1983 ASSESSMENT REPORT ON
GEOLOGY, GEOCHEMISTRY AND EXAMINATION OF TRENCHES

by
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on the

Al 2, 3 and 4 Mineral Claims

situated north of Metsantan Lake
in the Liard Mining Division

57°28'N, 127°24'W
NTS 94E/6W

owned by
KIDD CREEK MINES LTD.

work by
KIDD CREEK MINES LTD.

June, 1984

Vancouver, B.C.

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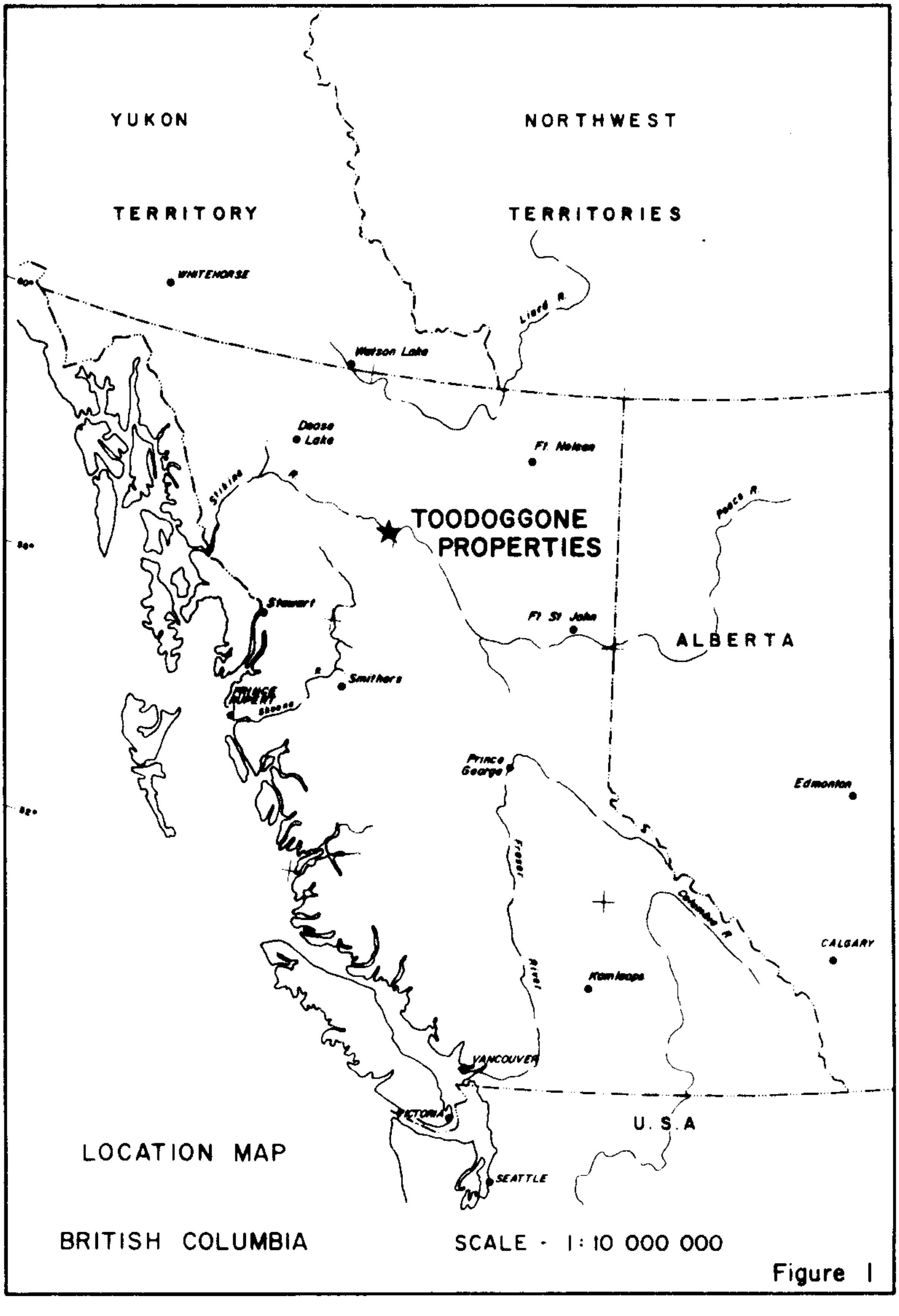
LOCATION, ACCESS AND TERRAIN

The Al property is located in north-central British Columbia at 127°24'W and 57°28'N, within the area of NTS 94E/6W (Figure 1). The claims lie east of the Stikine River and directly north of Metsantan Lake. Figure 2 indicates the position of the property with respect to other Kidd Creek properties in the Toodoggone. Claim boundaries are shown with respect to local features (Figure 3). The nearest supply and transportation centre is Smithers, located 300 km to the south.

The Toodoggone district is fairly inaccessible. The Al claims can be reached by a combination of fixed-wing aircraft to the Sturdee Valley airstrip (30 km southeast of the property) and helicopter thereafter. Small float-equipped aircraft can also land at Metsantan Lake.

Alberts Hump is the most prominent physical feature on the property. It is located near the eastern margin of the Spatsizi Plateau, and comprises a low, rounded hill and an easterly trending broad ridge, surrounded by deeply incised stream valleys. The overall relief is gentle to moderate, with elevations ranging from 1400 m to 1690 m. The lowermost parts of the property are covered by conifers (dominantly spruce) mixed with scrub willow. Above 1600 m, the vegetation is restricted to alpine grasses and occasional clumps of "buckbrush". Drainage is fair over most of the property with the exception of isolated swampy patches, and boggy terrain on the lower slopes of Al 5 and 8 claims. Water supplies are generally adequate for drilling requirements. No permafrost has yet been recognized but may exist along the northern slopes of the property. The property is usually snow-bound from October to June.

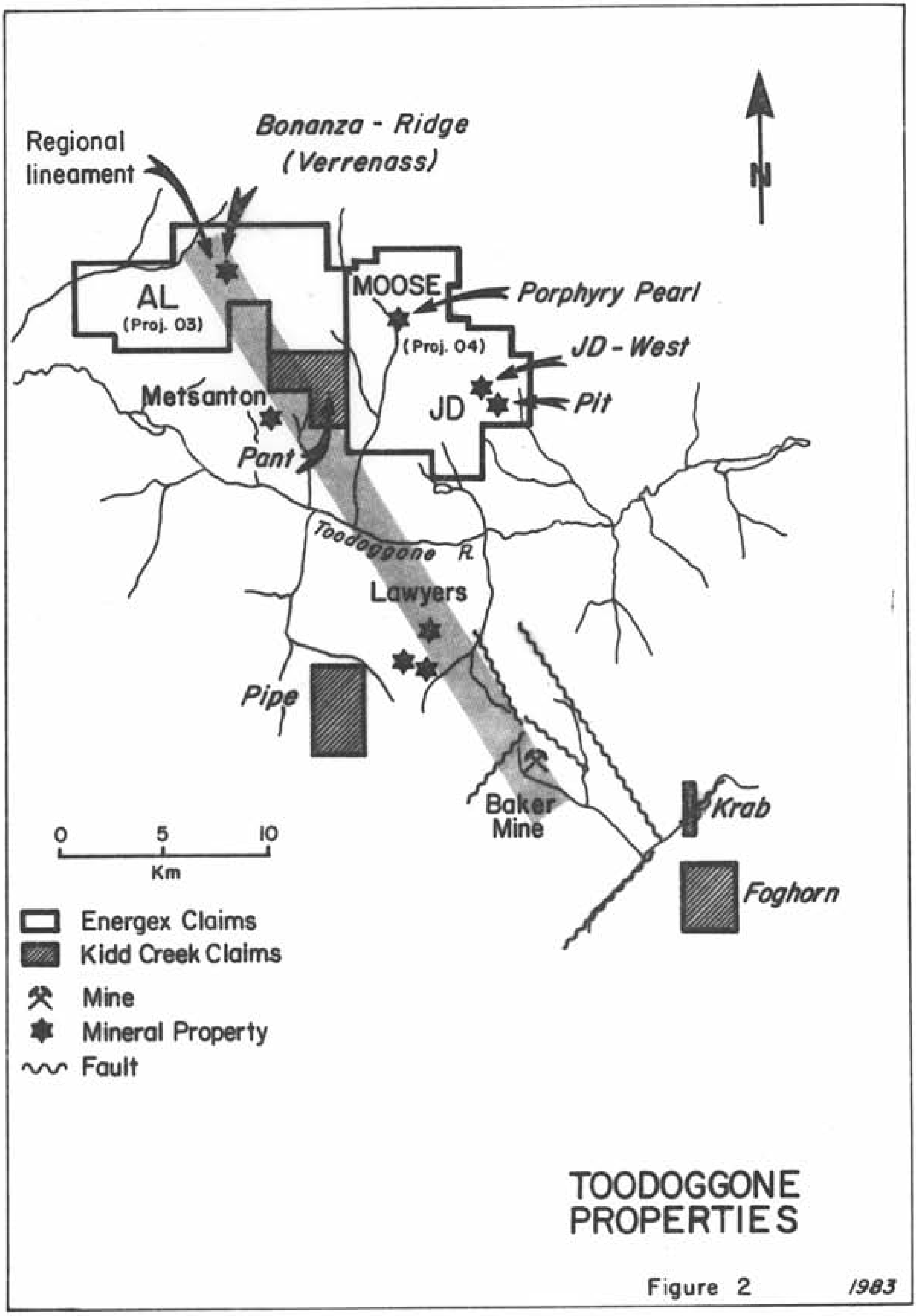


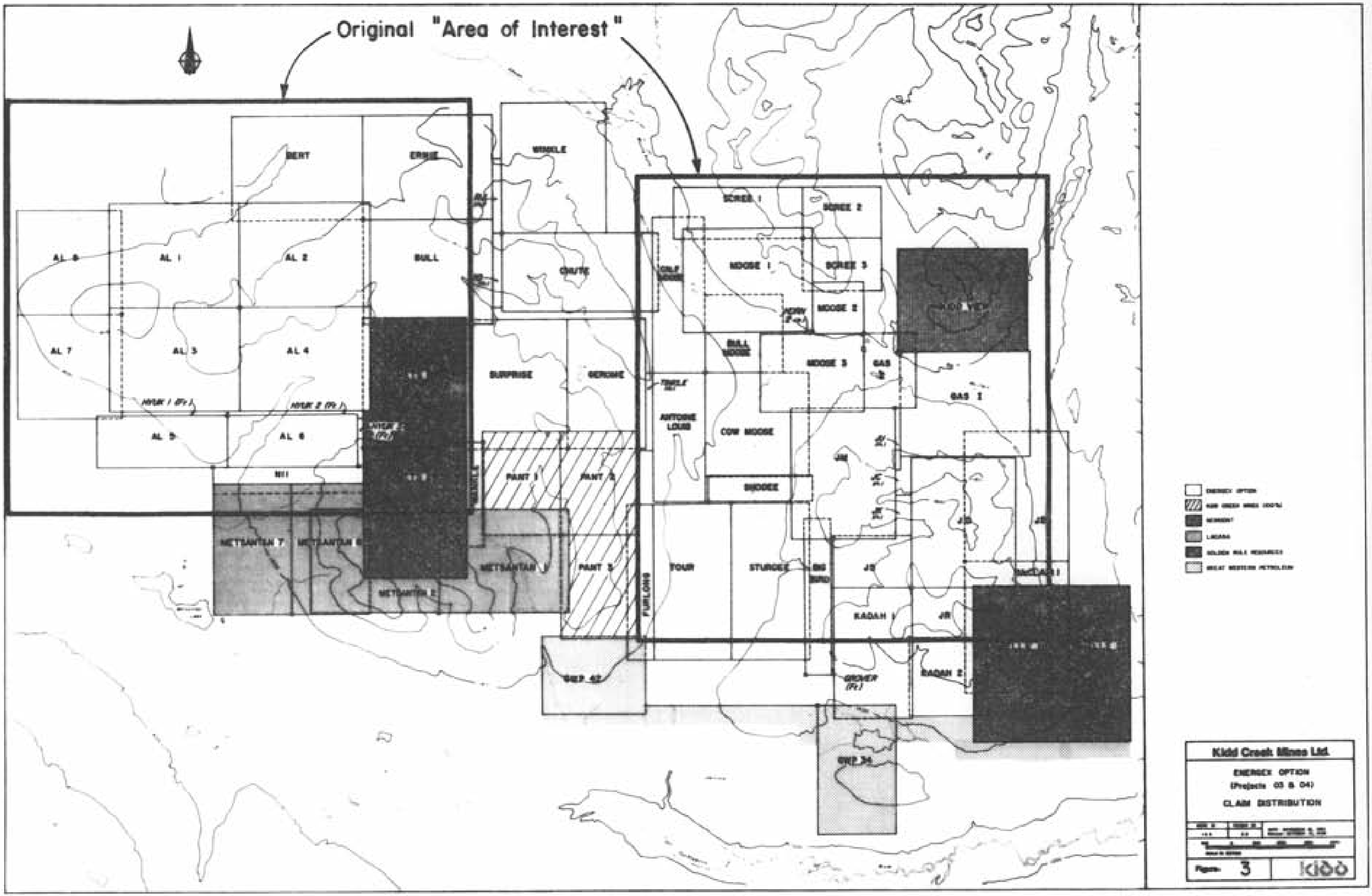
LOCATION MAP

BRITISH COLUMBIA

SCALE - 1: 10 000 000

Figure 1


Regional lineament
Bonanza - Ridge (Verrenass)
N
AL
(Proj. 03)
MOOSE
(Proj. 04)
Porphyry Pearl
JD - West
Pit
JD
Metsanton
Pant
Toodoggone R.
Lawyers
Pipe
Baker Mine
Krab
Foghorn
0
5
10
Km
Energex Claims
Kidd Creek Claims
Mine
Mineral Property
Fault
TOODOGGONE PROPERTIES
Figure 2
1983


Original "Area of Interest"
BERT
ERNIE
WINKLE
AL 8
AL 1
AL 2
BULL
CHUTE
AL 7
AL 3
AL 4
SURPRISE
GERONIE
AL 5
AL 6
NII
PANT 1
PANT 2
PANT 3
METSANTAN 7
METSANTAN 6
METSANTAN 2
FURLONG
SCREE 1
SCREE 2
SCREE 3
MOOSE 1
MOOSE 2
MOOSE 3
CALF MOOSE
BULL MOOSE
GAS 1
ANTOINE LOUIS
COW MOOSE
SUDDEE
TOUR
STURGEE
BIG BIRD
JR
KADAH 1
KADAH 2
GREP 42
GREP 34
ENERGEX OPTION
Kidd Creek Mines Ltd.
ENERGEX OPTION
(Projects 03 & 04)
CLAIM DISTRIBUTION
Figure 3
kidd

PROPERTY HISTORY & DEFINITION

Between 1971-1973, Sumac Mines explored the area for Cu-Mo porphyry deposits. They conducted limited soil geochemical (Cu, Pb, Zn, Ag, Au), induced polarization, magnetic, and geological surveys, with generally negative results (Rodgers, 1972; Rodgers and Scott, 1973; and Yoshida and Kawasaki, 1973). Sumac Mine's claims were allowed to lapse. In 1979, Al 1-4 were staked by a group of individuals, who later became affiliated with Energex Minerals Ltd. At that time, precious metal prices were rising and interest in the Toodoggone district had been heightened by the Au-Ag discoveries of the Chapelle/ Baker (Dupont) and Lawyers (Serem) deposits. In 1980 the Al 1-4 claims were acquired by Texasgulf Canada Ltd., subject to the terms of the Energex option agreement.

Work by Texasgulf in 1980 consisted of reconnaissance scale geological mapping and limited "orientation" type soil geochemistry (Au, Ag, Cu, Pb, Zn, Mo, As, Hg) as described by Peatfield (1980). Two claims, Al 5 and 6, were staked to extend coverage over Alberts Hump. A major exploration program was initiated in 1981 on the basis of encouraging 1980 results, and extensive soil geochemical (Au, Ag, Cu, Pb, Zn, Mn, Ba, Hg) and geological surveys indicated good potential for the property. In addition, some trenching and orientation geophysical surveys (VLF, magnetometer) were completed. Further staking covered additional alteration systems and potential extensions of known systems (Al 7-8, Bert, Ernie, and Bull).

Ownership of the claims was transferred to Kidd Creek Mines Ltd. following the corporate name change in 1982. The 1982 Al exploration program consisted of diamond drilling, geological mapping and rock geochemistry regional and detailed soil geochemistry, induced polarization surveys, trenching, and a legal survey of LCP's.

SUMMARY OF WORK COMPLETED

Trenching

A total of 48 trenches (2694 m) were excavated on the Al property in 1983. Between July 15 and Aug 2, 25 trenches were completed on the Bonanza-Ridge area of Al 2 M.C.. Second phase trenching on this same area involved the completion of 18 additional trenches between September 7 and September 13. Trenching on the Thesis II zone of the Al 4 M.C. was completed between August 2 and 3; 5 trenches were excavated.

A Case 450 backhoe was used for the mechanized trenching. This machine, operated by S. Jaycox of Smithers, B.C. was flown by Hercules aircraft from Smithers to the Sturdee airstrip and thereafter driven to the Al property. 1-2 m wide trenches were dug to bedrock, the depth of which varied between 0.5-2 m. Prior to sampling the trench, floors were hand-mucked.

Geological Surveys

From July 15 to August 18 and September 9 to September 19, all the trenches were mapped at a scale of 1:100 by J.R. Clark with assistance from J.F. Macdougall, L. Louis, L. Haering and R. Vandenbrink. Trench maps (Figure 15 to 63) were produced with emphasis on alteration. Trench panel samples of the more intensely altered zones were collected primarily from the trench floors.

Compilation of the geology in the Bonanza-Ridge area (Figures 6 and 7; 1:2,000) was carried out by I.G. Sutherland, assisted by L. Louie, from Aug 7 to Sept 7 and Sept 9 to Sept 16. This work attempted to present a general correlation of the geology from each trench with that of the exposed rocks from across the grid area.

Geochemical Surveys

Between July 15 and August 18, 1079 trench panel samples from the Bonanza-Ridge area (Al 2 M.C.) were collected and shipped to Acme Analytical Laboratories of Vancouver. Samples from "phase 1" trenching were analysed geochemically (687 analyses) and by assay (437 analyses-including 45 duplicate assays) for Au and Ag. Second phase sampling from this area was undertaken between Sept 9 and 13; 367 samples were assayed for Au and Ag.

Prior to trenching on the Thesis II zone (Al 4 M.C.), 12 rock samples were analysed geochemically for Au and Ag; 5 samples were also assayed for Au. All analyses were done by Acme Analytical Laboratories.

A detailed soil geochemical program was carried out on the SW grid area (Al 3 and 4 M.C.) from June 20 to July 3 and from Aug 28 to Sept. 7. Of the 608 total samples, 337 were collected prior to July 11 and 1271 were collected after this date. All samples were geochemically analysed for Au and Ag by Acme Analytical Laboratories. A sample interval of 25 m was used on 50 m-spaced lines (Figures 9a to 9c).

A brief program of soil sampling was also completed along the western part of the Bonanza-Ridge grid as a supplement to the 1982 survey. Two lines were also sampled between L15E and L16E over a resistivity anomaly.

station spacings of 20 m in both directions were employed and a total of 203 samples were analysed geochemically for Au and Ag. (Figures 10a to 10c).

A total of eleven soil profiles were sampled from the Bonanza-Ridge area as part of the geological mapping program. Trenched soil profiles were selectively sampled and analysed geochemically for Au, Ag, Cu, Pb, Zn, Hg and Ba. A total of 53 samples were analysed and 1 sample was checked by Au assay. Sampling by I. Sutherland and L. Louie was undertaken between Sept. 10 and Sept. 19. Analyses were carried out by Chemex Labs Ltd. of North Vancouver using techniques outlined in Appendix C.

Distribution of Work

Work was carried out in several stages on the Al 2, 3 and 4 M.C. of the Fiji-83 group. . A detailed breakdown of time distribution and exploration expenditures is presented in Appendix B.

GEOLOGY

Regional Setting

The Toodoggone district lies along the eastern margin of the Intermontane Belt. It is flanked to the east by the Omineca Crystalline Belt, to the north by the Stikine Range, and to the west and south by the Sustut and Bowser Basin assemblages. Regional mapping was conducted in the 1970's by the Geological Survey of Canada (Gabrielse and Dodds, 1974; Gabrielse, et al. 1976), and a 1:250,000 scale geology map was produced by Gabrielse, et al., 1975. The B.C. Ministry of Energy, Mines and

Petroleum Resources has recently undertaken more detailed work, and will soon publish a comprehensive regional map.

The Toodoggone volcanic rocks were first distinguished by Carter (1971), who described them as a Jurassic sequence of dacite and latite porphyry flows and pyroclastic rocks, which unconformably overlie the Upper Triassic Takla Group. Souther (1977) analysed some Toodoggone rocks and identified them as being mainly calc-alkaline in character. Schroeter (1981a, b; 1982) and Panteleyev (1982) described the Toodoggone volcanic sequence as a complexly intercalated pile of volcanic and volcaniclastic rocks of Lower to Middle Jurassic age, comprising a transitional submarine-subaerial island arc environment. The district contains at least some units which appear to have shoshonitic affinities (Clark and Williams-Jones, 1983), therefore the simple island arc model may require further qualification or revision. Additional petrochemistry is anticipated to be completed in 1984 by J.R. Clark (McGill) and L. Diakow (U.W.O.) on volcanic rocks from the Al property.

The oldest rocks exposed in the Toodoggone area are blocks of Permian Asitka Group limestones which sit in thrust fault contact with younger volcanic rocks. The Triassic Takla Group consists of submarine basaltic to andesitic, augite-phyric flows and pyroclastic rocks, and is in turn unconformably overlain (often fault contacts) by the Toodoggone volcanic sequence. Toodoggone rocks have been subdivided by Diakow (1983) into an early explosive period and a later quiescent period. The early period consists of (oldest to youngest): 1. andesitic ash falls with minor flow unit components, 2. a lithic tuff unit with minor discontinuous members of subaqueous limestones, lava flows and epiclastic volcanic greywackes near the top of the sequence, 3. an ashfall (in part flow) unit, stratigraphically overlying the lithic tuffs. The later period is characterized by andesitic to trachyandesitic (latitic) lava flows with crowded porphyritic textures and no observable quartz phenocrysts. Minor epiclastic and interformational clastic members are present. The locality for these rock types is Tuff Peak on the eastern side of the Al property. The stratigraphy outlined by Diakow is only partially correlative with the lithologic units of Panteleyev (1983) for the region south of the Toodoggone River.

The sequence is at least 1000 m thick and has been tentatively correlated with the early Jurassic Hazelton Group which lies to the east. The belt extends at least 90 km in a NW-SE direction and is up to 15 km wide (35 km if Hazelton Group is included). Upper Cretaceous to Tertiary conglomerates and sandstones (Sustut Group) unconformably overlie both the Toddoggone and Takla rocks.

Toodoggone rocks are cut by the Omineca intrusions (granodiorites to quartz monzonites). Rb-Sr and K-Ar dates for the intrusions range from 181-207 Ma, and for the volcanics from 179 $\pm$8 to 189 $\pm$6 Ma (Gabrielse, et al., 1980), indicating that they may be, in part, coeval. Schroeter (1981b) points out that these large plutonic bodies have porphyry deposits which are anomalous in precious metals, and that local "syenomonzonite" and quartz-feldspar porphyry dykes may represent feeders to the Toodoggone volcanic rocks. No true volcanic centres or calderas have yet been identified.

The dominant structural component of the Toodoggone district is northwest-trending faults, with lengths of more than 50 km. These major structures may be transcurrent and long-lived in nature. Extensive and repeated normal block faulting has also occurred from Jurassic through Tertiary time (Schroeter, 1981a). Folding is not evident, and most anomalous dips can be accounted for by natural depositional dip variations in a dynamic volcanic environment and by fault block movement. On average, the Toodoggone volcanic rocks dip gently to the west (Schroeter, 1981a; b). Metamorphism is very low grade, ranging up to lower greenschist facies.

Precious metal showings in the Toodoggone are abundant and characterized by both vein/breccia and replacement-type systems. The main showings, as known in 1981, are summarized by Schroeter (1982), and the Baker Mine is described by Barr (1978). An update of regional prospects is outlined in Sutherland (1983). Regional variations in deposit types are noteworthy. Many of the most important properties (e.g., Baker, Lawyers, Silver Pond, Moosehorn, Metsantan, and Bonanza/Ridge) lie along a 30 km (or greater) airphoto lineament. The deposits to the southeast are generally dominated by "deeper" sulphide-bearing veins/breccias, whereas "shallower", sulphate/oxide-bearing replacement and vein types are more common near Alberts Hump.

Although the Mesozoic Toodoggone district is similar in many respects to the classic, younger, epithermal/geothermal gold belts in the southwest United States, Kamchatka, and New Zealand, it also bears a strong metallogenic resemblance to the epithermal Au districts in Fiji and New Guinea.

Property Geology

The claims are underlain by a sequence of subaerial to shallow water volcanic rocks, including tuffs, flows, intrusives, and reworked volcaniclastic equivalents. The rocks are andesitic, dacitic, and latitic, and are invariably porphyritic. Reconnaissance mapping has been carried out over much of the areas with significant exposure. Detailed geological mapping is incomplete.

The geology is extremely complex. Because of the lack of outcrop, much of the geology is interpreted from talus, frost-heaved material, and from variably spaced trench exposures.

Outcrops are deeply weathered, except where silicified. Lithological contacts are rarely observed. Many units apparently grade into one another and the compositional differences between most units are minimal. Local unconformities are also fairly common between and within units. The gradational nature of some units is characterized by subtle changes in a minor mineral constituent (e.g., quartz, K-feldspar), changing ratios of the dominant mafic phenocryst abundances (e.g., hornblende, biotite), differing degrees of apparent diagenetic hematization (i.e. hematitic alteration), and intercalations of tuffs and sediments. Equally common are fault contacts between units. Many units have reworked equivalents, where tuffaceous and blocky material has been moved or washed by local alluvial processes such as debris slides/flows, sheet wash, stream channeling, and other erosive activities present in a dynamic, subaerial volcanic environment.

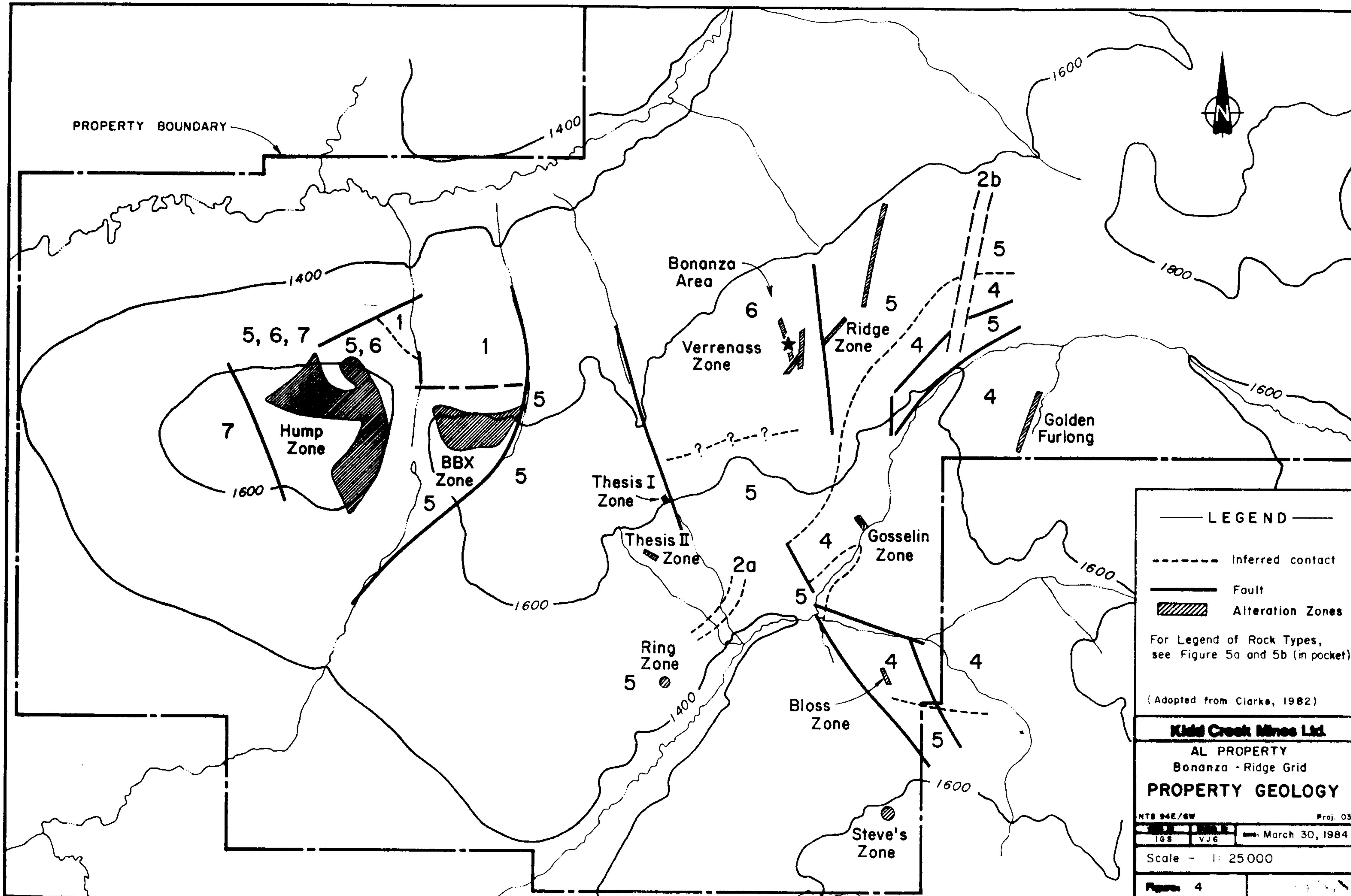
Subhorizontal stratigraphy and numerous normal and transverse faults complicate the geological interpretation. Dyke rocks are compositionally similar to the volcanic units, and may represent feeder systems. Felsic intrusions, encountered in several of the 1982 drill holes, are rarely exposed at the surface; these rocks may be genetically related to the late-stage, ore-forming fluids.

The recent stratigraphic mapping by Diakow (1984) suggests the dominance of three rock units on the Al property. Mapping by Clark (Sutherland, 1982) subdivided the rocks of the Al property into seven lithologies (Figures 4, 5a and 5b) which differ substantially from the classification by Diakow. The limited mapping undertaken in 1983 was too localized to justify changes to the existing property-wide lithologic subdivisions (see Sutherland, 1982 for details of units).

Bonanza-Ridge Area Geology

Most of the Bonanza-Ridge area was mapped in detail in conjunction with the 1983 trenching (Figures 6 and 7). Earlier mapping classified this area as dacitic to andesitic tuffs and minor flow, flow breccia and ash flow components (Unit 5). Recent mapping indicates that many rocks are dacitic ash flows and may belong to the younger Unit 6 (Sutherland, 1982).

The Bonanza-Ridge area lies between lines 6E and 18E of the original Ridge grid on the Al 2 claim. Outcrop exposure is less than 10%, much of which consists of intensely silicified rock. Widespread till cover is


PROPERTY BOUNDARY
1400
1600
1800
N
2b
5
4
5
4
Bonanza Area
6
Verrenass Zone
Ridge Zone
Golden Furlong
5, 6, 7
5, 6
1
1
7
Hump Zone
BBX Zone
5
5
5
Thesis I Zone
Thesis II Zone
2a
Gosselin Zone
Ring Zone
Bloss Zone
Steve's Zone
LEGEND
Inferred contact
Fault
Alteration Zones
For Legend of Rock Types, see Figure 5a and 5b (in pocket)
(Adopted from Clarke, 1982)
Kidd Creek Mines Ltd.
AL PROPERTY
Bonanza - Ridge Grid
PROPERTY GEOLOGY
NTS 94E/6W
Proj. 03
IGS
VJG
March 30, 1984
Scale - 1: 25000
Figure 4

responsible for the limited exposure. The rocks of the Bonanza-Ridge area have been divided into 5 units based on field-recognizable characteristics. Shallow, southerly to westerly dips are observed. As elsewhere on the Al property, many contacts are fault-controlled, making relative age determinations of units difficult. Correlation of these new units with the property-wide classification of Clark and the regional classification of Diakow has not yet been carried out.

