GEOCHEMICAL SAMPLING REPORT

on the

WASI CREEK PROPERTY

OSI, OSI 2, OSI 3, TM 2 and TM 3 Mineral Claims

Omineca Mining Division

NTS: 94C/03E

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

Latitude: 56° 6.0′ N; Longitude 125° 2.5′ W

UTM: 6 219 000N; 372 500 E; Zone 10

Owner and Operator: Cross Lake Minerals Ltd.

Author: Calvin Church, P.Geo.

October 28, 2004

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SECTION A: REPORT

INTRODUCTION:

Cross Lake Minerals Ltd. ("Cross Lake" or "the Company") owns a 100% interest in the Wasi Creek Property. The property was initially acquired in July 2000 following a review of prospective areas in British Columbia for carbonate-hosted zinc-lead-silver deposits. The property was staked to cover the area previously known as the Par Property which Cominco Ltd. extensively explored from 1990 to 1995. The Wasi Creek Property is located 150 kilometres northwest of Mackenzie on the south side of the Osilinka River adjacent to Wasi Lake in the Omineca Mining Division. This report summarizes the program of geochemical sampling that was carried out by Cross Lake in June 2004 along exposed road cuts on the OSI, OSI 2, OSI 3, TM 2 and TM 3 mineral claims and on adjacent open ground. 13,100 linear metres of road were sampled on intervals of 100 m; 6,400 m on the east side of Wasi Creek and 6,700 m on the west side. A total of 137 soil samples and 11 rock samples were taken.

PROPERTY:

The Wasi Creek Property is comprised of 11 contiguous mineral claims, three 4 post and eight 2 post, totaling 66 claim units and covering an area of 1650 hectares. The claims are all situated in the Omineca Mining Division. The Property is registered in the name of Cross Lake Minerals Ltd. and was acquired by staking on four occasions between July 2000 and October 2001 (see Plan Numbers WA-04-2 and WA-03-3). A list of the mineral claims is appended in Section B. The expiry dates therein are based on the Statement of Work filed on July 29, 2004 (Event #3214539) and assume that the work contained in this report will be accepted for assessment purposes. The legal corner posts of the claims have not been surveyed.

By agreement dated September 1, 2004, Cross Lake granted Bard Ventures Ltd. an option to earn a 50% interest in the Property by incurring aggregate exploration expenditures of $800,000 on or before December 31, 2006.

LOCATION AND ACCESS:

The Property is located on the south side of the Osilinka River some 150 kilometres northwest of Mackenzie and 43 kilometres north-northwest of Germansen Landing. The claims are on BCGS map sheets 94C005 and 94C015 and NTS map sheet 94C/3E. Geographic co-ordinates are 56° 7.5′ North latitude; 125° 01′ West longitude and UTM coordinates of 6 221 500 N and 374 500 E in Zone 10, NAD 83.

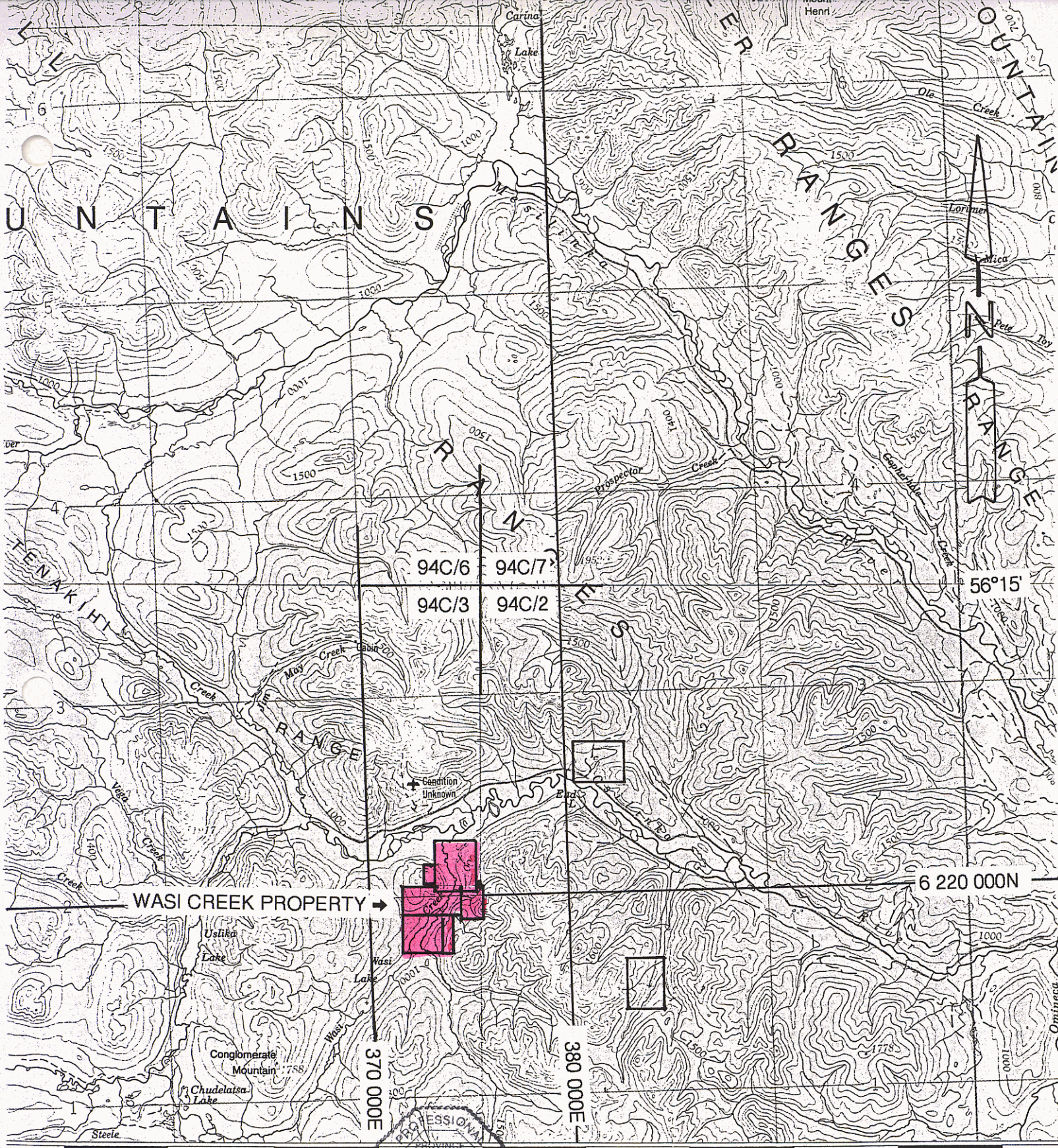
Access to the property is excellent due to extensive logging operations that have been carried out around and on the claims. The easiest access is by using Highway #97 north of Prince George to a small community named Windy Point, 12 kilometres north of McLeod Lake. From Windy Point one drives on the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

CLIMATE, TOPOGRAPHY AND VEGETATION:

The Wasi Lake area has cold, high snowfall winters and warm, damp summers. The topography of the property is moderately steep. The lowest elevation is 830 metres on the northern boundary of the property along Wasi Creek near its confluence with the Osilinka River while the high point is 1460 metres on the ridge located along the eastern boundary of the claims. The slopes are heavily timbered by pine and spruce. In the clear cuts deciduous willows and poplars predominate.

