

on the

INGENIKA PROPERTY

DEL 1-3 Mineral Claims

Omineca Mining Division

NTS: 94C/11E

B.C. Geographic System Map Sheet: 094C.065

Latitude: 56° 41' N; Longitude 125° 10' W

UTM: 6 284 000 N; 368 000 E; Zone 10

Owner and Operator: Cross Lake Minerals Ltd.

Author: Jim Miller-Tait, P.Geo.

December 2, 2001

GEOLOGICAL SURVEY BRANCH

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SECTION A: REPORT

INTRODUCTION:

Cross Lake Minerals Ltd. owns 100% interest in the Ingenika Property (DEL 1-3 mineral claims). This report documents four phases of exploration completed from late May to October 2001. The first phase of fieldwork from May 22 to 26, 2001 consisted of one soil sample line, with two samples collected at each site, comparing conventional soil sampling and analyses with Mobile Metal lons (MMI) sample collection and analyses. The test soil sample line was centered over the known Onward South shaft and trenches of known zinc-lead-silver mineralization on the Del 3 mineral claim. The comparison of the results of the conventional versus the MMI soil results concluded that the MMI soil results outlined the mineralization more accurately. Therefore, the second phase of field exploration from June 23 to June 28, 2001 consisted of a detailed MMI soil sample grid to trace the strike extension of the known Onward South showing and to explore for new unknown mineralization. Once the results of the phase two soil sampling results were interpreted it was noticed that there was a strong base metal anomaly on the southwestern edge of the survey area. Therefore, in August 2001, a phase three program of sampling a mini-grid to expand the base metal anomaly on the southwestern edge of the survey was completed. These soil samples were highly anomalous in base metals so during the period of October 15-17, 2001 a fourth soil sampling program in this area was completed.

PROPERTY:

The Ingenika Property is comprised of 3 contiguous mineral claims totalling 54 claim units and covering 1,300 hectares, all being in the Omineca Mining Division. The claims were staked in

July, 2000 and are held by Cross Lake Minerals Ltd. A complete list of the mineral claims that comprise the Property is set out in Section B of this report.

LOCATION AND ACCESS:

The Ingenika Property is located in the Swannell Ranges of the Omineca Mountains in the Omineca Mining Division some 103 kilometres north-northwest of Germansen Landing. The claims are situated on NTS map sheet 94C/11E and B.C. Geographic System map sheet 094C.065. Geographic coordinates are Latitude 56° 41' N; Longitude 125° 10' W and the UTM coordinates are 6 284 000 N and 368 000 E in Zone 10.

There is excellent access to the property as a result of intense logging activity in the area. Access to the property is gained by driving 216 kilometres north from Mackenzie along the west side of Williston Lake on a main logging haulage road, then west for 18 kilometres, south for 10 kilometres and west for 3 kilometres to Delkluz Lake. Secondary logging roads are used to access the claims. Care must be taken on some of the secondary logging access roads because they cannot be driven by four-wheel drive vehicles as a result of the roads being deactivated by the logging contractor.

CLIMATE, TOPOGRAPHY AND VEGETATION:

The Ingenika area has cold, medium snowfall winters and warm, dry summers. The topography of the claims is relatively flat with low rolling hills that are heavily timbered by pine and spruce. In the clear cuts deciduous willows and poplars predominate.







HISTORY:

The original claims in the Ingenika area were staked in 1917 by S. Ferguson to cover the oxidized limestone hill, named Ferguson Hill. The oxidized limestone hill, located on the south bank of the Ingenika River, contains stratabound zinc, lead and silver sulphide mineralization consisting of sphalerite, galena and pyrite. The mineralization ranges from 1 to 3 metre thickness and strikes 100 degrees and dips north from 20 to 40 degrees.

In 1927 Ingenika Mines Ltd. was formed and completed the existing historic underground development of drifting, crosscutting and raising from 1927 to 1932. There was also extensive trenching completed and some diamond drilling. The assessment report database has very limited information because the Ingenika Mine was covered by crown granted mineral claims and therefore assessment reports were not required.

In 1926 these claims were acquired by the Selkirk Mining Syndicate of Victoria.

The work completed from 1927 to 1932 was summarized in the Geological Survey of Canada, Memoir 274, by E.F. Roots. The underground development explored four base metal zones from four levels, the 1, 2, 4 and 5 levels. Ore was encountered in all levels except for the lowest level, 5-level, which is postulated as being driven too low in stratigraphy.

During the summers of 1956 and 1957 Consolidated Mining and Smelting Ltd. conducted geophysical and geological work in and around the Ingenika Mine, Onward, Onward South and Swannell showings. This work was followed by 3,602 metres of AQ core size diamond drilling. Dorita Silver Mines acquired the Ingenika Property in 1969 and completed surface and underground mapping and diamond drilled 550 metres in 21 drill holes. Dorita Silver Mines estimated the Ingenika Mine reserve at 22,677 tonnes grading 119.9g/t silver, 9.8% lead and 6.1% zinc.

International Impaia Resources acquired the Ingenika property in 1991 and completed 24 kilometres of VLF and magnetometer surveying. 7 kilometres of 1.P. surveying, collected 490 soil geochemical samples and 14 rock samples. The company concluded that drilling east of the No.5 level workings would intersect the ore if it rakes northeast.

REGIONAL GEOLOGY:

The Ingenika area was mapped by Roots, whose work is documented in Geological Survey of Canada. Memoir 274, and published in 1954. There is no detailed stratigraphic correlation or fossil dates available from the rocks in the area of the Ingenika Property. The present interpretation of the rocks underlying the Ingenika area, in the vicinity of the claims, are correlated with the Upper Cambrian – Lower Ordovician Kechika Group which lies unconformably on Upper Proterozoic rocks of the Ingenika Group, correlated with the Windermere Supergroup.

The rock units underlying the Ingenika claims can be subdivided into the Ingenika and Kechika Groups. The lowest stratigraphic unit is sandstone and grit belonging to the Upper Proterozoic Ingenika Group – The carbonate bearing strata of the Kechika Group overlies it and forms the core of a broad northerity plunging syncline, mapped by the G.S.C. The Kechika Group rocks disappear 3 kilometres south of the Swannell River because the syncline intersects the surface here.

PROPERTY GEOLOGY:

The Ingenika area was mapped by E.F. Roots, whose work is documented in Geological Survey of Canada, Memory 274, and published in 1954. The lowermost unit consists of the Upper

Proterozoic Ingenika Group, exposed by the Swannell River, consists of brown siltstone with several thin coarse sandstone and quartzite beds and schist. A 5-20 metre thick impure limestone bed caps the brown siltstone and underlies a group of distinctly carbonaceous siltstone, which is approximately 50 metres thick. The carbonaceous siltstone unit becomes less carbonaceous and distinctly carbonate-rich up-section where it is interbedded with limestone-dolomite beds of the Upper-Cambrian-Lower Ordovician Kechika Group. This carbonate-rich section hosts the mineralization, strikes at 100 degrees and dips 20 to 40 degrees north. This section is a mixture of coarse to fine clastic rocks with layers and beds of pure crystalline to impure silty limestone a few metres to 60 metres thick with an overall unit thickness of 80 metres. The mineralized sequence is overlain by a fine to coarse clastic sequence, which shows a gradational contact from limy siltstone to sandstone, grit and sericite phyllite.

The important showings, that were also mapped by Roots, consist of the Ingenika, Onward. Onward South and Burden. The Ingenika showing is not held by Cross Lake but is on three crown granted mineral claims surrounded by Cross Lake's claims and it is important to describe in order to provide a comparison with the other showings and the interpretation of the soil sampling anomalies.

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The Ingenika showing has been extensively explored by soil and geophysical surveying (VLF, magnetometer, and LP.), geological mapping on surface and underground, trenching, diamond drilling and underground drifting, crosscutting and raises from four levels. Most of the work is confined on Ferguson Hill where the base metal mineralization is exposed. The mineralization is confined to the cream colored crystalline limestone of the Ingenika Group of Lower Cambrian age. The mineralization, 1 to 3 metres in thickness, consists of four parallel zones that are controlled by bedding. The bedding and mineralization strikes at 100 degrees and dips from 20

to 40 degrees north. The mineralization replaces limestone-quartz-siderite host and consists of pyrite, galena and sphalerite with lessor amounts of copper and silver sulphides. The upper three levels of underground development, the 1, 2 and 4-levels, intersected strong mineralization in the limestone host. However, the lowest level, 5-level, was driven through the limestone host and intersected schist where the mineralization was projected to from the upper levels.

The Onward and Onward South mineralization are in the same Lower Cambrian limestone host as the Ingenika mineralization and consist of galena, sphalerite and pyrite but differ in that they appear to cross-cut the limestone. At the Onward showing, on the south side of Delkutz Lake, the mineralization exposed by trenching is a siderite, quartz flooded brecciated vein system with galena, pyrite and sphalerite mineralization. The vein system strikes at 010° and dips vertical. At the Onward South trenches and old shaft, located 500 metres south of the Onward showing, Roots described the mineralization as consisting of sphalerite, galena and pyrite cross-cutting the stratigraphy and confined to a brecciated vein system. The mineralization is not exposed in place because the trenches and shaft are now filled with slumping overburden but rock samples collected from the dumps confirm the mineralization. Rock samples were collected from the Onward and Onward South showing and are described in the following section "Rock Sampling Results".

The Burden showing was not examine by the author but the following description is compiled from Roots G.S.C. Memoir 274. The Burden showing is located on the east side of the Swannell River, eight kilometres above its confluence with the Ingenika River. The Swannell River has exposed several irregular masses of white vein quartz in highly calcareous talc-sericite schist of the Ingenika Group. The quartz is cut by stringers of cream-colored crystalline calcite, and contains blebs and stringers of pyrite and chalcopyrite. About 30 metres downstream from the

main quartz occurrence is a rounded massive sulphide boulder $0.6 \ge 0.6 \ge 1.2$ metres in size comprised of massive, fine-grained pyrite, chalcopyrite, covellite and bornite.

ROCK SAMPLING RESULTS:

Rock sampling was initially carried out on the Onward and Onward South showings in July 2000 during the staking of the DEL 1-3 mineral claims and prior to any soil sampling program. The reason for this rock sampling was to examine the mineralization and structures so that a soil sample grid could be orientated to cover the trend of the mineralization in an optimum direction. All of the showings and sampling were of zinc, lead and silver mineralization consisting of sphalerite, galena and pyrite hosted in limestone. The limestone had been brecciated and flooded with quartz/calcite veinlets with siderite. Twelve samples were taken in July 2000 and analysed at ALS Chemex in North Vancouver and a further three samples were collected in May 2001 and analysed at the Cominco Exploration Research Laboratory. The following table summarizes the results and the laboratory reports are appended in Section D.

2000 SA	MPLING	1		
SAMPLE NUMBER	DESCRIPTION	Ag (PPM)	Pb (PPM or %)	Zn (PPM or %)
Onward	showing:	:	:	
M674626	Grab of W. dump in take, Py, Sph? In Imst.	4.6	640	132
M674627	Grab of 50cm trench boulders. Mass gal in Imst.	1205	51.8%	540
M674628	Grab of 50cm trench boulders. Mass gal in Imst.	1070	45.2%	114
M674629	Grab of 50cm trench boulders. Mass gal in Imst.	121	8.11%	80
M674630	Grab of 50cm trench boulders. Mass gal in Imst.	135	8.35%	74
M674631	Qtz vein flat 10 m west of adit lying in lmst. Minor py, mala.	4.8	470	38
M674632	Grab of siderite in Imst near trenches.	10.2	7550	42
M203401	Galena - Cpy (qtz stringers) in Lmst.	1870	64.2%	304
M203402	Galena + Cpy (qtz stringers) in Linst.	272	13.95%	112
Onward	South Trench showing:			
M674640	Sphalerite, minor galena in Lmst. Old Trenches.	7.2	4960	2.65%
M674641	Sphalerite, galena in Linst. In old trenches.	55.6	5.86%	13.05%
M674642	Sphalerite, galena in Linst. In old trenches.	45.6	5.07%	15.7%

SAMPLE NUMBE	DESCRIPTION R	Ag (PPM)	Pb (%)	Zn (%)
2001 SA	MPLING	1		
Onward	I South Shaft showing:			1
l-1	Grap of Such linst sphalerite, galena approx, 40%.	139.8	16.28%	25.62%
1-2	Grab of 40cm lmst, sphalerite, galena approx, 30%.	8.4	0.59%	31.07%;
4-3	Grab of Norm linst, sphalerite, galena approx, 50%.	81.4	8.77%	33.61%

SOIL GEOCHEMICAL SAMPLING RESULTS:

The first phase of soil sampling was designed to test the effectiveness of conventional soil sampling of the B-horizon compared with the Mobile Metal Jons (MMI) sampling method and analyses. Previous operators have documented poor results using conventional soil geochemistry to trace the mineralization probably due to the fact that the area is extensively covered by heavy mantling of the bedrock by glacial till and outwash gravels with a poorly developed B-horizon. The first phase consisted of centering a soil sample line, L3S, across the Onward South shaft where the known zinc, lead and silver mineralization is present. The line was sampled at 25 metre intervals for 250 metres east and 250 metres west for a total of 21 conventional and 21 MMI soil samples. The line was orientated at a bearing of 090° because the Onward showing mineralization strikes 010 and east-west lines would give optimum exposure at right angles to the mineralization.

The conventional soil sample was collected from the B-horizon using a shovel at an average depth of approximately 20 to 30 centimetres and the sample placed in standard paper Kraft soil sample bags and cent to ALS Chemex in North Vancouver, B.C. for analyses by ICP analytical method. The NAP soft samples were collected at a standard depth, regardless of soil horizon, of 10 centimetres by using a shovel and placed in a plastic sample bag and sent to XRAL Laboratories dot brackses. The analytical procedures for the conventional soil sample by ALS Chemex dual the NAP method used by NRAL Laboratories are appended in Section D.

The results are plotted on the Plan Numbers ING-01-4 to ING-01-7 and the values for the MMI samples are expressed as Response Ratio Numbers. This is a calculation recommended by XRAL Laboratories for interpretation purposes. The Response Ratio is calculated by dividing the actual assay value (ppb) by the average assay value (ppb) of the lowest twenty-five percentile of all the samples collected. A table of assay values and calculated response ratios are appended in Section E.

The soil sample results of the conventional and MMI samples collected from the line centered over the known mineralization was compared and it was concluded that MMI samples outlined the mineralization more accurately than the conventional soil samples (see Plan Numbers ING-01-4 to ING-01-7 for results).

As a result of the MMI soil sampling over the known mineralization, a second phase of detailed grid soil sampling was undertaken from the Onward showing on the north end of the grid, south over the Onward South showing, and another 500 metres south to test a large area where there is no bedrock exposure. A total of 249 MMI soil samples were collected in this second phase of exploration. The baseline was flagged, cleared and soil sampled at 25 metre intervals at a bearing of 180°. The cross lines were flagged and sampled at 25 metre intervals at a bearing of 090°. These line directions were selected after a detailed examination of the base metal showings at the Onward showing on the south side of Delkluz Lake.

The MMI soil sample results of zinc, copper, lead and cadmium outlined the Onward and Onward South showings and several other highly anomalous areas. The Onward showing is anomalous in lead, cadmium and copper which is expected because the assays of the rock samples from the trenches were very high in lead and silver with low values in zinc. The Onward South showing was outlined as highly anomalous in zinc, lead and minor copper and the

strike extension from the showing is anomalous from station L2S; 150W southeast for 450 metres to station L5S: 125E. A second anomalous area in zinc and lead was outlined 200 metres southwest of the Onward South showing from station L4S; 250W, 550 metres southeast, to station L7S: 100E. The most important anomalous area in zinc, lead and minor cadmium was initially outlined in this phase of MMI soil sampling on L8W from station 500W to the end of the line at station 650W. This area is located at the extreme southwest corner of the survey grid. The third and fourth phases of MMI soil sampling were completed in this area in the extreme southwest corner of the survey grid because the second phase zinc-lead-cadmium anomaly was not closed off. This phase of MMI soil sampling consisted of extending lines 6S, 7S and 8S and sampling new lines 6.5S, 7.5S, 8.5S, 9S and 9.5S, spaced at 50 metre intervals, all in a westerly direction. There were a total of 91 soil samples collected in these two phases of soil sampling. This additional sampling outlines a new highly anomalous area in zinc, lead and cadmium from station L6.5S; 900W, 500 metres southeast to station L8.5S; 550W. Several of the samples collected in this area have higher values in zinc, lead and cadmium than where the survey covered the known high grade bed rock mineralization at the Onward and Onward South showing. This 500 metre long, highly anomalous soil area is still open to the northwest and southeast.

The three main base metal anomalies all strike between 120 and 130 degrees. This is very important because this is very similar to the strike direction of the Ingenika Mine mineralization, located 2.5 kilometres north of the survey area.

CONCLUSIONS:

The original claims in the Ingenika area were staked in 1917 by S. Ferguson to cover the oxidized limestone hill subsequently named Ferguson Hill. The oxidized limestone hill, located on the south bank of the Ingenika River, contains stratabound zinc, lead and silver sulphide mineralization consisting of sphalerite, galena and pyrite. The mineralization ranges from 1 to 3 metres in thickness and strikes 100 degrees and dips north from 20 to 40 degrees. The Ingenika Property, 100% owned by Cross Lake Minerals Ltd., surrounds the three crown granted claims of the Ingenika Mine and covers two base metal showings named the Onward and Onward South. The two showings contain significant values in zinc, lead and silver.

The experimental test work of comparing conventional versus Mobile Metal lons (MMI) soil sampling and analyses proved that the MMI method outlined the known mineralization more effectively than conventional soil sampling. Based on this favourable comparison a survey area was selected to cover the known showings and a 500 x 800 metre area south of the known areas of mineralization where there is no bedrock exposure.

The MMI soil sampling survey was successful in outlining the known mineralization and extending the anomalous area along strike. Most importantly the survey discovered two new high priority soil anomalies located southwest of the known mineralization. The most important soil geochemical anomaly is located in the southwestern area of the grid and is still open along strike. This 500 metre anomalous area has higher values in the soil than where the survey covered the known aigh grade mineralization.

Also observed in this area where the logging contractors have constructed roads is angular manganese stathed timestone float with semi-massive pyrite. This material is very similar to the Ingenika Mine host weld located 2.5 kilometres north of the survey area. All of the soil

anomalies have a similar strike direction as the mineralization at the Ingenika Mine. More exploration work is recommended to explore the highly prospective Ingenika Property.

RECOMMENDATIONS:

The next phase of exploration on the Ingenika Property should consist of expanding the existing Mobile Metal Ions survey area along strike of the large high priority base metal anomaly located in the southwest area of the existing survey grid. Once this area has been geologically mapped, soil sampled and interpreted a second phase consisting of trenching and diamond drilling should be completed to identify the source of the base metal soil anomaly.

Respectfully submitted. MALLIS TA

Jim Miller-Tait, P.Geo.

LIST OF REFERENCES:

J. Chapman, T. Lewis, Jan. 10, 1991. Geological, Geophysical and Geochemical Report on the Ferguson Project for International Impala Resources Ltd.

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

Mawer, A.B., 1982. Cominco Year End Report on the Swannell Group.

Mawer, A.B., 1986. Cominco Year End Report on the Swannell Group.

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.

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 operator and agreement holder of the property.