Unit 1: These rocks are plagioclase-hornblende ± biotite, porphyritic, andesite flows, flow breccias and tuffs. They are restricted to the Ridge zone and predominate along the east side of the main alteration zone. Flow (1) and flow breccia (1x) units predominate and generally occur together. Minor crystal-lithic tuff (1p) ash tuff (1r) and aquagene tuff breccia (1q) beds/ lenses within the flow units may be correlative over short distances. All units have a fine-grained, feldspathic groundmass. Minor traces of biotite and specularite phenocrysts are observed locally. Chloritization is ubiquitous and makes recognition of textures and differentiation of lithologies very difficult. The aquagene breccias are only recognizable on cut surfaces and are characterized by monolithic, porphyritic fragments with distinctive, bleached chill rims. These rocks imply a shallow water environment of deposition.

Unit 2: These rocks are latites, similar in appearance to the Unit 1 andesites. Differentiation of units is based on the presence of scattered, megacrystic K-feldspars (sanidine?) and traces of quartz and apatite phenocrysts. The flows(2), flow breccias (2x) and local aquagene tuff breccias (2q) of this unit are also restricted to the immediate area of the Ridge zone. Intermediate, fine-grained xenoliths are rarely observed. Units 1 and 2 are obviously similar in most respects; segregating them may be premature because their differences may only reflect subtle physio-chemical variations in different flows from a single magma source.

Unit 3: Dacitic rocks are the most widespread units on the Bonanza-Ridge area and most are ash flows(3w). These rocks are plagioclase$\pm$biotite$\pm$hornblende-phyric with minor amounts ($\leq$2%) each of specularite, quartz and/or apatite. Three fragment types occur in a commonly feldspathic, fine-grained groundmass: (1) grey, very fine-grained, intermediate fragments (1-2 cm, some pumiceous); (2) brown, felsic fragments (<1 cm) with feldspar phenocrysts; (3) subrounded, intermediate, and porphyritic fragments. Bedding planes are locally defined by flattened fragments, aligned plagioclase phenocrysts and/or flaggy cleavage. Erratic occurrences of intermediate, fine-grained xenoliths are recognized. Attempts to subdivide this unit on the basis of the presence or absence of pumiceous fragments, sanidine megacrysts, and intermediate xenoliths were unsuccessful. This is mainly because of the difficulty in recognizing these features on broken surfaces, the commonly intense alteration in the rocks and the generally sparse distribution, particularly of xenoliths and mega-crysts, even when present. Textural variations are common within and between individual beds. Phenocryst contents might also be used to distinguish units but the same problems of recognition limit this type of unit subdivision as well.

Unit 4: Only two quartz latite dykes were recognized on the Bonanza-Ridge area. This massive rock, located in trenches ATR 83-03 and -18, is very similar to adjacent volcanics but the lack of visible mafic phenocrysts makes it distinctive. Fine- to coarse-grained plagioclase phenocrysts and minor coarse-grained K-feldspar phenocrysts occur in a very fine-grained, quartzo feldspathic groundmass. The rock is relatively fresh but feldspars are weakly altered to sericite and chlorite. Finely disseminated pyrite is rarely present. This unit likely represents feeder dykes to latitic rocks noted in the Bonanza-Ridge zone area.

Unit 5: Rhyodacite dykes occur in several localities in the Bonanza area. They contain plagioclase, hornblende, quartz and biotite phenocryst phases in a fine-grained, felsic to intermediate groundmass. Angular to subrounded, dioritic xenoliths are rare but locally make up 10-15% of the rock. Little is known about the geometry of this unit but the narrow widths commonly encountered suggest that these are dyke-like bodies and may be feeders to overlying dacitic ash flow units.

Property Structure

Structural interpretation is limited by the poor rock exposure. Where bedrock is exposed, the volcanic units are generally flat lying or dip gently to the west. No folding has been observed. Locally steeper dips (although usually less than 30°) are likely the result of original paleotopography, fault rotations, and/or unconformities. Structures (faults, fractures) are far more important than stratigraphy in controlling most alteration and mineralization.

The Al claims are near the northwestern end of a linear trend of alteration (and associated mineralization) centres. This NW trend is reflected in the orientations of many major lineaments on the property (Figure 6b). These NW to NNW lineaments commonly control drainage and vegetation patterns. A second NNE trend appears to control some local alteration zones.

The geometry and chronology of fault movements are poorly understood, and reconstructions are tenuous. Mapping, geophysics and drilling indicate that there are severe structural complexities associated with alteration zones. Block faulting with dip-slip movement is suggested where alteration is abruptly truncated, and strike-slip movement is common along many linear silicified zones. The lateral sense of movement is preserved by slickensides and oriented tectonic breccias. Unconsolidated clay zones, many of which contain angular, altered fragments, may also have resulted from such faulting. Joint patterns on the outcrop scale often trend E-W in areas distant from major lineaments, but also parallel the major alteration zones when proximal to them.

The intersections of major structures are difficult to locate. Alteration styles and intensities vary along strike and down dip. Unaltered structures may also cut altered systems without discernable offset. The ambiguous natures of multiple offsets, barren versus mineralized trends, and cross-cutting and reactivated faulting remain as some of the more disturbing problems facing exploration on the property. Even detailed mapping of trenches around the Verrenass showing has not yielded sufficient information to unravel most of the complexities of the structural controls of this showing and adjacent alteration zones.

Property Alteration

Hydrothermal alteration on the Al property is widespread and ranges in effect from partial to complete obliteration of primary features. Where mineralization is present, it is always directly or spatially associated with the strongest alteration zones, but many intensely altered areas have no apparent metal anomalies. The intense alteration zones are usually confined to structurally controlled linear fault/fracture systems. Shallower and broader, strong alteration zones exhibit much less distinct structural controls. The weak, prevailing alteration of minor and patchy zeolites and minor propylitization seems to be virtually property-wide, and is superimposed on diagenetic hematization. This weak alteration is easily confused with the effects of paleo-weathering on the subaerial depositional environment. It is commonly difficult to distinguish the very low grade hydrothermal alteration from this latter effect.

A schematic, vertically descending sequence of alteration types in and above a hydrothermal conduit on the property would include quartz-alunite, quartz-clay, quartz-barite-clay, quartz, quartz-hematite, and quartz-sulphide. The assemblages are complicated by multiple events (e.g., telescoping) and structural rearrangements. Brecciated, banded, and massive alteration textures are common, and depend on proximity to hydrothermal pathways of greatest flow and activity. Mineralization is found primarily in association with barite-quartz veins (Verrenass zone). Lower grade mineralization is associated with quartz-hematite and quartz-sulphide alteration, and with drusy quartz veins.

Quartz veins occur at all but the highest levels of alteration.

The simplified classification of alteration types used in Figures 5a & b, 6, and 11-61 is based on the dominant alteration mineral assemblages.

TYPE A1: This distinctive yellow-green to brownish silicification-alunitization occurs on the central portion of Alberts Hump. It is characterized by complete replacement of the original volcanic rock; primary textures are frequently preserved. Quartz and alunite seem to be dominant in the core of such zones, with increasing (but still minor) amounts of hematite and clays towards the margins. Alunite preferentially replaces lapilli fragments of the host tuffs, and quartz crystals show syntactic overgrowths. Additional detail of this alteration type is outlined in Clark and Sutherland (1982).

TYPE A2: Type A2 alteration is characterized by white to grey or purplish argillization. Quartz and clays (primarily kaolinite and dickite, lesser illite, sericite, montmorillonite, and nacrite) completely replace pre-existing volcanic rocks. Occasionally alteration is almost entirely to clay minerals, but usually quartz dominates and clays are disseminated and/or line fractures. Brecciation is fairly common. Hematite, sericite, and sulphates sometimes accompany argillization. In the general alteration model, argillization occurs vertically above massive silicification, and peripheral to various other intense alteration zones. Argillization is considered to represent a relatively acidic and oxidizing environment, but its presence in several different settings requires complicated models to account for the apparant variations in the alteration environment.

TYPE A3: Maroon to bluish, weak argillic, sericitic, and propylitic alteration characterizes type A3. The alteration occurs as a partial replacement of primary mineralogy, and preserves original igneous textures. Brecciation is rare. Small veinlets of clays and micas (dickite $\pm$ kaolinite, sericite $\pm$ illite) may locally be present. Incipient development of montmorillonite in feldspars and the groundmass is common. Iron is remobilized by this alteration, however pyrite is rare. Type A3 is common throughout the property in fracture/fault zones, and peripheral to zones of more intense argillization. A3 alteration represents the lowest grade of readily distinguishable hydrothermal activity.

The A3 alteration type is characterized by a predominance of weak argillic alteration. Plagioclase is variably altered to clay/sericite, biotite is sericitized (other mafics indistinct), and groundmass components are commonly replaced by sericite and hematite ($\pm$ clays). The variant A3a is a weak argillic alteration in which all mafics are hematized and the groundmass is generally altered to clay and hematite ($\pm$ sericite). A3b alteration generally consists of weak propylitization and sericitization; plagioclase is sericitized, mafics are chloritized and/or epidotized, and the groundmass is sercitized and chloritized. Hematization is less dominant and Fe/Mn stains are common along fractures.

TYPE A4: Pervasive silicification-argillization with abundant barite is not common on the property, but where present, is intense and distinctive. Type A4 alteration is usually grey to brownish in colour, with a purplish cast when hematite is present. Original rock textures are variably preserved. Barite commonly occurs pervasively, in a breccia matrix, in veins, and as vug fillings. The associated minerals found in Type A4 alteration include sericite, kaolinite, hematite, and possibly dickite, illite and alunite. The role of this barite-rich alteration is difficult to assess, but it seems to be restricted to massive, irregular zones (perhaps hydrothermal centres?). In the general alteration model, A4 alteration is found beneath Type A1 and A2, and in variable positions with respect to silicification (A5). It is associated with spotty, low grade Au-Ag mineralization.

The distinction between A4 alteration and A5 alteration with barite veining (as in the Verrenass showing) is made on the presence of mixed, alteration quartz and clays in the former and the absence of clays (especially where mineralized) in the latter. The A4 alteration of the BBX zone (the type locality) consists, in part, of pervasive barite alteration associated with alteration quartz and clays. Where clays do appear in the Verrenass showing (i.e A2/A5 or A5/A2 alteration) one basic alteration type generally occurs as patches in the more dominant alteration facies. Au values are relatively poor in A2 alteration.

TYPE A5: This alteration type is characterized by complete silicification with only minor auxiliary minerals. Large, silicified, alteration zones weather as long ridges or low hills, but when the zones are smaller and other alteration types are present in the silicification (e.g. Types A2, A6, and A7), Type A5 may occur in gullies and depressions. Silicification tends to preferentially frost-heave, and piles of rubble often indicate buried alteration zones. The quartz is crypto-crystalline to fine-grained, and has a greyish, brownish or white colour. Original textures are generally preserved except where destroyed by brecciation or veining. Hornblende and specularite are visible as silicified tan-brown ghosts, and quartz crystals are either unaffected or syntaxially augmented. Plagioclase may be silicified or leached from the rock. These cavities and other vugs are usually partially infilled by quartz and coated with a light druse. Small barite plates often occur in the vugs, and barite veinlets may cut the silicification. Leaching of pumiceous fragments may also account for significant vug development. Vug fillings, veinlets and stockworks of barite reach maximum proportions in the Verrenass showing with barite contents up to 25% and very significant associated Au mineralization. This newly recognized association of barite and Au adds potential to other barite vein occurrences (e.g. Steve's zone, Bloss zone, BBX zone).

Traces of hematite are frequent along fractures. The silicification may be massive, but it is commonly distorted by polyphase brecciation and fracture-controlled quartz veining. Type A5 can be roughly subdivided into "drusy" (A5a) and "dry" (A5b) silicification. The "drusy" variety appears to have the best potential for precious metals mineralization. "Dry" silicification alone is usually barren unless it is cut by veins, breccias, or it contains quartz druses. Silicification is directly associated with the localization of mineralization, and is found beneath Types A1, A2, and A4, and above Types A6 and A7 in the idealized system.

TYPE A6: This alteration type, silicification-hematization, is quite similar to Type A5, but with the addition of hematite as disseminations and fracture and cavity coatings. A6 alteration is usually purplish to reddish brown, and where the hematite is fracture-controlled, takes on a distinctive mottled pattern. Silicification normally precedes the addition of hematite. However, disseminated hematite is often contemporaneous with silicification. Replacement is complete and primary textures are preserved as in Type A5. The hematite content is often proportional to the amount of brecciation and fracturing. Vugs and quartz ± hematite drusy infillings are common. Type A6 contains mineralization at most localities, but the Au grades tend to be low to moderate and somewhat erratic. Nevertheless, this alteration is an important potential mineralization host. The Au values exhibit little correlation with hematite abundances, but the fluids which carried and deposited the Fe probably transported the precious metals as well. The "dry" hematitic silicification zones are less mineralized than the "drusy" equivalents. Type A6 alteration occurs at several localities on the Al property, mainly as linear zones. This alteration appears to lie above quartz-sulphide and below 'non hematitic' silicification and argillic alteration in the idealized system. The potential exists that the hematite may be late, hydrothermal or 'post-hydrothermal', or supergene alteration of pyrite associated with silicification. In outcrop, the hematite may be altered to limonite, but does not form significant gossans due to the low overall iron content of these silicified zones.

TYPE A7: These silicification-sulphidization assemblages have been divided into two subtypes. Type A7a alteration consists of grey silicification-pyritization with very minor phyllosilicates. The replacement is complete, and original volcanic rock textures are preserved except where heavily banded or brecciated. Vugs are commonly associated with brecciation and veining. Barite is present in minor amounts usually as a late cavity-filling or vein mineral. Type A7a alteration contains variable Au-Ag mineralization and may include traces of base metals. If Cu-Pb-Zn sulphides predominate over pyrite, the classification becomes Type A7b. Both types A7a and A7b are iron-stained in outcrop, but rarely develop extensive gossans.

TYPE A8: Previously termed A7c (Clark and Sutherland, 1982), this alteration is characterized by the phyllic alteration assemblage of quartz-sericite-pyrite. In contrast to the almost complete replacements of A7a and A7b, this alteration is variable in intensity. Phyllic alteration is generally structurally controlled, but is not always spatially or temporally related to the alteration types. Phyllic assemblages are nowhere directly related to significant Au-Ag mineralization. Occasionally A8 alteration may be superimposed upon other alteration types. The timing of such events is not clear. Type A8 is concentrated along river valleys (faults/ fractures) in the southeast corner of the property.

GEOCHEMISTRY

Soil geochemistry has proved to be a fairly good exploration technique on the A1 proeprty. Work in 1983 consisted of semi-detailed, 'fill-in' sampling over the Thesis I and II zones and nearby reconnaissance-scale anomalies identified in earlier surveys (see Clark and Sutherland, 1982). In addition, the detailed soil geochemical program on the Bonanza-Ridge grid (1982) was augmented along the western edge of the previous survey. Following completion of the trenching, ten soil profiles were selectively sampled from the surface down to the trench floor (or solid rock), in an attempt to identify the characteristics of, and problems associated with, metal dispersion in the Bonanza-Ridge area soils. Rock sampling was restricted to a brief resampling program on the Thesis II zone early in the field season as an aid to directing later trenching activities. Geochemistry conducted in association with the trenching is discussed in the appropriate section below.

Throughout this report, values are expressed in g/t (fire assay) or ppm (atomic absorption geochemistry). These units are essentially interchangeable (i.e. 1 g/t = 1 ppm) and primarily illustrate the analytical technique. Assay results are considered the most accurate because of the large sample size used in the analysis. Au values $\geq$1.0 g/t and Ag values $\geq$50.0 g/t are recognized as "significant" mineralization.

Rock Geochemistry

Rock sampling on the Al property in 1983 was restricted primarily to the Thesis II zone (SW grid area). Resampling by I.G. Sutherland was carried out on June 28 in hopes of recognizing the extent of the zone and the style of alteration with the greatest potential for Au-Ag mineralization. A total of 12 samples were collected and geochemically analysed for Au and Ag by Acme Analytical Laboratories of Vancouver, utilizing preparation and analytical procedures outlined in Appendix C.

All of these samples were at least 1 kg, cleaned grab samples. Usually two or more samples were taken from each significantly altered outcrop in order to obtain representative mineralization. Intensely silicified and variably brecciated rocks (± limonite/hematite) were sampled in every case.

The rock geochemistry results from the Thesis II zone are included in Appendix D, and the Au and Ag values are plotted in Figure 8. These results indicate good potential for the Thesis II zone. Six samples had Au values greater than 1.0 g/t.

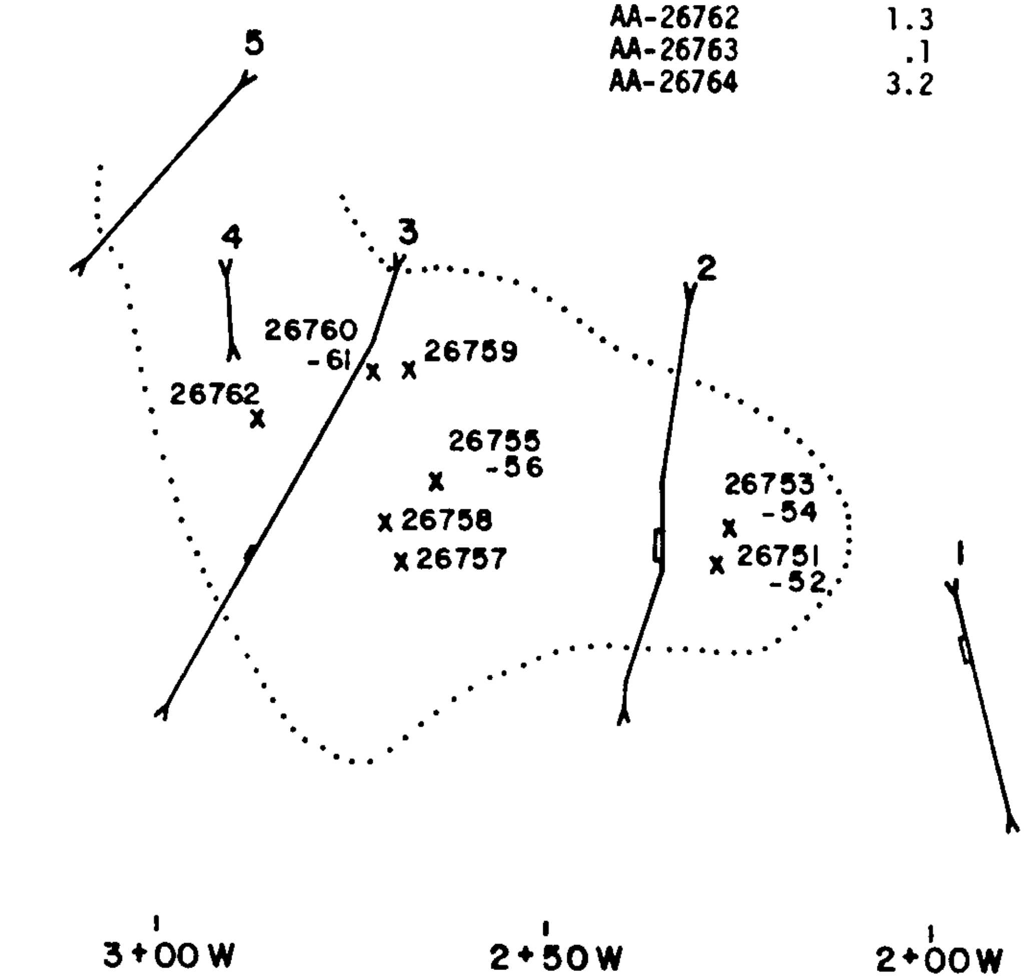
Soil Geochemistry

The majority of soil sampling completed in 1983 was from the SW grid over the Thesis I and II zones and adjacent, reconnaissance-scale base and precious metals anomalies (Al 4 claim). A total of 608 samples were collected and analysed geochemically for Au and Ag by Acme Analytical Laboratories of Vancouver. These samples were gathered along 50-m spaced grid lines at an interval of 25 m with the intent of detailing earlier anomalies. The sample preparation and analytical procedures employed are summarized in Appendix C. The sample distribution and analytical results are given in Figures 9a to 9c.

A brief program of sampling was completed along the western part of the Bonanza-Ridge grid as a supplement to the 1982 survey. Two lines were also sampled between L15E and L16E over a resistivity anomaly. Station spacings of 20 m in both directions were employed and a total of 203 samples were analysed geochemically for Au and Ag. The same sample preparation and analytical procedures were used as above (see Appendix C). The sample locations and analytical results are presented in Figures 10a to 10c.

Sample	Ag ppm	Au ppb	Au oz/ton
AA-26751	.6	-	.069
AA-26752	.3	480	-
AA-26753	8.4	-	2.110
AA-26754	1.4	950	-
AA-26755	1.4	540	-
AA-26756	.5	540	-
AA-26757	.2	-	.054
AA-26758	1.2	-	.118
AA-26759	.1	345	-
AA-26760	.4	665	-
AA-26761	.8	-	.061
AA-26762	1.3	-	.164
AA-26763	.1	70	-
AA-26764	3.2	255	-

THESIS II ZONE



Kidd Creek Mines Ltd.

THESIS II ZONE
Rock Geochemistry

ER

MAR 1984

0 10 20m

Figure: 8

The development of soil profiles on the Al property varies from fair to poor. The alpine and high latitude environment has stunted the evolution of solum, and the sampled material varies from regolithic material to till or swampy, organic-rich accumulations. On the upper slopes and ridges, soils are regosols to brunisols. On the lower slopes and valley, the soils tend to be brunisolic to podzolic. Drainage is fair over most of the property and is dominantly structurally controlled. Boggy patches are found locally. All of the grids are located on the upper slopes and ridge, with the exception of the Muzzer grid and small portions of the Boss and SW grids.

Soil profiles on the upper slopes are characterized by thin A_O horizons (essentially a grass mat), overlying poorly developed B horizons which grade downward into the dominant C horizons. Sometimes the B horizon is absent and a thin layer of organic material directly overlies the regolithic material. The overburden is almost always less than 3 m deep and averages approximately 1 m. There is no evidence of substantial soil creep, solifluction, or permafrost. Recent trenching has shown that much of the area of the upper slopes is till covered (average 1.0 m of lodgement(?) till) where alpine meadow predominates. The till was seen to overlie a weathered soil profile (see Appendix E, Profile 11) in at least one trench (ATR83-16) on the Bonanza Ridge grid. The paleosol had been essentially unaffected by ice activity. These overburden components indicate serious problems with respect to interpretation of soil geochemical data. A complex environment of trace element dispersion and potential geochemical masking is evident.

Discussion of soil profile geochemistry (below) outlines these problems.

The lower forested slopes have thin to fairly thick A_0 and A_1 horizons, and may include thin zones of eluviation. B horizons are weakly to fairly well developed. Areas of poor drainage and organic accumulation are quite common. The overburden on the lower slopes and valleys may be tens of metres thick but average less than 3 m. In some areas these valleys and lower slopes have been filled with glacial till and/or glaciofluvial deposits. No Eh-pH studies have been undertaken, but the soils are probably relatively acidic.

Soil samples were generally taken at a 20-40 cm depth with the aid of a grubhoe. A standard soil data sheet including depth, colour, texture, and composition was completed (information on file in the Vancouver Office). B horizon material was collected, when feasible, but C horizon (upper slopes) or organic-rich soil (poorly drained areas) was substituted where B horizon could not be obtained. A few duplicate samples were collected, but no strict controls were exercised over the quality of lab results.

Soil geochemistry has been an important exploration tool since the property was first explored by Sumac. The discussions of Kidd Creek's soil geochemical results (Sutherland, 1982) outlined all significant anomalies from the various grid areas as based on statistical evaluations of the data.

Bonanza-Ridge Grid

The recent sampling was responsible for no new anomalies of major significance. The two-station Au anomaly in the vicinity of the Verrenass zone appears to continue towards the northwest. The indicated trend contradicts that of the mineralized zone, however, implying some anomaly transport. Au and Ag values from the 1983 survey are apparently much lower than 1982 results, implying some unknown change(s) in sampling or analytical techniques.

SW Grid

The most important anomalous area of this grid is a Au-Zn-Hg±Pb anomaly lying between the **Thesis I** and **II zones**, which may extend northward towards the west end of the Ridge grid baseline. The Thesis I and II zones have high gold values in grab samples, and only the latter has been partially delineated by trenching. Preliminary soil geochemistry (1981-82) showed a wide and consistent north-trending Au anomaly, and a northeast-trending Zn anomaly.

The detailed survey completed over this area in 1984 confirmed the main, north-trending anomaly centred on L2+00W of the 1981 survey (centred on L2+50W in the recent survey). The anomaly can be considered in three segments, each with northwest- to northeast-trending elements. Between 1+00N and 3+25N, three parallel anomaly components, each trending east-northeast, represent the area immediately around the Thesis II zone. In contrast, the reconnaissance scale survey shows a northwesterly trending anomaly that parallels the northeast margin of the Thesis II zone. The central segment of the anomaly (3+25 to 5+00N) appears to be composed of two to three, east-northeasterly trending components cut by a stronger northwesterly trend. From 5+00 to 7+00 N a dominant, north-south, highly anomalous zone occurs (strongest along lines 3+50W). This may be due to downslope and/or glacial dispersion from the Thesis I zone. One of two northeast and northwest components can be inferred but these are much less dominant than the north-trending anomaly. One of these weaker components may be part of the northeast-trending Zn anomaly that lies between the Thesis I and II zones.

The northeast-trending Au anomaly located just north of the Thesis I zone was also well developed in the recent survey but is apparently more widespread than originally thought.

A second, north-south 'string' of Au anomalies lies between L5+00W and 6+50W, north of 2+50N. The extent and exact location of individual anomalies varies between the two surveys to a greater degree than the adjacent anomalies to the east.

All Au anomalies ($\geq \bar{x} + 2SD$ or $GX + 2GSD$, based on 1981-2 data) from the reconnaissance survey were confirmed and no new multi-station anomalies were detected. The detailed survey added greater resolution to known anomalous areas and effectively altered anomaly shapes. Local variance is noted between the Au values from the two surveys. Background values are similar but resampled stations (not necessarily the identical sample location) show signficant divergences of >100 ppb in many cases. Even 1984 duplicate samples collected between L5+50W and L6+00W from identical sample locations show similar variations (as high as 1000 ppb). These variations represent an important sampling problem, probably due to a "particle sparsity effect" with respect to Au in the soils.

Anomalous Ag values (i.e. $\geq \bar{x}$ + 2SD or GX + 2 GSD, based on 1981-2 data) are extremely scarce in both survey results. A small, low-order anomaly, centred on L 4+00W at the baseline, was confirmed in the detailed survey. The latter survey also recognized single-station Ag anomalies on L 3+00W south and downslope of the Thesis II zone and on L 5+50W south of an untested, Au anomaly.

Follow-up work on the above-mentioned anomalies (especially Au) is required in 1984. Test pits over anomalous areas are required to evaluate the nature of metal dispersion and the potential for geochemical masking in anomalous and adjacent background areas. The nature of each anomaly will determine the type of follow-up evaluation required.

TRENCHING

Procedures

The 1983 exploration program on the Al property consisted primarily of detailed trenching on the Bonanza-Ridge area and Thesis II zone. Work was done by a bulldozer-mounted backhoe followed by limited hand mucking. Trenches were generally about 1 m wide at the bottom and 2 m wide at the top. Overburden depths ranged from 30 cm to 2 m; only rarely was bedrock not exposed. Panel areas on the trench floors were sampled where the intensity of alteration indicated potential Au and/or Ag mineralization. Rocks with visible mineralization were sampled in panels of 0.5 m (along the trench) by 1.0 m (across the trench). Intense silicification, (e.g. A5, A5/A2, A7, A8) without visible mineralization, was sampled in panels of 1.0 m (along the trench) by 0.5 m (across the trench). Panels 2.0 m long by 0.5 m wide were used for zones of intense alteration with lower, apparent mineralization potential (e.g. A2, A2/A3). Significant changes in alteration resulted in local variations in panel length: intensely altered rock was sampled in narrower panels. Panel samples weighing approximately 10 kg were shipped to Acme Analytcial Laboratories of Vancouver and analysed for Au and Ag.

Sample preparation and analytical procedures (geochemical and assay) are outlined in Appendix C. The geological and analytical results from trenching are presented in Figures 11 to 61. Trenching results are discussed in the following sections.

Compilation of Trenching Results

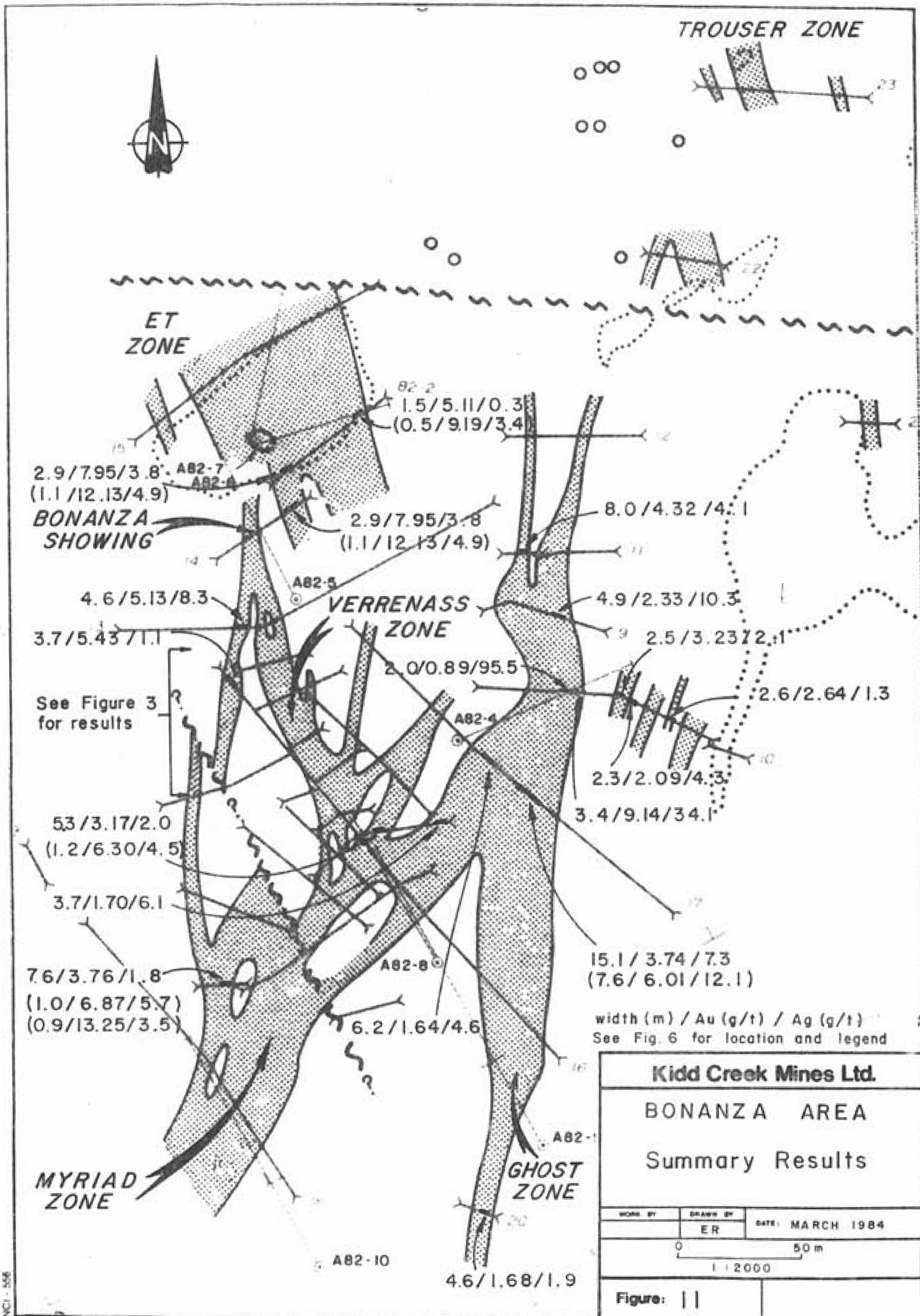
Bonanza-Ridge Area

A total of 43 trenches (2504 m) were excavated on the Bonanza-Ridge area (Figures 6 & 7). The first phase of trenching (trenches ATR83-1 to -25) was completed between July 15 and Aug. 2. Trenching tested priority soil and rock geochemical and IP anomalies as well as potential extensions of known altered and/or mineralized zones. The second phase of trenching (ATR83-26 to -43) involved more detailed testing of the Verrenass and adjacent zones between Sept. 9 and Sept. 13.