HISTORY:

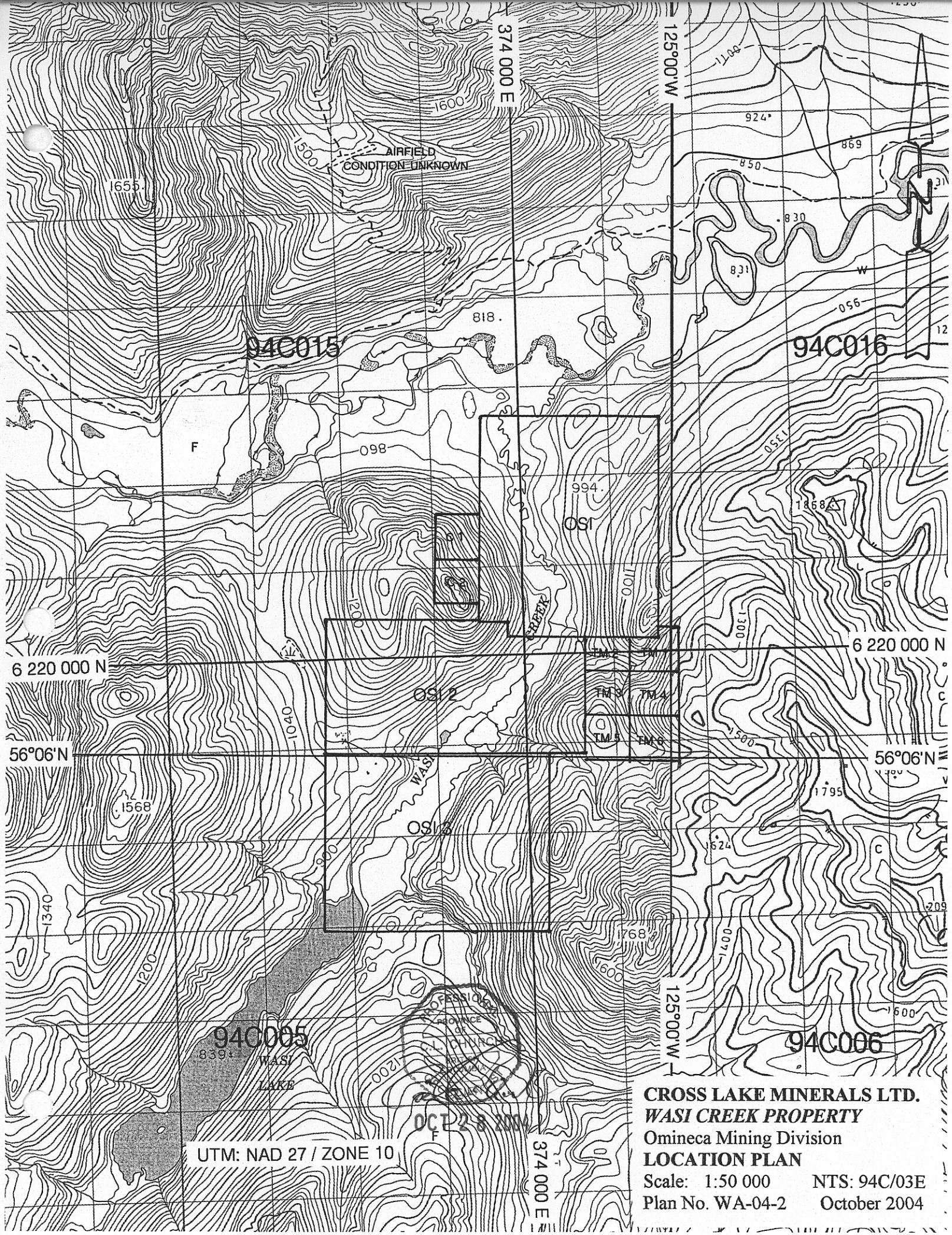
The earliest recorded work located in the area was in the Annual Report of the Minister of Mines in 1930 documenting the Weber Prospect, located near the northern edge of the present Wasi Creek Property. The report describes the Weber mineralization as disseminated galena, zinc and pyrite in siliceous dolomite of which a 5.18 metre channel sample assayed 3.6% zinc, 1.6% lead, 1oz/ton silver and 0.02oz/ton gold.



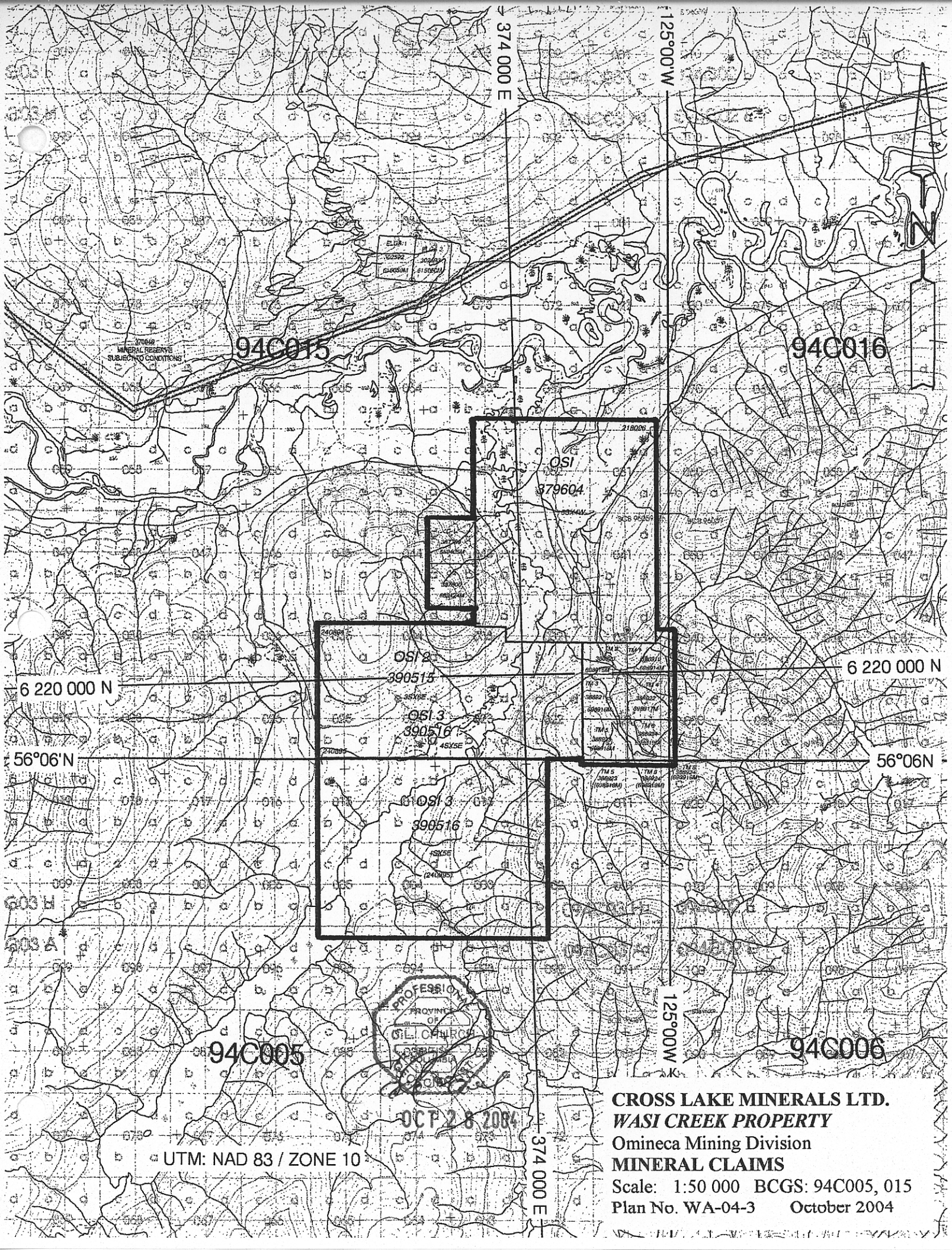
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
C.L. CHURCH
GEOSCIENTIST

OCT 2 8 2004

CROSS LAKE MINERALS LTD.
WASI CREEK PROPERTY
Omineca Mining Division
GENERAL LOCATION PLAN
Scale: 1:250 000 NTS: 94C/03E
Plan No. WA-04-1 October 2004



CROSS LAKE MINERALS LTD.
WASI CREEK PROPERTY
Omineca Mining Division
LOCATION PLAN
Scale: 1:50 000 NTS: 94C/03E
Plan No. WA-04-2 October 2004


374 000 E
125°00'W
94C015
94C016
94C005
94C006
OSI
379604
OSI 2
390515
OSI 3
390516
OSI 3
390516
6 220 000 N
56°06'N
56°06N
125°00W
374 000 E
MINERAL RESERVE
SUBJECT TO CONDITIONS
PROFESSIONAL
PROVINCE
OF
G.L. CHURCH
OCT 28 2004
UTM: NAD 83 / ZONE 10
CROSS LAKE MINERALS LTD.
WASI CREEK PROPERTY
Omineca Mining Division
MINERAL CLAIMS
Scale: 1:50 000 BCGS: 94C005, 015
Plan No. WA-04-3 October 2004

The Weber Prospect was restaked and worked at intermittent intervals with the next documented description occurring in the 1954 Geological Survey of Canada Memoir 274, by E.F. Roots entitled "Geology and Mineral Deposits of Aiken Lake Map-Area, British Columbia". He describes the showing as pyrite-galena-sphalerite-barite replacement body in limestone that strikes north 30 degrees west and dips 80 degrees northeast. A grab sample assayed gold trace; silver 2.0oz/ton; lead 10.24% and barite 4.06%.