SECTION B: PROPERTY

INGENIKA /SWANNELL	SCHEDULE OF MINERAL CLAIMS							
PROVINCE: British Columbia	CLAIMS: 10	UNITS: 1	30	AREA: 3250 ha				
MINING DIVISION: Omineca	NTS: 94C/11E	·	BCGS: 094C.065					
LOCATION: near the Ingenika Mine and	LATITUDE: 56°	39'	LO	IGITUDE: 125° 10'				
Delkluz Lake some 250 km north-northeast of	UTM: ZONE 10	6 282 0	100N	367 000E				
Smithers and 108 km north-northwest of	PROPERTY INTERESTS: Ingenika: Cross Lake Minerals Ltd 100% Swannell: Cominco Ltd 100%. Option Agreement with Cominco Ltd. dated April 24, 2001 whereby Cross Lake may earn a 100% interest subject to a 2% Net							
Germansen Landing								
MAP SHEET (1:250 000): 94C - Mesilinka River (1:50 000): 94C/11 - Ingenika Mine								

CLAIM NAME	RECORD NUMBER	ECORD UNITS RECORD UMBER DATE (yyyy-mm-dd)		RD DUE DATE ANNUAL C (yyyy-mm-dd) WORK -dd) REQUIRED		RECORDED HOLDER			
INGENIKA	PROPERTY	Y:							
DEL 1 DEL 2 DEL 3	379605 379606 379607	20 18 <u>16</u> 54	2000-07-29 2000-07-29 2000-07-28	2002-07-29 2002-07-29 2002-07-28	2000.00 1800.00 <u>1600.00</u> 5400.00	Cross Lake Minerals Ltd. Cross Lake Minerals Ltd. Cross Lake Minerals Ltd.			
SWANNEL	L PROPERT	'Y:	<u> </u>	<u> </u>					
KLUZ 1	238502	09	1981-09-09	2005-09-09	1800.00	Cominco Mining Worldwide Holdings Ltd.			
KLUZ 2 KLUZ 3	238503 238504	09 09	1981-09-09 1981-09-09	2005-09-09 2005-09-09	1800.00 1800.00	"			
KLUZ 4 KLUZ 5	238505 238991	09 18	1981-09-09 1985-05-29	2005-09-09 2005-05-29	1 80 0,00 3600,00	11 17			
DEL 4 386927 06 DEL 5 390517 16		2001-05-23 2001-10-16	2005-05-23 120 2002-10-16 <u>160</u>		Cross Lake Minerals Ltd. Cross Lake Minerals Ltd.				
		130		·	\$19000.00				

ASSESSMENT WORK SUMMARY

Date of Filing (yyyy-mm-dd)	Work Filed S	New Work Applied S	Banked Credits Applied	Banked Credits Saved	Total Banked Credits	Date of Approval (yyyy-mm-dd)	Event Number
2001-01-24	5400,90	5400.00	0	0	0	2001-01-24	3159810
2001-05-28	4000 d0	3600.00	0	0	0		3165802
2001-08-24	Notice	to Group	0	0 1	0		3172061
2001-08-24	[90ad 50	18600.00	0	460.50	0		3170262
2001-09-07	34026.00	$22800.00 \pm$	0	0 .	0		3170821

SECTION C: EXPENDITURES

Item	Work Performed	Quantities / Rates	Amount		
		······································			
Project Geologist:	Project supervision, soil				
J. Miller-Tait, P.Geo.	! sampling and mapping.				
	Period: May 17-28, 2001	4 days @ \$350.00	\$1400.00		
	June 23-July 4, 2001	3 days @ \$350.00	1050.00		
	Aug 26, 2001	1 day @ \$350.00	350.00		
	Oct 15-17, 2001	3 days @ \$350.00	<u>1050.00</u>		
			3850.00		
Field Geologist:	Soil sampling and geological		, ,		
C. Church	mapping				
	Period: May 17-28, 2001	4 days @ \$267.50	1070.00		
	June 23-July 4, 2001	3 days @ \$267.50	802.50		
			1872.50		
Consulting Geologist:	Property visit and review of	1 day @ \$535.00	535.00		
T.W. Muraro, P.Geo.	work program		-		
Field Assistants:	Line cutting and MMI soil		<u> </u>		
	sampling.				
F. Tait	Period: June 23 to July 4, 2001	3 days @ \$250.00	750.00		
	Oct 15-17, 2001	3 days @ \$250.00	750.00		
M. Russell	June 23 to July 4, 2001	3 days @ \$200.00	600.00		
T. Klaussen	June 23 to July 4, 2001	3 days @ \$150.00	450.00		
	<i>•••••••••••••••••••••••••••••••••••••</i>		2550.00		
Transportation:	4x4 pickup trucks: Units				
Vancouver to	Period: May 17-28, 2001 (2)	8 days @ \$105.00	840.00		
property, onsite and	Jun 23-Jul 4 2001 (2)	6 days @ \$105 00	630.00		
return	Aug 26, 2001 (1)	1 day @ \$105.00	105.00		
	Oct 15-17 2001 (1)	3 days @ \$105.00	315.00		
			1890.00		
Accommodation and	Period	Man days @ \$35.00			
Meals	May 17-28 2001	8	280.00		
	June 23-July 4, 2001	15	525.00		
	Aug 26, 2001	1	35.00		
	Oct 15-17 2001	6	210.00		
			1050.00 1		
Field Supplies	Camp materials and sampling		1050.00		
riora pappilos	supplies for the period:				
	May 17-28 2001		120.27		
	[une 23.]uly 4. 2001		7.17 68		
	Δug 26, 2001		277.70		
	$O_{ct} = 15.17 - 2001$		- 79		
	OUT COTTAL LOUI		376.03		
			570.05		

ltem	Work Performed	Quantities / Rates	Amount
Freight:	Sample shipments:		
Vancouver to XRAL	Greyhound Courier Express	Jun 15, Sep 09, Oct	103.45
Labs in Don Mills,	1	24 2001	
Ontario	Reimer Express Lines Ltd.	Jul 04 2001	<u>82.10</u>
	· · · · · · · · · · · · · · · · · · ·		185,55
Analytical Services:			
ALS Chemex Labs	ICP-AES 32 element analyses	21 @ \$8.335	175.04
Cominco Lab	Assaying and rock polishing	3 @ \$37.45	112.35
XRAL Labs	MMI Base Metal Suite-A	361 @ \$23.00	<u>8303.00</u>
	analyses		8590.39
Report Preparation:	J. Miller-Tait, P.Geo.	4 days @ \$350.00	1400.00
Data Plotting,	Ron Simpson, P.Geo.,	6.3 hours @ \$58.85	370,76
Analysis and Map	Geosim Services Inc.		ĺ
Preparation			
Total			\$22670.23
Expenditures: May 17	' to July 28, 2001		\$15893.64
Expenditures: July 29	to November 25, 2001		\$6776.59

Expenditure Apportionment:

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Claim	Samples	% of Total	Prorated Expenditure
DEL 1	-	-	-
DEL 2		-	-
DEL 3	385	100	\$22670.23
Total	385	100	\$22670.23

SECTION D: ANALYTICAL RESULTS

- 1. Analyses carried out by ALS Chemex Labs of North Vancouver, B.C.
 - Certificate of Analysis A0025580 dated August 17,2000
 - Certificate of Analysis A0025582 dated August 18,2000
 - Certificate of Analysis A0026464 dated August 21,2000
 - Certificate of Analysis A0026564 dated August 23, 2000
 - Certificate of Analysis A0117685 dated June 7, 2001
 - Statement of Analytical Procedures
- 2. Analyses carried out by Cominco Exploration Research Laboratory of Vancouver, B.C.
 - Certificate of Analysis V 01-0217R dated June 12, 2001
- 3. Analyses carried out by XRAL Laboratories of Toronto, Ontario
 - Certificate of Analysis #063695 dated June 7, 2001
 - Certificate of Analysis #063906 dated June 27, 2001
 - Certificate of Analysis #064149 dated July 16, 2001
 - Certificate of Analysis #064152 dated July 18, 2001
 - Certificate of Analysis #064154 dated July 18, 2001
 - Certificate of Analysis #064155 dated July 19, 2001
 - Certificate of Analysis #065222 dated September 12, 2001
 - Certificate of Analysis #066040 dated November 15, 2001
 - Statement of Analytical Procedures



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

₹o:	CROSS	LAKE	MINERALS	LTD.
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240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6

Comments: ATTN: JIM MILLER -TAIT

С	ERTIFI	CATE	A0025580			ANALYTICAL P	ROCEDURES		
(NWT) - (Project: P.O. # :	CROSSLA	KE MINERALS LTD).	CHEMEX	NUMBER SAMPLES	DESCRIPTION	METHOD		UPPER LIMIT
Samples Jis rep	submitt port was	ed to our 1ab i printed on 17-	n Vancouver, BC. AUG-2000.	983 2118 2119 2120 557 2121 2122	55555	Au ppb: Fuse 30 g sample Ag ppm: 32 element, soil & rock Al %: 32 element, soil & rock As ppm: 32 element, soil & rock B ppm: 32 element, rock & soil Ba ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock	FA-AAS ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	5 0.2 0.01 2 10 10 0.5	10000 100.0 15.00 10000 10000 10000
	SAM	PLE PREPAI	RATION	2123 2124 2125	5 5	B1 ppm: 32 element, soil & rock Ca %: 32 element, soil & rock Cd ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES	2 0.01 0.5	10000 15.00 500
CHEMEX CODE 205 226 3202 229	NUMBER SAMPLES 5 5 5 5	Geochem ring 0-3 Kg crush Rock - save e ICP - AQ Dige	DESCRIPTION to approx 150 mesh and split ntire reject stion charge	2126 2127 2128 2150 2130 20 2132 2151 2134 2135 2136 2137 2138 2139 2140 551 2141 2141 2141 2143 2144	555555555555555555555555555555555555555	Co ppm: 32 element, soil & rock Cr ppm: 32 element, soil & rock Cu ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Hg ppb: HN03-HC1 digestion K %: 32 element, soil & rock Mg %: 32 element, soil & rock Mn ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Na %: 32 element, soil & rock Ni ppm: 32 element, soil & rock Ni ppm: 32 element, soil & rock P ppm: 32 element, soil & rock S %: 32 element, soil & rock S ppm: 32 element, soil & rock	ICP-AES ICP-AES	1 1 1 0.01 10 10 0.01 10 0.01 5 1 0.01 10 2 0.01 2 1 1 0.01 1 0.01 1 0 0.01 1 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{c} 10000\\ 10000\\ 10000\\ 15.00\\ 10000\\ 10000\\ 10.000\\ 10.00\\ 00\\ 10.00\\ 00\\ 00\\ 00\\ 00\\ 00\\ 00\\ 00\\ 00\\ 00$
The 32 a trace 1 Element digesti Ba, Be, Tl, W.	element metals s for w on is po Ca, Cr,	ICP package is in soil and r hich the nitri ssibly incomple Ga, K, La, Mg,	suitable for rock samples. .c-aqua regia te are: Al, Na, Sr, Ti,	2145 2146 2147 2148 2149	5555	T1 ppm: 32 element, soil & rock U ppm: 32 element, soil & rock 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 ICP-AES	10 10 1 10 2	10000 10000 10000 10000

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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 To: CROSS LAKE MINERALS LTD.

240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 Page nber :1-A Total jes :1 Certificate Date: 17-AUG-2000 Invoice No. : 10025580 P.O. Number : Account :NWT

Project : Comments: ATTN: JIM MILLER -TAIT

											CERTIFICATE OF ANALYSIS			A0025580							
	SAMPLE	PREP CODE	Au ppb FA+AA	λg ppm	A1 %	As ppm	B	Ba ppa	Be ppm	Bi ppm	Ca %	Cđ ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %
1.36£JIIKA	203401 203402 703403 203404 203405	205 226 205 226 205 226 205 226 205 226 205 226	240 10 50 30 15	>100.0 < >100.0 < >100.0 < 50.8 < 21.2	< 0.01 < 0.01 < 0.01 < 0.01 < 0.26	8 60 < 2 22	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	< 0.5 < 0.5 0.5 0.5 0.5	8 < 2 < 2 10 8	1.60 6.69 0.83 0.05 2.16	9.0 <u>4.0</u> 35.0 >500 70.0	5 4 24 53 22	29 71 28 41 10	4520 3540 2270 15 8	2.48 5.48 >15.00 10.50 >15.00	< 10 < 10 < 10 20 20	360 110 610 80900 2230	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 10 < 10 < 10 < 10 < 10 < 10	0,29 <u>1.40</u> 0.29 0.15 1.53
																					
															CERTIF	ICATION	l: .	·			•



hemex Α Aurora Laboratory Services Ltd.

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Account NWT

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												CEF	RTIFIC	CATE	OFA	NALY	/SIS		400258	580	
SAMPLE	PRI CO	EP DE	Mn ppm	Mo ppm		Na X	Ni ppm	ppm P	ppm mqq	9 %	Sb ppm	Sc ppm	Sr ppm	Tİ %	T1 ppm	U PPm	V Ppm	W ppm	Zn ppm		
203401 203402 203403 203404 203405	205 205 205 205 205 205	226 226 226 226 226 226 226	805 2520 8390 2130 >10000	< 1 4 < 1 < 1 < 1	$\langle \langle \langle \rangle \rangle$	0.01 0.01 0.01 0.01 0.01	18 12 47 16 62	70 20 50 120 60	>10000 >10000 >10000 >10000 >10000	>5.00 2.15 4.66 4.88 1.57	2020 256 218 62 20	< 1 < 1 < 1 < 1 < 1 < 1	14 < 52 < 15 < 4 < 27 <	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 < 1 < 1 < 1	10 10 20 < 10 10	304 112 8010 >10000 >10000		
							.				- <u>101</u> , 1										, L
																CERTIFI	CATION:		<u> </u>		



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

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Vo: CROSS LAKE MINERALS LTD.

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

A0025582

Comments: ATTN: JIM MILLER -TAIT

AKE MINERALS LTD. ted to our lab in Vancouver, BC. as printed on 18-AUG-2000. MPLE PREPARATION	CHEMEX CODE 983 975 976 977 2118 2119 2120 557 2121	NUMBER SAMPLES 38 5 5 5 43 43	DESCRIPTION Au ppb: Fuse 30 g sample Au ppb: FA ICP package Pt ppb: FA ICP package Pd ppb: FA ICP package	METHOD FA-AAS FA-ICP FA-ICP	DETECTION LIMIT 5 2 5	UPPER LIMIT
ted to our lab in Vancouver, BC. As printed on 18-AUG-2000. MPLE PREPARATION	983 975 976 977 2118 2119 2120 557 2121	38 5 5 43 43	Au ppb: Fuse 30 g sample Au ppb: FA ICP package Pt ppb: FA ICP package Pd ppb: FA ICP package	FA-AAS FA-ICP FA-ICP	5 2 5	10000 10000
		43	Ag ppm: 32 element, soil & rock Al %: 32 element, soil & rock As ppm: 32 element, soil & rock B ppm: 32 element, rock & soil Ba ppm: 32 element, soil & rock	FA-ICP ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	2 0.2 0.01 2 10	10000 10000 100.0 15.00 10000 10000
	2122	43	Be ppm: 32 element, soil & rock Bi ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
R DESCRIPTION	2123 2124 2125 2126 2127 2127	43 43 43 43	Ca %: 32 element, soil & rock Ca %: 32 element, soil & rock Cd ppm: 32 element, soil & rock Co ppm: 32 element, soil & rock Cr ppm: 32 element, soil & rock Cu ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	0.01 0.5 1 1	10000 15,00 \$00 10000 10000
Geochem ring to approx 150 mesh 0-3 Kg crush and split Rock - save entire reject ICP - AQ Digestion charge	2150 2130 20 2132 2151 2134 2135 2136 2137 2138 2139	43 43 43 43 43 43 43 43 43 43 43 43	Fe %: 32 element, soil & rock Ga ppm: 32 element, soil & rock Hg ppb: HN03-HC1 digestion K %: 32 element, soil & rock La ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Na %: 32 element, soil & rock Na %: 32 element, soil & rock Ni ppm: 32 element, soil & rock P ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	0.01 10 10 0.01 10 0.01 5 1 0.01 1 10	15.00 10.000 10.00 10.00 10.00 15.00 10000 10000 10.00 10000 10.00
	551	43	Pb ppm: 32 element, soil & rock S %: 32 element, rock & soil	ICP-AES ICP-AES ICP-NES	0.01	10000 5.00
t ICP package is suitable for in soil and rock samples. which the nitric-aqua regia possibly incomplete are: Al, r, Ga, K, La, Mg, Na, Sr, Ti,	2141 2143 2144 2145 2146 2147	43 43 43 43 43 43 43	Sc ppm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Ti %: 32 element, soil & rock Ti ppm: 32 element, soil & rock U ppm: 32 element, soil & rock V ppm: 32 element, soil & rock	ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES ICP-AES	1 1 0.01 10 10 1	10000 10000 10.00 10000 10000 10000
	0-3 Kg crush and split Rock - save entire reject ICP - AQ Digestion charge	0-3 Kg crush and split2130Rock - save entire reject20ICP - AQ Digestion charge213221312134213521362137213821392140551214121412142t ICP package is suitable for2141in soil and rock samples.2144which the nitric-aqua regia2145possibly incomplete are: Al,2146r, Ga, K, La, Mg, Na, Sr, Ti,2147	0-3 Kg crush and split 2130 43 Rock - save entire reject 20 43 ICP - AQ Digestion charge 2132 43 2132 43 2132 43 2131 43 2132 43 2132 43 2132 43 2131 43 2132 43 2132 43 2134 43 2135 43 2135 43 2136 43 2135 43 2137 43 2138 43 2138 43 2136 43 2137 43 2138 43 2138 43 2134 43 2140 43 2140 43 2141 43 2142 43 2141 43 2142 43 2142 43 2144 43 possibly incomplete are: Al, 2145 43 2147 43 2147 43 2147 43 2147 43	10-3 Kg crush and split Rock - save entire reject ICP - AQ Digestion charge 112 2130 43 Ga ppm: 32 element, soil & rock 112 43 K %: 32 element, soil & rock 112 43 K %: 32 element, soil & rock 1132 43 Mg %: 32 element, soil & rock 1132 43 Mg %: 32 element, soil & rock 1134 43 Mg %: 32 element, soil & rock 1135 43 Mn ppm: 32 element, soil & rock 1136 43 Mo ppm: 32 element, soil & rock 1136 43 Ni ppm: 32 element, soil & rock 1136 43 Ni ppm: 32 element, soil & rock 1138 43 Ni ppm: 32 element, soil & rock 1139 43 P ppm: 32 element, soil & rock 114 43 Sb ppm: 32 element, soil & rock 114 43 Sr ppm: 32 element, soil & rock 114 43 Sr ppm: 32 element, soil & rock 1141 43 Sr ppm: 32 element, soil & rock 1144 43 Sr ppm: 32 element, soil & rock 1144 43 Th ppm: 32 element, soil & rock 1144 43 Th ppm: 32 element, s	03 Kg crush and split213043Ca ppm: 32 element, soil & rockICP-AESRock - save entire reject2043Kg rph: HN03-RCI digestionAAS-FLAMMIESSICP - AQ Digestion charge213243K %: 32 element, soil & rockICP-AES213243K%: 32 element, soil & rockICP-AES213443Mg %: 32 element, soil & rockICP-AES213543Mn ppm: 32 element, soil & rockICP-AES213643Mn ppm: 32 element, soil & rockICP-AES213743Ni ppm: 32 element, soil & rockICP-AES213843Ni ppm: 32 element, soil & rockICP-AES213943P ppm: 32 element, soil & rockICP-AES214043Sb ppm: 32 element, soil & rockICP-AES214143Sb ppm: 32 element, soil & rockICP-AES214243Sb ppm: 32 element, soil & rockICP-AES214443Ti x: 32 element, soil & rockICP-AES214543V ppm: 32 element, soil & rockICP-AES	0-3 Kg crush and split213043Cappm: 32 element, soil & rockICP-AES10Nock - save entire reject2043K %: 32 element, soil & rockICP-AES0.0112913243K %: 32 element, soil & rockICP-AES0.01213143K %: 32 element, soil & rockICP-AES0.01213443M ppm: 32 element, soil & rockICP-AES0.01213543M ppm: 32 element, soil & rockICP-AES0.01213443M ppm: 32 element, soil & rockICP-AES0.01213543M ppm: 32 element, soil & rockICP-AES0.01213643M ppm: 32 element, soil & rockICP-AES1213743N k32 element, soil & rockICP-AES1213843M ppm: 32 element, soil & rockICP-AES1213943P ppm: 32 element, soil & rockICP-AES1213943P ppm: 32 element, soil & rockICP-AES1214043Sr ppm: 32 element, soil & rockICP-AES1214143Sr ppm: 32 element, soil & rockICP-AES1214443Sr ppm: 32 element, soil & rockICP-AES1214543U ppm: 32 element, soil & rockICP-



Aurora Laboratory Services Ltd. Analytical Chemists * Geochemists * Registered Assayers

