

PCDM

REPORT OF INITIAL CORE DRILLING  
ON THE KENO AND APEX MINERAL CLAIMS  
(Work Permit MX-10-180)

**RECEIVED**

SEP - 5 2000

Gold Commissioner's Office  
VANCOUVER, B.C.

Cariboo Mining Division  
NTS 93A-6E

Lat. 52° 18' 30" Long. 121° 02' 30"

Owned and Operated by  
Herb Wahl  
and  
Jack Brown-John

Prepared by H. J. Wahl, P. Eng. B.C.  
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Gibsons, B. C. V0N 1V3  
August 2000

GEOLOGICAL SURVEY BRANCH  
26,317

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- (1)    ACME A 001696 (K-1)
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- (5)    ACME A 001917 (K-4)
- (6)    ACME A 001980 (K-4)

## **SUMMARY**

On the Keno-Apex mineral claims 28 km east of Horsefly, B.C., 604 meters of NQ coring was completed during 17 May-23 June, 2000. This effort marks the first drilling ever performed on or adjacent to the 35 unit Keno property.

The drill program has discovered a brand new, back-arc molybdenum-bearing porphyry system with classic features including lithology, multiple diking, alteration, and silica capping. Significant intercepts include 59 meters at 212.65 ppm Mo in Hole K-2 and 87 meters at 323.94 ppm Mo in Hole K-3.

Mineralization is continuous from 40 to 127 meters (E.O.H.) in No. 3.

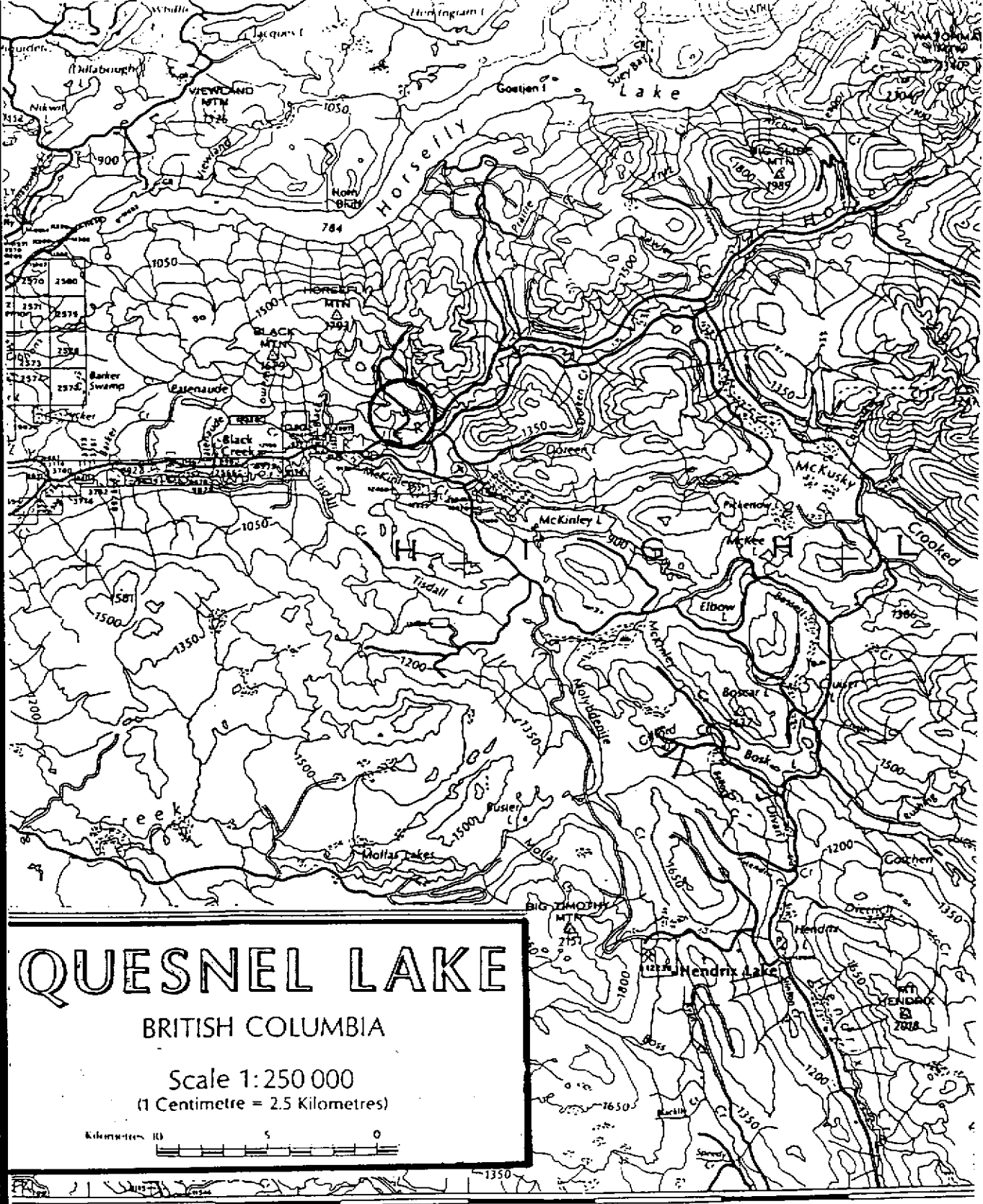
Molybdenum mineralization is wide spread in all units cored and is related to an argillic-pyritic alteration zone contained beneath a silica capping characterized by a pyrrhotite-chalcopyrite stockworks.

The current program was undertaken without benefit of comprehensive grid work, which needs to be completed prior to additional drilling. Costs of the current program are \$64,395.62.

## **INTRODUCTION**

This report documents the results of first core drilling completed on the Keno mineral claims during the period 17 May-23 June, 2000 inclusive. Drill holes were located on the basis of geology, limited I.P. survey, and trial enzyme leach soils survey.

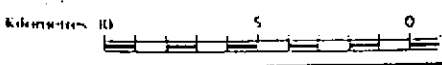
Costs and results of the latter two items are not submitted for work credits. The reader is referred to the references for historical and background information.



# QUESNEL LAKE

BRITISH COLUMBIA

Scale 1:250 000  
 (1 Centimetre = 2.5 Kilometres)

