

GEOLOGICAL REPORT



on the

Gold Commissioner's Office SI CREEK PROPERTY VANCOUVER, B.C.

OSI Mineral Claim

Omineca Mining Division

NTS: 94C/03E

B.C. Geographic System Map Sheet: 094C.005, 015

Latitude: 56° 7.5' N; Longitude 125° 01' W

UTM: 6 221 500N; 374 500 E; Zone 10

Owner and Operator: Cross Lake Minerals Ltd.

Author: Jim Miller-Tait, P.Geo.

January 15, 2002

GEOLOGICAL SURVEY BRANCH ASSESSMENT LITURE

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SECTION A: REPORT

INTRODUCTION:

Cross Lake Minerals Ltd. owns 100% interest in the Wasi Creek Property. The property was initially acquired in 2000 after a review of prospective areas in British Columbia for carbonate-hosted zinc-lead-silver deposits. The property was staked to cover the previously named Par claims which Cominco Ltd. extensively explored from 1990 to 1995. The Wasi Creek Property is located 150 kilometres northwest of Mackenzie on the south side of the Osilinka River in the Omineca Mining Division. This report documents two phases of exploration carried out from mid-May to early July 2001. The first phase of fieldwork was for a geological examination of the stratigraphic units underlying the property, verifying of the high stream sediment sample collected by the Provincial Government, and hand trenching of the Carrie 2 showing. The second phase of fieldwork was to extend the Carrie 2 trench because both ends of the initial trench were still in mineralization.

PROPERTY:

The Wasi Creek Property is 100% owned by Cross Lake Minerals Ltd. and was acquired by staking from July 2000 to October 2001. The Property is located on the south side of the Osilinka River some 150 kilometres northwest of Mackenzie and 43 kilometres north-northwest of Germansen Landing. The claims are situated in the Omineca Mining Division on NTS mapsheet 94C/03E, latitude 56° 7.5° N, longitude 125° 01° W and UTM coordinates of 6 221 500N and 374 500 E in Zone 10. The Property consists of 11 mineral claims totalling 66 units

and covering approximately 1,650 hectares. A list of the mineral claims is appended in Section B and they are illustrated on Plan Numbers WA-01-2 and WA-01-3.

LOCATION AND ACCESS:

The Wasi Creek Property is located 150 kilometres northwest of Mackenzie, British Columbia in the Omineca Mining Division. Access to the property is excellent due to extensive logging operations that have been carried out around and on the claims. The easiest access is by using Highway #97 north of Prince George to a small community named Windy Point, 12 kilometres north of the town of McLeod Lake. From Windy Point one drives on the main haulage logging road, which is located on the west side of Williston Lake, north for 170 kilometres, and then west for 22 kilometres to the junction of the Osilinka and Wasi Lake Forest Access roads. Driving another 18 kilometres along the south side of the Osilinka River on the Wasi Lake Forest access road accesses the Wasi Creek claims. There are several secondary forest access roads crossing the claims, which are navigable with a four wheel drive vehicle.

CLIMATE, TOPOGRAPHY AND VEGETATION:

The Wasi Lake area has cold, high snowfall winters and warm, damp summers. The topography of the property is moderately steep with the lowest elevation of 820 metres along the Osilinka River on the northern boundary of the property to 1380 metres on the ridge located along the eastern boundary of the claims. The slopes are heavily timbered by pine and spruce. In the clear cuts deciduous willows and poplars predominate.







HISTORY:

The earliest recorded work located in the area was in the Annual Report of the Minister of Mines in 1930 documenting the Weber Prospect, located near the northern edge of the present Wasi Creek Property. The report describes the Weber mineralization as disseminated galena, zinc and pyrite in siliceous dolomite of which a 5.18 metre channel sample assayed 3.6% zinc, 1.6% lead, loz/ton silver and 0.020z/ton gold.

The Weber Prospect was restaked and worked at intermittent intervals with the next documented description occurring in the 1954 Geological Survey of Canada Memoir 274, by E.F. Roots entitled "Geology and Mineral Deposits of Aiken Lake Map-Area, British Columbia". He describes the showing as pyrite-galena-sphalerite-barite replacement body in limestone that strikes north 30 degrees west and dips 80 degrees northeast. A grab sample assayed gold trace; silver 2.00z/ton; lead 10.24% and barite 4.06%.

An inventory of the numerous carbonate-hosted stratabound zinc, lead, silver and barite showings in the Wasi Creek area is well described in British Columbia Department of Mines Open File Paper 1992-1. The paper is named "Geology of the Usilika Lake Area, Northern Quesnel Trough, B.C.", (94C/3, 4, 6) by F.Ferri, S. Dudka and C. Rees.

In 1990 Cominco Ltd. completed a reconnaissance silt and soil geochemical survey on the stratigraphic extensions of the Lower Cambrian to Middle Devonian carbonates that host the known mineral occurrences. The area around the Weber Prospect was highly anomalous so Cominco staked their first two claims covering this prospect and the anomalous areas. Cominco then completed contour and grid soil sampling and outlined a large, highly anomalous area 1.0 by 4.5 kilometres in size in lead, zinc, iron and silver and staked five additional claims.

Cominco Ltd. completed an intense exploration program during 1991. The exploration program consisted of geological mapping, soil sampling, airborne electromagnetic and magnetometer surveys, ground geophysical surveys including HLEM, magnetometer, Induced Polarization and VLF surveys. A trenching program was completed on the target area of the large soil geochemical anomaly and the coincident conductors. There were seven trenches excavated with the best mineralization discovered in trench #3 that assayed 8.4% zinc, 3.5% lead and 14.2g/t silver over a width of 17.2 metres.

In 1992 Cominco Ltd. completed 16 diamond drill holes totalling 1,346 metres in the area of the trenching. The strike length explored is approximately 2.0 kilometres along a fault controlled base metal mineralized structure, on the east side of Wasi Creek. The work was not filed for assessment credit so there are no records of the results in the provincial data base.

In 1993 Cominco drilled four holes on the north side of the Osilinka River on a separate area and one hole in the Wasi Creek area in the vicinity of the 1992 drilling. The drill hole was collared near the Duncan Showing and was successful in intersecting two mineralized horizons that assayed 6.9% zinc, 1.6% lead and 18.4g/t silver over a width of 4.5 metres and 3.1% zinc, 3.2% lead and 32.0g/t silver over a width of 3.1 metres.

In 1994 Cominco constructed more drill access roads and sites and completed four holes totalling 1,164 metres, including two vertical holes drilled possibly to complete stratigraphic sections on either side of the fault controlled mineralization.

No further work is documented. Cross Lake Minerals Ltd. staked the claims when they came open in 2000.

REGIONAL GEOLOGY:

The following regional geological description has been compiled from papers in the British Columbia Geological Survey Branch Reports of Geological Fieldwork in 1989 and 1991. The Wasi Creek Property is located in an area that straddles the boundary between the Intermontane and Omineca tectostratigraphic belts of the Canadian Cordillera. The Western Intermontane Superterrane is represented by the Slide Mountain and Quesnel terranes. Together with the eastern autochthonous North American stratigraphy, these rocks form part of a southwestdipping homoclinal sequence. This sequence has been cut by a series of normal faults, which trend northeasterly. With the exception of the eastern pericratonic strata all of the rocks have been weakly metamorphosed.

The Wasi Creek Property is underlain by the pericratonic North American rocks of primarily carbonates and siliciclastics of miogeoclinal origin. These rocks include the Upper Proterozoic Ingenika Group consisting of impure quartzite, schist, phyllite, limestone, feldspathic wacke and arkosic sandstone. Overlying this Group is the Lower Cambrian to Middle Devonian Atan, Razorback, Echo Lake and Otter Lake Groups. These Groups consist of limestone, dolomite, shale, quartzite, and argillaceous limestone.

