GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

ACHILLES PROPERTY

ACHILLES 1 TO 4 MINERAL CLAIMS

Skeena Mining Division, British Columbia

NTS 104B/7E
Latitude 56°28'N
Longitude 130°36'W

on behalf of

CANADIAN INDUSTRIAL MINERALS CORP.
Vancouver, B.C.

by

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SUMMARY

The Achilles property consists of four contiguous modified-grid claims totalling 80 units located approximately 80 km northwest of Stewart, British Columbia. Access to the property is by fixed-wing aircraft from Terrace, Stewart, or Smithers to various airstrips in the area and then via helicopter to the property.

The property is situated within the Intermontane Tectono-Stratigraphic Belt, near the contact between the Stikine Terrane and the unmetamorphosed sediments of the Bowser Basin. The property covers an assemblage of northeasterly striking interbedded argillite, chert, quartzite, siltstone and limestone of the Upper Triassic Stuhini Group. Volcanics belonging to the Upper Triassic to Lower Jurassic Unuk River Formation underlie the western edge of the claims.

The area has an exploration history dating back to the turn of the century when prospectors passed through the region on their way to the interior. In the 1970's, the porphyry copper boom again brought prospectors and companies into the area. The current gold exploration rush began in 1980 with the option of the Sulphurets property by Esso Minerals Canada and the acquisition of the Johnny Mountain claims by Skyline Exploration Ltd. which was brought into production in mid-1988. The adjacent SNIP property is slated for production in 1991.

At this time, the Eskay Creek property, located 20 km northeast of the Achilles property and currently being explored by Corona and Placer-Dome, is the most significant deposit in the area. The property comprises at least eight mineralized zones occurring over a strike length of 1,800 metres within a sequence of felsic volcanics. The mineralization is associated with massive to disseminated sulphides in felsic volcanic breccias and graphitic argillites in contact with overlying intermediate volcanic rocks. A total of 665 surface diamond drill holes have been completed plus an exploration decline has been driven to test underground mineralization.

A review of all available information indicates that the entire Unuk River area was subjected to reconnaissance geological mapping and prospecting by Newmont Mines Ltd. in 1959-1962 which led to the discovery of a number of showings in the vicinity of the Achilles property. Exploration programs were conducted in this area from 1968 to 1986 by various companies. The exploration work completed did not extend onto the Achilles property.

In 1987, a limited amount of reconnaissance mapping, prospecting, and geochemical sampling was completed along King Creek, in the northeastern corner of the Achilles 4 claim. No mineralization was located.

An airborne electromagnetic and magnetic survey was conducted over the property in 1988. Five anomalous resistivity low zones occurring either on the flanks of or coincident with broad, moderate strength magnetic "highs" and a number of north-northeast trending, weak to moderate strength conductors were delineated.

The 1989 exploration program consisted of helicopter-supported reconnaissance prospecting, geological mapping and geochemical sampling with the objective of evaluating the property's potential for hosting economic precious metals deposits. Fractured and/or brecciated argillite and chert were located in numerous areas within the property boundaries. Lithogeochemical sampling completed in the northeastern corner of the Achilles 4 claim yielded elevated to anomalous Au, Ag, As, Zn, and/or Pb values, the best values being 0.127 oz/ton Au and 0.51 oz/ton Ag, from grab samples of strongly gossanous, sheared, siliceous and pyritic sulphide mineralized tuffaceous sedimentary rocks within a structurally complex zone measuring roughly 40 metres wide.

The 1990 exploration program consisted of helicopter supported geological mapping and geochemical soil and stream sediment sampling, with the objective of evaluating the property's economic potential through follow-up exploration on geochemically anomalous areas delineated by the 1989 program.

A total of 80 rock samples, 947 soil samples and 57 stream silt samples were collected. Areas characterized by elevated gold-in-soil values were targeted in the Achilles 1, 2 and 3 claims as a result of an extensive contour soil geochemical survey conducted over the majority of the property. Gold-in-soil values up to 842 ppb were returned from soil samples collected along contour soil lines. In the northeastern corner of the Achilles 4 claim, a 700 metre by 700 metre grid was established over the King Creek showing and surrounding area to provide grid control for detailed soil sampling and mapping.

A potential high grade gold-bearing system exists on the north bank of King Creek, characterized by strongly gossanous, intensely silica-sulphide mineralized chert and siliceous tuffs, carbonatized chert breccia and extensively faulted and sheared outcrop measured for 115 metres along the bank. Grid soil sampling yielded gold values up to 3,332 ppb Au accompanied by coincident, moderately to strongly anomalous values for the pathfinder elements and base metals of Ag, As, Cu,

Pb and Zn. Lithogeochemical sampling produced correspondingly elevated gold values with coincident weakly to moderately anomalous values for As, Pb and Zn. The intense pervasive silica-carbonate alteration, faulting and surface soil geochemical anomalies within the King Creek grid area is traced along a north-south mineralized strike length exceeding 450 metres and possibly up to 600 metres. Isolated elevated gold-in-soil and silt values located elsewhere on the property warrant further examination. A considerable amount of follow-up exploration is recommended for 1991.

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INTRODUCTION

Canadian Industrial Minerals Corp. of Vancouver commissioned Keewatin Engineering Inc. to conduct an extensive field exploration program on the Achilles property located north of the Unuk River valley in northern British Columbia. Exploration was directed by Keewatin Engineering Inc. and crews were based out of the "Doc Camp", situated approximately 15 kilometres southeast of the Achilles property, on the South Unuk River.

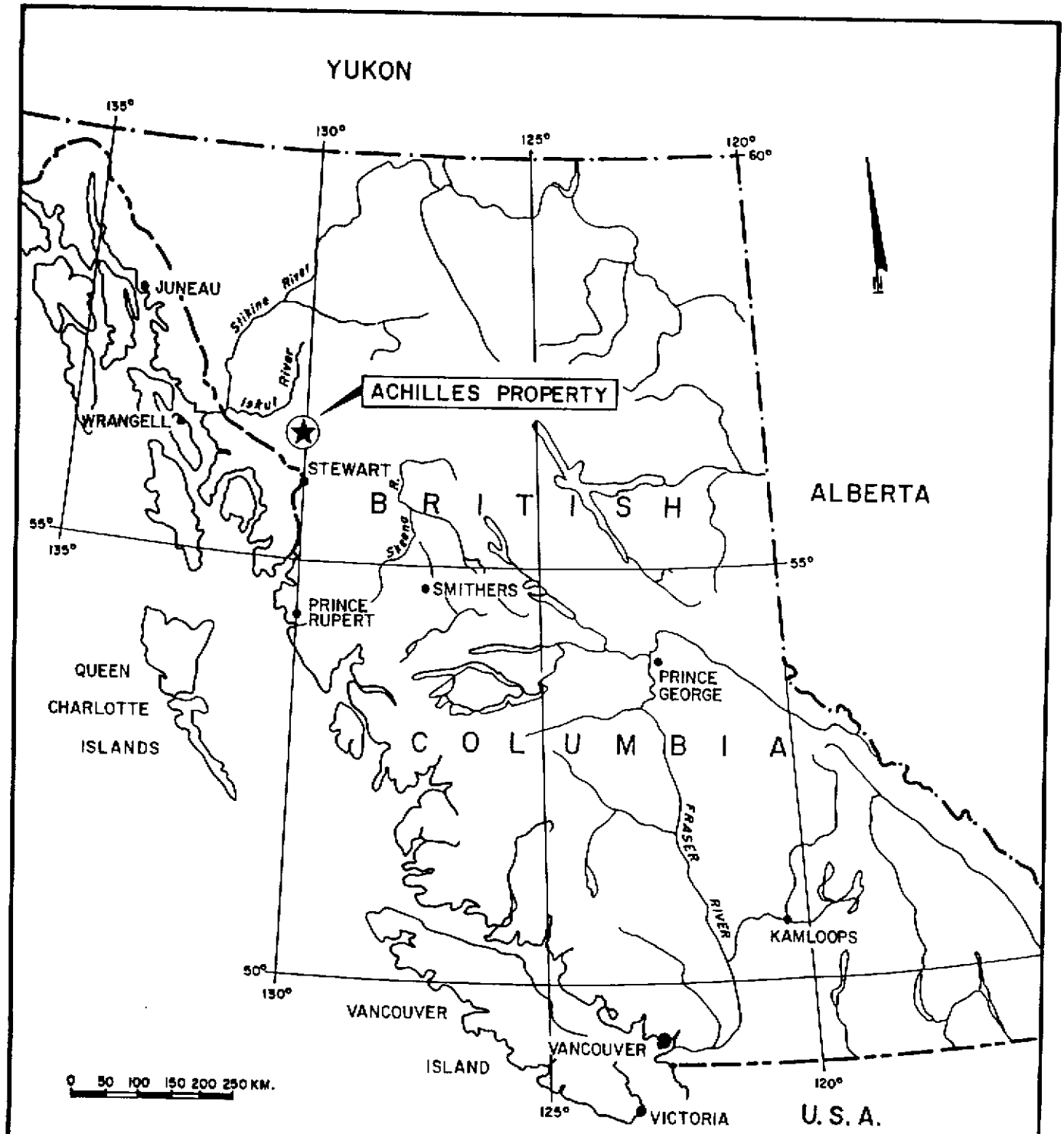
The objective of the program was to evaluate the property's economic potential through follow-up exploration on geochemical anomalies delineated by the 1989 program and to provide reconnaissance coverage throughout the property. The 1990 exploration program was conducted during the period of August 19 to September 29, 1990 and involved geological mapping, lithogeochemical, contour soil and grid soil sampling. Stream silt samples were collected from active drainages intersected on daily traverses.

A total of 70 rock grab, 4 float and 6 chip samples, 947 soil samples and 57 stream silt samples were collected from the property. This included 523 grid soil samples and 15 stream silt samples collected from 4.075 kilometres of flagged grid lines established over the King Creek showing and the surrounding area north and south of King Creek. A total of 424 contour soil samples plus 42 stream silts were collected from approximately 21.45 kilometres of contour soil lines. Contour soil geochemical and geological mapping data were compiled on 1:5,000 scale contour maps and the grid survey data was plotted at a 1:2,500 scale in the field. Final geochemical and geological data for the King Grid and the Achilles property were plotted at 1:1,250 scale and 1:5,000 scale, respectively, on computer generated maps.

All geochemical samples were forwarded to Bondar-Clegg & Company Ltd. in North Vancouver for Au plus 8 element (Ag, Cu, Pb, Zn, As, Sb, Mo, Hg) ICP geochemical analysis. Samples registering greater than 1,000 ppb Au were further analyzed by fire assay. Analytical procedures are described in Appendix III and analytical results are presented in Appendix IV and V.

Location and Access

The Achilles property is located in northwestern British Columbia, approximately 80 km northwest of Stewart (Figure 1). The claims are situated within N.T.S. map-sheet 104-B/7E and centred about 56°28' North latitude and 130°36' West longitude. Access to the property is by fixed-



PROPERTY LOCATION MAP

GEOLOGICAL ASSOCIATION OF CANADA
G.L. WESA
FELLOW

Figure 1

KEEWATIN ENGINEERING INC.

wing aircraft from Terrace, Stewart, or Smithers to various airstrips in the area, and then via helicopter to the property. The claims can also be directly accessed by helicopter from Stewart.

In the fall of 1991, a 72 kilometre road over the mountains is scheduled to open, connecting the Eskay Creek area with the main Stewart-Cassiar Highway.

Physiography and Climate

The Achilles property is situated within the Coast Range physiographic division and is characterized by northern rain forest and sub-alpine plateaus. Elevations range from 150 m in the valley of the Unuk River to 1280 m in the western part of the property.

A transitional tree line, characterized by dense sub-alpine scrub, meanders through the property at approximately 915 m elevation. The terrain found above the tree line is typified by intermontane alpine flora. Conifers up to 30 m tall are common below the tree line, especially within the stream valleys. Water for camp and drilling purposes is generally in good supply from the numerous creeks draining the claim area.

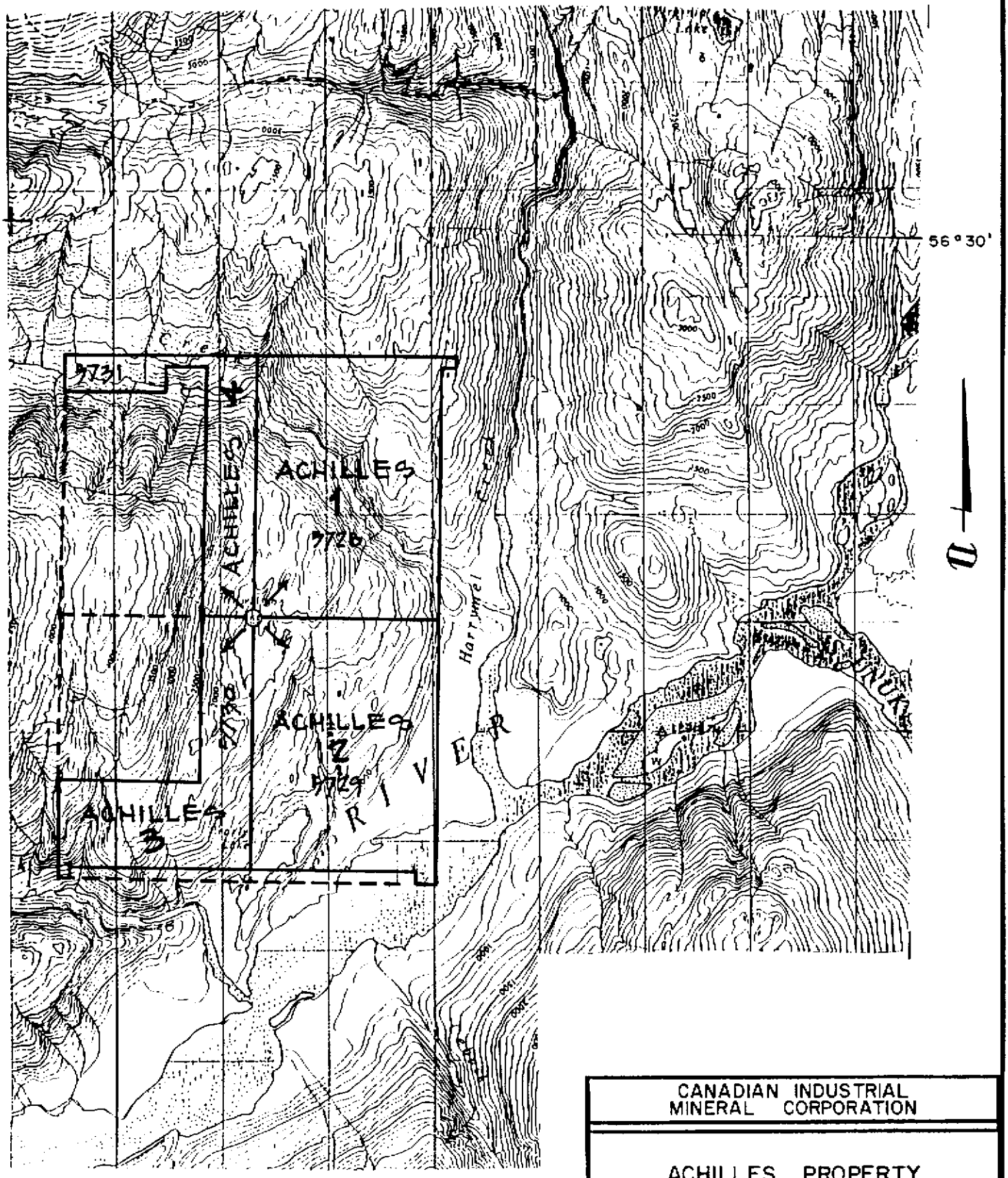
Precipitation is heavy, exceeding 200 cm per annum, with mild short summers but very wet spring and fall periods. Thick accumulations of snow are common during winter. It is seldom possible to begin surface geological work before July and difficult to continue past September.

Property Status and Ownership

The Achilles property (Figure 2) consists of four modified-grid claims totalling 80 units located within the Skeena Mining Division. Relevant claims data are tabulated in Table 1.

TABLE 1: Achilles Property - Claim Status

Claim Name	No. of Units	Record No.	Date of Record	Expiry Year
Achilles 1	20	5728	January 9, 1987	1998
Achilles 2	20	5729	January 9, 1987	1998
Achilles 3	20	5730	January 9, 1987	1998
Achilles 4	20	5731	January 9, 1987	1998



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CANADIAN INDUSTRIAL MINERAL CORPORATION

ACHILLES PROPERTY

CLAIM MAP

DATE: Nov. 1990	NTS: 104 B/7
PROJECT: 331	PROJ. GEOL.: G. Wesa
SCALE: 1:50000	

Keewatin Engineering Inc. | FIGURE: 2

These claims are apparently the subject of an agreement between the claim holder (Winslow Gold Corp.) and Canadian Industrial Minerals Corp. The claim records and maps show that the property was subsequently overstaked and that most of the Achilles 3 and 4 claims encompass pre-existing mineral claims.

HISTORY OF EXPLORATION

Regional History

The area drained by the upper reaches of the Stikine, Iskut, Unuk, Craig and Bell-Irving Rivers has been explored for gold since the late 1800's when prospectors passed through the region on their way to the interior.

Exploration to the north of Stewart in the late 1920's and early 1930's resulted in the discovery of mineralization in the vicinity of the Eskay Creek, Summit Lake and East Gold occurrences. Activity was relatively intermittent until the 1950's copper "boom" when the Granduc and Galore Creek deposits were discovered. Much of the area underwent preliminary prospecting during the 1950's and 1960's. Numerous showings and prospects were documented but the inaccessibility of the region and low metal prices resulted in limited exploration activity.

In the 1970's, the porphyry copper boom again brought prospectors and companies into the area. With the dramatic increase in precious metal prices in 1979, all prospects and former producers in the region were re-evaluated. Exploration programs focusing on potential high grade gold and silver deposits were initiated. Approximately $140 million in exploration expenditures have been spent in the region over the last ten years. Subsequent to 1986, total annual expenditures have averaged between $25 to $40 million. These expenditures have pushed several prospects to the advanced stage and resulted in the discovery of over 100 new mineralized occurrences. The advanced projects include the SNIP (Cominco-Prime), Eskay Creek (Corona-Placer-Dome), SB (Tenajon-Westmin) and Sulphurets (Newhawk-Granduc) deposits. Skyline Gold's Johnny Mountain deposit and Westmin/Pioneer/Canacord's Silbak-Premier and Big Missouri deposits went into production during the late 1980's. The exploration activity has been extended north of the Iskut River where numerous gold occurrences have been reported. The most prominent include the McLymont Creek (Gulf International), Iskut J.V. (American Ore-Golden Band-Prime), KRL (Kestral) and Forrest (Avondale) properties. Major exploration programs on these properties were conducted in 1990 and the SNIP property is scheduled for production in 1991.

The 1988 discovery of the Eskay Creek gold-silver-zinc-lead deposit demonstrates the area's potential to host world class deposits. Table 3 lists mineral deposits of the Stewart-Iskut River area.

The recent high level of exploration activity in the area led to federal-provincial government geological mapping programs which began in 1986. These programs will continue in the 1990's.

The Unuk River area was covered by geological mapping in 1988 as part of the Iskut-Sulphurets project conducted by the B.C. Ministry of Energy, Mines and Petroleum Resources (Britton et al., 1989). The entire NTS 104B map sheet is currently being mapped by the Geological Survey of Canada (Anderson, 1989).

The results of a regional stream sediment sampling program conducted over this area were released in July, 1988 (National Geochemical Reconnaissance, 1988). Britton et al. (1989) reported that almost every known precious metal prospect in the Unuk River area is associated with high stream gold values. Known gold occurrences are also associated with high but variable values for such pathfinder elements as silver, arsenic, antimony and barium.

Property History

A review of the material in the government's Assessment Report Archives indicates that the entire Unuk River area was subjected to reconnaissance geological mapping and prospecting by Newmont Mines Ltd. in 1959-1962. This work did not discover any promising showings or prospects on the present-day Achilles property.

In 1968, Granduc Mines Ltd. undertook an airborne electromagnetic and magnetic survey over McQuillan Ridge. A portion of this survey encompassed the southeastern part of the Achilles 2 claim.

In 1971, Great Plains Development Company of Canada Ltd. conducted a reconnaissance geochemical program in the Mt.Dunn and neighbouring areas which resulted in the staking of a copper anomaly (Minfile #079), located 1.5 km west of the property. Work in the area in 1974 and 1975 led to additional staking north and south, covering most of the Achilles 3 and 4 claims. Exploration completed in this area did not extend onto the Achilles property.

In 1981, DuPont of Canada Exploration Limited staked the COLE claims in the area immediately north of and covering the northern part of the Achilles 4 claim along King Creek, to

follow up a heavy mineral survey conducted in 1980 (Minfile #209). Further work was undertaken on the claim group, while under option to Placer Development and Skyline Exploration in 1983, but did not extend onto the Achilles claims. The assessment records also indicate that Duval Corp. conducted a regional heavy-mineral survey in the Unuk River area in 1981 (Korenic, 1982).

In 1986, Crest Resources Ltd. staked the King claims to cover the area adjoining the west side of the Achilles property, and in 1987, staked the Consort claim to cover the area immediately north of the Achilles 4 claim.

In 1987, a reconnaissance mapping, prospecting and geochemical (lithogeochemical and stream silt) program was conducted over several claim groups in the Unuk River area by Paul A. Hawkins and Associates Ltd. on behalf of Axiom Explorations Ltd. Half of one man-day of exploration was completed in the northeastern corner of the Achilles 4 claim along King Creek, with two rock and three silt samples collected. This sampling did not yield any elevated precious metals values.

In 1988, an airborne electromagnetic and magnetic survey was flown over the Achilles property. A number of north-northeast trending, weak to moderate strength conductors were delineated on the property. Interpretation of apparent resistivity data outlined the presence of five anomalous resistivity low zones. Four coincided with the conductive zones along Pearly Lake, north of and through Hawilson Lake, east of Hawilson Lake, and the extreme northwestern corner of the Achilles 1 claim near King Creek. The fifth coincided with the Unuk River cutting across the southeastern corner of the property. These zones occur either on the flanks of or coincident with broad moderate strength magnetic areas.

1989 Exploration Program

The 1989 property exploration program, conducted by Keewatin Engineering Inc., was completed between September 9 and October 16 and consisted of helicopter-supported reconnaissance prospecting, geological mapping and geochemistry (lithogeochemical, stream silt and heavy mineral sampling). Areas of known mineralization and gossans noted within the area were investigated and sampled.

The best values recorded were 4,358 ppb Au (0.127 oz/t) and 17.5 ppm Ag (0.51 oz/t) in rock chip samples collected from shear zones hosting up to 25% pyritic sulphides in chert and siliceous tuffs on the King Creek showing located in the northeastern corner of the Achilles 4 claim (Aussant

and DuPre, 1989). A summary of the 1989 geochemical results from the King Creek showing is presented in the Geochemistry section of this report and plotted on Figure 5. In addition, lithogeochemical sampling in three other locations: the southeastern portion of the Achilles 3 claim; southwestern portion of the Achilles 2 claim and northeastern part of the Achilles 2 claim yielded elevated gold values between 191-596 ppb Au. An anomalous gold value of 3,847 ppb Au was obtained from a heavy mineral sample collected from a south flowing tributary of King Creek located west of the King Creek showing. A float sample collected from the southeastern corner of the Achilles 3 claim yielded 178 ppb Au and 9,432 ppm Pb in black argillite containing quartz-carbonate stringers. A summary of other elevated geochemical results is presented in the Geochemistry section and the results are plotted on Figure 5.

GEOLOGY

Regional Geology

The property lies within the Intermontane Tectono-Stratigraphic Belt -- one of five parallel, northwest-southeast trending belts which comprise the Canadian Cordillera (Figure 3). The Achilles property is situated near the boundary between the Stikine Terrane, which comprises the majority of the western part of the Intermontane Belt, and the unmetamorphosed sediments of the Bowser Basin.

During Late Triassic and Early Jurassic time, the Stikine Terrain was the site of very active calc-alkaline volcanism. This volcanism was also accompanied by felsic intrusions that may have been comagmatic with the volcanic events. The sequences of rocks deposited at this time are now referred to as the Hazelton Group (Table 2). This predominantly volcanic assemblage is characterized by basal pyroclastic rocks overlain by argillites and, finally, by coarse volcanic breccia and conglomerate with interbedded tuffs, greywacke and siltstone.

At the end of Early Triassic time, this volcano-plutonic complex was uplifted to form the Stikine Arch. During Middle to Late Jurassic time, parts of the Stikine Terrain were filled with detritus shed from the Stikine Arch. The resulting, mainly sedimentary, sequences are referred to by Grove (1986) as the Betty Creek Formation, the Salmon River Formation and the Nass Formation (Table 3).

The Unuk River Valley is predominantly underlain by an Upper Triassic to Lower Jurassic section composed of miogeosynclinal volcanic and sedimentary rocks. The composition of the

volcanic rocks ranges from andesitic to rhyolite. Thick layers of siltstone and greywacke are intercalated within the predominantly volcanic assemblage. Grove (1986) assigns most of these rocks to the Unuk River Formation. This formation is the oldest of the Hazelton Group and unconformably overlies older Triassic units. The Unuk River Formation includes diagnostic Hettangian, Upper Pleinsbachian and Lower to Middle Toarcian fossil assemblages. In the type area, this formation has a measured cumulative thickness of over 14,000 metres.

The Unuk River Formation is unconformably overlain by the Middle Jurassic Betty Creek Formation which is mainly composed of clastic sediments with minor conglomerate, carbonate, chert and volcanic rocks. Fossil collections made from the various sedimentary units have defined the age of the Betty Creek Formation as Lower to Middle Bajocian, that is, lower Middle Jurassic.

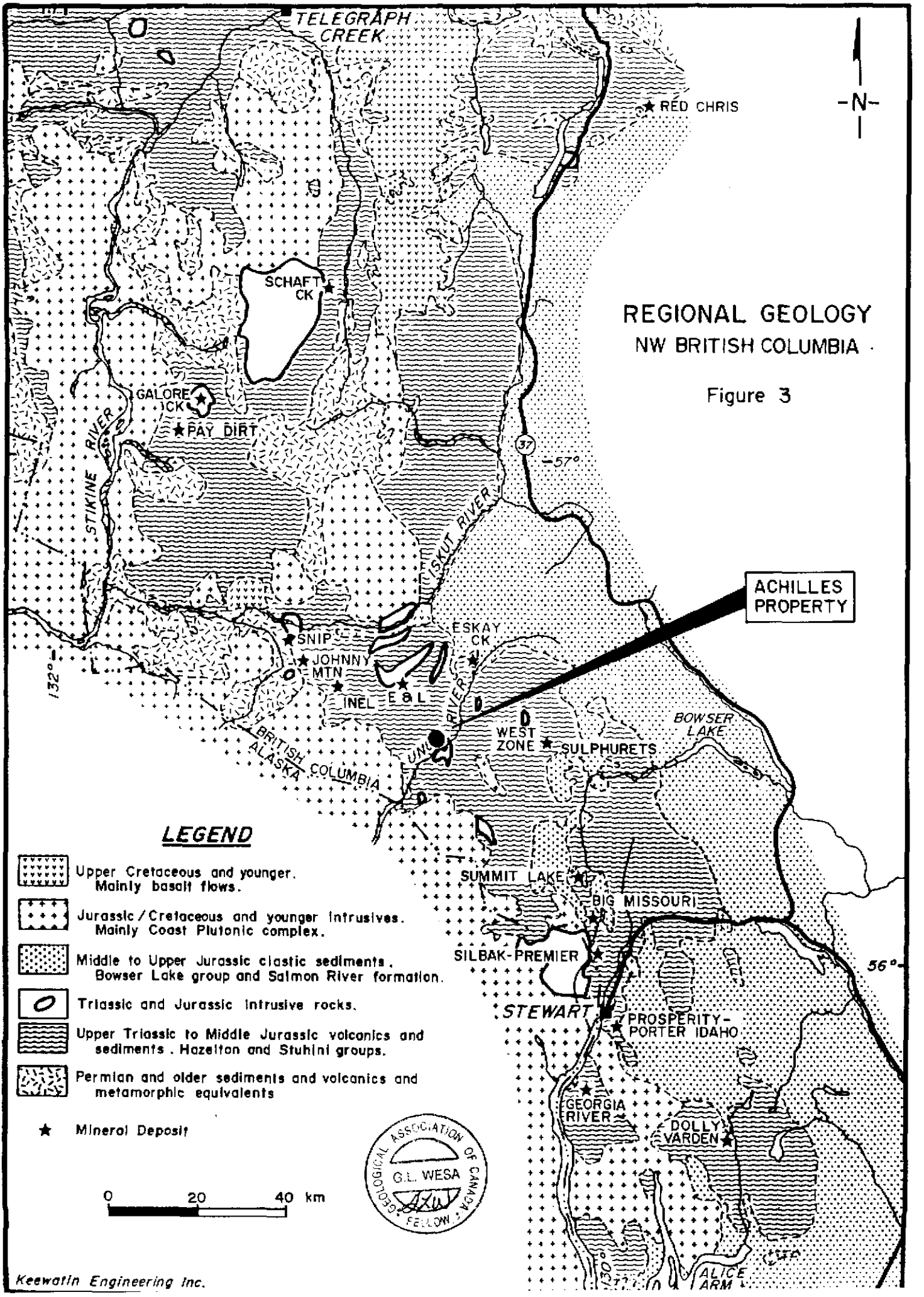
The Mount Dilworth Formation, a thin but regionally extensive blanket of felsic pyroclastics, overlies the Betty Creek Formation. Pyritiferous felsic welded tuffs, tuff breccia flows and thin lenses of siltstones, mudstones and argillites are the prevalent lithologies.

A thick sequence of Middle Jurassic, thinly bedded turbiditic siltstones (Salmon River Formation) overlies the Mount Dilworth Formation. Anderson (1990) has recently postulated that the Eskay Creek deposit "appears to be stratabound within the siliceous to limey sedimentary rocks and pillowed lava sequence of the Eskay Creek facies of the Salmon River Formation".

The Hazelton Group rocks were intruded by granitic rocks of the Coast Plutonic Complex. These intrusions consist of a variety of plutons representing at least four intrusive episodes spanning late Triassic to Tertiary time. These include synvolcanic plugs, small stocks, small satellitic diapirs, dyke swarms, isolated dykes and sills as well as batholiths belonging to the Coast Mountain Complex. Granodiorite is the predominant rock type, although a variety of lithotypes are recorded. The orogenic event which accompanied this intrusive phase also produced a major structural grain along the western margin of the Central Cordillera. The stratigraphic sequence has been folded, faulted and weakly metamorphosed during Cretaceous time, however, some Jurassic strata are polydeformed and may record an earlier deformation event. Regional metamorphism is classifed as lower greenschist facies and is characterized by saussuritized plagioclase, chloritized mafic minerals and the conversion of clay constituents to white mica. The age of metamorphism is Cretaceous, however, near the contact of the Coast Plutonic Complex, granitic dykes thought to be offshoots of the complex have been mylonitized, indicating that deformation has also occurred after this Eocene intrusive event (Alldrick et al., 1987).

AGE	GROUPS	FORMATIONS	MEMBERS	LITHOLOGIES
Bathonian	Bowser Lake	Ashman	Main Sequence	Turbidites, wackes, intraformational conglomerates
			Basal Conglomerate	Chert pebble conglomerates
Bajocian to Toarcian	Spatsizi(?)	Salmon River	Pyjama Beds	Thin bedded, alternating siltstones and mudstones
			Basal Limestone	Gritty, fossiliferoius limestone
Toarcian	Hazelton	Mount Dilworth	Upper Lapilli Tuff	Dacitic lapilli tuff with flow-banded clasts
			Middle Welded Tuff	Dacitic welded ash flow and lapilli tuff
			Lower Dust Tuff	Dacitic dust tuff
Pliensbachian		Betty Creek	Sedimentary Members	Hematitic volcaniclastic sediments, and turbidites
			Volcanic Members	Andesitic to dacitic tuffs and flows
Sinemurian to Hettangian(?)		Unuk River	Premier Porphyry	Two feldspar + hornblende porphyritic tuffs
			Upper Andesite	Massive tuffs with local volcaniclastic sediments
			Upper Siltstone	Turbidites, minor limestones
			Middle Andesite	Massive tuffs and minor volcaniclastic sediments
			Lower Siltstone	Turbidites
			Lower Andesite	Massive to bedded ash tuffs
Norian to Carnian	Stuhini		Volcanic Members	Pyroxene porphyry flows and tuffs
			Sedimentary Members	Turbidites, limestones, conglomerates

TABLE 2. Table of Formations - Unuk River Area


TELEGRAPH CREEK
RED CHRIS
-N-
SCHAFT CK
REGIONAL GEOLOGY
NW BRITISH COLUMBIA
Figure 3
GALORE CK
PAY DIRT
STIKINE RIVER
37
-57°
ACHILLES PROPERTY
SNIP
JOHNNY MTN
INEL
E & L
ESKAY CK
ESKAY RIVER
132°
BRITISH COLUMBIA
ALASKA
WEST ZONE
SULPHURETS
BOWSER LAKE
LEGEND
Upper Cretaceous and younger. Mainly basalt flows.
Jurassic / Cretaceous and younger intrusives. Mainly Coast Plutonic complex.
Middle to Upper Jurassic clastic sediments. Bowser Lake group and Salmon River formation.
Triassic and Jurassic intrusive rocks.
Upper Triassic to Middle Jurassic volcanics and sediments. Hazelton and Stuhini groups.
Permian and older sediments and volcanics and metamorphic equivalents
Mineral Deposit
SUMMIT LAKE
BIG MISSOURI
SILBAK-PREMIER
56°
STEWART
PROSPERITY-PORTER IDAHO
GEORGIA RIVER
DOLLY VARDEN
0 20 40 km
GEOLOGICAL ASSOCIATION OF CANADA
G.L. WESA
FELLOW
ALICE ARM
Keewatin Engineering Inc.

Regional Economic Geology

The Iskut-Unuk River area hosts many significant gold, silver and base metal deposits (Figure 3 and Table 3). These deposit types include epithermal and mesothermal precious metal shear-veins and replacements, calc-alkaline and alkaline copper ± gold porphyries, concordant massive sulphides, stratabound hydrothermal deposits and skarns. The majority of these are hosted by Upper Triassic to Lower Jurassic volcanics and sediments and display a spatial relationship with early Jurassic potassic intrusions (Table 3, Figure 4). A brief description of some of the more important deposits in the region are as follows:

Eskay Creek (21 Zone)

The mineralization at Eskay Creek was discovered in 1932 and active prospecting has continued sporadically since then. Two adits were the result of limited mining activity on this prospect. In 1988, Calpine Resources Incorporated discovered high-grade gold and silver mineralization on the #21 Zone (Northern Miner, November 7, 1988).

Eskay Creek appears to display characteristics of both epithermal exhalative and volcanogenic massive sulphide types of deposits. The deposit has been described as consisting of stratabound gold-silver-base metal zones, hosted by a carbonaceous mudstone unit (Salmon River Formation?) at the top of a rhyolite breccia sequence. The mudstone is overlain by andesitic pillow lavas. The rhyolite (Mount Dilworth Formation) is underlain by dacitic tuffs of the Betty Creek Formation. The southern part of the deposit (21A Zone) contains massive to disseminated stibnite-realgar mineralization with associated high grade gold and minor silver contents. This is underlain by a footwall stockwork zone in the rhyolite. The northern part of the deposit (21B Zone) is a very gold-silver rich, base metal sulphide lens, with extensive footwall stockwork mineralization. This mineralization is associated with pervasive quartz-chlorite-muscovite alteration and minor gypsum, barite, feldspar and calcite (Idziszek et al., 1990).

The 21C Zone lies 25 metres to 50 metres down section from the 21B Zone. Diamond drilling has identified the mineralized zone along a minimum strike length of roughly 600 metres. The 21C Zone is strongly mineralized with gold and silver, however, sulphide content is low compared to the 21B Zone. In addition, the Pumphouse Lake Zone has been traced by drilling over a strike length of 250 metres. There have been 665 surface diamond drill holes drilled to date plus an exploration decline has been driven to test the main contact ore lens and three mineralized horizons. Wall chip

assay results indicate a grade-width return of 1.56 oz/t Au and 40.5 oz/t Ag over 10 metres. This section includes 2.51 oz/t Au and 62.6 oz/t Ag over 5.54 metres. Underground drifting, bulk sampling and drilling will continue through the winter months of 1990-91.

Exploration activity has brought the total geological reserve base to an estimated 5,300,000 ounces gold equivalent at the 0.10 oz/ton Au threshold. This high grade reserve is contained within both the 21B and 21A Deposits. The potential to significantly increase the total reserve base is considered to be excellent. Immediately apparent potential lies within the northern 21B Deposit, in the Pumphouse Lake Zone, and the 21C Deposit. Additional new zones of discovery may be forthcoming pending results of surface drilling now underway elsewhere on the Eskay Creek property (Vancouver Stockwatch, September 18 and October 1, 1990).

Sulphurets Area

Several different deposit types are present in the Sulphurets map sheet (Open File 1988-4). A group of occurrences known as the Sulphurets Camp is located approximately 20 km southeast of Eskay Creek. Both porphyry type and mesothermal to epithermal precious metal deposits are present. Apparent overprinting of mineralization types and multiple generations of alteration and vein assemblages are noted. Most mineral occurrences in the area are hosted by the upper part of the Unuk River Formation or the lower part of the Betty Creek Formation (Britton et al., 1988). The Goldwedge Zone is hosted by the Betty Creek Formation. Other deposits in the camp include the Sulphurets and Snowfield Zones, the West Zone deposit and the Kerr deposit. Mineralization can be grouped into four main categories; veins, disseminations, intrusive contacts and stratabound. Extensive gossans are associated with mineralization in the area.

The mineralization of the West Zone is located in structurally controlled quartz vein stockworks within a silicified, sericitic alteration zone. The complex vein system, within the zone, is up to 40 metres thick and contains in excess of 60% vein material. The zone has been traced for over 600 metres along strike and for 500 metres at depth. Andesitic tuffs of the Unuk River Formation, near the volcanic-sediment contact, host the deposit. The mineralization consists of pyrite, electrum, native gold, argentite, galena, sphalerite, chalcopyrite, tetrahedrite, pyrargyrite, proustite, freibergite and stephanite.

Johnny Mountain

This mine has produced 100,300 tons of ore grading 0.46 oz/t gold, 1.0 oz/t silver and 0.75% copper to the end of October, 1989 (D. Yeager, personal communications, January, 1990). The deposit comprises five sub-parallel quartz veins, hosted by interbedded andesitic to dacitic volcaniclastics and volcanic sediments (Lower Jurassic) which are cut by feldspar porphyry dykes. The veins reportedly thicken and contain higher grades at quartz-carbonate cross structures and at lithologic contacts. The northeast trending veins are generally one to two metres wide and contain pyrite and chalcopyrite with minor sphalerite, galena and pyrrhotite. Electrum and native gold have been reported. A distinctive alteration halo surrounds the veins. Outward from the vein, the alteration sequence progressively changes from massive potassium feldspar and ankerite to a quartz-pyrite stringer zone to a disseminated pyrite zone.

Snip

This deposit is hosted by massive to bedded siltstone and feldspathic wacke (Upper Triassic). The ore zone ('Twin Zone') is described as a one to ten metre thick, discordant, banded shear vein which trends southeast. The zone consists of veins with alternating bands of massive, streaky calcite, heavily disseminated to massive pyrite, biotite-chlorite, quartz and pyritic to non-pyritic fault gouge. Mineralization consists of pyrite, lesser pyrrhotite, minor sphalerite and locally abundant arsenopyrite, galena, molybdenite and chalcopyrite. The gold grades are reported to be fairly uniform throughout, although native gold has been observed locally.