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

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

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

In 1992 Cominco Ltd. completed 16 diamond drill holes totalling 1,346 metres in the area of the trenching. The strike length explored is approximately 2.0 kilometres along a fault controlled

base metal mineralized structure, on the east side of Wasi Creek. The work was not filed for assessment credit so there are no records of the results in the provincial data base.
In 1993 Cominco drilled four holes on the north side of the Osilinka River on a separate area and one hole in the Wasi Creek area in the vicinity of the 1992 drilling. The drill hole was collared near the Duncan Showing and was successful in intersecting two mineralized horizons that assayed 6.9% zinc, 1.6% lead and 18.4g/t silver over a width of 4.5 metres and 3.1% zinc, 3.2% lead and 32.0g/t silver over a width of 3.1 metres.

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

Cross Lake Minerals Ltd. acquired a 20 unit mineral claim over the property when the ground came open in 2000 and in 2001 added an additional 46 units. The Company carried out a program of geological mapping, stream sediment sampling and trenching in 2001 and in 2002 completed a soil geochemical survey.

One of the main reasons that Cross Lake Minerals Ltd. staked the Wasi Creek Property was to explore for the source of high grade massive sulphide boulders which were discovered during Cominco's trenching program in 1991. The sulphide boulders, 70 cm in size and angular, consist of layered massive sulphides contain galena, sphalerite and pyrite. Cross Lake assayed two of these angular boulders with the following results:

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

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

Stream sediments in the Wasi Creek area were sampled by the British Columbia Geological Survey in 1991 and the results are detailed in Open File 1992-11. Four samples were collected in the Wasi Creek Property area (SS-018, SS-130, SS-203, and SS-304) and had the highest in indicator and base metal elements minerals for the entire survey area. The base metal source for the three anomalous samples, SS-018, 130 and 203, are most likely the Duncan and Par mineralized horizons on the east side of Wasi Creek. Stream sediment sample SS-018, the highest in base metal elements of all of the stream sediment samples, was collected from a stream on the west side of Wasi Creek and south of any known mineralization. In July 2002, Cross Lake Minerals Ltd. sampled the same drainage in order to verify the earlier result. The new sample (WS-1) was taken approximately 750 metres upstream, and to the west, of the B.C. government sample site location SS-018 on the OSI 2 mineral claim at approximate NAD 27 UTM coordinates 6 219 053 N, 371 988 E at an elevation of 967 metres. The sample was lower in base metal values than the B.C. government sample.

The 2002 soil sampling program was designed to test both sides of an unnamed stream that was highly anomalous in base metal elements when sampled previously by the B.C. Geological Survey. Therefore, two east-west lines, designated Line #1 and #4, parallel to and approximately 100 metres on either side of the creek were sampled at 25 metre intervals. Two additional lines, designated Line #2 and #3 were sampled in a southerly and northerly direction from where the creek meets the main Wasi Creek drainage valley, again at 25 metre sample intervals. A total of 55 soil samples were collected and the total length of the grid line surveyed was 1350 metres.

The sampling program was successful in delineating two areas of anomalous base metal elements. The first area was located on the Line #2 with samples elevated in zinc, lead, copper, molybdenum, silver and cadmium. This anomaly remains open to the south. The second area, with the highest values in base metal signature, is located on the Line #3 with samples being highly anomalous in zinc, lead, copper, nickel, cadmium, calcium and boron. This anomaly remains open to the north. The details of this 2002 program were set out in the "Soil Geochemical Report on the Wasi Creek Property, OSI 2 and 3 Mineral Claims" by Jim Miller-Tait, P.Geo. dated January 10, 2003, B.C Assessment Report #27,032.

REGIONAL GEOLOGY:

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

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

PROPERTY GEOLOGY:

The Wasi Creek Property geology is a compilation from Cross Lake's 2001 exploration work, Cominco's 1990-1995 exploration programs and mapping completed by the British Columbia Geological Survey as described in File Paper 1992-1. The paper is named "Geology of the Usilika Lake Area, Northern Quesnel Trough, B.C.", (94C/3, 4, 6) by F.Ferri, S. Dudka and C. Rees. The geological stratigraphy underlying the property are all Paleozoic in age ranging from Lower Cambrian to Mississippian.

The oldest rock units exposed in the claim area are the Lower Cambrian to Middle Devonian carbonates. The oldest is the Lower Cambrian Mount Kison Formation of the Atan Group. Overlying this unit are the Cambrian and Ordovician Razorback, Middle Ordovician to Lower Devonian Echo Lake Group and Middle Devonian Otter Lakes Group. This entire carbonate

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

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

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

The Carrie 2 showing is located on the west side of the Wasi Valley structure near the northwest edge of the property. The showing was hand trenched, mapped and sampled by Cross Lake Minerals Ltd. during 2001. The mineralization consists of hydrozincite stained, oxidized,

disseminated, fine-grained sphalerite, galena and pyrite hosted in brecciated dolomite and limestone with carbonate in-filling of fractures and open space.

2004 SOIL SAMPLING PROGRAM:

The soil sampling program in 2004 was designed to test the undisturbed bank material along 13,100 m of logging road that transects the property on the east side of Wasi Creek and to the west of the property on open ground on the west side of Wasi Creek and Wasi Lake. The "B" horizon was sampled in June 2004 along the roads at 100 m intervals; 6,400 m of road on the east side of Wasi Creek and 6,700 m on the west side. The sample line designations, sample numbers and quantities are set out in Table 1 below and are illustrated on Plan Number WA-04-4 which is appended in Section E.

The soil and rock geochemical results for Cd, Cu, Pb, Zn and Ag are set out on individual drawings Section E (see Plan Nos. WA-04-5 to WA-04-9).

Table 1	**Summary of 2004 Sampling Program**					
Line Number	**Length of Sampling (m)**	**Soil Sample Numbers**	**No. of Soils**	**Rock Sample Numbers**	**No. of Rock**	**Total**
WE LINE 1	6400	0N to 0+027N 0S to 0+037S	66	M-04-4 , 5, 6, 7, 8 and 11	6	72
WW LINE 1	1300	0N to 0+013N	14	-	-	14
WW LINE 2	700	0S to 0+007S	8	M-04-1	1	9
WW LINE 3	2800	0+001N to 0+008N 0S to 0+020S	28	M-04-2	1	29
WW LINE 4	1200	0S to 0+012S	13	M-04-3	1	14
WW LINE 5	700	0N to 0+007N	8	M-04-9,and 10	2	10
	13100		**137**		**11**	**148**

A total of 137 soil samples were collected, each soil sample being collected by shovel from the B-horizon at an average depth of approximately 20 to 30 cm and the sample placed in standard paper Kraft soil sample bags and delivered to Acme Analytical Laboratories in Vancouver, B.C. for analyses by the ICP-MS analytical process. The analytical reports and laboratory methods and specifications are appended in Section D.

The sampling program was successful in identifying two areas of anomalous base metal elements in the eastern half of the OSI claim east of Wasi Creek. The first, and southernmost of the two, is likely the subsurface trace of the mineralized horizon of the Duncan showing. A sequence of four consecutive samples (WE LINE 1 0+001N to 0+004N) spaced 100m apart indicate significantly elevated values of Pb, Zn, and Ag. Further north along the same sample line a sequence of seven consecutive samples (WE LINE 1 0+013N to 0+019N) define an anomalous area nearly 700m in length along the east bank of the road. This area is approximately one kilometre to the east of the Par showing and may be a continuation of that mineralized horizon. Isolated geochemical soil anomalies occur in the same general area east of Wasi creek and may be due to transported till. These sample locations are at WE LINE 1 0+013S and WE LINE 1 0+026N.

2004 ROCK SAMPLING PROGRAM:

A total of 11 rock samples were collected from exposed rock outcrops along the logging roads. Two rock samples (M-04-4 and M-04-5) returned significant values of Pb, Zn, and Ag and are in close proximity to anomalous soils collected during this program. The samples were from boulders in road cuts and suspected to be from a local source uphill in the direction of the Duncan showing. These samples were delivered to Acme Analytical Laboratories in Vancouver, B.C. for analyses by the ICP-MS analytical process. Three of the samples (M-04-7, 8 and 11) located along WW Line 1 also had Whole Rock Analysis conducted. The analytical reports and laboratory methods and specifications are also appended in Section D.

CONCLUSIONS:

- The Wasi Creek Property, owned 100% by Cross Lake Minerals Ltd., covers an extensive belt of Lower Cambrian to Middle Devonian limestone and dolomite which is the host to several base metal showings.
- Access to the property is excellent due to the extensive logging that has occurred on and around the claims.
- There are three mineralized showings on the east side of Wasi Creek. The valley bottom of the creek hosts a major geological structure.