The Lower Cambrian to Middle Devonian limestone and dolomite host the zinc, lead and silver mineralization on the Wasi Creek Property.

PROPERTY GEOLOGY:

The Wasi Creek Property geology is a compilation from Cross Lake Minerals Ltd.'s 2001 exploration work, Cominco Ltd.'s 1990-1995 exploration programs and mapping completed by

the British Columbia Geological Survey as described in File Paper 1992-1. The paper is named "Geology of the Usilika Lake Area, Northern Quesnel Trough, B.C.", (94C/3, 4, 6) by F.Ferri, S. Dudka and C. Rees. The geological stratigraphy underlying the property are all Paleozoic in age ranging from Lower Cambrian to Mississippian.

The oldest rock units exposed in the claim area are the Lower Cambrian to Middle Devonian carbonates. The oldest is the Lower Cambrian Mount Kison Formation of the Atan Group. Overlying this unit are the Cambrian and Ordovician Razorback, Middle Ordovician to Lower Devonian Echo Lake Group and Middle Devonian Otter Lakes Group. This entire carbonate package consists of limestone, dolomite, lesser shale, quartzite and argillaceous limestone. The Atan and Razorback Groups are host to the mineralization on the Wasi Creek Property. Overlying the carbonates is the Upper Devonian to Lower Mississippian aged Big Creek Group. This Group consists of dark grey to blue grey shales, argillites and minor siltstones and siltite. The next oldest unit, the only major volcanic rock unit observed on the claims, is the Lower Mississippian-aged Dacitic Tuff Unit of the Lay Range Assemblage. This thick unit is only exposed on the northwest side of a major geological structure which is postulated to occur in the valley bottom of Wasi Lake and Wasi Creek. The rest of the Lay Range Assemblage is absent in the Wasi Creek Area.

Across Wasi Creek Valley, on the southeast side, is the youngest, Pennsylvanian-aged, Mount Howell Formation. This Formation consists of argillite, chert, gabbro and minor basalt, wacke and felsic tuff.

There are numerous carbonate-hosted zinc-lead-silver showings on the Wasi Creek Property but only the main showings, with the largest amount of exploration work will be discussed in this report. Three of the showings, the Duncan, Par and the Weber, that comprise the Par

mineralization which was the main focus of Cominco Ltd. are located from south to north over a two kilometre strike length. These showings are located along a fault structure, which may be the conduit of the mineralizing solutions and which strikes at approximately 330 degrees and dips east at 70 degrees. The fault and the three showings are all located on the east side of the major structural lineament located along the valley bottom of Wasi Creek and Lake. Cominco Ltd. completed the bulk of their exploration work in this area by completing the airborne and ground surveys, seven excavator trenches and 21 diamond drill holes exploring these mineralized structures. The mineralization is stratabound with most primary features obliterated by deformation. The sulphides consist of sphalerite, galena, pyrite and traces of tetrahedrite and grain size varies from fine grained at the Duncan showing to coarse-grained.

The Carrie 2 showing is located on the west side of the Wasi Valley structure near the northwest edge of the property. The showing was hand trenched, mapped and sampled by Cross Lake Minerals Ltd. during 2001. The mineralization consists of hydrozincite stained, oxidized, disseminated, fine-grained sphalerite, galena and pyrite hosted in brecciated dolomite and limestone with carbonate in-filling of fractures and open space.

One of the main reasons that Cross Lake Minerals Ltd. staked the Wasi Creek Property was to explore for the source of high grade massive sulphide boulders which were discovered during Cominco Ltd.'s trenching program in 1991. The sulphide boulders, 70 centimetres in size and angular, consist of layered massive sulphides consisting of galena, sphalerite and pyrite. Their location is shown on Plan No. WA-01-4. Cross Lake assayed two of these angular boulders with the following results:

Sample	Zn	Pb	Ag
Number	(%)	(%)	(g/t)
W-1	26.30	25.98	96.3
W-2	8.46	42.43	384.8

None of the drilling or trenching to date has intersected mineralization similar to the high grade boulders.

STREAM SEDIMENT SAMPLING RESULTS:

Stream sediments in the Wasi Creek area were sampled by the British Columbia Geological Survey in 1991 and the results are detailed in Open File 1992-11. There were four samples that were collected in the Wasi Creek Property area that are the highest in indicator and base metal elements minerals for the entire survey area. The stream sediment sample numbers are SS-018, SS-130, SS-203 and SS-304. The base metal source for the three anomalous samples, SS-018, 130 and 203, are most likely the Duncan and Par mineralized horizons an the east side of Wasi Creek. The sediment samples were collected from streams draining the basins where the mineralization is located.

The stream sediment sample SS-018, the highest in base metal elements of all of the stream sediment samples, was collected from a stream on the west side of Wasi Creek and south of any known mineralization. This stream is located near the volcanic tuff contact on the west side of the major structure located in the valley of Wasi Creek. This is an excellent geological environment for base metal deposition and a high priority target area for the possible source of the high grade base metal float boulders that were discovered when Cominco Ltd. was trenching. This area is also upstream and up-ice from the trenched area.

As a result of this base metal stream sediment anomaly of which the source is unknown, Cross Lake Minerals Ltd. sampled the same drainage in May for verification. The sediment sample was collected by using a long-handled shovel to collect stream sediment and screen the sediment through a -10 mesh screen and approximately 1 kilogram of the screened sediment placed into a plastic sample bag and shipped to ALS Chemex Laboratories in North Vancouver for analysis. The stream was sampled, sample W-01-1, at UTM coordinates of 6 218 885 N, 372 722 E at an elevation of 852 metres. The sample was collected in May when the creek was quite high. The sample was lower in base metal elements than the government sample but was still highly anomalous. The reason for the lower results is probably due to the fact that the sample was collected during high water during spring thaw. (for complete results for sample W-01-1 refer to Section D, Certificate of Analysis #A0117685)

TRENCH ROCK SAMPLING RESULTS:

The Carrie 2 showing on the Wasi Creek Property is located on the west side of the major structural lineament located along the south to north flowing Wasi Creek. It is situated on the west side of the OSI mineral claim and its location is shown on Plan No. WA-01-4. The UTM coordinates of the showing are 6 221 221 N, 373 766 E and the elevation is 920 metres above sea level. The showing is located in a dead vegetation zone on the heavily timbered east slope of a prominent 530 metre high limestone mound. The mineralization consists of hydrozincite stained, oxidized, disseminated, fine-grained sphalerite, galena and pyrite hosted in brecciated dolomite and limestone with carbonate in-filling of fractures and open space.

The first phase of hand trenching was completed at the end of May, 2001 and the second phase of hand trenching was completed in late June, 2001. The trenches were excavated on the steep slope using shovels, picks and pelican picks. The depth of the first trench was approximately one metre and five metres long. The second trench was an extension of the first and it was excavated to a depth of 2.0 metres and for a length of ten metres. The rock samples were collected with a hammer and moil and placed in a plastic sample bag and shipped to ALS

Chemex in North Vancouver for analysis. The first hand trench exposed the Carrie 2 mineralization for a width of five metres. The weighted average of the five metres assayed 5.05% zinc, 0.75% lead and 21.7g/t silver.

Sample	Type of Sample	Length	Zn	Pb (nnm)	Ag (nnm)
<u>1902107</u>	Baalt ahim		40200	<u> </u>	16.6
203107	ROCK Chip	1.0	49200	00390	10.0
203108	Rock chip	1.0	/8300	9920	21.0
203109	Rock chip	3.0	41700	6990	23.4
For complete	results see ALS C	hemex analytica	l reports A011	7686 and A01	17970

The second phase of hand trenching was completed to extend the first trench because both ends of the first trench were still in mineralization. The second phase of hand trenching exposed mineralization which the weighted assay average is 5.01% zinc, 0.89% lead and 18.0g/t silver over a width of ten metres.