Summit Lake (Scottie Gold)

This mine produced 160,264 tonnes of ore grading 18.6 g/t gold and 10.1 g/t silver between 1981 and 1984. Epigenetic, mesothermal veins are developed along three sub-parallel shear systems which form part of a ladder vein set. Within these structures are plunging, parallel ore shoots consisting of massive pyrrhotite and/or pyrrhotite-pyrite, up to 5 metres wide. The shoots are usually symmetrically bordered by gold-bearing, quartz-carbonate-pyrrhotite-base metal sulphide vein swarms and disseminated base metals. These are hosted by brecciated and intensely silicified, hematized, carbonatized and chloritized wallrock. The overall gold/silver ratio is 2:1.

SIB Group

American Fibre and Silver Butte Resources have drilled 20 holes on their SIB claims and intersected mineralization contained in graphitic mudstone interbedded with felsic volcanic units. One hole returned 49.6 feet grading 0.42 oz/t Au and 30.91 oz/t Ag which includes 16.7 feet of 0.86 oz/t Au and 50.24 oz/t Ag. The geological setting is believed to be similar to the Eskay Creek deposit (The Northern Miner, October 22, 1990).

Inel

Avondale Resources conducted underground drilling and drifting of the AK Zone at the Inel property which produced significant high grade assay results in 1989. The underground program comprised 1,500 feet of adit and footwall drifting. A recent 24.3 foot intercept grading 1.19 oz/t Au, 1.39 oz/t Ag and 0.87% zinc was returned from underground drilling (The Northern Miner, October 15, 1990).

Recent exploration activity north of the Iskut River has resulted in the discovery of three different styles of mineralization. Gulf International has been drilling stratabound skarn mineralization (Mississipian age) on their McLymont Creek property. The zone has been traced for some 300 metres along strike and 200 metres at depth. The best reported drill results include 3.55 oz/t gold over 6.5 feet and 0.62 oz/t gold over 10 feet (L.O.M. Western Securities Ltd., 1990). Mineralization consists of pyrite, chalcopyrite, sphalerite and galena with a gangue of barite, calcite, gypsum, magnetite and specularite. It is believed that the formation of the deposit is due to the presence of a strong structure, chemically reactive host rocks and close proximity to intrusive bodies (Logan et al., 1990). Palaeozoic strata on Kestral's KRL property and Avondale's Forrest property are reported to host mesothermal, shear related gold mineralization. Kestral has reported that channel samples from veins graded up to 7.28 oz/t gold. Avondale has indicated that a large mineralized hydrothermal system, which has been traced for over 3 miles, hosts at least 19 precious and base metal occurrences. Rock samples grading up to 5.8 oz/t gold, 3.6 oz/t silver and 9.5% copper have been reported (L.O.M. Western Securities Ltd., 1990). The mineralization is found in quartz stockworks and veins and consists of gold and silver-bearing quartz-chalcopyrite, with or without malachite, azurite, arsenopyrite, galena, bornite and hematite. The mineralization is spatially related to granitic (Jurassic) and, locally, dioritic (Permian) intrusions. Further north, Cominco has reported polymetallic, massive sulphide float on their Fore More property. They have found more than 800

massive sulphide boulders containing fine-grained pyrite, sphalerite, galena, barite, chalcopyrite and, locally, silver minerals (Logan et al., 1989).

Britton et al. (1989) listed 55 mineral occurrences on the Unuk area map sheet. These showings are predominantly gold/silver occurrences and are hosted by a number of various lithologies. Most can be classified into one of four categories: stratabound, vein, skarn and disseminations. Grove (1986) determined that the age of the mineralizing events is variable, and notably, can be post-Triassic.

Stratabound mineralization consists almost exclusively of pyritic zones and lenses contained within a particular stratum or restricted set of strata. The best example is the Eskay Creek deposit.

Intrusive contact (skarn) deposits show a close spatial and temporal relationship with igneous intrusions. Three deposits in this category are the E & L nickel/copper deposit (Minfile #006), the Max copper/iron skarn (Minfile #013) and the Chris-Anne copper/iron skarn (Minfile #125). Britton et al. (1989) stated:

> Mineralization at the E & L occurs within two medium- to coarse-grained, olivine-pyroxene gabbro bodies. These roughly triangular plugs are each approximately 1300 square metres in area and are probably connected. They intruded a sequence of argillites, tuffaceous siltstones, and grey dacitic ash tuffs that strike northwesterly with moderate to steep southwesterly dips. Mineralization consists of pyrrhotite, pentlandite, and chalcopyrite, with lesser amounts of pyrite and magnetite. In the northwestern gabbro, mineralization extends up to the contact with the sediments, whereas in the southeastern gabbro, mineralization is confined to the pluton. Diamond drilling has delineated pipe-like pods and disseminations of sulphides to a depth of 120 metres. Drill-indicated reserves are 2.8 million tonnes of 0.7% Ni and 0.6% Cu (Sharp, 1965).
>
> The Max prospect lies on the northwest side of McQuillan Ridge, between the Unuk and South Unuk Rivers, at elevations between 455 and 1500 metres. Massive magnetite with lesser pyrrhotite and chalcopyrite occur in skarn-altered sedimentary rocks adjacent to a diorite stock. Garnet, epidote, actinolite, and diopside characterize the skarn assemblage. Drilling has indicated a reserve of 11 million tonnes at 45% iron (Canadian Mines Handbook 1973-1974, page 432).
>
> The Chris-Anne prospect lies approximately 3 kilometres east of the Max. Skarn mineralization is reported in limestone beds which are up to 10 metres thick and that are interbedded with volcaniclastics. Magnetite and pyrrhotite-rich layers, from 0.5 to 7 metres thick, with minor chalcopyrite, extend over a distance of one kilometre. There are minor intrusive bodies reported on the property. Grades range from 0.1% to 0.4% copper (Allan and MacQuarrie, 1981).

The gold potential of these skarn deposits does not appear to have been tested. Based on recent skarn studies (Ettlinger and Ray, 1988), this area has many features that are associated with gold-enriched skarns elsewhere in the province: sequences of calcareous and tuffaceous host rocks; structural deformation; intrusion by dioritic I-type granitoids; and contact metamorphism and recrystallization. Some auriferous skarns are enriched in cobalt, an element that may be a useful pathfinder.

High-grade precious metal quartz veins were the target of exploration programs at Mount Madge (Minfile #240 and #233) by Bighorn Development Corporation, and at the Doc prospect (Minfile #014) by Echo Bay Mines Limited. Britton et al.(1989) reported:

> The Mount Madge prospects are located south of Sulphurets Creek near its confluence with Unuk River, on the east and west sides of Mandy Glacier. Two different targets are being evaluated (Kruchkowski and Sinden, 1988). On the west, the C-10 prospect (Minfile #240) is a stockwork of thin quartz veinlets, locally with thicker quartz lenses, in intensely altered, fine-grained tuffaceous andesite or dacite. Quartz veinlets locally form up to 30% of the rock. The alteration assemblage consists of quartz and sericite with up to 10% pyrite. Chalcopyrite and traces of sphalerite are also present. The rocks are strongly foliated to schistose and are very similar to the broad alteration zones seen at Brucejack Plateau 12 kilometres to the northeast (Britton and Alldrick, 1988). Soil samples locally return analyses in excess of 1 ppm gold.
>
> Two kilometres to the east, Ken Konkin discovered a massive pyrite-siderite float boulder with visible gold. Prospecting uphill led to the discovery of the GFJ veins (Minfile #233), apparently flat-lying, zoned siderite-quartz-sulphide veins that returned assays up to 121 grams per tonne gold (Kruchkowski and Sinden, 1988). The veins are poorly exposed. Float blocks seen this year display symmetrical zoning from margin to core across vein widths of 10 to 15 centimetres. Vein margins are 1 to 2 centimetres of thin white quartz layers separated by hairline accumulations of very fine-grained tin-white sulphide, probably arsenopyrite. The core is a very coarse-grained intergrowth of siderite, milky quartz, and cubes and clusters of pyrite, with lesser amounts of sphalerite and chalcopyrite as crystals and irregular masses. Rare tetrahedrite and visible gold have been observed (K.Konkin, personal communication, 1988). The veins cut variably foliated andesitic ash tuffs with thin interbeds of foliated to schistose siltstones.
>
> The Doc prospect (Minfile #014) is located at treeline on a ridge overlooking the South Unuk River, opposite the mouth of Divelbliss Creek. The prospect consists of several west-northwest trending quartz veins up to 2 metres wide that have surface strike lengths of up to 275 metres (Gewargis, 1986). The main veins (Q17, Q22) are massive white quartz with sparse sulphide mineralization (5% to 10%) consisting of galena, pyrite, chalcopyrite, and sphalerite, with associated specular hematite and magnetite. Precious metal values are mostly confined to the sheared edges of veins and immediately adjacent wallrock. Shear zones with very little quartz may also return good values. Seraphim (1948) observed that gold was associated with either specular hematite or with galena and pyrite, but not with chalcopyrite and pyrite assemblages. The veins are a true fissure type, crosscutting folded and metamorphosed andesitic tuffs and thin-bedded sediments, including marble, that have been intruded by

TABLE 3: Summary of Mineral Deposits in the Golden Triangle Area

Deposit	Type	Host	Ore Reserves (tons)	Grade	Comments
Silbak-Premier	epithermal/ porphyry	Unuk River Formation (Lower Jurassic)	6,100,000	0.064 oz/t Au & 2.39 oz/t Ag	production resumed 1989
Big Missouri	epithermal and stratabound	Unuk River Formation (Lower Jurassic)	1,860,000	0.091 oz/t Au & 0.67 oz/t Ag	production resumed 1989
SB	epithermal	Unuk River Formation (Lower Jurassic)	152,000	0.335 oz/t Au, 0.79 oz/t Ag, 1.42% Pb-Zn	1982 discovery
Summit Lake	mesothermal shear vein	Unuk River Formation (Lower Jurassic)	132,000	0.56 oz/t Au	closed 1985
West Zone	mesothermal shear vein	Unuk River Formation (Lower Jurassic)	854,072	0.354 oz/t Au & 22.94 oz/t Ag	feasibility stage
Granduc	concordant massive sulphide	Unuk River Formation (Lower Jurassic)	10,900,000	1.79% Cu, 0.004 oz/t Au & 0.24 oz/t Ag	closed 1984
Kerr	alkaline porphyry	Unuk River Formation (Lower Jurassic)	66,000,000	0.86% Cu & 0.010 oz/t Au	1987 discovery
Eskay Creek	stratabound hydrothermal system	Mount Dilworth Formation (Lower Jurassic)	6,035,220 (prelim.)	0.643 oz/t Au & 15.61 oz/t Ag	1988 discovery drilling still in progress
Goldwedge	mesothermal shear vein	Betty Creek Formation (Lower Jurassic)	295,000	0.63 oz/t Au & 2.44 oz/t Ag	1981 discovery
Johnny Mountain	mesothermal shear vein	Unuk River Formation (Lower Jurassic)	740,000	0.52 oz/t Au, 1.0 oz/t Ag & 0.75% Cu	production commenced 1988
Snip	mesothermal shear vein	Stuhini Group (Upper Triassic)	1,032,000	0.875 oz/t Au	feasibility stage
Galore	alkaline porphyry	Stuhini Group (Upper Triassic)	125,000,000	1.06% Cu, 0.013 oz/t Au & 0.25 oz/t Ag	1955 discovery
Shaft Creek	calc alkaline porphyry	Stuhini Group (Upper Triassic)	1,000,000,000	0.30% Cu & 0.004 oz/t Au	dormant
Red Chris	alkaline porphyry	monzonite (Late Triassic to Early Jurassic)	43,700,000	0.56% Cu & 0.010 oz/t Au	dormant
E & L	porphyry	Nickel Mountain Gabbro (Jurassic)	2,930,000	0.80% Ni & 0.62% Cu	dormant

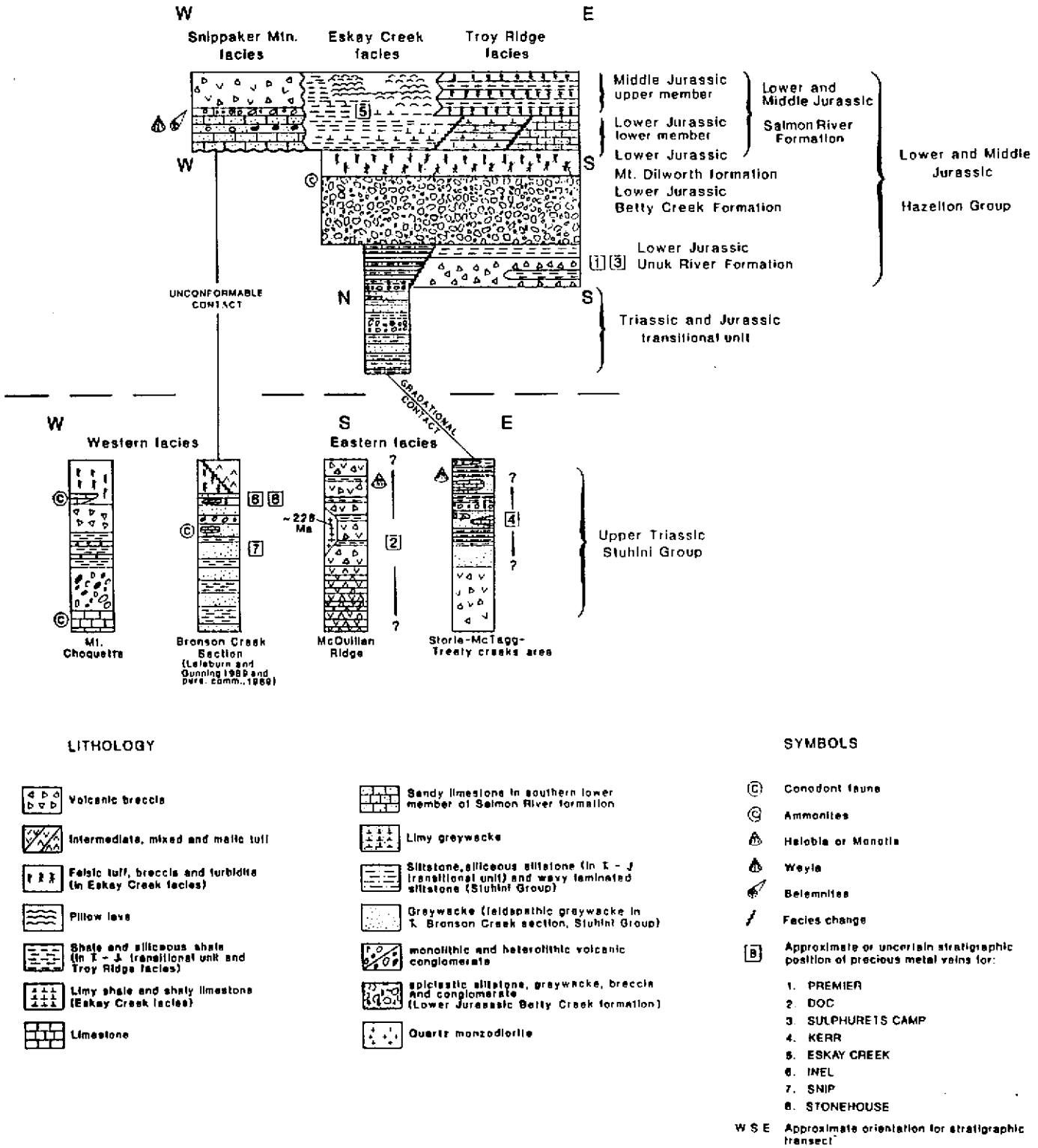


Figure 4: Mesozoic stratigraphy and setting for some mineral deposits in Iskut River map area, northwestern British Columbia

irregular dioritic dykes or sills and small monzodioritic plugs. The veins are different from any others seen in the Sulphurets or Unuk map areas. They have very restricted wallrock alteration aureoles, no apparent zoning, and appear to be limited to a few large fluid pathways. In this, they display characteristics of mesothermal veins. Structural control of the vein sets has not been determined but may be due to fractures related to folds in the host rocks. Total mineral inventory of the Q17 and other veins is given as 426,000 tonnes with 9.26 grams per tonne gold and 44.91 grams per tonne silver (*Northern Miner*, November 7, 1988).

Porphyry-type disseminated pyrite, chalcopyrite, and molybdenite mineralization occurs immediately north and south of King Creek, west of Harrymel Creek. Two properties have been worked: the VV to the south and the Cole to the north.

The VV property (Minfile #079), located 1.5 km west of the Achilles property boundary is the site of a heavily weathered monzonitic intrusive body in fault contact, on the east and west, with layered andesitic lapilli tuffs and tuff breccias with minor siltstone and calcareous sandstone interbeds. The stock is 250 metres wide, at least 6 kilometres long, strikes northerly, and dips steeply to the west, parallel to the country rocks. Chalcopyrite occurs in quartz stockworks and as fine disseminations within the monzonite. Molybdenite, sphalerite, malachite, and azurite have also been reported (Winter and McInnis, 1975; Mawer et al., 1977). Representative assays give 0.34% copper, 0.003% molybdenum, 2.1 grams per tonne silver, and 0.8 gram per tonne gold. Maximum gold and silver values obtained were 8.65 grams per tonne gold and 19.54 grams per tonne silver (Mawer et al., 1977).

The Cole prospect (Minfile #209) is situated approximately 4 kilometres north of the VV claims; it appears to be on strike with the same fault system and has similar intrusive and country rocks. Mineralization consists of up to 10% pyrite as disseminations and fracture fillings. Minor chalcopyrite and malachite have been reported but the bedrock source of the gold/silver soil anomalies has not been located (Korenic, 1982; Gareau, 1983). Reported assays range up to 0.43% copper, 7.12 grams per tonne gold, and 13.03 grams per tonne silver. Gold and copper values show a positive correlation on both properties with gold values appearing to associate with quartz-pyrite vein mineralization.

Property Geology

The Achilles property was geologically mapped and lithogeochemically sampled in conjunction with contour soil sampling and grid controlled soil sampling. These data were plotted on topographic base maps of 1:10,000 scale, prepared from an enlargement of a 1:50,000 NTS topographic map, and subsequently transferred to final 1:5,000 scale sepias. More detailed mapping and grid controlled soil sampling was conducted over the area covered by the King Creek grid and these data were compiled initially at 1:2,500 scale and finally at 1:1,250 scale.

Approximately 90% of the property is forest covered with outcrop exposure, accounting for 5% of the claims area, restricted to drainage valleys and incised gullies on steep slopes. Isolated exposures are found along lake shorelines (Hawilson Lake), in cliffs, scarps and bluffs on steep forested slopes and on topographic highs. The remaining 5% of the property is occupied by the braided Unuk River which develops an intricate network of interlacing channels through fluvial and glaciofluvial deposits.

Regional geological mapping by Britton et al.(1989) illustrates that Upper Triassic to Lower Jurassic supracrustal rocks are found on the property. Most of the property is underlain by Upper Triassic sediments of the Stuhini Group. The western edge of the property is underlain by the Lower Jurassic Unuk River Formation which consists of andesitic volcanics with lesser sediments (Table 2, Figures 3 and 5). These units are described by Britton et al. (1989) below:

Lithologies

Upper Triassic Stuhini Group

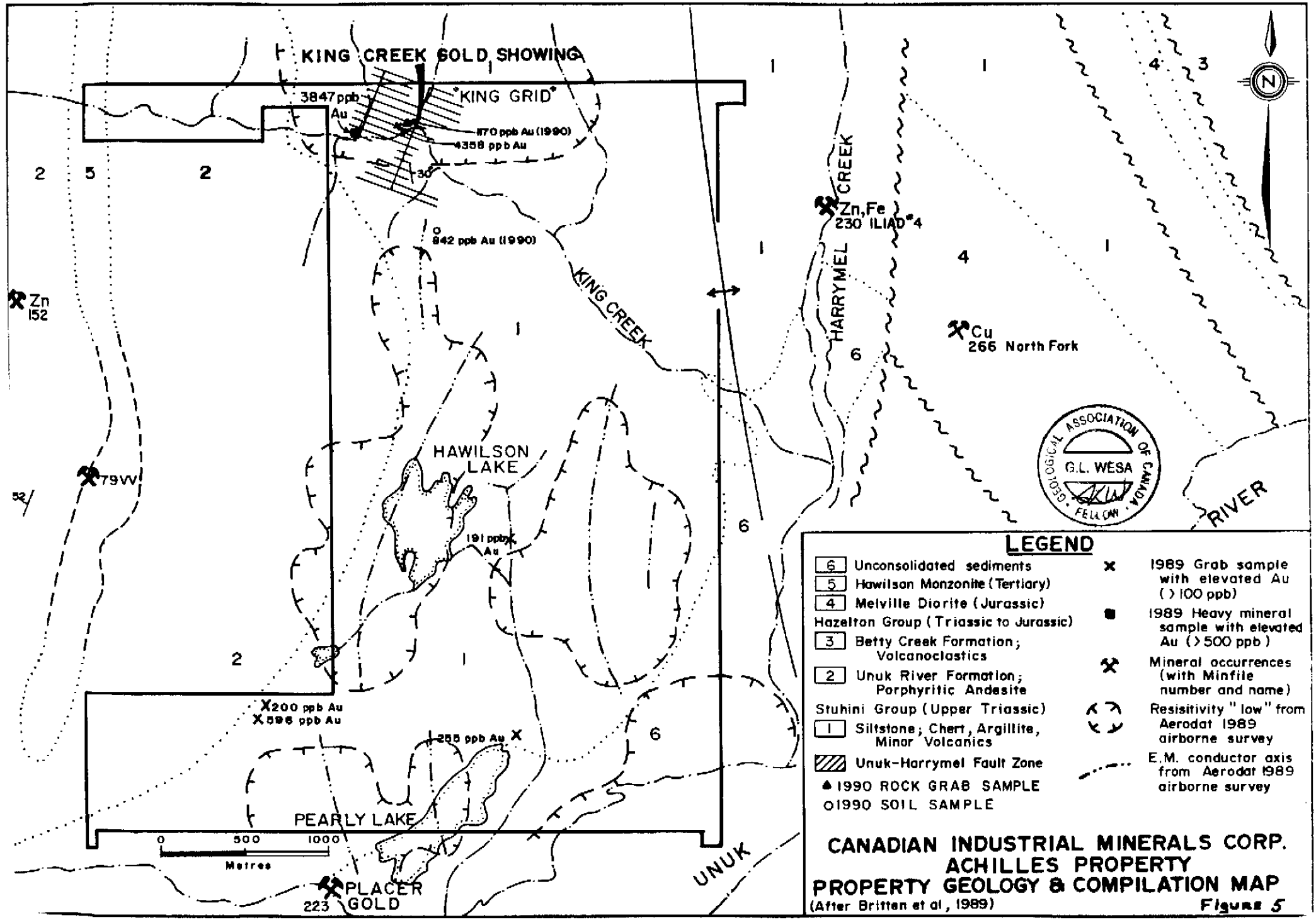
The Stuhini Group rocks occupy the nose of a north-plunging anticline, and occur as a wedge between the Unuk-Harrymel Shear Zone and the overlying Unuk River Formation. These rocks underlie most of the property, consisting of thin bedded siltstones, immature fine-grained wackes, chert, impure limestone, and andesitic tuffs that locally attain a considerable thickness. Andesitic tuffs may be laminated to massive, aphanitic or hornblende-feldspathic. Limestones occur as thin beds or discontinuous lenses that show extensive recrystallization and highly disrupted internal structure. Fossil evidence led Britton et al.(1989) to ascribe a Carnian to Norian age to these rocks.

Upper Triassic to Lower Jurassic Unuk River Formation

Britton et al.(1989) described this sequence as green and grey intermediate to mafic volcaniclastics and flows with locally thick interbeds of fine-grained immature sediments. The volcanics are reported to be dominantly massive to poorly bedded plagioclase (± hornblende) porphyritic andesite. The sediments are predominantly grey, brown, and green, thinly bedded tuffaceous siltstone and fine-grained wacke. These Norian to Sinemurian rocks belong to the Unuk River Formation which is the lowermost unit of the Hazelton Group. The basal contact with Triassic strata appears to be near the top of a thick sequence of clastic sedimentary rocks. Neither an angular unconformity nor a widespread conglomerate marks this lower contact. Regional geological government mapping and mapping completed during the 1989 property exploration program indicates this unit underlies the western edge of the property.

Tertiary Hawilson Monzonite

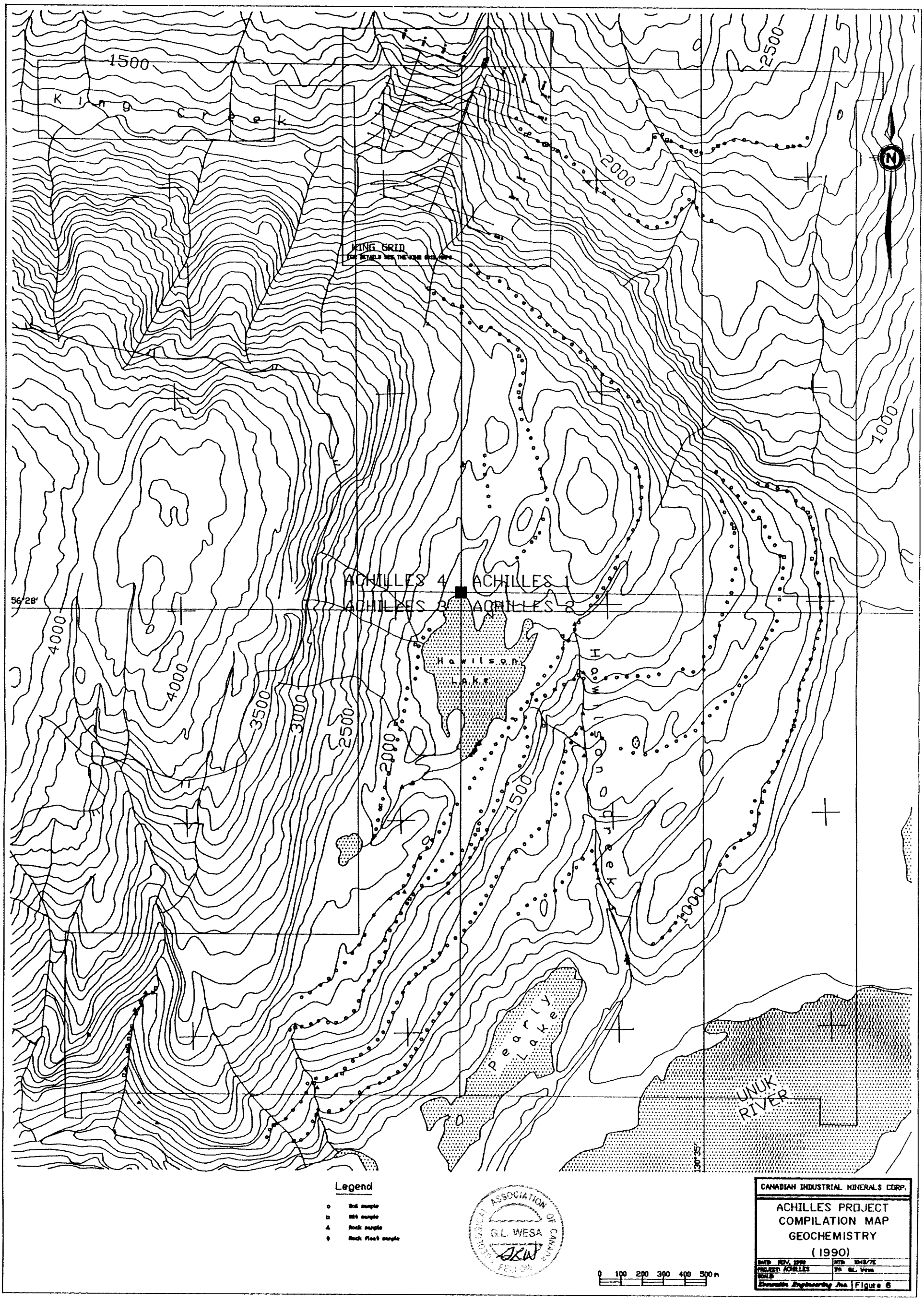
The Jurassic Unuk River Formation volcanics are intruded by an Eocene or older monzonite stock that varies from 150 to 350 m in width and appears to be continuous in a north-south direction for about 6 km. The intrusive is comprised of a light grey, fine- to medium-grained monzonite and



CANADIAN INDUSTRIAL MINERALS CORP.
ACHILLES PROPERTY
PROPERTY GEOLOGY & COMPILATION MAP

(After Britten et al, 1989)

Figure 5


1500
King Creek
2500
2000
KING GRID
1000
N
ACHILLES 4
ACHILLES 1
ACHILLES 3
ACHILLES 2
56°28'
4000
4000
3500
3000
2500
2000
1500
1000
Hawilson Lake
Hawilson Creek
Pearly Lake
UNUK RIVER
130°35'
Legend
Soil sample
Silt sample
Rock sample
Rock float sample
CANADIAN ASSOCIATION OF EXPLORATION GEOCHEMISTS
G.L. WESA
0 100 200 300 400 500 m
CANADIAN INDUSTRIAL MINERALS CORP.
ACHILLES PROJECT
COMPILATION MAP
GEOCHEMISTRY
(1990)
DATE NOV. 1990
NTS 104B/7E
PROJECT ACHILLES
BY G.L. Wesa
SCALE
Figure 6

is described as a "high level" vertically tabular monzonite body that has apparently been block faulted up into the volcanic sequence. This unit cuts across the western portion of the Achilles 3 and 4 claims, which is covered by pre-existing mineral claims.

Geological mapping by Keewatin Engineering personnel has identified two assemblages or rock stratigraphic units. The basal package comprises a thick sequence of sedimentary rocks defined as the Stuhini Group of Upper Triassic age. Overlying this sequence is a second package of rocks composed of intermediate to mafic volcaniclastics and massive flows belonging to the Unuk River Formation. This unit is exposed only near the west boundary of the property in Achilles 3 and 4 claims (Map 1).

The bedrock geology comprises predominantly thinly bedded argillite, cherty argillite, chert, massive limestone, greywacke and volcanic sediments composed of andesitic ash, crystal and lapilli tuffs. Minor thinly bedded to fissile shales and lesser quartzites and siltstones were also observed. These lithologies belong to the Upper Triassic Stuhini Group and are mapped along the steep, locally canyoned sides of King Creek and Hawilson Creek plus numerous isolated outcrops in gullies and on timbered slopes throughout the property (Map 1).

In the northwestern corner of the property, in the Achilles 4 claim, the predominant lithologies are interbedded pale to dark grey and black, thinly bedded to laminated argillite, cherty argillite, chert and finely laminated andesitic ash tuffs. Interbedded chert, ash tuffs and cherty argillites host sulphide mineralization at the King Creek showing in the northeastern corner of the Achilles 4 claim. Massive, medium to dark grey, fine to coarse clastic greywacke and pale to medium grey, locally, weakly to moderately recrystallized limestone forms cliffed exposures along King Creek. Massive greywacke also forms cliffs near the north end of the King Creek grid, on the west side of the baseline, and on the north side of King Creek, near the southeast corner of the grid.

In the King Creek grid area, numerous northwest-southeast striking, fine to medium crystalline dykes of quartz-eye porphyry, quartz-feldspar, diorite and diorite porphyry are observed cutting the stratigraphy. These dykes are best exposed in the two fault gullies occupied by south flowing tributary drainages to King Creek (Map 5). The dykes are commonly 0.5 to 2.0 metres wide and trend predominantly southeasterly. Their composition is generally felsic to intermediate north of King Creek, however, they are composed of dark grey to greenish-black aphanitic diorite south of King Creek.

Lithologies exposed within the western tributary gully to King Creek, in the Achilles 4 claim, are characterized by fracturing and brecciation resulting in the formation of silicified chert breccias, "crackle-frac" breccias and quartz-vein stockwork breccias. Two common lithologies mapped within this drainage are chert and black argillite which frequently weather bright orange resulting from local concentrations of contained pyritic sulphides. The lithologies covered by the King Creek grid are commonly characterized by extensive gossanous weathering, faulting, shearing and local folding resulting in intense quartz-carbonate alteration, silicification and brecciation.

Southeastward along King Creek, massive limestone and impure greywacke, containing narrow argillaceous and shale lenses and horizons, forms canyoned walls through the Achilles 1 claim. The limestones are pale grey to greenish-grey in colour and are commonly massive, however, local contorted bedding with pale green, ribbony layering was observed. Weak to moderate recrystallization was observed in cliffs on the south bank of King Creek in the northeastern corner of the Achilles 4 claim.

The bedrock lithologies covered by the Achilles 2 and 3 claims comprise a thick succession of interbedded, fissile to thinly bedded black argillite and shale, limey to siliceous greywacke, siltstone, quartzite, chert and minor andesitic ash and lapilli tuff. The tuffaceous sediments on the Achilles 3 claim appear to be siliceous and chertified. These rocks may correlate with the chert, cherty argillite and massive, strongly siliceous quartz/chert breccias exposed in isolated outcrops north of Hawilson Lake on the Achilles 4 claim. The siliceous, locally brecciated character of these rocks may be due to their proximity to local north-south fault zones which have fractured the bedrock of the area on a megascopic scale. Structural interpretation is complicated by the extensive cover of overburden and forested slopes covering the majority of the property.

Near the western boundary of the property, on the Achilles 4 claim, aphanitic, dark green andesitic volcanic flows were found in outcrop and in the massive talus blocks below cliffs composed of andesite. These rocks belong to the Upper Triassic to Lower Jurassic Unuk River Formation.

Structure

The general trend of the stratigraphic sequences is northwesterly with dips to the southeast. Dips vary from near vertical to shallow southeasterly or easterly in drainage gullies, representative of faults which have disrupted and contorted bedding. Deviations in strike and dip of stratigraphy are recorded throughout the property owing to local folding and fault related deformation, commonly

observed in creek gullies such as Hawilson Creek and fault gullies in the northeastern corner of the Achilles 4 claim. Prominent lineaments and structural features are readily observed on air photos and interpreted from topographic maps (Map 1).

Faulting on various scales was observed. Major north-south trending faults are represented by: Hawilson Creek on the Achilles 2 claim; two south flowing tributary drainage gullies on the northeastern Achilles 4 claim and a south flowing drainage gully paralleling the eastern claim boundary of the Achilles 1 claim. A northeast-southwest trending fault is postulated for the southeastern side of Hawilson Lake. The writer believes this fault may be traced from a small pond southwest of Hawilson Lake to the east-central part of the Achilles 1 claim. This fault is marked by sheared, brecciated and silicified bedrock occurring in drainages and along the southeastern shore of Hawilson Lake and is traced through gullies and cliffs to the northeast (Map 1).

Numerous narrow and discontinuous shears and fault zones are identified locally. In the central part of the Achilles 2 claim, two parallel northeast-southwest striking gullies represent the surface trace of two faults trending southwest toward Pearly Lake. Pearly Lake probably lies within the southern fault zone. Numerous scarps and bluffs in the Achilles 2 and 3 claims probably represent northeast-southwest trending structures.

Geological mapping has focused attention on the King Creek showing on the north bank of King Creek, which occurs as a 115 metre wide zone of extensively faulted and sheared, strongly gossanous, altered chert and siliceous tuffs. Parallel and sub-parallel, near vertical faults, striking at 020°, 040° and 160° to 180°, are responsible for the localization and emplacement of sulphide mineralization plus a strong silica-carbonate-limonite alteration halo. Individual mineralized fault zones vary in width from 1 cm to 4 metres. Broad carbonate-limonite-hematite breccia zones (Figure 7, Map 5) attain a maximum thickness of 4 metres.

Faulting and deformation on a regional scale tends to reflect itself locally in the form of limonitic micro-fractures and joints in brittle argillites. Evidence of this was observed at the King Creek showing and in the Hawilson Creek region. Strata in Hawilson Creek are characterized by mild to intense deformation, brecciation and, locally, intense slickensiding and fault polishing of large cliffed exposures in the lower parts of the drainage.

A north-trending fault on the south-central claim boundary of the Achilles 3 claim is defined by intensely slickensided and fault polished greywacke and argillite wallrock. Limonitic quartz-

sulphide fault breccias containing up to 10% disseminated pyrite occur in black argillite. Argillite within the fault zone is extensively fractured and cut by abundant pyritic quartz-limonite veins and veinlets. This fault may be associated with a series of northerly trending faults in the southwestern corner of the Achilles 3 claim.

Alteration

Rocks on the Achilles property are locally silicified and carbonatized with the most intense alteration being localized by and accompanying faulting and shearing. The sulfide-bearing rocks are commonly limonitic. Evidence of significant hydrothermal alteration of sulphide-mineralized outcroppings was observed at the King Creek showing. The showing is characterized by intense, pervasive quartz-carbonate-limonite-sulphide alteration of the host interbedded cherts, fine ash tuffs and cherty argillites. The alteration halo of the showing occurs as a bright yellow, orange and rusty coloured stain on steep outcrops along the north bank of King Creek (Figure 7).

Further downstream on King Creek, massive limestones display a mild to moderate degree of recrystallization. In Hawilson Creek gully, limestones may be moderately to strongly siliceous. Correspondingly, greywacke sequences are variably siliceous and calcareous. At lower elevations in Hawilson Creek, specifically, below 1,000 feet, intense shearing of the argillite and greywacke is accompanied by strong quartz-carbonate alteration with the formation of quartz-calcite veins, lenses, pods and stockwork veins. Boudinaged calcite-quartz veins with calcite stockwork-vein breccia, containing up to 2-5% disseminated pyrite, commonly occur along this section of the gully. Shear zones accompanied by fault breccia, clay-limonite gouge and graphite may contain up to 15% finely disseminated and nodular pyrite. Also commonly observed were vugs and dilatancy features, lined with drusy quartz, within siliceous argillite.

Similar, limonite-quartz-sulphide alteration of fractured, brecciated argillites occurs in a fault gully located on the south-central Achilles 3 claim boundary.

Intense silicification, silica-flooding and carbonatization of graphitic argillite and finely laminated ash tuffs occurs along the southeastern shore of Hawilson Lake. A narrow stream connecting Hawilson Lake to a small pond 620 metres to the southwest probably represents the surface trace of a fault zone characterized by silicified "crackle" breccia in a chert horizon. Brecciation of the chert is accompanied by silica-flooding and the formation of fine, dark quartz-sulphide (pyrite,

pyrrhotite) filled fractures and veinlets. Bedrock in the stream also appears gossanous and contains numerous fine limonitic fractures.

Elsewhere on the property, rocks are altered primarily by silicification and carbonatization. Limestones, greywackes and argillaceous sediments are the lithologies most commonly affected. Andesitic lapilli tuffs appear weakly chloritized. Proximal to most fault zones, rocks are fractured and stained with fracture and surface coatings of limonite and lesser hematite.

Mineralization

Trace to minor amounts (1-2%) of disseminated pyrite (± pyrrhotite) are ubiquitous within the Stuhini sedimentary and volcanic sequence. Areas of quartz-carbonate alteration, silica-flooding and brecciation within tuffs, cherts and siliceous argillites (Hawilson Lake area), contain up to 10% finely disseminated pyrite and pyrrhotite.

The southern part of the Hawilson Creek fault zone contains up to 10-15% coarse, stringer, vein, nodular and disseminated pyrite associated with calcite-quartz veins, fault brecciation and clay-limonite-graphite gouge. Sulphide mineralization in Hawilson Creek is intimately associated with shearing and alteration suggesting that faulting has directly influenced and controlled the emplacement of sulphides and carbonate-quartz vein material. Mineralized, calcareous and siliceous shear zones measure from <1.0 cm to 0.3-0.5 metres in width within the bedrock of the gully. Locally, numerous calcite-quartz veins and lenses attain an accumulated width of 3-4 metres, however, the majority of sulphide mineralization is restricted to narrow shears and breccia zones (Map 1).

