

REPORT ON THE
1997 EXPLORATION PROGRAM
ON THE
SUSTUT PERIMETER PROPERTY
OMINECA MINING DIVISION, BRITISH COLUMBIA
FOR CROSS LAKE MINERALS LTD.

25,266

Vancouver, B.C.
September 15, 1997

J. Miller-Tait
J. Miller-Tait, P. Geo.
Sikanni Mine Development Ltd.

Calvin Church
Calvin Church, P. Geo.





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In Pocket

1.0 INTRODUCTION

The Sustut Perimeter property is located in the Omineca Mining Division, N.T.S. 94D/10, at Lat. 56 degrees 35 minutes and long. 126 degrees 42 minutes. The Sustut River is located immediately to the east and the Omineca mining access road is approximately 10 kms. to the northeast.

The property surrounds the known Sustut deposit which has unclassified reserves of 50,000,000 tonnes grading 1.25 % copper (Minfile #094D 063). The property covers two known prospects, A Bornite and A Chalcocite, with similar mineralization compared to the Sustut deposit. The last work on these prospects was in 1973 when the area was active after the discovery of the Sustut deposit.

During August-September, 1997, a field program consisting of prospecting, geological mapping, rock and soil sampling was completed on the Sustut Perimeter property. The program was completed by Sikanni Mine Development Ltd. under the supervision of the two authors of this report on the behalf of the property owner, Cross Lake Minerals Ltd. This report documents the 1997 exploration program.

2.0 LOCATION/ACCESS/TOPOGRAPHY

The Sustut Perimeter property is located at Latitude 56 degrees 35 minutes, Longitude 126 degrees 42 minutes. It is located in UTM zone 09 with a Northing of 6275000 and Easting of 641000.

Access is by helicopter depending on the location of their base. Usually there is a base located at Johansen Lake, 35 kms. to the east, or Bear Lake, 50 kms. south, or Suskeena Lodge where the Sikanni crew was based located 40 kms. to the southwest. The Omineca mining road is located 10 kms. to the northeast.

The property is located in mountainous terrain with wide glacially eroded valleys. Elevations range from 1,040 m. - 2,000 meters above sea level. Below treeline, approximately 1,400 meters, the slopes are covered by dense coniferous forests.

3.0 PROPERTY DESCRIPTION

The Sustut Perimeter property consists of 9, 4-post mineral claims, totalling 169 metric units. The property is owned 100% by Cross Lake Minerals Ltd. and is located in the Omineca Mining Division on map sheets 94D/10E&10W. Claim details are as follows:

<u>CLAIM NAME</u>	<u>CLAIM SIZE</u>	<u>RECORD #</u>	<u>EXPIRY DATE</u>
Sustut 1	20	353058	Dec.11/1997
Sustut 2	20	353059	Dec.11/1997
Sustut 3	20	353060	Dec.11/1997
Sustut 4	15	353061	Dec.11/1997
Sustut 5	20	353062	Dec.12/1997
Sustut 6	20	353063	Dec.12/1997
Sustut 7	16	353064	Dec.12/1997
Sustut 8	20	353065	Dec.12/1997
Sustut 9	18	353066	Dec.12/1997

*The expiry date does not account for the 1997 assessment credit.



**PROPERTY
LOCATION**

0 50 100
Kilometres

PROFESSIONAL
PROVINCE OF
C.L. CHURCH
BRITISH
COLUMBIA
GEOLOGIST
C.L. Church
Oct 18/97

PROFESSIONAL
PROVINCE OF
J. M. MILLER-TAIT
BRITISH
COLUMBIA
GEOLOGIST
J. M. Miller-Tait
Oct. 8/97

CROSS LAKE MINERALS LTD.

SUSTUT-PERIMETER PROPERTY

OMINECA MINING DIVISION, B. C.

LOCATION MAP

SKANNI MINE DEVELOPMENT LTD.