	Ca	rrie 2 Trench -	- 2 nd Phase		· · ·
Sample Number	Type of Sample	Length (metres)	Zn (ppm)	Pb (ppm)	Ag _(ppm)
203251	Rock chip	2.0	23600	1160	8.2
203252	Rock chip	2.0	48100	4210	14.2
203253	Rock chip	2.0	91500	30300	38.2
203254	Rock chip	2.0	46000	2830	11.2
203255	Rock chip	2.0	41200	6510	18.4
203256	Grab	Grab	31100	56400	176.0
* For complete appended in Sec	results see ALS C tion D.	hemex analytica	ll reports A011	9776 and A01	20625

The samples were continuous two metre rock chip channel samples except for S#203256 which was a selected grab of the oxidized lenses. This trench ended in mineralization as well. The full width and height or depth of the mineralization has not been determined. Polished rock sections were made on representative samples from the trench for examination. The polished sections



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were helpful to identify the carbonate breccia with angular fragments up to 3 centimetres in size and angular sulphide fragments consisting of pyrite, galena and sphalerite up to 1.0 centimetre in size. The breccia host has been totally re-sealed with carbonate flooding. Mechanical excavation would be the recommended method to further explore the Carrie 2 showing. (Refer to Plan No. WA-01-5 for trench details and for sample results)

CONCLUSIONS:

- The Wasi Creek Property, owned 100% by Cross Lake Minerals Ltd., covers an extensive belt of Lower Cambrian to Middle Devonian limestone and dolomite which is the host to several base metal showings.
- Access to the property is excellent due to the extensive logging that has occurred on and around the claims.
- There are three mineralized showings on the east side of Wasi Creek. The valley bottom of the creek hosts a major geological structure.
- The three showings from south to north, named Duncan, Par and Weber, are all on the same mineralized fault controlled structure which strikes at approximately 330 degrees and dips east at 70 degrees.
- This area was the focus of Cominco Ltd.'s extensive exploration programs from 1990 to 1995. The trenching and drilling intersected the favorable base metal horizon with promising results.
- The Cominco trenching discovered angular float boulders of exceptional grade in zinc, lead and silver of which the source has not been found.

- The British Columbia Geological Survey completed a stream sediment sampling program in the area and the four highest sediment values in base metal elements were collected from drainages in the Wasi Creek Property area.
- The source of three of the stream sediment samples are concluded to have been the known mineralized horizon on the east side of the Wasi Creek structure.
- One of the highest stream sediment samples was collected from a tributary on the west side of Wasi Creek, the opposite side of the Wasi Creek structure near a volcanic tuff unit contact, a favorable geological environment for base metal deposition.
- The source of the stream sediment anomaly has not been discovered and it is upstream and up-ice of the extremely high grade angular massive sulphide boulders discovered in Cominco's trenching program of which the source has yet to be found.
- The hand trenching of the Carrie 2 showing on the west side of the Wasi Creek structure resulted in promising assays of zinc, lead and silver over a ten metre width where the mineralization is still open in all directions.

RECOMMENDATIONS:

The Wasi Creek Property covers a favorable geological environment for the possibility of a discovery of a significant carbonate-hosted zinc-lead-silver deposit. The property covers a large area with targets at different stages of exploration.

The area south of the Duncan showing should be intensely prospected, mapped and sampled because the grades of the mineralization and widths intersected during Cominco's drilling were more promising in this direction.

The area in the vicinity of the stream sediment anomaly, on the west side of the Wasi Creek structure, should be prospected, mapped and the creek sediment sampled at 100 metre intervals upstream to locate the source of the anomaly. There should be special attention paid to the volcanic tuff unit and its contacts in this area. The new logging roads on the east and west sides of the Wasi Creek valley should be prospected and mapped because there may be undiscovered mineralization outcropping along the newly constructed roads.

The Carrie 2 showing should have a road constructed to it and the showing extensively trenched up and down the slope. Once the geometry of the mineralization is verified the base metal target should be diamond drilled.

The main two kilometre long Duncan, Par and Weber horizon should be explored on its west side, closer to the structure along the bottom of Wasi Creek valley. There should be drilling completed in a westerly direction under Wasi Creek to test if this Wasi Creek structure is mineralized as is the fault controlling the Duncan, Par and Weber mineralization. An airborne Electromagnetic Survey should be completed south of the intersection of the Duncan, Par and Weber mineralized structure that may be mineralized. This area is up-ice and upstream of the area where the high grade, angular, massive sulphide boulders were discovered during Cominco's trenching program.

Respectfully submitted, PROVINCE M. MILLER-TAIT .lim/Miller-Tait. P.Geo.

LIST OF REFERENCES:

Ferri F., Dudka S., Rees C. Geology of the Usilika Lake Area, Northern Quesnel Trough, B.C. (94C/3, 4, 6) British Columbia Geological Survey Geological Fieldwork 1991, Paper 1992-1.

Ferri F., Dudka S., Rees C., Meldrum D., Willson M., Geology, Geochemistry and Mineral Occurrences of the Usilika Lake Area, B.C. (94C 3, 4 and 6). British Columbia Geological Survey Open File 1992-11.

Gabrielse, H., Unpublished GSC Map of the Mesilinka Map Area, 94C.

Mansy, J.L. and Gabrielse, 1978. Stratigraphic Terminology and Correlation of Upper Proterozoic Rocks in Omineca and Cassiar Mountains, North-Central B.C., GSC Paper 77-19.

Melville D.M. Carbonate-Hosted Lead-Zinc Occurrences in the Germansen Landing and End Lake Areas (94C 2, 93N/15). British Columbia Geological Fieldwork Exploration in British Columbia 1989, Pages 193 to 196.

Roots, E.F., 1954. Geology and Mineral Deposits of the Aiken Lake Map Area, B.C., GSC Memoir 274.

STATEMENT OF QUALIFICATIONS:

For: Jim Miller-Tait of 828 Whitchurch Street, North Vancouver, B.C. V7L 2A4

I graduated from the University of British Columbia with a Bachelor of Sciences Degree in Geology (1987);

I have been practicing my profession as a geologist in mineral exploration and mining continuously since 1987;

I am a fellow in good standing with the Geological Association of Canada;

I am a registered member in good standing as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia;

The observations, conclusions and recommendations contained in the report are based on field examinations, personal sampling, and the evaluation of results of the exploration programs completed by the owner and operator of the property.

SECTION B: PROPERTY

WASI CREEK	SCHEDULE OF MINERAL CLAIMS								
PROVINCE: British Columbia	CLAIMS: 11	UNITS: 6	6	AREA: 1650 ha					
MINING DIVISION: Omineca	NTS: 94C/03E	NTS: 94C/03E BCG:							
LOCATION: on the south side of the Osilinka	LATITUDE: 56°	7.5'	LON	ONGITUDE: 125° 01'					
River some 200 km northeast of Smithers,	UTM: ZONE 10	6 221 5	00N	374 500E					
150 km northwest of Mackenzie and 43 km	PROPERTY INT	EREST:							
north northwest of Germansen Landing	Cross Lake Minerals Ltd. – 100%								
MAP SHEET (1:250 000): 94C - Mesilinka River									
(1:50 000): 94C/03 - Uslika Lake									