Sulphide mineralization within the King Creek showing represents the most promising mineral occurrence on the property. This mineralized zone is exposed for 115 metres along the north bank of King Creek and is identified by strongly gossanous, limonitic staining of intensely silica-sulphide (pyrite ± pyrrhotite) mineralized chert and interbedded, siliceous, finely laminated intermediate ash tuffs. Pervasive carbonate alteration, calcite veining and intense brecciation accompany extensive shearing and faulting. Mineralization at this site comprises very finely disseminated, massive and semi-massive to smokey-grey pyritic sulphides in fine bands, lenses, irregular nodules and large pods hosted in brightly gossanous banded to thinly bedded chert and cherty or siliceous tuffs.

A 700 metre by 700 metre grid was established over the King Creek showing and the surrounding area to provide grid control for detailed mapping and sampling (Figure 5, Maps 5 and 6).

At station 0+48W to 0+45W, immediately north of line 4+00N, sulphide mineralization occurs as very fine grained, massive, pyritic sulphide bands and horizons up to 4 cm thick conformable to and interbedded with thin, pale grey to cream, finely laminated tuffs and chert. At 0+48W, 10-12 cm wide lenses or zones of strongly siliceous, medium to smokey grey tuffaceous material host up to 15% very fine to coarse disseminated pyrite. At 0+50W, fine grained, smokey-grey pyritic sulphide forms irregular pods, nodules, pinch and swell veins or lenses in yellow to cream/buff weathering, strongly hydrothermally altered chert. The chert is bleached, sucrosic and brittle. Massive, smokey-grey pyritic sulphide appears to have replaced the wallrock subsequent to alteration. Upslope, on steep cliffed outcrop, massive, medium to coarse crystalline pyrite in the form of limonitic elongate pods, or lenses, occurs in altered chert.

The gossanous alteration envelope extends westward to 0+75W. To this point the chert unit is massive but encloses zones of broken, milled wallrock resulting in a strongly calcareous chert breccia hosting disseminated, fracture-filling and veinlet pyritic sulphide mineralization. The areas bordering this gossanous, sulphidized chert zone are identified by intense fracturing and milling of the wallrock resulting in the formation of calcareous chert breccia, abundant coarse calcite veining, calcite-quartz alteration and, locally, disseminated to semi-massive pyrite (Figure 7).

Numerous sets of continuous to discontinuous faults and shear zones cut the showing and appear responsible for the alteration and mineralization of the wallrock. Between 0+48W and 0+54W, two sets of vertical faults cut the mineralized zone at 020° and 170°. At 0+54W a third, 0.5 metre wide fault zone strikes 040° and contains semi-massive pyritic sulphide in veins, fractures and narrow lenses hosted in rusty to cream weathering, hydrothermally altered, siliceous chert and tuff. To the west, faults cutting the calcareous breccia zones, strike at roughly 170° and 160°.

In summary, the semi-massive to massive pyritic (± pyrrhotite) sulphide mineralization appears to have an affinity for the pale grey to buff, siliceous ash tuff layers and bands within the chert horizons, plus the strongly limonitic, hydrothermally altered zones within the cherts. Disseminated sulphides pervade the entire altered sequence between 0+10W and 1+25W, however, the primary sulphide enrichment zones occur between 0+48W to 0+54W and 0+15W to 0+25W, immediately north of line 4+00N. The lithologies mentioned above appear to be conducive to replacement by silica-sulphide mineralization owing to extensive faulting and local hydrothermal alteration. Evidence

indicates that sulphide mineralization is lithologically and structurally controlled and that structural controls appear to have localized hydrothermal fluids and volatiles which subsequently altered the host lithologies.

1990 EXPLORATION PROGRAM

Geological Mapping

Approximately 65-70% of the property was evaluated by geological mapping and concurrent soil, stream silt and lithogeochemical sampling. This exploration activity was performed on the four Achilles claims with the highest concentration of effort directed toward the King Creek showing in the northeastern corner of the Achilles 4 claim and northwestern corner of the Achilles 1 claim. All of the claims were contour soil sampled and mapped. Contour soil lines were established at approximately 500 foot contour intervals between the 1,000 foot and 2,000 foot elevations on the property. A 2,200 foot elevation soil line was run in the northeastern corner of the Achilles 1 claim (Figure 6). Soil samples were collected at 50 metre spacings thus providing good coverage of almost the entire Achilles property. All of the lithogeochemical samples were collected concurrent with the geological mapping program.

Geochemistry

Sampling Procedure

A total of 80 rock grab, float and chip samples, 947 soil samples and 57 stream silt samples were collected during the 1990 reconnaissance survey. Rock grab and chip samples were collected from outcrop exposures exhibiting favourable characteristics such as sulphide content, gossanous staining, alteration and shearing. Rock and chip specimens were placed in marked plastic sample bags accompanied with a numbered tag for sample identification purposes. All sample sites were marked with a tyvek tag and fluorescent ribbon displaying the corresponding sample number.

Soil samples were collected from an average depth of 25 cm at 50 metre intervals from slope corrected contour lines established along slopes and ridges as well as from the King Creek grid. Sample pits were dug with long handled mattocks and good representative B_1 horizon soils were obtained from well developed soil profiles. Optimum soil samples were obtained from more than 90% of the property area sampled owing to the development of good reddish-brown B_1 horizon sandy clays

and silts. Locally, on the King Creek grid, talus fines substituted for soils on very steep slopes. Soil samples were placed in numbered, large gusseted kraft paper soil bags and the sample sites were correspondingly identified with a coded fluorescent ribbon and a tyvek tag. Stream silt samples were collected from the active portions of drainages intersected during contour soil sampling and mapping and, likewise, placed in marked kraft paper bags. Detailed notes were recorded for each sample and these are incorporated in Appendix VI. Analytical results are presented in Appendix IV and V and geochemical values are plotted on Maps 3, 4 and 7 to 12. Ground control for contour lines was provided by altimeter, clinometer, compass and topo chain and all crews were supplied with 1:10,000 and 1:50,000 scale topo maps for plotting geological and geochemical data.

Samples were subsequently shipped to Bondar-Clegg and Company Ltd. in North Vancouver for geochemical analysis. The analytical techniques are described in Appendix III.

Rock Geochemistry

Initial lithogeochemical (grab) sampling of the King Creek showing in 1989 yielded elevated to anomalous Au, Ag, As, Zn and Pb values. These results are summarized in Table 4.

Table 4
King Creek Showing - Lithogeochemical Analysis (1989)

Sample	Au ppb	Ag ppm	As ppm	Zn ppm	Pb ppm
KYR-15	912	4.4	446	-	-
KYR-16	665	1.5	367	529	-
KYR-30	211	1.4	-	-	-
KYR-31	116	-	221	-	-
KYR-33	4,358 0.127 oz/t	17.5 0.51 oz/t	1,478	768	2,352
KYR-34	177	-	94	721	-
KYR-35	477	3.4	370	3,596	409
KYR-45	-	-	119	-	-
KYR-40	869 ppm Ba				

In addition to this area, lithogeochemical sampling of fractured, rusty weathered black argillite yielded elevated Au, Ag and As values in three other locations on the property: in the southeastern portion of the Achilles 3 claim (KPR-85, KPR-86); in the southwestern portion of the

Achilles 2 claim (KYR-14); and in the northeastern part of the Achilles 2 claim (KZR-82). A summary of these elevated analytical results follows in Table 5.

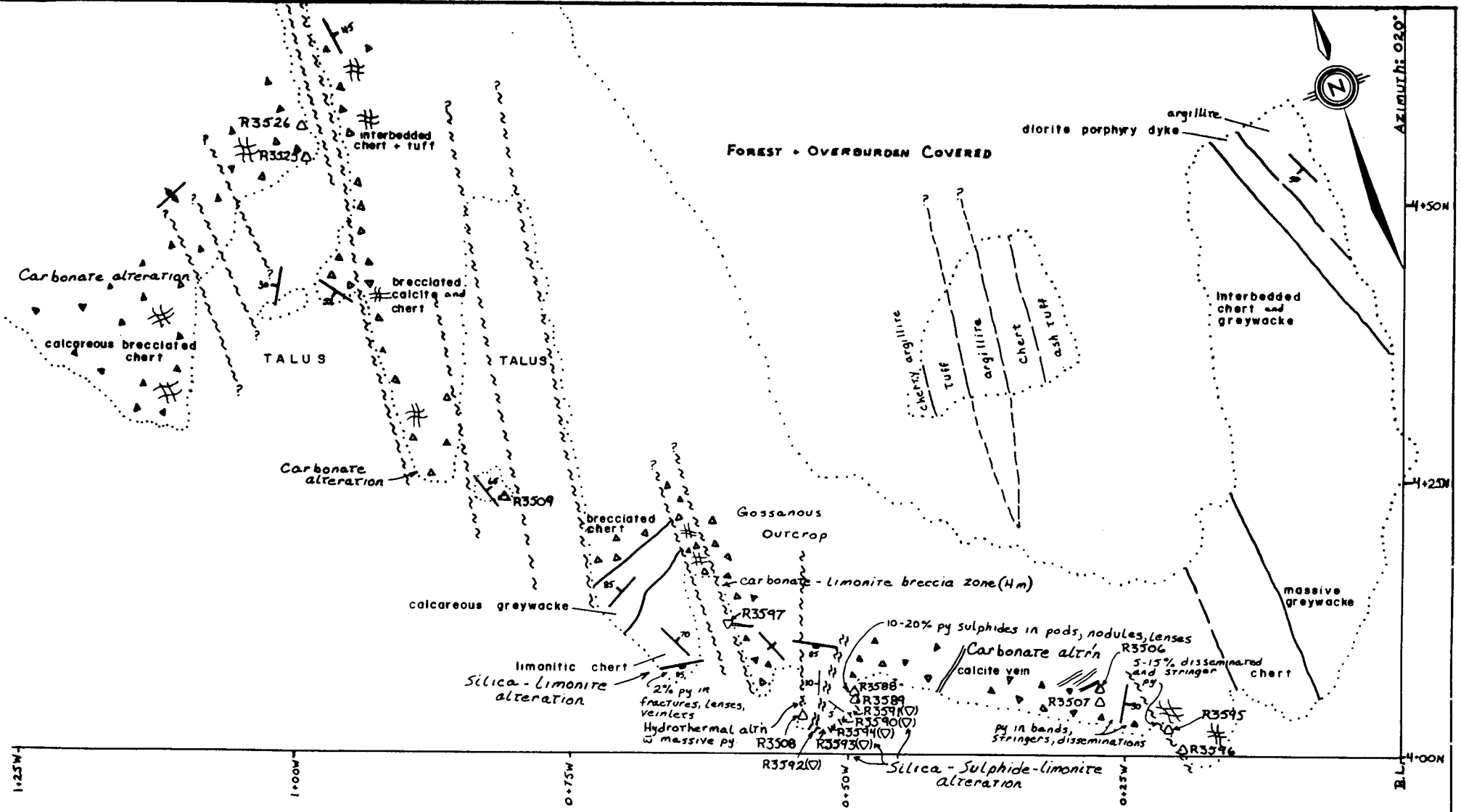
Table 5
Achilles Property - Lithogeochemical Analysis (1989)

Sample No.	Au ppb	Ag ppm	As ppm
KPR-85	200	3.8	165
KPR-86	596	2.0	97
KYR-14	255	-	-
KZR-82	191	1.5	93

During the course of the 1990 geological mapping and lithogeochemical survey, 80 rock samples were collected of which 70 were rock grab samples, 4 were float samples and 6 were chip samples. Rock and chip sample locations are plotted on Figure 7 and Maps 2 and 6 and geochemical values are plotted on Figure 8 and Maps 3, 4 and 7 to 12. Analytical results are presented in Appendix V and rock sample descriptions are recorded in Appendix VI.

The majority of the samples were sulphide (pyrite, pyrrhotite, chalcopyrite) bearing and were collected from areas of alteration, shearing, faulting and, where observed, lithological contacts. Analytical results from the lithogeochemical survey on the Achilles property were low with the exception of rock grab and continuous chip samples collected from gossanous, sulphidized outcrops at the King Creek showing where a rock grab sample returned the highest gold value of 1,170 ppb Au (0.036 oz/ton Au).

Table 6 records the values for Au, Ag, Cu, Pb, Zn, As and Hg resulting from the chip and rock grab sampling survey at the King Creek showing.



SYMBOLS

- outcrop boundary
- lithological contact (observed, approximate, assumed)
- fault
- breccia
- fractures
- vein
- bedding (inclined, vertical)
- joint
- small anticline
- rock sample (R3508)
- chip sample (R3590)

NOTE: All samples prefixed with 90GW331/R.....

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G.L. WESA
FELLOW

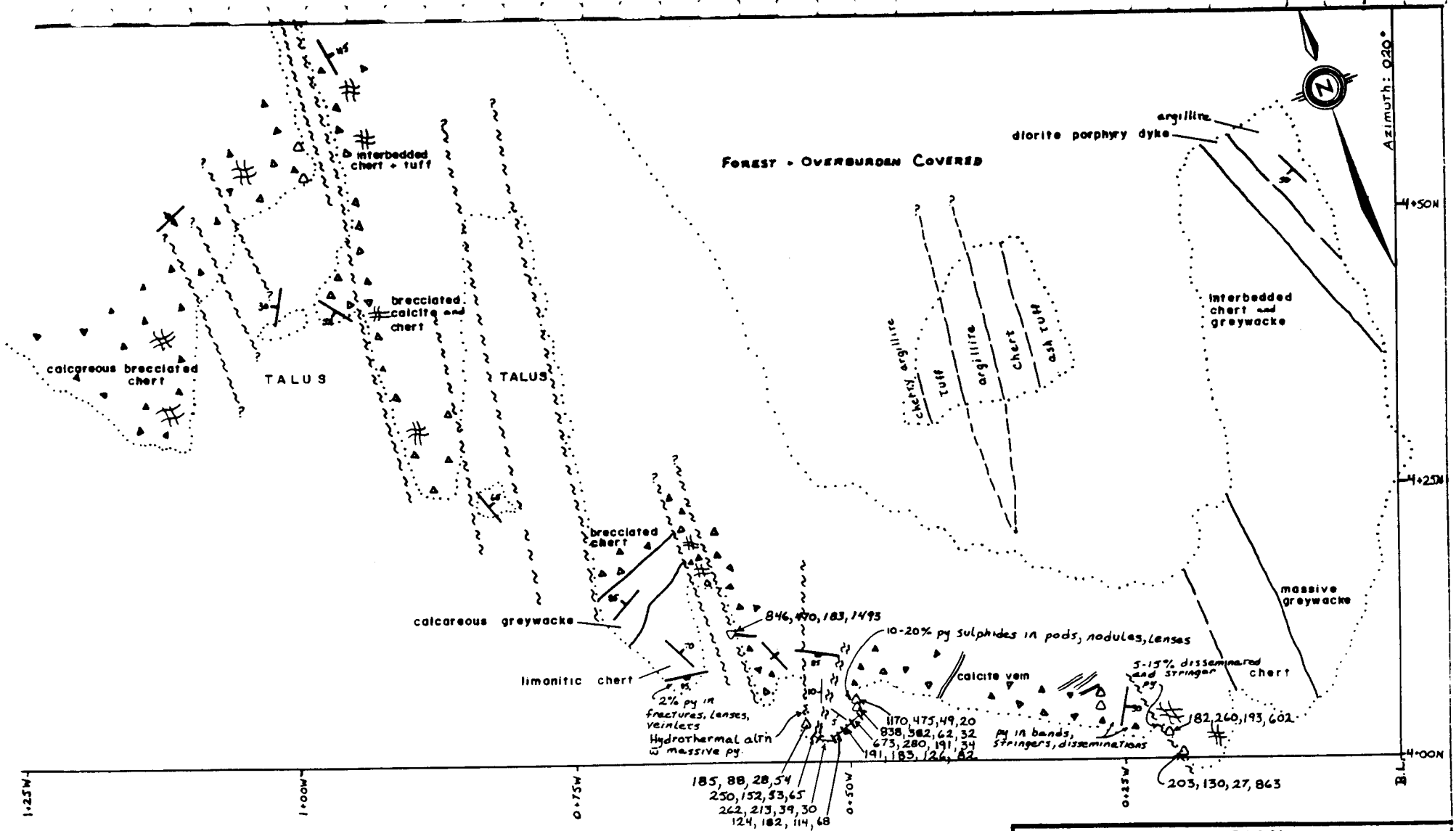
0 5 10 15 20m
Metres

CANADIAN INDUSTRIAL MINERALS CORP.

KING CREEK SHOWING

GEOLOGY & ROCK SAMPLE LOCATIONS

DATE: Dec., 1990	NTS: 104 B/7E
PROJECT: Achilles	PROJ. GEOL.: G. L. Wesa
SCALE: 1:500	Figure 7
Keewatin Engineering Inc.	MAP No.



LEGEND

185, 88, 28, 54 Au(ppb), As(ppm), Pb(ppm), Zn(ppm)

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FELLOW

CANADIAN INDUSTRIAL MINERALS CORP.

KING CREEK SHOWING

LITHOGEOCHEMICAL RESULTS

Au, As, Pb, Zn

DATE: Dec., 1990	NTS: 104 B/7E
PROJECT: Achilles	PROJ. GEOL.: G. L. Wesa
SCALE: 1:500	Figure 8
Keewatin Engineering Inc.	MAP No.

Table 6
King Creek Showing - Lithogeochemical Analysis (1990)

Sample No.	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Hg (ppm)
90GWR3588	1,170	3.7	26	49	20	475	0.046
90GWR3589	838	3.7	37	62	32	382	0.055
90GWR3590	191	1.4	44	126	82	183	0.041
90GWR3591	673	2.6	29	191	34	280	0.066
90GWR3592	250	2.0	44	53	65	152	0.028
90GWR3593	262	1.8	33	39	30	213	<0.010
90GWR3594	124	1.3	37	114	68	182	0.024
90GWR3595	182	1.9	63	193	602	260	0.021
90GWR3596	203	0.8	21	27	863	130	0.039
90GWR3597	846	3.2	130	183	1,493	470	0.125
90GWR3508	185	1.2	41	28	54	88	0.023

Rock grab sample 90GWR3588 (Table 6) returned the highest gold value of 1,170 ppb Au (0.036 oz/t Au). A 20 cm chip sample from a narrow, rusty weathering, quartz-pyritic sulphide vein (7-10% finely disseminated and fracture-filling pyrite) in a fault gouge zone returned 846 ppb Au, 3.2 ppm Ag, 130 ppm Cu, 183 ppm Pb, 1,493 ppm Zn and 470 ppm As (90GWR3597). The analytical results indicate that there exists a very close correlation between gold and arsenic values. Weak mercury values are recorded for the 11 samples in Table 4. Elevated arsenic values, moderately anomalous gold values and an hydrothermal character to the alteration suggests a potential epithermal origin for the mineralization.

Elsewhere on the property, lithogeochemical results for gold were low with the highest gold value (80 ppb) yielded from a grab sample of massive quartz breccia north of Hawilson Lake. Analytical values for base metals were low except for a few scattered elevated zinc values ranging from 166 ppm to 788 ppm Zn. The lithogeochemical survey failed to outline any significant base metal and gold targets in other areas of the property.

Soil Geochemistry

A total of 947 soil samples were collected from the Achilles property. Four-hundred and twenty-four soil samples were collected from approximately 21.45 kilometres of slope corrected contour lines established using clinometer, altimeter, compass and hip-chain to mark out 50 metre sample stations. Soil lines were planned at 500 foot contour intervals, however, steep terrain

conditions and daily fluctuations in barometric pressure, which caused changes in altimeter readings, occasionally precluded efforts to maintain constant elevations. Good quality soil samples were collected from well developed, rusty orange to reddish brown B_1 horizon silts, silty clays and sands at an average depth of 25 cm. Terrain covered by this survey varied from subdued and gently sloping to extremely high relief where contour lines followed steep valley slopes, bluffs and scarps (Map 2).

Areas of elevated gold-in-soil values occur in: west-central Achilles 1 claim (842 ppb Au); northeastern Achilles 2 claim (155 ppb Au); central Achilles 2 claim (Hawilson Creek, 161 ppb Au); southern Achilles 3 claim (123 ppb Au) approximately 200 metres south of the claim boundary (Map 3).

The contour soil geochemical survey conducted over the Achilles property failed to detect any strongly significant base metal targets. Elevated copper, lead and zinc values were scattered and widespread. The highest values for copper, lead and zinc were 573 ppm Cu, 151 ppm Pb and 1,534 ppm Zn. In places there was a correlation among the three elements within a sample, however, this was not a common characteristic of metals association as indicated by the analytical results (Map 4).

A 700 metre long by 700 metre wide grid, composed of 4.075 kilometres of flagged lines, was established with compass and hip chain in the northeastern corner of the Achilles 4 claim to cover the King Creek sulphide showing and surrounding area. A 700 metre flagged baseline was established at 020° azimuth with 50 metre spaced lines. All lines were slope corrected and sample stations were located at 25 metre intervals. Five hundred and twenty-three soil samples were collected from 15-30 cm deep pits in well-developed B_1 soil horizons. Samples collected from steep valley slopes paralleling King Creek and its two tributary drainage gullies from the north were principally talus fines. Fifteen stream silt samples were collected from the two main tributaries plus occasional tiny streams encountered during grid sampling (Maps 2 and 6).

Elevated gold values resulting from the initial grid soil survey warranted follow-up work in the form of close spaced soil sampling at five to ten metre intervals, along 10 metre spaced lines on either side of anomalous gold-in-soil geochemical stations. Anomalous sections of the initial soil lines were also resampled at 5 metre intervals.

With regard to the "King Grid" (Maps 7 - 12), the gold, silver, arsenic, copper, lead and zinc analytical values from soil samples have been categorized into four intervals using circles of increasing diameter to represent these categories. The threshold of anomalous values used for soil samples was

established using the 90th percentile for the individual element and comparing these thresholds with data published in the National Geochemical Reconnaissance publication, G.S.C. Open File 1645, plus Keewatin Engineering Inc.'s extensive data base for similar lithologies in the Unuk River map area. Symbol sizes on the maps represent approximately the 90th, 93rd, 96th and 98th percentile. Analytical determinations are listed adjacent to the symbols.

Maps 7 to 12 show the analytical results of the grid controlled soil geochemical survey conducted on the King Creek grid. Follow-up, close spaced soil sampling in the form of "mini-grids" has further enhanced the significance of the King Creek showing. Strongly anomalous gold values up to 3,332 ppb Au (0.098 oz/t Au) are recorded on line 4+50N at station 2+00W (Zone 1). On line 4+50N, two strongly anomalous zones; one in the vicinity of 2+00W and a second between 0+50W and 1+25W, suggest that two mineralized zones trend perpendicular to line 4+50N. Anomalous gold values at similar stations on line 4+00N (277 ppb, 98 ppb, 170 ppb Au) further assure that a mineralized trend exists closely paralleling the baseline.

Elsewhere on the grid, moderately strong gold values are recorded on lines 3+00N, 2+50N, 0+50N and 0+00N on the east side of the baseline. The anomalous area outlined on lines 2+50N and 3+00N (Zone 2) appears to be offset 50-75 metres to the east from the target area defined by lines 4+00N and 4+50N (Zone 1) on the north side of King Creek. Furthermore, the anomalous area surrounding lines 0+00N and 0+50N (Zone 3) is offset approximately 75-80 metres east of Zone 2. These offsets may be due to displacements related to regional faulting as reflected in King Creek and its tributaries.

An isolated single station gold value of 668 ppb Au in the southwestern corner of the grid was accompanied by two weak to moderately anomalous gold values (93 ppb Au and 314 ppb Au) from the mini-grid established over this anomaly. A second single station, elevated gold value (110 ppb) occurs at station 1+25W on line 6+00N and a third (195 ppb) occurs at 2+50E on line 5+50N.

An examination of the analytical results of the grid soil sampling on the King Creek grid indicates that there is a close correlation between elevated Au, As, Cu and Zn values between lines 1+00N and 7+00N. In Zones 1 and 2, lead is less closely associated with the above elements and occurs as scattered, weakly elevated values (Appendix IV). There exists a profound gold-arsenic association as indicated by closely corresponding elevated Au and As values. The highest gold values (3,332 ppb) and the highest coincident arsenic values (>2,000 ppm) recorded were yielded by soil samples collected along line 4+50N and from the "mini-grids" established parallel to this line in

Zone 1. In Zone 2, strongly elevated copper values (up to 2,245 pm Cu) are coincident with elevated gold, arsenic and zinc results. A different pattern is detected in Zone 3 in the southeastern part of the grid. This area is characterized by strongly elevated lead values (up to 1,976 ppm Pb) and coincident strongly elevated zinc values (up to 1,877 ppm Zn). Soil samples yielded anomalous gold values (up to 1,105 ppb Au) and arsenic values (up to 212 ppm As). Although lead and zinc values for Zone 3 are dramatically increased compared to values recorded for the area of the grid to the north, gold values appear to be generally weakly to moderately anomalous. This suggests a change in the style of mineralization as indicated by the close correlation between the three base metals and weaker but continuing significant gold and arsenic responses. Analysis for antimony, molybdenum and mercury failed to return any anomalous values within the King Grid area and the remainder of the property.

Stream Silt Geochemistry

Fifteen stream silt samples were collected from active drainages and streams during the course of soil sampling on the King Creek grid and a further 38 silts were collected from drainages intersected during the contour sampling survey. One elevated gold-in-silt value (155 ppb Au) was recorded from a steep, active drainage gully in the south-central part of the Achilles 3 claim. Corresponding weakly anomalous gold-in-soil values (40 ppb and 95 ppb Au) were recorded downslope from this silt sample on the sides of the gully. Geological mapping within this gully indicates that the drainage represents a fault zone defined by fault polished, slickensided wallrock, brightly gossanous, brecciated and altered argillite and greywacke sediments.

GEOPHYSICS

An airborne VLF-EM electromagnetic and magnetic survey was conducted over the property during the period of December 22, 1988 to January 8, 1989 by Aerodat Ltd. Five anomalous resistivity low zones were delineated over the property (Figure 5). Broad, moderate strength magnetic anomalies coincide with the resistivity lows. Ground investigations provided interpretations and supported conclusions made by Aerodat Ltd.

Five resistivity low zones were identified on the Achilles property and these may be related to bedrock conductors containing sulphide mineralization. Some of these conductive zones appear to be coincident with faults. Low resistivity was delineated over Hawilson and Pearly Lakes. Geological mapping delineated a zone of sulphide bearing, siliceous, tuffaceous and chert sediments along the

southeastern shore of Hawilson Lake plus siliceous sediments and chert breccias to the north, however, no source of the conductors over Pearly Lake was discovered. One possible explanation for the Pearly Lake anomaly is the existence of covered, sulphide bearing, northerly to northeasterly trending silicified fault zones similar to faults in the southwestern corner of the property.

Low resistivity accompanied by a high magnetic field over the King Creek grid area may be accounted for by the fault controlled, intensely sulphidic bedrock of the King Creek showing.

Aerodat Ltd. states that prominent linear fractures occur in areas of high magnetic field which may explain a magnetic high field in the central portion of the property east of Hawilson Lake. This zone also correlates with a prominent low resistivity anomaly. A surface geological expression in the form of cliffs and scarps occurs in this area and may represent normal faulting.

A fifth conductor, producing a well defined resistivity low zone with a coincident magnetic high field, occurs in the Unuk River valley in the southeastern corner of the property.

Three areas; the King Creek showing,the area east of Hawilson Lake and the Unuk River valley area, are characterized by prominent coincident resistivity low responses and high magnetic field. Two other areas of low resistivity, over Hawilson and Pearly Lakes, coincide with magnetically quiet or low areas and probably reflect the conductive nature of the sediments in these areas.

CONCLUSIONS

Geological mapping, contour and grid controlled soil sampling, stream silt sampling and lithogeochemical sampling was the focus of exploration activity on the Achilles property during the 1990 reconnaissance program. Geological mapping has shown that the property covers an assemblage of northeasterly striking interbedded argillite, chert, cherty argillite, limestone, greywacke and lesser quartzite and siltstone of the Upper Triassic Stuhini Group. Locally, minor andesitic ash, crystal or lapilli tuffs are interbedded with the argillites and cherts. The sedimentary sequence is overlain by aphanitic intermediate volcanic flows belonging to the Upper Triassic to Lower Jurassic Unuk River Formation near the western edge of the property.

A total of 80 rock samples, 947 soil samples and 57 stream silt samples were collected for analysis with the objective of evaluating the property's economic potential plus following up geochemically anomalous areas delineated by the 1989 program. Areas of elevated gold-in-soil values

occur in: west-central Achilles 1 claim (842 ppb Au); northeastern Achilles 2 claim (155 ppb Au); central Achilles 2 claim (Hawilson Creek, 161 ppb Au); and south-central Achilles 3 claim (155 ppb Au-in-stream silt). In addition, a potential high grade gold-base metal system occurs in the northeastern corner of the Achilles 4 claim adjacent to the Achilles 1 boundary. This zone of strongly gossanous, intensely silica-sulphide mineralized chert and siliceous tuffs, carbonatized tuff breccia and extensively sheared and faulted outcrop is exposed for 115 metres (378 feet) along the north bank of King Creek.

A 700 metre by 700 metre grid was established over the King Creek showing and the area to the south of King Creek to provide grid control for geological mapping and detailed soil sampling. From this grid, 523 soil samples and 15 stream silt samples were collected. Closely spaced soil sampling, at 25 metre stations and, locally, at 5 metres in areas of anomalous soil geochemical responses, has produced strongly anomalous gold values up to 3332 ppb (0.098oz/ton Au) and outlined an area of interest (Zone 1) measuring 275 metres (902 feet) wide. Continuous rock chip samples across 6 metres of intensely sulphidized, chertified and siliceous tuffs in Zone 1 produced corresponding elevated gold values up to 1,170 ppb Au. Mineralization at this site comprises very finely disseminated, massive and semi-massive to smokey-grey pyritic sulphide in fine bands, lenses and large pods hosted in interbedded cherts and cherty tuffs. Locally, sulphide horizons measure up to 4 cm wide and form thin layers conformable to the bedding. This gossanous, silica-sulphide mineralized zone is bounded to the east and west by strongly carbonatized, brecciated tuffaceous sediments. These areas are also characterized by intense shearing and fracturing and documented gold-in-soil values up to 2021 ppb Au (0.059 oz/t Au).

The gullies between the brilliantly gossanous outcrops in Zone 1 represent major fault zones and fractures which provided the conduit for hydrothermal fluids and imparted an epithermal character of alteration and silica-sulphide mineralization along this trend. An epithermal origin for the mineralization is favoured further by the presence of corresponding elevated arsenic values in soil and rock.

Anomalous gold-in-soil values suggest a mineralized strike length of 50 metres and possibly 200 metres (656 feet) north of King Creek plus a further 400 metres (1,300 feet) south of King Creek where elevated gold values in soils are recorded. South of King Creek, closely spaced soil sampling, at 5 metre stations, has outlined an area of elevated gold values (Zone 2) measuring approximately 70 metres by 100 metres located slightly to the southeast of the gossanous outcroppings on the north bank of King Creek. This offset may be due to a set of faults traced out by King Creek and its

tributaries to the north. Also, the southeastern area of the King Creek grid has returned anomalous gold-in- soil values up to 1105 ppb Au, substantially increasing the size of the area of interest.

Copper, lead and zinc values from the grid correlate closely with elevated gold values, particularly south of King Creek where Cu values up to 2245 ppm, lead values up to 1,976 ppm and zinc values up to 1,877 ppm in soils are recorded (Zones 2 and 3).

An evaluation of previous work conducted in 1989 plus the results of the 1990 examination of the King Creek showing suggests that zones of gold and base metal mineralization, accompanied by quartz-carbonate-limonite alteration, are structurally controlled and may represent the surface expression of a larger, deeper gold bearing system. The presence of numerous surface gold-in-soil anomalies south of King Creek is indicative of the potential for more substantial mineralization on strike to the south.

RECOMMENDATIONS

Evaluation of the data from the 1990 exploration program on the Achilles property, which resulted in the discovery of significant shear hosted gold-sulphide mineralization, indicates that additional work is required to fully evaluate the Achilles property's mineral potential, particularly in the area of the King Creek grid. An exploration program comprised of geochemistry, geophysics, geological mapping and trenching is warranted. This program is described below:

1) Expand the King Creek grid to the south to cover gold-in-soil anomalies detected at higher elevations on the ridge. Coincident with grid establishment, conduct a soil geochemical survey with 25 metre sample intervals along 50 metre spaced lines. The grid should be of sufficient size to cover present geochemical anomalies plus potential subsurface structures.

2) Gridded VLF-EM and magnetometer survey over the entire King Creek grid.

3) Careful, detailed geological mapping and lithogeochemical sampling should be performed over the expanded grid, focusing particular attention to shear zones and structural features.

4) Trenching to bedrock should be performed over all zones of elevated gold- and base-metal-in-soil values within the grid area. Explosives may be required in areas where overburden thickness is excessive.

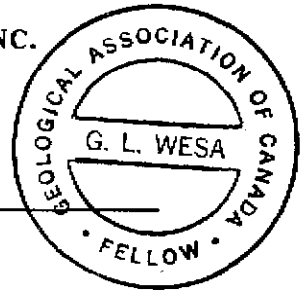
5) Exposed favourable bedrock should be chip sampled across appropriate intervals of one metre.

6) Follow-up work, in the form of close spaced (5 metre intervals) gridded soil sampling should be performed in the vicinity of other elevated gold-in-soil values on the property. Contingent upon favourable results, trenching to bedrock and chip sampling of anomalous targets should follow.

7) A diamond drilling program should be considered but would be contingent upon the receipt of favourable results from the soil sampling and trenching/chip sampling program.

Respectfully submitted,

KEEWATIN ENGINEERING INC.



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STATEMENT OF QUALIFICATIONS

I, GARY L. WESA, of #309 - 6669 Telford Avenue in the Municipality of Burnaby, in the Province of British Columbia do hereby certify that:

1. I am an independent consulting geologist under subcontract to Keewatin Engineering Inc. with offices at Suite 800 - 900 West Hastings Street, Vancouver, B.C.

2. I am a graduate of the University of Saskatchewan (1974) with a B.Sc. degree in Geology and I have practised my profession continuously since graduation.

3. I have been employed in mineral exploration since 1970 in Canada and the U.S.A.

4. I am a Fellow of the Geological Association of Canada.

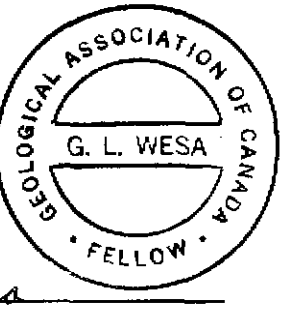
5. I am the author of the report entitled "Geological and Geochemical Report on the Achilles Property, Skeena Mining Division, British Columbia", dated December 17, 1990.

6. I have personally performed or supervised the work referenced in this report and I am familiar with the regional geology of nearby properties.

7. I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein nor in the securities of Canadian Industrial Minerals Corp. in respect of services rendered in the preparation of this report.

Dated at Vancouver, British Columbia this 17th day of December, 1990.

Respectfully submitted,



Gary L. Wesa, B.Sc., FGAC

APPENDIX I

Itemized Cost Statement

ITEMIZED COST STATEMENT

ACHILLES #331 SUMMARY - October 24, 1990	
Domicile	$ 10,837.50
Wages	35,165.00
Helicopter	23,602.68
Demobilization est.	8,237.00
Shipping Est.	1,000.00
Miscellaneous	6,322.09
Field and Office Supplies	1,758.47
Assays:	
Soils and Silts - 1,004 + 10%	11,331.65
Rocks - 80 + 10%	1,118.43
Post-Field est.	5,000.00
TOTAL:	**$104,372.82**

APPENDIX II

Summary of Personnel

SUMMARY OF PERSONNEL

ACHILLES WAGES #331
October 24, 1990

Employee	Days	Day Rate	Total $
Anderson, C.	9.0	$250.00	$ 2,250.00
Birkeland, E.	6.0	$300.00	1,800.00
Gibson, S.	1.0	$325.00	325.00
McIntyre, B.	5.0	$300.00	1,500.00
Thompson, S.	5.5	$250.00	1,375.00
Whittam, H.	22.0	$190.00	4,180.00
Wood, L.	13.0	$240.00	3,120.00
Viens, R.	17.0	$200.00	3,400.00
Wardwell, A.	21.0	$190.00	3,990.00
Wesa, G.	23.0	$325.00	7,475.00
Wilson, P.	23.0	$250.00	5,750.00
			Total: $35,165.00

APPENDIX III

Analytical Procedure

ANALYTICAL PROCEDURE

The Bondar-Clegg analytical methods are described as follows:

Sample Preparation

Silt & Soil: Dry and sieve through 80 mesh screens. Gold values are determined on 30 gram, representative sample of minus 80 fraction by fire assay with AA finish; remaining elements are determined using 0.6 gram sample of minus 80 fraction by hot aqua regia digestion followed by ICP.

Rocks: Dry and crush to minus 150 mesh; analysis made on minus 150 fraction by methods described above.

Geochemical Analysis: Gold is determined on a test sample of 30 g using Fire Assay Lead Collection pre-concentration. The bead is dissolved in nitric acid and hydrochloric acid and run by Atomic Absorption.

Mercury is determined on a test sample of 0.6 g. The sample is digested by aqua regia and bulked to 12 ml. The solution is then run by Cold Vapour Atomic Absorption.

All other elements are determined on a test sample of 0.6 g. The sample is digested by aqua regia and bulked to 12 ml. The solution is then run by ICP.

Fire Assay Procedure for Au: A prepared sample of one assay ton (29.166 grams) is mixed with a flux which is composed mainly of lead oxide. The proportions of the flux components (the litharge, soda, silica, borax glass, and flour) are adjusted depending upon the nature of the sample. Silver is added to help collect the gold. The samples are fused at 1950 F until a clear melt is obtained. The 30-40 gram lead button that is produced contains the precious metals. It is then separated from the slag. Heating in the cupellation furnace separates the lead from the noble metals. The normal-sized precious metal beads that are produced are transferred to test tubes and dissolved with aqua-regia. This solution is analyzed using Atomic Absorption by comparing the absorbance of these solutions with that of standard solutions. In the case of high grade samples, the precious metal bead is parted to separate the silver and the remaining gold is weighed.

Comments: As part of the routine quality control we run a duplicate analysis for about 12% of the samples. Also, all samples which are over 0.20 opt on the original fusion are run again to verify the results. If a sample gives erratic results, such as 0.10,

0.020, 0.30, we will indicate this on the report. We suggest that a new split should be taken from the reject for preparation and analysis by our metallics sieve procedure. These assay results will always be signed by the registered assayer.

Contamination Prevention:

The test tubes and cupels are used only once so that there is no possibility of cross contamination. The fusion crucibles are cleared before re-use by discarding any which had high samples in them. During the analysis a blank solution is run between each sample to ensure that there is no carry over.

Determination of Arsenic by Borohydride Generation:

Samples of 0.5 grams in weight are digested in borosilicate glass test tubes, with concentrated nitric and hydrochloric acids. These tubes are heated in a 90 degree Celsius water bath for two and one-half hours. The sample is then diluted with 14% HCl and mixed. A 0.5 ml aliquot is taken from this solution and HCl, deionized water, and potassium iodide are added. The resulting mixture is allowed to sit for one hour, after which it is run through a hydride generation system. In this system, the solution is reduced with sodium borohydride, releasing arsenic as arsine gas. The arsine gas is then swept into a quartz furnace mounted on a flame AA unit. The absorbance is recorded and compared to a standard series to determine the amount of arsenic present.

Quality Control:

Standards, repeats, and blanks are run with each batch of samples. These are carefully checked, and reweighs of samples are ordered if necessary. High arsenic results are also checked by running the original solution by flame AA and comparing the results from the two procedures.