DATE: SEPT/97 SCALE: As shown FIGURE: 1.1

4.0 HISTORY

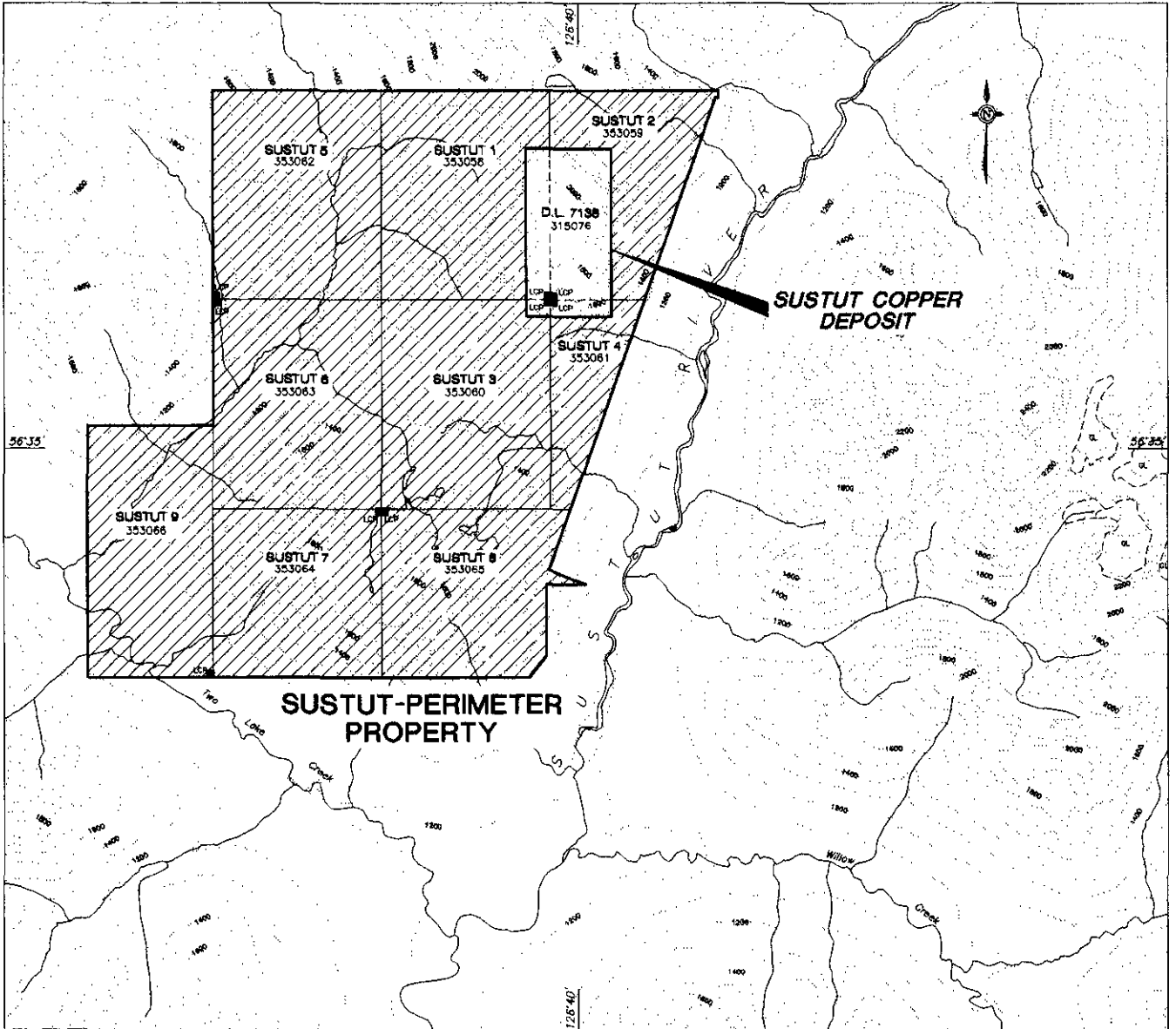
The first documented geological descriptions of the Sustut Perimeter property was from Lord (1948) who was completing a reconnaissance geological survey of the area. He described numerous small mineralized showings in the volcanic members of the Mesozoic Takla Group.

Falconbridge discovered the Sustut deposit late in the field season of 1971. The area had been extensively explored for petroleum by Union Oil Limited in 1969 but there was no reported mineralization. The discovery by Falconbridge triggered an intensive drilling program of the Sustut deposit and intensive prospecting and claim staking in the vicinity. The discovery was made by helicopter reconnaissance flying along the cliffs above and to the west of the Sustut River. The deposit is hosted in a gently dipping malachite stained copper rich unit. The unit was traced along the cliffs for 3,000 feet and in places was observed to be in excess of 40 feet in thickness.

In 1973 Yukon Gold Placer Ltd. and Consolidated Standard Mines Ltd. completed collected soil and silt samples from the west half of the Sustut Perimeter property. Prospecting and geological mapping also delineated the A Bornite and A Chalcocite showings.

Also in 1973 Wesfrob Mines Ltd. completed an airbourne geophysical survey over the southeast side of the property. This area was named the Go showing which consisted of disseminated chalcopyrite in a chert pebble conglomerate.

During 1973-74 Wesfrob Mines Ltd. drilled one hole on the extreme eastern edge of the Sustut Perimeter property down by the Sustut River. Disseminated mineralization was encountered but the results are unknown.



J. Miller-Iah
Oct 16/97

PROFESSIONAL
PROVINCE
OF
J. M. MILLER-IAH
BRITISH
COLUMBIA
GEOLOGIST
with last
Oct 8/97

CROSS LAKE MINERALS LTD.		
SUSTUT-PERIMETER PROPERTY		
OMINECA MINING DIVISION, B. C.		
CLAIM / TOPOGRAPHICAL MAP		
SIKANI MINE DEVELOPMENT LTD.		
DATE: OCT./97	SCALE: As shown	FIGURE: 3.1

5.0 REGIONAL GEOLOGY

The regional geology has been described in detail by Church, B.N.-1974/75 when he completed two years of geological mapping in the Sustut Perimeter showing area. The following is his interpretation of the regional geology:

“The oldest rocks of the area are found on the spur east of Sustut Peak and the lower east side of Mount Savage. These are Late Paleozoic strata which in the lower part consist of locally folded alternating coralline limestone and argillite beds. The rocks pass upward through several thousand feet of section into a more regular sequence of mainly greywacke and argillite plus a thick sequence of spherulitic rhyolite. Triassic basalt breccias and augite and plagioclase-rich volcanic sandstone rest on the Paleozoic assemblage with little or no angular discordance.

The Mesozoic pile is readily subdivided into three fundamental rock stratigraphic units. The lowest unit, about 7,000 feet thick, is identified as mainly a submarine deposit consisting primarily of augite porphyry basalt with local intercalations of aphanitic basalt and coarse feldspar porphyry basaltic andesite. Massive volcanic breccia deposits predominate in this part of the section although lava flows, bedded breccias, and pillow lavas are locally conspicuous. The middle unit consists of about 3,500 feet of what is believed to be mostly subaerial deposits of mixed andesite and basalt volcanoclastic rocks, lahars, tuff breccia, volcanic sandstone, and conglomerate beds - which rest on relatively thin fossiliferous Triassic tuffaceous argillite, chert, and carbonate beds. The uppermost unit, about 4,000 feet thick, comprises locally well-layered maroon and grey welded and non-welded ash flow tuffs, and volcanic breccias ranging from basalt to rhyolite in composition.

These strata are cut by a series of plutons referred to generally as the Omineca intrusions, a wide assortment of stocks, sills, and smaller bodies of mostly granitic composition and Jurassic age.