The following is a discussion of trenching results for each of the major mineralized systems recognized. (Figures 6, 7 and 11-13). Subdividing the alteration into individual systems is convenient but overly simplistic because the chronology of events, responsible for the present character and distribution of the individually described zones, is unknown. It is probable that the alteration systems are inter-related to varying degrees. Continued evaluation of the zones may help determine these inter-relationships and help to isolate zones of greatest mineral potential.

The **Verrenass zone** (Figures 6, 7, 11 and 12) occupies the southwestern region of the Bonanza-Ridge area and is the most promising gold prospect recognized to date on the property. Disseminated, native gold occurs with late stage barite, sericite and quartz in a vuggy, silicified dacitic ash flow. The mineralized zone is 80 m long by 3.9 m (average) wide and is controlled by a fault structure that trends roughly at 150° (Plates 1, 2 and 3). It is hosted in intensely silicified rocks (A5) along the western half of a wider zone of intense alteration (A5/A2, A2, clays) that measures at least 100 m long by 14 m (average) wide. The apparent flexure in the mineralized zone implies possible dilatency along the controlling fault. Two or more altered structures apparently intersect the southern third of the mineralized zone and may also contribute to higher grades present at this end of the zone. Complete replacement through silicification and/or argillization is common and preservation of original textures is locally observed. Pumiceous fragments, where abundant, have been hydrothermally corroded during the silicification process leaving vugs generally 1 to 2 cm long. Vugs also result locally from corrosion of plagioclase phenocrysts and from brecciation (i.e. between breccia fragments).

Au mineralization is hosted primarily in barite veins and stockworks. Au values correlate relatively well with the percentage of vein barite present. Fine- to very fine grained Au occurs primarily as small patchy concentrations within the veins. Au is



TROUSER ZONE
N
ET ZONE
82-2
1.5/5.11/0.3
(0.5/9.19/3.4)
2.9/7.95/3.8
(1.1/12.13/4.9)
A82-7
A82-6
BONANZA SHOWING
2.9/7.95/3.8
(1.1/12.13/4.9)
8.0/4.32/4.1
A82-5
4.6/5.13/8.3
VERRENASS ZONE
4.9/2.33/10.3
3.7/5.43/1.1
2.5/3.23/2.1
2.0/0.89/95.5
See Figure 3 for results
2.6/2.64/1.3
A82-4
2.3/2.09/4.3
3.4/9.14/34.1
5.3/3.17/2.0
(1.2/6.30/4.5)
3.7/1.70/6.1
15.1/3.74/7.3
(7.6/6.01/12.1)
A82-8
7.6/3.76/1.8
(1.0/6.87/5.7)
(0.9/13.25/3.5)
6.2/1.64/4.6
width (m) / Au (g/t) / Ag (g/t)
See Fig. 6 for location and legend
MYRIAD ZONE
GHOST ZONE
A82-10
4.6/1.68/1.9
Kidd Creek Mines Ltd.
BONANZA AREA
Summary Results
DRAWN BY ER
DATE: MARCH 1984
0 50 m
1 : 2000
Figure: 11

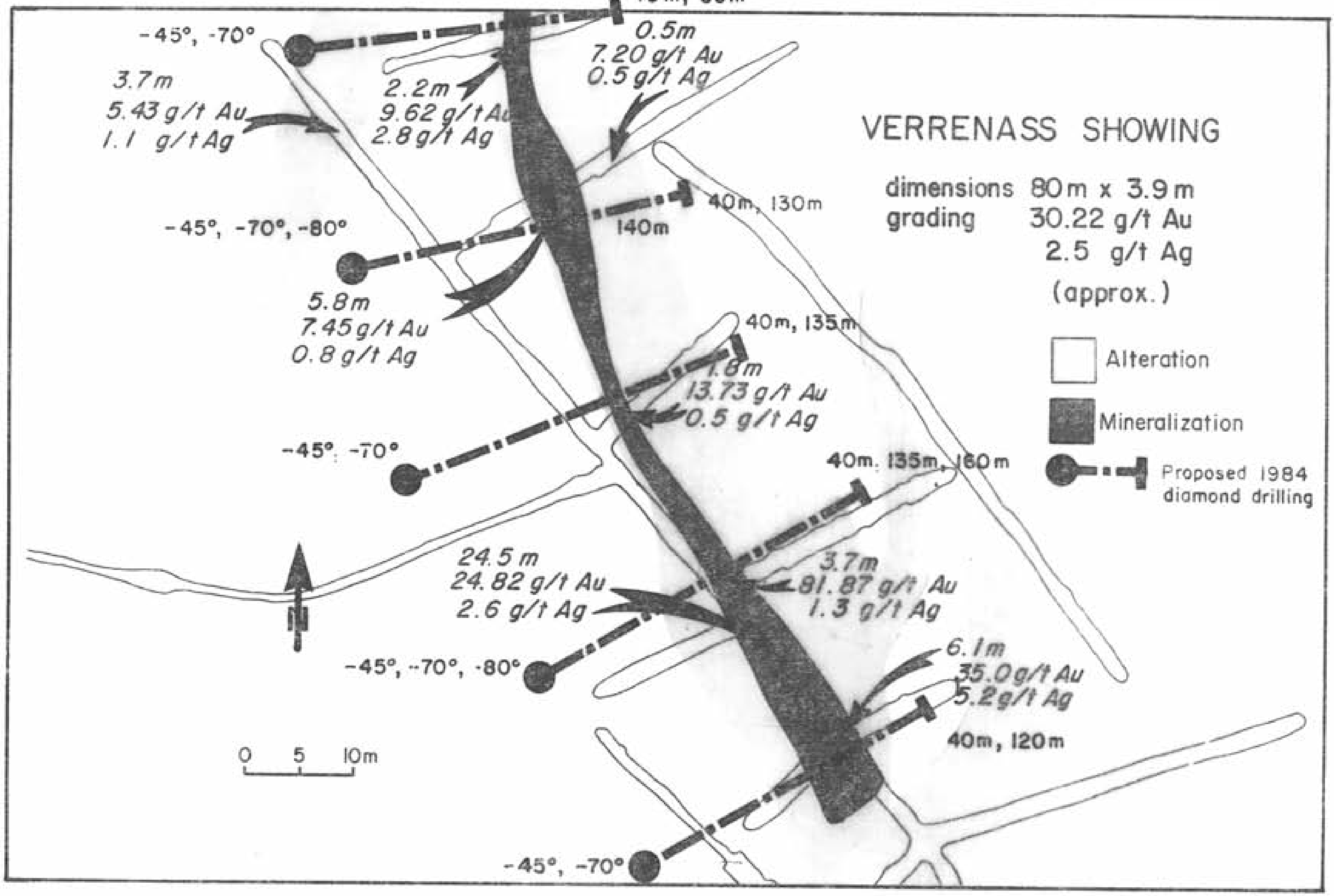


Figure 12

Dec. 1983

present within the barite crystals as well as between individual barite grains. Significant concentrations of barite also occur as drusy vug fillings where porosity has permitted fluid flow and subsequent crystal growth. Coarser Au, rarely seen, on the surface of coarse barite blades in vugs, may illustrate very minor Au remobilization or may be indicative of minor variations in the hypogene environment of metal deposition. Barite contents locally reach 50% but more commonly range from 5 to 20%. A general increased abundance of argillic alteration and a corresponding decrease in barite veining (and proportional Au values) is noted to the north of trench ATR83-32. Otherwise, alteration zoning is, at best, crude.

Au to Ag ratios suggest that native Au predominates over Ag mineralization. A Cu-bearing sulphosalt mineral (or mixture of minerals) occurs sporadically and is locally associated with Au mineralization. This Cu mineralization is very similar to the original Bonanza showing mineralization (Clark and Sutherland, 1982) and likely has a similar composition. Preliminary microscopic investigations suggest possible arsenopyrite crystals accompanying this Cu-Au mineralization. X-ray diffraction of this mineralization is to be carried out in 1984 by J.R. Clark as part of an M.Sc. thesis study. An indistinct, spatial correlation exists between visible, higher grade Au and this Cu mineralization. The only other associated minerals are quartz and sericite. The former occurs as a minor constituent with barite in veins and vug-fillings and rarely contains traces of native Au. Sericite appears to be later than barite and is present lining and filling vugs and fractures. The southern end of the zone is marked by the abrupt appearance of orange brown clays that are rich in jarosite (K_2 Fe_6 $(OH)_{12}$ $(SO_4)_4$) (personal communication; Clark, 1984). A minor occurrence of chalcedonic quartz vein material noted in trench ATR 83-35 does not appear to have any direct association with Au mineralization.

The 1982 diamond drill holes A82-8 and -9 terminated at depth immediately east and south of the southern limit of the Verrenass zone mineralization. The former hole ended roughly 80 m beneath the jarosite clay noted above but did not intersect any alteration typical of the mineralized Verrenass zone. Both holes appear to have intersected alteration associated with the Myriad zone.

No mineralized float was detected from the Verrenass zone prior to trenching. Grab samples with abundant visible Au were collected from trench ATR83-32 and returned Au assays of up to 750.1 g/t. A total of 16 of the 28 samples analysed greater than 69 g/t Au. These samples were also analysed by ICP for 30 additional elements. Those samples with visible Cu mineralization and correspondingly high Cu values also generally have anomalous amounts of Mo, As, Sb, Bi, V, Sn and Au. This multi-element suite is similar to that obtained from the Bonanza showing mineralization.

The following are averages of the geochemical/ assay results across five trench sections from the mineralized zone:

6.1 m of 32.84 g/t Au, 5.2 g/t Ag* (south end)
3.7 m of 81.87 g/t Au, 1.3 g/t Ag*
1.8 m of 13.73 g/t Au, 0.5 g/t Ag
5.8 m of 7.45 g/t Au, 0.8 g/t Ag
2.2 m of 9.62 g/t Au, 2.8 g/t Ag (north end)

Overall average 3.9 m of 30.22 g/t Au, 2.5 g/t Ag.

• (Involve various approximations of widths and grades due to the two sampling orientations; some geochemical results used: see Figures 12; 31a, and 44 to 51).

The values illustrate a general decrease in Au contents towards the north end of the zone.

The Verrenass zone can be traced along strike to the northwest into the **Bonanza showing** (Sutherland, 1982). A recent trench over this showing (ATR-83-14) failed to uncover any additional mineralization in a 70 m wide zone of silicified and argillized host rocks (A5/A2). Trenches ATR83-13 and ATR83-16 intersected mineralized sections in the apparent continuation of the **Bonanza zone** to the south (Figures 6, 7 and 11). Barite veining occurs in intensely silicified rocks in these trenches. Significant values include the following:

ATR83-13 4.6 m of 5.13 ppm Au, 8.3 ppm Ag
ATR83-16 3.7 m of 5.43 ppm Au, 1.1 ppm Ag.

The 1982 diamond drill hole A82-5 was located directly on the Bonanza showing and was thought to have been directed perpendicular to the trend of the zone. Unfortunately, the hole was oriented obliquely to the alteration trend. This may explain the discouraging results obtained both geologically and geochemically from the drilling.

The many similarities of the Bonanza and Verrenass mineralization reinforce the possibility that the Bonanza showing may be an extension of the Verrenass zone. The discontinuously mineralized structure would then have a total length of approximately 140 m.

Considered collectively, the Verrenass/Bonanza showings are controlled by at least two major fault structures that appear to coalesce between the two showings (Figures 6, 7 and 11). The oblique structures inferred to intersect the southern end of the Verrenass zone add to the complexity of possible structural controls. The nature of faulting is poorly understood but the local presence of veining and slickensides indicates both extensional and compressional elements in the tectonic history of these zones. Unravelling these structural complexities may be critical to the ultimate economic viability of this zone. This may be particularly important at the southern end of the Verrenass zone where the widest, well mineralized section has been abruptly terminated against one or more, cross-cutting alteration systems ('Myriad' zone). Similar problems exist at the north end, as well. The narrow alteration zone of the Bonanza showing (ATR83-14) appears to parallel and then become part of a broader alteration system (the 'ET' zone). Structural complexities may, again, be over-printing a highly variable alteration zone. Details of this zone are discussed below.

The **ET zone** is a broad area of intense alteration located immediately north of the Verrenass zone (Figures 6, 7 and 11). It may be, in part, an extension of the Verrenass-Bonanza system but it is also present

12 m east of the original Bonanza showing. Alteration includes silicification ± hematite (A5 and A6) and argillization (A2 and clays), all of which are apparently controlled by a northerly trending structure (or group of structures). Alteration is traceable from trench ATR 83-14 through ATR 82-2 and on to ATR 83-15. Exposed widths of alteration increase progressively to the north. Disruption of the zone due to faulting is implied by apparently discontinuous alteration trends over relatively short distances.

Alteration consists predominantly of silicification (A5) and hematitic silicification (A6) in the southern two trenches (ATR 83-14, ATR 82-2). Silicification in the northern trench (ATR 83-15) is non-hematitic and is commonly brecciated. Argillic alteration is similar in all trenches.

Late-stage veining is present in all trenches but varies from south to north. The A5 and A6 alteration in ATR 83-14 locally contains up to 10% barite veinlets. Minor quartz veinlets (± trace barite) are present in ATR 82-2. Quartz-barite veinlets are also common in the brecciated A5 alteration of ATR 83-15. As well, a single quartz-barite vein, approximately 1.2 m wide, cuts the trench. The southeasterly trend of this vein and the possibly coincidental situation of several other veins along this trend, suggest a single, structural control to these vein occurrences (e.g. ATR 83-13; ATR 83-9).

Significant Au mineralization is restricted to the two southern trenches and is primarily related to hematitic silicification. Encouraging results include the following:

ATR 83-14 10.4 m width of 4.3 ppm Au, 1.3 ppm Ag
including 3.2 m width of 8.7 ppm Au, 1.9 ppm Ag
ATR 82-2 2.9 m width of 7.95 g/t Au, 3.8 g/t Ag
including 1.1 m width of 12.13 g/t Au, 4.9 g/t Ag
4.7 m width of 1.3 g/t Au, 0.3 g/t Ag
1.5 m width of 15.11 g/t Au, 1.7 g/t Ag
including 0.5 m width of 9.19 g/t Au, 3.4 g/t Ag

In 1982, diamond drilling of this zone was undertaken in two holes (A82-6, -7) to test rock and soil geochemical anomalies between trenches ATR 82-2 and ATR 83-15. Both holes intersected poorly mineralized alteration. Au values were generally <2 g/t over ≥1.0 m. The highest grade intersection contained 3.10 g/t (A82-7). Drill hole A82-6 intersected 19 m of intense silicification. This is much less than was expected from surface alteration indications. The most likely reason for this abrupt truncation of the zone is moderate to low angle faulting. Such faulting is unconfirmed and a more complex structural situation may actually exist. Hole A82-7 encountered more continuous, intense alteration including almost 35 m of silicification. The nature of possible structural disruptions in this hole remains uncertain.

The **Myriad zone** represents a convenient but probably artificial grouping of numerous, varied alteration zones with a composite north to northeast trend (Figures 6, 7, 11). Immediately south of the Verrenass zone, the Myriad zone overlaps the anomalous chargeability trend that was diamond drilled in 1982 (holes A82-8, -9, -10, of the Extension zone; Sutherland, 1982). Host rocks are the same ash flows that occur across the Bonanza area.

Alteration varies from intense argillization (A2 or clay) to intense silicification (A5). Irregular patches of fine-grained, disseminated sulphide (or limonitic, weathered equivalents) are locally common. It is likely that several different structural trends control the alteration. Scattered, low-grade mineralization (mainly Au) occurs in the most intensely silicified zones. Values rapidly decrease with an increase in argillic content. Galena and chalcopyrite are rarely present in trace amounts in silicified and in argillized rocks, but precious metals contents do not relate to base metals. Significant values include the following:

ATR 83-39 7.6 m width of 3.76 g/t Au; 1.8 g/t Ag
including 1.0 m width of 6.87 g/t Au; 5.7 g/t Ag
and 0.9 m width of 13.25 g/t Au; 3.5 g/t Ag

ATR 83-42 5.3 m width of 3.17 g/t Au; 2.0 g/t Ag
including 1.2 m width of 6.30 g/t Au; 4.5 g/t Ag

The previous drilled holes A82-8, -9, -10, all encountered alteration styles and Au and Ag grades similar to the Myriad zone trench exposures. The observed decrease in the intersected widths of intense alteration from A82-8 to A82-9, over a vertical extent of 60 to 80 m, may be due to complexities of alteration or post-alteration faulting. Intersected alteration in A82-10 at depths of 80 to 120 m indicates a general similarity to the alteration exposed in ATR 83-18. The apparent vertical continuity of alteration here may only be coincidental.

A quartz-feldspar (rhyodacite) porphyry dyke was intersected in drill holes A83-9 (15 m) and A82-10 (50 m). These dykes are assumed to be similar but may not be part of a single dyke. Trench ATR 83-43 exposed similar dyke rock that may be associated with the intersected equivalents. The position of these dykes implies that they represent two or three separate dykes or, a single dyke that has been disjointed by later faulting.

The **Ghost zone** is situated approximately 100 m east of the Verrenass zone. It appears to intersect the northern limits of the Myriad zone in the vicinity of trench ATR 83-10. This zone is at least 350 m long and the width of intense alteration varies from approximately 10 m to 70 m. The north end of the zone appears to terminate through a combination of pinching of the zone and post-alteration faulting. The southern limits remain unknown but the zone projects south through the Au soil geochemical anomalies known as the 'Orewell' zone (Figures 6 and 62).

The Ghost zone is characterized by intense silicification (A5) and argillization (A2) and resembles many other alteration zones in this region of the property. Host rocks are the dacitic ash flow units, characteristic of the Bonanza area. Locally abundant pyrite accompanies the A5 and A2 alteration styles. As in other zones, precious metals are associated with intense silicification and locally with late stage barite. No mineralization appears to be associated with the clay alteration. No distinctive zonations of alteration assemblages have been recognized.

The 1982 trench ATR 1015E/168N (expanded as ATR 83-11), yielded favourable assays, averaging 4.32 g/t Au and 4.1 g/t Ag over the probable true width of 8 m. Several higher grade sections (e.g., 0.5 m of 10.70 g/t

Au) occur within the main zone of alteration. Encouraging results from 1983 trenching include:

ATR 83- 9 4.9 m width of 2.33 g/t Au, 10.3 g/t Ag

ATR 83-10 3.4 m width of 9.14 ppm Au, 34.1 ppm Ag

2.0 m width of 0.89 ppm Au, 95.5 ppm Ag

2.5 m width of 3.23 ppm Au. 2.1 ppm Ag

2.3 m width of 2.09 ppm Au, 4.3 ppm Ag

2.6 m width of 2.64 ppm Au, 1.3 ppm Ag

ATR 83-17 15.1 m width of 3.74 ppm Au, 7.3 ppm Ag
including 7.6 m width of 6.01 ppm Au, 12.1 ppm Ag
6.2 m width of 1.64 ppm Au, 4.6 ppm Ag

ATR 83-20 4.6 m width of 1.68 ppm Au, 1.9 ppm Ag.

Mineralization is generally related to intense silicification ± pyritization (A5 and A7a) with late stage barite in fractures and local vugs. In trench ATR 83-10, pyrite contents range from 10% to 50% (15% average) accompanied by 1% to 5% barite. Only patches of pyritic silicification appear in trench ATR 83-20 but limonite on fractures in the silicification (A5) may indicate weathering of pyrite. The mineralized section in trench ATR 83-17 is intermediate in nature with pyritic silicification (A7a) and brecciated silicification (A5) present together in almost equal amounts. From 1% to 5% barite is present as fracture fillings in most of the mineralized sections.

The mineralization in trench ATR 83-9 is related to quartz veins and stockwork breccias with a general northwesterly trend. Vein material accounts for 40% to 70% of the silicified host rock where present, and consists almost entirely of quartz (locally amethystine). Sulphides include chalcopyrite (1-5%), pyrite (trace-2%), and galena (trace). Minor vugs present in the silicified host rock are often lined with drusy quartz ± barite.

The 1982 drill hole A82-4 tested this zone at the apparent intersection with the Myriad zone. Drilling was based on the coincidence of mineralized, silicified float, a Ag soil geochemical anomaly, and a weak chargeability anomaly. Only very minor zones of predominantly argillic alteration were intersected at depths of 30- 60 m below the surface. This is in contradiction to the 20 m wide zone of silicification and argillization present in trench ATR 83-10. Rapid pinching of the alteration system and low angle, displacive faulting are possible explanations for this complexity.

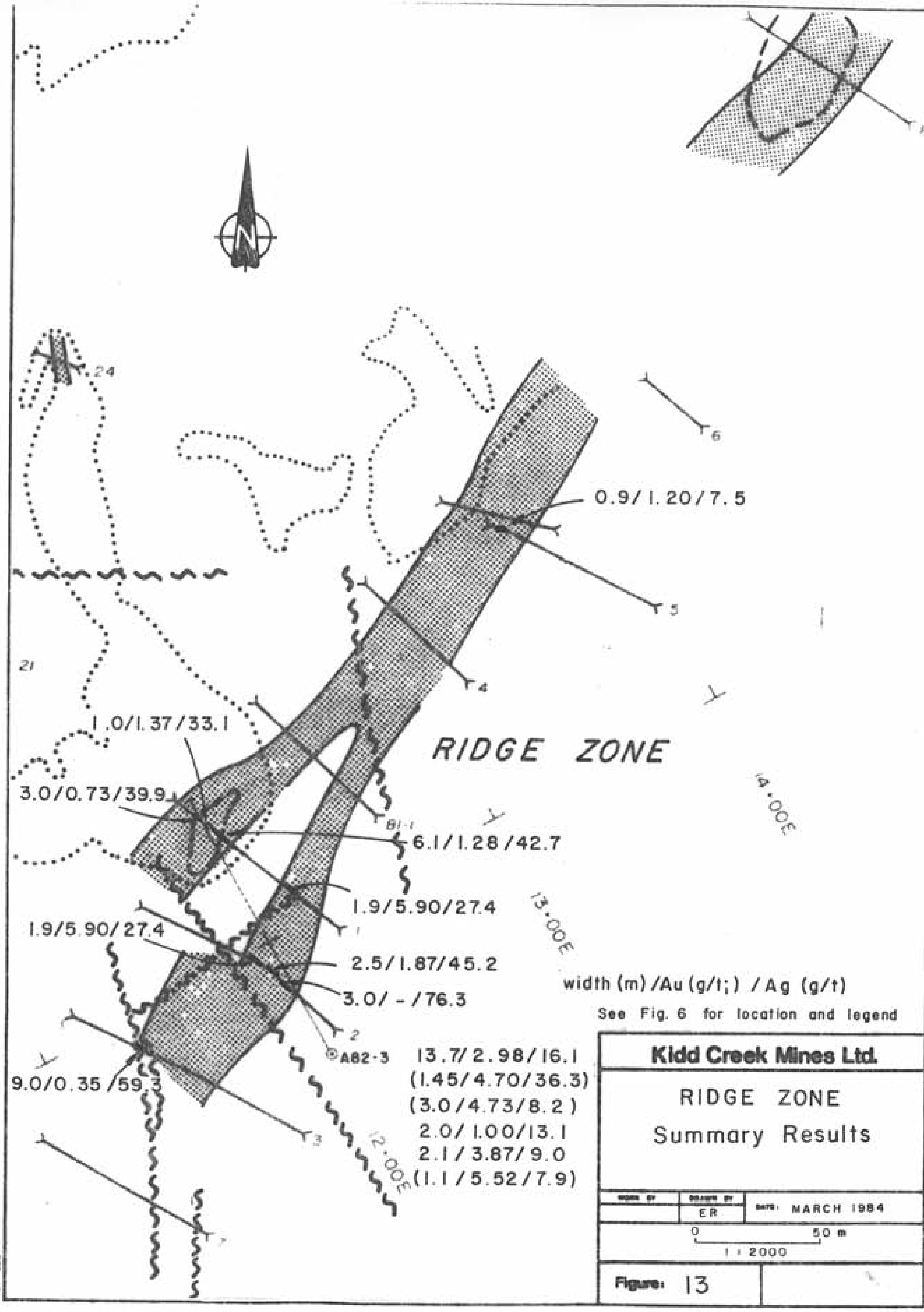
The top 50 m of diamond drill hole A82-9 intersected discontinuous, intense alteration akin to that of trench ATR 83-20 and to that in the south end of ATR 83-16, although it is only about half as wide as in this latter trench. Once again, pinching of the system with depth and/or displacive faulting is suspected.

The **Trouser** zone (Figures 6, 7, 11) was previously defined on the basis of rock and soil geochemical values, the presence of silicified float, and roughly coincident, chargeability and resistivity anomalies. A few grab samples from this zone yielded values up to 4.24 g/t Au and 2.5 g/t Ag. Strong multi-element soil anomalies occur in drainage channels downstream from this zone. An adjacent multi-station soil anomaly contained Au values up to 3200 ppb.

Unfortunately, the soil geochemical values are apparently due to transported, silicified material (see discussion in "Soil Geochemistry", this report). Trenching in the area of the silicified float and geophysical anomalies exposed several narrow zones of northerly trending, intense argillization, clays and silicification. The presence of minor patches of disseminated pyrite suggests an explanation for the chargeability anomaly. Grades encountered in trenching were consistently poor.

The **Ridge zone,** located 300 m east of the Verrenass showing on the Bonanza-Ridge grid, consists of a linear zone of intense alteration that splits and coalesces between trenches ATR 83-3 and ATR 83-4 (Figures 6, 7 adn 13). A 'north' and a 'south' half exist where the zone splits. Host rocks are predominantly andesitic flows, tuffs and affiliated breccias. A dacitic ash flow unit (as on the Bonanza area) is locally present but is restricted to the western side of the altered structure. The zone lies along a lineament with a minimum length of 2.3 km. The strike length of the Ridge zone is semi-continuous over at least 350 m (possibly 550 m). The southern end of the zone terminates abruptly against a northerly trending fault structure. The zone trends to the northeast past the western edge of trench ATR 83-6 and probably projects through to the intense alteration in trench ATR 83-8. Beyond this point the above mentioned lineament bends to the north and continues as the Continuation zone (see Sutherland, 1982).

The north and south segments of the Ridge zone exhibit intense silicification and hematization (A5 and A6), polyphase brecciation, and late, fracture-controlled alteration. The mineralized zones appear to be roughly lensoid and are clearly very discontinuous in nature. The zones apparently coalesce north of trench ATR 81-1. Trenching has exposed alteration widths of 15-30 m on the northern zone, and 5-35 m of strongly altered rock on the


N
24
6
0.9/1.20/7.5
5
21
4
RIDGE ZONE
1.0/1.37/33.1
3.0/0.73/39.9
81-1
6.1/1.28/42.7
14+00E
1.9/5.90/27.4
1
13+00E
1.9/5.90/27.4
2.5/1.87/45.2
3.0/ - /76.3
width (m) /Au (g/t;) / Ag (g/t)
See Fig. 6 for location and legend
2
A82-3
13.7/2.98/16.1
(1.45/4.70/36.3)
(3.0/4.73/8.2)
2.0/1.00/13.1
2.1/3.87/9.0
(1.1/5.52/7.9)
9.0/0.35/59.3
3
12+00E
7
Kidd Creek Mines Ltd.
RIDGE ZONE
Summary Results
ER
MARCH 1984
0
50 m
1 : 2000
Figure: 13

geophysical anomalies exposed several narrow zones of northerly trending, intense argillization, clays and silicification. The presence of minor patches of disseminated pyrite suggests an explanation for the chargeability anomaly. Grades encountered in trenching were consistently poor.

The **Ridge zone,** located 300 m east of the Verrenass showing on the Bonanza-Ridge grid, consists of a linear zone of intense alteration that splits and coalesces between trenches ATR 83-3 and ATR 83-4 (Figures 6, 7 adn 13). A 'north' and a 'south' half exist where the zone splits. Host rocks are predominantly andesitic flows, tuffs and affiliated breccias. A dacitic ash flow unit (as on the Bonanza area) is locally present but is restricted to the western side of the altered structure. The zone lies along a lineament with a minimum length of 2.3 km. The strike length of the Ridge zone is semi-continuous over at least 350 m (possibly 550 m). The southern end of the zone terminates abruptly against a northerly trending fault structure. The zone trends to the northeast past the western edge of trench ATR 83-6 and probably projects through to the intense alteration in trench ATR 83-8. Beyond this point the above mentioned lineament bends to the north and continues as the Continuation zone (see Sutherland, 1982).

The north and south segments of the Ridge zone exhibit intense silicification and hematization (A5 and A6), polyphase brecciation, and late, fracture-controlled alteration. The mineralized zones appear to be roughly lensoid and are clearly very discontinuous in nature. The zones apparently coalesce north of trench ATR 81-1. Trenching has exposed alteration widths of 15-30 m on the northern zone, and 5-35 m of strongly altered rock on the (local hematization) with only minor argillic alteration.

At depth, the character of the northern segment of the Ridge zone changes dramatically to banded clays and quartz, with discouraging geochemical results (DDH A83-3; Sutherland, 1982). Late stage faulting and very rapid changes in alteration style (vertically, laterally and longitudinally) are the apparent causes of the discontinuity in the mineralized zones.

Mineralization is restricted on surface to the section of the zone between trenches ATR 83-3 and ATR 83-5. Significant Au and Ag values (Au ≥1.0 g/t; Ag ≥50.0 g/t) occur primarily between ATR 83-3 and ATR 83-1. Grab samples from the 'north' zone (1981) contained up to 6.47 g/t Au and 131.2 g/t Ag. No previously sampled sections were resampled in 1983. Significant Au-Ag values from trenching (1981, 1983) include the following:

"Trench 3" (1981)	3.0 m of 0.73 g/t Au, 39.9 g/t Ag
(now part of	3.0 m of 1.23 g/t Au, 44.2 g/t Ag
ATR 83-1)	1.0 m of 1.37 g/t Au, 33.1 g/t Ag
"Trench 5" (1981)	2.5 m of 1.87 g/t Au, 45.2 g/t Ag
(now part of ATR 83-2)	3.0 m of 76.3 g/t Ag
ATR 83-1	6.1 m of 1.28 g/t Au, 42.7 g/t Ag
ATR 83-2	1.9 m of 5.90 g/t Au, 27.4 g/t Ag
ATR 83-3	9.0 m of 0.35 g/t AU, 59.3 g/t Ag
ATR 83-5	0.9 m of 1.20 g/t Au, 7.5 g/t Ag

The 1982 diamond drill hole A82-3 intersected the following mineralized sections:

13.7 m of 2.98 g/t Au, 16.1 g/t Ag
including 1.45 m of 4.70 g/t Au, 36.3 g/t Ag
and 3.0 m of 4.73 g/t Au, 8.2 g/t Ag
2.0 m of 1.00 g/t Au, 13.1 g/t Ag
2.1 m of 3.87 g/t Au, 9.0 g/t Ag
including 1.1 m of 5.52 g/t Au, 7.9 g/t Ag

Mineralization is exclusively hosted in silicified and often hematized rocks. Higher grade sections are commonly brecciated with two or more alteration stages in evidence. The only exception is the narrow, mineralized zone in trench ATR 83-2 consisting of 5 to 10% chalcedonic quartz veining in brecciated silicification.

Thesis II Zone

The Thesis II zone (Figures 3, 8 and 14) outcrops on the southwest grid, 1850 m southwest of the Verrenass showing. Between Aug. 2 and Aug. 3, five trenches (totalling 190 m) were excavated across the zone.

