Report on the

1983 Exploration Program

BLUEBELL JOINT VENTURE

Greenwood Mining Division

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April 1984

B.W. Kyba & K.L. Daughtry

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British Columbia

NTS: 82E/2E

LATITUDE: 49°08' North

LONGITUDE: 118°31' West

CONSULTANT: K.L. Daughtry & Associates Ltd.

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INTRODUCTION

The Bluebell Joint Venture was initiated by Kettle River Resources Ltd., New Frontier Petroleum Corporation and Fairmont Gas and Oil Corporation to explore primarily for gold-bearing massive sulphide deposits in the Summit Camp of the Greenwood Mining Division in southern British Columbia. The Joint Venture property comprises of 55 contiguous mineral claims (approximately 2500 acres).

The initial objectives of the exploration project were:

(a) to consolidate all key ground in the Summit Camp into one holding; all claims were acquired by option or staking,

(b) to compile and evaluate the considerable volume of data available from old production records, previous exploration work by others and work in the area by Kettle River since 1980,

(c) to evaluate the potential for ore reserves at the three former producing mines: the Emma, Oro Denoro and B.C., 92E5E062,63,060

(d) to select target areas for new exploration,

(e) to conduct intensive systematic surface exploration of the property using a combination of detailed geological, geochemical and geophysical surveys, and

(f) to test the most attractive targets by trenching and drilling.

During the 1983 field season phases (a),(b),(d),(e) and part of (f) were completed. Phases (c) and (f) should be completed in 1984.

After the conclusion of phase (b), it was decided to alter the subsequent

exploration programme. The detailed evaluation of the 3 former producing mines was postponed until more data on the area was available. Also, the initial plan to individually test 15 targets was altered by grouping targets into larger zones of interest and expanding the detailed surveys over entire zones. As a result it was possible to test 27 targets rather than the original 15.

The primary exploration objective is the discovery of precious metal bearing volcanogenic massive sulphide deposits, occurring either in their original syngenetic stratiform sulphide form or as metamorphosed deposits (skarn). Attention was also directed to the possible occurrence of epithermal gold-silver mineralization.

The exploration programme succeeded in several aspects.

1. All significant sulphide mineralization was found to occur in a specific geological setting. Consequently all future exploration can be concentrated on target areas within this favourable environment.
2. Several new massive sulphide occurrences containing one or more of copper, zinc, gold and silver were discovered.
3. Gold was found to occur in much higher than normal background levels in certain igneous rocks.
4. The number of potential targets was reduced to a relatively low number of particularly attractive areas requiring additional work, including drilling.

The report presents the results of the 1983 programme with recommendations for the next stage of exploration. The bulk of this report was written by B. Kyba, who was also directly responsible for the conduct of the field work. General supervision of the programme was provided by K.L. Daughtry, G.O.M. Stewart and Dr. J.T. Fyles.

SUMMARY AND RECOMMENDATIONS

1. The Bluebell Joint Venture property consists of 55 contiguous mineral claims in the Greenwood Mining Division of southern British Columbia.

2. In early 1983 K.L. Daughtry & Associates Ltd. completed a thorough compilation of previous exploration done on the Bluebell ground and recommended 32 target areas for further work. The target areas were favourable locations for the occurrence of volcanogenic massive sulphide gold-copper deposits similar in setting to the Sylvester K gold discovery, located 6 km to the west of the Bluebell area.

3. During the 1983 field season detailed geological, geochemical and geophysical surveys evaluated 27 of the 32 target areas.

4. The property is underlain by Triassic sedimentary, volcanic and intrusive rocks. The sedimentary rocks form three successive depositional sequences represented by clastic, transition and carbonate zones. Zones of skarn occur within the transition and carbonate zones.

5. Mineralization is closely related to zones of skarn on or near volcanic breccia or microdiorite contacts. Massive sulphide type mineralization occurs along volcanic breccia/skarn contacts.

6. Compilation of 1983 field data outlined 17 target areas that warrant further work. Limited follow-up work in 1983 discovered a new massive sulphide occurrence in the valley of Rathmullen Creek.

7. Recommendations for the target areas are:

   (a) diamond drilling in the Jumbo, Emma, Mountain Rose and Rathmullen Creek areas;

   (b) trenching on the Ontario and Jeep 1 Fr, R. Bell, Chemical and Joiner Fr, Bluebell and April Fr areas;

   (c) re-examination of available data and core to assess remaining reserves at Oro Denoro and B.C. areas;

   (d) detailed surface surveys of Elmer and Elmer 2, Jeep 9 Fr, May, Rathmullen Skarn and George's Lineament areas;

Respectfully submitted

B.W. Kyba

K.L. Daughtry

LOCATION AND ACCESS

The property is in the Greenwood Mining Division of southern British Columbia and covers the bulk of what was previously known as the Summit Camp of the Boundary District (Figure 1). The claims are about 8 miles (11 km) east-northeast of the town of Greenwood and about 9 miles (15 km) north of the international boundary. Approximate geographic centre of the property is at 49° 08' N and 118°32' W.

Provincial Highway No. 3 passes through the property from north to south and a number of old mine roads, abandoned railway lines and logging roads provide easy access to most parts of the claims.

PHYSIOGRAPHY AND VEGETATION

The topography of the area is gently rolling with relief in the order of 800 feet (250 metres). Highway No. 3 follows the divide between the headwaters of Brown Creek (Wilgress Lake) and Fisherman Creek, which drains to the southeast. East and west of this divide, a series of knolls rise to 4,000 feet (1200 metres).

Timber and brush are thick in the creek valleys, in the wet drift-covered depressions, and to a lesser extent on north-facing slopes. The drier south-facing slopes are grass covered with scattered trees.

CLAIMS

The Bluebell Joint Venture covers an area of approximately 2500 acres (1000 hectares) comprised of 55 contiguous mineral claims (Figure 2).

A complete alphabetical list of claims, record numbers, expiry dates and ownership included in the Bluebell Joint Venture agreement follows.

LEGEND

R.N.	Record Number
TYPE	C Located claim
	L Crown-granted claim
	R Reverted Crown-granted claim
EXPIRY	Year/Month/Day
OWNER	Registered Owner
LOT	Survey number of Crown-granted claim

BLUEBELL CLAIMS

CLAIM NAME	R.N.	TYPE	UNITS	EXPIRY	OWNER	LOT
APRIL FR	15826	L	1	880917	NEW FRONTIER	
B.C.		C	1		SCOTT AE ESTAT	882
B.C. FR NO 2		C	1		NEW FRONTIER	464S
BC	2382	L	12	900813	KETTLE RIVER	
BLUE BELL		C	1		NEW FRONTIER	2136
BREYFOGLE FR	15819	L	1	880911	NEW FRONTIER	
CHEMICAL FR	15861	L	1	881002	NEW FRONTIER	
CLIMAX FR	3710	L	1	900420	KETTLE RIVER	
CORDICK		C	1		NEW FRONTIER	625
DAISY FR	2299	R	1	900626	DOCKSTEADER WE	948
DENORO FR	16937	L	1	880916	NEW FRONTIER	
DUPLICATE		C	1		NEW FRONTIER	863
ELMER NO 2	3044	R	1	870405	KETTLE RIVER	2334
ELMER NO 2 FR	3871	L	1	840830	KETTLE RIVER	
EMMA		C	1		NEW FRONTIER	591
ERWIN		C	1		NEW FRONTIER	1691
JEEP # 1 FR	19066	L	1	900516	NEW FRONTIER	
JEEP # 8 FR	19067	L	1	900516	NEW FRONTIER	
JEEP # 9 FR	19068	L	1	900516	NEW FRONTIER	
JEEP #10 FR	19069	L	1	900516	NEW FRONTIER	
JEEP #11 FR	19070	L	1	900516	NEW FRONTIER	
JEEP #12 FR	19071	L	1	900516	NEW FRONTIER	
JEEP #13 FR	19072	L	1	900516	NEW FRONTIER	
JEEP #15	19074	L	1	900516	NEW FRONTIER	
JEEP #16 FR	19075	L	1	900516	NEW FRONTIER	
JEEP #18 FR	19077	L	1	900516	NEW FRONTIER	
JOINER FR	15827	L	1	880917	NEW FRONTIER	
JUMBO		C	1		NEW FRONTIER	592
JUMBO FR	3045	R	1	870405	NEW FRONTIER	2401
LONDON NO 2 FR		C	1		DOCKSTEADER WE	465S
MAB #2	21419	L	1	900520	NEW FRONTIER	
MAB #3	21420	L	1	900520	NEW FRONTIER	
MAB #4	27005	L	1	870228	NEW FRONTIER	
MAB FR	20360	L	1	900716	NEW FRONTIER	
MARY B		C	1		NEW FRONTIER	1568
MATABELLE FR		C	1		KETTLE RIVER	2114
MAY		C	1		NEW FRONTIER	1409
MINNIE MOORE		C	1		NEW FRONTIER	593
MOUNTAIN ROSE		C	1		KETTLE RIVER	794
MOUNTAIN VIEW		C	1		SCOTT AE ESTAT	1533
NORTON FR		C	1		NEW FRONTIER	986
NOVELTY FR		C	1		NEW FRONTIER	949
ONTARIO FR	2519	L	1	921201	KETTLE RIVER	
ORO DENORO		C	1		NEW FRONTIER	692
R. BELL		C	1		NEW FRONTIER	1506
RATHMULLEN 1	3243	L	1	871007	KETTLE RIVER	
RATHMULLEN 2	3244	L	1	871007	KETTLE RIVER	
RATHMULLEN 4	3245	L	1	871007	KETTLE RIVER	
RATHMULLEN 5	3246	L	1	871007	KETTLE RIVER	
RATHMULLEN FR	3819	L	1	900718	KETTLE RIVER	
REMINGTON FR	15866	L	1	881009	NEW FRONTIER	
VASHTI		C	1		NEW FRONTIER	950
WAKE FR	3709	L	1	900420	KETTLE RIVER	
WILGRESS 1 FR	3711	L	1	900420	KETTLE RIVER	
WILGRESS 2 FR	3712	L	1	900420	KETTLE RIVER	

HISTORY OF EXPLORATION

The Summit Camp, along with the Deadwood and Phoenix Camps, was discovered in 1891 and shortly afterwards smelters were built at Greenwood, Grand Forks and Boundary Falls. Numerous mines were worked in the Boundary District over the next 30 years, but in 1922 all activity ceased.

The main producers in the Summit Camp were the Oro Denoro, Emma and the B.C. Mines. Minor production is also recorded for the Mountain Rose, Swallow, Blue Bell and R. Bell showings. Total production from the main properties was as follows:

Oro Denoro - 136,000 tons grading 1.37% Cu, 0.027 oz/ton Au and 0.225 oz/ton Ag
Emma - 254,000 tons grading 1.01% Cu, 0.026 oz/ton Au and 0.31 oz/ton Ag
B.C. Mine - 103,000 tons grading 4.36% Cu, 0.01 oz/ton Au and 2.07 oz/ton Ag

Apart from minor production by lessors, the Summit Camp was dormant from the 1920's until the 1950's. In the period 1951-3 Attwood Copper Mines Ltd. conducted regional exploration work through the Boundary District including parts of the current property. This work consisted of geological, magnetometer and biogeochemical surveys.

In 1955 Noranda Mines Ltd. began systematic exploration of the Summit Camp. This work continued through 1956 and included detailed geological mapping, geophysical surveys and 6,000 feet (1800 metres) of diamond drilling on the Oro Denoro.

In 1963-6, West Coast Resources Ltd. optioned the Oro Denoro and performed magnetometer and geological surveys as well as 10,000 feet (3000 metres) of diamond drilling. In 1967, Furukawa Mining Co. Ltd. optioned the Oro Denoro and

drilled 42 vertical diamond drill holes aggregating approximately 20,000 feet (6000 metres). In 1968, the property was returned to West Coast Resources Ltd. and about 400 feet (120 metres) of drifting was done to bulk sample the areas of best mineralization. In 1969 Dolmage, Campbell and Associates prepared a feasibility study on the Oro Denoro, based on all previous work. This study indicated the presence of about 1.5 million tons of open pit material grading 0.95% Cu, 0.02 oz/ton Au and 0.3 oz/ton Ag.

During 1969 and 1970, minor diamond drilling was performed on the Emma claim by West Coast Resources Ltd.

From 1974 to 1976, the Oro Denoro claims were optioned by Granby Mining Corporation. During this period an intensive programme of geological mapping, magnetometer, electromagnetic and induced polarization surveys, trenching and limited percussion drilling was carried out. Early in 1975 Granby began a test operation to prove an ore body estimated by previous work to contain about 1.1 million tons (1 million tonnes) grading slightly less than 1 per cent copper. The test advanced to the third bench and involved the removal of approximately 136,000 tons (135,000 tonnes) of bedrock. A small shipment of stockpiled ore was made to the Phoenix mill in 1976.

In 1979, New Frontier Petroleum optioned the Oro Denoro claims and performed some surface exploration work and sampling of the old workings.

In 1981, Kettle River Resources optioned the B.C. Mine and adjacent claims and dewatered the old workings to the 200-foot level.

In 1982, magnetometer, electromagnetic, geochemical soil sampling and limited trenching was performed by Kettle River on some of the other claims adjacent to the B.C. Mine.

In late 1982, Kettle River and New Frontier merged their respective claim blocks and began the intensive programme of exploration which is the subject of this report.

GEOLOGY

Introduction

Geological mapping of the Bluebell ground was carried out on a scale of 1 inch = 400 feet (Figure 3). The 400 foot base map was prepared from the topographic base map of 1 inch = 1000 feet used by Dr. J.T. Fyles (1982). Mapping was done over the rehabilitated 400 foot (122 metres) Granby grid, using altimeter and hip chain for location. Rock descriptions are based on field observations.

Regional Geology

Previous geological investigations have shown that the region contains three principal rock units. The oldest is the Paleozoic Knob Hill Group overlain unconformably by the Brooklyn Formation. The Brooklyn Formation is a thick succession of Triassic sedimentary rocks interlayered with volcanic rocks and intruded by co-eval intrusive rocks. These rocks are intruded by many dykes and irregular bodies of post-Triassic diorite and granodiorite. Tertiary sedimentary rocks of the Kettle River Formation unconformably overlie the older rocks. Feldspar porphyry, feldspar biotite syenite and basalt dykes are the youngest rocks in the area.

Property Geology

Sedimentary Rocks

The oldest rocks in the region (Knob Hill Group) are not present in the Bluebell project area.

Rocks of the Triassic Brooklyn Formation predominate within the property area and form a sedimentary/volcanic sequence over 9400 feet (2900 metres) thick.

The sedimentary rocks form three successive sequences of clastic, through transition, to carbonate deposition. The sequences and depositional zones are:

	Depositional Zone	Map Unit	Rock Type
3)	upper carbonate zone	7	massive limestone
	upper transition zone	7a	limestone breccia
		7c	calcareous chert pebble conglomerate
		7b	argillaceous limestone
		6	banded arillaceous limestone
		6a	limestone breccia
		5a	argillite
	upper clastic zone	5b	volcanic chert/limestone breccia
		5c	chert sandstone, chert breccia
2)	middle carbonate zone	4a	limestone
	middle transition zone	4b	limestone breccia
		4d	calcareous chert pebble conglomerate
		4e	argillite
		4g	black limestone
		4f	argillaceous limestone
	middle clastic zone	4c	chert sandstone and chert breccia
1)	lower carbonate zone	3	massive limestone
		3a	limestone breccia
	lower transition zone	2a	limestone breccia
		2b	massive white limestone
		2d	calcareous chert pebble oonglomerate
		2c	argillaceous limestone
		2e	limy argillite
	lower clastic zone	1	chert breccia

Fyles (1982) refers to these rocks as a part of the Cyclops Basin.

Chert breccia (map unit 1) forms the lower clastic zone. It is a distinct light grey-green rock containing up to 60% light grey angular chert fragments, 1 to 2 inches across (25 to 50 mm). The unit is restricted to the westernmost edge of the map area and grades upward and is interbedded with map unit 2.

Map unit 2 forms the lower transition zone and is comprised of five distinct lithologies. The lithologies describe the transition from the high energy environment of chert breccia deposition to the quiescent platform environment and limestone deposition. Within the unit itself, the transition from the lower clastic members (2c,2e) to the upper calcareous members (2a,b) is marked by member 2d, the distinct calcareous chert pebble conglomerate. This conglomerate is a mappable unit for over 2000 feet (610 metres) and extends from outcrops west of the Minnie Moore to outcrops west of the Jumbo Mine. South of the Jumbo area the conglomerate grades rapidly into limy argillite (2e) which, still further south and east of the Emma Mine grades back into conglomerate. Total thickness of map unit 2 is estimated at 1400 feet (425 metres).

Generally, the contact from limestone of map unit 2b to limestone of map unit 3 is gradational but locally may be sharp and marked by the occurrence of limestone breccia (2a). The breccia consists of 60% to 80% white angular limestone fragments (up to 4 inches (100 mm) across) randomly orientated in a fine grained dark green matrix. Map unit 3 forms the lower carbonate zone and is typical Brooklyn Formation-type limestone. It is a white, massive, coarse crystalline limestone which forms large cliffs west of Highway 3 south of Wilgress Lake. Similar limestone, and included in map unit 3, crops out east of Highway 3 in the Bluebell Mine area and over large areas north and south of Bluebell Mine. The limestone of unit 3 has an approximate thickness of 2000 feet (610 metres).

Three thousand feet (915 metres) south of the Bluebell Mine the massive limestone appears to be abruptly cut off and is unconformably overlain by chert breccia and sandstone of the middle clastic zone (unit 4c). Elsewhere, the contact between map unit 3 and 4 is poorly exposed or interrupted by intrusive rocks.

Map unit 4 is defined by seven lithologically distinct members; contacts between them are generally gradational both laterally and stratigraphically. Chert breccia and sandstone (unit 4c) is basal to the unit and forms the middle clastic zone. Chert sandstone displays well developed graded beds that indicate tops to the east. The sandstone grades upward into the middle transition zone of interbedded argillite (4e), argillaceous limestone (4f), black limestone (4g) and calcareous chert pebble conglomerate (4d). The zone outcrops in a belt 200 feet (60 metres) wide and over 1000 feet (305 metres) long west of 15W baseline. Contacts to the overlying limestone (4a) are generally sharp. Locally the contacts are marked by thin beds of calcareous chert pebble conglomerate (4d) and in one area the conglomerate appears to fill a depression in the surface of the underlying argillaceous limestone (4f). This limestone (4a) forms the middle carbonate zone and is only poorly exposed east of 15W baseline.

The exposed lower section of map unit 4a includes a limestone breccia (4b) unit. The upper section of the limestone and its contact with map unit 5 is covered in the wide drift-filled basin between 15W baseline and 00 baseline.

Map unit 5, upper chert sandstone, is comprised of four lithological members. Members 5c and 5b form the upper clastic zone and 5a is part of the upper transition zone. Member 5c, basal chert breccia, varies in composition from chert breccia with 30% to 40% angular chert fragments to dark green, fine to

coarse grained chert sandstone. This member is well exposed in numerous outcrops in the area southwest of the B.C. Mine. Contacts with the overlying(?) volcanic chert breccia/limestone breccia member (5b) were not observed. The volcanic chert breccia contains 2% to 60% angular to subrounded chert and quartz fragments and pebbles up to 1/2 inch (13 mm) across set in a dark green, feldspar lath-rich matrix. The fragments change from predominantly chert in the B.C. Mine area to predominantly limestone, 800 feet (240 metres) to the south. Contacts to overlying argillite (5a) are sharp. Deposition of the argillite marks the beginning of the upper transition zone. Due to the extensive cover in the area, the total thickness of unit 5 was not measured. The section that is exposed suggests a minimum thickness of 600 feet (180 metres).

Overlying the argillite (member 5a) is banded argillaceous limestone of map unit 6. Locally limestone (breccia member 6a) occurs along the limestone-argillite contact and contains ripped up fragments of argillite. The argillaceous limestone, is bounded on the east by volcanic and intrusive rocks, and forms a narrow belt extending for over 4600 feet (1400 metres) from the B.C. Mine to the R. Bell Mine.

Map unit 7 is comprised of 4 lithological members. Members 7b and 7c form part of the upper transition zone. Argillaceous limestone (7b) is locally separated from the upper massive white limestone (7) by a narrow (10-15 feet, 3-4.5 metres) bed of calcareous chert pebble conglomerate (7c). The massive white limestone (7) forms the upper carbonate zone. A minimum thickness of 2000 feet (610 metres) is estimated for map unit 7 (including 7a,7b,7c).

The only other sedimentary rocks in the project area belong to the Tertiary Kettle River Formation (unit 14). Map unit 14 is a moderately well consolidated,

light brown arkosic conglomerate, containing 60% to 80% pebbles and boulders of quartz, granodiorite and greenstone. The unit occurs in a narrow belt on the ridge south of Rathmullen Creek.

Volcano-Sedimentary Rocks

Map unit 9 is comprised of 2 lithological members. Member 9a, volcanic sandstone, is most typically a dark green fine-grained rock with rounded clear and white quartz grains and ghosty light grey feldspar laths. Member 9b, mixed volcanic breccia, varies from massive greenstone to a well developed volcanic breccia that contains up to 40% angular greenstone and dark grey feldspar porphyry fragments.

One thin section of volcanic breccia from Rathmullen trench 3 showed 60% interlocking and individual quart crystals and grains, 40% euhedral feldspar laths (twinning common) and trace apatite(?) in a very fine grained quartz and carbonate matrix. Fragments of feldspar porphyry with rounded twinned feldspar laths in very fine grained quartz matrix are common in the section. Late carbonate veinlets cut the breccia.

Volcanic sandstone (9a) 3000 feet (900 metres) south of the Bluebell Mine is interfingered with and gradational to well-bedded chert sandstone and breccia (4c). In the area west of the Maple Leaf Mine volcanic sandstone encloses lenticular pods of massive white limestone (7). Over a large area north of the R. Bell Mine volcanic sandstone is completely gradational to volcanic breccia (9b).

Mixed volcanic breccia (9b) occurs as moderately thick flows(?) near the Emma and Bluebell Mines and in the area east of 15W baseline south of the

Mountain View showing. It forms thick volcano-sedimentary piles north of the R. Bell Mine and in the valley of Rathmullen Creek. Its distribution is closely related to that of microdiorite (map unit 10) and in the area north of the R. Bell Mine contacts between the two are gradational.

Eruption and deposition of the unit occurred intermittently through time of deposition of Triassic sedimentary rocks.

Intrusive Rocks

Map unit 10 is comprised of three gradational phases of microdiorite and two breccias. Feldspar microdiorite (10c) and feldspar hornblende microdiorite (10d), the most widespread members, are both typically dark green very fine to fine grained rocks. Hornblende granodiorite (10e) occurs only locally as a gradational phase of the microdiorite stock located on the knoll north of the Mountain View. Feldspar microdiorite breccia (10b) is composed of 80% angular microdiorite fragments in a dark green very fine grained matrix. It outcrops along the margin of the microdiorite stock north of the Mountain View workings and also forms a pipe-like(?) body in the south east corner of the property. Brecciated microdiorite (10a) is a light green to grey rock composed of 90% jumbled angular microdiorite fragments in a light green gouge matrix. It outcrops in a 500 foot (150 metres) wide zone on the ridge between the B.C. Mine and Rathmullen Creek and is the surface expression of the B.C. Fault (Little 1983).

Microdiorite (10c,10d) forms large irregular-shaped bodies and smaller dykes throughout the property. In the area north of the Mountain View it occurs as a small stock with a well developed chill margin and a marginal intrusion breccia.

In the eastern half of the property massive microdiorite is gradational to large piles of volcanic breccia although in one area a dyke of microdiorite cuts volcanic breccia.

The microdiorite appears to be the intrusive equivalent of greenstone (9) and therefore of a middle to late Triassic age. Little (1983) suggests a Jurassic age for the volcanic-intrusive sequence based on a correlation with the Rossland volcanics.

Map unit 11 is dark green, medium to coarse grained, hornblende feldspar diorite with hornblende phenocrysts up to 1/2 inch (13 mm) long. The rock is fresh looking with minor pyrite on blocky fractures. It occurs as two large dyke-like bodies that locally include fragments of the surrounding country rock. It outcrops in the area near the southern boundary of the property. Its fresh appearance and intrusive relation to Triassic rocks indicates a post-Triassic age.

Map unit 12 is dark grey, medium to coarse grained, feldspar hornblende diorite. It forms the western wall of the Emma deposit and is known as the Emma intrusion. It has an irregular gradational contact to granodiorite of map unit 13 and Church (1983) considers it a porphyritic offshoot of the granodiorite.

Map unit 13 is light grey, coarse grained, biotite granodiorite. It forms an irregular intrusive mass south and west of the Emma Mine and is known as the Lion Creek intrusion. Church (1983) has determined a Cretaceous age of 140 Ma based K/Ar analysis of biotite from the granodiorite.

Map unit 15 is comprised of pink feldspar porphyry (15a), pink feldspar biotite syenite (15b) and basalt (15c). Members 15a and 15b are widely distributed over the property and occur as numerous dykes and large irregular

masses. They are correlated with the Coryell intrusions of mid-Eocence age. Later basalt dykes (15c) are rare and are mapped only on the large bluffs west of highway 3, south of Wilgress Lake.

Structure

Within the mapped area, the Brooklyn Formation forms a relatively uniform series of north-northeast trending beds dipping moderately to steeply to the east. Well developed graded bedding exposed at several localities throughout the project area indicate tops to the east.

A major northwest trending fault zone up to 500 feet (150 metres) wide brecciates microdiorite (10A) north on the B.C. Mine and has been named the B.C. Fault by Little (1983). Across the property several minor faults parallel the northwest trend. Minor north and northeast trending faults have also been mapped on the property.

Skarn and Mineralized Zones

In the project area, skarn occurs within the transition and carbonate zones within the Brooklyn Formation. These zones are repeated in three successive depositional sequences and hence rocks favourable for hosting skarn occur at different stratigraphic levels but within transition and carbonate zones across the entire project area.

Mineralization is closely related to zones of skarn on or near volcanic breccia or microdiorite contacts. Sulphides usually occur as disseminations, blebs and stringers within skarn and, rarely, as massive sulphide bodies on volcanic breccia/skarn contacts.

The Emma deposit occurs within the lower part of the lower transition zone (map unit 2). The deposit was mined from a single body of massive magnetite and chalcopyrite over 600 feet (180 metres) long and enclosed in garnetite skarn. The Cretaceous Lion Creek intrusion occurs along the western contact of the deposit. Triassic volcanic agglomerate lies above the deposit but is separated from it by limy argillite. Although the Cretaceous intrusions had a prominent role in the final development of the deposit the stratigraphic position and conformable nature of the deposit suggests the existence of a pre-intrusive mineral deposit of possible volcanogenic origin (Fyles 1982, Peatfield 1978).

Within the same transition zone but above the Emma and separated from it by volcanic agglomerate (9b) and calcareous chert pebble conglomerate (2d) is a wide zone of calc-silicate skarn that hosts the Minnie Moore, Jumbo and Swallow mines and may even be extended to include the Oro Denoro deposit. The zone contains several untested copper and zinc occurrences.

The lower section of the lower carbonate zone (map unit 3) hosts a poorly exposed northeast trending belt of irregular small pods of skarn along a microdiorite (10d) contact. The skarn hosts the Mountain Rose and Breyfogle deposits and several small copper prospects. East of the Mountain Rose, the limestone is interlayered with volcanic breccia (9b) and volcanic sandstone (9a). A narrow zone of skarn occurs along the western volcanic/limestone contact and hosts the Bluebell Mine deposit and several small showings south of the mine. The Mountain View deposit occurs in a small isolated skarn pod located near the top of the lower carbonate zone and on the microdiorite (10d) contact.

Neither skarn zones, mineral occurrences nor volcanic rocks (unit 9b) occur in the middle transition zone.

Only the lower section of the middle carbonate zone (unit 4a) is exposed but includes, in ascending order, calcareous chert pebble conglomerate (4d), mixed volcanic breccia/sandstone (9a 9b), limestone breccia (4b) and skarn (8a,8d). The zone of skarn is over 700 feet (200 metres) long and includes showings of chalcopyrite, pyrite and pyrrhotite. Only limited exploration has been carried out on this skarn zone.

The upper transition zone is intruded by microdiorite (10d) and interlayered with a thick pile of volcanic breccia and sandstone (9b,9a). Skarn is developed along the western and eastern margins of the volcanic unit. The western zone is comprised of numerous irregular and pod-like bodies of skarn that host the B.C., Cordick and R. Bell mines and several smaller chalcopyrite, pyrite and magnetite showings. The favourable limestone/volcanic contact is over 4600 feet (1400 metres) long and open to the north and south. The eastern zone is comprised of a calc-silicate skarn mappable along strike for over 800 feet (240 metres). No mineralization has been discovered in this area.

The upper carbonate zone is comprised of limestone of map unit 7. The limestone has been intruded by large masses of microdiorite (10d,10c) with associated extrusive volcanic breccia (9b) and volcanic sandstone (9a). A zone of calc-silicate skarn forms a northeast trending belt over 3600 feet (1100 metres) long that lies near or on the volcanic-intrusive/limestone contact. Limestone breccia locally flanks the calc-silicate zone. The skarn hosts the old Rathmullen showings and several chalcopyrite, sphalerite, pyrite and magnetite/pyrrhotite occurrences.

A less well defined zone of skarn and limestone breccia was discovered within the upper carbonate zone in the valley of Rathmullen Creek in 1983. The

zone occurs on the volcanic breccia/limestone contact and includes bodies of massive sphalerite, pyrrhotite and pyrite. The mineralization displays rotated angular massive sulphide fragments in massive sulphide matrix.

Another poorly defined zone of skarn and mineralization occurs in the upper carbonate zone in the area of the Maple Leaf showing. In this area an irregular zone of calc-silicate skarn is completely(?) enveloped in microdiorite (10d) and volcanic sandstone (9a). The volcanic sandstone includes pods of white massive limestone (unit 7).

Other Mineralized Zones

Small showings of chalcopyrite, pyrite and magnetite occur in microdiorite breccia (10b) that forms a pipe-like(?) body in the southeast corner of the property. Other small showings of chalcopyrite, pyrite and pyrrhotite occur in the generally massive microdiorite (10d,10c) throughout the project area.

An epithermal quartz breccia zone occurs west on the Jumbo mine. In this area the older limestone (2a) is brecciated and invaded by epithermal(?) chalcedonic vuggy quartz and mineralized with very fine grained disseminated pyrite. The quartz-limestone breccia occurs in an oval shaped zone 300 feet (90 metres) long and 150 feet (45 metres) wide. One sample of the breccia (5091) was geochemically analysed and returned 20 ppb Au, 217 ppm Zn, 24 ppm Cu, and 1.1 ppm Ag.

GEOCHEMICAL SURVEY

Soil Geochemistry

Operations

A total of 3447 soil samples were collected at 50 foot (15 metres) intervals along 49 miles (80 km) of picketed grid lines spaced 200 feet (60 metres) and 400 feet (120 metres) apart. Samples were collected from the B or C horizons at depths ranging from 3 to 14 inches (75 to 350 mm). Average depth was 8 inches (200 mm). Material collected varied from grey clay to brown silt and sand. The area is one of moderate relief with gentle to steep slopes between broad ridges and wide drainage basins.

Samples were collected in numbered Kraft paper bags and shipped to Kamloops Research and Assay Laboratory, Kamloops, B.C. for geochemical analysis. All samples were analysed for gold, silver, copper and zinc. Thirty gram samples of the -80 mesh fraction were analysed for gold by the fire assay/atomic absorption method using aqua regia solution. Silver, copper and zinc analyses of the -80 mesh fraction were by the hot acid extraction/atomic absorption method.

A statistical analysis of the analytical results (Figures 4a,b,c,d) permitted an anomalous classification as follows:

Gold in Soils	0 - 10 ppb	background
	15 - 30 ppb	weakly anomalous
	35 - 65 ppb	anomalous
	70+ ppb	strongly anomalous
Silver in Soils	0 - 0.9 ppm	background
	1.0 - 1.4 ppm	weakly anomalous
	1.5 - 3.0 ppm	anomalous
	3.0+ ppm	strongly anomalous

Copper in Soils	0 - 42 ppm	background
	43 - 80 ppm	weakly anomalous
	81 - 160 ppm	anomalous
	160+ ppm	strongly anomalous
Zinc in Soils	0 - 147 ppm	background
	148 - 200 ppm	weakly anomalous
	201 - 430 ppm	anomalous
	430+ ppm	strongly anomalous

APPENDIX A of this report contains a numerical list of all geochemical results.

Sample number locations are plotted on Figure 9. Copper, zinc, silver and gold results are plotted on figures 5a, 6a, 7a and 8a respectively. Contoured anomaly maps of copper, zinc, silver and gold are presented in figures 5b, 6b, 7b and 8b respectively.

Discussion of Results

Soil geochemistry proved to be an excellent exploration tool in the Bluebell project area. In the 1983 field season, the geochemical survey:

1) combined with geophysics and geology to discover a new, buried massive sulphide zinc-silver occurrence in the valley of Rathmullen Creek;

2) outlined, and in some cases enlarged, the area of known showings; and

3) targeted new areas that warrant further exploration

A priority rated list of targets is presented in the final chapter of this report.

Rock Geochemistry

Operations

A total of 220 rock chip samples were collected from the project area. Of the total, 93 were collected during property mapping and 127 were collected during trenching operations.

Geochemical analyses for copper, zinc, silver and gold were carried out on 142 rock samples by Kamloops Research and Assay Laboratory, Kamloops, B.C. Seventy-five rock samples were submitted for gold assay, seventy seven for silver assay, twenty six for zinc assay, and thirty for copper assay.

A numerical list of all results is included in APPENDIX A of this report. Sample number locations with rock type and results are presented in Figure 10.

Discussion of Results

The following table presents the breakdown of rock sampling by map unit or rock type.

Rock type/deposition zone	Number of Samples
massive sulphide	28
mineralized quartz vein	1
skarn (map unit 8)	33
microdiorite (10) and greenstone (9)	85
microdiorite (12)	1
clastic zone	1
transition zone	28
carbonate zone	29
feldspar porphyry (15a,b)	14

This breakdown and compilation of analytical results suggests the following relationships between rock type/depositional zone and metal concentration:

Gold: Highest gold values came from samples of massive sulphide collected from the dumps of the Emma (0.184 oz/ton, 0.150 oz/ton) and Maple Leaf workings

(0.108 oz/ton).

Gold values in skarn were low. Weakly anomalous amounts occurred in samples collected from the dumps on the Minnie Moore and Breyfogle showings.

Microdiorite and associated volcanic breccia contain 5 to 7 times normal gold background listed for intermediate and basic rocks (Boyle, 1979). This high background level was the probable source of the gold soil anomaly explored by Rathmullen trenches 1 through 4.

Rock samples collected from the transition zones showed weakly anomalous gold values in the lower and upper transition zones, but only trace amounts in the middle transition zone. Rock samples collected from the carbonate zones showed anomalous gold concentrations in limestone breccia, but only trace amounts in massive limestone.

Fourteen samples collected from feldspar porphyry dykes indicate that a weak gold concentration occasionally occurs along dyke margins.

Zinc: Highest zinc values came from massive sulphide samples collected in the Rathmullen Creek trenches (up to 29.9% zinc). Massive sulphide samples from other areas were conspicuously low in zinc.

Zinc occurs in anomalous amounts in a belt of garnet skarn north of the Jumbo Mine. Elsewhere, anomalous concentrations occur at the Breyfogle Mine and in the calc-silicate skarn zone 2000 feet (610 metres) south of the Bluebell Mine.

In microdiorite and volcanic breccia zinc is only moderately anomalous in small isolated showings.

In the transition zones zinc occurs in low background amounts.

A high zinc background appears to be present in the carbonate zones. Limestone breccias of the upper carbonate zone contain an average of 400 ppm zinc.

Samples of feldspar porphyry dyke contained an average of 92 ppm zinc.

Copper: Highest copper values came from massive sulphide samples collected from a dump near the northernmost working on the Emma Mine (8.76% copper). Other assays of over 1% copper came from samples collected from the dumps of the Maple Leaf and Cordick showings. The average copper content from the massive sulphides sampled in the Rathmullen Creek trenches was 0.16%.

Chalcopyrite in skarn is the most common type of mineralization in the property area. Assays of greater than 2% copper were returned from samples collected in the area north of the old Rathmullen showing, the area south of the B.C. Mine, and the dumps of the Breyfogle, the Jumbo and Minnie Moore showings.

Generally, microdiorite and volcanic breccia contained low background values in copper. Isolated anomalous concentrations occur in the microdiorite and one sample of volcanic breccia collected from the Rathmullen trenches assayed 0.71% copper.

The lower and upper transition zones contain a background of 165 ppm copper, two and one-half times the background of the middle transition zone. Anomalous concentrations occur in limestone breccia of the upper transition zone. Anomalous copper concentrations occur in middle carbonate zone and in limestone breccia of the upper carbonate zone. One sample of limestone breccia from an area of poor exposure southeast of the B.C. Mine assayed 2.56% copper.

Pink feldspar porphyry dykes contained an average of 28 ppm copper.

Silver: Highest silver assays were returned from massive sulphide samples collected from the dumps of the Maple Leaf showing (6.0 oz/ton and 7.64 oz/ton). Assays of over 1 oz/ton silver were contained in samples collected from the Emma Mine area. Samples of massive sulphide from the Rathmullen trenches were generally low in silver (less than 0.6 oz/ton).

Assays of over 1 oz/ton silver in skarn occurred in samples from the area north the old Rathmullen showing and in samples from the dumps of the Breyfogle and Minnie Moore showings. The skarn zone that includes the Jumbo and Minnie Moore showings contains several samples of silver in the 0.25 oz/ton range. A high silver background occurs in the skarn zone that extends from the B.C. Mine through the Cordick showings.

Generally, microdiorite and volcanic breccia contain 1 to 5 ppm silver. In the Rathmullen trenches isolated assays of volcanic breccia ranged from 0.41 oz/ton silver to 1.64 oz/ton silver.

Rock samples from the transition zones contained only trace amounts of silver. A high silver background occurs in the carbonate zones. Anomalous concentrations occur in limestone at the Mountain View showings and in limestone breccia in the Rathmullen trenches.

Felspar porphyry dykes contain less than 2 ppm silver.

GEOPHYSICAL SURVEYS

Operations

Three types of survey were utilized over the Bluebell project area. Nielsen Geophysics Ltd. of Vernon, B.C. was contracted to perform the work. Very low frequency electromagnetic (VLF-EM), ground magnetometer (MAG) and self-potential (SP) surveys were carried out in selected areas on 200 feet (60 metres) and 400 feet (120 metres) picketed grid lines. Stations were initially spaced at 50 foot (15 metre) intervals and reduced to 25 foot (8 metre) intervals in areas of follow-up work.

Areas of survey coverage and results are presented in map form. Axes of VLF-EM conductors are plotted on Figure 11. A contoured magnetic map is presented in Figure 12 and outlines of SP anomalies are presented in Figure 13.

Discussion of Results

The geophysical surveys were well suited for exploration on the Bluebell project. The VLF-EM survey proved the most useful and combined with soil geochemistry and geology discovered a completely hidden new massive sulphide occurrence in valley of Rathmullen Creek.

A priority rated list of targets is presented in the final chapter of this report.

TRENCHING AND DRILLING

Rathmullen Creek Area:

Summary: Results of detailed soil sampling, geological mapping and VLF-EM and MAG surveys carried out early in the 1983 field season defined several areas in the valley of Rathmullen Creek that warranted further exploration. Kettle River Resources Ltd.'s Koering 666 excavator was moved onto the property July 20, 1983. A program of trenching and road building commenced July 21, 1983 and was terminated on August 14, 1983.

A total of 10 trenches was completed and have a combined length of 1030 feet (314 metres) and involved building 2280 feet (695 metres) of access road. Total machine time was 110 hours.

A detail plan (1"=30') of the trenched area with tables of analytical results is presented in Figure 3a.

Four short x-ray diamond drill holes, maximum length 50 feet (15 metres) were drilled in Rathmullen trench 9. The results of this drilling are tabulated in Figure 3a. Drill logs are presented in APPENDIX B.

Results: Rathmullen trenches 1 through 5 failed to encounter significant mineralization. The soil geochemical gold anomaly in the area is attributed to a relatively high background gold content in the igneous and volcanic rocks.

Rathmullen trenches 6 through 10 outlined an irregular zone of massive sulphide mineralization 350 feet (105 metres) long and 10 to 15 feet (3 to 4.5 metres) wide.

The zone appears to be made up of subparallel, locally discontinuous lenses and pods up to 30 feet (9 metres) long and 10 feet (3 metres) wide. It appears to pinch out at the south end (in trench 6) and to be faulted off at the north end (between trench 9 and 10).

One-foot (0.3 metre) samples of the sulphide zone in trench 6 ran 0.03% to 0.41% zinc, 0.05% to 0.06% copper, 0.13 oz/ton to 0.51 oz/ton silver and 0.001 to 0.002 oz/ton gold. In trench 7 an 8-foot (2.4 metre) sample of the zone ran 9.8% zinc, 0.19% copper, 0.16 oz/ton silver and 0.002 oz/ton gold. A 4-foot (1.2 metre) sample of massive sulphide from trench 9 ran 22.0% zinc, 0.21% copper, 0.17 oz/ton silver and 0.006 oz/ton gold. Ten feet (3 metres) to the northeast a 6-foot (1.8 metre) sample of the zone ran 12% zinc, 0.18% copper, 0.15 oz/ton silver and 0.002 oz/ton gold.