A varied development of folds and faults is evident in the map area. The belt of Hazelton and Upper Takla rocks flanking the northeast side of Willow creek, extending through to Two Lake Creek, is characterized by gently undulating beds cut by minor faults. In marked contrast, the Paleozoic and lower Takla rocks on the spurs northwest of Sustut Lake and on the north part of Mount Savage display some spectacular folds, major dislocations, and a faulted repetition of the strata.”

6.0 PROPERTY GEOLOGY

The northern section of the Sustut Perimeter property is underlain by the Upper Triassic Takla Group. The Takla Group consists of the undivided Moosevale, Savage Mountain and Dewar Formations. The Moosevale Formation consists of andesite and basaltic volcanic conglomerate, breccia, sandstone, tuff and argillite. The Savage Mountain Formation is comprised of basic augite porphyry basalt flow, breccia, pillow breccia, tuff and interbedded bladed feldspar porphyry. The Dewar Formation consists of tuff, sandstone, argillite and minor breccia.

The southern half of the property is on the southwest side of a fault which splits the property in a northwest-southeast direction. This fault parallels the Moose Valley fault located to the northeast and the Two Lake Creek fault located to the southwest. The A Chalcocite and A Bornite showings are located on the southwest side of this fault.

The southern portion of the claims are underlain by the Lower Jurassic Telkwa Formation. This Formation is comprised of the following: calcalkaline basalt, andesite, dacite and rhyolite flow breccia, tuff and lahar, intravolcanic conglomerate, conglomerate, sandstone and siltstone; polymict conglomerate with Asitka, Takla and granitic clasts.

A "new" mineralized shear located at the crest of the ridge in the Upper Triassic Takla group to the west of the Sustut deposit. The location of the sample #91953 is plotted on Fig.# 7.1. The 0.75 malachite stained chalcocite shear zone assayed 9.18% Cu and 36.4 g/t Ag. The shear strike and dip are 090/85N.

Two "new" mineralized calcite/epidote veins are located 500 meters east of the plotted A Bornite showing. The two veins are labeled S#91957 and S#91958 on Fig.# 7.1. The two 30 cm. wide veins are separated by 25 meters and are located in purple tuff of the Lower Jurassic Telkwa Formation, striking 095/70S. The mineralization consists of malachite stained chalcocite and assayed 4.96% Cu, 64.4 g/t Ag, and 2.88% Cu, 40.2 g/t Ag.

The A Bornite showing was located, sampled, and plotted on Fig # 7.1. The A Bornite showing strikes at 100/75N. The showing consists of malachite stained chalcocite and bornite mineralization in a volcanic/sedimentary breccia of the Telkwa Formation. Sample #92003 is taken from a mineralized shear (0.5 to 1.5 m wide) with orientation 100/75N. The margins of the zone contain minor calcite and epidote veins averaging 2mm and are non mineralized.

The A Chalcocite prospect was located and a talus float sample was collected (S# 91960, 10.59 % Cu, 215.0 g/t Ag). The showing could not be sampled or examined in place as the steep terrain made a traverse to the actual showing impossible. The strike/dip is estimated at 110/65N, and the mineralized shear is approximately 1 meter wide. The mineralization in the talus slope below the showing observed was malachite stained chalcocite hosted by bedded tuff of the Telkwa Formation. A feldspar porphyry dike,

approximately 50 meters wide, strikes 080/80S immediately to the south of the showing.

7.0 SOIL GEOCHEMICAL RESULTS

A four line soil geochemical grid was completed to cover the strike direction of the A Chalcocite showing to the east over a flat bench covered by scrub conifers. The grid was sampled at 25 meter intervals on lines with 100 meter separation, and line length of 500 meters. A total of 74 samples were collected using a long-handled shovel to collect soil from the B and C-soil horizons. The samples were collected and placed into paper Kraft sample bags, dried, and shipped to Eco-Tech Laboratories Ltd. based in Kamloops, B.C.

Anomalous copper values are on: 0+00W, 1+25N; 0+00W, 2+25N; 0+00W, 2+50N. The 2+25N and 2+50N samples could represent a two line anomaly which may represent the strike extension of the A Chalcocite showing down across the bench to the east. Further sampling in these station areas would confirm the extension. Refer to Fig # 7.1 for results and sample locations.

8.0 ROCK SAMPLING RESULTS - SUSTUT PROPERTY

<u>SAMPLE No.</u>	<u>Cu(% or ppm)</u>	<u>Ag(g/t or ppm)</u>	<u>DESCRIPTION</u>
91951	5.55%	16.4ppm	-Grab of Sustut deposit. Chalcocite, pyrite, malachite in congl. At D.D. hole #120.
91952	1.02%	3.6ppm	-Grab of chalcocite, pyrite, malachite stained congl. On Sustut 1 claim. Elev.1885m.
91953	9.18%	36.4g/t	-Width=.75 m. chalcocite,pyrite, malachite in carb. Epidote veining. 090/85N. on Sustut 1 east ridge.
91954	340ppm	0.2ppm	-Grab of float on north side of bornite creek. W=30cm. Boulder.
91955	8.92%	5.8ppm	-Grab of 30 cm. Boulder, chalcocite with mala. Stain. Northing=6274637 Easting=641931, elev.=1660m.
91956	2.16%	38.8g/t	-Grab of 1.0 meter boulder. Mala., pyrite, chalcocite in carb./epidote veining. Northing 6274748 Easting 641388.
91957	4.96%	64.4g/t	-W=30cms. Source of #91956. Chalcocite,pyrite,bornite 095/75S. cliffs E. of bornite showing. Purple congl. host rock.
91958	2.88%	40.2g/t	-parallel to 91957 but 25 m. South.
91959	12.32%	179.0g/t	-Grab of 30 cm. Talus boulder. Mala. chalcocite~50%. elev.1815m. Other Cu talus present.