The quartz-limonite and quartz-hematite breccias present are vaguely similar to breccias of the Ridge zone. Host rocks are andesitic to dacitic flows. A hornblende porphyry occupies the northwestern part of the area and a xenolithic, biotite-hornblende porphyry predominates on the eastern part. The dimensions of the Thesis II zone are uncertain. The alteration appears to trend in a northwest direction parallel to weakly defined airphoto lineaments. Previous suggestions that the Thesis II zone may be connected with the Thesis I zone are now considered erroneous.

Trenching revealed highly variable widths of

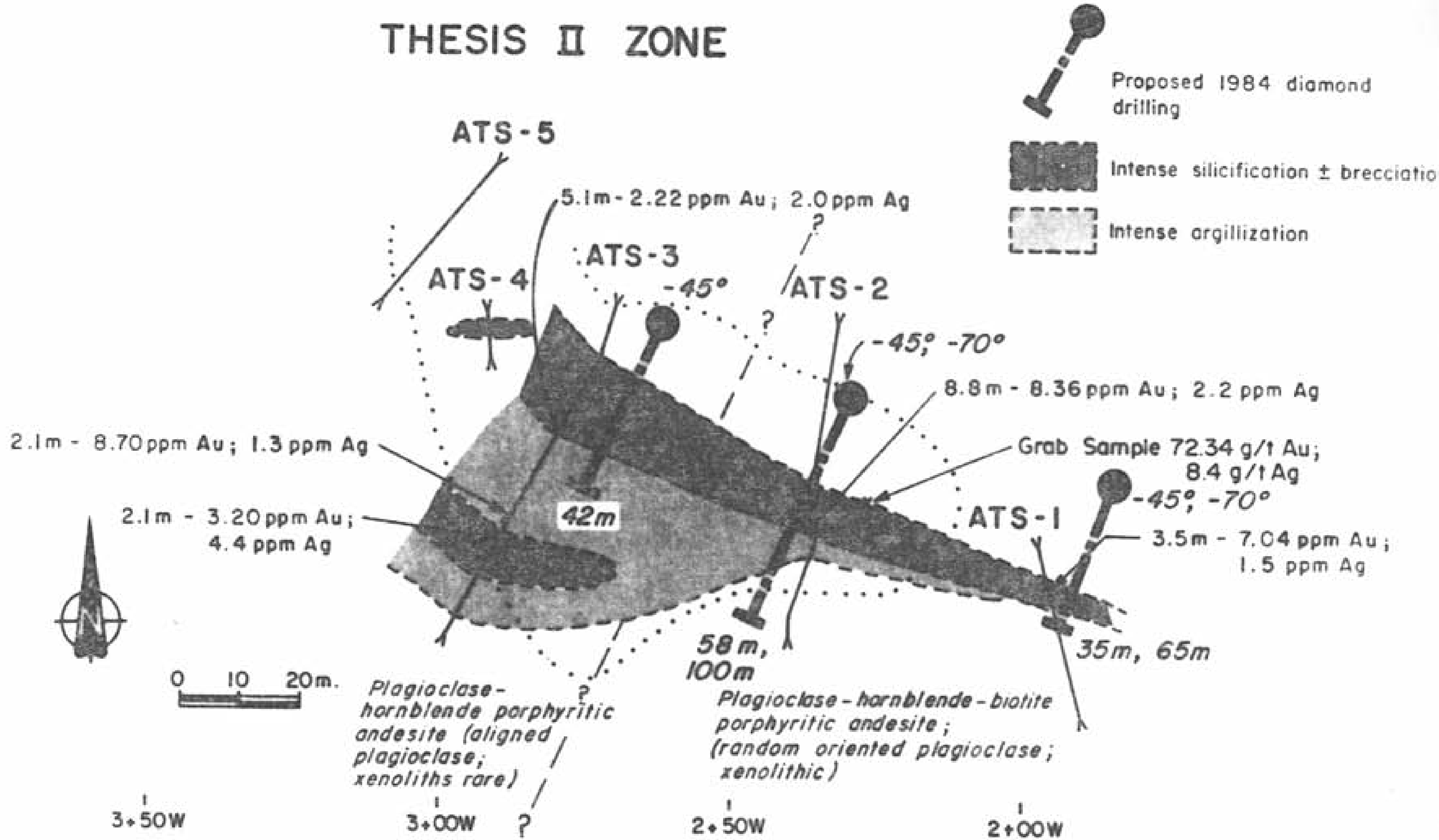

THESIS II ZONE
Proposed 1984 diamond drilling
Intense silicification ± brecciatio
Intense argillization
ATS-5
ATS-4
ATS-3
ATS-2
ATS-1
5.1m - 2.22 ppm Au; 2.0 ppm Ag
-45°
-45°, -70°
8.8m - 8.36 ppm Au; 2.2 ppm Ag
Grab Sample 72.34 g/t Au; 8.4 g/t Ag
2.1m - 8.70 ppm Au; 1.3 ppm Ag
2.1m - 3.20 ppm Au; 4.4 ppm Ag
42m
-45°, -70°
3.5m - 7.04 ppm Au; 1.5 ppm Ag
58 m, 100m
35m, 65m
0 10 20m.
Plagioclase-hornblende porphyritic andesite (aligned plagioclase; xenoliths rare)
Plagioclase-hornblende-biotite porphyritic andesite; (random oriented plagioclase; xenolithic)
3+50W
3+00W
2+50W
2+00W

Figure 14

alteration over a maximum strike length of 150 m. The narrow zone of alteration exposed by the southern two trenches rapidly widens to 60 m in trench ATS 83-03 then is absent in the essentially unaltered, northern trench (ATS 83-05). This rapid variation is likely a result of faulting and/or pinching of the system. Such faulting could also contribute to the sharp change in lithologies observed between trenches ATS 83-02 and -03.

Three grab samples from the zone (1982) contained more than 700 ppb Au. The highest values were 12.00 g/t Au and 1.7 g/t Ag. Detailed sampling in 1984 returned a grab sample which assayed 72.34 g/t Au and 8.4 g/t Ag. Most 1984 grabs yielded values between 0.4 and 0.9 ppm Au with only minor Ag. The high-grade sample was collected in situ near trench ATS 83-02 and consisted of a silicified and brecciated rock with about 15% limonite/ goethite cement.

Some of the better values encountered in trenching include:

ATS 83-01	3.5 m width; 7.04 ppm Au, 1.5 ppm Ag
ATS 83-02	8.8 m width; 8,36 ppm Au, 2.2 ppm Ag
ATS 83-03	5.1 m width; 2.22 ppm Au, 2.0 ppm Ag
	2.1 m width; 8.70 ppm Au, 1.3 ppm Ag
	2.1 m width; 3.20 ppm Au, 4.4 ppm Ag

The mineralized sections in ATS 83-01 and -02 are clearly related and are likely continuous. Values are associated with silicified breccias with quartz and/or limonite/geothite cement. Work by J.R. Clark (M.Sc. student, McGill University) has shown Au to be present in both the quartz and the limonite/goethite cement. This implies a hypogene origin to the mineralization, though the possibility of supergene enrichment cannot be disregarded. The depth of weathering is unknown. Late-stage veins and stockworks of barite (5-10%) occur locally (ATS 83-01, ATS -03) and also contain significant mineralization. Trench ATS 83-04 was not sampled because of some confusion in the field.

DISCUSSION

The Al property continues to exhibit a high potential for Au-Ag mineralization. The central region of the property (Al 2, 4 and 8 claims) appears to have the best potential for one or more, economically viable Au-Ag deposits. Of all areas, the Bonanza/Ridge grid is the most promising with several zones of significant (and, locally, spectacular) mineralization.

Additional work is clearly warranted on the Al proeprty. Diamond dirll testing of the Berrenass zone and hte Thesis II zone is required. Tenching of various geochemical anoamlies on the Bonanza-Ridge and SW grids is also necessary and should be compelted prior to diamond drilling.

Ian G. Sutherland

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APPENDIX A
Statement of Qualifications

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I.G. Sutherland - Geologist

I.G. Sutherland holds a B.Sc., (Hons) Degree in Geology from the University of Western Ontario, granted in 1976. Since that time he has held several positions in Industry and Government, and has been employed by Kidd Creek Mines Ltd. in Vancouver since March 1981.

J.R. Clark - Geologist

J.R. Clark holds a B.Sc. (Hons) Degree in Geology from McGill University, granted in 1979. He has wide exploration experience and has been temporarily employed by Kidd Creek Mines Ltd. since the 1981 field season. He is presently enrolled in a M.Sc. program at McGill, where he is researching various aspects of the geology of properties in this region.

J.F. Macdougall - Sr. Geologist

J.F. Macdougall holds a PhD. from McGill University. He has worked as a geologist for Kidd Creek Mines (previously Texasgulf Inc.) in Canada and the USA since 1958.

APPENDIX B

Statement of Expenditures

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1) Physical Work

S. Jaycox - Backhoe Operator			
July 15-Aug 3	135.0 hrs @ $45.00	6,075.00	
Sept 9-13	38.0 hrs @ $45.00	1,710.00	
		7,785.00	7,785.00

2) Trench Mapping and Sampling

B. Anderson - Assistant			
Sept 9-13	5 days @ $55/day	275.00	
J. Black - Assistant			
July 18-Aug 20	29.5 days @ $54/day	1,593.00	
J. Clark - Geologist			
July 15-Sept 9	50.5 days @ $104/day	5,252.00	
D. Coolidge - Assistant			
July 16-Sept 13	24 days @ $65/day	1,560.00	
L. Haering - Geological Assistant			
July 18-Aug 20	29.5 days @ $67/day	1,976.50	
D. Horvat - Assistant			
July 17-Sept 13	34.5 days @ $54/day	1,863.00	
A. Hunt - Assistant			
Sept 9-13	5 days @ $55/day	275.00	
J. Leigh - Assistant			
July 17-Aug 15	28 days @ $60/day	1,680.00	
M. Logan - Assistant			
Sept 12-13	2 days @ $46/day	92.00	
L. Louie - Geological Assistant			
July 16-Sept 19	34.5 days @ $67/day	2,311.50	
J.F. Macdougall - Geologist			
July 15-23	8 days @ $185/day	1,480.00	
M. Neave - Assistant			
Sept 12-13	2 days @ $46/day	92.00	
K. Norris - Assistant			
July 18-Aug 21	19.5 days @ $50/day	1,131.00	
R. Vandenbrink - Assistant			
July 18-Aug 19	23 days @ $62/day	1,426.00	
		21,907.00	$21,907.00

APPENDIX B
Statement of Expenditures

3) Geochemical Survey

B. Anderson - Assistant			
Sept 3-7	4 days @ $55/day	220.00	
J. Black - Assistant			
June 24-Aug 28	3 days @ $54/day	162.00	
D. Coolidge - Assistant			
June 30-Sept 7	6.5 days @ $65/day	442.50	
L. Haering - Geological Assistant			
June 30	1 day @ $67/day	67.00	
D. Horvat - Assistant			
June 24-Sept 7	9.5 days @ $54/day	513.00	
A. Hunt - Assistant			
Sept 7	1 day @ $55/day	55.00	
J Leigh - Assistant			
June 20-Aug 28	5 days @ $60/day	300.00	
L. Louie - Geological Assistant			
June 28-July 3	2.5 days @ $67/day	167.50	
K. Norris - Assistant			
June 21-Sept 7	10.5 days @ $58/day	609.00	
R. Vandenbrink - Assistant			
June 20-Sept 3	5.5 days @ $62/day	341.00	
		2,857.00	2,857.00

4) Geological Survey (Compilation)

I.G. Sutherland - Geologist			
Aug 7-Sept 16	11 days @ $136/day	1,496.00	
L. Louie - Geological Assistant			
Aug 21-31	7 days @ $67/day	469.00	
		1,965.00	1,965.00

5) Room & Board

S. Jaycox	24 man-days @ $80	1,920.00	
Kidd Creek Personnel			
	361.5 man-days @ $80	28,920.00	
		30,840.00	30,840.00

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6) Helicopter Support - Personnel

ALC, Hughes 500D; 60.9 hrs @ $510/hr		31,059.00

7) Sample Shipping

a) Helicopter to Airstrip ALC, Hughes 500D 28.4 hrs @ $510/hr	14,484.00	
b) Fixed-wing to Smithers Central Mountain Air Service, 'Islander' 20 half trips @ $375	7,500.00	
c) Greyhound Bus to Vancouver 41,230 lbs @ $0.28/lb	11,544.40	
	33,528.40	33,528.40

8) a) Analytical Costs (Acme Analytical)

1656 Au and Ag geochemical analyses @ $5.60	9,273.60	
804 Au and Ag assays @ $10.00	8,040.00	
5 Au assays @ $9.00	45.00	
1604 rock sample preparations @ $2.50	4,010.00	
24,704 lbs 'overweight' charges @ $0.25/lb	6,176.00	
811 soil sample preparations @ $0.50	405.50	

b) Chemex Labs Limited (Soil Profile Samples)

53 Cu,Pb,Zn,Ag,Hg,Ba and Au geochemical analyses @ $18.35	972.55	
1 Au assay @ $7.50	7.50	
53 soil sample preparations @ $0.60	31.80	
	28,961.95	28,961.95

9) Report Preparatiaon Costs

Typing - D. Leigh 2.5 days @ $127.00	317.50	
Drafting - D. Phillips 121 hrs @ $17/hr	2,057.00	
- V. Goodfellow 3 mos @ $2050/mo	6,150.00	
Reproductions	75.00	
	8,600.00	8,600.00
	TOTAL	**$167,502.95**

APPENDIX C

ANALYTICAL TECHNIQUES

APPENDIX C

ANALYTICAL TECHNIQUES

a) **Acme Analytical Laboratories,**
Vancouver, B.C.

Soils:	**Au Geochemistry**	**Ag Geochemistry**
size fraction analysed	-80 mesh	-80 mesh
analysed weight	10 gm	0.5 gm
technique	Aqua Regia; MIBK; AA	3:1:3 ($HCl:HNO_3:H_2O$);AA
detection limit	5 ppb	0.2 ppm

Rocks:

size fraction analysed	-100 mesh	-100 mesh
analysed weight	as for soils	as for soils
technique	"	"
detection limit	"	"

Fire Assays: - "1/2 assay ton" basis
-100 mesh fraction analysed

APPENDIX C

ANALYTICAL TECHNIQUES

b) **Chemex Labs Ltd.,**
North Vancouver, B.C.

Soils: (Profiles,1 Appendix D/E):

Element	Analysed Wt	Technique	Detection Limit
Cu	1 gm	Perchloric + nitric; AA	2 ppm
Pb	1 gm	Perchloric + nitric; AA	1 ppm
Zn	1 gm	Perchloric + nitric; AA	1 ppm
Ag	1 gm	Perchloric + nitric; AA	0.1 ppm
Au	10 gm	FA prep; AA	5 ppb
Ba	1 gm	Perchloric + nitric + HF; AA	10 ppm
Hg	1 gm	nitric acid + stannous sulphate; flameless AA	5 ppb

APPENDIX D

Analytical Results

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED AUG 6 1983

DATE REPORTS MAILED Aug 12/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER [signature] DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-1512

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27251	7.0	.45
AA-27252	7.0	.65
AA-27253	8.0	.80
AA-27254	.5	.05
AA-27255	.5	.05
AA-27256	7.5	.40
AA-27257	10.5	.50
AA-27258	5.5	.40
AA-27259	3.0	.10
AA-27260	2.0	.10
AA-27261	1.0	.10
AA-27262	.5	.05
AA-27263	.5	.05
AA-27264	.5	.05
AA-27265	.5	.05
AA-27266	.5	.05
AA-27267	.5	.05
AA-27268	.5	.05
AA-27269	.5	.05
AA-27270	.5	.05
AA-27271	.5	.05
AA-27272	.5	.05
AA-27273	.5	.05
AA-27274	.5	.05
AA-27275	.5	.05
AA-27276	.5	.05
AA-27277	.5	.05
AA-27278	.5	.05
AA-27279	.5	.05
AA-27280	2.5	.05
AA-27281	14.5	.15
AA-27282	1.5	.05
AA-27283	16.5	1.25
AA-27284	35.5	3.45
AA-27285	28.5	2.80
AA-27286	10.5	.55
AA-27287	6.5	.25
AA-27288	4.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27289	168.5	.05
AA-27290	8.0	.05
AA-27291	9.0	.20
AA-27292	8.5	.30
AA-27293	13.5	.15
AA-27294	17.5	.10
AA-27295	20.5	.05
AA-27296	3.0	.05
AA-27297	44.5	.05
AA-27298	14.5	.05
AA-27299	15.0	.05
AA-27300	4.5	.05
AA-27301	.5	.05
AA-27302	.5	.05
AA-27303	.5	.05
AA-27304	.5	.05
AA-27305	.5	.05
AA-27306	.5	.05
AA-27307	.5	.05
AA-27308	.5	.05
AA-27309	.5	.05
AA-27310	.5	.05
AA-27311	.5	.05
AA-27312	.5	.05
AA-27313	.5	.05
AA-27314	1.5	.05
AA-27315	.5	.05
AA-27316	1.0	.05
AA-27317	.5	.05
AA-27318	1.0	.05
AA-27319	2.0	.05
AA-27320	4.0	.15
AA-27321	5.0	.35
AA-27322	34.0	7.95
AA-27323	21.5	4.05
AA-27324	8.0	.05
AA-27325	5.0	.05
AA-27326	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27327	.5	.05
AA-27328	.5	.05
AA-27329	.5	.05
AA-27330	.5	.05
AA-27331	.5	.05
AA-27332	.5	.05
AA-27333	.5	.05
AA-27334	6.5	.05
AA-27335	1.5	.05
AA-27336	2.0	.05
AA-27337	4.0	.20
AA-27338	1.5	.10
AA-27339	1.5	.05
AA-27340	2.0	.05
AA-27341	.5	.05
AA-27342	1.5	.05
AA-27343	2.5	.10
AA-27344	1.5	.45
AA-27345	1.5	.05
AA-27346	.5	.05
AA-27347	.5	.05
AA-27348	33.5	.05
AA-27349	.5	.05
AA-27350	.5	.05
AA-27351	.5	.05
AA-27352	.5	.05
AA-27353	.5	.05
AA-27354	.5	.05
AA-27355	.5	.05
AA-27356	.5	.15
AA-27357	.5	.05
AA-27358	74.5	.05
AA-27359	68.5	.05
AA-27360	43.5	.05
AA-27361	88.5	.20
AA-27362	48.5	.20
AA-27363	83.0	.40
AA-27364	27.0	.30

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27365	69.0	1.00
AA-27366	41.0	.80
AA-27367	34.5	.80
AA-27368	1.5	.05
AA-27369	.5	.05
AA-27370	3.5	.05
AA-27371	1.5	.05
AA-27372	17.5	.05
AA-27373	10.0	.05
AA-27374	8.0	.20
AA-27375	11.5	.05
AA-27376	14.5	.05
AA-27377	4.0	.05
AA-27378	15.5	.05
AA-27379	3.0	.05
AA-27380	20.5	.05
AA-27381	7.5	.05
AA-27382	11.5	.05
AA-27383	12.5	.05
AA-27384	12.5	.05
AA-27385	16.0	.05
AA-27386	10.5	.05
AA-27387	11.0	.05
AA-27388	13.0	.05
AA-27389	12.0	.60
AA-27390	12.0	.05
AA-27391	11.5	.05
AA-27392	9.5	.30
AA-27393	14.5	.20
AA-27394	19.0	.05
AA-27395	13.5	.05
AA-27396	3.0	.05
AA-27397	1.5	.05
AA-27398	.5	.05
AA-27399	.5	.05
AA-27400	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27401	.5	.05
AA-27402	.5	.05
AA-27403	.5	.05
AA-27404	.5	.05
AA-27405	.5	.05
AA-27406	.5	.05
AA-27407	.5	.05
AA-27408	.5	.05
AA-27409	.5	.05
AA-27410	.5	.05
AA-27411	.5	.05
AA-27412	.5	.05
AA-27413	.5	.05
AA-27414	.5	.05
AA-27415	.5	.05
AA-27416	.5	.05
AA-27417	.5	.05
AA-27418	.5	.05
AA-27419	.5	.05
AA-27420	.5	.05
AA-27421	.5	.05
AA-27422	.5	.05
AA-27423	.5	.05
AA-27424	.5	.05
AA-27425	.5	.05
AA-27426	.5	.05
AA-27427	.5	.05
AA-27428	.5	.05
AA-27429	.5	.05
AA-27430	.5	.05
AA-27431	1.0	.05
AA-27432	5.0	.05
AA-27433	12.5	.05
AA-27434	7.0	.05
AA-27435	.5	.05
AA-27436	1.5	.05
AA-27437	2.5	.05
AA-27438	1.0	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27439	.5	.05
AA-27440	.5	.05
AA-27441	.5	.05
AA-27442	.5	.05
AA-27443	.5	.05
AA-27444	8.0	.25
AA-27445	5.5	.10
AA-27446	6.0	.15
AA-27447	15.5	.60
AA-27448	10.0	.60
AA-27449	13.5	.95
AA-27450	13.5	.60
AA-27451	2.5	.05
AA-27452	.5	.05
AA-27453	1.5	.05
AA-27454	.5	.05
AA-27455	.5	.05
AA-27456	.5	.05
AA-27457	.5	.05
AA-27458	.5	.05
AA-27459	.5	.05
AA-27460	.5	.05
AA-27461	.5	.05
AA-27462	.5	.05
AA-27463	.5	.05
AA-27464	2.0	.35
AA-27465	.5	.05
AA-27466	7.5	1.20
AA-27467	6.0	.40
AA-27468	.5	.05
AA-27469	.5	.05
AA-27470	.5	.05
AA-27471	.5	.05
AA-27472	.5	.05
AA-27473	.5	.05
AA-27474	.5	.05
AA-27475	.5	.05
AA-27476	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27477	.5	.05
AA-27478	.5	.05
AA-27479	.5	.05
AA-27480	.5	.05
AA-27481	.5	.05
AA-27482	.5	.05
AA-27483	.5	.05
AA-27484	.5	.05
AA-27485	.5	.05
AA-27486	.5	.05
AA-27487	.5	.05
AA-27488	.5	.05
AA-27489	.5	.05
AA-27490	.5	.05
AA-27491	.5	.05
AA-27492	.5	.05
AA-27493	.5	.05
AA-27494	.5	.05
AA-27495	.5	.05
AA-27496	1.0	.05
AA-27497	.5	.05
AA-27498	.5	.05
AA-27499	.5	.05
AA-27500	.5	.05
AA-27501	.5	.05
AA-27502	.5	.05
AA-27503	.5	.05
AA-27504	.5	.05
AA-27505	.5	.05
AA-27506	.5	.05
AA-27507	.5	.05
AA-27508	.5	.05
AA-27509	.5	.05
AA-27510	.5	.05
AA-27511	.5	.05
AA-27512	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27513	.5	.05
AA-27514	.5	.05
AA-27515	.5	.05
AA-27516	.5	.05
AA-27517	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED AUG 10 1983

DATE REPORTS MAILED Aug 12/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

FIDO CREEK MINES PROJECT # 03 FILE # 83-1553 PAGE# 1

SAMPLE	AG GM/TNE	AU GM/TNE
AA-24346	3.5	6.80
AA-24347	1.5	24.20
AA-24348	2.5	3.90
AA-24349	3.0	5.95
AA-24350	2.0	13.60
AA-24351	.5	13.40
AA-24352	.5	3.15
AA-24353	1.5	31.70
AA-24354	1.5	2.80
AA-24355	.5	16.60
AA-24356	2.5	9.25
AA-24357	1.5	5.25
AA-24358	1.0	1.30
AA-24359	.5	2.80
AA-24360	.5	1.20
AA-24361	2.0	3.80
AA-24362	.5	4.40
AA-24363	2.0	38.30
AA-24364	15.5	140.80
AA-24365	3.0	35.40
AA-24366	3.0	31.90
AA-24367	5.0	54.60
AA-24368	4.0	33.50
AA-24369	5.5	87.90
AA-24370	4.0	69.20
AA-24371	5.5	61.90
AA-24372	6.0	82.10
AA-24373	5.5	85.80
AA-24374	12.5	98.40
AA-24375	5.5	44.20
AA-24376	3.5	8.05
AA-24377	2.5	6.45
AA-24378	3.0	3.70
AA-24379	.5	4.35
AA-24380	.5	13.70
AA-24381	.5	7.60
AA-24382	.5	9.30
AA-24383	.5	9.20

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-24384	.5	6.35
AA-24385	.5	8.79
AA-24386	.5	4.35
AA-24387	.5	5.20
AA-24388	1.5	8.90
AA-24389	1.0	3.35
AA-24400	.5	2.95

* NOTE — GM/TNE = GRAM/TONNE

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED AUG 7 1983

DATE REPORTS MAILED Aug 18/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES LTD PROJECT # 03 FILE # 83-1515 PAGE# 1

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27518	.5	.05
AA-27519	.5	.05
AA-27520	.5	.05
AA-27521	.5	.05
AA-27522	.5	.05
AA-27523	.5	.05
AA-27524	1.5	.05
AA-27525	.5	.05
AA-27526	.5	.05
AA-27527	.5	.05
AA-27528	.5	.05
AA-27529	.5	.05
AA-27530	6.5	.05
AA-27531	3.0	.05
AA-27532	2.5	.05
AA-27533	5.5	.05
AA-27534	6.0	.05
AA-27535	8.5	.05
AA-27536	4.5	.05
AA-27537	.5	.05
AA-27538	2.0	.05
AA-27539	1.0	.05
AA-27540	.5	.05
AA-27541	.5	.05
AA-27542	1.0	.05
AA-27543	2.5	.05
AA-27544	2.5	.05
AA-27545	2.5	.05
AA-27546	48.0	.05
AA-27547	2.0	.05
AA-27548	.5	.05
AA-27549	5.0	.05
AA-27551	.5	.05
AA-27552	.5	.05
AA-27553	.5	.05
AA-27554	.5	.05
AA-27555	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27556	.5	.05
AA-27557	.5	.05
AA-27558	.5	.05
AA-27559	.5	.05
AA-27560	.5	.05
AA-27561	.5	.05
AA-27562	.5	.05
AA-27563	.5	.05
AA-27564	.5	.05
AA-27565	.5	.05
AA-27566	.5	.05
AA-27567	.5	.05
AA-27568	.5	.05
AA-27569	.5	.05
AA-27570	.5	.05
AA-27571	.5	.05
AA-27572	.5	.05
AA-27573	.5	.05
AA-27574	1.5	.05
AA-27575	.5	.05
AA-27576	.5	.05
AA-27577	.5	.05
AA-27578	1.5	.05
AA-27579	4.5	.05
AA-27580	.5	.05
AA-27581	.5	.05
AA-27582	2.0	.05
AA-27583	1.0	.10
AA-27584	1.5	.15
AA-27585	4.0	.50
AA-27586	3.5	.40
AA-27587	1.5	.20
AA-27588	.5	.10
AA-27589	.5	.15
AA-27590	.5	.10
AA-27591	.5	.05
AA-27592	.5	.05

* NOTE – GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27593	.5	.10
AA-27594	2.0	.15
AA-27595	1.5	.45
AA-27596	.5	.35
AA-27597	.5	.30
AA-27598	.5	.10
AA-27599	.5	.20
AA-27600	.5	.05
AA-27601	.5	.05
AA-27602	.5	.05
AA-27603	.5	.05
AA-27604	.5	.05
AA-27605	.5	.05
AA-27606	.5	.05
AA-27607	.5	.05
AA-27608	.5	.05
AA-27609	.5	.05
AA-27610	.5	.05
AA-27611	.5	.05
AA-27612	.5	.05
AA-27613	.5	.05
AA-27614	.5	.05
AA-27615	.5	.05
AA-27616	.5	.05
AA-27617	.5	.05
AA-27618	.5	.05
AA-27619	.5	.05
AA-27620	.5	.05
AA-27621	.5	.05
AA-27622	.5	.05
AA-27623	.5	.05
AA-27624	.5	.05
AA-27625	.5	.05
AA-27626	.5	.50
AA-27627	.5	.05
AA-27628	.5	.05
AA-27629	1.0	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-27630	.5	.05
AA-27631	.5	.05
AA-27632	8.5	.50
AA-27633	23.5	1.98
AA-27634	.5	.05
AA-27635	.5	.05
AA-27636	.5	.05
AA-27637	.5	.05
AA-27638	.5	.15
AA-27639	3.5	.20
AA-27640	4.5	.10
AA-27641	1.5	.25
AA-27642	8.5	1.65
AA-27643	.5	.10
AA-27644	.5	.05
AA-27645	3.5	.20
AA-27646	1.0	.05
AA-27647	.5	.05
AA-27648	.5	.05
AA-27649	1.5	.05
AA-27650	4.0	.15
AA-27651	16.5	.55
AA-27652	10.5	4.85
AA-27653	4.5	1.00
AA-27654	5.5	4.70
AA-27655	4.5	.75
AA-27656	4.0	.70

* NOTE - GM/TNE = GRAM/TONNE

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED SEPT 20 1983

DATE REPORTS MAILED Sept 27/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER [signature] DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES LTD PROJECT # 03 FILE # 83 2220 PAGE# 1

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29501	.5	.05
AA-29502	17.5	.10
AA-29503	.5	.05
AA-29504	3.5	.05
AA-29505	7.0	.15
AA-29506	3.0	1.20
AA-29507	.5	.10
AA-29508	2.5	.15
AA-29509	13.5	.15
AA-29510	.5	.15

* NOTE GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29511	3.0	.05
AA-29512	4.0	.05
AA-29513	1.5	.30
AA-29514	1.0	.05
AA-29515	2.5	.15
AA-29516	.5	.05
AA-29517	.5	.05
AA-29518	.5	.05
AA-29519	.5	.05
AA-29520	.5	.05
AA-29521	.5	.05
AA-29522	.5	.05
AA-29523	.5	.40
AA-29524	.5	.05
AA-29525	.5	.05
AA-29526	5.5	.10
AA-29527	.5	.05
AA-29528	1.0	.05
AA-29529	.5	.10
AA-29530	.5	.10
AA-29531	.5	.40
AA-29532	.5	.30
AA-29533	.5	.05
AA-29534	2.5	.15
AA-29535	.5	.20
AA-29536	.5	.35
AA-29537	1.5	.05
AA-29538	.5	.05
AA-29539	2.5	.95
AA-29540	1.5	.35
AA-29541	2.0	.20
AA-29542	.5	.05
AA-29543	.5	.05
AA-29544	.5	.05
AA-29545	.5	.05
AA-29546	.5	.05
AA-29547	1.5	.05
AA-29548	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29549	.5	.05
AA-29550	.5	.05
AA-29551	.5	.10
AA-29552	.5	.05
AA-29553	.5	.05
AA-29554	.5	.10
AA-29555	.5	.05
AA-29556	.5	.05
AA-29557	.5	.45
AA-29558	18.5	47.50
AA-29559	3.0	34.35
AA-29560	2.0	19.45

* NOTE - GM/TNE = GRAM/TONNE

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PH:253-3158 TELEX:04-53124

DATE RECEIVED SEPT 22 1983

DATE REPORTS MAILED Sept 27/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER [signature] DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-2260 PAGE# 1

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29611	.5	.05
AA-29612	.5	1.55
AA-29613	1.0	4.25
AA-29614	1.5	4.50
AA-29615	.5	.05
AA-29616	2.0	.05
AA-29617	.5	.15
AA-29618	.5	1.10
AA-29619	.5	2.60
AA-29620	.5	68.50
AA-29621	.5	232.10
AA-29622	.5	82.50
AA-29623	.5	117.05
AA-29624	.5	61.50
AA-29625	.5	154.20
AA-29626	.5	5.85
AA-29627	.5	.80
AA-29628	.5	.25
AA-29629	.5	2.80
AA-29630	1.5	3.45
AA-29631	1.5	3.40
AA-29632	.5	.20
AA-29633	1.0	1.70
AA-29634	.5	.25
AA-29635	.5	1.20
AA-29636	2.0	1.70
AA-29637	1.0	.25
AA-29638	.5	.65
AA-29639	.5	.70
AA-29640	.5	.10
AA-29641	3.5	.15
AA-29642	.5	.05
AA-29643	1.5	.15
AA-29644	.5	.05
AA-29645	.5	.05
AA-29646	.5	.05
AA-29647	.5	.10
AA-29648	.5	.65