Volcanic tuff and limestone breccia exposed in trenches 6 and 7 show locally anomalous concentrations of silver. From trench 6, a 5-foot (1.5 metre) sample of limestone breccia ran 4.45 oz/ton silver and 0.009 oz/ton gold. A 5-foot (1.5 metre) sample of volcanic tuff from the same trench assayed 0.41 oz/ton silver and 0.005 oz/ton gold. A 10-foot (3 metre) sample of volcanic tuff from trench 7 ran 1.64 oz/ton silver, 0.71% copper, 0.11% zinc and 0.003 oz/ton gold.

The drilling in trench 9 intersected a maximum thickness of 4.5 feet (1.4 metres) of massive sulphide mineralization. Sample 13298 of massive pyrrhotite, pyrite and sphalerite assayed 13.4% zinc, 0.15 oz/ton silver, 0.10% copper and less than 0.001 oz/ton gold over 4.5 feet (1.4 metres).

Conclusions: A new massive sulphide occurrence was found on the favourable contact between volcanic breccia and limestone breccia. The massive sulphide zone discovered by trenching has not been fully explored. Copper and zinc soil anomalies extend south westerly from the trenched area and along the projected strike of the mineralization for a distance of over 400 feet (120 metres). A large zinc anomaly and co-incident VLF-EM conductor extend northeasterly from the trenched area and along strike for a distance of over 800 feet (245 metres).

Wilgress Lake Area

Summary: Several very old prospect pits in rusty faulted microdiorite are located along the abandoned rail grade southeast of Wilgress Lake. One machine hour was used to open up the old workings.

A detailed plan of the area with tabulated analytical results and location map are presented in Figure 3b.

Results: A wide northwest trending fault zone brecciates Triassic(?) microdiorite and middle Eocene feldspar porphyry dykes in the trenched area. Two samples of microdiorite and one of feldspar porphyry showed only background values in copper, zinc, silver and gold.

Conclusions: The fault may be part of the B.C. Fault zone, a large northwest trending structure mapped on the ridge between the B.C. Mine and Rathmullen Creek. The fault is younger than mid-Eocene age. No significant mineralization is associated with the fault in this area.

Mountain View Area

Summary: Compilation and interpretation of results of the detailed geophysical surveys, geological mapping and soil sampling delineated an area south of the Mountain View showings for further exploration.

Kettle River Resources Ltd.'s excavator was moved into the target area on August 15, 1983. A programme of trenching and road building commenced on August 16, 1983 and terminated on August 18, 1983.

Two trenches (1MV,2MV) were completed and have a combined length of 300 feet (90 metres) and involved building 1400 feet (427 metres) of access road. Total machine time was 27 hours.

A detailed plan (1"=40') of the trenched area with tables of analytical results is presented in Figure 3c.

Results: Trenches 1 and 2 MV failed to encounter any significant mineralization.

Conclusions: Black graphitic limestone and pyritic sediments were the probable cause of the geophysical anomalies.

Area South of the Bluebell Mine

Summary: Compilation and interpretation of results of detailed geological mapping, geophysical surveys and soil sampling delineated an area south of the Bluebell Mine for further exploration.

Kettle River Resources Ltd.'s excavator was moved into the target area and completed trenches 1 and 2 BB on August 19, 1983. Total machine time was 6.5 hours.

The two trenches have a combined length of 170 feet (52 metres). No road building was required to gain access to the area.

A detailed plan (1"=40') of the trenched area with tabulated analytical results is presented in Figure 3d.

Results: Trenches 1BB and 2BB exposed fractured and faulted pyritic volcanic breccia. The volcanic breccia is cut by a pyritic pink syenite dyke(?) at the west end of 1BB. The volcanic breccia is weakly anomalous in gold and the syenite is weakly anomalous in copper. Massive pyrite and pyrrhotite boulders were found in the overlying till but not in outcrop in the trenches.

Conclusions: The belt of volcanic breccia that forms the hanging wall of the Bluebell deposit is mineralized 600 feet (180 metres) to the south and is exposed in the Bluebell trenches. The favourable volcanic/breccia limestone contact was not exposed in the trenches but may be within 50 feet (15 metres) of the west end of trench 1BB. The massive sulphide boulders found in the glacial till suggests a source to the north which may be a buried massive sulphide deposit along the volcanic breccia/limestone contact.

TARGET AREAS AND RECOMMENDATIONS

Results of the 1983 field exploration program have defined four targets for diamond drilling, five targets for trenching, five targets for detailed ground surveys and three targets for further exploration.

The target areas recommended for diamond drilling are rated as highest priority, those for trenching as high priority and those for additional ground surveys as priority target areas.

The target areas are located on Figure 14. Descriptions of the target areas are contained in the following pages.

Highest Priorty Areas:

JUMBO

Geology: An 800 foot (250 m) wide by 3600 foot (1100 m) long skarn belt includes the Swallow, Jumbo, and Minnie Moore deposits and an area of highest priority. The skarn occurs within the lower transition zone.

Geochemistry: A strong zinc anomaly (>430 ppm) is coincident over the skarn belt and encloses copper and silver anomalies in the area of highest priority.

Geophysics: No geophysics was done in the area in 1983. Previous surveys defined a strong north-south EM anomaly through the area.

Recommendations: In the highest priority area, diamond drilling is recommended, to test for zinc, copper and silver massive sulphide mineralization. Over the remaining area of skarn detailed geophysics and rock chip sampling is recommended to define additional drill targets. Geological mapping and soil sampling is warranted along the northeastern projection of the skarn belt.

EMMA

Geology: Two types of massive sulphide mineralization occur in garnetite skarn at the Emma Mine. Massive magnetite with chalcopyrite and trace gold (0.002 to 0.03 oz/ton) predominates in the old stopes. Massive pyrite with chalcopyrite occurs at the north end of the mine workings and contains significant gold values (0.150 to 0.184 oz/ton). The distribution of the two types of mineralization suggests a zoning in the Emma area and may indicate the presence of a zone of copper gold mineralization north of the old mine. This is an area of highest priority.

Geochemistry: Rock sampling of massive pyrite with chalcopyrite returned assays of 8.76% Cu, 0.10% Zn, 1.46 oz/ton Ag, and 0.184 oz/ton Au.

Geophysics: No geophysics was done in the area in 1983.

Recommendations: In the highest priority area diamond drilling is recommended to test for gold copper massive sulphide mineralization. In the Emma Mine area a re-examination of mining records is recommended to assess remaining reserves of copper ore. Detailed geological mapping, geophysics and soil sampling are warranted north of the area of highest priority to explore for a continuation of the mineralized zone.

MOUNTAIN ROSE

Geology: Well developed skarn pods and lenses occur in a belt 300 feet (100 m) wide and 3200 feet (1000 m) long along the microdiorite and limestone contact. Massive pyrite and pyrrhotite with chalcopyrite is common on the dumps of the Mountain Rose and Breyfogle deposits. The northeastern end of the area is covered by the swamp south of Wilgress Lake.

Geochemistry: The area is defined by the alignment of high copper soil anomalies. Two areas of highest priority are defined by the coincidence of copper, gold, zinc and silver soil anomalies within the skarn belt.

Geophysics: A strong north-south VLF-EM anomaly is subparallel to the belt east of highway 3. No surveys were done west of the highway in 1983.

Recommendations: In the two highest priorty areas diamond drilling is recommended to test for gold, copper, zinc and silver massive sulphide mineralization. Geophysics, soil sampling and geological mapping are warranted along the southwest and northeast projections of the belt to define additional drill targets.

RATHMULLEN CREEK

Geology: Zinc with silver massive sulphide type mineralization was discovered by trenching in 1983. The mineralization occurs on a volcanic breccia/limestone breccia contact within the upper carbonate zone. The extent of mineralization was not fully explored during 1983 and the area remains one of highest priority.

Geochemistry: A strong, linear zinc soil anomaly with coincident copper soil anomalies define a zone 30 feet (10 m) wide and 2600 feet (800 m) long along the course of Rathmullen Creek. The geochem anomaly extends southwest and northeast of the new showings.

Geophysics: A strong VLF-EM anomaly extends from the showing area in a northeasterly direction. A large magnetic low is present southwest of the showings.

Recommendations: Diamond drilling or trenching is recommended on the geochemical and geophysical anomalies extending northeast and southwest of the showings discovered in 1983.

High Priority Areas:

ORO DENORO

Geology: Massive garnetite skarn occurs along a granodiorite contact. Total production (from 1903) is 136,447 tons grading 1.37% Cu, 0.027 oz/ton Au, and 0.225 oz/ton Ag.

Geochemistry: No work done in area in 1983.

Geophysics: No work done in area in 1983

Recommendations: Re-examination of mine records and drill logs is recommended to estimate remaining reserves.

B.C. MINE

Geology: Skarn with massive pyrite and chalcopyrite occurs along the upper transition zone limestone/volcanic breccia contact.

Geochemistry: No work done in area in 1983.

Geophysics: No work done in area in 1983.

Recommendations: Re-examination of available data to evaluate remaining reserves.

ONTARIO AND JEEP 1 FR

Geology: Light green calc-silicate skarn occurs along the footwall and hanging wall contacts of volcanic breccia in the upper transition zone. The skarn has been mapped for over 800 feet (250 m) along strike and is conformable to bedding.

Geochemistry: A broad strong zinc soil anomaly outlines the area. Coincident zinc and silver soil anomalies over the skarn define a smaller area recommended for trenching.

Geophysics: Scattered magnetic highs occur through the area. A strong northeast trending VLF-EM anomaly passes through a covered narrow gulley west of the skarn outcrop area.

Recommendations: Trenching for zinc with silver massive sulphide mineralization is recommended on the zinc-silver soil anomaly underlain by skarn along the VLF-EM anomaly. Additional geophysics and soil sampling should be carried out to the northeast of the area to define extent of magnetic, VLF-EM, zinc and silver anomalies.

R. BELL

Geology: The area is underlain by skarn, limestone and argillaceous limestone of the upper transition zone near the microdiorite contact. The R. Bell and Cordick deposits occur on the eastern margin of the target area.

Geochemistry: A strong linear gold soil anomaly outlines the western half of the target area and encloses zinc, silver and copper soil anomalies.

Geophysics: A strong VLF-EM anomaly is coincident with the gold, zinc, silver and copper soil anomalies west of the old showings.

Recommendations: Trenching for gold, zinc, copper and silver massive sulphide mineralization west of the old showings is recommended.

CHEMICAL AND JOINER FR

Geology: The area is underlain by a narrow, 500-foot (150 m) long skarn band that occurs in the middle carbonate zone along a volcanic breccia contact. The skarn contacts microdiorite on the south and is cut by large feldspar porphyry dykes on the north.

Geochemistry: Coincident zinc and silver soil anomalies occur in the area of the skarn-microdiorite contact. Weak gold soil anomalies occur throughout the target area.

Geophysics: A strong VLF-EM anomaly is coincident over the skarn unit. Coincident weak magnetic highs and a SP anomaly extend north from skarn to an area of skarn cut by feldspar porphyry dykes.

Recommendations: Trenching for zinc, silver and gold massive sulphide mineralization in the area of coincident geophysical anomalies is recommended.

BLUEBELL

Geology: At the old Bluebell Mine massive pyrite in skarn occurs in the lower carbonate zone along a volcanic breccia contact. Massive pyrrhotite and pyrite boulders were found in the till in trenches 600 feet (180 m) south of the old workings.

Geochemistry: A large strong copper soil anomaly occurs north and south of the old workings. A zinc soil anomaly is coincident with copper in the southern part of the area.

Geophysics: A weak magnetic high trends northeasterly north of the Bluebell showings and is coincident with the copper soil anomaly. A north-south VLF-EM anomaly extends southwards from the old workings.

Recommendations: Trenching for copper and zinc massive sulphide mineralization is recommended north and south of the old Bluebell showings.

APRIL FR

Geology: An irregularly shaped, faulted skarn unit occurs within the lower carbonate zone near a volcanic sandstone contact. Numerous old pits in the area expose an east-west fault zone with distinct hematite staining.

Geochemistry: A broad strong zinc soil anomaly defines most of the area and encloses small gold and copper anomalies.

Geophysics: A VLF-EM conductor trends northeast across the area and is coincident to the zinc anomaly.

Recommendations Trenching for zinc, copper and gold massive sulphide mineralization is recommended in the skarn/volcanic sandstone contact area and in the area of the coincident geochemical and geophysical anomaly.

Priority Areas

ELMER and ELMER 2

Geology: This area was not mapped in 1983 but surrounding geology suggests the area is underlain by limestone of the upper carbonate zone near a volcanic breccia contact. Elsewhere on the property this contact is a favourable location for skarn and mineralization.

Geochemistry: A broad strong zinc anomaly defines the area. Samples were collected on lines 400 feet (120 m) apart.

Geophysics: A northeast trending VLF-EM anomaly extends for over 800 feet (250 m) through the Elmer target area. A magnetic high lies to the west of the EM anomaly.

Recommendations: Detailed geophysics, geological mapping and analysis of soil samples for lead is recommended to better define areas of interest within the broad zinc soil anomaly.

JEEP 9 FR

Geology: The area was not mapped in 1983 but surrounding geology suggests the area is underlain by limestone and limestone breccia of the middle transition zone.

Geochemistry: No work done in area in 1983.

Geophysics: No work done in area in 1983. Previous work indicated a SP anomaly in the area.

Recommendations: Geological mapping of the area is recommended and, if warranted, follow up soil sampling and detailed geophysics.

MAY

Geology: The target area is covered by heavy overburden. Surrounding geology suggests the area is underlain by argillaceous limestone of the upper transition zone near a volcanic breccia contact. This contact is favourable for the occurrence of skarn and mineralization.

Geochemistry No work done in 1983.

Geophysics No work done in 1983. TURAM EM conductor and IP anomaly in area outlined by previous work.

Recommendations: Detailed soil sampling and geophysics is recommended to better define the target area.

RATHMULLEN SKARN

Geology A narrow, 3800 foot (1160 m) long skarn unit occurs in limestone of the upper carbonate zone along a volcanic breccia/microdiorite contact. Trenches 1 to 4 explored the skarn in an area of coincident gold soil and VLF-EM anomalies. The trenching exposed microdiorite and volcanic breccia that contained high background gold values.

Geochemistry: During the 1983 survey no additional anomalies were defined. The area west of Baseline 24E was not sampled.

Geophysics: The VLF-EM anomaly explored in trenches 1 through 4 continues northeasterly for 1500 feet (460 m). An isolated magnetic high occurs at the south end of the target area.

Recommendations: A large portion of the skarn unit remains untested by detailed surveys. Detailed soil sampling and geophysics is recommended for these areas.

GEORGE'S LINEAMENT

Geology: The area is covered by swamp and heavy forest south of Wilgress Lake. Surrounding geology suggests the area is underlain by limestone of the lower carbonate zone near a microdiorite contact. Elsewhere on the property this zone is a favourable location for skarn and mineralization.

Geochemistry: Results of detailed soil sampling show scattered gold and copper soil anomalies in the areas of the Bluebell Mine and Bluebell Mine camp. The anomalies reflect surface contamination. No other other anomalies were defined in the target area.

Geophysics: A long north-northeast VLF-EM anomaly extends through the target area. The north end coincides with the northeast end of the Mountain Rose target area.

Recommendations: The northern end of the VLF-EM anomaly should be tested during the exploration recommended for the Mountain Rose area.

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Report on the

1983 Exploration Program

BLUEBELL JOINT VENTURE

Greenwood Mining Division

April 1984 B.W. Kyba & K.L. Daughtry

APPENDIX A

Numerical list

1983

Geochem and Assay

Results

KAMLOOPS RESEARCH
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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 16 1983
ANALYST
FILE NO. G 846

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
112	5000	>4000.0	301.0	>20.0	170.0
113	5001	26.0	36.0	1.2	5.0
114	5002	330.0	60.0	2.0	10.0
115	5003	18.0	28.0	1.0	10.0
116	5004	2000.0	2300.0	8.0	50.0
117	5005	2640.0	375.0	3.2	20.0
118	5006	500.0	124.0	5.4	110.0
119	5007	2600.0	730.0	16.1	300.0
120	5008	3580.0	860.0	4.6	120.0
96	5009	119.0	75.0	13.0	1.0
97	5010	>4000.0	2380.0	>20.0	3200.0
98	5011	>4000.0	1240.0	>20.0	2500.0
99	5012	88.0	35.0	1.8	1.0
348	5013	101.0	950.0	0.8	1.0
349	5014	57.0	29.0	0.4	1.0
350	5015	52.0	34.0	0.4	1.0
351	5016	4000.0	4000.0	20.0	1200.0
352	5017	291.0	545.0	1.5	1.0
353	5018	443.0	4000.0	2.5	30.0
354	5019	3700.0	135.0	5.2	50.0
355	5020A	1600.0	89.0	13.9	80.0
356	5020B	105.0	65.0	0.6	15.0
357	5021	65.0	75.0	0.5	90.0
358	5023	3820.0	146.0	10.3	1.0
359	5012-1	62.0	63.0	0.4	1.0

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KETTLE RIVER RESOURCES
BOX 130
GREENWOOD B C
V0H IJ0
ATTN BARRY KYBA

DATE JUNE 29 1983
ANALYST LW
FILE NO. G 796 **A**

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	3000	22.0	106.0	0.4	1.0
2	3001	76.0	144.0	0.8	20.0
3	3002	28.0	94.0	0.4	10.0
4	3003	20.0	106.0	0.6	25.0
5	3004	14.0	86.0	0.4	10.0
6	3005	20.0	82.0	0.6	1.0
7	3006	18.0	200.0	0.8	5.0
8	3007	12.0	126.0	0.4	1.0
9	3008	16.0	176.0	0.6	1.0
10	3009	12.0	80.0	0.4	1.0
11	3010	12.0	110.0	0.4	1.0
12	3011	22.0	200.0	0.6	10.0
13	3012	6.0	52.0	0.2	1.0
14	3013	24.0	130.0	0.6	10.0
15	3014	44.0	266.0	0.8	1.0
16	3015	28.0	108.0	0.6	1.0
17	3016	80.0	224.0	0.8	1.0
18	3017	56.0	138.0	0.6	1.0
19	3018	18.0	110.0	0.4	1.0
20	3019	14.0	142.0	0.4	1.0
21	3020	14.0	102.0	0.4	1.0
22	3021	16.0	106.0	0.6	1.0
23	3022	18.0	68.0	0.4	10.0
24	3023	16.0	94.0	0.6	1.0
25	3024	14.0	116.0	0.4	1.0
26	3025	16.0	224.0	0.4	1.0
27	3026	14.0	166.0	0.4	1.0
28	3027	12.0	160.0	0.4	5.0
29	3028	12.0	230.0	0.2	1.0
30	3029	86.0	501.0	0.7	1.0

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KETTLE RIVER RESOURCES
BOX 130
GREENWOOD B C
V0H IJ0
ATTN BARRY KYBA

DATE JUNE 29 1983
ANALYST LW
FILE NO. G 796 A

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	3000	22.0	106.0	0.4	1.0
2	3001	76.0	144.0	0.8	20.0
3	3002	28.0	94.0	0.4	10.0
4	3003	20.0	106.0	0.6	25.0
5	3004	14.0	86.0	0.4	10.0
6	3005	20.0	82.0	0.6	1.0
7	3006	18.0	200.0	0.8	5.0
8	3007	12.0	126.0	0.4	1.0
9	3008	16.0	176.0	0.6	1.0
10	3009	12.0	60.0	0.4	1.0
11	3010	12.0	110.0	0.4	1.0
12	3011	22.0	200.0	0.6	10.0
13	3012	6.0	52.0	0.2	1.0
14	3013	24.0	130.0	0.6	10.0
15	3014	44.0	266.0	0.8	1.0
16	3015	28.0	108.0	0.6	1.0
17	3016	80.0	224.0	0.8	1.0
18	3017	56.0	138.0	0.6	1.0
19	3018	18.0	110.0	0.4	1.0
20	3019	14.0	142.0	0.4	1.0
21	3020	14.0	102.0	0.4	1.0
22	3021	16.0	106.0	0.6	1.0
23	3022	18.0	68.0	0.4	10.0
24	3023	16.0	94.0	0.6	1.0
25	3024	14.0	116.0	0.4	1.0
26	3025	16.0	224.0	0.4	1.0
27	3026	14.0	166.0	0.4	1.0
28	3027	12.0	160.0	0.4	5.0
29	3028	12.0	230.0	0.2	1.0
30	3029	86.0	501.0	0.7	1.0

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FILE NO G 796

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	3071	25.0	148.0	0.5	1.0
72	3072	16.0	239.0	0.6	1.0
73	3073	55.0	74.0	0.7	1.0
74	3074	106.0	31.0	0.6	1.0
75	3075	11.0	43.0	0.5	1.0
76	3100	35.0	82.0	0.6	1.0
77	3101	37.0	84.0	0.5	1.0
78	3102	24.0	65.0	0.6	1.0
79	3103	26.0	74.0	0.7	1.0
80	3104	25.0	93.0	0.7	1.0
81	3105	18.0	50.0	0.4	1.0
82	3106	14.0	115.0	0.4	1.0
83	3107	12.0	81.0	0.4	1.0
84	3108	24.0	103.0	0.5	1.0
85	3109	20.0	70.0	0.5	1.0
86	3110	19.0	72.0	0.5	1.0
87	3111	108.0	97.0	0.7	1.0
88	3112	26.0	80.0	0.5	1.0
89	3113	17.0	89.0	0.4	1.0
90	3114	23.0	73.0	0.5	1.0
91	3115	16.0	307.0	0.6	1.0
92	3116	28.0	121.0	0.6	1.0
93	3117	19.0	82.0	0.6	1.0
94	3118	14.0	70.0	0.4	1.0
95	3119	17.0	43.0	0.5	1.0
96	3120	8.0	30.0	0.3	15.0
97	3121	11.0	53.0	0.4	1.0
98	3122	10.0	82.0	0.4	1.0
99	3123	9.0	42.0	0.3	1.0
100	3124	10.0	69.0	0.4	1.0
101	3125	17.0	58.0	0.5	1.0
102	3126	11.0	69.0	0.4	1.0
103	3127	8.0	34.0	0.3	1.0
104	3128	6.0	26.0	0.3	1.0
105	3129	13.0	74.0	0.4	1.0
106	3130	10.0	26.0	0.3	1.0
107	3131	11.0	97.0	0.4	1.0
108	3132	10.0	112.0	0.4	1.0
109	3133	12.0	196.0	0.5	1.0
110	3134	207.0	1015.0	0.6	1.0

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FILE NO G 796

KRAL NO.	IDENTIFICATION		CU	ZN	AG	AU
111	3135		31.0	28.0	0.4	15.0
112	3136		4.0	14.0	0.2	10.0
113	3137		5.0	88.0	0.4	1.0
114	3138		8.0	31.0	0.2	1.0
115	3139		14.0	134.0	0.4	5.0
116	3140		12.0	141.0	0.5	1.0
117	3141		11.0	85.0	0.5	1.0
118	3142		6.0	39.0	0.3	1.0
119	3143		12.0	90.0	0.5	1.0
120	3144		53.0	320.0	0.6	1.0
121	3145		14.0	96.0	0.4	1.0
122	3146		12.0	59.0	0.4	1.0
123	3147		8.0	60.0	0.4	1.0
124	3148		10.0	38.0	0.2	1.0
125	3149		9.0	87.0	0.4	1.0
126	3150		8.0	54.0	0.4	10.0
127	3151		10.0	58.0	0.3	1.0
128	3152		10.0	53.0	0.4	1.0
129	3153		13.0	61.0	0.5	1.0
130	3154		11.0	87.0	0.4	5.0
131	3155		15.0	77.0	0.5	5.0
132	3156		11.0	63.0	0.4	1.0
133	3157		17.0	135.0	0.3	10.0
134	3158		40.0	150.0	0.4	1.0
135	3159		10.0	132.0	0.2	10.0
136	3160		13.0	120.0	0.3	1.0
137	3161		21.0	147.0	0.5	1.0
138	3162		15.0	83.0	0.6	1.0
139	3163		12.0	107.0	0.5	1.0
360	31501	(3150-1)	15.0	83.0	0.4	1.0
361	31512		23.0	110.0	0.4	1.0
362	31523		16.0	100.0	0.4	1.0
363	31534		17.0	75.0	0.4	1.0
364	31545		59.0	162.0	0.4	1.0
365	31556		28.0	193.0	0.4	1.0
366	31567		27.0	108.0	0.4	1.0
367	31578		18.0	116.0	0.4	1.0
368	31589		15.0	70.0	0.3	1.0
369	31590		15.0	71.0	0.4	1.0
370	31601		26.0	190.0	1.5	1.0
371	31612		15.0	161.0	0.6	1.0
372	31623		10.0	135.0	0.3	1.0
373	31634	(3163-4)	12.0	90.0	0.5	1.0

PLEASE NOTE THAT GOLD IS REPORTED IN PPB

IN AU COLUMN 1 MEANS LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD FIRE ASSAY ATOMIC ABSORPTION

156 Geochem data

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H IJ0
ATTN BARRY KYBA

DATE JULY 12 1983
ANALYST
FILE NO. G 606

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	3164	13.0	225.0	0.4	1.0
2	3165	12.0	123.0	0.3	1.0
3	3166	10.0	100.0	0.3	1.0
4	3167	14.0	134.0	0.2	1.0
5	3168	83.0	605.0	0.2	1.0
6	3169	30.0	235.0	0.4	1.0
7	3170	13.0	232.0	0.3	1.0
8	3171	7.0	37.0	0.2	1.0
9	3172	8.0	76.0	0.2	1.0

156 Geochem Data

ROSLOCK RESEARCH
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2095 WEST TRANS CANADA HIGHWAY
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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 136
BOX 130
GREENWOOD B.C.
V0H 1J0
ATTN BARRY KYBA

DATE JULY 21 1983
ANALYST
FILE NO. G 813

ANAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	32161 (3218-1)	24.0	164.0	0.7	0.0
2	3173	36.0	67.0	0.4	0.0
3	3174	37.0	13.0	0.7	0.0
4	3175	40.0	30.0	0.6	0.0
5	3176	23.0	16.0	0.5	5.0
6	3177	23.0	23.0	0.8	0.0
7	3178	10.0	79.0	0.4	5.0
8	3179	20.0	102.0	0.5	5.0
9	3180	17.0	93.0	0.5	10.0
10	3181	20.0	93.0	0.6	5.0
11	3182	45.0	92.0	0.6	5.0
12	3183	40.0	116.0	0.7	1.0
13	3184	24.0	70.0	0.4	5.0
14	3185	46.0	171.0	0.6	10.0
15	3186	21.0	145.0	0.5	1.0
16	3187	63.0	75.0	0.8	1.0
17	3188	23.0	200.0	0.5	1.0
18	3189	53.0	109.0	0.7	1.0
19	3190	22.0	14.0	0.6	1.0
20	3191	40.0	10.0	0.6	1.0
21	3192	19.0	41.0	0.5	1.0
22	3193	58.0	5.0	0.2	1.0
23	3194	39.0	14.0	0.8	1.0
24	3195	24.0	152.0	0.2	5.0
25	3196	26.0	76.0	0.3	10.0
26	3197	26.0	85.0	0.3	5.0
27	3198	15.0	116.0	0.2	10.0
28	3199	15.0	151.0	0.4	5.0
29	3200	138.0	178.0	0.5	5.0
30	3201	61.0	457.0	0.5	15.0

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FILE NO G 813

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3202	19.0	164.0	0.3	1.0
32	3203	35.0	82.0	0.4	1.0
33	3204	65.0	76.0	0.3	1.0
34	3205	25.0	165.0	0.4	1.0
35	3206	50.0	164.0	0.5	1.0
36	3207	28.0	125.0	0.3	1.0
37	3208	17.0	99.0	0.3	1.0
38	3209	21.0	126.0	0.3	225.0
39	3210	24.0	153.0	0.4	1.0
40	3211	42.0	220.0	2.3	1.0
41	3212	38.0	138.0	0.9	1.0
42	3213	15.0	14.0	0.4	1.0
43	3214	49.0	16.0	0.5	0.0
44	3215	38.0	15.0	0.4	0.0
45	3216	56.0	21.0	0.6	0.0
46	3217	36.0	36.0	0.6	1.0
47	3218	69.0	37.0	0.6	1.0
48	3219	20.0	126.0	0.5	1.0
49	3220	35.0	344.0	2.7	1.0
50	3221	25.0	218.0	1.8	1.0
51	3222	15.0	152.0	0.8	1.0
52	3223	24.0	126.0	1.3	1.0
53	3224	18.0	250.0	0.7	1.0
54	3225	25.0	205.0	0.9	1.0
55	3226	17.0	141.0	0.5	1.0
56	3227	56.0	145.0	0.5	1.0
57	3228	28.0	137.0	0.6	1.0
58	3229	38.0	95.0	0.4	1.0
59	3230	34.0	154.0	0.4	1.0
60	3231	38.0	140.0	0.5	1.0
61	3232	20.0	94.0	0.4	1.0
62	3233	24.0	98.0	0.4	1.0
63	3234	20.0	75.0	0.3	1.0
64	3235	13.0	37.0	0.2	1.0
65	3236	18.0	84.0	0.3	1.0
66	3237	21.0	73.0	0.4	1.0
67	3238	13.0	55.0	0.4	1.0
68	3239	16.0	91.0	0.3	1.0
69	3240	13.0	67.0	0.4	1.0
70	3241	22.0	94.0	0.5	1.0

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FILE NO G 813

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	3242	27.0	61.0	0.5	1.0
72	3243	41.0	46.0	0.4	1.0
73	3244	39.0	73.0	0.5	1.0
74	3245	40.0	81.0	0.5	1.0
75	3246	53.0	215.0	0.7	1.0
76	3247	97.0	211.0	0.6	1.0
77	3248	59.0	141.0	0.5	1.0
78	3249	28.0	123.0	0.4	600.0
79	3250	30.0	102.0	0.5	1.0
80	3251	57.0	131.0	0.8	1.0
81	3252	28.0	124.0	0.5	1.0
82	3253	27.0	163.0	0.5	1.0
83	3254	23.0	137.0	0.8	1.0
84	3255	22.0	185.0	1.6	15.0
85	3256	27.0	158.0	2.7	1.0
86	3257	19.0	191.0	0.7	1.0
87	3258	16.0	150.0	0.9	1.0
88	3259	22.0	158.0	1.0	1.0

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PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1V0
ATTN BARRY KYBA

DATE JULY 26 1983
ANALYST
FILE NO. G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	3260	24.0	128.0	0.5	1.0
2	3261	13.0	153.0	0.4	1.0
3	3262	14.0	107.0	0.3	15.0
4	3263	19.0	308.0	0.5	30.0
5	3264	11.0	99.0	0.3	45.0
6	3265	9.0	112.0	0.2	10.0
7	3267	48.0	115.0	0.6	10.0
8	3268	32.0	90.0	0.5	275.0
9	3269	12.0	86.0	0.3	1.0
10	3270	15.0	69.0	0.4	1.0
11	3271	38.0	118.0	0.5	1.0
12	3272	19.0	74.0	0.3	1.0
13	3273	78.0	95.0	0.6	1.0
14	3274	29.0	76.0	0.4	10.0
15	3275	25.0	116.0	0.3	10.0
16	3276	21.0	76.0	0.4	1.0
17	3277	10.0	68.0	0.3	1.0
18	3278	16.0	127.0	0.4	10.0
19	3279	14.0	74.0	0.4	1.0
20	3280	26.0	81.0	0.5	25.0
21	3281	15.0	87.0	0.5	5.0
22	3282	18.0	86.0	0.6	5.0
23	3283	12.0	80.0	0.4	1.0
24	3284	10.0	85.0	0.3	10.0
25	3285	21.0	173.0	0.4	1.0
26	3286	16.0	131.0	0.5	1.0
27	3287	15.0	126.0	0.5	1.0
28	3288	22.0	166.0	0.4	1.0
29	3289	16.0	115.0	0.9	1.0
30	3290	27.0	100.0	0.4	1.0

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FILE NO G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3291	16.0	99.0	0.5	1.0
32	3292	20.0	129.0	0.6	1.0
33	3293	28.0	97.0	0.7	1.0
34	3294	25.0	103.0	0.6	1.0
35	3295	35.0	160.0	0.8	1.0
36	3296	34.0	127.0	0.7	10.0
37	3297	40.0	106.0	0.8	1.0
38	3298	24.0	165.0	0.6	1.0
39	3299	37.0	127.0	0.6	1.0
40	3300	37.0	96.0	0.7	45.0
41	3301	29.0	104.0	0.5	1.0
42	3302	25.0	93.0	0.4	1.0
43	3303	20.0	100.0	0.4	1.0
44	3304	39.0	124.0	0.4	1.0
45	3305	38.0	107.0	0.4	1.0
46	3306	13.0	44.0	0.3	1.0
47	3307	14.0	86.0	0.7	1.0
48	3308	5.0	70.0	0.2	1.0
49	3309	13.0	77.0	0.3	1.0
50	3310	9.0	52.0	0.1	1.0
51	3311	14.0	89.0	0.2	1.0
52	3312	19.0	147.0	0.3	1.0
53	3313	85.0	96.0	0.6	1.0
54	3314	26.0	95.0	0.4	10.0
55	3315	19.0	38.0	0.2	1.0
56	3316	16.0	77.0	0.4	5.0
57	3317	14.0	64.0	0.3	1.0
58	3318	10.0	55.0	0.2	1.0
59	3319	11.0	99.0	0.4	1.0
60	3320	15.0	339.0	0.4	1.0
61	3321	15.0	130.0	0.4	1.0
62	3322	17.0	132.0	0.4	1.0
63	3323	14.0	100.0	0.4	1.0
119	~~3322~~ 3325	19.0	124.0	0.5	1.0
64	3326	6.0	52.0	0.1	1.0
65	3327	12.0	72.0	0.3	1.0
66	3328	13.0	73.0	0.4	1.0
67	3329	11.0	56.0	0.3	1.0
68	3330	8.0	48.0	0.2	1.0
69	3331	7.0	67.0	0.3	1.0
70	3332	10.0	75.0	0.3	1.0

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KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	3333	9.0	68.0	0.3	1.0
72	3334	8.0	92.0	0.3	1.0
73	3335	12.0	67.0	0.3	1.0
74	3336	12.0	74.0	0.4	1.0
75	3337	11.0	56.0	0.3	1.0
76	3338	11.0	53.0	0.4	1.0
77	3339	13.0	45.0	0.2	1.0
78	3340	15.0	74.0	0.4	1.0
79	3341	4.0	52.0	0.1	1.0
80	3342	7.0	101.0	0.1	20.0
81	3343	5.0	49.0	0.2	1.0
82	3344	10.0	105.0	0.3	1.0
83	3345	10.0	95.0	0.3	15.0
84	3346	17.0	137.0	0.4	1.0
85	3347	8.0	75.0	0.2	1.0
86	3348	8.0	66.0	0.3	1.0
87	3349	7.0	56.0	0.2	20.0
88	3350	5.0	45.0	0.2	1.0
89	3351	8.0	48.0	0.4	1.0
90	3352	13.0	49.0	0.4	1.0
91	3353	6.0	76.0	0.2	1.0
92	3354	8.0	56.0	0.4	1.0
93	3355	5.0	67.0	0.3	1.0
94	3356	8.0	75.0	0.4	1.0
95	3357	11.0	70.0	0.4	1.0
96	3358	12.0	63.0	0.5	1.0
97	3359	17.0	51.0	0.3	1.0
98	3360	11.0	93.0	0.3	1.0
99	3361	11.0	76.0	0.2	1.0
100	3362	12.0	62.0	0.4	1.0
101	3363	11.0	59.0	0.4	1.0
102	3364	10.0	103.0	0.4	1.0
103	3365	9.0	67.0	0.3	1.0
104	3366	4.0	31.0	0.2	1.0
105	3367	8.0	80.0	0.4	1.0
106	3368	17.0	66.0	0.4	1.0
107	3369	17.0	72.0	0.5	1.0
108	3370	16.0	53.0	0.4	1.0
109	3371	16.0	60.0	0.5	1.0
110	3372	12.0	70.0	0.4	1.0

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KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	3373	12.0	64.0	0.3	1.0
112	3374	9.0	41.0	0.2	1.0
113	3375	12.0	60.0	0.4	1.0
114	3376	14.0	53.0	0.3	1.0
115	3377	13.0	53.0	0.4	1.0
116	3378	13.0	54.0	0.3	1.0
117	3379	12.0	95.0	0.3	1.0
118	3380	16.0	355.0	0.6	1.0

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE JULY 30 1983
ANALYST
FILE NO. G 827.