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

A0025582

Comments: ATTN: JIM MILLER -TAIT

с	ERTIF	CATE	A0025582				PROCEDURES	2 of 2	
(NWT)-(CROSS LA	KE MINERALS LT	D.	CHEMEX CODE	NUMBER	DESCRIPTION	METHOD	DETECTION LIMIT	Upper Limit
P.O. # : Samples This rep	submitt port was	ed to our lab printed on 18	in Vancouver, BC. -AUG-2000.	2148 2149	43 43	W ppm: 32 element, soil & rock Zn ppm: 32 element, soil & rock	ICP-AES ICP-AES	10 2	10000 10000
	SAM	PLE PREPA	RATION						
CHEMEX	NUMBER SAMPLES		DESCRIPTION						
205 226 3202 229	43 43 43 43	Geochem ring 0-3 Kg crush Rock - save ICP - AQ Dig	to approx 150 mesh and split entire reject estion charge						
* NOTE	1;								
The 32 trace Element digesti Ba, Be, Tl, W.	element metals s for v on is po Ca, Cr,	ICP package 1 in soil and which the nit: saibly incomp Ga, K, La, M	s suitable for rock samples. ric-aqua regia lete are: Al, g, Na, Sr, Ti,						



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240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 A0025582

Project : Comments: ATTN: JIM MILLER -TAIT

CERTIFICATE OF ANALYSIS

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			.																
	CANDLE	PREP	Au ppp Au pp	pb Pt ppb Pd pp	pp Ag	Al	Хs	В	Ba	Be	Bi	Ċa	¢đ	Co	Cr	Cu	Fe	Ga	Ħg
	DAMPLE	CODE	FATAA IO		ст рры	*	ppm	ppm	ppm	թթա	ppm	*	ррш	ррш	ррш	ррш	%	ppm	ppb
	674605	205 226	< 5		- 6.8	0.01	2	< 10	>10000	< 0.5	4	11 00	<u>с</u>	2.1	5.2		0 13	- 10	110
U) WST LER	674606	205 226	< 5		- 8.2	0.08	4	< 10	30	< 0.5	6	13.05	210	`⊥ 8	⊐∡ Ř	77	1 0.13	< 10 < 10	48500
	674607	205 226	< 5		10.4	0.08	< 2	< 10	10	< 0.5	4	10.10	103.0	< 1	3	12	3.29	< 10	21800
i	674608	205 226	< 5		- 4.0	0.05	< 2	< 10	130	< 0.5	< 2 >	15.00	6.5	< 1	1	< 1	0.19	< 10	1580
	0/4009	400 XX6	< 5		• 0.2	0.19	< 2	< 10	>10000	< 0.5	< 2	12.35	< 0.5	< 1	5	1	0.68	< 10	50
	674610	205 226	< 5		- 8.2	0.04	72	< 10	180	< 0.5	6	13.85	108.5	1	< 1	5	5.96	< 10	12420
	674611	205 226	< 5		- 0.8	0.01	< 2	< 10	330	< 0.5	< 2 >	15.00	8.5	< 1	< 1	< 1	0.23	< 10	930
what .	674617	205 226	< 5		- 0.4	0.06	< 2	< 10	1750	< 0.5	< 2 >	15.00	3.0	10	< 1	< 1	0.81	< 10	340
CREEK	674614	205 226		• ••••••	- 0,4	0.05	8	< 10	500	< 0.5	< 2 >	15.00	5.5	1	9	2	2.29	< 10	200
					· 0.2	0.01		< 10	1590	< 0.5		9.35	1.0	1	63	< 1	0.19	< 10	80
	674615	205 226	30		- 8.0	0.19	116	< 10	300	0.5	6	6.83	26.0	4	6	33	>15.00	10	3570
	674617	205 226	<u> </u>		- 7.0	0.09	122	< 10	210	1.0	4	0.95	14.5	4	3	30	>15.00	10	1920
	674618	205 226	5		- 3.4	< 0.01	40 52	< 10	10	< 0.5 0.5	< 2	12.85	3.0	< 1	< 1	14	8.36	< 10	2820
1 EPO	674619	205 226	< 5		- 21.6	< 0.01	84	< 10	< 10	0.5	< 2	7.23	159.5	۲ (L	< 1 2 1	46	>15.00	< 10	910
I AKE													10510				10.30	10	37300
	674620	205 226	< 5		- 16.8	0.03	32	< 10	30	< 0.5	6	12.10	163.5	1	1	80	3.72	10	28900
	674621	205 226	< 5	· ·····	- 4.2	< 0.01	68	< 10	< 10	< 0.5	4	7.19	32.0	1	11	50	B.63	< 10	14380
1	674624	205 226	10	· ····· ····	- 8.8 - 21.4	< 0.01	198	< 10	< 10	0.5	< 2	4.31	108.0	4	5	147	>15.00	10	19230
1	674625	205 226	45		>100.0	< 0.01	2	< 10	< 10	< 0.5	* 2	0.72	14.5	13	< 1	5970	>15.00	10	220
							-	• 10			` •	0.41		0	13	TOP	9.91	< 10	/530
CHOCE + CH	674626	205 226	85		- 4.6	< 0.01	222	< 10	10	0.5	12	9.69	8.0	32	1	567	>15.00	10	90
	674627	205 226	80	• ••••• •	- >100.0	< 0.01	8	< 10	< 10	< 0.5	6	4.09	8.5	5	16	2550	4.24	< 10	300
	674628	205 226	55		- >100.0	< 0.01	10	< 10	< 10	< 0.5	4	5.90	7.5	5	9	1320	4.32	< 10	70
	674630	205 226	10		- >100.0	2 0 01	10	< 10	< 10	< 0.5	2	3.43	2.0	1	45	107	2.76	< 10	40
ł							¥¥	× 10	× 10	< 0.5	× 4	0.11	4.5	3	31	1420	4.20	< 10	40
	674631	205 226	190		- 4.8	< 0.01	308	< 10	< 10	0.5	< 2	6.16	1.5	83	28	640	14.05	< 10	< 10
CUD LAK	674632	205 226	< 5	·	- 10.2	< 0.01	< 2	< 10	< 10	1.0	8	1.17	12.0	5	< 1	3	>15.00	10	< 10
A DECK	674614	205 226	< 5	· ····· ·····	- 0.2	0.43	8	< 10	10	< 0.5	< 2	0.16	< 0.5	6	99	18	1.51	< 10	< 10
	674635	205 226	10		- 0.8	< 0.01	60	< 10	< 10	< 0.5		4.8/	10.0	4	62	36	2.47	< 10	2420
									• 10		-	14.05	4.0	•	3	¥0	0.11	< 10	50
	674636	205 226	40		- 6.6	< 0.01	156	< 10	10	0.5	< 2	3.17	34.5	7	58	101	11.30	< 10	4950
INGENIE	674637	205 226	30		- 5.6	0.06	164	< 10	30	0.5	< 2	1.62	6.0	3	92	32	12.35	< 10	9860
10	674630	205 226			- 1.2	0.02	40	< 10	10	< 0.5	< 2	0.70	0.5	< 1	120	5	1.95	< 10	1300
	674640	205 226	15		- 3.0	< 0.04 < 0.01	24	< 10	10	< 0.5	< 2	3.06	0.5	7	157	153	4.81	< 10	3490
								× 10	~ 10	< 0.5	0 /	15.00	81.5	4	< 1	د	0.50	< 10	310
	674641	205 226	235		- 55.6	< 0.01	< 2	< 10	< 10	< 0.5	12 >	15.00	402	20	< 1	24	1.47	< 10	2050
	0/4642 674642	205 226	120		- 45.6	< 0.01	< 2	< 10	< 10	< 0.5	20 >	15.00	492	24	< 1	21	1.64	< 10	2040
	674641	205 226	< 3	· ····	- 1.8	< U.01	< 2 1 A	< 10	< 10	< 0.5	< 2 >	15.00	2.0	1	6	< 1	1.06	< 10	10
YLAT	674645	205 226	«	4 < 10 ×	4 < 0.2	0.01	118	130	< 10	< 0.5	< 2	1.02	205	15	40	11	4.89	< 10	40
				,				100			•	v.v/	- 014	24	194	Γ, Γ	3.34	· < 10	10
									• ·								0	\mathcal{A}_{-}	
																		T	

CERTIFICATION:_



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 "o: CROSS LAKE MINERALS LTD.

240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 Page nber : 1-B Total, Jes :2 Certificate Date; 18-AUG-2000 Invoice No. : 10025582 P.O. Number : Account : NWT

Project :

Comments: ATTN: JIM MILLER -TAIT

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[1								CE	RTIF	CATE	OF A	NALY	SIS		40025	582		
SAMPLE	PREP CODE	R %	La ppm	Mg %	Mn ppm	Мо ррш	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	т1 ррш	U mqq	V ppm	W mqq	Zn ppm
674605	205 226	< 0.01	10	1.68	175	1	< 0.01	14	< 10	>10000	< 0.01		< 1	5610 4	0.01	< 10	c 10		< 10	24
674606	205 226	< 0.01	< 10	6.85	370	6 -	< 0.01	76	230	>10000	2.69	14	< 1	653 <	0.01	< 10	< 10	6	< 10	>10000
674607	205 226	< 0.01	< 10	5.50	430	< 1 -	< 0.01	9	50	>10000	4.82	18	< 1	411 <	0.01	< 10	< 10	4	< 10	>10000
674608	205 226	< 0.01	10	9.56	745	< 1	0.01	3	< 10	>10000	0.51	- 4	< 1	741 <	0.01	< 10	< 10	5	< 10	846
674609	205 226	< 0.01	< 10	6.97	485	1 ·	< 0.01	12	10	150	< 0.01	< 2	< 1	4800 <	0.01	< 10	< 10	5	< 10	16
674610	205 226	< 0.01	< 10	8.25	195	6	< 0.01	10	60	2020	0.36	6	< 1	108 <	0.01	< 10	< 10	3	< 10	>10000
674611	205 226	< 0.01	10	9.76	210	1	0.01	1	60	132	0.08	< 2	< 1	249 <	0.01	< 10	< 10	3	< 10	3500
674612	205 226	< 0.01	10	9.24	395	2	0.01	57	10	142	0.06	< 2	< 1	138 <	0.01	< 10	< 10	10	< 10	942
674614	205 226	1 0.01	< 10 < 10	1 67	4/5	1	< 0.01	12	90	30	0.17	< 2	< 1	100 <	0.01	< 10	< 10	8	< 10	240
					115	1	< 0.01	19	60	8	0.03	< 2	< 1	107 <	0.01	< 10	< 10	15	< 10	140
674615	205 226	0.05	< 10	4.04	585	4	< 0.01	46	240	606	0.32	22	1	43 <	0.01	< 10	< 10	10	30	7520
674616	205 226	0.05	< 10	0.53	190	Э.	< 0.01	51	290	310	0.25	4	1	16	0.01	< 10	< 10	13	40	8560
674617	205 226	< 0.01	< 10	3.73	130	1 .	< 0.01	5	150	1335	>5.00	10	< 1	24 <	0.01	< 10	< 10	1	< 10	2240
674618	205 226	0.03	< 10	3.75	195	1 .	< 0.01	10	200	1030	4,95	22	< 1	20 ×	0.01	< 10	< 10	- 4	10	1670
0/8012	203 220	× 0.01	< 10	3.18	115	1.	< 0.01	20	160	>10000	>5.00	72	< 1	10 <	0.01	< 10	< 10	< 1	< 10	>10000
674620	205 226	< 0.01	< 10	6.64	395	1	0.01	7	170	>10000	>5.00	48	< 1	14 <	0.01	< 10	< 10	3	< 10	>10000
674621	205 226	< 0.01	< 10	3.48	175	< 1 -	< 0.01	9	100	3420	>5.00	14	< 1	7 <	0.01	< 10	< 10	1	< 10	>10000
674622	205 226	< 0.01	< 10	1.90	155	1 ·	< 0.01	32	210	9820	>5.00	76	< 1	12 <	0.01	< 10	< 10	< 1	< 10	>10000
0/4624	2051 226	< 0.01	< 10	1.26	9850	< 1	< 0.01	45	10	116	0,66	< 2	< 1	11 <	0.01	< 10	< 10	< 1	40	764
0/10/0	203 226	× 0.01	< 10	0.19	3/10	< 1	< 0.01	6	50	>10000	>5.00	1205	< 1	6 <	0.01	< 10	< 10	< 1	20	>10000
674626	205 226	< 0.01	< 10	1.87	6380	< 1	< 0.01	49	60	640	>5.00	< 2	1	98 <	0.01	< 10	< 10	< 1	30	132
674627	205 226	< 0.01	< 10	0.63	1975	< 1 -	< 0.01	12	40	>10000	4.95	1355	< 1	30 <	0.01	< 10	< 10	< 1	10	540
674628	205 226	< 0.01	< 10	1.29	2220	< 1	< 0.01	8	30	>10000	4.17	1180	< 1	43 <	0.01	< 10	< 10	< 1	10	114
674610	205 226		< 10	0.50	1250	< 1 -	< 0.01	5	10	>10000	1.19	126	< 1	27 <	0.01	< 10	< 10	< 1	< 10	80
			× 10	1.33	1933	· • ·	. 0.01	•	10	×10000	1.03	110	< 1	51 K	0.01	< 10	< 10	< 1	< 10	74
674631	205 226	< 0.01	< 10	0.50	2570	< 1	< 0.01	33	140	470	>5.00	2	< 1	57 <	0.01	< 10	< 10	< 1	< 10	38
674634	205 226	< 0.01	< 10	1.15	7720	< 1	< 0.01	33	< 10	7550	0.18	10	1	16 <	0.01	< 10	< 10	1	30	42
674634	205 225	0.03	- 10	0.20	140	< 1	0.01	18	170	166	0.10	< 2	< 1	> E	0.01	< 10	< 10	7	< 10	40
674635	205 226	< 0.01	< 10	2.96	7880	21		14	210	100	3.09	5	< 1	140 <	0.01	< 10	< 10	< 1	< 10	7610
								-			23.00		· · ·	124 4	0.01	< 10	< 10	1	< 10	934
674636	205 226	0.02	< 10	0.50	8100	< 1	< 0.01	6	670	5490	>5.00	10	< 1	41 <	0.01	< 10	< 10	< 1	< 10	>10000
674637	205 226	0.07	< 10	0.26	5650	< 1	0.01	6	610	4100	3.81	8	< 1	29 <	0.01	< 10	< 10	5	< 10	2B40
674638	205 226	0.02	< 10	0.03	360	< 1	< 0.01	3	140	786	0.92	< 2	< 1	9 <	0.01	< 10	< 10	1	< 10	678
674639	205 226	0.04	< 10	0.07	620 1036			6	100	2310	>5.00	2	< 1	40 <	0.01	< 10	< 10	1	< 10	1610
			10	U.14	1973	< 1	V.01	2	20	4950	0.63	< 2	< 1	432 <	0.01	< 10	< 10	< 1	< 10	>10000
674641	205 226	< 0.01	10	0.67	1980	< 1	< 0.01	6	70	>10000	2.35	38	< 1	268 <	0.01	< 10	< 10	< 1	< 10	>10000
674642	205 226	< 0.01	10	0.64	2040	1	< 0.01	6	80	>10000	1.88	40	< 1	234 <	0.01	< 10	< 10	< 1	< 10	>10000
0/6643	205 226	< 0.01	10	0.21	755	< 1	< 0.01	.4	30	1410	0.03	< 2	< 1	213 <	0.01	< 10	< 10	< 1	< 10	55B
674645	205 224	2 0 01	< 10	V.04 515.00	225	1		15	810	706	4.06	4	3	66	0.14	< 10	< 10	75	< 10	1860
			~ 40	-10.00	173	~ 1	- 0.0I	4900	A 0	36	0.60	< 2	2	1 <	0.01	< 10	< 10	\ < 1	< 10	104
L																	\)	<u> 1 1 1 1 1 </u>	O
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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

"o: CROSS LAKE MINERALS LTD.

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

Page iber :2-A Total es :2 Certificate Date: 18-AUG-2000 :10025582 Invoice No. P.O. Number Account NWT

Project : Comments: ATTN: JIM MILLER -TAIT

CERTIFICATION:

				-								CE	RTIF	CATE	OF	ANALY	rsis	4	0025	582		
	SAMPLE	PR CO	EP DE	λu ppb Fλ+λλ	Au ppb ICP	Pt ppb ICP	Pd ppb ICP	Ag ppm	A1 %	As ppm	B	Ba ppm	Be ppm	Bi ppm	Ca %	Cđ ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb
77	674646 674647 674648	205 205 205	226 226 226	 	< 4 < 4 < 4	< 10 < 10 < 10	< 4 4 < 4	< 0.2 < 0.2 0.2	0.03 0.03 0.03	10 10 10	190 170 200	< 10 < 10 < 10	< 0.5 < 0.5 < 0.5	< 2 < 2 < 2	0.19 0.14 0.06	< 0.5 < 0.5 < 0.5	89 94 92	237 262 242	< 1 < 1 < 1	3.50 4.04 3.76	< 10 < 10 < 10 < 10	10 < 10 < 10
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																OFOTIEN			- j.S.	stall -	1 - <u>1 - 1 - 1</u> <u>1 - 1</u> <u>1 - 1</u>	

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

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240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 Page iber :2-B Total _{1 d}es :2 Certificate Date: 18-AUG-2000 Invoice No. : 10025582 P.O. Number : Account :NWT

Project : Comments: ATTN: JIM MILLER -TAIT

CERTIFICATE OF ANALYSIS A0025582 PREP ĸ La Mg Mn Ni ₽ Mo Na ₽b S Sb Ti T1 U ٧ Sc Sr. W Zn SAMPLE CODE × * % ppm × ppm ppm ppm ppm × ppm ppmррд ₽₽Щ ppm ppm ppm ppm ppm 674646 205 226 < 0.01 < 10 >15.00 645 2530 < 1 < 0.01 30 58 0.52 < 2 3 4 < 0.01< 10 < 10 < 1 < 10 162 674647 205 226 < 0.01 < 10 >15.00 620 < 1 < 0.01 2410 20 2 0.55 < 2 з 4 < 0.01 < 10 < 10 < 1 < 10 12 674648 205 226 < 0.01 < 10 >15.00 605 < 1 < 0.01 2490 20 8 0.73 < 2 3 1 < 0.01 < 10 < 1 < 10 < 10 24

CERTIFICATION:



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ALS Chemex

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

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

A0026464

Comments: ATTN: JIM MILLER -TAIT

с	ERTIFI	CATE	A0026464			ANALYTICAL	PROCEDURES		
(NWT)-(Project:	CROSS LA	KE MINERALS LTE).	CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
Samples his rep	submitt. port was	ed to our lab i printed om 21-	in Vancouver, BC. -AUG-2000.	384 312 316	3 5 2	Ag g/t: Gravimetric Pb %: Conc. Nitric-HCl dig'n Zn %: Conc. Nitric-HCl dig'n	FA-CRAVIMETRIC AAS AAS	3 0.01 0.01	3500 100.0 100.0
	SAM	PLE PREPA	RATION						
	NUMBER SAMPLES		DESCRIPTION						
212	5	Overlimit pul	p, to be found						
		1							
			· · · · · · · · · · · · · · · · · · ·						



* PLEASE NOTE

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'o: CROSS LAKE MINERALS LTD.

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

Page / mber :1 Total Certificate Date: 21-AUG-2000 Invoice No. :10026464 P.O. Number : Account :NWT

Project : Comments: ATTN: JIM MILLER -TAIT

CERTIFICATE OF ANALYSIS

1

1	SAMPLE	PREP CODE	Ag FA g/t	Pb %	Zn %		,		
11=6#HUCA 11=6#HUCA	203401 203402 203403 203404 203405	212 212 212 212 212 212	1870 272 271 	64.2 13.95 33.5 8.06 3.75	32.6 4.29				
								r 	
					r F				



Aurora Laboratory Services Lid.

Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave. North Vancouver

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

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

A0026564

Comments: ATTN: JIM MILLER -TAIT

С	ERTIFI	CATE A0026564			ANALYTICAL	PROCEDURES		
(NWT) - (Project: P.O. # :	CROSS LA	KE MINERALS LTD.	CHEMEX	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
Samples his rep	submitte port was	ed to our lab in Vancouver, BC. printed on 23-AUG-2000.	384 312 316	5 13 12	Ag g/t: Gravimetric Pb %: Conc. Nitric-HCl dig'n Zn %: Conc. Nitric-HCl dig'n	FA-GRAVIMETRIC AλS AλS	3 0.01 0.01	3500 100.0 100.0
	SAM	PLE PREPARATION						
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION						
212	18	Overlimit pulp, to be found						
L	<u></u>							



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

240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 Page mber :1 Total es :1 Certificate Date: 23-AUG-2000 Invoice No. :10026564 P.O. Number : Account :NWT

Project : Comments: ATTN: JIM MILLER -TAIT

* PLEASE NOTE **CERTIFICATE OF ANALYSIS** A0026564 PREP Ag FA Pb Zn SAMPLE CODE g/t % % 674605 212 ---4.24 _ _ _ _ _ ____ 674606 212 --_ _ _ _ _ 4.53 4.51 WHISTLER 674607 212 ____ 5.B6 1.90 674608 212 ----3.19 674610 212 ---_ _ _ _ _ ___ 2.46 WASI CR. 674619 212 -------9.39 10.20 674620 END 212 _____ 5.62 9.23 674621 212 LAKE ----_ _ _ _ _ 1.98 ----674622 212 --____ 6.08 ----674625 212 --632 49.9 1.47 674627 212 1205 -----51.8 ____ 674628 212 ---1070 45.2 ----INGENIKA 212 212 674629 -----121 8.11 _ _ 674630 ----135 8.35 674636 212 ---____ 2.73 _ _ _ _ 674640 212 ---------2.65 674641 212 --____ 5.86 13.05 674642 212 ----____ 5.07 15.70

CERTIFICATION: Chial, al

RERUNS FROM A0025582. * RECOMMEND TITRATION FOR Pb >20% FOR GREATER ACCURACY.


LS 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

CERTIFICATE A0117685 (NWT) - CROSS LAKE MINERALS LTD. SWAMMELL INGENIKA Project: PO.#: Samples submitted to our lab in Vancouver, BC. 's 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.

To: CROSS LAKE MINERALS LTD.

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

Comments: ATTN: JIM MILLER-TAIT

		ANALYTICAL PR	OCEDURE	S	
METHOD CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	upper Limit
Ag-ICP41 Al-ICP41 Ba-ICP41 Ba-ICP41 Ba-ICP41 Ca-ICP41 Ca-ICP41 Ca-ICP41 Cu-ICP41 Cu-ICP41 Fe-ICP41 Fe-ICP41 Mg-ICP41 Mg-ICP41 Ma-ICP41 Ma-ICP41 Ni-ICP41 Ni-ICP41 Sb-ICP41 Sb-ICP41 Sb-ICP41 Sc-ICP41 Sc-ICP41 Sc-ICP41 T1-ICP41 U-ICP41 U-ICP41 T1-ICP41 U-ICP41 U-ICP41 Cu-ICP4	42 42 42 42 42 42 42 42 42 42 42 42 42 4	Ag ppm: 32 element, soil & rock Al %: 32 element, soil & rock As ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock Ca %: 32 element, soil & rock Co ppm: 32 element, soil & rock Co ppm: 32 element, soil & rock Co ppm: 32 element, soil & rock Cu ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Cu ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Ga ppm: 32 element, soil & rock Hg ppm: 32 element, soil & rock Mg %: 32 element, soil & rock Mg %: 32 element, soil & rock Mm ppm: 32 element, soil & rock Mn ppm: 32 element, soil & rock Mi ppm: 32 element, soil & rock Ni ppm: 32 element, soil & rock S %: 32 element, soil & rock S %: 32 element, soil & rock S %: 32 element, soil & rock F ppm: 32 element, soil & rock S %: 32 element, soil & rock S ppm: 32 element, soil & rock Y ppm: 32 element, soil & rock M ppm: 32 element, soil & rock M ppm: 32 element, soil & rock S ppm: 32 element, soil & rock S ppm: 32 element, soil & rock M ppm: 32 element, soil & rock	ICP-AES ICP-AES	0.2 0.01 2 10 10 0.5 2 0.01 0.5 1 1 0.01 10 0.01 2 0.01 10 0.01 10 0.01 10 0.01 10 0.01 2 0.01 10 0.01 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01 10 0.01	100.0 15.00 10000

A0117685



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

240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT

I		1			· · · · · · · · ·					CE	RTIFI	CATE	OF A	NAL	YSIS	/	40117	685		
SAMPLE	PREP CODE	Ag ppm	Al %	As ppm	B	Ba ppm	Be ppm	Bi prm	Ca %	Cd ppn	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	к %	La ppm	Mg %	Mn ppm
05+000	201 202	< 0.2	1.22	10	< 10	40	< 0.5	< 2	0.14	< 0.5	8	26	11	2.50	< 10	< 1	0.03	< 10	0.48	160
05+025	201 202		1.48	6 10	< 10	60	< 0.5	< 2	0.16	< 0.5	8	26	7	2.68	< 10	< 1	0.04	< 10	0.40	165
DS+075	201 202		1.28	10	< 10	40	< 0.5	< 2	0.09	< 0.5	9	23	10	2.56	< 10	< 1	0.03	< 10	0.45	145
05+100	201 202	< 0.2	1.29	8	< 10	70	< 0.5	< 2	0.11	< 0.5	9	25 25	12	2.78	< 10 < 10	< 1 < 1	0.02 0.03	< 10 < 10	0.52	160 195
05+125	201 202	< 0.2	1.33	8	< 10	70	< 0.5	< 2	0.13	< 0.5	9	26	7	2.46	< 10	< 1	<u> </u>	< 10	31.0	175
ps+150	201 202	< 0.2	1.53	12	< 10	70	0.5	< 2	0.28	< 0.5	12	27	27	3.78	< 10	< 1	0.05	10	0.45	370
05+175	201 202	< 0.2	1.32	8	< 10	80	< 0.5	< 2	0.14	< 0.5	9	27	8	2.55	< 10	< 1	0.02	< 10	0.53	225
S+200 C ba, 225		< 0.2	1.36	14	< 10	80	< 0.5	< 2	0.21	< 0.5	10	26	12	2.82	< 10	< 1	0.03	10	0.45	265
S 05+225	201 202	< 0.2	1.01	8	< 10	50	< 0.5	< 2	0.11	< 0.5	7	21	5	2.28	< 10	< 1	0.03	< 10	0.35	200
] 0S+250	201 202	< 0.2	1.19	8	< 10	60	< 0.5	< 2	0.09	< 0.5	8	23	12	2.56	< 10	< 1	0.02		0 44	170
4 ps+275	201 202	< 0.2	1.58	12	< 10	50	< 0.5	< 2	0.19	< 0.5	11	31	10	2.77	< 10	< 1	0.03	< 10	0.57	355
OV DS+300	201 202	< 0.2	1.15	10	< 10	50	< 0.5	< 2	0.08	< 0.5	9	23	15	2.44	< 10	< 1	0.02	< 10	0.45	220
1 ng+150	201 202		1.27	0 £		90	< 0.5	< 2	0.15	< 0.5	8	23	8	2.37	< 10	< 1	0.03	< 10	0.40	200
2				······································	< 10	50	< 0.5	< 2	0.14	< 0.5	b	18	4	1.85	< 10	< 1	0.03	< 10	0.29	280
0S+375	201 202	< 0.2	1.20	10	< 10	50	< 0.5	< 2	0.14	< 0.5	8	27	7	2.43	< 10	< 1	0.03	< 10	0.45	170
05+400		< 0.2	1.08	8	< 10	50	< 0.5	< 2	0.06	< 0.5	9	21	12	2.27	< 10	< 1	0.03	< 10	0.33	155
034423	201 202		1 20	14	< 10	40	< 0.5	. 2	0.07	< 0.5	. 9	23	14	2.70	< 10	< 1	0.03	< 10	0.39	145
OS+475	201 202	< 0.2	1.26	12	< 10	50	< 0.5	< <u>4</u>	0.12	< 0.5	10	27	11	2.83	< 10	< 1	0.03	< 10	0.44	155
										. 0.3	10		<u> </u>	2.79	< 10	< 1	0.04	10	0.55	250
DS+500			1.19	10	< 10	60	< 0.5	< 2	0.14	< 0.5	8	25	13	2.31	< 10	< 1	0.03	10	0.39	200
S+025W	201 202	20.2	1.31	16	< 10	20	205	~ 2	0.20	< 0.5	1/	41	15	2.77	< 10	< 1	0.05	10	2.17	255
S+050W	201 202	< 0.2	1.08	12	< 10	50	< 0.5	× 2	0.31	< 0.5	19	40	19	3.70	< 10	< 1	0.12	10	1.21	335
S+075W	201 202	2 < 0.2	1.15	10	< 10	70	< 0.5	< 2	0.45	< 0.5	19	40	17	3.33	< 10	< 1	0.10	10	1.24	200 420
S+100W	201 202	2 < 0.2	0.76	10	< 10	20	< 0.5	< 2	0.22	< 0.5	16	31	17	2 61	< 10		0.00	- 10	1 54	0.9.5
S+125W	201 202	< 0.2	0.70	10	< 10	10	< 0.5	< 2	0.09	< 0.5	18	37	17	2.69	< 10	21	0.08	2 10	1 65	233
S+150W	201 202	2 < 0.2	0.82	12	< 10	30	< 0.5	< 2	0.19	< 0.5	16	31	14	2.63	< 10	< 1	0.11	< 10	1.28	210
S+175W	201 202	2 < 0.2	0.87	12	< 10	20	< 0.5	< 2	0.14	< 0.5	18	43	14	3.01	< 10	< 1	0.09	< 10	1.44	195
S+200W	201 202	2 < 0.2	0.95	12	< 10	30	< 0.5	< 2	0.15	< 0.5	19	41	21	2.98	< 10	< 1	0.12	10	1.66	310
S+225W	201 202	< 0.2	1.00	12	< 10	30	< 0.5	< 2	0.14	< 0.5	19	46	24	3.15	< 10	< 1	0.06	10	1.58	305
- 8+250W	201 202		1.39	14	< 10	60	0.5	< 2	0.15	< 0.5	20	43	28	3.63	< 10	< 1	0.12	10	1.19	370
W S+300W	201 202		1.34	10	< 10	50	< 0.5	< 2	0.17	< 0.5	24	52	20	3.79	< 10	< 1	0.07	10	1.55	245
7 S+325W	201 202	2 < 0.2	0.99	12	< 10	70	< 0.5	< 2	0.15	< 0.5 2 A E	21	50	18	3.12	< 10	< 1	0.08	< 10	1.93	280
3								· · ·	5.13	× v.a	4U	33	14	4.92	< 10	< 1	0.09	< 10	1.23	210
18+350W	201 202	2 < 0.2	1.54	12	< 10	60	< 0.5	< 2	0.14	< 0.5	16	57	14	3.51	< 10	< 1	0.04	< 10	0.50	135
B+375W	201 203		1.15	12	< 10	60	< 0.5	< 2	0.11	< 0.5	16	51	15	2.80	< 10	< 1	0.06	10	0.52	160
J S+425W	201 202	2 < 0.2	1 78	12	< 10	4Q 50	< 0.5 2 n F	< 2	0.13	< 0.5	19	50	17	3.00	< 10	< 1	0.07	< 10	1.02	175
V S+450W	201 202	2 < 0.2	1 65	14	< 10	60	0.5	< 2	0.14	< 0.5	19	55	16	3.40	< 10	< 1	0.08	< 10	0.56	155
		1						• •			47	23	30	7.23	< 10	< 1 ₁	/0.08	10	0.73	275
L				<u> </u>			· ·····											_ 7		

CERTIFICATION:_____

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ALS Chemex

Aurora Laboratory Services Ltd. Analytical Chemists * Geochemists * Registered Assayers

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

240 - 800 W. PENDER ST. VANCOUVER, BC V6C 2V6 Page Number :1-B Total / 's :2 Certific. - Date: 07-JUN-2001 Invoice No. : I0117685 P.O. Number : Account : NWT

Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT

ſ		-,									CE	RTIFI	CATE	OF A	NAL	/SIS	A	0117685	
SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P Ppm	Pb ppm	S ኈ	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl Prm	U PPm	V mqq	W	Zn jopm		
05+000	201 20	2	< 1 <	0.01	22	240	 6 < 0	.01	< 2	1	11	0.03	< 10	< 10	29	< 10	44		
ps+025	201 20;	2	< 1 <	0.01	24	290	8 < 0).01	< 2	1	14	0.03	< 10	< 10	32	< 10	56		
05+050	201 20:	2	< 1 <	0.01	22	210	10 < 0).01	< 2	1	9	0.01	< 10	< 10	22	< 10	50		
OS+075	201 203	2	< 1 <	0.01	22	270	6 < 0).01	< 2	1	8	0.01	< 10	< 10	23	< 10	46		
DS+100	201 20:	2	< 1 <	0.01	19	340	8 < C	0.01	2	1	11	0.03	< 10	< 10	32	< 10	60		
05+125	201 20:	2	< 1 <	0.01	20	230	10 < 0	0.01	< 2	1	12	0.03	< 10	< 10	31	< 10	68	······································	
05+150	201 20;	2	< 1 <	0.01	40	220	68 < 0	1.01	< 2	4	20	0.01	< 10	< 10	23	< 10	304		1
ps+175	201 20:	2]	< 1 <	0.01	20	140	6 < 0	0.01	< 2	1	13	0.03	< 10	< 10	32	< 10	46		
ps+200	201 20:	2	< 1 <	0.01	25	190	52 < 0	1.01	2	1	12	0.01	< 10	< 10	25	< 10	116		
DS+225	201 20	2	< 1 <	0.01	15	130	10 < 0	3.01	< 2	< 1	7	0.03	< 10	< 10	27	< 10	86		
05+250	201 20	2	< 1 <	0.01	22	210	10 < 0	0.01	2	1	6	0.01	< 10	< 10	23	< 10	52		
05+275	201 20:	2	< 1 <	0.01	25	370	8 < 0	.01	< 2	1	15	0.04	< 10	< 10	38	< 10	68		
ps+300	201 20.	2	< 1 <	0.01	24	310	8 < 0	3.01	< 2	1	8	0.01	< 10	< 10	21	< 10	38		
OS+325	201 20	2	< 1 <	0.01	18	170	10 < 0	0.01	< 2	1	14	0.01	< 10	< 10	26	< 10	42		
DS+350	201 20	2	< 1 <	0.01	11	150	8 < 0	0.01	< 2	< 1	12	0.02	< 10	< 10	29	< 10	30		
05+375	201 20	2	< 1 <	0.01	18	140	8 < 0	.01	2	1	12	0.04	< 10	< 10	34	< 10	34		
05+400	201 20	2	< 1 <	0.01	24	330	6 < 0).01	< 2	1	6	0.01	< 10	< 10	18	< 10	30		
05+425	201 20	2	< 1 <	0.01	22	270	8 < 0	0.01	< 2	1	6	0.02	< 10	< 10	24	< 10	36		
05+450		2	< 1 <	0.01	22	340	10 < 0	0.01	< 2	1	11	0.03	< 10	< 10	33	< 10	38		
U5+4/5		4	< 1 <	0.01	36	280	12 < 0	0.01	< 2	3	17	0.02	< 10	< 10	22	< 10	42		
05+500	201 20	2	< 1 <	0.01	24	200	6 < 0	.01	< 2	2	13	0.02	< 10	< 10	22	< 10	32		
S+UUOW	201 20.	2	< 1 <	0.01	143	450	6 0	0.01	< 2	1	15	0.02	< 10	< 10	37	< 10	38		
S+025W	201 20	2	< 1 <	0.01	86	280	16 (0.01	< 2	2	32	0.04	< 10	< 10	35	< 10	136		
S+U50W	201 20	2	< 1 <	0.01	99	460	12 < 0	0.01	< 2	3	25	0.03	< 10	< 10	25	< 10	56		
S+075W	201 20	2	< 1 <	0.01	96	340	12 (3.01	< 2	2	36	0.03	< 10	< 10	29	< 10	72		
S+100W	201 20	2	< 1 <	0.01	106	310	10 (0.01	< 2	1	16	0.03	< 10	< 10	25	< 10	38		
S+125W	201 20	2	< 1 <	0.01	124	240	8 < (D.01	< 2	1	5	0.03	< 10	< 10	30	< 10	36		
S+150W	201 20	2	< 1 <	0.01	88	530	8 < (0.01	< 2	1	10	0.03	< 10	< 10	23	< 10	46		
S+175W	201 20	2	< 1 <	0.01	107	210	10 < (0.01	< 2	1	8	0.03	< 10	< 10	35	< 10	40		
S+200W	201 20	2	< 1 <	0.01	128	390	8 < (0.01	< 2	3	9	0.04	< 10	< 10	27	< 10	44		
9+225W	201 20	2	< 1 <	0.01	122	310	10 < (0.01	< 2	2	9	0.04	< 10	< 10	29	< 10	44		
5+450W	201 20	<u>2</u>	< 1 <	0.01	103	410	12 < (0.01	2	3	10	0.04	< 10	< 10	28	< 10	64		
S+2/5W	201 20	4	< 1 <	0.01	107	490	12 < (0.01	< 2	1	10	0.04	< 10	< 10	38	< 10	60		
8+300W	201 20	2	< 1 <	0.01	146	390	10 < 0	0.01	< 2	2	9	0.04	< 10	< 10	34	< 10	40		
D+320W	201 20	2 	< 1 <	0.01	85	500	12 < (0.01	< 2	1	7	0.04	< 10	< 10	25	< 10	70		
S+350W	201 20	2	< 1 <	0.01	65	220	12 < (0.01	< 2	1	12	0.04	< 10	< 10	44	< 10	74		
WC/CTO	201 20	1	< 1 <	0.01	60	300	8 < (0.01	< 2	4	8	0.04	< 10	< 10	25	< 10	50		
STADEW	201 20	<u> </u>	< 1 <	0.01	97	500	8 < 1	0.01	< 2	1	8	0.04	< 10	< 10	28	< 10	46		
ST42DW St450W	201 20	<u>*</u>	< 1 <	0.01	74	500	10 < 0	0.01	< 2	1	9	0.04	< 10	< 10	34	< 10	56	~	
P37830W	201 20	1	< 1 <	0.01	88	310	10 < 0	0.01	< 2	5	13	0.05	< 10	< 10	27	< 10	58	() -	1
L	[!												•					\rightarrow	1

CERTIFICATION:

· Dave

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ALS Chemex

Aurora Laboratory Services Ltd. Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver

212 Brocksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

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To: CROSS LAKE MINERALS LTD.

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

Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT Page Number :2-A Total F s :2 Certific , Date: 07-JUN-2001 Invoice No. : 10117685 P.O. Number : Account : NWT

[DDED									ĊE	RTIFI	CATE	OF A	NAL	YSIS		40117	685		_
SAMPLE	PR CO	EP DE	Ag ppm	A1 %	As ppm	binu B	Ba pŗm	Be ppm	Bi ppm	Ca १	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K L	La ppm	Mg %	Mn ppm
S+500W W-01-1	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
																			A	1	

CERTIFICATION:

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ALS hemex

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

To: CROSS LAKE MINERALS LTD.

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

Page Number : 2-B Total '95 : 2 Certifi 9 Date: 07-JUN-2001 Invoice No. : 10117685 P.O. Number : Account : NWT

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Project : INGENIKA Comments: ATTN: JIM MILLER-TAIT ÷

F											CE	RTIF	CATE	OF A	NAL	rsis		A0117685	
SAMPLE	PRI COI	2P DE	Mo ppm	Na %	Ni ppm	p prm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti X	Tl ppm	U mīg	V ppm	M M	Zn ppm		
S+50DW W-01-1	201 201	202 202	< 1 19	< 0.01 < 0.01	129 85	470 3430	14 204	0.01 0.10	< 2 6	32	22 460	0.05 0.01	< 10 < 10	< 10 < 10	27 118	< 10 < 10	64 1275		
		,																	
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	1																		
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CERTIFICATION:

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212 Brooksbank Avenue North Vancouver, BC Canace 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.

Chemex Labs

✗ 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			C	Detection	Upper Limit
<u>Code</u>		Element	<u>Symbol</u>		<u>••••••</u> ••••••••••••••••••••••••••••••
229		ICP-AQ Digestion	n/a	n/a	n/a
2119	٠	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	*	Bervilium	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 %
2150		Iron	Fe	0.01%	15 %
2151		Lanthanum	La	10 ppm	1%
2140		Lead	РЬ	2 ppm	1%
2134	٠	Magnesium	Mg	0.01%	15 %
2135		Manganese	Mn	5 ppni	1 %
2131		Mercury	Hg	1 ppm	1 %
2136		Molvbdenum	Mo	1 ppm	1 %
2138		Nickel	Ni	1 ppm	1 %
2139		Phosphorus	P	10 ppm	1 %
2132	٠	Potassium	К	0.01%	10 %



Geochemical Procedure - G32 Package (con't)

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

*Elements for which the digestion is possibly incomplete.

.