91960	10.59%	215g/t	-Grab below chalcocite showing. Chalcocite/mala. ~30%.
91961	604ppm	0.4ppm	-Grab pyrite in felsic intrusion. Northing 6272110.East 640472. Elev.1646m.
92001	9533ppm	0.6ppm	-0.5m chip mal. Stained bornite CPY, Northing 6275018 Easting 641038.
92002	4.12%	26.8ppm	-Grab. Chute before bornite sh. CPY stringers in f.g. congl.
92003	8.79%	134.0g/t	-1 m. chip. Bornite showing. Mal. stained Cpy 100/75N.

9.0 CONCLUSIONS

The Sustut Perimeter property has three areas examined during the 1997 exploration program which have sufficient values in copper and silver to justify further exploration. All three, and numerous shears, all strike east-west and are steeply dipping. This direction and dip were observed on the Sustut deposit as well. They occur in the Telkwa Formation, younger than the Sustut deposit, and occur with calcite/epidote veining.

The first area is the A Bornite showing located to the southwest of the Sustut copper deposit. The showing has the possibility of being expanded along strike and down dip.

The second area of interest is located 500 meters east of the A Bornite showing where two "new" veins, 25 meters apart, are striking east-west. The area of interest is to the west of these veins as high grade float was discovered (S# 91959; 12.32%Cu, 179.0 g/t Ag) on the south facing slope along strike with the "new" veins. (Refer to Fig.# 7.1)

The third prospective showing is the A Chalcocite where the talus float sample was of sufficient grade, combined with the soil anomaly on strike show that the prospect could be expanded. The ground traverses and helicopter reconnaissance of the showing indicate that the best direction for expansion is to the east.

With the proximity of the Sustut property, the similar geology, mineralization, and strike directions of the prospects, further detailed work is recommended.

10.0 RECOMMENDATIONS AND COST ESTIMATES

A three phased exploration program is proposed to further explore the Sustut perimeter property. The first phase will consist of further soil and talus sampling along strike of the three areas of interest. The areas along strike will be geologically mapped as well. Reconnaissance soil sampling, prospecting, and geological mapping along the timbered valleys is recommended as these areas remain untested.

Detailed geological mapping along the fault which cuts across the property should be completed in the Phase one program as well. The vertical offset of this fault which splits the property in a northwest-southeast direction should be determined to identify the older Upper Triassic Takla Formation which hosts the Sustut copper deposit on the southern portion of the property.

The second phase program would consist of a geophysical survey. A test of Induced Polarization survey of a couple lines across the known Sustut deposit should be completed to identify the geophysical signature of the deposit. The I.P. survey could then be used to test the prospective areas identified in the first phase. A third phase of diamond drilling any promising targets outlined in Phases one and two is recommended.

There is no cost estimate for Phases two and three as the size of these programs is unknown until phase one is completed. A rough cost estimate of Phase one is as follows:

<u>ITEM DESCRIPTION</u>	<u>COST ESTIMATE</u>
Labor (2 geol.&2 tech. X 30 days)	\$33,000
Sample Analyses (2,000 soil + 500 rock @ \$15/sample)	\$37,500
Tent camp (food, sat. phone, etc...)	\$10,000
15 hrs. helicopter support (Mob./Demob.)	\$12,500
Mob./Demob. + truck/fuel	\$10,000
Report & Drafting	\$10,000
<u>10% contingency</u>	<u>\$11,300</u>
TOTAL	\$124,300
ROUNDED = \$125,000	

11.0 STATEMENT OF COSTS

<u>ITEM DESCRIPTION</u>	<u>COST</u>
Helicopter support	\$10,529.50
Labor (2 geol. & tech. Aug. 28 - Sept. 1)	\$4,815.00
Sample Analyses (74 soil & 14 rock samples)	\$1,064.97
Room & Board	\$1,765.50
Truck Rental and Fuel	\$960.00
Supplies	\$450.00
Report preparation and drafting	\$3,610.00
<u>Phone and office overhead</u>	<u>\$500.00</u>
Total	\$23,694.97

CERTIFICATE OF QUALIFICATIONS

I, **Jim Miller-Tait**, of 828 Whitchurch St., North Vancouver, British Columbia, V7L-2A4, do hereby certify that:

I hold a Bachelor of Sciences Degree in Geology (1986) from the University of British Columbia.

I am a registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.

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

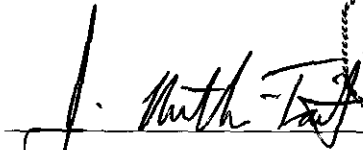

I have been practicing my profession as a geologist since 1986.

I am a Consulting Geologist and President of Sikanni Mine Development Ltd., an independent firm specializing in mineral exploration and mine development.

This report is based upon the evaluation of the available data and supervision of the work completed.

I hereby give my permission to include this report, or the summary thereof, in any document to be filed with any appropriate regulatory authority.

Dated at Vancouver, British Columbia, this 8th day of October, 1997.

Jim Miller-Tait, P. Geo.
Sikanni Mine Development Ltd.

Statement of Qualifications

I, Calvin Church, of 1733 Napier St. Vancouver, B.C. do hereby certify that;


I am a graduate of the University of British Columbia (BSc. Geology) and have worked in the mineral exploration industry since 1986.

I am a registered member in good standing of the Professional Engineers and Geoscientists of British Columbia.

This report is based on personal visits to the property and an evaluation of relevant information made available from Cross Lake Minerals and from public sources.

I have not recieved any interest, direct or indirect, in the properties of Cross Lake Minerals nor do I expect to receive any such interest.

I consent to the use of this report by Cross Lake Minerals, in whole or in part, as they so require.



Calvin Church 1/18/97
Calvin Church, PGeo.

The image shows a circular professional seal for Calvin Church, PGeo. The seal contains the text: "PROFESSIONAL", "PROVINCE OF", "C.L. CHURCH", "BRITISH COLUMBIA", and "P.GEO.". Overlaid on the seal is a handwritten signature "Calvin Church" and the date "1/18/97". Below the seal and signature, the name "Calvin Church, PGeo." is printed.