The lower detection limits for the elements analyzed are listed below:

Element		Lower Detection Limit
Au	Gold 30 grams	5 ppb
Ag	Silver	0.2 ppm
Cu	Copper	1 ppm
Pb	Lead	2 ppm
Zn	Zinc	1 ppm
As	Arsenic	5 ppm
Sb	Antimony	5 ppm
Mo	Molybdenum	1 ppm
Hg	Mercury	0.010 ppm

APPENDIX IV

Soil and Stream Silt Geochemical Lab Reports

Bondar-Clegg & Company Ltd.
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BONDAR-CLEGG

Geochemical Lab Report

A DIVISION OF INSPECTRAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 6-SEP-90

REPORT: V90-01813.0 | PROJECT: 331 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 PW 331 (PREFIX)										
S1 7+00N 0+30E		34	5.6	349	32	799	70	18	25	0.276
S1 7+00N 0+50E		15	0.6	41	<2	61	31	<5	2	0.124
S1 7+00N 0+75E		11	1.1	143	25	205	362	16	11	0.070
S1 7+00N 1+00E		<5	1.1	253	22	139	43	16	3	0.100
S1 7+00N 1+25E		33	8.6	205	33	765	79	19	18	0.253
S1 7+00N 1+50E		12	4.3	153	22	313	120	16	12	0.153
S1 7+00N 1+75E		6	0.6	177	28	197	174	16	7	0.078
S1 90 AW 331 (PREFIX)										
S1 5+00N 0+00		18	2.8	135	22	409	79	11	27	0.163
S1 5+00N 0+75E		14	1.7	154	34	379	100	18	29	0.156
S1 5+00N 1+25E		14	7.1	157	17	715	36	10	37	0.601
S1 5+00N 1+50E		24	4.2	393	43	477	71	14	17	0.171
S1 5+00N 1+75E		<5	1.0	40	12	121	19	10	1	0.155
S1 5+00N 2+00E		<5	0.5	34	9	73	<5	8	1	0.189
S1 4+50N 1+00W		42	1.0	332	21	213	133	<5	15	0.088
S1 4+50N 0+75W		630	0.9	239	31	397	156	12	69	0.115
S1 4+50N 0+50W		45	1.2	87	29	203	61	12	12	0.186
S1 4+50N 0+25W		23	1.2	36	12	106	24	6	4	0.160
S1 4+50N 0+25E		10	1.5	85	23	286	56	10	23	0.128
S1 4+50N 0+50E		9	2.8	72	51	246	81	15	33	0.129
S1 4+50N 0+75E		17	1.8	180	29	435	204	20	23	0.123
S1 90 RW 331 (PREFIX)										
S1 4+00N 0+75W		58	0.6	84	30	166	44	6	1	0.018
S1 4+00N 0+50W		170	0.5	75	27	146	32	6	2	0.023
S1 4+00N 0+25E		15	2.8	177	27	458	100	22	29	0.125
S1 4+00N 0+50E		15	3.5	186	34	582	66	18	30	0.203
S1 4+00N 0+75E		34	4.0	220	32	706	66	20	40	0.290
S1 4+00N 1+00E		21	5.3	217	24	629	56	15	39	0.393
S1 4+00N 1+25E		20	4.0	240	29	876	81	16	35	0.163
S1 4+00N 1+50E		18	3.8	284	29	1016	83	24	80	0.324

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Geochemical Lab Report

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REPORT: V90-01864.0

PROJECT: 331

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 RV 331 (PREFIX)										
S1 7+00N 3+75W		19	2.9	44	11	97	27	6	6	0.201
S1 7+00N 3+50W		<5	1.9	32	11	59	29	8	4	0.248
S1 7+00N 3+25W		23	2.0	89	14	213	29	8	5	0.177
S1 90 PW 331 (PREFIX)										
S1 7+00N 3+00W		<5	1.5	23	8	54	21	<5	4	0.220
S1 7+00N 2+75W		<5	1.7	25	7	51	15	5	4	0.184
S1 7+00N 2+50W		<5	0.8	15	11	31	<5	<5	4	0.235
S1 7+00N 2+25W		<5	1.8	12	2	29	5	<5	2	0.231
S1 7+00N 2+00W		21	1.5	66	19	160	28	7	6	0.143
S1 7+00N 1+75W		<5	1.7	34	9	60	23	8	3	0.248
S1 7+00N 1+50W		6	1.4	47	7	70	<5	6	3	0.363
S1 7+00N 1+25W		8	1.6	59	7	58	14	<5	4	0.264
S1 7+00N 0+75W		<5	1.9	31	12	49	36	10	5	0.228
S1 6+50N 3+75W		7	1.2	107	9	148	33	9	4	0.097
S1 6+50N 3+50W		43	2.1	36	31	62	119	19	5	0.238
S1 90 RV 331 (PREFIX)										
S1 6+50N 3+50W		12	1.3	53	13	115	29	<5	4	0.195
S1 6+50N 3+25W		6	2.4	37	14	105	41	7	5	0.384
S1 90 PW 331 (PREFIX)										
S1 6+50N 3+25W		11	1.1	117	21	176	37	8	6	0.080
S1 6+50N 3+00W		61	4.3	156	14	179	60	13	7	0.177
S1 90 RV 331 (PREFIX)										
S1 6+50N 2+75W		10	0.8	50	10	93	37	9	3	0.124
S1 6+50N 2+50W		10	2.1	104	10	103	27	6	11	0.287
S1 6+50N 2+25W		9	1.2	51	9	70	40	11	6	0.249
S1 6+50N 2+00W		58	2.2	51	8	85	23	6	6	0.229
S1 6+50N 1+75W		15	1.7	45	10	43	34	8	4	0.190
S1 6+50N 1+50W		<5	2.0	50	13	60	25	8	7	0.073
S1 6+50N 1+25W		<5	1.9	44	13	55	9	<5	8	0.203
S1 6+50N 1+00W		8	2.2	49	13	87	41	<5	8	0.293
S1 90 JJ 331 (PREFIX)										
S1 6+50N 0+25E		10	1.9	244	17	199	75	6	5	0.080
S1 6+50N 0+50E		6	1.5	226	17	190	140	<5	8	0.082
S1 6+50N 0+75E		<5	1.7	257	18	170	136	7	13	0.067
S1 6+50N 1+00E		11	2.5	336	22	266	271	13	21	0.068
S1 6+50N 1+25E		9	2.4	400	26	187	126	10	15	0.062
S1 6+50N 1+50E		12	2.3	400	24	199	113	<5	13	0.096
S1 6+50N 1+75E		6	1.5	196	18	176	50	6	9	0.046
S1 6+50N 2+00E		<5	1.5	143	14	143	56	9	8	0.112

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

DATE PRINTED: 11-SEP-90

REPORT: V90-01864.0

PROJECT: 331 PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 6+50N 2+25E		<5	2.1	211	17	130	31	<5	6	0.065
S1 6+50N 2+50E		<5	1.0	155	13	88	19	<5	3	0.086
S1 6+50N 2+75E		<5	1.0	139	9	99	18	<5	3	0.100
S1 6+50N 3+00E		8	1.4	46	13	142	26	9	8	0.143
S1 90 PW 331 (PREFIX)										
S1 6+00N 3+00W		<5	0.7	18	6	35	<5	<5	2	0.200
S1 6+00N 2+75W		11	1.6	38	9	38	15	<5	3	0.176
S1 6+00N 2+50W		<5	0.8	20	12	50	<5	<5	7	0.176
S1 6+00N 2+25W		6	2.0	29	11	57	9	7	6	0.164
S1 6+00N 2+00W		12	3.6	38	9	114	12	7	10	0.186
S1 6+00N 1+75W		6	1.2	26	6	48	10	<5	4	0.205
S1 6+00N 1+50W		8	1.4	39	10	89	25	11	4	0.172
S1 6+00N 1+25W		110	0.9	75	10	100	29	<5	3	0.103
S1 6+00N 1+00W		5	2.1	57	13	110	46	12	7	0.205
S1 90 AW 331 (PREFIX)										
S1 6+00N 0+30E		9	1.9	302	16	267	143	8	7	0.118
S1 6+00N 0+50E		13	2.4	389	24	200	114	10	10	0.103
S1 6+00N 1+50E		26	2.2	193	22	293	74	9	18	0.062
S1 6+00N 1+75E		12	2.4	70	11	134	14	<5	5	0.224
S1 6+00N 2+25E		<5	1.4	32	9	239	11	<5	12	0.148
S1 6+00N 2+50E		<5	2.5	57	19	139	28	8	8	0.237
S1 6+00N 2+75E		6	2.1	71	22	137	24	7	12	0.262
S1 6+00N 3+00E		<5	2.7	33	10	96	22	<5	25	0.222
S1 90 PW 331 (PREFIX)										
S1 5+50N 3+50W		9	2.4	64	20	75	37	8	6	0.213
S1 5+50N 3+25W		<5	1.7	32	11	59	7	<5	4	0.354
S1 5+50N 3+00W		8	1.1	21	8	47	10	6	4	0.270
S1 90 JJ 331 (PREFIX)										
S1 5+50N 2+75W		<5	1.1	27	8	68	18	6	3	0.301
S1 5+50N 2+50W		<5	0.7	22	7	39	<5	<5	2	0.120
S1 5+50N 2+25W		<5	0.7	18	3	24	12	<5	3	0.240
S1 5+50N 2+00W		<5	1.5	21	10	38	21	8	6	0.323
S1 5+50N 1+75W		6	<0.2	10	30	56	<5	7	7	0.140
S1 5+50N 1+50W		6	0.9	29	7	87	6	<5	4	0.197
S1 5+50N 1+25W		8	1.4	35	10	42	34	6	6	0.292
S1 5+50N 1+00W		<5	0.9	21	4	42	<5	<5	3	0.237
S1 5+50N 0+75W		<5	1.0	44	14	83	14	8	4	0.094
S1 5+50N 0+50W		14	1.7	113	26	218	25	<5	4	0.077
S1 90 AW 331 (PREFIX)										
S1 5+50N 1+00E		6	1.2	91	13	285	36	9	18	0.102

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Geochemical Lab Report

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REPORT: V90-01864.0

PROJECT: 331 PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 5+50N 1+25E		9	3.9	222	22	804	109	15	18	0.251
S1 5+50N 1+50E		7	1.8	122	15	180	35	<5	6	0.111
S1 5+50N 1+75E		6	2.3	152	17	144	30	5	10	0.138
S1 5+50N 2+00E		25	2.1	138	10	234	<5	9	8	0.142
S1 5+50N 2+25E		<5	1.1	40	5	77	13	<5	3	0.338
S1 5+50N 2+50E		195	1.4	34	13	69	<5	<5	9	0.247
S1 5+50N 2+75E		<5	3.5	27	12	58	8	<5	6	0.231
S1 5+50N 3+00E		<5	1.8	29	7	48	10	6	3	0.287
S1 90 JJ 331 (PREFIX)										
S1 5+00N 4+00W		20	2.1	35	8	56	14	8	5	0.179
S1 5+00N 3+75W		<5	1.1	19	9	50	<5	<5	4	0.099
S1 5+00N 3+50W		8	0.8	72	12	115	24	<5	2	0.119
S1 5+00N 3+25W		32	1.2	69	9	114	30	<5	3	0.156
S1 5+00N 3+00W		<5	1.5	50	9	106	21	<5	2	0.162
S1 5+00N 2+75W		<5	1.8	29	12	60	16	<5	9	0.230
S1 5+00N 2+50W		7	0.9	46	12	115	36	9	4	0.111
S1 5+00N 2+25W		<5	1.3	43	9	97	10	<5	3	0.209
S1 5+00N 2+00W		7	1.1	18	9	54	6	11	3	0.218
S1 5+00N 1+75W		<5	1.2	35	8	76	13	<5	4	0.183
S1 5+00N 1+50W		17	3.4	101	13	85	85	<5	11	0.213
S1 5+00N 1+25W		42	2.1	164	22	109	109	5	24	0.203
S1 5+00N 1+00W		16	2.6	98	42	233	168	<5	21	0.259
S1 5+00N 0+75W		23	2.2	576	17	221	71	15	11	0.101
S1 5+00N 0+50W		6	2.0	187	22	182	84	9	10	0.156
S1 5+00N 0+25W		29	2.1	175	22	327	130	8	13	0.171
S1 4+50N 4+00W		25	7.6	157	33	311	38	9	27	0.402
S1 4+50N 3+75W		35	4.0	236	31	403	77	12	25	0.296
S1 4+50N 3+50W		12	4.6	90	18	163	36	7	130	0.398
S1 4+50N 3+25W		<5	1.0	15	5	51	6	<5	5	0.128
S1 90 PW 331 (PREFIX)										
S1 4+50N 3+00W		<5	1.4	43	9	99	24	<5	3	0.183
S1 90 JJ 331 (PREFIX)										
S1 4+50N 2+75W		126	1.8	54	14	90	25	7	6	0.193
S1 4+50N 2+50W		11	1.9	95	25	279	49	5	9	0.145
S1 4+50N 2+25W		14	1.8	68	16	77	24	<5	6	0.159
S1 4+50N 2+00W		395	1.8	147	26	125	151	6	6	0.112
S1 4+50N 1+75W		14	0.9	18	3	43	<5	<5	2	0.162
S1 4+50N 1+50W		6	1.9	120	17	123	106	<5	4	0.234
S1 4+50N 1+25W		8	1.6	81	11	86	13	<5	5	0.320
S1 4+50N 1+00W		2005	3.2	369	53	216	441	9	34	0.233

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 4+50N 0+75W		61	1.7	51	20	100	123	7	12	0.147
S1 4+50N 0+50W		27	2.6	114	17	210	66	8	12	0.276
S1 4+50N 0+25W		15	2.2	90	18	169	78	9	14	0.154
S1 90 PW 331 (PREFIX)										
S1 4+00N 4+00W		9	1.9	31	13	75	18	<5	7	0.170
S1 4+00N 3+75W		12	1.8	88	19	273	32	8	23	0.095
S1 4+00N 3+50W		13	2.0	40	9	90	22	8	9	0.296
S1 4+00N 3+25W		10	1.6	46	9	113	14	<5	3	0.196
S1 4+00N 3+00W		12	1.8	31	8	56	<5	5	3	0.185
S1 90 JJ 331 (PREFIX)										
S1 4+00N 2+75W		13	1.8	31	13	55	<5	<5	6	0.178
S1 4+00N 2+50W		41	1.4	67	10	91	9	<5	2	0.168
S1 4+00N 2+25W		<5	2.4	71	15	173	34	6	8	0.132
S1 4+00N 2+00W		277	2.3	125	17	134	44	6	8	0.209
S1 4+00N 1+75W		21	1.7	72	10	111	33	5	5	0.106
S1 4+00N 1+50W		98	2.2	176	14	129	72	7	10	0.314
S1 4+00N 1+25W		65	3.0	1339	36	186	165	9	11	0.090
S1 4+00N 1+00W		41	3.7	248	30	85	295	15	29	0.095
S1 90 AW 331 (PREFIX)										
S1 3+50N 4+00W		11	2.0	47	14	104	18	6	5	0.193
S1 3+50N 3+75W		13	1.8	25	10	73	14	7	5	0.202
S1 3+50N 3+25W		9	2.3	52	10	125	20	7	3	0.219
S1 3+50N 3+00W		23	1.7	98	14	123	24	5	3	0.159
S1 3+50N 2+75W		18	2.4	54	14	114	20	6	5	0.162
S1 3+50N 2+50W		23	0.8	54	10	108	20	<5	2	0.095
S1 3+50N 2+25W		51	0.7	81	16	109	19	6	3	0.073
S1 3+50N 2+00W		21	1.0	45	11	87	18	<5	4	0.084
S1 3+50N 1+75W		16	1.2	81	13	127	5	6	3	0.079
S1 3+50N 1+50W		22	1.4	120	15	163	89	8	12	0.143
S1 3+50N 1+00W		103	0.6	56	13	122	<5	8	2	0.021
S1 90 PW 331 (PREFIX)										
S1 3+00N 4+00W		9	0.9	22	6	44	<5	<5	2	0.226
S1 3+00N 3+75W		14	1.0	29	19	63	<5	<5	7	0.130
S1 3+00N 3+25W		9	2.9	40	9	74	16	<5	4	0.254
S1 3+00N 3+00W		13	0.8	55	11	122	18	<5	3	0.186
S1 3+00N 2+75W		10	2.2	20	11	56	<5	<5	4	0.191
S1 3+00N 2+50W		11	0.9	49	15	110	10	<5	4	0.217
S1 3+00N 2+25W		29	0.8	64	12	95	13	6	2	0.095
S1 3+00N 2+00W		27	1.4	65	14	126	16	11	5	0.225
S1 3+00N 1+50W		21	1.1	25	12	54	<5	<5	8	0.105

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 3+00N 1+25W		14	0.7	62	18	124	16	<5	2	0.042
S1 3+00N 1+00W		15	0.8	80	20	155	22	10	2	0.012
S1 2+50N 4+00W		21	0.9	45	11	86	16	<5	5	0.099
S1 2+50N 3+50W		8	1.5	64	14	117	18	7	4	0.169
S1 2+50N 3+25W		13	1.8	40	14	66	<5	5	4	0.267
S1 2+50N 2+75W		17	0.9	50	11	89	12	11	2	0.117
S1 2+50N 2+50W		6	0.5	69	11	105	19	<5	3	0.131
S1 2+50N 2+25W		12	1.2	75	13	92	29	6	4	0.181
S1 90 AW 331 (PREFIX)										
S1 2+00N 4+00W		25	1.2	87	16	293	38	6	12	0.140
S1 2+00N 3+75W		46	1.8	81	16	120	27	6	5	0.117
S1 2+00N 3+50W		18	1.5	111	18	322	43	7	16	0.082
S1 2+00N 3+25W		25	0.9	86	15	142	24	5	4	0.052
S1 2+00N 3+00W		14	1.0	73	16	265	22	<5	8	0.035
S1 2+00N 2+75W		22	0.7	75	21	150	26	6	6	0.020
T1 90 AW 331 (PREFIX)										
T1 L001 6+00N 0+30E		15	3.0	167	16	562	52	13	28	0.133
T1 L002 5+50N 0+00E		25	3.1	176	18	564	72	14	29	0.159
T1 L003 3+50N 3+50W		17	1.7	113	18	583	49	10	18	0.117
T1 L004 2+00N 3+60W		30	1.5	112	21	496	32	6	15	0.123
T1 90 GW 331 (PREFIX)										
T1 L001		14	2.9	157	15	489	57	13	29	0.104
T1 L002		21	3.0	171	17	595	67	13	29	0.144
T1 L003		16	1.5	105	19	502	33	9	17	0.063
T1 L004		15	1.5	108	19	405	44	6	15	0.062
T1 90 JJ 331 (PREFIX)										
T1 5+00N 2+60W MOSS MAT		6	1.8	85	15	379	53	8	9	0.160
T1 5+00N 0+00BL		18	3.0	172	16	534	67	13	31	0.141
T1 90 PW 331 (PREFIX)										
T1 L001		19	1.5	102	18	429	35	10	18	0.063
T1 L002		12	1.4	111	21	550	36	8	18	0.085
T1 L003		15	1.4	102	19	473	40	12	17	0.089
T1 90 RV 331 (PREFIX)										
T1 L001		15	0.8	77	12	135	24	<5	2	0.045

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 AW 331 (PREFIX)										
S1 3+50N 0+50W		81	0.7	61	20	122	7	<5	4	0.022
S1 3+50N 0+25W		11	0.8	26	14	82	13	<5	5	0.057
S1 3+50N 0+00		8	0.5	31	14	96	11	<5	3	0.032
S1 90 JJ 331 (PREFIX)										
S1 3+50N 0+20E		<5	0.7	42	17	98	<5	<5	4	0.012
S1 3+00N 0+50W		21	1.9	67	16	75	23	<5	8	0.209
S1 90 PW 331 (PREFIX)										
S1 3+00N 0+25W		26	1.8	77	13	39	18	<5	12	0.239
S1 90 JJ 331 (PREFIX)										
S1 3+00N 0+00		47	1.2	69	14	125	31	9	14	0.106
S1 3+00N 0+25E		182	1.9	206	20	89	69	9	15	0.115
S1 3+00N 0+50E		206	3.1	1200	44	182	238	9	20	0.101
S1 3+00N 0+75E		82	2.3	262	23	125	88	8	15	0.180
S1 2+50N 0+50W		41	1.0	57	13	66	9	5	3	0.169
S1 2+50N 0+25W		21	2.5	29	28	58	<5	<5	16	0.204
S1 90 AW 331 (PREFIX)										
S1 2+50N 0+00		384	4.5	252	22	67	63	8	11	0.316
S1 2+50N 0+25E		184	2.1	145	14	93	29	9	6	0.237
S1 2+50N 0+50E		102	2.1	268	31	170	73	7	17	0.135
S1 2+00N 0+50W		21	1.8	19	10	39	13	<5	5	0.159
S1 2+00N 0+25W		12	3.2	43	15	57	15	6	6	0.148
S1 90 PW 331 (PREFIX)										
S1 2+00N 0+00		8	1.6	40	14	75	15	<5	5	0.202
S1 2+00N 0+25E		15	1.9	36	24	65	<5	7	9	0.213
S1 2+00N 0+50E		16	3.8	37	19	56	<5	<5	9	0.256
S1 90 AW 331 (PREFIX)										
S1 1+50N 1+50W		24	1.5	35	14	24	<5	<5	6	0.150
S1 1+50N 1+00W		15	1.7	46	18	71	<5	5	13	0.151
S1 1+50N 0+75W		17	1.3	34	28	81	5	<5	14	0.064
S1 1+50N 0+50W		17	1.5	32	13	41	<5	<5	5	0.187
S1 1+50N 0+25W		16	1.6	39	13	47	<5	<5	4	0.211
S1 1+50N 0+00		14	1.1	61	15	65	10	6	4	0.163
S1 1+50N 0+25E		12	1.5	32	11	65	9	<5	3	0.160
S1 1+50N 0+50E		13	0.9	23	6	64	<5	<5	1	0.167
S1 1+50N 0+75E		22	5.0	39	23	76	24	7	8	0.231
S1 90 PW 331 (PREFIX)										
S1 1+00N 1+50W		12	1.3	26	11	26	11	<5	4	0.156
S1 1+00N 1+25W		13	2.3	57	18	65	16	<5	9	0.104
S1 1+00N 1+00W		32	1.9	42	11	43	11	6	5	0.079

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 1+00N 0+75W		11	1.8	38	19	68	<5	<5	7	0.153
S1 1+00N 0+50W		12	2.0	35	18	83	8	8	5	0.217
S1 1+00N 0+25W		13	1.6	36	15	52	<5	<5	5	0.247
S1 1+00N 0+00E		20	1.0	20	16	83	<5	<5	7	0.090
S1 1+00N 0+25E		14	1.2	34	17	72	9	<5	7	0.099
S1 1+00N 0+50E		12	2.2	56	13	54	6	<5	12	0.162
S1 1+00N 0+75E		11	2.1	40	15	82	11	<5	7	0.142
S1 0+50N 2+00W		10	1.6	45	31	71	24	<5	17	0.242
S1 0+50N 1+75W		43	1.3	59	15	80	14	<5	11	0.128
S1 0+50N 1+50W		10	1.1	42	16	64	7	6	5	0.119
S1 0+50N 1+25W		8	1.5	48	12	58	11	<5	3	0.158
S1 0+50N 1+00W		14	1.8	78	15	51	12	<5	9	0.095
S1 0+50N 0+75W		18	1.0	63	13	52	10	6	7	0.070
S1 0+50N 0+50W		7	1.4	36	13	53	<5	8	5	0.115
S1 0+50N 0+25W		11	0.9	23	12	54	<5	<5	5	0.103
S1 0+50N 0+00		12	1.5	26	20	65	<5	<5	8	0.115
S1 90 JJ 331 (PREFIX)										
S1 0+50N 0+25E		<5	1.6	28	11	61	<5	<5	4	0.170
S1 0+50N 0+50E		<5	1.9	38	13	71	5	<5	5	0.242
S1 0+50N 0+75E		14	2.0	82	14	61	10	<5	11	0.154
S1 0+50N 1+00E		7	1.9	63	11	86	24	<5	4	0.162
S1 0+50N 1+25E		42	1.4	209	32	171	95	<5	6	0.118
S1 0+50N 1+50E		256	3.5	312	108	168	147	8	25	0.196
S1 0+50N 1+75E		113	1.9	251	876	1163	67	9	10	0.086
S1 0+50N 2+00E		48	3.2	302	846	796	136	8	14	0.113
S1 0+50N 2+25E		202	2.8	172	36	483	67	11	32	0.150
S1 0+50N 2+50E		13	2.2	132	23	139	14	<5	8	0.205
S1 0+50N 2+75E		20	5.9	24	9	67	20	<5	5	0.232
S1 0+50N 3+00E		42	3.8	225	33	671	212	14	29	0.154
S1 90 AW 331 (PREFIX)										
S1 0+00 2+50W		12	2.6	41	25	72	10	6	15	0.242
S1 0+00 2+25W		668	2.1	52	20	72	10	8	14	0.201
S1 0+00 2+00W		6	1.9	49	13	63	<5	<5	14	0.117
S1 0+00 1+75W		6	0.9	56	12	102	<5	<5	2	0.167
S1 0+00 1+50W		8	1.9	79	16	108	25	<5	5	0.142
S1 0+00 1+25W		14	5.2	98	12	46	8	<5	8	0.123
S1 0+00 1+00W		9	0.9	61	12	78	18	<5	4	0.092
S1 0+00 0+75W		<5	1.5	69	14	45	17	6	9	0.071
S1 0+00 0+25W		<5	2.4	65	14	58	29	6	6	0.230
S1 90 JJ 331 (PREFIX)										

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 0+00 0+00E		5	1.6	43	15	51	8	8	10	0.112
S1 0+00 0+25E		14	2.2	75	10	46	12	<5	7	0.183
S1 0+00 0+50E		8	1.8	35	11	63	<5	7	6	0.181
S1 0+00 0+75E		10	1.5	39	18	59	29	<5	6	0.135
S1 0+00 1+00E		28	2.4	381	54	419	107	8	21	0.192
S1 0+00 1+25E		22	2.8	316	494	1228	149	10	17	0.343
S1 0+00 1+50E		19	2.1	40	36	70	28	<5	10	0.251
S1 0+00 1+75E		22	2.9	247	145	139	106	8	28	0.192
S1 0+00 2+00E		89	3.1	220	258	186	110	10	39	0.213
S1 0+00 2+25E		117	2.6	142	91	356	105	8	23	0.148
S1 0+00 2+50E		27	2.5	293	25	287	24	11	8	0.091
S1 0+00 2+75E		11	2.3	223	16	304	26	6	7	0.101
S1 0+00 3+00E		16	2.7	227	19	218	34	8	7	0.147
S1 90 AW 331 (PREFIX)										
S1 0+00 S001		14	2.1	28	17	52	33	14	55	1.158
S1 0+50E S002		15	1.7	54	24	83	<5	<5	4	0.216
S1 1+00E S003		842	2.4	75	13	30	9	<5	18	0.088
S1 1+50E S004		8	1.7	47	18	38	25	7	8	0.117
S1 2+00E S005		32	1.0	81	14	89	27	6	3	0.090
S1 2+50E S006		24	3.2	96	10	30	7	<5	10	0.180
S1 3+00E S007		19	1.2	162	7	48	<5	<5	3	0.156
S1 3+50E S008		11	1.9	36	13	36	<5	<5	5	0.227
S1 4+00E S009		16	2.3	74	20	47	20	5	13	0.295
S1 4+50E S010		8	2.1	61	17	40	15	5	6	0.165
S1 5+00E S011		9	2.2	107	15	74	16	7	8	0.144
S1 5+50E S012		6	3.0	37	15	40	5	<5	8	0.108
S1 6+00E S013		<5	1.9	33	14	68	14	<5	7	0.149
S1 6+50E S014		<5	1.2	60	10	249	19	<5	3	0.142
S1 7+00E S015		6	1.2	20	16	56	<5	<5	5	0.072
S1 7+50E S016		12	1.6	37	14	68	5	6	13	0.132
S1 8+00E S017		6	2.1	106	18	113	19	<5	2	0.258
S1 8+50E S018		6	1.6	60	17	68	17	9	5	0.217
S1 9+00E S019		<5	1.4	22	21	39	6	<5	8	0.140
S1 9+50E S020		8	1.6	110	21	238	25	<5	9	0.103
S1 10+00E S021		13	0.6	30	11	81	15	<5	8	0.128
S1 90 JJ 331 (PREFIX)										
S1 0+00 S001		6	1.5	40	13	44	<5	<5	6	0.294
S1 0+50E S002		8	1.6	10	6	32	<5	<5	2	0.174
S1 1+00E S003		<5	0.5	19	7	22	<5	<5	2	0.204
S1 1_50E S004		<5	0.5	12	6	29	<5	<5	2	0.173

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S1 90 PW 331 S001		15	6.2	91	19	172	19	8	25	0.306
S1 90 PW 331 S002		<5	1.9	22	18	63	<5	5	19	0.075
S1 90 PW 331 S003		12	1.7	145	17	121	31	<5	3	0.093
S1 90 PW 331 S004		<5	1.4	21	11	27	<5	6	3	0.099
S1 90 PW 331 S005		8	1.4	29	16	66	5	5	15	0.120
S1 90 PW 331 S006		6	1.0	37	40	77	<5	10	18	0.152
S1 90 PW 331 S007		<5	1.5	24	12	57	<5	<5	13	0.109
S1 90 PW 331 S008		<5	4.7	23	8	41	<5	5	2	0.165
S1 90 PW 331 S009		6	2.0	25	9	81	14	6	3	0.178
S1 90 PW 331 S010		7	1.6	60	11	47	9	<5	3	0.280
S1 90 PW 331 S011		8	1.2	30	11	180	<5	7	4	0.218
S1 90 PW 331 S012		<5	1.6	46	13	60	16	<5	4	0.178
S1 90 PW 331 S013		7	3.2	70	10	65	<5	8	3	0.208
S1 90 PW 331 S014		8	2.6	29	13	39	<5	<5	3	0.340
S1 90 PW 331 S015		7	1.3	30	10	52	<5	<5	2	0.213
S1 90 PW 331 S016		10	1.3	37	15	60	<5	5	2	0.199
S1 90 PW 331 S017		7	1.2	31	9	34	<5	<5	3	0.206
S1 90 RV 331 S001		6	1.0	17	10	38	<5	<5	3	0.097
S1 90 RV 331 S002		11	3.8	73	21	411	23	<5	10	0.175
S1 90 RV 331 S003		8	1.4	35	18	41	11	5	7	0.160
S1 90 RV 331 S004		<5	1.3	31	25	59	30	8	4	0.134
S1 90 RV 331 S005		8	2.0	35	13	42	8	10	3	0.279
S1 90 RV 331 S006		<5	2.1	37	11	45	18	7	3	0.197
S1 90 RV 331 S007		<5	2.2	24	18	68	<5	7	3	0.147
S1 90 RV 331 S008		<5	2.0	124	16	124	24	<5	2	0.321
S1 90 RV 331 S009		<5	1.8	57	8	55	10	<5	3	0.222
S1 90 RV 331 S010		<5	1.6	44	12	54	28	8	5	0.241
S1 90 RV 331 S011		6	2.0	58	10	97	10	10	2	0.254
T1 90 JJ 331 5+05E L001		9	1.4	41	16	126	15	<5	5	0.214
T1 90 PW 331 L004		12	1.7	82	20	493	53	13	22	0.113
T1 90 PW 331 L005		9	1.5	108	20	385	27	15	15	0.097
T1 90 RV 331 L002		6	1.1	46	23	275	18	6	3	0.138
T1 90 RV 331 L003		6	1.6	43	15	480	43	11	28	0.055

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 JJ 331 6+50W		14	2.1	22	23	46	<5	<5	2	0.320
S1 90 JJ 331 6+00W		10	1.3	112	14	81	28	8	30	0.177
S1 90 JJ 331 5+50W		10	2.8	81	16	59	<5	6	8	0.194
S1 90 JJ 331 5+00W		7	2.5	61	21	79	5	12	30	0.275
S1 90 JJ 331 4+00W		6	3.0	33	7	43	<5	<5	2	0.307
S1 90 JJ 331 3+50W		9	2.8	32	8	30	6	<5	2	0.251
S1 90 JJ 331 3+00W		6	3.1	109	87	108	35	7	5	0.426
S1 90 JJ 331 2+50W		15	3.0	27	9	50	<5	<5	3	0.247
S1 90 JJ 331 2+00W		9	1.2	35	13	66	<5	<5	4	0.135
S1 90 JJ 331 1+50W		10	1.8	56	13	95	17	<5	6	0.255
S1 90 JJ 331 1+00W		9	1.1	26	11	39	<5	<5	6	0.082
S1 90 JJ 331 0+50W		<5	1.3	24	10	56	<5	8	3	0.163
S1 90 JJ 331 0+00		<5	1.1	21	8	46	5	<5	3	0.150
S1 90 JJ 331 2+00E		<5	0.8	12	7	36	<5	<5	2	0.099
S1 90 JJ 331 2+50E		6	1.6	22	8	45	<5	5	3	0.156
S1 90 JJ 331 3+00E		9	1.0	17	12	49	<5	<5	6	0.065
S1 90 JJ 331 3+50E		<5	1.2	35	19	85	6	<5	4	0.231
S1 90 JJ 331 4+00E		6	1.9	48	22	83	12	11	7	0.214
S1 90 JJ 331 4+50E		11	1.1	19	14	53	7	<5	4	0.126
S1 90 JJ 331 5+00E		<5	1.6	59	42	101	9	9	22	0.287
S1 90 JJ 331 5+50E		15	1.5	82	45	122	13	6	5	0.173
S1 90 JJ 331 6+00E		6	<0.2	38	37	108	<5	6	2	0.153
S1 90 JJ 331 6+50E		6	1.5	38	30	62	<5	5	13	0.124
S1 90 JJ 331 7+00E		155	0.4	13	10	59	<5	<5	2	0.135
S1 90 JJ 331 8+00E		14	0.8	24	13	67	<5	5	7	0.102
S1 90 JJ 331 8+50E		21	1.4	46	25	94	12	7	3	0.258
S1 90 JJ 331 9+00E		36	1.3	26	18	68	<5	<5	4	0.240
S1 90 JJ 331 9+50E		7	1.3	28	16	89	21	6	5	0.341
S1 90 JJ 331 10+00E		<5	0.5	15	12	84	12	7	<1	0.043
S1 90 JJ 331 11+00E		7	1.9	61	24	91	16	7	4	0.179
S1 90 JJ 331 11+50E		<5	1.7	24	19	99	<5	<5	6	0.313
S1 90 JJ 331 12+00E		<5	2.2	36	14	154	<5	<5	8	0.200
S1 90 JJ 331 12+50E		25	2.1	53	21	125	35	7	5	0.286
S1 90 JJ 331 13+00E		12	2.1	24	13	61	<5	<5	3	0.222
S1 90 JJ 331 13+50E		<5	0.7	20	12	39	<5	<5	3	0.113
S1 90 JJ 331 14+00E		<5	0.4	9	3	63	<5	<5	2	0.073
S1 90 JJ 331 14+50E		16	0.9	28	8	73	6	6	4	0.052
S1 90 JJ 331 15+00E		7	2.0	53	17	86	<5	7	9	0.126
S1 90 JJ 331 15+50E		<5	1.7	39	18	221	18	7	6	0.158
S1 90 JJ 331 16+00E		6	<0.2	40	29	88	<5	5	3	0.169

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 JJ 331 16+50E		9	1.5	48	35	165	24	<5	5	0.161
S1 90 JJ 331 17+00E		6	0.6	23	12	55	<5	5	6	0.049
S1 90 JJ 331 17+50E		7	1.0	37	13	64	<5	<5	5	0.117
S1 90 JJ 331 18+00E		<5	1.2	18	12	44	<5	<5	2	0.120
S1 90 JJ 331 19+00E		10	2.3	44	13	88	12	5	4	0.176
S1 90 JJ 331 19+50E		11	3.4	29	23	50	40	9	4	0.284
S1 90 JJ 331 20+00E		<5	2.9	20	7	62	11	<5	5	0.247
S1 90 JJ 331 20+50E		70	1.6	120	23	184	62	11	5	0.327
S1 90 JJ 331 21+00E		43	0.9	20	4	52	<5	<5	1	0.118
S1 90 JJ 331 21+50E		<5	2.2	9	9	29	<5	<5	1	0.137
S1 90 JJ 331 22+00E		12	1.9	28	30	49	<5	<5	4	0.142
S1 90 JJ 331 22+50E		<5	2.0	21	8	36	13	<5	2	0.167
S1 90 JJ 331 23+00E		5	2.1	19	20	71	20	<5	5	0.210
S1 90 JJ 331 23+50E		9	0.9	17	15	36	<5	<5	2	0.132
S1 90 JJ 331 24+00E		<5	2.2	29	21	90	18	<5	3	0.233
S1 90 JJ 331 24+50E		6	2.0	68	58	93	23	10	6	0.215
S1 90 JJ 331 25+00E		<5	1.9	27	12	51	<5	7	2	0.205
S1 90 JJ 331 25+50E		9	2.4	21	12	59	10	5	3	0.164
S1 90 JJ 331 26+00E		92	1.9	40	20	96	8	8	4	0.151
S1 90 JJ 331 26+50E		12	2.0	92	37	1534	39	<5	4	0.126
S1 90 JJ 331 27+00E		6	1.6	78	42	40	30	<5	6	0.106
S1 90 JJ 331 27+50E		<5	1.6	36	35	35	46	10	5	0.220
S1 90 JJ 331 28+00E		<5	1.4	25	10	21	<5	7	2	0.141
S1 90 JJ 331 28+50E		8	1.9	25	24	59	<5	<5	5	0.124
S1 90 JJ 331 29+00E		8	1.8	25	15	33	<5	<5	3	0.164
S1 90 JJ 331 29+50E		<5	0.5	17	12	47	<5	<5	1	0.203
S1 90 JJ 331 30+00E		6	0.7	14	8	39	<5	<5	<1	0.166
S1 90 JJ 331 30+50E		8	1.9	37	41	124	21	<5	6	0.250
S1 90 JJ 331 31+00E		<5	2.1	29	22	49	<5	<5	4	0.162
S1 90 JJ 331 31+50E		9	3.6	79	24	212	8	5	7	0.274
S1 90 JJ 331 32+00E		7	2.0	57	28	135	14	<5	5	0.329
S1 90 PW 331 S084		9	2.6	44	21	51	<5	<5	3	0.228
S1 90 PW 331 S085		<5	4.8	24	16	41	<5	9	4	0.251
S1 90 PW 331 S086		10	2.7	18	9	35	<5	6	3	0.231
S1 90 PW 331 S087		6	1.4	22	16	74	6	<5	2	0.313
S1 90 PW 331 S088		6	2.2	13	9	22	9	<5	1	0.104
S1 90 PW 331 S089		14	1.9	35	23	36	11	9	8	0.137
S1 90 PW 331 S090		8	2.5	56	20	50	17	8	4	0.224
S1 90 PW 331 S091		7	3.0	15	11	27	<5	<5	2	0.096
S1 90 PW 331 S092		7	3.9	31	19	43	<5	<5	4	0.187