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)

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:

С	hemex <u>Code</u>	Element	<u>Symbol</u>	Detection <u>Limit</u>	Lpper <u>Limit</u>
	331	Arsenic	As	0.01 %	100 %
	349	Bismuth	Bi	0.001 %	100 %
	320	Cadmium	Cd	0.001 %	100 %
.	201	Comper	Cu	0.01 %	100 %
T	2501	Corper	Cu	0.001 %	100 %
	3501	Corper	Cu	10 ppm	1,000,000 ppm
	3300 2000	Iron	Fe	0.01 %	100 %
	320 310	Lead	Pb	0.01 %	100 %
÷	312	Malubdenum	Mo	0.001 %	100 %
	300	Molybuenam Molybuenam as MoS	MoS	0.001 %	100 %
	307	Ciliana	Δσ	0.3 g/t	350 g/t
	385	Silver		0.3 g/t	350 g/t
	956	Silver (Rush charge)	75 75	0.01 %	100 %
¥	316	Zinc	Z.E1	0.01 %	100 %
	8089	Manganese	ivin	0.01 /0	200 10

American/English Units:

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



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 F	ternation loutine <u>Code</u>	al Units: Rush <u>Code</u>	Element	*Sample <u>Weight</u>	<u>Symbol</u>	Detection Limit	Upper <u>Limit</u>
*	397 997 3597 1297 1597 448 384 447	474 955 473	Gold Gold Gold Gold Gold Silver Silver	1 assay ton 1 assay ton 50 grams 2 assay ton 5 assay ton all 1/2 assay ton all	Au Au Au Au Au Ag Ag	0.1 g/t 0.07 g/t 0.07 g/t 0.03 g/t 0.03 g/t 0.002 mg 3 g/t 0.1 mg	1,000 g/t 1,000 g/t 1,000 g/t 1,000 g/t 1,000 g/t 30 mg 3,500 g/t 100 mg

American/H Routine <u>Code</u>	English Units: Rush <u>Code</u>	Element	*Sample <u>Weight</u>	<u>Symbol</u>	Detection Limit	Upp er <u>Limit</u>
396 996 3596 1296 1596 383	471 954 470	Gold Gold Gold Gold Gold Silver	14 assay ton 1 assay ton 50 grams 2 assay ton 5 assay ton 14 assay ton	Au Au Au Au Au Ag	0.003 oz/ton 0.002 oz/ton 0.001 oz/ton 0.001 oz/ton 0.001 oz/ton 0.1 oz/ton	30 oz/ton 30 oz/ton 30 oz/ton 30 oz/ton 30 oz/ton 100 oz/tor

"Note:	½ assay ton	28	14.5883 grams
,	1 assay ton	H	29.166 grams
	2 assay ton	=	55.322 grams
	5 assay ton	=	145.83 grams



Fire Assay Procedure - Trace Gold

Sample Decomposition: 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:

R	outine <u>Code</u>	Rush <u>Code</u>	Element	Sample Weight <u>(grams)</u>	<u>Symbol</u>	Detection <u>Limit</u>	Upper <u>Limit</u>
*	100 96 983	990 1090 991	Gold Gold Gold	10 10 30	Au Au Au	5 ppb 0.005 ppm 5 ppb	10,000 ppb 10 ppm 10,000 ppb 10 ppm
*11	99 494 3583 3584 3594	1091 1209	Gold Gold Gold Gold Gold	30 30 50 50 50	Au Au Au Au Au	0.005 ppm 0.005 g/t 5 ppb 0.005 ppm 0.005 g/t	10 ppin 10 g/t 10,000 ppb 10 ppm 10 g/t

American/English Units:

Routine Co <u>de</u>	e Rush <u>Code Element</u>		Sample Weight (<u>grams) Symbol</u>		Detection <u>Limit</u>	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	LABORATORY	
Project : CROSS Ref/I.D.: (W-1,2	LAKE MINER 2/1-1,2,3)	ALS			
Reported to and	: JIM MILL :	ER-TAIT		Shipped to lab : Received at lab:	08 06 01 08 06 01 12 06 01
Lab Nos : R01-02	2799 to R01	-02803		Work completed :	12 06 01
Analysis/prep	reported	no req no	0 rate	no @ rate	\$ TOTAL
Rock Slabbing/Po Pb assay Zn assay Ag acid dig/AA Standard Rock P:	olishing (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 \$5.0 0 \$5.0	00 00 00 00 00	80.00 40.00 40.00 25.00 25.00
				Job Cost = \$	210.00 /

G.S.T (7%) = \$ 14.70 / TOTAL PAYABLE (Cdn) = \$ 224.70 /

2

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

...

		Ag (2)	Zn (1)	Pb(1)	FIELD NUMBER	LAB NO
		g/t	8	۲		
		96.3	26.30	25.98		80102799
		384.8	8.46	42.43	₩-2	R0102800
e . e	2	139.8	25.62	16.28	I-1	R0102801
TNGENIN	1	8.4	31.07	0.59	1-2	R0102802
)	81.4	33.61	8.77	I-3	R0102803

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

ANALYTICAL METHODS

Pb(1) Assay

Zn(1) Assay

Ag(2) Acid decomposition / AAS



1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 063695

To: Cross Lake Minerals Ltd Attn: Jim Miller-Tait

Date : 07/06/01

240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

Copy 1 to :

Copy 2 to

P.O. No.	:	
Project No.	:	INGENIKA
No. of Samples	:	40 Soil
Date Submitted	:	04/06/01
Report Comprises	:	Cover Sheet plus
		Pages 1 to 2

1

Distribution of unused material: Pulps: STORE Rejects: STORE

Certified By

÷

Dr. Hugh de Souza, General Manager XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer:	L.N.R.	= Listed not received	I.S.	= Insufficient Sample
	n.a.	 Not applicable 		 No result
	* INE	= Composition of this sample m	nakes detection impl	ossible by this method
	M after a	result denotes ppb to ppm convers	sion, % denotes ppn	1 to % conversion



	A Div	ision of	SGS Ca	inada inc.		
Work Order:	063695]	Date:	07/06/01	FINAL	Page 1 of 2
Element.	Cu	Zn	Cd	Рь		
Method.	MMI-A	MMI-A	MMI-A	MMI-A		
Det.Lim.	5	5	10	20		
Units.	р р Ь	ppb	ppb	ррb		
SW 000W	119	2100	< 10	< 20		
SW 025W	168	2190	26	61		
SW 050W	182	663	54	125		
SW 075W	141	487	24	83		
SW 100W	287	172	17	119		
SW 125W	85	61	< 10	242		
SW 150W	86	1270	15	72		
SW 175W	67	371	< 10	80		
SW 200W	123	1310	19	207		
SW 225W	120	218	13	271		
SW 250W	214	199	12	1 65		
SW 275W	73	233	<10	236		
SW 325W	66	856	13	241		
SW 350W	60	402	<10	206		
SW 375W	50	126	<10	128		
-SW 400W	67	75	< 10	146		
- 'SW 425W	76	129	< 10	85		
450W	66	65	< 10	294	Sugar and Frank	
<u>SW 500W</u>	379	780	< 10	143		<u> </u>
OS 075S	91	645	< 10	256	INGENIKA	
OS 000W	63	338	< 10	150		
OS 025W	91	145	<10	227		
OS 050W	104	174	<10	315		
OS 100W	71	678	<10	414		
OS 125W	46	67	<10	289		
OS 150W	197	242	<10	71		
OS 175W	55	133	< 10	160		
OS 200W	65	1770	<10	599		
OS 225W	36	2610	19	316		
OS 250W	38	4740	38	319		
OS 275W	113	201	< 10	187		
OS 300W	38	53	<10	150		
OS 325W	102	239	< 10	283		
OS 350W	92	366	< 10	214		
OS 375W	97	56	< 10	166		
OS 400W	118	484	< 10	209		
OS 425W	69	160	< 10	357		
OS 450W	58	121	< 10	180		
OS 475W	238	70	< 10	232		
OS 500W	95	79	< 10	307		
*Dup SW 000W	116	2170	13	< 20		
*Dup SW 325W	59	784	11	207		
*Dup OS 125W	41	68	< 10	311		
*Dup OS 425W	75	160	<10	395		
*BIK BLANK	<5	<5	<10	< 20		



Pb		Cd	Ζп	Cu
Al-A	MM	MMI-A	MMI-A	MMI-A
20		10	5	5
ppb		ppb	ppb	ppb

612 4310 17

*Std MMISRM07

Method. Det.Lim. Units.

١.

413

FINAL

Page 2 of 2



1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 063906

To: Cross Lake Minerals Ltd Attn: Jim Miller-Tait

> 240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

> > 1

Copy 1 to

P.O. No. Ingenika Project No. Ingerika 1 Soil(MMI) No. of Samples ÷ 21 21/06/01 **Date Submitted** 1 **Report Comprises** Cover Sheet plus ÷ Pages 1 to 1

Distribution of unused material: Pulps: Store. Rejects: Store.

Certified By

Dr.⁴Hugh de Souza, General Manager XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer:	L.N.R. n.a.	 Listed not received Not applicable 	I.S.	 Insufficient Sample No result
	• INF M after a	= Composition of this sample result denotes ppb to ppm convert	makes detection imp rsion, % denotes ppn	ossible by this method n to % conversion



Date : 27/06/01



Work Order:	063906	Ι	Date:	27/06/01	FINAL
Element. Method. Det.Lim. Units.	Cu MMI-A 5 ppb	Zn MMI-A 5 ppb	Cd MMI-A 10 ppb	РЬ ММІ-А 20 ррь	
ON-M-000	29	136	< 10	98	
ON-M-025	52	41	< 10	74	
ON-M-050	51	70	< 10	140	
ON-M-075	30	55	< 10	153	
ON-M-100	159	74	13	6390	
ON-M-125	31	97	< 10	195	
ON-M-150	43	98	< 10	237	
ON-M-175	29	102	< 10	358	
ON-M-200	30	59	< 10	231	
ON-M-225	43	79	<10	183	
ON-M-250	34	159	<10	140	
ON-M-275	68	58	13	111	
ON-M-300	24	51	12	179	
ON-M-325	62	203	10	80	
ON-M-350	99	79	16	87	
•••ON-M-375	49	49	13	327	
' ON-M-400	646	46	<10	89	
· ON-M-425	23	54	<10	71	
ON-M-450	34	313	12	247	
ON-M-475	63	93	13	130	
ON-M-500	57	60	<10	136	

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1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 064149

To: Cross Lake Minerals Ltd Attn: Jim Miller-Tait

240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

:

Copy 1 to

P.O. No. Project No.	:	INGENIK	Δ	v	/
Project No.			ြင်္ခရ	илл	MB
No. of Samples		34	. 300	11111	¥117
Date Submitted	:	10/07/01	1		
Report Comprises	:	Cover Sh	ieet p	lus	
		Pages	1 t	0	2

Distribution of unused material: Pulps: Store. Rejects: Store.

Certified By

1

Dr. Hugh de Souza, General Manager XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer:	L.N.R.	= Listed not received	1.S.	= Insufficient Sample
hepott i obtoil	n.a.	 Not applicable 		= No result
	*INF	= Composition of this sample m	akes detection imp	possible by this method
	M after a	result denotes ppb to ppm conversion	ion, % denotes pp	m to % conversion



Date : 16/07/01

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2



	A Div	ision of	565 Cá	inada (nc.	
Work Order:	064149	1	Date:	16/07/01	FINAL
Element.	Cu	Zn	Cd	Pb	
Method.	MMI-A	MMI-A	MMI-A	MMI-A	
Det.Lim.	5	5	10 	20 nab	
Units.	bbp	ррв	ppo	իիս	
IBL+00S	38	65	< 10	50	
1BL + 50S	23	32	< 10	143	
IBL+75S	130	100	< 10	234	
IBL + 100S	22	100	< 10	234	
IBL+2755	43	(47	< 10	217	
IBL + 300S	12	800	10	151	
IBL+575S	94	31	< 10	124	
IBL+625S	20	20	<10	<20	
IBL+675S	113	91	<10	189	
IBL + 725S	100	25	<10	127	
IL1S+50E	20	26	<10	136	
ILIS+75E	39	117	<10	317	
IL1S+100E	23	126	<10	37	
IL1S + 125E	38	21	< 10	<20	
IL1S + 150E	31	70	<10	32	
IL1S+175E	15	65	<10	< 20	
IL1S+200E	15	45	<10	<20	
IL1S+225E	78	72	<10	94	
IL1S+50W	16	27	< 10	49	
ILIS+75W	22	9	<10	39	
1L1S+250W	17	31	<10	<20	
IL2S+25E	112	459	<10	231	
IL2S + 50E	33	460	< 10	163	
IL2S + 75E	26	353	< 10	99	
IL2S + 100E	52	310	<10	143	
IL2S+150E	28	89	<10	193	
1L2S + 175E	41	200	<10	158	
IL2S + 200E	62	159	<10	371	
IL2S+225E	34	210	< 10	242	
IL2S+250E	37	229	< 10	181	
IL2S+75W	34	33	< 10	289	
IL25 + 125W	134	3590	11	73	
IL2S + 150W	16	159	< 10	220	
TL2S+175W	63	68	< 10	301	
IL2S+200W	79	52	< 10	550	
IL2S+225W	52	205	< 10	187	
IL4S+25E	98	203	< 10	207	
IL4S + 75E	45	143	< 10	253	
IL4S + 100E	73	27	< 10	108	
IL4S + 125E	70	424	< 10	213	
IL4S + 150E	31	221	< 10	145	
IL4S+175E	43	303	< 10	200	
IL4S+200E	53	213	< 10	221	
IL4S+225E	36	287	< 10	155	
IL4S + 250E	42	106	< 10	100	

Page 1 of 2



Work Order:	064149	Date:		16/07/01
Element.	Cu	Zn	Cđ	Pb
Method.	MMI-A	MMI-A	MMI-A	MMI-A
Det.Lim.	5	5	10	20
Units.	ppb	ppb	ppb	ppb
IL4S + 275E	42	239	<10	384
*Bik BLANK	<5	<5	<10	<20
*Std MMISRM07	654	8630	23	516
IL4S + 300E	31	247	<10	206
IL4S + 325E	34	732	<10	580
IL4S + 350E	29	518	<10	162
IL4S + 375E	32	75	<10	54
IL5S + 150E	45	708	<10	344
IL5S + 450E	32	1510	<10	394
IL5S + 500E	76	128	<10	64
IL6S + 250E	17	973	<10	<20
*Dup IBL +00S	40	74	<10	70
*Dup IL1S + 100E	23	114	<10	24
*Dup IL2S + 100E	47	303	<10	156
*Dup IL4S + 25E	108	187	<10	225
*Dup IL4S + 350E	31	510	<10	168
*Blk BLANK	<5	<5	<10	<20
*Std MMISRM07	647	8630	24	562

FINAL

Page 2 of 2

JUL 2 4 2001



1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 064152

To: Cross Lake Minerals Ltd Attn: Jim Miller-Tait

> 240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

> > 1

Copy 1 to

:	INGENIKA	~	
:	55 S	ioiI{MMI}	
:	10/07/01		
:	Cover Shee	t plus	
	Pages 1	to 2	
		INGENIKA 55 S 10/07/01 Cover Shee Pages 1	INGENIKA 55 Soil{MMI} 10/07/01 Cover Sheet plus Pages 1 to 2

Distribution of unused material: Pulps: Store. Rejects: Store.

Certified By

1

Dr. Hugh de Souza, General Manager XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer:	L.N.R.	= Listed not received	I.S.	= Insufficient Sample
,	n.a.	 Not applicable 		= No result
	*INF	 Composition of this sample mak 	es detection im	possible by this method
	M after a	result denotes ppb to ppm conversion	1, % denotes pp	im to % conversion



Date : 18/07/01



XRAL Laboratories A Division of SGS Canada Inc.

Work Order:	064152	1	18/07/0	
Element. Method. Det Lim	Cu MMI-A 5	Zn MMI-A 5	Cd MMI-A 10	Pb MMI-A 20
Units.	ppb	ppb	ppb	ppb
IBL+25S	49	378	< 10	341
IBL-100S	311	112	< 10	96
IBL-125S	23	31	< 10	177
IBL-150S	42	64	< 10	278
IBL-175S	42	318	< 10	158
IBL-200S	63	278	< 10	457
IBL-225S	44	104	< 10	203
IBL+2758	00	1700	~ 10	110
IBL-325S	247	1780	00	420
IBL-350S	100	114	< 10	000
IBL-375S	44	700	< 10	239
IBL-400S	/1	204	< 10	232
IBL-4258	40	204	< 10	374
IBL-4508	310	70	< 10	133
IBL-475S	53	11	< 10	122
IBL-500S	41	271	< 10	205
IBL-525S	52	165	< 10	295
IBL-550S	92	125	<10	286
IBL-600S	21	10	< 10	<20
IBL-650S	41	928	< 10	<20
IBL-700S	58	113	< 10	196
IBL-750S	51	133	<10	645
IBL+775S	34	486	<10	257
IBL + 800S	65	473	<10	195
IL1S+25E	53	266	<10	250
IL1S+50E	41	217	< 10	178
IL1S+125E	85	112	<10	125
IL1S+250E	17	11	<10	<20
L1S+25W	22	299	<10	<20
IL1S+100W	15	25	< 10	<20
IL1S + 125W	16	41	< 10	<20
IL1S+150W	25	1150	<10	39
IL1S+175W	13	10	<10	<20
IL1S+200W	15	< 5	<10	<20
IL1S+225W	12	17	<10	<20
IL2S+25W	25	703	< 10	154
IL2S+50W	37	1060	<10	177
IL2S+100W 🖌	30	71	< 10	215
IL2S+250W	146	165	< 10	59
IL4S+25W	52	109	< 10	224
IL4S+50W	40	642	< 10	173
IL4S+75W	70	63	< 10	66
IL4S+100W	32	117	< 10	217
IL4S+125W	40	75	< 10	150
IL4S+150W	39	117	< 10	148

Date: 18/07/01 FINAL

Page 1 of 2



Work Order:	064152	Date:		18/07/01
Element.	Cu	Zn	Cd	Pb
Method.	MMI-A	MMI-A	MMI-A	MMI-A
Det.Lim.	5	5	10	20
Units.	ppb	ppb	ppb	ppb
IL4S+175W	43	93	< 10	116
*Blk BLANK	<5	<5	<10	< 20
*Std MMISRM07	714	9810	25	485
IL4S+200W	40	752	<10	159
IL4S+225W	37	86	< 10	236
IL4S+250W	21	1520	< 10	341
IL4S+275W	28	1350	<10	250
IL4S + 300W	16	116	<10	170
IL6S + 400W	46	89	<10	91
IL7S+425W	31	510	<10	209
IL7S + 500W	12	77	< 10	< 20
IL8S+225W	50	628	<10	193
*Dup IBL + 25S	50	402	<10	326
*Dup IBL-425S	36	180	<10	430
*Dup 1L1S+25E	47	268	<10	230
*Dup IL2S+50W	33	905	<10	199
*Dup IL4S+250W	18	1400	<10	311
*Bik BLANK	<5	<5	<10	< 20
*Std MMISRM07	701	9710	22	501

FINAL

Page 2 of 2

JUL 2 4 2001



1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 064154

To: **Cross Lake Minerals Ltd** Jim Miller-Tait Attn:

Date 18/07/01 :

240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

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Copy 1 to

P.O. No. INGENIKA SWANNELL Project No. 2 57 Soil (MMI) No. of Samples 2 10/07/01 Date Submitted ÷ **Report Comprises** Cover Sheet plus ŝ 2 Pages 1 to

Distribution of unused material: Store Pulps: Rejects: Store

Certified By

ŝ

Dr. Hugh' de Souza, General Manager XRAL Laboratories

Sample

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer:	L.N.R.	 Listed not received 	t. S .	= Insufficient Sampl
·	n.a.	 Not applicable 		= No result
	*INF	= Composition of this sample m	nakes detection imp	ossible by this method
	M after a	result denotes ppb to ppm convers	sion, % denotes ppr	n to % conversion





