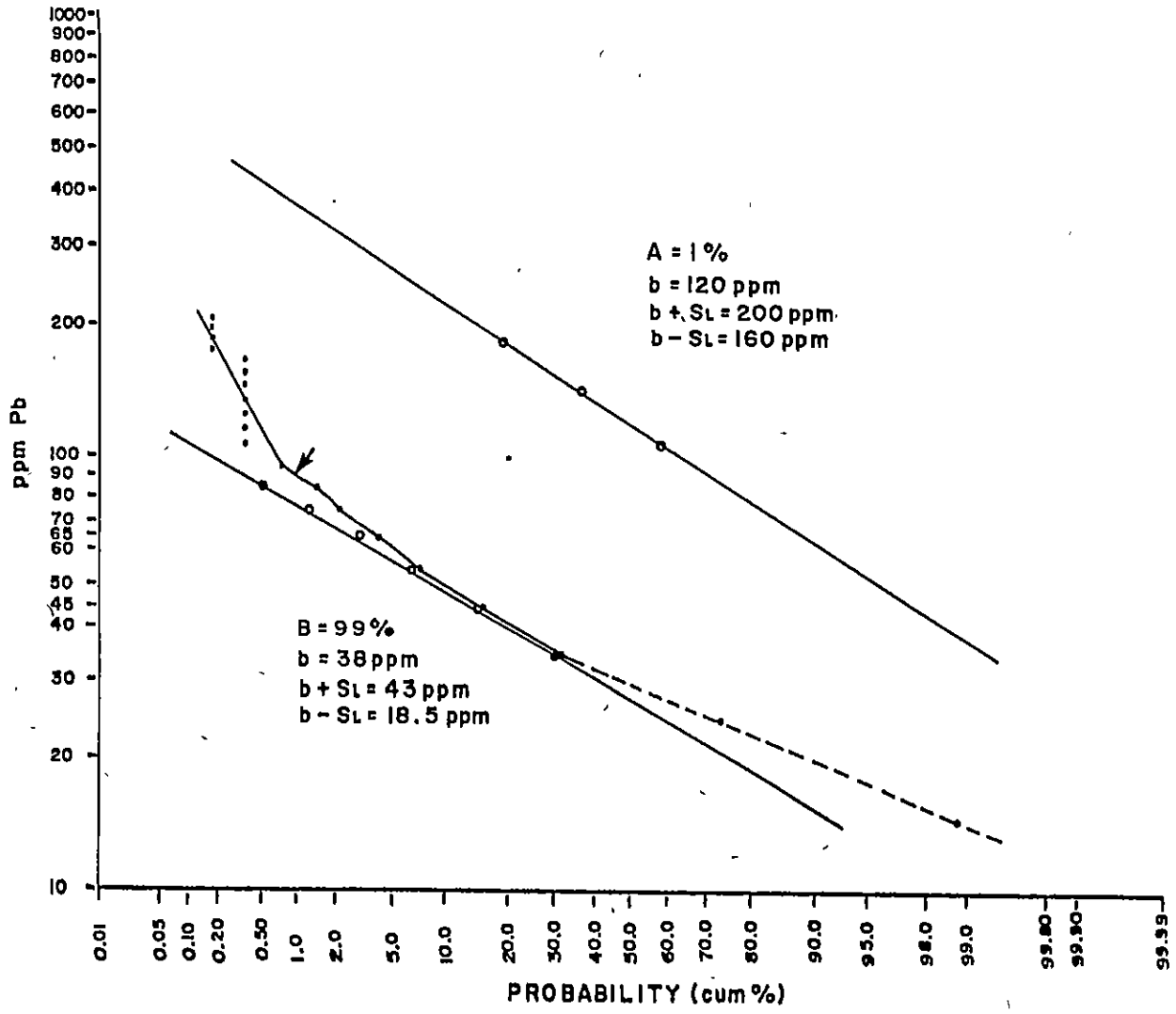
ARITHMETIC HISTOGRAM – LEAD

Figure 8



LOG PROBABILITY PLOT – LEAD

Figure 9



Anomaly Pb-6: Ta Hoola 9 claim, Line 14+00E to 18+00E between 13+00N and 20+00N. Three discrete lead anomalies coincide with silver and zinc anomalies. The lead anomaly on line 14+00E at 20+00N correlates with silver Anomaly Ag-12 and is open to the north.

Zinc:

Drawings TA1-11, 12, 20 and 26 show the distribution of zinc content in soil samples collected on the property. Most of the data displayed in Drawings TA1-11 and 12 were compiled from Imperial Oil Ltd. surveys (Hill, 1972 and 1973). Samples collected by SMD Mining are denoted by the smaller circles.

The data (Figures 10 and 11) are positively skewed and lognormally distributed. The logarithmic-cumulative frequency distribution curve (Figure 11) has been divided into two populations by an inflection point at the 0.9 percentile. The upper (290 ppm) and lower (225 ppm) 2.5 percentiles of Populations A and B respectively were taken as the thresholds. Values greater than 225 ppm zinc are anomalous and correspond to the upper 3.5 percent of the total sample population.

Three zinc soil anomalies have been identified on Ta Hoola 9 claim.

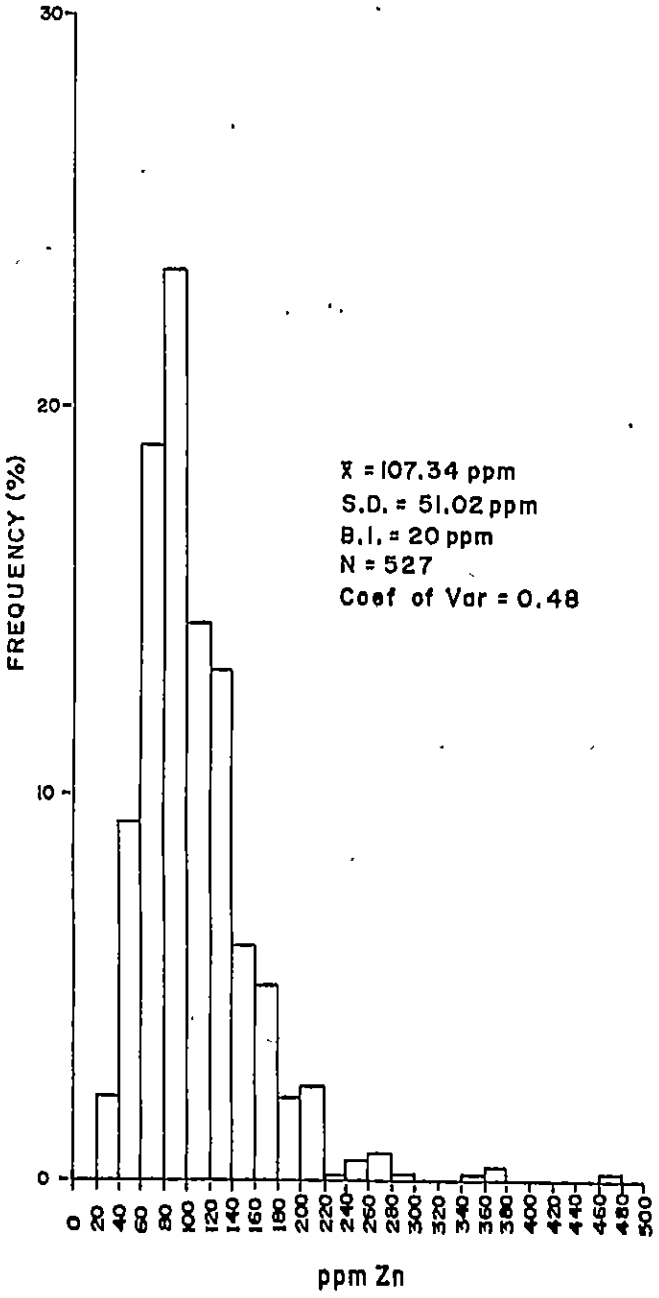
Anomaly Zn-1: Line 14+00E to 20+00E between 18+00N and 20+00N. High zinc contents occur in an area concomitantly anomalous in silver (Anomaly Ag-12)and lead (Anomaly Pb-6). The anomaly is open to the north.

Anomaly Zn-2: Line 14+00E to 16+00E between 13+00N and 16+00N. High values of zinc occur in an area that also contains a small lead soil anomaly.

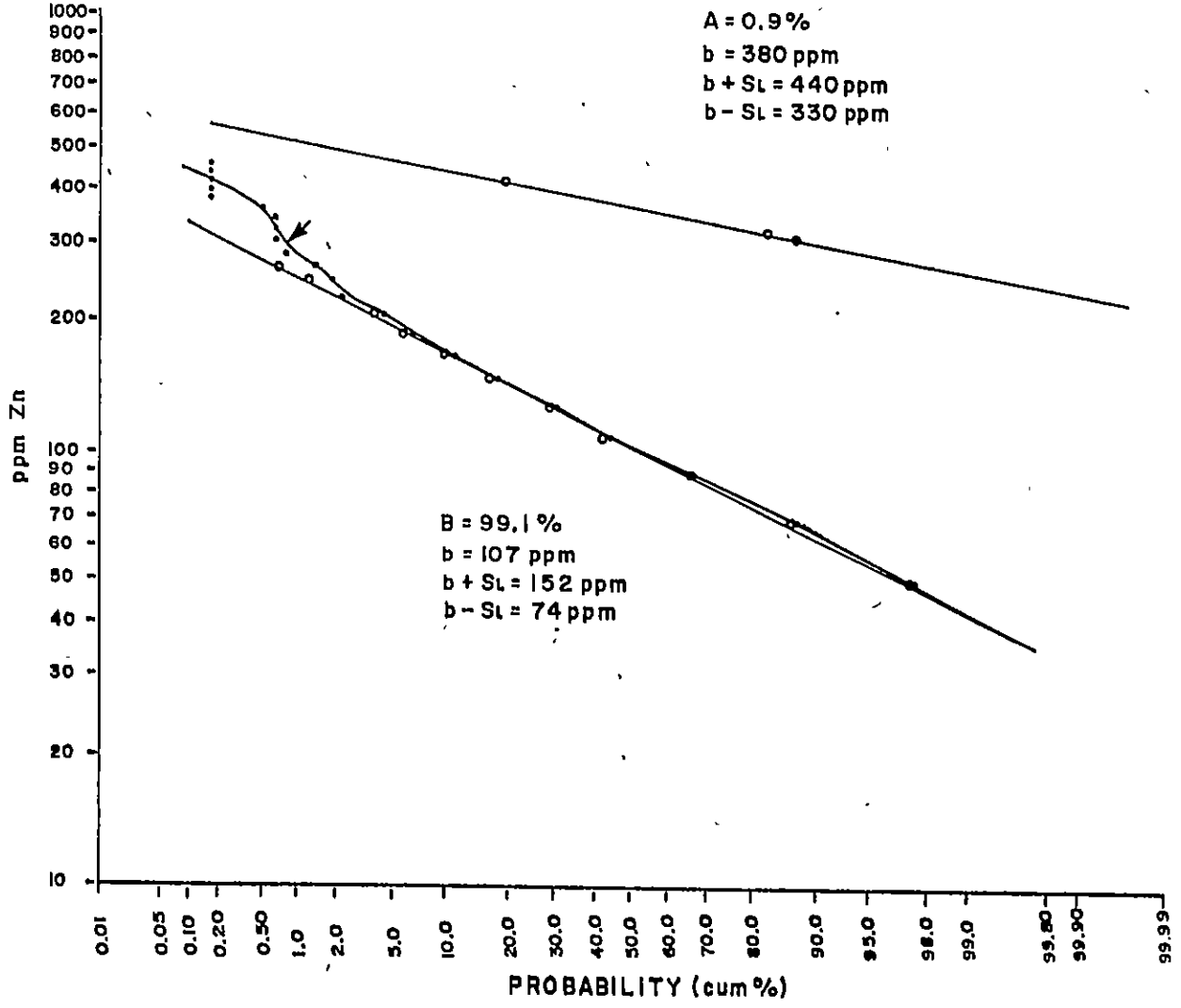
Anomaly Zn-3: Line 26+00E to eastern claim boundary between 13+00N and 17+00N. This mono-element anomaly is open to the east.

Although no anomalous areas were delineated on Ta Hoola 1-8 claims, several one point soil anomalies were found scattered throughout the property. Some of them coincide with lead and copper soil anomalies, but in general are too erratic to ascertain their significance.

ARITHMETIC HISTOGRAM - ZINC
Figure 10



LOG - PROBABILITY PLOT - ZINC
Figure 11



Copper:

The results of the copper analyses for soil samples collected on the Ta Hoola 1-9 claims are depicted in Drawings TA1-13, 14, 21 and 27. Drawings TA1-13 and 14 include data compiled from surveys by Imperial Oil Ltd. (Hill, 1972 and 1973). Samples analyzed by SMD Mining are depicted as small circles.

Figure 12 indicates that the data are positively skewed and log-normally distributed. The logarithmic-cumulative frequency distribution plot of the data (Figure 13) has been partitioned into three populations by inflection points at the 2 and 6 percentiles. The upper (200 ppm) and lower (210 ppm) 2 percentiles of Populations A and B, respectively, were chosen as thresholds. Values greater than 200 ppm are considered anomalous and lie within the upper 2 percent of the sample data.

On this basis, several copper anomalies have been identified on the Ta Hoola 1-4 and 9 claims.

Anomaly Cu-1: Lines 112+20N to 121+96N between the western claim boundary and 100+00E.

Anomaly Cu-2: Lines 107+32N to 112+20N between 106+00E and 108+00E.

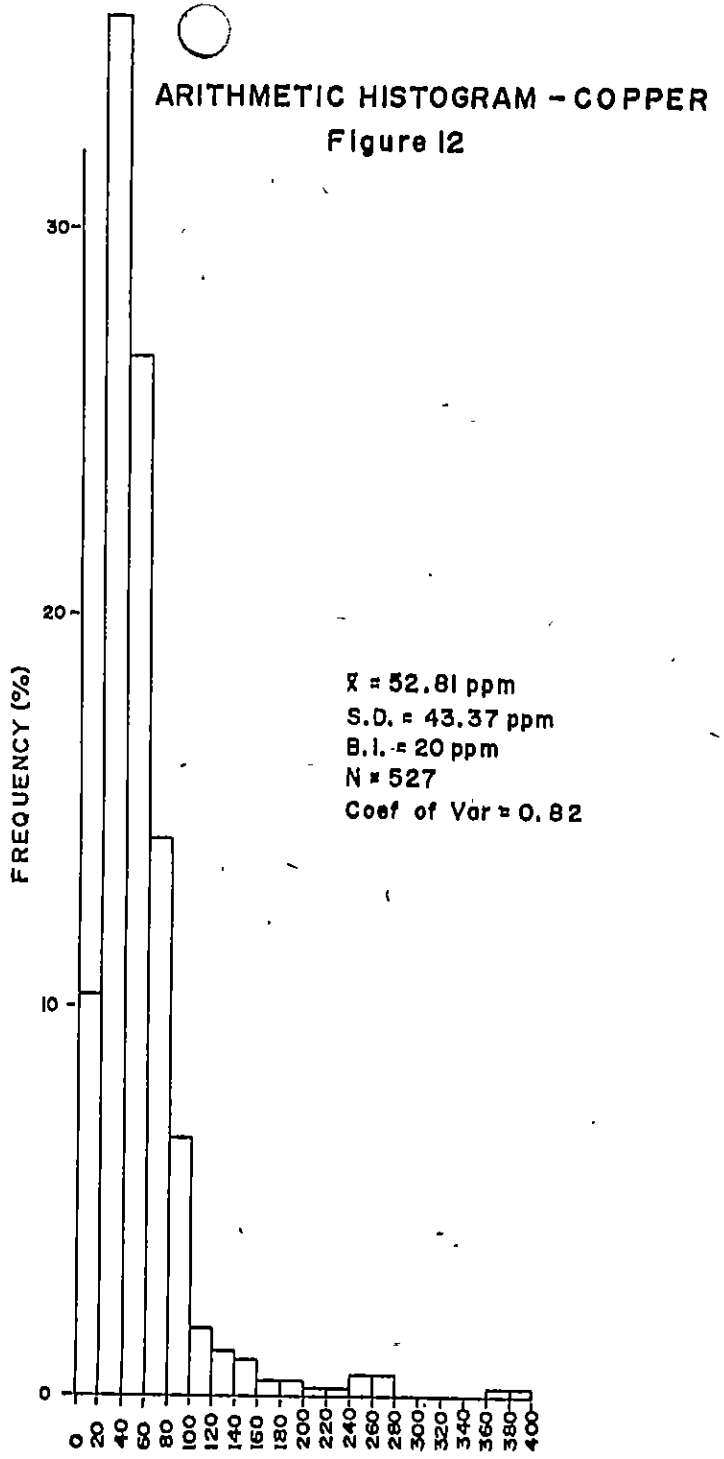
Anomaly Cu-3: Ta Hoola 2 claim, Lines 107+32N to 112+20N between 111+00E and 120+50E. This anomaly, which trends northeast, coincides with silver (Anomaly Ag-3), lead (Anomaly Pb-2) and molybdenum soil anomalies.

Anomaly Cu-4: Ta Hoola 4 claim, Lines 101+22N to 104+88N between 110+00E and 120+00E. This anomaly is coincident with silver (Anomaly Ag-6), lead (Anomaly Pb-2) and molybdenum soil anomalies.

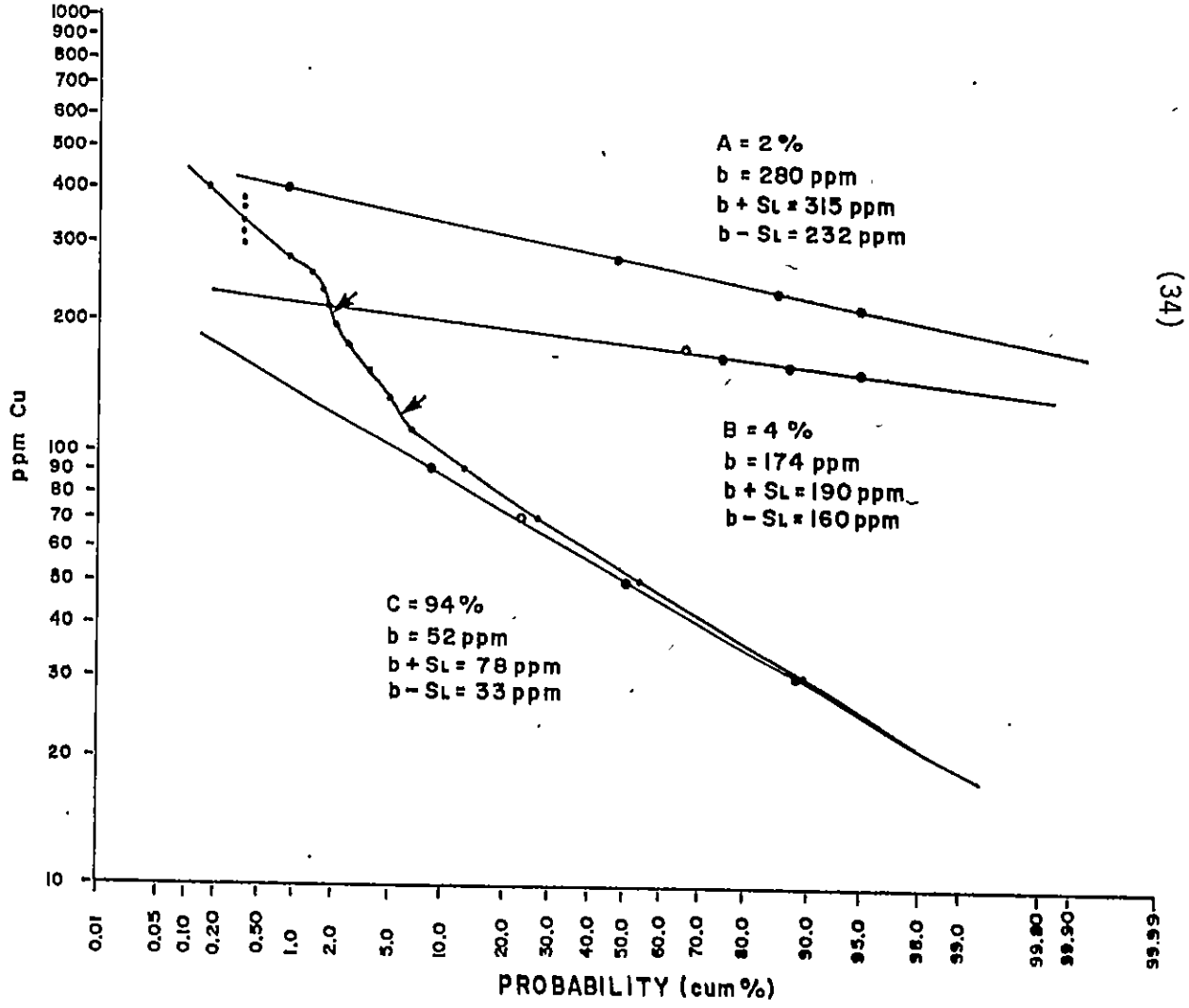
Anomaly Cu-5: Ta Hoola 3 claim, Lines 87+80N to 92+68N between 95+50E and 102+00E. It is also anomalous in silver (Anomaly Ag-9) and lead (Anomaly Pb-3).

Anomaly Cu-6: Ta Hoola 4 claim, Lines 89+02N to 90+24N between 121+00E and 124+00E. A few anomalous values define a small zone adjacent to the east end of Friendly Lake that is concomitantly anomalous in lead (Anomaly Pb-4) and molybdenum.

ARITHMETIC HISTOGRAM - COPPER
Figure 12



LOG - PROBABILITY PLOT - COPPER
Figure 13



Anomaly Cu-7: Ta Hoola 9 claim, Line 12+00E between the southern claim boundary and 4+00N.

Numerous small one and two point soil anomalies also occur scattered throughout the Ta Hoola 1-9 claims, but are too erratic to interpret their significance.

Molybdenum:

Drawings TA1-15, 16, 22 and 28 illustrate the results of the molybdenum analyses for soil samples taken from the Ta Hoola 1-9 claims. Drawings TA1-15 and 16 include data compiled from Imperial Oil Ltd.'s surveys (Hill, 1972 and 1973). The small circles represent samples collected by SMD Mining.

No statistical analysis of the molybdenum content of the soil samples was done, but an empirical threshold can be taken at 20 ppm. This value seems to produce the best clustering of the data with minimal scatter, and correlates with a statistically determined threshold of 19 ppm, established by Imperial Oil Ltd. during previous surveys (Hill, 1972 and 1973). Consequently, only two significant molybdenum soil anomalies have been identified.

Anomaly Mo-1: Ta Hoola 2 claim, Lines 97+56N to 109+76N between 112+00E and 128+00E. This large, arcuate anomaly is coincident with previously described silver (Anomalies Ag-3 and 7), lead (Anomaly Pb-2) and copper (Anomalies Cu-3 and 4) soil anomalies.

Anomaly Mo-2: Ta Hoola 4 claim, Lines 85+36N to 92+68N between 118+00E and 126+00E. The anomaly trends northwest over a length of 1000 m. The zone encloses lead Anomaly Pb-5 and copper Anomaly Cu-6.

A few one point anomalies occur elsewhere on the Ta Hoola 1-8 claims, but are too scattered to be interpreted adequately.

Soil Geochemistry Follow-up

Several of the preceding soil anomalies warrant further investigation.

Rock

A total of 488 rock samples from the Ta Hoola 1-9 claims were analyzed, all or in part, for gold, silver, lead, zinc, copper, molybdenum, nickel, cobalt, arsenic, antimony and cadmium. These samples include rock samples collected routinely from most of the outcrops on the Ta Hoola 1-6 claims grid, and selected rock and chip samples from old trenches and mineralized or strongly altered outcrops.

All of the samples were analyzed at Acme Analytical Laboratories Ltd. in Vancouver, under the supervision of Mr. D. Toye. The assay certificates are included in Appendix A.

The results of the geochemical study of the samples routinely collected from outcrops on the Ta Hoola 1-6 claims are reported separately by S. Earle, and are included in Appendix B of this report.

Follow-up investigations should include detailed soil and rock sampling, detailed geological mapping, and IP surveys.

GEOPHYSICS

Introduction

Preliminary ground magnetometer and VLF surveys were performed on the Ta Hoola 1-4 claims during July and August, 1981.

VLF Survey

The VLF survey results are reported separately by R. Matthews and are included in Appendix C of this report.

Ground Magnetometer Survey

The ground magnetics survey was undertaken to:

(1) Aid in mapping the different lithological units
(2) Define the contact between the syenite and surrounding volcanic rocks.
(3) Indicate the presence of hidden fault zones.
(4) Determine whether or not alteration has significantly affected the magnetic pattern of the rocks.

The survey employed a Geometrics G-816 proton precession magnetometer. Readings were taken at 25 m intervals along grid lines spaced 200 to 240 m apart, and were corrected for diurnal drift using a Canadian Mining Geophysics built MR-10 base station recorder. Instrument drift was checked by running the magnetometer traverses in closed loops.

Only lines 112+20N to 128+58N inclusive were surveyed (Drawing TA1-in pocket). The survey was not completed due to instrument malfunction and the unavailability of a replacement unit.

The contoured survey results exhibit a strong north-south bias attributable to the relatively wide line spacing and close station interval. However, the results do show a large area of low magnetic expression, ranging from 100 to 400 gammas, between stations 100+00E and 110+00E on lines 114+64N to 121+96N inclusive (Drawing TA1-43) (in map pocket), which is coincident with syenite outcrops mapped on the claims.

A relatively higher magnetic pattern peripheral to this area probably reflects the hornfelsed (magnetite rich) contact metamorphic aureole in the country rocks around the syenite. Local magnetic highs (up to 3300 gammas) present in the contact zone can be correlated with megascopically abundant magnetite in the volcanic outcrops.

In general, the magnetometer survey can distinguish between lithological units, but the results are far from conclusive. The volcanic and sedimentary rocks show an irregular, high magnetic susceptibility outside of the contact aureole and alteration zones. Some of the magnetic lows in the eastern part of the claims could be underlain by argillite or siltstone.

Some of the suspected faults, determined by lithological relationships, coincide with vague discontinuities in the magnetic contours. However the strong bias of the contours prevents a positive identification of the fault zones using magnetic data.

The effect of alteration on the magnetic susceptibility of the rocks could not be ascertained because the survey was not completed over the areas where the alteration has been perceived to be strongest. Immediately south of Four Pound Lake (Drawing TA1-43), the contours are widely spaced and the magnetic expression is relatively low over an area of carbonatized and epidotized volcanic rocks. The low magnetic intensity could be caused by the alteration.

DISCUSSION

Geological mapping on the Ta Hoola 1-6 claims has outlined the upper Triassic (Nicola Group) and lower to middle Jurassic volcanic and sedimentary stratigraphy. The rocks are interpreted to be part of an island-arc assemblage formed in a restricted shallow marine environment.

The stratigraphic sequence from oldest to youngest (south to north on the grid) is:

(1) Proximal volcanic facies consisting of a thick succession of andesitic flows, tuff and pyroclastic breccias, porphyritic augite andesites and basalts.

(2) Distal volcanic-epiclastic facies comprising interbedded lapilli and ash tuff, and argillite, siltstone and intraformational conglomerates.

(3) Sedimentary facies composed of volcanic conglomerate and tuffwacke deposited from lahars.

(4) Brief reef-building period marked by the formation of cherty dolomite.

(5) Intrusions comagmatic with the volcanic rocks and consisting of early predominantly diorite plugs and dykes and later stocks of leucosyenite porphyry.

(6) Interbedded volcanic and coarse epiclastic sequence of andesite agglomerate, tuff, and greywacke, marking renewed volcanic activity during the early to middle Jurassic.

Structural interpretation is hindered by poor outcrop exposure and lack of marker horizons, however tight isoclinal folding is inferred from the sedimentary rocks in the northeastern part of the claims. The fold axes trend parallel to bedding which strikes 120° to 140°, but their plunge is not known. Overturned bedding, recognized in a few outcrops indicates the folds are also inclined.

Block faulting is inferred from airphotograph interpretation and geological mapping. A large fault zone, trending 130° to 140°, roughly coincides with the contact between the predominantly volcanic and

volcanic-epiclastic rocks suggesting that this stratigraphic interface constituted a plane of weakness along which faulting occurred.

The emplacement of the syenite stock has imposed a schistosity on the adjacent volcanic rocks that parallels the stock margin and dip between 30° and 80° away from the intrusion. Co-genetic with the intrusion of the syenite stock, is the formation of a relatively narrow biotite hornfels (± magnetite) contact aureole and a broader crackle-breccia zone characterized its angular fragments and their lack of apparent rotation.

The rocks around the syenite stock and diorite plugs have undergone varying degrees of alteration and pyritization accompanied by disseminated and fracture filling chalcopyrite, galena, molybdenite and pyrrhotite mineralization, resulting from hydrothermal activity during the culmination of volcanic and intrusive activity. A possible sequence of alteration and mineralization for the Ta Hoola 1-6 claims is as follows:

(1) Regional lower greenschist facies metamorphism resulting in widespread chlorite-silica-carbonate alteration of the volcanic rocks.