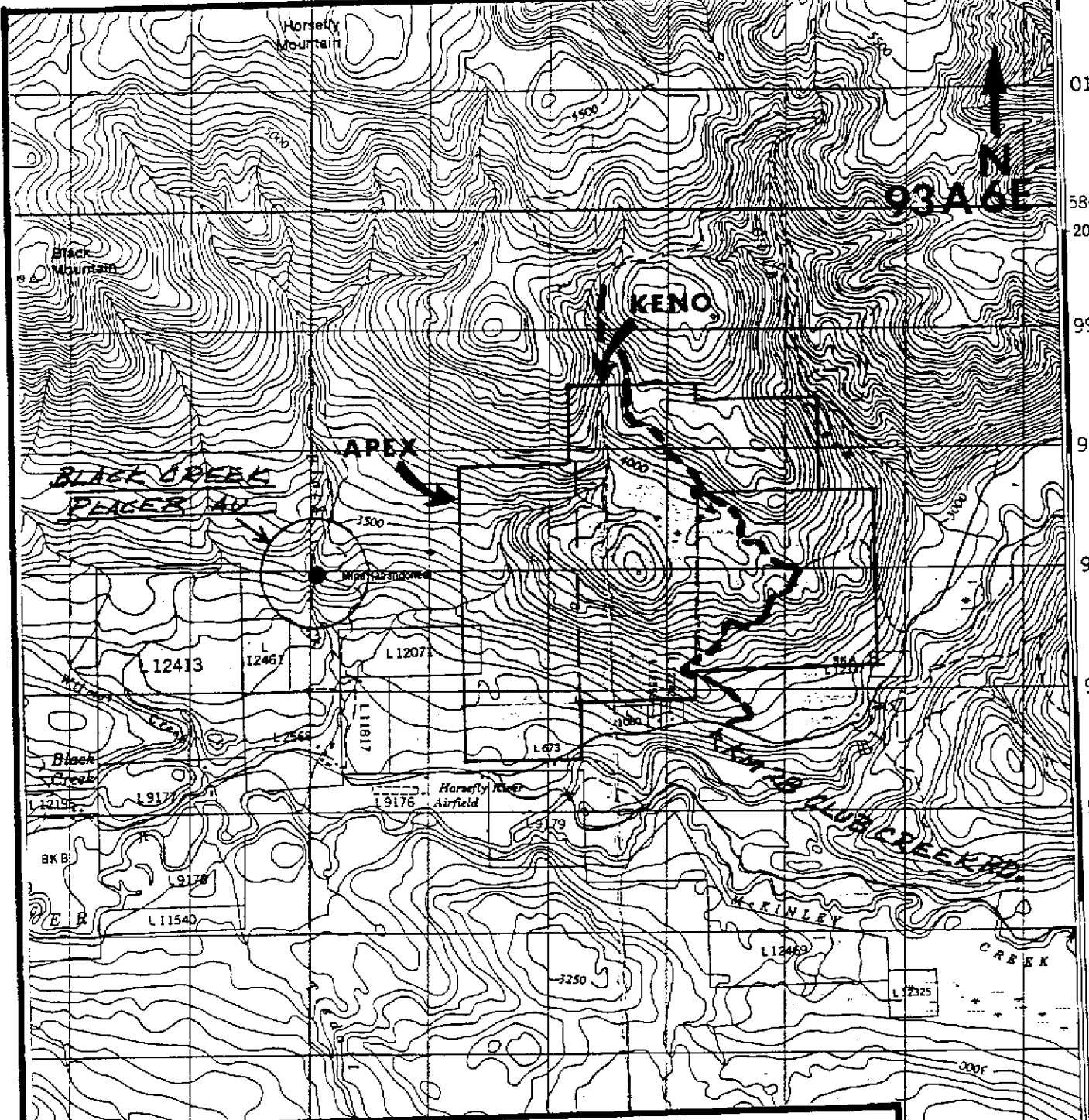


15° 121°00' 45'

GENERAL LOCATION MAP  
 KENO CLAIMS, CARIBOO M.D.

NTS 93A-6E

FIG. 1



01  
580  
20'  
99  
98  
9  
6  
5  
3

**HORSEFLY**  
CARIBOO LAND DISTRICT  
BRITISH COLUMBIA  
Scale 1:50,000 Échelle

Miles 1 0 1 2 3 Miles

Metres 1000 0 1000 2000 3000 4000 Metres

Yards 1000 0 1000 2000 3000 4000 Yards

**CONTOURS @ 50 FEET**

28 29 30 05' 32 33 34 635000m. E. 36 121

**FIG. 2**  
**Property Location**  
**KENO AND APEX MINERAL CLAIMS**

**FIG**

## LOCATION AND ACCESS (FIGS. 1, 2)

The Keno claims are located on the north side of the Horsefly River Valley between Black Creek and Club Creek, some 28 km east of Horsefly, B.C. Access is via the Horsefly main haul road to its junction with the '500' Road, then 1.0 km eastwards to the newly rehabilitated Club Creek Road at kilometer 128, which passes through the Keno claims. Specific locational details are:

NTS 93A-6E  
Cariboo Mining Division  
Latitude 52° 18' 30"  
Longitude 121° 02' 30"

The Club Creek Road, currently inactive, serviced logging operations east and northeast of Black Creek, during the 1996 season. Three new cut blocks were logged on the Keno claim in 1995, with additional logging completed in 1999-2000, south of the drilled area.

## PROPERTY (FIG. 6)

The property consists of 35 units (875 ha), being one 4-post metric claim and 26 each 2-post claims as follows:

<u>Claim</u>	<u>Units</u>	<u>Record No.</u>	<u>Good Till Date</u>
Keno	9	339778	11 Sep. 2001
Keno 1 - Keno 8	8	34095 - 340961	10 Oct. 2001
Keno 9 - Keno 10	2	340962 - 340963	11 Oct. 2001
Keno 11 - Keno 12	2	340964 - 390465	11 Oct. 2000
Keno 18 - Keno 21	4	364896 - 364899	11 Aug 2003
Apex - 1 -10	10	377642 - 377651	06 June 2001

35 Units

## WORK PERFORMED

603.5 meters core drilling (NQ) in four surface angle holes  
182 number of core and sludge assay samples  
1 only rock sample, surface o/c of pyroxenite for Au + PGMs

## **TERRAIN/ TOPOGRAPHY (FIG 2)**

The claims lie on a broad south-facing slope fronting the Horsefly River. Elevations vary from 2,900 feet ASL in the south, or valley bottom, to 4500 feet ASL in the upper reaches. Terrain varies from flattish to rolling, with local areas of steep declivities. Forest cover consists of interspersed areas of relatively open aspen groves to thicker zones of spruce-pine-fir-cedar.

Club Creek drains the eastern tier of claims, with a tributary of Black Creek draining the western sector. Seepages and springs are infrequent.

Overburden is extensive and complex being slope wash overlying a fairly porous glacial drift. In sulphide mineralized areas a basal layer of ferricrete is present.

## **REGIONAL GEOLOGY**

The Quesnel Trough (Nicola Group) consists of a variable assemblage of Late Triassic to Early Jurassic (island arc/subduction zone) submarine and subaerial volcanics, volcanoclastics and sedimentary strata underlying much of the Intermontane belt of central and south central British Columbia. The lowermost Nicola is largely a sedimentary pelitic unit overlain by an upper, dominantly fragmental basalt/ volcanoclastic package. Current literature suggests that the upper volcanic assemblage was thrust northeastwards over the pelitic zone during Jurassic time. The Eureka thrust marks the eastern boundary of the trough, and the contact between the Mesozoic and Paleozoic terranes. Strata of the Quesnel Trough have been intruded by both Late Jurassic to Early Cretaceous plutonic intrusives (Takomkane, Thuya) and a series of alkalic stocks of diorite, monzonite, and syenite, which occur in the central volcanic belt and constitute eruptive centers.

Exact geologic relationships are obscure, being limited by lack of stratigraphic continuity, block faulting, and glacial cover.

The Keno claims are sited at the margin of a strong northwesterly trending regional magnetic high with more subdued magnetic relief to the east. This zone marks the contact between dominantly Cycle-1 sedimentary strata to the east and dominantly volcanic strata on the west.