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	3381	145.0	165.0	0.8	1.0
2	3382	40.0	106.0	0.6	10.0
3	3383	45.0	139.0	0.7	10.0
4	3384	31.0	118.0	0.7	100.0
5	3385	31.0	180.0	0.7	10.0
6	3386	22.0	82.0	0.6	10.0
7	3387	33.0	150.0	0.7	20.0
8	3388	84.0	101.0	1.0	10.0
9	3389	70.0	40.0	0.4	40.0
10	3390	45.0	40.0	0.7	20.0
11	3391	43.0	65.0	0.7	10.0
12	3392	10.0	58.0	0.7	10.0
13	3393	16.0	94.0	0.6	30.0
14	3394	14.0	95.0	0.7	1.0
15	3395	20.0	90.0	0.8	1.0
16	3396	35.0	36.0	0.6	1.0
17	3397	22.0	70.0	0.7	1.0
18	3398	8.0	53.0	0.4	115.0
19	3399	13.0	65.0	0.4	1.0
20	3400	27.0	69.0	0.6	1.0
21	3401	15.0	59.0	0.6	1.0
22	3402	9.0	75.0	0.7	1.0
23	3403	13.0	89.0	0.8	1.0
24	3404	14.0	56.0	0.5	1.0
25	3405	14.0	32.0	0.5	1.0
26	3406	27.0	35.0	0.5	1.0
27	3407	25.0	89.0	0.8	1.0
28	3408	11.0	67.0	0.5	1.0
29	3409	33.0	37.0	0.5	5.0
30	3410	12.0	67.0	0.5	1.0

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FILE NO 6

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3411	46.0	98.0	0.5	1.0
32	3412	22.0	120.0	0.8	1.0
33	3413	11.0	149.0	0.6	1.0
34	3414	15.0	126.0	0.6	1.0
35	3415	13.0	136.0	0.8	1.0
36	3416	16.0	100.0	0.7	1.0
37	3417	30.0	104.0	0.7	1.0
38	3418	23.0	95.0	0.5	1.0
39	3419	35.0	106.0	0.6	1.0
40	3420	336.0	230.0	0.5	1.0
41	3421	25.0	96.0	0.7	1.0
42	3422	17.0	92.0	0.7	1.0
43	3423	16.0	131.0	0.6	1.0
44	3424	10.0	83.0	0.4	1.0
45	3425	13.0	100.0	0.5	1.0
46	3426	14.0	92.0	0.6	1.0
47	3427	17.0	69.0	0.4	1.0
48	3428	17.0	69.0	0.5	60.0
49	3429	15.0	64.0	0.4	1.0
50	3430	18.0	62.0	0.5	1.0
51	3431	21.0	51.0	0.5	1.0
52	3432	27.0	39.0	0.4	1.0
53	3433	20.0	38.0	0.3	1.0
54	3434	44.0	58.0	0.5	1.0
55	3435	15.0	43.0	0.4	1.0
56	3436	17.0	62.0	0.5	1.0
57	3437	16.0	51.0	0.5	1.0
58	3438	16.0	65.0	0.6	1.0
59	3439	10.0	84.0	0.6	1.0
60	3440	19.0	73.0	0.5	1.0
61	3441	20.0	47.0	0.5	1.0
62	3442	22.0	63.0	0.5	1.0
63	3443	14.0	53.0	0.6	15.0
64	3444	17.0	58.0	0.7	10.0
65	3445	16.0	57.0	0.5	1.0
66	3446	17.0	51.0	0.5	1.0
67	3447	13.0	58.0	0.6	1.0
68	3448	11.0	45.0	0.4	1.0
69	3449	11.0	69.0	0.6	1.0
70	3450	30.0	56.0	0.6	1.0

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FILE NO 6

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	3451	25.0	68.0	0.7	1.0
72	3452	15.0	55.0	0.5	1.0
73	3453	13.0	54.0	0.7	1.0
74	3454	25.0	57.0	0.5	1.0
75	3455	15.0	51.0	0.4	1.0
76	3456	14.0	79.0	0.3	1.0
77	3457	20.0	70.0	0.4	1.0
78	3458	15.0	86.0	0.5	1.0
79	3459	17.0	90.0	0.6	1.0
80	3460	25.0	88.0	0.7	1.0
81	3461	35.0	67.0	0.6	1.0
82	3462	32.0	86.0	0.8	1.0
83	3463	16.0	68.0	0.5	1.0
84	3464	22.0	53.0	0.4	1.0
74	34631 (3463-1)	33.0	98.0	0.8	1.0
75	34642 (3464-2)	48.0	88.0	1.2	1.0

CU ZN AG METHOD -80 MESH HOTACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 8 1983
ANALYST
FILE NO. G 835

KRAL NO	IDENTIFICATION	CU	ZN	AG	AU
1	3465	50.0	98.0	0.9	1.0
2	3466	23.0	99.0	0.6	1.0
3	3467	40.0	125.0	0.9	1.0
4	3468	28.0	118.0	0.9	1.0
5	3469	29.0	69.0	0.6	1.0
6	3470	22.0	74.0	0.6	1.0
7	3471	20.0	54.0	0.6	1.0
8	3472	20.0	51.0	0.6	1.0
9	3473	30.0	51.0	0.6	1.0
10	3474	21.0	49.0	0.6	1.0
11	3475	16.0	47.0	0.6	1.0
12	3476	28.0	57.0	0.7	1.0
13	3477	29.0	40.0	0.6	1.0
14	3478	28.0	39.0	0.6	1.0
15	3479	15.0	43.0	0.6	1.0
16	3480	22.0	48.0	0.6	1.0
17	3481	18.0	45.0	0.6	1.0
18	3482	20.0	49.0	0.6	1.0
19	3483	34.0	29.0	0.6	1.0
20	3484	19.0	49.0	0.6	1.0
21	3485	27.0	66.0	0.6	1.0
22	3486	25.0	58.0	0.7	1.0
23	3487	20.0	54.0	0.7	1.0
24	3488	18.0	45.0	0.5	1.0
76	34881 (3488-1)	33.0	55.0	0.7	1.0
25	3489	20.0	54.0	0.6	1.0
26	3490	20.0	56.0	0.4	1.0
27	3491	22.0	62.0	0.6	1.0
28	3492	21.0	51.0	0.6	1.0
29	3493	26.0	50.0	0.6	1.0
30	3494	20.0	46.0	0.6	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
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FILE NO G 835

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3495	20.0	58.0	0.6	1.0
32	3496	23.0	67.0	0.6	1.0
33	3497	18.0	41.0	0.6	1.0
34	3498	25.0	37.0	0.6	1.0
35	3499	36.0	49.0	0.6	1.0
36	3500	25.0	49.0	0.6	1.0
37	3501	18.0	46.0	0.6	1.0
38	3502	23.0	56.0	0.7	1.0
39	3503	24.0	60.0	0.6	1.0
40	3504	23.0	69.0	0.7	1.0
41	3505	32.0	66.0	0.8	1.0
42	3506	28.0	79.0	0.8	1.0
43	3507	19.0	78.0	7.0	1.0
44	3508	23.0	69.0	0.8	1.0
45	3509	42.0	71.0	0.8	1.0
46	3510	32.0	71.0	0.6	1.0
47	3511	59.0	114.0	0.7	1.0
48	3512	57.0	121.0	0.8	1.0
49	3513	34.0	200.0	1.2	1.0
50	3514	41.0	192.0	0.9	1.0
51	3515	32.0	93.0	0.8	1.0
52	3516	36.0	99.0	0.8	1.0
53	3538	18.0	58.0	0.7	1.0
54	3539	19.0	59.0	0.7	1.0
55	3540	25.0	61.0	0.8	15.0
56	3541	20.0	99.0	7.0	1.0
57	3542	21.0	141.0	0.8	1.0
58	3543	21.0	177.0	0.8	1.0
59	3544	26.0	53.0	0.6	1.0
60	3545	323.0	97.0	0.9	1.0
61	3546	44.0	101.0	0.8	1.0
62	3547	111.0	127.0	0.9	1.0
63	3548	73.0	63.0	0.9	1.0
64	3549	28.0	74.0	0.8	1.0
65	3550	51.0	40.0	0.8	1.0
66	3551	29.0	41.0	0.8	1.0
67	3552	36.0	82.0	1.1	5.0
68	3553	19.0	69.0	0.6	1.0
69	3554	34.0	61.0	0.8	1.0
70	3555	23.0	37.0	0.6	1.0

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FILE NO G 835

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	3556	28.0	175.0	0.9	1.0
72	3557	22.0	84.0	0.7	1.0
73	3558	23.0	87.0	0.7	1.0
1	3559	10.0	104.0	0.4	1.0
2	3560	66.0	128.0	0.5	1.0
3	3561	14.0	98.0	0.5	1.0
4	3562	10.0	85.0	0.5	1.0
5	3563	10.0	118.0	0.7	1.0
6	3564	11.0	121.0	0.6	1.0
7	3565	19.0	100.0	0.6	1.0
8	3566	13.0	59.0	0.6	1.0
9	3567	11.0	51.0	0.6	1.0
10	3568	23.0	49.0	0.7	1.0
11	3569	35.0	52.0	0.6	1.0
12	3570	31.0	48.0	0.5	1.0
13	3571	30.0	54.0	0.5	5.0
14	3572	27.0	59.0	0.5	1.0
15	3573	44.0	66.0	0.6	1.0
16	3574	41.0	67.0	0.6	1.0
17	3575	51.0	52.0	0.5	1.0
18	3576	42.0	55.0	0.5	1.0
19	3577	36.0	101.0	0.5	1.0
20	3578	36.0	122.0	0.6	1.0
21	3579	36.0	91.0	0.6	1.0
22	3580	44.0	61.0	0.3	1.0
23	3581	66.0	49.0	0.6	1.0
24	3582	39.0	40.0	0.5	1.0
25	3583	11.0	35.0	0.3	1.0
26	3584	35.0	49.0	0.4	20.0
27	3585	32.0	32.0	0.6	20.0
28	3586	22.0	52.0	0.7	1.0
29	3587	35.0	60.0	0.4	1.0
30	3588	21.0	53.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 838

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3589	24.0	56.0	0.5	1.0
32	3590	33.0	45.0	0.5	5.0
33	3591	26.0	100.0	0.4	5.0
34	3592	19.0	76.0	0.4	1.0
35	3593	24.0	47.0	0.5	1.0
36	3594	22.0	74.0	0.6	1.0
37	3595	20.0	78.0	0.5	1.0
38	3596	21.0	65.0	0.6	1.0
39	3597	18.0	68.0	0.4	10.0
40	3598	52.0	130.0	6.0	5.0
41	3599	29.0	106.0	0.5	1.0
42	3600	13.0	76.0	0.4	1.0
43	3601	43.0	96.0	0.8	10.0
44	3602	34.0	79.0	0.8	10.0
45	3603	29.0	86.0	0.8	1.0
46	3604	15.0	100.0	0.5	1.0
47	3605	14.0	59.0	0.5	1.0
48	3606	18.0	67.0	0.4	5.0
49	3607	24.0	76.0	0.4	1.0
50	3608	80.0	63.0	0.7	1.0
51	3609	14.0	56.0	0.5	1.0
52	3610	16.0	75.0	0.4	1.0
53	3611	16.0	71.0	0.4	1.0
54	3612	12.0	68.0	0.4	1.0
55	3613	12.0	57.0	0.3	1.0
56	3614	16.0	59.0	0.5	1.0
57	3615	25.0	51.0	0.6	15.0
58	3616	21.0	53.0	0.6	35.0
59	3617	16.0	50.0	0.6	10.0
60	3618	18.0	51.0	0.5	15.0
61	3619	17.0	45.0	0.5	5.0
62	3620	15.0	44.0	0.6	5.0
63	3621	17.0	54.0	0.7	5.0

KAMLOOPS RESEARCH
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ASSAY LABORATORY
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B.C. CERTIFIED ASSAYERS
2095 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 10 1983
ANALYST
FILE NO. G 841

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	3622	10.0	142.0	0.8	5.0
2	3623	14.0	148.0	0.7	15.0
3	3624	7.0	54.0	0.4	10.0
4	3625	6.0	89.0	0.5	10.0
5	3626	11.0	167.0	0.4	10.0
6	3627	15.0	271.0	0.4	10.0
7	3628	16.0	139.0	0.6	5.0
8	3629	21.0	403.0	0.7	5.0
9	3630	8.0	153.0	0.5	5.0
10	3631	10.0	165.0	0.6	5.0
11	3632	11.0	106.0	0.6	1.0
12	3633	13.0	154.0	0.7	5.0
13	3634	17.0	83.0	0.6	1.0
14	3635	7.0	91.0	0.5	15.0
15	3636	4.0	109.0	0.5	20.0
16	3637	5.0	127.0	0.5	1.0
17	3638	5.0	136.0	0.5	1.0
18	3639	10.0	127.0	0.6	20.0
19	3640	8.0	175.0	0.6	5.0
20	3641	8.0	297.0	0.6	5.0
21	3642	11.0	283.0	0.8	10.0
22	3643	16.0	247.0	0.7	1.0
23	3644	10.0	187.0	0.7	10.0
24	3645	13.0	175.0	0.7	15.0
25	3646	13.0	255.0	0.9	1.0
26	3647	18.0	133.0	0.9	5.0
27	3648	8.0	320.0	0.7	5.0
28	3649	10.0	358.0	0.8	1.0
29	3650	12.0	358.0	0.7	5.0
30	3651	11.0	314.0	0.7	5.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 841

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3652	10.0	324.0	0.6	1.0
32	3653	12.0	160.0	0.8	1.0
33	3654	8.0	152.0	0.6	1.0
34	3655	10.0	335.0	0.6	1.0
35	3656	10.0	252.0	0.7	1.0
36	3657	11.0	330.0	0.7	1.0
37	3658	14.0	169.0	0.6	1.0
38	3659	11.0	252.0	0.6	1.0
39	3660	9.0	184.0	0.6	1.0
40	3661	11.0	173.0	0.7	1.0
41	3662	15.0	161.0	0.5	1.0
42	3663	11.0	111.0	0.6	1.0
43	3664	11.0	254.0	0.6	5.0
44	3665	16.0	171.0	0.7	1.0
45	3666	10.0	176.0	0.5	1.0
46	3667	14.0	590.0	1.0	1.0
47	3668	10.0	325.0	0.9	1.0
48	3669	11.0	265.0	0.6	1.0
49	3670	17.0	1210.0	0.6	1.0
50	3671	12.0	162.0	0.5	5.0
51	3672	12.0	120.0	0.7	1.0
52	3673	13.0	95.0	0.7	1.0
53	3674	10.0	104.0	0.5	1.0
54	3675	23.0	64.0	0.6	1.0
55	3676	11.0	84.0	0.7	1.0
56	3677	11.0	73.0	0.6	1.0
57	3678	11.0	69.0	0.5	1.0
58	3679	15.0	76.0	0.7	1.0
59	3680	16.0	111.0	0.9	1.0
60	3681	9.0	135.0	0.5	1.0
61	3682	11.0	142.0	0.6	1.0
62	3683	11.0	196.0	0.6	1.0
63	3684	12.0	338.0	0.6	1.0

KAMLOOPS RESEARCH
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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD.
PROJECT 156
BOX 130
GREENWOOD, B.C.
V0H 1J0
ATTENTION: MR. BARRY KYBA

DATE AUGUST 25, 1983
ANALYST
FILE NO. G-881

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	3685	16.0	116.0	0.4	5.0
2	3686	49.0	104.0	0.8	1.0
3	3687	23.0	164.0	0.4	1.0
4	3688	17.0	198.0	0.4	1.0
5	3689	15.0	150.0	0.4	1.0
6	3690	29.0	128.0	0.4	1.0
7	3691	18.0	120.0	0.4	1.0
8	3692	25.0	179.0	0.4	1.0
9	3693	19.0	111.0	0.4	1.0
10	3694	13.0	90.0	0.5	1.0
11	3695	29.0	145.0	0.7	1.0
12	3696	30.0	137.0	0.6	1.0
13	3697	25.0	135.0	0.4	1.0
14	3698	21.0	135.0	0.5	1.0
15	3699	16.0	171.0	0.5	1.0
16	3700	21.0	192.0	0.5	1.0
17	3701	25.0	125.0	0.5	1.0
18	3702	30.0	182.0	0.6	1.0
19	3703	32.0	150.0	0.5	1.0
20	3704	77.0	183.0	0.6	1.0
21	3705	11.0	150.0	0.4	1.0
22	3706	16.0	138.0	0.3	1.0
23	3707	17.0	125.0	0.4	1.0
24	3708	54.0	105.0	1.0	1.0
25	3709	39.0	137.0	0.5	1.0
26	3710	30.0	33.0	0.6	1.0
27	3711	26.0	112.0	0.5	1.0
28	3712	24.0	142.0	0.5	1.0
29	3713	30.0	120.0	0.6	1.0
30	3714	33.0	96.0	0.6	1.0

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FILE NO G-881

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3715	24.0	116.0	0.5	1.0
32	3716	19.0	103.0	0.4	1.0
33	3717	18.0	94.0	0.5	85.0
34	3718	19.0	103.0	0.5	45.0
35	3719	32.0	140.0	0.5	1.0
36	3720	25.0	107.0	0.4	1.0
37	3721	48.0	68.0	0.5	1.0
38	3722	22.0	76.0	0.5	1.0
39	3723	19.0	144.0	0.6	1.0
40	3724	16.0	90.0	0.5	1.0
41	3725	21.0	127.0	0.5	1.0
42	3726	24.0	165.0	0.6	1.0
43	3727	22.0	228.0	0.7	1.0
44	3728	32.0	167.0	0.6	1.0
45	3729	36.0	119.0	0.5	1.0
46	3730	71.0	181.0	0.5	1.0
47	3731	47.0	159.0	0.5	10.0
48	3732	24.0	191.0	0.5	30.0
49	3733	14.0	166.0	0.3	1.0
50	3734	10.0	81.0	0.2	1.0
51	3735	11.0	60.0	0.2	1.0
52	3736	26.0	87.0	0.4	1.0
53	3737	31.0	124.0	0.6	1.0
54	3738	25.0	137.0	0.6	1.0
55	3739	28.0	110.0	0.4	1.0
56	3740	21.0	97.0	0.5	1.0
57	3741	26.0	87.0	0.5	1.0
58	3742	34.0	78.0	0.5	1.0
59	3743	27.0	62.0	0.5	1.0
60	3744	27.0	118.0	0.6	1.0
61	3745	27.0	100.0	0.5	1.0
62	3746	35.0	85.0	0.4	1.0
63	3747	32.0	57.0	0.5	1.0
64	3748	24.0	53.0	0.4	1.0
65	3749	65.0	32.0	0.6	1.0
66	3750	47.0	18.0	0.3	1.0
67	3751	50.0	27.0	0.3	1.0
68	3752	16.0	146.0	0.4	1.0
69	3753	54.0	144.0	0.9	20.0
70	3754	35.0	65.0	0.6	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

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FILE NO G-881

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	3755	35.0	11.0	0.3	1.0
72	3756	66.0	34.0	0.4	1.0
73	3757	28.0	103.0	0.5	1.0
74	3758	68.0	132.0	0.5	1.0
75	3759	37.0	109.0	0.5	1.0
76	3760	47.0	116.0	0.5	1.0
77	3761	62.0	105.0	0.7	1.0
78	3762	53.0	112.0	0.6	1.0
79	3763	54.0	119.0	0.6	1.0
80	3764	29.0	97.0	0.5	1.0
81	3765	114.0	60.0	0.6	15.0
82	3766	36.0	103.0	0.6	1.0
83	3767	15.0	139.0	0.6	1.0
84	3768	34.0	82.0	0.4	1.0
85	3769	28.0	112.0	0.5	1.0
86	3770	10.0	101.0	0.3	1.0
87	3771	13.0	91.0	0.3	1.0
88	3772	10.0	41.0	0.3	1.0
89	3773	22.0	89.0	0.4	1.0
90	3774	24.0	65.0	0.5	1.0
91	3775	21.0	73.0	0.4	15.0
92	3776	18.0	77.0	0.4	1.0
93	3777	20.0	58.0	0.4	1.0
94	3778	60.0	148.0	0.5	1.0
95	3779	201.0	122.0	0.6	20.0
96	3780	119.0	145.0	0.5	1.0
97	3781	47.0	159.0	0.6	1.0
98	3782	33.0	167.0	0.4	1.0
99	3783	25.0	149.0	0.5	1.0
100	3784	37.0	102.0	0.5	1.0
101	3785	18.0	68.0	0.2	1.0
102	3786	50.0	106.0	0.5	5.0
103	3787	51.0	107.0	0.6	1.0
104	3788	73.0	109.0	0.6	1.0
105	3789	30.0	110.0	0.5	1.0
106	3790	47.0	96.0	0.5	85.0
107	3791	42.0	119.0	0.5	1.0
108	3792	85.0	92.0	0.6	1.0
109	3793	32.0	140.0	0.5	1.0
110	3794	26.0	92.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G-881

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	3795	25.0	82.0	0.4	1.0
112	3796	12.0	85.0	0.3	1.0
113	3797	22.0	155.0	0.4	1.0
114	3798	46.0	141.0	0.7	30.0
115	3799	34.0	138.0	0.6	1.0
116	3800	26.0	94.0	0.6	1.0
117	3801	13.0	89.0	0.3	1.0
118	3802	19.0	→92.0	0.4	1.0
119	3803	10.0	61.0	0.2	1.0
120	3804	26.0	110.0	0.5	1.0
121	3805	24.0	110.0	0.5	20.0
122	3806	26.0	101.0	0.5	1.0
123	3807	35.0	122.0	0.4	1.0
124	3808	10.0	85.0	0.4	1.0
125	3809	41.0	82.0	0.5	1.0
126	3810	29.0	80.0	0.5	1.0
127	3811	24.0	67.0	0.4	120.0
128	3812	30.0	72.0	0.6	1.0
129	3813	18.0	61.0	0.5	1.0
130	3814	23.0	68.0	0.5	1.0
131	3815	17.0	44.0	0.3	1.0
132	3816	35.0	104.0	0.6	5.0
133	3817	40.0	93.0	0.6	1.0
134	3818	19.0	153.0	0.4	1.0
135	3819	23.0	111.0	0.4	1.0
136	3820	50.0	93.0	0.4	5.0
137	3821	47.0	56.0	0.4	1.0
138	3822	24.0	21.0	0.3	5.0
139	3823	103.0	59.0	0.5	1.0
140	3824	74.0	44.0	0.4	1.0
141	3826#1	35.0	153.0	0.7	1.0
142	3826#2	21.0	102.0	0.3	10.0
143	3827	30.0	135.0	0.5	1.0
144	3828	26.0	148.0	0.4	50.0
145	3829	28.0	126.0	0.4	1.0
146	3830	26.0	121.0	0.4	1.0
147	3831	22.0	100.0	0.3	1.0
148	3832	23.0	96.0	0.4	1.0
149	3833	40.0	161.0	0.6	20.0
150	3834	41.0	88.0	0.4	1.0

K RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G-881

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
151	3835	39.0	120.0	0.4	1.0
152	3836	33.0	235.0	0.4	1.0
153	3837	26.0	218.0	0.4	1.0
154	3838	21.0	264.0	0.7	1.0
155	3839	30.0	415.0	0.8	1.0
156	3840	28.0	149.0	0.8	1.0
157	3841	37.0	120.0	0.8	25.0
158	3842	27.0	112.0	0.7	1.0
159	3843	52.0	113.0	0.7	5.0
160	3844	28.0	28.0	1.0	1.0
161	3845	29.0	219.0	0.8	1.0
162	3846	56.0	1900.0	9.6	1.0
163	3847	20.0	294.0	0.4	1.0
164	3848	31.0	290.0	0.8	1.0
7	3849	35.0	89.0	0.7	5.0
8	3850	38.0	102.0	0.7	5.0
9	3851	33.0	116.0	0.8	5.0
10	3852	34.0	113.0	0.9	1.0
11	3853	32.0	118.0	0.9	1.0
12	3854	29.0	131.0	0.9	1.0
13	3855	30.0	114.0	0.7	20.0
14	3856	32.0	108.0	0.8	1.0
15	3857	24.0	111.0	0.7	10.0
16	3858	20.0	112.0	0.4	25.0
17	3859	36.0	90.0	0.8	1.0
18	3860	33.0	85.0	0.6	15.0
19	3861	39.0	102.0	0.7	70.0
20	3862	35.0	103.0	0.6	40.0
21	3863	17.0	60.0	0.5	45.0
22	3864	46.0	182.0	1.6	20.0
23	3865	32.0	97.0	2.0	20.0
24	3866	30.0	87.0	0.7	20.0
25	3867	29.0	68.0	0.8	20.0
26	3868	27.0	131.0	0.9	20.0
27	3869	40.0	187.0	1.6	20.0
28	3870	28.0	106.0	1.3	15.0
29	3871	87.0	351.0	0.7	1.0
30	3872	139.0	349.0	2.2	35.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 889

RAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	3873	49.0	99.0	1.7	25.0
32	3874	40.0	107.0	1.4	5.0
33	3875	31.0	110.0	1.2	1.0
34	3876	32.0	170.0	1.0	15.0
35	3877	30.0	141.0	0.8	10.0
36	3878	28.0	158.0	0.8	10.0
37	3879	31.0	143.0	0.7	15.0
38	3880	25.0	120.0	0.6	20.0
39	3881	22.0	65.0	0.6	1.0
40	3882	24.0	76.0	0.5	40.0
41	3883	23.0	69.0	0.6	20.0
42	3884	22.0	96.0	0.4	5.0
43	3885	21.0	90.0	0.4	5.0
44	3886	21.0	62.0	0.4	1.0
45	3887	20.0	45.0	0.5	5.0
46	3888	27.0	81.0	0.6	5.0
47	3889	21.0	61.0	0.5	10.0
48	3890	32.0	60.0	0.5	5.0
49	3891	24.0	92.0	0.6	5.0
50	3892	20.0	90.0	0.4	10.0
51	3893	17.0	71.0	0.4	5.0
52	3894	13.0	67.0	0.4	5.0
53	3895	14.0	78.0	0.4	5.0
54	3896	23.0	122.0	0.3	1.0
55	3897	14.0	76.0	0.3	5.0
56	3898	20.0	86.0	0.4	15.0
57	3899	17.0	70.0	0.4	10.0
58	3900	14.0	58.0	0.3	1.0
59	3901	15.0	56.0	0.4	1.0
60	3902	16.0	51.0	0.4	1.0
61	3903	26.0	71.0	0.3	1.0
62	3904	25.0	50.0	0.3	1.0
63	3905	16.0	64.0	0.3	1.0
64	3906	20.0	57.0	0.3	1.0
65	3907	18.0	66.0	0.3	5.0
66	3908	12.0	42.0	0.3	1.0
67	3909	15.0	65.0	0.4	1.0
68	3910	16.0	40.0	0.4	5.0
69	3911	16.0	71.0	0.3	5.0
70	3912	16.0	100.0	0.3	1.0
71	3913	71.0	94.0	0.6	5.0
72	3914	16.0	65.0	0.4	5.0
73	3915	20.0	68.0	0.3	5.0
74	3916	16.0	93.0	0.3	10.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

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FILE NO G 851

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
140	4000	60.0	156.0	0.5	1.0
141	4001	156.0	234.0	0.6	1.0
142	4002	31.0	145.0	0.4	1.0
143	4003	21.0	137.0	0.4	1.0
144	4004	29.0	164.0	0.3	1.0
145	4005	36.0	197.0	0.3	1.0
146	4006	16.0	44.0	0.2	1.0
147	4007	50.0	62.0	0.4	1.0
148	4008	20.0	90.0	0.4	1.0
149	4009	14.0	126.0	0.5	1.0
150	4010	16.0	133.0	0.5	1.0
151	4011	7.0	30.0	0.2	1.0
152	4012	13.0	130.0	0.3	1.0
153	4013	17.0	181.0	0.4	1.0
154	4014	38.0	175.0	0.5	1.0
155	4015	14.0	142.0	0.3	1.0
156	4016	11.0	173.0	0.3	1.0
157	4017	34.0	88.0	0.5	1.0
158	4018	13.0	169.0	0.5	1.0
159	4019	17.0	100.0	0.6	1.0
160	4020	11.0	120.0	0.3	1.0
161	4021	9.0	122.0	0.3	1.0
162	4022	6.0	94.0	0.2	1.0
163	4023	11.0	80.0	0.2	1.0
164	4024	42.0	56.0	0.3	1.0
165	4025	19.0	162.0	0.3	1.0
166	4026	22.0	91.0	0.3	1.0
167	4027	14.0	55.0	0.3	1.0
168	4028	38.0	72.0	0.3	1.0
169	4029	65.0	135.0	0.8	1.0
170	4030	120.0	87.0	0.4	1.0
171	4031	14.0	20.0	0.2	1.0
172	4032	18.0	60.0	0.5	1.0
173	4033	36.0	63.0	0.5	1.0
174	4034	18.0	46.0	0.3	1.0
175	4035	36.0	62.0	0.5	1.0
176	4036	14.0	53.0	0.2	1.0
177	4037	20.0	71.0	0.5	1.0
178	4038	12.0	85.0	0.5	1.0
179	4039	10.0	88.0	0.4	1.0
180	4040	12.0	177.0	0.4	1.0
181	4041	16.0	67.0	0.3	1.0
182	4042	12.0	81.0	0.4	10.0
183	4043	9.0	102.0	0.2	1.0
184	4044	9.0	118.0	0.3	1.0
185	4045	10.0	45.0	0.2	1.0
186	4046	15.0	94.0	0.2	1.0
187	4047	17.0	95.0	0.6	1.0
188	4048	9.0	87.0	0.3	1.0
189	4049	8.0	342.0	0.4	1.0
190	4050	17.0	180.0	0.5	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
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FILE NO G 796

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
191	4051	16.0	140.0	0.5	1.0
192	4052	13.0	103.0	0.4	1.0
193	4053	15.0	104.0	0.5	1.0
194	4054	15.0	65.0	0.4	1.0
195	4055	16.0	60.0	0.4	1.0
196	4056	16.0	67.0	0.4	1.0
197	4057	17.0	49.0	0.4	1.0
198	4058	14.0	46.0	0.4	1.0
199	4059	42.0	51.0	0.7	1.0
200	4060	24.0	94.0	0.5	1.0

PLEASE NOTE THAT GOLD IS REPORTED IN PPB

IN THE AU COLUMN "1" INDICATES LESSTHAN 5 PPB

IN THE AU COLUMN "1" INDICATES LESSTHAN 5 PPB

CU

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE JUNE 29 1983
ANALYST LW
FILE NO. G 796 (b)

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	4061	12.0	41.0	0.5	1.0
2	4062	14.0	64.0	0.5	10.0
3	4063	11.0	46.0	0.4	1.0
4	4064	10.0	80.0	0.4	1.0
5	4065	11.0	48.0	0.4	1.0
6	4066	13.0	52.0	0.4	1.0
7	4067	14.0	48.0	0.5	1.0
8	4068	12.0	67.0	0.4	1.0
9	4069	10.0	55.0	0.2	1.0
10	4070	11.0	47.0	0.2	1.0
11	4071	16.0	109.0	0.4	1.0
12	4072	8.0	57.0	0.2	1.0
13	4073	12.0	58.0	0.3	1.0
14	4074	11.0	70.0	0.4	1.0
15	4075	20.0	100.0	0.5	1.0
16	4076	12.0	67.0	0.4	1.0
17	4077	11.0	49.0	0.4	1.0
18	4078	8.0	52.0	0.3	1.0
19	4079	8.0	53.0	0.3	1.0
20	4080	10.0	51.0	0.4	1.0
21	4081	7.0	50.0	0.3	1.0
22	4082	37.0	49.0	0.5	1.0
23	4083	18.0	65.0	0.4	1.0
24	4084	57.0	322.0	0.6	1.0
25	4085	12.0	84.0	0.4	1.0
26	4086	11.0	73.0	0.5	1.0
27	4087	9.0	84.0	0.4	1.0
28	4088	9.0	64.0	0.3	1.0
29	4089	15.0	75.0	0.3	1.0
30	4090	17.0	66.0	0.3	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
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FILE NO G 796

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	4091	18.0	72.0	0.5	1.0
32	4092	15.0	71.0	0.5	1.0
33	4093	13.0	51.0	0.5	1.0
34	4094	21.0	87.0	0.6	1.0
35	4095	12.0	80.0	0.4	1.0
36	4096	15.0	87.0	0.4	1.0
37	4097	13.0	51.0	0.4	1.0
38	4098	10.0	43.0	0.3	1.0
39	4099	13.0	63.0	0.4	1.0
40	4100	16.0	49.0	0.4	1.0
41	4101	13.0	61.0	0.5	1.0
42	4102	18.0	68.0	0.8	1.0
43	4103	16.0	100.0	0.4	1.0
44	4104	15.0	67.0	0.4	1.0
45	4105	12.0	44.0	0.3	1.0
46	4106	13.0	23.0	0.4	1.0
47	4107	10.0	42.0	0.4	1.0
48	4108	12.0	63.0	0.3	1.0
49	4109	8.0	76.0	0.3	1.0
50	4110	9.0	62.0	0.3	1.0
51	4111	10.0	73.0	0.5	1.0
52	4112	8.0	58.0	0.3	1.0
53	4113	6.0	95.0	0.3	1.0
54	4114	8.0	57.0	0.3	1.0
55	4115	9.0	72.0	0.4	1.0
56	4116	27.0	54.0	0.5	1.0
57	4117	24.0	46.0	0.3	1.0
58	4118	13.0	55.0	0.2	1.0
59	4119	28.0	125.0	0.5	1.0
60	4120	18.0	120.0	0.4	1.0
61	4121	17.0	65.0	0.4	1.0
62	4122	27.0	121.0	0.5	1.0
63	4123	37.0	130.0	0.4	1.0
64	4124	80.0	180.0	0.5	1.0
65	4125	30.0	106.0	0.5	1.0
66	4126	25.0	92.0	0.4	1.0
67	4127	12.0	93.0	0.3	1.0
68	4128	11.0	60.0	0.3	1.0
69	4129	15.0	87.0	0.3	1.0
70	4130	21.0	74.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

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KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	4131	22.0	70.0	0.4	1.0
72	4132	18.0	120.0	0.4	1.0
73	4133	13.0	66.0	0.4	0.0
74	4134	8.0	25.0	0.2	1.0
75	4135	15.0	86.0	0.3	1.0
76	4136	17.0	62.0	0.5	1.0
77	4137	13.0	90.0	0.4	1.0
78	4138	9.0	48.0	0.2	1.0
79	4139	21.0	64.0	0.5	1.0
80	4140	23.0	82.0	0.6	1.0
81	4141	15.0	76.0	0.5	1.0
82	4142	14.0	72.0	0.4	1.0
83	4143	13.0	59.0	0.3	1.0
84	4144	12.0	38.0	0.3	1.0
85	4145	12.0	64.0	0.5	1.0
86	4146	9.0	31.0	0.3	1.0
87	4147	10.0	1080.0	0.9	1.0
88	4148	12.0	192.0	0.7	1.0
89	4149	11.0	267.0	0.5	1.0
90	4150	11.0	122.0	0.4	1.0
91	4151	8.0	74.0	0.3	1.0
92	4152	10.0	151.0	0.4	1.0
93	4153	70.0	464.0	0.5	1.0
94	4154	46.0	188.0	0.6	1.0
95	4155	13.0	256.0	0.5	1.0
96	4156	12.0	164.0	0.4	1.0
97	4157	8.0	116.0	0.4	1.0
98	4158	15.0	38.0	0.4	1.0
99	4159	15.0	55.0	0.6	1.0
100	4160	11.0	49.0	0.3	1.0
101	4161	12.0	63.0	0.3	1.0
102	4162	93.0	38.0	0.6	1.0
103	4163	9.0	135.0	0.2	1.0
104	4164	13.0	103.0	0.4	1.0
105	4165	13.0	96.0	0.4	1.0
106	4166	14.0	143.0	0.4	1.0
107	4167	14.0	193.0	0.5	1.0
108	4168	14.0	124.0	0.5	1.0
109	4169	10.0	130.0	0.5	1.0
110	4170	12.0	213.0	0.6	1.0

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE JULY 5 1983
ANALYST
FILE NO. G 800

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	4172	37.0	82.0	0.4	1.0
2	4173	40.0	102.0	0.3	1.0
3	4174	48.0	91.0	0.3	1.0
4	4175	61.0	88.0	0.3	1.0
5	4176	30.0	63.0	0.3	1.0
6	4177	28.0	62.0	0.4	1.0
7	4178	22.0	75.0	0.4	1.0
8	4179	32.0	94.0	0.5	1.0
9	4180	46.0	126.0	0.6	1.0
10	4181	28.0	80.0	0.4	1.0
11	4182	23.0	76.0	0.3	1.0
12	4183	26.0	67.0	0.4	1.0
13	4184	25.0	78.0	0.4	1.0
14	4185	33.0	89.0	0.4	1.0
15	4186	42.0	75.0	0.4	1.0
16	4187	62.0	104.0	0.6	1.0
17	4188	31.0	116.0	0.4	1.0
18	4189	23.0	79.0	0.3	1.0
19	4190	29.0	72.0	0.3	1.0
20	4191	33.0	69.0	0.4	1.0
21	4192	33.0	59.0	0.4	1.0
22	4193	34.0	83.0	0.5	1.0
23	4194	29.0	69.0	0.4	1.0
24	4195	18.0	54.0	0.3	1.0
25	4196	22.0	70.0	0.3	1.0
26	4197	29.0	81.0	0.5	1.0
27	4198	26.0	89.0	0.5	1.0
28	4199	24.0	81.0	0.5	1.0
29	4200	18.0	54.0	0.2	1.0
30	4201	16.0	60.0	0.3	1.0

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FILE NO G 800

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	4202	16.0	62.0	0.3	1.0
32	4203	14.0	59.0	0.3	1.0
33	4204	20.0	60.0	0.3	1.0
34	4205	19.0	65.0	0.3	1.0
35	4206	36.0	70.0	0.4	1.0
36	4207	27.0	75.0	0.4	1.0
37	4208	21.0	97.0	0.3	1.0
38	4209	28.0	135.0	0.3	1.0
39	4210	25.0	63.0	0.3	1.0
40	4211	32.0	85.0	0.4	1.0
41	4212	74.0	140.0	0.4	1.0
42	4213	24.0	86.0	0.5	1.0
43	4214	26.0	94.0	0.4	1.0
44	4215	25.0	106.0	0.5	1.0
45	4216	25.0	156.0	0.4	1.0
46	4217	35.0	127.0	0.4	1.0
47	4218	34.0	126.0	0.6	1.0
48	4219	31.0	83.0	0.5	1.0
49	4220	26.0	65.0	0.4	1.0
50	4221	18.0	75.0	0.4	1.0
51	4222	32.0	67.0	0.4	1.0
52	4223	25.0	50.0	0.3	1.0
53	4224	19.0	101.0	0.4	1.0
54	4225	26.0	87.0	0.5	1.0
55	4226	33.0	61.0	0.5	1.0
56	4227	34.0	84.0	0.9	1.0
57	4228	26.0	97.0	0.8	1.0
58	4229	31.0	173.0	0.5	1.0
59	4230	31.0	124.0	0.4	100.0
60	4231	31.0	106.0	0.4	1.0
61	4232	19.0	60.0	0.4	1.0
62	4233	27.0	47.0	0.5	1.0
63	4234	35.0	53.0	0.4	1.0
64	4235	25.0	79.0	0.4	1.0
65	4236	20.0	66.0	0.4	1.0
66	4237	21.0	59.0	0.4	1.0
67	4238	16.0	93.0	0.3	1.0
68	4239	31.0	168.0	0.5	1.0
69	4240	34.0	93.0	0.4	1.0
70	4241	32.0	75.0	0.4	1.0

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FILE NO G 800

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	4242	48.0	104.0	0.4	1.0
72	4243	37.0	87.0	0.4	1.0
73	4244	63.0	102.0	0.5	1.0
74	4245	148.0	1117.0	0.9	1.0
75	4246	35.0	120.0	0.4	1.0
76	4247	31.0	109.0	0.4	1.0
77	4248	42.0	79.0	0.4	1.0
78	4249	48.0	68.0	0.5	1.0
79	4250	36.0	69.0	0.4	1.0
80	4251	35.0	62.0	0.3	1.0
81	4252	34.0	91.0	0.4	1.0
82	4253	43.0	89.0	0.4	1.0
83	4254	28.0	77.0	0.3	1.0
84	4255	22.0	59.0	0.3	1.0
85	4256	24.0	66.0	0.4	1.0
86	4257	20.0	76.0	0.3	1.0
87	4258	27.0	55.0	0.3	1.0
88	4259	34.0	108.0	0.4	1.0
89	4260	28.0	95.0	0.3	1.0
90	4261	35.0	115.0	0.4	1.0
91	4262	47.0	97.0	0.4	1.0
92	4263	49.0	73.0	0.4	1.0
93	4264	87.0	85.0	0.5	1.0
94	4265	66.0	243.0	0.4	1.0
95	4266	36.0	130.0	0.5	1.0
10	4267	14.0	75.0	0.3	1.0
11	4268	15.0	66.0	0.3	1.0
12	4269	8.0	47.0	0.2	1.0
13	4270	17.0	161.0	0.4	1.0
14	4271	27.0	120.0	0.4	1.0
15	4272	28.0	140.0	0.5	1.0
16	4273	10.0	59.0	0.3	1.0
17	4274	27.0	83.0	0.4	1.0
18	4275	28.0	125.0	0.4	1.0
19	4276	16.0	79.0	0.4	1.0
20	4277	19.0	78.0	0.4	1.0
21	4278	20.0	82.0	0.5	1.0
22	4279	26.0	76.0	0.4	1.0
23	4280	26.0	61.0	0.4	1.0
24	4281	16.0	46.0	0.4	1.0
25	4282	15.0	42.0	0.4	1.0
26	4283	16.0	32.0	0.4	1.0
27	4284	17.0	38.0	0.4	1.0
28	4285	13.0	45.0	0.4	1.0
29	4286	12.0	66.0	0.4	1.0
30	4287	15.0	64.0	0.4	1.0

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KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	4288	72.0	46.0	0.4	1.0
32	4289	15.0	153.0	0.4	1.0
33	4290	12.0	83.0	0.3	1.0
34	4291	11.0	51.0	0.3	1.0
35	4292	15.0	185.0	0.4	1.0
36	4293	14.0	191.0	0.4	1.0
37	4294	14.0	129.0	0.4	1.0
38	4295	12.0	151.0	0.4	1.0
39	4296	13.0	210.0	0.5	1.0
40	4297	23.0	397.0	0.4	1.0
41	4300	14.0	92.0	0.4	1.0
42	4301	14.0	93.0	0.4	1.0
43	4302	21.0	89.0	0.3	1.0
44	4303	21.0	80.0	0.4	1.0
45	4304	33.0	90.0	0.5	1.0
46	4305	48.0	180.0	0.4	1.0
47	4306	48.0	128.0	0.3	1.0
48	4307	31.0	125.0	0.4	25.0
49	4308	24.0	82.0	0.3	1.0
50	4309	15.0	68.0	0.4	1.0
51	4310	51.0	89.0	0.4	1.0
52	4311	28.0	148.0	0.4	1.0
53	4312	8.0	69.0	0.2	1.0
54	4313	15.0	280.0	0.5	1.0
55	4314	12.0	96.0	0.3	1.0
56	4315	20.0	61.0	0.4	1.0
57	4316	13.0	84.0	0.4	1.0
58	4317	12.0	96.0	0.4	1.0
59	4318	13.0	117.0	0.4	1.0
60	4319	14.0	202.0	0.5	1.0
61	4320	198.0	412.0	0.5	1.0
62	4321	24.0	65.0	0.4	1.0
63	4322	12.0	53.0	0.3	1.0
64	4323	10.0	85.0	0.4	1.0
65	4324	13.0	38.0	0.3	1.0
66	4325	12.0	120.0	0.3	1.0
67	4326	11.0	132.0	0.4	1.0
68	4327	8.0	65.0	0.3	1.0
69	4328	15.0	98.0	0.5	1.0
70	4329	11.0	84.0	0.4	1.0