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Work Order:	064154	I	Date:	18/07/01	
Element. Method. Det.Lim.	Cu MMI-A 5	Zn MMI-A 5	Cd MMI-A 10	РЬ ММІ-А 20	
Units.	ppb	ppb	ppb	ppb	
			- 10	05	
IL5S+025E	317	109	< 10	85	
1L5S+050E	37	158	< 10	109	
1L5S+075E	29	111	< 10	01	
IL5S + 100E	41	75	< 10	97	
IL5S+125E	30	203	< 10	020	
IL5S + 150E	48	208	< 10	163	
IL5S + 175E	91	81	< 10	124	
11.5S + 200E	79	30	< 10	121	
IL5S + 225E	22	193	< 10	178	
IL5S + 250E	30	118	<10	217	
IL5S+275E	51	88	<10	187	
IL5S+300E	40	481	<10	312	
IL5S+025W	59	233	<10	151	
IL5S+050W	68	344	<10	205	
IL5S+075W	51	423	<10	279	
U 58 + 100W	46	497	< 10	1040	
$11.55 \pm 125W$	43	632	<10	176	
II 55 + 175W	20	1020	< 10	306	
1153 + 175 W	40	536	< 10	220	
1L5S+225W	37	530	<10	352	
IL5S+250W	43	787	<10	366	
IL5S+275W	29	535	< 10	196	
IL5S+300W	28	234	< 10	209	
IL5S+325W	56	99	< 10	165	
IL5S+350W	50	159	< 10	314	
IL5S + 375W	40	39	< 10	195	
IL5S + 400W	69	58	< 10	201	
IL5S + 425W	26	289	< 10	196	
IL5S+475W	26	47	< 10	27	
IL6S+025E	19	133	< 10	< 20	
B (B - 8787	76		17	101	
IL6S +050E	13	72	<10 <10	101 ~ 20	
IL05+075E	41	44	< 10	< 20 < 20	
1L6S + 100E	20	22	< 10	< 20	
1L0S + 125E	10	72	< 10	< 20	
1L6S+150E	17	13	< 10	~ 20	
IL6S+175E	< 5	420	< 10	43	
IL6S+200E	< 5	1140	<10	25	
IL6S+225E	7	227	<10	<20	
IL6S+275E	< 5	240	<10	<20	
IL6S+300E	15	32	<10	<20	
U.78 (100E	56	607	< 10	445	
11.75 + 1002	20- 20-	140	< 10	170	
1L/3+23W	40 04	147	<10	< 20	
1L75+123W	دہ יי	20 110	~ 10	54	
11.75 ± 200 W	21	4U 11A	~ 10	24	
1L7S+325W	24	40	< 10	200	

FINAL

Page 1 of 2



XRA	XRA A Div	L Labo ision of	oratorie SGS Ca	es Inada Inc.	
Work Order:	064154	Ι	Date:	18/07/01	FINAL
Element.	Cu	Zn	Cđ	Pb	
Method.	MMI-A	MMI-A	MMI-A	MMI-A	
Det.Lim.	5	5	10	20	
Units.	ррр	ррЬ	ppb	ррь	
IL7S+600W	22	651	11	83	
*Blk BLANK	< 5	<5	<10	< 20	
*Std MMISRM07	694	9460	27	500	
IL8S+75E	33	458	<10	307	
IL8S+200W	77	88	<10	205	
IL8S+250W	111	201	<10	269	
IL8S + 325W	56	180	<10	328	
IL8S + 350W	62	38	<10	43	
IL8S + 375W	48	83	<10	<20	
IL8S+425W	35	122	<10	302	
IL8S+475W	13	766	<10	<20	
IL8S + 500W	90	2530	22	182	
IL8S+600W	24	1220	<10	465	
IL8S+625W	73	1190	11	91	
*Dup IL5S+025E	342	120	<10	67	
*Dup IL5S+025W	66	208	<10	133	
*Dup IL5S+350W	56	186	<10	277	
*Dup IL6S+200E	9	861	<10	<20	
*Dup IL8S+250W	100	242	<10	305	
*Blk BLANK	<5	<5	<10	<20	
*Std MMISRM07	693	9460	28	479	

Page 2 of 2



1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 064155

To: Cross Lake Minerals Ltd Attn: Jim Miller-Tait

Date : 19/07/01

240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

:

Copy 1 to

P.O. No. Project No.	:	SWANNEL INGENIKA
No. of Samples Date Submitted	:	62 Soil (MMI) 10/07/01
Report Comprises	:	Cover Sheet plus Pages 1 to 2

Distribution of unused material: Pulps: Store. Rejects: Store.

Certified By

:

Dr. Hugh de Souza, General Manager XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer:	L.N.R.	= Listed not received	I.S.	= Insufficient Sample
	n,a.	= Not applicable		= No result
	*INF	= Composition of this sample makes deter	ction impo	ssible by this method
	M after a re	sult denotes ppb to ppm conversion, % der	notes ppm	to % conversion



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XRAL Laboratories A Division of SGS Canada Inc.

Work	Order:	064155	Date:		19/07/01
Element. Method. Det.Lim.		Cu MMI-A 5	Zn MMI-A 5	Cd MMI-A 10	Pb MMI-A 20
Units.		ррб	рро	рро	ррь
L6S+025W		24	165	<10	97
L6S+050W		<5	545	<10	<20
L6S+075W		<5	310	<10	<20
L6S+100W		<5	191	<10	<20
L6S+125W		12	1260	<10	73
L6S+150W		31	170	< 10	180
L6S+175W		<5	19	< 10	< 20
L6S + 200W		<5	26	< 10	< 20
L6S+225W		16	25	< 10	29
L6S + 250W		42	43	<10	<20
L6S+275W		35	87	<10	80
L6S+300W		47	182	<10	63
L6S+325W		< 5	49	<10	38
L6S+350W		21	29	<10	62
L6S+375W		18	6	<10	<20
L6S+425W		23	74	<10	89
L6S+450W		23	60	< 10	99
L6S+475W		33	988	< 10	237
L6S + 500W		44	81	< 10	340
IL7S+025E		65	198	< 10	194
IL7S+050E		90	1040	<10	220
IL7S+075E		33	228	<10	229
IL7S+125E		70	135	<10	521
IL7S+150E		26	113	<10	169
IL7S+175E		19	864	< 10	221
IL7S+050W		42	31	< 10	110
IL7S+075W		38	30	< 10	148
IL7S+100W		58	27	< 10	84
IL7S+150W		20	25	< 10	36
1L7S + 175W		81	52	< 10	/4
IL7S+200E		55	141	< 10	133
IL7S+225W		38	60	< 10	182
IL7S+250W		34	99	< 10	<20
IL7S+275W		50	35	< 10	103
IL7S+300W		34	20	<10	4(
IL7S+350W		44	67	<10	206
IL7S+375W		16	99	<10	64
IL7S + 400W		97	403	<10	382
IL7S+450W		35	708	<10	213
IL7S+475W		86	190	<10	280
IL7S + 525W		<5	375	< 10	< 20
IL7S + 550W		45	263	< 10	195
1L7S + 575W		04	121	< 10	272
		31	299 6 CD	< 10 < 10	241
1L03+030E		18	050	~ 10	200

FINAL

Page 1 of 2



Work Order:	064155]	Date:	19/07/01	FINAL
Element.	Си	Zn	Cd	Pb	
Method.	MMI-A	MMI-A	MMI-A	MMI-A	
Det.Lim.	5	5	10	20	
Units.	ppb	ppb	ppb	ppp	
IL8S+100E	30	337	< 10	217	
*Bik BLANK	< 5	<5	< 10	< 20	
*Std MMISRM07	535	8020	22	476	
IL8S+025W	47	290	<10	270	
IL8S+050W	35	91	<10	244	
IL8S+075W	46	501	<10	183	
IL8S+100W	54	501	<10	243	
IL8S+125W	54	427	<10	403	
IL8S+150W	103	62	<10	353	
IL8S+175W	107	264	<10	388	
IL8S+200W	11	82	<10	58	
IL8S+225W	28	51	<10	189	
IL8S + 300W	74	591	13	193	
IL8S+400W	46	222	< 10	369	
IL8S+450W	6	222	< 10	31	
IL8S + 525W	28	284	< 10	23	
L8S+550W	15	878	< 10	359	
IL8S+575W	22	3880	<10	188	
IL8S+650W	9	1000	<10	< 20	
*Dup L6S+025W	21	193	<10	110	
*Dup L6S+325W	7	46	<10	45	
*Dup IL7S+175E	19	787	<10	196	
*Dup IL7S+375W	21	110	<10	76	
*Dup IL8S+075W	51	583	<10	223	
*Dup IL8S+575W	30	3980	<10	177	
*Bik BLANK	<5	<5	<10	<20	
*Std MMISRM07	511	7720	18	496	

Page 2 of 2

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1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 065222

To: Cross Lake Minerals Ltd Attn: Jim Miller-Tait

240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

:

Copy 1 to

P.O. No. Project No. No. of Samples Date Submitted Report Comprises

Ingenika 23 Soil(MMI) 12/09/01 Cover Sheet plus Pages 1 to 1

Distribution of unused material: Pulps: STORE Rejects: STORE

Certified By

.

Dr. Hugh de Šouza, General Manager XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report	Footer:
--------	---------

L.N.R.= Listed not receivedI.S.= Insufficient Samplen.a.= Not applicable--= No result*INF= Composition of this sample makes detection impossible by this methodM after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Date : 19/09/01



XRAL Laboratories A Division of SGS Canada Inc.

Work Order:	065222]	Date:	19/09/01	FINAL
Element. Method. Det.Lim. Units.	Cu MMI-A 5 ppb	Zn MMI-A 5 ppb	Cd MMI-A 10 ppb	Pb MMI-A 20 ppb	
IL8S+675W	15	59	< 10	32	
1L8S + 700W	32	145	< 10	99	
IL8S+725W	69	68	12	136	
IL8S+750W	91	47	<10	25	
IL8S+775W	72	104	<10	49	
IL85+800W	52	179	< 10	< 20	
IL7.5S + 600W	26	1590	< 10	130	
IL7.5S+625W	47	1150	12	222	
IL7.5S+650W	17	877	<10	254	
IL7.5S+675W	43	525	<10	217	
IL7.5S+700W	117	4490	34	87	
IL7.5S+725W	43	1040	<10	157	
IL7.5S+750W	56	372	<10	218	
IL7.5S + 775W	31	533	< 10	242	
IL7.5S+800W	31	277	< 10	156	
IL8.5S+550W	122	2460	16	660	
IL8.5S+575W	62	9730	59	982	
IL8.5S+600W	22	2700	14	358	
IL8.5S+625W	64	412	24	316	
IL8.5S+650W	38	976	14	20	
IL8.5S+675W	79	3760	<10	83	
IL8.5S + 700W	50	258	<10	51	
IL8.5S+725W	7	96	< 10	< 20	
*Dup 1L8S+675W	14	58	< 10	25	
*Dup IL7.5S+750W	53	407	< 10	257	
*Bik BLANK	< 5	<5	<10	< 20	
*Std MMISRM07	777	8970	30	473	

Page 1 of 1



XRAL Laboratories A Division of SGS Canada Inc.

1885 Leslie Street Don Mills, Ontario Canada M3B 3J4 Telephone (416) 445-5755 Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 066040

To: Cross Lake Minerals Ltd Attn: Jim Miller-Tait

240-800 West Pender St. VANCOUVER BC/CANADA/V6C 2V6

:

Copy 1 to

P.O. No.	÷	1		
Project No.	: Inger	a second		
No. of Samples	: 68	:	Soil(M	IMI)
Date Submitted	: 30/	(10/01		
Report Comprises	: Cov	ver Shei	et plus	s
• •	Pag	jes 1	to	2

Distribution of unused material: Pulps: Store Rejects: Store

Certified By

Dr. Hugh de Souza, General Manager XRAL Laboratories

ISO 9002 REGISTERED

Subject to SGS General Terms and Conditions

Report Footer:	
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L.N.R.= Listed not receivedI.S.= Insufficient Samplen.a.= Not applicable-- \approx No result*INF= Composition of this sample makes detection impossible by this methodM after a result denotes ppb to ppm conversion, % denotes ppm to % conversion



Date : 15/11/01



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XRAL Laboratories A Division of SGS Canada Inc.

Work Order:	066040	I	Date:	15/11/01	
Element. Method.	Cu MMI-A	Zn MMI-A	Cd MMI-A	Pb MMI-A	
Det.Lim.	5	5	10	20	
Units.	ppb	ppb	ppb	ppb	
IL6S+625W	89	59	14	57	
IL6S+650W	199	262	20	174	
IL6S+675W	110	384	16	<20	
IL6S + 700W	54	350	<10	333	
IL6S + 725W	53	402	< 10	177	
II 65 + 750W	80	346	< 10	210	
$H_{65} + 775W$	58	144	< 10	143	
	08	1610	~ 10	193	
1203 + 000 0	55	1640	10	199	
1L05 + 025 W	20	01	- 10	100	
1L03 + 650 W	20	10	< 10	200	
IL6S+875W	60	634	17	426	
IL6S+900W	38	516	<10	49	
IL6.5S+575W	64	226	13	111	
IL6.5S+600W	36	68	<10	372	
IL6.5S+625W	27	245	<10	248	
$H = 55 \pm 650 W$	73	422	10	118	
116.55 + 675W	81	200	13	323	
$II_{6}SS + 700W$	58	1070	17	165	
11.6 5S±225W	61	1500	< 10	304	
11.0.33 + 723 W	17	700	~ 10	207	
120.53 + 750 W		709	<10	200	
IL6.5S+775W	40	1630	<10	251	
IL6.5S+800W	37	1150	<10	171	
IL6.5S+825W	48	1580	<10	304	
11.6.55+850W	60	2540	13	70	
IL6.5S+900W	93	5070	12	238	
IL7S+625W	69	154	< 10	275	
IL7S+650W	57	942	< 10	268	
IL7S+675W	62	750	<10	162	
IL7S+700W	52	1480	15	216	
IL7S+725W	51	777	< 10	169	
IL78+750W	78	1120	11	358	
IL7S+775W	63	763	< 10	141	
IL7S+800W	71	767	13	187	
IL7S + 825W	43	799	< 10	275	
IL7S+850W	49	660	< 10	233	
	• ·			100	
1L7S+875W	44	2190	15	450	
1L7S+900W	31	2660	< 10	1490	
1L9S + 500W	<5	46	<10	<20	
1L9S + 525W	133	807	31	185	
IL9S + 550W	64	597	13	58	
IL9S+575W	73	720	25	179	
IL9S+600W	54	169	10	105	
IL9S+625W	303	166	12	136	
1L9S+650W	127	867	27	<20	
IL9S+725W	17	262	<10	<20	

FINAL

Page 1 of 2

SES Member of the SGS Group (Société Générale de Surveillance)

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XRAL Laboratories A Division of SGS Canada Inc.

Work Order:	066040	J	Date:	15/11/01	FINAL
Element.	Cu	Zn	Cd	Pb	
Method.	MMI-A	MMI-A	MMI-A	MMI-A	
Det.Lim.	5	5	10	20	
Units.	ppb	ppb	ppb	ррь	
1L9S+750W	108	196	14	< 20	
*Blk BLANK	< 5	< 5	<10	< 20	
*Std MMISRM07	796	1480	22	326	
IL9S+775W	109	217	< 10	268	
IL9S+800W	135	115	17	98	·
IL9.5S+450W	77	81	< 10	621	
IL9.5S+475W	55	400	< 10	277	
IL9.5S+525W	220	222	12	355	
IL9.5S+550W	117	289	<10	106	
IL9.5S+575W	73	273	11	152	
IL9.5S+600W	62	252	12	118	
IL9.5S+625W	67	355	13	68	
IL9.5S+650W	52	318	< 10	85	
IL9.5S+675W	35	110	11	44	
IL9.5S+700W	43	121	< 10	83	
IL9.5S+725W	71	695	12	336	
IL9.5S+750W	44	667	< 10	183	
IL9.5S+775W	58	80	<10	71	
IL9.5S+800W	40	451	< 10	65	
IL6.55 + 850WA	48	2970	19	175	
IL-98+725WA	61	167	13	<20	
IL9S + 775WA	38	474	10	21	
IL9.5S+475WA	37	163	< 10	<20	
IL8.5S+500W	<5	1080	< 10	<20	
IL8.5S+525W	11	347	< 10	<20	
*Dup IL6S+625W	82	56	14	41	
*Dun IL6.5S+575W	58	188	< 10	121	
*Dup II.6.5S+900W	89	5130	<10	207	
*Dup II.7S+900W	26	3010	< 10	1240	
*Dup IL9.5S + 450W	68	77	<10	533	
*Dun II.9 \$\$+775W	40	90	< 10	85	
*Bik BLANK	< 5	<5	< 10	< 20	
*Std MMISRM07	728	1330	24	281	

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Mobile Metal lons Process



A totally integrated approach to base metal and gold exploration developed by Wamtech, MMI uses a weak partial extraction scheme to improve the conventional geochemical response over buried ore deposits. Its effectiveness has been documented in over 1000 case histories on six continents and includes numerous commercial successes.

The anomalies are sharply bounded and in most cases directly overlie and define the extent of the surface projection of buried primary mineralized zones.

The MMI Process includes a simple sample collection procedure. Samples are collected at 10 to 30 cm below the A° regardless of soil horizon, and there is no sample preparation or drying. It includes analysis of a 50g sample and an innovative interpretation step.

Multi-component extractants are used and metals are determined by ICP/MS in the part per billion range.

Sampling manuals are available from XRAL and should be consulted prior to collection.

Further information is available upon request.

"The New Dawn in Geochemical Exploration"

- Method Code: MMI-A Base Metal Suite - Cu, Pb, Zn, Cd, Price per sample: \$21.50
- Method Code: MMI-B
- Gold Exploration Suite Co, Au, Ag, Pd. Ni
- Price per sample: \$21.50
- Method Code: MMI-C Base Metal Suite for samples with elevated carbonate - Cu, Pb, Zn, Cd · Price per sample: \$21.50
- Method Code: MMI-D Kimberlite Package - Ni, Co, Pd, Cr, Nb, Rb, Mg, Y, Ti
- Price per sample: \$21.50
- Method Code: MMI-F Porphyry Pathfinder Suite - As, Hg, Sb, Mo, Se, Fe
- Price per sample: \$21.50

ENHANCED DIAMOND **EXPLORATION** WITH MMI-D






XRAL Laboratories A Division of SGS Canada Inc.

1885 Loslie Street Dan Mäls, Ontario Canada M38 3.14 Tolephane (416) 145-5755 Fax (416) 445-4152

From/Da:

Date:

Walter Grondin August 8/01

To/A: Sim Miller - Tait 1-604-688-5443

Copius:

SUBJECT: Analytical Procedures

FAX TRANSMITTANCE / TRANSMISSION DE FAX

Page(s): 4 XRAL ABCRATORIES IS CERTIFIED TO ISC9002

OSISS Martine of the SGS Group (Sectors) Benerate de Surveillande)

XRAL LABORATORIES WORK INSTRUCTION

TITLE: ICP Analysis – MMI-A (Mobile Metal Ions Process) Date: December 3, 1997 Written by: Sorina Oprea CD# TO-WI-IC-12 Rev: 02 Approved by: P.Burgener

Process: ICP Lab

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Relates to procedure MMI-A

1. PURPOSE:

To analyse Cu, Cd, Zn, Pb for samples of geochemical interest after a weak partial extraction with specific extractants.

2. SCOPE:

Samples digested in wet lab are analyzed in ICP department on ARL3410 and results are released to data centre after validation.

3. INSTRUCTIONS:

MMI-A is performed on ARL3410.

- 3.1 Starting up procedure daily see Appendix 1
- 3.2 Setting up the analysis
- 3.2.1 Digestion procedure see Wet Lab Work Instruction TO-WI-SD-12 The matrix is MMI-A solution matrix.
- 3.2.2 The control sample digested with each batch of samples is SRM02 supplied by WAMTECH.
- 3.2.3 Following calibration standards, made up in MMI-A solution matrix, as per procedure. TO-WI-CH-33
 - 1. Blank
 - 2. High 5 opm 4 elements: Cu, Zn, Cd, Pb
- 3.2.4 Software task used in ARL3410 is "MMIA"
- 3.3 Setting up autosampler run
 The batch consists of:
 Standards
 - Samples to be analyzed
 - Drift check solution approximately 5 ppm of Cu, Zn, Cd, Pb (see procedure for
 - · drift) to be checked every 24 samples

lopmi

3.3.1 Calibration.

This step is mandatory for ARL3410 when original calibration has drifted more than 30%.

The calibration is done with the 2 standards using procedure ARL – CD#TO-WI-IC-02, Section 2.1.

Autosampler and sequence calibration "MMIA".

3.3.2 Automated analysis

3.3.2.1 Set up autosampler batch in computer. In the same batch, a series of different work orders can be run, one after another, up to 228 samples. For each batch enter the appropriate DF, WO#, method code. Create sequence of samples into a batch using sequence file MMIA.