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 PW 331 S093		26	3.8	233	43	65	44	8	14	0.120
S1 90 PW 331 S094		17	2.0	16	17	25	<5	<5	2	0.106
S1 90 PW 331 S095		7	4.1	22	28	37	13	<5	8	0.193
S1 90 PW 331 S096		12	2.6	19	15	37	<5	<5	2	0.227
S1 90 PW 331 S097		16	2.0	29	23	47	23	10	5	0.152
S1 90 PW 331 S098		10	6.3	24	14	22	6	<5	2	0.219
S1 90 PW 331 S100		6	3.0	35	10	57	24	<5	2	0.286
S1 90 PW 331 S101		27	1.6	12	8	24	<5	<5	2	0.231
S1 90 PW 331 S102		12	2.6	18	18	31	<5	<5	3	0.214
S1 90 PW 331 S103		<5	3.3	33	11	28	<5	<5	3	0.264
S1 90 PW 331 S104		6	2.7	40	12	33	<5	<5	4	0.155
S1 90 PW 331 S105		7	2.3	41	15	35	<5	8	2	0.176
S1 90 PW 331 S106		50	2.6	67	29	72	38	8	5	0.147
S1 90 PW 331 S107		15	2.7	35	12	26	11	<5	17	0.262
S1 90 PW 331 S108		111	2.1	48	32	24	36	<5	6	0.168
S1 90 PW 331 S109		6	1.9	19	8	32	<5	<5	2	0.177
S1 90 PW 331 S110		16	1.7	62	17	51	10	8	8	0.117
S1 90 PW 331 S111		7	1.4	37	11	28	7	<5	3	0.111
S1 90 PW 331 S113		6	1.3	13	13	25	<5	<5	2	0.090
S1 90 PW 331 S115		18	2.2	73	27	79	21	11	9	0.086
S1 90 PW 331 S116		6	1.8	28	35	59	6	6	4	0.189
S1 90 PW 331 S117		6	2.7	24	10	36	<5	<5	2	0.119
S1 90 PW 331 S118		<5	1.7	22	11	35	<5	7	1	0.183
S1 90 PW 331 S119		<5	1.7	17	12	31	<5	<5	2	0.175
S1 90 PW 331 S120		<5	3.0	32	11	47	<5	<5	1	0.231
S1 90 PW 331 S121		5	1.2	32	32	60	26	<5	4	0.105
S1 90 PW 331 S122		8	1.5	35	17	100	<5	7	4	0.149
S1 90 PW 331 S123		10	2.4	21	16	32	<5	<5	2	0.137
S1 90 RV 331 S012		5	1.9	28	12	82	<5	<5	5	0.247
S1 90 RV 331 S013		6	2.0	21	25	62	<5	8	24	0.218
S1 90 RV 331 S014		9	2.2	59	23	81	19	7	4	0.229
S1 90 RV 331 S015		6	2.1	24	19	65	<5	<5	3	0.268
S1 90 RV 331 S016		<5	1.8	32	18	81	<5	8	3	0.186
S1 90 RV 331 S017		10	1.5	38	26	90	13	7	4	0.206
S1 90 RV 331 S018		8	1.6	43	17	108	17	8	3	0.163
S1 90 RV 331 S019		6	2.0	33	20	62	12	<5	3	0.224
S1 90 RV 331 S020		7	3.7	30	12	79	<5	<5	2	0.266
S1 90 RV 331 S021		12	1.9	23	23	33	<5	<5	3	0.172
S1 90 RV 331 S022		7	1.9	41	21	77	<5	<5	2	0.291
S1 90 RV 331 S023		<5	2.4	36	13	64	<5	7	2	0.177

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S1 90 RV 331 S024		8	0.9	10	16	19	<5	<5	3	0.070
S1 90 RV 331 S025		6	2.2	41	20	77	<5	<5	4	0.227
S1 90 RV 331 S026		10	2.5	79	48	201	30	<5	4	0.315
S1 90 RV 331 S027		7	2.5	38	25	56	<5	6	3	0.258
S1 90 RV 331 S028		95	2.3	38	26	67	<5	7	3	0.222
S1 90 RV 331 S029		15	1.6	197	53	353	30	11	6	0.172
S1 90 RV 331 S030		<5	2.1	30	16	71	<5	<5	4	0.219
S1 90 RV 331 S031		13	2.8	51	62	350	<5	<5	4	0.255
S1 90 RV 331 S032		123	3.5	49	28	103	56	8	6	0.232
S1 90 RV 331 S033		11	6.1	22	13	46	<5	6	14	0.130
S1 90 RV 331 S034		<5	1.3	12	10	52	<5	<5	7	0.090
S1 90 RV 331 S035		<5	1.5	36	13	54	6	9	4	0.109
S1 90 RV 331 S036		<5	3.4	175	34	67	99	10	4	0.263
S1 90 RV 331 S037		<5	3.5	28	20	39	32	<5	8	0.158
S1 90 RV 331 S038		<5	6.4	26	17	45	22	7	7	0.162
S1 90 RV 331 L039		8	1.7	130	42	101	36	13	6	0.097
S1 90 RV 331 L041		<5	1.3	34	17	81	9	9	3	0.123
S1 90 RV 331 L042		9	2.1	76	24	47	29	8	7	0.156
S1 90 RV 331 L043		<5	3.1	36	26	56	15	<5	4	0.177
S1 90 RV 331 L044		10	1.9	32	27	51	14	6	4	0.155
S1 90 RV 331 L045		<5	0.5	35	5	32	<5	<5	2	0.079
S1 90 RV 331 L046		62	1.7	42	22	42	12	6	4	0.219
S1 90 RV 331 L047		15	1.5	37	25	86	10	8	2	0.262
S1 90 RV 331 L048		<5	0.9	18	8	24	<5	<5	1	0.229
T1 90 PW 331 L006		9	1.2	27	13	280	8	7	17	0.077
T1 90 PW 331 L007		<5	1.3	58	20	431	44	12	21	0.073
T1 90 PW 331 L008		<5	1.3	51	18	231	38	<5	6	0.112
T1 90 RV 331 L004		<5	1.5	62	12	157	21	8	3	0.146
T1 90 RV 331 L005		<5	0.3	20	10	70	<5	<5	1	0.223
T1 90 RV 331 L006		<5	1.7	306	38	503	18	5	4	0.158
T1 90 RV 331 L007		18	2.2	175	34	401	59	6	10	0.108
T1 90 RV 331 L008		38	1.4	30	16	408	10	7	10	0.097

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 AW 331 17+00W		<5	0.6	21	27	90	<5	<5	1	0.134
S1 90 AW 331 16+50W		6	0.3	14	12	29	<5	<5	2	0.224
S1 90 AW 331 16+00W		9	1.0	38	34	63	10	<5	4	0.176
S1 90 AW 331 15+50W		<5	1.0	39	22	75	115	8	4	0.186
S1 90 AW 331 15+00W		18	1.5	21	18	33	54	<5	5	0.172
S1 90 AW 331 14+50W		15	2.4	23	32	38	19	6	5	0.294
S1 90 AW 331 14+00W		6	0.7	19	15	456	22	6	6	0.105
S1 90 AW 331 13+50W		<5	0.6	8	22	28	<5	<5	4	0.117
S1 90 AW 331 12+50W		<5	0.4	7	11	34	<5	<5	1	0.117
S1 90 AW 331 12+00W		<5	2.2	19	29	31	<5	<5	5	0.208
S1 90 AW 331 11+50W		28	1.2	197	7	118	<5	<5	<1	0.143
S1 90 AW 331 11+00W		<5	3.2	35	14	27	11	<5	4	0.402
S1 90 AW 331 10+00W		<5	0.4	7	9	25	11	<5	2	0.056
S1 90 AW 331 9+50W		<5	0.7	13	22	170	<5	<5	7	0.150
S1 90 AW 331 9+00W		<5	1.2	27	12	46	<5	<5	3	0.190
S1 90 AW 331 8+50W		6	1.6	22	12	45	26	<5	8	0.136
S1 90 AW 331 8+00W		6	2.6	28	21	47	8	7	4	0.231
S1 90 AW 331 7+50W		41	7.9	573	151	1257	30	13	43	0.300
S1 90 AW 331 32+50E		9	1.4	20	15	39	<5	<5	4	0.255
S1 90 AW 331 33+00E		<5	1.5	22	15	73	<5	<5	4	0.249
S1 90 AW 331 33+50E		<5	1.1	17	13	118	<5	<5	3	0.174
S1 90 AW 331 34+00E		<5	1.2	27	29	127	<5	<5	5	0.217
S1 90 AW 331 34+50E		30	1.2	9	10	26	<5	<5	2	0.172
S1 90 AW 331 35+00E		6	1.1	22	13	40	<5	<5	1	0.255
S1 90 AW 331 35+50E		5	1.2	44	26	92	<5	<5	2	0.271
S1 90 AW 331 36+00E		15	1.7	39	26	99	<5	<5	3	0.274
S1 90 AW 331 36+50E		15	1.5	110	70	144	15	6	3	0.327
S1 90 AW 331 37+00E		7	1.1	27	22	70	<5	<5	3	0.226
S1 90 AW 331 37+50E		<5	1.5	24	10	42	<5	<5	<1	0.393
S1 90 AW 331 38+00E		<5	1.2	17	15	59	<5	<5	3	0.305
S1 90 AW 331 38+50E		9	1.2	80	52	232	13	9	8	0.108
S1 90 AW 331 39+00E		28	1.7	80	40	191	38	<5	5	0.246
S1 90 AW 331 39+50E		15	4.5	24	13	83	<5	<5	3	0.306
S1 90 AW 331 40+00E		<5	1.6	17	11	28	<5	<5	2	0.164
S1 90 AW 331 40+50E		6	1.5	104	32	134	<5	<5	7	0.087
S1 90 AW 331 41+00E		40	1.3	50	34	161	21	<5	2	0.276
S1 90 AW 331 41+50E		<5	1.9	19	11	34	<5	<5	<1	0.144
S1 90 AW 331 42+00E		24	3.1	118	41	219	<5	6	6	0.254
S1 90 AW 331 42+50E		16	4.4	35	21	62	20	<5	5	0.221
S1 90 AW 331 43+00E		48	1.8	83	5	141	<5	6	8	0.171

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 AW 331 43+50E		6	1.3	28	10	46	8	<5	5	0.150
S1 90 AW 331 44+00E		10	1.5	23	13	68	<5	6	4	0.288
S1 90 AW 331 44+50E		<5	1.6	48	14	112	<5	<5	5	0.184
S1 90 AW 331 45+00E		10	1.5	23	17	43	<5	<5	4	0.197
S1 90 AW 331 45+50E		5	2.7	30	11	41	<5	<5	4	0.289
S1 90 JJ 331 (PREFIX)										
S1 S081 0+00W		12	1.5	12	10	37	<5	<5	3	0.155
S1 S082 0+50W		<5	2.5	23	8	97	<5	5	2	0.109
S1 S083 1+00W		<5	2.4	22	28	66	<5	<5	5	0.280
S1 S084 1+50W		<5	5.1	29	25	35	7	6	4	0.287
S1 S085 2+00W		8	2.4	20	12	31	<5	6	2	0.320
S1 S086 2+50W		9	1.1	37	62	95	249	16	5	0.124
S1 S087 3+00W		8	2.6	22	16	36	<5	<5	3	0.207
S1 S088 3+50W		<5	1.4	21	11	54	6	5	2	0.042
S1 S089 4+00W		<5	1.7	29	13	67	<5	6	2	0.049
S1 S090 4+50W		6	1.5	44	21	64	2410	11	9	0.163
S1 S091 5+00W		<5	1.7	20	13	48	5	8	2	0.197
S1 S092 5+50W		<5	2.5	44	85	75	62	10	10	0.204
S1 S093 6+00W		6	1.9	35	5	49	<5	<5	2	0.159
S1 S094 6+50W		14	2.3	50	30	64	18	7	5	0.265
S1 S095 7+00W		5	2.6	22	16	36	7	<5	2	0.286
S1 S096 7+50W		5	2.7	44	19	83	<5	5	4	0.227
S1 S097 8+00W		12	2.0	25	18	50	<5	<5	2	0.186
S1 S098 8+50W		9	1.8	30	14	43	<5	<5	2	0.189
S1 S099 9+00W		9	2.2	27	24	49	<5	<5	3	0.166
S1 S100 9+50W		<5	2.2	21	10	35	14	<5	2	0.236
S1 S101 10+00W		34	2.3	29	20	38	<5	9	4	0.211
S1 S102 10+50W		<5	2.0	26	13	45	<5	<5	3	0.161
S1 S103 11+00W		<5	2.8	26	13	43	<5	<5	2	0.289
S1 S104 11+50W		6	2.0	85	27	94	17	9	12	0.185
S1 S105 12+00W		6	1.8	72	35	71	12	<5	4	0.401
S1 S106 12+50W		<5	1.5	29	18	42	14	<5	3	0.264
S1 S107 13+00W		10	1.4	57	36	73	25	5	5	0.124
S1 S108 13+50W		8	2.0	28	16	71	<5	8	3	0.274
S1 S109 14+00W		<5	1.9	19	14	33	<5	<5	3	0.113
S1 S110 14+50W		10	1.3	17	11	34	<5	<5	2	0.166
S1 90 ST 331 S001 0+00		<5	1.7	37	12	53	<5	<5	2	0.185
S1 90 ST 331 S002 0+50		7	1.6	23	16	51	<5	<5	5	0.187
S1 90 ST 331 S003 1+00		15	1.8	25	31	87	<5	10	8	0.172
S1 90 ST 331 S004 1+50		22	2.5	25	21	78	<5	<5	5	0.124

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 ST 331 S005 2+00		6	1.3	25	19	75	<5	<5	2	0.130
S1 90 ST 331 S006 2+50		8	1.2	52	24	90	18	<5	8	0.041
S1 90 ST 331 S007 3+00		11	1.9	34	26	111	<5	8	5	0.248
S1 90 ST 331 S008 3+50		7	1.2	72	21	82	5	7	5	0.152
S1 90 ST 331 S009 4+00		<5	0.5	10	22	38	<5	<5	6	0.154
S1 90 ST 331 S010 4+50		5	1.4	37	23	77	41	7	5	0.153
S1 90 ST 331 S011 5+00		7	1.2	21	17	40	<5	<5	3	0.088
S1 90 ST 331 S012 5+50		8	2.0	19	19	86	<5	<5	5	0.189
S1 90 ST 331 S013 6+00		6	1.6	52	22	78	22	6	5	0.227
S1 90 ST 331 S014 6+50		6	1.2	35	15	89	16	9	4	0.123
S1 90 ST 331 S015 7+00		<5	1.4	28	21	51	15	10	4	0.133
S1 90 ST 331 S016 7+50		7	1.7	40	18	93	21	7	6	0.118
S1 90 ST 331 S017 8+00		7	1.8	36	13	59	<5	6	6	0.207
S1 90 ST 331 S018 8+50		8	1.5	39	21	95	57	<5	2	0.222
S1 90 CC 331 S001		6	4.4	28	11	48	<5	<5	3	0.205
S1 90 CC 331 S002		<5	4.2	31	7	174	<5	<5	24	0.108
S1 90 CC 331 S003		<5	2.0	49	15	84	29	7	21	0.237
S1 90 CC 331 S004		12	3.4	29	12	50	42	13	65	0.111
S1 90 CC 331 S005		6	1.5	19	9	42	<5	<5	10	0.122
S1 90 CC 331 S006		<5	3.1	26	8	53	<5	<5	4	0.128
S1 90 CC 331 S007		10	2.3	22	17	119	20	5	31	0.114
S1 90 CC 331 S008		<5	1.8	27	10	40	16	<5	2	0.141
S1 90 CC 331 S009		<5	1.9	55	6	43	<5	<5	2	0.092
S1 90 CC 331 S010		10	2.1	75	14	239	21	9	5	0.079
S1 90 CC 331 S011		10	1.6	29	19	57	<5	<5	4	0.135
S1 90 CC 331 S012		7	1.4	32	22	61	16	9	3	0.190
S1 90 CC 331 S013		8	1.9	24	12	40	<5	<5	3	0.214
S1 90 CC 331 S014		13	1.3	32	11	36	11	6	9	0.041
S1 90 CC 331 S015		8	1.6	16	9	44	7	<5	6	0.036
S1 90 CC 331 S016		8	3.3	42	17	59	29	5	8	0.239
S1 90 CC 331 S017		30	2.7	32	32	66	18	7	10	0.168
S1 90 CC 331 S018		5	1.6	33	15	52	21	<5	5	0.150
S1 90 CC 331 S019		6	3.9	39	8	180	<5	7	16	0.086
S1 90 CC 331 S020		15	1.5	87	37	272	32	6	5	0.249
S1 90 CC 331 S021		<5	0.7	25	7	253	<5	<5	10	<0.010
S1 90 PW 331 S018		7	0.8	25	14	28	<5	<5	2	0.250
S1 90 PW 331 S019		15	1.3	38	12	50	<5	<5	2	0.194
S1 90 PW 331 S020		<5	1.7	17	12	48	<5	<5	3	0.221
S1 90 PW 331 S021		7	1.9	49	12	64	9	8	3	0.233
S1 90 PW 331 S022		<5	1.9	69	12	78	<5	6	7	0.103

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S1 90 PW 331 S023		11	1.4	22	19	86	<5	6	7	0.155
S1 90 PW 331 S024		13	1.6	47	9	37	31	<5	2	0.481
S1 90 PW 331 S025		8	1.7	31	17	69	8	7	5	0.105
S1 90 PW 331 S026		7	1.6	31	14	40	<5	<5	2	0.251
S1 90 PW 331 S027		8	2.8	26	10	34	<5	5	2	0.418
S1 90 PW 331 S028		10	1.5	14	15	34	<5	6	3	0.159
S1 90 PW 331 S029		16	1.2	20	13	45	<5	<5	4	0.209
S1 90 PW 331 S030		9	1.9	42	11	44	<5	<5	4	0.158
S1 90 PW 331 S031		9	1.6	20	13	27	<5	<5	3	0.101
S1 90 PW 331 S032		12	1.7	19	11	34	<5	<5	5	0.066
S1 90 PW 331 S033		6	0.8	12	9	27	<5	<5	1	0.163
S1 90 PW 331 S034		6	2.2	26	15	53	14	<5	5	0.192
S1 90 PW 331 S035		<5	0.7	15	13	35	<5	<5	2	0.102
S1 90 PW 331 S036		6	1.1	13	20	43	<5	<5	7	0.078
S1 90 PW 331 S037		9	2.4	60	11	52	10	6	4	0.162
S1 90 PW 331 S038		11	2.8	24	20	43	<5	<5	4	0.076
S1 90 PW 331 S039		24	1.9	21	9	31	16	<5	3	0.114
S1 90 PW 331 S040		<5	2.0	55	9	38	<5	<5	5	0.080
S1 90 PW 331 S041		6	2.3	32	11	47	<5	<5	2	0.158
S1 90 PW 331 S042		<5	2.2	33	11	48	7	8	1	0.173
S1 90 PW 331 S043		6	1.7	70	8	61	11	<5	4	0.181
S1 90 PW 331 S044		11	1.8	41	8	90	15	<5	2	0.273
S1 90 PW 331 S045		<5	2.2	33	18	34	8	5	3	0.250
S1 90 PW 331 S046		6	1.7	53	9	43	8	<5	3	0.123
S1 90 PW 331 S048		5	1.8	20	8	47	<5	<5	2	0.143
S1 90 PW 331 S049		8	1.4	63	11	72	8	<5	2	0.231
S1 90 PW 331 S050		<5	1.9	28	5	36	<5	<5	2	0.212
S1 90 PW 331 S051		7	3.1	12	10	32	<5	<5	2	0.173
S1 90 PW 331 S052		6	2.8	23	9	42	8	<5	3	0.113
S1 90 PW 331 S053		11	1.8	34	11	51	8	<5	3	0.208
S1 90 PW 331 S054		8	1.8	23	11	49	<5	<5	2	0.141
S1 90 PW 331 S055		<5	1.1	31	9	41	12	<5	2	0.089
S1 90 PW 331 S056		6	3.0	26	14	49	9	<5	10	0.198
S1 90 PW 331 S057		<5	1.5	31	17	157	13	<5	26	0.065
S1 90 PW 331 S058		<5	1.8	40	12	36	9	7	7	0.137
S1 90 PW 331 S059		<5	1.9	27	9	40	6	<5	3	0.106
S1 90 PW 331 S060		<5	1.8	23	11	29	<5	<5	4	0.190
S1 90 PW 331 S061		12	2.6	30	13	44	9	10	6	0.265
S1 90 PW 331 S062		<5	1.6	34	17	91	19	<5	4	0.182
S1 90 PW 331 S063		10	1.8	24	8	41	<5	<5	3	0.176

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S1 90 PW 331 S0064		<5	1.5	18	7	38	<5	<5	3	0.095
S1 90 PW 331 S0065		<5	1.5	13	8	31	<5	<5	3	0.094
S1 90 PW 331 S0066		<5	1.7	13	8	124	<5	<5	11	0.049
S1 90 PW 331 S0068		<5	1.7	22	10	41	<5	<5	3	0.154
S1 90 PW 331 S0069		<5	0.5	15	9	38	5	<5	2	0.116
S1 90 PW 331 S0070		<5	1.7	21	8	55	<5	<5	2	0.121
S1 90 PW 331 S0071		<5	1.7	20	12	37	<5	5	3	0.175
S1 90 PW 331 S0072		11	1.3	18	11	51	<5	<5	3	0.088
S1 90 PW 331 S0073		6	1.7	48	19	67	11	8	13	0.144
S1 90 PW 331 S0074		<5	1.5	26	11	55	<5	<5	5	0.109
S1 90 PW 331 S0075		6	1.4	29	14	42	7	6	3	0.205
S1 90 PW 331 S0076		12	1.7	37	20	45	70	<5	7	0.243
S1 90 PW 331 S0077		<5	0.7	13	10	27	<5	<5	2	0.123
S1 90 PW 331 S0079		<5	1.6	18	11	52	<5	<5	7	0.112
S1 90 PW 331 S0080		<5	3.4	28	8	59	<5	<5	2	0.105
S1 90 PW 331 S0081		<5	1.4	19	8	213	<5	<5	5	0.307
S1 90 PW 331 S0082		18	5.2	17	13	24	<5	<5	4	0.156
S1 90 PW 331 S0083		30	4.5	34	25	50	21	8	3	0.331
S1 90 X 331 S0001		9	2.4	26	11	75	8	6	5	0.186
S1 90 X 331 S0002		161	2.8	98	40	101	127	12	9	0.228
S1 90 X 331 S0003		26	2.8	34	18	102	26	8	4	0.313
S1 90 X 331 S0004		9	1.5	100	20	220	18	<5	4	0.235
S1 90 X 331 S0005		<5	1.9	31	14	78	8	7	4	0.285
S1 90 X 331 S0006		6	1.8	28	18	109	21	7	5	0.278
S1 90 X 331 S0007		<5	1.6	42	18	110	23	<5	4	0.187
S1 90 X 331 S0008		6	1.7	24	11	54	30	6	3	0.167
S1 90 X 331 S0009		7	2.5	25	12	56	<5	5	3	0.166
S1 90 X 331 S0010		7	2.0	35	13	52	15	<5	3	0.166
T1 90 AW 331 (PREFIX)										
T1 L001 40+68E		11	1.0	272	15	494	20	<5	4	0.217
T1 L002 42+35E		155	2.8	226	41	561	84	15	13	0.111
T1 L0028 14+30		6	1.3	51	13	1139	26	<5	4	0.116
T1 L003 45+45E		29	2.4	262	15	344	24	8	10	0.108
T1 L005 1+90E		10	1.6	87	13	570	34	9	44	0.194
T1 L006 3+00E		11	1.8	71	10	58	47	8	26	0.154
T1 L007 3+85E		19	2.0	89	9	492	33	7	17	0.100
T1 L008 10+75E		18	1.7	109	23	457	63	10	26	0.139
T1 L004 2+97W		<5	1.3	41	13	305	19	<5	4	0.096
T1 L005 7+42W		25	3.8	128	58	535	138	9	6	0.206
T1 L006 1+23W		9	1.3	53	16	1307	24	<5	3	0.077

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T1 L007 5+57W		<5	1.1	33	23	195	24	<5	3	0.088
T1 L008 14+27W		<5	1.1	315	9	627	14	<5	5	0.079
T1 90 CC 331 L001		8	1.1	33	16	795	38	9	33	0.032
T1 90 CC 331 L002		7	1.0	36	8	264	9	<5	5	0.036
T1 90 CC 331 L003		6	1.2	63	9	231	24	<5	6	0.046
T1 90 CC 331 L005		55	1.4	284	13	199	21	7	7	0.060
T1 90 CC 331 L006		44	1.4	289	17	197	35	<5	7	0.089
T1 90 CC 331 L007		35	1.4	321	17	207	33	10	7	0.058
T1 90 CC 331 L008		9	1.3	311	14	201	28	5	7	0.079
T1 90 CC 331 L009		6	1.5	324	16	205	36	8	7	0.070
T1 90 CC 331 L010		51	1.7	328	17	203	29	7	9	0.074
T1 90 CC 331 L011		124	1.5	385	15	195	47	8	8	0.059
T1 90 CC 331 L012		64	1.4	382	16	207	38	7	9	0.055
T1 90 CC 331 L013		54	1.6	377	16	195	48	8	9	0.073
T1 90 ST 331 L001		6	1.2	45	13	246	33	7	5	0.102
T1 90 X 331 L001		20	1.3	78	24	420	35	6	4	0.059

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S1 S111 0+00		11	3.5	96	12	164	31	7	5	0.195
S1 S112 0+50E		9	2.4	157	14	158	27	8	5	0.234
S1 S113 1+00E		20	1.9	59	12	195	34	<5	27	0.440
S1 S114 1+50E		27	3.2	72	35	463	141	29	105	0.437
S1 S115 2+00E		17	2.9	44	14	94	26	7	10	0.248
S1 S116 2+50E		11	1.7	34	14	151	27	<5	26	0.143
S1 S117 3+00E		15	1.7	54	14	196	49	8	14	0.187
S1 S118 3+50E		18	2.0	24	11	97	31	9	9	0.281
S1 S119 4+00E		29	3.8	61	16	146	44	7	15	0.180
S1 S120 4+50E		21	4.2	51	14	150	39	9	30	0.160
S1 S121 5+00E		21	3.2	91	14	693	53	11	71	0.351
S1 S122 5+50E		24	3.7	57	10	130	19	<5	8	0.320
S1 S123 6+00E		24	3.5	43	10	75	21	6	5	0.438
S1 S125 7+00E		15	2.0	54	15	146	31	6	4	0.190
S1 S126 7+50E		26	1.7	51	6	129	18	<5	3	0.158
S1 S127 8+00E		19	2.6	135	6	254	26	<5	3	0.219
S1 S128 8+50E		10	1.6	42	8	94	32	6	2	0.184
S1 S129 9+00E		12	1.9	31	11	82	27	9	6	0.195
S1 S130 9+50E		13	0.2	12	10	31	<5	<5	2	0.107
S1 S131 10+00E		48	2.5	47	17	99	46	<5	5	0.315
S1 S132 10+50E		25	2.5	50	15	75	27	8	4	0.229
S1 S133 11+00E		30	1.8	29	15	52	35	6	10	0.046
S1 S134 11+50E		61	1.1	44	6	146	19	6	5	0.086
S1 S135 12+00E		34	1.4	28	11	66	17	5	4	0.108

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V90-02130.0

DATE PRINTED: 28-SEP-90

PROJECT: 331

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 RV 331 S049		<5	2.1	60	26	70	23	7	7	0.22[illegible]
S1 90 RV 331 S050		<5	2.3	26	23	48	29	8	5	0.213
S1 90 RV 331 S051		7	1.6	28	21	43	12	7	6	0.074
S1 90 RV 331 S052		<5	2.4	44	23	80	25	12	5	0.163
S1 90 RV 331 S053		<5	2.1	45	21	64	17	17	5	0.209
S1 90 RV 331 S054		6	5.0	40	13	47	28	9	13	0.226
S1 90 RV 331 S055		6	1.4	20	17	46	9	<5	7	0.088
S1 90 RV 331 S056		7	0.8	12	16	22	<5	<5	3	0.104
S1 90 RV 331 S057		9	2.4	33	27	113	38	7	7	0.280
S1 90 RV 331 S058		8	2.1	85	33	120	12	<5	10	0.198
S1 90 RV 331 S059		7	2.6	110	31	108	34	9	7	0.425
S1 90 RV 331 S060		7	1.9	51	35	76	23	8	6	0.266
S1 90 RV 331 S062		11	1.2	16	10	26	<5	<5	3	0.302
S1 90 RV 331 S063		20	1.8	42	21	40	21	5	5	0.212
S1 90 RV 331 S064		5	1.5	32	10	35	5	<5	3	0.191
S1 90 RV 331 S065		<5	2.3	29	15	47	11	5	3	0.131
T1 90 RV 331 (PRE)										
T1 L008		<5	1.2	64	23	214	35	9	14	0.038
T1 L009		6	1.6	50	17	209	70	13	10	0.078
T1 L010 MOSS MATT		6	0.9	39	10	119	13	6	3	0.146
T1 L011		<5	1.5	118	33	225	42	11	8	0.034

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V90-02269.0

DATE PRINTED: 15-OCT-90
PROJECT: 331 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 JJ 331(PRE)										
S1 4+60N 2+25W		108	1.5	165	60	441	132	<5	34	0.140
S1 4+60N 2+20W		7	1.8	82	24	103	32	<5	7	0.168
S1 4+60N 2+15W		17	1.6	94	31	97	53	<5	9	0.157
S1 4+60N 2+10W		11	1.5	77	15	119	33	<5	4	0.193
S1 4+60N 2+05W		19	1.4	109	24	131	44	<5	4	0.083
S1 4+60N 2+00W		404	1.5	229	45	120	254	<5	11	0.113
S1 4+60N 1+95W		3332	0.9	592	110	294	1198	14	15	0.276
S1 4+60N 1+90W		2216	0.7	328	73	161	882	9	16	0.209
S1 4+60N 1+85W		19	1.0	53	18	88	23	<5	4	0.144
S1 4+60N 1+80W		7	1.7	34	14	58	35	<5	4	0.249
S1 4+60N 1+75W		9	2.4	47	23	97	32	<5	8	0.252
S1 4+50N 2+25W		7	1.4	45	18	85	36	<5	6	0.143
S1 4+50N 2+20W		8	1.3	91	28	95	51	<5	7	0.125
S1 4+50N 2+15W		218	1.5	181	47	186	199	<5	15	0.204
S1 4+50N 2+10W		306	1.0	154	44	167	425	<5	6	0.117
S1 4+50N 2+05W		83	1.3	178	28	127	108	<5	7	0.160
S1 4+50N 2+00W		360	1.4	175	31	149	137	<5	6	0.117
S1 4+50N 1+95W		299	0.8	43	16	64	43	<5	4	0.125
S1 4+50N 1+90W		131	1.4	102	25	103	59	<5	4	0.138
S1 4+50N 1+85W		16	1.0	42	25	56	33	<5	8	0.147
S1 4+50N 1+80W		<5	2.0	55	14	127	25	<5	4	0.143
S1 4+50N 1+75W		14	1.5	47	32	65	51	<5	12	0.151
S1 4+40N 2+25W		14	2.7	55	18	49	29	<5	4	0.245
S1 4+40N 2+20W		161	3.2	147	57	164	206	<5	14	0.227
S1 4+40N 2+15W		113	2.3	100	35	151	195	<5	9	0.199
S1 4+40N 2+10W		151	1.3	152	32	131	149	<5	7	0.221
S1 4+40N 2+05W		427	1.5	190	29	140	123	<5	13	0.161
S1 4+40N 2+00W		867	1.3	63	20	73	41	<5	9	0.170
S1 4+40N 1+95W		463	1.2	62	19	82	45	<5	6	0.121
S1 4+40N 1+90W		221	1.7	176	30	177	144	<5	8	0.151
S1 4+40N 1+85W		194	0.6	987	60	303	130	6	13	0.138
S1 4+40N 1+80W		20	0.9	156	14	168	57	<5	6	0.135
S1 4+40N 1+75W		19	1.7	34	28	56	27	<5	15	0.161
S1 90 PW 331S (PRE)										
S1 2+60N 0+25W		7	3.5	27	11	25	10	<5	4	0.315
S1 2+60N 0+20W		<5	1.3	20	16	41	11	<5	5	0.139
S1 2+60N 0+15W		14	1.3	42	18	33	8	<5	10	0.267
S1 2+60N 0+10W		<5	1.3	27	12	32	10	<5	5	0.191
S1 2+60N 0+05W		<5	1.2	21	17	34	11	<5	4	0.214

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V90-02269.0

DATE PRINTED: 15-OCT-90

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 2+60N 0+00BL		<5	1.4	24	15	37	13	<5	3	0.185
S1 2+60N 0+10E		17	2.6	38	19	23	14	<5	7	0.267
S1 2+60N 0+15E		14	1.8	41	18	56	22	<5	10	0.264
S1 2+60N 0+20E		7	2.1	54	14	60	37	<5	5	0.264
S1 2+60N 0+25E		42	1.3	201	26	94	46	<5	14	0.160
S1 2+60N 0+30E		48	1.3	142	32	59	37	<5	18	0.134
S1 2+60N 0+35E		149	2.1	190	34	61	63	<5	32	0.149
S1 2+60N 0+40E		220	3.1	903	78	290	310	<5	22	0.147
S1 2+60N 0+45E		173	3.0	693	63	251	163	<5	25	0.161
S1 2+60N 0+50E		196	3.3	881	113	282	267	<5	16	0.165
S1 2+50N 0+25W		<5	0.8	27	6	45	12	<5	2	0.130
S1 2+50N 0+20W		38	1.8	74	18	61	37	<5	4	0.305
S1 2+50N 0+15W		30	1.3	20	21	23	<5	<5	5	0.216
S1 2+50N 0+10W		27	1.3	20	20	27	<5	<5	4	0.295
S1 2+50N 0+05W		293	1.2	138	15	113	38	<5	10	0.127
S1 2+50N 0+00BL		14	1.3	27	15	59	17	<5	10	0.197
S1 2+50N 0+10E		17	2.5	19	15	45	9	<5	4	0.214
S1 2+50N 0+15E		46	0.7	22	22	40	7	<5	14	0.187
S1 2+50N 0+20E		87	2.0	134	17	52	129	<5	29	0.244
S1 2+50N 0+25E		33	1.3	36	24	41	15	<5	17	0.215
S1 2+50N 0+30E		15	1.5	42	25	68	14	<5	14	0.247
S1 2+50N 0+35E		7	2.2	38	15	51	24	<5	6	0.286
S1 2+50N 0+40E		<5	2.8	64	6	42	20	<5	4	0.214
S1 2+50N 0+45E		22	3.6	111	24	80	26	<5	17	0.194
S1 2+50N 0+50E		82	2.0	198	31	141	84	<5	17	0.134
S1 2+40N 0+25W		13	0.4	75	18	99	33	<5	3	0.076
S1 2+40N 0+20W		7	1.7	73	14	104	20	<5	5	0.176
S1 2+40N 0+15W		19	5.4	58	22	51	24	<5	9	0.446
S1 2+40N 0+10W		21	2.6	96	20	45	12	<5	18	0.289
S1 2+40N 0+05W		30	1.0	28	16	37	15	<5	191	0.130
S1 2+40N 0+00BL		8	1.3	30	12	40	20	<5	6	0.194
S1 2+40N 0+05E		11	3.5	35	13	40	8	<5	6	0.336
S1 2+40N 0+10E		7	2.2	25	19	37	6	<5	6	0.167
S1 2+40N 0+15E		170	3.4	211	30	48	159	<5	17	0.308
S1 2+40N 0+20E		26	3.0	56	26	28	35	<5	6	0.300
S1 2+40N 0+25E		35	1.5	450	12	132	20	<5	6	0.049
S1 2+40N 0+30E		52	0.9	212	17	88	47	<5	12	0.114
S1 2+40N 0+35E		62	1.6	556	20	48	94	<5	28	0.170
S1 2+40N 0+40E		20	1.5	114	18	54	45	<5	11	0.182
S1 2+40N 0+45E		46	1.9	117	20	118	43	<5	22	0.271

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Geochemical Lab Report

REPORT: V90-02269.0

DATE PRINTED: 15-OCT-90

PROJECT: 331 PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 2+40N 0+50E		86	1.7	472	25	179	52	<5	23	0.216
S1 90 RV 331 (PRE)										
S1 3+10N 0+00E		13	2.1	68	9	53	32	<5	8	0.289
S1 3+10N 0+05E		28	2.2	83	20	77	34	<5	8	0.248
S1 3+10N 0+10E		104	1.8	233	39	117	104	<5	14	0.271
S1 3+10N 0+15E		675	2.3	680	75	194	256	<5	18	0.179
S1 3+10N 0+20E		316	2.2	318	24	57	125	<5	26	0.217
S1 3+10N 0+25E		78	2.6	231	22	73	190	<5	18	0.233
S1 3+10N 0+30E		205	2.9	1013	39	135	328	<5	33	0.175
S1 3+10N 0+35E		151	1.0	1558	50	129	191	11	34	0.135
S1 3+10N 0+40E		36	0.8	346	18	169	36	<5	8	0.062
S1 3+10N 0+45E		122	2.2	1466	32	243	136	<5	16	0.088
S1 3+10N 0+50E		36	1.3	591	22	179	58	<5	11	0.095
S1 3+10N 0+55E		44	1.9	400	27	123	92	<5	22	0.201
S1 3+10N 0+60E		38	1.0	234	15	184	68	<5	12	0.128
S1 3+10N 0+65E		96	2.4	122	20	121	86	<5	18	0.247
S1 3+10N 0+70E		18	1.6	226	19	143	100	<5	5	0.063
S1 3+10N 0+75E		79	3.4	243	24	180	77	<5	10	0.209
S1 3+00N 0+00E		17	3.6	82	26	130	49	<5	18	0.198
S1 3+00N 0+10E		26	1.2	118	21	143	45	<5	6	0.120
S1 3+00N 0+20E		481	3.1	567	33	115	191	<5	32	0.198
S1 3+00N 0+25E		61	2.3	310	27	177	124	<5	20	0.200
S1 3+00N 0+30E		45	1.3	639	19	182	169	<5	12	0.101
S1 3+00N 0+35E		165	0.6	1699	54	281	405	<5	26	0.090
S1 3+00N 0+40E		86	2.2	1312	49	251	264	<5	22	0.103
S1 3+00N 0+45E		288	2.0	678	58	247	294	<5	11	0.105
S1 3+00N 0+50E		208	2.5	613	36	238	130	<5	11	0.107
S1 3+00N 0+55E		75	2.5	279	21	136	122	<5	20	0.235
S1 3+00N 0+60E		360	3.3	2245	126	296	493	10	31	0.084
S1 2+90N 0+05E		26	2.6	185	24	252	73	<5	19	0.124
S1 2+90N 0+10E		9	2.9	115	15	222	37	<5	7	0.154
S1 2+90N 0+15E		90	3.5	259	34	106	91	<5	11	0.297
S1 2+90N 0+20E		239	2.8	468	21	105	116	<5	19	0.161
S1 2+90N 0+25E		48	2.4	197	22	121	116	<5	17	0.241
S1 2+90N 0+30E		30	0.8	209	16	183	70	<5	9	0.085
S1 2+90N 0+35E		201	2.5	1248	51	164	355	<5	25	0.145
S1 2+90N 0+40E		113	1.9	836	37	132	277	<5	24	0.165