## **LOCAL GEOLOGY (Fig. 3, Ref 5-7)**

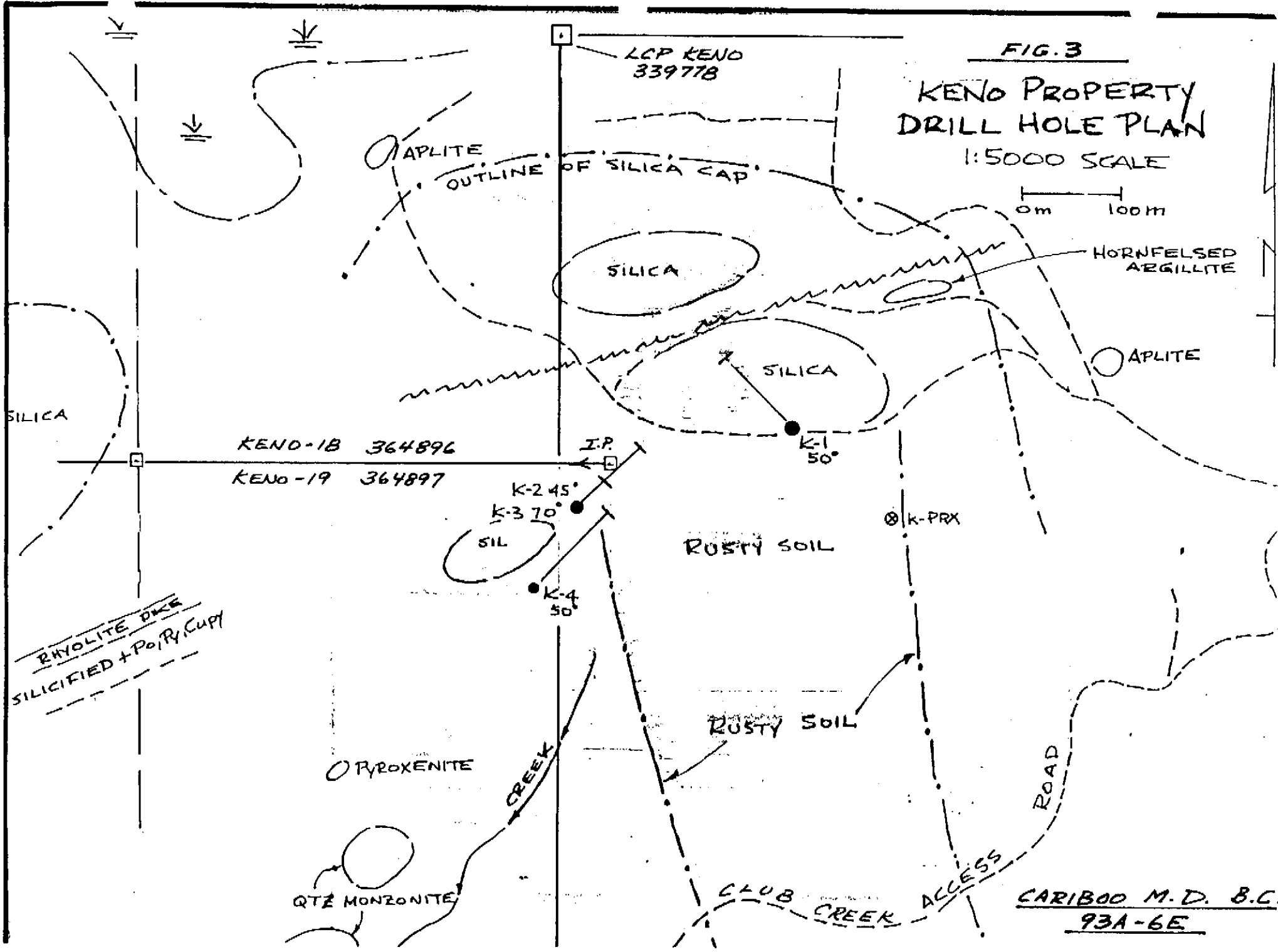
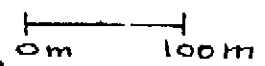
The Keno claims are underlain by a thick sequence of argillites intruded by multiple apophyses of various intrusives. Work by Selco (3) reported the argillites to strike northwest with a southwest dip. Centered approximately on the road trench discovery area, the argillites have been intensely contact metasomatized with alteration intensity decreasing outwards over several hundreds of meters.



FIG. 3

# KENO PROPERTY DRILL HOLE PLAN

1:5000 SCALE



CARIBOO M.D. B.C.  
93A-6E

Intrusive rock types observed on the property consist of:

- (1) Coarse grained pink quartz monzonite/ granodiorite
- (2) Coarse grained pyroxenite
- (3) Rhyolite dikes
- (4) Dark grey porphyry
- (5) Syenite
- (6) Aplite
- (7) Alkali granite, with or without books of hydro mica
- (8) Calc-silicate rock (float) with 10-15% disseminated magnetite

The contact metasomatic zone including the previously trenched gold arsenopyrite showings are all contained within an oval aeromagnetic anomaly which trends N-S (3000  $\gamma$  contour) and is 1 km long. Magnetism is caused by high pyrrhotite content.

## **LITHOLOGIES CORED (Figs. 4, 5, and Drill Logs)**

Major rock units cut by drilling are described in estimated order from oldest to youngest.

### **1. Silica Cap:**

This was the dominant rock type cored by Hole K-1 to a final depth of 170 meters. The rock varies from hard to very hard and varies in magnetic intensity from weak to moderate depending on pyrrhotite content. The ground mass is fine grained to amorphous, pale grey to light sea green in color, with occasional light mauve-colored argillite clasts not totally reabsorbed. Micro and macro silica veining is evident throughout contrasted by subtle color variations, giving an overall appearance of "silica streaming".

The entire zone is micro stockworked with omni-directional fracture fills of pyrrhotite and actinolite. Patchy zones of pale brown garnet appeared at the 151 m mark. Silica rock fragments in fault zones have chloritic slips. Anhydrite is present on many fractures, and occurs as a 1.5 cm thick "vein" at 59 m carrying very fine disseminated pyrite.

Overall, the silica cap carries about 5-20% Po, with associated Cpy that would likely average out to 500 ppm Cu. Moly occurs sporadically throughout the section as fracture coatings and in narrow quartz veins, none of which exceeded 0.5 cm.

The silica cap is regarded as the oldest unit being derived from the regional Triassic argillite formation that forms the dominant country rock. Occasional grey porphyry dikes intrusive into the cap are thus younger.

### **2. Argillite (altered)**

This unit is found in the upper 50 m of Hole K-2. The rock is pale greyish-tan with mottled texture due to mauve colored breccia fragments of sub-centimeter to 5 cm size. The unit is strongly fractured with intense silica, sericite, and argillic alteration. It is further complexed by a micro pyrite stockworks of multi-directional fractures, and vuggy quartz-

kaolin veins with Py and Mo. Pyrite is the dominant sulphide as fine-grained dusty disseminations and aggregates. Mo occurs on fractures, in quartz veins (micro and macro) and as fine disseminations.

### **3. Pyroxenite**

In outcrop, weathered surface shows etched salt and pepper texture, suggesting  $\approx$  60% pyroxene to 5-6 mm in size, 30-40% Na feldspar. In core (K-2) rock is medium to coarse grained with sub-porphyrific appearance due to blocky pyroxene. Color is medium grey, rock is non-magnetic. Unit is strongly silicified with secondary biotite, and blue-green sericite. Sulphide content is 1-10% Py as disseminations and micro fracture fills. Some sections show good Mo as fracture coatings and in Qtz-Py-Mo veins to 2-3 cm of random orientation.