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CLAIM	TENURE	UNITS	RECORD	DUE DATE	ANNUAL	RECORDED
INAME	TUCATDEA		(yyyy-mm-dd)	(3333 000)	REQUIRED	
OSI	379604	20	2000-07-25	2002-07-25	\$2000.00	Cross Lake Minerals Ltd.
TM I	386919	01	2001-05-28	2002-05-28	100.00	Cross Lake Minerals Ltd.
TM 2	386920	01	2001-05-28	2002-05-28	100.00	Cross Lake Minerals Ltd.
ТМ 3	386921	01	2001-05-28	2002-05-28	100.00	Cross Lake Minerals Ltd.
TM 4	386922	01	2001-05-28	2002-05-28	100.00	Cross Lake Minerals Ltd.
TM 5	386923	01	2001-05-28	2002-05-28	100.00	Cross Lake Minerals Ltd.
TM 6	386924	01	2001-05-28	2002-05-28	100.00	Cross Lake Minerals Ltd.
C 1	387799	01	2001-07-01	2002-07-01	100.00	Cross Lake Minerals Ltd.
C 2	387800	01	2001-07-01	2002-07-01	100,00	Cross Lake Minerals Ltd.
OSI 2	390515	18	2001-10-19	2002-10-19	1800.00	Cross Lake Minerals Ltd.
OS1 3	390516	20	2001-10-19	2002-10-19	2000.00	Cross Lake Minerals Ltd.
	1					
		66			\$6600.00	

ASSESSMENT WORK SUMMARY

Date of Filing (yyyy-mm-dd)	Work Filed S	New Work Applied \$	PAC Credits Applied	PAC Credits Saved	Total PAC Credits	Date of Approval (yyyy-mm-dd)	Event Number
2001-01-24	2000.00	2000.00	0	0	_	2001-01-24	3159811

SECTION C: EXPENDITURES – Wasi Creek Property

Item	Work Performed	Quantities / Rates	Amount
Project Geologist:	Supervision, hand trenching,		
J. Miller-Tait, P.Geo.	sampling and mapping.		
i	Period: May 17-28, 2001	4 days @ \$350.00	\$1400.00
	June 23-July 4, 2001	3 days @ \$350.00	<u>1050.00</u>
į		· · · · · · · · ·	2450.00
Field Geologist:	Hand trenching, sampling and		
C. Church	geological mapping		
! :	Period: May 17-28, 2001	4 days @ \$267.50	1070.00
Consulting Geologist:	Property visit and review of		
T.W. Muraro, P.Geo.	work program during the		
	period: May 17-28, 2001	1 day @ \$535.00	535.00
Field Assistants:	Hand trenching and sampling		(
F. Tait	Period: June 23 to July 4, 2001	2.5 days @ \$250.00	625.00
M. Russell	June 23 to July 4, 2001	2.5 days @ \$200.00	500.00
T. Klausen	June 23 to July 4, 2001	2.5 days @ \$150.00	375.00
·			1500.00
Transportation:	4x4 pickup trucks: Units		010.00
Vancouver to	Period: May 17-28, 2001 (2)	8 days @ \$105.00	840.00
property, onsite and	$\int Jun 23 - Jul 4, 2001 (2)$	6 days @ \$105.00	<u>630.00</u>
return			1470.00
Accommodation and	Period:	Man days (a) \$35.00	215.00
Meals	May 17-28, 2001	9	315.00
	June 23-July 4, 2001	10.5	<u>307.30</u> (82.50
			682.50
Field Supplies	Camp materials and sampling	1	
	supplies for the period:	1 	100.07
	May 17-28, 2001		120.27
	June 23-July 4, 2001		247.98
A 1 / 10	<u> </u>	· · · · · · · · · · · · · · · · · · ·	
Analytical Services:	ICD A ES 22 alament analyses	12 @ \$22 100	201.44
ALS Chemex Labs	ICP-AES 32 element analyses	15 @ \$25.188	501.44
. Comineo Leh	A serving and real realishing	2 @ \$56.17	112.24
Cominco Lao	Assaying and fock polisning	2 (0) \$30.17	<u>112.34</u> /12.79
Papart and Man	L Miller Tait, P.Goo	3 days @ \$250.00	1050.00
Preparation:	5. WINCI-LAN, F.CEO.	5 uays (10 \$350.00	1000.00
Total	· · · · · · · · · · · · · · · · · · ·		£0520 52
1 U(A)			97.337.33

Expenditure Apportionment:

Claim	Samples	% of Total	Expenditure
OSI	15	100.0	\$9539.53

SECTION D: ANALYTICAL RESULTS

- 1. Analyses carried out by ALS Chemex Labs of North Vancouver, B.C.
 - Certificate of Analysis #A0117685 dated June 7, 2001
 - Certificate of Analysis #A0117686 dated June 7, 2001
 - Certificate of Analysis #A0117970 dated June 8, 2001
 - Certificate of Analysis #A0119776 dated July 16, 2001
 - Certificate of Analysis #A0120625 dated July 18, 2001
 - Statement of Analytical Procedures

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- 2. Analyses carried out by Cominco Ltd. Exploration Research Laboratory
 - Certificate of Analysis #V01-0217R dated June 12, 2001



ALS Chemex

Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

CERTIFICATE A0117685 (NWT) - CROSS LAKE MINERALS LTD. SWAMPELL /WASI INGENIKA Project: P.O. # : "umples submitted to our lab in Vancouver, BC. is report was printed on 11-JUL-2001. SAMPLE PREPARATION METHOD NUMBER CODE SAMPLES DESCRIPTION 201 42 Dry, sieve to -80 mesh 202 42 save reject 229 42 ICP - AQ Digestion charge NOTE

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W. o: CROSS LAKE MINERALS LTD.

240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6

Comments: ATTN: JIM MILLER-TAIT

	NUMBER	DESCRIPTION	METHOD	DETECTION	UPPEF LIMIT
Ag-ICP41	42	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
A1-ICP41	42	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
As-ICP41	42	As ppm: 32 element, soil & rock	ICP-AES	2	10000
B-ICP41	42	B ppm: 32 element, rock & soil	ICP-AES	10	10000
Ba-ICP43	47	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
Be-ICP41		Be prm: 32 element, soll & rock	ICP-AES	0.5	100.0
Ce-TCP41	42	Ca 2, 12 element soil & rock	ICP-ADD	0.01	15 00
Cd-ICP41	42	Cd num: 32 element. soil & rock	ICP-AES	0.5	500
Co-ICP41	42	Co prm: 32 element, soil & rock	ICP-AES	1	10000
Cr-ICP41	42	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
Cu-ICP41	42	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
Fo-ICP41	42	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
Ga-ICP41	42	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
Hg-ICP41	42	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
K-ICP4	42	K %1 33 element, soll & rock	ICP-AES	0.01	10.0
La-ICP41		La ppm: 32 element, soll & rock	ICP-AES	10	1000
Ma-TCP41	1 12	ing at 52 diement, soil & fock	TCD-1PG	6.UI	1000
Mo-TCP41		Mo pom: 32 element, soil & rock	TCP-AES	1	1000
Na-ICP4	42	Na %: 32 element, soil & rock	ICP-AES	0.01	10.0
Ni-ICP4	i 42	Ni ppm: 32 element, soil & rock	ICP-AES	1	1000
P-ICP4	42	P ppm: 32 element, soil & rock	ICP-AES	10	1000
Pb-ICP42	L [42	Pb ppm: 32 element, soil & rock	ICP-MES	2	1000
S-ICP4:	42	S %: 32 element, rock & soil	ICP-AES	0.01	10.0
SD-ICP4	42	Sb ppm: 32 element, soil & rock	ICP-AES	2	1000
SC-ICP4	L 42	Sc ppm: 32 elements, soil & rock	ICP-AES	1	1000
ST-ICP4		Sr prm: 32 element, soil & rock	ICP-AES	1	1000
TI+ICP4.		TI 5; JZ element, soll & rock	ICP-AES	0.01	10.0
IL-ICPS		I por 32 element, soil & rock	TCD-AES	10	1000
V-ICP4	1 42	V ppmi 32 element, soil 4 rock	ICP-AES	1	1000
W-ICP4	1 42	W ppm: 32 element, soil & rock	ICP-AES	10	1000
2	1 42	To poor 30 alamant and 1 t mark		-1	