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Geochemical Lab Report

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PROJECT: 331

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 AW 331 (PRE)										
S1 4+70N 2+95W		6	1.5	51	15	89	29	<5	5	0.175
S1 4+70N 2+90W		<5	3.4	43	26	77	64	12	8	0.219
S1 4+70N 2+85W		15	2.4	69	18	78	30	<5	6	0.246
S1 4+70N 2+80W		29	7.2	187	44	637	154	8	91	0.357
S1 4+70N 2+75W		24	3.7	95	43	225	100	22	33	0.245
S1 4+70N 2+70W		9	1.2	63	39	130	34	<5	10	0.103
S1 4+70N 2+65W		27	2.1	134	53	129	89	8	8	0.226
S1 4+70N 2+60W		21	9.2	505	152	453	89	<5	43	0.245
S1 4+60N 2+95W		11	0.9	43	10	102	19	<5	2	0.113
S1 4+60N 2+90W		9	1.3	68	17	122	52	<5	5	0.188
S1 4+60N 2+85W		52	1.3	46	11	83	31	<5	4	0.214
S1 4+60N 2+80W		13	1.4	52	15	60	35	<5	4	0.198
S1 4+60N 2+75W		11	1.2	75	15	146	51	<5	4	0.160
S1 4+60N 2+70W		<5	1.9	98	8	131	50	<5	8	0.162
S1 4+60N 2+65W		<5	1.8	66	8	125	42	<5	8	0.138
S1 4+60N 2+60W		20	3.4	112	40	355	92	11	52	0.197
S1 4+60N 2+55W		42	7.4	200	43	706	90	15	28	0.294
S1 4+50N 2+95W		14	1.1	57	16	123	41	<5	4	0.153
S1 4+50N 2+90W		8	1.5	48	19	92	53	<5	5	0.188
S1 4+50N 2+85W		51	1.0	91	18	133	45	<5	6	0.166
S1 4+50N 2+80W		37	1.1	106	16	141	48	<5	5	0.119
S1 4+50N 2+75W		12	2.0	64	22	94	50	<5	12	0.193
S1 4+50N 2+70W		11	2.6	93	18	108	73	16	9	0.097
S1 4+50N 2+65W		7	2.5	89	19	168	68	6	22	0.120
S1 4+50N 2+60W		22	3.3	102	41	232	91	9	55	0.196
S1 4+50N 2+55W		41	2.7	248	69	233	140	<5	19	0.129
S1 4+40N 2+95W		5	1.2	53	11	88	21	<5	3	0.139
S1 4+40N 2+90W		10	1.1	88	19	182	46	<5	4	0.160
S1 4+40N 2+85W		11	1.3	63	15	144	52	<5	5	0.191
S1 4+40N 2+80W		15	1.4	56	11	102	28	<5	4	0.177
S1 4+40N 2+75W		6	1.1	86	11	130	31	<5	7	0.137
S1 4+40N 2+70W		15	1.7	83	17	136	58	<5	12	0.208
S1 4+40N 2+65W		10	1.5	58	20	109	59	7	12	0.174
S1 4+40N 2+60W		10	1.6	59	10	96	37	<5	33	0.128
S1 4+40N 2+55W		14	4.9	84	20	163	48	7	25	0.304
S1 90 CC 331 (PRE)										
S1 4+60N 1+10W		232	3.9	358	71	277	327	<5	62	0.257
S1 4+60N 1+05W		83	3.5	212	52	125	264	16	41	0.224
S1 4+60N 1+00W		539	4.6	187	100	504	345	<5	15	0.494

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PROJECT: 331

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 4+60N 0+95W		68	3.0	153	35	165	113	<5	18	0.244
S1 4+60N 0+90W		114	2.7	52	81	93	120	<5	13	0.213
S1 4+60N 0+85W		30	2.7	45	31	69	70	9	13	0.187
S1 4+60N 0+80W		24	1.2	57	16	111	95	<5	12	0.199
S1 4+60N 0+75W		79	1.5	87	24	151	185	<5	13	0.250
S1 4+60N 0+70W		90	1.6	109	19	272	136	<5	9	0.279
S1 4+60N 0+65W		331	2.2	333	44	368	501	<5	7	0.161
S1 4+60N 0+60W		68	2.2	118	16	179	112	<5	8	0.217
S1 4+50N 1+25W		30	2.2	282	40	167	136	<5	21	0.207
S1 4+50N 1+20W		133	7.2	599	1218	175	373	<5	98	0.152
S1 4+50N 1+15W		2021	5.2	559	467	424	1200	5	38	0.193
S1 4+50N 1+10W		294	1.9	789	62	124	>2000	5	21	0.096
S1 4+50N 1+05W		370	2.6	406	52	170	357	<5	38	0.201
S1 4+50N 1+00W		359	3.8	801	88	451	470	<5	69	0.275
S1 4+50N 0+95W		253	4.7	228	102	304	337	<5	26	0.285
S1 4+50N 0+90W		81	<0.2	193	40	156	167	9	13	0.323
S1 4+50N 0+85W		104	<0.2	65	30	177	163	12	18	0.247
S1 4+50N 0+80W		19	3.3	71	27	243	104	7	15	0.239
S1 4+50N 0+75W		49	1.9	100	35	205	156	18	17	0.231
S1 4+50N 0+70W		16	2.4	70	13	187	63	<5	13	0.238
S1 4+50N 0+65W		25	2.2	87	18	215	86	<5	13	0.176
S1 4+50N 0+60W		24	3.1	167	38	230	138	17	16	0.176
S1 4+50N 0+55W		32	2.5	93	21	184	82	<5	13	0.167
S1 4+50N 0+50W		29	1.6	206	25	335	98	<5	12	0.271
S1 4+50N 0+45W		21	2.2	102	21	233	85	<5	18	0.248
S1 4+50N 0+40W		16	2.7	78	14	169	44	<5	13	0.327
S1 4+50N 0+35W		17	2.6	80	21	219	68	<5	26	0.188
S1 4+50N 0+30W		15	1.7	128	18	213	75	<5	11	0.111
S1 4+50N 0+25W		34	2.8	194	22	253	121	<5	22	0.151
S1 4+50N 0+20W		16	2.2	115	22	202	71	<5	18	0.209
S1 4+50N 0+15W		21	2.7	229	28	465	196	<5	47	0.241
S1 4+50N 0+10W		23	2.8	224	56	744	189	8	31	0.189
S1 4+50N 0+05W		18	3.3	225	25	472	126	<5	24	0.203
S1 90 CC 331 L-005		85	0.9	89	29	164	108	<5	23	0.085

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Geochemical Lab Report

REPORT: V90-02391.0

DATE PRINTED: 23-OCT-90

PROJECT: 331

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 90 AW 331 (PRE)										
S1 0+50N 1+50E		131	2.2	240	99	134	152	<5	21	0.137
S1 0+50N 1+55E		72	1.6	281	794	1002	154	<5	21	0.091
S1 0+50N 1+60E		91	2.4	342	813	812	102	<5	13	0.072
S1 0+50N 1+65E		71	2.4	337	736	749	89	<5	12	0.040
S1 0+50N 1+70E		84	2.5	309	920	731	101	<5	13	0.099
S1 0+50N 1+75E		42	2.6	251	962	914	119	<5	11	0.113
S1 0+50N 1+80E		71	2.6	251	1067	976	124	<5	11	0.092
S1 0+50N 1+85E		45	3.0	138	606	293	106	<5	22	0.096
S1 0+50N 1+90E		125	3.1	97	407	190	79	<5	12	0.111
S1 0+50N 1+95E		<5	3.9	46	185	126	32	<5	10	0.092
S1 0+50N 2+00E		94	5.1	189	670	447	101	<5	24	0.184
S1 0+50N 2+05E		147	2.3	141	46	411	70	<5	32	0.133
S1 0+50N 2+10E		57	1.6	138	23	255	40	<5	11	0.080
S1 0+50N 2+15E		30	1.8	198	25	240	51	<5	9	0.152
S1 0+50N 2+20E		77	2.4	185	39	460	73	<5	26	0.140
S1 0+50N 2+25E		42	1.8	100	27	423	47	<5	23	0.138
S1 0+40N 1+50E		272	2.0	369	249	290	98	<5	13	0.108
S1 0+40N 1+60E		104	3.0	253	1976	1877	101	<5	8	0.161
S1 0+40N 1+70E		167	3.0	151	1255	575	127	<5	17	0.221
S1 0+40N 1+80E		149	4.0	182	852	299	77	<5	15	0.212
S1 0+40N 1+90E		122	3.3	131	656	257	72	<5	19	0.193
S1 0+40N 2+00E		16	2.4	153	345	463	81	<5	28	0.221
S1 0+40N 2+10E		25	2.0	206	20	221	45	<5	7	0.171
S1 0+40N 2+20E		1105	3.2	162	40	428	145	<5	39	0.234
S1 0+40N 2+30E		131	2.3	187	59	440	149	10	58	0.186
S1 0+10N 2+50W		42	2.2	21	13	38	7	<5	5	0.148
S1 0+10N 2+40W		66	1.8	38	17	56	25	<5	10	0.178
S1 0+10N 2+30W		<5	1.3	42	25	66	28	<5	13	0.153
S1 0+10N 2+20W		<5	1.3	36	7	55	18	<5	13	0.088
S1 0+10N 2+10W		<5	1.3	29	9	53	13	<5	10	0.108
S1 0+10N 2+00W		21	1.8	46	13	50	30	<5	25	0.185
S1 0+00N 2+50W		<5	1.9	26	18	46	24	<5	44	0.321
S1 0+00N 2+40W		12	2.1	40	10	37	20	<5	4	0.249
S1 0+00N 2+30W		<5	1.3	47	11	41	12	<5	5	0.233
S1 0+00N 2+20W		<5	1.1	17	4	81	<5	<5	3	0.247
S1 0+00N 2+10W		6	1.9	72	9	61	136	<5	24	0.079
S1 0+00N 2+00W		24	1.8	76	13	58	40	<5	16	0.189
S1 0+10S 2+50W		30	<0.2	52	26	43	<5	7	7	0.217
S1 0+10S 2+40W		<5	2.1	73	10	35	24	<5	7	0.164

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
S1 0+10S 2+30W		<5	1.1	28	12	29	12	<5	6	0.156
S1 0+10S 2+20W		314	3.7	76	12	90	111	<5	13	0.181
S1 0+10S 2+10W		93	3.1	99	13	140	159	<5	26	0.154
S1 0+10S 2+00W		23	1.7	67	11	81	23	<5	12	0.181
S1 90 CC 331 (PRE)										
S1 0+10N 2+00E		527	2.6	262	227	303	207	<5	32	0.185
S1 0+10N 2+10E		88	2.2	146	62	308	101	<5	19	0.185
S1 0+10N 2+20E		9	2.5	200	11	277	34	<5	7	0.128
S1 0+10N 2+30E		18	2.3	285	23	318	40	<5	9	0.163
S1 0+10N 2+40E		23	2.1	288	25	309	40	<5	8	0.127
S1 0+10N 2+50E		8	1.8	289	24	259	35	<5	7	0.083
S1 0+00N 2+00E		15	1.6	72	136	136	58	<5	17	0.097
S1 0+00N 2+05E		22	1.5	41	86	91	39	<5	10	0.136
S1 0+00N 2+10E		148	4.1	177	190	356	147	<5	41	0.307
S1 0+00N 2+15E		168	4.9	200	92	448	120	<5	29	0.293
S1 0+00N 2+20E		416	4.8	278	187	637	332	<5	43	0.295
S1 0+00N 2+25E		132	2.6	145	91	291	99	<5	22	0.208
S1 0+00N 2+30E		<5	2.8	169	28	755	89	7	60	0.295
S1 0+00N 2+35E		<5	2.9	197	25	518	78	<5	34	0.214
S1 0+00N 2+40E		13	2.2	172	22	428	47	<5	22	0.156
S1 0+00N 2+45E		6	1.9	159	12	308	29	<5	19	0.151
S1 0+00N 2+50E		9	3.0	235	23	670	59	<5	37	0.276
S1 0+10S 2+30E		<5	2.8	158	28	741	94	6	52	0.261
S1 0+10S 2+40E		<5	2.1	188	39	637	101	<5	33	0.123
S1 0+10S 2+50E		<5	2.5	172	9	369	31	<5	16	0.147
S1 90 JJ 331 (PRE)										
S1 0+60N 1+50E		9	1.8	273	59	145	59	<5	28	0.235
S1 0+60N 1+60E		<5	1.0	147	250	714	64	<5	9	0.120
S1 0+60N 1+70E		55	2.1	370	750	1181	108	<5	11	0.097
S1 0+60N 1+80E		91	2.5	259	690	719	127	<5	15	0.163
S1 0+60N 1+90E		35	2.1	115	242	283	54	<5	13	0.148
S1 0+60N 2+00E		97	3.4	244	715	645	128	<5	22	0.213
S1 0+60N 2+10E		71	3.8	168	423	388	101	<5	19	0.206
S1 0+60N 2+20E		97	1.7	150	27	332	49	<5	18	0.150
S1 0+60N 2+30E		76	1.0	102	29	225	56	<5	6	0.094

APPENDIX V

Rock Geochemical Lab Reports

Bondar-Clegg & Company Ltd.
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Geochemical Lab Report

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PROJECT: 331 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
R2 90 GW 331 R3501		<5	0.6	42	14	47	87	6	15	0.047
R2 90 GW 331 R3502		<5	2.0	60	5	178	19	<5	10	0.089
R2 90 GW 331 R3503		<5	0.6	15	5	5	5	<5	5	0.012
R2 90 GW 331 R3504		<5	<0.2	19	3	13	5	<5	2	0.030
R2 90 GW 331 R3505		<5	0.3	15	3	6	12	<5	6	<0.010
R2 90 GW 331 R3506		19	0.7	6	3	20	6	<5	2	<0.010
R2 90 GW 331 R3507		<5	0.4	22	5	62	7	<5	2	<0.010
R2 90 GW 331 R3508		185	1.2	41	28	54	88	6	18	0.023
R2 90 GW 331 R3509		9	0.6	153	5	30	35	5	3	0.015
R2 90 GW 331 R3510		27	1.7	44	7	118	9	<5	4	0.027
R2 90 GW 331 R3511		<5	<0.2	20	6	37	<5	<5	4	0.016
R2 90 GW 331 R3512		<5	0.3	5	3	<1	6	<5	<1	<0.010
R2 90 GW 331 R3513		16	0.8	65	8	93	11	<5	7	0.031
R2 90 GW 331 R3514		<5	1.1	77	<2	55	<5	5	<1	<0.010
R2 90 GW 331 R3515		<5	1.1	62	3	129	<5	<5	1	0.016
R2 90 GW 331 R3516		<5	1.0	36	<2	67	8	<5	2	<0.010
R2 90 GW 331 R3517		<5	0.3	33	3	27	<5	<5	5	<0.010
R2 90 GW 331 R3518		24	0.9	66	7	67	23	<5	6	<0.010
R2 90 GW 331 R3519		25	1.6	29	12	272	25	5	41	0.071
R2 90 GW 331 R3520		6	1.2	42	7	351	20	<5	11	0.058
R2 90 GW 331 R3521		9	1.1	63	5	166	18	<5	12	0.067
R2 90 GW 331 R3522		<5	0.6	21	8	54	22	<5	3	0.036
R2 90 GW 331 R3523		<5	0.4	43	5	82	<5	<5	3	<0.010
R2 90 GW 331 R3524		<5	0.2	11	4	79	<5	<5	19	0.014
R2 90 GW 331 R3525		21	0.7	118	8	40	25	<5	2	<0.010
R2 90 GW 331 R3526		15	0.5	67	<2	20	44	<5	2	<0.010

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
R2 90GW331 R3527		41	2.2	32	21	35	89	<5	9	0.068
R2 90GW331 R3528		10	2.0	91	19	50	115	11	6	0.013
R2 90GW331 R3529		80	0.3	27	8	16	11	<5	4	0.081
R2 90GW331 R3530		<5	<0.2	6	<2	15	<5	<5	2	<0.010
R2 90GW331 R3531		<5	1.1	54	7	83	<5	6	2	<0.010
R2 90GW331 R3532		<5	0.7	44	15	87	29	10	3	<0.010

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
R2 90 X 331 R-1968		<5	1.0	83	6	110	<5	<5	1	0.033
R2 90 X 331 R-1969		<5	1.1	72	9	98	<5	9	6	0.024
R2 90 X 331 R-1970		<5	1.3	98	8	86	9	<5	1	<0.010
R2 90 X 331 R-1971		11	1.9	135	22	104	8	6	1	0.023
R2 90 X 331 R-1972		6	1.5	127	18	90	9	<5	<1	0.026
R2 90 X 331 R-1973		7	1.2	88	9	113	6	<5	2	0.054
R2 90 GW 331 R-3533		<5	0.6	20	9	84	12	<5	1	<0.010
R2 90 GW 331 R-3534		<5	1.0	93	8	81	12	7	2	<0.010
R2 90 GW 331 R-3535		12	0.7	49	24	88	13	6	13	0.032
R2 90 GW 331 R-3536		9	0.7	56	14	84	7	5	1	0.011
R2 90 GW 331 R-3537		<5	0.6	32	8	87	<5	<5	<1	<0.010
R2 90 GW 331 R-3538		54	0.5	22	10	38	<5	<5	3	0.011
R2 90 GW 331 R-3539		<5	1.1	139	6	73	7	<5	1	0.010
R2 90 GW 331 R-3540		<5	0.2	21	17	69	6	<5	<1	0.020
R2 90 GW 331 R-3541		6	0.8	22	5	46	18	<5	1	<0.010
R2 90 GW 331 R-3542		10	0.6	17	8	31	29	<5	<1	<0.010
R2 90 GW 331 R-3543		11	1.1	75	15	68	47	<5	<1	0.017
R2 90 GW 331 R-3544		15	0.9	11	31	38	45	5	2	0.022
R2 90 GW 331 R-3545		<5	0.4	22	3	44	6	<5	<1	<0.010
R2 90 GW 331 R-3546		9	1.1	65	12	183	23	<5	1	0.017
R2 90 GW 331 R-3547		17	0.9	39	17	110	35	5	2	0.015
R2 90 GW 331 R-3548		17	0.4	8	10	122	25	<5	3	0.035
R2 90 GW 331 R-3549		<5	<0.2	2	16	44	16	<5	2	0.030
R2 90 GW 331 R-3550		<5	1.4	55	9	80	39	5	2	0.013
R2 90 GW 331 R-3551		30	2.0	38	17	788	<5	<5	1	0.054
R2 90 GW 331 R-3552		<5	0.6	28	9	37	<5	<5	4	0.038
R2 90 GW 331 R-3553		<5	0.7	8	8	59	24	5	<1	<0.010
R2 90 GW 331 R-3554		11	1.9	94	36	25	19	<5	4	0.027
R2 90 GW 331 R-3555		<5	0.8	60	7	64	<5	<5	<1	<0.010
R2 90 GW 331 R-3556		<5	1.0	14	10	113	<5	5	<1	0.387
R2 90 GW 331 R-3557		<5	0.5	10	3	27	<5	<5	1	0.017
R2 90 GW 331 R-3558		7	1.7	100	12	122	<5	<5	2	0.026
R2 90 ST 331 R-3779		<5	1.3	81	4	80	<5	7	<1	0.012
R2 90 ST 331 R-3780		<5	0.9	38	7	73	<5	8	<1	0.027
R2 90 ST 331 R-3781		<5	0.8	53	6	69	9	<5	<1	0.043
R2 90 ST 331 R-3782		<5	1.3	56	3	65	<5	5	<1	<0.010
R2 90 ST 331 R-3783		<5	1.4	94	7	72	14	<5	<1	<0.010
R2 90 ST 331 R-3784		12	1.8	147	14	116	<5	<5	4	0.039

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Sb PPM	Mo PPM	Hg PPM
R2 90 GW 331 R-3588		1170	3.7	26	49	20	475	<5	3	0.046
R2 90 GW 331 R-3589		838	3.7	37	62	32	382	<5	3	0.055
R2 90 GW 331 R-3590		191	1.4	44	126	82	183	7	53	0.041
R2 90 GW 331 R-3591		673	2.6	29	191	34	280	8	40	0.066
R2 90 GW 331 R-3592		250	2.0	44	53	65	152	<5	34	0.028
R2 90 GW 331 R-3593		262	1.8	33	39	30	213	<5	100	<0.010
R2 90 GW 331 R-3594		124	1.3	37	114	68	182	<5	46	0.024
R2 90 GW 331 R-3595		182	1.9	63	193	602	260	<5	2	0.021
R2 90 GW 331 R-3596		203	0.8	21	27	863	130	<5	2	0.039
R2 90 GW 331 R-3597		846	3.2	130	183	1493	470	<5	24	0.125

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SAMPLE NUMBER	ELEMENT UNITS	Au OPT
R? 90 GW 331 R-3588		0.036

APPENDIX VI

Soil, Stream Silt and Rock Data Sheets

KEEWATIN ENGINEERING INC.

ROCK SAMPLES

Project: Achilles # 331
Area (Grid): Fewright Creek trib.
Collectors: B. McEntyre

Results Plotted By: B. McEntyre
Map: Hawk NTS: 104B/7
Date: Sept 4, 1990 Surface ✓ Underground

SAMPLE NUMBER 90X331R	LOCATION NOTES	REP. SAMPLE NUMBER	SAMPLE TYPE (LENGTH) GRAB	CHIP	CHANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DESCRIPTION	MAP SHEET
1968	900' Fewright Cr. E of trib				local		✓	Argillite	Very fine grain black argillite, bedded, carries >5% disseminated euhedral Py, nuggets of Po to 1cm, trace smears Chalco.	
1969	1270' Trib - E side		✓					intermed. volc	dark to med grey volc. at it's contact with sheared argill. carries >10% dissem. sulphide (Py)	
1970	1550' Trib - bedrock						✓	Argill.	Sharp angular 'local' float 60 cm carries >2% Po as fracture fillings	
1971	1620' Trib - W bank		✓					Argill.	black argillite at it's bedded contact with med. grain wacke carries >2% dissem Py + Po	
1972	1870' Trib - bedrock		✓					intern. to felsic dyke	Pale grey (with opaque flecks) dyke carries >2% Pyrite and lesser arsenopyrite at contact with pelitic sheared beddings.	
1973	2000' Trib - W bank		✓					Argill.	Bedded black argill carries >2% Py disseminated and on bedding planes.	

KEEWATIN ENGINEERING INC.

ROCK SAMPLES

Project: ACHILLES 331
Area (Grid): STEEP MATTHER CREEK (HOMER #3)
Collectors: S. THOMPSON

Results Plotted By:
Map: ACHILLES NTS: 104B/7
Date: 4-9-90 Surface ___ Underground ___

SAMPLE NUMBER	LOCATION NOTES	REP. SAMPLE NUMBER	SAMPLE TYPE (LENGTH) GRAB	CHIP	CHANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DESCRIPTION	MAP SHEET
90ST 331- -										
R3779	1380', 100m E of waterfall 2nd	ST	✓					argillite	coarser; slightly calcareous; pyrites (5-10% disseminated throughout	
R3780	1660', abv. large waterfall, in creek	ST	✓					volcanic	intermediate; pyritic (5-10% disseminated & blebs; mostly silicified; some carbonates	
R3781	1680, in creek 20m above R3780	ST	✓					volcanics	dark volcanics; pyritic (5-10%) quartz bedded between argillites & volcanics strike 350° dip 75W	
R3782	1800', in creek west side	ST	✓					volcanics	intermediate; pyritic - 10 < % disseminated & blebs of chalco & arseno; pyritic; silicified	
R3783	1920, in creek westside	ST	✓					volcanics	intermediate; pyritic - (>10% arseno) silicified; strike 140° dip 60° SW	
R3784	1970, in creek west side	ST	✓					volcanics	intermediate; pyritic (5-10% arseno & pyrite) quartz-carbonate veining; strike 110° dip 72° SW	

KEEWATIN ENGINEERING INC.

ROCK SAMPLES

Project: ACHILLES PROJ #331
Area (Grid): KING CREEK GRID
Collectors: G. L. WESA

Results Plotted By: _____
Map: ACHILLES NTS: 104 B/7
Date: AUG 19-26, 1990 Surface ✓ Underground ___

SAMPLE NUMBER 90GW331....	LOCATION NOTES	REP. SAMPLE NUMBER	SAMPLE TYPE (LENGTH) GRAB	CHIP	CHANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DESCRIPTION	MAP SHEET
90GW331R3501	B.L., 4+60N	3501	✓					CHERT	LIMONITIC, FRACT'D ẅ 1-2% DISSEM, FRAC-FILLING PY.	104B/7
R3502	1240' IN GULLY, NE ACHILLES #4	3502		✓				ARGILLITE	GRAPHITIC, LAMIN TO THN. BEDDED ẅ LOTE CALCITE LENSES	"
R3503	1290' IN GULLY, " " "	3503	✓					CHERT	LIMONITIC, 15-20% SULFIDES IN FRACS, STRINGERS, DISSEM	"
R3504	1300' IN GULLY, " " "	3504	✓					CHERT	LIMONITIC, 5-10% SULFIDES; CONTACT ẅ INTERM. DIKE	"
R3505	1700' ON EAST SLOPE OF GULLY	3505	✓					ARGILLITE	LIMONITIC, MINOR CARB STOCKWORK; 5-10% CALCITE	"
R3506	4+00N, 0+25W	3506	✓					CALCITE	COARSE CRYST PODS + LENSES IN CHERT	"
R3507	4+00N, 0+25W	3507	✓					CHERT	CONTAINS IRREG PODS + LENSES OF CALCITE	"
R3508	4+00N, 0+50W	3508		✓				CHERT	20% SULFIDES IN NODULES, STRINGERS + FRACS; 30-40% CARB.	"
R3509	4+00N, 0+75W	3509	✓					ANDESITE DIKE	CHLORITIC, FRACT'D ẅ 2-5% DISSEM. SULFIDES.	"
R3510	NEXT TRIB. TO WEST (1020')	3510	✓					CHERTY ARGILL	LIMONITIC, 2-5% V.F. DISSEM PY + FN HAIRLINE FRACS	"
R3511	IN WEST TRIB @ 1085'	3511					✓	CHERT	LIMONITIC ẅ QTZ VEIN STOCKWORK + 10-15% SULFIDES	"
R3512	" " " @ 1120'	3512	✓					CHERT	"CRACKLE-FRAC" BRX; ROCK CUT BY HAIRLINE QTZ FRACS + VEINLETS	"
R3513	" " " @ 1200'	3513	✓					ASH TUFF	5-10% DISSEM SULFIDES IN WATER-LAIN TUFF; LIMONITIC WITH.	"
R3514	" " " @ 1350'	3514	✓					FELSIC DIKE	QTZ-EYE SULFIDE PORPH. TEXTURE; 5-7% PY IN QTZ EYES.	"
R3515	% ON NORTH BANK KING CREEK	3515	✓					ASH TUFF	5-10% SULFIDES IN LIMONITIC SEQ. OF ASH TUFF + BLK ARGILLITE	"
R3516	IN WEST TRIB @ 1360'	3516	✓					DACITIC DIKE?	5% PY COARSE DISSEM + BLEBS IN LIMONITIC DIKE	"
R3517	" " " @ 1400'	3517	✓					CHERT	"CRACKLE-FRAC" BRX ẅ 5-10% SULFIDES IN FRACS REHEALED ẅ QTZ+PY	"
R3518	" " " @ 1400'	3518		✓				ARGILLITE	7-10% SULFIDE IN 1-2cm PY-QTZ-CC-LIM. VEIN	"
R3519	" " " @ 1400'	3519		✓				ARGILLITE	5% SULFIDES IN FRACT'D, QTZ+CC VEINED BLK, CHERTY ARGILL.	"
R3520	" " " @ 1400'	3520		✓				BRECCIA	"CRACKLE-FRAC" CHERT; REHEALED BY 10-15% SULF, QTZ + CALCITE	"
R3521	" " " @ 1400'	3521	✓					BRECCIA	"CRACKLE-FRAC"; 5-10% SULF, QTZ+CC REHEALING FRACS; LIMONITIC	"
R3522	" " " @ 1500'	3522	✓					ARGILLITE	5% FN DISSEM, STRINGER PY IN FOLIATED BLK ARGILL, GRAPHITIC	"
R3523	" " " @ 1480'	3523		✓				ASH TUFF	5-10% F. DISS, STRINGER + FRAC-FILL PY IN BANDED TUFF	"
R3524	CLIFF BASE; S. BANK KING CREEK	3524					✓	ARGILLITE	1-2% PY IN QTZ-VEINED, GRAPHITIC, STOCKWORKED BLK ARGILLITE	"
R3525	GRID; 4+00N, 1+00W	3525	✓					CALC-SILICATE	2-3% FN-CRSE SULF IN CRSE CRYST CALCITE + CHERT BED.	"
R3526	" " "	3526	✓					" "	" " " " " "	"
R3527	KING CREEK; 980' ELEV.	3527	✓					ARGILLITE	2-5% SULF IN LIMONITIC, QTZ VEINED, FOLDED SHALE/ARGIL	"
R3528	KING CREEK; 980' ELEV.	3528	✓					FELSIC DIKE	10% FN DISSEM, SMOKY SULF IN LIMONITIC SHEAR ZONE	"
R3529	ACHILLES #4, GULLY, 2300' EL.	3529	✓					QTZ. BRECCIA	MASSIVE, SILICEOUS BRX ẅ QTZ VEIN STOCKWORK	"
R3530	N OF HAWK SOUTH	3530	✓					QTZ VEIN	LIMONITIC, TRACE SULFIDES IN CONTACT ẅ BARREN INT DIKE	"

KEEWATIN ENGINEERING INC.

ROCK SAMPLES

Project: ACHILLES PROJ. #331
Area (Grid): ACHILLES 1-4 CLAIMS
Collectors: G.L. WESA

Results Plotted By:
Map: ACHILLES NTS: 104 B/7
Date: AUG 26 - SEPT. 2, 1990 Surface ✓ Underground

SAMPLE NUMBER 906W331-...	LOCATION NOTES	REP. SAMPLE NUMBER	SAMPLE TYPE (LENGTH) GRAB	CHIP	CHANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DESCRIPTION	MAP SHEET
R3531	N. OF HAWILSON LAKE	3531	✓					ANDES DIKE	<1% DISSEM py IN F.G. DIKE	
R3532	HAWILSON CREEK TRIB (980')	3532	✓					ARGILLITE	LIMONITIC ω 5-10% SULFIDES, FRACT'D, GRAPHITIC.	
R3533	HAWILSON CREEK (1800')	3533	✓					ARGILLITE	HEM STAINED ω 1/2 cm QTZ VEINS, VEINLETS	
R3534	HAWILSON CR (1660')	3534	✓					LIMESTONE	WEAKLY RECRYSTALLIZED	
R3535	HAWILSON CR. (1380')	3535	✓					BLK SHALE	LIMONITIC FRACS ω 2-3 FN DISS py.	
R3536	HAWILSON CR (1220')	3536	✓					ARGIL/SILT	LIMONITIC ω 1-3% FN. DISS. py	
R3537	HAWILSON CR (1000')	3537	✓					GREYWACKE	LIMEY ω CALCITE VEIN STOCKWORK	
R3538	HAWILSON CR (980')	3538	✓					ARGILLITE	SILICEOUS ω 2-3% SULF. IN FRACS + QTZ-SULF STRINGERS	
R3539	HAWILSON CR (700')	3539	✓					GREYWACKE	2-5% py IN FN FRACS, DISSEM + STRINGERS; RK SHEARED	
R3540	HAWILSON CR (700')	3540	✓					ARGILLITE	ALTERED; 1% py IN QTZ-CC VEINS + FRACS.	
R3541	HAWILSON CR (720')	3541		✓				ARGILLITE	ALTERED, SHEARED ω 2% py DISSEM, IN FRACS; py>CP(?)	
R3542	HAWILSON CR (720')	3542		✓				LIMONITIC SHEAR ZONE	1.5m QTZ-CC-LIMON-SULF ZONE; FOLIATED, GRAPHITIC 10-15% SULFIDES	
R3543	HAWILSON CR (720')	3543	✓					ARGILLITE	0.25cm CPX py VEINS ASSOC ω SHEAR ZONE	
R3544	HAWILSON CR. (720')	3544	✓					ARGILLITE	LIMONITIC, GRAPHITIC SHEAR ZONE; UP TO 15% SULF; FAULT BRX	
R3545	HAWILSON CR (720')	3545	✓					ARGILLITE	QTZ-CARB Vn'd, STOCKWORK BRX ω QTZ-CC py LIMON; 2-5% py	
R3546	SOUTH TIP HAWILSON LAKE	3546	✓					ARGILLITE	QTZ-CC Vn'd, SHEARED, FOLDED ω 2-5% DISSEM py.	
R3547	" " " "	3547	✓					ARGILLITE	QTZ-CC STOCKWORK BRX ω 10-12% FN TO CRSE py	
R3548	" " " "	3548	✓					TUFF(?)	SILICIFIED, QTZ-SULF VEINS + FRACS; 10% DISSEM, STRINGER py.	
R3549	" " " "	3549	✓					TUFF(?)	SILICIFIED + ALTR'D, CUT BY QTZ-SULF FRACS, LIMONITIC, 10% FN py	
R3550	" " " "	3550	✓					ALTR'D TUFF	CC-QTZ ALTR'D, MILDLY CHLORITIC ω 10% FN DISS + FRAC py	
R3551	" " " "	3551	✓					TUFF	STRONGLY SILICIFIED, WEAKLY LIMONITIC; 10% DISS py.	
R3552	" " " "	3552	✓					CHERT	FN LAMINATED; PALE-DK GREY; 5-10% FN-CRSE DISS py	
R3553	SOUTH OF HAWILSON LK	3553	✓					GREYWACKE	QTZ-CARB ALTR'D, Vn'd ω 5-7% py	
R3554	SOUTH CLAIM BOUNDARY; GOSSAN	3554					✓	ARGIL. BRX	SER. LIMONITIC, QTZ Vn'd, FRACT'D ω UP TO 10% SULFIDE (py)	
R3555	STREAM S.W. OF HAWILSON LK	3555	✓					CHERT	LIMONITIC, HEMATIC, FRACT'D ω 1-2% DISSEM py.	
R3556	" " " "	3556	✓					CHERT BRX	SILICIF'D FAULT BRX, "CRACKLE-FRAC" BRX ω 10% SULFIDES	
R3557	" " " "	3557	✓					CHERT BRX	SILICA-SULF STOCKWORK + HAIRLINE FRACS; 5% SULF.	
R3558	EAST SIDE HAWILSON LK	3558	✓					ARGILLITE	QTZ-CARB ALTR'D, Vn'd, BRX'D ROCK ω 5-7% SULFIDES	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331
Area (Grid): Contour @ 1800'
Collectors: Heath Whitlam.

Results Plotted By: Heath Whitlam.
Map: Achilles N.T.S.:
Date Sept 5/90.

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
S095	1850'	7+00	20% frag, trace org, silt											B	25	✓				LRB
S096	1850	7+50	20% frag, min org, silt											B	30	✓				DRB
S097	1800	8+00	5% frag, min org, clay/silt											A	45		✓			BLK
S098	"	8+50	clay/silt											BA	35		✓			DRB
S099	"	9+00	trace org, clay/silt											BA	35	✓				MRB
S099	"	+50	min org, clay/silt											B	30	✓				MRB
S100	"	10+00	clay/silt											B	30	✓				MRB
S101	"	+50	20% frag, min org, clay/silt											B	30	✓				XRB
S102	"	11+00	clay/silt											B	30	✓				MRB
S103	"	+50	min org, clay/silt											B	35	✓				MRB
S104	"	12+00	5% frag, 5% org, sand/silt											B	30	✓				MRB
S105	"	+50	10% frag, min org, silt											B	30		✓			MRB
S106	"	13+00	silt/clay											B	35	✓				MRB
S107	"	+50	min org, clay/silt											B	25	✓				MRB
S108	"	14+00	clay/silt, 9min org.											A-B	35		✓			DRB
S109	"	+50	clay/silt											A	40		✓			BLK
S110																				

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331
Area (Grid): Contour 1500' & 1800'
Collectors: Heath Whittam

Results Plotted By: Heath Whittam.
Map: Achilles N.T.S.:
Date Sept 2/90. / Sept 5/90.

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
S066.	1500'	0+00	Ø frag, 5% org, clay/silt											A-B	40		↘			mrb
S067	"	0+50	10% frag, min org, sand/silt											A-B	40		↘			mrb.
S068	"	1+00	Ø frag, min org, clay/silt											C	40		↘			mrb
S069	"	1+50	Ø frag, 20% org, clay/silt											B-C	40		↘			DRB
S070	"	2+00	Ø frag, min org, clay/silt											B	40	↘				LRB.
S071	"	2+50	Ø frag, 20% org, clay/silt											B-C	40		↘			mrb.
S072	"	3+00	Ø frag, min org, clay/silt											B.	30	↘				LRB
S073	"	3+50	5% frag, min org, clay/silt											A	40		↘			mrb
S074	1650	4+00	Ø frag, min org, clay/silt.											A	40		↘			mrb.
S075	1700	4+50	No SAMPLES																	
S076.	1700	5+00	Ø frag, min org, sand/silt											B	30	↘				LRB.
S077	1750	5+50	Ø frag, min org, sand/silt											B	30	↘				mrb.
S078	1750	6+00	Ø frag, min org, sand/silt											A	20	↘				LRB
S079	1775	6+50	Ø frag, min org, sand/silt											B.	20	↘				LRB
S080	1775	7+00	Ø frag, min org, sand/silt											B.	20	↘				LRB.
S081	1800'	0+00	Ø frag, 5% org, clay/silt											A	40			↘		BLK
S082	1750	0+50	6 frag, min org, clay/silt											A-B	40			↘		DRB
S083	1750	1+00	Ø frag, min org, clay/silt											A-B	40			↘		mrb
S084	1750	1+50	min frag + org, clay/silt											B.	25	↘				mrb
S085	1800	2+00	Ø frag, min org, clay/silt											B.	25	↘				mrb.
S086	1800	2+50	50% frag, 5% org, sand/silt											B-C	30			↘		mrb.
S087	1850	3+00	min frag + org, clay/silt											B.	25	↘				mrb.
S088	1850	3+50	6 frag, Ø org, clay/silt											B	30	↘				mrb.
S089	1825	4+00	6 frag, Ø frag, clay/silt											B	30	↘				mrb.
S090	1825	4+50	3 frag, min org, clay/silt											B	30	↘				mrb.
S091	1850	5+00	Ø frag, Ø org, clay/silt											B.	20	↘				mrb.
S092	1800	5+50	10% frag, Ø org, clay/silt											A	45	↘				BLK
S093	1850.	6+00	Ø frag, Ø org, silt/clay.											B.	25	↘				mrb.
S094.	1850	6+50.	20% frag, min org, silt.																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: King Creek 331
Area (Grid): Canton @ 1250'
Collectors: Walt Whitham.

Results Plotted By: Walt Whitham.
Map: Gochelles N.T.S.:
Date Aug 31/90.

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90SJ331														B	30	✓				LRB
S042	1250'	20+50	25% frag, min org, Sand/silt											A	35		✓			BLK
S043	"	21+00	0 frag, min org, Sand/silt											A	40		✓			BLK
S044	"	21+50	0 frag, 10% org, Clay/silt											A-B	30		✓			LRB
S045	"	22+00	20% frag, min org, Clay/silt											B	30	✓				DRB
S046	"	+50	0 frag, min org, Silt/clay.											B	30	✓				mRB
S047	"	23+00	0 frag, 0 org Clay/silt											A	35		✓			DB
S048	"	+50	0 frag, 15% org, Clay/silt											B	30	✓				mRB
S049	"	24+00	0 frag, min org Sand/silt											A	40		✓			DB
S050	"	+50	0 frag, min org, Sand/silt											A-B	35		✓			mRB
S051	"	25+00	5% frag, min org, Clay/silt											B	20	✓				LRB
S052	"	+50	0 frag, 0 org, Sand/silt											A	35		✓			DB
S053	"	26+00	0 frag, min org, Clay/silt											A	35		✓			mB
S054	"	+50	40% frag, min org, Silt/Sand-Tales.											A	40		✓			DB
S055	"	27+00	min frag & org, Clay/silt											A	40		✓			mB
S056	1300	+50	min frag & org, Sand/silt											A	40		✓			mB
S057	1300	28+00	10% frag, min org, Sandy silt											B	26	✓				LRB
S058	1275	+50	min frag & org Sand/silt											A	40		✓			mB
S059	1250	29+00	20% frag, min org, Sand/silt											A	40		✓			mB
S060	"	+50	50% frag, 5% org, Sand/silt											A	40		✓			DB
S061	"	30+00	0 frag, 45% org, silt											B	30	✓				mRB
S062	"	+50	20% frag, 0 org, Clay/silt											A	40		✓			mB
S063	"	31+00	20% frag, 30% org, Silt											A	40		✓			DB
S064	"	+50	0 frag, 0 org, Silt/clay											B	20	✓				mRB
S065	"	32+00	10% frag, 10% org, Silt/Sand.																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: King Creek 331

Area (Grid): Contour @ 1250'

Collectors: Heath Whittam.

Results Plotted By: Heath Whittam.