(2) Crackle-brecciation preceded by biotite hornfelsing of the volcanic rocks during the intrusion of the syenite stock.

(3) Epidote ± chlorite ± silica ± minor carbonate alteration in patches and fractures in the crackle-breccia, accompanied by pyritization, pyrrhotization and chalcopyrite and molybdenite mineralization during the early stages of hydrothermal activity.

(4) Blue fibrous amphibole ± chalcedony veins and carbonate open space filling in crackle breccia with associated pyritization and chalcopyrite mineralization.

(5) Carbonate-vuggy quartz veining along fractures

(6) Late stage (bulk) quartz flooding along dilational fractures in the syenite and adjacent volcanic rocks.

Soil geochemical surveys on the Ta Hoola 1-9 claims delineated four gold anomalies; two on the Ta Hoola 2 claim (Au-1 and 2) (Drawing TA1-5), and two on Ta Hoola 9 claim (Au-3 and 4).

Soil sampling also confirmed and enhanced previously discovered silver, lead, copper and molybdenum anomalies on the Ta Hoola 1-6 claims.

A copper (Cu-7) and a zinc-only (Zn-3) anomaly were also found on the Ta Hoola 9 claim.

A small lead anomaly (Pb-5) was found on the Ta Hoola 8 claim. It is currently of minimal interest because of its weak intensity and mono-element nature.

Trace element analyses of rock samples collected routinely from outcrops on the Ta Hoola 1-6 claims indicate substantial enrichment of silver, nickel, copper, lead, molybdenum and arsenic is present.

The copper and molybdenum enrichment is peripheral to the syenite stock, reflects a porphyry copper environment similar to the Afton or Cariboo-Bell copper deposits. The lead-silver enrichment and associated blue fibrous mineral ± chalcedony veins - carbonate alteration was superimposed on the early copper and molybdenum mineralization by hydrothermal fluids at or near the boiling level.

Precious and base metal enrichment suggest an exhalative-type environment.

The nickel, cobalt and arsenic enrichment zones on the property are probably related to original lithology in particular, the more mafic phases of the volcanic rocks. This is evidenced by the fact that the highest nickel concentrations are restricted to the volcanic rocks.

In parts of the Ta Hoola 1-6 claims, silver and base metal soil anomalies generally correlate with the areas of silver, lead, copper and molybdenum enrichment. One source of concern is that the rock geochemistry barely reflects a strong silver, copper and lead soil anomaly (Ag-9).

Ground magnetic and VLF surveys were undertaken to determine their effectiveness in distinguishing between lithologies, locating fault zones, and identifying strongly altered zones; and locating conductive structures and sulphide mineralization in overburden covered areas.

The ground magnetic survey over the northern part of Ta Hoola 1-6 grid successfully outlined the syenite stock, but only achieved limited success in distinguishing between volcanic and sedimentary rocks, locating fault zones and outlining strongly altered areas. This was because the wide line spacing and close station interval produced strongly biased contours which effectively masked the true magnetic expressions. A closer line spacing, wider station interval and tie lines would resolve the bias problem.

The VLF orientation survey results are very noisy and produced a complex pattern of conductor axes. Fraser filtering the data failed to rectify the problem. Five strong conductors and several weaker ones were found. Conductor I may reflect a northeast-trending fault whereas Conductors II-V might indicate conductive structures and/or sulphide mineralization zones. A more detailed survey at 100 m line spacing is required.

The potential exists for finding any or all of the following types of deposits in the Ta Hoola property area:

(1) Bulk-tonnage lead and silver ± copper deposit.
(2) Gold-rich porphyry copper deposit.
(3) Porphyry copper-molybdenum deposit.

Soil and rock geochemical surveys indicate precious and base metal mineralization has occurred in the rocks in certain areas of the Ta Hoola property. More work is required to further define these anomalous zones. An integrated program of geological mapping, detailed rock and soil geochemistry, and geophysics including IP, magnetic and VLF surveys, will be required to guide exploration for base and precious metals on the property.

CONCLUSIONS

Based on exploration work to date, the following conclusions can be drawn:

(1) Mapping on the Ta Hoola 1-6 claims at 1:5 000 scale has outlined the volcanic and sedimentary stratigraphy, alteration, structure and mineral occurrences. More detailed mapping is required to

further define these parameters.

(2) Mapping at 1:5 000 scale on the Ta Hoola 9-12 claims is needed to outline the geology.

(3) Soil geochemical surveys have delineated several precious and base metal anomalies, as well as confirming and enhancing previously known silver, lead, copper and molybdenum anomalies. Detailed soil sampling is required to further define the loci of the mineralization.

(4) Petrographic studies of the alteration and mineralogy of some of the rock samples would help to understand the enrichment patterns found by trace element rock geochemistry.

(5) Although incomplete, the ground magnetic and VLF surveys enjoyed some success in distinguishing between lithologic, locating fault zones and outlining strongly altered areas; and locating conductive zones.

(6) The presence of sulphide mineralization predicates the need for IP-Resistivity and VLF surveys.

REFERENCES

Campbell, R.B. and H.W. Tipper

1971: Geology of Bonaparte Lake Map Area, British Columbia, G.S.C. Memoir 363. 100 p.

Dawson, G.M.

1879: Preliminary report on the physical and geological features of the southern portion of the interior of British Columbia, G.S.C. Rept. Prog., 1877-78.

Hill, W.J.

1972: Assessment Report 4025: Geological, Geochemical and Geophysical Report (Friendly Lake) - FL1-149 Mineral Claims.

1973: Assessment Report 4817: 1973 Geochemical Report, Friendly Lake Property, Kamloops Mining Division.

Preto, V.A.G.

1970: Geology of the area between Eakin Creek and Windy Mountain; in Geology, Exploration and Mining in British Columbia, 1970, B.C. Department of Mines and Petroleum Resources, pp307-312.

Wheeler, J.O., et al.

1972: The Cordilleran Structural Province; in Variations in Tectonic Styles in Canada, Geol. Soc. Can. Spec. Paper 11, pp1-81.

APPENDIX A

GEOCHEMICAL ASSAY CERTIFICATES

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4
c.c. Sturdy-stone Centre, Sask.

File No. 81-0646 A
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Property ~~LA RHODA 49~~ (No.: 0551)

SAMPLE No.	Au
1	.010
2	.010
3	.010
~~4~~	.085
~~5~~	.030
6	.005
7	.015
8	.005
9	.010
9A	.010
10	.005
11	.005
~~12~~	.045
13	.005
14	.005
15	.005
16	.005
~~17~~	.060
18	.005
19	.005
20	.005
21	.010
22	.005
23	.005
24	.005
25	.005
26	.005
27	.005
28	.005
29	.005
30	.005
31	.005
32	.005
33	.005
~~34~~	.050
35	.005
36	.005
37	.010

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 1, 1981
DATE REPORTS MAILED July 7, 1981
ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

...aying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan ...ining Development Corporation,
#330 - 1130 W. Pender,
Vancouver, B.C.
V6E 4A4

cc: Mr Steven Earle, Saskatoon

File No. 81-0475
Type of Samples Percussin Drillings
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Property or Project : TAHOOLA 4947

SAMPLE No.	Cu	Pb	Zn	Ag	As	Sb	Au					
TH - 1 - P - 18	251	90	78	2.1	130	1	.150					1
												2
												3
												4
												5
												6
												7
												8
												9
												10
												11
												12
												13
												14
												15
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												39
												40

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DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED June 8, 1981

DATE REPORTS MAILED June 12, 1981

ASSAYER

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ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 81-0646 A

Type of Samples Soil & Rock

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Pb	Zn	Ag	Au
~~38~~					.045
39					.010
40					.010
41					.025
42					.005
43					.005
44					.005
45					.010
46					.005
47					.005
48					.055
~~49~~					.060
50					.010
TA-1-Ø = 9001	R	405	1500	95	12.5	.005

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DIGESTION:

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ASSAYER

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Telephone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#3330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

File No. 81-0646 B

Type of Samples Drill

Disposition

ASSAY CERTIFICATE

Property ~~Ta-Hoola 4947~~

c.c. Sturdy-Stone Centre, Sask.

No.	Sample	Cu%	Pb%	Zn%	Ag oz/ton	As%	Sb%	Au oz/ton	No.
1	TA-1-D-4	.01	.01	.02	.04	.01	.01	.001	1
2	6	.02	.02	.01	.08	.01	.01	.005	2
3	14	.13	.02	.02	.15	.01	.01	.001	3
4	TA-1-D-16	.01	.01	.01	.01	.01	.01	.001	4
5									5
6									6
7									7
8									8
9									9
10									10
11									11
12									12
13									13
14									14
15									15
16									16
17									17
18									18
19									19
20									20

DATE SAMPLES RECEIVED July 1, 1981

DATE REPORTS MAILED July 7, 1981

ASSAYER

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CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
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852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corporation,
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

Attn.: Mr. C.M. Rebagliati

File No. 81-0679
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Property or Project : TaHoola (4947)

SAMPLE No.	Au
TA-1-R- 51	.005
52	.005
53	.005
54	.005
55	.005
56	.010
57	.005
58	.005
59	.005
60	.005
61	.005
62	.005
63	.005
64	.005
65	.005
66	.010
67	.005
68	.005
69	.005
70	.005
71	.005
72	.020
73	.015
74	.010
75	.210
76	.020
77	.010
78	.005
79	.010
80	.005
81	.005
82	.005
83	.010
84	.005
85	.005
86	.005
87	.005
TA-1-R 88	.005

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 6, 1981

DATE REPORTS MAILED July 13, 1981

ASSAYER D. Toye

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852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corporation,

File No. 81-0679

Type of Samples Soil

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au
TA-1-R- 89	.005
90	.010
91	.005
92	.005
93	.015
94	.010
95	.010
96	.020
97	.010
98	.005
99	.025
100	.005
101	.005
102	.005
103	.005
104	.005
104-A	.015
105	.045
106	.020
107	.005
108	.005
109	.125
110	.005
111	.005
112	.005
113	.005
114	.005
115	.030
116	.005
117	.005
118	.005
119	.005
120	.005
121	.005
122	.040
123	.030
124	.010
125	.005
TA-1-R 126	.005

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QUESTION:

DETERMINATION:

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DATE REPORTS MAILED July 13, 1981

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phone:253 - 3158

To: Saskatchewan Mining Development Corporation,

File No. 81-0679

Type of Samples soil & Rock

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.		Au	Cu	Pb	Zn	Ag	
TA-1-R-127		.010					1
128		.020					2
129		.005					3
130		.005					4
131		.005					5
[132]		.140					6
[133]		.060					7
134		.025					8
[135]		.030					9
136		.010					10
137		.010					11
138		.005					12
139		.010					13
140		.005					14
141		.005					15
142		.010					16
143		.005					17
144		.005					18
145		.005					19
[146]		.040					20
147		.025					21
148		.005					22
149		.005					23
TA-1-R-150		.010					24
							25
TA-1-0-5002	R	.035	260	2800	68	23.7	26
TA-1-0-9002	R	.030	580	124	80	1.2	27
							28
							29
							30
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							40

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DIGESTION:

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852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St.,
Vancouver, B.C.

c.c. Mr. Steven Earle, Saskatoon, Sask.

File No. 81-0717
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Property or Project TA HOOLA 4947

	SAMPLE No.	Au	
	TA-1-R 151	.015	1
	152	.020	2
	153	.025	3
	154	.005	4
	155	.005	5
	156	.005	6
	157	.015	7
	158	.010	8
	159	.010	9
	160	.005	10
	161	.005	11
	162	.010	12
	163	.005	13
	164	.005	14
	165	.005	15
	166	.005	16
	167	.010	17
	168	.015	18
	169	.005	19
	TA-1-R 170	.005	20
			21
	TA-1-R 171	.005	22
	172	.015	23
	173	.005	24
	174	.005	25
	175	.005	26
	176	.005	27
	177	.010	28
	178	.005	29
	179	.030	30
	180	.010	31
	181	.005	32
	182	.020	33
	183	.010	34
	184	.015	35
	185	.015	36
	186	.025	37
	TA-1-R 187	.005	38
			39
			40

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DIGESTION:
DETERMINATION:

DATE SAMPLES RECEIVED July 10, 1981
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phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0717

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 188	.010	1
189	.005	2
190	.025	3
191	.015	4
192	.005	5
193	.005	6
194	.005	7
195	.005	8
196	.005	9
197	.005	10
198	.005	11
199	.005	12
200	.025	13
201	.010	14
202	.005	15
203	.005	16
204	.010	17
205	.005	18
206	.005	19
207	.010	20
208	.025	21
209	.025	22
210	.005	23
211	.095	24
212	.005	25
213	.050	26
TA-1-R 214	.010	27
		28
TA-1-R 215	.010	29
216	.005	30
217	.020	31
218	.005	32
219	.015	33
220	.005	34
221	.015	35
222	.005	36
223	.005	37
TA-1-R 224	.030	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 10, 1981

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ASSAYER

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ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0717

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 225	.005	1
226	.015	2
227	.005	3
228	.005	4
229	.005	5
230	.005	6
231	.005	7
232	.005	8
233	.005	9
234	.005	10
235	.005	11
236	.005	12
237	.010	13
238	.010	14
239	.005	15
240	.005	16
241	.005	17
242	.010	18
TA-1-R 243	.010	19
		20
TA-1-R 244	.010	21
245	.035	22
246	.005	23
247	.005	24
248	.005	25
249	.010	26
250	.010	27
251	.015	28
252	.005	29
253	.005	30
254	.010	31
255	.005	32
256	.010	33
257	.005	34
258	.005	35
259	.010	36
260	.015	37
TA-1-R 261	.005	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 10, 1981

DATE REPORTS MAILED July 25, 1981

ASSAYER

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CHIEF CHEMIST
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ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0717

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 262	.005	1
263	.005	2
264	.005	3
265	.005	4
266	.005	5
267	.005	6
268	.005	7
269	.005	8
270	.005	9
271	.020	10
272	.010	11
273	.005	12
274	.085	13
275	.005	14
276	.010	15
277	.005	16
278	.020	17
279	.010	18
280	.030	19
281	.040	20
282	.015	21
283	.005	22
284	.005	23
285	.010	24
286	.005	25
287	.005	26
288	.005	27
289	.005	28
TA-1-R 290	.005	29
		30
TA-1-R 291	.035	31
292	.010	32
293	.005	33
294	.010	34
295	.005	35
296	.025	36
297	.010	37
TA-1-R 298	.005	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 10, 1981

DATE REPORTS MAILED July 25, 1981

ASSAYER SKW

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0717

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

	SAMPLE No.	Au	
	TA-1-R 299	.010	1
	300	.005	2
	301	.005	3
	302	.010	4
	303	.005	5
	304	.010	6
	305	.005	7
	306	.005	8
	307	.005	9
	308	.010	10
	309	.005	11
	310	.005	12
	311	.005	13
	312	.005	14
	313	.010	15
	314	.005	16
	315	.010	17
	316	.010	18
	317	.010	19
	318	.020	20
	319	.005	21
	320	.005	22
	321	.015	23
	322	.005	24
	323	.005	25
	324	.005	26
	TA-1-R 325	.010	27
			28
			29
			30
			31
			32
			33
			34
			35
			36
			37
			38
			39
			40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 10, 1981

DATE REPORTS MAILED July 25, 1981

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ACME ANALYTICAL LABORATORIES LTD.
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852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender,
Vancouver, B.C.
V6E 4A4

c.c. Mr. Steven Earle, Saskatoon,

File No. 81-0749
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Property : TA HOOLA (4947) Requisition # 0554

SAMPLE No.	Au	
TA-1-R 326	.010	1
327	.005	2
328	.005	3
329	.005	4
330	.005	5
331	.005	6
332	.065	7
333	.005	8
334	.005	9
335	.010	10
336	.005	11
337	.005	12
338	.020	13
339	.005	14
340	.005	15
341	.005	16
342	.005	17
343	.005	18
344	.005	19
345	.010	20
346	.005	21
347	.005	22
348	.010	23
349	.005	24
350	.015	25
351	.010	26
352	.005	27
353	.005	28
354	.005	29
355	.010	30
356	.025	31
357	.005	32
358	.005	33
359	.010	34
360	.005	35
361	.005	36
TA-1-R 362	.010	37
		38
		39
		40

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QUESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED July 14, 1981

DATE REPORTS MAILED July 28, 1981

ASSAYER D. Toye

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CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 81-0749

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

2

SAMPLE No.	Au	
TA-1-R 363	.005	1
364	.005	2
365	.005	3
366	.005	4
367	.005	5
368	.005	6
369	.005	7
370	.005	8
371	.005	9
372	.005	10
373	.025	11
374	.005	12
375	.005	13
376	.230	14
377	.015	15
378	.005	16
379	.005	17
TA-1-R 380	.005	18
		19
TA-1-R 381	.005	20
382	.005	21
383	.005	22
384	.305	23
385	.005	24
386	.005	25
387	.005	26
388	.005	27
389	.005	28
390	.005	29
391	.005	30
392	.005	31
393	.010	32
394	.010	33
395	.005	34
396	.010	35
397	.005	36
398	.005	37
TA-1-R 399	.005	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 14, 1981

DATE REPORTS MAILED July 28, 1981

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Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0749

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 400	.005	1
401	.005	2
402	.005	3
403	.010	4
404	.005	5
405	.005	6
406	.005	7
407	.005	8
408	.010	9
409	.015	10
410	.015	11
411	.005	12
412	.005	13
413	.005	14
414	.025	15
415	.005	16
416	.005	17
417	.005	18
418	.005	19
419	.015	20
TA-1-R 420	.010	21
		22
TA-1-R 421	.010	23
422	.005	24
423	.005	25
424	.005	26
425	.010	27
426	.010	28
427	.005	29
428	.030	30
TA-1-R 429	.005	31
		32
TA-1-R 500	N.S.	33
501	.005	34
502	.005	35
503	.005	36
504	.005	37
505	.005	38
TA-1-R 506	.005	39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 14, 1981

DATE REPORTS MAILED July 28, 1981

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ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan ...ning Development Corp.

File No. 81-0749

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 507	.005	1
508	.005	2
509	.005	3
510	.005	4
511	.005	5
512	.005	6
513	.005	7
514	.005	8
515	.005	9
516	.005	10
517	.005	11
518	.005	12
519	.005	13
TA-1-R 520	.005	14
		15
TA-1-R 521	.005	16
522	.005	17
523	.005	18
524	.005	19
525	.005	20
526	.005	21
527	.005	22
528	.005	23
529	.005	24
530	.005	25
531	.005	26
532	.005	27
533	.005	28
534	.005	29
535	.005	30
536	.005	31
537	.005	32
538	.005	33
539	.005	34
540	.005	35
541	.005	36
542	.005	37
TA-1-R 543	.005	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 14, 1981

DATE REPORTS MAILED July 28, 1981

ASSAYER D. Toye

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CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
(ssaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan ..ining Development Corp.,

File No. 81-0749

Type of Samples _____

Disposition _____

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 544	.005	1
545	.005	2
546	.005	3
547	.005	4
548	.005	5
549	.005	6
550	.015	7
551	.005	8
552	.005	9
553	.005	10
554	.010	11
555	.005	12
556	.005	13
557	.070	14
558	.020	15
559	.015	16
560	.015	17
561	.005	18
562	.010	19
563	.005	20
564	.030	21
565	.005	22
566	.005	23
567	.010	24
568	.005	25
569	.025	26
TA-1-R 570	.010	27
		28
TA-1-R1001	.005	29
1002	.010	30
1003	.015	31
1004	.020	32
1005	.020	33
1006	.015	34
1007	.040	35
1008	.005	36
1009	.010	37
TA-1-R1010	.005	38
		39
		40

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DIGESTION: .....

DETERMINATION: .....

DATE SAMPLES RECEIVED July 14, 1981

DATE REPORTS MAILED July 28, 1981

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CHIEF CHEMIST
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Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan ...ning Development Corp.,

File No. 81-0749

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 1011	.005	1
1012	.005	2
1013	.005	3
1014	.015	4
1015	.005	5
1016	.005	6
1017	.005	7
1018	.005	8
1019	.010	9
1020	.005	10
1021	.005	11
1022	.005	12
1023	.010	13
1024	.005	14
1025	.005	15
1026	.005	16
1027	.005	17
1028	.020	18
1029	.005	19
1030	.005	20
1031	.005	21
1032	.005	22
1033	.005	23
1034	.005	24
1035	.005	25
1036	.005	26
1037	.005	27
1038	.005	28
1039	.005	29
TA-1-R 1040	.005	30
		31
TA-1-R 1041	.005	32
1042	.005	33
1043	.005	34
1044	.005	35
1045	.005	36
1046	.005	37
TA-1-R 1047	.005	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 14, 1981

DATE REPORTS MAILED July 28, 1981

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CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0749

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

	SAMPLE No.	Au	
	TA-1-R 1048	.005	1
	1049	.005	2
	1050	.005	3
	1051	.005	4
	1052	.005	5
	1053	.005	6
	1054	.005	7
	1055	.005	8
	1056	.005	9
	1057	.005	10
	1058	.005	11
	1059	.005	12
	TA-1-R 1060	.005	13
			14
	TA-1-R 2001	.005	15
	2002	.005	16
	2003	.005	17
	2004	.005	18
	2005	.005	19
	2006	.005	20
	2007	.005	21
	2008	.005	22
	2009	.050	23
	2010	.005	24
	2011	.005	25
	2012	.005	26
	2013	.005	27
	2014	.005	28
	2015	.005	29
	2016	.005	30
	2017	.005	31
	2018	.005	32
	2019	.005	33
	2020	.005	34
	2021	.005	35
	2022	.005	36
	2023	.005	37
	TA-1-R 2024	.005	38
			39
			40

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ESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 14, 1981

DATE REPORTS MAILED July 28, 1981

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 81-0749

Type of Samples Soil, Drill

Disposition ____ & Rock

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.		Cu	Pb	Zn	Ag	As	Sb	Au					
TA-1-R 2025								.005					1
2026								.005					2
2027								.005					3
2028								.015					4
2029								.005					5
2030								.005					6
2031								.005					7
2032							—	.030					8
2033								.005					9
TA-1-R 2034								.005					10
													11
TA-1-D 3		510	38	56	4.0	16	1	.005					12
													13
													14
TA-1-ϕ 9003	R	28	36	104	.5			.020					15
9004	R	520	10	23	.4			.010					16
9005	R	263	30	129	.8			.405					17
9006	R	113	4	99	.1			.005					18
TA-1-ϕ 9007	R	147	6	71	.4			.005					19
													20
													21
													22
													23
													24
													25
													26
													27
													28
													29
													30
													31
													32
													33
													34
													35
													36
													37
													38
													39
													40

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DIGESTION:
DETERMINATION:

DATE SAMPLES RECEIVED July 14, 1981
DATE REPORTS MAILED July 28, 1981
ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development
#330 - 1130 W. Pender Street,
Vancouver, B.C.
V6E 4A4
Attn.: Mr. P. Ruck

c.c. Mr. Steven Earle, Saskatoon.

File No. 81-0817
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Project : TA HOOLA 4947 Requisition No.: 0555

SAMPLE No.	Au	
TA-1-R 571	.005	1
572	.005	2
573	.005	3
574	.005	4
575	.005	5
576	.005	6
577	.005	7
578	.040	8
579	.005	9
580	.005	10
581	.005	11
582	.005	12
583	.005	13
584	.005	14
585	.005	15
586	.005	16
587	.005	17
588	.005	18
589	.005	19
590	.005	20
591	.005	21
592	.005	22
593	.005	23
594	.005	24
595	.005	25
596	.005	26
597	.015	27
598	.005	28
599	.005	29
600	.005	30
		31
601	.005	32
602	.020	33
603	.005	34
604	.005	35
605	.005	36
606	.025	37
TA-1-R 607	.005	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 20, 1981

DATE REPORTS MAILED July 31, 1981

ASSAYER D. Toye

DEAN TOYE, B Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0817

Type of Samples Soils

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R 608	.015	1
609	.010	2
610	.010	3
611	.005	4
612	.015	5
613	.010	6
614	.015	7
615	.010	8
616	.005	9
617	.005	10
618	.005	11
619	.005	12
620	.005	13
621	.005	14
622	.005	15
623	.005	16
624	.005	17
TA-1-R 625	.005	18
		19
TA-1-R1061	.005	20
1062	.005	21
1063	.005	22
1064	.005	23
1065	.005	24
1066	.005	25
1067	.020	26
1068	.010	27
1069	.005	28
1070	.020	29
1071	.005	30
1072	.015	31
1073	.005	32
1074	.010	33
1075	.010	34
1076	.005	35
1077	.010	36
1078	.005	37
TA-1-R 1079	.005	38
		39
		40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 20, 1981

DATE REPORTS MAILED July 31, 1981

ASSAYER

DEAN TOYE, B Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
saying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0817

Type of Samples Soils

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Au	
TA-1-R- 1080	.005	1
1081	.005	2
1082	.115	3
1083	.005	4
1084	.005	5
1085	.005	6
1086	.005	7
1087	.025	8
1088	.005	9
1089	.005	10
1090	.005	11
		12
1091	.010	13
1092	.005	14
1093	.010	15
1094	.010	16
1095	.010	17
1096	.005	18
1097	.015	19
1098	.005	20
1099	.005	21
1100	.005	22
1101	.005	23
1102	.010	24
1103	.005	25
1104	.005	26
1105	.005	27
1106	.015	28
1107	.030	29
1108	.005	30
1109	.005	31
1110	.035	32
1111	.005	33
1112	.005	34
1113	.015	35
1114	.005	36
1115	.005	37
TA-1-R 1116	.025	38
		39
		40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 20, 1981

DATE REPORTS MAILED July 31, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0817
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.		Au	Cu	Pb	Zn	Ag							
TA-1-R 1117		.005											1
1118		.005											2
1119		.005											3
1120		.005											4
													5
1121		.015											6
1122		.015											7
1123		.005											8
1124		.085											9
1125		.005											10
1126		.035											11
1127		.020											12
1128		.025											13
1129		.005											14
1130		.005											15
1131		.005											16
1132		.005											17
1133		.005											18
1134		.005											19
1135		.005											20
1136		.010											21
1137		.010											22
1138		.015											23
1139		.045											24
1140		.005											25
1141		.020											26
1142		.005											27
1143		.005											28
1144		.005											29
1145		.005											30
1146		.015											31
1147		.010											32
1148		.010											33
1149		.005											34
TA-1-R 1150		.005											35
													36
TA-1-O 9008	Rock	.835	85	5	20	3.2							37
													38
													39
													40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 20, 1981

DATE REPORTS MAILED July 31, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St.,
Vancouver, B.C.

c.c. Mr. Steven Earle, Saskatoon, Sask.

Requisition No.: 0556

File No. 81-0881
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R Property : TA HOOLA 4947

SAMPLE No.	Au
626	.010
627	.015
628	.010
629	.005
630	.005
631	.010
632	.010
633	.005
634	.020
635	.010
636	.010
637	.020
638	.010
639	.005
640	.005
641	.015
642	.010
643	.005
644	.010
645	.005
646	.005
647	.005
648	.005
649	.005
650	.005
651	.010
652	.015
653	.005
654	.005
655	.010
656	.005
657	.005
658	.005
659	.005
660	.005
661	.005

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253-3158

To: Saskatchewan Mining Development Corp.

File No. 81-0881

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	
730	.005	1
731	.005	2
732	.055	3
733	.005	4
734	.010	5
735	.015	6
736	.020	7
737	.020	8
738	.005	9
739	.060	10
740	.120	11
		12
741	.005	13
742	.005	14
743	.005	15
744	.060	16
745	.005	17
746	.005	18
747	.335	19
748	.205	20
749	.030	21
750	.235	22
		23
751	.010	24
752	.010	25
753	.010	26
754	.040	27
755	.035	28
756	.405	29
757	.020	30
758	.160	31
759	.065	32
760	.010	33
		34
761	.020	35
762	.070	36
763	.100	37
764	.120	38
765	.025	39
766	.005	40

All reports are the confidencial property of clients
All results are in PPM.

QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 81-0881

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	
767	.070	1
768	.025	2
769	.035	3
770	.020	4
771	.025	5
772	.040	6
773	.025	7
774	.005	8
775	.135	9
776	.025	10
777	.010	11
778	.050	12
779	.055	13
		14
1151	.005	15
1152	.015	16
1153	.010	17
1154	.025	18
1155	.030	19
1156	.015	20
1157	.005	21
1158	.010	22
1159	.020	23
1160	.015	24
1161	.005	25
1162	.005	26
1163	.005	27
1164	.030	28
1165	.005	29
1166	.010	30
1167	.010	31
1168	.015	32
1169	.040	33
1170	.005	34
1171	.030	35
1172	.005	36
1173	.020	37
1174	.010	38
1175	.015	39
		40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
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ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 81-0881

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	
1176	.005	1
1177	.015	2
1178	.005	3
1179	.005	4
1180	.005	5
		6
1181	.010	7
1182	.005	8
1183	.005	9
1184	.005	10
1185	.005	11
1186	.025	12
1187	.025	13
1188	.010	14
1189	.005	15
1190	.010	16
1191	.005	17
1192	.005	18
1193	.005	19
1194	.005	20
1195	.005	21
1196	.005	22
1197	.010	23
1198	.005	24
1199	.010	25
1200	.015	26
1201	.005	27
1202	.005	28
1203	.005	29
1204	.005	30
1205	.005	31
1206	.005	32
1207	.015	33
1208	.030	34
1209	.005	35
1210	.005	36
		37
1211	.005	38
1212	.005	39
1213	.005	40

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All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug 5, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Saskatchewan ...ning Development Corp.,

File No. 81-0881

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au
1214	.005
1215	.010
1216	.005
1217	.010
1218	.010
1219	.435
1220	.005
1221	.005
1222	.005
1223	.005
1224	.005
1225	.020
1226	.010
1227	.005
1228	.005
1229	.010
1230	.005
1231	.005
1232	.010
1233	.040
1234	.045
1235	.015
1236	.005
1237	.010
1238	.015
1239	.015
1240	.020
1241	.005
1242	.005
1243	.005
1244	.005
1245	.005
1246	.005
1247	.005
1248	.030
1249	.010
1250	.005

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All results are in PPM.

SUGGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
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ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To:Saskatchewan Mining Development Corp.,

File No. 81-0881

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	
1251	.005	1
1252	.005	2
1253	.005	3
1254	.005	4
1255	.005	5
1256	.050	6
1257	.005	7
1258	.015	8
1259	.005	9
1260	.010	10
1261	.020	11
1262	.020	12
1263	.020	13
1264	.015	14
1265	.005	15
1266	.005	16
1267	.020	17
1268	.030	18
1269	.005	19
1270	.015	20
		21
		22
		23
		24
		25
		26
		27
		28
		29
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		33
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		36
		37
		38
		39
		40

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 81-0881

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Cu	Pb	Zn	Ag	Au	
662	78	86	98	.7	.005	1
663	60	64	75	.4	.010	2
664	77	89	124	.6	.005	3
665	154	94	138	1.9	.020	4
666	22	44	129	.4	.005	5
667	46	39	98	.5	.005	6
668	59	45	100	.2	.005	7
669	21	35	79	.5	.005	8
670	55	30	100	.3	.005	9
						10
671	55	37	90	.4	.010	11
672	46	27	81	.3	.010	12
673	42	25	65	.5	.005	13
674	160	51	102	.9	.005	14
675	50	34	82	.2	.005	15
676	143	30	120	1.1	.020	16
677	70	76	88	.8	.005	17
678	190	66	92	2.5	.005	18
679	86	44	104	.5	.005	19
680	60	44	67	.2	.005	20
						21
681	69	44	101	.3	.010	22
682	>200	39	>214	.4	.060	23
683	72	59	95	.9	.005	24
684	55	32	117	.3	.005	25
685	45	35	104	.2	.005	26
686	37	44	87	.5	.010	27
687	27	35	140	.5	.005	28
688	42	38	104	.5	.005	29
689	66	54	128	.4	.005	30
690	64	48	83	.6	.005	31
						32
691	82	70	107	.3	.020	33
692	46	33	82	.4	.010	34
693	38	23	79	.6	.005	35
694	49	32	97	.3	.005	36
695	52	30	126	.3	.005	37
696	18	18	73	.4	.005	38
697	>200	51	162	2.6	.010	39
						40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0881

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Cu	Pb	Zn	Ag	Au	
698	89	43	113	.4	.005	1
699	46	28	71	.1	.005	2
700	17	14	37	.2	.005	3
						4
701	42	46	169	.4	.015	5
702	50	45	136	.3	.005	6
703	95	57	101	.4	<.035	7
704	53	41	110	.4	.010	8
705	69	79	128	.3	.010	9
706	62	43	124	.7	.005	10
707	38	37	127	.6	.005	11
708	79	42	122	1.3	.010	12
709	96	51	124	.7	.020	13
710	89	37	116	1.4	.010	14
						15
711	44	21	83	.2	.005	16
712	61	24	101	.3	.005	17
713	26	15	47	.3	.010	18
714	53	22	121	.1	.005	19
715	28	23	122	.4	.005	20
716	21	18	71	.4	.005	21
717	112	29	160	<2.6	.005	22
718	64	29	120	.7	.005	23
719	58	23	116	.4	.050	24
720	43	22	84	.5	.005	25
						26
721	25	23	69	.7	.005	27
722	23	18	58	.2	.020	28
723	40	20	75	.4	.005	29
724	78	21	50	.5	.005	30
725	73	23	135	1.2	<.030	31
726	37	22	92	.4	<.070	32
727	60	21	115	.2	.010	33
728	36	24	108	.4	<.055	34
729	64	22	130	.2	.005	35
						36
						37
						38
						39
						40

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All results are in PPM.

QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981

DATE REPORTS MAILED Aug. 5, 1981

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0881
Type of Samples Rock
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø

ASSAY

SAMPLE No.		Cu	Pb	Zn	Ag	Au			Cu%	Ag oz/ton			
5022 X	N.S.												1
5023 X	N.S.												2
													3
9009		64	20	56	.1	.005							4
9010		110	23	63	.1	.005							5
9011		179	23	62	.2	.005							6
9012		7	29	100	.1	.005							7
9013		20	27	67	.1	.005							8
9014		69	20	26	.1	.005							9
9015		6500	4200	1900	*	.060				1.05			10
9016		2000	146	144	2.8	.005							11
9017		1450	570	95	7.6	.010							12
9018		79	44	30	.4	.020							13
9019		61	22	53	.2	.005							14
9020		*	240	340	*	.065			4.90	1.76			15
													16
9021		600	311	8	2.5	.005							17
9022		340	1260	5	9.9	.005							18
9023		1600	1000	66	8.1	.010							19
													20
													21
													22
													23
													24
													25
													26
													27
													28
													29
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													31
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													33
													34
													35
													36
													37
													38
													39
													40

All reports are the confidencial property of clients
All results are in PPM.

QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED July 28, 1981
DATE REPORTS MAILED aug. 5, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Dev. Corp.

File No. 81-0881 A
Type of Samples pulp
Disposition (re-run)

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R Property : TA HOOLA 4947

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 750	2	27	20	86	.4	1
751	1	40	20	64	.8	2
752	1	48	20	66	.3	3
753	1	24	15	100	.3	4
754	1	52	21	122	.3	5
755	1	16	22	80	1.0	6
756	1	88	25	124	.7	7
757	8	60	23	182	.6	8
758	7	68	50	260	2.6	9
759	2	31	54	260	1.0	10
760	1	27	30	130	.4	11
761	1	24	24	146	.5	12
762	1	38	26	380	.4	13
763	11	100	50	275	.4	14
764	5	46	35	168	.2	15
765	1	21	16	82	.3	16
766	1	52	18	124	.2	17
767	2	80	22	124	1.9	18
768	1	70	23	116	.1	19
769	1	58	20	56	.5	20
770	1	245	21	160	1.5	21
771	1	33	19	114	.2	22
772	1	30	22	146	.2	23
773	1	36	17	80	.3	24
774	1	30	18	98	.4	25
775	1	54	26	156	.4	26
776	1	21	16	78	.3	27
777	1	33	25	148	.7	28
778	1	54	26	180	1.1	29
TA-1-R 779	1	17	32	134	.3	30
						31
TA-1-R 1267	1	35	24	164	.3	32
1268	1	31	17	80	.3	33
1269	1	66	30	198	.3	34
TA-1-R 1270	1	35	19	166	.4	35
						36
						37
						38
						39
						40

All reports are the confidencial property of clients
All results are in PPM.

QUESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Oct. 1, 1981
DATE REPORTS MAILED Oct. 22, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender,
Vancouver, B.C.
V6E 4A4

c.c. Mr. Steven Earle, Saskatoon,

File No. 81-0930
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R Project : TA HOOL A (4947) Requisition # 0557

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag
1271	.030	1	31	18	74	.2
1272	.010	1	24	15	92	.3
1273	.010	1	33	17	84	.5
1274	.020	1	25	16	64	.2
1275	.035	1	50	16	90	.3
1276	.005	1	64	20	25	.8
1277	.040	1	270	19	66	.5
1278	.130	1	235	22	84	.3
1279	.010	1	48	24	120	.5
1280	.025	1	395	26	144	.9
1281	.025	1	255	20	106	1.0
1282	.040	6	38	30	295	.5
1283	.005	1	27	20	56	.3
1284	.065	1	16	16	54	.7
1285	.010	3	29	21	162	.8
1286	.020	1	41	24	128	.6
1287	.020	1	86	60	76	.2
1288	.035	2	76	26	92	1.4
1289	.045	1	72	23	120	.3
1290	.015	2	36	23	100	.3
1291	.015	1	50	21	78	.4
1292	.030	1	122	20	80	1.1
1293	.040	1	37	23	76	.9
1294	.010	1	54	18	66	.6
1295	.030	1	38	19	101	.6
1296	.065	1	44	28	210	.3
1297	.065	1	25	18	72	.7
1298	.145	1	49	21	104	.5
1299	.720	1	28	20	76	.4
1300	.005	1	37	16	98	.5
1301	.045	2	90	22	88	.2
1302	.005	1	96	27	210	1.2
1303	.010	1	26	24	166	.5
1304	.025	1	27	23	116	.6
1305	.030	1	68	22	148	.5

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 2, 1981
DATE REPORTS MAILED Aug. 10, 1981
ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0930
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag
1306	.020	2	32	19	122	.3
1307	.005	1	100	20	84	.9
1308	.005	2	16	18	60	.3
1309	.100	3	58	20	120	.4
1310	.015	4	80	22	124	.5
1311	.005	1	58	17	82	.2
1312	.005	2	84	22	88	.1
1313	.005	1	37	18	98	.3
1314	.005	1	54	32	160	.2
1315	.005	1	70	20	92	.3
1316	.005	1	24	17	74	.5
1317	.005	1	21	23	108	.4
1318	.020	2	34	21	70	.6
1319	.010	4	70	22	120	.4
1320	.030	1	23	17	96	.1
1321	.015	1	19	17	68	.2
1322	.005	1	26	29	80	.2
1323	.005	4	45	21	56	.1
1324	.015	3	43	20	64	.3
1325	.005	2	40	22	74	.6
1326	.015	1	68	20	66	.3
1327	.005	1	60	21	210	.3
1328	.035	2	34	22	94	.4
1329	.020	1	49	22	106	.3
1330	.005	1	48	23	124	.6
1331	.055	2	74	42	160	.3
1332	.005	2	104	23	102	.7
1333	.010	1	38	20	112	.3
1334	.005	1	23	20	100	.3
1335	.005	2	270	21	78	1.2

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 2, 1981

DATE REPORTS MAILED Aug. 10, 1981

ASSAYER D. Toye

DEAN TOYE, B Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.
#330 - 1130 W. Pender
Vancouver, B.C.
V6E 4A4

c.c. Mr. Steven Earle, Saskatoon

File No. 81-0999
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R Property : TA HOOLA (4947) Req. No.: 0558

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
780	.005	1	25	24	116	.7	1
781	.005	1	25	25	164	.5	2
782	.025	1	17	26	150	.5	3
783	.020	4	80	70	375	1.2	4
784	.020	1	70	30	174	.1	5
785	.005	1	40	25	100	.2	6
786	.005	1	17	15	74	.3	7
787	.005	1	29	15	72	.2	8
788	.010	1	23	12	64	.3	9
789	.005	1	68	23	144	.5	10
790	.015	1	60	28	192	.3	11
791	.015	5	62	55	162	1.1	12
792	.050	2	41	35	112	.5	13
793	.030	1	26	26	136	.3	14
794	.010	1	28	26	128	.4	15
795	.115	4	82	40	190	1.4	16
796	.130	1	27	17	162	.4	17
797	.030	1	78	27	114	.4	18
798	.020	2	58	25	144	.2	19
799	.005	1	44	21	112	.2	20
800	.045	1	28	22	162	.5	21
801	.005	1	43	28	130	.9	22
802	.005	1	41	20	92	.2	23
803	.035	1	36	27	205	.4	24
804	.005	4	54	35	480	.8	25
805	.025	2	78	20	88	.3	26
806	.005	3	166	22	168	1.3	27
807	.005	1	21	11	66	.2	28
808	.005	2	23	22	210	.5	29
809	.005	2	24	20	178	.4	30
810	.005	2	80	23	162	1.1	31
811	.025	3	72	23	210	1.6	32
812	.005	4	23	22	92	.5	33
813	.035	2	21	31	132	.3	34
814	.020	1	39	32	275	.4	35
815	.050	1	42	30	168	.6	36
816	.005	1	34	22	98	.3	37
							38
							39
							40

All reports are the confidencial property of clients
results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 8, 1981

DATE REPORTS MAILED Aug. 14, 1981

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0999

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
817	.025	1	54	28	180	.6	1
817a	.015	1	64	25	124	.3	2
818	.010	2	41	37	198	.3	3
818a	.005	1	17	16	98	.2	4
819	.015	1	76	25	98	.4	5
819a	.005	2	76	25	205	1.2	6
820	.010	1	41	28	144	.2	7
820a	.055	1	25	22	275	.3	8
821	.010	1	25	24	92	.3	9
821a	.020	4	104	100	265	.5	10
822	.020	1	42	22	92	.9	11
822a	.005	1	42	25	380	.2	12
823	.005	1	18	17	90	.4	13
823a	.005	1	14	18	116	.1	14
824	.005	1	27	20	132	.4	15
824a	.025	1	33	20	164	.2	16
825	.015	4	58	30	152	.2	17
826	.005	1	26	28	158	.2	18
827	.005	1	62	25	160	.1	19
828	.005	1	12	13	64	.1	20
829	.005	1	42	23	44	.5	21
830	.005	1	15	17	230	.2	22
							23
831	.005	1	17	24	345	.2	24
832	.010	1	19	22	126	.3	25
833	.005	1	14	16	92	.4	26
834	.005	1	20	19	102	.1	27
835	.005	1	24	23	182	.5	28
836	.025	4	142	32	220	.7	29
837	.010	6	45	40	245	.4	30
838	.015	1	66	25	130	.7	31
839	.355	1	82	27	120	.5	32
840	.005	2	66	26	120	.4	33
841	.010	1	49	24	130	.7	34
842	.005	2	68	25	116	.4	35
843	.005	1	58	27	106	.6	36
844	.005	2	60	23	106	.5	37
							38
							39
							40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 8, 1981

DATE REPORTS MAILED Aug. 14, 1981

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0999

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
845	.010	1	62	23	106	.7	1
846	.005	1	58	26	96	.7	2
847	.040	1	27	17	49	.2	3
848	.160	1	13	17	25	.1	4
849	.015	1	66	30	70	.2	5
850	.005	2	110	34	98	.5	6
851	.010	1	43	25	58	.2	7
852	.005	1	20	28	41	.7	8
853	.020	3	30	30	80	.1	9
854	.005	1	21	20	70	.5	10
855	.005	2	25	19	66	.7	11
856	.035	1	24	10	33	.2	12
857	.050	30	84	70	78	.5	13
858	.005	2	42	23	72	.2	14
859	.005	1	23	15	54	1.1	15
860	.010	1	62	23	96	.4	16
							17
861	.020	1	28	18	102	.2	18
862	.010	1	28	18	82	.6	19
863	.005	2	25	22	126	1.1	20
864	.005	1	28	16	76	1.0	21
865	.030	1	26	17	52	.1	22
866	.005	1	70	25	94	.7	23
867	.005	1	27	22	84	.5	24
868	.010	2	86	80	58	.1	25
869	.005	1	17	24	49	.1	26
870	.010	1	10	20	44	.1	27
871	.025	1	43	31	68	.1	28
872	.040	1	46	33	78	.3	29
873	.015	1	100	27	52	.3	30
874	.010	1	39	43	58	.6	31
875	.010	4	58	30	54	.2	32
876	.010	7	66	26	56	.2	33
877	.020	3	72	40	62	1.5	34
878	.115	1	41	27	52	.2	35
879	.060	1	19	20	39	.1	36
880	.025	1	54	25	52	1	37
							38
							39
							40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 8, 1981

DATE REPORTS MAILED Aug. 14, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0999

Type of Samples _____

Disposition _____

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
881	.010	2	47	26	92	.1	1
882	.005	2	12	25	58	.2	2
883	.005	8	52	45	190	.2	3
884	.005	3	31	19	112	.3	4
885	.005	11	50	30	194	.5	5
886	.005	1	18	17	76	.1	6
887	.025	1	60	22	90	.2	7
888	.005	2	72	23	144	.8	8
889	.005	8	60	21	96	.8	9
890	.010	2	28	15	90	.5	10
891	.005	1	15	13	84	.2	11
892	.005	1	86	22	164	.4	12
893	.005	1	44	18	112	.3	13
894	.005	1	13	14	47	.1	14
895	.005	1	16	12	86	.1	15
896	.010	1	45	19	92	.4	16
897	.005	1	41	12	140	.6	17
898	.015	1	9	10	37	.3	18
899	.020	1	118	20	92	1.0	19
900	.005	5	66	23	215	.6	20
							21
901	.005	1	30	20	134	.3	22
902	.015	1	62	27	132	.3	23
903	.005	1	33	23	148	.5	24
904	.005	5	31	15	76	.1	25
905	.110	1	22	20	64	.3	26
906	.005	2	45	25	54	.4	27
907	.010	1	28	25	68	.5	28
908	.005	7	265	60	106	1.5	29
909	.005	8	86	55	100	.6	30
910	.015	2	30	24	74	.3	31
911	.010	5	37	45	70	.6	32
912	.015	2	30	35	80	.2	33
913	.005	9	11	205	45	.5	34
914	.005	4	21	38	60	.1	35
915	.010	3	35	36	130	.3	36
916	.005	1	13	30	34	.5	37
917	.005	1	5	8	37	.2	38
							39
							40

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DIGESTION: _____

DETERMINATION: _____

DATE SAMPLES RECEIVED Aug. 8,1918

DATE REPORTS MAILED Aug. 14, 1981

ASSAYER D. Toye

DEAN TOYE, B Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0999

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
918	.005	1	31	15	114	.6	1
919	.005	1	16	17	98	.2	2
920	.065	1	41	19	108	.3	3
921	.010	1	80	21	132	.9	4
922	.005	1	19	30	108	.7	5
923	.005	2	94	45	100	1.0	6
924	.010	1	64	26	66	.1	7
925	.005	1	37	42	150	.2	8
926	.130	1	70	25	144	.4	9
927	.005	1	60	26	150	.2	10
928	.015	1	27	30	124	.3	11
929	.015	6	37	40	108	.3	12
930	.030	1	21	33	136	.2	13
931	.005	1	16	30	68	.2	14
							15
1336	.015	1	37	30	122	.1	16
1337	.010	1	50	24	108	.2	17
1338	.005	1	56	25	106	.1	18
1339	.020	1	21	19	86	.4	19
1340	.015	1	68	25	134	.5	20
1341	.005	1	34	24	76	.5	21
1342	.005	1	43	20	56	.1	22
1343	.005	1	40	25	104	.3	23
1344	.005	1	26	20	92	.1	24
1345	.005	1	19	17	58	.5	25
1346	.010	2	92	26	122	.4	26
1347	.005	1	23	20	78	.4	27
1348	.010	1	78	27	118	.2	28
1349	.005	1	44	20	43	.1	29
1350	.005	2	24	21	52	.1	30
1351	.005	1	31	18	54	.6	31
1352	.005	1	56	21	96	.1	32
1353	.005	1	36	25	150	.1	33
1354	.020	1	58	21	82	.4	34
1355	.005	1	18	21	40	.3	35
1356	.005	1	96	23	104	.1	36
1357	.005	1	31	23	138	.1	37
1358	.025	1	34	22	138	.2	38
							39
							40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 8, 1981

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ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253-3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0999

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
1359	.005	3	46	30	162	.7	1
1360	.015	1	45	23	152	.8	2
1361	.005	1	25	26	130	1.1	3
1362	.010	3	48	26	136	.6	4
1363	.005	1	26	23	172	.6	5
1364	.030	1	82	27	102	.5	6
1365	.005	8	37	60	86	.2	7
1366	.005	4	80	70	142	.4	8
1367	.010	3	370	35	118	1.3	9
1368	.005	12	96	30	64	1.9	10
1369	.010	19	130	43	178	.8	11
1370	.005	10	88	40	88	.4	12
							13
1371	.005	1	49	32	88	.2	14
1372	.005	3	80	35	96	.4	15
1373	.015	4	124	60	94	.9	16
1374	.030	3	62	34	60	.6	17
1375	.005	1	31	25	80	.6	18
1376	.010	1	25	21	56	.5	19
1377	.005	1	45	19	58	.8	20
1378	.105	1	90	35	122	.7	21
1379	.025	1	90	30	122	1.0	22
1380	.035	1	26	20	60	.7	23
1381	.010	1	38	17	66	.6	24
1382	.020	1	41	20	90	.6	25
1383	.015	1	22	16	64	.3	26
1384	.005	1	49	15	58	.5	27
1385	.010	1	82	26	76	.3	28
1386	.005	1	47	22	96	.4	29
1387	.005	1	34	15	58	.1	30
1388	.005	1	24	15	68	.1	31
1389	.015	1	18	14	62	.1	32
1390	.010	2	118	26	62	.8	33
1391	.055	2	39	20	82	.4	34
1392	.010	1	62	30	74	.1	35
1393	.005	1	29	25	56	.2	36
1394	.015	1	28	38	122	.1	37
1395	.010	1	35	33	136	.4	38
							39
							40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 8, 1981

DATE REPORTS MAILED Aug. 14, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0999

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
1396	.025	1	40	40	112	.3	1
1397	.005	1	14	30	60	.3	2
1398	.005	1	12	23	56	.1	3
1399	.005	1	43	36	64	.1	4
1400	.040	1	80	42	70	.5	5
1401	.010	1	27	33	84	.4	6
1402	.010	1	30	24	102	.4	7
1403	.020	1	17	24	96	.5	8
1404	.005	1	35	23	100	.3	9
1405	.015	1	30	26	78	.2	10
1406	.005	1	16	30	74	.1	11
1407	.035	2	22	20	76	.7	12
1408	.010	1	41	18	96	.6	13
1409	.015	1	29	27	192	.2	14
1410	.010	4	76	30	156	.5	15
							16
1411	.010	1	21	20	126	.3	17
1412	.005	1	11	21	68	.9	18
1413	.005	3	62	43	96	.4	19
1414	.005	3	56	40	100	.2	20
1415	.005	1	11	21	37	.3	21
1416	.010	2	42	40	100	.3	22
1417	.015	2	62	50	86	.2	23
1418	.005	8	184	60	134	.3	24
1419	.015	4	90	60	94	2.3	25
1420	.015	1	52	44	88	.5	26
1421	.015	6	215	51	104	1.4	27
1422	.015	2	58	43	136	1.1	28
1423	.025	2	62	45	76	.2	29
1424	.045	3	136	60	104	.6	30
1425	.025	1	25	30	62	.3	31
1426	.080	11	36	23	158	.9	32
1427	.020	2	11	15	64	.4	33
1428	.035	1	38	15	66	.3	34
1429	.015	1	58	25	98	.4	35
1430	.005	1	8	16	27	.1	36
1431	.035	9	52	16	126	.2	37
1432	.005	14	27	15	82	.2	38
							39
							40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 8, 1981

DATE REPORTS MAILED Aug. 14, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-0999

Type of Samples _____

Disposition _____

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-R

SAMPLE No.	Au	Mo	Cu	Pb	Zn	Ag	
1433	.005	1	41	15	156	1.6	1
1434	.005	1	23	35	82	.6	2
1435	.020	1	104	85	122	.7	3
1436	.005	2	86	70	110	.6	4
1437	.005	2	46	50	88	.5	5
1438	.005	10	72	76	156	.6	6
1439	.005	2	47	30	162	1.0	7
1440	.005	1	42	32	184	.8	8
1441	.005	4	35	35	126	.2	9
1442	.005	3	45	50	158	.4	10
1443	.005	1	38	35	114	.4	11
1444	.010	17	180	35	110	1.0	12
1445	.010	3	66	35	78	.2	13
1446	.005	1	41	38	60	.1	14
1447	.010	2	56	32	80	.2	15
1448	.010	2	92	38	94	.4	16
1449	.010	1	154	50	102	.6	17
1450	.005	1	37	30	110	.4	18
1451	.005	2	54	32	82	.4	19
1452	.010	1	84	32	66	1.7	20
1453	.005	1	96	50	96	1.5	21
1454	.005	1	22	26	100	.4	22
1455	.005	1	33	31	136	.7	23
1456	.005	4	72	21	96	.3	24
1457	.010	1	35	32	74	.2	25
1458	.005	6	39	41	196	.4	26
1459	.005	3	44	63	78	.3	27
1460	.005	1	49	20	54	.1	28
							29
							30
							31
							32
							33
							34
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DIGESTION: _____

DETERMINATION: _____

DATE SAMPLES RECEIVED Aug. 8, 1981

DATE REPORTS MAILED Aug. 14, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

c.c. Mr. Steven Earle, Saskatoon,

File No. 81-1034
Type of Samples Soils
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Project : TA HOOLA (4947) Req. No.: 0559

SAMPLE No.	Ag	Au	Mo	Cu	Pb	Zn
TA-1-R 932	.1	.005	1	33	31	96
933	.2	.010	2	24	32	70
934	.2	.030	3	44	46	88
935	.1	.005	3	37	38	66
936	.1	.005	2	41	34	86
937	.2	.005	4	66	43	108
938	.1	.010	2	39	48	116
939	.1	.005	2	50	56	104
940	.1	.005	1	27	10	60
941	.1	.005	5	58	20	80
942	.3	.005	3	9	13	52
943	.1	.005	2	22	10	74
944	1.0	.005	3	32	15	136
945	.7	.010	5	74	30	132
946	.1	.005	3	35	22	68
947	2.4	.015	3	60	33	152
948	.2	.005	2	22	18	90
949	.2	.020	5	15	20	62
950	.4	.110	1	26	23	86
951	.8	.005	2	28	21	112
952	.1	.005	1	74	25	108
953	.1	.005	1	44	30	140
954	.1	.005	2	23	32	100
955	.2	.005	1	41	37	126
956	.4	.005	1	21	33	172
957	.5	.005	1	22	40	134
958	.3	.005	5	60	35	160
959	.2	.005	4	27	25	160
960	.1	.015	2	32	30	126
961	.1	.010	5	78	50	166
962	.2	.005	5	21	25	144
963	1.5	.030	4	108	31	98
964	.1	.005	2	25	17	86
965	.1	.010	3	34	20	72
966	.8	.015	3	52	21	94
967	.1	.020	3	50	27	74
968	.1	.015	3	39	15	60
TA-1-R 969	.1	.015	3	58	24	82

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 13, 1981

DATE REPORTS MAILED Aug. 21, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To. Saskatchewan Mining Development Corp.,

File No. 81-1034
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Ag	Au	Mo	Cu	Pb	Zn	
TA-1-R 970	.2	.005	6	47	22	100	1
971	.5	.005	7	20	14	92	2
							3
TA-1-R 972	.8	.005	27	31	15	140	4
973	.2	.005	3	27	12	84	5
974	.6	.005	15	21	12	80	6
975	.9	.005	1	70	20	130	7
976	.1	.005	1	27	25	88	8
977	.6	.005	1	47	30	84	9
978	.1	.005	1	82	50	108	10
TA-1-R 979	.1	.015	1	44	30	104	11
							12
TA-1-R 1461	.2	.005	1	50	70	144	13
1462	.5	.005	3	34	40	184	14
1463	.4	.005	1	25	65	220	15
1464	.3	.005	1	33	22	122	16
1465	.3	.010	1	52	26	166	17
1466	.8	.005	1	31	21	142	18
1467	.6	.005	1	20	25	68	19
1468	.4	.020	7	152	30	200	20
1469	.1	.005	3	43	18	92	21
1470	.6	.005	72	58	21	200	22
1471	.7	.010	4	34	28	122	23
1472	.2	.005	3	22	19	116	24
1473	.1	.005	5	45	23	84	25
1474	.1	.005	5	62	15	84	26
1475	.1	.005	2	27	23	104	27
1476	.5	.005	2	22	16	102	28
1477	.1	.005	2	40	24	90	29
1478	.2	.010	1	27	13	60	30
1479	.5	.015	1	32	24	142	31
1480	.1	.375	2	47	22	72	32
TA-1-R 1481	.4	.015	2	37	35	250	33
							34
TA-1-R 2035	.1	.005	5	52	45	72	35
2036	.6	.005	14	128	50	126	36
2037	.2	.005	19	140	45	126	37
2038	.4	.005	13	48	35	100	38
2039	1.0	.015	8	76	45	82	39
TA-1-R 2040	.3	.010	2	33	30	68	40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 13, 1981

DATE REPORTS MAILED Aug. 21, 1981

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 81-1034

Type of Samples Soil & Rock

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Au	
TA-1-R-2041	1	27	42	88	.3	.005	1
2042	14	60	90	280	1.1	.005	2
2043	3	41	34	80	.1	.005	3
2044	1	16	20	66	.6	.005	4
2045	1	45	27	172	.5	.005	5
2046	6	20	35	98	.2	.005	6
2047	2	19	34	94	.4	.005	7
2048	1	24	28	62	.1	.010	8
2049	5	37	36	76	.4	.005	9
2050	4	20	25	96	.6	.005	10
2051	3	102	21	78	.7	.005	11
2052	3	54	40	98	.3	.005	12
2053	4	36	28	90	.4	.005	13
2054	1	21	37	72	.3	.010	14
2055	2	66	60	170	.3	.015	15
2056	1	54	32	94	.1	.005	16
2057	1	41	45	60	.1	.005	17
2058	1	64	50	110	.1	.005	18
2059	2	58	46	82	.1	.020	19
2060	3	88	170	94	.2	.005	20
2061	1	23	22	80	.5	.010	21
2062	1	19	21	74	.1	.005	22
2063	1	26	30	80	.4	.005	23
2064	3	27	26	43	.1	.005	24
2065	1	40	32	124	.2	.005	25
2066	1	58	35	136	.2	.005	26
2067	2	124	47	210	.4	.005	27
2068	3	68	44	250	.5	.005	28
2069	3	43	40	210	.5	.005	29
2070	1	21	30	130	.1	.005	30
2071	1	82	31	162	.3	.005	31
TA-1-R 2072	1	40	25	110	.2	.015	32
							33
TA-1-R-9024	R	80	11	24	.1	.030	34
TA-1-R-9025	R	186	11	30	.1	.275	35
							36
TA-1-R-9501	R	102	12	18	.1	.100	37
9502	R	42	14	15	.1	.010	38
TA-1-R-9503	R	47	17	28	.1	.005	39
							40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 13, 1981

DATE REPORTS MAILED Aug. 21, 1981

ASSAYER D. Toye

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ACME ANALYTICAL LABORATORIES LTD.
aying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan ...ning Development Corp.
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4
c.c. Mr. Steven Earle, Saskatoon, Sask.