The pyroxenite is considered the oldest dike phase indicated by x-cutting grey dike fingers.

### **4. Grey Porphyry Dikes**

Rock is pale whitish-grey in color. Porphyritic texture due to scattered books of biotite (10-15%) of 1-3 mm size, and whitish phenos of soda feldspar to 3-4 mm. Ground mass is amorphous silica; pyrite content 1-5% as scattered grains; rock non-magnetic. May also carry Mo mineralization on slips and x-cutting Py-Qtz veinlets. The grey dikes cut silica cap rock but may be older than the 'Big Grey' Porphyry unit.

### **5. 'Big Grey' Porphyry Unit (Hole K-3)**

Rock is very pale whitish grey, biotite books largely obliterated by alteration with main porphyry texture due to blocky white soda feldspars to 3-4 mm. Ground mass is largely silica. Unit is highly broken, and intensely kaolinized in these areas. Entire zone is stockworked by Py-Mo fracture fills and Qtz-Py-Mo veinlets of variable orientation. Some zones carry good Mo-paint on fracture surfaces. Zone extends beyond limits of hole.

### **6. Pink & Tan Porphyry (unit cored in K-4)**

Medium to coarse grained granodioritic intrusive. Color due to abundant K-spar ( $\approx$ 30%, both primary and secondary) bleached blocky soda feldspar phenos (white), and books of biotite with light green chlorite alteration. Quartz forms the ground mass. Rock is variably weakly magnetic. About 1-5% disseminated pyrite. Fractures show kaolin alteration. This unit is cut by later greenish alteration dikes characterized by intense greenish sericitization of both soda feldspars and biotite books: along with K-spar phenos, this unit has a "terrazzo-like" appearance. The greenish alteration dikes and/or injections often show intense kaolin alteration.

## 7. Felsite Dike

This unit was only observed in hole K-4. The unit was very pale grey, fine grained and micro porphyritic. Green sericitic alteration is prominent. The rock is non-magnetic and carries variable lean disseminations of Py and Cpy, all as fine grained sulphides. The unit is younger than the pink and tan porphyry, but relationships with other units are unknown.

## MINERALIZATION

Molybdenum was the main metal of significance located by coring. MoS<sub>2</sub> is present in all lithologies drilled signifying a potent mineralizing event. MoS<sub>2</sub> occurs in three principal modes: as fracture coatings, as a constituent of Py ± Cpy quartz veins, and as fine disseminations in highly argillized grey porphyry or brecciated argillite.

Significant mineralized intervals are:

<u>Hole K-2</u>	16-75 m (59 m),	ppm 212.65 Mo
<u>Hole K-3</u>	40-127m (87m) (Bottomed in mineral)	ppm 323.94 Mo

Based upon results, additional sampling is required for Hole K-2 between intervals 75-99 meters and 110-121 meters.

## CONCLUSIONS

Recently completed coring has discovered a brand new molybdenum-bearing porphyry system having all the attributes of lithology, structure, alteration, and mineralization that are associated with known deposits of this class.

Results of drilling plus known surface parameters indicate a favorable zone in excess of some 2 km E-W x 1 km N-S.

## RECOMMENDATIONS

An absolute requirement prior to renewed drilling, is the construction of a survey grid geologic mapping, plus I.P./Enzyme Leach soil surveys. On completion, a 5,000 meter coring program will be required to extend known mineralization and test new targets.

Prepared by H.J. Wahl,  
P.Eng. B.C.



## STATEMENT OF COSTS

Field work was conducted under the direct supervision of H.J. Wahl, P.Eng. B.C. assisted by experienced logging contractor and prospector, Jack Brown-John of Horsefly, B.C. Contract coring services were provided by Phil's Diamond Drilling Ltd., of 100 Mile House, B.C.

H.J. Wahl, Field supervision and management 33 days @ \$600/day	\$19,800.00
H.J. Wahl, reporting, 7 days @ \$300/day	2,100.00
Jack Brown-John, field assistant 15 days @ \$300/day	4,500.00
Contract coring 604 meters (1981 feet) @\$15/ft	29,715.00
Assaying (Acme Analytical Labs Ltd.)	3,037.74
Field Vehicle, 1996 Dodge diesel 4x4 Lic. #4086PP @\$110/day	3,630.00
Travel Expense	620.99
Prints, xerox	130.00
Secretarial	200.00
Postage and freight	30.00
Field equipment and supplies	531.89
Permits, fees, and licenses	<u>100.00</u>
<b>Grand Total:</b>	<b><u>\$64,395.62</u></b>

Certified True and Correct  
H.J. Wahl, P. Eng. B.C.



## REFERENCES

- (1) Quesnel Lake Geological Map, OF 574, 1964, scale 1:125,000.
- (2) Geophysics Paper 5239, Horsefly, 93A-6, 1967, scale 1:63,360,
- (3) AR 12, 363 Gamble, D. 1984, Geochemical Survey on the HR 1-5 Mineral Claims, Cariboo M.D. for B.P. Exploration Canada Ltd.
- (4) AR 20, 040, Mowat, U. May 1990, Geochemical Report on the Tacoma Claim, Cariboo M.D.
- (5) Wahl, H.J. Preliminary Evaluation Report on the Keno Mineral Claims, Cariboo M.D., Nov.-Dec. 1995.
- (6) Jones, M.J. and Caulfield, D.A., 1996 Assessment Report, Keno Property, for Westmin Resources Ltd., January 1997.
- (7) Wahl, H.J. Report of Preliminary Work on the Keno 18-21 Mineral Claims, October 1998.
- (8) H.J. Wahl, P.Eng. B.C., Summary Report on the Keno Property (1995-1999), January 2000 (Private Report)







































SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	
K-2 125-127	19.7	620	3	77	.5	19	14	201	3.49	2	<1	<2	<1	50	.3	.5	<.5	52	1.26	.060	5	24	.40	35	.194	4	.92	.131	.05	6	<1	4.5	<1	1.48	4
K-2 127-129	57.3	656	2	60	.5	23	16	232	3.74	1	<1	<2	<1	50	<.2	1.6	.6	58	1.95	.064	5	28	.46	19	.187	<1	1.14	.123	.05	2	<1	5.3	<1	1.57	5
K-2 129-131	152.6	487	4	57	.4	18	12	300	3.40	2	<1	<2	<1	29	.3	<.5	<.5	33	1.66	.069	5	16	.23	19	.148	3	.85	.094	.04	33	<1	2.9	<1	1.38	3
K-2 131-133.5	133.4	873	5	51	.7	22	28	158	4.53	2	<1	<2	1	32	.4	<.5	.5	27	1.19	.065	4	12	.19	10	.133	1	.90	.135	.03	47	<1	2.6	<1	2.04	3
RE K-2 131-133.5	129.9	872	5	51	.7	22	28	155	4.68	3	<1	<2	<1	30	.4	.6	.5	26	1.16	.066	4	13	.19	10	.132	<1	.88	.131	.03	45	<1	2.6	<1	2.00	3

Sample type: CORE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

GEOCHEM PRECIOUS METALS ANALYSIS

Wahl, Herb PROJECT KENO File # A001798  
R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl



SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb
K-PRX	46	9	12

GROUP 3B - FIRE GEOCHEM AU, PT, PD - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.  
- SAMPLE TYPE: ROCK

DATE RECEIVED: JUN 12 2000 DATE REPORT MAILED: *Jun 20/00* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS





ASSAY CERTIFICATE



Wahl, Herb PROJECT KENO File # A001797

R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Sn %
K-3 11.6-14.6	.018	.008	<.02	<.01	2.6	.002	<.001	.05	2.46	.03	<.001	<.01	.02	2.29	.10	<.01	.99	7.11	2.41	2.19	<.01	-
K-3 14.6-16	.008	<.001	<.02	<.01	<.3	<.001	<.001	.02	2.32	.05	<.001	<.01	<.01	2.17	.09	<.01	.89	6.81	2.82	2.35	<.01	-
K-3 16-17	.002	.002	<.02	<.01	<.3	.002	<.001	.01	2.11	.06	<.001	<.01	<.01	1.57	.09	<.01	.77	7.04	3.15	2.49	<.01	-
K-3 17-19	.019	.026	<.02	<.01	.5	.001	.001	.04	3.20	.05	<.001	<.01	<.01	2.37	.09	<.01	.82	7.48	3.58	1.97	<.01	-
K-3 19-21	.004	.029	<.02	.01	<.3	.005	.001	.09	3.41	.06	<.001	<.01	<.01	2.92	.08	<.01	1.14	7.85	3.85	2.01	<.01	-
K-3 21-23	.002	.044	<.02	<.01	1.5	.003	.001	.08	3.20	.06	<.001	<.01	<.01	2.86	.08	<.01	1.04	7.73	3.55	2.49	<.01	-
K-3 23-24	.003	.009	<.02	.01	<.3	<.001	.001	.08	2.70	.06	<.001	<.01	<.01	1.89	.09	<.01	.72	7.00	2.95	3.09	<.01	-
K-3 24-24.4	.038	.037	<.02	.02	1.0	.005	.005	.26	11.32	.05	<.001	<.01	<.01	1.95	.14	<.01	.68	5.90	2.56	2.05	<.01	<.01
K-3 24.4-25.6	.006	.017	<.02	.01	1.2	.001	.001	.07	2.68	.06	<.001	<.01	<.01	2.14	.10	<.01	.76	7.00	2.94	3.18	.01	<.01
K-3 25.6-26.2	.049	.037	<.02	.01	.5	.010	.002	.12	6.22	.06	<.001	<.01	<.01	2.85	.19	.01	1.54	6.27	2.66	2.29	<.01	<.01
RE K-3 25.6-26.2	.048	.038	<.02	<.01	.5	.010	.002	.12	6.17	.06	<.001	<.01	<.01	2.85	.19	.01	1.54	6.32	2.69	2.30	<.01	<.01
RRE K-3 25.6-26.2	.048	.038	<.02	<.01	.4	.009	.002	.12	6.06	.06	<.001	<.01	<.01	2.80	.19	.01	1.53	6.37	2.71	2.34	<.01	<.01
K-3 26.2-27	.018	.041	<.02	.01	<.3	.006	.002	.14	6.75	.08	<.001	<.01	<.01	7.67	.21	.02	4.32	5.91	2.09	1.52	<.01	-
K-3 27-29	.008	.012	<.02	.01	<.3	.003	.001	.10	3.81	.08	<.001	<.01	<.01	3.67	.15	.01	2.07	7.29	2.98	2.72	<.01	-
K-3 29-31	.013	.023	<.02	.01	<.3	.005	.002	.16	6.68	.10	<.001	<.01	<.01	7.43	.23	.02	4.43	5.66	2.03	1.72	<.01	-
K-3 31-33	.011	.016	<.02	<.01	<.3	.005	.002	.14	6.38	.10	<.001	<.01	<.01	6.67	.22	.02	4.24	6.06	2.23	1.90	<.01	-
K-3 33-35	.006	.023	<.02	.01	<.3	.004	.002	.15	5.93	.08	<.001	<.01	<.01	6.57	.19	.02	3.89	5.94	2.25	2.03	<.01	-
K-3 35-37	.005	.006	<.02	<.01	.5	.001	<.001	.04	2.22	.05	<.001	<.01	<.01	2.20	.09	<.01	.72	7.13	2.91	2.79	<.01	-
K-3 37-39	.003	.008	<.02	<.01	<.3	<.001	<.001	.03	1.98	.03	<.001	<.01	<.01	2.32	.09	<.01	.56	7.07	2.55	2.37	<.01	-
K-3 39-39.9	.313	.005	<.02	<.01	<.3	.001	<.001	.03	1.75	.01	<.001	<.01	<.01	2.15	.08	<.01	.55	5.72	1.60	1.88	<.01	-
STANDARD MP1-A	.032	1.441	4.30	19.29	73.7	.001	<.001	.05	6.24	<.01	.068	<.01	.03	1.28	.01	<.01	<.01	1.78	.01	.09	.07	.22

GROUP 7TD - 0.25 GM SAMPLE, 4 ACID (HF-HClO4-HNO3-HCl) DIGESTION TO 100 ML, ANALYSIS BY ICP-ES.  
- SAMPLE TYPE: CORE Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 12 2000

DATE REPORT MAILED:

*Jun 20/00*

SIGNED BY:

*[Signature]*

F.D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE

Wahl, Herb PROJECT KENO File # A001979 Page 1

R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

Table with 34 columns for elements (Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Hg, Sc, Tl, S, Ga) and rows for various sample IDs (K-3, RE, RRE, STANDARD).

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY OPTIMA ICP-ES. UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: CORE Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 23 2000 DATE REPORT MAILED: July 5/00 SIGNED BY: [Signature] TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Data FA