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Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT Page N er :2-A Total Pages :2 Certificate Date: 07-JUN-2001 Involce No. : 10117685 P.O. Number : Account : NWT

								·		CE	RTIFI	CATE	OF A	NAL	(SIS	A	0117	685		
SAMPLE	PREP CODE	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca १	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
<u>5+500W</u> W-01-1	201 202 201 202	< 0.2 0.2	1.41 0.76	18 26	< 10 < 10	60 810	0.5 < 0.5	< 2 < 2	0.34 3.12	< 0.5 5.5	23 9	42 20	40 86	3.62 3.37	< 10 < 10	< 1 < 1	0.13 0.09	10 < 10	1.51 1.56	540 905
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Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT

Page N er :2-B Total Pages :2 Certificate Date: 07-JUN-2001 Invoice No. : 10117685 P.O. Number : Account :NWT

											CERTIFICATE OF ANALYSIS						4	40117685	
SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	T1 ppm	U PPm	V ppm	W mqq	Zn ppm		
S+500W W-01-1	201 20 201 20	2	< 1 < 19 <	0.01 0.01	129 85	470 3430	14 204	0.01 0.10	< 2 6	3 2	22 460	0.05 0.01	< 10 < 10	< 10 < 10	27 118	< 10 < 10	64 1275		
2																			
					<u> </u>													$\left(\right)$	
															CERTIFI		•		C.

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240 - 800 W, PENDER ST, VANCOUVER, BC V6C 2V6

Comments: ATTN: JIM MILLER-TAIT

CERTIFICATE A0117686			ANALYTICAL PROCEDURES										
IWT) - CROSS	S LAKE M ENIKA	INERALS LTO).	METHOD CODE	NUMBER SAMPLES	DESCRIPTION	METHOD		UPPER LIMIT				
amples submi is report t	itted to was pri:	o our lab i ated on 11-	n Vancouver, BC. -JUL-2001.	Ag-ICP41 Al-ICP41 As-ICP41 B-ICP41 Ba-ICP41 Be-ICP41 Bi-ICP41	6 6 6 6 5	Ag ppm: 32 element, soil & rock Al %: 32 element, soil & rock As ppm: 32 element, soil & rock B ppm: 32 element, rock E soil Ba ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock Bi ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	0.2 0.01 2 10 10 0.5 2	100.0 15.00 10000 10000 10000 100.0				
S/			RATION	Ca-ICP41 Cā-ICP41	6	Ca %: 32 element, soil & rock Cd ppm: 32 element, soil & rock	ICP-AES ICP-AES	0.01 0.5	15.00 500				
				Co-ICP41 Cr-ICP41 Cu-ICP41	6 6	Co ppm: 32 element, soil & rock Cr ppm: 32 element, soil & rock Cu ptm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES	1 1 1	10000 10000 10000				
METHOD CODE	NUMBER SAMPLES		DESCRIPTION	Pe-ICP41 Ga-ICP41 Hg-ICP41	6 6 6	Fe %: 32 element, soil & rock Ga ppm: 32 element, soil & rock Hg ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES	0.01 10 1	15.00 10000 10000				
205 226 3202 229	6 6 6	Geochem ri 0-3 Kg cru Rock - sav ICP - AQ D	ng to approx 150 mesh sh and split e entire reject igestion charge	K-ICP41 La-ICP41 Mg-ICP41 Mn-ICP41 Mo-ICP41	6 6 6 6	K %: 32 element, soil & rock La ppm: 32 element, soil & rock Mg %: 32 element, soil & rock Mn ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	0.01 10 0.01 5 1	10.00 10000 15.00 10000 10000				
				Na-ICP41 Ni-ICP41 P-ICP41 Pb-ICP41 S-ICP41	6 6 6 6	Na %: 32 element, soil & rock Ni ppm: 32 element, soil & rock P ppm: 32 element, soil & rock Pb ppm: 32 element, soil & rock S %: 32 element, rock & soil	ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	0.01 1 10 2 0.01	10.00 10000 10000 10000				
				Sb-ICP41 Sc-ICP41 Sr-ICP41	6 6	Sb ppm: 32 element, soil & rock Sc ppm: 32 elements, soil & rock Sr ppm: 32 elements, soil & rock	ICP-AES ICP-AES ICP-AES	2	10000				
NOTE 1:	,			TI-ICP41 T1-ICP41 U-ICP41	6	Ti %: 32 element, soil & rock Tl ppm: 32 element, soil & rock	ICP-AES ICP-AES	0.01	10.00				
te 32 eleme ace metal lements for igestion is 1, Be, Ca,	nt ICP s in which possib Cr. Ga.	package is soil and the nitr ly incompl K. La. Mg	suitable for rock samples. ic-aqua regia eto are: A1, . Na. Sr. Ti.	V-ICP41 W-ICP41 Zn-ICP41	6 6 6	V ppm: 32 element, soil & rock W ppm: 32 element, soil & rock Zn ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES ICP-AES	10 10 2	10000 10000 10000 10000				
L, W.				• · ·									

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To: CROSS LAKE MINERALS LTD.

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Page Miniber : 1-A Total is :1 Certificate Date: 07-JUN-2001 Invoice No. : 10117686 P.O. Number Account :NWT

Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT

										CERTIFICATE OF ANALYSIS					rsis	A0117686					
SAMPLE	PRI CO	ep De) Ag	እ1 %	As ppm	B ppm	Ba ppm	Be p <u>pm</u>	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K ጜ	La ppm	Mg %	Mn ppm
203107 203108 203109 203461 203462	205 205 205 205 205 205	226 226 226 226 226 226	16.6 21.6 23.4 8.6 9.4	0.04 0.03 0.04 0.01 < 0.01	24 76 68 96 180	< 10 < 10 < 10 < 10 < 10 < 10	20 20 70 < 10 60	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 6 24	13.20 12.05 12.60 10.10 0.34	206 324 167.0 58.5 33.5	1 1 < 1 < 1	< 1 < 1 < 1 < 1 6	4 22 37 < 1 11	2.28 5.00 4.78 10.85 >15.00	10 10 10 < 10 < 10	39 < 105 < 56 < 6 < < 1	0.01 0.01 0.01 0.01 0.01 0.01	< 10 < 10 < 10 < 10 < 10 < 10	8.86 8.02 8.48 6.41 0.23	265 345 340 150 20
203463	205	226	11.2	< 0.01	42	< 10	< 10	< 0.5	< 2	11.70	82.0	< 1	< 1	< 1	5.62	< 10	9 <	0.01	< 10	7.13	160
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Α Aurora Laboratory Services Ltd. Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

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240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6

Page Number : 1-B Total is : 1 Certificate Date: 07-JUN-2001 : 10117686 Invoice No. P.O. Number : Account NWT

Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT

									CERTIFICATE OF ANALYSIS A0117686														
SAMPLE	PRI COI	2P DE	5	Mo		Na %	Ni ppm	P Ppm	F	Pb	S *	Sb ppm	Sc ppm	Sr ppm	T1 %	Tl ppm	U PPM	D. A	ppm W	Zn ppm			
203107 203108 203109 203461 203462	205 205 205 205 205 205	226 226 226 226 226 226	* * *		: 0. : 0. : 0. : 0. : 0.	01 01 01 01 01	5 6 6 < 1 < 1	90 160 120 70 < 10	63 99 69 23 12	190 220 190 190 1955	1.13 3.54 1.54 1.56 0.53	14 26 42 10 30	< 1 < 1 < 1 < 1 < 1 < 1	39 < 45 < 52 < 19 < 8 <	0.01 0.01 0.01 0.01 0.01 0.01	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 10	< 1 < 1 1 4 5	< 10 < 10 < 10 < 10 < 10 < 10	>10000 >10000 >10000 >10000 >10000			
203463	205	226		:1 4	: 0.	01	< 1	50	84	190	1.55	12	< 1	19 <	0.01	< 10	< 10	1	< 10	>10000			
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240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6