- The three showings from south to north, named Duncan, Par and Weber, are all on the same mineralized fault controlled structure which strikes at approximately 330 degrees and dips east at 70 degrees.
- This area was the focus of Cominco Ltd.'s extensive exploration programs from 1990 to 1995. The trenching and drilling intersected the favorable base metal horizon with promising results.
- The Cominco trenching discovered angular float boulders of exceptional grade in zinc, lead and silver of which the source has not been found.
- The British Columbia Geological Survey completed a stream sediment sampling program in the area and the four highest sediment values in base metal elements were collected from drainages in the Wasi Creek Property area.
- The source of three of the stream sediment samples is concluded to have been the known mineralized horizon on the east side of the Wasi Creek structure.
- One of the highest stream sediment samples was collected from a tributary on the west side of Wasi Creek, the opposite side of the Wasi Creek structure near a volcanic tuff unit contact, a favorable geological environment for base metal deposition.
- The source of the stream sediment anomaly has not been discovered and it is upstream and up-ice of the extremely high grade angular massive sulphide boulders discovered in Cominco's trenching program of which the source has yet to be found.
- The soil sampling completed in 2004 has confined the anomalous area of the stream sediments to the Wasi Creek valley itself. Geochemical soil anomalies indicate the mineralization is coming from the northeast trending structure following the trace of the valley and from subsurface outcrops east of the valley.

RECOMMENDATIONS:

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

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

The main two kilometre long Duncan, Par and Weber horizon should be explored on its west side, closer to the structure along the bottom of Wasi Creek valley. A grid should be constructed across the valley and geophysical survey completed to determine hidden mineralization that may occur beneath the valley fill. There should be drilling completed in a westerly direction under Wasi Creek to test if this Wasi Creek structure is mineralized as is the fault controlling the Duncan, Par and Weber mineralization.

Soil geochemical sampling in the 2004 exploration program was successful in delineating two areas prospective for base metals. These two areas of sampling should be tested further to determine the extent of the anomalous area with either contour soil lines or a grid. Therefore, a program of additional soil sampling, prospecting and geological mapping is recommended up-slope and along the east side of the Wasi Creek valley in a easterly direction from the two anomalous areas. This would delineate the dimensions of the anomalies and then the area should be trenched using a CAT 320 excavator or size equivalent.

Respectfully submitted,

Calvin Church, P.Geo.

LIST OF REFERENCES:

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

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

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

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

Melville D.M. (1990): Carbonate-Hosted Lead-Zinc Occurrences in the Germansen Landing and End Lake Areas (94C/2, 93N/15). British Columbia Geological Fieldwork Exploration in British Columbia 1989, Pages 193 to 196.

Miller-Tait, J. (January 2002): Geological Report on the Wasi Creek Property, OSI Mineral Claim, for Cross Lake Minerals Ltd.; NTS 94C/3E; B.C. Assessment Report #26,827

Miller-Tait, J. (January 2003): Soil Geochemical Report on the Wasi Creek Property, OSI 2 and 3 Mineral Claims, for Cross Lake Minerals Ltd.; NTS 94C/3E; B.C. Assessment Report #27,032

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

STATEMENT OF QUALIFICATIONS:

For: Calvin Church, 1733 Napier Street, Vancouver, B.C. V5L 2N1.

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 intermittently since 1987;

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 past operators.

Calvin Church, P.Geo.

SECTION B: PROPERTY

WASI CREEK			*SCHEDULE OF MINERAL CLAIMS*			
PROVINCE: British Columbia			**CLAIMS: 11**	**UNITS: 66**	**AREA: 1650 ha**	
MINING DIVISION: Omineca			**NTS: 94C/03E**		**BCGS: 094C.005, 015**	
LOCATION: on the south side of the Osilinka River near Wasi Lake some 150 km northwest of Mackenzie, 200 km northeast of Smithers and 43 km north-northwest of Germansen Landing			**LATITUDE: 56° 7.5'**		**LONGITUDE: 125° 01'**	
			UTM NAD 83	**ZONE 10**	**6 221 500N**	**374 500E**
			PROPERTY INTEREST: **Cross Lake Minerals Ltd. – 100%** **Bard Ventures Ltd. – 0%**			
MAP	**1:250 000**	**94C Mesilinka River**				
	1:50 000	**94C/03 Uslika Lake**				
	1:20 000	**94C005 Conglomerate Mtn.**				
	1:20 000	**94C015 Tenakihi Range**				

AGREEMENT SUMMARY: Letter Option Agreement dated September 1, 2004 between Cross Lake Minerals Ltd. and Bard Ventures Ltd. whereby Bard may earn a 50% interest in the Property by incurring aggregate exploration expenditures of $800,000 by December 31, 2006.

CLAIM NAME	TENURE NUMBER	UNITS	RECORD DATE (yyyy-mm-dd)	DUE DATE (yyyy-mm-dd)	ANNUAL WORK REQUIRED	RECORDED HOLDER
OSI	379604	20	2000-07-25	2005-08-01	$4000.00	Cross Lake Minerals Ltd.
TM 1	386919	01	2001-05-28	2006-08-01	200.00	Cross Lake Minerals Ltd.
TM 2	386920	01	2001-05-28	2006-08-01	200.00	Cross Lake Minerals Ltd.
TM 3	386921	01	2001-05-28	2006-08-01	200.00	Cross Lake Minerals Ltd.
TM 4	386922	01	2001-05-28	2006-08-01	200.00	Cross Lake Minerals Ltd.
TM 5	386923	01	2001-05-28	2006-08-01	200.00	Cross Lake Minerals Ltd.
TM 6	386924	01	2001-05-28	2006-08-01	200.00	Cross Lake Minerals Ltd.
C 1	387799	01	2001-07-01	2006-08-01	200.00	Cross Lake Minerals Ltd.
C 2	387800	01	2001-07-01	2006-08-01	200.00	Cross Lake Minerals Ltd.
OSI 2	390515	18	2001-10-19	2005-08-01	3600.00	Cross Lake Minerals Ltd.
OSI 3	390516	20	2001-10-19	2005-08-01	4000.00	Cross Lake Minerals Ltd.
		66			**$13200.00**	

ASSESSMENT WORK SUMMARY

Date of Filing (yyyy-mm-dd)	Work Filed $	New Work Applied $	PAC Credits Applied	PAC Credits Saved	Total PAC Credits	Date of Approval (yyyy-mm-dd)	Event Number
2001-01-24	2000.00	2000.00	0	0	-	2001-01-24	3159811
2002-03-26	Notice to Group: 11 claims					2002-03-26	3177258
2002-03-26	9539.53	9500.00	0	39.53	-	2002-07-31	3177259
2002-09-23	6500.00	5086.76	1413.24	-	-	2003-08-12	3184393
2003-09-09	Notice to Group: 11 claims for Common Anniversary Date					2003-09-09	3199038
2003-09-09	0	0	1506.41	0	-	2003-09-09	3199038
2004-07-29	5400.00	5000.00	400.00	0	-		3214539

SECTION C: EXPENDITURES – Wasi Creek Property-2004 Geochem – Phase 1

Item	Work Performed	Quantities / Rates	Amount
Project Geologist: B. Mawer, P.Geo., A.B. Mawer Geological Consulting	Sampling and mapping. Period: June 8-24, 2004	10 days @ $400.00	$4000.00
Field Assistant: Matthew Keevil	Sampling Period: June 14-24, 2004	10 days @$150.00	$1500.00
Transportation: Vancouver to property, onsite and return	4x4 pickup truck: Period: June 14-24, 2004	8 days @ $75.00 Fuel	600.00 416.36 1016.36
Accommodation and Meals	Abitibi Consolidated Omineca Camp: June 16-22 Other travel expenses	2 persons / 7 days	1508.00 599.08 2107.07
Analytical Services: Acme Analytical Laboratories Ltd.	ICP-MS 35 element analyses	148 samples	2207.28
Map Preparation: L. Erdman	Base Map Preparation, Data Plotting and Geological Map Preparation	18 hours @ $50.00	900.00
Project Geologist: Calvin Church, P.Geo. Caledonia Geological Inc.	Data Analysis and Report Preparation:	3 days @ 400.00	1200.00
Printing:	Map reproduction		50.00
Total			**$12980.71**

Expenditure Apportionment:

Claim	Samples	% of Total	Expenditure
OSI	26	17.57	2280.71
OSI 2	19	12.84	1666.73
OSI 3	18	12.16	1578.45
TM 2	9	6.08	789.23
TM 3	1	0.67	86.97
Subtotal	**73**	**49.32**	**6402.09**
Outside Claim Area	75	50.68	6578.62
Total	**148**	**100.0**	**$12980.71**

SECTION D: ANALYTICAL RESULTS

1. Analyses carried out by Acme Analytical Laboratories Ltd. of Vancouver, B.C.

   - Certificate of Analysis #A402989 dated July 9, 2004
   - Certificate of Analysis #A402987 dated July 9, 2004
   - Certificate of Analysis #A402987R dated July 15, 2004
   - Certificate of Analysis #A402988 dated July 15, 2004
   - Statement of Analytical Procedures: 4 data sheets

ACME ANALYTICAL LABORATORIES LTD. (ISO 02 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

JUL 2 1 2004

Cross Lake Minerals File # A402989 Page 1

1255 W. Pender St., Vancouver BC V6E 2V1

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample gm
WW LINE 1 0+013N	8.5	32.3	22.6	229	.5	33.0	7.0	261	2.99	11.7	1.9	1.7	4.1	20	2.4	2.0	.1	76	.27	.198	14	25.2	.32	213	.029	2	1.43	.005	.07	.2	.11	3.0	.2	<.05	4	1.4	15.0
WW LINE 1 0+012N	7.8	46.1	23.9	499	2.3	101.8	16.3	480	4.09	10.4	6.0	3.4	2.6	62	6.6	2.8	.4	48	1.04	.148	14	26.4	.51	361	.015	2	1.18	.009	.09	.1	.12	2.8	.1	.07	4	3.2	5.0
WW LINE 1 0+011N	7.2	61.5	21.6	400	1.0	104.2	13.7	621	3.50	15.3	6.3	2.4	2.2	54	13.4	2.2	.2	55	.90	.087	16	25.9	.46	527	.017	2	1.19	.007	.09	.1	.10	3.3	.1	<.05	3	1.9	7.5
WW LINE 1 0+010N	1.9	26.0	11.7	91	.4	26.8	9.5	518	2.61	5.8	1.7	4.7	2.8	33	.9	.6	.1	58	.53	.056	15	26.5	.51	570	.032	1	1.25	.007	.09	.1	.08	3.4	.1	<.05	4	.9	15.0
WW LINE 1 0+009N	3.3	65.4	20.2	136	.1	48.3	16.5	653	3.86	11.1	1.3	1.2	7.6	35	.6	1.3	.2	54	.50	.096	20	28.9	.63	760	.049	2	1.35	.007	.14	.1	.13	4.9	.1	<.05	4	.7	15.0
WW LINE 1 0+008N	8.4	60.1	17.1	550	1.1	98.9	10.6	483	2.67	16.0	6.4	3.6	1.3	75	6.6	2.9	.2	48	1.47	.091	12	20.0	.43	622	.013	2	.99	.009	.08	.1	.19	2.3	.2	.07	3	4.0	15.0
WW LINE 1 0+007N	2.1	65.4	15.0	108	.1	42.5	13.9	716	3.31	11.5	1.4	26.5	5.9	43	.4	1.2	.2	59	.55	.087	20	29.8	.66	910	.051	2	1.42	.008	.13	.1	.21	6.0	.1	<.05	4	1.0	15.0
WW LINE 1 0+006N	1.8	35.2	10.6	105	.5	26.3	11.3	504	3.02	5.8	1.4	1.4	2.1	34	1.1	.6	.1	66	.54	.054	14	26.3	.46	590	.029	1	1.33	.008	.10	.1	.05	3.6	.1	<.05	4	.7	15.0
WW LINE 1 0+005N	2.0	47.3	10.8	89	.5	34.2	11.5	531	3.26	9.0	2.3	2.0	3.4	35	.9	.9	.1	69	.55	.055	17	32.3	.58	551	.048	2	1.44	.009	.10	.1	.09	4.8	.1	<.05	4	.8	15.0
WW LINE 1 0+004N	1.8	31.3	8.8	58	.2	25.8	8.3	334	2.91	9.8	1.3	4.0	4.5	40	.2	.9	.1	61	.75	.111	20	27.0	.50	300	.054	2	.94	.010	.08	.1	.08	4.0	.1	<.05	3	.6	15.0
WW LINE 1 0+003N	2.0	32.0	8.7	61	.3	30.8	9.1	378	2.80	7.7	2.0	3.0	3.5	37	.3	.8	.1	62	.58	.084	17	26.9	.55	333	.055	2	1.20	.009	.09	.1	.08	3.9	.1	<.05	4	.7	15.0
WW LINE 1 0+002N	4.2	57.8	12.9	125	.3	45.7	11.4	503	3.36	10.5	2.0	4.0	5.3	43	.6	1.5	.1	62	.69	.105	21	26.6	.61	509	.050	3	1.24	.010	.12	.1	.18	4.7	.1	<.05	4	.8	15.0
WW LINE 1 0+001N	5.8	52.0	13.2	110	.1	51.6	13.9	435	3.42	10.1	1.6	5.2	5.1	36	.4	1.7	.1	61	.54	.131	25	38.6	.67	512	.052	2	1.30	.007	.11	.1	.07	4.2	.2	<.05	4	1.3	15.0
WW LINE 1 0+000N	2.9	34.4	8.5	534	.2	53.5	9.6	437	2.73	9.0	1.2	3.2	2.8	71	13.5	2.0	.1	63	3.71	.112	13	26.7	.60	245	.055	4	.95	.011	.09	.1	.14	4.1	.1	<.05	3	.8	15.0
WW LINE 2 0S	8.0	109.8	28.3	263	1.8	60.2	12.6	394	4.52	22.3	2.7	11.3	6.6	62	1.9	4.3	.3	39	.59	.186	22	19.8	.23	693	.016	1	.78	.004	.08	.1	.36	4.0	.2	.07	2	3.4	15.0