ACME ANALYTICAL



ACME ANALYTICAL

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
K-3 100-102	283.4	113	9	48	.4	9	6	270	1.39	1	5	<2	14	50	.2	<.5	.5	29	.70	.094	26	15	.45	207	.064	1	.51	.063	.20	4	<1	2.0	<1	.26	2
K-3 102-104	1267.5	71	10	43	.5	9	8	289	1.72	2	5	<2	14	54	<.2	<.5	.9	30	.82	.098	29	15	.46	215	.064	3	.52	.064	.20	5	<1	2.0	<1	.54	3
K-3 104-106	647.9	119	11	56	.6	11	7	293	1.59	3	5	<2	14	47	<.2	<.5	.6	34	.72	.103	27	17	.46	271	.085	<1	.58	.063	.24	3	<1	2.0	<1	.28	3
K-3 106-108	619.9	149	9	47	.6	9	8	307	1.90	2	5	<2	13	37	<.2	<.5	<.5	37	.82	.096	26	15	.52	203	.076	1	.70	.058	.22	4	<1	1.9	<1	.41	4
K-3 108-110	334.0	578	10	52	2.0	15	18	310	2.35	2	5	<2	15	42	.7	.5	.9	38	.79	.102	26	17	.51	221	.077	4	.71	.065	.24	3	<1	2.0	<1	.76	4
K-3 110-112	408.6	137	9	45	.5	9	8	367	1.71	2	6	<2	14	56	.5	<.5	<.5	33	.93	.110	29	13	.49	246	.063	<1	.53	.058	.21	4	<1	2.2	<1	.43	3
K-3 112-114	225.4	112	8	42	.5	10	6	311	1.62	1	5	<2	14	66	.3	<.5	<.5	29	1.18	.104	32	14	.48	347	.047	5	.69	.050	.22	3	<1	2.1	<1	.25	3
K-3 114-116	373.9	113	9	47	.4	7	10	326	1.45	4	5	<2	13	84	.2	<.5	<.5	22	1.50	.099	29	10	.36	303	.016	5	.65	.044	.19	3	<1	2.0	<1	.35	2
K-3 116-118	208.8	112	10	58	.5	9	7	323	1.42	2	5	<2	14	63	.6	<.5	.8	27	.80	.098	27	13	.42	417	.042	<1	.47	.052	.18	3	<1	2.2	<1	.40	2
K-3 118-120	164.8	133	13	73	.5	6	6	362	1.47	2	5	<2	13	71	.8	<.5	<.5	25	1.18	.090	25	11	.50	238	.030	2	.49	.049	.14	4	<1	2.0	<1	.43	2
RE K-3 118-120	174.0	139	14	73	.6	6	6	390	1.55	2	5	<2	14	73	.9	<.5	.5	27	1.23	.090	26	13	.52	250	.033	<1	.51	.051	.15	4	<1	2.0	<1	.44	2
RRE K-3 118-120	167.9	140	12	67	.6	8	6	359	1.47	2	5	<2	13	71	.8	<.5	.5	25	1.17	.092	26	14	.49	238	.030	4	.47	.050	.14	3	<1	2.0	<1	.46	2
K-3 120-122	140.7	995	9	45	2.7	11	16	401	2.58	2	4	<2	10	94	.6	<.5	2.5	24	1.82	.072	19	12	.70	152	.017	1	.51	.039	.13	3	<1	1.9	<1	1.59	2
K-3 122-124	129.1	555	14	65	1.7	10	13	319	1.77	3	5	<2	13	67	.8	.6	3.4	25	1.05	.095	23	12	.41	206	.026	1	.54	.048	.15	2	<1	1.9	<1	.82	2
K-3 124-126	153.2	135	12	52	.5	6	5	380	1.33	2	5	<2	13	71	.8	<.5	<.5	26	1.05	.085	27	12	.43	174	.021	<1	.48	.050	.14	3	<1	1.9	<1	.26	2
K-3 126-127	429.9	53	11	53	.5	8	4	451	1.37	1	5	<2	14	62	.4	<.5	2.1	26	1.20	.099	27	13	.36	178	.034	5	.55	.049	.17	3	<1	2.2	<1	.34	2
STANDARD C3	26.0	65	38	167	6.2	35	12	811	3.18	56	21	<2	19	25	22.9	16.9	24.4	80	.53	.096	16	163	.62	160	.087	24	1.77	.031	.17	15	1	3.0	1	.03	7
STANDARD G-2	1.5	3	2	44	<.1	8	4	574	1.93	<1	2	<2	4	62	<.2	<.5	<.5	42	.65	.106	7	79	.64	270	.134	3	1.04	.070	.52	2	<1	2.3	<1	.01	5

Sample type: CORE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.





SAMPLE#	Mu	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	%	ppm	%	%	ppm	%	%	%	ppm	ppm	%	ppb	ppm	ppm	ppm	
K-4 498-508	181.53	168.23	31.12	160.5	5845	29.0	18.0	753	9.12	4.6	3.7	6.7	8.8	95.3	.19	1.62	2.10	29	1.27	.078	24.3	632.7	.52	227.9	.008	3	.79	.039	.19	22.3	1.4	.09	1.10	29	.6	.32	3.6
K-4 508-518	124.35	142.27	88.20	269.4	8177	26.8	13.1	607	6.56	8.0	3.4	23.9	8.3	88.1	.90	3.20	3.56	33	1.20	.079	21.3	355.9	.57	215.0	.015	6	.88	.044	.20	24.1	1.7	.20	.97	59	.6	.33	3.3
K-4 518-528	113.33	112.57	36.57	92.6	13866	21.4	13.5	503	4.95	4.6	4.0	14.1	9.6	164.1	.20	1.14	4.33	29	1.28	.084	22.9	198.5	.57	228.8	.022	4	.82	.040	.24	43.3	1.5	.08	1.13	36	.8	.34	3.2
K-4 528-538	148.41	142.31	39.81	59.9	16450	26.2	14.5	527	5.10	5.6	3.3	7.9	8.7	693.3	.21	1.00	7.24	35	1.47	.079	18.4	157.1	.66	173.2	.026	3	.87	.040	.20	47.3	1.8	.07	1.48	29	1.2	.53	3.5
K-4 538-548	57.25	120.37	48.92	67.3	20239	21.6	12.2	444	3.66	2.9	4.8	13.2	9.6	171.6	.11	.64	5.58	33	1.31	.080	24.6	81.9	.68	293.6	.045	3	.81	.067	.31	80.4	1.8	.08	.98	8	.8	.30	3.3
K-4 548-558	289.32	109.47	46.56	69.1	18901	27.2	11.6	405	3.66	2.5	5.0	12.5	10.6	749.8	.25	.56	7.26	35	1.28	.094	27.4	83.2	.75	277.5	.018	2	.81	.064	.23	56.9	1.7	.06	1.10	17	.9	.44	3.5
RE K-4 548-558	279.51	108.96	43.10	68.0	18350	26.6	11.2	405	3.62	2.4	5.1	6.9	10.6	748.4	.23	.57	7.10	34	1.27	.091	26.2	81.3	.74	248.8	.017	2	.78	.062	.21	60.8	1.8	.06	1.08	13	.9	.43	3.5
STANDARD US2	13.94	133.03	33.69	163.9	245	37.8	12.4	838	3.13	62.4	18.9	201.7	3.6	25.9	10.11	9.55	10.74	76	.53	.095	15.5	162.3	.61	155.4	.095	3	1.74	.031	.16	6.8	2.7	1.80	.02	228	2.3	1.83	6.0