REFERENCES

Church, N.B., 1974: Geology of the Sustut Area; Geology, Exploration and Mining in British Columbia; in 1973, Brit. Columb. Dept. Mines Pet. Resour., p. 411-455.

Church, N.B., 1975: Geology of the Sustut Area; Geology, Mining and Exploration in British Columbia in 1974; Brit. Columb. Dept. Mines Pet. Resour.

Lord, C.S., 1948: McConnell Creek Map-Area, Cassiar District, British Columbia; Geol. Surv. Canada, Memoir 251.

Melville D.M. September 1992: NTS 094D McConnell Creek, Geological Survey Branch.

Richards, T.A., 1975: McConnell Creek Map Area 94D/E Geology.

Minfile Reports #094D 038, #094D 054, #094D 057, #094D 063, #094D 077, #094D 078, #094D 079, #094D 081, #094D 082, #094D 088: Geological Survey Branch - Mineral Resource Division. Ministry of Energy, Mines, and Petroleum Resources.

ASSESSMENT REPORTS:

A.R.#4595 - Geological and Geochemical Report on the ROY claims, McIntyre Porcupine Mines Ltd. by J. McLeod, Sept. 1973.

A.R.#4625 - Geological Mapping, Silt and Soil Sampling on the No. 1&2, A claims. Yukon Gold Placer Ltd./Consolidated Standard Mines Ltd. by J. McLeod, 1973.

A.R.#4700 - Airbourne Geophysical Survey on the Go, Mar, Plus, OK, Best Mineral claims, D. Brown for Wesfrob Mines Ltd., 1973

A.R.#4780 - Geological Report on the Pike, Fire, & Carlos claims, W.Meyers for Highhawk Mines Ltd./Sproatt Silver Mines Ltd., Aug. 1973.

A.R.# 5060-5064, 5109, 5110 - Diamond Drilling Reports on Wesfrob Mines Ltd. Sustut Deposit by G. Harper and D. H. Brown 1973-1974.

A.R.#5366 - Geological Report on "B" and "BR" claims for Brascan Resources Ltd., L.W. Saleken, 1973.

**APPENDIX A: ANALITICAL PROCEDURES &
ANALYTICAL RESULTS**



ASSAYING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700
Fax (250) 573-4557

Analytical Procedure Assessment Report

MULTI ELEMENT ICP ANALYSIS

Samples are catalogued and dried. Soil samples are screened to obtain a -80 mesh sample. Rock samples are 2 stage crushed to minus 10 mesh and pulverized on a ring mill pulverizer to minus 140 mesh, rolled and homogenized.

A 0.5 gram sample is digested with aqua regia which contain beryllium which acts as an internal standard. The sample is analyzed on a Jarrell Ash ICP unit.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are printed on a laser printer and are faxed and/or mailed to the client.



ASSAYING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700
Fax (604) 573-4557

Analytical Procedure Assessment Report

GEOCHEMICAL GOLD ANALYSIS

Samples are catalogued and dried. Soils are prepared by sieving through an 80 mesh screen to obtain a minus 80 mesh fraction. Rock samples are 2 stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverizer to -140 mesh. The subsample is rolled, homogenized and bagged in a prenumbered bag.

The sample is weighed to 10 grams and fused along with proper fluxing materials. The bead is digested in aqua regia and analyzed on an atomic absorption instrument. Over-range values for rocks are re-analyzed using gold assay methods.

Appropriate reference materials accompany the samples through the process allowing for quality control assessment. Results are entered and printed along with quality control data (repeats and standards). The data is faxed and/or mailed to the client.



ASSAYING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (604) 573-5700
Fax (604) 573-4557

Analytical Method Assessment for

GOLD ASSAY

Samples are sorted and dried (if necessary). The samples are crushed through a jaw crusher and cone or rolls crusher to -10 mesh. The sample is split through a Jones riffle until a -250 gram subsample is achieved. The subsample is pulverized in a ring & puck pulverizer to 95% -140 mesh. The sample is rolled to homogenize.

A 1/2 or 1.0 A.T. sample size is fire assayed using appropriate fluxes. The resultant dore bead is parted and then digested with aqua regia and then analyzed on a Perkin Elmer AA instrument.

Appropriate standards and repeat sample (Quality Control components) accompany the samples on the data sheet.

11-Sep-97

ECO-TECH LABORATORIES LTD.
10041 East Trans Canada Highway
KAMLOOPS, B.C.
V2C 6T4

ICP CERTIFICATE OF ANALYSIS AK 97-961

SIKANNI MINE DEVELOPMENT LTD.
828 Whitchurch Street
N. VANCOUVER, BC
V7L 2A4

Phone: 604-573-5700
Fax : 604-573-4557

ATTENTION: JIM MILLER-TAIT

No. of samples received: 20
Sample type: Rock
PROJECT #: Not given
SHIPMENT #: Not given
Samples submitted by: Not given