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29649	.5	.35
AA-29650	.5	6.95
AA-29651	.5	12.30
AA-29652	.5	21.90
AA-29653	.5	2.10
AA-29654	.5	.60
AA-29655	.5	.10
AA-29656	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

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DATE RECEIVED SEPT 21 1983

DATE REPORTS MAILED Oct 3/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER [signature] DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-2237 PAGE# 1

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29657	.5	.10
AA-29658	.5	.05
AA-29659	.5	2.55
AA-29660	.5	.25
AA-29661	.5	.35
AA-29662	.5	.05
AA-29663	.5	.05
AA-29664	1.5	.15
AA-29665	.5	.05
AA-29666	.5	.05
AA-29667	.5	.05
AA-29668	.5	.05
AA-29669	.5	.05
AA-29670	.5	.05
AA-29671	.5	.50
AA-29672	.5	.05
AA-29673	.5	.25
AA-29674	.5	6.15
AA-29675	.5	.45
AA-29676	.5	6.95
AA-29677	.5	4.15
AA-29678	1.5	13.60
AA-29679	.5	4.75
AA-29680	1.0	13.80
AA-29681	.5	5.95
AA-29682	1.0	11.80
AA-29683	1.5	11.55
AA-29684	.5	5.25
AA-29685	.5	.10
AA-29686	.5	.30
AA-29687	.5	.35
AA-29688	.5	.25
AA-29689	.5	2.80
AA-29690	.5	7.20
AA-29691	.5	.50
AA-29692	.5	.05
AA-29693	.5	.15
AA-29694	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29695	.5	.05
AA-29696	.5	.05
AA-29697	.5	.10
AA-29698	5.5	.05
AA-29699	2.5	.30
AA-29700	.5	.05
AA-29701	.5	.20
AA-29702	.5	.05
AA-29703	.5	.05
AA-29704	.5	.05
AA-29705	.5	.05
AA-29706	.5	.05
AA-29707	.5	.50
AA-29708	.5	1.40
AA-29709	.5	7.45
AA-29710	1.5	13.65
AA-29711	3.5	8.75
AA-29712	6.5	8.25
AA-29713	4.0	2.80
AA-29714	7.0	1.90
AA-29715	1.5	1.05
AA-29716	.5	.05
AA-29717	.5	.05
AA-29718	.5	.10
AA-29719	.5	.05
AA-29720	.5	.05
AA-29721	.5	.05
AA-29722	2.0	.15
AA-29723	.5	.15
AA-29724	.5	.10
AA-29725	.5	.40
AA-29726	.5	.20
AA-29727	.5	.25
AA-29728	.5	.40
AA-29729	.5	.15
AA-29730	.5	.30
AA-29731	.5	.10

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29732	.5	.05
AA-29733	3.5	4.60
AA-29734	.5	.10
AA-29735	1.5	.25
AA-29736	.5	.20
AA-29737	.5	.50
AA-29738	.5	.30
AA-29739	.5	.75
AA-29740	.5	1.25
AA-29741	.5	2.25
AA-29742	1.5	1.40
AA-29743	.5	.15
AA-29744	.5	.05
AA-29745	1.5	.80
AA-29746	4.5	1.00
AA-29747	.5	.15
AA-29748	2.0	.35
AA-29749	.5	.05
AA-29750	.5	.10
AA-29751	2.5	.10
AA-29752	.5	.10
AA-29753	.5	.05
AA-29754	1.0	.15
AA-29755	1.0	.10
AA-29756	.5	.10
AA-29757	2.0	.50
AA-29758	.5	.10
AA-29759	.5	.60
AA-29760	.5	2.90
AA-29761	8.5	7.05
AA-29762	1.5	6.60
AA-29763	1.0	4.10
AA-29764	.5	3.20
AA-29765	3.5	13.25
AA-29766	.5	4.10
AA-29767	.5	3.45
AA-29768	2.0	5.85
AA-29769	.5	1.10

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29770	.5	3.40
AA-29771	.5	.50
AA-29772	1.0	.20
AA-29773	.5	.25
AA-29774	.5	.30
AA-29775	.5	.35
AA-29776	1.0	.10
AA-29777	1.5	2.45
AA-29778	1.0	.10
AA-29779	.5	.05
AA-29780	.5	.35
AA-29781	.5	.30
AA-29782	.5	.30
AA-29783	.5	.05
AA-29784	.5	.10
AA-29785	.5	.15
AA-29786	.5	.05
AA-29787	.5	.10
AA-29788	.5	1.25
AA-29789	.5	.80
AA-29790	.5	.15
AA-29791	.5	.65
AA-29792	.5	.05
AA-29793	.5	.10
AA-29794	.5	.05
AA-29795	.5	.05
AA-29796	.5	.05
AA-29797	.5	.05
AA-29798	.5	.05
AA-29799	.5	.05
AA-29800	.5	.05
AA-29801	.5	.05
AA-29802	.5	.05
AA-29803	.5	.05
AA-29804	1.5	.05
AA-29805	.5	.05
AA-29806	.5	.40
AA-29807	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29808	.5	.25
AA-29809	1.5	3.15
AA-29810	.5	1.60
AA-29811	.5	.85
AA-29812	.5	1.05
AA-29813	.5	1.25
AA-29814	.5	.55
AA-29815	.5	.75
AA-29816	.5	.30
AA-29817	1.0	.10
AA-29818	.5	.05
AA-29819	.5	.05
AA-29820	.5	.05
AA-29821	.5	.10
AA-29822	1.5	.10
AA-29823	2.5	.05
AA-29824	.5	.05
AA-29825	1.0	.05
AA-29826	.5	.20
AA-29827	.5	.05
AA-29828	.5	.05
AA-29829	.5	.20
AA-29830	.5	.05
AA-29831	.5	.05
AA-29832	1.5	.05
AA-29833	.5	.95
AA-29834	3.5	4.15
AA-29835	.5	2.15
AA-29836	.5	1.75
AA-29837	4.5	6.30
AA-29838	.5	.75
AA-29839	.5	.45
AA-29840	.5	.15
AA-29841	.5	.30
AA-29842	.5	.10
AA-29843	1.5	.25
AA-29844	.5	.20
AA-29845	.5	.15

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29846	.5	.15
AA-29847	.5	.10
AA-29848	.5	.05
AA-29849	.5	.40
AA-29850	3.0	.20
AA-29851	6.0	.15
AA-29852	11.5	.70
AA-29853	4.0	.30
AA-29854	3.5	.45
AA-29855	.5	.10
AA-29856	.5	.10
AA-29857	.5	.85
AA-29858	4.0	.15
AA-29859	11.5	.70
AA-29860	3.0	1.15
AA-29861	14.5	1.25
AA-29862	4.0	2.20
AA-29863	3.5	2.25
AA-29864	1.0	.45
AA-29865	.5	.10
AA-29866	3.5	.70
AA-29867	.5	.40
AA-29868	.5	.05
AA-29869	1.0	1.05
AA-29870	.5	.05
AA-29871	.5	.05
AA-29872	.5	.15
AA-29873	.5	.05
AA-29874	.5	.05
AA-29875	.5	.05
AA-29876	.5	.20
AA-29877	.5	.05
AA-29878	.5	.10
AA-29879	.5	.05
AA-29880	.5	.05
AA-29881	.5	.20
AA-29882	.5	.05
AA-29883	.5	.05

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29884	.5	.15
AA-29885	.5	.15
AA-29886	.5	.10
AA-29887	.5	.10
AA-29888	1.5	.50
AA-29889	1.0	.40

* NOTE - GM/TNE = GRAM/TONNE

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DATE RECEIVED SEPT 24 1983

DATE REPORTS MAILED Oct 4/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER ______ DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-2292 PAGE# 1

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29561	2.5	13.30
AA-29562	2.0	24.10
AA-29563	.5	13.40
AA-29564	.5	20.10
AA-29565	.5	.10
AA-29566	.5	.10
AA-29567	.5	.05
AA-29568	2.5	.30
AA-29569	.5	.05
AA-29570	.5	.05
AA-29571	.5	.05
AA-29572	.5	.40
AA-29573	.5	.05
AA-29574	.5	.05
AA-29575	.5	.05
AA-29576	.5	.05
AA-29577	.5	.05
AA-29578	.5	.05
AA-29579	.5	.05
AA-29580	.5	.05
AA-29581	.5	.10
AA-29582	1.0	.05
AA-29583	3.5	3.20
AA-29584	1.5	.05
AA-29585	1.0	.05
AA-29586	.5	.05
AA-29587	.5	.20
AA-29588	.5	1.30
AA-29589	.5	.05
AA-29590	1.5	.05
AA-29591	.5	.05
AA-29592	.5	.05
AA-29593	.5	.05
AA-29594	.5	.05
AA-29595	.5	.10
AA-29596	2.5	.10
AA-29597	.5	.05
AA-29598	1.0	.35

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-29599	.5	.65
AA-29600	.5	.30
AA-29601	.5	.60
AA-29602	.5	.20
AA-29603	5.0	60.80
AA-29604	6.5	44.50
AA-29605	12.0	30.20
AA-29606	1.0	.10
AA-29607	.5	2.50
AA-29608	1.5	1.10
AA-29609	1.0	2.25
AA-29610	.5	1.30

* NOTE - GM/TNE = GRAM/TONNE

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DATE RECEIVED SEPT 3 1983

DATE REPORTS MAILED Sept 15/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER [signature] DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-2000 PAGE# 1

SAMPLE	AG PPM	AU* PPB
AA-24041	.3	180
AA-24042	.1	50
AA-24043	.4	55
AA-24044	.1	30
AA-24045	.1	25
AA-24046	.1	40
AA-24047	.2	75
AA-24048	.1	15
AA-24049	.1	10
AA-24050	.3	240
AA-24051	.2	20
AA-24052	.1	10
AA-24053	.1	5
AA-24054	.1	5
AA-24055	.1	15
AA-24056	.1	20
AA-24057	.2	10
AA-24058	.1	80
AA-24059	.1	10
AA-24060	.1	5
AA-24061	.1	20
AA-24062	.1	5
AA-24063	.1	5
AA-24064	.3	5
AA-24065	.1	5
AA-24066	.2	10
AA-24067	.1	5
AA-24068	.1	10
AA-24069	.1	5
AA-24070	.1	5
AA-24071	.4	10
AA-24072	.2	5
AA-24073	.1	5
AA-24074	.1	5
AA-24075	.2	5
AA-24076	.1	5
AA-24077	.3	5

SAMPLE	AG PPM	AU* PPB
AA-24078	.1	25
AA-24079	.3	40
AA-24080	.3	15
AA-24081	.5	10
AA-24082	.5	20
AA-24083	.1	275
AA-24084	.3	200
AA-24085	.1	250
AA-24086	1.0	250
AA-24087	.5	500
AA-24088	.8	500
AA-24089	.4	235
AA-24090	1.2	400
AA-24091	1.1	340
AA-24092	.9	220
AA-24093	.6	540
AA-24094	.9	270
AA-24095	.5	630
AA-24096	.7	530
AA-24097	2.5	1700
AA-24098	4.6	5000
AA-24099	1.3	2400
AA-24100	.9	1060
AA-24101	.8	1080
AA-24102	.7	450
AA-24103	.7	230
AA-24104	.5	240
AA-24105	.3	520
AA-24106	.8	580
AA-24107	.4	220
AA-24108	.8	200
AA-24109	.9	145
AA-24110	.1	130
AA-24111	.2	150
AA-24112	.4	300
AA-24113	.3	510
AA-24114	.1	390

SAMPLE	AG PPM	AU* PPB
AA-24115	2.3	17000
AA-24116	.4	1150
AA-24117	.6	605
AA-24118	.8	750
AA-24119	1.0	945
AA-24120	4.4	3200
AA-24121	.2	575
AA-24122	.4	510
AA-24123	.6	705
AA-24124	.3	595
AA-24125	.4	505
AA-24126	.3	205
AA-24127	.4	295
AA-24128	.2	230
AA-24129	.3	305
AA-24130	.2	280
AA-24131	.1	320
AA-24132	.1	415
AA-24133	.1	220
AA-24134	.1	50
AA-24135	.1	30
AA-24136	.8	870
AA-24137	.3	10
AA-24138	.1	5
AA-24139	.1	10
AA-24140	.3	20
AA-24141	.2	5
AA-24142	.1	20
AA-24143	.2	50
AA-24144	1.2	880
AA-24145	1.1	1180
AA-24146	1.2	9000
AA-24147	2.1	12000
AA-24004	.1	40

ACME ANALYTICAL LABORATORIES LTD.
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DATE RECEIVED SEPT 7 1983

DATE REPORTS MAILED Sept 13/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER __D.Toye__ DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES LTD PROJECT # 03 FILE # 83-2041 PAGE# 1

SAMPLE	AG PPM	AU* PPB
AA-24017	.3	160
AA-24018	.4	360
AA-24021	.8	680
AA-24022	1.3	1650

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED AUG 27 1983

DATE REPORTS MAILED Aug 30/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-1863 PAGE# 1

SAMPLE	AG PPM	AU* PPB
AA-24001	.1	5
AA-24002	.1	5
AA-24003	.3	45
AA-24005	.3	80
AA-24006	.3	525
AA-24007	.1	95
AA-24008	.1	405
AA-24009	.1	865
AA-24010	.3	510
AA-24011	.2	550
AA-24012	.5	305
AA-24013	.3	145
AA-24014	.4	335
AA-24015	.1	985
AA-24016	.4	690
AA-24019	.6	775
AA-24020	.2	355
AA-24023	1.2	960
AA-24024	2.3	1490
AA-24025	2.3	2650
AA-24026	2.4	6600
AA-24027	2.6	6500
AA-24028	2.8	10300
AA-24029	2.6	14600
AA-24030	2.3	10700
AA-24031	2.8	18300
AA-24032	3.2	23100
AA-24033	3.3	30700
AA-24034	1.0	2700
AA-24035	1.4	2100
AA-24036	2.6	2800
AA-24037	1.5	1370
AA-24038	.4	630
AA-24039	.3	175
AA-24040	.3	180

ACME ANALYTICAL LABORATORIES LTD.
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DATE RECEIVED AUG 22 1983
DATE REPORTS MAILED Aug 27/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-1762 PAGE# 1

SAMPLE	AG PPM	AU* PPB
AA-24651	5.9	5400
AA-24652	2.9	410
AA-24653	1.5	225
AA-24654	1.0	300
AA-24655	1.0	280
AA-24656	.8	130
AA-24657	.4	20
AA-24658	1.4	570
AA-24659	.5	135
AA-24660	1.5	520
AA-24661	1.9	1500
AA-24662	1.6	1220
AA-24663	2.6	2840
AA-24664	1.9	1760
AA-24665	1.3	970
AA-24666	.6	280
AA-24667	.7	470
AA-24668	.2	5
AA-24669	.3	5
AA-24670	3.6	15
AA-24671	3.4	10
AA-24672	9.4	10
AA-24673	7.8	25
AA-24674	2.9	20
AA-24675	.3	5
AA-24676	2.9	5
AA-24677	2.9	165
AA-24678	2.6	10
AA-24679	5.9	15
AA-24680	1.8	5
AA-24681	1.0	280
AA-24682	2.5	5100
AA-24683	1.4	520
AA-24684	6.2	415
AA-24685	2.2	35
AA-24686	.6	10
AA-24687	10.3	20

SAMPLE	AG PPM	AU* PPB
AA-24688	.6	5
AA-24689	.3	5
AA-24690	.8	10
AA-24691	.5	155
AA-24692	2.2	1800
AA-24693	1.4	1700
AA-24694	1.6	2200
AA-24695	1.2	925
AA-24696	1.1	990
AA-24697	3.6	1180
AA-24698	5.0	3600
AA-24699	3.2	4500
AA-24700	1.3	795
AA-24701	1.3	1350
AA-24702	1.1	1410
AA-24703	3.1	3300
AA-24704	2.9	3200
AA-24705	1.5	595
AA-24706	1.0	190
AA-24707	1.3	195
AA-24708	10.4	345
AA-24709	4.4	1430
AA-24710	1.5	230
AA-24711	1.5	80
AA-24712	.6	85
AA-24713	1.3	65
AA-24714	1.2	85
AA-24715	.9	75
AA-24716	1.4	90
AA-24717	.6	45
AA-24718	1.2	120
AA-24719	1.3	55
AA-24720	1.0	150
AA-24721	.8	75
AA-24722	.9	135
AA-24723	.3	105
AA-24724	.2	45

SAMPLE	AG PPM	AU* PPB
AA-24725	1.5	45
AA-24726	2.3	50
AA-24727	3.8	35
AA-24728	3.2	50
AA-24729	2.2	95
AA-24730	2.3	5
AA-24731	1.0	20
AA-24732	.8	5
AA-24733	.7	5
AA-24734	1.4	30
AA-24735	.9	5
AA-24736	1.1	5
AA-24737	.4	5
AA-24738	.8	15
AA-24739	.6	5
AA-24740	.4	5
AA-24741	.7	30
AA-24742	1.0	5
AA-24743	1.0	15
AA-24744	.3	5
AA-24745	.6	5
AA-24746	.7	5
AA-24747	1.8	10
AA-24748	1.0	20
AA-24749	1.7	120
AA-24750	7.0	810
AA-24751	34.0	3850
AA-24752	12.8	2650
AA-24753	12.6	1780
AA-24754	.1	5
AA-24755	2.2	15
AA-24756	.8	5
AA-24757	.5	5
AA-24758	.8	5
AA-24759	2.4	40
AA-24760	.2	5
AA-24761	.4	15

SAMPLE	AG PPM	AU* PPB
AA-24762	.1	60
AA-24763	.1	15
AA-24764	.1	50
AA-24765	.1	35
AA-24766	.3	30
AA-24767	.1	20
AA-24768	.1	15
AA-24769	.7	10
AA-24770	.1	5
AA-24771	.1	15
AA-24772	.1	155
AA-24773	.1	90
AA-24774	.1	10
AA-24775	.1	10
AA-24776	.1	5
AA-24777	.1	5
AA-24778	.1	10
AA-24779	.1	10
AA-24780	.1	170
AA-24781	.1	105
AA-24782	.1	40
AA-24783	.1	30
AA-24784	.1	90
AA-24785	.1	95
AA-24786	.1	45
AA-24787	.1	110
AA-24788	.1	85
AA-24789	.1	15
AA-24790	.1	15
AA-24791	.1	20
AA-24792	.1	15
AA-24793	.1	25
AA-24794	4.2	10
AA-24795	.4	15
AA-24796	5.9	280
AA-24797	.7	10
AA-24798	.1	5

SAMPLE	AG PPM	AU* PPB
AA-24799	.2	10
AA-24800	.4	5
AA-24801	.3	5
AA-24802	.4	5
AA-24803	.1	5
AA-24804	.1	5
AA-24805	.1	15
AA-24806	.1	20
AA-24807	.1	10
AA-24808	.3	10
AA-24809	.2	5
AA-24810	.3	15
AA-24811	.2	20
AA-24812	.2	10
AA-24813	.2	15
AA-24814	.1	10
AA-24815	.6	5
AA-24816	.5	5
AA-24817	.1	5
AA-24818	.1	5
AA-24819	.1	5
AA-24820	.2	5
AA-24821	.1	5
AA-24822	.1	5
AA-24823	.1	5
AA-24824	.1	5
AA-24825	.2	5
AA-24826	.4	5
AA-24827	.1	5
AA-24828	.2	5
AA-24829	.1	5
AA-24830	.1	5
AA-24831	.1	5
AA-24832	.1	5
AA-24833	.1	20
AA-24834	.1	10
AA-24835	.2	5

SAMPLE	AG PPM	AU* PPB
AA-24836	.2	5
AA-24837	.1	5
AA-24838	.2	5
AA-24839	.3	5
AA-24840	.1	5
AA-24841	.1	5
AA-24842	.1	5
AA-24843	.4	5
AA-24844	1.1	5
AA-24845	.4	5
AA-24846	.2	5
AA-24847	.5	5
AA-24848	.4	5
AA-24849	.6	5
AA-24850	.4	5

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GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-1751 PAGE# 1

SAMPLE	AG PPM	AU* PPB
AA-24301	.2	40
AA-24302	1.3	60
AA-24303	1.4	70
AA-24304	.2	20
AA-24305	.3	65
AA-24306	.1	60
AA-24307	.4	35
AA-24308	.3	55
AA-24309	.5	135
AA-24310	.2	175
AA-24311	.1	145
AA-24312	.1	90
AA-24313	.4	150
AA-24314	.2	25
AA-24315	.1	85
AA-24316	.3	140
AA-24317	.5	245
AA-24318	1.2	95
AA-24319	3.9	90
AA-24320	.7	260
AA-24321	.6	500
AA-24322	.2	375
AA-24323	1.1	2820
AA-24324	1.3	11200
AA-24325	1.5	3950
AA-24326	.4	3250
AA-24327	.1	135
AA-24328	4.1	85
AA-24329	.3	35
AA-24330	.2	40
AA-24331	.4	125
AA-24332	.3	85
AA-24333	.1	35
AA-24334	.1	105
AA-24335	.1	115
AA-24336	.1	155
AA-24337	.8	1590

SAMPLE	AG PPM	AU* PPB
AA-24338	.3	525
AA-24339	.1	2900
AA-24340	.1	1550
AA-24341	.1	70
AA-24342	1.0	860
AA-24343	.6	5800
AA-24344	3.1	29300
AA-24345	2.0	20600
AA-24390	2.5	12500
AA-24391	2.7	1230
AA-24392	3.3	2050
AA-24393	3.0	1320
AA-24394	1.5	755
AA-24395	1.3	545
AA-24396	1.1	395
AA-24397	1.0	235
AA-24398	1.7	210
AA-24399	2.8	240
AA-24401	2.0	305
AA-24402	1.2	295
AA-24403	1.1	125
AA-24404	.4	45
AA-24405	.4	30
AA-24406	.4	730
AA-24407	.2	50
AA-24408	.6	195
AA-24409	.9	220
AA-24410	.7	350
AA-24411	.8	410
AA-24412	.7	290
AA-24413	.5	55
AA-24414	.6	65
AA-24415	.6	30
AA-24416	1.1	665
AA-24417	.2	35
AA-24418	.5	65

SAMPLE	AG PPM	AU* PPB
AA-24419	.5	15
AA-24420	1.2	355
AA-24421	.6	25
AA-24422	.7	20
AA-24423	.6	140
AA-24424	.3	5
AA-24425	.7	5
AA-24426	.9	5
AA-24427	.8	25
AA-24428	.7	15
AA-24429	.9	20
AA-24430	.5	520
AA-24431	1.0	1600
AA-24432	3.5	8800
AA-24433	4.7	6900
AA-24434	6.6	4500
AA-24435	5.9	3300
AA-24436	4.9	3700
AA-24437	1.6	1450
AA-24438	.8	185
AA-24439	.8	225
AA-24440	.6	980
AA-24441	1.3	47300
AA-24442	.7	60
AA-24443	.3	10
AA-24444	1.3	25
AA-24445	.4	10
AA-24446	.1	5
AA-24447	.9	40
AA-24448	.5	5
AA-24449	.3	5
AA-24450	1.9	50
AA-24451	.6	15
AA-24452	.1	5
AA-24453	.1	15
AA-24454	.1	25
AA-24455	.1	40

SAMPLE	AG PPM	AU* PPB
AA-24456	.5	205
AA-24457	1.2	395
AA-24458	1.1	175
AA-24459	.5	70
AA-24460	1.3	25
AA-24461	6.2	1050
AA-24462	.6	40
AA-24463	.8	295
AA-24464	3.7	735
AA-24465	3.1	640
AA-24466	2.1	325
AA-24467	2.7	405
AA-24468	2.0	325
AA-24469	1.6	210
AA-24470	1.5	110
AA-24471	1.5	95
AA-24472	1.0	780
AA-24473	.5	20
AA-24474	.5	25
AA-24475	1.6	340
AA-24476	1.5	135
AA-24477	.8	20
AA-24478	1.2	255
AA-24479	3.5	685
AA-24480	2.0	1450
AA-24481	2.6	2080
AA-24482	2.6	2160
AA-24483	3.4	3200
AA-24484	2.0	3800
AA-24485	5.1	4300
AA-24486	3.6	4200
AA-24487	2.4	3500
AA-24488	3.4	2500
AA-24489	2.1	2900
AA-24490	.7	1900
AA-24491	1.4	3200
AA-24492	1.9	5700

SAMPLE	AG PPM	AU* PPB
AA-24493	1.6	4100
AA-24494	1.4	3400
AA-24495	1.9	10400
AA-24496	2.6	10500
AA-24497	3.9	7700
AA-24498	2.1	3600
AA-24499	1.9	4200
AA-24500	3.2	10200

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SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

Requested by I Sutherland.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-1625 PAGE# 1

SAMPLE	AG PPM	AU* PPB
AA-27657	1.8	25
AA-27658	2.6	15
AA-27659	2.3	25
AA-27660	.7	5
AA-27661	.5	5
AA-27662	3.1	55
AA-27663	.2	5
AA-27664	1.0	190
AA-27665	4.3	130
AA-27666	5.1	140
AA-27667	4.4	310
AA-27668	5.7	250
AA-27669	5.6	495
AA-27670	7.0	1500
AA-27671	1.9	170
AA-27672	.4	55
AA-27673	.5	160
AA-27674	.4	15
AA-27675	.7	15
AA-27676	.7	5
AA-27677	.9	15
AA-27678	.3	20
AA-27679	.5	310
AA-27680	.1	5
AA-27681	.2	5
AA-27682	.1	5
AA-27683	.7	15
AA-27684	.3	340
AA-27685	2.6	7200
AA-27686	.1	205
AA-27687	1.1	950
AA-27688	.1	15
AA-27689	.1	10
AA-27690	.4	30
AA-27691	.6	15
AA-27692	.2	25
AA-27693	.3	5

SAMPLE	AG PPM	AU* PPB
AA-27694	.6	5
AA-27695	1.3	80
AA-27696	1.2	165
AA-27697	.6	60
AA-27698	.9	80
AA-27699	.7	20
AA-27700	2.5	160
AA-27701	4.0	2380
AA-27702	4.5	1900
AA-27703	1.1	525
AA-27704	1.0	60
AA-27705	.7	55
AA-27706	.4	15
AA-27707	.3	40
AA-27708	6.8	175
AA-27709	2.3	150
AA-27710	2.4	260
AA-27711	2.1	115
AA-27712	1.8	2400
AA-27713	2.9	5100
AA-27714	.3	15
AA-27715	.8	65
AA-27716	.6	65
AA-27717	.6	20
AA-27718	.9	15
AA-27719	1.5	15
AA-27720	1.9	40
AA-27721	16.3	2420
AA-27722	10.8	13800
AA-27723	61.0	8550
AA-27724	26.4	400
AA-27725	44.5	290
AA-27726	25.8	200
AA-27727	33.4	120
AA-27728	115.0	1080
AA-27729	50.0	440
AA-27730	4.4	195

SAMPLE	AG PPM	AU* PPB
AA-27731	2.3	45
AA-27732	1.9	160
AA-27733	2.1	20
AA-27734	1.5	930
AA-27735	2.5	10
AA-27736	2.3	185
AA-27737	1.0	10
AA-27738	.7	5
AA-27739	2.6	5
AA-27740	1.8	5
AA-27741	1.2	5
AA-27742	1.7	5
AA-27743	.8	5
AA-27744	1.8	135
AA-27745	1.2	5
AA-27746	.5	5
AA-27747	.8	5
AA-27748	.9	10
AA-27749	1.3	40
AA-27750	.6	30
AA-27751	1.2	35
AA-27752	.7	10
AA-27753	.2	5
AA-27754	.3	5
AA-27755	1.2	15
AA-27756	2.2	55
AA-27757	1.1	45
AA-27758	.4	5
AA-27759	.5	10
AA-27760	.3	25
AA-27761	.6	325
AA-27762	2.1	275
AA-27763	2.2	345
AA-27764	.5	15
AA-27765	.8	20
AA-27766	2.5	25
AA-27767	1.8	350

SAMPLE	AG PPM	AU* PPB
AA-27768	.9	45
AA-27769	.9	25
AA-27770	.4	5
AA-27771	.7	15
AA-27772	1.5	30
AA-27773	2.4	5
AA-27774	.4	5
AA-27775	.3	5
AA-27777	1.2	20
AA-27778	2.2	25
AA-27779	2.5	20
AA-27780	8.8	80
AA-27781	1.2	50
AA-27782	2.5	55
AA-27783	1.5	25
AA-27784	3.6	415
AA-27785	8.6	350
AA-27786	83.0	6150
AA-27787	.7	85
AA-27788	1.0	90
AA-27789	2.1	30
AA-27790	.8	35
AA-27791	.3	45
AA-27792	2.9	10
AA-27793	1.5	15
AA-27794	.5	10
AA-27795	.6	20
AA-27796	.5	10
AA-27797	2.7	15
AA-27798	.5	15
AA-27799	.4	15

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ASSAYER D Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-1696 PAGE# 1

SAMPLE	AG PPM	AU* PPB
AA-27800	.2	170
AA-27801	.2	35
AA-27802	2.2	140
AA-27803	.1	240
AA-27804	.2	20
AA-27805	.2	150
AA-27806	.1	15
AA-27807	.6	25
AA-27808	.4	125
AA-27809	.3	60
AA-27810	.7	540
AA-27811	.4	45
AA-27812	.6	50
AA-27813	.6	170
AA-27814	7.1	10400
AA-27815	1.6	2450
AA-27816	19.5	5450
AA-27817	7.8	3600
AA-27818	4.5	4740
AA-27819	.8	450
AA-27820	.4	205
AA-27821	.1	35
AA-27822	.1	30
AA-27823	.1	130
AA-27824	.6	1690
AA-27825	.5	4270
AA-27826	.3	320
AA-27827	.1	70
AA-27828	3.6	1800
AA-27829	2.4	7650
AA-27830	1.9	14800
AA-27831	1.4	4440
AA-27832	.7	1950
AA-27833	.6	3680
AA-27834	1.4	2950
AA-27835	.2	370
AA-27836	1.8	40

SAMPLE	AG PPM	AU* PPB
AA-27837	1.1	105
AA-27838	2.9	15
AA-27839	.8	55
AA-27840	.2	10
AA-27841	1.1	2100
AA-27842	.3	20
AA-27843	.1	30
AA-27844	.1	75
AA-27845	.1	320
AA-27846	.3	380
AA-27847	.1	35
AA-27848	1.6	15
AA-27849	1.8	20
AA-27850	.2	5
AA-27851	.1	5
AA-27852	.4	5
AA-27853	.1	5
AA-27854	.8	25
AA-27855	34.0	2300
AA-27856	7.5	480
AA-27857	20.0	1150
AA-27858	.2	10
AA-27859	.2	10
AA-27860	2.8	5
AA-27861	.2	5
AA-27862	.6	10
AA-27864	.1	5
AA-27865	.1	5
AA-27866	.1	5
AA-27867	.2	5
AA-27868	.1	20
AA-27869	1.2	5
AA-27870	.5	40
AA-27871	.3	60
AA-27872	.4	45
AA-27873	.1	50
AA-27874	1.1	55

SAMPLE	AG PPM	AU* PPB
AA-27875	.6	50
AA-27876	.4	55
AA-27877	.7	215
AA-27878	.5	105
AA-27879	.2	45
AA-27880	.2	35
AA-27881	.1	45
AA-27882	.6	65
AA-27883	.3	50
AA-27884	3.5	345
AA-27885	.6	150
AA-27886	1.1	205
AA-27887	.7	195
AA-27888	7.4	3900
AA-27889	4.6	2200
AA-27890	7.7	16500
AA-27891	4.6	2300
AA-27892	8.8	3500
AA-27893	31.0	10200
AA-27894	16.0	2600
AA-27895	3.8	675
AA-27896	6.2	395
AA-27897	3.7	1600
AA-27898	2.0	710
AA-27899	2.9	5800
AA-27900	2.2	1350
AA-27901	5.3	965
AA-27902	.8	390
AA-27903	.1	105
AA-27904	.6	115
AA-27905	.2	65
AA-27906	4.3	1600
AA-27907	4.8	2400
AA-27908	5.1	1500
AA-27909	4.8	1050
AA-27910	10.0	1650
AA-27911	3.8	1620