File No: 81-1221
Type of Samples: Soil
Disposition:

GEOCHEMICAL ASSAY CERTIFICATE

Project : TA HOOLA (4947) Req.No.: 0560

SAMPLE No.	Cu	Pb	Zn	Ag	Au
TA-1-R 430	30	20	80	.2	.005
431	24	15	50	.2	.005
432	40	15	55	.4	.005
433	40	15	95	.4	.005
434	28	19	75	.1	.005
435	145	17	95	.3	.005
436	21	16	17	.1	.005
437	115	25	130	1.3	.005
438	24	13	70	.2	.005
439	70	18	50	.5	.005
440	140	17	70	.4	.005
441	65	70	50	.8	.005
442	95	38	75	.4	.015
443	36	200	105	.6	.045
444	80	20	65	.4	.005
445	23	28	55	.8	.035
446	43	25	110	.6	.185
447	50	39	130	.6	.055
448	27	20	170	.7	.005
449	40	23	205	.5	.005
450	70	20	230	.7	.260
451	30	22	125	.6	.075
452	34	29	185	.6	.050
453	145	30	245	.8	.205
454	18	17	130	.5	.005
455	27	18	140	.3	.005
456	13	16	80	1.2	.005
457	32	22	125	.5	.650
458	53	20	270	.6	.045
459	60	16	105	1.0	.055
TA-1-R-460	43	21	200	.9	.260
TA-1-R-461	65	20	150	1.6	.105
462	24	19	145	.9	.005
463	65	22	115	.8	.005
464	26	16	145	.8	.005
465	35	20	130	.8	.005
TA-1-R-466	18	14	75	.5	.005

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 31, 1981
DATE REPORTS MAILED Sept. 5, 1981

ASSAYER D Toye

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852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-1221
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Pb	Zn	Ag	Au
TA-1-R-467	40	28	84	.1	.010
468	56	30	130	.4	.075
469	50	28	205	.5	<.030
470	24	33	118	.3	.005
471	28	29	98	.2	.005
472	45	70	220	1.7	<.100
473	50	60	250	1.6	.095
474	32	38	164	.8	.005
475	52	43	158	.3	.005
476	115	74	390	5.3	<.140
477	25	30	102	.4	.005
478	55	48	160	.7	<.035
479	75	30	176	.5	<.170
480	40	53	290	1.0	.005
481	34	50	138	.8	<.060
482	60	60	240	.3	<.050
483	55	32	168	.2	.005
484	45	23	230	.7	.005
485	65	25	162	.1	<.145
486	33	26	210	.4	<.055
487	55	36	220	.4	.025
488	80	25	114	.1	<.030
489	45	50	300	.6	<.110
TA-1-R-490	55	60	305	.2	.020

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QUESTION:

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ASSAYER D. Toye

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ACME ANALYTICAL LABORATORIES LTD.
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phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-1221

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

ASSAY

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Au	Cu%	
TA-1-Ø 9026		135	13	34	.4	.005		1
9027		87	28	24	.1	.145		2
9028		75	13	25	.2	.005		3
9029		140	47	68	.4	.005		4
9030		300	140	106	.6	.005		5
9031		320	290	54	4.2	.005		6
9032		1600	18	40	1.3	.145		7
9033		95	19	47	.3	.005		8
9034		135	28	76	.4	.005		9
9035		125	18	50	.2	.005		10
9036		*	27	62	27.0	.720	1.66	11
9037		70	13	35	.3	.005		12
9038		190	32	210	.4	.005		13
9039		70	22	82	.1	.005		14
9040		75	38	64	.4	.050		15
9041		35	16	43	.1	.005		16
9042		80	18	124	.3	.005		17
9043		75	55	100	.6	.005		18
9044	2	140	55	72	.3	.005		19
9045	12	170	580	10	1.5	.005		20
9046	24	1500	2880	14	12.4	.045		21
9047	25	700	1750	19	12.6	.015		22
9048	25	810	3000	36	20.5	.005		23
9049		92	32	68	.4	.005		24
TA-1-Ø-9050		195	34	86	.4	.005		25
								26
TA-1-Ø-9504		265	450	94	2.2	.005		27
9505		330	660	80	3.2	.005		28
9506		250	360	64	2.2	.005		29
9507		280	160	62	1.5	.005		30
9508		360	2580	76	19.0	.005		31
9509		1160	650	116	12.3	.105		32
9510		830	220	60	1.8	.005		33
9511		60	27	34	.2	.005		34
9512		100	14	14	.2	.005		35
9513		100	10	21	.1	.005		36
9514		135	14	30	.1	.005		37
TA-1-Ø-9515		110	14	23	.1	.005		38
								39
								40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Aug. 31, 1981

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ASSAYER D. Toye

DEAN TOYE, B Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan ..ining Development Corp.

File No. 81-1221

Type of Samples Rock

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Pb	Zn	Ag	Au
TA-1-Ø-9516	120	11	16	.1	.005
9517	105	6	10	.1	.005
9518	135	3	8	.1	.025
9519	42	3	9	.1	.005
9520	135	6	8	.1	.005
9521	95	5	10	.1	.005
9522	125	5	4	.1	.005
9523	25	30	580	.6	.020
TA-1-Ø-9524	70	7	26	.1	.005

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DIGESTION:

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ASSAYER D Toye

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ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

c.c. Mr. Steven Earle, Saskatoon

File No. 81-1261
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Project : TA HOOLA (4947)

SAMPLE No.	Cu	Pb	Zn	Ag	Au	
TA-1-R 491	50	30	196	.6	.005	1
492	33	22	98	.5	.125	2
493	35	28	158	.7	.015	3
494	40	34	180	1.1	.075	4
495	30	24	75	.3	.005	5
496	31	25	128	.9	.005	6
497	30	24	68	.4	.005	7
498	40	27	98	.9	.005	8
499	43	28	88	.6	.005	9
TA-1-R 500	27	28	86	.6	.005	10
						11
TA-1-R 1482	23	19	58	.5	.005	12
1483	25	20	84	.4	.030	13
1484	45	19	98	.5	.060	14
1485	30	16	82	.4	.005	15
1486	75	22	60	.2	.020	16
1487	40	20	92	.5	.040	17
1488	40	20	98	.4	.040	18
1489	27	25	94	.5	.005	19
1490	28	19	125	.4	.005	20
1491	47	26	105	.4	.005	21
1492	70	28	185	.8	.005	22
1493	50	22	146	.3	.005	23
1494	26	20	82	.5	.005	24
1495	45	28	148	.8	.005	25
1496	38	22	120	.3	.005	26
1497	18	21	86	.3	.005	27
1498	28	34	255	.4	.005	28
1499	28	26	185	.4	.005	29
1500	85	42	340	.7	.005	30
1501	60	16	60	.5	.030	31
1502	200	22	75	.2	.025	32
1503	245	24	68	.5	.075	33
1504	145	22	68	.3	.020	34
1505	115	19	80	.4	.045	35
1506	50	28	65	.8	.005	36
1507	60	142	108	.6	.005	37
TA-1-R 1508	45	52	158	.8	.005	38
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DIGESTION:
DETERMINATION:

DATE SAMPLES RECEIVED Sept. 2, 1981
DATE REPORTS MAILED Sept.10, 1981
ASSAYER

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ACME ANALYTICAL LABORATORIES LTD.
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852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253-3158

To: Saskatchewan Mining Development Corp.,

File No. 81-1261
Type of Samples Soil
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Pb	Zn	Ag	Au	
TA-1-R 1509	78	140	140	1.4	.005	1
1510	25	50	75	.7	.005	2
1511	43	32	93	.3	.005	3
1512	37	30	55	.5	.005	4
1513	38	38	50	.5	.005	5
1514	65	92	65	.5	.035	6
1515	73	54	60	.4	.005	7
1516	45	84	73	.6	.005	8
1517	325	128	80	.7	.005	9
1518	22	30	85	.2	.050	10
1519	165	45	90	.5	.005	11
1520	19	24	65	.1	.045	12
1521	70	32	108	.1	.015	13
1522	30	30	110	.4	.050	14
1523	45	30	75	.3	.005	15
1524	25	32	120	.6	.075	16
1525	35	32	115	.2	.040	17
1526	70	30	50	.4	.005	18
1527	11	32	115	.7	.005	19
1528	28	25	87	.5	.005	20
TA-1-R 1529	40	24	90	.5	.005	21
						22
TA-1-R 1550	95	98	105	.7	.005	23
1551	35	45	55	.3	.005	24
1552	100	105	95	.8	.005	25
1553	30	78	75	.3	.005	26
1554	115	148	225	1.0	.005	27
1555	165	140	130	.9	.005	28
1556	80	86	95	1.0	.005	29
1557	90	116	100	.7	.005	30
1558	45	70	120	.3	.005	31
1559	95	32	130	.8	.005	32
1560	155	32	80	2.2	.005	33
1561	40	26	115	.1	.005	34
1562	25	21	90	.4	.005	35
1563	20	15	38	.4	.005	36
1564	25	19	63	.6	.005	37
TA-1-R 1565	12	18	48	.5	.005	38
						39
						40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Sept. 2, 1981
DATE REPORTS MAILED Sept.10, 1981

ASSAYER D. Toye

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Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,

File No. 81-1261

Type of Samples Soil

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Pb	Zn	Ag	Au	
TA-1-R 1506	35	21	135	.2	.005	1
1567	28	15	54	.4	.020	2
1568	55	46	154	.5	.005	3
1569	20	26	84	.2	.005	4
1570	22	35	98	.6	.005	5
1571	60	46	115	.3	.005	6
1572	30	34	178	1.1	.005	7
1573	33	20	125	.7	.005	8
1574	35	24	96	.3	.005	9
1575	75	31	124	.2	.005	10
TA-1-R 1576	155	74	148	1.8	.025	11
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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Sept. 2, 1981

DATE REPORTS MAILED Sept. 10, 1981

ASSAYER

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To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

c.c. Mr. Steven Earle, Saskatoon,

File No. 81-1508

Type of Samples Rock &

Disposition Percussion Drillings

GEOCHEMICAL ASSAY CERTIFICATE

Req.No.: 0533 Project : 4947 TA HOOLA

SAMPLE No.	Cu	Pb	Zn	Ag	As	Au	
Rock 1	83	6	66	.8	55	.020	1
2	53	9	480	2.3	54	.085	2
P.D.-Second Knob	198	58	49	.8	21	.010	3
							4
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QUESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Sept. 30, 1981

DATE REPORTS MAILED Oct. 13, 1981

ASSAYER D. Toye

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CHIEF CHEMIST
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852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St,,
Vancouver, B.C.
V6E 4A4
c.c. Mr. Steven Earle, Saskatoon.

File No. 82-0003
Type of Samples Rocks
Disposition

Project : TAHOOLA 4947 Req. No. 0567

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø (AA)

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
5000	30	117	35	32	.3	66	30	23	2	1	.4	.005	1
5001	2	43	9	38	.2	98	34	18	2	1	.1	.020	2
5002	38	351	8540	79	66.8	41	13	2	2	7	65.0	.040	3
5003	1	97	30	49	.2	7	21	2	2	1	.2	.005	4
5004	1	97	63	49	.4	16	17	6	2	1	.3	.005	5
5005	1	36	9	47	.1	10	12	3	2	1	.1	.005	6
5006	1	10	26	19	.1	4	2	2	2	1	.1	.005	7
5007	1	51	14	117	.1	4	22	6	2	1	.1	.005	8
5008	1	33	10	84	.1	3	19	2	2	1	.1	.005	9
5009	1	129	12	90	.1	7	28	3	2	1	.1	.005	10
5010	1	96	23	127	.1	5	24	3	2	1	.1	.005	11
5011	1	53	13	156	.1	6	25	7	2	1	.1	.005	12
5012	1	31	7	30	.1	39	21	3	2	1	.1	.005	13
5013	2	45	11	40	.1	23	16	2	2	1	.1	.005	14
5014	1	90	7	30	.1	11	15	3	2	1	.1	.005	15
5015	1	16	8	43	.1	16	19	7	2	1	.1	.005	16
5016	2	128	13	13	.2	7	11	16	2	1	.1	.005	17
5017	1	73	9	93	.1	4	21	2	2	1	.1	.005	18
5018	8	51	7	76	.1	7	7	4	2	1	.1	.005	19
5019	1	77	12	38	.1	11	12	5	2	1	.1	.005	20
5020	1	65	12	88	.1	14	16	5	2	1	.1	.005	21
5021	1	167	12	92	.1	3	25	4	2	1	.1	.005	22
5022	1	14	12	24	.1	4	19	9	2	1	.1	.005	23
5023	1	15	7	77	.1	5	21	3	2	1	.1	.005	24
5024	1	124	9	83	.1	4	26	2	2	1	.1	.005	25
5025	3	57	5	45	.1	2	16	8	2	1	.1	.005	26
5026	5	173	18	182	.1	5	27	7	2	1	.1	.005	27
5027	1	49	14	220	.1	3	22	2	2	1	.1	.005	28
5028	1	103	7	85	.1	6	22	2	2	1	.1	.005	29
5029	57	93	13	67	.3	40	14	8	11	1	.3	.005	30
5030	39	104	10	20	.6	87	25	79	2	1	.5	.065	31
5031	9	121	9	17	.1	55	22	13	2	1	.1	.005	32
5032	1	125	7	31	.1	4	28	10	2	1	.2	.005	33
5033	1	33	6	37	.1	4	18	6	2	1	.1	.005	34
5034	1	116	4	60	.1	18	23	4	2	1	.1	.005	35
5035	1	10	8	21	.1	2	8	6	2	1	.1	.005	36
5036	1	158	10	250	.1	4	26	6	2	1	.2	.005	37
5037	1	111	9	86	.1	3	24	2	2	1	.4	.005	38
													39
													40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan 12, 1982

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-D

(AA)

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
5038	1	179	6	150	.2	5	3	5	2	1	.3	.005	1
5039	1	93	10	100	.1	3	19	4	2	1	.2	.005	2
5040	1	223	9	82	.2	2	18	2	2	1	.3	.005	3
5041	1	118	8	127	.1	3	24	3	2	1	.2	.005	4
5042	1	141	6	93	.2	2	22	2	2	1	.1	.005	5
5043A	1	93	7	65	.1	3	19	3	2	1	.1	.005	6
5043B	1	205	7	57	.1	3	17	2	2	1	.2	.005	7
5044	1	102	5	93	.1	9	38	2	2	2	.2	.005	8
5045	1	69	6	53	.1	21	26	2	2	1	.3	.005	9
5046	72	210	25	207	.5	45	16	2	2	2	.6	.010	10
5047	1	74	5	88	.1	12	17	4	2	1	.1	.010	11
5048	2	52	3	27	.1	10	11	2	2	1	.1	.005	12
5049	1	79	5	20	.2	18	17	2	2	1	.1	.005	13
5050	1	2	4	41	.2	13	33	2	2	1	.1	.005	14
													15
5051	1	97	11	60	.2	4	22	5	2	1	.1	.005	16
5052	1	132	7	165	.2	5	21	7	2	1	.1	.005	17
5053	1	18	11	70	.2	9	41	15	2	1	.1	.005	18
5054A	1	69	9	38	.2	2	12	5	2	1	.1	.005	19
5054B	1	29	8	39	.1	5	8	6	2	1	.1	.005	20
5055	1	82	10	69	.1	5	25	13	2	1	.1	.005	21
5056	1	73	13	52	.2	4	29	23	2	1	.1	.005	22
5057	1	107	9	78	.1	3	27	5	2	1	.1	.005	23
5058	1	167	10	165	.1	3	19	17	2	1	.1	.005	24
5059	1	160	11	50	.1	39	32	2	2	1	.1	.005	25
5060A	16	59	15	33	.1	21	22	18	10	1	.1	.005	26
5060B	283	438	49	34	.8	18	24	38	2	1	.7	.020	27
5061	11	50	12	15	.1	20	15	7	2	1	.1	.005	28
5062	4	8	114	13	.4	4	4	2	2	1	.4	.005	29
5063	35	3735	635	111	10.3	15	40	11	2	6	9.1	.015	30
5064	3	27	14	94	.1	21	6	3	2	1	.1	.005	31
5065A	1	77	6	52	.1	33	24	11	2	1	.1	.005	32
5065B	1	37	6	151	.1	34	31	34	2	1	.1	.015	33
5066	1	42	9	36	.1	26	19	23	2	1	.1	.020	34
5067	2	87	10	45	.2	36	34	10	2	1	.1	.010	35
5068A	1	16	2	17	.1	27	20	31	2	1	.1	.040	36
5068B	2	44	4	15	.1	32	12	16	2	1	.1	.005	37
5069	3	95	6	38	.1	24	25	3	2	1	.1	.015	38
													39
													40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø (AA)

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
5070 A	1	78	2	18	.1	31	19	8	2	1	.2	.010	1
5070 B	1	66	3	15	.1	25	15	7	2	1	.1	.035	2
5071 A	1	44	3	24	.1	36	21	23	2	1	.1	.005	3
5071 B	3	53	4	9	.1	34	15	195	2	1	.1	.005	4
5072 A	2	55	5	16	.1	26	17	44	2	1	.1	.005	5
5072 B	1	80	7	20	.1	27	31	35	2	1	.1	.005	6
5073	4	260	53	71	.5	13	7	7	2	2	.5	.005	7
5074 A	1	152	42	73	.2	100	27	74	2	1	.3	.005	8
5074 B	16	425	31	37	.5	18	7	5	2	1	.4	.005	9
5074 C	3	268	34	33	.3	24	18	9	2	1	.3	.005	10
5075	2	180	17	33	.3	22	8	2	2	1	.2	.005	11
5076	1	61	9	61	.1	26	20	14	2	1	.1	.005	12
5077	1	84	8	72	.1	24	26	11	2	1	.2	.005	13
5078	1	81	9	68	.1	28	23	4	2	1	.1	.005	14
5079	1	59	9	71	.1	18	21	12	2	1	.1	.005	15
5080	1	69	11	104	.1	23	19	14	2	1	.2	.005	16
													17
5081	5	93	6	30	.2	35	21	10	2	1	.3	.005	18
5082 A	1	47	6	41	.1	21	20	18	2	1	.1	.040	19
5082 B	1	57	6	37	.1	14	17	10	2	1	.1	.005	20
5083 A	1	63	9	61	.1	212	34	9	2	1	.2	.005	21
5083 B	1	96	9	69	.2	23	25	6	2	1	.3	.005	22
5084	1	93	11	76	.1	29	26	10	2	1	.1	.005	23
5085	1	62	8	74	.1	21	27	10	2	1	.1	.005	24
5086	1	49	10	73	.2	19	15	12	2	1	.4	.005	25
5087	1	75	12	126	.1	25	17	11	2	1	.2	.005	26
5088	1	57	9	84	.1	18	19	11	2	1	.3	.005	27
5089	1	52	13	97	.1	11	21	11	2	2	.1	.005	28
5090 A	1	63	12	127	.1	22	20	9	2	2	.3	.005	29
5090 B	1	72	17	75	.1	12	21	6	2	1	.2	.005	30
5091 A	1	106	11	69	.1	70	29	13	2	1	.2	.005	31
5091 B	1	165	10	69	.8	20	43	62	2	1	.5	.005	32
5092	1	123	10	57	.1	24	37	11	2	1	.1	.005	33
5093	1	100	12	76	.2	49	37	11	2	1	.1	.005	34
5094 A	1	98	11	75	.2	48	37	13	2	1	.1	.005	35
5094 B	1	111	9	73	.5	55	41	11	2	1	.3	.005	36
5095	1	123	13	64	.2	47	32	12	2	1	.3	.005	37
5096 A	1	53	8	74	.1	22	18	11	2	1	.3	.005	38
5096 B	3	52	17	85	.1	8	8	2	2	1	.2	.005	39
													40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-D

AA

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
5097	1	44	9	77	.1	15	17	9	2	1	.1	.005	1
5098	1	68	11	67	.1	14	20	6	2	1	.1	.005	2
5099	1	15	9	86	.2	5	13	11	2	1	.3	.010	3
5100	1	74	10	64	.1	65	26	6	2	1	.3	.010	4
5101	1	70	10	71	.1	23	20	6	2	1	.1	.005	5
5102 A	1	121	7	84	.3	22	19	15	2	1	.5	.005	6
5102 B	1	34	9	71	.2	13	16	12	2	1	.2	.005	7
5103	1	43	7	66	.1	16	18	4	2	1	.3	.005	8
5104	1	71	10	75	.2	33	27	17	2	1	.3	.005	9
5105	1	93	10	91	.3	29	20	10	2	1	.3	.005	10
5106 A	1	49	8	71	.3	18	17	9	2	1	.3	.005	11
5106 B	1	51	10	76	.3	22	18	8	2	1	.3	.005	12
5107	1	55	6	61	.2	19	20	8	2	1	.2	.005	13
5108	1	92	4	55	.2	15	26	17	2	1	.4	.005	14
5109	1	108	4	60	.3	44	35	4	2	1	.2	.005	15
5110	1	88	10	74	.1	26	26	10	2	1	.1	.005	16
5111	2	74	12	67	.1	15	19	4	2	1	.2	.005	17
5112	1	100	10	116	.6	28	22	11	2	1	.6	.005	18
													19
7001 A	1	70	6	40	.2	19	20	4	2	1	.1	.005	20
7001 B	1	127	15	106	.2	7	21	3	2	1	.1	.005	21
7002 A	3	69	2	68	.1	5	31	2	2	1	.1	.005	22
7002 B	1	55	9	91	.2	6	31	5	2	1	.1	.005	23
7003	1	122	7	79	.1	9	40	14	2	1	.1	.005	24
7004	1	79	7	94	.2	3	22	9	2	1	.2	.005	25
7005	1	139	10	59	.1	30	47	18	2	1	.1	.005	26
7006	1	77	5	122	.1	3	19	6	2	1	.1	.005	27
7007 A	1	20	4	31	.1	5	9	3	2	1	.1	.005	28
7007 B	1	207	2	42	.2	9	22	3	2	1	.2	.005	29
7008	1	44	6	51	.9	9	15	9	2	1	.9	.010	30
7009 A	1	125	7	68	.3	6	27	11	2	1	.2	.005	31
7009 B	1	156	10	79	.3	5	32	8	2	1	.2	.005	32
7010 A	1	102	8	135	.3	3	21	5	2	1	.3	.005	33
7010 B	1	156	9	158	.2	3	22	9	2	1	.3	.005	34
7011 A	1	76	10	89	.2	5	32	2	2	1	.1	.005	35
7011 B	9	86	5	85	.2	4	29	8	2	1	.3	.005	36
7012	1	64	4	54	.1	13	26	6	2	1	.1	.005	37
7013	1	143	3	66	.3	62	35	6	2	1	.3	.005	38
													39
													40

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QUESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø

AA

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
7014	2	61	10	45	.1	8	10	2	2	1	.1	.005	1
7015	4	146	3	58	.1	31	15	2	2	1	.1	.005	2
7016	2	39	7	52	.1	11	14	2	2	1	.1	.005	3
7017	1	72	5	55	.1	12	16	2	2	1	.1	.005	4
7018	2	160	2	48	.3	27	23	5	2	1	.4	.005	5
7019	1	53	5	54	.1	19	18	3	2	1	.1	.005	6
7020	1	55	6	67	.1	10	29	9	2	1	.2	.005	7
7021	1	122	5	66	.1	10	31	5	2	1	.1	.005	8
7022	1	99	2	30	.1	24	19	2	2	1	.1	.005	9
7023	1	104	8	105	.2	18	32	10	2	1	.2	.005	10
7024 A	1	183	25	249	.4	3	22	6	2	1	.2	.010	11
7024 B	1	74	17	167	.3	4	22	5	2	1	.1	.005	12
7025	1	142	6	249	.3	3	25	11	2	1	.2	.010	13
7026	1	113	12	259	.2	3	22	14	2	1	.1	.005	14
7027	1	123	10	57	.6	15	33	14	2	1	.4	.010	15
7028	1	27	5	75	.1	7	18	6	2	1	.1	.005	16
7029 A	1	7	12	51	.2	6	12	9	2	1	.1	.010	17
7029 B	1	90	8	87	.2	7	24	12	2	1	.2	.005	18
7030	1	49	5	35	.2	4	21	10	2	1	.2	.010	19
													20
7031 A	1	156	12	95	.3	3	22	33	2	1	.2	.005	21
7031 B	1	140	7	175	.2	3	21	9	2	1	.1	.005	22
7032 A	1	115	7	153	.3	3	3	4	2	1	.1	.005	23
7032 B	1	63	5	73	.3	3	20	6	2	1	.1	.010	24
7033	1	51	10	72	.1	3	22	2	2	1	.1	.005	25
7034 A	1	85	3	38	.1	29	22	2	2	1	.1	.010	26
7034 B	1	70	6	181	.2	3	19	5	2	1	.1	.005	27
7035	1	101	10	99	.2	4	24	10	2	1	.1	.005	28
7036	3	38	20	163	.1	2	21	17	2	1	.1	.010	29
7037 A	2	11	12	82	.1	2	11	19	2	1	.1	.005	30
7037 B	1	195	16	170	.6	2	19	15	2	1	.4	.015	31
7038 A	1	169	3	50	.2	31	24	2	2	1	.1	.005	32
7038 B	1	17	4	126	.1	2	14	5	2	1	.1	.005	33
7038 C	1	93	9	227	.2	4	24	11	2	1	.2	.005	34
7038 D	1	81	3	134	.1	3	14	2	2	1	.1	.005	35
7039 A	1	209	21	222	.4	4	27	7	2	1	.4	.020	36
7039 B	1	81	12	206	.2	3	27	15	2	1	.1	.005	37
7040	1	145	4	198	.2	3	21	8	2	1	.1	.005	38
													39
													40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

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ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-P

AA

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
7041	1	82	15	210	.2	3	18	5	2	1	.1	.005	1
7042	1	55	5	47	.2	16	34	4	2	1	.1	.005	2
7043	1	124	2	37	.1	43	25	2	2	1	.1	.005	3
7044 A	1	75	5	36	.1	50	21	12	2	1	.1	.005	4
7044 B	1	10	4	44	.1	19	6	3	2	1	.1	.005	5
7045	13	272	13	50	.4	12	8	2	2	1	.2	.005	6
7046 A	16	373	449	46	2.6	68	26	2	2	1	2.6	.005	7
7046 B	20	291	1292	60	7.9	87	20	3	2	2	8.2	.005	8
7047	3	38	16	59	.2	62	44	14	2	1	.1	.005	9
7048	2	38	12	26	.3	12	22	19	2	1	.1	.005	10
7049	1	51	5	42	.1	169	38	66	2	1	.1	.005	11
7050	1	132	6	36	.2	22	13	6	2	1	.1	.005	12
													13
7051 A	4	73	3	13	.1	22	19	2	2	1	.1	.005	14
7051 B	1	99	4	37	.1	13	10	2	2	1	.1	.005	15
7052	1	9	2	10	.1	7	2	2	2	1	.1	.005	16
7053	2	395	10	37	.8	12	14	9	2	1	.5	.025	17
7054	1	202	7	34	.2	17	11	2	2	1	.3	.005	18
7055 A	2	593	10	15	1.4	6	10	2	2	1	1.1	.005	19
7055 B	2	749	5	20	.8	12	12	2	2	1	.8	.010	20
7056	1	334	7	35	.5	98	20	2	2	1	.4	.010	21
7057	1	357	8	27	.8	6	5	15	2	1	.6	.030	22
7058 A	7	318	203	35	1.5	14	18	3	2	1	1.3	.005	23
7058 B	3	18	195	6	.6	3	1	2	2	1	.5	.005	24
7059	5	17	8	17	.1	12	5	33	2	1	.1	.025	25
7060	8	335	163	45	1.7	20	18	5	2	1	1.4	.005	26
7061	6	96	4	13	.1	28	26	2	2	1	.1	.005	27
7062 A	1	121	6	15	.1	20	18	60	2	1	.1	.030	28
7062 B	1	2	5	20	.1	170	63	375	2	1	.1	.010	29
7063 A	2	48	3	25	.1	24	21	9	2	1	.1	.005	30
7063 B	2	27	1	13	.1	41	22	45	2	1	.1	.035	31
7064	2	40	4	18	.1	23	17	19	2	1	.1	.005	32
7065	6	76	5	8	.1	66	21	18	2	1	.3	.035	33
7066 A	2	76	7	31	.1	26	25	14	2	1	.4	.005	34
7066 B	2	96	3	10	.1	22	24	2	2	1	.5	.005	35
7067	2	89	4	18	.1	21	21	26	2	1	.4	.005	36
7068	3	92	6	25	.1	24	19	14	2	1	.2	.005	37
													38
													39
													40