Comments: ATTN: JIM MILLER-TAIT

CERT	IFICA	TE A0117970	ANALYTICAL PROCEDURES											
(NWT) - CROSS Project: ING	ENIKA	INERALS LTD.	METHOD CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION	upper Limit						
Samples submi is report w	itted to vas pri:	o our lab in Vancouver, BC. nted on 11-JUL-2001.	Zn-AA46	6	Zn %: Conc. Nitric-HCl dig'n	ХЛS	0.01	50.0						
SA	MPLE	PREPARATION												
METHOD CODE	NUMBER SAMPLES	DESCRIPTION												
212	6	Overlimit pulp, to be found												
1														
						· · · · · · · · · · · · · · · · · · ·								

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Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT Page ber :1 Total Pages :1 Certificate Date: 08-JUN-2001 Invoice No. :10117970 P.O. Number : Account :NWT

		CERTIFICATE OF ANALYSIS A0117970									
SAMPLE	PREP CODE	Zn %									
203107 203108 203109 203461 203462	212 212 212 212 212 212	4.92 7.83 4.17 2.84 2.45									
203463	212	3.21				· · · · · · · · · · · · · · · · ·					
			Ì								
							- - -				
									.02	$ \bigcirc -$	1 -
							(ERTIFICATION	N/	N-Wind	3



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) - CROSS	LAKE M	INERALS LTD.
t WAS	SI	
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es submi report w	tted to	our lab in Vancouver, BC.
SA	MPLE	PREPARATION
METHOD		DESCRIPTION
UUDL		
L09-22	6	Samples received without barcode
CRU-31	6	Crush to 70% minus 2mm
PUL-31	6	Pulv. <250g to >85%/-75 micron
ST0-21	6	Reject Storage-First 90 Days
229	6	ICP - AQ Digestion charge
1		
4		

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Ba, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, T1, W. : CROSS LAKE MINERALS LTD.

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Comments: ATTN: JIM MILLER-TAIT

	METHOD CODE	NUMBER	DESCRIPTION	METHOD	DETECTIÓN LIMIT	UPPEF LIMIT
-	1433	6	Weight in kilograme	BIINCE	0.01	1000 0
	λυ-λλ23	6	Au-AA23 : Au ppb: Fuse 30 grams	PA-AAS	5	10000
1	Ag-ICP41	6	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
1	A1-ICP41	6	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
	As-ICP41	6	As ppm: 32 element, soil & rock	ICP-AES	2	10000
	B-ICP41	6	B ppm: 32 element, rock & soil	ICP-AES	10	10000
	Ba-ICP41	6	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
	BO-ICP41	6	Be prus 32 element, soil & rock	ICP-AES	0.5	100.0
	B1-1CP41	2	Bi pim: 32 element, soli & rock	ICP-AES	2	10000
1	C4-10241	e e	Cd war 22 element, soil & rock	TCP-AES	0.01	15.00
1	Co-TCP41	6	Co man 32 element, soll & rock	ICP-AES	0.5	1000
	Cr-TCP41	6	Cr prm: 32 element, soil & rock	TCP-ARG	1	10000
	Cu-ICP41	6	Cu pran 32 element, soil & rock	ICP-ARS	1	10000
L	Fe-ICP41	5	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
	Ga-ICP41	6	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
	fig-ICP41	6	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
	K-ICP41	6	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
	La-ICP41) 6	La ppm: 32 element, soil & rock	ICP-AES	10	10000
	Mg-ICP41	6	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
	Mn-ICP41	6	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
	MO-ICP41	2	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
Т	NA-ICPAI Ni-TODAI	2	NE %: 32 Clement, Soll & rock	ICP-AES	0.01	10.00
	D_TCD/1	6	INI ppm: 34 Clement, soil & rock	ICP-AES	1	10000
	Ph-TCD41	6	P pont 32 element, goll & rock	ICP-AKS	10	10000
1	S-TCP41		is k: 32 element rock & soil	107-ADS	A 01	10000
	Sb-ICP41	6	Sb pro: 32 element. soil & rock	107-129 107-129	0.01	10000
	Sc-ICP41	6	Sc ppm: 32 elements, soil & rock	ICP-ARS	1	10000
	Sr-ICP41	6	Sr ppm: 32 element, soil & rock	ICP-AES	+ 1	10000
	TI-ICP41	6	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
	T1-ICP41	6	T1 ppm: 32 element, soil & rock	ICP-AES	10	10000
	U-ICP41	6	U ppm: 32 element, soil & rock	ICP-AES	10	1000
	V-TCP41) 6	V provi 32 element, soil & rock	TCD_170	4	1000

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A0119776

Comments: ATTN: JIM MILLER-TAIT

CERTI	re A0119776		ÁNALYTICAL PROCEDURES 2 of 2											
NWT) - CROSS Project: WAS	LAKE M	NERALS LTD.	N	AETHOD CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT					
amples submi ls report w	tted to as prin	o our lab in Vancouver, BC. ated on 16-JUL-2001.		W-ICP41 Zn-ICP41	6	W ppm: 32 element, soil & rock Zn ppm: 32 element, soil & rock	ICP-AES ICP-AES	10 2	10000 10000					
SA	MPLE	PREPARATION												
METHOD CODE	NUMBER SAMPLES	DESCRIPTION												
LOG-22 CRU-31 SPL-21 PUL-31 BTO-21 229	6 6 6 6	Samples received without bard Crush to 70% minus 2mm Splitting Charge Pulv. <250g to >85%/-75 micro Reject Storage-First 90 Days ICP - AQ Digestion charge	n											
* NOTE 1:														
The 32 element trace metals Elements for digestion is Ba, Be, Ca, (Tl, W.	ht ICP s in which possib Cr, Ga,	package is suitable for soil and rock samples. the nitric-aqua regia ly incomplete are: Al, K, La, Mg, Na, Sr, Ti,	•											



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240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 Page / ber : 1-A Total F. Js : 1 Certificate Date: 16-JUL-2001 Invoice No. : 10119776 P.O. Number : Account : NWT

Project : WASI Comments: ATTN: JIM MILLER-TAIT

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SAMPLE	PREI CODI	2	Weight Kg	λυ ppb Fλ+λλ	λg ppm	A1 %	λs ppm	B ppm	Ba ppm	Be ppn	Bi ppm	Ca %	Cd ppm	Co ppm	Ĉr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	К %	La ppm
203251 203252 203253 203254 203255	9400 9400 9400 9400	267 267 267 267 267 267	1.22 1.58 2.40 1.46 1.54	< 5 < 5 < 5 < 5 < 5	8.2 14.2 38.2 11.2 18.4	0.06 0.04 < 0.01 0.09 0.01	38 30 38 54 38	< 10 < 10 < 10 < 10 < 10 < 10	40 30 30 50 30	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	12.45 12.85 11.40 12.40 12.80	77.5 233 374 199.5 233	1 1 1 1 1	1 < 1 < 1 < 1 < 1	22 28 70 39 32	4.66 2.74 2.71 4.46 2.65	< 10 < 10 < 10 < 10 < 10 < 10	31 72 119 52 66	0.01 0.01 < 0.01 0.01 < 0.01 < 0.01	< 10 < 10 < 10 10 < 10
203256	9400 2	267	0.54	5	>100.0	< 0.01	358	< 10	50	1.0	< 2	3.73	145.5	3	< 1	91	>15.00	40	311	0.02	< 10
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Project : WASI Comments: ATTN: JIM MILLER-TAIT