Values in ppm unless otherwise reported

Et #.	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn	
1	91951	5	16.4	2.76	2220	60	<5	>10	248	33	69	>10000	8.54	<10	2.41	2188	8	0.02	19	1000	70	15	<20	76	<0.01	<10	137	<10	<1	352	
2	91952	5	3.6	3.57	30	25	<5	4.54	5	27	67	>10000	5.74	<10	1.49	760	<1	0.04	13	470	<2	<5	<20	62	0.30	<10	205	10	24	52	
3	91953	10	>30	1.94	10	30	<5	1.33	4	29	36	>10000	4.22	<10	1.48	725	<1	0.03	11	>10000	<2	10	<20	38	0.22	<10	167	90	36	48	
4	91954	5	0.2	1.37	<5	20	<5	>10	2	31	52	340	4.92	<10	1.45	2391	2	0.01	9	200	<2	<5	<20	223	0.03	<10	74	<10	12	43	
5	91955	5	5.8	1.37	10	30	<5	3.53	4	26	54	>10000	4.25	<10	1.34	952	<1	0.04	16	>10000	<2	10	<20	37	0.14	<10	179	90	30	39	
6	91956	10	>30	2.12	<5	50	<5	8.16	2	18	64	>10000	3.49	<10	1.99	1242	<1	0.01	7	<10	<2	15	<20	54	0.18	<10	98	<10	24	65	
7	91957	Subst 35	>30	2.35	<5	40	<5	1.48	<1	31	110	>10000	2.80	<10	2.17	1042	<1	0.02	23	>10000	<2	20	<20	83	0.22	<10	131	40	42	75	
8	91958	Per.	5	>30	0.62	5	25	<5	>10	7	6	13	>10000	1.04	<10	0.30	695	<1	0.01	<1	>10000	<2	10	<20	52	<0.01	<10	31	40	4	9
9	91959	200	>30	0.90	45	25	<5	1.44	3	12	40	>10000	1.14	<10	0.13	228	<1	0.02	<1	9860	<2	10	<20	119	0.20	<10	67	150	31	8	
10	91960	25	>30	2.63	<5	70	<5	0.30	7	32	35	>10000	6.75	<10	1.75	1195	<1	0.02	26	>10000	<2	<5	<20	9	<0.01	<10	107	70	<1	142	
11	91961	5	0.4	1.83	15	90	<5	2.61	<1	23	66	604	3.97	<10	1.65	807	<1	0.05	11	490	6	<5	<20	16	0.26	<10	77	<10	32	59	
12	92001	5	0.6	1.88	<5	215	<5	2.64	2	19	51	9533	3.98	<10	1.26	1001	<1	0.02	8	280	<2	10	<20	21	0.30	<10	93	<10	28	66	
13	92002	5	26.8	2.06	<5	65	<5	4.72	3	30	46	>10000	6.31	<10	1.43	1010	<1	0.03	15	>10000	<2	<5	<20	32	0.18	<10	102	20	33	97	
14	92003	5	>30	2.32	<5	55	<5	2.18	8	22	7	>10000	5.01	<10	1.81	1351	<1	0.03	4	>10000	<2	10	<20	51	0.13	<10	63	80	22	91	



**ASSAYING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ENVIRONMENTAL TESTING**

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700
Fax (250) 573-4557

CERTIFICATE OF ASSAY AK 97- 961

SIKANNI MINE DEVELOPMENT LTD.
828 Whitchurch Street
N. VANCOUVER ,BC
V7L 2A4

13-Sep-97

ATTENTION: JIM MILLER-TAIT

No. of samples received: 20
Sample type: Rock
PROJECT #: Not given
SHIPMENT #: Not given
Samples submitted by: Not given

ET #.	Tag #	Ag (g/t)	Ag (oz/t)	Cu (%)
1	91951	-	-	5.55
2	91952	-	-	1.02
3	91953	36.4	1.06	9.18
5	91955	-	-	8.92
6	91956	38.8	1.13	2.16
7	91957	64.4	1.88	4.96
8	91958	40.2	1.17	2.88
9	91959	179.0	5.22	12.32
10	91960	215.0	6.27	10.59
13	92002	-	-	4.12
14	92003	134.0	3.91	8.79

*Sustut
Perimeter.*

11-Sep-97

ECO-TECH LABORATORIES LTD.
10041 East Trans Canada Highway
KAMLOOPS, B.C.
V2C 6T4