WW LINE 2 0+001S	3.0	92.0	19.3	226	.7	61.0	14.7	451	3.64	9.3	1.9	3.5	7.4	35	1.1	1.5	.3	34	.82	.136	25	19.1	.29	441	.019	2	.83	.005	.10	<.1	.24	5.4	.1	<.05	2	2.0	15.0
WW LINE 2 0+002S	1.1	36.3	9.9	65	.4	36.3	11.5	639	3.30	8.0	2.5	2.9	3.0	35	.6	.8	.1	64	.97	.057	16	36.9	.69	556	.069	3	1.54	.007	.10	.1	.12	5.8	.1	<.05	4	1.0	15.0
RE WW LINE 2 0+003S	2.3	72.1	17.3	109	.5	40.0	11.1	628	3.14	13.8	7.7	22.3	3.7	52	.7	.7	.2	50	.74	.089	24	28.6	.66	483	.023	3	1.36	.007	.15	.1	.36	4.5	.1	<.05	4	1.1	15.0
WW LINE 2 0+003S	2.1	70.4	17.3	111	.5	40.1	11.5	658	3.39	14.8	7.6	2.6	3.6	47	.6	.7	.2	49	.74	.089	23	30.4	.65	447	.022	2	1.23	.006	.13	.1	.36	4.5	.1	<.05	4	1.1	15.0
WW LINE 2 0+004S	2.6	65.8	21.7	117	.7	43.3	12.9	813	3.54	16.1	6.9	1.0	3.9	55	2.2	.7	.2	52	.86	.053	22	27.4	.52	471	.017	2	1.32	.006	.11	.1	.14	3.8	.1	<.05	4	1.0	15.0
WW LINE 2 0+005S	1.7	27.7	17.1	77	.4	16.3	6.7	232	2.42	9.4	2.9	1.3	2.3	61	.9	.6	.2	41	.82	.046	20	15.8	.37	669	.009	2	1.16	.005	.09	.1	.06	2.3	.1	<.05	3	.9	15.0
WW LINE 2 0+006S	2.4	56.3	14.2	110	.1	41.4	12.8	398	3.58	13.2	1.4	3.1	4.5	31	.4	1.3	.1	65	.46	.132	20	26.9	.52	310	.044	2	1.45	.006	.09	.1	.06	3.8	.1	<.05	4	1.1	15.0
WW LINE 2 0+007S	3.3	33.7	21.3	181	.4	28.4	7.8	291	2.76	8.6	1.2	2.5	4.2	27	.9	1.2	.1	59	.39	.121	17	20.3	.38	270	.033	1	1.23	.006	.09	.1	.04	3.0	.1	<.05	4	.8	15.0
WW LINE 3 0+008N	2.2	67.2	13.7	158	.4	51.5	11.3	382	3.07	8.8	1.7	24.1	3.6	29	1.2	1.7	.2	49	.50	.093	21	21.8	.47	432	.033	2	1.20	.007	.06	.1	.09	3.9	.1	<.05	3	.9	15.0
WW LINE 3 0+007N	1.5	51.3	14.7	67	.2	39.6	11.8	548	2.96	9.0	1.9	4.3	5.7	37	.4	1.3	.1	54	.58	.130	22	24.2	.47	382	.050	2	.97	.006	.07	.1	.10	4.9	.1	<.05	3	.8	15.0
WW LINE 3 0+006N	2.8	60.4	14.7	89	.7	35.4	11.7	485	3.23	14.3	3.1	37.5	4.5	57	.5	2.0	.1	72	1.05	.283	21	27.3	.49	407	.046	2	.99	.008	.10	.1	.14	4.7	.1	<.05	3	1.1	15.0
WW LINE 3 0+005N	1.1	33.3	11.6	62	<.1	28.4	9.7	468	2.69	9.1	.9	2.9	5.4	29	.2	.8	.1	51	.41	.072	19	26.7	.53	284	.069	2	1.03	.006	.09	.1	.05	3.6	.1	<.05	3	.9	15.0
WW LINE 3 0+004N	6.2	64.0	16.9	223	.2	49.2	11.8	438	3.38	16.2	2.1	3.7	6.3	46	.9	2.2	.2	58	.53	.122	22	26.1	.46	588	.042	2	1.02	.006	.08	.1	.10	3.7	.1	<.05	3	1.7	15.0
WW LINE 3 0+003N	1.4	49.6	13.8	80	.1	34.7	13.8	614	3.44	11.3	1.4	2.0	6.1	40	.2	.9	.2	51	.50	.085	19	26.8	.66	887	.051	2	1.29	.010	.11	.1	.17	4.4	.1	<.05	4	.8	15.0
WW LINE 3 0+002N	3.4	92.2	15.2	152	.5	62.1	14.1	507	3.62	14.4	5.9	4.5	5.9	39	.7	1.7	.2	50	.60	.134	19	37.8	.64	359	.033	2	1.17	.006	.11	.1	.22	6.0	.1	<.05	4	1.0	15.0
WW LINE 3 0+001N	1.4	45.8	13.8	76	.1	30.0	10.9	561	2.90	9.4	1.4	2.3	6.4	39	.3	.9	.1	48	.47	.085	20	23.6	.58	1194	.058	2	1.13	.008	.11	.1	.14	4.6	.1	<.05	3	.7	15.0
WW LINE 3 0S	4.4	94.1	46.6	149	.3	69.6	18.6	3628	6.51	17.3	2.4	2.9	9.2	39	.9	1.4	.3	42	.37	.086	28	28.9	.75	1012	.026	3	1.40	.006	.13	<.1	.43	7.1	.2	<.05	4	1.6	15.0
WW LINE 3 0+001S	1.1	39.2	14.9	114	.3	48.8	12.9	740	4.13	8.4	.9	1.1	3.9	24	.4	.6	.1	51	.28	.087	17	26.5	.49	355	.030	2	1.23	.005	.09	.1	.05	3.2	.1	<.05	4	.8	15.0
WW LINE 3 0+002S	1.5	43.4	15.7	72	.1	32.2	10.4	436	3.19	9.3	1.0	1.9	5.7	25	.2	.8	.1	42	.33	.068	18	23.1	.53	457	.036	2	1.06	.005	.09	.1	.06	3.4	.1	<.05	3	.7	15.0
STANDARD DS5	13.2	138.4	25.5	139	.3	24.6	11.7	796	3.02	19.6	6.2	42.7	2.7	46	5.7	3.8	6.3	62	.74	.088	13	179.4	.68	145	.094	19	1.91	.034	.14	4.8	.18	3.3	1.0	<.05	7	5.0	15.0