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All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER D. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition AA

TA-1-ϕ

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
7069 A	1	87	8	25	.2	73	39	48	2	1	.1	.010	1
7069 B	2	48	6	38	.2	20	24	30	2	1	.1	.010	2
7069 C	3	104	6	28	.2	30	20	15	2	1	.1	.010	3
7070	2	53	2	34	.2	14	19	18	2	1	.1	.010	4
7071	1	31	4	80	.3	12	17	18	2	1	.1	.005	5
7072	1	57	6	79	.2	18	19	12	2	1	.1	.005	6
7073	5	62	5	11	.3	22	20	11	2	1	.1	.025	7
7074	8	82	5	11	.2	50	23	18	2	1	.1	.005	8
7075 A	1	33	3	41	.2	10	26	40	2	1	.1	.005	9
7075 B	2	46	1	32	.2	22	26	36	2	1	.1	.005	10
7076	1	46	4	36	.3	35	29	35	2	1	.1	.005	11
7077 A	3	67	3	20	.2	29	14	25	2	1	.1	.005	12
7077 B	7	22	8	21	.2	48	13	23	5	1	.1	.010	13
7078	1	54	4	23	.2	28	24	26	2	1	.1	.005	14
7079 A	2	18	2	17	1	120	5	33	2	1	.1	.010	15
7079 B	2	110	2	13	1	29	23	94	2	1	.1	.010	16
7080	3	73	4	64	.2	41	31	16	2	1	.1	.010	17
7081	3	118	6	9	.2	11	24	17	2	1	.3	.005	18
7082	26	38	12	5	.3	24	17	30	2	1	.1	.005	19
7083 A	31	67	20	18	.2	48	29	7	2	1	.1	.005	20
7083 B	2	98	12	20	.2	138	34	4	2	1	.1	.005	21
7084	7	25	13	16	.2	48	22	12	2	1	.1	.005	22
7084 X	2	101	103	17	.6	12	12	8	2	1	.6	.005	23
													24
7085	15	104	542	12	5.9	24	8	2	2	1	5.2	.005	25
7086	41	131	18	45	5	108	26	18	2	1	3	.020	26
7087	7	124	9	10	.3	31	22	4	2	1	.1	.005	27
7088	2	80	2	28	.2	54	21	2	2	1	.1	.010	28
7089	3	11	2	6	.1	5	1	5	2	1	.1	.010	29
7090	2	50	15	17	.1	5	2	4	2	1	.1	.005	30
7091	3	30	17	14	.1	4	1	4	2	1	.1	.010	31
7092	4	91	12	16	.1	4	2	2	2	1	.1	.005	32
7093	2	9	12	10	.1	5	2	3	2	1	.1	.005	33
7094	2	29	11	12	.1	3	1	2	2	1	.1	.005	34
7095	3	10	10	19	.1	7	3	3	2	1	.1	.030	35
7096	1	12	111	74	1.1	9	7	4	2	1	1.1	.095	36
7097	1	5	5	10	.1	6	2	2	2	1	.1	.005	37
													38
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													40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition AA

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
7100	9	246	10	51	.8	18	11	2	2	1	.3	.005	1
7101	2	12	4	25	.1	8	3	2	2	1	.1	.005	2
7102	1	10	6	19	.1	4	2	2	2	1	.1	.005	3
7103	4	6	2	14	.1	6	2	2	2	1	.1	.005	4
7104	1	3	6	16	.1	3	1	2	2	1	.1	.005	5
7105	1	8	5	12	.1	4	1	2	2	1	.1	.005	6
7106	1	12	4	13	.1	3	1	2	2	1	.1	.005	7
7107	2	11	8	15	.1	5	1	2	2	1	.2	.005	8
7108 A	4	39	4	22	.1	12	7	2	2	1	.2	.005	9
7108 B	2	50	6	28	.3	65	8	2	2	1	.3	.005	10
7109	2	25	4	24	.1	21	8	2	2	1	.1	.005	11
7110 A	18	435	42	46	1.3	15	19	2	2	2	1.0	.005	12
7110 B	10	307	24	39	1.0	23	24	7	2	1	.9	.005	13
7110 C	24	455	42	55	1.6	20	16	2	2	1	1.4	.005	14
7110 C-1	12	590	14	19	57.0	11	5	4	2	1	49.5	3.000	15
7110 D	15	470	13	49	1.3	161	30	2	2	1	1.2	.005	16
7111	6	103	39	42	.9	31	20	13	2	1	.7	.005	17
7112 A	6	62	4	28	.3	24	26	44	2	1	.1	.005	18
7112 B	2	110	3	32	.3	17	26	2	2	1	.3	.005	19
7113	1	84	5	69	.2	266	41	2	2	1	.3	.005	20
7114 A	1	78	7	74	.4	18	31	7	2	1	.1	.005	21
7114 B	1	113	2	54	.2	23	29	9	2	1	.1	.005	22
7115	1	67	5	60	.2	283	42	8	2	1	.2	.005	23
7116	1	86	7	70	.3	25	27	12	2	1	.1	.005	24
7117	1	81	9	77	.3	31	23	12	2	1	.1	.005	25
7118	1	92	6	82	.2	33	23	4	2	1	.1	.005	26
7119	1	49	11	74	.3	19	20	10	2	1	.1	.005	27
7120	1	44	8	82	.3	11	20	11	2	1	.1	.005	28
													29
7121 A	2	75	2	55	.4	21	20	21	2	1	.1	.005	30
7121 B	1	62	6	45	.3	34	22	22	2	1	.1	.005	31
7121 C	1	44	5	69	.4	19	20	13	2	1	.1	.005	32
7121 D	1	64	8	73	.4	24	20	13	2	1	.2	.005	33
7122 A	2	61	4	42	.2	25	18	16	2	1	.1	.005	34
7122 B	1	53	4	30	.2	22	25	27	2	1	.1	.005	35
7123 A	2	62	3	30	.2	24	26	23	2	1	.1	.005	36
7123 B	1	51	4	31	.2	23	15	7	2	1	.1	.005	37
7123 C	3	44	5	53	.2	27	20	20	2	1	.1	.005	38
													39
													40

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QUESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER D C Toye

DEAN TOYE, B Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

File No. 82-0003

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø AA

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
7124 A	3	85	6	15	.1	29	12	7	2	1	.1	.020	1
7124 B	2	48	4	14	.1	17	11	2	2	1	.1	.005	2
7124 C	1	17	5	27	.1	13	15	11	2	1	.1	.005	3
7125 A	7	40	8	30	.1	101	28	4	2	1	.1	.005	4
7125 B	6	88	9	14	.1	25	24	7	2	1	.1	.005	5
7125 C	7	215	14	17	.2	23	30	3	2	1	.1	.005	6
7126 A	6	85	7	19	.1	60	20	4	2	1	.1	.005	7
7126 B	6	120	10	18	.2	19	22	4	2	1	.1	.005	8
7127	1	42	7	17	.1	7	14	6	2	1	.1	.005	9
7128	1	9	7	12	.1	4	2	2	2	1	.1	.005	10
7129	1	27	12	12	.1	2	2	2	2	1	.1	.005	11
7130	2	32	11	14	.1	5	2	2	2	1	.1	.005	12
7131	1	17	9	15	.1	3	2	2	2	1	.1	.005	13
7132	1	16	6	14	.1	5	2	2	2	1	.1	.005	14
7133	1	10	6	18	.1	4	2	2	2	1	.1	.005	15
7134	1	17	5	17	.1	4	2	2	2	1	.1	.005	16
7135	1	18	5	12	.1	4	2	2	2	1	.1	.005	17
7136 A	1	31	7	9	.1	5	2	2	2	1	.1	.005	18
7136 B	1	370	8	50	.5	43	24	4	2	1	.6	.005	19
7137	1	186	8	36	.2	47	17	5	2	1	.2	.005	20
7138 A	1	12	4	13	.1	4	2	2	2	1	.1	.005	21
7138 B	1	119	5	43	.3	24	20	4	2	1	.3	.005	22
7138 C	1	165	17	15	.6	8	6	6	2	1	.6	.005	23
7139	3	53	18	18	.4	5	2	2	2	1	.5	.005	24
7140	3	18	71	20	.3	4	2	2	2	1	.3	.005	25
													26
7141	1	247	13	35	.3	43	19	3	2	1	.4	.005	27
7142 A	1	41	15	5	.3	2	2	2	2	1	.3	.005	28
7142 B	1	837	12	37	2.7	36	21	4	2	1	2.9	.025	29
7142 C	1	601	11	32	1.7	30	16	5	2	1	1.9	.015	30
7142 D	1	690	9	35	1.5	31	19	4	2	1	1.4	.020	31
7143 A	1	162	7	15	.3	4	5	3	2	1	.2	.005	32
7143 B	1	129	8	13	.3	8	4	4	2	1	.1	.005	33
7144 A	4	110	134	53	1.0	6	6	3	2	1	1.0	.005	34
7144 B	7	66	39	83	.3	68	14	3	2	1	.3	.005	35
7145	24	796	25	114	1.6	49	45	5	2	1	1.6	.005	36
7146	1	51	5	33	.1	36	19	4	2	1	.1	.005	37
													38
													39
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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER D Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition AA

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
7147 A	1	6	5	13	.1	4	2	2	2	1	.1	.005	1
7147 B	1	69	9	34	.1	23	15	4	2	1	.1	.005	2
7148	28	176	55	32	1.0	35	6	8	2	1	.9	.005	3
7149	4	35	5	12	.1	15	9	6	2	1	.1	.005	4
7150	5	60	5	10	.1	65	19	5	2	1	.1	.005	5
7151	4	42	3	21	.1	14	15	5	2	1	.1	.005	6
7152	10	75	10	4	.1	18	12	4	2	1	.1	.005	7
7153	4	25	3	10	.1	14	5	4	2	1	.1	.005	8
7154	24	135	8	10	.1	36	18	4	2	1	.1	.005	9
7155	6	71	4	5	.1	22	13	7	2	1	.1	.005	10
7156 A	5	49	6	13	.1	15	15	3	2	1	.1	.005	11
7156 B	4	9	9	6	.1	4	2	2	2	1	.1	.005	12
7157	2	56	5	14	.1	16	11	6	2	1	.1	.025	13
7158	3	37	2	10	.1	17	16	5	2	1	.1	.005	14
7159	2	27	4	18	.1	13	12	6	2	1	.1	.005	15
7160	3	97	32	25	.3	6	16	5	2	1	.2	.030	16
7161	15	83	3	11	.1	16	15	3	2	1	.1	.005	17
7162	2	87	5	17	.1	52	21	4	2	1	.1	.020	18
7163 A	3	6	3	6	.1	10	13	5	2	1	.1	.005	19
7163 B	2	64	6	8	.1	21	14	4	2	1	.1	.005	20
7164	3	41	2	12	.1	20	15	6	2	1	.1	.005	21
7165 A	4	44	7	9	.1	17	15	4	2	1	.1	.005	22
7165 B	2	46	6	18	.1	12	26	4	2	1	.1	.005	23
7166	2	68	6	5	.1	6	12	2	2	1	.1	.005	24
7167	4	46	4	12	.1	12	12	2	2	1	.1	.005	25
7168 A	3	142	4	25	.1	26	27	3	2	1	.1	.005	26
7168 B	5	28	2	6	.1	7	8	4	2	1	.1	.005	27
7169	4	23	3	8	.1	10	9	3	2	1	.1	.005	28
7170	2	17	3	14	.1	11	13	3	2	1	.1	.005	29
													30
7171 A	5	79	5	5	.1	13	21	10	2	1	.1	.015	31
7171 B	1	21	5	7	.1	5	11	4	2	1	.1	.005	32
7172	5	51	9	54	.3	14	15	5	2	1	.3	.005	33
7173 A	1	96	8	42	.1	45	34	2	2	1	.1	.005	34
7173 B	1	36	13	77	.1	11	17	3	2	1	.1	.005	35
7174 A	1	73	7	72	.1	24	23	6	2	1	.1	.005	36
7174 B	1	65	15	61	.1	176	28	4	2	1	.1	.005	37
													38
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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER A. Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0003

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

TA-1-Ø

AA

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	Ni	Co	As	Sb	Cd	Ag	Au	
7175	2	106	9	73	.1	17	23	2	2	1	.1	.005	1
7176	1	78	8	98	.1	24	18	9	2	1	.1	.005	2
7177	1	82	10	69	.1	71	26	3	2	2	.1	.005	3
7178	2	87	7	65	.1	40	21	2	2	1	.1	.005	4
7179	1	45	8	79	.1	16	17	6	2	1	.1	.005	5
7180	1	61	9	82	.1	20	17	6	2	1	.1	.010	6
7181	1	78	7	74	.1	19	17	5	2	1	.1	.010	7
7182	1	41	12	70	.1	16	15	4	2	1	.1	.015	8
7183	1	43	6	70	.1	18	17	3	2	1	.1	.015	9
7184	1	44	7	60	.1	18	16	2	2	1	.1	.005	10
7185	1	56	5	77	.1	23	17	4	2	1	.1	.005	11
7186	1	50	8	62	.1	18	19	6	2	1	.1	.005	12
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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 5, 1982

DATE REPORTS MAILED Jan. 12, 1982

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

c.c. Sturdy-Stone Centre

File No. 82-0044
Type of Samples pulps
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Project : TA HOOLA 4947 Req.No.: 0569

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 30	3	42	12	17	.4	1
31	20	89	50	130	1.3	2
32	13	52	52	92	1.0	3
33	25	108	71	100	.8	4
34	45	814	114	132	2.1	5
35	31	83	125	79	1.4	6
36	43	172	93	100	.7	7
37	13	89	45	107	.7	8
38	6	34	25	184	1.0	9
39	5	58	17	102	.4	10
40	5	174	20	188	1.6	11
41	6	83	15	194	1.0	12
42	4	42	13	128	.3	13
43	5	25	14	158	.6	14
44	4	18	14	127	.3	15
45	5	48	19	128	.5	16
46	6	36	23	86	.7	17
47	4	23	24	130	.5	18
48	23	199	68	172	.9	19
49	45	150	42	107	1.5	20
50	27	119	40	86	1.6	21
51	13	69	38	153	1.3	22
52	21	359	606	171	.7	23
53	6	53	103	122	.7	24
						25
114	6	62	45	42	.4	26
115	8	40	26	92	1.1	27
116	19	187	48	63	.7	28
117	16	124	89	159	1.4	29
118	10	25	25	45	.6	30
119	6	43	24	110	1.2	31
120	10	193	37	110	.7	32
121	13	51	23	35	.4	33
122	5	24	23	88	.6	34
123	6	47	16	106	.4	35
124	4	23	15	94	.3	36
125	4	29	13	194	.6	37
126	4	65	22	239	1.8	38
TA-1-R 127	6	59	23	144	1.4	39
						40

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DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Jan. 25, 1982
DATE REPORTS MAILED Feb. 1, 1982
ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0044

Type of Samples _____

Disposition _____

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 128	6	33	21	168	.7	1
129	4	25	15	132	.4	2
130	4	21	19	124	.4	3
131	6	60	28	207	.6	4
132	3	29	13	58	.4	5
133	6	55	18	74	.3	6
134	3	25	13	62	.7	7
135	3	20	13	85	.4	8
136	7	40	21	104	.5	9
137	4	29	20	92	.4	10
138	4	21	14	58	.3	11
139	9	51	35	98	.6	12
						13
204	14	72	21	100	.6	14
205	47	103	20	188	1.8	15
206	12	67	18	63	.4	16
207	10	45	15	107	.8	17
208	6	62	22	140	.4	18
209	4	34	16	72	.2	19
210	5	23	15	116	.5	20
211	8	82	18	123	.6	21
212	4	31	20	125	.3	22
213	25	95	67	210	.9	23
214	5	46	21	152	.9	24
215	8	28	17	163	.8	25
216	6	23	18	166	.3	26
217	14	34	15	213	.7	27
218	7	66	26	200	.6	28
219	4	96	22	153	1.5	29
220	5	39	20	135	.4	30
221	4	73	15	99	.9	31
222	5	38	18	109	.6	32
223	4	53	21	88	.4	33
224	5	44	18	77	.2	34
225	10	43	21	116	.7	35
226	25	206	22	86	.5	36
TA-1-R 227	13	50	20	176	1.0	37
						38
						39
						40

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QUESTION:.....

DETERMINATION:.....

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CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0044

Type of Samples _____

Disposition _____

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu ✓	Pb ✓	Zn	Ag	
TA-1-R 306	4	34	23	218	.7	1
307	2	31	15	93	.3	2
308	2	20	17	110	.9	3
309	4	24	16	108	.5	4
310	3	45	21	143	.5	5
311	3	36	21	168	.5	6
312	2	13	20	157	.6	7
313	2	44	19	99	.3	8
314	2	32	20	113	.3	9
315	2	28	18	141	.5	10
316	2	33	23	181	.6	11
317	3	60	15	123	.3	12
318	2	37	21	115	.8	13
319	2	42	18	181	1.2	14
320	3	111	22	213	2.3	15
321	4	38	17	125	.8	16
322	3	29	15	117	.7	17
323	3	28	20	77	.5	18
324	16	97	34	65	.6	19
325	11	33	33	122	.8	20
326	9	34	21	63	.4	21
327	4	22	12	49	.4	22
328	4	28	12	54	.5	23
329	5	30	11	43	.3	24
						25
613	4	76	178	81	.9	26
614	3	66	143	213	1.0	27
615	3	130	89	135	1.8	28
616	3	200	106	159	1.5	29
617	3	37	57	98	.4	30
618	7	381	159	126	2.3	31
619	4	48	85	143	1.3	32
620	3	67	56	75	.3	33
621	2	66	22	109	.4	34
622	3	164	32	76	.4	35
623	3	64	25	80	.3	36
624	2	56	25	103	.3	37
625	2	21	24	49	.4	38
TA-1-R 626	7	101	38	146	.8	39
TA-1-R 627	6	40	20	112	.9	40

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File No. 82-0044

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 629	3	45	20	111	.4	1
630	4	49	27	105	.4	2
631	5	58	26	78	.2	3
632	4	52	23	70	.4	4
633	3	55	25	110	.3	5
634	4	85	48	75	.3	6
635	1	194	34	46	1.6	7
636	3	59	74	80	.2	8
637	5	134	93	121	3.3	9
638	5	93	124	68	1.4	10
639	2	73	103	129	.6	11
640	5	52	77	114	.7	12
641	5	165	143	79	1.0	13
642	5	167	122	106	2.6	14
643	4	39	59	109	.5	15
644	3	70	45	87	.5	16
645	3	32	63	121	.5	17
646	4	101	65	122	1.2	18
647	4	104	62	135	.5	19
648	3	67	32	83	.4	20
649	4	38	24	124	.4	21
650	5	29	22	156	.5	22
651	10	146	32	100	.4	23
652	12	129	42	154	.8	24
653	11	171	44	187	1.3	25
654	6	159	25	96	1.6	26
655	6	99	40	110	.4	27
656	3	58	46	119	.8	28
657	4	215	69	322	2.4	29
658	4	67	64	100	.4	30
659	8	160	139	114	1.6	31
660	3	32	47	106	.6	32
661	4	91	211	120	1.6	33
TA-1-R 628	3	277	35	150	1.6	34
						35
TA-1-R 730	5	51	23	166	.6	36
731	9	58	25	112	1.4	37
732	19	61	23	81	.8	38
733	10	62	22	109	.3	39
TA-1-R 734	8	47	18	96	.6	40

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To: Saskatchewan Mining Development Corp.

File No. 82-0044
Type of Samples
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Project : TA HOOLA 4947

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 735	7	63	13	148	.1	1
736	10	86	20	143	.4	2
737	10	32	17	148	.6	3
738	5	24	16	172	.3	4
739	2	30	12	89	.2	5
740	5	66	17	60	.3	6
741	3	34	11	128	.3	7
742	2	53	15	130	.2	8
743	2	53	12	132	.2	9
744	2	36	15	182	.3	10
745	2	34	14	150	.6	11
						12
1010	14	24	12	75	1.2	13
1011	10	64	21	172	.2	14
1012	7	39	16	97	.3	15
1013	10	39	33	76	.3	16
1014	4	24	27	129	.4	17
1015	4	22	16	168	.5	18
1016	4	119	22	208	3.0	19
1017	3	20	12	116	.3	20
1018	2	57	13	169	1.1	21
1019	2	27	18	102	.4	22
1020	2	65	18	212	1.2	23
1021	3	40	24	174	1.3	24
1022	2	32	14	168	.2	25
1023	3	45	14	103	.1	26
1024	2	14	17	80	.3	27
1025	3	18	16	93	.1	28
1026	3	58	18	171	.2	29
1027	3	31	16	93	.2	30
1028	2	99	21	186	2.1	31
1029	2	67	19	256	1.9	32
1030	3	83	18	273	1.0	33
1031	3	26	14	130	.6	34
1032	5	63	14	149	.2	35
1033	4	81	16	125	.9	36
TA-1-R 1034	2	23	13	83	.2	37
						38
						39
						40

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phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0044

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 1045	5	44	18	125	.4	1
1046	6	41	19	169	.7	2
1047	7	31	34	116	.5	3
1048	4	26	19	125	.6	4
1049	5	21	25	118	.5	5
1050	5	55	19	146	.5	6
1051	3	9	11	56	1.0	7
1052	6	20	17	130	.8	8
1053	5	37	15	138	.7	9
1054	6	25	20	107	.6	10
1055	5	27	18	187	.7	11
1056	3	18	16	155	.5	12
1057	2	9	18	152	.6	13
1058	4	33	14	83	.7	14
1059	5	20	13	52	.4	15
1060	10	54	24	70	.4	16
						17
1108	6	42	24	92	.7	18
1109	7	57	22	77	.6	19
1110	53	135	36	131	.6	20
1111	17	89	22	97	.7	21
1112	4	50	27	107	.4	22
1113	10	80	21	62	.5	23
1114	6	68	36	53	.6	24
1115	24	84	29	58	1.3	25
1116	73	153	43	85	1.1	26
1117	11	52	30	85	.9	27
1118	7	56	28	96	.6	28
1119	6	50	27	49	.5	29
1120	3	47	13	91	.4	30
1121	4	21	13	41	.4	31
1122	10	76	21	81	1.0	32
1123	4	35	14	89	.5	33
1124	9	49	20	57	.6	34
1125	14	75	24	154	.7	35
1126	11	92	14	149	.6	36
1127	7	36	17	231	.6	37
1128	10	65	19	213	.6	38
TA-1-R 1129	11	86	22	205	.2	39
						40

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phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0044

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 1130	18	52	24	94	.7	1
1131	31	115	33	122	1.4	2
1132	29	90	34	72	.8	3
1133	29	115	42	78	.7	4
1134	10	94	22	93	1.7	5
1135	15	39	25	86	.8	6
1136	12	46	25	183	1.0	7
1137	15	47	18	76	.6	8
1138	8	45	22	225	1.5	9
1139	14	71	17	486	.4	10
1140	20	47	34	118	1.0	11
1141	185	695	170	529	1.7	12
1142	28	224	28	171	1.9	13
1143	10	92	54	139	.8	14
1144	7	43	36	94	.5	15
1145	7	129	33	72	.5	16
1146	8	311	38	83	.5	17
1147	6	71	72	67	.4	18
1148	3	31	29	74	.5	19
1149	6	51	59	89	1.1	20
1150	6	64	24	73	.2	21
1151	5	51	25	93	.5	22
1152	5	117	27	86	.4	23
1153	5	116	23	99	.8	24
1154	3	20	21	53	.4	25
1155	8	113	48	96	.4	26
1156	5	63	23	77	.3	27
1157	6	249	47	92	1.7	28
1158	9	45	36	103	.4	29
1159	5	28	37	63	.4	30
1160	3	27	21	44	.4	31
1161	7	50	23	58	.7	32
1162	5	73	25	67	1.2	33
1163	4	33	20	46	.4	34
1164	6	39	23	75	.6	35
1165	12	132	33	63	1.1	36
1166	5	34	22	65	1.0	37
TA-1-R 1167	13	963	30	62	1.5	38
						39
						40

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phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0044

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Mo	Cu	Pb	Zn	Ag	
TA-1-R 1168	5	52	15	47	.4	1
1169	12	129	33	78	.4	2
1170	3	37	25	78	.4	3
1171	4	26	26	66	.9	4
1172	5	35	27	85	.3	5
1173	4	36	30	72	.4	6
1174	4	72	25	76	.4	7
1175	7	32	19	76	.4	8
1176	4	38	21	60	.3	9
1177	4	92	24	89	.3	10
1178	4	89	28	114	1.7	11
1179	5	79	28	107	.3	12
1180	6	129	28	109	1.4	13
1181	6	76	22	112	.5	14
1182	8	88	37	99	.6	15
						16
1234	15	79	20	351	1.0	17
1235	14	58	15	293	.7	18
1236	13	39	23	189	.7	19
1237	7	159	20	150	1.1	20
TA-1-R 1238	5	44	17	101	.5	21
						22
						23
						24
						25
						26
						27
						28
						29
						30
						31
						32
						33
						34
						35
						36
						37
						38
						39
						40

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852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253-3158

To: Saskatchewan Mining Development Corp.,
#330 - 1130 W. Pender St.,
Vancouver, B.C.
V6E 4A4

c.c. Sturdy-Stone Centre, Sask.

File No. 82-0045
Type of Samples pulps
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Project : TA HOOLA Req. No.: 0570

SAMPLE No.	Cu	Pb	Zn	Ag	As	
TA-1-R 282	46	14	79	.5	9	1
283	29	13	59	.3	5	2
284	38	8	33	.5	7	3
285	76	14	41	.7	8	4
286	170	16	97	.9	13	5
287	31	15	30	.5	10	6
288	89	48	152	.9	11	7
289	48	114	43	1.1	11	8
290	107	14	37	.7	11	9
291	27	9	69	.5	11	10
292	25	24	97	1.4	15	11
293	35	13	79	.5	20	12
294	59	13	116	.9	21	13
295	34	13	86	.7	29	14
296	42	16	151	.7	99	15
297	55	11	133	.3	31	16
298	22	15	105	.5	13	17
299	48	18	150	.7	31	18
300	47	16	127	.6	24	19
301	93	15	212	1.4	36	20
302	33	10	183	1.6	28	21
303	30	14	161	.7	22	22
304	30	10	256	1.7	19	23
305	67	16	152	.3	26	24
						25
448	26	22	161	.6	43	26
449	48	15	178	.6	33	27
450	75	13	214	.6	41	28
451	30	16	111	.5	44	29
452	37	20	168	.6	127	30
453	147	24	210	.8	243	31
454	15	12	116	.5	4	32
455	24	13	126	.4	21	33
456	12	10	69	1.1	9	34
457	30	16	102	.6	89	35
458	59	16	253	.7	47	36
459	66	15	103	1.0	58	37
460	50	13	185	.9	31	38
TA-1-R 461	74	14	133	1.5	50	39
						40

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To: Saskatchewan Mining Development Corp.

File No. 82-0045

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Pb	Zn	Ag	As	
TA-1-R 472	59	62	240	1.6	89	1
473	66	51	284	2.0	109	2
474	38	39	186	1.0	49	3
475	64	36	158	.6	35	4
						5
482	61	48	260	.5	91	6
483	54	29	164	.5	32	7
						8
486	37	24	208	.6	26	9
487	59	36	210	.5	46	10
						11
490	67	61	311	.4	44	12
						13
746	31	27	122	.8	59	14
747	96	24	116	.4	136	15
748	91	24	141	.3	134	16
749	65	20	122	.8	45	17
						18
757	61	22	165	.4	38	19
758	72	48	243	2.5	96	20
759	30	55	243	1.1	49	21
760	27	31	118	.6	16	22
761	23	24	134	.6	14	23
762	35	27	353	.6	30	24
763	109	53	243	1	85	25
764	45	33	151	.3	42	26
765	17	14	73	.5	10	27
766	55	16	104	.3	118	28
767	85	20	112	1.8	40	29
768	73	18	103	.3	39	30
						31
777	31	24	134	.7	40	32
778	59	23	163	1.2	27	33
						34
806	189	21	164	1.5	29	35
						36
824	27	18	126	.6	16	37
825	56	28	137	.1	48	38
826	22	24	144	.3	16	39
TA-1-R 846	58	24	88	.8	10	40

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phone:253 - 3158

To: Saskatchewan Mining Development Corp.