ICP CERTIFICATE OF ANALYSIS AK 97- 968

SIKANNI MINE DEVELOPEMENT
828 Whitchurch Street
N. VANCOUVER ,BC
V7L 2A4

Phone: 604-573-5700
Fax : 604-573-4557

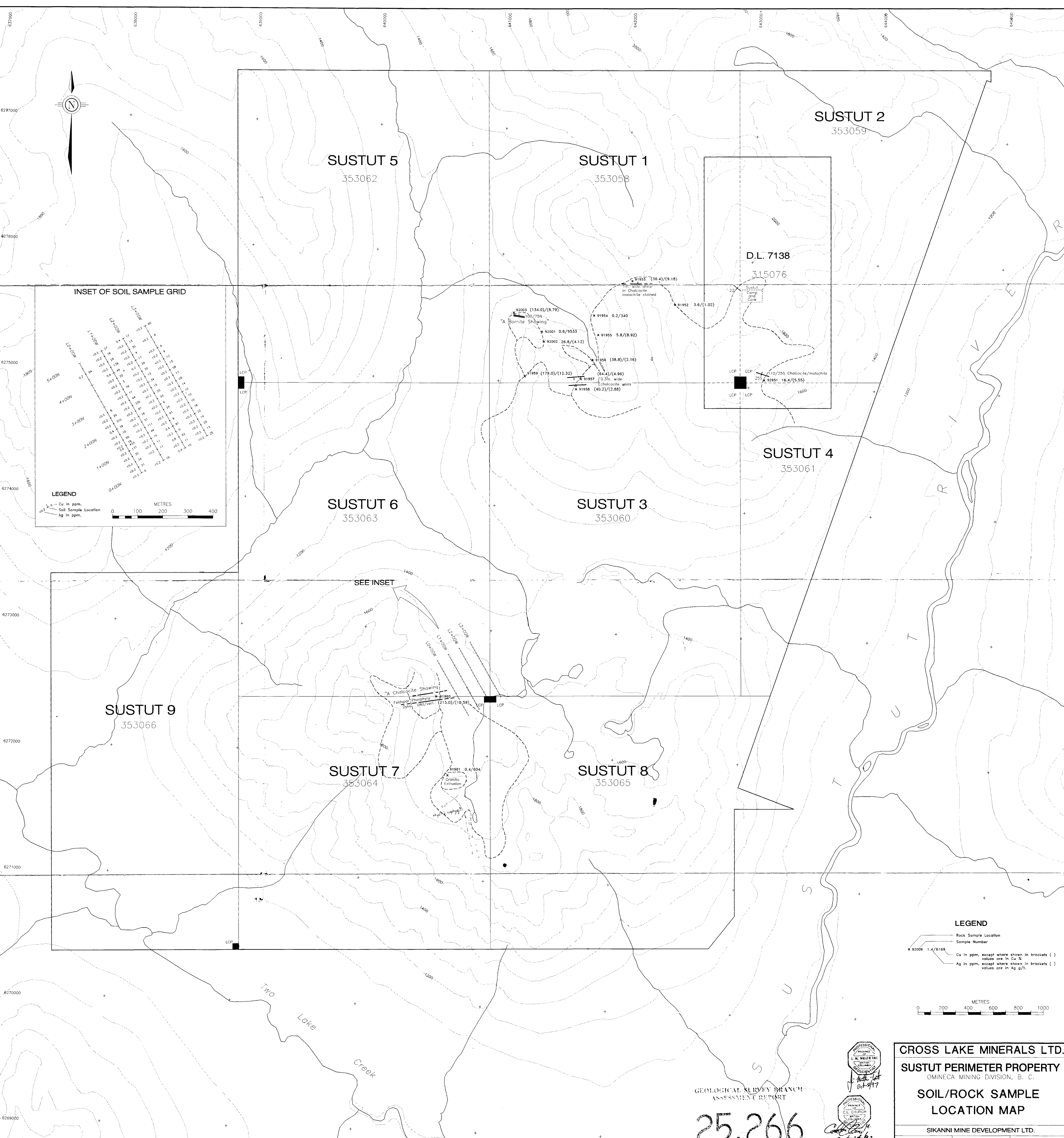
ATTENTION: JIM MILLER-TAIT

No. of samples received: 106
Sample type: Soil
PROJECT #: Not given
SHIPMENT #: Not given
Samples submitted by: Not given

Values in ppm unless otherwise reported

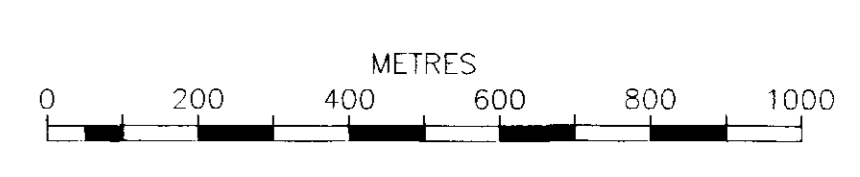
Et #.	Tag #	mesh size	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	L0+00W 0+00N		<5	<0.2	0.97	<5	90	5	0.19	<1	5	<1	6	1.11	<10	0.11	85	<1	0.03	<1	380	14	<5	<20	28	0.24	<10	53	<10	2	8
2	L0+00W 0+25N		<5	<0.2	2.19	<5	95	<5	0.29	<1	9	9	21	2.94	<10	0.47	242	<1	0.04	3	570	6	<5	<20	31	0.13	<10	77	<10	<1	28
3	L0+00W 0+50N		<5	<0.2	2.31	5	145	<5	0.47	<1	11	12	34	3.49	<10	0.72	899	<1	0.02	4	1020	6	<5	<20	30	0.06	<10	126	<10	3	37
4	L0+00W 0+75N		<5	<0.2	2.06	10	135	<5	0.61	<1	12	10	35	3.05	<10	0.77	594	<1	0.05	4	850	4	<5	<20	33	0.08	<10	97	<10	3	37
5	L0+00W 1+00N		<5	<0.2	2.58	5	225	<5	1.19	<1	13	14	131	3.06	<10	1.04	530	<1	0.04	5	920	<2	<5	<20	49	0.09	<10	95	<10	17	43
6	L0+00W 1+25N A	32 mesh	<5	0.6	2.95	35	160	<5	2.27	<1	10	52	433	2.06	40	0.39	2511	<1	0.06	3	4280	<2	<5	<20	55	0.03	<10	119	10	72	21
7	L0+00W 1+25N B		<5	<0.2	1.97	<5	115	5	0.28	<1	10	10	16	3.26	<10	0.48	309	<1	0.04	3	560	6	<5	<20	34	0.18	<10	79	<10	<1	34
8	L0+00W 1+50N	32 mesh	<5	<0.2	1.63	10	140	10	0.27	<1	12	7	20	4.43	<10	0.49	319	<1	0.04	1	270	12	<5	<20	22	0.25	<10	114	<10	<1	28
9	L0+00W 1+75N		<5	<0.2	1.20	<5	80	10	0.23	<1	8	2	10	2.84	<10	0.21	202	<1	0.03	<1	480	16	<5	<20	23	0.27	<10	99	<10	1	16
10	L0+00W 2+00N		<5	0.4	2.38	5	190	5	0.63	<1	14	15	39	3.17	<10	0.92	394	<1	0.04	5	490	6	<5	<20	60	0.24	<10	89	<10	3	40
11	L0+00W 2+25N		5	<0.2	4.33	20	155	<5	1.51	<1	19	20	310	3.64	<10	1.52	973	<1	0.04	11	1910	<2	<5	<20	87	0.08	<10	91	<10	14	71
12	L0+00W 2+50N		<5	<0.2	3.31	5	120	5	0.99	<1	15	3	29	3.50	<10	0.91	833	<1	0.05	2	1340	<2	<5	<20	72	0.17	<10	79	<10	5	51
13	L0+00W 2+75N	32 mesh	<5	<0.2	1.14	<5	45	15	0.28	<1	8	<1	6	4.22	<10	0.20	178	<1	0.03	<1	230	6	<5	<20	26	0.18	<10	101	<10	<1	12
14	L0+00W 4+50N	32 mesh	<5	0.2	0.45	<5	195	<5	1.03	6	<1	<1	84	0.46	<10	0.10	65	<1	0.12	<1	910	20	<5	<20	34	<0.01	<10	8	<10	2	47
15	L1+00W 0+00N	32 mesh	<5	<0.2	1.29	<5	90	10	0.41	<1	12	4	16	3.93	<10	0.53	577	<1	0.04	1	370	8	<5	<20	30	0.22	<10	116	<10	<1	30
16	L1+00W 0+50N		5	<0.2	1.69	<5	120	5	0.26	<1	9	2	11	3.24	<10	0.38	395	<1	0.04	<1	410	8	<5	<20	31	0.16	<10	106	<10	<1	25
17	L1+00W 0+75N		<5	<0.2	1.43	<5	80	10	0.29	<1	11	6	11	2.81	<10	0.39	270	<1	0.04	2	320	14	<5	<20	33	0.32	<10	103	<10	2	21
18	L1+00W 1+00N		<5	<0.2	2.34	5	90	5	0.23	<1	10	7	15	2.93	<10	0.47	869	<1	0.03	2	910	4	<5	<20	23	0.13	<10	82	<10	<1	32
19	L1+00W 1+25N		<5	<0.2	3.53	10	150	<5	0.69	<1	19	16	44	4.45	<10	1.00	558	<1	0.03	10	440	4	<5	<20	57	0.29	<10	104	<10	4	49
20	L1+00W 1+50N		<5	<0.2	4.23	15	225	<5	0.92	<1	13	10	111	3.06	<10	0.85	539	<1	0.04	6	1050	<2	<5	<20	51	0.17	<10	73	<10	6	52
21	L1+00W 1+75N		<5	<0.2	3.01	10	170	<5	0.69	<1	16	15	51	3.70	<10	0.98	553	<1	0.04	8	540	4	<5	<20	53	0.20	<10	87	<10	4	42
22	L1+00W 2+00N		<5	<0.2	1.51	<5	80	5	0.24	<1	9	6	18	2.99	<10	0.36	236	<1	0.03	<1	520	6	<5	<20	20	0.22	<10	80	<10	1	17
23	L1+00W 2+25N		<5	<0.2	2.39	10	190	<5	0.68	<1	9	12	87	2.78	<10	0.65	316	<1	0.03	3	910	4	<5	<20	44	0.08	<10	100	<10	6	28
24	L1+00W 2+50N		<5	<0.2	2.99	15	165	<5	0.79	<1	5	5	336	1.58	<10	0.31	252	<1	0.06	<1	1190	<2	<5	<20	47	0.05	<10	45	<10	18	19
25	L1+00W 2+75N		<5	<0.2	1.68	5	180	<5	0.32	<1	10	7	44	3.49	<10	0.54	511	<1	0.03	3	660	6	<5	<20	32	0.10	<10	87	<10	<1	36
26	L1+00W 3+00N		<5	<0.2	2.13	<5	145	10	0.23	<1	8	6	11	2.97	<10	0.34	197	<1	0.03	<1	450	12	<5	<20	39	0.19	<10	99	<10	<1	21
27	L1+00W 3+25N		<5	<0.2	1.66	<5	125	<5	0.35	<1	11	7	16	4.53	<10	0.42	324	<1	0.04	<1	570	8	<5	<20	48	0.20	<10	109	<10	<1	25
28	L1+00W 3+50N		<5	<0.2	1.27	<5	65	<5	0.04	<1	6	<1	3	3.77	<10	0.13	189	2	0.03	<1	110	6	<5	<20	6	0.03	<10	37	<10	<1	24