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FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	4330	38.0	286.0	0.5	1.0
72	4331	16.0	64.0	0.4	1.0
73	4332	22.0	400.0	0.5	50.0
74	4333	9.0	96.0	0.4	1.0
75	4334	32.0	229.0	0.5	50.0
76	4335	42.0	311.0	1.2	375.0
77	4336	40.0	219.0	2.0	75.0
78	4337	15.0	110.0	0.4	1.0
79	4338	15.0	102.0	0.5	10.0
80	4339	13.0	75.0	0.3	1.0
81	4340	15.0	45.0	0.4	5.0
82	4341	21.0	86.0	0.4	10.0
83	4342	22.0	216.0	0.4	1.0
84	4343	13.0	132.0	0.4	1.0
85	4344	17.0	213.0	0.4	10.0
86	4345	14.0	69.0	0.3	5.0
87	4346	15.0	135.0	0.4	5.0
88	4347	16.0	51.0	0.4	10.0
89	4348	17.0	85.0	0.4	5.0
90	4349	14.0	35.0	0.4	10.0
91	4350	15.0	52.0	0.4	20.0
92	4351	16.0	70.0	0.4	10.0
93	4352	21.0	58.0	0.4	10.0
94	4353	29.0	139.0	0.5	10.0
95	4354	21.0	98.0	0.4	1.0
96	4355	59.0	265.0	0.6	1.0
97	4356	16.0	87.0	0.4	1.0
98	4357	20.0	80.0	0.3	1.0
99	4358	15.0	61.0	0.4	1.0
100	4359	16.0	43.0	0.4	1.0
101	4360	16.0	54.0	0.4	1.0
102	4361	15.0	57.0	0.4	50.0
103	4362	18.0	162.0	0.4	1.0
104	4363	29.0	58.0	0.4	1.0
105	4364	27.0	61.0	0.4	1.0
106	4365	28.0	60.0	0.4	1.0
107	4366	18.0	57.0	0.4	1.0
108	4367	24.0	51.0	0.4	1.0
109	4368	41.0	88.0	0.4	1.0
110	4369	44.0	67.0	0.5	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	4370	36.0	62.0	0.4	1.0
112	4371	46.0	93.0	0.5	1.0
113	4372	28.0	56.0	0.4	1.0
114	4373	22.0	57.0	0.4	1.0
115	4374	31.0	41.0	0.4	1.0
116	4375	30.0	52.0	0.4	40.0
117	4376	20.0	60.0	0.4	100.0
118	4377	26.0	60.0	0.4	1.0
119	4378	25.0	44.0	0.4	1.0
120	4379	31.0	73.0	0.4	1.0
121	4380	16.0	60.0	0.3	1.0
122	4381	15.0	49.0	0.4	1.0
123	4382	14.0	59.0	0.4	1.0
124	4383	12.0	58.0	0.4	1.0
125	4384	15.0	59.0	0.4	1.0
126	4385	14.0	40.0	0.3	1.0
127	4386	23.0	65.0	0.4	1.0
128	4387	20.0	58.0	0.4	1.0
129	4388	15.0	57.0	0.4	170.0
130	4389	28.0	64.0	0.4	1.0
131	4390	49.0	52.0	0.4	35.0
132	4391	25.0	47.0	0.4	1.0
133	4392	13.0	73.0	0.4	1.0
134	4393	13.0	60.0	0.4	1.0
135	4394	42.0	88.0	0.5	250.0
136	4395	34.0	62.0	0.4	1.0
137	4396	23.0	44.0	0.4	1.0
138	4397	31.0	63.0	0.4	1.0
139	4398	88.0	45.0	0.3	1.0
140	4399	158.0	112.0	0.5	1.0
141	4400	74.0	85.0	0.4	1.0
142	4401	138.0	135.0	0.4	1.0
143	4402	260.0	1250.0	1.0	1.0
144	4403	100.0	395.0	0.5	1.0
145	4404	27.0	160.0	0.4	1.0
146	4405	89.0	194.0	0.4	1.0
147	4406	25.0	61.0	0.4	1.0
148	4407	29.0	60.0	0.4	1.0
149	4408	55.0	127.0	0.4	1.0
150	4409	15.0	124.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
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FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
151	4410	25.0	80.0	0.4	1.0
152	4411	29.0	67.0	0.4	1.0
153	4412	35.0	58.0	0.5	1.0
154	4413	37.0	68.0	0.4	1.0
155	4414	28.0	60.0	0.4	1.0
156	4415	16.0	66.0	0.4	10.0
157	4416	61.0	217.0	0.4	1.0
158	4417	25.0	883.0	0.4	1.0
159	4418	28.0	185.0	0.4	1.0
160	4419	35.0	186.0	0.4	1.0
161	4420	54.0	510.0	0.4	1.0
162	4421	295.0	3250.0	0.7	1.0
163	4422	35.0	211.0	0.4	1.0
164	4423	46.0	139.0	0.5	1.0
165	4424	36.0	79.0	0.5	1.0
166	4425	56.0	62.0	0.4	1.0
167	4426	47.0	69.0	0.5	1.0
168	4427	49.0	81.0	0.5	1.0
169	4428	31.0	77.0	0.5	1.0
170	4429	48.0	75.0	0.4	5.0
171	4430	13.0	35.0	0.3	1.0
172	4431	10.0	31.0	0.3	10.0
173	4432	16.0	62.0	0.4	1.0
174	4433	15.0	57.0	0.4	1.0
175	4434	12.0	65.0	0.3	10.0
176	4435	13.0	66.0	0.4	1.0
177	4436	16.0	53.0	0.4	1.0
178	4437	14.0	73.0	0.4	1.0
179	4438	47.0	136.0	0.5	1.0
180	4439	31.0	95.0	0.5	1.0
181	4440	16.0	71.0	0.4	1.0
182	4441	15.0	47.0	0.4	1.0
183	4442	17.0	57.0	0.4	1.0
184	4443	15.0	64.0	0.4	1.0
185	4444	24.0	112.0	0.5	1.0
186	4445	24.0	137.0	0.5	1.0
187	4446	23.0	151.0	0.4	1.0
188	4447	24.0	78.0	0.4	1.0
189	4448	23.0	68.0	0.5	1.0
190	4449	25.0	89.0	0.5	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
191	4450	15.0	47.0	0.4	1.0
192	4451	23.0	80.0	0.5	1.0
193	4452	25.0	64.0	0.4	1.0
194	4453	21.0	91.0	0.5	1.0
195	4454	40.0	92.0	0.5	1.0
196	4455	25.0	77.0	0.4	1.0
197	4456	8.0	20.0	0.3	1.0
198	4457	26.0	131.0	0.5	1.0
199	4458	30.0	84.0	0.5	1.0
200	4459	31.0	90.0	0.4	1.0
201	4460	19.0	105.0	0.4	5.0
202	4461	14.0	50.0	0.4	1.0
203	4462	25.0	75.0	0.4	1.0
204	4463	24.0	96.0	0.5	1.0
205	4464	15.0	102.0	0.4	1.0
206	4465	31.0	73.0	0.5	1.0
207	4466	71.0	76.0	0.5	20.0
208	4467	51.0	83.0	0.4	1.0
209	4468	21.0	80.0	0.4	1.0
210	4469	24.0	126.0	0.5	1.0
211	4470	16.0	90.0	0.4	20.0
212	4471	15.0	59.0	0.4	1.0
213	4472	29.0	126.0	0.4	1.0
214	4473	11.0	35.0	0.3	1.0
215	4474	12.0	47.0	0.4	1.0
216	4475	10.0	86.0	0.4	240.0
217	4476	20.0	67.0	0.4	1.0
218	4477	15.0	61.0	0.4	1.0
219	4478	29.0	101.0	0.4	1.0
220	4479	16.0	79.0	0.4	1.0
221	4480	14.0	58.0	0.3	1.0
222	4481	31.0	77.0	0.4	1.0
223	4482	24.0	81.0	0.4	1.0
224	4483	25.0	65.0	0.3	1.0
225	4484	63.0	110.0	0.5	1.0
226	4485	18.0	74.0	0.4	1.0
227	4486	26.0	145.0	0.4	1.0
228	4487	42.0	127.0	0.5	1.0
229	4488	47.0	126.0	0.5	1.0
230	4489	26.0	81.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
231	4490	23.0	94.0	0.5	1.0
232	4491	16.0	49.0	0.4	1.0
233	4492	15.0	47.0	0.4	1.0
234	4493	16.0	43.0	0.4	1.0
235	4494	9.0	22.0	0.3	1.0
236	4495	31.0	56.0	0.4	1.0
237	4496	56.0	74.0	0.4	1.0
238	4497	237.0	139.0	0.6	1.0
239	4498	37.0	67.0	0.4	1.0
240	4499	78.0	153.0	0.8	1.0
241	4500	58.0	162.0	0.4	1.0
242	4501	75.0	210.0	0.4	1.0
243	4502	49.0	138.0	0.4	1.0
244	4503	46.0	162.0	0.4	1.0
245	4504	11.0	169.0	0.4	1.0
246	4505	49.0	71.0	0.4	1.0
247	4506	35.0	98.0	0.4	1.0
248	4507	44.0	87.0	0.4	1.0
249	4508	49.0	103.0	0.4	1.0
250	4509	36.0	101.0	0.4	1.0
251	4510	28.0	113.0	0.4	1.0
252	4511	27.0	108.0	0.4	1.0
253	4512	18.0	128.0	0.5	1.0
254	4513	25.0	102.0	0.5	1.0
255	4514	16.0	70.0	0.4	1.0
256	4515	16.0	95.0	0.4	1.0
257	4516	12.0	94.0	0.4	1.0
258	4517	11.0	69.0	0.3	100.0
259	4518	23.0	110.0	0.4	1.0
260	4519	15.0	88.0	0.4	1.0
261	4520	15.0	65.0	0.4	1.0
262	4521	23.0	82.0	0.4	1.0
263	4522	13.0	46.0	0.4	70.0
264	4523	28.0	76.0	0.4	10.0
265	4524	25.0	71.0	0.5	5.0
266	4525	30.0	90.0	0.5	1.0
267	4526	17.0	77.0	0.5	1.0
268	4527	20.0	115.0	0.4	50.0
269	4528	14.0	60.0	0.4	1.0
270	4529	14.0	70.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
271	4530	11.0	67.0	0.3	1.0
272	4531	11.0	45.0	0.4	1.0
273	4532	8.0	37.0	0.3	1.0
274	4533	11.0	61.0	0.3	1.0
275	4534	21.0	105.0	0.5	1.0
276	4535	12.0	75.0	0.4	1.0
277	4536	9.0	60.0	0.4	5.0
278	4537	15.0	149.0	0.4	1.0
279	4538	14.0	209.0	0.4	1.0
280	4539	14.0	110.0	0.4	1.0
281	4540	14.0	114.0	0.5	50.0
282	4541	19.0	142.0	0.4	1.0
283	4542	12.0	184.0	0.4	1.0
284	4543	32.0	201.0	0.5	1.0
285	4544	13.0	202.0	0.3	1.0
286	4545	7.0	68.0	5.0	1.0
287	4546	13.0	82.0	0.5	1.0
288	4547	24.0	87.0	0.4	1.0
289	4548	14.0	69.0	0.3	1.0
290	4549	14.0	93.0	0.4	1.0
291	4550	11.0	63.0	0.3	1.0
292	4551	17.0	87.0	0.4	1.0
293	4552	24.0	85.0	0.4	1.0
294	4553	35.0	88.0	0.4	20.0
295	4554	14.0	80.0	0.4	1.0
296	4555	17.0	95.0	0.4	1.0
297	4556	29.0	99.0	0.4	1.0
298	4557	13.0	123.0	0.4	1.0
299	4558	14.0	109.0	0.4	1.0
300	4559	12.0	103.0	0.4	1.0
301	4560	14.0	118.0	0.4	1.0
302	4561	14.0	124.0	0.4	1.0
303	4562	17.0	90.0	0.4	1.0
304	4563	11.0	63.0	0.3	1.0
305	4564	11.0	76.0	0.3	1.0
306	4565	15.0	153.0	0.5	1.0
307	4566	15.0	103.0	0.1	1.0
308	4567	14.0	94.0	0.4	1.0
309	4568	34.0	90.0	0.4	1.0
310	4569	21.0	100.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
311	4570	27.0	112.0	0.4	1.0
312	4571	19.0	70.0	0.4	1.0
313	4572	24.0	51.0	0.3	1.0
314	4573	14.0	56.0	0.4	1.0
315	4574	26.0	75.0	0.4	1.0
316	4575	9.0	23.0	0.2	1.0
317	4576	26.0	89.0	0.4	1.0
318	4577	14.0	53.0	0.4	1.0
319	4578	13.0	70.0	0.3	1.0
320	4579	21.0	73.0	0.4	1.0
321	4580	17.0	72.0	0.4	1.0
322	4581	12.0	44.0	0.4	1.0
323	4582	10.0	65.0	0.4	1.0
324	4583	16.0	54.0	0.4	25.0
325	4584	7.0	26.0	0.2	1.0
326	4585	0.0	0.0	0.0	0.0
327	4586	13.0	57.0	0.3	1.0
328	4587	18.0	70.0	0.4	1.0
329	4588	11.0	31.0	0.2	1.0
330	4589	27.0	97.0	0.4	1.0
331	4590	22.0	90.0	0.4	1.0
332	4591	17.0	215.0	0.4	1.0
333	4592	24.0	160.0	0.4	1.0
334	4593	24.0	156.0	0.4	1.0
335	4594	26.0	174.0	0.4	1.0
336	4595	25.0	58.0	0.4	1.0
337	4596	13.0	59.0	0.3	1.0
338	4597	11.0	58.0	0.4	1.0
339	4598	23.0	78.0	0.4	1.0
340	4599	15.0	76.0	0.3	1.0
341	4600	16.0	174.0	0.4	1.0
342	4601	43.0	155.0	0.4	1.0
343	4602	200.0	667.0	0.5	1.0
344	4603	42.0	110.0	0.4	1.0
345	4604	81.0	170.0	0.4	1.0
346	4605	367.0	349.0	0.5	1.0
347	4606	22.0	90.0	0.3	1.0

156 Geochem Data

JUL 22 1983

SAMLOOPS RESEARCH
&
ASSAY LABORATORY
LTD

B. C. CERTIFIED ASSAYERS
2895 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE JULY14 1983
ANALYST
FILE NO. G 887

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	4607	40.0	82.0	0.5	1.0
2	4608	58.0	91.0	0.7	1.0
3	4609	29.0	79.0	0.7	1.0
4	4610	9.0	28.0	0.3	1.0
5	4611	65.0	94.0	0.6	1.0
6	4612	28.0	269.0	0.6	1.0
7	4613	106.0	1620.0	0.8	1.0
8	4614	70.0	385.0	0.7	1.0
9	4615	38.0	220.0	0.7	1.0
10	4616	26.0	119.0	0.5	1.0
11	4617	31.0	86.0	0.5	1.0
12	4618	32.0	85.0	0.6	1.0
13	4619	15.0	18.0	0.3	1.0
14	4620	69.0	57.0	0.6	1.0
15	4621	65.0	83.0	0.6	1.0
16	4622	19.0	95.0	0.5	1.0
17	4623	17.0	81.0	0.5	1.0
18	4624	18.0	124.0	0.6	1.0
19	4625	40.0	61.0	0.6	23.0
20	4626	37.0	67.0	0.6	1.0
21	4627	39.0	66.0	0.5	1.0
22	4628	20.0	96.0	0.5	1.0
23	4629	17.0	68.0	0.4	85.0
24	4630	18.0	101.0	0.5	1.0
25	4631	20.0	109.0	0.5	1.0
26	4632	56.0	156.0	0.6	1.0
27	4633	21.0	166.0	0.5	1.0
28	4634	16.0	219.0	0.6	1.0
29	4635	25.0	730.0	0.6	1.0
30	4636	27.0	235.0	0.4	1.0

ARMLOGA'S RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 807

ARAL NO.	IDENTIFICATION	CU	ZN	AG	AU	
31	4637	29.0	84.0	0.6	1.0	
32	4638	~~0.0~~	~~0.0~~	~~0.0~~	~~0.0~~	no sample
33	4639	16.0	42.0	0.4	1.0	
34	4640	26.0	53.0	0.4	1.0	
35	4641	23.0	57.0	0.4	1.0	
36	4642	16.0	39.0	0.2	1.0	
37	4643	24.0	70.0	0.5	1.0	
38	4644	19.0	87.0	0.4	10.0	
39	4645	17.0	121.0	0.5	1.0	
40	4646	15.0	80.0	0.4	1.0	
41	4647	15.0	155.0	0.4	1.0	
42	4648	17.0	164.0	0.4	20.0	
43	4649	6.0	30.0	0.2	1.0	
44	4650	3.0	163.0	0.2	1.0	
45	4651	16.0	150.0	0.4	1.0	
46	4652	20.0	141.0	0.5	1.0	
47	4653	16.0	84.0	0.4	1.0	
48	4654	16.0	90.0	0.4	10.0	
49	4655	15.0	99.0	0.4	10.0	
50	4656	16.0	107.0	0.3	15.0	
51	4657	20.0	132.0	0.5	10.0	
52	4658	15.0	124.0	0.4	1.0	
53	4659	17.0	100.0	0.5	10.0	
54	4660	17.0	97.0	0.6	5.0	
55	4661	13.0	60.0	0.4	1.0	
56	4662	14.0	66.0	0.4	30.0	
57	4663	11.0	96.0	0.4	1.0	
58	4664	16.0	94.0	0.6	1.0	
59	4665	17.0	150.0	0.6	1.0	
60	4666	13.0	216.0	0.5	1.0	
61	4667	12.0	155.0	0.6	1.0	
62	4668	27.0	176.0	0.5	1.0	
63	4669	11.0	150.0	0.3	1.0	
64	4670	11.0	94.0	0.3	1.0	
65	4671	13.0	72.0	0.3	1.0	
66	4672	17.0	135.0	0.4	1.0	
67	4673	11.0	50.0	0.3	1.0	
68	4674	26.0	104.0	0.3	1.0	
69	4675	10.0	72.0	0.3	1.0	
70	4676	30.0	150.0	0.6	1.0	

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 807

ANAL NO	IDENTIFICATION	CU	ZN	AG	AU
71	4677	38.0	88.0	0.6	1.0
72	4678	17.0	67.0	0.3	10.0
73	4679	18.0	100.0	0.4	10.0
74	4680	17.0	175.0	0.3	5.0
75	4681	22.0	125.0	0.6	10.0
76	4682	13.0	168.0	0.4	10.0
77	4683	25.0	147.0	0.4	20.0
78	4684	15.0	104.0	0.4	30.0
79	4685	9.0	48.0	0.2	15.0
80	4686	15.0	66.0	0.3	25.0
81	4687	26.0	96.0	0.4	10.0
82	4688	15.0	81.0	0.3	1.0
83	4689	14.0	82.0	0.3	1.0
84	4690	30.0	65.0	0.5	1.0
85	4691	26.0	76.0	0.5	1.0
86	4692	12.0	46.0	0.2	1.0
87	4693	18.0	41.0	0.5	1.0
88	4694	23.0	49.0	0.5	100.0
89	4695	12.0	30.0	0.4	1.0
90	4696	16.0	120.0	0.5	1.0
91	4697	24.0	65.0	0.4	1.0
92	4698	28.0	52.0	0.3	1.0
93	4699	13.0	49.0	0.3	1.0
94	4700	9.0	65.0	0.3	1.0
95	4701	18.0	56.0	0.3	1.0
96	4702	25.0	104.0	0.4	1.0
97	4703	18.0	121.0	0.4	1.0
98	4704	6.0	63.0	0.4	1.0
99	4705	4.0	26.0	0.3	1.0
100	4706	9.0	79.0	0.4	1.0
101	4707	9.0	94.0	0.5	1.0
102	4708	6.0	43.0	0.3	1.0
103	4709	17.0	60.0	0.4	1.0
104	4710	0.0	0.0	0.0	1.0
105	4711	8.0	71.0	0.3	1.0
106	4712	27.0	88.0	0.6	1.0
107	4713	32.0	98.0	0.6	1.0
108	4714	9.0	100.0	0.3	1.0
109	4715	6.0	41.0	0.3	1.0
110	4716	8.0	35.0	0.3	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 307

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	4717	14.0	75.0	0.2	1.0
112	4718	24.0	104.0	0.3	1.0
113	4719	7.0	60.0	0.4	1.0
114	4720	6.0	27.0	0.3	1.0
115	4721	16.0	74.0	0.4	1.0
116	4722	16.0	55.0	0.3	1.0
117	4723	19.0	89.0	0.3	1.0
118	4724	16.0	101.0	0.3	1.0
119	4725	15.0	53.0	0.2	1.0
120	4726	17.0	30.0	0.2	1.0
121	4727	13.0	64.0	0.2	1.0
122	4728	28.0	89.0	0.2	1.0
123	4729	27.0	102.0	0.3	1.0
124	4730	15.0	98.0	0.3	1.0
125	4731	15.0	54.0	0.2	1.0
126	4732	17.0	155.0	0.4	1.0
127	4733	22.0	118.0	0.5	1.0
128	4734	16.0	126.0	0.4	1.0
129	4735	16.0	238.0	0.4	1.0
130	4736	17.0	140.0	0.3	1.0
131	4737	24.0	146.0	0.5	1.0
132	4738A	17.0	109.0	0.4	1.0
133	4738B	16.0	83.0	0.3	1.0
134	4739	16.0	85.0	0.3	1.0
135	4740	15.0	41.0	0.2	1.0
136	4741	24.0	96.0	0.5	1.0
137	4742	16.0	141.0	0.3	1.0
138	4743	12.0	98.0	0.3	1.0
139	4744	17.0	141.0	0.4	1.0
140	4745	16.0	250.0	0.4	1.0
141	4746	19.0	351.0	0.5	1.0
142	4747	13.0	319.0	0.6	1.0
143	4748	29.0	233.0	0.5	1.0
144	4749	105.0	56.0	0.6	1.0
145	4750	29.0	63.0	0.5	1.0

143 total samples

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

* NB NO SAMPLE FOR 4638

JUL 25 1983

KAMLOOPS RESEARCH
&
ASSAY LABORATORY
LTD

B. C. CERTIFIED ASSAYERS
2095 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE JULY 21 1983
ANALYST
FILE NO. G 812

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	47491	18.0	107.0	0.6	1.0
2	4750	36.0	310.0	0.8	1.0
3	4751	18.0	88.0	0.6	1.0
4	4752	21.0	58.0	0.6	1.0
5	4753	24.0	98.0	0.7	1.0
6	4754	20.0	75.0	0.6	1.0
7	4755	19.0	104.0	0.7	10.0
8	4756	18.0	97.0	0.6	1.0
9	4757	19.0	103.0	0.6	1.0
10	4758	16.0	70.0	0.5	1.0
11	4759	17.0	86.0	0.6	15.0
12	4760	21.0	145.0	0.8	1.0
13	4761	16.0	93.0	0.6	1.0
14	4762	14.0	139.0	0.6	1.0
15	4763	14.0	104.0	0.6	1.0
16	4766	85.0	63.0	1.3	1.0
17	4769	14.0	65.0	0.7	1.0
18	4770	14.0	89.0	0.9	1.0
19	4771	19.0	159.0	1.0	1.0
20	4772	26.0	162.0	0.9	25.0
21	4773	24.0	140.0	0.7	15.0
22	4774	32.0	238.0	0.7	1.0
23	4775	22.0	149.0	0.6	1.0
24	4776	23.0	112.0	0.7	1.0
25	4777	36.0	148.0	0.7	1.0
26	4778	38.0	124.0	0.7	1.0
27	4779	63.0	153.0	0.8	1.0
28	4780	28.0	120.0	0.7	1.0
29	4781	35.0	125.0	0.8	100.0
30	4782	35.0	116.0	0.8	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 812

ANAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	4783	32.0	93.0	0.7	1.0
32	4784	40.0	117.0	0.8	1.0
33	4785	42.0	85.0	0.8	1.0
34	4786	44.0	115.0	0.8	1.0
35	4787	18.0	114.0	0.6	1.0
36	4788	17.0	135.0	0.6	1.0
37	4789	32.0	146.0	0.8	1.0
38	4790	18.0	150.0	0.7	1.0
39	4791	26.0	166.0	0.8	1.0
40	4792	28.0	120.0	0.7	1.0
41	4793	31.0	121.0	0.6	1.0
42	4794	24.0	134.0	0.7	1.0
43	4795	27.0	100.0	0.6	1.0
44	4796	34.0	105.0	0.8	1.0
45	4797	28.0	89.0	0.7	1.0
46	4798	17.0	108.0	0.8	1.0
47	4799	16.0	137.0	0.7	1.0
48	4800	27.0	184.0	0.7	1.0
49	4801	18.0	208.0	0.7	1.0
50	4802	85.0	42.0	0.9	1.0
51	4803	34.0	78.0	0.7	1.0
52	4804	20.0	92.0	0.7	70.0
53	4805	23.0	136.0	0.7	1.0
54	4806	26.0	100.0	0.6	1.0
55	4807	25.0	165.0	0.7	1.0
56	4807	24.0	103.0	0.7	1.0
57	4809	27.0	183.0	0.8	1.0
58	4810	25.0	107.0	0.7	1.0
59	4811	21.0	147.0	0.8	1.0
60	4812	25.0	90.0	0.7	1.0
61	4813	29.0	94.0	0.8	1.0
62	4814	32.0	127.0	1.2	1.0
63	4815	24.0	110.0	0.9	1.0
64	4816	28.0	132.0	0.8	1.0
65	4817	32.0	28.0	0.7	1.0
66	4818	22.0	94.0	0.7	1.0
67	4819	19.0	100.0	0.7	1.0
68	4820	19.0	102.0	0.7	1.0
69	4821	34.0	126.0	0.7	1.0
70	4822	23.0	103.0	0.7	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 812

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	4823	19.0	96.0	0.8	1.0
72	4824	15.0	91.0	0.7	1.0
73	4825	20.0	106.0	0.8	1.0
74	4826	23.0	117.0	0.8	1.0
75	4827	27.0	135.0	0.9	1.0
76	4828	26.0	88.0	0.8	1.0
77	4829	26.0	158.0	0.9	1.0
78	4830	23.0	137.0	0.8	1.0
79	4831	34.0	123.0	0.9	1.0
80	4832	14.0	109.0	0.8	1.0
81	4833	20.0	173.0	0.9	1.0
82	4834	36.0	191.0	0.9	1.0
83	4835	25.0	72.0	0.8	1.0
84	4836	30.0	86.0	0.9	1.0
85	4837	26.0	110.0	0.8	1.0
86	4838	27.0	123.0	0.8	1.0
87	4839	41.0	319.0	0.9	1.0
88	4840	33.0	132.0	0.8	1.0
89	4841	35.0	112.0	0.8	1.0
90	4842	30.0	113.0	0.8	1.0
91	4843	44.0	123.0	0.9	1.0
92	4844	85.0	228.0	1.0	1.0
93	4845	42.0	130.0	0.8	1.0
94	4846	41.0	181.0	0.8	1.0
95	4847	33.0	251.0	1.0	1.0
96	4848	55.0	258.0	1.0	1.0
97	4849	28.0	140.0	0.8	1.0
98	4850	32.0	161.0	0.8	1.0
99	4851	14.0	162.0	0.7	1.0
100	4852	28.0	124.0	0.7	1.0
101	4853	24.0	188.0	0.8	1.0
102	4854	32.0	96.0	0.7	1.0
103	4855	31.0	74.0	0.6	1.0
104	4856	19.0	167.0	0.7	1.0
105	4857	20.0	109.0	0.7	15.0
106	4858	20.0	91.0	0.7	1.0
107	4859	21.0	118.0	0.8	1.0
108	4860	18.0	183.0	0.8	1.0
109	4861	22.0	80.0	0.8	1.0
110	4862	19.0	209.0	0.7	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 812

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	4863	19.0	117.0	0.8	1.0
112	4864	28.0	109.0	0.8	1.0
113	4865	20.0	137.0	0.8	1.0
114	4866	34.0	86.0	0.8	1.0
115	4867	25.0	121.0	0.6	25.0
116	4868	26.0	168.0	0.8	1.0
117	4869	122.0	62.0	0.7	1.0
118	4870	78.0	75.0	0.8	1.0
119	4871	29.0	118.0	0.7	1.0
120	4872	42.0	94.0	0.6	1.0
121	4873	55.0	118.0	0.7	10.0
122	4974	90.0	178.0	0.9	10.0
123	4975	57.0	150.0	0.7	1.0
124	4976	26.0	337.0	0.8	1.0
125	4977	35.0	195.0	0.8	1.0
126	4978	23.0	175.0	0.7	1.0
127	4979	26.0	138.0	0.7	1.0
128	4980	31.0	133.0	0.6	1.0
129	4981	31.0	117.0	0.7	1.0
130	4982	32.0	122.0	0.8	1.0
131	4983	26.0	100.0	0.7	1.0
132	4984	30.0	89.0	0.7	1.0
133	4985	54.0	130.0	1.3	1.0
134	4986	16.0	95.0	0.6	1.0
135	4987	17.0	84.0	0.6	1.0
136	4988A	14.0	76.0	0.6	1.0
137	4988B	45.0	182.0	0.9	1.0
138	4989	44.0	201.0	1.1	1.0
139	4990	33.0	125.0	0.9	1.0
140	4991	30.0	142.0	0.8	1.0
141	4992	20.0	110.0	0.7	1.0
142	4993	14.0	63.0	0.5	1.0
143	4994	21.0	107.0	0.8	5.0
144	4995	33.0	112.0	0.7	1.0
145	4996	38.0	106.0	0.8	1.0
146	4997	36.0	130.0	0.8	1.0
147	4998	30.0	113.0	0.8	1.0
148	4999	39.0	98.0	0.9	5.0

Member
Canadian Testing
Association

KAMLOOPS *RESEARCH & ASSAY* LABORATORY LTD.

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.
V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources

Box 130,

Greenwood, B.C. V0H 1J0 Project 156

Certificate No. K 5601

Date July 6, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Au	Ag	Cu						
		ozs/ton	ozs/ton	per cent						
1	5000	-	1.62	2.06						
2	5010	.108	6.00	.68						
3	5011	.088	7.64	1.72						

NOTE:
Rejects retained three weeks.
Pulps retained three months unless otherwise arranged.

Registered Assayer, Province of British Columbia

Member
Canadian Testing
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B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources

Box 795

Vernon,B.C. V1T 6M7

Project 156

Certificate No. K 5624

Date July 14, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Ag	Zn	Cu	Au					
		ozs/ton	per cent	percent	ppb					
1	5016	1.49	2.31	1.55	1200					
2	5018	-	.60	-						

NOTE:
Rejects retained three weeks.
Pulps retained three months
unless otherwise arranged.

Registered Assayer, Province of British Columbia

KAMLOOPS
RESEARCH & ASSAY
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B.C. CERTIFIED ASSAYERS

912 LAVAL CRESCENT — KAMLOOPS, B.C.
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PHONE: (604) 372-2784 — TELEX: 048-8320

1/0

SEP 09 1983

GEOCHEMICAL LAB REPORT

Kettle River Resources Ltd.
Box 130
Greenwood, B.C.
V0H 1J0

REVISED

DATE September 2, 1983

ANALYST

FILE NO. —ATTENTION: MR. BARRY KYBA

FILE NO. G-813

KRAL NO.	IDENTIFICATION	ppm Cu	ppm Zn	ppm Ag
1	5033	1780	48	5.0
2	5032	G10000	84	16.5
3	5031	1520	116	3.4
4	5030	45	275	.8
5	5029	890	91	2.5
6	5028	470	4000	10.2
7	5027	7770	295	13.5
8	5026	1670	106	8.7
9	5025	81	35	1.5
10	5024	535	3500	2.9

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 806

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
135	5034	141.0	735.0	2.4	100.0
136	5035	>10000.0	750.0	>20.0	45.0
137	5036	8150.0	>10000.0	10.8	135.0
138	5037	440.0	88.0	1.2	90.0
139	5038	>10000.0	640.0	>20.0	90.0
140	5039	192.0	371.0	4.2	45.0
141	5040	856.0	218.0	3.4	90.0
1	5043	53.0	40.0	0.9	1.0
2	5044	25.0	33.0	2.0	25.0
3	5045	24.0	73.0	12.3	20.0
4	5046	12.0	72.0	2.9	1.0
5	5047	10.0	70.0	1.1	1.0

Xmas golds. You were awaiting for our 1st. rock geos.

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 889

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
54	5048	25.0	60.0	0.4	5.0
55	5049	19.0	36.0	0.5	5.0
56	5050	18.0	38.0	0.4	5.0
57	5051	7.0	50.0	1.7	1.0
58	5052	8.0	89.0	0.6	1.0
59	5053	4.0	77.0	0.5	1.0
60	5054	23.0	92.0	0.5	1.0
201	5055	92.0	80.0	0.6	1.0
202	5056	70.0	65.0	0.6	1.0
203	5057	9.0	55.0	1.6	5.0
204	5058	12.0	86.0	0.4	55.0

152

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PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources Ltd.

Box 130

Greenwood, B.C. V0H 1J0 ATTENTION: MR. BARRY KYBA

Certificate No. K-5737

Date September 14, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Cu	Zn							
		percent	percent							
1	5032	2.70	-							
2	5035	3.38	-							
3	5036	-	2.62							
4	5038	2.56	-							

NOTE:
Rejects retained three weeks.
Pulps retained three months
unless otherwise arranged.

Certified Assayers Province of British Columbia

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KAMLOOPS *RESEARCH & ASSAY* LABORATORY LTD.

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V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

12 BK

TO Kettle River Resources Ltd. PROJECT 156

Box 130

Greenwood, B.C. V0H 1J0 ATTENTION: MR. BARRY KYBA

Certificate No. K-5722

Date August 9, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Au	Ag							
		ounces/ton	ounces/ton							
1	[redacted] 5041	L.001	.15							
	L means "Less than"									
	5042	- lost in	transit -							

NOTE:
Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.

Registered Assayer, Province of British Columbia

KAMLOOPS RESEARCH
&
ASSAY LABORATORY
LTD

B.C. CERTIFIED ASSAYERS

2095 WEST TRANS CANADA HIGHWAY
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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD.
BOX 130
GREENWOOD, B.C.
V0H 1J0
PROJECT 156
ATTENTION: MR. BARRY KYBA

DATE 09/22/83
ANALYST RJL
FILE NO. G-916&928

KRAL NO.	IDENTIFICATION	AU	CU	ZN	AG
127	5060	33.0	980.0	5.4	5.0
1	5061	20.0	7.0	52.0	0.5
2	5062	1.0	46.0	307.0	1.4
3	5063	35.0	106.0	4000.0	1.7
4	5064	65.0	467.0	189.0	2.4
5	5065	1.0	96.0	295.0	2.1
6	5066	5.0	14.0	127.0	0.5
7	5067	5.0	35.0	155.0	1.3
8	5068	1.0	43.0	42.0	0.8
9	5070	1.0	334.0	75.0	1.5
10	5071	5.0	48.0	486.0	2.6
11	5072	45.0	1200.0	259.0	4.5
12	5074	10.0	250.0	138.0	2.3
13	5075	25.0	193.0	80.0	1.3
14	5076	5.0	65.0	355.0	1.0
15	5077	30.0	194.0	107.0	1.5
16	5082	5.0	34.0	34.0	1.0
17	5086	5.0	33.0	24.0	0.9
18	5087	10.0	38.0	36.0	0.7

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

IN ZN COLUMN 4000 INDICATES GREATER THAN 4000 PPM

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

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KAMLOOPS *RESEARCH & ASSAY* LABORATORY LTD.

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.
V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources Ltd.

Box 130

Greenwood, B.C. V0H 1J0 ATTENTION: MR. BARRY KYBA

Certificate No. K-5913

Date September 28, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Au	Ag	Cu	Zn					
		ounces/ton	ounces/ton	percent	percent					
~~1~~	~~13094~~	~~.002~~	~~.45~~	~~.22~~	~~2.48~~					
2	5069	.003	.26	.57	.03					
3	5073	.036	1.46	3.86	.36					
4	5078	.010	.52	2.11	.40					
5	5079	.002	.23	.24	.06					
6	5080	.184	1.46	8.76	.10					
7	5081	.005	.26	1.07	.03					
8	5083	.008	.17	.54	.30					
9	5084	.004	.23	.52	.06					
10	5085	.032	1.57	2.89	.96					

NOTE
Rejects retained three weeks
Pulps retained three months
unless otherwise arranged

Registered Assayer, Province of British Columbia

KAMLOOPS
RESEARCH & ASSAY
LABORATORY LTD.

B.C. CERTIFIED ASSAYERS

2095 WEST TRANS CANADA HIGHWAY — KAMLOOPS B.C.
V1S 1A7
PHONE: (604) 372-2784 — TELEX: 048-8320

GEOCHEMICAL LAB REPORT

K.L. Daughtry & Associates
Box 795
Vernon, B.C.
V1T 6M7

DATE November 3, 1983

ANALYST

FILE NO. G 978

KRAL NO.	IDENTIFICATION	ppb Au	ppm Cu	ppm Zn	ppm Ag
1	5088	30	692	170	.8
2	5089	90	141	71	2.9
3	5090	L5	194	157	1.6
4	5091	20	24	217	1.1
5	5092	5	109	G 4,000	2.9
6	5093	G 4000	G4000	1500	G20.0

L means "less than"

G means "greater than"

assay req'd
5092 Zn +
5093 Au, Cu, Ag +

Au Method: -80 mesh
Fire assay
Atomic absorption

Cu,Zn,Ag Method: -80 mesh
Hot acid extraction
Atomic absorption

Member
Canadian Testing
Association

KAMLOOPS *RESEARCH & ASSAY* LABORATORY LTD.

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.
V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources Ltd.

Box 795

Vernon, B.C. V1T 6M7 Project 156

Certificate No. K 6176

Date January 13, 1984

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Au	Ag	Zn	Cu					
		ozs/ton	ozs/ton	percent	percent					
1	5092	-	-	3.38	-					
2	5093	.150	1.31	-	6.21					

NOTE:
Rejects retained three weeks
Pulps retained three months
unless otherwise arranged.