Sample type: SLUDGE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

GEOCHEMICAL ANALYSIS CERTIFICATE

Wahl, Herb PROJECT KENO File # A001980

R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

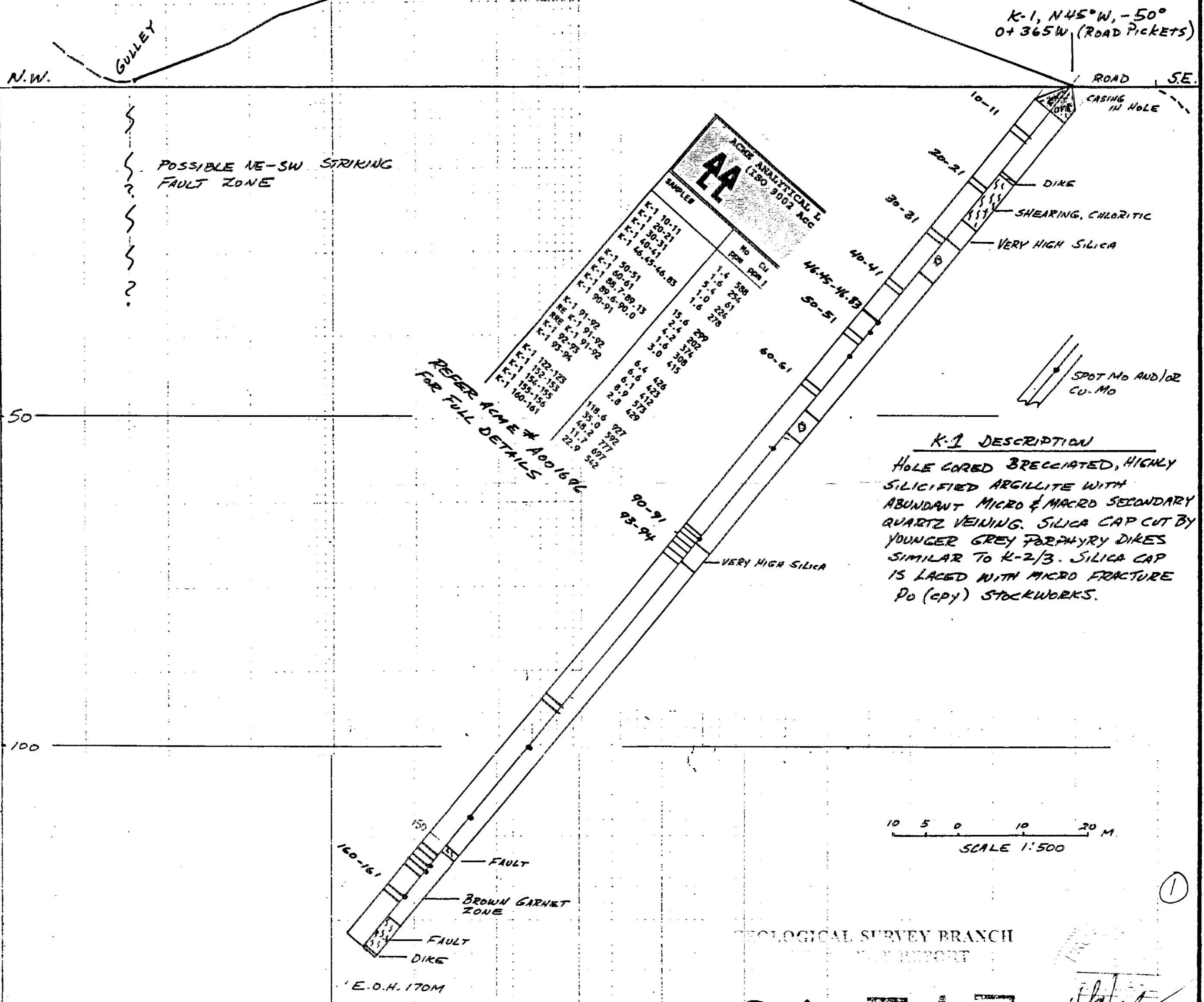


SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
K-4 21.5-22.0	4.37	349.59	8.51	49.8	434	48.9	10.7	489	2.70	1.3	2.1	7.1	9.5	76.5	<.01	.04	12.12	45	2.71	257	70.6	68.2	1.96	204.0	.007	3	1.38	.068	.24	1.2	5.3	.22	.33	9	<.1	.34	6.0
K-4 22-24	3.33	957.12	6.56	54.2	1544	39.2	10.4	609	2.53	1.5	2.5	19.0	8.4	83.0	.02	.07	5.47	40	2.80	235	67.8	61.8	1.81	184.4	.005	2	1.10	.064	.21	.7	5.2	.17	1.06	13	<.1	.75	5.4
K-4 24-26	2.45	86.96	4.77	37.3	195	46.5	13.4	447	2.87	1.1	1.8	3.6	9.4	80.3	<.01	<.02	1.57	48	2.87	248	85.2	69.0	2.00	162.5	.008	2	1.64	.106	.24	1.4	6.3	.26	.42	7	<.1	.47	7.5
K-4 26-28	2.90	1889.46	4.04	41.7	2527	47.7	8.8	409	2.71	1.4	1.6	31.7	8.8	60.9	.11	.12	12.02	56	2.46	247	69.7	73.3	1.92	196.7	.021	2	1.40	.074	.24	1.1	5.0	.19	1.13	12	.1	.72	6.6
K-4 62.0-62.5	4.44	70.31	8.70	20.3	155	10.0	5.8	294	1.34	3.1	6.0	1.9	14.7	221.0	.03	.23	1.24	9	2.40	.090	24.0	7.2	.44	557.8	.003	5	.88	.015	.26	1.6	1.8	.06	.41	13	.5	.23	1.9
K-4 68-69	22.42	65.86	12.16	23.5	180	11.7	7.2	181	1.52	3.1	4.6	3.9	13.0	104.3	.01	.28	1.69	9	1.03	.084	15.4	9.5	.73	416.8	.003	5	1.41	.011	.23	.8	1.9	.07	.49	16	.5	.19	2.8
K-4 77.1-79.0	12.62	29.05	10.89	24.5	115	10.9	8.2	332	1.72	2.1	7.8	1.4	13.2	122.5	.02	.16	3.80	13	2.03	.093	25.0	11.3	.68	315.2	.002	3	1.02	.028	.20	2.0	2.7	.07	.70	7	1.3	.27	2.6
K-4 85.6-85.8	215.40	39.07	7.07	21.1	109	12.5	5.5	411	1.39	.9	7.8	3.7	14.0	141.4	<.01	.30	1.80	16	2.40	.089	26.1	16.8	.55	524.1	.008	2	.84	.034	.20	1.3	2.6	.06	.38	<.5	.4	.17	2.6
K-4 98.5-99.0	168.88	448.63	8.19	28.3	457	13.0	10.0	393	1.84	4.4	7.1	3.1	12.5	157.4	<.01	.74	.48	18	2.13	.087	26.2	14.8	.69	254.7	.010	8	.71	.023	.23	3.1	2.4	.08	.89	18	.8	.19	2.3
K-4 128.8-130.0	107.81	26.54	13.33	33.1	175	14.8	5.8	111	1.76	2.3	4.8	5.1	12.9	126.2	<.01	1.03	.77	10	.29	.095	26.2	11.6	.56	484.2	.002	4	1.38	.005	.27	1.2	2.0	.10	.49	47	.2	.12	2.8
K-4 130-131	25.39	41.39	18.96	30.6	349	14.5	8.1	163	2.23	3.6	4.4	12.8	13.7	116.9	.02	3.87	.86	9	.68	.094	25.2	9.8	.37	120.0	.002	4	1.00	.010	.25	2.2	1.7	.19	1.82	75	.3	.12	2.1
RE K-4 130-131	25.00	41.76	18.60	29.7	346	14.1	7.8	156	2.19	3.6	4.3	11.8	13.4	116.0	.02	3.88	.83	9	.67	.091	25.8	9.2	.37	133.4	.003	4	1.00	.008	.25	2.2	1.7	.18	1.79	71	.3	.12	2.1
K-4 137.7-139.7	8.14	13.15	10.95	35.0	145	17.3	7.2	154	1.86	2.9	5.0	3.2	11.2	148.6	.03	.88	.14	14	.38	.087	14.7	12.3	.54	651.5	.002	4	1.49	.006	.22	1.3	2.6	.07	.33	77	.2	.04	3.1
K-4 146.5-147.0	2.45	53.83	8.50	30.1	120	15.4	6.8	203	2.04	1.3	3.8	2.3	13.1	169.1	<.01	.37	.11	14	.93	.095	40.8	9.9	1.13	473.5	.001	3	1.94	.014	.27	1.7	2.3	.06	.21	125	<.1	.05	4.0
K-4 147-149	6.97	64.35	11.87	27.8	153	15.0	6.8	295	1.70	1.2	4.6	4.6	13.4	191.4	<.01	.37	.43	15	1.37	.097	31.9	14.9	.85	578.9	.005	3	1.46	.011	.25	.9	2.1	.06	.33	107	<.1	.11	3.4
K-4 149-151	32.45	40.85	12.48	25.9	220	15.1	13.5	134	2.12	2.0	4.9	9.2	12.3	210.2	.01	2.82	.33	8	.73	.093	24.6	8.7	.49	107.8	.001	3	1.17	.006	.26	2.0	1.4	.18	1.39	58	.5	.09	2.1
K-4 164.7-165.0	50.09	31.55	10.26	28.7	157	11.3	7.9	381	1.63	2.5	5.9	1.6	11.3	315.6	<.01	.34	1.41	15	2.58	.081	21.8	10.9	.65	495.1	.005	5	.79	.017	.28	1.5	2.2	.30	.45	27	.5	.16	2.1
K-4 167.0-167.4	821.64	38.33	4.28	26.5	156	15.4	5.7	313	1.45	.6	3.1	1.7	14.5	58.4	<.01	.10	16.51	32	1.09	.085	32.4	26.8	.77	176.2	.027	2	.71	.050	.19	2.7	2.4	.06	.22	<.5	.8	.09	3.4
STANDARD DS2	14.45	131.35	34.48	165.1	268	36.1	12.0	847	3.12	60.4	21.2	209.5	3.7	29.5	10.54	9.96	11.27	77	.55	.094	17.2	168.3	62	154.7	.101	3	1.79	.033	.17	7.1	3.4	1.94	.01	248	2.3	1.90	6.3