SAMPLE	AG PPM	AU* PPB
AA-27912	5.8	235
AA-27913	8.1	390
AA-27914	2.6	535
AA-27915	3.5	670
AA-27916	2.5	760
AA-27917	2.2	1230
AA-27918	1.8	640
AA-27919	.8	170
AA-27920	3.0	730
AA-27921	.2	10
AA-27922	.2	35
AA-27923	.3	10
AA-27924	70.0	10
AA-27925	.4	5
AA-27926	.7	5
AA-27927	.1	5
AA-27928	25.7	90
AA-27929	8.6	50
AA-27930	.2	20
AA-27931	1.1	10
AA-27932	.4	15
AA-27933	1.4	5
AA-27934	.3	5
AA-27935	.5	10
AA-27936	.2	55
AA-27937	.3	25
AA-27938	.2	20
AA-27939	.1	5
AA-27940	.2	5
AA-27941	.2	100
AA-27942	.4	20
AA-27943	.1	70
AA-27944	.2	185
AA-27945	.3	45
AA-27946	.2	30
AA-27947	.1	100
AA-27948	.1	45

SAMPLE	AG PPM	AU* PPB
AA-27949	.6	260
AA-27950	.2	115
AA-27951	.3	55
AA-27952	.7	65
AA-27953	1.2	55
AA-27954	2.5	85
AA-27955	.9	450
AA-27956	.9	605
AA-27957	2.4	395
AA-27958	.7	295
AA-27959	1.8	260
AA-27960	6.8	5300
AA-27961	2.9	1760
AA-27962	.5	150
AA-27963	.7	190
AA-27964	2.8	260
AA-27965	1.4	235
AA-27966	1.3	250
AA-27967	1.1	105
AA-27968	.6	85
AA-27969	.6	120
AA-27970	.5	65
AA-27971	.6	75
AA-27972	.5	125
AA-27973	.5	60
AA-27974	.2	75
AA-27975	.2	50
AA-27976	.3	105
AA-27977	.4	60
AA-27978	.3	65
AA-27979	.3	75
AA-27980	.5	55
AA-27981	.2	60
AA-27982	.3	95
AA-27983	.2	85
AA-27984	.9	165
AA-27985	.8	365

SAMPLE	AG PPM	AU* PPB
AA-27986	.2	135
AA-27987	.1	105
AA-27988	.1	85
AA-27989	.2	120
AA-27990	.8	230
AA-27991	.1	140
AA-27992	.1	35
AA-27993	.1	50
AA-27994	.1	70
AA-27995	.1	15
AA-27996	.1	20
AA-27997	.1	10
AA-27998	.1	15
AA-27999	.2	25
AA-28000	.1	15

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED AUG 10 1983

DATE REPORTS MAILED Aug 22/83

ASSAY CERTIFICATE

SAMPLE TYPE : PULP Re Run

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # RE: 83-1553 PAGE# 1

SAMPLE	AG GM/TNE	AU GM/TNE
AA-24346	3.5	5.90
AA-24347	2.0	17.20
AA-24348	2.5	4.50
AA-24349	3.0	6.00
AA-24350	2.0	13.10
AA-24351	.5	11.60
AA-24352	1.0	3.05
AA-24353	1.0	37.60
AA-24354	1.5	3.30
AA-24355	.5	13.60
AA-24356	2.5	11.80
AA-24357	1.5	5.25
AA-24358	1.0	1.80
AA-24359	.5	1.15
AA-24360	.5	1.30
AA-24361	2.0	4.00
AA-24362	.5	5.30
AA-24363	2.0	47.70
AA-24364	11.0	136.20
AA-24365	2.5	32.70
AA-24366	2.5	26.90
AA-24367	5.0	57.10
AA-24368	4.0	34.30
AA-24369	4.5	80.30
AA-24370	3.5	60.40
AA-24371	4.5	63.10
AA-24372	6.5	76.40
AA-24373	5.0	90.50
AA-24374	10.5	94.80
AA-24375	5.0	36.90
AA-24376	3.0	9.20
AA-24377	2.5	6.95
AA-24378	3.0	3.05
AA-24379	.5	4.75
AA-24380	.5	12.30
AA-24381	.5	8.05
AA-24382	1.0	8.10
AA-24383	.5	8.30

* NOTE - GM/TNE = GRAM/TONNE

SAMPLE	AG GM/TNE	AU GM/TNE
AA-24384	.5	7.75
AA-24385	.5	8.45
AA-24386	.5	4.90
AA-24387	.5	4.95
AA-24388	1.5	10.95
AA-24389	1.0	3.55
AA-24400	.5	4.05

* NOTE - GM/TNE = GRAM/TONNE

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
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DATE RECEIVED OCT 27 1983

DATE REPORTS MAILED Nov 4/83

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.
SAMPLE TYPE - ROCK CHIPS

ASSAYER [signature] DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES FILE # 83-2721 PAGE# 1

SAMPLE	CU ppm	PB ppm	ZN ppm	AG ppm	Au* ppb
AA-26765	16	4	42	.7	10
AA-26766	11	5	46	1.5	15
AA-26767	33	10	26	73.8	280
AA-26768	19	7	15	11.5	40
AA-26876	3	3	61	.4	5
AA-26877	1	7	58	.5	5
AA-26878	6	7	33	.4	5
AA-26879	2	3	50	.3	5
AA-26880	13	10	43	.2	5
AA-26881	6	5	77	.2	5
AA-26882	4	9	72	.2	5
AA-26883	1	7	35	.1	5
AA-26884	6	6	42	.3	5
STD A-1	31	39	179	.3	-

ACME ANALYTICAL LABORATORIES LTD.
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DATE RECEIVED JULY 5 1983

DATE REPORTS MAILED July 9/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.
AU OZ/TON RUN BY FIRE ASSAY

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK PROJECT# 03 FILE # 83-1063 PAGE# 1

SAMPLE	AG PPM	AU* PPB	AU** OZ/TON
AA-26751	.6	-	.069
AA-26752	.3	480	-
AA-26753	8.4	-	2.110
AA-26754	1.4	950	-
AA-26755	1.4	540	-
AA-26756	.5	540	-
AA-26757	.2	-	.054
AA-26758	1.2	-	.118
AA-26759	.1	345	-
AA-26760	.4	665	-
AA-26761	.8	-	.061
AA-26762	1.3	-	.164
AA-26763	.1	70	-
AA-26764	3.2	255	-

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH:253-3158 TELEX:04-53124

ASSAY CERTIFICATE

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
SAMPLE TYPE - ROCK CHIPS

DATE RECEIVED SEPT 26 1983 DATE REPORTS MAILED Sept 29/83 ASSAYER D Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK FILE # 83-2323 PAGE # 1

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sn PPM	Au g/t
AA-26769	19	42	39	1	.9	1	2	27	.28	31	2	47	2	124	1	19	3	2	.01	.01	3	10	.01	3336	.01	2	.04	.01	.01	2	8	69.50
AA-26770	40	5453	94	57	3.5	1	1	21	.35	1635	2	96	2	149	1	398	32	10	.01	.01	4	9	.01	1974	.01	2	.04	.01	.01	2	78	106.21
AA-26771	33	7084	53	95	6.1	1	1	16	.29	714	2	226	2	147	1	268	14	6	.01	.01	5	10	.01	891	.01	2	.04	.01	.01	2	40	277.10
AA-26772	19	71	27	1	1.1	1	2	19	.25	26	2	79	2	106	1	11	2	2	.01	.01	2	10	.01	3128	.01	2	.06	.01	.01	2	2	154.90
AA-26773	6	53	31	3	.8	1	2	28	.31	16	2	46	2	137	1	10	2	2	.01	.01	3	11	.01	3367	.01	2	.04	.01	.01	2	2	65.10
AA-26774	6	15	31	4	4.7	1	2	25	.34	9	2	52	2	110	1	8	2	2	.01	.01	2	10	.01	3275	.01	2	.06	.01	.01	2	2	91.10
AA-26775	10	67	62	2	.1	1	2	30	.36	23	2	12	2	131	1	26	2	2	.01	.01	2	10	.01	3557	.01	2	.04	.01	.01	2	4	2.50
AA-26776	5	21	52	1	.8	1	2	22	.24	10	2	69	2	144	1	13	2	2	.01	.01	3	10	.01	3413	.01	11	.04	.01	.01	2	5	124.80
AA-26777	15	29	72	6	3.0	1	3	35	.42	16	2	63	2	150	1	9	2	4	.01	.02	3	11	.01	3349	.01	8	.05	.01	.01	2	2	91.70
AA-26778	2206	1428	152	1592	18.8	1	1	16	1.22	8557	2	181	2	73	28	2598	307	25	.01	.16	3	11	.01	79	.01	2	.06	.01	.01	2	228	174.27
AA-26779	17	603	35	13	1.4	2	3	30	.35	66	2	82	2	119	1	37	4	2	.01	.01	2	12	.01	3316	.01	2	.04	.01	.01	2	2	77.30
AA-26780	14	686	26	16	.5	2	2	27	.31	109	2	89	2	131	1	41	3	2	.01	.01	3	11	.01	3062	.01	10	.04	.01	.01	2	2	46.80
AA-26781	20	97	58	7	3.5	1	3	37	.45	105	2	153	2	117	1	36	4	2	.01	.01	3	13	.01	3463	.01	2	.07	.01	.02	2	2	261.10
AA-26782	17	141	46	2	1.9	1	2	21	.28	85	2	45	2	133	1	45	9	2	.01	.01	3	10	.01	3466	.01	14	.04	.01	.01	2	2	54.05
AA-26783	17	125	64	2	1.5	1	2	22	.30	93	2	52	2	123	1	44	29	2	.01	.01	3	10	.01	3537	.01	2	.04	.01	.01	2	10	24.60
AA-26784	30	117	30	1	1.2	1	2	20	.24	76	2	59	2	129	1	88	18	2	.01	.01	3	9	.01	3533	.01	9	.03	.01	.01	2	27	111.47
AA-26785	37	534	40	4	1.0	1	2	24	.32	445	2	16	2	135	1	135	9	2	.01	.01	3	10	.01	3460	.01	4	.04	.01	.01	2	22	44.80
AA-26786	23	68	93	14	2.4	2	2	41	.56	26	2	34	2	122	1	16	4	8	.01	.02	2	12	.01	3590	.01	8	.10	.01	.02	2	2	55.80
AA-26787	16	41	71	2	.3	1	2	27	.35	27	2	7	2	145	1	12	2	2	.01	.01	4	10	.01	3089	.01	9	.07	.01	.01	2	2	19.55
AA-26788	14	28	53	1	3.1	1	2	20	.25	16	2	545	2	143	1	17	2	2	.01	.01	5	9	.01	3373	.01	9	.03	.01	.01	2	2	750.51
AA-26789	13	72	63	23	13.1	2	3	92	.81	30	2	297	2	99	1	13	3	11	.01	.02	2	13	.01	3173	.01	10	.13	.01	.02	2	2	775.10
AA-26790	17	187	55	3	.9	1	2	24	.34	253	2	24	2	138	1	90	28	2	.01	.01	4	10	.01	3122	.01	10	.04	.01	.01	2	16	47.90
AA-26791	18	1313	60	24	.9	1	1	29	.26	313	2	50	2	153	1	145	65	6	.01	.01	5	10	.01	2403	.01	16	.04	.01	.01	2	75	63.50
AA-26792	48	16712	97	739	4.4	1	1	21	.43	3296	2	34	2	116	11	1336	110	15	.01	.02	4	9	.01	387	.01	11	.04	.01	.01	2	597	44.30
AA-26793	11	194	62	30	.4	1	2	26	.31	56	2	52	2	150	1	31	4	2	.01	.01	4	10	.01	3060	.01	10	.04	.01	.01	2	6	57.10
AA-26794	56	13169	70	160	7.4	1	1	15	.40	1629	2	106	2	145	3	526	35	11	.01	.02	6	7	.01	486	.01	12	.03	.01	.01	2	81	221.05
AA-26795	140	7282	65	105	6.2	1	1	16	.35	880	2	224	2	168	1	307	11	4	.01	.02	7	10	.01	970	.01	7	.03	.01	.01	2	72	247.10
AA-26796	15	251	70	4	.8	1	2	24	.34	166	2	47	2	139	1	57	10	2	.01	.01	4	10	.01	3189	.01	2	.04	.01	.01	2	24	22.10
STD A-1	1	30	38	186	.3	36	13	1016	2.81	9	2	40	2	38	1	2	2	58	.58	.10	7	72	.73	275	.08	9	2.06	.02	.21	2	2	-

Au + 10,000 require regular Assay
Sb 1,000 " " "

↑ may be suspect.

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED SEPT 12 1983
DATE REPORTS MAILED Sept 16/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H20 AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : SOIL - DRIED AT 60 DEG C., -80 MESH, PULVERIZED.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER [signature] DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES LTD PROJECT # 03 FILE # 83-2104 PAGE# 1

SAMPLE	AG PPM	AU* PPB
SD-01800	.5	20
SD-01801	.3	10
SD-01802	.4	70
SD-01803	.5	5
SD-01804	.4	5
SD-01805	.3	5
SD-01806	.3	20
SD-01807	.3	5
SD-01808	.6	5
SD-01809	.2	5
SD-01810	.5	5
SD-01811	.4	15
SD-01812	.4	10
SD-01813	.8	20
SD-01814	.5	135
SD-01815	.6	10
SD-01816	.4	5
SD-01817	.3	5
SD-01818	.4	345
SD-01819	.3	250
SD-01820	.3	495
SD-01821	.4	390
SD-01822	.5	485
SD-01823	.3	240
SD-01824	.4	385
SD-01825	1.2	10
SD-01826	.4	40
SD-01827	.5	5
SD-01828	.3	140
SD-01829	.5	95
SD-01830	.7	30
SD-01831	.5	35
SD-01832	.4	70
SD-01833	.4	25
SD-01834	.9	45
SD-01835	.7	5
SD-01836	.4	5

SAMPLE	AG PPM	AU* PPB
SD-01837	.6	5
SD-01838	.5	5
SD-01839	.3	5
SD-01840 P	1.2	5
SD-01841 P	1.6	5
SD-01842 P	1.3	5
SD-01843	1.1	5
SD-01844	.8	5
SD-01845	1.2	5
SD-01846	1.0	5
SD-01847	.7	5
SD-01848	.8	5
SD-01849	.2	5
SD-01850	.5	5
SD-01851	.4	5
SD-01852	.3	5
SD-01853	.1	5
SD-01854	.1	5
SD-01855	.2	110
SD-01856	.7	5
SD-01857	.3	35
SD-01858	.4	20
SD-01859	.7	5
SD-01860	.4	210
SD-01861	.3	70
SD-01862	.4	105
SD-01863	.8	30
SD-01864	.4	80
SD-01865	.6	10
SD-01866	.3	60
SD-01867	.3	120

ACME ANALYTICAL LABORATORIES LTD.
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DATE RECEIVED SEPT 21 1983
DATE REPORTS MAILED Sept 29/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H20 AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : SOIL - DRIED AT 60 DEG C., -80 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-2239 PAGE# 1

SAMPLE	AG PPM	AU* PPB
SD-00543	.4	10
SD-00544	.5	250
SD-00545	.3	90
SD-00546	.3	5
SD-00547	.1	455
SD-00548	.2	5
SD-00549	.4	20
SD-00550	.1	5
SD-00551	.1	5
SD-00552	.1	5
SD-00553	.1	45
SD-00554	.1	10
SD-00555	.1	5
SD-00556	.1	5
SD-00557	.1	5
SD-00558	.3	5
SD-00559	.4	20
SD-00560	.4	5
SD-00561	.2	5
SD-00562	.1	15
SD-00563	.2	30
SD-00564	.5	5
SD-00565	.4	40
SD-00566	.4	20
SD-00567	.1	10
SD-00568	.8	225
SD-00569	.6	25
SD-00570	.1	15
SD-00571	.2	5
SD-00572	.3	50
SD-00573	.1	10
SD-00574	.1	10
SD-00575	.2	40
SD-00576	.4	10
SD-00577	.3	45
SD-00578	.2	5
SD-00579	.3	225

SAMPLE	AG PPM	AU* PPB
SD-00580	.2	5
SD-00581	.5	15
SD-00582	.4	30
SD-00583	.4	20
SD-00584	.2	5
SD-00585	.2	25
SD-00586	.4	5
SD-00587	.2	35
SD-00588	.1	5
SD-00589	.2	20
SD-00590	.1	5
SD-00591	.1	5
SD-00592	.1	35
SD-00593	.1	90
SD-00594	.2	5
SD-00595	.3	5
SD-00596	.1	5
SD-00597	.1	35
SD-00598	.1	20
SD-00599	.1	120
SD-00600	.4	10
SD-00601	.2	5
SD-00602	.5	35
SD-00603	.1	35
SD-00604	.1	10
SD-00605	.1	10
SD-00606	.1	5
SD-00607	.1	5
SD-00608	.1	140
SD-00609	.1	310
SD-00610	.1	30
SD-00611	.1	5
SD-00612	.1	25
SD-00613	.1	10
SD-00614	.1	325
SD-00615	.1	75
SD-00616	.3	25

SAMPLE	AG PPM	AU* PPB
SD-00617	.4	240
SD-00618	.3	95
SD-00619	.6	25
SD-00620	.3	70
SD-00621	.3	35
SD-00623	.3	15
SD-00624	.4	20
SD-00625	.1	25
SD-00626	.4	1300
SD-00627	.2	30
SD-00628	.2	25
SD-00629	.3	165
SD-00630	.6	130
SD-00631	.4	115
SD-00632	.2	10
SD-00633	.3	75
SD-00634	.1	25
SD-00635	.2	80
SD-00636	.2	130
SD-00637	.4	25
SD-00638	.3	45
SD-00639	.5	20
SD-00640	.2	15
SD-00641	.4	45
SD-00642	.1	25
SD-00643	.2	525
SD-00644	.2	60
SD-00645	.3	30
SD-00646	.3	25
SD-00647	.2	235
SD-00648	.6	210
SD-00649	.8	395
SD-01052	.3	10
SD-01053	.1	5
SD-01054	.5	5
SD-01055	.7	10

SAMPLE	AG PPM	AU* PPB
SD-01056	.4	65
SD-01057	.5	20
SD-01058	.1	5
SD-01059	.2	5
SD-01060	.3	95
SD-01061	.1	15
SD-01062	.1	20
SD-01063	.2	5
SD-01064	.2	5
SD-01065	.6	30
SD-01066	.1	5
SD-01067	.5	5
SD-01068	.3	20
SD-01069	.3	5
SD-01070	.1	5
SD-01071	.1	5
SD-01072	.1	5
SD-01073	.3	5
SD-01074	.1	5
SD-01075	.1	5
SD-01076	1.0	10
SD-01077	.2	15
SD-01078	.1	5
SD-01079	.1	5
SD-01080	.1	5
SD-01081	.1	5
SD-01082	.1	5
SD-01083	.2	40
SD-01084	.3	10
SD-01085	.3	5
SD-01086	.2	10
SD-01087	.3	45
SD-01088	.3	195
SD-01089	.3	5
SD-01090	.1	5
SD-01091	.1	10
SD-01092	.4	5

SAMPLE	AG PPM	AU* PPB
SD-01093	.3	5
SD-01094	.5	5
SD-01095	.5	5
SD-01096	.4	30
SD-02241	.2	95
SD-02242	.1	5
SD-02243	.5	600
SD-02244	.4	25
SD-02245	.3	115
SD-02246	.3	40
SD-02247	.3	5
SD-02248	.2	10
SD-02249	.1	10
SD-02250	.4	10
SD-02251	.1	70
SD-02252	.3	20
SD-02253	.3	20
SD-02254	.2	45
SD-02255	.1	5
SD-02256	.2	20
SD-02257	.4	5
SD-02258	.4	5
SD-02259	.5	5
SD-02260	.3	125
SD-02261	.2	5
SD-02262	.6	5
SD-03101	.7	5
SD-03102	.3	5
SD-03103	.4	5
SD-03104	.5	5
SD-03105	.3	5
SD-03106	.4	5
SD-03107	.6	5
SD-03108	.5	5
SD-03109	.6	5
SD-03110	.4	5

SAMPLE	AG PPM	AU* PPB
SD-03111	.4	5
SD-03112	.5	15
SD-03113	.4	5
SD-03114	.2	5
SD-03115	.3	5
SD-03116	.5	5
SD-03117	.4	5

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED SEPT 21 1983

DATE REPORTS MAILED Sept 27/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : SOIL - DRIED AT 60 DEG C., -80 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-2238

SAMPLE	AG PPM	AU* PPB
SD-01097	.7	5
SD-01098	.5	5
SD-01099	1.2	20
SD-01100	.7	10
SD-01101	.9	5
SD-01102	.7	5
SD-01103	.5	5
SD-01104	.4	35
SD-01105	.6	5
SD-01106	.6	5
SD-01107	.5	5
SD-01108	.9	5
SD-01109	.7	5
SD-01110	.7	10
SD-01111	.2	5
SD-01112	.6	5
SD-01113	.4	5
SD-01114	.5	5
SD-01115	.6	5
SD-01116	.9	5
SD-01117	.7	5
SD-01118	.9	5
SD-01119	.4	5
SD-01120	.2	20
SD-01121	.5	30
SD-01122	.5	25
SD-01123	.9	50
SD-01124	.6	20
SD-01125	.5	10
SD-01126	.5	5
SD-01127	1.1	5
SD-01128	.9	5
SD-01129	.5	5
SD-01130	.8	5
SD-01131	.5	5
SD-01132	.4	5
SD-01133	.5	5

SAMPLE	AG PPM	AU* PPB
SD-01134	.5	5
SD-01135	1.4	5
SD-01136	.7	5
SD-01137	.4	5
SD-01138	.4	5
SD-01139	.5	5
SD-01140	.4	5
SD-01141	.5	5
SD-01142	.4	5
SD-01143	.5	5
SD-01144	.6	5
SD-01145	.2	5
SD-01146	.1	5
SD-01147	.6	5
SD-01148	.9	5
SD-01149	.5	5
SD-01150	.5	5
SD-01151	.6	635
SD-01152	.8	5
SD-01153	.6	5
SD-02263	.5	5
SD-02264	.4	5
SD-02265	.3	10
SD-02266	1.1	10
SD-02267	.5	5
SD-02268	.3	5
SD-02269	.2	5
SD-02270	.1	5
SD-02271	.3	10
SD-02272	.6	5
SD-02273	.5	5
SD-02274	.2	5
SD-02275	.1	5
SD-02276	.2	5
SD-02277	.3	5
SD-02278	.4	5
SD-02279	.3	5

SAMPLE	AG PPM	AU* PPB
SD-02280	.3	5
SD-02281	.3	5
SD-02282	.3	10
SD-02283	.8	5
SD-02284	.4	5
SD-02285	.1	5
SD-02286	.4	5
SD-02287	.1	5
SD-02288	.5	30
SD-02289	.4	10
SD-02290	.4	5
SD-02291	1.0	110
SD-02292	.3	5
SD-02293	.5	5
SD-02294	.4	10
SD-02295	.3	35
SD-02296	.6	15
SD-02297	.3	10
SD-02298	1.0	25
SD-02299	.4	5
SD-02300	.2	5
SD-02301	.4	15
SD-02302	.5	5
SD-02303	1.2	110
SD-02304	.1	150
SD-02305	.2	15
SD-02306	.3	225
SD-02307	.1	175
SD-02308	.2	30
SD-02309	.5	25
SD-02310	.6	10
SD-02311	.4	1100
SD-02312	.4	480
SD-02313	.5	75
SD-02314	.3	145
SD-02315	.2	25
SD-02316	.3	2100

SAMPLE	AG PPM	AU* PPB
SD-02317	.3	5
SD-02318	.3	5
SD-02319	.1	60
SD-02320	.3	80
SD-02321	.2	10
SD-02322	.5	5
SD-02323	.9	5
SD-02324	.5	5
SD-02325	.6	5
SD-02326	.3	5
SD-02327	.4	5
SD-02328	.4	15
SD-02329	.8	20
SD-02330	.7	225
SD-02331	.2	70
SD-02332	.8	65
SD-02333	.8	10
SD-02334	1.1	35
SD-02335	1.0	30
SD-02336	1.1	5
SD-02337	.7	5
SD-02338	.6	35
SD-02339	.1	10
SD-02340	.3	5
SD-02341	.5	40
SD-02342	.4	95
SD-02343	.7	25
SD-02344	1.1	10
SD-02345	1.0	10
SD-02346	.7	5
SD-02347	.3	25
SD-02348	.5	15
SD-02349	.1	10
SD-02350	.1	15
SD-02351	.5	5
SD-02352	.4	5
SD-02353	1.0	5

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED JULY 25 1983
DATE REPORTS MAILED July 29/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : SOIL - DRIED AT 60 DEG C., -80 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES FILE # 83-1342 PROJECT # 03 PAGE# 1

SAMPLE	AG PPM	AU* PPB
SD-02071	.1	380
SD-02072	.2	70
SD-02073	.3	5
SD-02074	.1	5
SD-02075	.3	150
SD-02076	.3	3300
SD-02077	.3	60
SD-02078	.8	85
SD-02079	.4	160
SD-02080	2.3	1500
SD-02081	.5	15
SD-02082	.4	25
SD-02083	.3	5
SD-02084	.4	5
SD-02085	.4	5
SD-02086	.2	5
SD-02087	.8	5
SD-02088	.2	20
SD-02089	.5	10
SD-02090	1.1	10
SD-02091	.5	20
SD-02092	.4	5
SD-02093	1.1	5
SD-02094	.4	5
SD-02095	1.1	5
SD-02096	.6	5
SD-02097	.3	10
SD-02098	.2	5
SD-02099	.4	15
SD-02100	.2	5
SD-02101	.4	5
SD-02102	.4	5
SD-02103	.7	5
SD-02104	.7	5
SD-02105	.5	5
SD-02106	.2	10
SD-02107	.3	15

SAMPLE	AG PPM	AU* PPB
SD-02109	.1	5
SD-02110	.3	5
SD-02111	.6	5
SD-02112	.6	5
SD-02113	.4	105
SD-02114	.3	5
SD-02115	.1	5
SD-02116	.2	5
SD-02117	.2	5
SD-02118	.1	5
SD-02119	.1	5
SD-02120	.2	10
SD-02121	.3	5
SD-02122	.4	5
SD-02123	.2	5
SD-02124	.4	5
SD-02125	.2	5
SD-02126	.1	5
SD-02127	.1	5
SD-02128	.3	5
SD-02129	.3	5
SD-02130	.3	5
SD-02131	.3	5
SD-02132	.3	5
SD-02133	.1	5
SD-02134	.1	5
SD-02135	.1	5
SD-02136	.2	5
SD-02137	.2	5
SD-02138	.1	5
SD-02139	.2	5
SD-02140	.2	5
SD-02141	.3	5
SD-02142	.3	5
SD-02143	.5	5
SD-02144	.9	75
SD-02145	1.0	5

SAMPLE	AG PPM	AU* PPB
SD-02146	.5	10
SD-02147	.3	90
SD-02148	.5	25
SD-02149	.7	15
SD-02150	.9	10
SD-02151	.4	5
SD-02152	.5	5
SD-02153	.6	15
SD-02154	.5	5
SD-02155	.4	25
SD-02156	.5	10
SD-02157	.4	895
SD-02158	.7	60
SD-02159	.5	10
SD-02160	.1	25
SD-02161	.3	20
SD-02162	.4	10
SD-02163	.1	15
SD-02164	.4	5
SD-02909	.3	5
SD-02910	.1	5
SD-02911	.2	15
SD-02912	.2	5
SD-02913	.4	5
SD-02914	.4	5
SD-02915	.8	5
SD-02916	.3	15
SD-02917	.3	20
SD-02918	.3	35
SD-02919	.1	30
SD-02920	.1	10
SD-02921	.2	10
SD-02922	.1	15
SD-02923	.3	5
SD-02924	.3	5
SD-02925	.1	5
SD-02926	.1	5

SAMPLE	AG PPM	AU* PPB
SD-02927	.4	5
SD-02928	.9	35
SD-02929	.2	5
SD-02930	.3	125
SD-02931	.2	5
SD-02932	.5	30
SD-02933	.6	35
SD-02934	1.0	250
SD-02935	.3	10
SD-02936	.5	5
SD-02937	.3	5
SD-02938	.5	10
SD-02939	.6	25
SD-02940	1.1	5
SD-02941	.7	5
SD-02942	1.5	10
SD-02943	1.0	5
SD-02944	.4	5
SD-02945	.6	10
SD-02946	.5	5
SD-02947	.3	5
SD-02948	.4	5

ACME ANALYTICAL LABORAT ES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECI 'ED JULY 5 1983
DATE REPORTS MAILED July 11/83

GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H20 AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : SOIL - DRIED AT 60 DEG C., -80 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK MINES PROJECT # 03 FILE # 83-1062

SAMPLE	AG PPM	AU* PPB
SD-01501	.2	5
SD-01502	.1	5
SD-01503	.1	10
SD-01504	.1	50
SD-01505	.1	25
SD-01506	.1	210
SD-01507	.1	5
SD-01508	.1	5
SD-01509	.1	15
SD-01510	.1	5
SD-01511	.1	5
SD-01512	.1	5
SD-01513	.1	15
SD-01514	.1	10
SD-01515	1.1	5
SD-01516	.6	20
SD-01517	.7	10
SD-01518	.3	10
SD-01519	.1	30
SD-01520	.2	10
SD-01521	.1	20
SD-01522	.1	5
SD-01523	.1	5
SD-01524	.1	5
SD-01525	.1	5
SD-01526	.1	10
SD-01527	.1	5
SD-01528	.1	5
SD-01529	.1	10
SD-01530	.1	75
SD-01531	.1	5
SD-01532	.1	5
SD-01533	.1	5
SD-01534	.1	5
SD-01535	.1	5
SD-01536	.1	10
SD-01537	.2	5

SAMPLE	AG PPM	AU* PPB
SD-01538	.7	5
SD-01539	1.1	5
SD-01540	.3	40
SD-01541	.1	55
SD-01542	.1	115
SD-01543	.1	105
SD-01544	.1	70
SD-01545	.1	5
SD-01546	.1	180
SD-01547	.2	10
SD-01548	.1	35
SD-01549	.4	55
SD-01550	.3	45
SD-01551	.5	25
SD-01552	.6	15
SD-01553	1.6	20
SD-01554	.4	25
SD-01555	.1	50
SD-01556	.2	25
SD-01557	.5	60
SD-01558	.5	25
SD-01559	.2	10
SD-01560	.3	35
SD-01561	.6	20
SD-01562	.7	15
SD-01563	1.3	170
SD-01564	.2	85
SD-01565	.3	15
SD-01566	.3	20
SD-01567	.4	10
SD-01568	.4	10
SD-01569	1.0	25
SD-01570	.1	30
SD-01571	.2	10
SD-2501	.5	15
SD-2502	.5	10
SD-2503	.4	435
SD-2504	.5	25

SAMPLE	AG PPM	AU* PPB
SD-02505	.3	35
SD-02506	.4	5
SD-02507	.6	5
SD-02508	.4	5
SD-02509	.5	5
SD-02510	.4	5
SD-02511	.4	5
SD-02512	.2	5
SD-02513	.3	5
SD-02514	.1	5
SD-02515	.3	5
SD-02516	.4	10
SD-02517	.3	5
SD-02518	.2	5
SD-02519	.4	5
SD-02520	.3	5
SD-02521	.4	5
SD-02522	.3	10
SD-02523	.4	5
SD-02524	.3	15
SD-02525	.1	5
SD-02526	1.1	5
SD-02527	.8	5
SD-02528	.5	35
SD-02529	1.1	5
SD-02530	.6	5
SD-02531	.8	80
SD-02532	1.0	5
SD-02533	.9	5
SD-02534	.8	10
SD-02535	.8	5
SD-02536	.4	5
SD-02537	.3	10
SD-02538	.5	35
SD-02539	.2	5
SD-02540	.2	10
SD-02541	.3	35