Registered Assayer, Province of British Columbia

ASSAY LABORATORY
LTD

2095 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 19 1983
ANALYST
FILE NO. G 859 A

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	6000	29.0	121.0	0.5	1.0
2	6001	43.0	106.0	0.6	10.0
3	6002	52.0	103.0	0.6	5.0
4	6004	56.0	170.0	0.5	1.0
5	6005	59.0	89.0	0.6	1.0
6	6006	143.0	82.0	0.5	5.0
7	6007	80.0	80.0	0.5	1.0
8	6008	41.0	152.0	0.5	1.0
9	6009	31.0	70.0	0.5	10.0
10	6010	52.0	100.0	0.6	1.0
11	6011	146.0	168.0	0.5	1.0
12	6012	24.0	86.0	0.3	50.0
13	6013	20.0	55.0	0.5	10.0
14	6014	16.0	40.0	0.5	1.0
15	6015	15.0	44.0	0.5	5.0
16	6016	29.0	195.0	0.6	1.0
17	6017	18.0	60.0	0.5	5.0
18	6018	18.0	97.0	0.5	1.0
19	6019	120.0	325.0	0.5	1.0
20	6020	17.0	67.0	0.5	1.0
21	6021	17.0	93.0	0.5	1.0
22	6022	31.0	83.0	0.5	5.0
23	6023	49.0	280.0	0.5	1.0
24	6024	90.0	870.0	0.6	1.0
25	6025-1	68.0	580.0	0.5	1.0
26	6025-2	16.0	76.0	0.5	1.0
27	6027	20.0	55.0	0.5	1.0
28	6028	22.0	55.0	0.5	1.0
29	6029	27.0	175.0	0.5	1.0
30	6030	11.0	53.0	0.3	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	6031	13.0	83.0	0.3	1.0
32	6032	27.0	90.0	0.5	1.0
33	6033	25.0	102.0	0.5	1.0
34	6034	25.0	87.0	0.6	1.0
35	6035	25.0	174.0	0.4	1.0
36	6036	51.0	833.0	0.4	1.0
37	6037	108.0	1470.0	0.5	10.0
38	6038	37.0	469.0	0.3	1.0
39	6039	20.0	183.0	0.4	1.0
40	6040	20.0	152.0	0.5	1.0
41	6041	21.0	66.0	0.4	1.0
42	6042	24.0	61.0	0.4	1.0
43	6043	29.0	90.0	0.5	1.0
44	6044	26.0	108.0	0.5	1.0
45	6045	30.0	85.0	0.6	1.0
46	6046	34.0	77.0	0.5	1.0
47	6047	40.0	82.0	0.5	1.0
48	6048	25.0	78.0	0.5	1.0
49	6049	32.0	83.0	0.5	1.0
50	6050	35.0	172.0	0.6	1.0
51	6051	44.0	95.0	0.5	5.0
52	6052	37.0	82.0	0.5	1.0
53	6053	20.0	100.0	0.4	1.0
54	6054	31.0	206.0	0.6	1.0
55	6055	32.0	141.0	0.6	5.0
56	6056	31.0	111.0	0.7	10.0
57	6057	27.0	130.0	0.9	1.0
58	6058	58.0	890.0	0.6	15.0
59	6059	131.0	2370.0	0.8	10.0
60	6060	39.0	765.0	0.6	5.0
61	6061	42.0	239.0	0.5	1.0
62	6062	293.0	206.0	0.8	1.0
63	6063	63.0	396.0	0.5	25.0
64	6064	26.0	172.0	0.4	70.0
65	6065	25.0	129.0	0.5	20.0
66	6066	28.0	164.0	0.8	10.0
67	6067	24.0	126.0	0.6	1.0
68	6068	23.0	77.0	0.5	1.0
69	6070	42.0	190.0	0.7	1.0
70	6071	39.0	160.0	0.5	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
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FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	6072	47.0	116.0	1.8	1.0
72	6073	27.0	114.0	0.8	1.0
73	6074	26.0	115.0	0.8	1.0
74	6075	33.0	241.0	0.5	1.0
75	6076	54.0	161.0	0.7	1.0
76	6077	192.0	126.0	1.1	1.0
77	6078	45.0	103.0	0.6	1.0
78	6079	38.0	75.0	0.5	1.0
79	6080	68.0	118.0	0.6	1.0
80	6081	39.0	165.0	0.6	1.0
81	6082	51.0	140.0	0.6	10.0
82	6083	38.0	110.0	0.6	1.0
83	6084	53.0	191.0	0.6	1.0
84	6085	32.0	85.0	0.6	10.0
85	6086	18.0	127.0	0.5	5.0
86	6087	39.0	95.0	0.8	10.0
87	6088	41.0	202.0	0.5	10.0
88	6089	22.0	100.0	0.5	10.0
89	6090	29.0	66.0	0.4	1.0
90	6091	20.0	67.0	0.4	5.0
91	6092	34.0	97.0	0.5	5.0
92	6093	23.0	114.0	0.6	5.0
93	6094	26.0	189.0	0.6	5.0
94	6095	15.0	112.0	0.6	5.0
95	6096	21.0	125.0	0.8	1.0
96	6097	14.0	197.0	0.6	5.0
97	6098	324.0	151.0	1.1	5.0
98	6099	31.0	67.0	0.5	15.0
99	6100	102.0	84.0	0.8	25.0
100	6101	26.0	98.0	0.6	5.0
101	6102	20.0	68.0	0.5	1.0
102	6103	24.0	87.0	0.5	10.0
103	6105	29.0	114.0	0.4	1.0
104	6106	48.0	92.0	0.5	1.0
105	6107	27.0	124.0	0.5	1.0
106	6108	21.0	126.0	0.5	1.0
107	6109	32.0	87.0	0.5	10.0
108	6110	24.0	87.0	0.6	5.0
109	6111	34.0	211.0	0.6	5.0
110	6112	44.0	117.0	0.7	15.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	6113	37.0	171.0	0.5	10.0
112	6114	576.0	4000.0	0.6	5.0
113	6115	72.0	1250.0	0.4	15.0
114	6116	37.0	303.0	0.4	5.0
115	6117	32.0	159.0	0.5	5.0
116	6118	36.0	122.0	0.4	10.0
117	6119	31.0	134.0	0.4	15.0
118	6120	30.0	92.0	0.4	10.0
119	6121	19.0	82.0	0.4	1.0
120	6122	24.0	172.0	0.4	5.0
121	6123	20.0	147.0	0.5	1.0
122	6124	26.0	173.0	0.5	1.0
123	6125	33.0	142.0	0.5	1.0
124	6126	36.0	278.0	0.4	15.0
125	6127	92.0	998.0	0.4	10.0
126	6128	78.0	2750.0	0.6	10.0
127	6129	38.0	408.0	0.5	1.0
128	6130	28.0	135.0	0.4	1.0
129	6131	26.0	200.0	0.5	10.0
130	6132	39.0	300.0	0.5	10.0
131	6133	43.0	221.0	0.6	30.0
132	6134	46.0	536.0	0.6	10.0
133	6135	47.0	299.0	0.5	10.0
134	6136	36.0	404.0	0.5	1.0
135	6137	34.0	461.0	0.5	1.0
136	6138	18.0	270.0	0.4	15.0
137	6139	27.0	270.0	0.4	10.0
138	6140	26.0	239.0	0.4	10.0
139	6141	27.0	209.0	0.5	15.0
140	6142	18.0	160.0	0.3	1.0
141	6143	27.0	171.0	0.4	1.0
142	6144	21.0	139.0	0.5	1.0
143	6145	31.0	120.0	0.5	5.0
144	6146	33.0	167.0	0.8	1.0
145	6149	30.0	490.0	0.6	5.0
146	6150	47.0	1220.0	0.5	1.0
147	6151	80.0	2680.0	0.8	10.0
148	6152	94.0	2180.0	0.7	1.0
149	6153	42.0	203.0	3.1	25.0
150	6154	36.0	145.0	0.6	5.0

NOTE: sampled 6155 - 6199 NOT TAKEN

REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
151	6200	22.0	141.0	0.6	5.0
152	6201	27.0	172.0	0.5	1.0
153	6202	25.0	165.0	0.5	5.0
154	6203	32.0	179.0	0.6	1.0
155	6204	23.0	232.0	0.5	1.0
156	6205	28.0	153.0	0.5	10.0
157	6206	45.0	181.0	0.5	1.0
158	6207	19.0	178.0	0.4	1.0
159	6208	20.0	135.0	0.5	1.0
160	6209	30.0	120.0	0.7	1.0
161	6210	19.0	169.0	0.5	5.0

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
162	9000	39.0	57.0	0.6	5.0
163	9001	30.0	75.0	0.5	1.0
164	9002	45.0	105.0	0.5	1.0
165	9003	60.0	118.0	0.5	10.0
166	9004	238.0	107.0	0.9	10.0
167	9005	49.0	137.0	0.5	1.0
168	9006	68.0	102.0	0.6	1.0
169	9007	43.0	115.0	0.7	215.0
170	9008	23.0	86.0	0.6	10.0
171	9009	14.0	78.0	0.4	1.0
172	9010	20.0	72.0	0.5	1.0
173	9011	16.0	126.0	0.4	5.0
174	9012	18.0	86.0	0.4	1.0
175	9013	16.0	80.0	0.4	1.0
176	9014	23.0	75.0	0.5	1.0
177	9015	24.0	98.0	0.5	5.0
178	9016	38.0	138.0	0.4	1.0
179	9017	36.0	179.0	0.4	5.0
180	9018	52.0	180.0	0.5	10.0
181	9020	23.0	202.0	0.4	5.0
182	9021	21.0	104.0	0.4	5.0
183	9022	35.0	98.0	0.4	1.0
184	9023	23.0	90.0	0.4	5.0
185	9025	28.0	113.0	0.4	1.0
186	9026	29.0	138.0	0.5	5.0
187	9027	80.0	190.0	0.5	5.0
188	9028	42.0	68.0	0.4	5.0
189	9029	18.0	99.0	0.5	5.0
190	9030	16.0	87.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
191	9031	17.0	74.0	0.4	15.0
192	9032	14.0	80.0	0.4	1.0
193	9033	19.0	129.0	0.3	1.0
194	9034	25.0	245.0	0.4	15.0
195	9035	64.0	1040.0	0.4	1.0
196	9036	42.0	654.0	0.3	1.0
197	9037	25.0	300.0	0.4	1.0
198	9038	190.0	810.0	0.8	1.0
199	9039	472.0	720.0	0.8	5.0
200	9040	52.0	73.0	0.4	5.0
201	9041	27.0	80.0	0.4	5.0
202	9042	28.0	75.0	0.5	5.0
203	9043	25.0	63.0	0.5	1.0
204	9044	24.0	93.0	0.5	10.0
205	9045	22.0	116.0	0.4	1.0
206	9046	21.0	73.0	0.5	10.0
207	9047	42.0	220.0	0.8	10.0
208	9048	55.0	89.0	0.5	15.0
209	9049	30.0	67.0	0.4	10.0
210	9050	41.0	81.0	0.4	1.0
211	9051	55.0	123.0	0.6	1.0
212	9052	39.0	146.0	0.6	15.0
213	9053	193.0	153.0	0.8	10.0
214	9054	1770.0	90.0	1.4	90.0
215	9055	85.0	306.0	0.5	10.0
216	9056	130.0	451.0	0.6	10.0
217	9057	73.0	400.0	0.5	10.0
218	9058	53.0	950.0	0.5	5.0
219	9059	54.0	920.0	0.4	5.0
220	9060	51.0	263.0	0.5	10.0
221	9061	31.0	127.0	0.5	10.0
222	9062	30.0	123.0	0.5	5.0
223	9063	27.0	118.0	0.6	5.0
224	9064	29.0	114.0	0.5	10.0
225	9065	16.0	88.0	0.4	1.0
226	9066	20.0	106.0	0.5	1.0
227	9067	25.0	152.0	0.5	15.0
228	9068	39.0	141.0	0.7	10.0
229	9069	24.0	142.0	0.6	5.0
230	9070	27.0	125.0	0.6	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
231	9071	28.0	112.0	0.6	10.0
232	9072	23.0	119.0	0.6	5.0
233	9073	27.0	118.0	0.5	10.0
234	9074	17.0	45.0	0.3	1.0
235	9075	26.0	102.0	0.5	5.0
236	9076	28.0	135.0	0.6	5.0
237	9077	25.0	114.0	0.5	55.0
238	9078	32.0	121.0	0.5	10.0
239	9079	84.0	135.0	0.6	10.0
240	9080	39.0	129.0	0.5	10.0
241	9081	15.0	177.0	0.5	5.0
242	9082	28.0	149.0	0.5	1.0
243	9083	23.0	109.0	0.4	1.0
244	9096	27.0	146.0	0.5	1.0
245	9097	30.0	100.0	0.6	10.0
246	9098	29.0	134.0	0.6	1.0
247	9099	75.0	1230.0	0.5	1.0

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 22 1983
ANALYST
FILE NO. G 859 B

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	9100	41.0	860.0	0.5	1.0
2	9101	16.0	112.0	0.4	1.0
3	9102	16.0	138.0	0.7	1.0
4	9103	19.0	59.0	0.4	1.0
5	9104	27.0	70.0	0.5	1.0
6	9105	25.0	169.0	0.6	1.0
7	9106	23.0	141.0	0.5	1.0
8	9107	21.0	125.0	0.6	1.0
9	9108	25.0	112.0	0.6	1.0
10	9109	29.0	135.0	0.4	1.0
11	9110	25.0	149.0	0.5	5.0
12	9111	74.0	228.0	0.5	1.0
13	9112	26.0	265.0	0.4	5.0
14	9113	79.0	1030.0	0.6	5.0
15	9114	87.0	535.0	0.7	1.0
16	9115	58.0	251.0	0.7	1.0
17	9116	38.0	118.0	0.6	1.0
18	9117	35.0	135.0	0.6	1.0
19	9118	55.0	410.0	0.8	1.0
20	9119	58.0	245.0	1.1	1.0
21	9120	48.0	3000.0	1.1	10.0
22	9121	118.0	2800.0	1.1	1.0
23	9122	87.0	691.0	0.5	40.0
24	9123	38.0	212.0	0.5	1.0
25	9124	23.0	193.0	0.5	1.0
26	9125	29.0	230.0	0.5	20.0
27	9126	19.0	200.0	0.5	1.0
28	9127	20.0	196.0	0.5	1.0
29	9128	20.0	153.0	0.4	20.0
30	9129	29.0	162.0	0.5	1.0

GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	9130	28.0	198.0	0.5	5.0
32	9131	31.0	179.0	0.5	1.0
33	9132	24.0	123.0	0.5	1.0
34	9133	31.0	179.0	0.4	1.0
35	9134	41.0	356.0	0.5	1.0
36	9135	106.0	810.0	0.8	1.0
37	9136	415.0	2970.0	1.0	5.0
38	9137	25.0	170.0	0.5	1.0
39	9138	24.0	117.0	0.5	1.0
40	9139	23.0	128.0	0.4	1.0
41	9200	28.0	142.0	0.6	1.0
42	9201	19.0	141.0	0.4	1.0
43	9202	34.0	142.0	0.5	1.0
44	9203	33.0	196.0	0.5	1.0
45	9204	28.0	175.0	0.5	1.0
46	9205	29.0	178.0	0.5	1.0
47	9206	22.0	180.0	0.6	1.0
48	9207	15.0	131.0	0.6	1.0
49	9208	19.0	87.0	0.6	1.0
50	9209	17.0	118.0	0.5	1.0
51	9210	21.0	128.0	0.5	1.0
52	1919	75.0	560.0	0.4	1.0

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 24 1983
ANALYST
FILE NO. G 874

KRAL NO.	IDENTIFICATION	CU -	ZN -	AG -	AU -
1	9211	502.0	103.0	2.7	40.0
2	9212	346.0	120.0	1.4	70.0
3	9213	260.0	92.0	2.4	60.0
4	9214	443.0	119.0	1.4	50.0
5	9215	393.0	176.0	1.5	25.0
6	9216	200.0	345.0	0.8	20.0
7	9217	95.0	811.0	0.7	5.0
8	9218	114.0	720.0	0.7	1.0
9	9219	54.0	253.0	0.7	30.0
10	9220	42.0	495.0	0.8	65.0
11	9221	46.0	157.0	0.6	35.0
12	9223	58.0	185.0	0.6	5.0
13	9224	38.0	500.0	0.6	30.0
14	9225	32.0	128.0	0.5	1.0
15	9226	71.0	160.0	0.5	1.0
16	9227	34.0	90.0	0.4	1.0
17	9228	36.0	122.0	0.5	1.0
18	9229	37.0	151.0	0.6	1.0
19	9230	79.0	178.0	0.6	10.0
20	9231	197.0	233.0	0.7	10.0
21	9232	194.0	278.0	1.0	20.0
22	9233	450.0	3100.0	1.8	35.0
23	9234	452.0	1960.0	2.4	65.0
24	9235	208.0	301.0	1.2	20.0
25	9236	124.0	376.0	0.5	1.0
26	9237	100.0	329.0	1.0	15.0
27	9238	65.0	325.0	0.6	460.0
28	9239	42.0	158.0	0.6	1.0
29	9240	36.0	204.0	0.4	1.0
30	9241	32.0	194.0	0.5	1.0

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	9242	34.0	276.0	0.5	1.0
32	9243	30.0	334.0	0.4	1.0
33	9244	27.0	336.0	0.4	1.0
34	9245	24.0	195.0	0.6	10.0
35	9246	25.0	112.0	0.5	10.0
36	9247	26.0	160.0	0.4	1.0
37	9248	37.0	355.0	0.6	5.0
38	9249	118.0	292.0	0.6	10.0
39	9250	52.0	237.0	0.6	1.0
40	9251	49.0	190.0	0.7	30.0
41	9252	19.0	71.0	0.3	1.0
42	9253	25.0	94.0	0.5	10.0
43	9254	28.0	50.0	0.4	25.0
44	9255	25.0	37.0	0.6	30.0
45	9256	22.0	30.0	0.5	1.0
46	9257	26.0	130.0	0.4	5.0
47	9258	25.0	235.0	0.4	25.0
48	9259	24.0	429.0	0.4	1.0
49	9260	31.0	399.0	0.4	1.0
50	9261	4000.0	4000.0	20.0	360.0
51	9262	2400.0	4000.0	3.5	30.0
52	9263	80.0	249.0	0.3	1.0
53	9264	27.0	425.0	0.3	1.0
165	9265	26.0	136.0	0.8	1.0
166	9266	28.0	154.0	0.8	1.0
167	9267	20.0	159.0	0.7	1.0
168	9268	17.0	204.0	0.6	1.0
169	9269	63.0	108.0	0.6	1.0
170	9270	3790.0	160.0	5.3	140.0
171	9271	51.0	118.0	0.4	1.0
172	9272	38.0	352.0	0.6	1.0
173	9273	45.0	67.0	0.5	1.0
174	9274	20.0	77.0	0.5	1.0
175	9275	60.0	103.0	0.6	1.0
176	9276	41.0	119.0	0.6	1.0
177	9277	40.0	123.0	0.5	1.0
178	9278	102.0	122.0	0.6	1.0
179	9279	48.0	107.0	0.5	1.0
180	9280	40.0	85.0	0.6	1.0
181	9281	39.0	88.0	0.7	1.0
182	9282	19.0	96.0	0.6	1.0
183	9283	11.0	71.0	0.3	1.0
184	9284	35.0	102.0	0.7	20.0
75	9285	17.0	141.0	0.3	5.0
76	9286	17.0	162.0	0.2	1.0
77	9287	12.0	210.0	0.5	45.0
78	9288	25.0	339.0	0.5	5.0
79	9289	17.0	186.0	0.4	1.0
185	9290	21.0	104.0	0.5	1.0
186	9291	19.0	71.0	0.5	5.0
187	9292	16.0	132.0	0.3	1.0
188	9293	17.0	166.0	0.5	1.0
189	9294	26.0	80.0	0.6	1.0
190	9295	23.0	61.0	0.5	1.0

REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
191	9296	9.0	17.0	0.3	1.0
192	9297	18.0	65.0	0.5	1.0
193	9298	23.0	109.0	0.3	1.0
194	9299	17.0	176.0	0.5	1.0
195	9300	16.0	103.0	0.5	1.0
196	9301	36.0	297.0	0.4	1.0
197	9302	11.0	126.0	0.4	1.0
198	9303	25.0	172.0	0.5	1.0
199	9304	67.0	202.0	0.5	10.0
200	9305	18.0	95.0	0.5	1.0
	NOTE: SAMPLES 9306 - 9322 NOT TAKEN				
80	9323	46.0	67.0	0.9	1.0
81	9324	25.0	104.0	1.0	1.0
82	9325	11.0	60.0	0.2	5.0
83	9326	20.0	83.0	0.4	1.0
84	9327	17.0	63.0	0.6	1.0
85	9328	18.0	88.0	0.6	5.0
86	9329	16.0	65.0	0.7	5.0
87	9330	15.0	81.0	0.5	5.0
88	9331	18.0	97.0	0.5	10.0
89	9332	14.0	56.0	0.4	1.0
90	9333	24.0	67.0	0.4	1.0
91	9334	18.0	103.0	0.5	1.0
92	9335	13.0	73.0	0.5	1.0
93	9336	13.0	86.0	0.4	1.0
94	9337	30.0	71.0	0.9	1.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

CTA
Member
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KAMLOOPS *RESEARCH & ASSAY* LABORATORY LTD.

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B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources
Box 130,
Greenwood, B.C. V0H 1J0

Certificate No. K 5682
Date July 28, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No	Marked	Au	Ag
		ozs/ton	ozs/ton
1	11376	.001	.06
2	11377	.001	.06
3	11378	L.001	.09
4	11379	L.001	.06
5	11380	.001	.06

L means "less than"

NOTE:
Rejects retained three weeks.
Pulps retained three months
unless otherwise arranged.

Registered Assayer, Province of British Columbia

CTA
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B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources Ltd.

Box 795

Vernon, B.C. V1T 6M7

Certificate No. K 5694

Date July 30, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Au	Ag
		ozs/ton	ozs/ton
1	11381	.003	.02
2	11382	.004	.06
3	11383	.003	.06
4	11384	.003	.05
5	11385	.003	.07
6	11386	.002	.06
7	11387	.003	.08
8	11388	.003	.08
9	11389	.003	.09
10	11390	.003	.09
11	11391	.004	.07
12	11392	.002	.09
13	11393	.002	.05
14	11394	.002	.04
15	11395	.004	.04
16	11396	.003	.06
17	11397	.002	.07
18	11398	.002	.10

NOTE:
Rejects retained three weeks.
Pulps retained three months
unless otherwise arranged.

Registered Assayer, Province of British Columbia

received Aug 4 1983
shipped July 23 1983
(13 rocks)

KAMLOOPS RESEARCH
&
ASSAY LABORATORY
LTD

B. C. CERTIFIED ASSAYERS
2095 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 16 1983
ANALYST
FILE NO. G 846

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
147	T11399	37.0	121.0	0.8	50.0
148	T11400	63.0	46.0	0.8	30.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 796

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
113	T13201	65.0	56.0	1.0	25.0
114	T13202	61.0	68.0	0.9	10.0
115	T13203	34.0	36.0	0.7	5.0
116	T13204	458.0	890.0	1.8	25.0
117	T13205	129.0	298.0	0.9	20.0
118	T13206	108.0	104.0	0.9	35.0
119	T13207	115.0	570.0	1.4	130.0
120	T13208	67.0	88.0	0.9	105.0
121	T13209	123.0	126.0	1.2	15.0
122	T13210	187.0	127.0	1.1	5.0
123	T13211	253.0	87.0	1.2	1.0
124	T13212	45.0	114.0	0.6	140.0
125	T13213	88.0	157.0	0.9	50.0
126	T13214	43.0	49.0	0.7	40.0
127	T13215	100.0	58.0	0.6	10.0
128	T13216	110.0	57.0	0.7	190.0
129	T13217	169.0	49.0	1.3	245.0
130	T13218	140.0	56.0	0.7	190.0
131	T13219	310.0	57.0	1.2	95.0
132	T13220	1050.0	102.0	2.5	450.0
133	T13221	177.0	119.0	1.3	140.0
134	T13222	218.0	253.0	1.4	125.0
135	T13223	164.0	91.0	1.0	10.0
136	T13224	90.0	100.0	0.8	10.0
137	T13225	40.0	72.0	0.7	1.0
138	T13226	96.0	361.0	1.0	25.0
139	T13227	143.0	2960.0	1.6	35.0
140	T13228	21.0	222.0	0.7	20.0
141	T13229	166.0	910.0	1.6	30.0
142	T13230	382.0	3200.0	3.7	60.0
143	T13231	139.0	180.0	1.1	15.0
144	T13232	66.0	94.0	0.9	1.0
145	T13233	167.0	143.0	2.4	40.0
146	T13234	192.0	48.0	1.8	35.0
6	T13235	110.0	63.0	0.8	340.0
7	T13236	180.0	101.0	1.7	20.0
8	T13237	29.0	35.0	0.8	15.0
9	T13238	56.0	320.0	1.7	20.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

Member
Canadian Testing
Association

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912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.
V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

VCC Aug 20/83
Shipped Aug 12/83
18BK

TO Kettle River Resources Ltd.

Box 130

Greenwood, B.C. V0H 1J0 ATTENTION: MR. BARRY KYBA

Certificate No. K-5777

Date August 18, 1983

I hereby certify that the following are the results of assays made by us upon the herein described PROJECT 156 samples

Kral No.	Marked	Au	Ag	Cu	Zn					
		ounces/ton	ounces/ton	percent	percent					
1	13239	.003	1.64	.71	.11					
2	13240	L.001	.11	.01	.06					
3	13241	L.001	.10	.01	.06					
4	13242	L.001	.09	-	-					
5	13243	L.001	.05	-	-					
6	13244	.002	.16	.19	9.8					
7	13245	L.001	.12	-	-					
8	13246	L.001	.05	-	-					
9	13247	L.001	.06	-	-					
10	13248	L.001	.03	.19	1.8					
11	13249	L.001	.14	-	-					
12	13250	.006	.17	.21	22.0					
13	13251	L.001	.11	-	-					
14	13252	.002	.05	.18	12.0					
15	13253	.001	.14	-	-					
16	13254	.005	.41	-	-					
17	13255	.001	.08	-	-					
18	13256	L.001	.12	-	-					
19	13257	.002	.24	-	-					
20	13258	L.001	.06	-	-					

Rathmullan trench
6R, 7R, 9R

NOTE:
Rejects retained three weeks.
Pulps retained three months unless otherwise arranged.

C. Fouth B.Sc.

Registered Assayer, Province of British Columbia

Member
Canadian Testing
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KAMLOOPS *RESEARCH & ASSAY* LABORATORY LTD.

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C.
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PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources Ltd.

Certificate No. K-5777 2

Date August 18, 1983

I hereby certify that the following are the results of assays made by us upon the herein described PROJECT 156 samples

Kral No	Marked	Au	Ag	Cu	Zn					
		ounces/ton	ounces/ton	percent	percent					
21	13259	.001	.48	-	-					
22	13260	.002	.13	.06	.03					
23	13261	.009	4.47	-	-					
24	13262	L.001	.17	-	-					
25	13263	L.001	.14	-	-					
26	13264	.002	.09	-	-					
27	13265	L.001	.07	-	-					
28	13266	.001	.51	.05	.41					
29	13267	.001	.26	-	-					
30	13268	L.001	.14	-	-					
31	13269	L.001	.12	-	-					
32	13270	L.001	.12	-	-					
33	13271	L.001	.08	-	-					
34	13272	L.001	.04	-	-					
35	13273	L.001	.13	-	-					

L means "Less than"

NOTE:
Rejects retained three weeks.
Pulps retained three months
unless otherwise arranged.

Registered Assayer, Province of British Columbia

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
205	13274	77.0	196.0	0.5	1.0
206	13275	24.0	88.0	0.8	1.0
207	13276	41.0	128.0	1.0	1.0
208	13277	18.0	41.0	1.0	1.0
209	13278	128.0	51.0	0.6	1.0
210	13279	68.0	70.0	1.0	1.0
211	13280	51.0	124.0	0.8	1.0
212	13281	9.0	20.0	1.4	1.0
1	13282	12.0	22.0	2.4	1.0
2	13283	50.0	76.0	1.0	1.0
3	13284	18.0	63.0	1.2	1.0
4	13285	13.0	88.0	2.3	5.0
5	13286	46.0	69.0	1.1	1.0
6	13287	47.0	46.0	0.8	1.0

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KAMLOOPS *RESEARCH & ASSAY* LABORATORY LTD.

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V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

rec Sept 24 1983

CERTIFICATE OF ASSAY

TO Kettle River Resources Ltd.

Box 130

Greenwood, B.C. V0H 1J0 ATTENTION: MR. BARRY KYBA

Certificate No. K-5862

Date September 16, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Au	Ag	Cu	Zn					
		ounces/ton	ounces/ton	percent	percent					
1	13288	L.001	.58	.04	29.9					
2	13289	.001	.17	.04	1.84					
3	13298	L.001	.15	.10	13.4					

L means "Less than"

NOTE:
Rejects retained three weeks.
Pulps retained three months unless otherwise arranged.

Registered Assayer, Province of British Columbia

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V2C 5P5
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B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

CERTIFICATE OF ASSAY

TO Kettle River Resources Ltd.

Box 130

Greenwood, B.C. V0H 1J0 ATTENTION: MR. BARRY KYBA

Certificate No. K-5913

Date September 28, 1983

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	Au	Ag	Cu	Zn
		ounces/ton	ounces/ton	percent	percent
1	13294	.002	.15	.22	2.40
~~2~~	~~5069~~	~~.003~~	~~.26~~	~~.57~~	~~.03~~
~~3~~	~~5073~~	~~.036~~	~~1.46~~	~~3.86~~	~~.36~~
~~4~~	~~5078~~	~~.010~~	~~.52~~	~~2.11~~	~~.40~~
~~5~~	~~5079~~	~~.002~~	~~.23~~	~~.24~~	~~.06~~
~~6~~	~~5080~~	~~.184~~	~~1.46~~	~~8.76~~	~~.10~~
~~7~~	~~5081~~	~~.005~~	~~.26~~	~~1.07~~	~~.03~~
~~8~~	~~5083~~	~~.008~~	~~.17~~	~~.54~~	~~.30~~
~~9~~	~~5084~~	~~.004~~	~~.23~~	~~.52~~	~~.06~~
~~10~~	~~5085~~	~~.032~~	~~1.57~~	~~2.89~~	~~.96~~

NOTE:
Rejects retained three weeks
Pulps retained three months
unless otherwise arranged

Registered Assayer, Province of British Columbia

ASSAYERS
&
ASSAY LABORATORY
LTD
2095 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 29 1983
ANALYST
FILE NO. G 889

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
128	13290	0.0	0.0	0.8	1.0
129	13291	0.0	0.0	0.3	1.0
130	13292	0.0	0.0	0.7	1.0
131	13293	0.0	0.0	2.9	1.0
132	13295	0.0	0.0	4.0	10.0
133	13296	0.0	0.0	0.7	1.0
134	13297	0.0	0.0	0.6	1.0
135	13299	0.0	0.0	0.6	1.0
136	13300	0.0	0.0	2.0	1.0

IN AU COLUMN I INDICATES LESS THAN 5 PPB O INDICATES INSUFFICIENT S
AMPLE

CU ZN AG METHOD -80 MESH HOT ACID DIGESTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 851

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
149	15000	37.0	110.0	1.1	1.0
150	15001	29.0	114.0	0.9	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 812

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
151	15002	20.0	155.0	0.8	1.0
152	15003	15.0	153.0	0.7	1.0
153	15004	20.0	110.0	0.8	1.0
154	15005	16.0	81.0	0.5	1.0
155	15006	20.0	95.0	0.6	1.0
156	15007	33.0	123.0	0.8	1.0
157	15008	28.0	295.0	0.9	1.0
158	15009	19.0	249.0	0.5	1.0
159	15010	40.0	645.0	0.7	1.0
160	15011	69.0	774.0	0.8	1.0
161	15012	145.0	1550.0	0.8	1.0
162	15013	32.0	391.0	0.9	1.0
163	15014	20.0	197.0	0.8	1.0
164	15015	38.0	591.0	0.9	1.0
165	15016	21.0	776.0	0.8	1.0
166	15017	43.0	994.0	0.7	1.0
167	15018	42.0	1560.0	0.8	1.0
168	15019	18.0	428.0	0.9	1.0
169	15020	25.0	614.0	0.7	1.0
170	15021	6.0	103.0	0.5	1.0
171	15022	27.0	225.0	0.7	1.0
172	15023	26.0	145.0	0.7	1.0
173	15024	19.0	100.0	0.7	1.0
174	15025	13.0	121.0	0.7	1.0
175	15026	17.0	104.0	0.7	1.0
176	15027	16.0	75.0	0.7	1.0
177	15028	19.0	89.0	0.6	1.0
178	15029	20.0	98.0	0.9	1.0
179	15030	17.0	110.0	0.8	1.0
180	15031	35.0	78.0	0.7	1.0
181	15032	74.0	182.0	1.0	1.0
182	15033	35.0	93.0	0.9	1.0
183	15034	28.0	57.0	0.6	1.0
184	15035	31.0	123.0	0.7	1.0
185	15036	36.0	94.0	1.0	1.0
186	15037	40.0	119.0	1.0	1.0
187	15038	55.0	152.0	1.1	1.0
188	15039	41.0	154.0	0.9	1.0
189	15040	40.0	168.0	1.1	1.0
190	15041	37.0	136.0	1.1	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 812

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
191	15042	35.0	156.0	0.8	1.0
192	15043	34.0	164.0	0.9	1.0
193	15044	36.0	162.0	1.3	90.0
194	15045	45.0	161.0	1.0	15.0
195	15046	100.0	957.0	6.4	5.0
196	15047	69.0	1100.0	2.5	1.0
197	15048	31.0	201.0	1.0	1.0
198	15049	49.0	150.0	1.1	1.0
199	15050	34.0	135.0	0.9	1.0
200	15051	86.0	466.0	1.0	1.0
201	15052	42.0	156.0	1.0	1.0
202	15053	36.0	117.0	1.0	1.0
203	15054	28.0	102.0	0.8	1.0
204	15055	38.0	120.0	1.0	1.0
205	15056	29.0	88.0	0.9	1.0
206	15057	40.0	97.0	0.8	1.0
207	15058	30.0	90.0	0.9	5.0
208	15059	22.0	61.0	0.9	1.0
209	15060	41.0	40.0	1.0	1.0
210	15061	24.0	70.0	0.8	5.0
211	15062	15.0	67.0	0.9	1.0
212	15063	23.0	81.0	1.0	1.0
213	15064	15.0	39.0	0.7	1.0
214	15065	16.0	141.0	1.0	5.0
215	15066	21.0	132.0	1.0	1.0
216	15067	22.0	124.0	1.2	1.0
217	15068	30.0	68.0	0.9	1.0
218	15069	30.0	73.0	0.9	5.0
219	15070	26.0	94.0	0.9	1.0
220	15071	27.0	68.0	1.0	1.0
221	15072	54.0	110.0	1.0	1.0
222	15073	52.0	109.0	1.0	1.0
223	15074	31.0	134.0	1.1	1.0
224	15075	31.0	138.0	1.0	1.0
225	15076	32.0	160.0	1.0	1.0
226	15077	33.0	158.0	1.0	1.0
227	15078	28.0	171.0	0.9	1.0
228	15079	39.0	212.0	1.0	10.0
229	15080	22.0	185.0	0.7	1.0
230	15081	30.0	234.0	0.7	1.0

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GEOCHEMICAL LAB REPORT

FILE NO G 812

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
231	15082	28.0	94.0	0.7	1.0
232	15083	31.0	183.0	0.9	1.0
233	15084	28.0	157.0	0.8	1.0
234	15085	18.0	140.0	0.7	1.0
235	15086	32.0	330.0	0.7	1.0
236	15087	26.0	171.0	0.8	1.0
237	15088	26.0	189.0	0.8	1.0
238	15089	22.0	255.0	0.7	1.0
239	15090	33.0	305.0	0.8	1.0
240	15091	42.0	284.0	1.0	1.0
241	15092	34.0	143.0	0.8	1.0
242	15093	32.0	103.0	0.8	1.0
243	15094	48.0	143.0	0.9	1.0
244	15095	27.0	105.0	0.9	1.0
245	15096	30.0	94.0	0.9	1.0
246	15097	28.0	50.0	0.8	1.0
247	15098	33.0	78.0	0.9	1.0
248	15099	32.0	64.0	0.8	1.0
249	15100	21.0	60.0	0.9	1.0
250	15101	31.0	59.0	0.8	1.0
251	15102	16.0	58.0	0.7	1.0
252	15103	30.0	110.0	0.9	1.0
253	15104	23.0	164.0	0.7	1.0
254	15105	22.0	184.0	0.8	1.0
255	15106	20.0	118.0	0.8	1.0
256	15107	27.0	120.0	0.9	1.0
257	15108	46.0	190.0	0.9	1.0
258	15109	28.0	153.0	0.8	1.0
259	15110	34.0	118.0	0.8	1.0
260	15111	32.0	110.0	0.8	1.0
261	15112	73.0	137.0	0.9	1.0
262	15113	46.0	88.0	0.9	1.0
263	15114	44.0	86.0	0.9	1.0
264	15115	43.0	73.0	0.9	1.0
265	150411 (1504H-1)	45.0	59.0	0.9	1.0

AU REPORTED IN PPB

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 851

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
89	15116	28.0	58.0	1.1	1.0
90	15117	56.0	68.0	0.6	1.0
91	15118	52.0	69.0	0.6	0.0
92	15119	24.0	11.0	0.2	1.0
93	15120	29.0	248.0	0.7	10.0
94	15121	25.0	245.0	0.5	1.0
95	15122	14.0	119.0	0.4	1.0
96	15123	21.0	175.0	0.5	1.0
97	15124	17.0	58.0	0.4	1.0
98	15125	24.0	64.0	0.5	1.0
99	15126	63.0	52.0	0.6	1.0
100	15127	36.0	34.0	0.8	1.0
101	15128	43.0	81.0	0.5	1.0
102	15129	81.0	23.0	0.6	0.0
103	15130	31.0	40.0	0.6	1.0
104	15131	20.0	61.0	0.4	1.0
105	15132	65.0	71.0	0.9	1.0
106	15133	27.0	79.0	0.7	1.0
107	15134	35.0	66.0	0.6	1.0
108	15135	51.0	25.0	0.6	1.0
109	15136	50.0	18.0	0.5	1.0
110	15137	39.0	110.0	0.7	1.0

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FILE NO G 813

ANAL NO	IDENTIFICATION	CU	ZN	AG	AU
111	15138	32.0	104.0	0.7	1.0
112	15139	15.0	85.0	0.5	1.0
113	15140	16.0	97.0	0.4	1.0
114	15141	14.0	86.0	0.4	1.0
115	15142	24.0	79.0	0.5	1.0
116	15143	16.0	61.0	0.3	1.0
117	15144	23.0	86.0	0.4	1.0
118	15145	22.0	91.0	0.4	1.0
119	15146	25.0	101.0	0.4	1.0
120	15147	34.0	111.0	0.4	1.0
121	15148	41.0	193.0	0.7	1.0
122	15149	43.0	138.0	0.6	1.0
123	15150	40.0	134.0	0.7	1.0
124	15151	47.0	132.0	0.6	1.0
125	15152	27.0	154.0	0.4	1.0
126	15153	35.0	155.0	0.4	1.0
127	15154	23.0	112.0	0.3	1.0
128	15155	36.0	169.0	0.4	1.0
129	15156	37.0	171.0	0.6	1.0
130	15157	19.0	87.0	0.5	1.0
131	15158	18.0	65.0	0.4	1.0
132	15159	21.0	165.0	0.6	1.0
133	15160	41.0	91.0	0.5	5.0
134	15161	50.0	94.0	0.6	1.0
135	15162	33.0	90.0	1.0	1.0
136	15163	35.0	135.0	1.2	1.0
137	15164	75.0	412.0	5.6	40.0
138	15165	34.0	182.0	1.0	15.0
139	15166	31.0	98.0	2.3	40.0
140	15167	109.0	285.0	7.8	350.0
141	15168	36.0	117.0	1.7	1.0
142	15169	32.0	105.0	1.1	1.0
143	15170	64.0	223.0	1.7	75.0
144	15171	492.0	2450.0	3.8	45.0
145	15172	95.0	349.0	0.8	1.0
146	15173	36.0	83.0	0.7	1.0
147	15174	20.0	74.0	0.6	1.0
148	15175	30.0	92.0	0.4	1.0
149	15176	23.0	65.0	0.4	1.0
150	15177	16.0	76.0	0.4	1.0

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FILE NO 6 813

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
151	15178	16.0	62.0	0.4	1.0
152	15179	32.0	73.0	0.5	1.0
153	15180	33.0	64.0	0.5	1.0
154	15181	20.0	78.0	0.4	1.0
155	15182	22.0	83.0	0.5	1.0
156	15183	20.0	91.0	0.5	10.0
157	15184	40.0	84.0	0.7	10.0
158	15185	42.0	105.0	0.8	10.0
159	15186	36.0	130.0	0.7	10.0
160	15187	260.0	509.0	2.3	35.0
161	15188	40.0	171.0	0.7	1.0
162	15189	64.0	194.0	1.2	50.0
163	15190	20.0	78.0	0.6	10.0
164	15191	19.0	74.0	0.9	20.0
165	15192	42.0	111.0	1.3	10.0
166	15193	29.0	97.0	0.9	1.0
167	15194	32.0	100.0	0.6	1.0
168	15195	32.0	136.0	0.8	1.0
169	15196	26.0	202.0	1.2	1.0
170	15197	19.0	200.0	0.5	1.0
120	152461	6.0	62.0	0.2	1.0
121	15198	22.0	100.0	0.4	1.0
122	15199	9.0	93.0	0.2	1.0
123	15200	7.0	65.0	0.2	1.0
124	15201	15.0	73.0	0.3	1.0
125	15202	8.0	68.0	0.3	1.0
126	15203	17.0	100.0	0.3	1.0
127	15204	17.0	82.0	0.4	1.0
128	15205	19.0	83.0	0.4	1.0
129	15206	96.0	89.0	0.5	1.0
130	15207	115.0	130.0	0.6	20.0
131	15208	84.0	122.0	0.5	5.0
132	15209	41.0	103.0	0.4	1.0
133	15210	19.0	63.0	0.4	1.0
134	15211	21.0	74.0	0.5	1.0
135	15212	21.0	76.0	0.5	1.0
136	15213	22.0	119.0	0.4	1.0
137	15214	57.0	142.0	0.5	1.0
138	15215	57.0	99.0	0.4	1.0
139	15216	66.0	104.0	0.5	1.0
140	15217	99.0	102.0	0.6	1.0
141	15218	41.0	192.0	0.5	1.0
142	15219	20.0	76.0	0.3	1.0
143	15220	21.0	71.0	0.4	1.0
144	15221	28.0	136.0	0.6	1.0
145	15222	20.0	89.0	0.6	10.0
146	15223	20.0	122.0	0.6	1.0
147	15224	21.0	99.0	0.5	1.0
148	15225	19.0	94.0	0.7	25.0
149	15226	18.0	83.0	0.5	1.0
150	15227	20.0	90.0	0.5	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
151	15228	16.0	93.0	0.5	1.0
152	15229	11.0	76.0	0.3	1.0
153	15230	21.0	142.0	1.2	1.0
154	15231	21.0	140.0	1.9	1.0
155	15232	30.0	144.0	1.0	1.0
156	15233	25.0	108.0	0.9	1.0
157	15234	29.0	65.0	0.4	25.0
158	15235	21.0	74.0	1.0	50.0
159	15236	34.0	126.0	1.2	580.0
160	15237	23.0	99.0	0.7	25.0
161	15238	38.0	99.0	0.6	1.0
162	15239	42.0	107.0	0.9	5.0
163	15240	23.0	84.0	0.5	1.0
164	15241	15.0	24.0	0.2	1.0
165	15242	55.0	89.0	0.7	1.0
166	15243	14.0	105.0	0.3	1.0
167	15244	13.0	63.0	0.4	1.0
168	15245	9.0	58.0	0.3	1.0
169	15246	56.0	45.0	0.4	1.0
170	15247	21.0	110.0	0.3	1.0
171	15248	17.0	106.0	0.4	1.0
172	15249	22.0	162.0	0.5	5.0
173	15250	18.0	78.0	0.3	1.0
174	15251	7.0	65.0	0.2	1.0
175	15252	11.0	43.0	0.3	1.0
176	15253	18.0	37.0	0.4	1.0
177	15254	25.0	66.0	0.6	25.0
178	15255	19.0	119.0	0.4	1.0
179	15256	9.0	138.0	0.4	1.0
180	15257	20.0	55.0	0.4	1.0
181	15258	52.0	21.0	0.3	1.0
182	15259	17.0	32.0	0.4	1.0
183	15260	10.0	16.0	0.2	1.0
184	15261	16.0	71.0	0.4	1.0
185	15262	11.0	54.0	0.4	1.0
186	15263	17.0	76.0	0.4	1.0
187	15264	12.0	88.0	0.4	1.0
188	15265	13.0	84.0	0.2	1.0
189	15266	13.0	67.0	0.3	1.0
190	15267	18.0	115.0	0.4	1.0

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FILE NO G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
191	15268	24.0	92.0	0.3	1.0
192	15269	9.0	121.0	0.2	1.0
193	15270	13.0	38.0	0.1	1.0
194	15271	19.0	70.0	0.3	1.0
195	15272	20.0	80.0	0.3	1.0
196	15273	19.0	80.0	0.4	1.0
197	15274	12.0	82.0	0.2	1.0
198	15275	8.0	123.0	0.2	1.0
199	15276	15.0	107.0	0.3	1.0
200	15277	13.0	185.0	0.3	1.0
201	15278	11.0	182.0	0.3	1.0
202	15279	17.0	171.0	0.4	10.0
203	15280	11.0	132.0	0.3	5.0
204	15281	17.0	217.0	0.3	1.0
205	15282	8.0	67.0	0.2	1.0
206	15283	16.0	41.0	0.1	1.0
207	15284	17.0	39.0	0.2	1.0
208	15285	20.0	59.0	0.3	1.0
209	15286	18.0	69.0	0.3	30.0
210	15287	22.0	113.0	0.4	5.0
211	15288	25.0	217.0	0.4	1.0
212	15289	16.0	290.0	0.5	1.0
213	15290	8.0	106.0	0.2	1.0
214	15291	12.0	68.0	0.3	1.0
215	15292	5.0	31.0	0.1	1.0
216	15293	10.0	50.0	0.3	1.0
217	15294	8.0	26.0	0.2	5.0
218	15295	12.0	26.0	0.3	1.0
219	15296	8.0	72.0	0.3	1.0
220	15297	20.0	88.0	0.5	10.0
221	15298	16.0	63.0	0.2	1.0
222	15299	9.0	59.0	0.2	1.0
223	15300	7.0	105.0	0.2	1.0
224	15301	11.0	95.0	0.3	1.0
225	15302	7.0	46.0	0.2	1.0
226	15303	14.0	97.0	0.4	1.0
227	15304	14.0	65.0	0.4	10.0
228	15305	9.0	51.0	0.3	1.0
229	15306	9.0	47.0	0.2	1.0
230	15307	20.0	235.0	0.5	1.0