File No. 82-0045

Type of Samples

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE No.	Cu	Pb	Zn	Ag	As	
TA-1-R 1293	35	22	63	1.1	21	1
1294	55	18	57	.6	8	2
1295	36	21	83	.6	35	3
1296	40	29	178	.4	16	4
1297	22	20	58	.8	18	5
1298	49	21	66	.5	15	6
1299	26	20	55	.6	15	7
1300	33	16	73	.3	9	8
1301	87	23	66	.3	53	9
1302	104	32	178	1.4	32	10
1303	24	25	143	.9	19	11
						12
1524	23	19	124	.4	39	13
1525	42	21	123	.2	69	14
1526	81	18	44	.1	86	15
1527	10	17	122	.5	14	16
1528	33	19	88	.6	21	17
TA-1-R 1529	45	21	82	.4	37	18
						19
TA-1-R 104 A	171	42	69	.5	9	20
						21
						22
						23
						24
						25
						26
						27
						28
						29
						30
						31
						32
						33
						34
						35
						36
						37
						38
						39
						40

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APPENDIX B

REPORT ON ROCK GEOCHEMISTRY OF OUTCROP SAMPLES FROM THE TA HOOLA PROJECT

GEOCHEMISTRY OF OUTCROP SAMPLES FROM THE TA HOOLA PROJECT

SUMMARY

Geochemical data from outcrop samples collected on the Ta Hoola project indicate substantial enrichment of copper, arsenic, silver, nickel, lead and molybdenum. It is postulated that the enrichment is due to hydrothermal alteration related to upper-Triassic or lower-Jurassic magmatism.

Two types of mineralization may be responsible for the observed patterns. Lead, silver, copper and molybdenum enrichment surrounding a syenite porphyry stock may reflect porphyry copper-type alteration. Arsenic and silver enrichment at the andesite-siltstone contact, and adjacent to a zone of pyritization with copper, lead, silver and arsenic enrichment, suggests the presence of exhalative type mineralization.

Drilling and trenching east and southeast from the syenite porphyry stock may have partially ruled out the possibility of porphyry-copper mineraliztion in that area. The andesite-siltstone contact has not been tested.

INTRODUCTION

The Ta Hoola project area is underlain by a series of steeply dipping andesite flows and tuffs and volcaniclastic siltstone, tuff and conglomerate, all of upper-Triassic to lower-Jurassic age. These rocks are intruded by cogenetic syenite and diorite stocks and plugs, the largest of which is a leuco-syenite porphyry which has an exposed area of roughly 1 square km. The area around this stock is characterized by various degrees of pyritization, carbonitization, silicification and epidotization along with chalcopyrite and galena mineralization. Details of the geology and alteration are described by Ruck (1982).

The present work is partly based on a similar study in the Goosly-Owen Lake area some 400 km to the northwest (Church et al., 1976), which revealed striking enrichment of copper, mercury, arsenic, lead, zinc and cadmium in the unmineralized rocks surrounding the Goosly and Bradina deposits. For the present study some 375 outcrop samples were collected within an area of 22 square km. The data have been statistically analyzed. Interpretation of spacial variations is based on maps derived from a moving-average smoothing procedure.

SAMPLING

Samples were collected on an irregular pattern at roughly 100 m intervals. Where two or more lithological types were observed in one outcrop, separate samples were collected from each type. Obviously mineralized zones were avoided.

ANALYSIS

Samples were crushed and ground and digested in hot dilute aqua regia.

Molybdenum, copper, zinc, silver, nickel, cobalt, arsenic, antimony and cadmium were analyzed by ICP-Emission spectrophotometry. Silver was also analyzed by atomic absorption, as was gold, the latter after complexation with MIBK. Analytical work was carried out by Acme Analytical Laboratories of Vancouver.

DATA PROCESSING

Field data, including lithology, texture and grid coordinates, were combined with the analytical data as one computer file. Percentiles were calculated for the entire data set and for various subjects based on lithology and texture. Correlation coefficients were calculated and R-Mode factor analysis was carried out following logarithmic transformation.

Smoothed map arrays were derived using a circular moving average method which is shown schematically in Fig. 14. Values are calculated for each point in a regular grid based on all samples which fall within a specified radius of the point. Within that radius the contribution from each sample is given a weighting based on the inverse-square of the distance to the centre point. Grid intervals were 100 m, with search radii of 70 m.

RESULTS

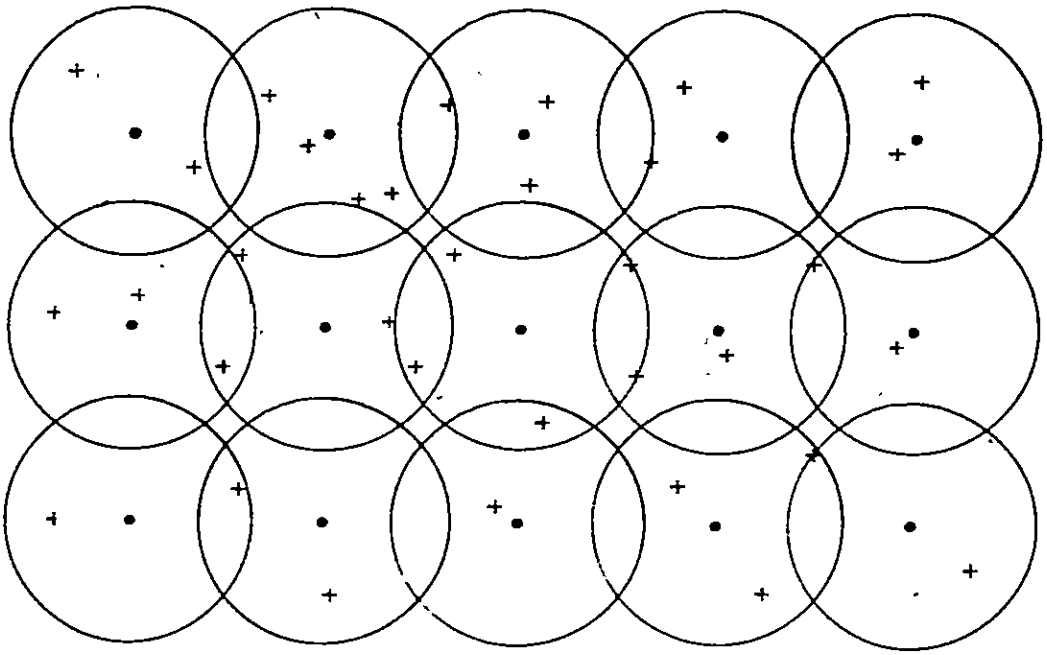
A list of geochemical results is given in Table 5 (Appendix B-1). Cadmium and antimony are not included because, in each case, roughly 99% of the data are below the detection limit. (Detection limits are 5 ppm for Sb and 2 ppm for Cd). Silver by ICP is not included because the data are very similar to the data for silver by AA.

Cumulative frequency curves are shown in Fig. 15. The lower parts of the molybdenum, silver and gold curves are not shown because the data are below the detection limit. The curve for lead is obviously indicative of a bi-modal population. There is an anomalous group with lead concentrations greater than 50 ppm, which comprises about 3% of the data. Cobalt is also obviously bi-modal, but in this case the anomalous group comprises the lower 5% of the data. Copper, zinc, arsenic and silver are probably bi-modal, and are characterized by the presence of anomalously high sub-populations.

Average metal concentrations for world-wide andesite rocks are shown on Figure 15. Copper, arsenic and silver are obviously strongly enriched. For arsenic some 50% of the data are higher than twice the world average. For copper and silver 30% to 40% respectively are higher than twice the average. Nickel, lead and molybdenum have 15% of the data higher than twice the average. Cobalt

FIG. 14

Schematic Representation of
Moving-Average-Smoothing Technique.



\+ Original sample sites

• Points for gridded data

FIG. 15 (B-5)

Cumulative Curves for 375 Outcrop Samples
From The Ta Hoola Area. Open Circles are World-Average
Background Concentrations for Andesites. (data from Wedepohl)

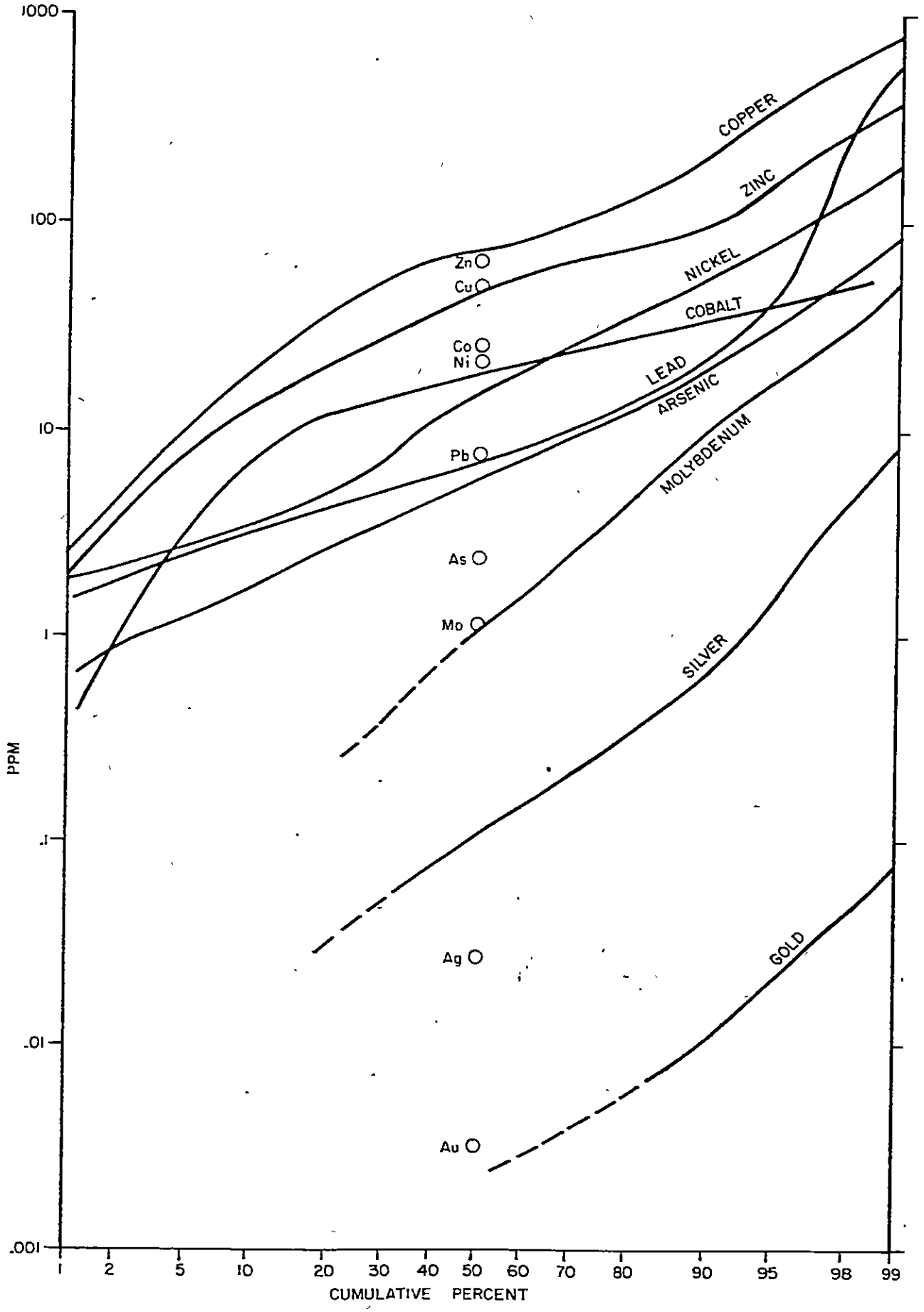


TABLE 6

COMPARISON OF METAL CONCENTRATIONS
FROM DIFFERENT ROCK TYPES

	ANDESITE	VOLCANICLASTICS	SYENITE
Mo	-	Very high, especially Ash Tuff	Low
Cu	High	-	Low
Pb	High	-	-
Zn		High	Low
Ni		High, especially Ash Tuff	Low
Co	-	High	Very Low
As		High	Very Low
Sg	High		
Au		High	

TABLE 7

CORRELATION COEFFICIENTS FOR
LOG-TRANSFORMED DATA (n=375)

Mo	1.0								
Cu	.24	1.0							
Pb	.37	.31	1.0						
Zn	-.30	.33	.20	1.0					
Ni	.27	.22	-.01	-.12	1.0				
Cv	-.04	.46	-.04	.48	.44	1.0			
As	.00	.01	-.11	.09	.30	.41	1.0		
Ag	.38	.53	.60	.12	.15	.08	.03	1.0	
Au	.17	.12	.08	-.09	.11	-.02	.20	.35	1.0

TABLE 8

RESULTS OF R-MODE FACTOR

ANALYSIS WITH VARIMAX ROTATION

FOR LOG-TRANSFORMED DATA

ELEMENT	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
Mo	.52	.20	-.65	-.01
Cu	.68	.40	.24	-.05
Pb	.82	-.14	.01	.00
Zn	.24	.15	.87	.08
Ni	.09	.80	-.35	.01
Co	.09	.81	.43	-.06
As	-.23	.61	.10	.45
Ag	.86	.00	-.04	.27
Au	.20	.01	-.09	.91
% Variance Explained	26	21	18	13

and zinc are not much higher than average.

These high concentrations probably reflect the addition of substantial amounts of metal to the volcanic rocks. Copper, for example is enriched by about 50 ppm over the world average within an area of about 2 square kilometres. Assuming that this enrichment extends to an average depth of only 50 m about 270 million T of rock has been affected, and some 13 million kg of copper has been introduced.

Differences in metal concentration amongst the major lithologies are summarized in Table 6. The syenite is significantly lower than the extrusive rocks in copper, zinc, nickel, cobalt and arsenic. In comparison to the andesite, the volcaniclastics are high in molybdenum, zinc, nickel, arsenic and gold, but low in copper, lead and silver. The ash-tuff is particularly enriched in molybdenum and nickel.

Correlation coefficients for all of the data after log-transformation are given in Table 7. There are significant correlations amongst all of the base metals and silver. Arsenic is correlated only with cobalt and nickel.

The results of R-Mode factor analysis for a 4-factor model are given in Table 8. Factor 1 has strong loadings for lead, silver, copper and to a lesser extent molybdenum. Factor 2 has strong loadings for nickel, cobalt and arsenic. Factor 3 has a strong positive loading for zinc and a strong negative loading for molybdenum. Factor 4 has a strong loading for gold and weaker loadings for arsenic and silver. These 4 factors account for 78% of the total variance.

Factors 1 and 2 are remarkably similar to the first two factors calculated by Church et al. (1976) for their data from a similar environment.

Iso-concentration contours based on the moving average techniques described above, are shown on Drawings TA1-36 to 43 (in pocket).

There are four main zones of enrichment, namely:

a) The area underlain by andesite east and southeast of the large syenite stock, with consistent enrichment of lead, silver, molybdenum and copper and sporadic enrichment of nickel and arsenic

b) The area along the andesite-siltstone contact with enrichment of arsenic and nickel.

c) The area of strong pyritization extending southwest from the andesite siltstone contact, with enrichment of copper, lead, silver and arsenic.

d) The southwest corner of the map sheet, with low level enrichment of silver, arsenic and copper.

DISCUSSION

Volcanic rocks in the Ta Hoola area are characterized by copper, arsenic, silver, nickel, lead and molybdenum concentrations well above the world average, and similar to those reported by Church et al. (1976) near mineralization in the Owen Lake - Goosly Lake area. Based on geological relationships it is apparent that the syenite and diorite stocks are responsible for the enrichment.

Correlation coefficients and factor analysis suggest relationships amongst copper, lead and silver; nickel, cobalt and arsenic; and silver and arsenic. The copper-lead-silver association is probably related to the enrichment, within the andesite, east and southeast of the syenite stock (Type A) and within the zone of pyritization (Type C), the silver-arsenic association is probably related to the enrichment along the andesite-siltstone contact (Type B), and also within the zone of pyritization. The nickel-cobalt-arsenic association may be related to original lithology, for example the more mafic parts of the volcanic rocks.

The type A enrichment of lead, silver, molybdenum and copper is proximal to the syenite stock and can probably be classed as a zone of "porphyry copper-type" alteration. The Type B enrichment of arsenic and silver in the vicinity of the andesite-siltstone interface may be a product of boiling of hydrothermal fluids due to a reduction in confining pressure, or to a chemical change caused by differing compositions of the andesite and siltstone. The zone of pyritization may be related to the alteration along the contact.

RECOMMENDATIONS

1) Whole-rock geochemical analysis and petrographic studies should be carried out on some of the existing rock samples in order to assess the geochemical and textural differences between the andesite (Unit 1) and the volcaniclastic rocks

(Units 2 and 3).

2) More detailed geochemical surveys should be carried out along the andesite-siltstone contact zone and within the area of pyrite alteration. Soil samples should be collected on a 50 by 50 metre grid (up to 500 samples). If possible, some of the gaps in the present outcrop sample pattern should be filled in.

3) Biogeochemical surveys for gold have been successful in Eastern Canada, in Saskatchewan and in B.C. (e.g. Warren and Barakso, 1982). A test survey should be carried out at Ta Hoola.

Steven Earle
March, 1982

REFERENCES

Church, B.N., Barakso, J.J., Bowman, A.F., 1976 — The Endogenous Distribution of Minor Elements in the Goosly-Owen Lake Area of Central British Columbia, C.I.M. Bull. V69 No. 773, p 88-95

Ruck, P., 1982 — Annual Report for SMD Mining Ta Hoola Lake Project

Warren, H.V., Barakso,J.J., 1982 — The Development of Biogeochemistry as a Practical Prospecting Tool for Gold, Western Miner, Vol. 55 No. 2. p 27-32.

Wedepohl, K.H., (editor) — Handbook of Geochemistry Springer-Verlag, Berlin.

APPENDIX B-1

Table 5

TABLE 5

FIELD AND ANALYTICAL DATA FOR 375 OUTCROP SAMPLES FROM THE TA HOOLA PROJECT

Lithological Codes:

AND - Andesite
AAN - Augite Andesite
DRT - Diorite
SNT - Syenite
VCC - Volcaniclastic

Textural Codes:

TA - Ash Tuff
TB - Tuff Breccia
TF - Flow Tuff
TL - Lapilli Tuff

FL - Flow
PO - Porphyry
BX - Breccia
SD - Sedimentary
AG - Agglomerate

Coordinates are in metres

Concentrations are in parts per million

PROJ	NUM	LITH	TEX	EAST	NORTH	MO	CU	PB	ZN	NI	CO	AS	AG	AU
TA10	5000	VCC	TL	78170	18540	30	117	35	32	66	30	23	0.4	0.005
TA10	5001	AND	TB	78640	18570	2	43	9	38	98	34	18	0.1	0.020
TA10	5002	AND	TF	76810	18270	38	351	8540	79	41	13	2	65.0	0.040
TA10	5003	AND	TB	75775	18260	1	97	30	49	7	21	2	0.2	0.005
TA10	5004	AND	TB	75730	18280	1	97	63	49	16	17	6	0.3	0.005
TA10	5005	AND	TB	75610	18275	1	36	9	47	10	12	3	0.1	0.005
TA10	5006	SNT	PO	75520	18510	1	10	26	19	4	2	2	0.1	0.005
TA10	5007	AND	TB	74770	18420	1	51	14	117	4	22	6	0.1	0.005
TA10	5008	AND	TB	74780	18270	1	33	10	84	3	19	2	0.1	0.005
TA10	5009	DRT		74840	18270	1	129	12	90	7	28	3	0.1	0.005
TA10	5010	DRT		75080	18270	1	96	23	127	5	24	3	0.1	0.005
TA10	5011	AND	TB	75180	18270	1	53	13	156	6	25	7	0.1	0.005
TA10	5012	AND	TB	75510	18270	1	31	7	30	39	21	3	0.1	0.005
TA10	5013	AND	TF	75890	18025	2	45	11	40	23	16	2	0.1	0.005
TA10	5014	AND	TB	75815	18030	1	90	7	30	11	15	3	0.1	0.005
TA10	5015	AAN	PO	75760	18020	1	16	8	43	16	19	7	0.1	0.005
TA10	5016	AND	TB	75765	18040	2	128	13	13	7	11	16	0.1	0.005
TA10	5017	AND	TB	75430	18075	1	73	9	93	4	21	2	0.1	0.005
TA10	5018	AND	TB	76140	17780	8	51	7	76	7	7	4	0.1	0.005
TA10	5019	AND	TB	75950	17810	1	77	12	38	11	12	5	0.1	0.005
TA10	5020	AND	TB	75890	17790	1	65	45	88	14	16	5	0.1	0.005
TA10	5021	AND	TB	75590	17780	1	167	12	92	3	25	4	0.1	0.005
TA10	5022	AND	TB	75490	17785	1	14	12	24	4	19	9	0.1	0.005
TA10	5023	AND	TF	74845	17790	1	15	7	77	5	21	3	0.1	0.005
TA10	5024	AND	TF	74840	18015	1	124	9	83	4	26	2	0.1	0.005
TA10	5025	AND	TF	75020	18010	3	57	5	45	2	16	8	0.1	0.005
TA10	5026	AND	TB	75140	18030	5	173	18	182	5	27	7	0.1	0.005
TA10	5027	AND	TB	75230	18030	1	49	14	220	3	22	2	0.1	0.005
TA10	5028	AND	TB	75340	18050	1	103	7	85	6	22	2	0.1	0.005
TA10	5029	VCC	TA	78300	17840	57	93	13	67	40	14	8	0.3	0.005
TA10	5030	VCC	TA	78635	17635	39	104	10	20	87	25	79	0.5	0.065
TA10	5031	VCC	TA	78680	17635	9	121	9	17	55	22	13	0.1	0.005
TA10	5032	DRT		75820	17530	1	125	7	31	4	28	10	0.2	0.005
TA10	5033	AND	TB	75740	17550	1	33	6	37	4	18	6	0.1	0.005
TA10	5034	AND	TF	75570	17520	1	116	4	60	18	23	4	0.1	0.005
TA10	5035	DRT		75440	17530	1	10	8	21	2	8	6	0.1	0.005
TA10	5036	AND	TB	75730	17530	1	158	10	250	4	26	6	0.2	0.005
TA10	5037	AND	TF	74910	17580	1	111	9	86	3	24	2	0.4	0.005
TA10	5038	AND	TF	75165	17400	1	179	6	150	5	3	5	0.3	0.005
TA10	5039	AND	FL	75235	17400	1	93	10	100	3	19	4	0.2	0.005
TA10	5040	AND	FL	75345	17405	1	223	9	82	2	18	2	0.3	0.005
TA10	5041	AND	TF	75440	17405	1	118	8	127	3	24	3	0.2	0.005
TA10	5042	AND	TF	75445	17290	1	141	6	93	2	22	2	0.1	0.005
TA10	5043A	AND	TF	75365	17285	1	93	7	65	3	19	3	0.1	0.005
TA10	5043B	AND	TF	75370	17285	1	205	7	57	3	17	2	0.2	0.005
TA10	5044	AND	FL	75220	17130	1	102	5	93	9	38	2	0.2	0.005
TA10	5046	VCC	TA	78330	16920	72	210	25	207	45	16	2	0.6	0.010
TA10	5047	AND	TB	78115	16625	1	74	5	88	12	17	4	0.1	0.010
TA10	5048	AND	TB	78150	16410	2	52	3	27	10	11	2	0.1	0.005
TA10	5049	DRT		78750	16030	1	79	5	20	18	17	2	0.1	0.005
TA10	5050	DRT		78170	15950	1	2	4	41	13	33	2	0.1	0.005
TA10	5051	AND	TF	77120	15890	1	97	11	60	4	22	5	0.1	0.005
TA10	5052	AND	TF	76790	15920	1	132	7	165	5	21	7	0.1	0.005
TA10	5053	AND	TF	76630	15930	1	18	11	70	9	41	15	0.1	0.005
TA10	5054A	AND	TF	76280	15850	1	69	9	38	2	12	5	0.1	0.005
TA10	5054B	AND	TF	76290	15850	1	29	8	39	5	8	6	0.1	0.005

PROJ	NUM	LITH	TEX	EAST	NORTH	MO	CU	PB	ZN	NI	CO	AS	AG	AU
TA10	5055	AND	TF	75800	16065	1	82	10	69	5	25	13	0.1	0.005
TA10	5056	AND	TF	75900	16060	1	73	13	52	4	29	23	0.1	0.005
TA10	5057	AND	TF	76080	16125	1	107	9	78	3	27	5	0.1	0.005
TA10	5058	AND	TF	76190	16060	1	167	10	165	3	19	17	0.1	0.005
TA10	5059	AAN	PO	77670	16225	1	160	11	50	39	32	2	0.1	0.005
TA10	5060A	AND	TF	78120	19080	16	59	15	33	21	22	18	0.1	0.005
TA10	5060B	AND	TF	78120	19090	283	438	49	34	18	24	38	0.7	0.020
TA10	5061	AND	TF	77790	19040	11	50	12	15	20	15	7	0.1	0.005
TA10	5062	SNT	PO	77180	19000	4	8	114	13	4	4	2	0.4	0.005
TA10	5063	AND	TF	76425	19260	35	3735	635	111	15	40	11	9.1	0.015
TA10	5064			78240	19040	3	27	14	94	21	6	3	0.1	0.005
TA10	5065A	AND	TF	78080	19020	1	77	6	52	33	24	11	0.1	0.005
TA10	5065B	AND	TF	78085	19020	1	37	6	151	34	31	34	0.1	0.015
TA10	5066	VCC	TA	78630	19320	1	42	9	36	26	19	23	0.1	0.020
TA10	5067	AAN	PO	78630	19355	2	87	10	45	36	34	10	0.1	0.010
TA10	5068A	VCC	TA	78460	19330	1	16	2	17	27	20	31	0.1	0.040
TA10	5068B	VCC	BX	78460	19350	2	44	4	15	32	12	16	0.1	0.005
TA10	5069	AND	TF	78140	19310	3	95	6	38	24	25	3	0.1	0.015
TA10	5070A	AND	TF	78250	19310	1	78	2	18	31	19	8	0.2	0.010
TA10	5070B	VCC	BX	78240	19330	1	66	3	15	25	15	7	0.1	0.035
TA10	5071A	AND	TF	78310	19310	1	44	3	24	36	21	23	0.1	0.005
TA10	5071B	VCC	BX	78310	19320	3	53	4	9	34	15	195	0.1	0.005
TA10	5072A	VCC	TF	78400	19320	2	55	5	16	26	17	44	0.1	0.005
TA10	5072B	VCC	BX	78400	19330	1	80	7	20	27	31	35	0.1	0.005
TA10	5073	AND	TF	77555	19325	4	260	53	71	13	7	7	0.5	0.005
TA10	5074A	AND	TF	77130	19275	1	152	42	73	100	27	74	0.3	0.005
TA10	5074B	AND	TF	77110	19275	16	425	31	37	18	7	5	0.4	0.005
TA10	5074C	AND	TF	77090	19275	3	268	34	33	24	18	9	0.3	0.005
TA10	5075	AND	TF	76900	19270	2	180	17	33	22	8	2	0.2	0.005
TA10	5076	VCC	SD	76940	20720	1	61	9	61	26	20	14	0.1	0.005
TA10	5077	VCC	TA	77065	20740	1	84	8	72	24	26	11	0.2	0.005
TA10	5078	VCC	TA	77380	20765	1	81	9	68	28	23	4	0.1	0.005
TA10	5079	VCC	SD	77540	20770	1	59	9	71	18	21	12	0.1	0.005
TA10	5080	VCC	SD	77660	20750	1	69	11	104	23	19	14	0.2	0.005
TA10	5081	VCC	TA	77300	20470	5	93	6	30	35	21	10	0.3	0.005
TA10	5082A	VCC	TA	77370	20470	1	47	6	41	21	20	18	0.1	0.040
TA10	5082B	VCC	SD	77390	20470	1	57	6	37	14	17	10	0.1	0.005
TA10	5083A	VCC	TA	77605	20530	1	63	9	61	212	34	9	0.2	0.005
TA10	5083B	VCC	SD	77610	20550	1	96	9	69	23	25	6	0.3	0.005
TA10	5084	VCC	TA	77640	20490	1	93	11	76	29	26	10	0.1	0.005
TA10	5085	VCC	SD	77680	20490	1	62	8	74	21	27	10	0.1	0.005
TA10	5086	VCC	SD	77700	20485	1	49	10	73	19	15	12	0.4	0.005
TA10	5087	VCC	SD	77790	20470	1	75	12	126	25	17	11	0.2	0.005
TA10	5088	VCC	TA	77890	20450	1	57	9	84	18	19	11	0.3	0.005
TA10	5089	VCC	TA	78010	20440	1	52	13	97	11	21	11	0.1	0.005
TA10	5090A	VCC	TA	78070	20480	1	63	12	127	22	20	9	0.3	0.005
TA10	5090A	VCC	SD	78090	20490	1	72	17	75	12	21	6	0.2	0.005
TA10	5091A	VCC	TA	78250	20450	1	106	11	69	70	29	13	0.2	0.005
TA10	5091B	VCC	SD	78260	20460	1	165	10	69	20	43	62	0.5	0.005
TA10	5092	AND	AG	78640	20500	1	123	10	57	24	37	11	0.1	0.005
TA10	5093	AND	AG	78680	20490	1	100	12	76	49	37	11	0.1	0.005
TA10	5094A	VCC	TL	78770	20560	1	98	11	75	48	37	13	0.1	0.005
TA10	5094B	VCC	TL	78780	20560	1	111	9	73	55	41	11	0.3	0.005
TA10	5095		SD	78700	20700	1	123	13	64	47	32	12	0.3	0.005
TA10	5096A	VCC	SD	78310	20720	1	53	8	74	22	18	11	0.3	0.005
TA10	5096B	VCC	SD	78290	20730	3	52	17	85	8	8	2	0.2	0.005