3.3.2.2 Set up samples in rack as per procedure TO-WI-IC-01.

3.3.2.3 Start analysis.

Press "Run Unknown" key, and for overnight run, answer "YES" when asked "Estinguish torch at the end of the run".

3.4 Report the results - as per general ICP procedure.

3.4.1 Getting the printed report

See CCLASS procedure.

3.4.2 Validation of results

Check instrument print out for drift check values. If greater than 15%, update results .

Check blanks, and control sample results (see limits set up by CCLASS) Check duplicates. If apart more than 20%, redigest the bad duplicate and rerunit.

If new duplicate is similar to original samples in the batch, reject first duplicate.

If new duplicate is similar to old duplicate, redigest and rerun the whole sequence of samples between the two good duplicates.

4. SAFETY PRECAUTIONS

When handling the samples, wear gloves and safety glasses.

APPENDIX I

Daily Start-Up Procedure

ARL 3410

- 1. Quick visual check of the system:
 - Argon supply pressure (no less than 80 psi)
 - Pinch and check cooling water circuit
 - Read PM tube parameters (Attention to "drive voltage" no higher than 3 V)
 - Check vacuum reading on the vacuum meter (no higher than 10⁻² torr)
- 2. Check the cleanliness of the torch, if necessary remove and clean it.
- 3. Replace peristaltic pump tubing and start up pump. Check for proper sample intake flow (no bubbles on the intake and fog in spray chamber), and check the drain reservoir empty if necessary.
- 4. Check washing station. Make sure there is enough 5% HNO₃ solution supply and the waste bottle is empty enough to take the wash solution.
- 5. Ignite plasma.
- 6. Warm up instrument for half an hour.

SECTION E: SAMPLE TABLES

Sample Identification, MMI-A Analytical Results and Response Ratios:

Ingenika Property Mobile Metal Ions (MMI) Soil Sample Results:									
May-October 2001 Response Ratios									
Sample Station	Cu_ppb	Zn_ppb	Cd_ppb	Pb_ppb	Cu-MMI	Zn-MMI	Cd-MMI	Pb-MMI	
IBL+000S	38	65	5	501	2	2	1	2	
IBL+025S	49	378	5	341	3	10	1	13	
IBL+050S	23	32	5	143	11	1	1	5	
IBL+075S	130	166	5	187	8	4	1	7	
IBL+275S	43	749	5	277	3	20	1	10	
IBL+300S	12	800	10	151	1	21	2	6	
IBL+575S	94	31	5	124	6	1	1	5	
IBL+625S	20	20	5	10	1	1	1.	0	
IBL+675S	113	91	5	189	7	2	1	7	
IBL+725S	100	25	5	127	6	1	1	5	
IBL+775S	34	486	5	257	2	13	1	10	
IBL+800S	65	473	5	195	4	12	1	7	
IBL-100S	311	112	5	96	19	3	1	4	
IBL-125S	23	31	5	177	1	1	1	7	
IBL-150S	42	64	5	278	3	2	1	10	
IBL-175S	42	318	5	158	3	8	1	6	
IBL-200S	63	278	5	457	4	7	1	17	
IBL-225S	44	164	5	203	3	4	1	8	
IBL-325\$	247	1780	36	420	15	47	7	16	
IBL-350S	100	114	5	635	6.	3	1	24	
IBL-375S	44	700	5	239	3	18	1	9	
IBL-400S	71	117	5	252	4	3	1	9	
IBL-425S	40.	204	5	374	3	5	1	14	
IBL-450S	310	98	5	254	19	3	1	9	
IBL-475S	53	77	5	122	3	2	1	5	
IBL-500S	41	271	5	205	3	7	1	8	
IBL-525S	52	165	5	295	3	4	1	11	
IBL-550S	92	125	5	286	6	3	1	11	
IBL-600S	21	10	5	10	1	0:	1:	0	
IBL-650S	41	928	5	10	3	24	1	0	
IBL-700S	58	113	5	196	4	3	1	7	
IBL-750S	51	133	5	645	3	4	1_	24	
IL0S+025E	24	51	12	179	2	1	2	7	
IL0S+025W	62	203	10	80	4	5	2	3	
IL0S+050E	68	58	13	111	4	2	3	4	
IL0S+050W	99	79	16	87	6	2	3	3	
IL0S+075E	34	159	5	140	2	4	1:	5	
IL0S+075W	49	49	13	327	3	1	3	12	
IL0S+100E	43	79	5	183	3	2	1	7	
IL0S+100W	646	46	5.	89	40	1!	1	3	
IL0S+125E	30	59	5	231	2	2	1	9	
IL0S+125W	23	54	5	71	1	1	1	3	
IL0S+150E	29	102	5	358	2	31	1	13	
IL0S+150W	34	313	12	247	2	8	2	9	
IL0S+175E	43	98	5	237	3	3	1	9	
IL0S+175W	63	93	13	130	4	2	3	5	
IL0S+200E	31	97	5	195	2	3	1	7	
1L0S+200W	57	60	5	136	4	2	1	5	
IL0S+225E	159	74	13	6390	10	2:	3	237	

·····			·					
IL0S+250E	30	55	5	153	2	1	<u> </u>	6
IL0S+275E	51	70	5	140	3	2	1	5
IL0S+300E	52	41	5	74	3	1	1	3
1L0S+325E	29	136	5	98	2	4	1	4
IL1S+025E	53	266	5	250	3	7	1	9
IL1S+025W	22	299	5	10	1	8	1	0
IL1S+050E	41	217	5	178	3	6	1	7
1L1S+050E	20	26	5;	136	1	1	1	5
IL1S+050W	16	27	5	49	1	1	1	2
IL1S+075E	39	117	5	317	2'	3	1	12
IL1S+075W	22	9	5	39	1	0	1	1
IL1S+100E	23	126	5	37	1	3	1	1
IL1S+100W	15	25	5	10	1	1	·· 1	0
IL1S+125E	38	21	5	10	2	1	1	0
IL1S+125W	16	41	5	10	1	1	1	0
IL1S+150E	31	70	5	32	2	2	1	1
IL1S+150W	25	1150	5	39	2	30:	1	1
IL1S+175E	15	65	5	10	1	2	1	0
II 1S+175W	13	10	5	10	1	0	1.	0
II 1S+200E	15	45	5	101	1	1	1	0
II 15+200W	15	2.5	5	10	1	0	1	0
II 1S+225E	78	72	5	94	5	2	1	3
II 1S+225W	12	17	5	10	<u> </u>	0	1	0
II 1S+250E	17	11	5	10	1	0	1:	0
II 1S+250W	17	31	5	10	1	1	1	ō
IL 2S+025E	112	459	5	231	7	12	1	9
IL 2S+025W	25	703	5	154	2	19	1	6
11 2S+050F		460	5	163	2	12	1	6
11 28+050\\	37	1060	5	177	2	28	1	7
11 28+0755	26	353	5	99	2	9	1	4
11.28+07514/		33	5	289	2		1	11
123+07344	52	310	5	143	3	8	<u>.</u>	5
1123+100L	30	71	5	215	2	2	<u> </u>	8
11.28+1251	194	3500	11	73	8	94	2	3
1120+120V	28	80	5	103	2	2	· · · · · · · · · · · · · · · · · · · · · ·	7
123+1502	16	150	5	220		4	<u> </u>	8
120+1755	41	200		158			1.	6
120-1700	<u>41</u>	200	<u> </u>	301	4	2	<u>.</u>	11
	63	160	5	271		<u> </u>		14
1L25+200E		109	5	550	_	1	······································	20
125+2007	24	210	5	242				Ğ
1L25+229E		205	<u>5</u>	197				
125+225VV		200	5	107	2	6		7
128+250E		465		<u> </u>	2	<u>.</u>	<u>+</u>	
L2S+250W	140	100		210		125		12
113S+000E	38	4/40	38	319	<u> </u>	E0		12
L3S+025E	30	2010	<u> </u>	310		<u>6</u>	* .	7
IL3S+025W	113	201		10/	<u>_</u>			
IL3S+050E	65	1//0	D	099	4	41		22
IL3S+050W	38	53	5	150	<u> </u>	<u>I</u>	· ···	0
IL3S+075E	55	133	5	160	3	4		
IL3S+075W	102	239	5	283	<u> </u>			
IL3S+100E	197	242	5.	71	12	6	1	3.

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IL3S+100W	92	366	5	214	6	10	1	8
IL3S+125E	46	67	5	289	3	2	1	11
IL3S+125W	97	56	5	166	6	1	1	6
IL3S+150E	71	678	5	414	4	18	1	15
IL3S+150W	118	484	5	209	7	13	1	8
IL3S+175E	91	645	5	256	6	17	1	9
IL3S+175W	69	160	5	357	4	4	1	13
IL3S+200E	104	174	5	315	7	5	1	12
IL3S+200W	58	121	5	180	4	3	1	7
IL3S+225E	91:	145	5	227	6	4	1	8
IL3S+225W	238	70	5	232	15	2	1	9
IL3S+250E	63	338	5	150	4	9	1	6
IL3S+250W	95.	79	5	307	6	2	1	11
IL4S+025E	98:	203	5	207	6	5	1	8
IL4S+025W	52	109	5	224	3	3	1	8
IL4S+050W	40	642	5	173	3	17	· · · · · · · · · · · · · · · · ·	6
II 4S+075F	45	143	5	253	3!	4	1	
II 4S+075W	70	63	5	66	4	2	1	2
IL46+07074	73	27	5	108	5	1	1	4
1145+100W	32	117	5	217		3	1	
IL 4S+125E		424	5	273	4	11	<u>1</u>	10
IL 45+125\A/	40	75	5	150	31	2	1	8
1140+1201		221	5	145	2	6	1	<u> </u>
		417	5	140	2	2		
11.45+15077	39	202	5	2001	2		1	
1L4S+1/5E	43	303		200	; 	<u> </u>		'
IL4S+1/5VV	43	93	5	110	<u> </u>	<u> </u>	I	
IL4S+200E	53	213	5	221	3:	20		<u> </u>
IL4S+200W	40	/52	<u> </u>	159				
IL4S+225E	36		5	155		8		···· 8
IL4S+225W	37	86	5	236	2:	2	1	9
IL4S+250E	42	106	5	166	3.	3	1	<u> </u>
IL4S+250W	21	1520	5	341	1!	40		13
IL4S+275E	42	239	5	384	3	6	1	
IL4S+275W	28	1350	5	250	2	36	1	9
IL4S+300E	31	247	5	206	2	7	1	8
IL4S+300W	16	116	5	170	<u> </u>	3	1	6
IL4S+325E	34	732	5	580	2	19	1	21
IL4S+350E	29	518	5	162	2.	14	1	6
IL4S+375E	32	75	5	54	2	2	1	2
IL5S+025E	317	109	5	85	20	3	1	3
IL5S+025W	59	233	5	151	4!	6	1	6
IL5S+050E	37	158	5	109	2	4	1	4
IL5S+050W	68	344	5	205	4	9	1	8
II 5S+075E	29	111	5	61	2	3	1	2
II 5S+075W	51	423	5	279	3	11	1	10
11.5S+100E	41	75	5	97	3	2	1	4
H 58+100M	46	407	5	1040	3	13	1	39
11 5S+125E	36	503	5	620	2	13	1	23
11 58±125\M		632	5	176	3	17	1	
	45	208	5	163	<u> </u>	5	i	6
IL SOT TOUE	40 76	708	5	344	3	19		13
	4U 01	<u>21</u>	5	12/	A		<u>.</u>	5
	31	01	J	124		-		<u>v</u>

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IL5S+175W	20	1020	5	306	1_	27	1	11
IL5S+200E	79	30	5	121	5	1	1 :	4
L5S+200W	40	536	5	220	3	14	1	8
IL5S+225E	22	193		178	1	<u> </u>	1	7
IL5S+225W	37	530	5	352	2!	14	<u> </u>	13
IL5S+250E	30	118	5	217	2	3	1	8
IL5S+250W	43	787	5	366	3	21	1	14
IL5S+275E	51	88	5	187	3	2	1	7
IL5S+275W	29	535	5	196	2	14	1	7
IL5S+300E	40	481	5	312	3	13	1	12
IL5S+300W	28	234	5	209	2	6	1	8
IL5S+325W	56	99	5	165	4	3	1	6
IL5S+350W	50	159	5	314	3	4	1	12
IL5S+375W	40	39	5	195	3	1	1	7
IL5S+400W	69	58	5	201	4	2	1	7
IL5S+425W	26	289	5	196	2	8	1	7
IL5S+450W	32	1510	5	394	2	40	1	15
IL5S+475W	26	47	5	27	2	- 1	1	1
IL5S+500W	76	128	5	64	5	3	1	2
IL6S+025E	19	133	5	10	1	4	1	0
L6S+025W	24	165	5	97	2	4	1	4
11 6S+050F	75	72	13	101	5	2	3	4
16S+050W	2.5	545	5	10	0	14	<u>-</u>	Ö
II 6S+075E	41	44	5	10	3	1	<u>_</u>	ō
16S+075W	25	310	5	10	0	8	1	ō
11.6S+100E	26	35	5	10	2	1	1	Ö
16S+100W	2.5	191	5	10	0	5	1	—õ
II 6S+125E	10	22	5	10	1	 1	1	0
165+125\/	12	1260	5	73	1	33	1	3
11 6S+150E	17	73	5	10	1	2	1	0
165+15014	31	170	5	180	2		1	7
1169+1300	25	420	5	43	0		i	
100+1700	2.J		<u> </u>	10	0	1	;	
	2.5	1140	5	25	0	30	<u>_</u>	
	2.5	26	5	10	0	1	<u> </u>	
	2.5	20	; 	10	0	6	1	
		221	5	20		1	<u>/</u>	
L00+220VV	10	20	5	<u></u>	3'	1		
L6S+250VV	42	43	<u> </u>	40				
IL6S+275E	2.5		<u> </u>	10	0	2	4	
L6S+275W	35	8/	<u>></u>		<u> </u>	4		
IL6S+300E	15	32	5	10	1		I	
L6S+300W	47	182	····	63	3		I:	
L6S+325W	2.5	49	5	38	······································	1	<u> </u>	. I
L6S+350W	21	29	5	10		1	1.	
L6S+375W	18	6	5	10	1	0	1	0
L6S+425W	23	74	5	89	1	2	1	3
L6S+450W	23	60	5	99	1	2	1	4
L6S+475W	33	9 88	5	237	2	26	1	9
L6S+500W	44	81	5	340	3	2	<u> </u>	13
IL6S+625W	89	59	14	57	6	2	3	2
IL6S+650W	199	262	20	174	12	7	4	6
IL6S+675W	110	384	16	10	7	10	3	0

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11.00. 20014		0.50			-	- : : : : : : : : : : : : -		
1L05+/00W	54	350	5	333	3	9	1	12
1L6S+725W	53	402		177	3	11	1	7
1L6S+750W	80	346	5	210	5	<u> </u>	1	8
IL6S+775W	58	144	5	143	4	4	1	5
IL6S+800W	98	1610	5	123	6	42	1	5
IL6S+825W	55	1640	18	188	3:	43	4	7
IL6S+850W	38	81	5	255	2	2	1	9
IL6S+875W	60	634	17	426	4	17	3	16
IL6S+900W	38	516	5	49	2	14	1	2
IL6.5S+575W	64	226	13.	111	4	6	3	4
IL6.5S+600W	36	68	5	372	2	2	1	14
IL6.5S+625W	27	245	5	248	2	6	1	9
IL6.5S+650W	73	422	101	118	5	11:	2	4
IL6.5S+675W	81	200	13	323	5	5	3	12
L6.5S+700W	58	1070	17	165	4	28	3	6
L6.5S+725W	61	1590	5	304	4	42	1	11
IL6.5S+750W	17	709	5	288	1	19	1	11
IL6.5S+775W	40	1630	5	251	3	43	1	9
IL6.5S+800W	37	1150	5	171	2	30	1	6
IL6.5S+825W	48	1580	5	304	3	42	1	11
IL6.5S+850W	60	2540	13	70	4	67	3	3
IL6.5S+875W	48	2970	19	175	3	78	4	6
IL6.5S+900W	93	5070	12	238	6	133	2	ģ
IL7S+025E	65	198	5	194	4	5	1	7
L7S+025W	48	149	5	170	3	4	1	6
L7S+050E	90	1040	5	220	6	27	1	8
IL7S+050W	42	31	5	110	3	1	1	4
11.7S+075E	33	228	5	229	2	6	1	
IL 7S+075W	38	30		148	2	1	1	5
117S+100E	56	607	<u>-</u>	445	4	16	1	16
11.75+10014/	58	27	5	84	A	1	1	
11 79+1255	70	135	5	521	4		1	19
11 75+1251	85	28	5	10	5	1	1	
IL 75+1200	26	113	5	169	2	3	1	6
11 75+15014/	20	25	5	36		1	1	1
IL73+130VV	10	864	5	221		23	1	, 8
11 78+17510/	81	<u>52</u>	5	74	5	1	1	
IL 78:000E	65	1/1	5	122	2	4	4	<u> </u>
1L737200E	21	141	5	<u> </u>		2	1	2
IL/S+200VV	21	- 119	5	100				∠ 7
IL/S+225W		00	5	102	2	2	······ <u>I</u>	· · ·
IL/S+250VV	- 34	991		10.	2			U
IL/S+2/5W	50	35	5	103	3	11	1	4
IL/S+300W	34	- 26		4/		11	1	<u>~</u>
L7S+325W	22	40	5	205		1		8
L7S+350W	44	67	5	206	3	2		8
IL7S+375W	16	99	5	64	1	3		2
L7S+400W	97	403	5	382	6	11	1	14
IL7S+425W	31	510	5	209	2	13	1	8
IL7S+450W	35	708	5	213	2	19	1	8
IL7S+475W	86	190	5	286	5	5	1	11
IL7S+500W	12	77	5	10	1	2	1	0
IL7S+525W	2.5	375	5	10	0	10	1	0

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IL7S+550W	45	263	5	195	3'	7	1	7
IL7S+575W	64	121	5 i	272	4	3	1	10
IL7S+600W	22	651	11	83	1	17	2	3
IL7S+625W	69	154	5	275	4	4	1	10
IL7S+650W	57	942	5	268	4	25	1	10
IL7S+675W	62	750	5	162	4	20	1	6
IL7S+700W	52	1480	15	216	3	39	3	8
IL7S+725W	51	777	5	169	3	20	1	6
IL7S+750W	78	1120	11	358	5	29	2	13
IL7S+775W	63	763	5	141	4	20	1	5
IL7S+800W	71	767	13	187	4	20	3	7
IL7S+825W	43	799	5	275	3	21	1	10
IL7S+850W	49	660	5	233	3	17	1	9
IL7S+875W	44	2190	15	430	3	58	3	16
1L7S+900W	31	2660	5	1490	2	70	1	55
IL7.5S+600W	26	1590	5	130	2	42	1	5
IL7.5S+625W	47	1150	12	222	3	30	2	8
IL7.5S+650W	17	877	51	254	1	23	1	9
IL7.5S+675W	43	525	5	217	3	14	1	8
IL7.5S+700W	117	4490	34	87	7	118	7	3
IL7.5S+725W	43	1040	5	157	3	27	1	- 6
IL7.5S+750W	56	372	5	218	4	10	1	8
IL7.5S+775W	31	533	5	242	2	14	1	9
IL7.5S+800W	31	277	5	156	2	7	1	6
IL8S+025E	31	299	5	241	2	8	1	9
IL8S+025W	47	290	5	270	3	8	1	10
IL8S+050E	18	650	5	260	1	17	1	10
IL8S+050W	35	91	5	244	2	2	1	9
IL8S+075E	33	458	5	307	2	12	1	11
IL8S+075W	46	501	5	183	3	13	1	7
IL8S+100E	30	337	5	217	2	9	1	8
L8S+100W	54	501	5	243	3	13	1	9
L8S+125W	54	427	5	403	3	11	1	15
L8S+150W	103	62	5	353	6	2	1	13
L8S+175W	107	264	5	388	7	7	1	14
L8S+200W	11	82	5	58	1	2	1	2
IL8S+225W	28	51	51	189	2	1	1	7
IL8S+250W	111	201	5	269	7	5	1	10
IL8S+275W	50	628	5	193	3	17	1	7
IL8S+300W	74	591	13	193	5	16	3	7
IL8S+325W	56	180	5	328	4	5	1	12
IL8S+350W	62	38	5	43	4	1	1	2
II 8S+375W	48	83	5	10	31	2	1	<u>-</u>
II 8S+400W	46	222		369	31	6	1	14
II 8S+425W	35	122	5	302	2	3	1	11
11 8S+450W		222	5	31	0	6	1	
II 8S+475W	13	766	5	10	1	20	·: <u>·</u>	
11 8S+500W	90	2530	22	182	6	67	4	7
II 8S+525\//	28	284	5	23	2	7	1	
11.85+550\/	15	878	5	359	1	23		13
11.85+575\/	22	3880	5	188	1	102	<u> </u>	7
11.85+600\/	24	1220	5	465		32	<u>i</u>	17
100.00044	47	1220			<u></u>		•	