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: SOIL SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data MC FA ____ DATE RECEIVED: JUN 24 2004 DATE REPORT MAILED: July 9/04

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample gm
G-1	1.6	2.5	2.5	38	<.1	4.4	3.6	527	1.92	<.5	1.9	.6	4.2	77	<.1	<.1	.1	37	.57	.082	9	14.7	.53	232	.124	1	.87	.093	.51	2.2	<.01	2.1	.3	<.05	5	<.5	15.0
WW LINE 3 0+003S	1.1	22.6	8.1	94	.3	16.9	6.3	362	1.60	6.1	.8	2.4	1.6	70	.9	.6	.1	32	.70	.087	10	14.4	.36	426	.028	5	.62	.006	.10	.1	.09	2.1	.1	.07	2	.7	15.0
WW LINE 3 0+004S	1.0	34.4	10.8	118	.3	30.7	9.4	644	2.63	7.7	1.5	3.8	3.6	39	.3	.7	.1	47	.46	.058	18	22.4	.48	546	.043	2	1.00	.006	.11	.1	.06	4.0	.1	<.05	3	.9	15.0
WW LINE 3 0+005S	2.0	35.8	10.4	64	.4	28.4	8.9	371	2.65	9.4	1.0	4.7	3.9	30	.3	1.0	.1	46	.34	.070	16	26.8	.51	993	.042	1	1.11	.005	.08	.1	.07	3.1	.1	<.05	3	1.0	15.0
WW LINE 3 0+006S	7.9	68.5	13.4	177	2.5	45.9	9.1	746	3.40	21.0	2.5	8.2	2.6	62	.6	2.3	.2	19	.59	.062	14	13.2	.22	2596	.009	5	1.00	.004	.09	<.1	.30	2.8	.1	.10	2	3.4	7.5
WW LINE 3 0+007S	1.3	58.4	16.4	121	.6	48.9	15.2	576	3.21	8.4	.9	7.8	4.9	69	.3	.7	.2	38	.84	.078	22	26.3	.72	791	.025	2	1.34	.007	.09	<.1	.16	4.8	.1	<.05	3	1.2	15.0
WW LINE 3 0+008S	2.1	48.7	20.4	157	.2	35.3	12.1	492	3.28	12.6	1.7	2.3	8.7	38	.8	2.1	.4	49	.45	.097	26	25.5	.62	421	.027	5	1.44	.008	.25	.1	.25	5.0	.2	<.05	4	1.0	15.0
WW LINE 3 0+009S	1.0	54.4	13.7	82	.1	46.4	16.2	730	3.83	9.7	.9	3.2	4.7	41	.2	1.0	.2	88	.73	.085	17	51.7	.88	357	.109	4	1.73	.014	.15	.1	.14	8.5	.1	<.05	6	<.5	15.0
WW LINE 3 0+010S	1.1	33.5	12.1	54	.1	22.5	7.9	307	2.55	9.0	.9	5.9	4.8	22	.1	.9	.1	51	.31	.066	18	23.8	.53	117	.055	3	1.07	.006	.12	.1	.04	3.2	.1	<.05	3	.7	15.0
WW LINE 3 0+011S	.9	24.5	12.4	43	<.1	18.6	8.1	345	2.38	8.1	.8	4.6	5.8	26	.1	.8	.1	44	.38	.072	22	20.5	.45	264	.044	1	.84	.009	.10	.1	.06	3.3	.1	<.05	3	<.5	15.0
WW LINE 3 0+012S	1.9	63.6	33.2	83	.1	33.9	19.5	674	4.12	17.1	1.6	16.0	5.8	28	.3	1.3	.3	62	.41	.136	18	30.3	.64	264	.033	2	1.30	.005	.12	.1	.10	4.1	.1	<.05	4	.7	15.0
WW LINE 3 0+013S	.7	26.0	11.1	43	.1	20.2	8.6	402	2.41	8.5	1.5	2.0	5.3	31	.2	.7	.1	53	.56	.082	20	24.3	.52	196	.065	2	.99	.009	.12	.1	.07	4.6	.1	<.05	3	<.5	15.0
WW LINE 3 0+014S	3.5	63.8	23.2	142	.1	43.2	15.7	486	4.23	22.4	1.6	7.5	4.9	31	.5	2.3	.2	56	.42	.167	16	23.5	.47	209	.024	1	1.10	.006	.11	.1	.04	3.6	.1	<.05	3	1.8	15.0
WW LINE 3 0+015S	1.1	30.7	13.6	53	.1	22.7	10.2	460	2.60	9.0	1.1	8.6	5.2	32	.3	.8	.1	59	.52	.101	22	24.1	.50	270	.063	3	.86	.007	.09	.1	.12	4.4	.1	<.05	3	<.5	15.0
RE WW LINE 3 0+015S	1.0	30.9	12.6	53	.1	21.4	9.5	439	2.49	9.2	1.0	3.0	5.0	30	.3	.8	.1	53	.47	.097	21	22.7	.49	252	.057	1	.84	.007	.09	.1	.12	3.9	.1	<.05	3	<.5	15.0
WW LINE 3 0+016S	1.3	34.4	15.5	66	.1	30.9	11.5	433	3.26	14.4	1.0	1.5	4.4	27	.2	1.0	.1	76	.41	.089	18	38.2	.54	225	.060	2	1.19	.006	.11	.1	.05	4.1	.1	<.05	4	.5	7.5
WW LINE 3 0+017S	.9	23.4	10.6	46	.1	21.5	9.7	392	2.67	7.6	.9	3.2	4.5	28	.1	.7	.1	58	.44	.056	17	29.2	.57	197	.074	2	.97	.008	.08	.1	.05	3.7	.1	<.05	3	<.5	15.0
WW LINE 3 0+019S	.8	36.4	14.4	56	.1	30.8	10.3	502	2.75	9.4	2.2	7.4	6.1	33	.2	.9	.2	52	.54	.073	22	27.1	.60	313	.060	1	1.08	.009	.13	.1	.11	5.4	.1	<.05	3	.5	15.0
WW LINE 3 0+020S	1.2	39.9	29.8	59	.2	34.2	12.7	562	3.21	14.7	3.2	1.6	6.4	28	.2	1.0	.3	53	.41	.064	26	30.6	.61	547	.041	1	1.39	.008	.13	.1	.08	5.0	.1	<.05	4	.5	7.5
WW LINE 4 0S	1.5	32.6	9.0	68	.2	21.5	8.3	278	3.08	8.2	.6	3.7	3.2	25	.4	.8	.1	76	.36	.123	14	30.3	.50	146	.057	2	1.77	.007	.06	.1	.08	4.3	.1	<.05	5	.6	15.0
WW LINE 4 0+001S	2.1	64.6	11.1	86	.1	41.8	13.6	644	3.86	12.5	.8	6.5	4.0	34	.3	1.5	.1	84	.53	.080	18	49.8	.87	298	.098	1	1.80	.009	.11	<.1	.21	8.9	.1	<.05	6	.7	15.0
WW LINE 4 0+002S	1.5	44.5	11.4	77	.2	30.1	10.1	317	3.46	9.1	.7	3.4	3.1	28	.5	1.1	.1	79	.39	.092	14	36.3	.60	157	.055	2	1.87	.006	.09	.1	.09	5.6	.1	<.05	5	.5	15.0
WW LINE 4 0+003S	14.0	55.8	24.4	339	2.1	46.8	15.1	520	4.42	16.1	2.7	6.5	4.0	32	1.4	4.5	.3	59	.34	.150	25	29.5	.45	644	.010	<1	1.90	.006	.12	.1	.54	3.2	.3	.07	4	2.8	15.0
WW LINE 4 0+004S	5.5	45.4	36.4	172	.2	34.1	12.7	243	7.51	33.7	3.7	6.6	10.3	54	.6	5.9	.4	41	.16	.308	23	20.2	.33	712	.019	2	1.72	.018	.21	.1	.17	5.3	.2	.26	4	2.5	15.0
WW LINE 4 0+005S	13.3	107.4	13.1	546	2.3	141.2	13.5	419	3.96	21.3	6.2	7.7	4.1	108	3.2	7.6	.2	151	.90	.440	13	44.0	.51	>10000	.040	4	3.20	.009	.11	.2	1.01	7.1	.7	<.05	8	5.9	15.0
WW LINE 4 0+006S	3.9	30.1	12.6	171	.7	27.5	6.3	268	2.65	10.8	2.0	1.9	3.5	544	1.3	2.6	.1	53	.36	.299	19	22.3	.28	1212	.015	2	1.08	.005	.07	.1	.12	3.0	.1	<.05	3	2.5	15.0
WW LINE 4 0+007S	3.1	52.9	19.0	127	.3	40.0	11.0	428	2.95	10.9	2.0	3.4	6.1	35	.7	1.8	.2	44	.40	.113	28	26.1	.49	222	.027	<1	1.19	.005	.11	.1	.09	2.9	.2	<.05	3	.7	15.0
WW LINE 4 0+008S	1.5	42.0	49.7	55	.3	28.9	15.6	1150	3.29	43.5	6.9	6.2	9.9	26	.1	1.2	.1	12	.34	.069	42	9.9	.15	251	.004	2	.65	.003	.17	<.1	.15	6.3	.1	<.05	1	.7	15.0
WW LINE 4 0+009S	3.2	57.8	14.6	85	.1	31.1	15.5	743	3.14	10.1	1.3	5.0	4.7	32	.3	1.2	.2	69	.51	.090	19	32.0	.55	237	.072	3	1.36	.010	.11	.1	.12	6.2	.1	<.05	4	.9	15.0
WW LINE 4 0+010S	1.3	24.0	10.7	60	.2	18.9	7.9	345	3.32	6.3	.5	74.0	2.3	22	.3	.5	.1	83	.29	.116	11	28.8	.44	105	.043	1	1.67	.006	.06	.1	.06	3.4	.1	<.05	6	<.5	15.0
WW LINE 4 0+011S	3.0	46.1	9.2	80	.4	32.0	11.7	553	3.45	8.7	1.6	1.9	2.3	34	.5	.8	.1	85	.50	.085	13	36.2	.63	207	.047	<1	1.66	.008	.08	.1	.14	4.9	.1	<.05	5	.8	15.0
WW LINE 4 0+012S	1.6	45.8	6.0	61	.3	28.6	10.5	422	3.01	7.5	.8	3.7	2.2	31	.3	.8	.1	81	.56	.092	13	37.5	.68	164	.085	4	1.40	.009	.05	.1	.09	5.7	.1	<.05	4	.7	15.0
WW LINE 5 0+007N	2.6	26.9	18.4	52	.5	16.8	5.8	206	1.85	11.1	3.0	3.2	4.2	1332	.1	1.5	.2	34	.27	.262	14	46.8	.29	1226	.018	2	1.21	.003	.08	<.1	.06	3.1	.1	<.05	5	6.4	15.0
WW LINE 5 0+006N	3.6	74.3	16.6	166	.3	49.5	15.4	1024	3.06	12.9	1.3	5.3	5.5	44	.8	1.3	.2	47	.35	.095	17	21.3	.50	1606	.041	1	1.02	.007	.09	.1	.16	4.2	.1	<.05	4	1.5	15.0
WW LINE 5 0+005N	2.4	50.4	26.9	115	.3	39.0	19.4	1082	3.54	20.2	1.3	2.9	8.8	33	.4	1.4	.3	31	.36	.100	28	20.5	.53	2118	.012	2	1.11	.006	.14	.1	.12	4.4	.1	<.05	3	.6	15.0
STANDARD DS5	13.1	145.4	25.7	140	.3	26.0	12.1	796	3.04	19.1	6.2	43.8	2.8	46	5.9	3.8	6.3	61	.77	.099	13	193.3	.71	147	.101	18	2.02	.035	.15	4.9	.18	3.4	1.2	<.05	7	4.8	15.0