PROJ NUM	LITH	TEX	EAST	NORTH	MO	CU	PB	ZN	NI	CO	AS	AG	AU
TA10 5097	VCC	SD	78110	20730	1	44	9	77	15	17	9	0.1	0.005
TA10 5098	VCC	TA	77965	20730	1	68	11	67	14	20	6	0.1	0.005
TA10 5099	VCC	TA	76510	21000	1	15	9	86	5	13	11	0.3	0.010
TA10 5100	VCC	TA	76630	21015	1	74	10	64	65	26	6	0.3	0.010
TA10 5101	VCC	SD	76805	20970	1	70	10	71	23	20	6	0.1	0.005
TA10 5102A	VCC	TA	77570	21020	1	121	7	84	22	19	15	0.5	0.005
TA10 5102B	VCC	SD	77375	20995	1	34	9	71	13	16	12	0.2	0.005
TA10 5103	VCC	SD	77470	21010	1	43	7	66	16	18	4	0.3	0.005
TA10 5104	VCC	SD	77590	21025	1	71	10	75	33	27	17	0.3	0.005
TA10 5105	VCC	SD	77640	21030	1	93	10	91	29	20	10	0.3	0.005
TA10 5106	VCC	SD	77705	21000	1	49	8	71	18	17	9	0.3	0.005
TA10 5106B	VCC	SD	77710	21010	1	51	10	76	22	18	8	0.3	0.005
TA10 5107	VCC	SD	77900	21055	1	55	6	61	19	20	8	0.2	0.005
TA10 5108	AND	AG	78500	21090	1	92	4	55	15	26	17	0.4	0.005
TA10 5109	AND	AG	78560	21150	1	108	4	60	44	35	4	0.2	0.005
TA10 5110	VCC	TA	78490	21120	1	88	10	74	26	26	10	0.1	0.005
TA10 5111	VCC	TA	78100	21150	2	74	12	67	15	19	4	0.2	0.005
TA10 5112	VCC	SD	77970	21090	1	100	10	116	28	22	11	0.6	0.005
TA10 7001A	AAN	PO	75945	17335	1	70	6	40	19	20	4	0.1	0.005
TA10 7001B	DRT		75960	17335	1	127	15	106	7	21	3	0.1	0.005
TA10 7002A	DRT		75970	17310	3	69	2	68	5	31	2	0.1	0.005
TA10 7002B	DRT		75975	17310	1	55	9	91	6	31	5	0.1	0.005
TA10 7003	DRT		75915	17170	1	122	7	79	9	40	14	0.1	0.005
TA10 7004	AND	TF	75380	16770	1	79	7	94	3	22	9	0.2	0.005
TA10 7006	AND	TF	75245	16750	1	77	5	122	3	19	6	0.1	0.005
TA10 7007A	AND	TF	74900	16530	1	20	4	31	5	9	3	0.1	0.005
TA10 7007B	AND	TF	74910	16520	1	207	2	42	9	22	3	0.2	0.005
TA10 7008	AND	TB	75050	16505	1	44	6	51	9	15	9	0.9	0.010
TA10 7009A	AND	TF	75240	16540	1	125	7	68	6	27	11	0.2	0.005
TA10 7009B	AND	TF	75250	16540	1	156	10	79	5	32	8	0.2	0.005
TA10 7010A	AND	TF	75600	16580	1	102	8	135	3	21	5	0.3	0.005
TA10 7010B	AND	TF	75605	16580	1	156	9	158	3	22	9	0.3	0.005
TA10 7011A	AND	TF	76495	16805	1	76	10	89	5	32	2	0.1	0.005
TA10 7011B	AND	TF	76505	16800	9	86	5	85	4	29	8	0.3	0.005
TA10 7012	AND	TF	76525	16835	1	64	4	54	13	26	6	0.1	0.005
TA10 7013	AAN	PO	76760	16840	1	143	3	66	62	35	6	0.3	0.005
TA10 7014	AND	TB	77000	16860	2	61	10	45	8	10	2	0.1	0.005
TA10 7015	AND	TF	77050	16870	4	146	3	58	31	15	2	0.1	0.005
TA10 7016	AND	TB	77080	16855	2	39	7	52	11	14	2	0.1	0.005
TA10 7017	AND	TB	77250	16870	1	72	5	55	12	16	2	0.1	0.005
TA10 7018	AAN	PO	76510	17020	2	160	2	48	27	23	5	0.4	0.005
TA10 7019	AND	TB	77610	16605	1	53	5	54	19	18	3	0.1	0.005
TA10 7020	AND	TB	76925	16640	1	55	6	67	10	29	9	0.2	0.005
TA10 7021	DRT		76830	16600	1	122	5	66	10	31	5	0.1	0.005
TA10 7022	AAN	PO	76780	16585	1	99	2	30	24	19	2	0.1	0.005
TA10 7023	AND	TB	76690	16630	1	104	8	105	18	32	10	0.2	0.005
TA10 7024A	AND	TF	76450	16570	1	183	25	249	3	22	6	0.2	0.010
TA10 7024B	AND	TF	76480	16570	1	74	17	167	4	22	5	0.1	0.005
TA10 7025	AND	TF	75375	16595	1	142	6	249	3	25	11	0.2	0.010
TA10 7026	AND	TF	75965	16615	1	113	12	259	3	22	14	0.1	0.005
TA10 7027	AND	TF	75080	16240	1	123	10	57	15	33	14	0.4	0.010
TA10 7028	AND	TB	74855	16060	1	27	5	75	7	18	6	0.1	0.005
TA10 7029A	AND	TF	75345	16065	1	7	12	51	6	12	9	0.1	0.010
TA10 7029B	AND	TF	75355	16075	1	90	8	87	7	24	12	0.2	0.005
TA10 7030	DRT		75570	16210	1	49	5	35	4	21	10	0.2	0.010
TA10 7031A	AND	TF	75700	16230	1	156	12	95	3	22	33	0.2	0.005

PROJ NUM	LITH	TEX	EAST	NORTH	MO	CU	PB	ZN	NI	CO	AS	AG	AU
TA10 7031B	AND	TF	75710	16230	1	140	7	175	3	21	9	0.1	0.005
TA10 7032A	AND	TF	75750	16205	1	115	7	153	3	3	4	0.1	0.005
TA10 7032B	AND	TF	75770	16205	1	63	5	73	3	20	6	0.1	0.010
TA10 7033	AND	TF	75885	16220	1	51	10	72	3	22	2	0.1	0.005
TA10 7034A	AND	TF	76070	16240	1	85	3	38	29	22	2	0.1	0.010
TA10 7034B	AAN	PO	76070	16250	1	70	6	181	3	19	5	0.1	0.005
TA10 7035	AND	TF	76140	16260	1	101	10	99	4	24	10	0.1	0.005
TA10 7036	AND	TF	76250	16225	3	38	20	163	2	21	17	0.1	0.010
TA10 7037A	AND	TB	76370	16225	2	11	12	82	2	11	19	0.1	0.005
TA10 7037B	AND	TB	76380	16235	1	195	16	170	2	19	15	0.4	0.015
TA10 7038A	AND	TB	76510	16250	1	169	3	50	31	24	2	0.1	0.005
TA10 7038B	AND	TF	76520	16250	1	17	4	126	2	14	5	0.1	0.005
TA10 7038C	AAN	PO	76525	16250	1	93	9	227	4	24	11	0.2	0.005
TA10 7038D	AAN	PO	76535	16250	1	81	3	134	3	14	2	0.1	0.005
TA10 7039A	AND	TF	76615	16240	1	209	21	222	4	27	7	0.4	0.020
TA10 7039B	AND	TF	76620	16240	1	81	12	206	3	27	15	0.1	0.005
TA10 7040	AND	TF	76730	16240	1	145	4	198	3	21	8	0.1	0.005
TA10 7041	AND	TF	76820	16250	1	82	15	210	3	18	5	0.1	0.005
TA10 7042	AAN	PO	77400	16255	1	55	5	47	16	34	4	0.1	0.005
TA10 7043	AAN	PO	77495	16245	1	124	2	37	43	25	2	0.1	0.005
TA10 7045	AND	TF	76690	18785	16	272	13	50	12	8	2	0.2	0.005
TA10 7046A	AND	TF	77780	18755	16	373	449	46	68	26	2	2.6	0.005
TA10 7046B	AND	TF	77790	18722	20	291	1292	60	87	20	3	8.2	0.005
TA10 7047	AND	TF	77920	18755	3	38	16	59	62	44	14	0.1	0.005
TA10 7048	AND	TF	78580	18760	2	38	12	26	12	22	19	0.1	0.005
TA10 7049	AND	TF	78650	18760	1	51	5	42	169	38	66	0.1	0.005
TA10 7050	AND	TF	75300	19700	1	132	6	36	22	13	6	0.1	0.005
TA10 7051A	AND	TF	76305	19490	4	73	3	13	22	19	2	0.1	0.005
TA10 7051B	AND	TF	76310	19490	1	99	4	37	13	10	2	0.1	0.005
TA10 7052	SNT	.	76340	19500	1	9	2	10	7	2	2	0.1	0.005
TA10 7053	AND	TF	76320	19420	2	395	10	37	12	14	9	0.5	0.025
TA10 7054	AND	TF	76360	19470	1	202	7	34	17	11	2	0.3	0.005
TA10 7055A	AND	TF	76400	19475	2	593	10	15	6	10	2	1.1	0.005
TA10 7055B	AND	TF	76405	19475	2	749	5	20	12	12	2	0.8	0.010
TA10 7056	AND	TF	76480	19440	1	334	7	35	98	20	2	0.4	0.010
TA10 7057	AND	TF	76615	19450	1	357	8	27	6	5	15	0.6	0.030
TA10 7058A	AND	TF	76720	19465	7	318	203	35	14	18	3	1.3	0.005
TA10 7058B	AND	TF	76730	19465	3	18	195	6	3	1	2	0.5	0.005
TA10 7059	SNT		76840	19470	5	17	8	17	12	5	33	0.1	0.025
TA10 7060	AND	TF	76880	19475	8	335	163	45	20	18	5	1.4	0.005
TA10 7061	AND	TF	77800	19480	6	96	4	13	28	26	2	0.1	0.005
TA10 7062A	AND	TF	78140	19530	1	121	6	15	20	18	60	0.1	0.030
TA10 7062B	VCC	TA	78155	19515	1	2	5	20	170	63	375	0.1	0.010
TA10 7063A	VCC	TA	78245	19515	2	48	3	25	24	21	9	0.1	0.005
TA10 7063B	DRT		78250	19515	2	27	1	13	41	22	45	0.1	0.035
TA10 7064	DRT		78350	19535	2	40	4	18	23	17	19	0.1	0.005
TA10 7065	VCC	TA	78400	19535	6	76	5	8	66	21	18	0.3	0.035
TA10 7066A	VCC	TA	78425	19520	2	76	7	31	26	25	14	0.4	0.005
TA10 7066B	VCC	TA	78430	19520	2	96	3	10	22	24	2	0.5	0.005
TA10 7067	VCC	TA	78490	19490	2	89	4	18	21	21	26	0.4	0.005
TA10 7068	VCC	BX	78550	19500	3	92	6	25	24	19	14	0.2	0.005
TA10 7069A	VCC	TA	78590	19500	1	87	8	25	73	39	48	0.1	0.010
TA10 7069B	VCC	SD	78590	19510	2	48	6	38	20	24	30	0.1	0.010
TA10 7069C	AAN	PO	78590	19520	3	104	6	28	30	20	15	0.1	0.010
TA10 7070	VCC	SD	78620	19475	2	53	2	34	14	19	18	0.1	0.010
TA10 7071	VCC	SD	78735	19685	1	31	4	80	12	17	18	0.1	0.005

PROJ NUM	LITH	TEX	EAST	NORTH	MO	CU	PB	ZN	NI	CO	AS	AG	AU
TA10 7072	VCC	SD	78465	19785	1	57	6	79	18	19	12	0.1	0.005
TA10 7073	VCC	TA	78420	19670	5	62	5	11	22	20	11	0.1	0.025
TA10 7074	VCC	TA	78355	19740	8	82	5	11	50	23	18	0.1	0.005
TA10 7075A	VCC	SD	78245	19750	1	33	3	41	10	26	40	0.1	0.005
TA10 7075B	VCC	TA	78230	19740	2	46	1	32	22	26	36	0.1	0.005
TA10 7076	VCC	SD	78195	19775	1	46	4	36	35	29	35	0.1	0.005
TA10 7077A	VCC	TA	78145	19765	3	67	3	20	29	14	25	0.1	0.005
TA10 7077B	VCC	SD	78120	19760	7	22	8	21	48	13	23	0.1	0.010
TA10 7078	VCC	TA	78055	19780	1	54	4	23	28	24	26	0.1	0.005
TA10 7079A	VCC	TA	77960	19750	2	18	2	17	120	5	33	0.1	0.010
TA10 7079B	VCC	TA	77950	19735	2	110	2	13	29	23	94	0.1	0.010
TA10 7080	AND	TF	77900	19775	3	73	4	64	41	31	16	0.1	0.010
TA10 7081	AAN	TA	77725	19775	3	118	6	9	11	24	17	0.3	0.005
TA10 7082	AND	TF	77700	19775	26	38	12	5	24	17	30	0.1	0.005
TA10 7038A	AAN	PO	77620	19785	31	67	20	18	48	29	7	0.1	0.005
TA10 7083B	VCC	TA	77610	19785	2	98	12	20	138	34	4	0.1	0.005
TA10 7084	VCC	TA	77435	19735	7	25	13	16	48	22	12	0.1	0.005
TA10 7084X	VCC	TA	77435	19730	2	101	103	17	12	12	8	0.6	0.005
TA10 7085	AND	TF	77190	19760	15	104	542	12	24	8	2	5.2	0.005
TA10 7086	AAN	PO	76755	19745	41	131	18	45	108	26	18	0.3	0.020
TA10 7087	AND	TF	76705	19720	7	124	9	10	31	22	4	0.1	0.005
TA10 7088	AND	TF	76595	19750	2	80	2	28	54	21	2	0.1	0.010
TA10 7089	SNT		76410	19720	3	11	2	6	5	1	5	0.1	0.010
TA10 7090	SNT		76230	19720	2	50	15	17	5	2	4	0.1	0.005
TA10 7091	SNT		76055	19740	3	30	17	14	4	1	4	0.1	0.010
TA10 7092	SNT		75975	19835	4	91	12	16	4	2	2	0.1	0.005
TA10 7093	SNT		75870	19750	2	9	12	10	5	2	3	0.1	0.005
TA10 7094	SNT		75820	19940	2	29	11	12	3	1	2	0.1	0.005
TA10 7095	SNT		75690	19925	3	10	10	19	7	3	3	0.1	0.030
TA10 7096	SNT		75595	19945	1	12	111	74	9	7	4	1.1	0.095
TA10 7097	SNT		75705	19690	1	5	5	10	6	2	2	0.1	0.005
TA10 7100	AND	TF	75400	19940	9	246	10	51	18	11	2	0.3	0.005
TA10 7101	SNT		75480	20185	2	12	4	25	8	3	2	0.1	0.005
TA10 7102	SNT		75565	20195	1	10	6	19	4	2	2	0.1	0.005
TA10 7103	SNT		75570	20060	4	6	2	14	6	2	2	0.1	0.005
TA10 7104	SNT		76105	19950	1	3	6	16	3	1	2	0.1	0.005
TA10 7105	SNT		76190	19950	1	8	5	12	4	1	2	0.1	0.005
TA10 7106	SNT		76280	19950	1	12	4	13	3	1	2	0.1	0.005
TA10 7107	SNT		76380	19955	2	11	8	15	5	1	2	0.2	0.005
TA10 7108A	AND	TF	76495	19950	4	39	4	22	12	7	2	0.2	0.005
TA10 7109	VCC	TA	76460	20090	2	25	4	24	21	8	2	0.1	0.005
TA10 7110A	VCC	TA	76730	20065	18	435	42	46	15	19	2	1.0	0.005
TA10 7110B	VCC	TA	76750	20075	10	307	24	39	23	24	7	0.9	0.005
TA10 7110C	VCC	TA	76765	20065	24	455	42	55	20	16	2	1.4	0.005
TA10 7110C	VCC	TA	76770	20065	12	590	14	19	11	5	4	49.5	3.000
TA10 7110D	AAN	PO	76800	20080	15	470	13	49	161	30	2	1.2	0.005
TA10 7111	AND	TF	77115	20125	6	103	39	42	31	20	13	0.7	0.005
TA10 7112A	VCC	TA	78030	19980	6	62	4	28	24	26	44	0.1	0.005
TA10 7112B	AAN	PO	78035	19985	2	110	3	32	17	26	2	0.3	0.005
TA10 7113	VCC	TL	78885	19970	1	84	5	69	266	41	2	0.3	0.005
TA10 7114A	VCC	SD	78850	20290	1	78	7	74	18	31	7	0.1	0.005
TA10 7114B	AND	AG	78850	20300	1	113	2	54	23	29	9	0.1	0.005
TA10 7115	VCC	TL	78775	20300	1	67	5	60	283	42	8	0.2	0.005
TA10 7116	AND	AG	78520	20260	1	86	7	70	25	27	12	0.1	0.005
TA10 7117	VCC	SD	78360	20360	1	81	9	77	31	23	12	0.1	0.005
TA10 7118	VCC	TA	78160	20290	1	92	6	82	33	23	4	0.1	0.005

PROJ NUM	LITH	TEX	EAST	NORTH	MO	CU	PB	ZN	NI	CO	AS	AG	AU
TA10 7119	VCC	BX	78040	20260	1	49	11	74	19	20	10	0.1	0.005
TA10 7120	VCC	SD	78000	20260	1	44	8	82	11	20	11	0.1	0.005
TA10 7121A	VCC	TA	77860	20240	2	75	2	55	21	20	21	0.1	0.005
TA10 7121B	VCC	SD	77850	20240	1	62	6	45	34	22	22	0.1	0.005
TA10 7121C	VCC	SD	77855	20260	1	44	5	69	19	20	13	0.1	0.005
TA10 7121D	VCC	SD	77840	20255	1	64	8	73	23	20	13	0.2	0.005
TA10 7122A	VCC	TA	77780	20220	2	61	4	42	25	18	16	0.1	0.005
TA10 7122B	VCC	SD	77790	20225	1	53	4	30	22	25	27	0.1	0.005
TA10 7123A	VCC	TA	77700	20240	2	62	3	30	24	26	23	0.1	0.005
TA10 7123B	VCC	BX	77690	20230	1	51	4	31	23	15	7	0.1	0.005
TA10 7123C	VCC	TA	77685	20215	3	44	5	53	27	20	20	0.1	0.005
TA10 7124A	VCC	TA	77600	20260	3	85	6	15	29	12	7	0.1	0.020
TA10 7124B	VCC	BX	77615	20265	2	48	4	14	17	11	2	0.1	0.005
TA10 7124C	VCC	TA	77625	20250	1	17	5	27	13	15	11	0.1	0.005
TA10 7125A	AAN	PO	76890	20230	7	40	8	30	101	28	4	0.1	0.005
TA10 7125B	AND	TF	76900	20225	6	88	9	14	25	24	7	0.1	0.005
TA10 7125C	AND	TF	76910	20220	7	215	14	17	23	30	3	0.1	0.005
TA10 7126A	AND	TF	76835	20365	6	85	7	19	60	20	4	0.1	0.005
TA10 7126B	AND	TF	76855	20360	6	120	10	18	19	22	4	0.1	0.005
TA10 7127	AND	TF	76355	20215	1	42	7	17	7	14	6	0.1	0.005
TA10 7128	SNT		76295	20225	1	9	7	12	4	2	2	0.1	0.005
TA10 7129	SNT		76145	20220	1	27	12	12	2	2	2	0.1	0.005
TA10 7130	SNT		75990	20220	2	32	11	14	5	2	2	0.1	0.005
TA10 7131	SNT		75865	20205	1	17	9	15	3	2	2	0.1	0.005
TA10 7132	SNT		75735	20180	1	16	6	14	5	2	2	0.1	0.005
TA10 7133	SNT		75620	20190	1	10	6	18	4	2	2	0.1	0.005
TA10 7134	SNT		75555	20305	1	17	5	17	4	2	2	0.1	0.005
TA10 7135	SNT		75550	20430	1	18	5	12	4	2	2	0.1	0.005
TA10 7136A	AND	FL	75105	20375	1	31	7	9	5	2	2	0.1	0.005
TA10 7136B	SNT		75115	20375	1	370	8	50	43	24	4	0.6	0.005
TA10 7137	AND	FL	75125	20350	1	186	8	36	47	17	5	0.2	0.005
TA10 7138A	SNT		76265	20425	1	12	4	13	4	2	2	0.1	0.005
TA10 7138B	AAN	PO	76295	20430	1	119	5	43	24	20	4	0.3	0.005
TA10 7138C	AND	TF	76300	20430	1	165	17	15	8	6	6	0.6	0.005
TA10 7139	SNT		76190	20455	3	53	18	18	5	2	2	0.5	0.005
TA10 7140	SNT		76080	20460	3	18	71	20	4	2	2	0.3	0.005
TA10 7141	AND	TB	75210	20350	1	247	13	35	43	19	3	0.4	0.005
TA10 7142A	AND	FL	75095	20345	1	41	15	5	2	2	2	0.3	0.005
TA10 7142B	AND	FL	75125	20350	1	837	12	37	36	21	4	2.9	0.025
TA10 7142C	AND	FL	75120	20350	1	601	11	32	30	16	5	1.9	0.015
TA10 7142D	AND	FL	75095	20340	1	690	9	35	31	19	4	1.4	0.020
TA10 7143A	AND	TB	75065	20415	1	162	7	15	4	5	3	0.2	0.005
TA10 7143B	AND	TB	75075	20415	1	129	8	13	8	4	4	0.1	0.005
TA10 7144A	AND	TF	74470	20435	4	110	134	53	6	6	3	1.0	0.005
TA10 7144B	AND	TF	74460	20435	7	66	39	83	68	14	3	0.3	0.005
TA10 7145	AND	TF	74320	20425	24	796	25	114	49	45	5	1.6	0.005
TA10 7146	AAN	PO	76385	20335	1	51	5	33	36	19	4	0.1	0.005
TA10 7147A	SNT		76340	20315	1	6	5	13	4	2	2	0.1	0.005
TA10 7147B	AAN	PO	76365	20335	1	69	9	34	23	15	4	0.1	0.005
TA10 7148	AND	TF	76340	20445	28	176	55	32	35	6	8	0.9	0.005
TA10 7149	AND	TF	76365	20665	4	35	5	12	15	9	6	0.1	0.005
TA10 7150	AND	TF	75470	20670	5	60	5	10	65	19	5	0.1	0.005
TA10 7151	AND	TB	75550	20640	4	42	3	21	14	15	5	0.1	0.005
TA10 7152	AND	TF	75935	20665	10	75	10	4	18	12	4	0.1	0.005
TA10 7153	AND	TF	76120	20655	4	25	3	10	14	5	4	0.1	0.005
TA10 7154	VCC	TA	76545	20680	24	135	8	10	36	18	4	0.1	0.005

PROJ NUM	LITH	TEX	EAST	NORTH	MO	CU	PB	ZN	NI	CO	AS	AG	AU
TA10 7155	VCC	TA	76505	20675	6	71	4	5	22	13	7	0.1	0.005
TA10 7156A	AND	TF	76185	20665	5	49	6	13	15	15	3	0.1	0.005
TA10 7156B	AND	TF	76175	20670	4	9	9	6	4	2	2	0.1	0.005
TA10 7157	AND	TF	75340	20910	2	56	5	14	16	11	6	0.1	0.025
TA10 7158	AND	TF	75250	20885	3	37	2	10	17	16	5	0.1	0.005
TA10 7159	AND	TB	75400	20875	2	27	4	18	13	12	6	0.1	0.005
TA10 7160	AND	TF	75425	20885	3	97	32	25	6	16	5	0.2	0.030
TA10 7161	AND	TF	76080	20915	15	83	3	11	16	15	3	0.1	0.005
TA10 7162	AND	TF	76035	20920	2	87	5	17	52	21	4	0.1	0.020
TA10 7163A	AAN	FO	74960	21100	3	6	3	6	10	13	5	0.1	0.005
TA10 7163B	AND	TF	74960	21090	2	64	6	8	21	14	4	0.1	0.005
TA10 7164	AND	TF	75045	21035	3	41	2	12	20	15	6	0.1	0.005
TA10 7165A	AND	TF	75245	21070	4	44	7	9	17	15	4	0.1	0.005
TA10 7165B	AND	TB	75260	21070	2	46	6	18	12	26	4	0.1	0.005
TA10 7166	AND	TF	75975	20915	2	68	6	5	6	12	2	0.1	0.005
TA10 7167	AND	TF	75715	20955	4	46	4	12	12	12	2	0.1	0.005
TA10 7168A	AND	FL	75380	21050	3	142	4	25	26	27	3	0.1	0.005
TA10 7168B	AND	FL	75380	21045	5	28	2	6	7	8	4	0.1	0.005
TA10 7169	AND	TB	75520	21099	4	23	3	8	10	9	3	0.1	0.005
TA10 7170	AND	TB	75590	21100	2	17	3	14	11	13	3	0.1	0.005
TA10 7171A	AND	TF	75685	21100	5	79	5	5	13	21	10	0.1	0.015
TA10 7171B	AND	TF	75685	21105	1	21	5	7	5	11	4	0.1	0.005
TA10 7172	VCC	SD	76470	21180	5	51	9	54	14	15	5	0.3	0.005
TA10 7173A	AAN	FO	76530	21120	1	96	8	42	45	34	2	0.1	0.005
TA10 7173B	VCC	TA	76540	21120	1	36	13	77	11	17	3	0.1	0.005
TA10 7174A	VCC	SD	76630	21140	1	73	7	72	24	23	6	0.1	0.005
TA10 7174B	VCC	TA	76610	21140	1	65	12	61	176	28	4	0.1	0.005
TA10 7175	VCC	SD	76580	21135	2	106	9	73	17	23	2	0.1	0.005
TA10 7176	VCC	SD	76720	21155	1	78	8	98	24	18	9	0.1	0.005
TA10 7177	VCC	TA	76755	21125	1	82	10	69	71	26	3	0.1	0.005
TA10 7178	VCC	TA	76815	21146	2	87	7	65	40	21	2	0.1	0.005
TA10 7179	VCC	SD	76950	21200	1	45	8	79	16	17	6	0.1	0.005
TA10 7180	VCC	SD	76230	21150	1	61	9	82	20	17	6	0.1	0.010
TA10 7181	VCC	SD	77300	21135	1	78	7	74	19	17	5	0.1	0.010
TA10 7182	VCC	SD	77320	21180	1	41	12	70	16	15	4	0.1	0.015
TA10 7183	VCC	SD	77340	21175	1	43	6	70	18	17	3	0.1	0.015
TA10 7184	VCC	SD	77365	21140	1	44	7	60	18	16	2	0.1	0.005
TA10 7185	VCC	SD	77470	21120	1	56	5	77	23	17	4	0.1	0.005
TA10 7186	VCC	SD	77530	21115	1	50	8	62	18	19	6	0.1	0.005

APPENDIX C

VLF SURVEY RESULTS

VLF SURVEY RESULTS - TA HOOLA PROJECT

An in-house crew carried out magnetic and VLF orientation surveys on our Ta Hoola Lake property during the summer field season, 1981. Magnetic readings were obtained on lines 112+20N to 128+58N, using a G-816 proton precession magnetometer. The station interval was 25 m. VLF results were obtained on lines 92+68N to 107+32N, and the western portions of lines 119+52, 120+74 and 121+96N. Measurements of the in-phase and quadrature components of the primary field were recorded for both Seattle, Washington (18.6 kHz), and Cutler, Maine (17.8 kHz). A Geonics EM-16 unit was used for the survey, and the station spacing was again 25 m.