Et #.	Tag #	mesh size	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
67	L3W 275N		<5	<0.2	2.12	<5	150	10	0.31	2	13	9	17	5.28	<10	0.55	343	<1	0.03	2	420	8	<5	<20	45	0.29	<10	147	<10	<1	33
68	L3W 300N		<5	<0.2	2.99	10	220	<5	0.94	1	14	10	58	3.62	<10	0.89	485	<1	0.04	4	580	4	<5	<20	66	0.15	<10	101	<10	6	41
69	L3W 325N		<5	<0.2	1.97	<5	115	10	0.35	2	11	7	13	4.22	<10	0.48	401	<1	0.03	<1	800	8	<5	<20	38	0.22	<10	117	<10	<1	22
70	L3W 350N	32 mesh	<5	<0.2	2.26	10	80	10	0.34	3	17	6	12	4.01	<10	0.94	432	<1	0.05	2	570	6	<5	<20	44	0.29	<10	122	<10	<1	40
71	L3W 375N		<5	<0.2	1.55	<5	95	15	0.23	<1	11	7	9	4.44	<10	0.27	266	<1	0.04	<1	310	12	<5	<20	33	0.39	<10	174	<10	<1	16
72	L3W 400N	32 mesh	<5	<0.2	1.25	<5	145	<5	0.21	<1	5	2	6	2.92	<10	0.20	156	<1	0.06	<1	350	10	<5	<20	24	0.10	<10	92	<10	<1	15
73	L3W 450N		<5	<0.2	1.45	<5	80	<5	0.15	<1	6	<1	6	3.07	<10	0.22	192	<1	0.03	<1	340	6	<5	<20	22	0.12	<10	97	<10	<1	11
74	L3W 500N	32 mesh	<5	<0.2	0.92	<5	90	<5	0.25	2	5	<1	60	3.09	<10	0.17	175	<1	0.08	<1	500	8	<5	<20	36	0.07	<10	73	<10	<1	28



LEGEND

- Rock Sample Location
- Sample Number
- Cu in ppm, except where shown in brackets () values are in Cu %
- Ag in ppm, except where shown in brackets () values are in Ag g/l.



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,266



CROSS LAKE MINERALS LTD.
SUSTUT PERIMETER PROPERTY
 OMINECA MINING DIVISION, B. C.
SOIL/ROCK SAMPLE LOCATION MAP
 SIKANNI MINE DEVELOPMENT LTD.
 DATE: SEPT/97 SCALE: 1:10,000 FIGURE: 7.1