SAMPLE	AG PPM	AU* PPB
SD-02542	.1	10
SD-02543	.1	5
SD-02544	.1	5
SD-02545	.2	5
SD-02546	.2	5
SD-02547	.2	5
SD-02548	.1	5
SD-02549	.1	5
SD-02550	.1	15
SD-02551	.1	30
SD-02552	.2	5
SD-02553	.1	45
SD-02554	.2	5
SD-02555	.2	5
SD-02556	.4	50
SD-02557	.3	5
SD-02558	.4	5
SD-02559	.4	125
SD-02560	.4	25
SD-02561	3.1	175
SD-02562	.6	50
SD-02563	.4	10
SD-02564	.6	10
SD-02565	.4	5
SD-02566	.2	5
SD-02567	.5	5
SD-02568	.7	10
SD-02569	.2	5
SD-02570	.1	5
SD-02801	.1	5
SD-02802	.4	20
SD-02803	.8	30
SD-02804	.5	10
SD-02805	.1	5
SD-02806	.2	5
SD-02807	.1	5
SD-02808	.5	5
SD-02809	.1	5

SAMPLE	AG PPM	AU* PPB
SD-02810	1.1	5
SD-02811	.8	5
SD-02812	.2	5
SD-02813	.6	5
SD-02814	.5	5
SD-02815	.8	5
SD-02816	.9	350
SD-02817	.6	5
SD-02818	3.0	45
SD-02819	1.1	5
SD-02820	2.4	5
SD-02821	.4	5

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
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DATE RECEIVED JULY 5 1983
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GEOCHEMICAL ASSAY CERTIFICATE

A .500 GM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER. ELEMENTS ANALYSED BY AA : AG.
SAMPLE TYPE : SOIL - DRIED AT 60 DEG C., -80 MESH.
AU* - 10 GM, IGNITED, HOT AQUA REGIA LEACH MIBK EXTRACTION, AA ANALYSIS.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK PROJECT # 03 FILE # 83-1061 PAGE# 1

SAMPLE	AG PPM	AU* PPB
SD-01001	.4	5
SD-01002	.1	10
SD-01003	.4	350
SD-01004	.2	145
SD-01005	.8	15
SD-01006	.1	5
SD-01007	.3	15
SD-01008	.1	5
SD-01009	.2	5
SD-01010	.4	5
SD-01011	1.0	5
SD-01012	.1	10
SD-01013	.1	30
SD-01014	.5	15
SD-01015	.4	5
SD-01016	.5	5
SD-01017	.4	5
SD-01018	.5	5
SD-01019	.5	10
SD-01020	.4	5
SD-01021	.8	5
SD-01022	.4	5
SD-01023	.5	5
SD-01024	.2	5
SD-01025	.3	5
SD-01026	.2	5
SD-01027	.4	5
SD-01028	.1	5
SD-01029	.3	25
SD-01030	.4	5
SD-01031	.1	5
SD-01032	.1	5
SD-01033	.1	5
SD-01034	.2	5
SD-01035	.1	5
SD-01036	.1	5
SD-01037	.1	5

SAMPLE	AG PPM	AU* PPB
SD-1038	.1	5
SD-1039	.2	5
SD-1040	.2	5
SD-1041	.1	5
SD-1042	.1	5
SD-1043	.3	5
SD-1044	.1	5
SD-1045	.1	5
SD-1046	.1	5
SD-1047	.3	5
SD-1048	.3	5
SD-1049	.1	5
SD-1050	.1	5
SD-1051	.1	5
SD-1573	.1	5
SD-1574	.1	5
SD-1575	.1	5
SD-1576	.1	5
SD-1577	.1	5
SD-1578	.1	5
SD-1579	.1	5
SD-1580	.1	5
SD-1581	.1	5
SD-1582	.1	5
SD-1583	.1	5
SD-1584	.1	5
SD-1585	.1	5
SD-1586	.1	5
SD-1587	.1	5
SD-1588	.1	5
SD-1589	.1	5
SD-1590	.1	5
SD-1591	.9	5
SD-1592	.4	10
SD-1593	.2	5
SD-1594	.1	20
SD-1595	.1	5

SAMPLE	AG PPM	AU* PPB
SD-1596	.2	5
SD-1597	.1	5
SD-1598	.1	5
SD-1599	.1	5
SD-1600	.2	5
SD-1601	.2	5
SD-1602	.1	5
SD-1603	.4	5
SD-1604	.2	5
SD-1605	.1	10
SD-1606	.3	5
SD-1607	.2	10
SD-1608	.1	5
SD-1609	.2	5
SD-1610	.1	5
SD-1611	.1	5
SD-1612	.1	5
SD-1613	.4	5
SD-1614	.3	10
SD-1615	.2	5
SD-1616	.1	10
SD-1617	.3	5
SD-1618	.4	5
SD-1619	.2	5
SD-1620	.3	10
SD-1621	.3	5
SD-1622	.1	10
SD-1623	.2	5
SD-1624	.1	5
SD-1625	.2	5
SD-1626	.1	5
SD-1627	.1	10
SD-1628	.4	10
SD-1629	.2	35
SD-1630	.1	10
SD-1631	.2	5
SD-1632	.4	5
SD-1633	.1	20

SAMPLE	AG PPM	AU* PPB
SD-1634	.5	5
SD-1635	.7	5
SD-1636	.6	45
SD-1637	.3	5
SD-1638	.2	10
SD-1639	.5	5
SD-1640	.3	5
SD-1641	.3	5
SD-1642	.5	5
SD-1643	.2	5
SD-1644	.4	5
SD-1645	.6	5
SD-1646	.7	5
SD-1647	.4	10
SD-1648	.4	10
SD-1649	.5	5
SD-1650	.4	5
SD-1651	.1	10
SD-1652	.3	10
SD-1653	.1	25
SD-1654	.4	10
SD-1655	.1	15
SD-1656	.1	65
SD-1657	.1	10
SD-1658	.1	10
SD-1659	.7	15
SD-1660	.2	10
SD-1661	.1	15
SD-1662	.1	5
SD-1663	.2	10
SD-1664	.1	10
SD-1665	.1	5
SD-1666	.1	5
SD-1667	.2	35
SD-1668	.1	5
SD-1669	.1	10
SD-1670	.1	5

SAMPLE	AG PPM	AU* PPB
SD-1671	.3	5
SD-1672	.2	5
SD-1673	.1	5
SD-1674	.2	5
SD-1675	.2	5
SD-1676	.3	5
SD-1677	.1	5
SD-1678	.2	5
SD-1679	.1	5
SD-1680	.4	5
SD-1681	.5	5
SD-2822	.2	5
SD-2823	.1	5
SD-2824	.1	5
SD-2825	.1	5
SD-2826	.2	5
SD-2827	.3	10
SD-2828	.1	25
SD-2829	.2	5
SD-2830	.1	25
SD-2831	.1	5
SD-2832	.2	5
SD-2833	.1	5
SD-2834	.1	15
SD-2835	.1	5
SD-2836	.1	5
SD-2837	.1	5
SD-2838	.1	5
SD-2839	.1	5
SD-2840	.1	5
SD-2841	.1	5
SD-2842	.1	5
SD-2843	.1	15
SD-2844	.1	5
SD-2845	.4	5
SD-2846	.6	5
SD-2847	1.0	10

SAMPLE	AG PPM	AU* PPB
SD-2848	.6	10
SD-2849	1.4	5
SD-2850	.3	5
SD-2851	.2	5
SD-2852	1.0	5
SD-2853	3.4	15
SD-2854	2.5	5
SD-2855	.6	5
SD-2856	1.0	5
SD-2857	.4	5
SD-2858	.3	5
SD-2859	.3	5
SD-2860	.2	5
SD-2861	.1	5
SD-2862	.4	5
SD-2863	.4	5
SD-2864	.2	5
SD-2865	.2	5
SD-2866	.1	5
SD-2867	.1	10
SD-2868	.9	5
SD-2869	.4	5
SD-2870	.3	10
SD-2871	.2	5
SD-2872	.3	10
SD-2873	1.1	5
SD-2874	.9	10
SD-2875	.3	15
SD-2876	.3	10
SD-2877	.2	5
SD-2878	.6	5
SD-2879	.1	5
SD-2880	.3	25
SD-2881	.4	10
SD-2882	.2	10
SD-2883	.1	5
SD-2884	.1	10

SAMPLE	AG PPM	AU* PPB
SD-2885	.1	5
SD-2886	.1	5
SD-2887	.3	5
SD-2888	1.2	5
SD-2889	1.9	5
SD-2890	1.2	5
SD-2891	.2	5
SD-2892	.1	5
SD-2893	.1	5
SD-2894	.4	5
SD-2895	.3	15
SD-2896	.3	20
SD-2897	.1	5
SD-2898	.1	15
SD-2899	.3	5
SD-2900	.5	5
SD-2901	.3	5
SD-2902	.9	5
SD-2903	1.2	5
SD-2904	.5	5
SD-2905	.4	5
SD-2906	1.0	5
SD-2907	1.3	5
SD-2908	1.7	5

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CANADA V7J 2C1
TELEPHONE (604) 984-0221
TELEX 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : KIDD CREEK MINES LTD.,
ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8315690-001-A
INVOICE # : I8315690
DATE : 7-NOV-83
P.O. # : NONE
03

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Hg ppb	Ba ppm
1-1	201	19	14	128	0.6	80	780
1-2	201	23	31	155	0.8	40	1040
1-3	201	22	27	150	0.1	30	880
1-4	201	23	35	245	0.1	40	1160
1-5	201	42	68	458	0.1	60	1440
1-6	201	72	94	690	0.8	50	1520
1-7	201	77	223	780	0.7	110	1120
1-9	201	67	570	930	0.4	240	940
2-1	201	22	22	160	0.5	50	740
2-2	201	26	37	250	0.1	40	1020
2-3	201	36	68	450	0.1	50	1480
2-4	201	26	185	118	0.7	120	620
2-5	201	14	158	30	0.8	120	240
3-1	201	26	42	253	0.1	50	900
3-2	201	38	51	430	0.1	60	880
3-3	201	102	112	565	0.7	80	1400
3-4	201	95	80	782	2.3	140	1340
3-5	201	120	98	1300	1.4	110	1560
4-1	201	14	7	72	1.3	150	620
4-2	201	18	8	94	0.5	100	720
4-3	201	24	26	170	0.1	50	920
4-4	201	27	62	310	0.1	50	1140
4-5	201	15	35	233	0.1	60	1200
4-6	201	15	38	278	0.1	100	1460
5-1	201	17	12	90	0.8	80	820
5-2	201	26	34	170	0.1	70	920
5-3	201	105	64	415	0.1	80	1320
5-4	201	150	73	555	0.1	160	2000
5-5	201	265	92	200	1.3	50	>10000
6-1	201	15	18	123	0.6	80	720
6-2	201	22	34	210	0.3	50	960
6-3	201	26	98	495	0.1	50	1000
6-4	201	35	67	850	1.0	130	1240
6-5	201	23	58	820	0.5	100	1080
7-1	201	18	18	92	0.5	110	640
7-2	201	39	30	185	0.5	150	920
7-3	201	32	30	140	0.1	70	1000
7-4	201	57	39	168	0.1	90	1080
-1	201	12	10	90	0.1	70	680
?-2	201	20	26	160	0.1	40	820

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CERTIFICATE OF ANALYSIS

TO : KIDD CREEK MINES LTD..
ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8315690-001-
INVOICE # : I8315690
DATE : 7-NOV-83
P.O. # : NONE
03

Sample description	Prep code	Au ppb					
1-1	201	20	--	--	--	--	--
1-2	201	75	--	--	--	--	--
1-3	201	60	--	--	--	--	--
1-4	201	225	--	--	--	--	--
1-5	201	1930	--	--	--	--	--
1-6	201	970	--	--	--	--	--
1-7	201	4990	--	--	--	--	--
1-8	201	6320	--	--	--	--	--
2-1	201	160	--	--	--	--	--
2-2	201	310	--	--	--	--	--
2-3	201	2020	--	--	--	--	--
2-4	201	4170	--	--	--	--	--
2-5	201	310	--	--	--	--	--
3-1	201	160	--	--	--	--	--
3-2	201	150	--	--	--	--	--
3-3	201	180	--	--	--	--	--
3-4	201	430	--	--	--	--	--
3-5	201	100	--	--	--	--	--
4-1	201	70	--	--	--	--	--
4-2	201	5	--	--	--	--	--
4-3	201	560	--	--	--	--	--
-4	201	70	--	--	--	--	--
5	201	80	--	--	--	--	--
4-6	201	20	--	--	--	--	--
5-1	201	150	--	--	--	--	--
5-2	201	40	--	--	--	--	--
5-3	201	1055	--	--	--	--	--
5-4	201	4720	--	--	--	--	--
5-5	201	>10000	--	--	--	--	--
6-1	201	140	--	--	--	--	--
6-2	201	80	--	--	--	--	--
6-3	201	120	--	--	--	--	--
6-4	201	70	--	--	--	--	--
6-5	201	60	--	--	--	--	--
7-1	201	100	--	--	--	--	--
7-2	201	940	--	--	--	--	--
7-3	201	705	--	--	--	--	--
7-4	201	140	--	--	--	--	--
8-1	201	20	--	--	--	--	--
8-2	201	60	--	--	--	--	--

Certified by ....

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CERTIFICATE OF ANALYSIS

TO : KIDD CREEK MINES LTD.,
ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8315690-002-A
INVOICE # : I8315690
DATE : 7-NOV-83
P.O. # : NONE
03

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Hg ppb	Ba ppm
[illegible]-3	201	28	45	222	0.1	50	900
[illegible]-4	201	12	62	460	0.1	80	1240
[illegible]-5	201	3	68	530	0.1	40	960

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MEMBER CANADIAN TESTING ASSOCIATION

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ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8315690-002-B
INVOICE # : I8315690
DATE : 7-NOV-83
P.O. # : NONE
03

Sample description	Prep code	Au ppb					
8-3	201	150	--	--	--	--	--
9-4	201	20	--	--	--	--	--
8-5	201	20	--	--	--	--	--

Certified by ......[signature]......

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CERTIFICATE OF ANALYSIS

TO : KIDD CREEK MINES LTD.,
ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8316334-001-A
INVOICE # : I8316334
DATE : 22-NOV-83
P.O. # : NONE
03

ATTN: IAN SUTHERLAND

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Hg ppb	Ba ppm
9-1	201	690	115	620	1.3	2100	720
9-2	201	296	131	490	1.4	480	740
9-3	201	301	96	540	1.0	370	1120
9-4	201	211	67	345	2.7	1000	1600
9-5	201	229	110	470	1.8	580	1300
10-1	201	28	58	245	0.2	60	880
10-2	201	25	53	230	0.3	40	880
10-3	201	25	53	260	0.2	20	760
10-4	201	26	52	240	0.2	30	740
10-5	201	26	50	245	0.3	40	680

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TELEX 043-52597

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CERTIFICATE OF ANALYSIS

TO : KIDD CREEK MINES LTD.,
ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8316334-001-B
INVOICE # : I8316334
DATE : 25-NOV-83
P.O. # : NONE
03

ATTN: IAN SUTHERLAND

Sample description	Prep code	Au ppb FA+AA					
9-1	201	850	--	--	--	--	--
9-2	201	900	--	--	--	--	--
9-3	201	600	--	--	--	--	--
9-4	201	1800	--	--	--	--	--
9-5	201	700	--	--	--	--	--
10-1	201	10	--	--	--	--	--
10-2	201	120	--	--	--	--	--
10-3	201	10	--	--	--	--	--
10-4	201	15	--	--	--	--	--
10-5	201	15	--	--	--	--	--

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TELEPHONE (604) 984-0221
TELEX 043-52597

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TO : KIDD CREEK MINES LTD.,
ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8316007-001-A
INVOICE # : I8316007
DATE : 17-NOV-83
P.O. # : NONE
03

Sample description	Prep code	Ba NAA %					
5-5	214	4.56	--	--	--	--	--

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CERTIFICATE OF ASSAY

TO : KIDD CREEK MINES LTD.,
ATTN:PETER DELANCEY
701 - 1281 W. GEORGIA ST.
VANCOUVER, B.C.
V6E 3J7

CERT. # : A8316220-001-A
INVOICE # : I8316220
DATE : 16-NOV-83
P.O. # : NONE
03

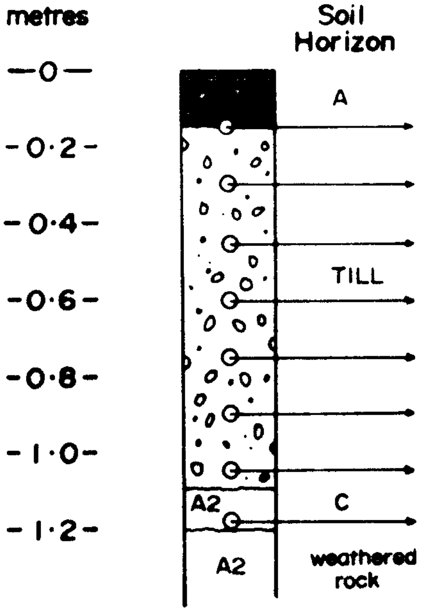
Sample description	Prep code	Au FA oz/T					
5-5	214	3.170	--	--	--	--	--

CTA

Appendix E

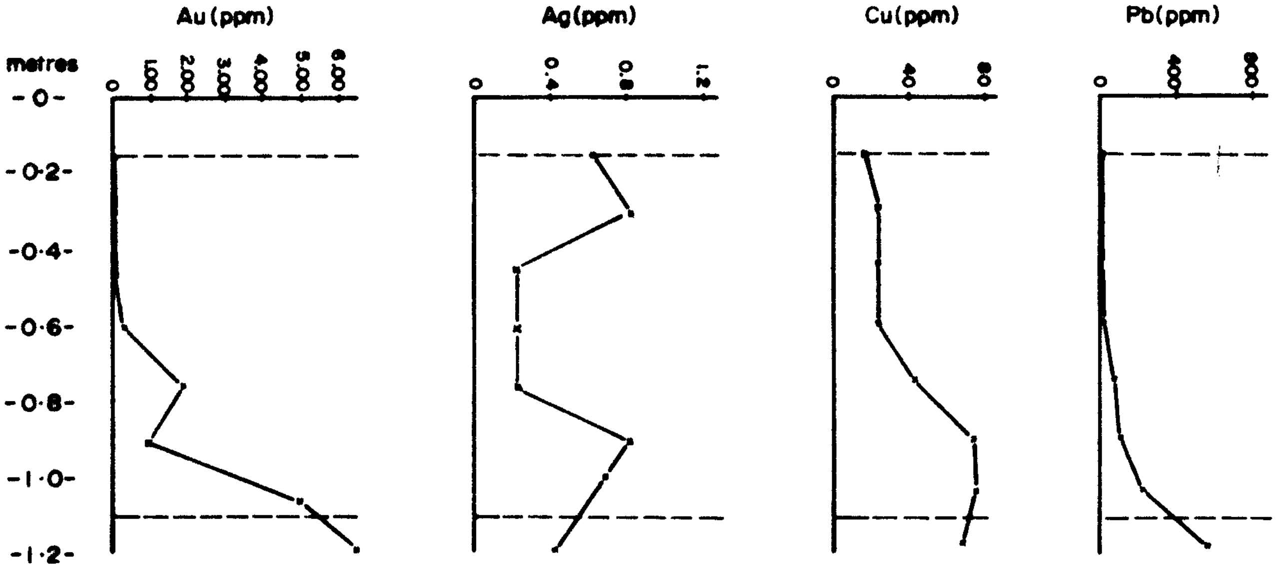
Soil Profiles

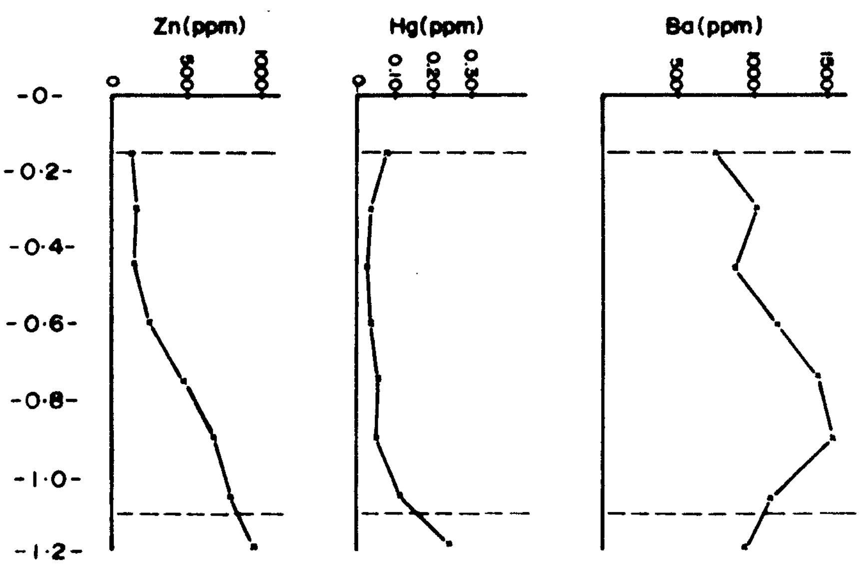
SOIL PROFILE # 1



Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
0.020	0·6	18	14	128	0.080	780
0.075	0·8	23	31	155	0.040	1040
0.060	0.1	22	27	150	0.030	880
0.325	0.1	23	35	245	0.040	1160
1.930	0.1	42	68	458	0.060	1440
0.870	0.8	72	94	680	0.050	1520
4.890	0.7	77	223	780	0.110	1120
6.320	0.4	67	570	930	0.240	940

Note: contact between till and C is estimated





Kidd Creek Mines Ltd.

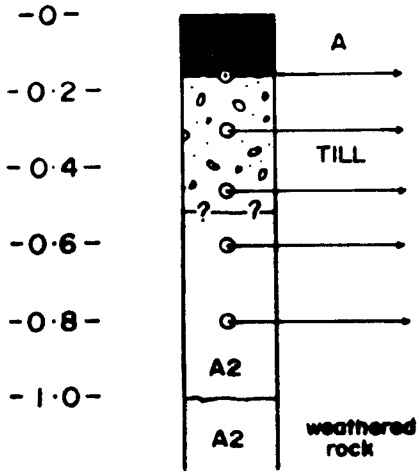
AL PROPERTY
BONANZA-RIDGE GRID
Soil Geochemical Profile #1

WORK BY	DRAWN BY	DATE
WBC	dIP	Dec. 1983

Figure: D1

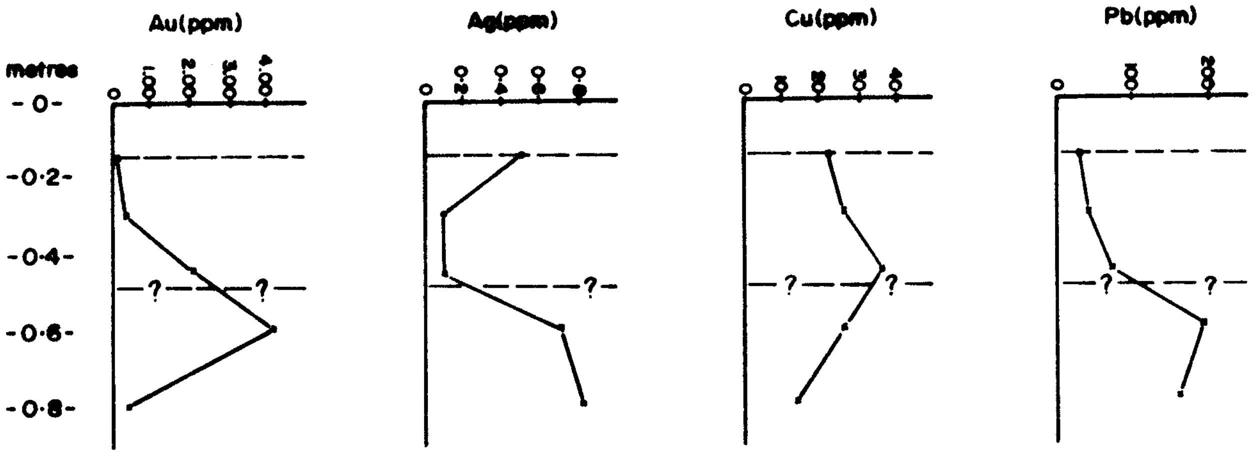
NCI - 556

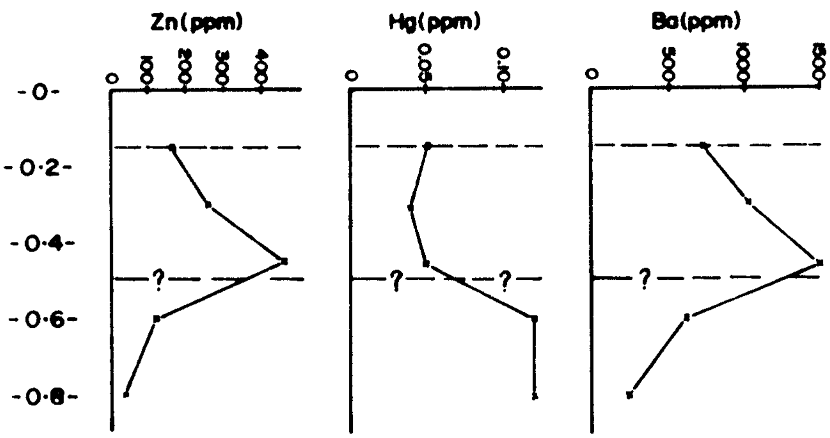
SOIL PROFILE #2



Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
0.160	0.5	22	22	160	0.050	740
0.310	0.1	26	37	250	0.040	1020
2.020	0.1	36	68	450	0.050	1480
4.170	0.7	26	185	118	0.120	620
0.310	0.8	14	158	30	0.120	240

Note: contact between till and C is estimated.





Kidd Creek Mines Ltd.

AL PROPERTY
BONANZA-RIDGE GRID

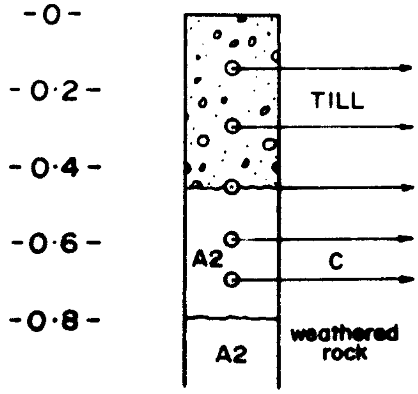
Soil Geochemical Profile #2

Work by	Drawn by	Date
WBC	dlP	Dec. 1983

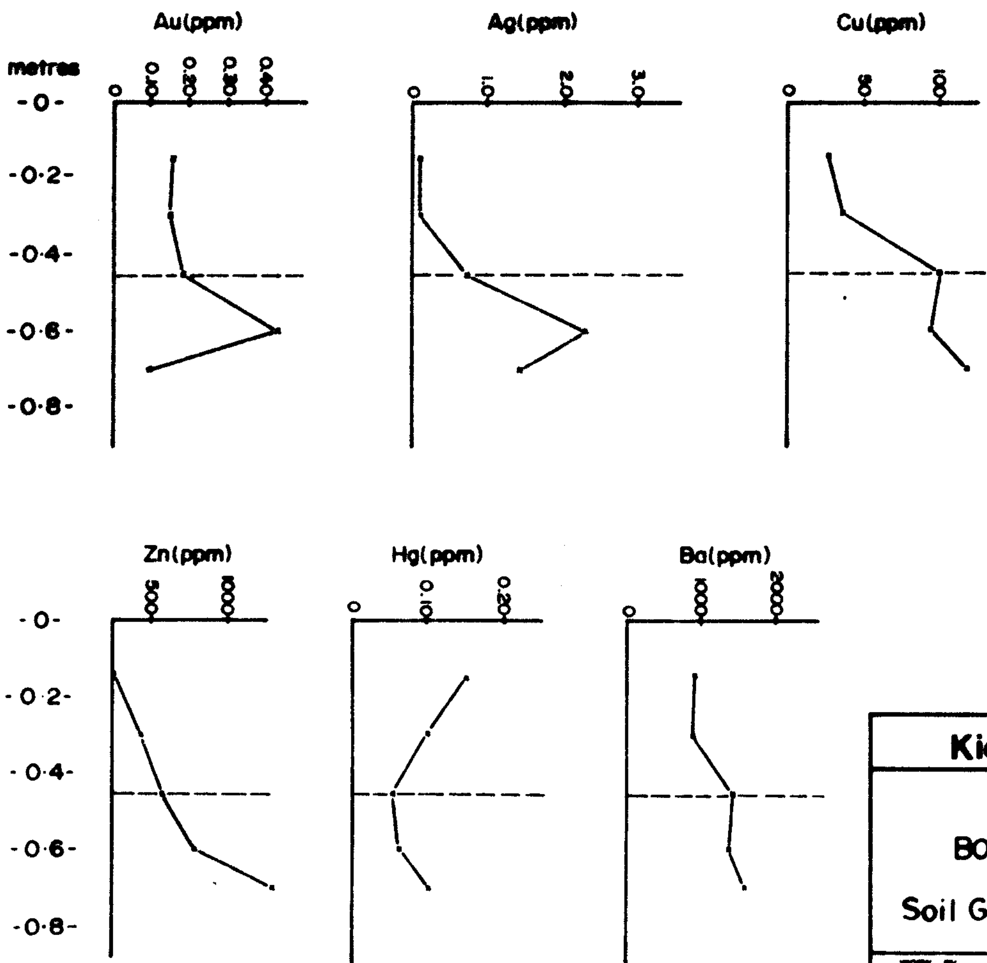
Figure: D2

NCI - 556

SOIL PROFILE #3



Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
0.160	0.1	26	42	253	0.050	900
0.150	0.1	38	51	430	0.060	880
0.180	0.7	102	112	565	0.080	1400
0.430	2.3	95	80	782	0.140	1340
0.100	1.4	120	98	1300	0.110	1560



Kidd Creek Mines Ltd.