Map: Caribou N.T.S.:

Date Aug 27 and 30. /90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90JJ331																				
S001	1250'	0+00	minor frag + org, Sand/silt											B	25	✓				DRB
S002	"	0+50	∅ frag, 5% org, Sand/silt											A	30		✓			DB
S003	"	1+00	∅ frag, min org, silt/clay.											A	30		✓			BLK
S004	"	1+50	∅ frag, 20% org, Sand/silt,											A	30		✓			mB
S005	"	2+00	∅ frag, 30% org, clay/silt											A	25		✓			DB
S007	"	3+00	5% frag, 20% org, Sand/silt											A	25	✓	✓			DB
S009	"	4+00	20% frag, 5% org, Sand/silt											B	25	✓				LRB
S011	"	5+00	35% frag, min org, Sand/silt											B	20	✓				mRB
S013	"	6+00	20% frag, min org, Sand/silt											B	20	✓				mRB
S015	"	7+00	15% frag, min org, clay/silt											A-C	30		✓			Grey
S017	"	8+00	20% frag, 5% org, Sand/silt											A	40		✓			DB
S019	"	9+00	10% frag, 5% org, clay/silt											B	25	✓				LRB
S021	"	10+00	20% frag, min org, silt/Sand,											C	30		✓			Grey
S028	"	11+00	15% frag, 5% org, Sand/silt,											B	15	✓				LRB
S025	"	12+00	5% frag, min org, clay/silt,											B	20	✓				LRB
S027	"	13+00	∅ frag, 20% org, clay/silt											B	25	✓				mRB
S029	"	14+00	∅ frag, 20% org, silt/clay.											A-B	25		✓			mB
S031	"	15+00	5% frag, 5% org, silt/cobby											B	25	✓				LRB
S033	"	16+00	15% frag, min org, Sand/silt											B	20	✓				mRB
S035	"	17+00	20% frag, 10% org, clay/silt											A	30		✓			mB
S037	"	18+00	10% frag, min org, clay/silt											B+A	20	✓				mRB
S039	"	19+00	10% frag, 5% org, clay/silt											B	25	✓				mRB
S041	"	20+00	∅ frag, 10% org, clay/silt.											B	20	✓				LRB
		~~20+50~~																		
		~~21+00~~																		
		~~21+50~~																		
		~~22+00~~																		
		~~22+50~~																		
		~~23+00~~																		
		~~23+50~~																		

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331

Area (Grid): Grid.

Collectors: Heath Whitham.

Results Plotted By: Heath Whitham.

Map: Achilles N.T.S.

Date Aug 24/90 & 25/90.

Sample Number	Sample Location		Notes	Topography				Vegetation						Soil Data						
	Line	Station		Valley Bottom	Direction of slope	Hill Top	Level Ground	Heavily Wooded	Sparsely Wooded	Burnt	Logged	Grassland	Swampy	Horizon Sampled	Depth to Horizon Sample	Horizon Development: Good	Horizon Development: Poor	Parent Material: Drift	Parent Material: Bedrock	Colour
	0+50N	0+25 E	0 frag, min org, silt/clay											A	25	✓				DKB
	"	0+50 E	0 frag, min org, silt/clay											B	20	✓				DKB
	"	0+75 E	0 frag, 5% org, silt/clay											B	15	✓				DKB.
	"	0+00 E	5% frag, min org, silt/clay											B	20	✓				MKB
	"	1+25 E	20% frag, min org, sand/silt											B	25	✓				LKB.
	"	1+50 E	20% frag, min org, sand/silt											A-B	30		✓			MB.
	"	1+75 E	0 frag, 5% org, sand/silt											B	15	✓				LKB.
	"	2+00 E	Talus, 50% frag, 0 org, silt/sand											A	30		✓			MB.
	"	2+25 E	Struggy bush, 60% frag, min org	Silt/Sand										A	25		✓			MB.
	"	2+50 E	10% frag, min org, sand/silt											B	25	✓				DKB.
	"	2+75 E	5% frag, 5% org, sand/silt											A	25		✓			MB.
	"	3+00 E	Talus 65% frag, min org, sand/silt.											A	25		✓			Grey.
	2+00N	0+50 W	5% frag, min org, clay/silt											A	25		✓			BLK
	"	0+25 W	5% frag, min org, clay/silt											B	25	✓				MKB.
	2+50N	0+50 W	5% frag, min org, sand/silt											B-A	20		✓			DB.
	"	0+25 W	5% frag, min org, sand/silt											A	30		✓			DB.
	3+00N	0+00 BL	10% frag, min org, sand/silt											A	30		✓			DB.
		0+25	20% frag, min org, sand/silt											A-B	30		✓			LKB
		0+50	50% frag, min org, silt/sand											A-B	30		✓			LKB
		0+75 E	25% frag, min org, sand/silt											B	30	✓				MKB
	3+00N	0+50 W	20% frag, min org, sand/silt											B	35	✓				LKB.
	3+50N	0+20 E	5% frag, min org, sand/silt											A	20		✓			MB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Aquilles 331 — Results Plotted By: Matt Whitton.

Area (Grid): Grid — Map: Achilles — N.T.S.:

Collectors: Matt Whitton. — Date Aug. 23/90. & 24/90.

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	5+50N	0+50W	10% frag, min org, Sand/Silt											A	25		✓			DB
	"	0+75 W	15% frag, min org, Sand/Silt											A	25		✓			DB
	"	1+00 W	5% frag + org. Sand/Silt											B	25		✓			DB
	"	1+25 W	5% frag, min org. Sand/Silt											B.	25	✓				LRB
	"	1+50 W	5% frag, min org. Sand/Silt											B	26	✓				LRB
	"	1+75 W	Minor frag + org Sand/Silt											B	25	✓				mRB.
	"	2+00 W	min frag + org Sand/Silt											B	25	✓				mRB
	"	2+25 W	5% frag, min org, Sand/Silt											B	25	✓				mRB
	"	2+50 W	5% frag + org, clay/silt											A.	30		✓			BLK
	"	2+75 W	5% frag, min org, Sand/Silt											B	20	✓				mRB.
	0+00	3+00 E	30% frag, min org, Sand/Silt											B	35	✓				mRB
	"	2+75	20% frag, min org, silt/Sand.											A	35		✓			Grey
	"	2+50	20% frag, org, silt/Sand:											A	30		✓			GR. B
	"	2+00	15% frag, 5% org, Sand/silt											A.	30		✓			BLK
	"	1+75	10% frag, min org, Sand/Silt											A.	25		✓			mR
	"	1+50	10% frag, min org, Sand/Silt											B.	25	✓				mRB.
	"	1+25	15% frag, 10% org, Sand/Silt											A	35		✓			mR.
	"	1+00	30% frag, 5% org, Sand/Silt											A-B	25	?	✓			mR.
	"	0+75	5% frag, min org, Sand/Silt											B	30	✓				LRB.
	"	0+50	minor frag + org, Silt/Clay											A	30		✓			BLK
	"	0+25	minor frag + org, silt/clay											A	30		✓			BLK
	"	0+00 E	5% frag, min org, silt/clay											A	25		✓			BLK.
	"	0+00 E																		

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331 — Results Plotted By: Heath Whittam.

Area (Grid): GRID — Map: Achilles — N.T.S.:

Collectors: Heath Whittam. — Date: Aug 22/90. & 23/90.

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	4+50N	2+75W	5% frag, min org, clay/silt											B	20	↓				mRB
	"	2+50W	10% frag, min org, clay/silt											A	25		↓			DB
	"	2+25W	5% frag, min org, sand/silt											B	25	↓				mRB
	"	2+00W	15% frag, min org, sand/silt											B	20	↓				LRB
	"	1+75W	5% frag, min org, sand/silt											A	25		↓			DB
	"	1+50W	min frag + org, clay/silt											A	30		↓			DRB
	"	1+25W	0% frag, min org, sand/silt											A	25		↓			mB
	"	1+00W	10% frag, min org, sand/silt											B	20	↓				LRB
	"	0+75W	5% frag, min org, clay/silt											B	25	↓				mRB
	"	0+50W	5% frag, min org, sand/silt											B	20	↓				mRB
	"	0+25W	5% frag, min org, sand/silt											B-A	25	↓				mRB
	4+00N	1+00W	20% frag, min org, silt/sand											A	25		↓			mB
	"	1+25W	30% frag, min org, silt/sand											A	15		↓			LB
	"	1+50W	15% frag, min org, sand/silt											B	25	↓				DRB
	"	1+75W	20% frag, min org, silt/clay											B-A	25	↓				mRB
	"	2+00W	10% frag, min org, sand/silt											B	20	↓				DRB
	"	2+25W	20% frag, min org, sand/silt											A	20		↓			mB
	"	2+50W	25% frag, 5% org, sand/silt											O-A	25		↓			mRB
	"	2+75W	10% frag, min org, sand/silt											B	25	↓				LRB
	4+50N	3+25W	5% org + frag, sand/silt											A	35		↓			BLK
	"	3+50W	35% frag, min org, sand/silt											A	25		↓			mB
	"	3+75W	30% frag, min org, silt/sand											A	20		↓			LB
	"	4+00W	30% frag, min org, sand/silt											B-A	25		↓			LRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331 — Results Plotted By: Heath Whitham.

Area (Grid): GRID. — Map: Achilles N.T.S.: —

Collectors: Heath Whitham. — Date Aug 21/90. & 22/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	6+50N	3+00	5% frag, 5% org, Sand/Silt											B	20	✓				LRB
	"	2+75	5% frag, 5% org, Sand/Silt											B	20	✓				LRB
	"	2+50	15% frag, min org, Silt/Sand.											B/A	20	✓				MRB
	"	2+25	40% frag, min org, Silt/Sand.											B.	25	✓				DRB
	"	2+00	25% frag, min org. Silt/Sand.											A	25		✓			MB
	"	1+75	20% frag, min org, Sand/Silt											B/A	20	✓	✓			DRB
	"	1+50	15% frag, min org, Silt/Sand.											B.	20	✓				MRB
	"	1+25	35% frag, min org, Silt/Sand (TALUS)											B.	15	✓				LRB
	"	1+00	30% frag, min org, Silt/Sand (TALUS)											B	25	✓				LRB
	"	0+75	25% frag, min org, Silt/Sand (TALUS)											A	25		✓			DB
	"	0+50	40% frag, min org, Sand/Silt											A	30		✓			DB
	"	0+25	15% frag, ∅ org, Silt/Sand.											B	15	✓				MRB
	5+00N	0+25W	5% frag, min org, Sand/Silt											B	20	✓				LRB
	"	0+50W	20% frag, min org, Sand/Silt											B	25	✓				MRB
	"	0+75W	30% frag, min org, Silt/Sand											B.	25	✓				LRB
	"	1+00W	25% frag, min org, Sand/Silt											B	20	✓				LRB
	"	1+25W	15% frag, min org, Sand/Silt											B.	25	✓				LRB
	"	1+50W	15% frag, min org, Sand/Silt											B	20	✓				LRB
	"	1+75W	10% frag, 5% org, Sand/Silt											B	20	✓				LRB
	"	2+00W	10% frag, 5% org, Sand/Silt											B	20	✓				LRB
	"	2+25W	10% frag, 5% org, Sand/Silt											B.	25	✓				LRB
	"	2+50W	5% frag, min org, Sand/Silt-											B	20	✓				LRB
	"	2+75W	0% frag, min org, clay/silt											B	20	✓				LRB
	"	3+00W	5% frag, min org, clay/silt											B	25	✓				MRB
	"	3+25W	clay/silt											B	20	✓				MRB
	"	3+50W	5% frag, min org, Sand/Silt											B	25	✓				MRB
	"	3+75W	5% frag, clay/silt											B	20	✓				MRB
	"	4+00W	10% frag, min org, clay/silt											B	25	✓				MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles, 331
Area (Grid): Mini Grid.
Collectors: Heath Whittam.

Results Plotted By: Heath Whittam.
Map: Achilles N.T.S.: 104 B/7
Date Sept. 25/90.

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	4+60N	2+25W	5% frag, 5% org, silt/sand.											A-C	20		✓			MK
	"	2+20	5% frag, 5% org, silt											B	20	✓				MKB
	"	2+15	10% frag, 5% org, silt											B	25	✓				LKB
	"	2+10	10% frag, min org, silt											B	20	✓				LKB
	"	2+05	10% frag, 5% org, silt											B	25	✓				MKB
	"	2+00	20% frag, 5% org, silt											B	25	✓				MKB
	"	1+95	55% frag, 5% org, silt/sand											B	30	✓				LKB
	"	1+90	20% frag, 5% org, sand/silt											B	20	✓				LKB
	"	1+85	5% frag, org, sand/silt											B	25	✓				MKB
	"	1+80	5% frag, 10% org, silt											B	30	✓				MKB
	"	1+75W	0 frag, 15% org, silt.											B	30	✓				LKB
	4+50N	2+25W	15% frag & org silt											B	30	✓				MKB
	"	2+20	10% frag, 20% org, silt											B	25	✓				MKB
	"	2+15	15% frag & org, silt											B	25	✓				MKB
	"	2+10	5% frag, 15% org, silt											B	25	✓				MKB
	"	2+05	5% frag, 15% org, silt											B	25	✓				LKB
	"	2+00	15% frag, min org, silt											B	20	✓				LKB
	"	1+95	0% frag, 20% org, silt											B	30	✓				MKB
	"	1+90	10% frag, 5% org, sand/silt											B	25	✓				MKB
	"	1+86	45% frag, 60% org, silt/sand.											B	20	✓	✓			MKB
	"	1+80	0% frag, min org, silt											B	20	✓				MKB
	"	1+75	min frag, 5% org, silt											B	30	✓				MKB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 Achilles
Area (Grid): 1250' Contour
Collectors: Aaron Wardwell

Results Plotted By:
Map: Achilles N.T.S.: 104 B/7
Date Sept 1, 1990

Sample Number 90JJ331	Sample Location: Line, 1250'	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
S066		32+50E	2% Frag, 5% org, silt/clay.											B	30	✓				MRB
S067		33+00E	2% Frag, 5% org, silt											B	25	✓				MRB
S068		33+50E	5% org, silt											B	30	✓				MRB
S069		34+00E	20% org, silt.											A-B	30		✓			MRB
S070		34+50E	20% org, silt.											A-B	30		✓			MRB
S071		35+00E	30% org, silt											A-B	40		✓			MRB
S072		35+50E	2% Frag, 5% org, silt,											B	40	✓				LRB
S073		36+00E	5% Frag, 5% org, silt/clay											B	40	✓				LRB
S074		36+50E	10% Frag, 10% org, silt											B	40	✓				MRB
S075		37+00E	10% Frag, 5% org, silt/clay											B	45	✓				LRB
S076		37+50E	10% org, silt.											B	30	✓				LRB
S077		38+00E	10% Frag, 2% org, silt.											B	25	✓				LRB
S078		38+50E	40% Frag, silt											B	30	✓				LRB
S079		39+00E	15% Frag, 2% org, silt											B	30	✓				LRB
S080		39+50E	10% Frag, 5% org, silt.											B	25	✓				LRB
S081		40+00E	5% Frag, 5% org, silt.											B	30	✓				LRB
S082		40+50E	5% Frag, 10% org, silt											B	25	✓				LRB
S083		41+00E	2% Frag, 5% org, silt											B	30	✓				LRB
S084		41+50E	10% org, silt.											B	30	✓				LRB
S085		42+00E	20% Frag, 5% org, silt.											B	20	✓				MRB
S086		42+50E	5% Frag, 5% org, silt.											B	30	✓				LRB
S087		43+00E	5% Frag, 5% org, silt.											B	30	✓				LRB
S088		43+50E	5% org, silt.										B	~~B~~	35	✓				MRB
S089		44+00E	5% org, silt 15% Frag.										B	~~B~~	30	✓				MRB
S090		44+50E	5% Frag, 10% org, silt										B	~~B~~	30	✓				MRB
S091		45+00E	20% org, silt.										A-B	~~B~~	40		✓			MRB
S092		45+50E	30% org, silt.										A-B	~~B~~	40		✓			LRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 Achilles

Area (Grid): 1500' Contour

Collectors: ~~Anton Lambert~~ / HEATH WILLIAM

Results Plotted By:

Map: Achilles N.T.S.: 104 B/7

Date Sept. 8/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90JJ331	1700'		Sept. 8, 1990																	
S 120		4+50	5% org, silt.											B	30	/				MRB
S 121		5+00	5% org, silt.											B	25	/				MRB
S 122		5+50	5% org, silt.											B	25	/				MRB
S 123		6+00	10% org, silt.											B	30	/				MRB
S 124		6+50	15% org, silt.											B	20	/				MRB
S 125		7+00	10% Frag, silt.											B	25	/				MRB
S 126		7+50	5% Frag, 5% org, silt.											B	30	/				MRB
S 127		8+00	5% Frag, 10% org, silt.											B	20	/				MRB
S 128		8+50	5% Frag, 15% org, silt.											A-B	30		/			LRB
S 129		9+00	10% org, silt.											A-B	30		/			LRB
S 130		9+50	5% Frag, 10% org, silt.											B	25	/				LRB
S 131		10+00	silt											A-B	25		/			LRB
S 132		10+50	silt.											B	30	/				MRB
S 133		11+00	5% Frag, 15% org, silt.											B	20	/				LRB
S 134		11+50	5% Frag, 25% org, silt.											B	20	/				MRB
S 135		12+00	10% org, silt.											A-B	40		/			MRB
														A-B	35		/			MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331
Area (Grid): King Creek Grid (mini)
Collectors: Heath Whetham (FF)

Results Plotted By: Heath Whetham
Map: Achilles N.T.S.: 104 B/7
Date Sept 29/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged -	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	0+60N	1+60 E	402 frag, 10% org, silt											B	25		✓			mrB
	"	1+60	30% frag, 5% org, silt											C	30		✓			LB
	"	1+70	30% frag, 15% org, sand/silt											A	25		✓			LB
	"	1+80	40% frag, 10% org, sand/silt											A	30		✓			LB
	"	1+90	40% frag, 20% org, sand/silt											A	25		✓			mB
	"	2+00	55% frag, 5% org, sand											B	30	✓				mrB
	"	2+10	55% frag, 5% org, sand											B	30	✓				LrB
	"	2+20	75% frag, 5% org, sand											A	35		✓			Gray
	"	2+30	25% frag, 5% org, sand/silt											C	20		✓			Gray

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles # 331 — Results Plotted By: _____

Area (Grid): KING GRID — Map: _____ N.T.S.: 104 B 7

Collectors: Patrick Wilson — Date June 19-20 1990

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90 PW 331	L 7+00N	1+75 E				✓								B	20"					Brown
		1+50 E				✓								B	22"					Br. Blk
		1+25E				✓								B	25"					Br. Blk
		1+00E				✓								B	29					Br. Blk
		0+75E				✓								B	22"					Brown
		0+50E				✓								B	29					Brown
		0+30E				✓								B	26"					Brown
90 PW331	L 4+00N	4+00W	20% org 10% frag.											B	20"					Brown
	[illegible]	3+75W	20% org 50%											B	20"					Br. Blk
		3+50W	20% org 5%											B	25"					Brick
		3+25W	10% org 40%											B	19"					Br.
		3+00W	10% org 40%											B	20"					Br
90 PW331	L 7+00N	0+75N	20% org 40% frag											B	25"					Br
		[illegible]																		
		1+25W	20% org 30% frag.											B	25"					Br
		1+50W	20% org 30% frag.											B	25"					R.B.
		1+75W	10% org 50% frag		✓									B	20"					Br.
		2+00W	20% org 10% frag											B	20"					R Br
		2+25W	20% org 40% frag											B	20"					Br.
		2+50W	20% org 20% frag											B	20"					Brn
		2+75W	10% org 20% frag											B	25"					Brn
		3+00W	20% org 10% frag											B	20"					Brn

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331
Area (Grid): King Grid
Collectors: [illegible] Wilson

Results Plotted By: PW
Map: [illegible] N.T.S.: 104 B 7
Date: Aug 21-22

Sample Number	Sample Location: Line	Sample Location: Station	Notes: org/FR.	Notes: Soil Type	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Horizon Sampled	Depth to Horizon — Sample	Horizon Development: Good	Horizon Development: Poor	Parent Material: Drift	Parent Material: Bedrock	Colour
90 PW331	3+00W	7+00 N	20 % org	40 % frag											B	24"					RBr.
		6+50 N	10 % org	40 % frag											B	24"					RBr
		6+00 N	10 % org	20 % frag											B	20"					Br.
		5+50 N	15 % org	20 % frag											B	20"					Br.
		5+00 N	10 % org	50 % frag											B	25"					Br.
		4+50 N	20 % org	50 % frag											B	25"					Br.
		4+00 N	20 % org	50 % frag											B	25"					BrB
90 PW 331	6+50 N	3+25W	10 % org	90 % frag (SILT Soil)											A	35"					[illegible]
		3+50W	10 % org	60 % frag											B	25"					RBr
		3+75W	20 % org	40 % frag											B	30"					RBr.
		~~4+00W~~																			
90 PW331	6+00N	2+75W																			
		2+50W	10 % org	10 % frag.											B	35"					RBr.
		2+25W	10 % org	20 % frag.											B	30"					RBr.
		2+00W	20 % org	10 % frag.											B	30"					RBr.
		1+75W	20 % org	10 % frag.											B	30"					RBr.
		1+50W	20 % org	10 % frag.											B	35"					RBr
		1+25W	20 % org	20 % frag.											B	25"					RBr
		1+00W	20 % org	20 % frag											B	25"					LBr
															B	25"					LBr
90 PW331	5+50N	3+25W	20 % org	30 % frag											B	25"					Rd.
		3+50W	20 % org	30 % frag											B	25"					Rd.

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Archibald Results Plotted By: [illegible]

Area (Grid): King Grid Map: Archibald N.T.S.: 104 B 7

Collectors: Patrick Wilson 90 PW331 Date: Aug 25- [illegible] 1990

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90 PW331	3+00N	4+00W	20% org 30% frag.											C	35+					R/Bn.
		3+75W	30% org 20% frag											B	30+					R/Bn.
		3+50W	N/S																	
		3+25W	30% org 10% frag											B	30+					R/L
		3+00W	30% org 10% frag											B	30+					R/L
		2+75W	20% org 10% frag											B	35					R/L
		2+50W	20% org 10% frag											B	35					Red
		2+25W	40% org 20% frag.											C	30					R/Bn
		2+00W	40% org 20% frag											B	35					L.Gr.
		1+75W	N/S											B	35					—
		1+50W	20% org 20% frag.											B	35					R/Bn
		1+25W	25% org 10% frag											B	35					Gra.
		1+00W	25% org 10% frag											C	35					Gr/Bn
														[illegible]	30					[illegible]
90 PW331	2+50N	2+75W	30% org 20% frag											C	24					R/Bn
		2+50W	20% org 50% frag.											B	35+					L.Gr.
		2+25W	20% org 10% frag.											B	30					L.Gr.
		3+25W	10% org 20% frag.											B	30					R.L.
		3+00W	20% org 20% frag.											C	25					L.Br.
		3+75W	N/S											C	24					L.Gr.
		4+00W	20% org 20% frag											B	25					L.Br.

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331

Area (Grid): KING GRID

Collectors: Patrick Wilson 90 PW 331

Results Plotted By: PW

Map: Achilles N.T.S.: 104 B 7

Date Aug 24, 25

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90 PW 331	0+50N	2+00W	20% org 10% frag.											B	30					Bn.
		1+75W	20% org 10% frag.											B	30					Bn.
		1+50	20% org 20% frag.											B	35					Bn.
		1+25	20% org 10% frag.											B	31					Bn.
		1+00	15% org 20% frag.											B	35					LBr.
		0+75	20% org 20% frag.											B	35					LBr.
		0+50	10% org 10% frag.											B	30					Rd.
		0+25	30% org 20% frag.											B	35					RBr.
		0+00	30% org 30% frag.											C	20					LBr.
90 PW 331	1+00N	0+00E	20% org 20% frag.											B	25					Br.
		0+25												B	30					Br.
		0+50	20% org 30% frag.											B	30					Br.
		0+75	30% org 20% frag.											B	30					LBr.
90 PW 331	2+00N	0+00	25% org 20% frag.											B	35					Rd
		0+25E	10% org 5% frag.											B	30					Rd.
		0+50E	20% org 5% frag.											B	35					Rd.
90 PW 331	1+00N	0+25W	10% org 15% frag.											B	30					Br.
		0+50	10% org —											B	37					RBr.
		0+75	15% org 5% frag.											B	35					BrB
		1+00	10% org 10% frag.											B	30					Br.
		1+25	20% org 10% frag.											B	35					Br.
		1+50	20% org 5% frag.											C	30					Br.
90 PW 331	3+00N	0+25	20% org 10% frag.											C	30					BrB.

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331

Area (Grid):

Collectors: Patrick Wilson

Results Plotted By: PW

Map: N.T.S.:

Date Aug 26, 27, 90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90 PW 331	Contour		[redacted] 10% org/10% Frag											B	30					BR.
	2000"	S001												B	35					dBr.
	2000	S002	10% org/10% Frag											B	35					Br Blk
	2000	S003	10% org/10% Frag.											B	30					Br Blk
	2080	S004	20% org 10% [redacted]											B	30					Blk
	2140	S005	10% " 15% "											B	30					Brown
	2000	S006	10% " 10% "											B	30					Brown
	2000	S007	5% " 10% "											B	30					BR Blk
	2000	S008	5% org 5% Frag.											B	30					BR Blk
														B	35					
Aug 27, 90 PW 331																				
	Contour																			
	1000	S009	10% org 15% Frag											B	30					R.Br.
	"	S010	10% org 20% Frag											B	25					Br.
	"	S011	10% org 20% Frag											B	25					R Br.
		S012	10% org.											B	30					Red
	1000	S013	10% org 10% Frag											B	30					Br
	"	S014	15% org 10% Frag											B	25					Mag
	"	S015	15% org 10% Frag											B	30					Br.
	"	S016	5% Frag											B	30					Br.
	1000	S017	10% org 10% Frag.											B	30					Br.

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles #331

Area (Grid): [redacted]

Collectors: Patrick Wilson

Results Plotted By: [illegible]

Map: _____ N.T.S.: _____

Date Aug 30, 90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
Contour 1000																				
S018	1000		10 % org 15% Frag											B	30	30				LBr.
S019	1000		20 % " 5 % "											B	35					Br.
S020	1000		10 % " 5 % "											B	35					LBr.
S021	1000		5 % " 5 % "											B	30					dBr.
S022	1000		5 % org. 10 % Frag											B	35					RBr.
S023	1000		5 % " 10 % "											B	30					MRBr.
S024	1000		5 % " 5 % "											B	35					dBr.
S025	1000		5 % " 15 % "											B	30					LBr.
S026	1000		5 % " 5 % "											B	30					MBr.
S027	1000		5 % " 5 % "											B	35					LBr.
S028	1000		10 % " 5 % "											B	32					LBr.
S029	1000		5 % " 15 % "											B	35					LBr.
S030	1000		5 % org 15% Frag.											B	36					dBr.
S031	1000		10 % " 10 % "											B	35					LBr.
S032	1000		20 % " 5 % "											B	40					dBr.
S033	1000													[redacted]						[redacted]
S034	1000		15 % org 5% FRAG.											B	30					RBr.
S035	1000		10 % org 10 % FRAG.											B	35					dBr.
S036	1000		10 % " 10 % "											B	35					R.
S037	1000		10 % 10 %											B	30					Red

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles #331

Area (Grid):

Collectors: Patrick Wilson

Results Plotted By: KW

Map: N.T.S.: 104 B 7

Date Aug 31, 90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
[redacted]																				
														B	35					LBr
5038	1000		15 % org 2% FRAG											B	35					LBr
5039	1000		15 % " 5 % "											B	30					dBr
5040	1000		10 % 5 %											B	35					RBr
5041	1000		10 % 5 %											B	30					dBr
5042	1000		10 % 5 %											B	25					RBr
5043	1000		10 % org 10% Frag											B	25					RBr
5044	1000		5 % 10 %											B	25					RBr
5045	1000		5 % 10 %											B	30					RBr
5046	1000		5 % 10 %											B	30					dBr
5047	~~1000~~	No Sample												B	25					RBr
5048	1000		5% org 5 % FRAG											B	25					RBr
5049	1000		5 % " 10 % "											B	30					RBr
5050	1000		15 % " 5 % "											B	35					dBr
5051	1000		10 % 5 %											B	35					dBr
5052	1000		5 % 10 %											B	40					RBr
5053	1000		5 % 5 %											B	25					RdBr
5054	1000		5 % 5 %											B	30					RBr
5055	1000		10 % 10 %																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: [redacted] #331

Area (Grid): [redacted]

Collectors: [redacted] Wilson

Results Plotted By: [redacted]

Map: [redacted] N.T.S.: 104-B-7

Date [redacted] Sept 1, 90 2

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
RV90 331			Note, others samples are in Roberts notes.																	
5012	1100		10 % org	10 % FRAG										B	30					RBr
5018	1100		5 %	5 %										B	35					RBr
5019	1100		5 %	5 %										B	30					RBr
5020	1100		5 %	5 %										B	35					RBr
5021	1100		5 %	10 %										B	30					RBr
5022	1100		5 %	5 %										B	35					RBr
5023	1100		5 % org	5 % Frag.										B	35					LBr
5024	1100		5 % Org	10 % Frag										B	35					LBr
[redacted]																				
Sept 2, 90																				
5056	2000		10 % org	5 % FRAG.										B	30					dBr
5057	2000		10 % org	5 %										B	30					RBr
5058	2000		5 %	5 %										B	35					RBr
5059	2000		10 %	10 %										B	30					Br.
5060	2000		15 %	10 %										B	30					Br
5061	2000		5 %	5 %										B	30					aBr
5062	2000		5 %	5 %										B	30					Br.
5063	2000		5 % org	5 % Frag.										B	35					Br.
5064	2000		10 % "	5 % "										B	35					Br.
5065	2000		10 % "	10 % "										B	30					dBr
5066	2000		10 %	5 %										B	30					Br.
5067	2000		No Sample																	
5068	2000		10 % org											B	35					dBr
5069	2000		10 % org											B	30					dBr
5070	2000		5 % org	10 % Frag										B	30					aBr
5071	2000		10 % org	5 % Frag										B	35					dBr
5072	2000		10 % org	10 % Frag.										B	30					dBr

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles #331
Area (Grid):
Collectors: Patrick Wilson

Results Plotted By:
Map: N.T.S.: 104 B-7
Date Sept 4, 90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
S073	2000		5% organic 5% FRAG.											B	30					Br.
S074	2000		5% " " 5% " "											B	30					Br.
S075	2000		10% org 5 FRAG											B	35					BR BLK.
S076	2000		10% " 5% "											B	35					BR BLK.
S077	2000		15% " 5% "											B	35					BR BLK.
S078	2000	No Sample																		
S079	2000		10% org 5% FRAG.											B	35					BR BLK.
S080	1900		5% org 5% FRAG.											B	30					BR BLK
S081	1900		10% " 5% "											B	35					BR BLK
S082	1900		5% 5%											B	30					BR.
S083	1900		10% 5%											B	35					Red
S084	1900		10% org 10% FRAG											B	30					Brown
S085	1900		10% " 5% "											B	35					RBr
S086	1900		5% " 5% "											B	30					RBr
S087	1900		5% 5%											B	36					Br Blk.
S088	1900		15% 5%											B	35					Br Blk.
S089	1900		15% 5%											B	35					Red
S090	1900		5% org 5% FRAG											B	35					Red
S091	1900		5% " 5 "											B	35					Red
S092	1900		5% 10%											B	30					Red
S093	1900		5% 15%											B	35					Red
S094	1900		10% 5%											B	30					RBr
S095	1900		10% org 5% FRAG.											B	35					RBr
														B	36					Red

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331

Area (Grid):

Collectors: Patrick Wilson

Results Plotted By: ~~104 B~~

Map: N.T.S.: 104 B-7

Date Sept 5, 90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
5096	1900		5% Org 5% FRAG											B	~~B~~ 30					BLK
5097	1900		10% Org 2% FRAG											B	35					BLK
5098	1400		10% Org 5% FRAG											B	30					
5099	No Sample													~~B~~	~~25~~					
5100	1900		5% " 5% "											B	25					RBn
5101	1900		10% " 5% "											B	30					BLK
5102	1900		10% " 5% "											B	~~25~~					LBR
5103	1900		10% " 5% "											B	25					LBn
5104	1900		10% " 5%											B	20					RBn
5105	2000		5% " 5% "											B	25					Bn
5106	2000		5% Org 5% FRAG											B	20					RBn
5107	2000		5% " 5% "											B	25					RBn
5108	2000		5% 15%											B	25					RBn
5109	2000		10% 5%											B	25					BLK
5110	2000		5% 5%											B	30					BLK
5111	2000		10% 2%											B	35					BLK
5112	2000	No Sample												B	30					BnBLK
5113	2000		10% 5%											B	30					RBn
5114	2000	No Sample																		
5115	2000		5% Org 10% FRAG											B	35					RBn
5116	2000		5% " 10%											B	30					Bn
5117	2000		5% " 5%											B	35					Bn
5118	2000		10% 5%											B	30					BRBLK
5119	2000		5% 5%											B	35					LBRBLK
5120	2000		5% 5%											B	30					RBn
5121	2000		5% 5%											B	35					Bn
5122	2000		5% 5%											B	30					Bn
5123	2000		5% ~~10~~ %											B	30					RBn

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Archilles # 331

Area (Grid):

Collectors: Patrick Wilson 90 PW

Results Plotted By: Patrick

Map: N.T.S.: 104-B7

Date SEPT 25 / 90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
														B	30	✓				RB
[redacted]	2+50N	0+50E	5% org 5% Fmag											B	30		✓			RB
	"	0+45E	5% org 5% Fmag											B	30		✓			RB
	"	0+40E	5% org 5% Fmag											B	30		✓			RB
	"	0+35E	5% org 5% Fmag											B	30	✓				MRB
	"	0+30E	10% org 5% Fmag											B	30	✓				RB
	"	0+25E	5% org 5% Fmag											B	30	✓				MRB
	"	0+20E	" " "											B	30	✓				MRB
	"	0+15E	[redacted]											B	30	✓				MRB
	"	0+10E																		
		0+05E	No Sample											B	30	✓				MRB
	2+50N	0+00	15% org 5% Fmag											B	30	✓				MRB
		0+05W	5% org 5% Fmag											B	30		✓			MRB
		0+10W	5% org 5% Fmag											B	30	✓				MRB
		0+15W	5% org 5% Fmag											B	30					RB
		0+20W	5% org 10% clay											B	30	✓				MRB
		0+25W	5% org 5% Fmag																	
		[redacted]																		
	2+60N	0+25W	5% org 5% Fmag											B	30	✓				MRB
		0+20W	5% org 5% Fmag											B	30	✓				MRB
		0+15W	10% org 2% Fmag											B	30	✓				MRB
		0+10W	5% org 5% Fmag											B	30	✓				MRB
		0+05W	5% org 5% Fmag											B	30	✓				MRB
		BL	10% org 10% Fmag											B	30	✓				MRB
		0+05E	No Sample											B	30	✓				MRB
		0+10E	5% org 15% Fmag											B	25	✓				MRB
		0+15E	5% org 15% Fmag											B	25	✓				MRB
		0+20E	5% org 5% Fmag											B	30	✓				MRB
		0+25E	10% org 5% Fmag																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles #331

Area (Grid):

Collectors: Patrick Wilson

Results Plotted By:

Map: N.T.S.: 164-B7

Date SEPT 25 / 90

Sample Number	Sample Location: Line	Sample Location: Station	Notes		Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	L260N	0+20E	10% org	10% Frags											B	30		✓			URB
		0+35E	5% org	15% Frags											B	30					URB
		0+40E	5% org	30% Frags											B	25					LRB
		0+45E	5% org	30% Frags											B	30					LRB
		0+50E	2% org	40% Frags																	
															B	30					URB
	L240N	0+50E	5% org	35% Frags											B	30					URB
		0+45E	5% org	35% Frags											B	30					LRB
		0+40E	5% org	35% Frags											B	30					URB
		0+35E	5% org	40% Frags											B	30					MRB
		0+30E	5% org	20% Frags											B	30					MRB
		0+25E	5% org	20% Frags											B	25					LRB
		0+20E	10% org	15% Frags											B	30					URB
		0+15E	10% org	15% Frags											B	25					MRB
		0+10E	10% org	10% Frags											B	30					MRB
		0+05E	15% org	5% Frags											B	30					LRB
		0+00	10% org	10% Frags											B	25					URB
		0+05W	10% org	10% Frags											B	30					MRB
		0+10W	15% org	5% Frags											B	30					MRB
		0+15W	15% org	5% Frags											B	25					LRB
		0+20W	5% org	15% Frags											B	30					MRB
		0+25W	5% org	15% Frags																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331
Area (Grid): Main Grid.
Collectors: Heath Whittam.

Results Plotted By: Heath Whittam
Map: Achilles N.T.S.: 104 B/7
Date Sept 25/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	4+40N	2+25W	10% fgrs, 10% sed, Silt											A	35		✓			mR
	"	2+20	30% fgrs, min-% Silt											A	25	✓				mRB
	"	2+15	20% fgrs, 5% sed, Silt											B	20	✓				mRB
	"	2+10	10% fgrs, 5% sed, Silt											B-A	20		✓			mB
	"	2+05	20% fgrs, 5% sed, Silt											B	20	✓				mRB
	"	2+00	5% fgrs & sed, Silt											A	25		✓			mB
	"	1+95	10% fgrs, 5% sed, Silt											B	25	✓				mRB
	"	1+90	15% fgrs, 5% sed, Sand/Silt											B	25	✓				LRB
	"	1+85	55% fgrs, 10% sed, Silt/Sand											A	25		✓			mB
	"	1+80	5% fgrs, sed, Sand/Silt											B	20	✓				LRB
	"	1+75W	5% fgrs, sed, Clay/Silt											B	25	✓				DRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles #331

Area (Grid): Hawilson Creek - Peachy Lake

Collectors: B. McIntyre

Results Plotted By: _____

Map: Ennuk N.T.S.: 104 B/7

Date Aug 30, 1990

Sample Number 90X331S	Sample Location: Elev.	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample cm	Soil Data: Horizon Development Good	Soil Data: Horizon Development Poor	Soil Data: Parent Material Drift	Soil Data: Parent Material Bedrock	Soil Data: Colour
			0+00 Start on W bank Hawilson Crk. 210° to saddle.				✓	✓						B	45cm		✓	✓		MRB
001	1020'	0+50	break in slope 5% frags 5% organic clay/silt.					✓						B	30	✓			✓	MRB
002	1040'	1+00	break in slope 20% frags 5% organic sandy silt					✓						B	25	✓			✓	LRB
003	1080'	1+50	25% frags 5% organic sandy silt		steep			✓						B	25	✓			✓	LRB
004	1040'	1+90	40% frags 5% organic sandy silt		"			✓						B	35	✓			✓	LRB
005	1000'	2+50	10% frags 5% organic sandy silt					✓						B	25	✓			✓	DRB
006	1010'	3+00	10% frags 5% organic sandy silt					✓						B	25	✓			✓	LRB
007	1060'	3+50	5% frags, 5% organic sandy silt		Saddle ridge			✓						B	50	✓			✓	MRB
008	1110	4+00	5% frag 5% organic silty silt - break to S.					✓						B	35	✓			✓	LRB
009	1090'	4+50	5% frags 5% organic sandy silt - break in slope from S																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331
Area (Grid): ACHILLES (KING GRID)
Collectors: ROBERT VIENS

Results Plotted By: RV
Map: _____ N.T.S.: 104 I/7
Date aug 19/22

Sample Number	Sample Location: Line	Sample Location: Station	Notes: ans %/colour%	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
4+00N																				
0+25E	1010		Talus Top 0/60											B	40					DB
0+50E	1015		0/60											B	45					DB
0+75E	1020		0/70											B	60					DB
1+00E	1050		0/65											B	60					DB
1+25E	1090		0/70											B	60					DB
1+50E	1120		0/80											B	75					DB
0+25W			N/S																	
0+50W	1010		Gravel RIVER BED (DRY)											"	45					MRB
0+75W	1010		" " " "											"	45					"
			August 02/90																	
7+00N																				
3+25W	1560		5/10 Good B sample											"	30					"
3+50W	1580		10/10 "											"	25					"
3+75W	1560		15/10 "											"	35					"
4+00W																				
6+50N																				
2+75W	1510		10/15 "											"	30					"
2+50W	1500		10/15 "											"	"					"
2+25W	1510		10/15 "											"	"					"
2+00W	1500		10/10 "											"	"					"
1+75W	1500		10/10 "											"	"					"
1+50W	1500		20/10 "											"	"					"
1+25W	1500		15/10 "											"	25					"
1+00W	1510		15/10 "																	
														"	30					"
3+25W			10/10 "											"	30					"
3+50W			10/10 "																	
3+75W														"						

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 ACHILLES

Area (Grid): MAIN GRID

Collectors: ROBERT VIENS

Results Plotted By: T.V.