Page / ber : 1-B Total Pages : 1 Certificate Date: 16-JUL-2001 Invoice No. : 10119776 P.O. Number : Account INWT

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SAMPLE	PRI COI	SP DE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P D <u>Dm</u>	Pb prm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W	Zn ppm	
203251 203252 203253 203254 203255	9400 9400 9400 9400 9400	267 267 267 267 267 267	8.65 8.95 7.71 8.65 8.76	440 365 295 400 465	1 < 1 < 1 1 < 1 <	0.01 0.01 0.01 0.01 0.01 0.01	7 6 7 5	140 170 140 180 190	1160 4210 >10000 2830 6510	0.90 2.51 6.14 0.89 1.76	20 26 80 28 34	< 1 < 1 < 1 < 1 < 1 < 1	57 < 56 < 43 < 52 < 69 <	0.01 0.01 0.01 0.01 0.01 0.01	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	2 < 1 < 1 3 < 1	< 10 < 10 < 10 < 10 < 10 < 10	>10000 >10000 >10000 >10000 >10000 >10000	
203256	9400	267	2.49	225	< 1 <	0.01	5	190	>10000	0.70	250	< 1	45 <	0.01	< 10	< 10	5	30	>10000	
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240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 A¹⁴⁰ 7.9.7001

A0120625

Comments: ATTN: JIM MILLER-TAIT

CERTI	FICAT	TE A0120625		ANALYTICAL PROCEDURES					
NWT) - CROSS Project: WAS	LAKE M	INERALS LTD.	METHOD CODE	NUMBER	DESCRIPTION	METHOD	DETECTION LIMIT	Upper Limit	
20.#: Samples submi .s report w	tted to	o our lab in Vancouver, BC. nted on 18-JUL-2001.	Ад- лл4 РБ-АА4 2n-дл4	5 1 5 2 6 6	Ag g/t: Conc. Nitric HCl dig'n Pb %: Conc. Nitric-HCl dig'n Zn %: Conc. Nitric-HCl dig'n	AAS AAS AAS	1 0.01 0.01	1500 50.0 50.0	
SA	MPLE								
METHOD CODE	NUMBER SAMPLES	DESCRIPTION							
212	6	Overlimit pulp, to be found							
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ALS Chemex

Aurora Laboratory Services Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 : CROSS LAKE MINERALS LTD.

240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6

Project : WASI Comments: ATTN: JIM MILLER-TAIT Page 1 ber :1 Total F. 35 :1 Certificate Date: 18-JUL-2001 Invoice No. :10120625 P.O. Number : Account :NWT

CERTIFICATE OF ANALYSIS A0120625 PREP Ag Pb Zn SAMPLE CODE % g/t % 203251 212 ---____ 2.36 ----203252 212 _ _ 4.81 ----____ 203253 212 -----3.03 9.15 ----203254 212 _ _ 4.60 ---___ 203255 212 --4.12 ___ _ _ _ _ _ 203256 212 ---176 5.64 3.11

OVERLIMITS from A0119776

CERTIFICATION:



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ALS Chemex

Aurora Laboratory Services Ltd. Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 1: CROSS LAKE MINERALS LTD.

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Project : WASI Comments: ATTN: JIM MILLER-TAIT Page ber :1 Total : Jes :1 Certificate Date: 18-JUL-2001 Invoice No. : 10120625 P.O. Number : Account : NWT

SAMPLE PREP CODE Ag (y/t) Pb % Zn % Image: Control of the system Image: Controw of the system Image: Controwof			_			CERTIFICAT	E OF ANALYSIS	A012	20625	
03351 03353 03254 03255 212 212 212 212 212 212 212 212 212 212	SAMPLE	PREP CODE	Ag Ph g/t %	5 Zn %						
03256 212 176 5.64 3.11	203251 203252 203253 203254 203255	212 212 212 212 212 212		3.03	2.36 4.81 9.15 4.60 4.12					
	203256	212	176	5.64	3.11					
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212 Brooksbank Avenue North Vancouver, BC Canada V7J 2C1

Phone 604-984-0221 Fax 604-984-0218

FACSIMILE MESSAGE

To:	CROSSLAKE MINERALS	From: Stuart Mcleod
Name:	Jim Miller Tait	Pages: 6 (including this page)
Fax:	688 - 5443	Date: January 14, 2000
Re:	Analytical methods used .	

Dear Mr. Jim Miller Tait,

Please find attached 5 pages regarding the analytical methods we used to analyze your samples.

Please let me know if you need anything else.

Thank You Stuart Mcleod.

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★ Geochemical Procedure - G32 Package

Sample Decomposition: Nitric Aqua Regia Digestion Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)

A prepared sample (1.00 gram) is digested with concentrated nitric acid for at least one hour. After cooling, hydrochloric acid is added to produce aqua regia and the mixture is then digested for an additional hour and a half. The resulting solution is diluted to 25ml with demineralized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. The analytical results are corrected for inter-element spectral interferences.

Chemex				Detection	Upper
<u>Code</u>		Element	<u>Symbol</u>	<u>Limit</u>	Limit
229		ICP-AQ Digestion	n/a	n/a	n/a
2119	*	Aluminum	Al	0.01%	15 %
2141		Antimony	Sb	2 ppm	1%
2120		Arsenic	As	2 ppm	1%
2121	٠	Barium	Ba	10 ppm	1%-
2122	*	Beryllium	Be	0.5 ppm	0.01 %
2123		Bismuth	Bi	2 ppm	1%
557		Boron	В	10 ppm	10,000 ppm
2125		Cadmium	Cd	0.5 ppm	0.05 %
2124	*	Calcium	Ça	0.01%	15 %
2127	+	Chromium	Cr	1 ppm	1%
2126		Cobalt	Co	1 ppm	1%
2128		Copper	Cu	1 ppm	1%
2130	*	Gallium	Ga	10 ppm	1 %
21 50		Iron	Fe	0.01%	15 %
2151		Lanthanum	La	10 ppm	1 %
2140		Lead	Рb	2 ppm	1%
2134	*	Magnesium	Mg	0.01%	15 %
2135		Manganese	Mn	5 ppm	1 %
2131		Mercury	Hg	1 ppm	1 %
2136		Molvbdenum	Mo	1 ppm	1 %
2138		Nickel	Ni	1 ppm	1%
2139		Phosphorus	Р	10 ppm	1 %
2132	+	Potassium	K	0.01%	10 %



Geochemical Procedure - G32 Package (con't)

Chamex				Detection	Upper
<u>Code</u>		<u>Element</u>	<u>Symbol</u>	<u>Limit</u>	Limit
2142	*	Scandium	Sc	1 ppm	1 %
2118		Silver	Ag	0.2 ppm	0.01~%
2137	*	Sodium	Na	0.01%	10~%
2143	*	Strontium	Sr	1 ppm	1 %
551		Sulfur	S	0.01 %	5%
2145	*	Thallium	Tl	10 ppm	1 %
2144	+	Titanium	Ti	0.01%	10 %
2148	*	Tungsten	W	10 ppm	1%
2146		Uranium	U	10 ppm	1 %
. 2147		Vanadium	V	1 ppm	1%
2149		Zinc	Zn	2 ppm	1%

*Elements for which the digestion is possibly incomplete.

April 9, 1999

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Assay Procedure - Arsenic, Bismuth, Cadmium, Copper, Iron, Lead, Molybdenum, Silver, and Zinc by Nitric- Aqua Regia digestion

Sample Decomposition:Nitric - Aqua Regia DigestionAnalytical Method:Atomic Absorption Spectroscopy (AAS)

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A prepared sample (0.2 to 2.0g) is digested with concentrated nitric acid for one half hour. After cooling, hydrochloric acid is added to produce aqua regia and the mixture is then digested for an additional hour and a half. An ionization suppressant is added if molybdenum is to be measured. The resulting solution is diluted to volume (100 or 250 ml) with demineralized water, mixed and then analyzed by atomic absorption spectrometry against matrix-matched standards.