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FILE NO G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
231	15308	13.0	87.0	0.4	1.0
232	15309	12.0	51.0	0.3	1.0
233	15310	14.0	116.0	0.3	1.0
234	15311	26 0	172.0	0.5	1.0
235	15312	13.0	61.0	0.3	0.0
236	15313	17.0	317.0	0.4	1.0
237	15314	19.0	93.0	0.3	1.0
238	15315	31.0	58.0	0.3	25.0
239	15316	40.0	59.0	0.4	10.0
240	15317	28.0	55.0	0.3	1.0
241	15318	15.0	48.0	0.3	1.0
242	15319	19.0	66.0	0.3	1.0
243	15320	20.0	62 0	0.3	1.0
244	15321	18.0	77.0	0.3	5.0
245	15322	19.0	94.0	0.3	1.0
246	15323	19.0	62.0	0.5	10.0
247	15324	22.0	63.0	0.4	10.0
248	15325	20.0	48.0	0.5	1.0
249	15326	18.0	42.0	0.3	1.0
250	15327	14.0	45.0	0.3	1.0
251	15328	18.0	65.0	0.4	1.0
252	15329	14.0	51.0	0.3	1.0
253	15330	28.0	90.0	0.5	1.0
254	15331	12.0	45.0	0.3	1.0
255	15332	15.0	87.0	0.3	1.0
256	15333	15.0	60.0	0.4	1.0
257	15334	16.0	61.0	0.4	1.0
258	15335	15.0	53.0	0.5	1.0
259	15336	15.0	42.0	0.5	1.0
260	15337	17.0	53.0	0.3	1.0
261	15338	13.0	51.0	0.4	1.0
262	15339	19.0	107.0	0.4	1.0
263	15340	17.0	72.0	0.4	1.0
264	15341	36.0	75.0	0.5	1.0
265	15342	8.0	48.0	0.2	10.0
266	15343	14.0	65.0	0.3	1.0
267	15344	9.0	46.0	0.3	1.0
268	15345	16.0	75.0	0.4	1.0
269	15346	16.0	120.0	0.4	1.0
270	15347	18.0	157 0	0.4	1.0

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FILE NO G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
271	15348	13.0	265.0	0.4	1.0
272	15349	10.0	225.0	0.5	1.0
273	15350	13.0	141.0	0.4	1.0
274	15351	10.0	88.0	0.3	1.0
275	15352	12.0	69.0	0.4	1.0
276	15353	11.0	63.0	0.4	1.0
277	15354	13.0	124.0	0.3	1.0
278	15355	13.0	120.0	0.4	1.0
279	15356	14.0	55.0	0.4	1.0
280	15359	13.0	85.0	0.6	1.0
281	15360	13.0	95.0	0.5	1.0
282	15361	11.0	28.0	0.3	1.0
283	15362	17.0	50.0	0.5	1.0
284	15363	17.0	49.0	0.4	1.0
285	15364	27.0	133.0	0.5	15.0
286	15365	21.0	105.0	0.6	10.0
287	15366	19.0	86.0	0.3	15.0
288	15367	18.0	67.0	0.4	1.0
289	15368	15.0	92.0	0.4	10.0
290	15369	17.0	61.0	0.4	1.0
291	15370	11.0	72.0	0.4	1.0
292	15371	11.0	74.0	0.4	1.0
293	15372	12.0	71.0	0.4	1.0
294	15373	16.0	51.0	0.4	1.0
295	15374	19.0	55.0	0.4	1.0
296	15375	19.0	65.0	0.5	5.0
297	15376	15.0	82.0	0.4	1.0
298	15377	45.0	160.0	0.5	1.0
299	15378	36.0	183.0	0.6	1.0
300	15379	17.0	73.0	0.4	1.0
301	15380	20.0	73.0	0.4	1.0
302	15381	15.0	79.0	0.2	5.0
303	15382	11.0	45.0	0.3	1.0
304	15383	20.0	67.0	0.4	1.0
305	15384	24.0	67.0	0.3	1.0
306	15385	23.0	68.0	0.4	1.0
307	15386	15.0	62.0	0.2	1.0
308	15387	17.0	46.0	0.4	1.0
309	15388	15.0	39.0	0.3	1.0
310	15389	16.0	53.0	0.3	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
311	15390	20.0	41.0	0.2	1.0
312	15391	20.0	41.0	0.3	1.0
313	15392	23.0	100.0	0.4	1.0
314	15393	12.0	49.0	0.3	1.0
315	15394	18.0	63.0	0.3	1.0
316	15395	12.0	53.0	0.4	1.0
317	15396	29.0	43.0	0.4	1.0
318	15397	30.0	85.0	0.5	1.0
319	15398	17.0	90.0	0.4	10.0
320	15401	485.0	173.0	1.2	1.0
321	15402	85.0	60.0	0.4	5.0
322	15403	30.0	51.0	0.4	10.0
323	15404	12.0	65.0	0.3	10.0
324	15405	21.0	73.0	0.2	1.0
325	15406	45.0	64.0	0.5	10.0
326	15407	10.0	36.0	0.3	1.0
327	15408	11.0	75.0	0.2	1.0
328	15409	21.0	74.0	0.4	1.0
329	15410	22.0	70.0	0.4	5.0
330	15411	21.0	72.0	0.4	1.0
331	15412	11.0	74.0	0.3	1.0
332	15413	14.0	58.0	0.4	1.0
333	15414	11.0	61.0	0.3	1.0
334	15415	17.0	61.0	0.4	5.0
335	15416	19.0	76.0	0.4	1.0
336	15417	18.0	72.0	0.4	5.0
337	15418	15.0	79.0	0.4	1.0
338	15419	16.0	61.0	0.5	1.0
339	15420	15.0	64.0	0.4	1.0
340	15421	16.0	81.0	0.5	1.0
341	15422	16.0	45.0	0.4	1.0
342	15423	27.0	45.0	0.4	1.0
343	15424	43.0	21.0	0.4	1.0
344	15425	20.0	64.0	0.5	10.0
345	15426	18.0	61.0	0.5	5.0
346	15427	30.0	58.0	0.4	1.0
347	15428	25.0	36.0	0.4	5.0
348	15429	17.0	36.0	0.4	1.0
349	15430	17.0	53.0	0.4	10.0
350	15431	28.0	67.0	0.5	5.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 818

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
351	15432	14.0	48.0	0.3	1.0
352	15433	19.0	83.0	0.5	1.0
353	15434	10.0	103.0	0.4	1.0
354	15435	12.0	80.0	0.4	5.0
355	15436	78.0	67.0	0'5	1.0
356	15437	77.0	65.0	0.7	1.0
357	15438	75.0	65.0	0.7	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD

B.C. CERTIFIED ASSAYERS
2065 WEST TRANS CANADA HIGHWAY
PHONE 372-2764 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 15 1983
ANALYST
FILE NO G 851

KRAL NO	IDENTIFICATION	CU	ZN	AG	AU
1	15439	11.0	92.0	0.4	5.0
2	15440	17.0	95.0	0.4	20.0
3	15441	35.0	187.0	0.4	1.0
4	15442	64.0	202.0	0.4	5.0
5	15443	17.0	153.0	0.4	1.0
6	15444	14.0	183.0	0.5	5.0
7	15446	18.0	75.0	0.5	1.0
8	15447	17.0	52.0	0.4	5.0
9	15448A	11.0	86.0	0.4	1.0
10	15448B	16.0	97.0	0.7	1.0
11	15449	14.0	85.0	0.6	15.0
12	15450	15.0	115.0	0.6	10.0
13	15451	14.0	65.0	0.5	5.0
14	15452	10.0	76.0	0.3	1.0
15	15453	7.0	89.0	0.4	5.0
16	15454	10.0	75.0	0.4	5.0
17	15455	18.0	106.0	0.6	1.0
18	15456	26.0	103.0	0.5	5.0
19	15457	18.0	108.0	0.5	70.0
20	15458	14.0	88.0	0.4	5.0
21	15459	10.0	92.0	0.4	20.0
22	15460	10.0	62.0	0.3	10.0
23	15461	12.0	74.0	0.4	30.0
24	15462	10.0	63.0	0.4	5.0
25	15463	7.0	108.0	0.4	5.0
26	15464	12.0	70.0	0.5	10.0
27	15465	7.0	55.0	0.3	5.0
28	15466	15.0	198.0	0.6	1.0
29	15467	14.0	189.0	0.6	5.0
30	15468	8.0	85.0	0.2	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 851

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	15469	16.0	116.0	0.5	1.0
32	15470	15.0	129.0	0.4	1.0
33	15471	15.0	94.0	0.5	1.0
34	15472	7.0	56.0	0.2	1.0
35	15473	23.0	73.0	0.5	1.0
36	15474	15.0	300.0	0.8	1.0
37	15475	10.0	86.0	0.3	1.0
38	15476	7.0	65.0	0.2	1.0
39	15477	8.0	51.0	0.5	5.0
40	15478	7.0	65.0	0.2	1.0
41	15479	16.0	105.0	0.6	1.0
42	15480	36.0	83.0	0.6	1.0
43	15481	14.0	112.0	0.5	1.0
44	15482	14.0	139.0	0.4	1.0
45	15483	16.0	83.0	0.4	1.0
46	15484	12.0	78.0	0.4	5.0
47	15485	15.0	155.0	0.5	1.0
48	15486	12.0	82.0	0.4	1.0
49	15487	11.0	106.0	0.5	1.0
50	15488	11.0	119.0	0.4	1.0
51	15489	12.0	149.0	0.3	1.0
52	15490	21.0	260.0	1.3	1.0
53	15491	20.0	260.0	1.1	1.0
54	15492	17.0	111.0	0.5	5.0
55	15493	12.0	95.0	0.4	60.0
56	15494	12.0	90.0	0.5	5.0
57	15495	11.0	93.0	0.4	1.0
58	15496	23.0	50.0	0.4	1.0
59	15497	32.0	83.0	0.4	1.0
60	15498	13.0	103.0	0.4	1.0
61	15499	12.0	85.0	0.4	5.0
62	15500	17.0	96.0	0.6	85.0
63	15501	11.0	77.0	0.4	15.0
64	15502	9.0	89.0	0.4	1.0
65	15503	11.0	104.0	0.6	1.0
66	154541 (15454-1)	38.0	109.0	0.6	1.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

KAMLOOPS RESEARCH
&
ASSAY LABORATORY
LTD

B. C. CERTIFIED ASSAYERS
2035 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 154
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 15 1983
ANALYST
FILE NO. G 851

KRAL NO	IDENTIFICATION	CU	ZN	AG	AU
1	15504	15.0	62.0	0.5	1.0
2	15505	22.0	177.0	0.5	1.0
3	15506	65.0	69.0	0.7	1.0
4	15507	210.0	196.0	0.9	1.0
5	15508	33.0	152.0	0.6	1.0
6	15509	22.0	181.0	0.5	1.0
7	15510	18.0	107.0	0.5	1.0
8	15511	38.0	98.0	0.6	1.0
9	15512	15.0	85.0	0.5	1.0
10	15513	14.0	86.0	0.4	1.0
11	15514	25.0	116.0	0.5	5.0
12	15515	24.0	71.0	0.4	1.0
13	15516	23.0	66.0	0.4	1.0
14	15517	22.0	81.0	0.5	1.0
15	15518	28.0	93.0	0.5	1.0
16	15519	33.0	90.0	0.5	5.0
17	15520	35.0	87.0	0.6	5.0
18	15521	24.0	137.0	0.6	5.0
19	15522	21.0	138.0	0.5	1.0
20	15523	45.0	154.0	1.0	10.0
21	15524	33.0	150.0	0.7	5.0
22	15525	41.0	177.0	0.6	5.0
23	15526	48.0	152.0	0.9	5.0
24	15527	23.0	114.0	0.5	10.0
25	15528	25.0	156.0	0.7	5.0
26	15529	16.0	110.0	0.5	1.0
27	15530	21.0	175.0	0.6	5.0
28	15531	19.0	135.0	0.6	5.0
29	15532	21.0	127.0	0.5	5.0
30	15533	18.0	108.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 851

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	15534	18.0	128.0	0.5	1.0
32	15535	14.0	143.0	0.5	1.0
33	15536	26.0	175.0	1.0	1.0
34	15537	23.0	106.0	0.6	1.0
35	15538	18.0	260.0	0.5	5.0
36	15539	27.0	390.0	0.7	5.0
37	15540	21.0	370.0	0.7	1.0
38	15541	23.0	360.0	0.8	5.0
39	15542	27.0	179.0	0.7	5.0
40	15543	16.0	210.0	0.4	5.0
41	15544	27.0	140.0	0.7	25.0
42	15545	16.0	117.0	0.5	1.0
43	15547	22.0	123.0	0.5	1.0
44	15548	16.0	64.0	0.5	5.0
45	15549	28.0	131.0	0.7	10.0
46	15550	28.0	115.0	0.6	25.0
47	15551	25.0	260.0	0.7	1.0
48	15552	19.0	460.0	0.7	15.0
49	15553	46.0	670.0	1.3	10.0
50	15554	36.0	300.0	0.7	1.0
51	15555	27.0	260.0	0.7	10.0
52	15556	23.0	260.0	1.5	10.0
53	15557	20.0	580.0	5.1	5.0
54	15558	30.0	1490.0	7.8	25.0
55	15559	24.0	1090.0	5.1	5.0
56	15560	33.0	540.0	1.2	1.0
57	15561	73.0	240.0	0.9	5.0
58	15562	25.0	123.0	0.6	1.0
59	15563	19.0	107.0	0.6	5.0
60	15564	40.0	58.0	0.7	5.0
61	15565	15.0	44.0	0.4	1.0
62	15566	27.0	89.0	0.6	1.0
63	15567	19.0	85.0	0.7	1.0
64	15568	17.0	100.0	0.6	175.0
65	15569	14.0	98.0	0.6	1.0
66	15570	18.0	90.0	0.7	1.0
67	15571	25.0	118.0	0.4	1.0
68	15572	12.0	115.0	0.5	1.0
69	15573	22.0	110.0	0.4	1.0
70	15574	10.0	77.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 851

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	15575	7.0	61.0	0.3	1.0
72	15576	8.0	48.0	0.5	1.0
73	15577	11.0	61.0	0.6	5.0
74	15578	17.0	69.0	0.4	1.0
75	15579	9.0	52.0	0.4	5.0
76	15580	11.0	60.0	0.3	1.0
77	15581	12.0	77.0	0.4	1.0
78	15582	25.0	118.0	0.6	15.0
79	15583	25.0	150.0	0.5	1.0
80	15584	20.0	430.0	0.7	10.0
81	15585	24.0	240.0	0.6	10.0
82	15586	22.0	290.0	0.5	1.0
83	15587	38.0	300.0	0.5	10.0
84	15588	25.0	156.0	0.5	1.0
85	15589	23.0	111.0	1.3	30.0
86	15590	5.0	32.0	0.2	1.0
87	15591	11.0	201.0	0.6	10.0
88	15592	11.0	135.0	0.5	5.0
89	15593	5.0	51.0	0.2	1.0
90	15594	13.0	104.0	0.5	10.0
91	15595	4.0	159.0	0.3	1.0
92	15596	16.0	161.0	0.7	135.0
93	15597	8.0	203.0	0.4	1.0
94	15598	12.0	135.0	0.6	1.0
95	15599	14.0	92.0	0.5	1.0
96	15600	87.0	93.0	0.6	1.0
97	15601	82.0	128.0	0.9	1.0
98	15602	13.0	116.0	0.4	1.0
99	15603	14.0	95.0	0.6	1.0
100	15604	26.0	117.0	1.1	1.0
101	15605	15.0	148.0	1.1	80.0
102	15606	20.0	134.0	1.7	10.0
103	15607	7.0	86.0	0.3	10.0
104	15608	8.0	119.0	0.5	5.0
105	15609	2.0	31.0	0.1	5.0
106	15610	6.0	58.0	0.2	1.0
107	15611	19.0	310.0	0.6	1.0
108	15612	15.0	172.0	0.6	1.0
109	15613	63.0	188.0	1.0	10.0
110	15614	16.0	88.0	0.7	5.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO 6 851

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	15615	14.0	157.0	0.6	1.0
112	15616	12.0	106.0	0.6	1.0
113	15617	17.0	126.0	0.6	1.0
114	15618	20.0	88.0	0.4	1.0
115	15619	11.0	46.0	0.4	5.0
116	15620	17.0	89.0	0.5	1.0
117	15621	27.0	109.0	0.6	20.0
118	15622	24.0	120.0	0.7	5.0
119	15623	31.0	112.0	1.0	1.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
54	15624	148.0	21.0	0.5	1.0
55	15625	40.0	16.0	0.4	1.0
56	15626	21.0	41.0	0.5	1.0
57	15627	23.0	78.0	0.5	1.0
58	15628	12.0	72.0	0.3	1.0
59	15629	15.0	60.0	0.4	1.0
60	15630	15.0	74.0	0.6	1.0
61	15631	23.0	64.0	0.5	1.0
62	15632	80.0	42.0	1.1	1.0
63	15633	12.0	60.0	0.3	1.0
64	15634	12.0	93.0	0.4	1.0
65	15635	14.0	58.0	0.4	1.0
66	15636	16.0	72.0	0.4	1.0
67	15637	28.0	58.0	0.5	1.0
68	15638	19.0	76.0	0.5	1.0
69	15639	9.0	47.0	0.4	1.0
70	15640	14.0	69.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	15641	23.0	31.0	0.4	1.0
72	15642	23.0	36.0	0.5	1.0
73	15643	12.0	42.0	0.4	1.0
74	15644	21.0	64.0	0.4	1.0
75	15645	14.0	44.0	0.4	1.0
76	15700	9.0	32.0	0.3	1.0
77	15701	13.0	117.0	0.5	1.0
78	15702	8.0	58.0	0.3	1.0
79	1570	11.0	59.0	0.4	1.0
80	15704	7.0	57.0	0.2	1.0
81	15705	15.0	106.0	0.3	1.0
82	15706	10.0	63.0	0.4	1.0
83	15707	10.0	62.0	0.4	1.0
84	15708	13.0	54.0	0.4	1.0
85	15709	15.0	82.0	0.5	1.0
86	15710	14.0	65.0	0.5	1.0
87	15711	12.0	63.0	0.4	1.0
88	15712	11.0	84.0	0.3	1.0
89	15713	12.0	79.0	0.4	1.0
90	15714	10.0	32.0	0.3	1.0
91	15715	11.0	79.0	0.3	1.0
92	15716	12.0	61.0	0.3	1.0
93	15717	12.0	60.0	0.3	1.0
94	15718	18.0	73.0	0.4	1.0
95	15719	17.0	50.0	0.4	1.0
96	15720	6.0	28.0	0.1	1.0
97	15721	13.0	54.0	0.5	1.0
98	15722	10.0	71.0	0.3	1.0
99	15723	11.0	64.0	0.3	1.0
100	15724	11.0	46.0	0.3	1.0
101	15725	16.0	51.0	0.2	1.0
102	15726	12.0	56.0	0.4	1.0
103	15727	17.0	53.0	0.3	1.0
104	15728	10.0	45.0	0.3	1.0
105	15729	8.0	52.0	0.2	1.0
106	15730	8.0	53.0	0.3	1.0
107	15731	11.0	91.0	0.4	1.0
108	15732	12.0	60.0	0.4	1.0
109	15733	20.0	54.0	0.5	1.0
110	15734	14.0	71.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 859

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	15735	8.0	62.0	0.2	1.0
112	15736	11.0	73.0	0.3	1.0
113	15737	13.0	33.0	0.4	1.0
114	15738	13.0	76.0	0.3	1.0
115	15739	15.0	43.0	0.2	1.0
116	15740	8.0	72.0	0.3	1.0
117	15742	14.0	45.0	0.4	10.0
118	15744	9.0	65.0	0.3	1.0
119	15745	15.0	68.0	0.3	1.0
120	15746	10.0	77.0	0.3	1.0
121	15747	11.0	46.0	0.4	1.0
122	15748	11.0	83.0	0.3	1.0
123	15749	8.0	68.0	0.2	1.0
124	15750	11.0	48.0	0.4	1.0
125	15751	11.0	93.0	0.2	1.0
126	15752	16.0	44.0	0.3	1.0
127	15753	12.0	76.0	0.3	15.0
128	15754	8.0	67.0	0.2	5.0
129	15755	11.0	87.0	0.3	1.0
130	15756	13.0	102.0	0.6	1.0
131	15757	21.0	78.0	0.6	1.0
132	15758	13.0	66.0	0.4	1.0
133	15759	15.0	55.0	0.4	1.0
134	15760	9.0	39.0	0.3	1.0
135	15761	14.0	35.0	0.5	1.0
136	15762	12.0	39.0	0.3	1.0
137	15763	20.0	47.0	0.5	1.0
138	15764	15.0	40.0	0.4	1.0
139	15765	11.0	45.0	0.3	1.0
140	15766	20.0	132.0	0.6	1.0
141	15767	10.0	48.0	0.3	1.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

ASSAY LABORATORY
LTD

2095 WEST TRANS CANADA HIGHWAY
PHONE 372-2784 - TELEX 048-8320

GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE AUG 22 1983
ANALYST
FILE NO. G 865

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	15768	16.0	70.0	0.3	1.0
2	15769	10.0	64.0	0.3	1.0
3	15770	7.0	33.0	0.1	1.0
4	15771	7.0	82.0	0.2	1.0
5	15772	15.0	67.0	0.3	1.0
6	15773	8.0	59.0	0.3	1.0
7	15774	6.0	92.0	0.1	30.0
8	15775	9.0	69.0	0.2	1.0
9	15776	5.0	65.0	0.1	1.0
10	15777	7.0	45.0	0.3	1.0
11	15778	8.0	87.0	0.3	1.0
12	15779	10.0	34.0	0.3	55.0
13	15780	17.0	52.0	0.4	1.0
14	15781	11.0	69.0	0.3	1.0
15	15782	9.0	72.0	0.4	1.0
16	15783	8.0	95.0	0.4	1.0
17	15784	9.0	70.0	0.4	1.0
18	15785	8.0	51.0	0.3	1.0
19	15786	4.0	24.0	0.1	1.0
20	15787	7.0	67.0	0.4	10.0
21	15788	9.0	61.0	0.4	1.0
22	15789	6.0	32.0	0.3	1.0
23	15790	10.0	64.0	0.3	1.0
24	15791	12.0	41.0	0.4	30.0
25	15792	20.0	65.0	0.7	40.0
26	15793	8.0	37.0	0.4	1.0
27	15794	16.0	57.0	0.4	1.0
28	15795	12.0	61.0	0.4	1.0
29	15796	13.0	58.0	0.3	1.0
30	15797	14.0	71.0	0.4	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 865

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	15798	7.0	56.0	0.4	1.0
32	15799	8.0	55.0	0.5	1.0
33	15800	8.0	37.0	0.3	1.0
34	15801	12.0	66.0	0.4	1.0
35	15802	17.0	72.0	0.3	5.0
36	15803	12.0	40.0	0.3	1.0
37	15804	14.0	49.0	0.3	1.0
38	15805	20.0	61.0	0.3	1.0
39	15806	17.0	60.0	0.4	1.0
40	15807	14.0	64.0	0.4	1.0
41	15808	14.0	57.0	0.4	1.0
42	15809	7.0	31.0	0.3	1.0
43	15810	6.0	33.0	0.2	1.0
44	15811	7.0	46.0	0.2	1.0
45	15812	10.0	55.0	0.3	1.0
46	15813	36.0	60.0	0.4	1.0
47	15814	19.0	52.0	0.5	1.0
48	15815	14.0	63.0	0.5	1.0
49	15816	14.0	133.0	0.4	1.0
50	15817	8.0	51.0	0.3	1.0
51	15818	26.0	106.0	0.6	1.0
52	15819	6.0	52.0	0.3	1.0
53	15820	11.0	57.0	0.4	1.0
54	15821	6.0	66.0	0.3	1.0
55	15822	9.0	48.0	0.4	30.0
56	15823	8.0	93.0	0.3	1.0
57	15824	6.0	66.0	0.3	1.0
58	15825	12.0	53.0	0.3	10.0
59	15826	12.0	43.0	0.3	1.0
60	15827	16.0	55.0	0.4	5.0
61	15828	14.0	61.0	0.4	1.0
62	15829	12.0	66.0	0.5	1.0
63	15830	11.0	49.0	0.3	1.0
64	15831	14.0	63.0	0.4	10.0
65	15832	12.0	55.0	0.4	1.0
66	15833	15.0	69.0	0.4	1.0
67	15834	12.0	68.0	0.4	1.0
68	15835	10.0	64.0	0.3	1.0
69	15836	20.0	37.0	0.4	1.0
70	15837	13.0	53.0	0.4	35.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 865

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	15838	15.0	60.0	0.4	1.0
72	15839	20.0	138.0	0.6	1.0
73	15840	20.0	78.0	0.4	1.0
74	15841	15.0	78.0	0.4	1.0
75	15842	19.0	70.0	0.4	1.0
76	15843	25.0	124.0	0.4	1.0
77	15844	8.0	43.0	0.3	1.0
78	15845	12.0	51.0	0.3	1.0
79	15846	12.0	65.0	0.4	1.0
80	15847	11.0	69.0	0.4	1.0
81	15848	14.0	60.0	0.4	1.0
82	15849	15.0	67.0	0.4	1.0
83	15850	19.0	80.0	0.5	1.0
84	15851	16.0	81.0	0.5	1.0
85	15852	16.0	78.0	0.5	1.0
86	15853	16.0	69.0	0.4	1.0
87	15854	15.0	70.0	0.4	1.0
88	15855	9.0	48.0	0.2	1.0
89	15856	11.0	48.0	0.3	1.0
90	15857	21.0	85.0	0.4	1.0
91	15858	19.0	61.0	0.5	1.0
92	15859	14.0	63.0	0.3	1.0
93	15860	8.0	40.0	0.3	1.0
94	15861	13.0	70.0	0.3	1.0
95	15862	23.0	115.0	0.3	1.0
96	15863	10.0	72.0	0.4	1.0
97	15864	12.0	43.0	0.3	1.0
98	15865	21.0	48.0	0.4	30.0
99	15866	9.0	37.0	0.2	1.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

ASSAY LABORATORY & LTD

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GEOCHEMICAL LAB REPORT

KETLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE SEPT 15 1983
ANALYST
FILE NO. G 909

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	15867	27.0	285.0	1.7	1.0
2	15868	33.0	160.0	1.3	10.0
3	15869	25.0	267.0	1.1	10.0
4	15870	40.0	133.0	1.0	20.0
5	15871	28.0	134.0	1.6	1.0
6	15872	21.0	88.0	0.9	1.0
7	15873	12.0	42.0	1.3	1.0
8	15874	17.0	76.0	1.2	1.0
9	15875	18.0	106.0	0.9	10.0
10	15876	25.0	180.0	0.5	10.0
11	15877	26.0	85.0	0.6	5.0
12	15878	16.0	178.0	0.5	5.0
13	15879	24.0	195.0	0.5	10.0
14	15880	25.0	298.0	0.7	5.0
15	15881	32.0	133.0	0.6	1.0
16	15882	71.0	349.0	0.6	10.0
17	15883	40.0	157.0	0.5	1.0
18	15884	26.0	91.0	0.5	1.0
19	15885	24.0	50.0	0.4	1.0
20	15886	25.0	55.0	0.5	1.0
21	15887	18.0	54.0	0.3	1.0
22	15888	16.0	96.0	0.4	1.0
23	15889	17.0	85.0	0.4	1.0
24	15890	13.0	86.0	0.4	1.0
25	15891	16.0	110.0	0.5	1.0
26	15892	16.0	91.0	0.4	1.0
27	15893	21.0	75.0	0.4	1.0
28	15894	15.0	80.0	0.4	1.0
29	15895	14.0	109.0	0.4	1.0
30	15896	35.0	100.0	0.6	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 909

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	15897	33.0	108.0	0.6	10.0
32	15898	24.0	109.0	0.5	1.0
33	15899	18.0	91.0	0.4	1.0
34	15900	16.0	73.0	0.4	10.0
35	15901	21.0	82.0	0.6	1.0
36	15902	11.0	62.0	0.3	1.0
37	15903	12.0	90.0	0.4	1.0
38	15904	12.0	68.0	0.3	1.0
39	15905	15.0	60.0	0.4	1.0
40	15906	17.0	53.0	0.4	1.0
41	15907	23.0	64.0	0.4	1.0
42	15908	12.0	45.0	0.2	1.0
43	15909	24.0	54.0	0.4	1.0
44	15910	21.0	79.0	0.4	1.0
45	15911	17.0	67.0	0.4	5.0
46	15912	17.0	88.0	0.4	1.0
47	15913	26.0	462.0	0.6	5.0
48	15914	18.0	140.0	0.3	10.0
49	15915	32.0	275.0	0.5	10.0
50	15916	19.0	281.0	0.4	10.0
51	15917	23.0	200.0	0.4	5.0
52	15918	26.0	56.0	0.4	5.0
53	15919	141.0	10.0	0.4	0.0
54	15920	110.0	20.0	0.2	10.0
55	15921	28.0	85.0	0.2	5.0
56	15922	15.0	71.0	0.3	5.0
57	15923	23.0	145.0	0.4	1.0
58	15924	24.0	94.0	0.3	1.0
59	15925	31.0	75.0	0.6	5.0
60	15926	30.0	104.0	0.5	10.0
61	15927	25.0	144.0	0.5	10.0
62	15928	19.0	93.0	0.4	10.0
63	15929	26.0	115.0	0.6	1.0
64	15930	22.0	136.0	0.4	10.0
65	15931	44.0	142.0	0.6	1.0
66	15932	22.0	29.0	0.4	5.0
67	15933	115.0	23.0	0.5	0.0
68	15934	40.0	22.0	0.4	0.0
69	15935	39.0	18.0	0.6	0.0
70	15936	8.0	15.0	0.3	1.0

RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 909

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	15937	30.0	129.0	0.6	1.0
72	15938	10.0	45.0	0.3	1.0
73	15939	19.0	94.0	0.5	1.0
74	15940	35.0	78.0	0.6	1.0
75	15941	26.0	98.0	0.4	1.0
76	15942	22.0	113.0	0.4	5.0
77	15943	16.0	12.0	0.4	1.0
78	15944	38.0	16.0	0.3	1.0
79	15945	61.0	26.0	0.4	1.0
80	15946	54.0	25.0	0.5	1.0
81	15947	210.0	43.0	0.7	1.0
82	15948	31.0	135.0	0.3	5.0
83	15949	33.0	145.0	0.5	5.0
84	15950	45.0	109.0	0.6	5.0
85	15951	14.0	40.0	0.3	1.0
86	15952	19.0	51.0	0.3	5.0
87	15953	36.0	218.0	0.3	1.0
88	15954	62.0	128.0	0.4	80.0
89	15955	86.0	72.0	0.5	5.0
90	15956	35.0	51.0	0.6	5.0
91	15957	36.0	70.0	0.4	5.0
92	15958	20.0	100.0	0.3	1.0
93	15959	28.0	81.0	0.6	1.0
94	15960	25.0	80.0	0.4	5.0
95	15961	40.0	81.0	0.5	1.0
96	15962	23.0	163.0	0.8	5.0
97	15963	10.0	73.0	0.3	1.0
98	15964	12.0	35.0	0.3	5.0
99	15965	11.0	81.0	0.3	1.0
100	15966	10.0	56.0	0.3	5.0
101	15967	12.0	57.0	0.3	5.0
102	15968	10.0	63.0	0.4	5.0
103	15969	13.0	76.0	0.6	0.0
104	15970	11.0	92.0	0.4	0.0
105	15971	13.0	203.0	0.4	0.0
106	15972	16.0	74.0	0.3	1.0
107	15973	15.0	30.0	0.3	1.0
108	15974	18.0	43.0	0.4	20.0
109	15975	46.0	61.0	0.5	10.0
110	15976	11.0	62.0	0.3	5.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
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FILE NO G 909

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	15977	10.0	46.0	0.2	1.0
112	15978	13.0	76.0	0.3	1.0
113	15979	10.0	91.0	0.3	1.0
114	15980	64.0	302.0	0.4	1.0
115	15981	18.0	87.0	0.4	1.0
116	15982	12.0	51.0	0.4	1.0
117	15983	10.0	54.0	0.4	1.0
118	15984	12.0	114.0	0.4	1.0
119	15985	36.0	52.0	0.7	1.0
120	15986	13.0	61.0	0.5	1.0
121	15987	12.0	112.0	0.3	5.0
122	15988	66.0	340.0	0.5	1.0
123	15989	13.0	197.0	0.4	5.0
124	15990	15.0	188.0	0.4	1.0
125	15991	10.0	59.0	0.3	10.0
126	15992	24.0	19.0	0.3	10.0

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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE JULY 27 1983
ANALYST
FILE NO. G 820

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	16001	104.0	90.0	0.4	1.0
2	16002	35.0	97.0	0.2	1.0
3	16003	49.0	71.0	0.3	1.0
4	16004	20.0	78.0	0.2	1.0
5	16005	28.0	85.0	0.2	1.0
6	16006	35.0	48.0	0.2	1.0
7	16007	56.0	59.0	0.2	1.0
8	16008	23.0	72.0	0.2	1.0
9	16009	32.0	60.0	0.2	1.0
10	16010	92.0	44.0	0.3	1.0
11	16011	124.0	37.0	0.4	1.0
12	16012	88.0	19.0	0.3	1.0
13	16013	24.0	35.0	0.2	1.0
14	16014	18.0	81.0	0.2	1.0
15	16015	17.0	96.0	0.2	1.0
16	16016	36.0	30.0	0.2	1.0
17	16017	15.0	127.0	0.2	1.0
18	16018	11.0	96.0	0.2	1.0
19	16019	20.0	83.0	0.4	1.0
20	16020	32.0	96.0	0.5	1.0
21	16021	56.0	85.0	0.6	1.0
22	16022	51.0	100.0	0.3	1.0
23	16023	32.0	121.0	0.7	1.0
24	16024	49.0	135.0	0.3	1.0
25	16025	23.0	58.0	0.3	1.0
26	16026	24.0	26.0	0.3	1.0
27	16027	17.0	38.0	0.2	1.0
28	16028	16.0	67.0	0.2	1.0
29	16029	19.0	24.0	0.2	1.0
30	16030	19.0	108.0	0.2	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 820

KRAL NO	IDENTIFICATION	CU	ZN	AG	AU
31	16031	11.0	75.0	0.2	1.0
32	16032	11.0	87.0	0.3	1.0
33	16033	9.0	56.0	0.2	1.0
34	16034	17.0	16.0	0.2	1.0
35	16035	212.0	27.0	0.4	1.0
36	16036	33.0	21.0	0.2	1.0
37	16037	10.0	36.0	0.2	1.0
38	16038	14.0	116.0	0.3	50.0
39	16039	16.0	88.0	0.2	1.0
40	16040	17.0	69.0	0.2	20.0
41	16041	17.0	76.0	0.2	1.0
42	16042	48.0	292.0	0.3	1.0
43	16043	20.0	389.0	0.2	1.0
44	16045	16.0	60.0	0.2	1.0
45	16046	13.0	49.0	0.2	130.0
46	16047	12.0	60.0	0.2	1.0
47	16048	17.0	65.0	0.2	1.0
48	16049	16.0	48.0	0.2	1.0
49	16050	16.0	59.0	0.2	1.0
50	16051	12.0	63.0	0.2	1.0
51	16052	15.0	62.0	0.3	1.0
52	16053	16.0	56.0	0.3	1.0
53	16064	39.0	23.0	0.4	1.0
54	16065	15.0	72.0	0.3	1.0
55	16067	12.0	90.0	0.3	1.0
56	16068	11.0	50.0	0.3	1.0
57	16069	15.0	77.0	0.3	1.0
58	16070	17.0	69.0	0.3	1.0
59	16071	16.0	76.0	0.3	1.0
60	16072	23.0	57.0	0.4	1.0
61	16073	26.0	41.0	0.4	1.0
62	16074	19.0	46.0	0.3	1.0
63	16075	15.0	62.0	0.3	1.0
64	16076	14.0	66.0	0.3	1.0
65	16077	24.0	24.0	0.3	1.0
66	16078	136.0	21.0	0.4	1.0
67	16079	43.0	6.0	0.2	1.0
68	16080	115.0	34.0	0.4	1.0
69	16081	235.0	47.0	0.4	1.0
70	16082	130.0	36.0	0.3	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

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FILE NO G 820

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	16083	97.0	49.0	0.3	1.0
72	16084	30.0	35.0	0.3	1.0
73	16085	19.0	81.0	0.3	1.0
74	16086	14.0	67.0	0.2	1.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

KAMLOOPS RESEARCH
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GEOCHEMICAL LAB REPORT

KETTLE RIVER RESOURCES LTD
PROJECT 156
BOX 130
GREENWOOD B C
V0H 1J0
ATTN BARRY KYBA

DATE JULY 30 1983
ANALYST
FILE NO G 823

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
1	16088	31.0	48.0	0.5	1.0
2	16089	20.0	74.0	0.6	20.0
3	16090	17.0	77.0	0.6	1.0
4	16091	15.0	77.0	0.6	1.0
5	16092	18.0	55.0	0.5	10.0
6	16093	16.0	39.0	0.5	30.0
7	16094	17.0	44.0	0.6	10.0
8	16095	15.0	53.0	0.5	10.0
9	16096	13.0	68.0	0.5	5.0
10	16097	14.0	81.0	0.6	1.0
11	16098	19.0	82.0	0.5	1.0
12	16099	15.0	83.0	0.6	5.0
13	16100	16.0	100.0	0.6	5.0
14	16101	140.0	63.0	0.5	5.0
15	16102	65.0	70.0	0.6	30.0
16	16103	30.0	125.0	0.6	20.0
17	16104	31.0	106.0	0.6	30.0
18	16105	22.0	83.0	0.5	140.0
19	16106	16.0	102.0	0.6	10.0
20	16107	14.0	67.0	0.4	10.0
21	16108	19.0	122.0	0.5	10.0
22	16109	13.0	116.0	0.5	1.0
23	16110	15.0	90.0	0.5	10.0
24	16111	13.0	97.0	0.5	120.0
25	16112	16.0	113.0	0.5	10.0
26	16113	13.0	106.0	0.5	1.0
27	16114	14.0	107.0	0.4	1.0
28	16115	103.0	39.0	0.4	1.0
29	16116	20.0	83.0	0.5	1.0
30	16117	12.0	113.0	0.6	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 823

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
31	16118	15.0	83.0	0.6	1.0
32	16119	33.0	76.0	0.5	1.0
33	16120	17.0	60.0	0.5	1.0
34	16121	15.0	47.0	0.6	1.0
35	16122	16.0	59.0	0.6	1.0
36	16123	17.0	83.0	0.6	1.0
37	16124	17.0	75.0	0.6	1.0
38	16125	16.0	98.0	0.6	5.0
39	16126	13.0	70.0	0.6	5.0
40	16127	19.0	54.0	0.5	1.0
41	16128	16.0	65.0	0.5	5.0
42	16129	21.0	86.0	0.6	1.0
43	16130	13.0	113.0	0.7	1.0
44	16131	29.0	45.0	0.4	5.0
45	16132	13.0	70.0	0.6	1.0
46	16133	13.0	107.0	0.7	1.0
47	16134	24.0	420.0	0.6	1.0
48	16135	10.0	71.0	0.4	1.0
49	16136	9.0	70.0	0.3	5.0
50	16137	19.0	118.0	0.7	10.0
51	16138	13.0	102.0	0.6	1.0
52	16139	17.0	93.0	0.6	1.0
53	16140	16.0	101.0	0.5	1.0
54	16141	45.0	13.0	0.5	1.0
55	16142	48.0	14.0	0.4	1.0
56	16143	87.0	29.0	0.5	1.0
57	16144	32.0	22.0	0.5	1.0
58	16145	40.0	43.0	0.6	1.0
59	16146	28.0	24.0	0.5	1.0
60	16147	44.0	34.0	0.4	1.0
61	16148	36.0	11.0	0.4	1.0
62	16149	15.0	90.0	0.3	1.0
63	16150	19.0	92.0	0.6	1.0
64	16151	11.0	78.0	0.5	1.0
65	16152	15.0	132.0	0.7	1.0
66	16153	42.0	15.0	0.4	1.0
67	16154	14.0	112.0	0.5	1.0
68	16155	16.0	123.0	0.7	1.0
69	16156	13.0	83.0	0.7	1.0
70	16157	20.0	67.0	0.6	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 823

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	16158	30.0	69.0	0.7	1.0
72	16159	17.0	62.0	0.6	1.0
73	16160	15.0	44.0	0.6	1.0
74	16161	19.0	67.0	0.7	1.0
75	16162	18.0	54.0	0.6	1.0
76	16163	12.0	71.0	0.6	1.0
77	16164	16.0	167.0	0.6	1.0
78	16165	17.0	193.0	0.7	30.0
79	16166	15.0	167.0	0.6	1.0
80	16167	28.0	171.0	0.6	1.0
81	16168	40.0	169.0	0.7	1.0
82	16169	200.0	126.0	0.8	10.0
83	16170	26.0	183.0	0.7	1.0
84	16171	30.0	295.0	0.7	1.0
85	16172	12.0	111.0	0.4	1.0
86	16173	15.0	140.0	0.6	1.0
87	16174	14.0	75.0	0.6	1.0
88	16175	23.0	86.0	0.6	20.0
89	16176	15.0	76.0	0.6	1.0
90	16177	17.0	84.0	0.6	1.0
91	16178	14.0	72.0	0.7	1.0
92	16179	15.0	103.0	0.7	20.0
93	16180	12.0	68.0	0.6	10.0
94	16181	13.0	105.0	0.6	1.0
95	16182	17.0	96.0	0.6	15.0
96	16183	38.0	110.0	0.5	20.0
97	16184	69.0	19.0	0.5	1.0
98	16185	215.0	86.0	0.6	10.0
99	16186	20.0	78.0	0.6	20.0
100	16187	16.0	300.0	0.5	120.0
101	16188	14.0	91.0	0.6	1.0
102	16189	23.0	132.0	0.4	1.0
103	16190	15.0	69.0	0.4	1.0
104	16191	21.0	96.0	0.5	1.0
105	16192	187.0	430.0	0.5	1.0
106	16193	67.0	53.0	0.5	1.0
107	16194	32.0	92.0	0.6	1.0
108	16195	20.0	117.0	0.5	20.0
109	16196	25.0	78.0	0.6	10.0
110	16197	200.0	45.0	0.7	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 823