GROUP 1F15 - 15.00 GM SAMPLE, 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML, ANALYSIS BY ICP/ES & MS.  
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
- SAMPLE TYPE: CORE Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 23 2000 DATE REPORT MAILED: July 5/00 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

KENO PROJECT, CARIBOO M.D., B.C.  
93A-6E  
DRILL SECTION LOOKING N.E.



K-1, N45°W, -50°  
0+365W (ROAD PICKETS)

POSSIBLE NE-SW STRIKING  
FAULT ZONE

REFER ACME # A001696  
FOR FULL DETAILS

SAMPLE	ACME ANALYTICAL L (ISO 9002 ACC)	
	Mo	CU
K-1 10-11	1.4	588
K-1 20-21	1.6	234
K-1 30-31	1.0	224
K-1 40-41	1.6	278
K-1 46.45-46.83	15.6	289
K-1 50-51	4.2	374
K-1 60-61	3.0	308
K-1 64-65	6.4	428
K-1 68-69	8.9	512
K-1 72-73	2.8	428
K-1 76-77	118.6	927
K-1 80-81	35.0	777
K-1 84-85	14.2	777
K-1 88-89	11.7	637
K-1 92-93	22.9	532
K-1 96-97		
K-1 100-101		
K-1 104-105		
K-1 108-109		
K-1 112-113		
K-1 116-117		
K-1 120-121		
K-1 124-125		
K-1 128-129		
K-1 132-133		
K-1 136-137		
K-1 140-141		
K-1 144-145		
K-1 148-149		
K-1 152-153		
K-1 156-157		
K-1 160-161		

K-1 DESCRIPTION  
HOLE CORED BRECCIATED, HIGHLY  
SILICIFIED ARGILLITE WITH  
ABUNDANT MICRO & MACRO SECONDARY  
QUARTZ VEINING. SILICA CAP CUT BY  
YOUNGER GREY PORPHYRY DIKES  
SIMILAR TO K-2/3. SILICA CAP  
IS LACED WITH MICRO FRACTURE  
DO (OPY) STOCKWORKS.

10 5 0 10 20 M.  
SCALE 1:500

GEOLOGICAL SURVEY BRANCH  
REPORT

26,317

FIG. 4

120 METERS

KEND PROJECT, CARIBOO M. D. B.C. 93A-6E  
 DRILL SECTION LOOKING N.W.

K-4, N45°E, -50°  
 85M SW K-2/3,  
 25M SE OF SECTION

K-2, N45°E, -45°  
 K-3, N45°E, -70°  
 COLLAR 210M BELOW K-1

ROAD  
 125°NE  
 43°W (ROAD TICKETS)

LOW SWAMPY GROUND

ZONES FOR FUTURE SAMPLING

Py-MO ARGILLIC STOCKWORKS ZONE  
 PO STOCKWORKS-SILICA CAP ZONE

10 5 0 10 20 M  
 SCALE 1:500

SPOT MINERAL

MORE CONTINUOUS ZONE

LEGEND FOR K-2/K-3

- 7 SILICA ROCK, DK-GREY
- 6 SILICA CAP, PO STOCKWORKS
- 5a CSE. GRAINED, K-SPAR RICH MONZ. PORPHYRY
- 5 BIG GREY PORPHYRY MO, PY STOCKWORKS
- 4 PALE GREY, BIOTITE PORPHYRY DIRES
- 3 PYROXENITE DIRES
- 2 BRECCIATED, ARGILLIC ALTERED ARGILLITE MO STOCKWORKS
- 1 SILICIFIED ARGILLITE SILICA CAP @ DEPTH?

LEGEND FOR K-4

- F PALE GREY AMORPHOUS SILICA DIRES
- E PALE GREY FELSITE DIRES
- D SPECKLED GREEN ALTERATION PORPHYRY
- C WHITE SPECKLED PORPHYRY
- B PINK & TAN SPECKLED PORPHYRY K-SPAR RICH
- A LEUCO INTRUSIVE, SERICITIC BIOTITE BOOKS

CORE-K-4

SAMPLE	Fe	Co	Ni	Zn	Pb	Cu
K-4 21.5-22.0	4.37	309.39	0.51	49.8	0.4	0.4
K-4 22-24	2.33	167.12	4.86	64.2	15.4	0.4
K-4 24-26	2.46	161.19	4.77	57.3	1.6	0.4
K-4 26-28	2.99	128.46	4.99	41.7	2.27	0.4
K-4 28-30	4.44	78.31	8.78	39.3	1.56	0.4
K-4 30-32	22.42	66.36	12.16	23.5	1.88	0.4
K-4 32-34	12.62	39.85	18.19	14.6	1.15	0.4
K-4 34-36	775.08	39.17	7.19	21.1	1.69	0.4
K-4 36-38	369.08	40.63	8.19	28.3	1.47	0.4
K-4 38-40	107.11	28.14	12.53	33.1	1.75	0.4
K-4 40-42	25.79	41.39	16.16	38.0	3.09	0.4
K-4 42-44	25.80	41.74	16.80	29.7	3.46	0.4
K-4 44-46	9.14	12.15	16.96	36.0	1.46	0.4
K-4 46-48	1.46	53.03	8.70	38.1	1.29	0.4
K-4 48-50	0.17	64.24	12.67	31.6	1.53	0.4
K-4 50-52	32.05	49.85	12.48	25.9	2.28	0.4
K-4 52-54	59.19	31.53	10.26	28.7	1.67	0.4
K-4 54-56	123.64	33.23	4.28	26.5	1.94	0.4
K-4 56-58	32.05	49.85	12.48	25.9	2.28	0.4
K-4 58-60	59.19	31.53	10.26	28.7	1.67	0.4
K-4 60-62	123.64	33.23	4.28	26.5	1.94	0.4

REFER A 001980 FOR FULL DETAILS

REFER A 001917 FOR FULL DETAILS

FIG. 5