VLF Results

The VLF profiles for the two transmitter stations are plotted in Drawings TA1-44 and 45 (in map pocket). The coverage is incomplete, including only the southern portion of the grid. The results are very noisy- and a complex pattern of conductor axes is obtained. Fraser filtering the data did not help to resolve this complex pattern. Contouring the Fraser filtered results proved to be very ambiguous, because of the large number, and erratic nature, of the conductive responses. The Fraser filtered results have thus not been presented.

The conductor axes have been picked using the VLf profiles. The better responses that correlate from line to line have been picked, and are shown on Drawings TA1-44 and 45. The interpreted conductor axes for the two VLF stations are also plotted on a compilation map, Drawing TA1-46 (in map pocket).

The complex pattern of VLF responses is caused by a number of things. Surficial effects (e.g. swamps, streams, etc.) are dominant, particularly in the eastern portion of the survey area. A number of typical responses over broad surface conductors can be seen in this region. Some of the anomalous responses are also topographically related. In fact over the whole survey area, a good correlation between

topography and surface features is observed.

Nonetheless, a number of interesting features have been extracted from the results. The more promising VLF responses are indicated (I-V) on the compilation map, Drawing TA1-46. Conductor I though the strongest and most distinct anomaly, is more than likely caused by conductive material in the stream, or an underlying fault as postulated by Ruck (Drawing TA1-1). Note the proliferation of weak anomalies associated with the stream channels. Conductors II-V look a lot more promising, and possibly indicate the presence of sulphide mineralization. These anomalies are worth following up. In general the more significant VLF conductors have a north-north-east trend, and their disrupted pattern indicates the presence of an east-west structural break.

It is recommended that the complete grid is resurveyed at a 100 m line spacing. The VLF data should also be routinely corrected for topography.

Conclusions

Even though the magnetic and VLF coverage is incomplete a number of interesting features are apparent. It is recommended that the grid be detailed at 100 m line spacing to remove any bias. Also in view of the fact that extensive disseminated sulphide mineralization is indicated, IP work should also be considered.

R. B. Matthews
Senior Geophysicist
Saskatchewan Mining Development Corp.

APPENDIX D

EXPENDITURES ON TA HOOLA PROJECT

STATEMENT OF COSTS TA HOOLA 1-6, 13 CLAIMS

Physical Work

Line cutting, chaining and flagging:		
5 man days at $120/day	600	
10 man days at $100/day	1000	
40 man days at $85/day	3400	
		5000.00
4 x 4 vehicle (includes rental, fuel, maintenance and repairs):		
11 days at $50/day x 2 vehicles		1100.00
(1) TOTAL PHYSICAL WORK		6100.00

Technical Field Work

Geological Survey:		
1 Sr. Geol. Assist. x 54 man days @ $100/day	5400	
1 Geologist x 67 man days @ $120/day	8040	
1 Exploration Mgr. x 5 man days @ $300/day	1500	
		14,940.00
Geochemical Survey:		
Soil Sampling -		
21 man days @ $100/day	2100	
46 man days @ $85/day	3910	
		6,010.00
Soil Analyses -		
1064 samples @ $3.25/sample (Au)	3458	
284 samples @ $3.50/sample (Ag,Pb,Zn, Cu,Mo)	994	
152 samples @ $3.25/sample (Ag,Pb,Zn, Cu)	494	
49 samples @ $3.50/sample (Ag,Pb,Zn, Cu,As)	171	
		5,117.00

Statement of Costs (Cont'd)

Sample preparation and shipping -		
1064 samples @ .60/sample		638.00
Rock Sampling -		
9 man days @ $120/day	1080	
5 man days @ $100/day	500	
5 man days @ $85/day	425	
		2,005.00
Rock Analyses -		
381 samples @ $4.50/sample (Ag,Pb,Zn Cu,Mo,Ni,Co,As,Sb,Cd)	1714.50	
381 samples @ $3.75/sample (Au,Ag)	1428.75	
80 samples @ $6.50/sample (Au,Ag,Pb,Zn, Cu)	520.00	
7 samples @ $0.50/sample (Mo)	3.50	
5 samples @ $2.50/sample (As)	12.50	
23 samples @ $5.00/sample (Au,Pb)	115.00	
4 assays @ $31.50/assay (Au,Ag,Pb,Zn, Cu,As,Sb)	126.00	
		3,919.00
Sample Preparation -		
465 samples @ $2.25/sample		1,046.00
Sample Shipping -		
465 samples @ $.045/sample		209.00
Total Geochemical Survey		18,944.00

Geophysical Surveys:

Magnetic Survey -		
15 man days @ $120/day	600	
12 man days @ $85/day	1020	
		1,620.00

Statement of Costs (Cont'd)

Geophysical Surveys (cont'd):		
Instrument Rental 6 weeks @ 220/week		1,320.00
VLF Survey		
7 man days @ $120/day	840	
1 man day @ $100/day	100	
12 man days @ $85/day	1020	
1 man day @ $300/day	300	
		2,260.00
Equipment Rental 1.5 months @ $300/month		450.00
Total geophysical surveys		5,640.00

Field Support

Camp Operating Costs (includes room and board, equipment) 311 man days @ $40/day		12,440.00
Wages for Mobilization/Demobilization and Camp Construction:		
5 man days @ $120/day	600	
10 man days @ $100/day	1000	
10 man days @ $85/day	850	
		2,450.00
Freight and Courier Service:		1,050.00
Travel (Round trip airfare, Vancouver-Ta Hoola Claims):		
10 trips @ $119/trip		1,190.00
Travel and Meal Allowance:		
10 man days @ $19/day		190.00

Statement of Costs (Cont'd)

Field Support (cont'd)		
4 x 4 Vehicle (includes rental, fuel, maintenance and repairs:		
94 days @ $50/day x 2 vehicles		9,400
Total Field Support		26,720.00
(2) TOTAL TECHNICAL FIELD AND SUPPORT COSTS		66,244.00

Data Compilation Statistical Analyses and Report Preparation and Publication

Geological Report:		
Compilation - 20 man days @ $120/day	2400	
5 man days @ $100/day	500	
Drafting 10 man days @ $100/day	1000	
Report Writing 15 man days @ $120/day	1800	
		5,700.00
Soil Geochemical Report:		
Compilation - 5 man days @ $120/day	600	
5 man days @ $100/day	500	
Drafting - 10 man days @ $100/day	1000	
Report Writing 15 man days @ $120/day	1800	
		3,900
Rock Geochemical Report (S. Earle):		
Compilation - 3 days @ $200/day	600	
Drafting 10 days @ $100/day	1000	
Report Writing 10 days @ $200/day	2000	
Computer Time 5 hours @ $30/hr.	150	
		3,750.00

Statement of Costs (Cont'd)

Magnetic Survey Report:		
Compilation - 1 day @ $300/day	300	
3 days @ $100/day	300	
Drafting - 7 days @ $100/day	700	
Report Writing 2 days @ $120/day	240	
		1,540.00
VLF Survey Report (R. Matthews):		
Compilation - 4 days @ $300/day	1200	
5 days @ $100/day	500	
Drafting - 8 days @ $100/day	800	
Report Writing 2 days @ $300/day	600	
		3,100.00
Topographic Base Map Contract Cost:		2,240.00
Airphotographs:		156.00
Office Supplies and Printing Costs		2,800.00
(3) TOTAL DATA COMPILATION, STATISTICAL ANALYSES AND REPORT PREPARATION AND PUBLICATION		23,170.00
GRAND TOTAL (Sum of (1), (2) and (3))		$ 95,514.00

Note: Of the $95,514.00, the amount recorded on March 16, 1982 was $90,000.00

STATEMENT OF COSTS TA HOOLA 7 AND 8 CLAIMS

Physical Work

Line cutting, chaining and flagging:		
24 man days @ $85/day		2,040.00
4 x 4 Vehicle (includes rental, fuel, maintenance and repairs):		
7 days @ $50/day		350.00
(1) TOTAL PHYSICAL WORK		2,390.00

Technical Field Work

Geochemical Survey:		
Soil Sampling - 15 man days @ $85/day	1275	
Analyses - 288 samples @ $7.00/sample (Au,Ag,Pb,Zn,Cu,Mo)	2016	
Sample Preparation - 288 samples @ $.20/ sample	57	
		3,463.00
Field Support:		
Camp Operating Costs (including room and board, equipment		
47 man days @ $40/day	1880	
Mobilization/Demobilization		
2 man days @ $100/day	200	
6 man days @ $85/day	510	
		2,590.00
Freight and Courier Service		69.00
Vehicle (rental, fuel, maintenance and repair)		
8 days @ $50/day x 2 vehicles		800.00
(2) TOTAL TECHNICAL FIELD COSTS		6,922.00

Statement of Costs Ta Hoola 7 & 8 Claims

Data Compilation, Statistical Analyses and Report Preparation and Publication

Geochemical Compilation:	
3 man days @ $120/day	360.00
Drafting:	
6 man days @ $100/day	600.00
Report Writing:	
4 man days @ $120/day	480.00
Topographic Base Map - Contract Cost:	278.00
Office Supplies and Printing Costs	220.00
(3) TOTAL DATA COMPILATION, STATISTICAL ANALYSES AND REPORT PREPARATION AND PUBLICATION	1,938.00
GRAND TOTAL (Sum of (1), (2) and (3))	$ 11,110.00

Note: Of the $11,110, the amount recorded on March 16, 1982 was $5,200.00

STATEMENT OF COSTS TA HOOLA 9-12 CLAIMS

Physical Work

Line cutting, flagging and chaining:		
16 man days @ $85/day	1360	
Vehicle (includes rental, fuel, maintenance and repairs):		
8 days @ $50/day	400	
(1) TOTAL PHYSICAL WORK		1,760.00

Technical Field Work

Geochemical Survey:		
Soil Sampling -		
3 man days @ $100/day	300	
19 man days @ $85/day	1615	
		1,915.00
Analyses -		
203 samples @ $7/sample (Au,Ag,Pb,Zn, Cu,Mo)	1421	
63 samples @ $6.50/sample (Au,Ag,Pb Zn,Cu)	409.50	
39 samples @ $3.50/sample (Ag,Pb,Zn Cu,As)	136.50	
		1,967.00
Sample Preparation and Shipping -		
266 samples @ $.60/sample		159.00
Total		3,741.00

Field Support:	
Camp Operating Cost (room and board and equipment) -	
50 man days @ $40/man day	2,000.00

Statement of Costs - Ta Hoola 9-12 Claims (Cont'd)

Mobilization/Demobilization -		
2 man days @ $120/day	240	
4 man days @ $100/day	400	
6 man days @ 85/day	510	
		1,150.00
Freight and Courier Service -		69.00
Vehicles (rental, fuel, maintenance and repairs) -		
10 days @ $50/day x 2 vehicles		1,000.00
(2) TOTAL TECHNICAL FIELD COSTS		4,219.00
Data Compilation, Statistical Analyses and Report Preparation and Publication		
Geochemical Compilation -		
6 man days @ $120/day		720.00
Drafting -		
8 man days @ $100/day		800.00
Report Writing -		
7 man days @ $120/day		840.00
Topographic Base Map - Contract Cost		278.00
Office Supplies and Printing Costs		220.00
(3) TOTAL DATA COMPILATION, STATISTICAL ANALYSES AND REPORT PREPARATION AND PUBLICATION		2,858.00
GRAND TOTAL (Sum of (1), (2) and (3))		$ 12,578.00

APPENDIX E

PERSONNEL

PERSONNEL AND DATES

Name	Position	Rate/Day	Dates
P. Ruck	Geologist	120	May 1, 1981 - Mar 1982
G. McRoberts	Sr. Geol. Assistant	100	May 1 - Dec 4, 1981
B. Carmichael	Exploration Technician	100	May 1 - June 30, 1981
D. Oakey	Jr. Geol. Assistant	85	May 1 - Sept. 10, 1981
D. Hallson	Jr. Geol. Assistant	85	June 10 - Aug 29, 1981
P. Ehmayer	Jr. Geol. Assistant	85	May 1 - June 10, 1981
			July 15 - Aug 29, 1981
D. Worme	Jr. Geol. Assistant	85	June 20 - July 10, 1981
A. Rakofsky	Jr. Geol. Assistant	85	June 20 - July 20, 1981
G. Aust	Geophysical Technician	120	July 1 - July 20, 1981
M. Rebagliati P.Eng.	Geological Engineer	300	June 10 - July 30, 1981
R. Matthews	Sr. Geophysicist	300	July 10, 1981
			7 office man days
S. Earle	Geochemist	200	13 office man days
Draftsmen		100	June 1, 1981 - Mar 16, 1982

APPENDIX F

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Paul Ruck, of the City of Vancouver, in the Province of British Columbia, hereby certify the following:

I am a geologist currently employed with SMD Mining Co. Ltd. at 330-1130 West Pender St. Vancouver, B.C.

I am a Graduate of the University of Ottawa with a B.Sc Geology (1978). I subsequently obtained the degree of M.Sc. Applied (Mineral Exploration) from McGill University in 1981.

I have worked as an exploration geologist while attending post-graduate school at McGill University.

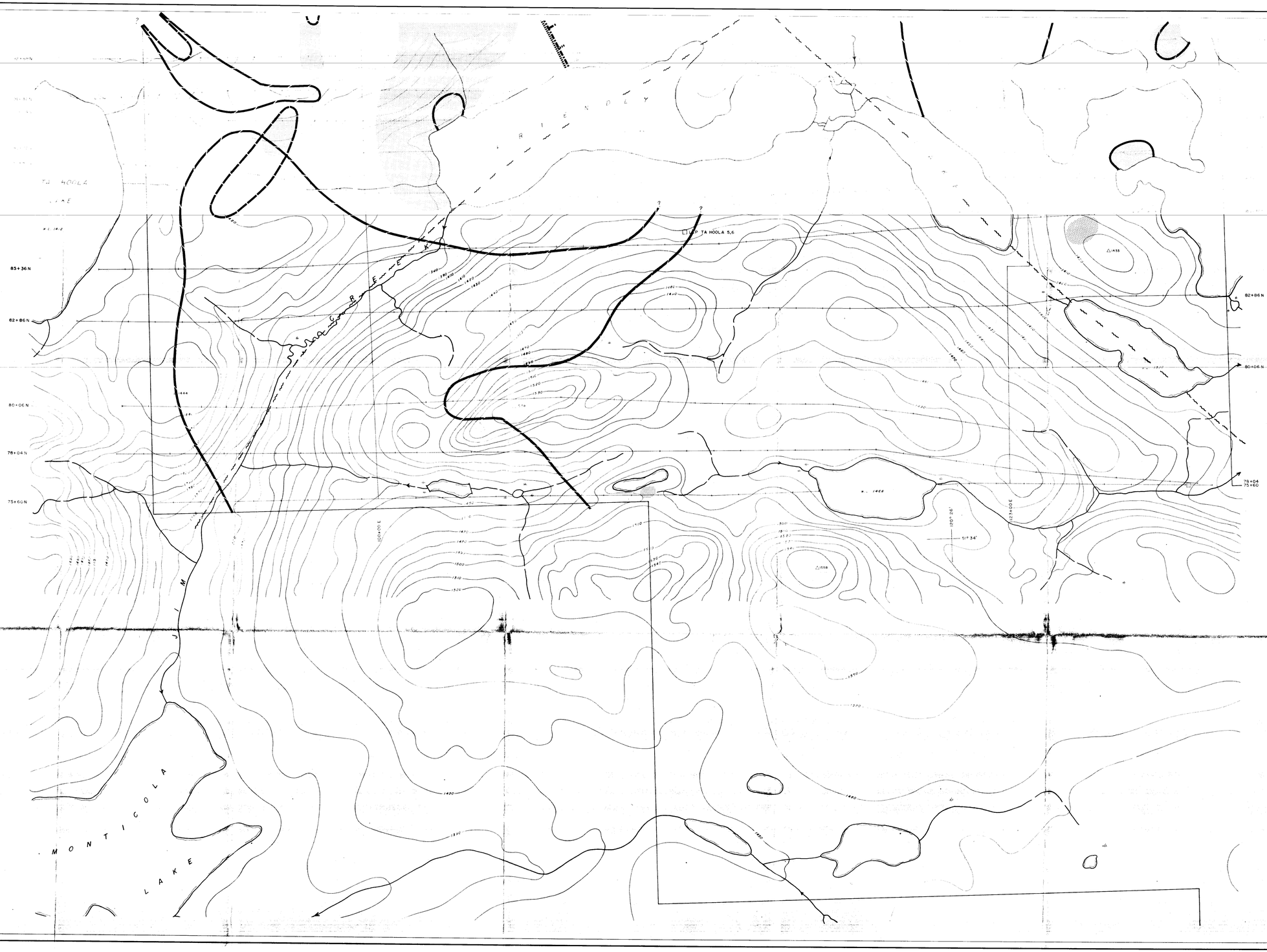
I am a member of the Canadian Institute of Mining and Metallurgy and the Geological Association of Canada.

I hold no interest in the properties or securiteis of SMD Mining Co. Ltd. nor do I expect to receive any interest directly or indirectly.

This report is based on work completed between May 25, 1981 and March 16, 1982, and upon the reports of the British Columbia Ministry of Mines.

Paul Ruck

Paul Ruck
March 17, 1982

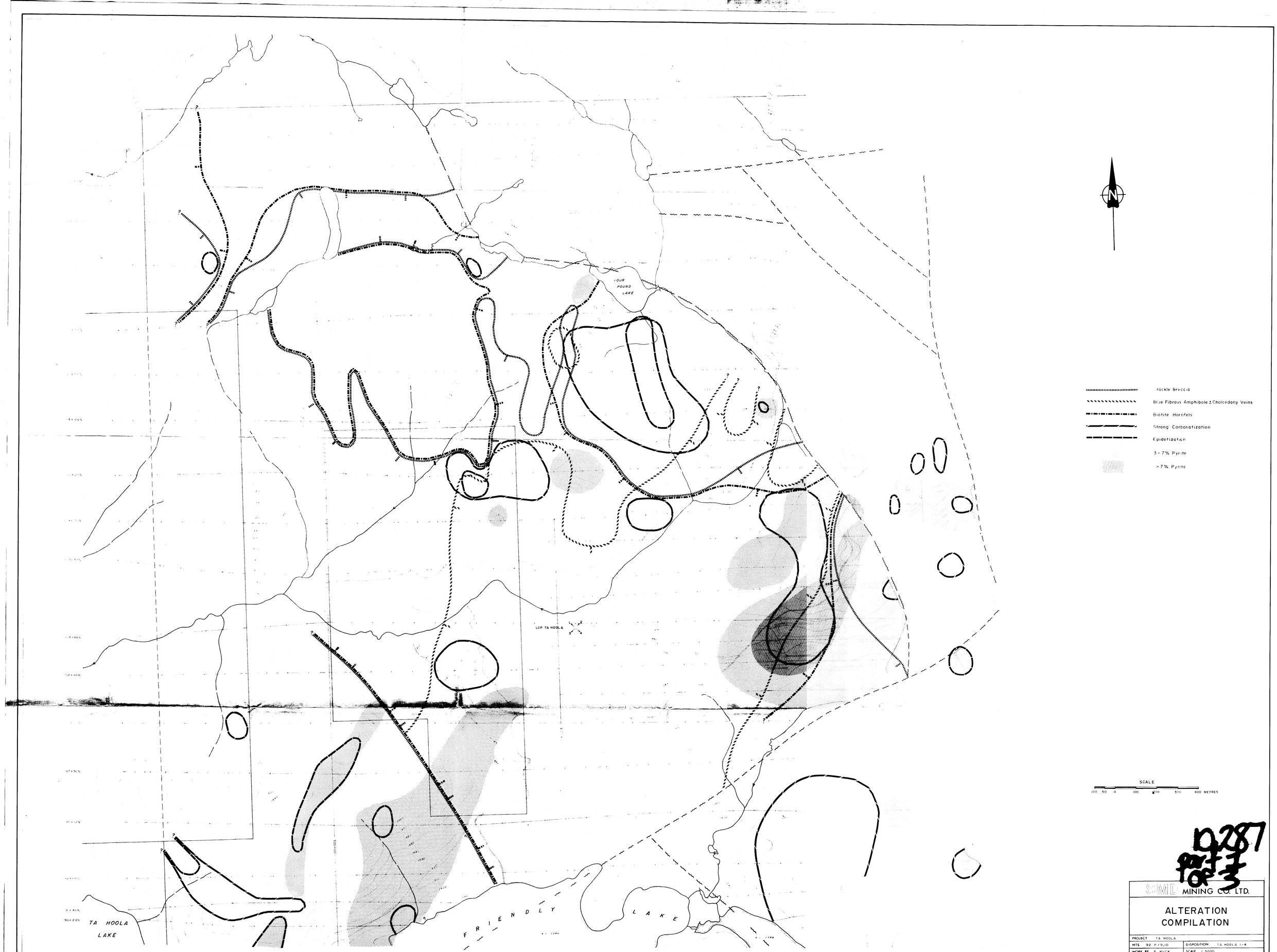


12287
Part 1
of 3

SMD MINING CO. LTD.

ALTERATION COMPILATION

PROJECT TA HOOLA			
NTS 92 P/9,10	DISPOSITION TA HOOLA 3-8,15		
WORK BY P. RUCK	SCALE 1:5000		
DRAWN D. CARR	DATE OCT. 81	TA1-4	



D287

SMD MINING CO. LTD.

ALTERATION COMPILATION

PROJECT	TA HOOLA		
NTS	92 P/9,10	DISPOSITION	TA HOOLA 1-4
WORK BY	P. RUCK	SCALE	1:5000
DRAWN	D.M. CARR	DATE	OCT 81 TA1 - 3

GEOLOGICAL LEGEND

LOWER – MIDDLE JURASSIC

- 7b GREYWACKE
- 7a AUGITE ANDESITE AGGLOMERATE

UPPER TRIASSIC – LOWER JURASSIC

- 6 LEUCO SYENITE PORPHYRY
- 5 DIORITE; LOCALY PORPHYRITIC
- 4 DOLOMITE
- 3b TUFFWACKE
- 3a VOLCANIC CONGLOMERATE
- 2f SILTSTONE – ARGILLITE CONGLOMERATE / BRECCIA
- 2e SILTSTONE – ARGILLITE; INTERBEDDED
- 2d SILTSTONE; MASSIVE, LAMINATED
- 2c ASH TUFF – BRECCIA; SILICEOUS
- 2b ASH TUFF; MASSIVE, LAMINATED, CRYSTAL, LITHIC
- 2a LAPILLI TUFF
- 1e BASALT
- 1d AUGITE ANDESITE FLOW; PORPHYRITIC
- 1c ANDESITE TUFF; CRYSTAL, LITHIC
- 1b ANDESITE TUFF – BRECCIA; MAY CONTAIN PLUTONIC FRAGMENTS
- 1a ANDESITE FLOW

SYMBOLS

- OUTCROP
- GEOLOGICAL CONTACT; DEFINED, ASSUMED
- SCHISTOSITY; VERTICAL, INCLINED, UNKNOWN
- BEDDING; VERTICAL, INCLINED, OVERTURNED
- FAULT; APPROXIMATE, ASSUMED
- MINERAL OCCURANCE
- DIAMOND DRILL HOLE LOCATION AND DEPTH
- PERCUSSION DRILL HOLE LOCATION AND DEPTH
- TRENCH
- ROAD

SCALE

100 50 0 100 200 300 400 METRES

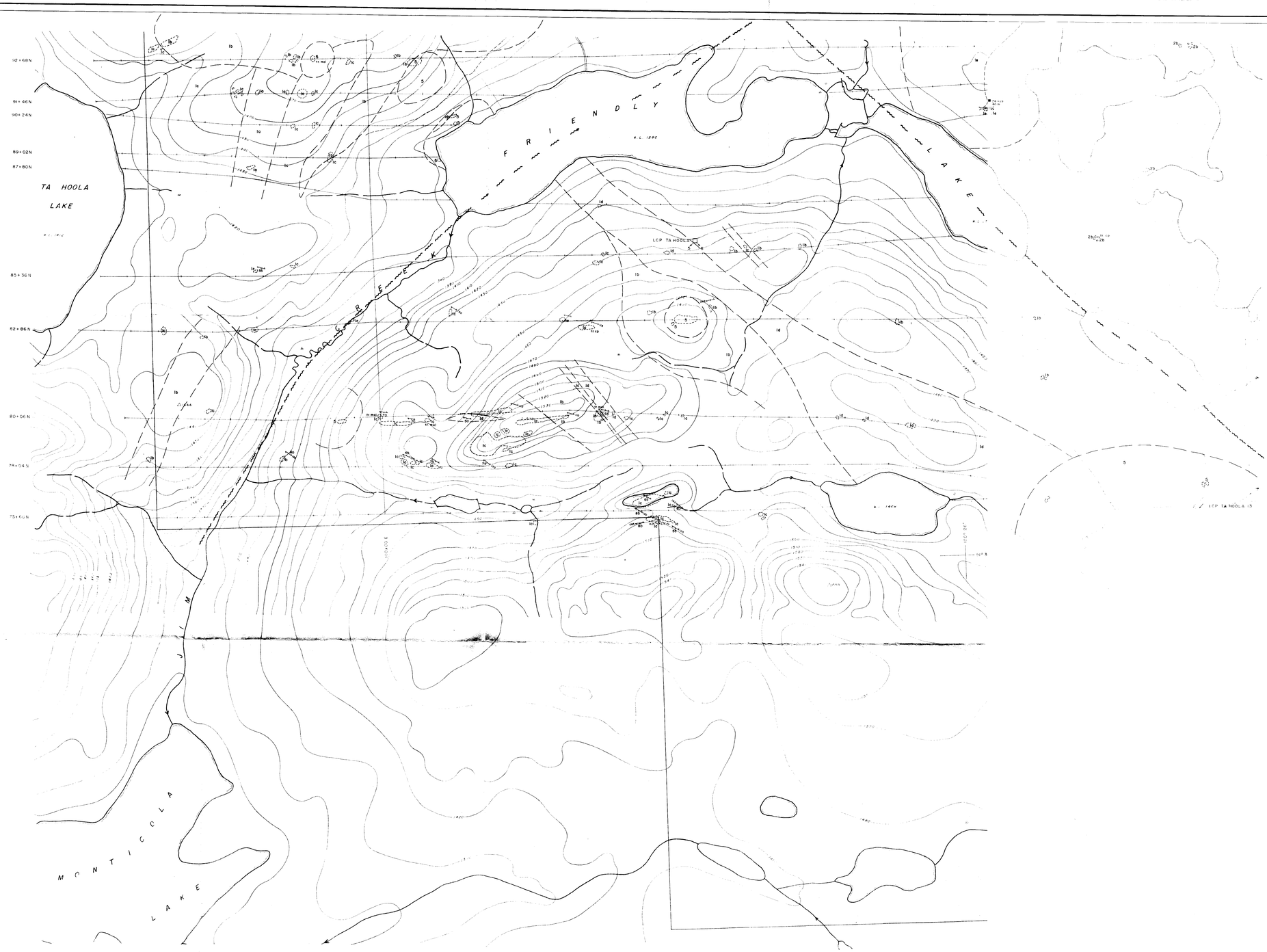
LCP TA HOOLA 1 – 4

FRIENDLY LAKE

SMD MINING CO. LTD.

GEOLOGY

PROJECT TA HOOLA		
NTS 93 P 9,10	DISPOSITION TA HOOLA 1 – 4	
WORK BY P. RUCK	SCALE 1: 5000	
DRAWN D. CARR	DATE OCT. 81	TA1 – 1



GEOLOGICAL LEGEND

LOWER - MIDDLE JURASSIC

- 7b GREYWACKE
- 7a AUGITE ANDESITE AGGLOMERATE

UPPER TRIASSIC - LOWER JURASSIC

- 6 LEUCO SYENITE PORPHYRY
- 5 DIORITE; LOCALLY PORPHYRITIC
- 4 DOLOMITE
- 3b TUFFWACKE
- 3a VOLCANIC CONGLOMERATE
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- 2c ASH TUFF - BRECCIA; SILICEOUS
- 2b ASH TUFF; MASSIVE, LAMINATED, CRYSTAL - LITHIC
- 2a LAPILLI TUFF
- 1e BASALT
- 1d AUGITE ANDESITE FLOW; PORPHYRITIC
- 1c ANDESITE TUFF; CRYSTAL, LITHIC
- 1b ANDESITE TUFF - BRECCIA; MAY CONTAIN PLUTONIC FRAGMENTS
- 1a ANDESITE FLOW

SYMBOLS

- OUTCROP
- GEOLOGICAL CONTACT; DEFINED, ASSUMED
- SCHISTOSITY; VERTICAL, INCLINED, UNKNOWN
- BEDDING; VERTICAL, INCLINED, OVERTURNED
- FAULT; APPROXIMATE, ASSUMED
- MINERAL OCCURANCE
- DIAMOND DRILL HOLE LOCATION AND DEPTH
- PERCUSSION DRILL HOLE LOCATION AND DEPTH
- TRENCH
- ROAD

SCALE

100 50 0 100 200 300 400 METRES

10287
Part 1
of 3

SMD MINING CO. LTD.

GEOLOGY

PROJECT TA HOOLA	
NTS 92 P/9, 10	DISPOSITION TA HOOLA 3-6, 13
WORK BY P RUCK	SCALE 1:5000
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