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	16198	111.0	24.0	0.6	10.0
112	16199	24.0	156.0	0.6	1.0
113	16200	22.0	146.0	0.6	1.0
114	16201	21.0	121.0	0.6	210.0
115	16202	16.0	84.0	0.6	1.0
116	16203	18.0	158.0	0.7	10.0
117	16204	20.0	93.0	0.7	1.0
118	16205	19.0	90.0	0.6	1.0
119	16206	11.0	91.0	0.5	1.0
120	16207	14.0	107.0	0.4	10.0
121	16208	38.0	212.0	0.5	1.0
122	16209	156.0	840.0	0.7	1.0
64	16210	23.0	33.0	0.6	1.0
65	16211	8.0	32.0	0.3	1.0
66	16212	20.0	67.0	0.4	1.0
67	16213	14.0	112.0	0.4	1.0
68	16214	10.0	108.0	0.3	1.0
69	16215	13.0	125.0	0.4	1.0
70	16216	24.0	104.0	0.5	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 838

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	16217	23.0	66.0	0.4	1.0
72	16218	8.0	67.0	0.2	1.0
73	16219	32.0	88.0	0.7	1.0
74	16220	34.0	58.0	0.4	1.0
75	16221	16.0	75.0	0.5	1.0
76	16222	20.0	95.0	0.5	5.0
77	16223	25.0	80.0	0.6	5.0
78	16224	28.0	56.0	0.5	5.0
79	16225	22.0	65.0	0.5	1.0
80	16226	7.0	42.0	0.3	1.0
81	16227	8.0	40.0	0.3	1.0
82	16228	16.0	59.0	0.4	1.0
83	16229	16.0	40.0	0.4	1.0
84	16230	5.0	61.0	0.3	1.0
85	16231	17.0	49.0	0.5	1.0
86	16232	15.0	54.0	0.5	1.0
87	16233	12.0	75.0	0.6	1.0
88	16234	11.0	103.0	0.5	1.0
89	16235	10.0	91.0	0.4	1.0
90	16236	14.0	86.0	0.6	1.0
91	16237	10.0	108.0	0.5	1.0
92	16238	11.0	89.0	0.5	1.0
93	16239	10.0	73.0	4.0	1.0
94	16240	9.0	71.0	0.5	1.0
95	16241	9.0	70.0	0.4	1.0
96	16242	12.0	55.0	0.3	1.0
97	16243	17.0	50.0	0.3	1.0
98	16244	16.0	71.0	0.4	1.0
99	16245	18.0	71.0	0.5	1.0
100	16246	12.0	63.0	0.6	1.0
101	16247	10.0	74.0	0.5	1.0
102	16248	11.0	68.0	0.3	1.0
103	16249	17.0	75.0	0.3	1.0
104	16250	9.0	49.0	0.3	1.0
105	16251	14.0	47.0	0.4	1.0
106	16252	20.0	80.0	0.5	1.0
107	16253	11.0	70.0	0.2	1.0
108	16254	19.0	57.0	0.8	1.0
109	16255	7.0	49.0	0.4	1.0
110	16256	10.0	56.0	0.3	1.0
111	16257	9.0	65.0	0.4	5.0
112	16258	9.0	49.0	0.5	1.0
64	16259	13.0	72.0	0.7	1.0
65	16260	14.0	80.0	0.6	1.0
66	16261	14.0	92.0	0.8	1.0
67	16262	13.0	88.0	0.7	1.0
68	16263	12.0	78.0	0.7	1.0
69	16264	11.0	88.0	0.5	1.0
70	16265	14.0	91.0	0.8	1.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

GEOCHEMICAL LAB REPORT

FILE NO G 841

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
71	16266	13.0	152.0	0.6	1.0
72	16267	17.0	130.0	0.8	1.0
73	16268	16.0	111.0	0.8	1.0
74	16269	11.0	156.0	0.6	1.0
75	16270	16.0	105.0	0.7	1.0
76	16271	14.0	79.0	0.7	1.0
77	16272	12.0	107.0	0.7	1.0
78	16273	13.0	95.0	0.7	1.0
79	16274	13.0	97.0	1.0	1.0
80	16275	26.0	106.0	0.8	1.0
81	16276	9.0	108.0	0.6	5.0
82	16277	12.0	152.0	0.7	1.0
83	16278	10.0	162.0	0.6	1.0
84	16279	12.0	192.0	0.7	1.0
85	16280	7.0	57.0	0.4	1.0
86	16281	13.0	102.0	0.8	10.0
87	16282	11.0	115.0	0.8	10.0
88	16283	11.0	97.0	0.8	10.0
89	16284	14.0	108.0	0.7	25.0
90	16285	15.0	109.0	0.9	5.0
91	16286	16.0	112.0	0.8	15.0
92	16287	13.0	93.0	0.7	10.0
93	16288	14.0	109.0	0.7	15.0
94	16289	9.0	89.0	0.8	5.0
95	16290	11.0	72.0	0.7	10.0
96	16291	11.0	120.0	0.6	10.0
97	16292	11.0	85.0	0.6	10.0
98	16293	14.0	74.0	0.7	10.0
99	16294	10.0	49.0	0.4	5.0
100	16295	9.0	254.0	0.6	1.0
101	16296	13.0	137.0	0.8	10.0
102	16297	12.0	140.0	0.7	1.0
103	16298	17.0	342.0	0.7	280.0
104	16299	20.0	269.0	0.7	30.0
105	16300	14.0	198.0	0.6	15.0
106	16301	13.0	106.0	0.7	1.0
107	16302	11.0	173.0	0.7	1.0
108	16303	15.0	195.0	0.5	1.0
109	16304	11.0	125.0	0.6	1.0
110	16305	20.0	127.0	0.9	5.0

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.
GEOCHEMICAL LAB REPORT

FILE NO G 841

KRAL NO.	IDENTIFICATION	CU	ZN	AG	AU
111	16306	8.0	70.0	0.5	1.0
112	16307	7.0	35.0	0.4	1.0
113	16308	18.0	73.0	0.7	1.0
114	16309	26.0	71.0	0.6	1.0
115	16310	25.0	85.0	0.6	1.0
116	16311	31.0	79.0	0.7	1.0
117	16312	43.0	180.0	0.6	1.0
118	16313	26.0	94.0	0.4	1.0
119	16314	14.0	144.0	0.6	1.0
120	16315	34.0	153.0	0.7	1.0
121	16316	12.0	118.0	0.6	5.0
122	16317	33.0	81.0	0.7	5.0
123	16318	20.0	57.0	0.5	1.0
124	16319	10.0	29.0	0.4	1.0
125	16320	30.0	65.0	0.6	1.0
126	16321	18.0	73.0	0.6	5.0
127	16322	14.0	84.0	0.6	1.0
128	16323	14.0	95.0	0.5	1.0
129	16324	18.0	60.0	0.7	1.0
130	16325	19.0	65.0	0.7	1.0
131	16326	26.0	56.0	0.8	1.0
~~132~~	~~16211~~	~~12.0~~	~~93.0~~	~~0.9~~	~~10.0~~
133	162561 (16258-1)	12.0	123.0	1.0	10.0

IN AU COLUMN 1 INDICATES LESS THAN 5 PPB

CU ZN AG METHOD -80 MESH HOT ACID EXTRACTION ATOMIC ABSORPTION

AU METHOD -80 MESH FIRE ASSAY ATOMIC ABSORPTION

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET, NORTH VANCOUVER, B.C. V7M 1T2
PHONE: (604) 980-5814 OR (604) 988-4524

Certificate of Assay

TO: Kettle River Resources

P.O. Box 130,

Greenwood, B.C.

PROJECT No. 156

DATE: Aug. 23/83

File No. 3-7 98

SAMPLE No.	Cu %	Zn %	Ag oz/ton	Au oz/ton		
24047	.106	14.20	.16	.001		
48	.213	2.66	.14	.001		
49	.298	8.35	.30	.001		
24050	.315	8.17	.20	.001		

MINE-EN Laboratories Ltd.

CERTIFIED BY: [signature]

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET, NORTH VANCOUVER, B.C. V7M 1T2
PHONE: (604) 980-5814 OR (604) 988-4524

Certificate of Assay

AUG 15 1983

TO: Kettle River Resources,
P.O. Box 130,
Greenwood, B.C.

PROJECT No.

DATE: Aug.11/83.

File No. 3-724

Blue Bell 2'
Discovery Rathmullen

SAMPLE No.	Ag oz/ton	Au oz/ton				
BB001	.51	.001				

MINE-EN Laboratories Ltd.

CERTIFIED BY:

APPENDIX B

DIAMOND DRILL LOGS - DDH RM 1,2,3,4

HOLE No. DDH RM 1

DIAMOND DRILL RECORD

DATE 83-08-22

COORD grid 350N + 3400E LOCATION Rathmullen Ck LOGGED BY BWK

REC: 100% AZ — CORE SIZE 3/4" XRAY DATE 83-08-22

LENGTH 0-4' DIP 90° PURPOSE test sulphide zone to depth

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	log	sample
0	4'	massive pyrrhotite, pyrite and sphalerite, discontinuous stringers at 10 to 20° to core axis, grades to massive sphalerite, pyrrhotite and pyrite in last 1½'	- po, pyr, sphal / sphal, po pyr /	no samples assayed
		EOH - drill vibrated apart		
		- core was bagged & stored in Kettle River trailer		

SEE-MOORE PRINT, SMITHERS

HOLE No. DDH RM 2

DIAMOND DRILL RECORD

DATE 83-08-25

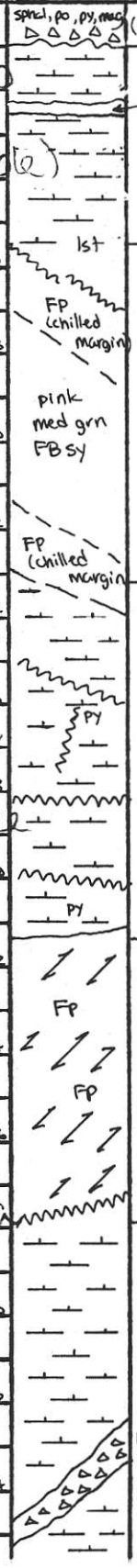
COORD grid 350N + 3400E LOCATION Rathmullen Ck LOGGED BY BWK

REC 78% (39/50) AZ — CORE SIZE 3/4" XRAY DATE 83-08-25

LENGTH 0-39' DIP -85° PURPOSE ~1' SE of DDH RM 1 - to test sulphide

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	1	massive sphalerite, pyrrhotite, pyrite and magnetite, poorly developed discontinuous banding @ 70° to core axis
1	2'4"	very fine xtalline white limestone (marble) cracked in part, white calcite veining common (fragment?)
2'4"	2'7"	massive pyrite, sphalerite, pyrrhotite and magnetite, banding at 70° to core axis
2'7"	5'6"	limestone: as above, contact filled with fine grained pyrite at 70° to core axis sharp to ...
5'6"	7'	light green to grey feldspar porphyry with rare white calcite fractures (randomly orientated) gradational contact over 6" to ....
7'	11'6"	pink medium grained feldspar, biotite syenite, porphyritic in part, trace disseminated and fracture pyrite, trace disseminated magnetite. Mottled light green with chlorite alteration of biotite and hornblende(?) - chlorite filled fractures at 20° to core axis, gradational contact over 4" to ...
11'6"	13'2"	dark green feldspar porphyry (chilled margin of above).
13'2"	21'8"	limestone: pale green to grey, intensely fractured to crackle breccia calcite veinning common, trace disseminated pyrite, poorly developed epidote bands up to 1" wide with very fine grained pyrite, sharp contact at 90° to core axis to ...

1:20



ASSAY SAMPLE

SEE MOORE PRINT, SMITHERS

HOLE No. DDH RM 2

DIAMOND DRILL RECORD

DATE 83-08-25

COORD grid 3+50N + 3400E LOCATION Bathmullen/Ck LOGGED BY BWK

REC 78% AZ — CORE SIZE 3/4" - X RAY DATE 83-08-25

LENGTH 0-39' DIP -85° PURPOSE page 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
21'8"	28'	feldspar porphyry: pink with dark green chlorite clots, weakly developed foliation at 45° to core axis, minor calcite fractures - core ground & milled, 6" gouge at fault contact to ...
28'	39'	limestone: white to light grey, massive, crackled. (locally over 3-4") with very fine grained pyrite matrix (≤1%) breccia zone at 35' 2" wide with angular fragments of limestone in black very fine grained sulphide matrix, trace disseminated very fine grained euhedral pyrite.
		EOH
		-core was sampled through each rock type & whole core sent for assay.

38

KEE-MOORE PRINT, SMITHERS

HOLE No. DDH RM 3

DIAMOND DRILL RECORD

DATE 83-08-26

COORD grid 3+50N 3400E LOCATION Rathmullen Ck LOGGED BY BWK

REC 70% (26/38) AZ — CORE SIZE 3/4" XRAY DATE 83-08-26

LENGTH 0-40' DIP -60° PURPOSE drum set up @ # 1,7

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	1'3"	massive pyrite, pyrrhotite and sphalerite. pyrite is medium grained to framboidal texture (1/8 - 1/4" across) pyrrhotite and sphalerite in 1/8 to 1/4" wide stringers to over 2" wide. sulphides include small 1" fragments of white limestone. sharp contact at 70° to core axis to...
1'3"	1'11"	white very fine crystalline limestone (marble); brecciated in part, trace pyrite on hairline fractures. sharp contact at 90° to core axis to ...
poor recovery	core	
1'11"	2'7"	massive pyrite, sphalerite, pyrrhotite with discontinuous bands at 70° to core axis, sharp contact at 60° to core axis to ...
2'7"	5'	dark and light green massive epidote skarn. very fine grained mottled light grey, trace disseminated pyrite. - poor core recovery at contact ...
poor	core	
recovery		
5'	5'8"	dark grey to green feldspar porphyry chilled margin - gradational over 6" to ...
5'8"	18'	pink fine grained porphyritic feldspar biotite syenite, trace disseminated magnetite, trace disseminated pyrite, gradational contact to ...
18'	18'6"	dark green to grey feldspar porphyry (chilled margin) sharp contact at 70° to core axis to ...
18'6"	20'	white coarse crystalline limestone with trace disseminated fine grained euhedral pyrite.
20'	22'6"	dark green to grey feldspar porphyry

1:20

SAMPLE

0-2'7" (2'7") 13294

2'7"-5' (2'5") 13295

5'-26'6" (21'6") 13296

26'6"-33'6" (7') 13297

NOT SAMPLED

BEE-MOORE PRINT, SMITHERS

HOLE No. DDH RM3

DIAMOND DRILL RECORD

DATE 83-08-26

COORD grid 3+50N 3400E LOCATION Rathmullen Ck LOGGED BY BWK

AZ — CORE SIZE 3/4" XRAY DATE 83-08-26

LENGTH 0-40' DIP: -60° PURPOSE Page 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
22'6"	26'6"	pink fine to very fine grained feldspar biotite syenite, massive. sharp contact at 50° core axis to ....
26'6"	31'7"	mottled green and pink feldspar porphyry breccia - 30% pink subrounded feldspar porphyry fragments (1/4 to 1" across) in light green aphanitic matrix, rare open calcite filled fractures. sharp contact at 60° to core axis to ....
31'7"	33'6"	dark green volcanic breccia - dark green subangular fragments (1 1/4" to 1/2") in dark green aphanitic matrix. sharp contact at 45° to core axis to ...
33'6"	40'	white very fine crystalline limestone locally brecciated with fractures filled with very fine grained pyrite. At 38' fault gouge over 4".
poor core recovery in limestone		
		EOH
		NOTE: whole core sampled as noted, skeleton core stored in Kettle River trailer 83-08-30

IEE-MOORE PRINT, SMITHERS

HOLE No. DDH RM4

DIAMOND DRILL RECORD

DATE 83-08-29

COORD grid 350N + 3400E LOCATION Rathmullen Ck LOGGED BY BNK

REC 76% (28/40) AZ — CORE SIZE 3/4" XRAY DATE 83-08-29

LENGTH 0-37' DIP: -75° PURPOSE opposite to RM#3 (-60°)

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	1:20	SAMPLE
0	4'6"	massive pyrrhotite, pyrite, sphalerite fine grained euhedral pyrite conspicuous in massive bronze pyrrhotite. sphalerite content increases to 20% (est) in last 1½'. subparallel stringers at 20° to core axis. sharp contact at 90° to core axis to ...	po, py sphal	0-4'6" 13298
4'6"	8'	dark green to grey feldspar porphyry. white feldspar phenos partially altered to dark green chlorite clots, gradational contact over 1' to	sphal, po, py; FP; BFsy	4'6"-14' (9'6") 13299
8'	14'	pink med grained Biotite feldspar syenite, chlorite fractures common and locally brecciated by dark green aphanitic matrix, gradational contact over 6" to feldspar porphyry (pyritic) sharp contact at 90° to core axis to ...	FP (py)	
14'	24'	light green and dark green to grey thinly banded argillite and argillaceous limestone, locally crackled with dark green aphanitic matrix with fine grained pyrite. Banding at 10° to core axis with crosscutting crackle zones up to 3" wide (at 30° to 80° to core axis) sharp contact at 70° to core axis to ...	arg lst	14'-24' (10') 13300
24'	26'6"	dark grey to green feldspar porphyry with white feldspar phenos partially and completely altered to chlorite clots — trace very fine grained disseminated pyrite. Sharp contact at 40° to core axis to	FP	NOT SAMPLE

SEE MOORE PRINT, SMITHERS

HOLE No. DDH RM4

DIAMOND DRILL RECORD

DATE 83-08-29

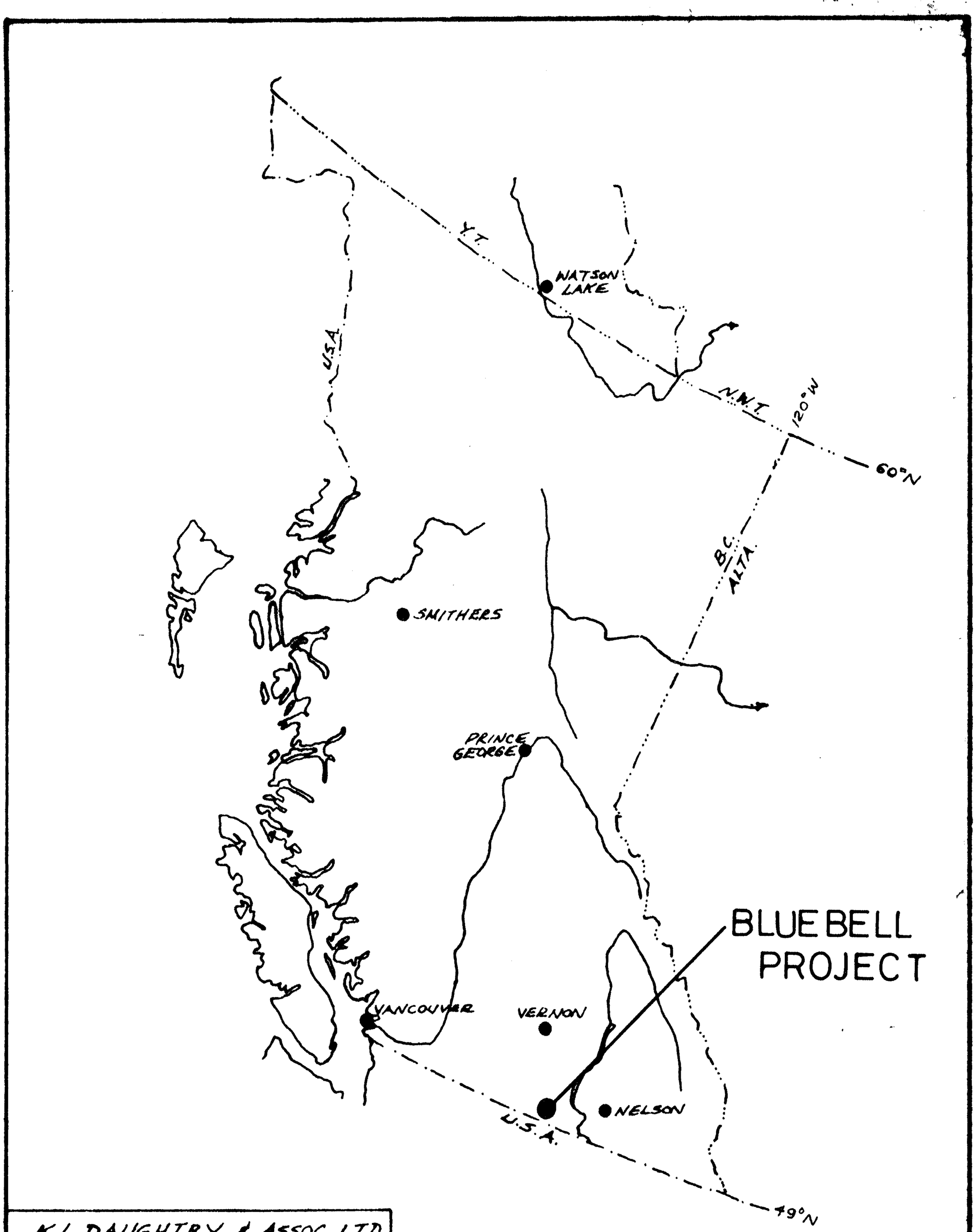
COORD 350N + 3450E LOCATION Rathmullen Ck LOGGED BY BLNK

76% (26/37) AZ — CORE SIZE 3/4" XRAY DATE 83-08-29

LENGTH 0-37' DIP -75° PURPOSE Page 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	
26'6"	37'	White fine xtalline limestone (marble) generally massive with black stylolitic fractures lined with very fine grained pyrite, trace disseminated pyrite.	— —
		EOH	
		NOTE: whole core sampled as noted, skeleton core stored in Kettle River trailer (greenwood) 83-08-30	

EE-MOORE PRINT, SMITHERS



K.L. DAUGHTRY & ASSOC. LTD

BLUEBELL PROJECT

LOCATION MAP

FIG. NO. 1

inches
0 1
0 1 2
centimetres

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EHOLT

CREEK

ABANDONED RR

PACIFIC RAILWAY

EHOLT

BROWN CANADIAN PACIFIC RAILWAY

BC CREEK

MAB # 4 27005

MAB # 3 21420

MAB # 2 21419

CLIMAX FR 3710

JEEP # 13 19072

WILGRESS 1 FR 3711

WILGRESS 2 FR 3712

MAB FR 20360

BC 2382

MINNIE MOORE L 593

JUMBO FR 3045

JEEP # 11 FR 19070

JEEP # 15 19074

JEEP # 16 FR 19075

JEEP # 12 FR 19071

JUMBO L 592

BREYFOGLE FR 15819

BLUEBELL L 2136

LONDON FR

VASHTI L 950

DAISY FR 2299

MAY L 1409

3243 RATHMULLEN 1 RATHMULLEN FR.

ELMER No 2 FR.

EMMA L 591

MOUNTAIN ROSE L 794

MOUNTAIN VIEW L 1533

B.C. L 882

NOVELTY FR L 946

B C FR No 2 L 4645

ELMER No 2 3047

REMINGTON FR 15866

MATABELLE FR L 2114

CHEMICAL FR 15861

ONTARIO FR 2519

JEEP #1 FR 19066

RATHMULLEN 2 3244

ORO DENORO L 692

MARY B L 1568

APRIL FR 15826

JOINER FR 15827

DENORO FR 16937

NORTON FR

JEEP # 18 FR 19077

ERWIN L 1691

CORDICK L 625

DUPLICATE L 863

RATHMULLEN 5 3246

RATHMULLEN 4 3245

THIMBLE MTN

JEEP # 10 FR 19069

JEEP # 9 FR 19068

JEEP # 8 FR 19067

R. BELL L 1506

ABANDONED RR

FISHERMAN

RIDGE

RAILWAY

inches 0 1 2

centimetres 0 1 2 3 4 5

BRITISH COLUMBIA GEOLOGICAL SURVEY

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0 500 1000

metres

N

KETTLE RIVER RESOURCES Ltd.

K. L. DAUGHTRY & Assoc. Ltd.

CLAIMS

BLUEBELL PROPERTY

GREENWOOD. M.D. 82E/2E

SCALE: 1:12000 1"=1000'		DATE: APRIL 1984
DWN. BY: WRG	PROJ No. 156	FIGURE No: 2

GEOLOGY MAP LEGEND

METAMORPHIC ROCKS	SEDIMENTARY ROCKS	VOLCANO-SEDIMENTARY ROCKS	INTRUSIVE ROCKS
	TERTIARY Kettle River Formation 14 a) Arkose		15 a) Feldspar Porphyry b) Feldspar biotite syenite c) Basalt
	CRETACEOUS		13 Granodiorite 12 Feldspar Hornblende Diorite
			AGE UNKNOWN 11 Diorite
	TRIASSIC Brooklyn Formation 7 Massive Limestone a) Limestone breccia b) Argillaceous limestone c) Calcareous chert pebble conglomerate 6 Banded Argillaceous Limestone a) Limestone breccia 5 Upper Chert Sandstone a) Argillite b) Volcanic chert breccia/limestone breccia c) Chert breccia 4 Interbedded Clastic and Carbonate Rocks a) Limestone b) Limestone breccia c) Chert Sandstone and chert breccia d) Calcareous chert pebble conglomerate e) Argillite f) Argillaceous limestone g) Black limestone 3 Massive Limestone a) Limestone breccia 2 Lower Interbedded Clastic and Carbonate Rocks a) Limestone breccia b) Massive white limestone c) Argillaceous limestone d) Calcareous chert pebble conglomerate e) Limy argillite 1 Chert Breccia	TRIASSIC?	TRIASSIC? 10 Micro diorite a) Brecciated b) Feldspar microdiorite breccia c) Feldspar microdiorite d) Feldspar hornblende microdiorite e) Hornblende granodiorite?
8 Skarn a) Light green calc-silicate b) Garnetite c) Garnet calcite d) Garnet epidote		9 Greenstone a) Volcanic sandstone b) Mixed volcanic breccia	

area of little or no outcrop
limit of mapping
attitude of bedding
attitude of vein or contact
attitude of schistosity
faults-defined, approximate, assumed
geological contacts-defined, approximate, assumed

SYMBOLS

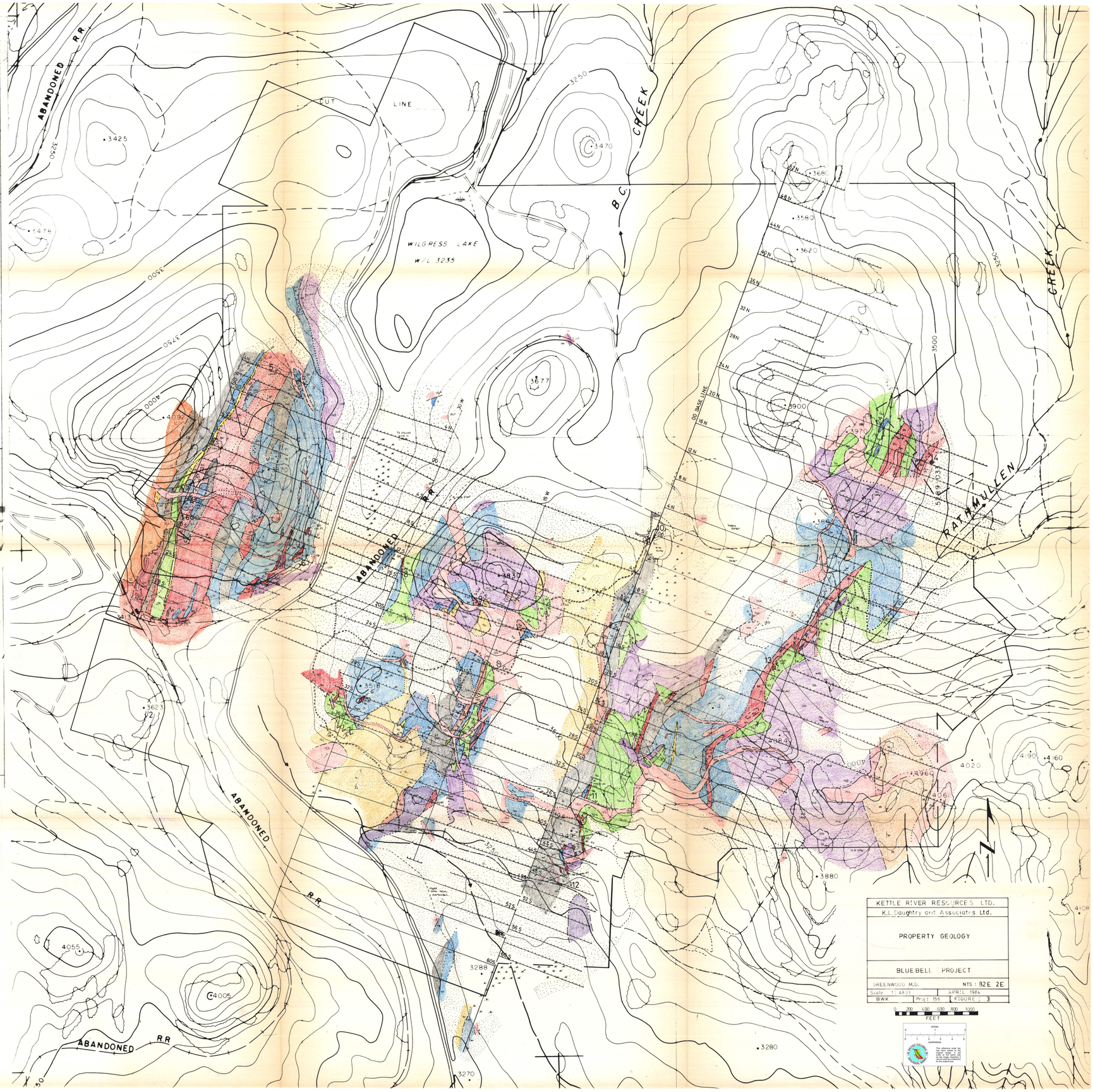
jointing
bedding tops
old workings, mines
showings, prospects
glory hole
swamp
py pyrite
cpy chalcopyrite
hem hematite
sphal sphalerite
qtz quartz
mag magnetite
po pyrrhotite
cgl conglomerate

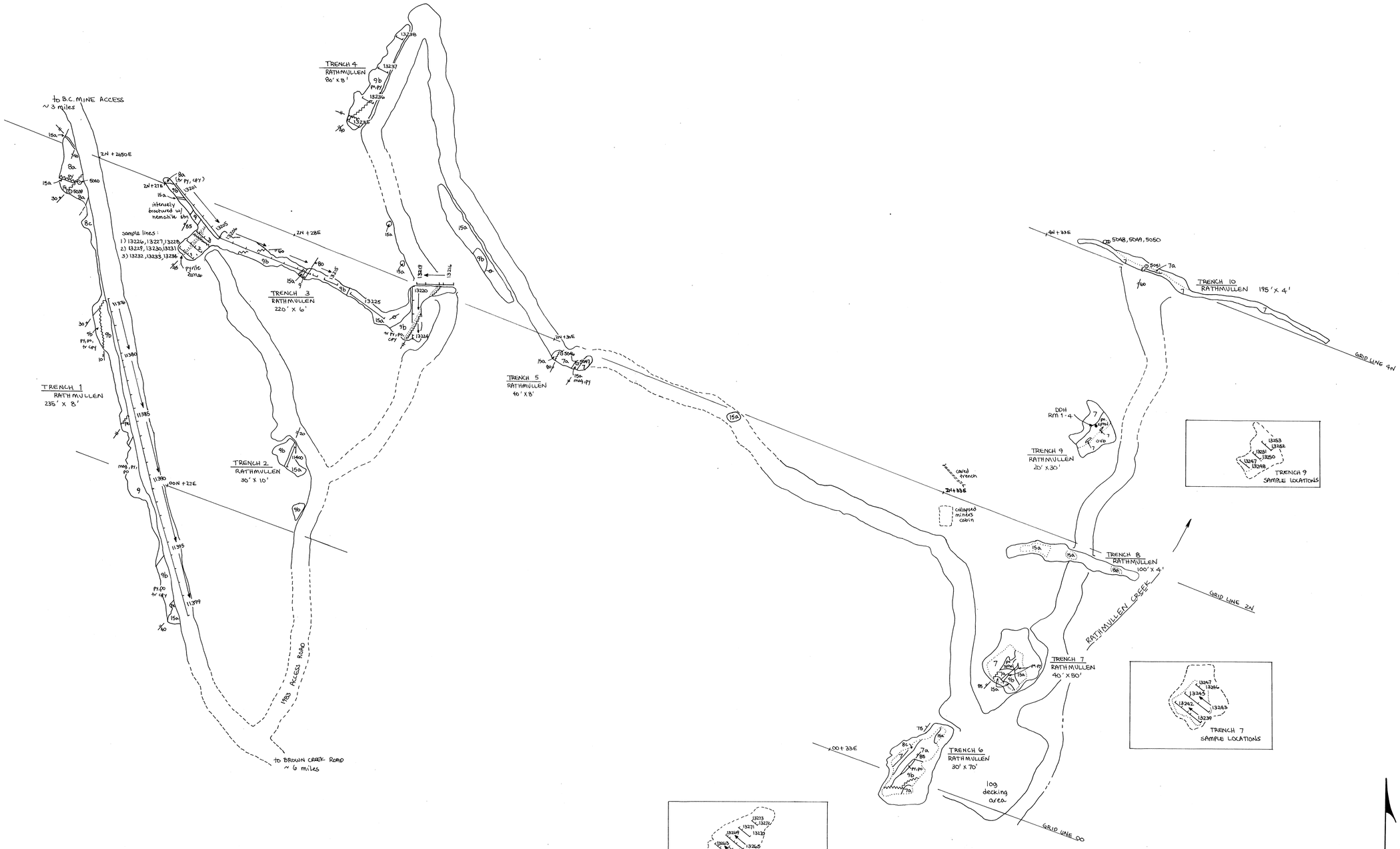
SHOWINGS

1 Emma
2 Ora Denora
3 Swallow
4 Jumbo
5 Minnie Moore
6 Mountain Rose
7 Breyfogle
8 Bluebell
9 Mountain View
10 BC Mine
11 Cordick
12 R Bell
13 Rathmullen
14 Maple Leaf

CLASSIFICATION OF SEDIMENTARY SEQUENCE

Depositional Zone	Map Unit
Upper Carbonate	7
Upper Transition	5a,6 6a,7a,b,c
Upper Clastic	5, 5c, e b
Middle Carbonate	4a
Middle Transition	4e, f, g, d, b
Middle Clastic	4c
Lower Carbonate	3, 3a
Lower Transition	2a, b, c, d, e
Lower Clastic	1





TABULATION OF GEOCHEMICAL AND ASSAY RESULTS - RATHMULLEN TRENCHING AND DRILLING

TRENCH 1 RATHMULLEN
(ASSAY oz/ton)

SAMPLE NO.	WIDTH	Au	Ag	Cu	Zn
11376	10'	.001	.06		
11377	10'	.001	.06		
11378	10'	<.001	.09		
11379	10'	<.001	.06		
11380	5'	.001	.06		
11381	5'	.003	.02		
11382	10'	.004	.06		
11383	10'	.003	.06		
11384	10'	.003	.05		
11385	10'	.003	.07		
11386	10'	.002	.06		
11387	10'	.003	.08		
11388	10'	.003	.08		
11389	10'	.003	.09		
11390	10'	.003	.09		
11391	10'	.004	.07		
11392	10'	.002	.09		
11393	10'	.002	.05		
11394	10'	.002	.04		
11395	10'	.004	.04		
11396	10'	.003	.06		
11397	10'	.002	.07		
11398	10'	.002	.10		
11399	15'	50ppb	.8ppm	37ppm	121 ppm
5039	grab sample	45 ppb	4.2ppm	192ppm	871 ppm
5040	" "	90 ppb	3.4ppm	856ppm	218 ppm

TRENCH 2 RATHMULLEN
GEOCHEM (Au in ppb, Ag, Cu, Zn in ppm)

SAMPLE NO.	WIDTH	Cu	Zn	Ag	Au
11400	15'	63	46	.8	30

TRENCH 3 RATHMULLEN
GEOCHEM (Au in ppb, Ag, Cu, Zn in ppm)

SAMPLE NO.	WIDTH	Cu	Zn	Ag	Au
13201	10'	68	56	1	25
13202	10'	61	68	.9	10
13203	10'	24	36	.7	5
13204	10'	488	890	1.8	25
13205	10'	129	298	.9	20
13206	10'	108	104	.9	35
13207	10'	115	570	1.4	130
13208	10'	67	88	.9	165
13209	10'	123	126	1.2	15
13210	10'	187	127	1.1	5
13211	10'	283	87	1.2	1
13212	5'	45	114	.6	140
13213	5'	88	157	.9	50
13214	3'	43	49	.7	40
13215	10'	100	88	.6	10
13216	9'	110	87	.7	140
13217	1'	169	49	1.3	245
13218	7'	140	56	.7	190
13219	7'	310	57	1.2	95
13220	10'	1050	162	2.5	450

TRENCH 3 RATHMULLEN cont'd...

SAMPLE NO.	WIDTH	Cu	Zn	Ag	Au
13221	10'	177	119	1.3	190
13222	10'	218	253	1.4	125
13223	5'	104	91	1	10
13224	2'	90	100	.8	10
13225	30'	40	72	.7	1
13226	5'	96	301	1	25
13227	2'	143	2960	1.6	35
13228	3'	21	222	.7	20
13229	4'	166	910	1.6	30
13230	1'	382	3200	3.7	60
13231	3'	139	180	1.1	15
13232	3'	66	94	.9	1
13233	2'	167	143	2.4	40
13234	2'	192	48	1.8	35

TRENCH 4 RATHMULLEN

SAMPLE NO.	WIDTH	Cu	Zn	Ag	Au
13235	8'	110	63	.8	340
13236	8'	180	101	1.7	20
13237	7'	29	39	.8	15
13238	8'	56	320	1.7	20

TRENCH 5 RATHMULLEN
GEOCHEM (Au in ppb, Ag, Cu, Zn in ppm)

SAMPLE NO.	WIDTH	Cu	Zn	Ag	Au
5046	grab sample	12	72	2.9	trace
5047	" "	10	70	1.1	trace

TRENCH 6 RATHMULLEN

ASSAY RESULTS	% Cu	% Zn	Ag	Au oz/ton
13254 5'			.41	.005
13255 5'			.08	.001
13256 9'			.12	trace
13257 2'			.24	.002
13258 1'			.06	trace
13259 11'			.48	.001
13260 1'	.06	.03	.13	.002
13261 5'			4.47	.009
13262 2'			.17	trace
13263 2'			.14	trace
13264 1.5'			.09	.002
13265 7'			.07	trace
13266 1'	.05	.41	.51	.001
13267 5'			.26	.001
13268 2'			.14	trace
13269 1'			.12	trace
13270 7'			.12	trace
13271 3'			.08	trace
13272 1'			.04	trace
13273 4'			.13	trace

TRENCH 7 RATHMULLEN

ASSAY RESULTS	WIDTH	% Cu	Zn	Ag	Au oz/ton
13239	10'	.71	.11	1.64	.003
13240	2'	.01	.06	.11	trace
13241	5'			.10	trace
13242	7'			.09	trace
13243	10'			.05	trace
13244	8'	.19	9.8	.16	.002
13245	4'			.12	trace
13246	4'			.05	trace
13247	2'			.06	trace

TRENCH 8 RATHMULLEN
NO SAMPLES COLLECTED

TRENCH 9 RATHMULLEN

ASSAY RESULTS	% Cu, Zn,	Ag, Au oz/ton
13248 3'	.19 1.8	.03 trace
13249 6'		.09 .002
13250 4'	.21 22.0	.17 .006
13251 2'		.11 trace
13252 6'	.18 12.0	.05 .002
13253 3'		.14 .001

TRENCH 10 RATHMULLEN
GEOCHEM (Au in ppb, Ag, Cu, Zn in ppm)

SAMPLE NO.	WIDTH	Cu	Zn	Ag	Au
5048	soil	25	60	.4	5
5049	soil	19	36	.5	5
5050	soil	18	38	.4	5
5051	grab sample	7	50	1.7	5

RESULTS OF DIAMOND DRILLING - ALL HOLES COLLARED IN TRENCH 9
ASSAY RESULTS Cu, Zn in %, Ag, Au in oz/ton
GEOCHEM RESULTS Cu, Zn, Ag in ppm, Au in ppb

HOLE NO.	SAMPLE NO.	WIDTH	ROCK TYPE	Cu	Zn	Ag	Au
DDH RM-1	NO SAMPLES						
DDH RM-2	13288	1'	mass. sphal., po	.09	29.9	.58	<.001
	13289	4.5'	lst w/ sphal.	.04	1.84	.17	<.001
	13290	7.75'	feldspar porphyry	geochem		.8	1
	13291	8.5'	pyritic lst	"		.3	1
	13292	6.25'	feldspar porphyry	"		.7	1
	13293	11'	pyritic lst	"		2.9	1
DDH RM-3	13294	2.75'	mass. po, sphal.	.22	2.9	.15	.002
	13295	2.5'	skarn	geochem		4	10
	13296	21.5'	feldspar porphyry	"		.7	1
	13297	7'	feldspar porphyry dx	"		.6	1
DDH RM-4	13298	6.5'	mass. po, sphal.	.10	13.4	.15	<.001
	13299	9.5'	feldspar porphyry	geochem		.6	1
	13300	10'	pyritic argillite	"		2	1

KETTLE RIVER RESOURCES Ltd.
K.L. DAUGHTRY & ASSOC Ltd.