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IL88+650W 9 1000 5 10 1 26 1 IL88+675W 15 59 5 32 1 2 1 IL88+75W 32 145 5 99 2 4 1 IL88+75W 69 68 12 136 4 2 2 IL88+75W 72 104 5 49 5 3 1 1 IL85+75W 72 104 5 49 5 3 1 1 IL8.58+50W 2.5 1080 5 10 0 28 1 1 IL8.58+55W 112 347 5 10 1 9 1 <t< td=""><td>IL8S+625W</td><td>73</td><td>1190</td><td>11</td><td>91</td><td>5</td><td>31</td><td>2</td><td>3</td></t<>	IL8S+625W	73	1190	11	91	5	31	2	3
LI85+675W 15 59 99 2 4 1 LI85+725W 69 68 12 136 4 2 2 LI85+75WW 91 47 5 25 6 1 1 LI85+75WW 72 104 5 49 5 3 1 LI85+75WW 72 104 5 49 5 3 1 LI85+55DWW 21 179 5 10 3 5 1 LI8.55+55WW 122 2460 16 660 8 65 3 2 LI8.55+55WW 62 9730 58 982 4 256 12 3 LI8.55+65WW 28 71 3 1 11 5 1 LI8.55+65WW 79 3760 5 83 5 99 1 1 LI8.55+675W 79 3760 5 83 5 99 1 1 LI8.55+675W 73 720 25 10 0<	IL8S+650W	9	1000	5	10	1	26	1	0
L88+700W 32 145 5 99 2 4 1 L88+750W 69 68 12 136 4 2 2 L88+750W 91 47 5 25 6 1 1 L88+750W 72 104 5 49 5 3 1 L85+600W 2.5 1080 5 10 0 28 1 L8.55+675W 62 9730 58 982 4 256 12 3 L8.55+675W 62 9730 58 982 4 256 12 3 L8.55+675W 62 9730 58 982 4 256 12 3 L8.55+675W 79 3760 5 83 5 99 1 <t< td=""><td>IL8S+675W</td><td>15</td><td>59</td><td>5</td><td>32</td><td>1</td><td>2</td><td>1</td><td>1</td></t<>	IL8S+675W	15	59	5	32	1	2	1	1
1L85+750W 69 681 12 136 4 2 2 1L85+750W 91 47 5 251 6 1 1 LL85+75W 72 104 5 49 5 3 1 LL85+850W 251 179 5 10 3 5 1 LL85+850W 251 1080 5 10 1 9 1 LL858+550W 122 2460 16 660 8 65 3 2 L858+550W 62 9730 59 982 4 256 12 3 L858+550W 64 412 24 316 4 11 5 1 L858+550W 64 412 24 316 4 11 5 1 L858+550W 79 3760 5 83 5 99 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IL8S+700W	32	145	5	99	2	4	1	4
IL85+750W 91 47 5 25 6 1 1 IL85+800W 52 179 5 10 3 5 1 IL8.58+600W 2.5 1080 5 10 3 5 1 IL8.58+550W 122 2460 16 660 8 65 3 2 IL8.58+550W 122 2470 14 358 1 71 3 1 IL8.58+650W 22 9700 14 358 1 71 3 1 IL8.58+650W 22 2700 14 358 1 71 3 1 IL8.58+700W 50 258 5 51 3 7 1 1 IL8.58+700W 50 258 5 51 3 7 1 1 1 IL98+525W 13 807 31 185 8 21 6 1 1 1 IL98+525W 13 807 3 58 4 16 3	IL8S+725W	69	68	12	136	4	2	2	5
IL8+775W 72 104 5 49 5 3 1 IL85+800W 62 179 5 10 3 5 1 IL8.55+500W 2.5 1080 5 10 0 28 1 IL8.55+500W 122 2460 16 660 8 65 3 2 IL8.55+75W 62 9730 59 982 4 256 12 3 IL8.55+75W 62 9730 59 982 4 256 12 3 IL8.55+75W 62 9730 59 982 4 256 12 3 IL8.55+75W 79 3760 5 83 5 99 1 IL8.55+75W 79 5 10 0 3 1 IL9.5+650W 64 597 13 58 4 6 3 IL9.5+650W 54 169 10 105	IL8S+750W	91	47	5	25	6	1	1	1
L84800W 52 179 5 10 3 5 1 L8.55450W 2.5 1080 5 10 0 28 1 L8.55450W 122 2460 16 660 8 65 3 2 L8.55450W 122 2460 16 660 8 65 3 2 L8.55460W 22 2700 14 358 1 71 3 1 L8.55460W 38 976 14 20 2 26 3 1 L8.55475W 79 3760 5 83 5 99 1 1 L8.55475W 79 3760 5 8 5 10 0 1 1 L95450W 25 46 5 10 0 1 </td <td>IL8S+775W</td> <td>72</td> <td>104</td> <td>5</td> <td>49</td> <td>5</td> <td>3</td> <td>1</td> <td>2</td>	IL8S+775W	72	104	5	49	5	3	1	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IL8S+800W	52	179	5	10	3	5	1	0
IL8 58+525W 11 347 5 10 1 9 1 IL8 58+550W 122 2460 16 660 8 65 3 2 IL8 58+575W 62 9730 59 982 4 256 12 3 IL8 58+650W 22 2700 14 358 1 71 3 1 IL8 55+650W 38 976 14 20 2 26 3 IL8 55+675W 79 3760 5 51 3 7 1 IL8 55+75W 79 366 5 10 0 1 1 IL95+600W 2.5 45 5 10 0 1 1 IL95+650W 64 597 13 58 4 16 3 IL95+650W 64 597 13 58 4 16 3 IL95+650W 133 807 31 185 8 21 6 IL95+650W 127 867 27 10 <td>IL8.5S+500W</td> <td>2.5</td> <td>1080</td> <td>5</td> <td>10</td> <td>0</td> <td>28</td> <td>1</td> <td>0</td>	IL8.5S+500W	2.5	1080	5	10	0	28	1	0
IL8 58+550W 122 2460 16 660 8 65 3 2 IL8 58+600W 22 2700 14 386 1 71 3 1 IL8 58+600W 22 2700 14 386 1 71 3 1 IL8 58+675W 64 412 24 316 4 11 5 1 IL8 58+675W 79 3760 5 83 5 99 1 <	IL8.5S+525W	11	347	5	10	1	9	1	0
LB 5S+575W 62 9730 59 962 4 256 12 3 LB 5S+625W 64 412 24 316 4 11 5 1 LB 5S+650W 38 976 14 20 2 26 3 LB 5S+675W 79 3760 5 83 5 99 1 LB 5S+725W 79 3760 5 83 5 99 1 LB 5S+725W 79 3760 5 83 5 99 1 LB 5S+725W 79 370 13 86 16 3 1 L9S+500W 2.5 46 5 10 0 1 1 L9S+550W 73 720 25 179 5 19 5 L9S+650W 127 366 12 166 1 3 1 2 L9S+650W 127 867 271 10 8 23 5 L9S+650W 127 867 10 1 <	IL8.5S+550W	122	2460	16	660	8	65	3	24
LB.5S+600W 22 2700 14 368 1 71 3 1 LB.5S+625W 64 412 24 316 4 11 5 1 LB.5S+650W 38 976 14 20 2 26 3 LB.5S+675W 79 3760 5 83 5 99 1 LB.5S+75W 79 96 5 10 0 3 1 LBS+500W 2.5 46 5 10 0 1 1 LBS+550W 138 807 31 185 8 21 6 LBS+550W 64 597 13 58 4 16 3 LBS+550W 73 720 25 179 5 19 5 LBS+600W 127 867 27 10 8 23 5 LBS+675W 303 166 12 136 19 4 2 LBS+675W 10 1 7 1 16 11	IL8.5S+575W	62	9730	59	982	4	256	12	36
IL8.5S+625W 64 412 24 316 4 11 5 1 IL8.5S+650W 38 976 14 20 2 26 3 IL8.5S+675W 79 3760 5 83 5 99 1 IL8.5S+700W 50 258 5 51 3 7 1 IL8.5S+700W 25 46 5 10 0 3 1 IL9S+525W 133 807 11 185 8 21 6 IL9S+525W 133 807 13 58 4 16 3 IL9S+525W 73 720 25 179 5 19 5 IL9S+625W 303 166 12 136 19 4 2 IL9S+650W 127 867 27 10 8 23 5 IL9S+650W 127 867 27 10 17 1 1 IL9S+650W 17 867 10 1 7 1	IL8.5S+600W	22	2700	14	358	1	71	3	13
IL8.5S+650W 38 976 14 20 2 26 3 IL8.5S+675W 79 3760 5 83 5 99 1 IL8.5S+700W 50 258 5 51 3 7 1 IL8.5S+725W 7 96 5 10 0 3 1 IL9S+525W 133 807 31 185 8 21 6 IL9S+550W 64 597 13 58 4 16 3 IL9S+550W 73 720 25 179 5 19 5 IL9S+650W 54 169 10 105 3 4 2 IL9S+650W 127 867 27 10 8 23 5 IL9S+650W 127 867 27 10 8 23 5 IL9S+750W 108 196 14 10 7 5 3 1 IL9S+750W 108 196 14 10 7 5 <td< td=""><td>IL8.5S+625W</td><td>64</td><td>412</td><td>24</td><td>316</td><td>4</td><td>11</td><td>5</td><td>12</td></td<>	IL8.5S+625W	64	412	24	316	4	11	5	12
IL8.5S+675W 79 3760 5 83 5 99 1 IL8.5S+705W 50 258 5 51 3 7 1 IL8.5S+725W 7 96 5 10 0 3 1 IL9S+500W 2.5 46 5 10 0 1 1 IL9S+525W 133 807 31 185 8 21 6 IL9S+525W 73 720 25 179 5 19 5 IL9S+625W 303 166 12 136 19 4 2 IL9S+625W 303 166 12 136 19 4 2 IL9S+650W 127 867 27 10 8 23 5 IL9S+675W 38 474 10 21 2 2 2 IL9S+750W 108 196 14 10 7 5 3 IL9S+750W 109 217 5 268 7 6 1	IL8.5S+650W	38	976	14	20	2	26	3	1
IL8.5S+700W 50 258 5 51 3 7 1 IL8.5S+725W 7 96 5 10 0 3 1 IL9S+550W 2.5 46 5 10 0 1 1 IL9S+525W 133 807 31 185 8 21 6 IL9S+550W 64 597 13 58 4 16 3 IL9S+550W 73 720 25 179 5 19 5 IL9S+650W 54 169 10 105 3 4 2 IL9S+650W 127 867 27 10 8 23 5 IL9S+675W 38 474 10 21 2 2 2 IL9S+75W 17 262 5 10 1 7 1 11 IL9S+75W 109 217 5 268 7 6 1 1 IL9S+75W 109 217 5 268 7 6	IL8.5S+675W	79	3760	5	83	5	99	1	3
IL8.5S+725W 7 96 5 10 0 3 1 IL9S+500W 2.5 46 5 10 0 1 11 IL9S+525W 133 807 31 185 8 21 6 IL9S+550W 64 597 13 58 4 16 3 IL9S+550W 73 720 25 179 5 19 5 IL9S+560W 54 169 10 105 3 4 2 IL9S+625W 303 166 12 136 19 4 2 IL9S+625W 303 166 12 136 19 4 2 IL9S+670W 81 67 71 10 8 23 5 IL9S+750W 108 196 14 10 7 1 11 IL9S+750W 108 196 14 10 7 5 3 IL9S+750W 109 217 5 268 7 6 1 1<	IL8.5S+700W	50	258	5	51	3	7	1	2
L9S+500W 2.5 46 5 10 0 1 1 L9S+525W 133 807 31 185 8 21 6 L9S+550W 64 597 13 58 4 16 3 L9S+575W 73 720 25 179 5 19 5 L9S+600W 54 169 10 105 3 4 2 L9S+625W 303 166 12 136 19 4 2 L9S+625W 303 166 12 136 19 4 2 L9S+625W 303 166 12 136 19 4 2 L9S+625W 107 847 10 21 2 2 L9S+625W 17 2667 10 1 7 1 L9S+75W 108 196 14 10 7 5 3 L9S+75W 108 196 14 10 7 5 3 3 3 3	IL8.5S+725W	7	96	5	10	0	3	1	0
L9S+525W 133 807 31 185 8 21 6 L9S+550W 64 597 13 58 4 16 3 L9S+575W 73 720 25 179 5 19 5 L9S+600W 54 169 10 105 3 4 2 L9S+625W 303 166 12 136 19 4 2 L9S+625W 303 166 12 136 19 4 2 L9S+675W 38 474 10 21 2 12 2 L9S+75W 17 262 5 10 1 7 1 L9S+75W 108 196 14 10 7 5 3 L9S+75W 109 217 5 268 7 6 1 1 L9S+800W 135 115 17 98 8 3 3 3 L9.5S+450W 7 85 400 5 277 3 <	IL9S+500W	2.5	46	5	10	0	1	1	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IL9S+525W	133	807	31	185	8	21	6	7
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	IL9S+550W	64	597	13	58	4	16	3	2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	L9S+575W	73	720	25	179	5	19	5	7
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	L9S+600W	54	169	10	105	3	4	2	4
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	L9S+625W	303	166	12	136	19	4	2	5
IL9S+675W 38 474 10 21 2 12 2 IL9S+700W 61 167 13 10 4 4 3 IL9S+725W 17 262 5 10 1 7 1 IL9S+750W 108 196 14 10 7 5 3 IL9S+750W 109 217 5 268 7 6 1 1 IL9S+75W 109 217 5 268 7 6 1 1 IL9S+800W 135 115 17 98 8 3 3 3 IL9SS+450W 77 81 5 621 5 2 1 2 IL9SS+50W 37 163 5 10 2 4 1 1 IL9SS+550W 117 289 5 106 7 8 1 1 IL9SS+550W 117 289 5 106 7 8 1 1 IL9SS+650W 62 <t< td=""><td>L9S+650W</td><td>127</td><td>867</td><td>27</td><td>10</td><td>8</td><td>23</td><td>5</td><td>0</td></t<>	L9S+650W	127	867	27	10	8	23	5	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IL9S+675W	38	474	10	21	2	12	2	1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IL9S+700W	61	167	13	10	4	4	3	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IL9S+725W	17	262	5	10	1	7	1	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IL9S+750W	108	196	14	10	7	5	3	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	IL9S+775W	109	217	5	268	7	6	1	10
IL9.5S+450W 77 81 5 621 5 2 1 2 IL9.5S+475W 55 400 5 277 3 11 1 1 IL9.5S+475W 37 163 5 10 2 4 1 1 IL9.5S+50W 37 163 5 10 2 4 1 1 IL9.5S+525W 220 222 12 355 14 6 2 1 IL9.5S+550W 117 289 5 106 7 8 1 1 IL9.5S+575W 73 273 11 152 5 7 2 1 IL9.5S+600W 62 252 12 118 4 7 2 1 IL9.5S+600W 62 318 5 85 3 8 1 1 IL9.5S+650W 52 318 5 85 3 8 1 1 IL9.5S+750W 43 121 5 83 3 3 1	IL9S+800W	135	115	17	98	8	3	3	4
IL9.5S+475W 55 400 5 277 3 11 1 1 1 IL9.5S+500W 37 163 5 10 2 4 1 IL9.5S+525W 220 222 12 355 14 6 2 1 IL9.5S+525W 220 222 12 355 14 6 2 1 IL9.5S+525W 117 289 5 106 7 8 1 1 1 IL9.5S+575W 73 273 11 152 5 7 2 1 </td <td>IL9.5S+450W</td> <td>77</td> <td>81</td> <td>5</td> <td>621</td> <td>5</td> <td>2</td> <td>1</td> <td>23</td>	IL9.5S+450W	77	81	5	621	5	2	1	23
IL9.5S+500W 37 163 5 10 2 4 1 IL9.5S+525W 220 222 12 355 14 6 2 1 IL9.5S+525W 117 289 5 106 7 8 1 IL9.5S+550W 117 289 5 106 7 8 1 IL9.5S+575W 73 273 11 152 5 7 2 IL9.5S+600W 62 252 12 118 4 7 2 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+625W 52 318 5 85 3 8 1 IL9.5S+675W 35 110 11 44 2 3 2 1 IL9.5S+700W 43 121 5 83 3 3 1 1 IL9.5S+750W 71 695 12 336	IL9.5S+475W	55	400	5	277	3	11	1	10
IL9.5S+525W 220 222 12 355 14 6 2 1 IL9.5S+550W 117 289 5 106 7 8 1 IL9.5S+575W 73 273 11 152 5 7 2 IL9.5S+575W 73 273 11 152 5 7 2 IL9.5S+600W 62 252 12 118 4 7 2 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+675W 35 110 11 44 2 3 2 1 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+750W 58 80 5 71 4	IL9.5S+500W	37	163	5	10	2	41	1	0
IL9.5S+550W 117 289 5 106 7 8 1 IL9.5S+575W 73 273 11 152 5 7 2 IL9.5S+575W 62 252 12 118 4 7 2 IL9.5S+600W 62 252 12 118 4 7 2 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+775W 58 80 5 71 4 2	IL9.5S+525W	220	222	12	355	14	6	2	13
IL9.5S+575W 73 273 11 152 5 7 2 IL9.5S+600W 62 252 12 118 4 7 2 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+625W 52 318 5 85 3 8 1 IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12	IL9.5S+550W	117	289	5	106	7	8	1!	4
IL9.5S+600W 62 252 12 118 4 7 2 IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+625W 52 318 5 85 3 8 1 IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+650W 35 110 11 44 2 3 2 IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	IL9.5S+575W	73	273	11	152	5	7	2	6
IL9.5S+625W 67 355 13 68 4 9 3 IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	IL9.5S+600W	62	252	12	118	4	7	2	4
IL9.5S+650W 52 318 5 85 3 8 1 IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+750W 58 80 5 71 4 2 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	IL9.5S+625W	67	355	13	68	4	9	3	3
IL9.5S+675W 35 110 11 44 2 3 2 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+750W 58 80 5 71 4 2 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	IL9.5S+650W	52	318	5	85	3	8	1	3
IL9.5S+700W 43 121 5 83 3 3 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	IL9.5S+675W	35	110	11	44	2	3	2:	2
IL9.5S+725W 71 695 12 336 4 18 2 1 IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+750W 58 80 5 71 4 2 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	L9.5S+700W	43	121	5	83	3	3	1	3
IL9.5S+750W 44 667 5 183 3 18 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	II 9 5S+725W	71	695	12	336	4	18	2	12
IL9.5S+775W 58 80 5 71 4 2 1 IL9.5S+800W 40 451 5 65 3 12 1	119.5S+750W	44	667	5	183	3	18	1	7
1195\$+800W 40 451 5 65 3 12 1	L9.5S+775W	58	80	5	71	4	2	1	3
	IL9.5S+800W	40	451	5	65	3	12	1	2

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SECTION F: ILLUSTRATIONS

Plan Number	Title	Scale
ING-01-1 (after p.5)	General Location Plan	1:250:000
ING-01-2 (after p.5)	Location Plan with Topography	1:50 000
ING-01-3 (after p.5)	Mineral Claims	1:50 000
ING-01-4 (in pocket)	Mobile Metal Ion Soil Geochemistry:	1:2 500
	Zn Response Ratio, DEL 3 Mineral Claim	
ING-01-5 (in pocket)	Mobile Metal Ion Soil Geochemistry:	1:2 500
	Pb Response Ratio, DEL 3 Mineral Claim	· ·
ING-01-6 (in pocket)	Mobile Metal Ion Soil Geochemistry:	1:2 500
	Cd Response Ratio, DEL 3 Mineral Claim	
ING-01-7 (in pocket)	Mobile Metal Ion Soil Geochemistry:	1:2 500
	Cu Response Ratio, DEL 3 Mineral Claim	