Map: _____ N.T.S.: 104 B 11

Date SEPT 25

Sample Number	Sample Location: Line	Sample Location: Station	Notes: % organic	Notes: % Scree	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
2+00N															B	30					MRB
0+00E	0+00		10	10 SOIL																	
0+10E			10	10																	
0+15E			10	15																	
0+20E			5	20																	
0+25E			5	20																	
0+30E			10	30																	
0+35E			5	10 BIG FRAG																	
0+40E			5	40 " "											B	30					MRB
3+00N	1+00 FT														B	25					MRB
0+00E			10	10 SOIL												40					MRB
0+05E			10	15												25					MRB
0+10E			10	10												25					MRB
0+15E			10	10												35					
0+20E			10	15												35					
0+25E			10	15											G	30					
0+30E			10	15											A	30					
0+35E			10	70 TALUS											B	30					
0+40E			10	40 "												30					
0+45E			10	40												30					
0+50E			5	70 OUT ROCKS												30					
0+55E			10	25 SOIL											B	30					MRB
0+60E			10	25 SOIL																	
3+00N	1+00 FT														B	30					MRB
0+00E																30					
0+05E																30					
0+10E																30					
0+15E																30					
0+20E															R	30					
0+25E																					

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 ACHILLES

Area (Grid): MAIN-GRID

Collectors: ROBERT OWENS

Results Plotted By: RV

Map: _____ N.T.S.: 104 B/7

Date Sept 25

Sample Number	Sample Location		Notes		Topography				Vegetation						Soil Data						
					Valley Bottom	Direction of slope	Hill Top	Level Ground	Heavily Wooded	Sparsely Wooded	Burnt	Lagged	Grassland	Swampy	Horizon Sampled	Depth to Horizon Sample	Horizon Development: Good	Horizon Development: Poor	Parent Material: Drift	Parent Material: Bedrock	Colour
3HON	Line	Station	% Organic	% Cover																	
C+25E	1CBC11		10	30												25					MRB
C+55L			10	35												25					MRB
C+40E			5	20												30					MRB
C+50L			10	10												30					MRB
C+65L			10	15												30					MRB
C+60L			10	10												25					MRB
C+65L			10	10											B	30					MRB
C+70E			15	10											B	25					MRB
C+75E			10	15																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: ACHILLES
Area (Grid): 331
Collectors: Robert Viens

Results Plotted By: RV
Map: N.T.S.:
Date: august 26/27/90 sept 1/2/

Sample Number	Sample Location: Line	Sample Location: Station	Notes: % fine / % coarse	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
INRY331														B	45					OB
5001	2000ft	0+50	10/50											"	25					MB
002	2000	1+00	25/10											"	25					MRB
003	2120	4+00	40/10											"	25					MRB
004	2100	4+50	25/10											"	25					MRB
005	2080	5+00	25/0																	
			august 27											"	25					MRB
006	1020	2+00	10/10											"	35					"
007	1010	2+50	10/10											"	35					"
008	1000	3+00	10/10											"	30					"
009	1000	3+50	20/10											"	30					"
010	1010	4+00	15/10											"	25					"
011	1000	4+50	30/10																	
			Sept 1																	MRB
012	1100	0+00	10/0 light soil											"	20					
013	1100	0+50	10/10												20					
014	1100	0+00	10/15												15					LRB
015	1100	1+50	15/10												25					MRB
016	1100	2+00	40/10												30					
017	1100	2+50	30/10												30					
018	1100	3+00																		
019	1100	3+50																		
020	1100	4+00																		
021	100	4+50																		
022	100	5+00																		
023	1100	5+50																		
024	1100	6+00													30					MRB
025	1100	6+50	10/10 light soil												30					MRB
026	1100	7+00	40/0											"	30					MRB
027	1100	7+50	30/10																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: ACHILLES
Area (Grid): 331
Collectors: Robert Viens.

Results Plotted By: RV
Map: N.T.S.: 104 B/7
Date: Sept 1/2/4/5

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
70RV331-														B	35					MRB
028	1100	8+00	15/20 GOOD B SAMPLING												35					DRB
029	1100	8+50	45/10 "												35					MRB
030	1140	9+00	15/15 "												35					MRB
031	1140	9+50	15/15 "												30					MRB
032	1140	9+75	N/O "												30					MRB
033	1140	10+50	10/10 "																	
			Sept 2 ND																	
034	2000	1+00	10/10 GOOD B SAMPLING											B	30					DB
035	1985	1+50	10/10 "												30					DB
036	1970	2+00	20/10 "												30					DRB
037	1930	2+50	15/10 "												20					DRB
038	1950	3+00	10/10 "												20					DRB
			Sept 4																	
039	1980	0+5	10/10 Rocky Top s											B	30					DRG
040	2050	1+00	N/S												40					MRB
041	2100	1+50	10/20 Rocky A HOR. GOOD B												40					MRB
042	2100	2+00	10/20 "												30					DRB
043	2080	2+50	10/20 "												50					DRB
044	2080	3+00	10/15 "												30					DRB
045	2060	3+50	10/15 "												30					MRB
046	2050	4+00	15/15 "												35					DB
047	2100	4+50	15/15 "												35					DRB
048	2100	5+00	10/15 "																	
			Sept 5																	

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: ACHILLES
Area (Grid): 331
Collectors: Robert Viens

Results Plotted By: RV
Map: _____ N.T.S.: _____
Date Sept 81

Sample Number 70RV331	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development Good	Soil Data: Horizon Development Poor	Soil Data: Parent Material Drift	Soil Data: Parent Material Bedrock	Soil Data: Colour
C49	2200	0+00	10/10 Medium Rocky A" hor.											B	20					MRB
050	2200	0+50	10/10												30					
051	2200	1+00	10/10												30					
052	2200	1+50	10/10												30					
053	2200	2+00	10/10												30					
054	2200	2+50	10/10												30					
055	2200	3+00	10/10												30					
056	2200	3+50	10/10												30					
057	2200	4+00	10/10 TALUS Rock A hor.												30					
058	2200	4+50	10/5												30					
059	2230	5+00	10/5 B"												30					
060	2230	5+50	10/10												M/S					
061		6+00	N/S												50					
062	2200	6+50	10/10												30					
063	2200	7+00	10/10												30					
064	2200	7+50	10/10												30					
065	2200	8+00	10/10												30					

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 Achilles

Area (Grid): 1500', 1250' Soil Contours

Collectors: Aaron Wardwell + HEATH WILLIAM

Results Plotted By:

Map: Achilles N.T.S.: 104 B/7

Date August 26 and 30, 1990

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90AW331			1500' Soil Contour Aug. 26, 1990																	
S013	1500'	6+00E	5% Frag, 10% org, clay/silt	1500'										B	30	✓				MRB
S014		6+50E	10% Frag, silt	1500'										B	30	✓				MRB
S015		7+00E	10% org, silt	1500'										B	35	✓				MRB
S016		7+50E	5% org, silt.	1500'										B	30	✓				LRB
S017		8+00E	10% Frag, 20% org, silt	1500'										B	30	✓				LRB
S018		8+50E	5% Frag, 5% org, silt.	1500'										B	35	✓				MRB
S019		9+00E	20% org, silt	1450'										A-B	35		✓			MRB
S020		9+50E	30% Frag, silt.	1450'										B	25	✓				MRB
S021		10+00E	30% org, silt.	1400'										B	35	✓				MRB
90JJ331			1250' Soil Contour Aug 30, 1990																	
S006	1250'	12+00E	10% Frag, 30% org, silt.											A-B			✓			DRB
S008		13+00E	5% Frag, 30% org, silt.											A-B			✓			LRB
S010		14+00E	5% Frag, 25% org, silt.											A-B			✓			MRB
S012		15+00E	20% Frag, 5% org, silt.											B		✓				MRB
S014		16+00E	5% Frag, 30% org, silt											A-B			✓			MRB
S018		18+00E	10% Frag, 10% org, silt											B		✓				LRB
S020		19+00E	10% Frag, 5% org, silt.											B		✓				LRB
S024		21+00E	10% org, clay/silt.											A-B			✓			LRB
S026		22+00E	10% Frag, clay/silt											B		✓				LRB
S028		23+00E	20% org, silt.											A-B			✓			LRB
S030		24+00E	5% Frag, 20% org, silt											B		✓				MRB
S032		25+00E	2% Frag, 10% org, silt/clay.											B		✓				LRB
S034		26+00E	5% Frag, 5% org, silt.											B		✓				LRB
S036		27+00E	2% Frag, 5% org, silt											B		✓				LRB
S040		29+00E	5% Frag, 10% org, silt											B		✓				MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 Achilles

Area (Grid): 1500' contour, ~~600' on 1000' contour~~

Collectors: Aaron Wardwell + Heather Williams

Results Plotted By:

Map: Achilles N.T.S.: 104 B/7

Date Sept 4, 1990, ~~Sept 6, 1990~~ Sept 8, 1990

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
90AW331	1500		Sept 4, 1990																	
S081		7+50W	35% Frag, 10% org, silt.											B	25	✓				MRB
S082		8+00W	10% Frag, 5% org, silt/clay.											B	30	✓				MRB
S083		8+50W	2% Frag, 5% org, silt/clay.											B	30	✓				LRB
S084		9+00W	5% org, silt/clay											B	30	✓				LRB
S085		9+50W	20% Frag, 5% org, silt/clay											B	35	✓				MRB
S086		10+00W	25% Frag, 5% org, silt/clay											B	30	✓				MRB
S088		11+00W	5% Frag, 15% org, silt/clay											B	30	✓				MRB
S089		11+50W	50% Frag, sandy.											A-B	40		✓			MRB
S090		12+00W	20% org, silt/clay.											R	30	✓				MRB
S091		12+50W	40% org, clay.											A-B	30		✓			MRB
S093		13+50W	25% org, silt											A-B	45		✓			MRB
S094		14+00W	40% org, clay											A-B	40		✓			MRB
S095		14+50W	20% org, silt.											A-B	50		✓			MRB
S096		15+00W	5% Frag, 10% org, silt											B	30	✓				MRB
S097		15+50W	5% Frag, 10% org, silt.											B	30	✓				MRB
S098		16+00W	50% Frag, 5% org, sandy											A-B	30		✓			MRB
S099		16+50W	10% Frag, 20% org, silt											B	20	✓				MRB
S100		17+00W	10% Frag, 10% org, silt.											A-B	30		✓			MRB
	~~1700'~~		~~Sept 6, 1990~~											A-B	20		✓			MRB
90JJ331	1700' Contour		Sept 8, 1990											~~A-B~~						
S111		0+00	silt																	
S112		0+50	silt											B	25	✓				MRB
S113		1+00	silt.											B	30	✓				MRB
S114		1+50	20% Frag, silt.											B	30	✓				MRB
S115		2+00	20% Frag, silt.											B	30	✓				MRB
S116		2+50	20% org, silt.											B	25	✓				MRB
S117		3+00	5% Frag, 5% org, silt.											B	25	✓				MRB
S118		3+50	5% Frag, 5% org, silt.											B	25	✓				MRB
S119		4+00	10% Frag, 5% org, silt											B	20	✓				MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 Achilles — Results Plotted By: _____

Area (Grid): King Creek / Mini-Grid — Map: _____ N.T.S.: _____

Collectors: ~~Aaron Wardwell~~ Heath Whittam, Aaron Wardwell — Date Sept 28/90, Sept 29/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	C+10S	2+00W	Sept. 28/90 10% Frag, 15% org., silt/clay											B	20	✓				LRB
		2+10W	10% Frag, silt											B	20	✓				MRB
		2+20W	15% Frag, silt.											B	25	✓				MRB
		2+30W	15% org, silt											B	35		✓			BLK MRB
		2+40W	5% Frag, 5% org, silt											B	30	✓				MRB
		2+50W	10% org, silt											B	30	✓				MRB
	C+00N	2+00W	5% Frag, 10% org, silt											B	35	✓				MRB
		2+10W	20% Frag, 5% org, silt/clay											B	25	✓				MRB
		2+20W	15% org, silt.											B	36		✓			MRB
		2+30W	5% Frag, 10% org, silt.											B	20	✓				MRB
		2+40W	5% Frag, 15% org, silt.											B	35		✓			MRB
		2+50W	20% Frag, 25% org, silt.											B	30		✓			MRB
	C+10N	2+00W	5% Frag, 5% org, silt											B	25	✓				MRB
		2+10W	clay/silt											B	30	✓				MRB
		2+20W	clay/silt											B	25	✓				MRB
		2+30W	20% Frag, 15% org, silt											B	30	✓				MRB
		2+40W	silt.											B	35	✓				MRB
		2+50W	5% Frag, 20% org, silt											B	30		✓			GRAY MRB
90AW331	~~C+40N~~		Sept. 29/90																	
	C+40N	1+50E	5% Frag, silt.											B	30	✓				MRB
		1+60E	20% Frag, silt/sand											B	30	✓				MRB
		1+70E	20% Frag, silt/sand											B	25	✓				MRB
		1+80E	20% Frag, silt/sand											B	35	✓				LRB
		1+90E	5% Frag, 10% org, silt.											B	35		✓			MRB
		2+00E	25% Frag, silt/sand											B	30	✓				MRB
		2+10E	40% Frag, silt/sand											B	35	✓				MRB
		2+20E	35% Frag, silt/sand											B	30	✓				MRB
		2+30E	40% Frag, sand											B	25	✓				MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: 331 Achilles
Area (Grid): King Creek Grid
Collectors: Aaron Wardwell

Results Plotted By:
Map: Achilles N.T.S.: 104 B/7
Date August 19, 1990

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	4+50N	0+25E	900' 30% org., 40% Frag, silt											A-B	35		✓			LRB
		0+50E	20% org, 25% Frag, silt 850'											B	30		✓			MRB
		0+75E	35% org, 20% Frag, silt 800'											A-B	50		✓			MRB
	4+50N	0+25W	10% org, silt 875'											B	35	✓				DRB
		0+50W	10% org, 10% Frag, silt 925'											B	35	✓				LRB
		0+75W	30% org, 25% Frag, silt 950'											A-B	45		✓			MRB
		1+00W	25% org, 30% Frag, silt 900'											A-B	35		✓			DRB
	5+00N	0+00	10% org, 40% Frag, silt 875'											A-B	35		✓			MRB
		0+75E	10% org, 40% Frag, silt 1050'											B	35	✓				LRB
		1+25E	40% org, 10% Frag, silt 1150'											A-B	45		✓			MRB
		1+50E	20% org, 20% Frag, silt 1225'											B	35	✓				MRB
		1+75E	10% org 0% Frag, silt 1275'											B	30	✓				MRB
		2+00E	10% org, 10% Frag, silt 1300'											B	30	✓				DRB
	5+50N	1+00E	20% org, 40% Frag, silt 1275'											B	30	✓				LRB
		1+25E	30% org, 0% Frag, silt 1375'											B	30	✓				LRB
		1+50E	10% Frag, clay 1425'											B	30	✓				MRB
		1+75E	20% Frag, silt 1475'											B	30	✓				MRB
		2+00E	20% Frag, silt 1550'											B	30	✓				DRB
		2+25E	30% Frag, silt 1600'											B	35	✓				DRB
		2+50E	20% Frag, silt 1650'											B	35	✓				MRB
		2+75E	5% org, 25% Frag, silt 1675'											B	45	✓				MRB
		3+00E	20% Frag, silt 1725'											B	35	✓				MRB
	6+00N	0+30E	65% Frag, silt 1825'											B	25		✓			MRB
		0+50E	70% Frag, silt 1875'											B	25		✓			MRB
		1+00E	10% org, 10% Frag, silt 1675'											B	35	✓				LRB
		1+75E	2% org, 10% Frag, silt 1700'											B	30	✓				DRB
		2+25E	30% Frag, silt 1760'											B	35	✓				DRB
		2+50E	25% Frag, silt/clay 1760'											B	30	✓				MRB
		2+75E	20% Frag, silt 1825'											B	35	✓				LRB
		3+00E	5% org, 35% Frag, silt 1850'											B	35	✓				MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331

Area (Grid): King Creek

Collectors: Aaron Wordwell

Results Plotted By:

Map: Achilles N.T.S.: 104 B/7

Date August 23, 1990 / 24, 1990

Sample Number	Sample Location		Notes		Topography				Vegetation						Soil Data						
	Line	Station	Aug. 23/90		Valley Bottom	Direction of slope	Hill Top	Level Ground	Heavily Wooded	Sparsely Wooded	Burnt	Logged	Grassland	Swampy	Horizon Sampled	Depth to Horizon Sample	Horizon Development Good	Horizon Development Poor	Parent Material Drift	Parent Material Bedrock	Colour
	3+50N	1+00W	10% org, 5% Frag, silt	1225'											B	30	✓				MRB
		1+25W	10% Frag, 10% org, silt	1200'											B	35	✓				LRB
		1+50W	10% Frag, 5% org, silt	1160'											B	30	✓				LRB
		1+75W	35% Frag, 20% org, silt	1125'											B	45	✓				LRB
		2+00W	35% Frag, 10% org, silt	1075'											A-B	45		✓			GREY
		2+25W	5% org, silt	1000'											B	35	✓				MRB
		2+75W	80% Frag, sand	1000'											B	35	✓				GREY
		3+00W	10% org, silt	1225'											B	25	✓				MRB
		3+25W	5% org, clay/silt	1175'											B	35	✓				MRB
		3+75W	5% Frag, 20% org, clay/silt	1175'											B	30	✓				DRB
		4+00W	2% Frag, 10% org, silt	1200'											B	25	✓				LRB
	2+00N	2+75W	75% Frag, Talus	1075'											B		✓				GREY
		3+00W	70% Frag, Talus	1075'											A-B		✓				MRB
		3+25W	70% Frag, Talus	1075'											A-B		✓				MRB
		3+50W	75% Frag, Talus	1075'											A-B		✓				GREY
		3+75W	5% Frag, 5% org, silt	1100'											Talus		✓				LRB
		4+00W	5% Frag, 5% org, clay/silt	1125'											B		✓				GREY
			Aug. 24/90																		
	0+00	0+25W	5% org, clay/silt	1350'											B		✓				LRB
		0+75W	5% Frag, 20% org, clay/silt	1350'											B		✓				LRB
		1+00W	20% org, clay/silt	1350'											B		✓				MRB
		1+25W	25% org, clay/silt	1350'											B		✓				MRB
		1+50W	5% Frag, 10% org, clay/silt	1350'											B		✓				MRB
		1+75W	10% org, clay/silt	1350'											B		✓				LRB
		2+00W	20% org, clay	1350'											B		✓				LRB
		2+25W	20% org, silt	1350'											B		✓				MRB
		2+50W	40% org, silt	1350'											A-B			✓			MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331

Area (Grid): King Breek Grid

Collectors: Aaron Wodwell

Results Plotted By:

Map: Achilles N.T.S.: 104 B/7

Date August 25, 1990, Aug. 24, 1990, Aug. 26, 1990

Sample Number	Sample Location		Notes	Topography				Vegetation						Soil Data						
	Line	Station		Valley Bottom	Direction of slope	Hill Top	Level Ground	Heavily Wooded	Sparsely Wooded	Burnt	Logged	Grassland	Swampy	Horizon Sampled	Depth to Horizon Sample	Horizon Development: Good	Horizon Development: Poor	Parent Material: Drift	Parent Material: Bedrock	Colour
			Aug. 24, 1990																	
	2+50N	0+00	20% Frag, 10% org, silt 1200'											B	35	✓				DRB
		0+25E	5% Frag, 5% org, silt 1175'											B	30	✓				DRB
		0+50E	25% Frag 15% org, silt 1100'											B	35	✓				LRB
			~~Aug 25, 1990~~																	~~GRB~~
	1+50N	0+00	5% org, silt. 1275'											B	30	✓				MRB
		0+25E	20% org, silt. 1275'											B	35	✓				MRB
		0+50E	30% org, silt 1250'											B	55	✓				LRB
		0+75E	20% org, silt 1225'											B	35	✓				LRB
			Aug. 25, 1990																	
	1+50N	0+25W	5% org, silt/clay 1225'											B	35	✓				MRB
		0+50W	10% org, silt 1100'											A-B	35		✓			MRB
		0+75W	10% org, silt/clay 1075'											B	30	✓				MRB
		1+50W	20% org, silt 1050'											B	35	✓				MRB
	3+50N	0+00	10% Frag, 5% org, silt. 800											B	30	✓				MRB
		0+25W	5% Frag, 5% org, clay/silt 800											B	30	✓				MRB
		0+50W	10% Frag, 5% org, clay 825											B	25	✓				MRB
40AW331	1500' Soil	Contour	Aug. 26, 1990																	
S 001	1500'	0+00	10% Frag, 10% org, silt. 1500'											B		✓				MRB
S 002		0+50E	10% Frag, 20% org, silt/clay 1500'											B		✓				MRB
S 003		1+00E	5% Frag, 10% org, clay 1500'											B		✓				MRB
S 004		1+50E	2% Frag, clay. 1475'											B		✓				MRB
S 005		2+00E	5% Frag, 10% Org, clay 1500'											B		✓				MRB
S 006		2+50E	5% Frag, 5% org, clay/silt. 1500'											B		✓				MRB
S 007		3+00E	5% Frag, 25% org, silt. 1500'											A-B			✓			MRB
S 008		3+50E	10% org, clay/silt. 1530'											B		✓				MRB
S 009		4+00E	5% org, silt. 1500'											B		✓				MRB
S 010		4+50E	5% org, clay/silt. 1500'											B		✓				MRB
S 011		5+00E	5% Frag, 5% org, silt. 1580'											B		✓				MRB
S 012		5+50E	5% Frag, 5% org, clay/silt 1500'											B		✓				MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331
Area (Grid): King Crk mini Grid
Collectors: Aaron Wardwell

Results Plotted By: Aaron Wardwell.
Map: Achilles N.T.S.: 104 B/7
Date Sept 29/30.

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	0+50N	2+250	55% frag, Sand.											A						mB
	4	2+20	60% frag, Sand.											A						DB
	4	2+15	40% frag, Sand.											B						mRB
	11	2+10	50% frag, Sand.											A						mB
	11	2+05	30% frag, 5% org, Sand.											A						mB
	11	2+00	30% frag, Sand.											B						mRB
	11	1+95	5% frag, 10% org, silt											A						mB
	11	1+90	30% org, silt											B						mB
	11	1+85	5% frag, 10% org, silty											B						mB
	11	1+80	Talus. 70% frag Sand/Silt											T						mB
	11	1+75	Talus 70% frag, Silt/Sand											T						mB
	11	1+70	40% frag, Silt/Sand.											B						mB
	11	1+65	30% frag, Silt/Sand											B						mB
	11	1+60	30% frag, Sand.											B						mB
	11	1+55	30% frag, Sand.											B						LB
	11	1+50	70% frag, 15% org, Silt.											B						mRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles #331 — Results Plotted By: _____

Area (Grid): West side of Hawison Lake - 2000' CONTOUR — Map: ACHILLES — N.T.S.: 104 B/7

Collectors: Colin Anderson (Scott T.) 900C#331 — Date Sept 2/90

Sample Number	Sample Location: Contour Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Muskeg, Bog, Swamp	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
S001	2000'	0+00	2020' silty soils		E			/						B		/				MRB
CC3		0+50	2000' " "		N			/						B		/				MRB
CC3		1+00	2000' 10% Subangular frag		E			/						B		/				LRB
CC4		1+50	1990' large subangular frag		W			/						B		/				LRB
CC5		2+00	1980' 50% clay 50% silt		N			/						B		/				MRB
CC6		2+50	1960 " "		S			/						B		/				MRB
CC7		3+00	2000' silty		W			/						B		/				MRB
CC8		3+50	1930' silty		E			/						B		/				LRB
CC9		4+00	1940' silty clay		E			/						B		/				MRB
C10		4+50	1940' silty		E			/						B		/				MRB
C11		5+00	1920' "		E			/						B		/				DRB
C12		5+50	1960' "		E			/						B		/				MRB
C13		6+00	1950' "		E			/						B		/				MRB
C14		6+50	1920 "		E			/						B		/				DRB
C15		7+00	1990' "		E			/						B		/				MRB
C16		7+50	1840' "		W			/						B	30 cm to	/				MRB
C17		8+00	1920' Rounded frag bimodal lake		W			/						B		/				MRB
C18		8+50	1780' Rounded frag " "		W					/				B		/				GRB
C19		9+00	1760' Rounded frag " "		O		/			/				B		/				LRB
C20	↓	9+50	1750' 10% sub angular frag " "		O		/			/				B		/				LRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles # 331
Area (Grid): King Creek Grid
Collectors: Colin Anderson 9CCC331

Results Plotted By:
Map: N.T.S.: 104B/7
Date Sept 29/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Slide Alder Bush Cloth	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
			more Talus Fines Than 2CC																	
	C+00 N	2+00E	50% Angular rock frag taken at Bedrock		E			/		/				A			/			Black
	C+00 N	2+05 E	25% Angular rock frags "		E					/				A			/			Black
	C+00 N	2+10 E	60% Angular rock frags "		E					/				B		/				MRB
	C+00 N	2+15 E	" "		E					/				B		/				MRB
	C+00 N	2+20 E	" "		E					/				B		/				MRB
	C+00 N	2+25 E	" "		E					/				C			/			Grey
	C+00 N	2+30 E	30% Angular Rock frags "		E					/										GRB
	C+00 N	2+35 E	50% " "		E					/										GRB
	C+00 N	2+40 E	" "		E					/										GRB
	C+00 N	2+45 E	" "		E					/										GRB
	C+00	2+50 E	" "		E					/										GRB
	0+00 S	2+50 E	30% Sub angular rock frags		E					/										GRB
	0+00 S	2+40 E	50% Subangular rock frags		E					/										Grey
	0+00 S	2+30 E	base of Cliff 60% Angular rock		E										Bolder 45 to 90 cm					
								/												MRB
	0+10 N	2+00 E	50% Subangular rock		E					/										MRB
	0+10 N	2+10 E	75% Angular rock frags "		E					/										MRB
	0+10 N	2+20 E	" "		E					/										MRB
	0+10 N	2+30 E	" "		E					/										MRB
	0+10 N	2+40 E	" "		E					/										MRB
	0+10 N	2+50 E	60%		E															

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles # 331
Area (Grid): King Creek
Collectors: Colin Anderson

Results Plotted By:
Map: N.T.S.: 104 B/7
Date Sept 25/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	4+50N	1+25 W	Angular rock Frag 10%		S			✓						B		✓				MRB
		1+20 W	" " " 50%		S			✓						B		✓				MRB
		1+15 W	" " " 65%		S			✓						B		✓				MRB
		1+10 W	" " " 80%		S			✓						B		✓				MRB
		1+05 W	Angular " " 35%		S			✓						B		✓				MRB
		1+00 W	Sub Angular Rock Frag		S			✓						B		✓				MRB
		0+95 W	Angular "		S			✓						B		✓				MRB
		0+90 W	Subangular " "		S			✓						B		✓				MRB
		0+85 W	" " 20%		S			✓						B		✓				MRB
		0+80 W	" " 20%		S			✓						B		✓				MRB
		0+75 W	very silty soil		S			✓						B		✓				MRB
		0+70 W	Sub rounded 20%		S			✓						B		✓				MRB
		0+65 W	very silty		E			✓						B		✓				MRB
		0+60 W	Sub Angular rock Frag 20%		E			✓						B		✓				MRB
		0+55 W	" " 20%		E			✓						B		✓				MRB
		0+50 W	" " 20%		E			✓						B		✓				MRB
		0+45 W	" " 20%		E			✓						B		✓				MRB
		0+40 W	" " 20%		E			✓						B		✓				MRB
		0+35 W	" " 20%		E			✓						B		✓				MRB
		0+30 W	" " 20%		E			✓						B		✓				MRB
		0+25 W	very silty		E			✓						B		✓				MRB
		0+20 W	Sub Angular rock Frag 20%		E			✓						B		✓				MRB
		0+15 W	" " 20%		E			✓						B		✓				MRB
		0+10 W	Angular 40%		E			✓						B		✓				MRB
		0+05 W	Beside creek					✓												

Bedrock 20 x 40 cm

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles 331
Area (Grid): King Creek Grid
Collectors: Colin Anderson 90CC331

Results Plotted By: _____
Map: _____ N.T.S.: 104B/7
Date Sept 23/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Burnt	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
	4+60N	1+10 W	outcrop 50% Angular rock Fragments		S			/						B		/				MRB
		1+05 W	35% Subangular " " "		S			/						B		/				MRB
		1+00 W	" " " " "		S			/						B		/				MRB
		0+95 W	" " " " "		S			/						B		/				MRB
		0+90 W			S			/						B		/				MRB
		0+85 W	high organic 30% Subrounded rock fragments		S			/						B		/				MRB
		0+80 W			S			/						B		/				MRB
		0+75 W	Very silty		S			/						B		/				MRB
	V	0+70 W	" " 30% Subrounded " "		S			/						B		/				MRB
		0+65 W	30% Subangular " "		S			/						B		/				MRB

KEEWATIN ENGINEERING INC.

SOIL SAMPLES

Project: Achilles #331 — Results Plotted By: _____

Area (Grid): King Creek — Map: ACHILLES N.T.S.: 104B/7E

Collectors: Colin Anderson - (BBT90 ST #331) Scott Thompson — Date Aug 30/90

Sample Number	Sample Location: Line	Sample Location: Station	Notes	Topography: Valley Bottom	Topography: Direction of slope	Topography: Hill Top	Topography: Level Ground	Vegetation: Heavily Wooded	Vegetation: Sparsely Wooded	Vegetation: Pines, D.C. Blue Berries	Vegetation: Logged	Vegetation: Grassland	Vegetation: Swampy	Soil Data: Horizon Sampled	Soil Data: Depth to Horizon Sample	Soil Data: Horizon Development: Good	Soil Data: Horizon Development: Poor	Soil Data: Parent Material: Drift	Soil Data: Parent Material: Bedrock	Soil Data: Colour
S001	1500"	0+00	0% Rock Frag		W					/				B						DRB
S002		0+50	" "		W					/				B						LRB
S003		1+00	" "				/			/			/	B			/			mRB
S004		1+50	3% Rounded Rock Frag				/			/			/	B			/			LRB
S005		2+00	4% Rock Frag		W					/			/	B						mRB
S006		2+50	10% Angular Rock Frag		S					/				B						mRB
S007		3+00	20% Angular Rock Frag		W					/			/	B			/			mRB
S008		3+50	40% Sub angular		E					/				B						LRB
S009		4+00	5% Sub angular				/			/			/	B			/			LRB
S010		4+50	0% Rock Frag				/			/				B						LRB
S011		5+00	0% " " high Organic				/			/				B?			/			LRB
S012		5+50	3% Sub angular		S					/				B						LRB
S013		6+00	" " silty		S					/				B						mRB
S014		6+50	15% Sub rounded Rock Frag		S					/				B	50 cm					mRB
S015		7+00	0% Rock Frag		S					/				B						dRB
S016		7+50	" "		S					/				B						LRB
S017		8+00	5% Subrounded Rock Frag		S					/				B						mRB
S018		8+50	2% Rounded Rock Frag		SW					/				B	30 &					DRB
															Between					

KEEWATIN ENGINEERING INC.

STREAM SEDIMENTS

Project: 331 Achilles

Area (Grid): King Creek ; 1250' Contour, 1500' Contour, 1700' Contours

Collectors: Aaron Lindwell

Results Plotted By: _____

Map: Achilles N.T.S.: 104 B/7

Date: Aug. 21, 1990 ; Sept 1, 1990 ; Sept 2/90 , Sept. 8/90

Sample Number	NOTES		SEDIMENT DATA					STREAM DATA					SPRING	DRY GULLY				
			Gravel	Sand	Silt	Clay	Organic	Bank	Active	Width	Depth	Velocity						
90AW331	Aug. 21, 1990 ; King Creek Grid																	
LCC4 0+30E	Flow at 236°, silt	1675'	20%	40%	40%				NO	3-4m	20cm	∅						
LCC4 0+00	Flow at 234°, silt		30%	40%	30%				NO	3-4m	20cm	∅						
90AW331	Aug. 23, 1990 ; King Creek Grid																	
LCC4 3+50N 3+50W	Flow at 220°, silt	1175'	25%	25%	45%		5%		Yes	3-4m	15cm	Fast						
LCC4 2+00N 3+00W	Flow at 228°, silt	1075'	30%	30%	40%				Yes	3-4m	20cm	Fast						
90AW331	Sept. 1, 1990 ; 1250' Contour																	
LCC1	150° Flow, Moss Mat, 40+75E	1250'	40%	20%	20%		20%		Yes	1.5m.	4cm	Fast						
LCC2	162° Flow, silt, 42+35E	1250'	10%	20%	70%				Yes	1-2m	6cm	Mod						
LCC3	140° Flow, silt, 45+45E	1250'	30%	10%	30%		30%		Yes	1-2m	8cm	Fast						
90AW331	Sept. 2, 1990 ; 1500' Contour																	
LCC4	140° Flow, silt, 2+97W	1500'	25%	25%	50%				Yes	1m	15cm	Fast						
LCC5	230° Flow, silt, 7+42W	1500'	50%	30%	20%				Yes	2-3m	35cm	Fast						
90AW331	Sept. 4, 1990 ; 1800' Contour																	
LCC6	253° Flow, silt, 1+23W	1800'	40%	20%	30%		10%		Yes	1m	10cm	Fast						
LCC7	200° Flow, silt, 5+57W	1800'	30%	20%	20%		30%		Yes	1m	8cm	Slow						
LCC8	236° Flow, silt, 14+27W	1800'	20%	10%	40%		30%		Yes	1-2m	15cm	Mod						
90AW331	Sept. 8/90 ; 1700' Contour																	
LCC5	220° Flow, silt, 1+90E	1700'		5%	65%		5%		Yes	1-2m	10cm	Fast						
LCC6	260° Flow, Moss Mat, 3+00E	1700'			80%		20%		Yes	1m	10cm	Fast						
LCC7	220° Flow, silt, 3+65E	1725'		10%	70%				Yes	1m	15cm	Mod						
LCC8	silt, 10+75E	1725'	30%	30%	40%				Yes	1-2m	15cm	Fast						

KEEWATIN ENGINEERING INC.

STREAM SEDIMENTS

Project: ACHILLES Results Plotted By: Robert Viens

Area (Grid): 331 Map: _____ N.T.S.: 104 B/7

Collectors: Robert Viens Date: august 26/27/

Sample Number	NOTES	SEDIMENT DATA					STREAM DATA					SPRING	DRY GULLY				
		Gravel	Sand	Silt	Clay	Organic	Bank	Active	Width cm	Depth cm	Velocity						
001																	
002	2000 ft angular Bedrock								50	20	VSF						
003	2000 ft "								50	20	VSF						
004	1000 ft " " BRG 240°								40	10	VSF						
005	1000 ft " " " 240°								40	10	VSF						
006	1100 ft " " " 330°								150	20	MF						
007	1100 ft " " ~~BRG 160°~~								150	30	MF						
008	2200 ft Rounded Bedrock BRG 160°								75	15	MF						
009	2200 ft " " BRG 160°								75	20	MF						
010	2200 ft " " Moss matt BRG 160°								75	15	MF						
011	2200 ft " " BRG 160°								40	10	SF						

KEEWATIN ENGINEERING INC.

STREAM SEDIMENTS

Project: ACHILLES # 331

Area (Grid): KING CR. GRID

Collectors: G.L. WESA

Results Plotted By: _____

Map: ACHILLES N.T.S.: 104 B/7

Date: AUG 19/1990 - AUG 22/1990

Sample Number	NOTES	SEDIMENT DATA					STREAM DATA					SPRING	DRY GULLY	BEARING			
		Gravel	Sand	Silt	Clay	Organic	Bank	Active	Width	Depth	Velocity						
90GW331-L001	PEBBLY, BLK, CRSE, GREYWACKE BEDROCK	20%	60%	20%		1-2%		✓	2-3m	12cm	MOD			200°			
" -L002	(1360') INTERBEDDED CHERT + ARGILLITE	20%	60%	20%				✓	2-3m	12cm	MOD			200°			
" -L003	(1080') RUSTY CHERT FLOAT IN TRIB	5%	95%	10%				✓	2m	8cm	MOD			180°			
" -L004	(1460') CANYONED GULLY - CHERT + ARGILL B/R	20%	60%	20%				✓	5m	12cm	FAST			200°			

KEEWATIN ENGINEERING INC.

STREAM SEDIMENTS

Project: Achilles # 331 — Results Plotted By: _____

Area (Grid): TRIB. to Fewright — Map: _____ N.T.S.: 104 B/7

Collectors: Colin Anderson - (Scott + T.) 190CC # 331 — Date: Sept 4/90

Sample Number	NOTES	SEDIMENT DATA: Gravel	Sand	Silt	Clay	Organic	STREAM DATA: Bank	Active	Width	Depth	Velocity	SPRING	DRY GULLY	Bearing
	Steep canyon, water flowing over bedrock													
L006	1705 sub angular rock fragments	0	30%	70%				✓	3m	1m	mod			190°
L007	1720 " "	0	50%	50%				✓	5m	50cm	mod			200°
L008	1760 " "	20%	50%	30%				✓	8m	20cm	mod			196°
L009	1810 " recent landslide	40%	30%	30%				✓	4m	50cm	mod			200°
L010	1885 " "large amount of wood in canyon	35%	35%	30%				✓	6m	35cm	mod			200°
L011	1930 " "	35%	30%	35%				✓	2m	50cm	Fast			230°
L012	1960 " "	50%	30%	30%				✓	2m	50cm	Fast			230°
L013	2050 " right below water fall	30%	50%	20%				✓	3m	40cm	Fast			190°

KEEWATIN ENGINEERING INC.

STREAM SEDIMENTS

Project: King Creek 331

Area (Grid): Contour 1250' @

Collectors: Heath Whitton

Results Plotted By: Heath Whitton.

Map: Achilles N.T.S.:

Date: Aug 27/90.

Sample Number	NOTES	SEDIMENT DATA					STREAM DATA					SPRING	DRY GULLY				
		Gravel	Sand	Silt	Clay	Organic	Bank	Active	Width	Depth	Velocity						
L001	1250'	Ø	40	60	Ø	Ø		F	Km	10cm	S						

KEEWATIN ENGINEERING INC.

STREAM SEDIMENTS

Project: Achilles 332 — Results Plotted By: Heath Whitton

Area (Grid): GRID. — Map: Achilles. — N.T.S.:

Collectors: Heath Whitton. — Date: Aug 22/90.

Sample Number	NOTES Silts Not Numbered. Coordinates ONLY!	SEDIMENT DATA					STREAM DATA					SPRING	DRY GULLY				
		Gravel	Sand	Silt	Clay	Organic	Bank	Active	Width	Depth	Velocity						
5+00N	0+00 B.L. (L001)	5	50	45	Ø	Ø		N	3m	Ø	Ø		Y				
5+00N	2+60W (L002) MOSSMAT.	Ø	Ø	70	Ø	30		Y	½m	5	S						