RATHMULLEN CREEK
TRENCH AREAS

BLUEBELL PROPERTY

GREENWOOD M.D. 82E/2E
SCALE: 1" = 30' APRIL 1984
DWN BY. BWK PROJ 156 FIGURE NO. 30

0 30 60 90 120 150 FEET

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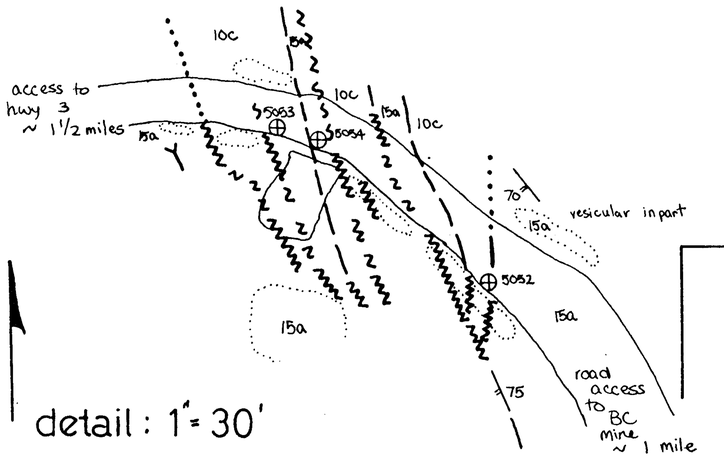
DETAIL OF AREA SOUTHEAST OF WILGRESS LAKE

FIGURE 3b

BWK APRIL 1984

rock samples from trench dug on old workings (~ 2150N + 20W)

sample no.	rock type	width	Cu	Zn	Ag	Au
5052	pyritic Feldspar microdevrite	grab	8	89	.6	1
5053	as above	"	4	77	.3	1
5054	vesicular Feldspar porphyry	"	23	92	.5	1

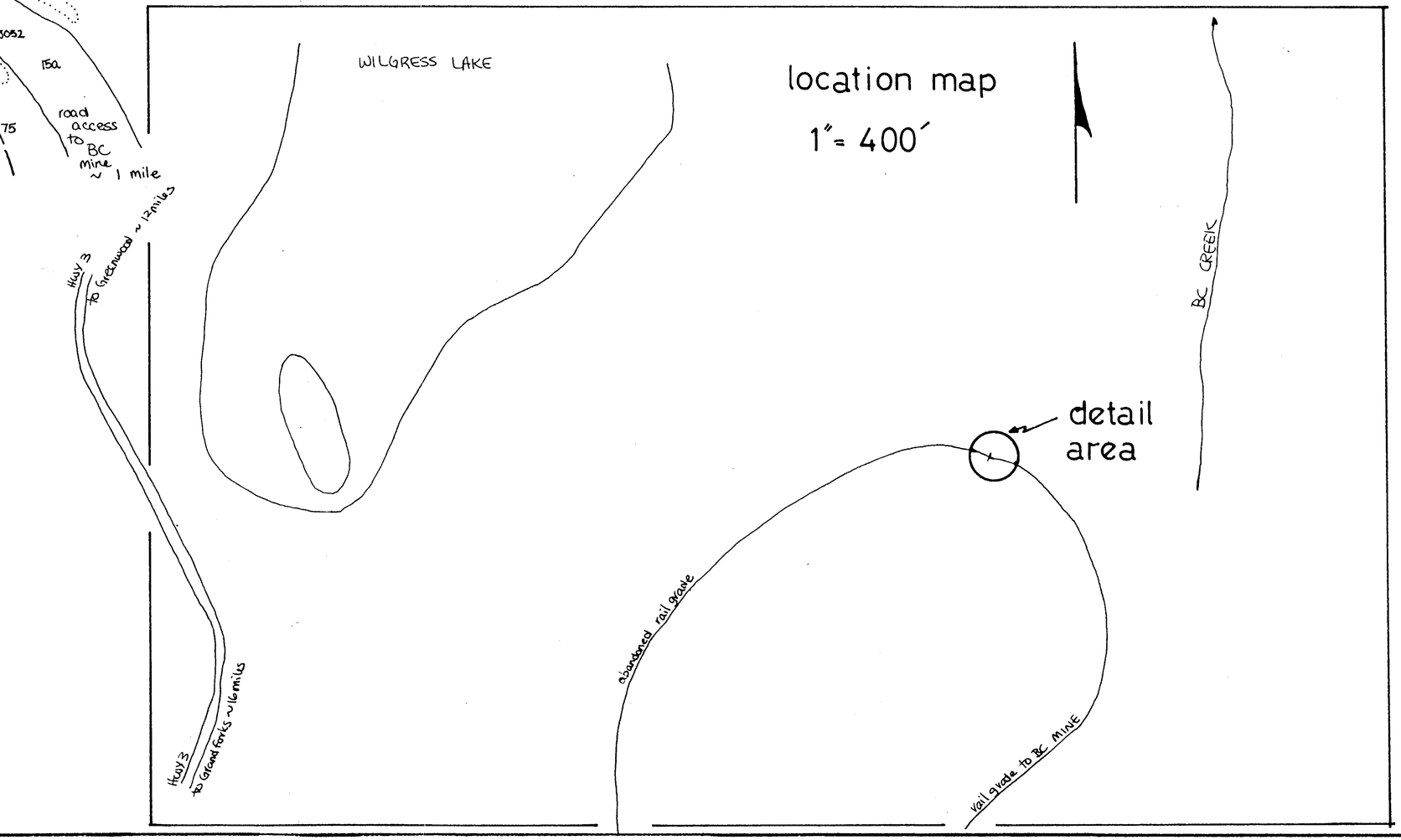


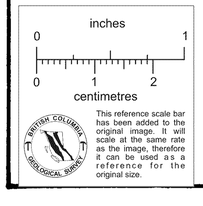
detail : 1" = 30'

1 trench ~ 12'X 20'

3 rock samples: 5052, 5053, 5054

BWK NOVEMBER 1983





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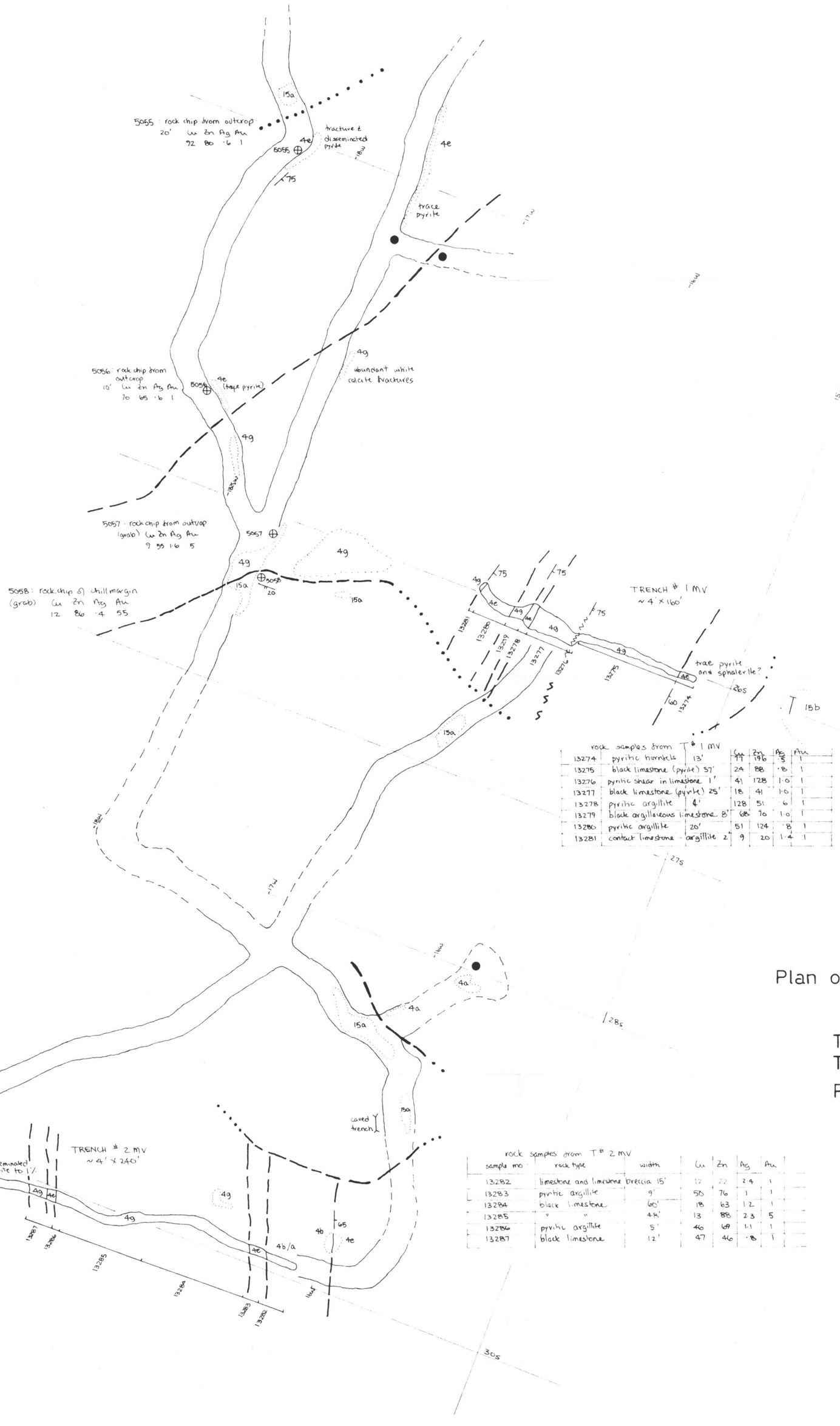


BLUEBELL PROJECT 156

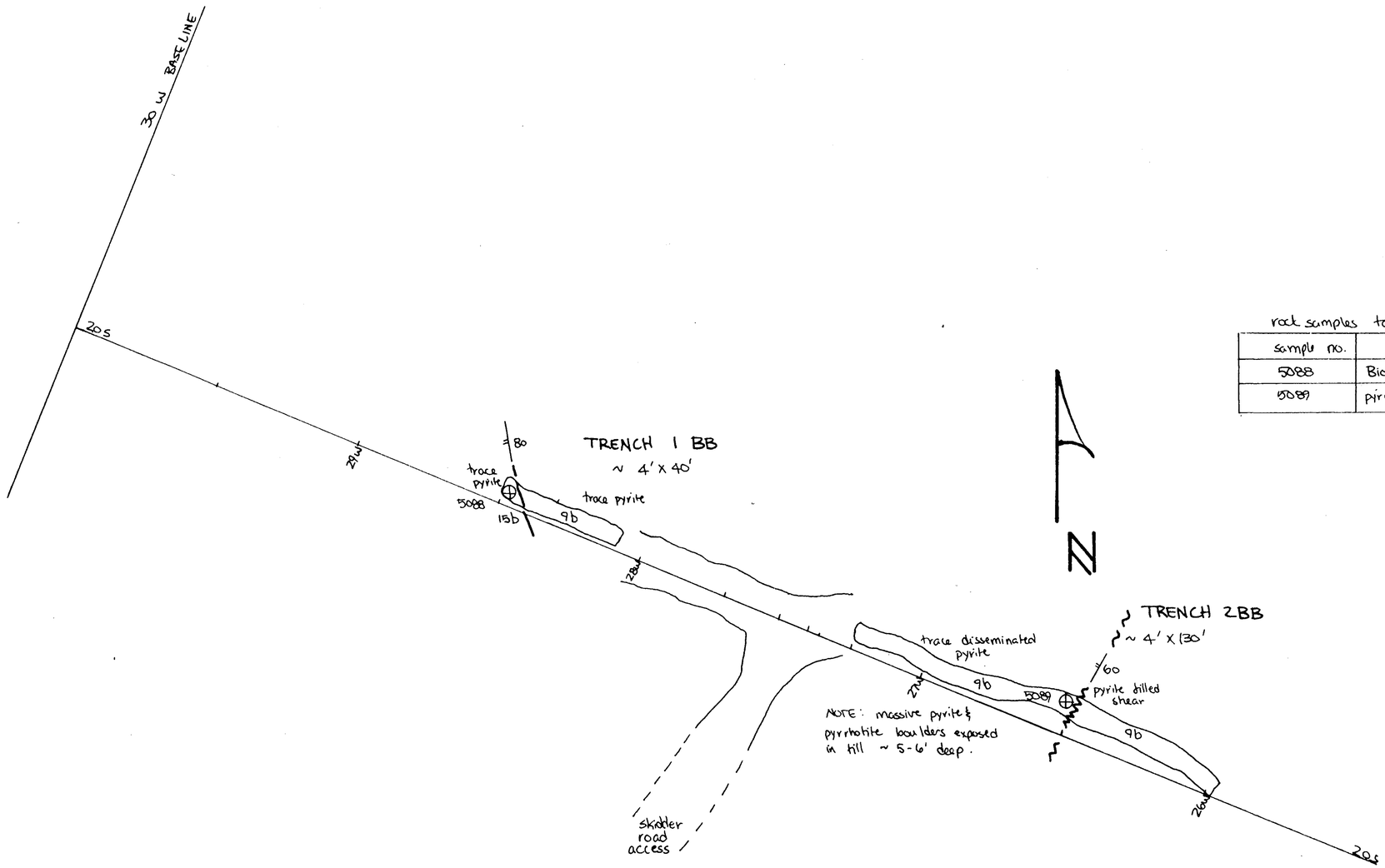
Plan of trenches - Mt. View area

1" = 40'

Trench 1 MV : ~ 4' X 160'
Trench 2 MV : ~ 4' X 240'
Rock samples : 5055 - 5058 (4)
13274 - 13278 (14)

BMK / APRIL 1984

FIGURE 3c



rock samples taken from Bluebell trenches

sample no.	rock type	width	Cu	Zn	Ag	Au
5088	Biotite Feldspar syenite	grab	692	170	.8	30
5089	pyritic volcanic breccia	grab	141	71	2.9	90

Bluebell trenches

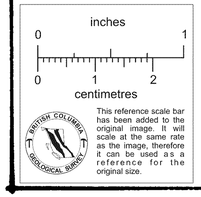
1" = 40'

trench 1 BB ~ 4' X 40'

trench 2 BB ~ 4' X 130'

FIGURE 3d

BWK APRIL 1984



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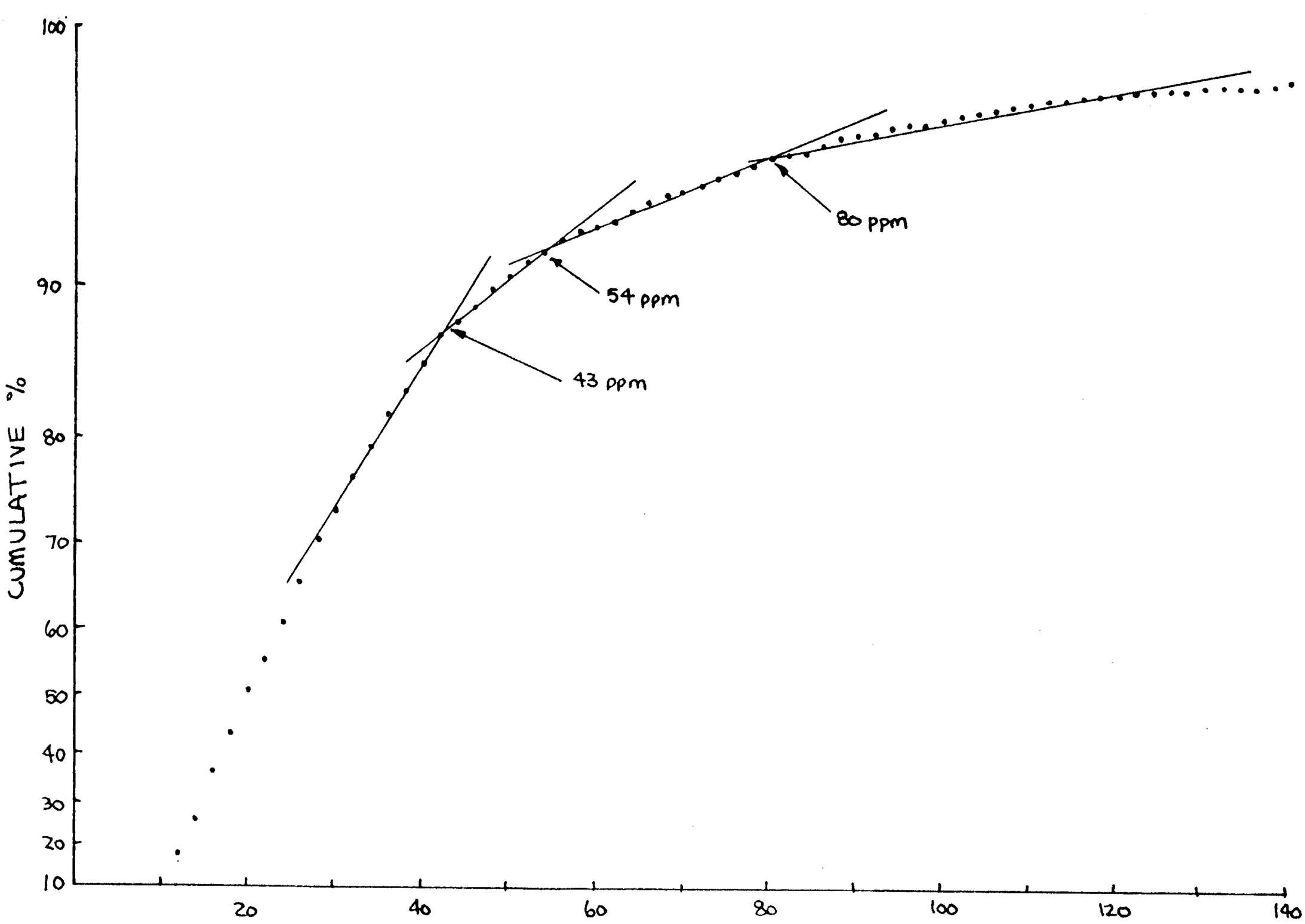
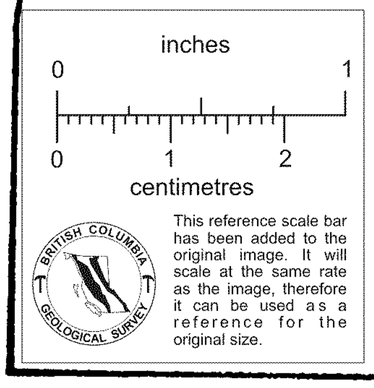


n = 3429

CUMULATIVE FREQUENCY DISTRIBUTION : COPPER IN SOILS

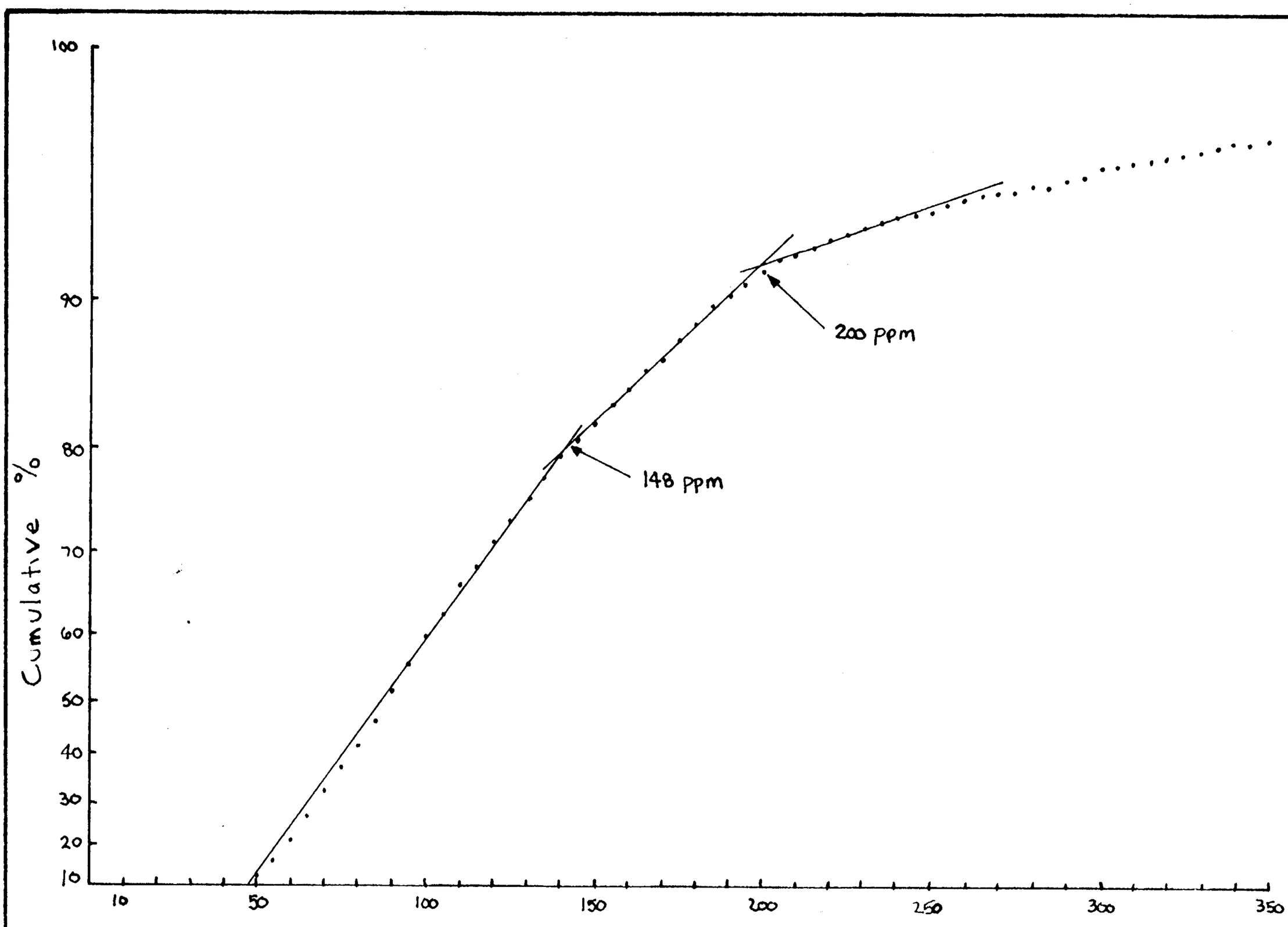
background	0-42 ppm
Weakly anomalous	43 - 80 ppm
anomalous	81 - 160 ppm
strongly anomalous	> 160 ppm



BLUEBELL PROJECT 156

FIGURE 4a

APRIL 1984



CUMULATIVE FREQUENCY DISTRIBUTION : ZINC IN SOILS

background	0 - 147 ppm
weakly anomalous	148 - 200 ppm
anomalous	201 - 430 ppm
strongly anomalous	> 430 ppm

inches
0 1
0 1 2
centimetres
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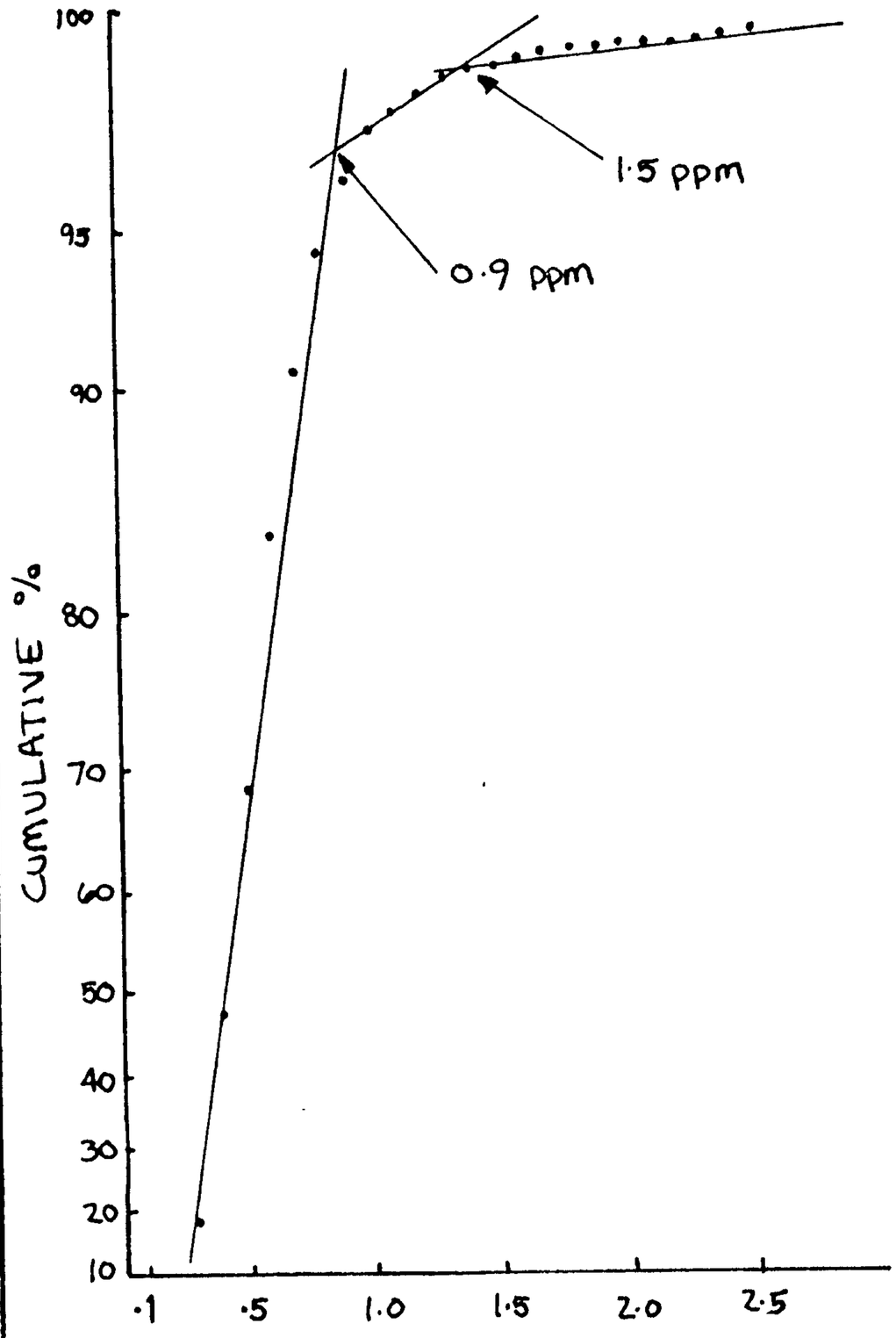
BRITISH COLUMBIA GEOLOGICAL SURVEY

BLUEBELL PROJECT 156

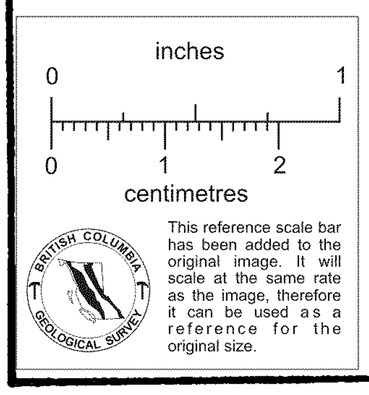
FIGURE 4b

April 1984



CUMULATIVE FREQUENCY DISTRIBUTION : SILVER IN SOILS

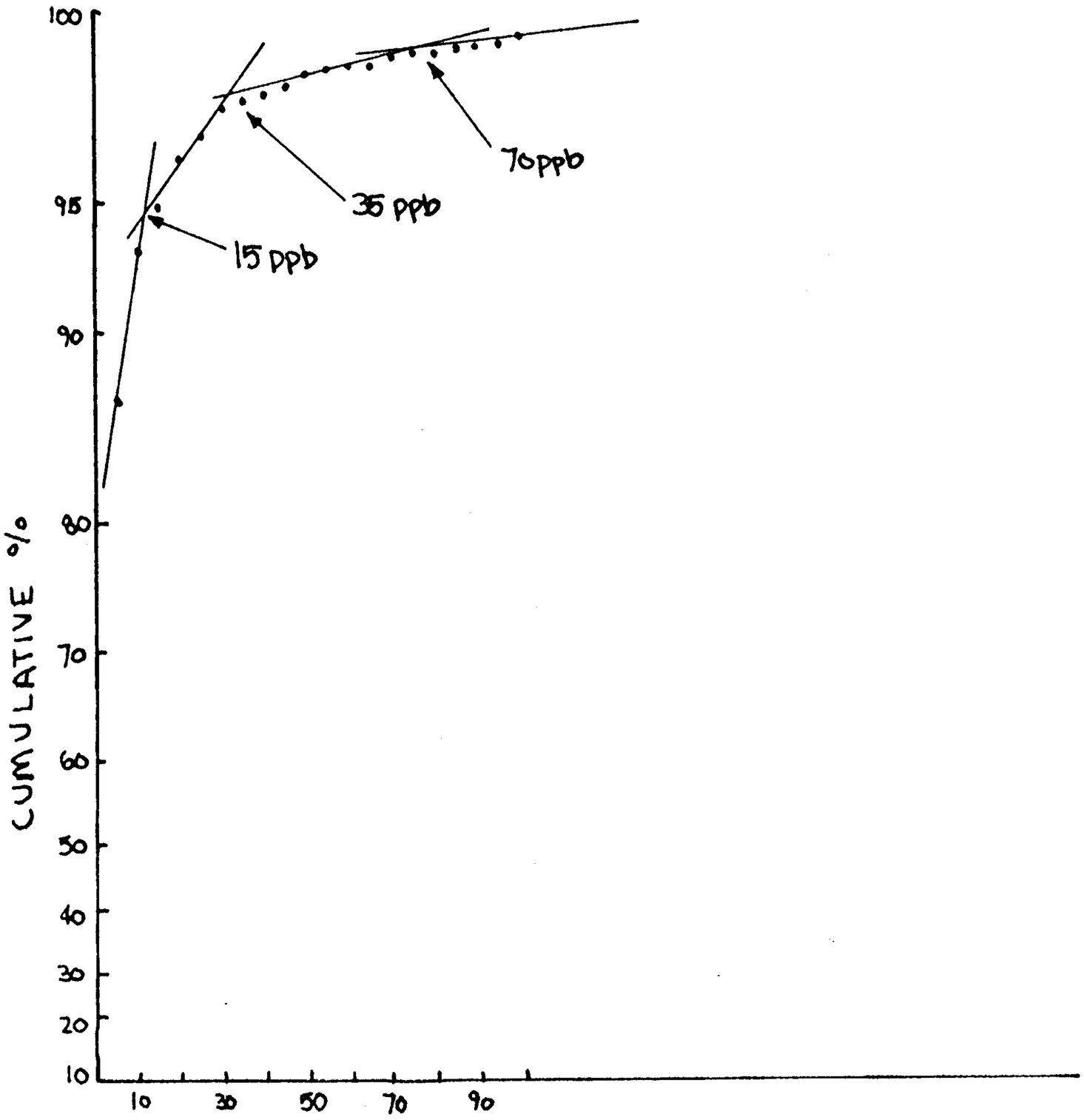
background	0 - 0.9 ppm
weakly anomalous	1.0 - 1.4 ppm
anomalous	1.5 - 3.0 ppm
strongly anomalous	> 3.0 ppm



BLUEBELL PROJECT 156

FIGURE 4C

APRIL 1984



CUMULATIVE FREQUENCY DISTRIBUTION : GOLD IN SOILS

background	0 - 10 ppb
weakly anomalous	15 - 30 ppb
anomalous	35 - 65 ppb
strongly anomalous	70 + ppb

inches
0 1
0 1 2
centimetres
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BLUEBELL PROJECT 156

FIGURE 4d

APRIL 1984

KETTLE RIVER RESOURCES LTD.		
K.L. Daughtry and Associates Ltd.		
COPPER IN SOILS GEOCHEM (PPM)		
BLUEBELL PROJECT		
Greenwood M.D.		NTS 82E 2E
Scale 1 4800	April 1984	
bwk	Project 156	Figure : 5a

0 200 400 600 800 1000
FEET

inches
0 1 2
0 1 2 3 4 5
centimetres

This reference scale bar has been added to the original figure. It is to scale at the same ratio as the image, therefore it can be used as a reference for the original size.

ABANDONED R.R.

CUT LINE

WILGRESS LAKE
W/L 3235

B.C. CREEK

CREEK

RATHMULLEN

ABANDONED R.R.

ABANDONED R.R.

ABANDONED R.R.

00 BASE LINE

5F89-033

KETTLE RIVER RESOURCES LTD.	
K.L. Daughtry and Associates Ltd.	
COPPER in SOIL contours 0-42 ppm background 43-80 ppm weakly anomalous 81-160 ppm anomalous > 160 ppm strongly anomalous	
BLUEBELL PROJECT	
Greenwood M.D.	NTS 82E 2E
Scale 1 : 4800	April 1984
bwk	Project 156 Figure 5b

0 200 400 600 800 1000
FEET

inches
centimetres

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KETTLE RIVER RESOURCES LTD.

K. L. Daughtry and Associates Ltd.

ZINC in SOILS

(geochem - p.p.m.)

BLUEBELL PROJECT

Greenwood M. D.	NTS 82E 2E
Scale 1 : 4800	April 1984
bwk Project 156	Figure 6a

0 200 400 600 800 1000

FEET

inches
centimetres
This reference scale bar has been added to the original image. It will scale at the same ratio as the original and can be used as a reference for the original size.

ABANDONED R.R.

CUT LINE

WILGRESS LAKE
W/L 3235

B.C. CREEK

CREEK

ABANDONED R.R.

ABANDONED R.R.

ABANDONED R.R.

RATHMULLEN

00 BASE LINE

5289-033

KETTLE RIVER RESOURCES LTD.	
K.L. Daughtry and Associates Ltd.	
ZINC in SOIL contours 0-147 ppm background 148-200 ppm weakly anomalous 201-430 ppm anomalous > 430 ppm strongly anomalous	
BLUE BELL PROJECT	
Greenwood M. D.	NTS 82E 2E
Scale 1 : 4800	April 1984
bwk	Project 156 Figure 6b

0 200 400 600 800 1000
FEET

inches
0 1 2
0 1 2 3 4 5
centimetres

This reference scale bar has been added to the original plan by the origin at the same scale as the image, therefore it can be used as a reference for the original size.

KETTLE RIVER RESOURCES LTD.

K.L. Daughtry and Associates Ltd.

SILVER in SOILS

geochem (ppm)

BLUEBELL PROJECT

Greenwood M.D.		NTS 82E 2E
Scale 1 : 4800		April 1984
bwk	Project 156	Figure 7a

0 200 400 600 800 1000

FEET

inches

0 1 2

0 1 2 3 4 5

centimetres

This reference scale bar has been added to the original image. It will scale at the same ratio as the original and can be used as a reference for the original size.

ABANDONED RR

CUT LINE

WILGRESS LAKE
W/L 3235

B.C. CREEK

CREEK

RATHMULLEN

00 BASE LINE

ABANDONED RR

ABANDONED RR

ABANDONED RR

KETTLE RIVER RESOURCES LTD.		
K.L. Daughtry and Associates Ltd.		
SILVER in SOIL contours 0 - 0.9 ppm background 1.0 - 1.4 ppm weakly anomalous 1.5 - 3.0 ppm anomalous > 3.0 ppm strongly anomalous		
BLUEBELL PROJECT		
Greenwood M.D.		NTS 82E 2E
Scale 1 : 4800		April 1984
bwk	Project 156	Figure 7b

0 200 400 600 800 1000
FEET

inches
0 1 2
0 1 2 3 4 5
centimetres

This reference scale bar has been added to the original image as well as the image, therefore it can be used as a reference for the original size.

KETTLE RIVER RESOURCES LTD.		
K.L. Daughtry and Associates Ltd.		
GOLD in SOIL geochem (ppb)		
BLUEBELL PROJECT		
Greenwood M.D.		NTS 82E 2E
Scale 1 : 4800		April 1984
bwk	Project 156	Figure 8a

0 200 400 600 800 1000
FEET

inches
0 1 2
centimetres
0 1 2 3 4 5

This reference scale bar was added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

ABANDONED R.R.

CUT LINE

WILGRESS LAKE
W/L 3235

B.C.

CREEK

RATHMULLEN

00 BASE LINE

KETTLE RIVER RESOURCES LTD.	
K. L. Daughtry and Associates Ltd.	
GOLD in SOIL contours 0-10 ppb background 15-30 ppb weakly anomalous 35-65 ppb anomalous 70+ ppb strongly anomalous	
BLUEBELL PROJECT	
Greenwood M. D.	NTS 82 E 2E
Scale 1 : 4800	April 1984
bwk Project 156	Figure 8b

0 200 400 600 800 1000
FEET

inches
centimetres

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KETTLE RIVER RESOURCES LTD.		
K.L. Daughtry and Associates Ltd.		
SOIL SAMPLE NUMBERS LOCATION MAP		
BLUEBELL PROJECT		
Greenwood M.D.		NTS 82E 2E
Scale 1 : 4800		April 1984
bwk	Project 156	Figure 9

0 200 400 600 800 1000
FEET

inches
0 1 2
0 1 2 3 4 5
centimetres

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NOTE :
geochemical results listed :
copper (ppm) , zinc (ppm) , silver (ppm) , gold (ppb)
assay results listed :
copper (%) , zinc (%) , silver (ounces / ton) , gold (ounces / ton)

rock description abbreviations :

argillite	arg
argillaceous limestone	arg lst
chert sandstone	cht ss
feldspar microdiorite	F microdiorite
feldspar microdiorite breccia	F microdiorite bx
feldspar hornblende microdiorite	FH microdiorite
feldspar porphyry	FP
limestone	lst
limestone breccia	lst bx
massive magnetite	mass. mag.
massive pyrite	mass py
quartz breccia	qtz bx
quartz vein	qtz vn
volcanic breccia	volc bx
volcanic sandstone	volc ss

KETTLE RIVER RESOURCES LTD.
K.L. Daughtry and Associates Ltd.

ROCK SAMPLE LOCATIONS AND RESULTS

BLUEBELL PROJECT

Greenwood M. D. NTS 82E 2E
Scale 1 : 4800 April 1984
bwk Project 156 Figure 10

0 200 400 600 800 1000
FEET

inches
0 1 2
0 1 2 3 4 5
centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

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KETTLE RIVER RESOURCES LTD.		
KL Daughtry and Associates Ltd.		
VLF-EM : AXIS OF CONDUCTOR PLOT AND SURVEY LOCATION		
BLUEBELL PROJECT		
Greenwood M.D.		NTS 82E 2E
Scale 1:4800	April 1984	
bwk	Project 156	Figure 11

0 200 400 600 800 1000
FEET

inches
centimetres
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KETTLE RIVER RESOURCES LTD.		
K.L. Daughtry and Associates Ltd.		
MAGNETIC CONTOUR MAP AND SURVEY AREA LOCATION		
BLUEBELL PROJECT		
Greenwood M.D.		NTS 82E 2E
Scale 1:4800		April 1984
bwk	Project 156	Figure 12

0 200 400 600 800 1000
FEET

inches
0 1 2
0 1 2 3 4 5
centimetres

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KETTLE RIVER RESOURCES LTD.		
K.L. Daughtry and Associates Ltd.		
SP ANOMALY MAP AND SURVEY AREA LOCATION		
BLUEBELL PROJECT		
Greenwood M.D.		NTS 82E 2E
Scale 1:4800	April 1984	
bwk	Project 156	Figure 13

0 200 400 600 800 1000
FEET

inches
0 1 2
0 1 2 3 4 5
centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will print to the same scale as the image, therefore it can be used as a reference for the original size.

ABANDONED R.R.

CUT LINE

WILGRESS LAKE
W/L 3235

B.C. CREEK

B.C. BASE LINE

RATHMULLEN CREEK

ELMER CREEK

EMMA

JUMBO

MOUNTAIN ROSE

GEORGE'S LINEAMENT

BLUEBELL

ORO DENORO

APRIL FR.

CHEMICAL & JOINER FRS.

ONTARIO & JEEP 1

MAY

RATHMULLEN SKARN

ELMER

R. BELL

JEEP 9 FR.

LEGEND

HIGHEST PRIORITY AREA - drilling / trenching recommended

HIGH PRIORITY AREA - trenching / detail ground surveys recommended

PRIORITY AREA - detail ground surveys recommended

AREAS RECOMMENDED FOR FURTHER EXPLORATION

KETTLE RIVER RESOURCES LTD.
K.L. Daughtry and Associates Ltd.

LOCATION OF
TARGET AREAS

BLUBELL PROJECT

Greenwood M.D. NTS 82E 2E
Scale 1 : 4800 April 1984
bwk Project 156 Figure 14

0 200 400 600 800 1000
FEET

inches
centimetres

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