International Units:

(Chemex			Detection	Upper
	` <u>Code</u>	Element	<u>Symbol</u>	Limit	Limit
	331	Arsenic	As	0.01 %	100 %
	349	Bismuth	Bi	0.001 %	100 %
	320	Cadmium	Cđ	0.001 %	100 %
¥	301	Copper	Cu	0.01 %	100 %
	3501	Copper	Cu	0.001 %	100 %
	3508	Соррег	Cu	10 ppm	1,000,000 ppm
	326	Iron	Fe	0.01 %	100 %
¥	312	Lead	Рb	0.01 %	100 %
	306	Molybdenum	Mo	0.001 %	100 %
	307	Molybdenum as MoS ₂	MoS ₂	0.001 %	100 %
	386	Silver	Ag	0.3 g/t	350 g/t
	955	Silver (Rush charge)	Ag	0.3 g/t	350 g/t
*	316	Zinc	Zn	0.01 %	100 %
•	8089	Manganese	Mn	0.01 %	100 %

American/English Units:

Chemex <u>Code</u>	Element	<u>Symbol</u>	Detection <u>Limit</u>	Upper <u>Limi</u> t
385	Silver	Ag	0.01 oz/ton	10.0 oz/ton
980	Silver (Rush charge)	Ag	0.01 oz/ton	10.0 oz/ton

Chemex Labs

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Fire Assay Procedure - Gold, Silver

Sample Decomposition: Fire Assay Fusion Analytical Method: Gravimetric

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents in order to produce a lead button. The lead button containing the precious metals is cupelled to remove the lead. The remaining gold and silver bead is parted in dilute nitric acid, annealed and weighed as gold. Silver, if requested, is then determined by the difference in weights.

In	ternation	al Units:				_	
I	Routine	Rush		"Sample		Detection	Upper
	<u>Code</u>	<u>Code</u>	Element	Weight	<u>Symbol</u>	Limit	<u>Limit</u>
	397	474	Gold	1/2 assay ton	Au	0.1 g/t	1,000 g/t
¥	997	955	Gold	1 assay ton	Au	$0.07 {\rm g/t}$	1,000 g/t
Ŧ	3597		Gold	50 grams	Au	$0.07 {\rm g/t}$	1,000 g/t
	1297		Gold	2 assay ton	Au	$0.03 {\rm g/t}$	1,000 g/t
	1597		Gold	5 assay ton	Au	0.03 g/t	1,000 g/t
	448		Gold	aĺĺ	Au	0.002 mg	30 mg
¥	384	473	Silver	12 assay ton	Ag	3g/t	3,500 g/t
	447		Silver	alÍ	Ağ	0.1 mg	100 mg

American/F	English Uni	ts:				
Routine	Rush		*Sample		Detection	Upper
<u>Code</u>	<u>Code</u>	Element	Weight	<u>Symbol</u>	Limit	<u>Limit</u>
396	471	Gold	1/2 assay ton	Au	0.003 oz/ton	30 oz/ton
996	954	Gold	1 assay ton	Au	0.002 oz/ton	30 oz/ton
3596		Gold	50 grams	Au	0.001 oz/ton	30 oz/ton
1296		Gold	2 assav ton	Au	0.001 oz/ton	30 oz/ton
1596		Gold	5 assay ton	Au	0.001 oz/ton	30 oz/ton
383	470	Silver	1/2 assay ton	Ag	0.1 oz/ton	100 oz/ton

Note:	₩ assay ton	#	14.5883 grams
	1 assay ton	=	29.166 grams
	2 assay ton	-	58.322 grams
	5 assay ton	=	145.83 grams

July 2, 1999



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01-14-00

Fire Assay Procedure - Trace Gold

Sample Decemposition: Fire Assay Fusion Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested for \star hour in dilute nitric acid. Hydrochloric acid is then added and the solution is digested for an additional hour. The digested solution is cooled, diluted to 7.5 ml with demineralized water, homogenized and then analyzed by atomic absorption spectrometry.

International Units:

F	loutine <u>Code</u>	Rush <u>Code</u>	<u>Element</u>	Sample Weight (<u>grams)</u>	<u>Symbol</u>	Detection <u>Limit</u>	Upper Limit
	100	990	Gold	10	Au	5 ppb	10,000 ррЪ
	96	1090	Gold	10	Au	0.005 ppm	10 ppm
*	983	991	Gold	30	Au	5 ppb	10,000 ppb
	99	1091	Gold	30	Au	0.005 ppm	10 ppm
	494	1209	Gold	30	Au	0.005 g/t	10 g/t
	3583		Gold	50	Au	5 ppb	10,000 ppb
	3584		Gold	50	Au	0.005 ppm	10 ppm
	3594		Gold	50	Au	0.005 g/t	10 g/t

American/English Units:

Routine <u>Code</u>	Rush <u>Code</u>	Element	Sample Weight (grams)	<u>Symbol</u>	Detection Limit	Upper <u>Limit</u>
877	1977	Gold	30	Au	0.0002 oz/ton	0.3 oz/ton

14 JUN 2001	Charge stat	ement for	COMINCO	E.R.L.	Job No :	V01-0217R
	COMINCO EX	PLORATION	RESEARCH	LABORAT	ORY	
<pre>Project : CROSS _ef/I.D.: (W~1,</pre>	LAKE MINEF 2/I-1,2,3)	ALS				
Reported to and Lab Nos : R01-0	: JIM MILL : 2799 to R01	ER-TAIT		Shipped Recaived Work con	to lab : i at lab: mlatad :	08 06 01 08 06 01 12 06 01
Analysis/prep	reported	no req no	0 rate	по (rate	\$ TOTAL
Rock Slabbing/Po Pb assay Zn assay Ag acid dig/AA Standard Rock Po	Dishing (h 12 06 01 12 06 01 12 06 01 12 06 01 rep	rly) 2 5 5 5 5 5 5 5 5 5 5	0 \$40.0 0 \$8.0 0 \$8.0 0 \$8.0 0 \$5.0 0 \$5.0	0 0 0 0 0		80.00 40.00 40.00 25.00 25.00
				Job G.S.T	Cost = \$ (7%) = \$	210.00 / 14.70 /

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TOTAL PAYABLE (Cdn) = \$ 224.70

Methods of analysis were reported with the results, as were field nos Enquiries to: Susie Woo/Jim McLeod Cominco Exploration Research Laboratory 1486 East Pender Street, Vancouver, B.C. V5L 1V8 PHONE (604)685-3032 / FAX (604)844-2686 CROSS LAKE MINERALS-X01

W-1,2/I-1,2,3

LAE NO FIELD NUMBER Pb(1) Zn(1) Ag(2) * * g/t R0102799 W-1 25.98 26.30 96.3 R0102800 W-2 42.43 8.46 384.8 R0102801 I-1 16.28 25.62 139.8 R0102802 I-2 0.59 31.07 8.4 R0102803 I-3 8.77 33.61 81.4

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I-insufficient sample X-small sample E-exceeds calibration C-being checked Rerevised If requested analyses are not shown , results are to follow

ANALYTICAL METEODS

Pb(1) Assay

Zn(1) Assay

Ag(2) Acid decomposition / AAS

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SECTION E: ILLUSTRATIONS

4

Plan Number	Title	Scale	
WA-01-1 (after p.4)	General Location Plan	1:250 000	
WA-01-2 (after p.4)	Location Plan with Topography	1:50 000	
WA-01-3 (after p.4)	Mineral Claims	1:50 000	
WA-01-4 (in pocket)	Location Map of 2001 Exploration Work	1:15 000	
WA-01-5 (after p.12)	Carrie 2 Trench Cross Section	1:50	

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