AL PROPERTY
BONANZA-RIDGE GRID

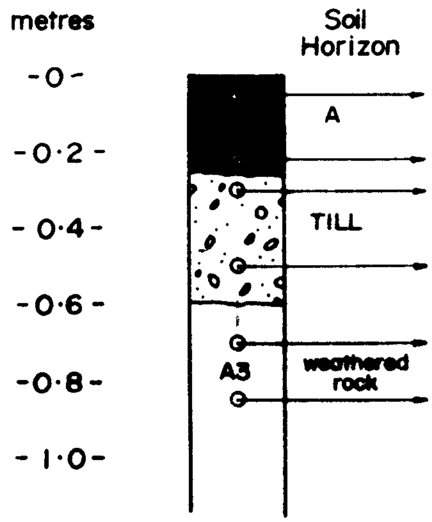
Soil Geochemical Profile #3

WORK BY	DRAWN BY	DATE
WBC	dIP	Dec. 1983

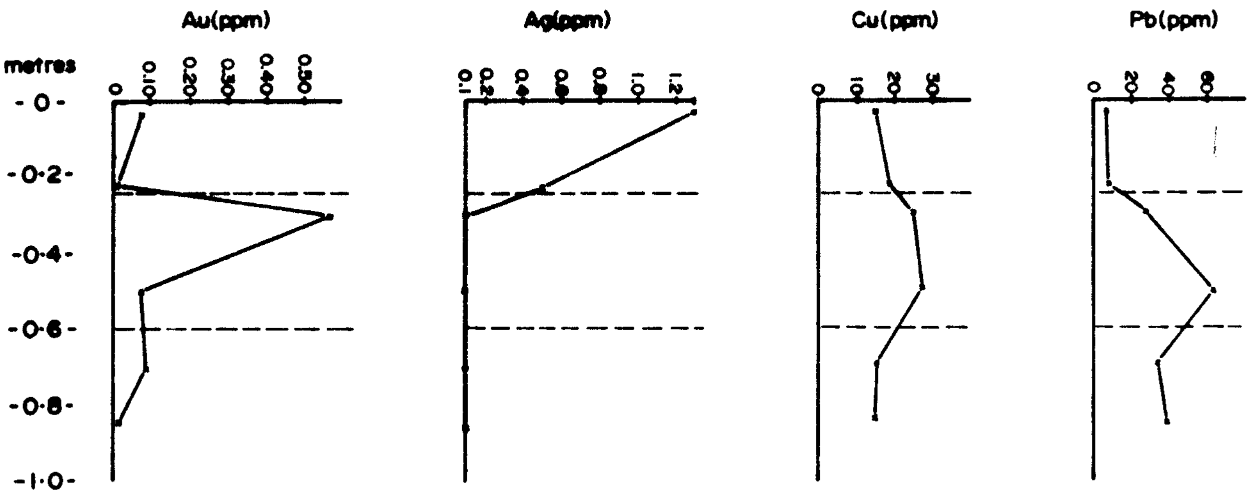
Figure: D 3

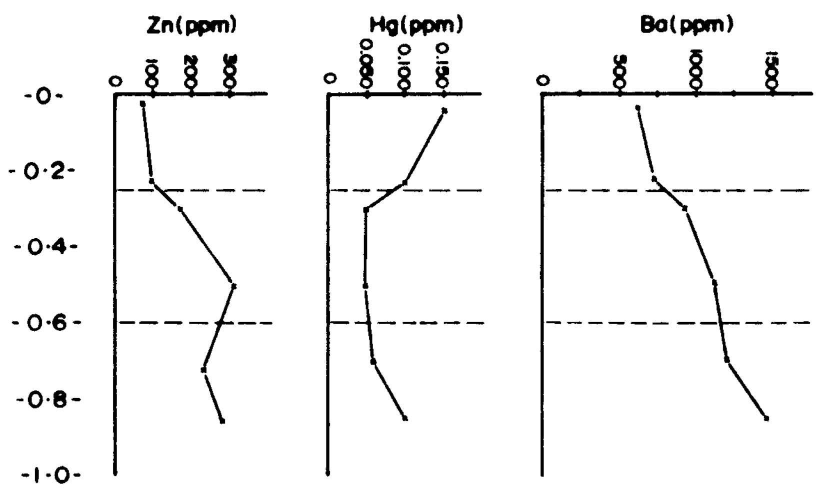
NCI - 556

SOIL PROFILE #4



Soil Horizon	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
A	0.070	1.3	14	7	72	0.150	620
A	0.005	0.5	18	8	94	0.100	720
TILL	0.560	0.1	24	26	170	0.050	920
TILL	0.070	0.1	27	62	310	0.050	1140
A3 weathered rock	0.080	0.1	15	35	233	0.060	1200
A3 weathered rock	0.020	0.1	15	38	278	0.100	1460





Kidd Creek Mines Ltd.

AL PROPERTY
BONANZA-RIDGE GRID

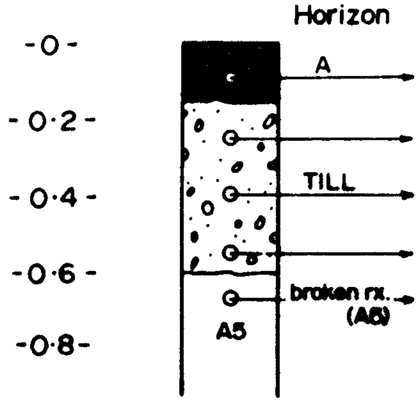
Soil Geochemical Profile #4

WORK BY	DRAWN BY	DATE
WBC	dIP	Dec. 1983

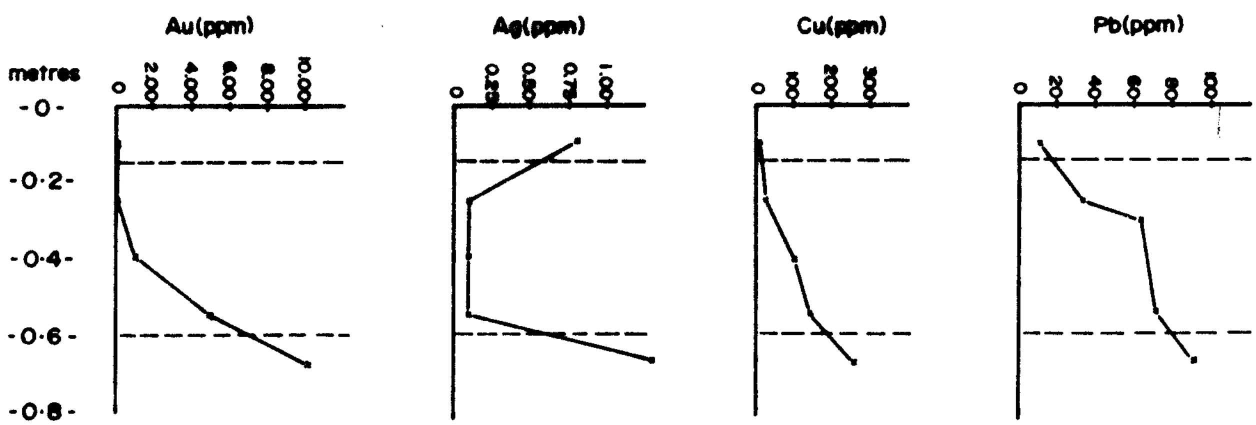
Figure: D4

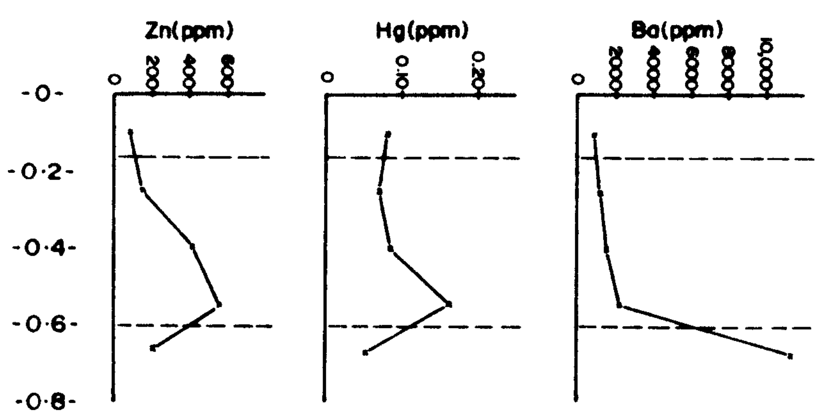
NCI - 556

SOIL PROFILE #5



Soil Horizon	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
A	0.150	0.8	17	12	90	0.080	820
	0.040	0.1	26	34	170	0.070	920
TILL	1.055	0.1	105	64	415	0.080	1320
	4.720	0.1	150	73	555	0.140	2000
broken rx. (A5)	108.69(g/t)	1.3	265	92	200	0.050	4.56(%)





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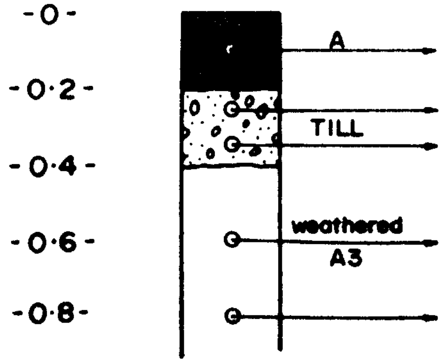
Soil Geochemical Profile #5

WORK BY	DRAWN BY	DATE
WBC	dlP	Dec. 1983

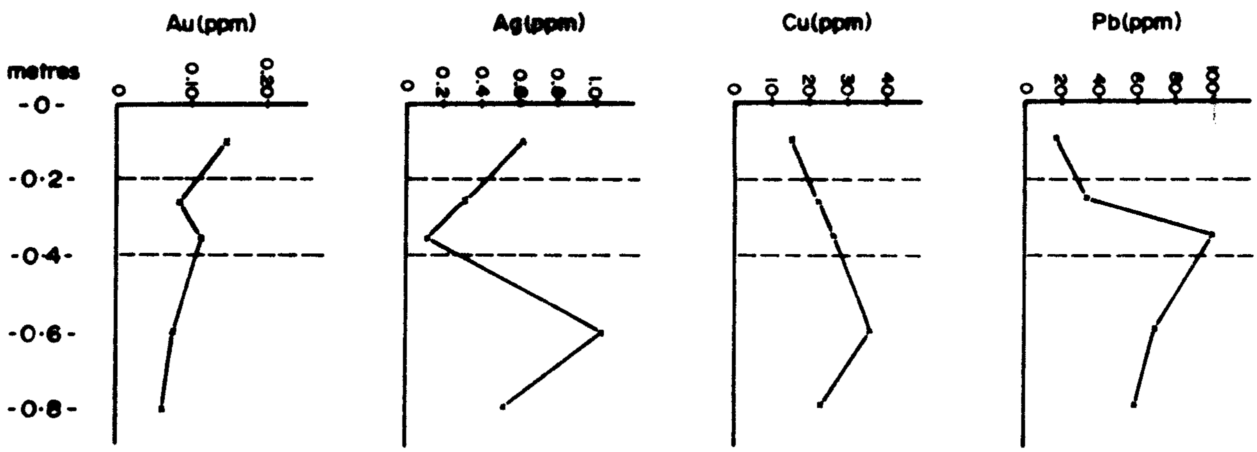
Figure: D5

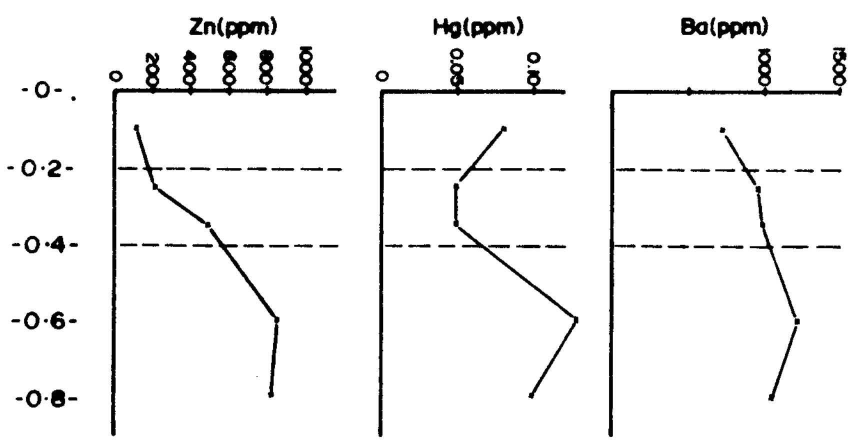
NCI - 556

SOIL PROFILE #6



Soil Horizon	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
A	0.140	0.6	15	18	123	0.080	720
TILL	0.080	0.3	22	34	210	0.050	960
TILL	0.120	0.1	26	98	495	0.050	1000
weathered A3	0.070	1.0	35	67	850	0.130	1240
	0.060	0.5	23	58	820	0.100	1080





Kidd Creek Mines Ltd.

AL PROPERTY
BONANZA-RIDGE GRID

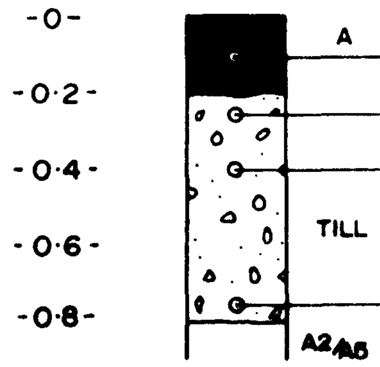
Soil Geochemical Profile #6

WORK BY	DRAWN BY	DATE: Dec. 1983
WBC	dIP	

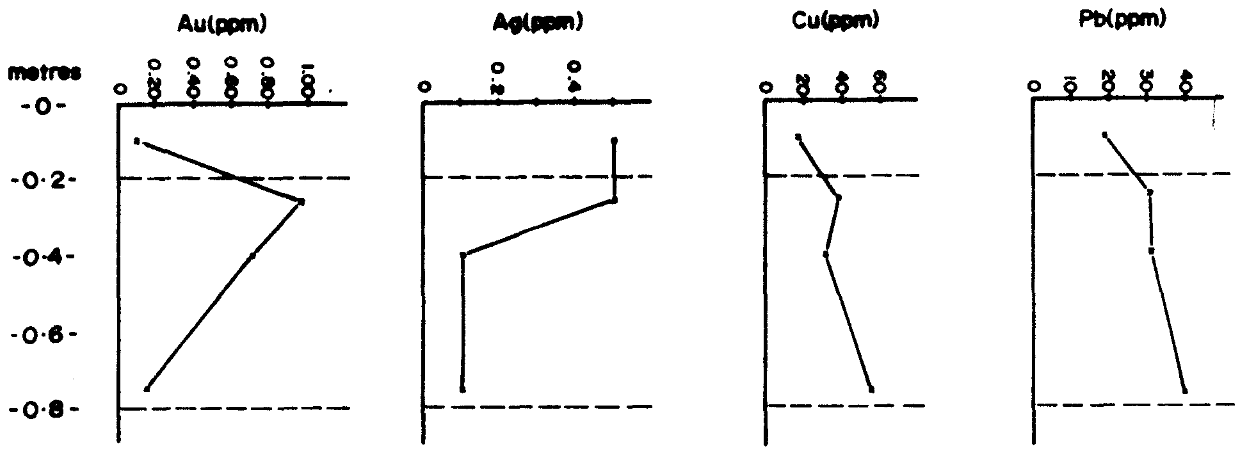
Figure: D6

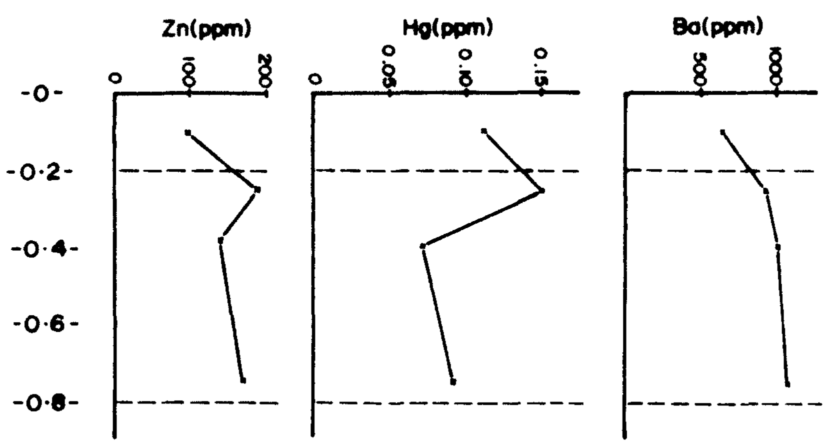
NCI - 556

SOIL PROFILE #7



Soil Horizon	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
A	0.100	0.5	18	18	92	0.110	640
	0.940	0.5	39	30	185	0.150	920
	0.705	0.1	32	30	140	0.070	1000
TILL	0.140	0.1	57	39	168	0.090	1080





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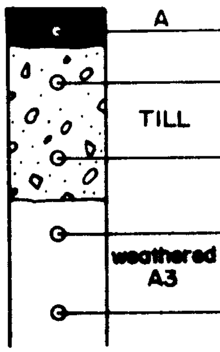
Soil Geochemical Profile #7

WORK BY	DRAWN BY	DATE
WBC	dIP	Dec. 1983

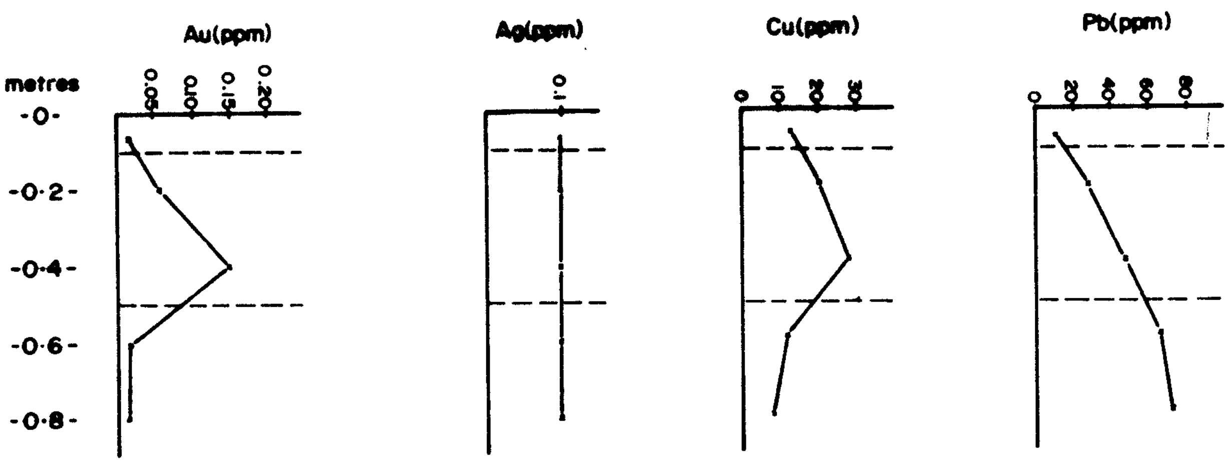
Figure: D 7

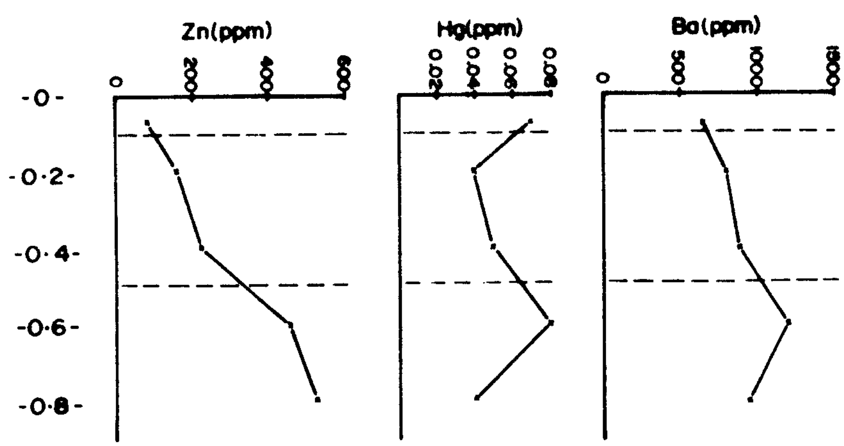
NCI - 556

SOIL PROFILE #8



metres	Soil Horizon	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
-0-	A	0.020	0.1	13	10	90	0.070	680
-0·2-	TILL	0.060	0.1	20	26	160	0.040	820
-0·4-	TILL	0.150	0.1	28	45	222	0.050	900
-0·6-	weathered A3	0.020	0.1	12	62	460	0.080	1240
-0·8-	weathered A3	0.020	0.1	8	68	530	0.040	960





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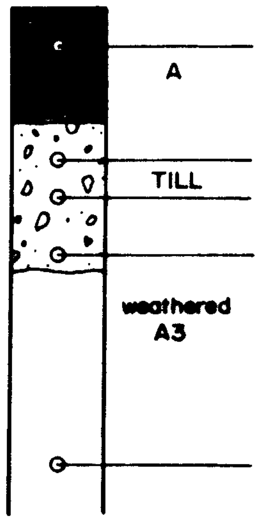
Soil Geochemical Profile # 8

WORK BY	DRAWN BY	DATE
WBC	dP	Dec. 1983

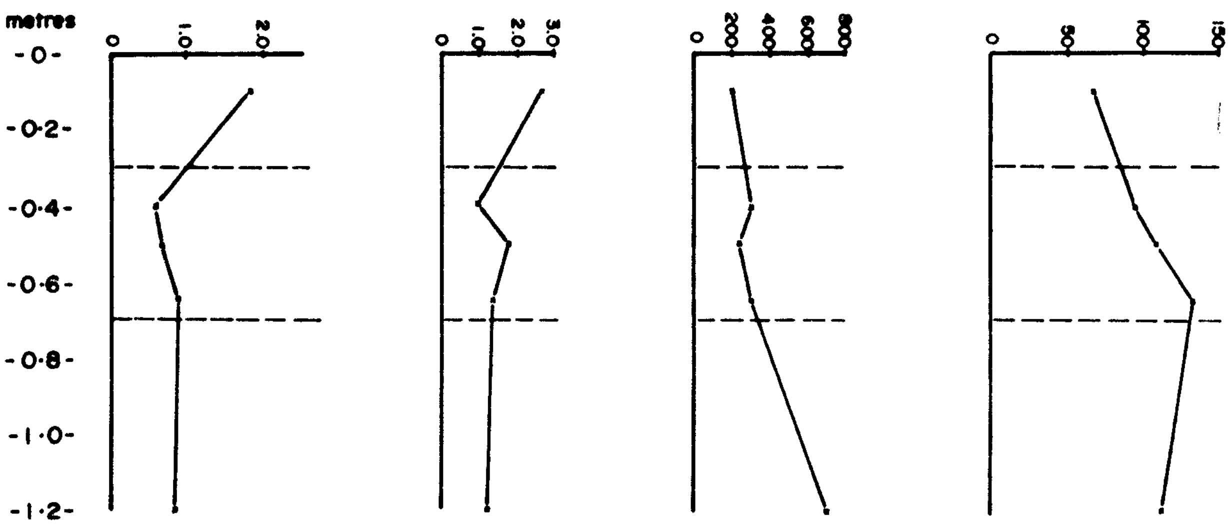
Figure: D 8

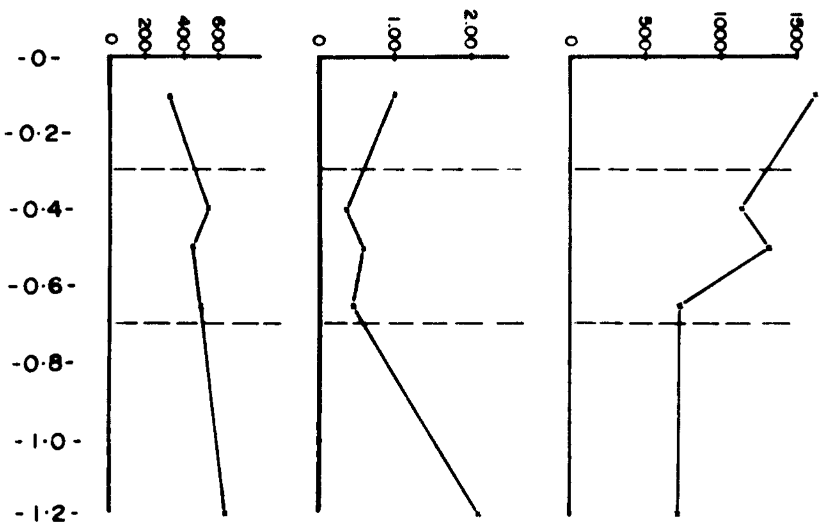
NCI - 556

SOIL PROFILE #9



Soil Horizon	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
A	0.800	2.7	211	67	345	1.000	1600
TILL	0.600	1.0	301	96	540	0.370	1120
	0.700	1.8	229	110	470	0.580	1300
	0.900	1.4	296	131	490	0.480	740
weathered A3	0.850	1.3	690	115	620	2.100	720





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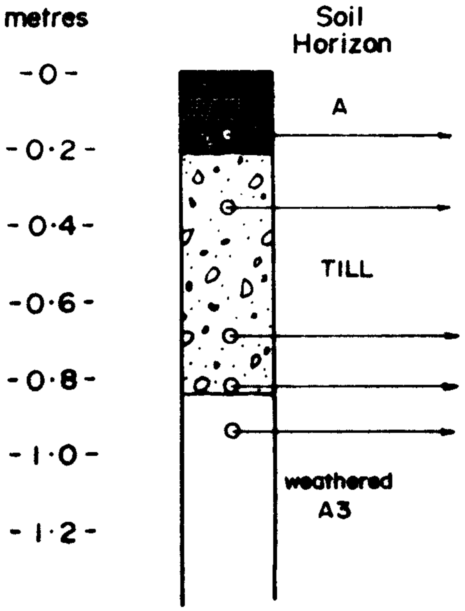
Soil Geochemical Profile #9

WORK BY	DRAWN BY	DATE
WBC	dlp	Dec. 1983

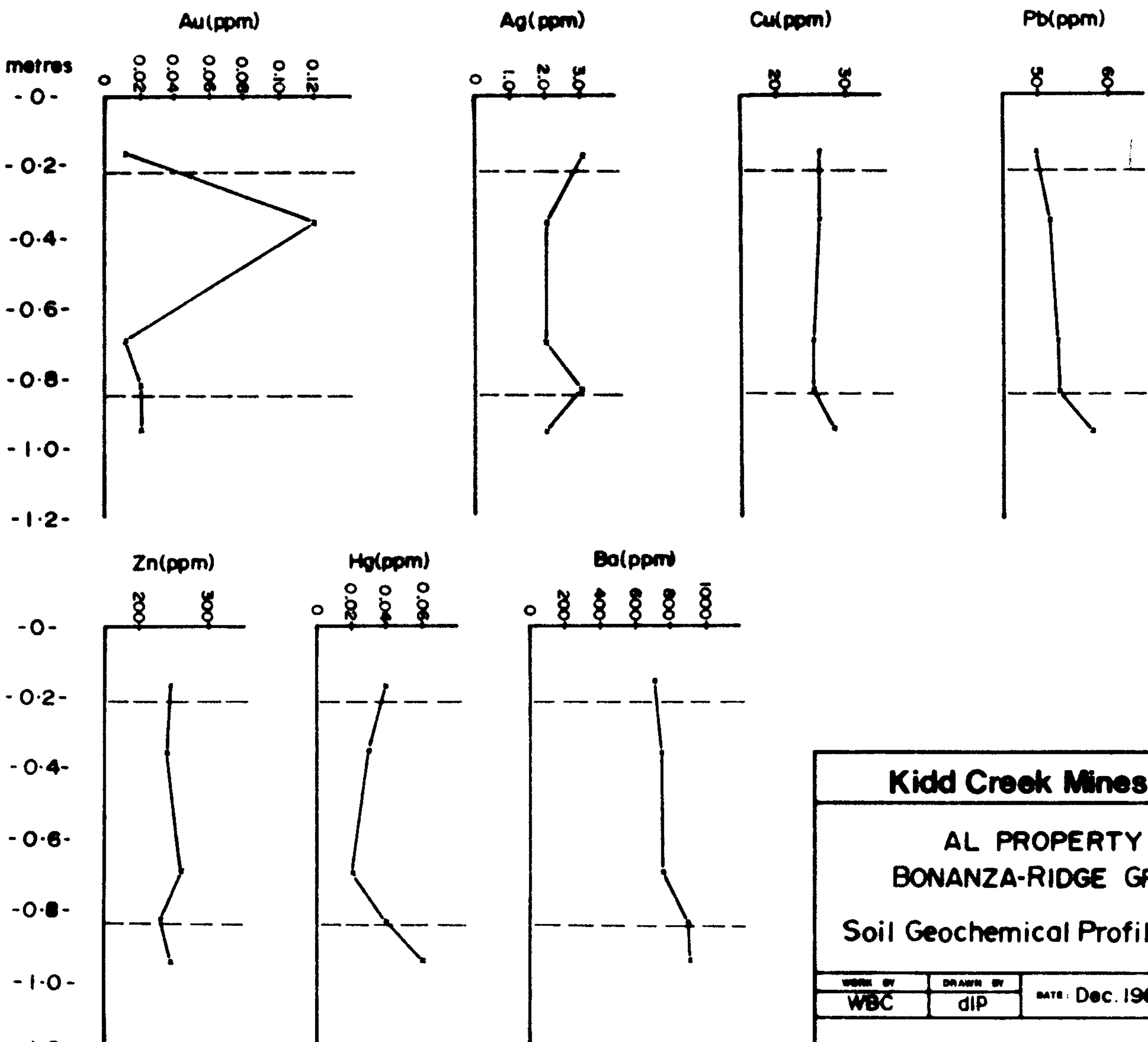
Figure: D9

NCI - 556

SOIL PROFILE #10



Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Hg ppm	Ba ppm
.01	0.3	26	50	245	0.040	680
.12	0.2	26	52	240	0.030	740
.01	0.2	25	53	260	0.020	760
.02	0.3	25	53	230	0.040	880
.02	0.2	28	58	245	0.060	880



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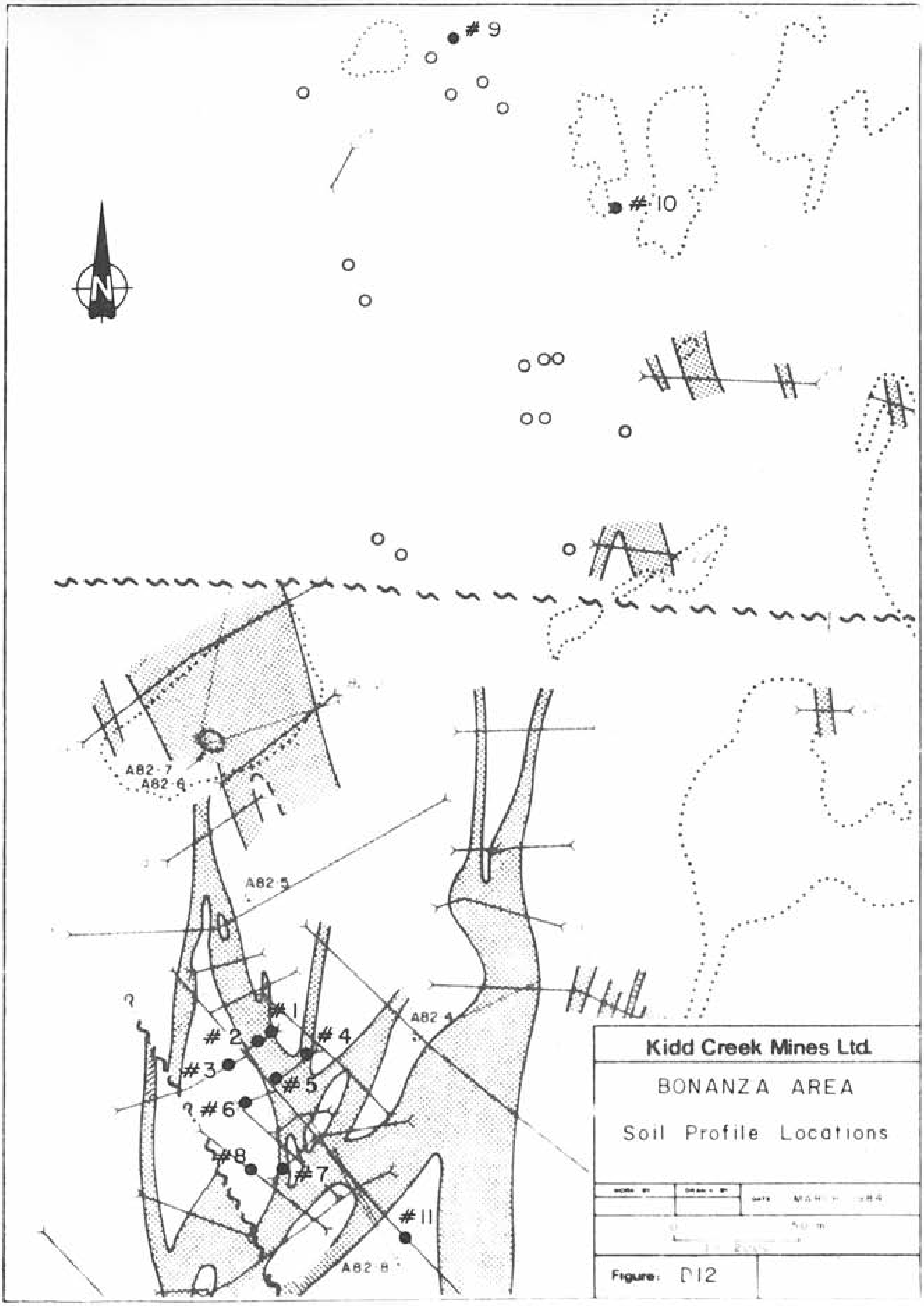
Soil Geochemical Profile #10

WORK BY	DRAWN BY	DATE
WBC	dlP	Dec. 1983

Figure: D 10

NCI-556


N
9
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A82·7
A82·6
A82·5
A82·4
A82·8
#1
2
3
4
5
6
#8
#7
#11
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BONANZA AREA
Soil Profile Locations
Figure: D12