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data Wk FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample gm
G-1	1.5	3.0	2.3	41	<.1	4.3	3.7	518	1.90	.6	1.9	1.3	4.0	74	<.1	<.1	.1	38	.51	.082	8	16.3	.51	213	.118	3	.87	.113	.41	2.4	<.01	2.2	.3	<.05	4	<.5	15
WW LINE 5 0+004N	2.7	78.5	16.8	113	.3	41.5	13.9	804	3.01	13.3	1.2	4.5	5.5	41	.4	1.5	.2	46	.30	.073	19	22.0	.50	1323	.037	1	1.10	.006	.07	.1	.14	4.2	.1	<.05	3	1.8	15
WW LINE 5 0+003N	4.4	136.6	14.7	243	1.3	104.2	16.9	1638	3.21	8.8	1.8	7.0	5.2	26	2.1	2.2	.2	18	.29	.071	27	21.5	.51	368	.009	1	1.02	.003	.04	<.1	.31	4.3	.1	<.05	2	3.4	15
WW LINE 5 0+002N	1.2	64.6	15.1	93	.3	34.3	12.1	779	2.79	11.2	1.6	6.8	5.6	39	.4	.9	.2	46	.45	.077	21	25.8	.56	974	.047	1	1.26	.010	.12	.1	.16	5.3	.1	<.05	3	1.1	15
WW LINE 5 0+001N	1.3	46.6	12.3	96	.1	23.5	9.3	547	2.27	8.8	1.5	3.0	4.6	42	.2	.8	.1	39	.34	.081	17	19.5	.42	870	.044	2	.82	.010	.07	.1	.12	3.5	.1	<.05	2	.7	15
WW LINE 5 ON	1.9	67.9	17.6	101	.2	52.4	15.9	838	3.56	11.6	1.3	4.1	5.1	38	.3	1.2	.2	58	.41	.078	18	34.9	.67	1112	.062	3	1.23	.007	.09	.1	.15	5.4	.1	<.05	4	1.0	15
WE LINE 1 0+027N	19.9	72.6	193.3	974	1.8	150.3	12.1	440	2.99	29.8	4.6	2.4	2.8	69	7.6	5.6	.1	81	3.88	.131	12	21.0	1.64	999	.022	3	.61	.007	.09	.2	.77	2.6	.8	.06	2	2.6	15
WE LINE 1 0+026N	69.0	161.4	154.2	2227	8.3	657.9	25.6	425	7.14	30.8	18.9	2.9	10.0	77	27.4	13.2	.4	108	3.21	.110	13	19.6	.75	532	.019	4	.76	.005	.18	.1	.77	3.7	.8	.16	2	15.4	15
WE LINE 1 0+025N	13.5	84.3	111.9	888	.8	165.1	21.3	537	3.44	35.2	11.9	3.2	4.0	165	8.5	6.1	.2	69	7.44	.237	10	18.9	2.89	1574	.025	2	.77	.009	.07	.2	.51	3.2	.8	.10	2	1.5	15
WE LINE 1 0+024N	6.3	35.0	131.0	431	.3	68.2	9.6	521	2.27	17.3	2.0	1.4	1.4	125	2.7	2.5	.1	77	9.52	.085	8	19.8	4.63	1908	.035	3	.67	.009	.04	.2	.43	2.5	.2	.12	2	.7	15
WE LINE 1 0+023N	1.6	53.4	24.7	131	.1	31.1	12.2	532	3.16	12.5	.9	3.6	2.9	59	.8	.9	.1	92	2.38	.108	11	32.8	1.38	857	.081	2	1.03	.017	.07	.2	.18	4.3	.1	.06	4	.6	15
WE LINE 1 0+022N	20.9	55.9	120.9	891	1.3	128.5	8.7	308	2.13	26.8	4.1	4.2	2.0	69	3.9	5.1	.1	69	4.01	.086	12	20.8	2.29	719	.012	1	.59	.006	.05	.5	1.48	2.8	1.0	.06	1	2.2	15
WE LINE 1 0+021N	10.7	5.9	32.0	718	.2	158.0	15.2	607	1.23	15.9	1.8	.6	.4	107	3.0	1.9	<.1	18	16.01	.048	4	6.1	8.82	1312	.004	2	.14	.008	.01	.3	.19	.6	.3	.14	<1	.9	15
WE LINE 1 0+020N	18.0	8.5	170.8	1128	.3	136.7	6.2	457	1.46	9.6	2.8	<.5	.4	121	6.6	2.7	<.1	27	17.63	.054	4	5.6	10.38	3187	.006	4	.17	.007	.01	.3	2.05	.5	.1	.17	1	2.2	15
WE LINE 1 0+019N	6.7	18.1	1200.3	3903	1.6	40.8	5.1	556	2.01	32.1	1.4	<.5	.6	126	22.9	4.6	<.1	23	15.79	.043	7	9.4	8.63	1992	.014	1	.32	.012	.02	.3	3.00	1.1	.3	.22	1	.9	15
WE LINE 1 0+018N	29.5	52.4	62.4	285	.9	71.8	7.1	264	2.15	25.6	3.9	2.9	3.4	55	1.3	5.4	.2	72	.52	.093	15	20.3	.40	673	.013	3	.73	.005	.07	.5	.69	2.5	1.0	.10	2	3.0	15
WE LINE 1 0+017N	8.5	46.7	309.9	1985	1.1	836.6	19.2	801	3.33	19.2	4.1	1.6	.7	52	11.7	4.2	.1	82	3.33	.148	12	32.5	1.89	786	.027	4	1.08	.011	.05	.3	.70	2.4	.6	<.05	3	1.8	15
WE LINE 1 0+016N	5.8	51.6	726.9	2849	1.6	61.8	14.1	1044	3.71	26.5	2.0	4.9	2.4	52	11.8	3.9	.1	77	3.14	.108	12	33.7	1.93	730	.048	2	1.21	.013	.07	.2	3.02	4.0	.7	<.05	4	1.2	15
WE LINE 1 0+015N	3.8	24.4	314.6	1320	.6	68.3	8.0	481	2.34	15.6	1.4	1.8	1.4	60	4.6	2.5	.1	53	9.27	.066	11	25.7	4.77	1218	.043	2	.86	.012	.05	.2	1.22	2.8	.6	.08	3	.8	15
RE WE LINE 1 0+014N	1.9	30.5	2636.0	998	5.3	34.6	8.7	521	2.81	21.0	.8	3.6	1.3	50	3.5	4.0	.1	60	6.80	.081	9	30.1	3.70	279	.048	2	.85	.012	.05	.2	6.37	2.9	.3	.07	3	.9	15
WE LINE 1 0+014N	2.0	31.4	2673.7	1005	5.3	33.5	8.8	536	2.98	21.9	.9	3.4	1.3	51	3.7	3.9	.1	60	6.72	.088	10	31.1	3.80	296	.048	3	.94	.012	.05	.2	6.48	3.0	.3	.07	3	.8	15
WE LINE 1 0+013N	2.7	39.2	484.2	1953	.8	32.0	9.2	478	2.73	23.4	.7	.8	2.1	77	9.4	2.7	.1	51	11.41	.070	8	26.0	2.97	473	.055	2	.81	.010	.06	.1	2.38	3.1	.7	<.05	3	.6	15
WE LINE 1 0+012N	2.3	55.4	47.4	228	.1	42.8	12.3	530	2.77	10.3	.8	2.3	2.6	52	.8	1.3	.1	76	4.94	.084	9	27.7	2.57	631	.067	3	.90	.014	.06	.1	.32	3.7	.4	<.05	3	<.5	15
WE LINE 1 0+011N	2.4	58.8	117.1	575	.3	42.4	12.6	555	2.94	12.4	.8	1.8	2.8	57	2.1	1.7	.1	70	5.05	.093	10	27.4	2.75	779	.074	3	1.03	.013	.07	.2	.59	3.9	.4	<.05	3	.5	15
WE LINE 1 0+010N	2.7	29.0	264.1	2120	.6	41.4	7.0	399	2.11	20.5	.9	5.0	1.5	66	9.0	3.1	<.1	49	10.49	.068	7	19.4	5.27	1823	.041	4	.55	.011	.04	.2	1.09	2.2	.5	<.05	2	.6	15
WE LINE 1 0+009N	1.8	26.5	144.9	438	.4	25.9	7.6	445	2.28	11.7	.7	1.5	1.7	62	2.2	1.7	.1	52	10.34	.071	7	20.3	4.89	868	.046	3	.61	.010	.05	.1	.72	2.4	.3	.06	2	<.5	15
WE LINE 1 0+008N	2.6	37.4	147.8	933	.5	31.5	8.9	557	2.61	14.7	1.0	1.8	1.9	67	2.8	2.9	.1	61	9.66	.081	7	24.0	4.84	1081	.051	3	.70	.012	.05	.2	1.01	3.0	.5	<.05	3	.7	15
WE LINE 1 0+007N	4.6	23.3	183.7	822	.8	25.5	6.5	426	2.70	24.8	1.2	2.4	1.5	85	3.3	7.6	.1	32	14.40	.059	6	14.6	6.22	918	.031	1	.43	.008	.03	.3	1.26	1.9	1.2	.11	1	.7	15
WE LINE 1 0+006N	1.8	24.5	277.3	957	.8	21.7	6.5	453	2.11	14.4	.7	2.3	1.6	88	5.4	2.6	.1	39	13.22	.057	6	15.9	5.26	908	.039	2	.49	.012	.03	.1	2.38	2.0	.5	.08	2	.5	15
WE LINE 1 0+005N	1.7	23.8	161.3	747	.6	20.7	6.0	452	1.99	14.4	.7	1.8	1.7	87	3.9	2.1	.1	37	12.47	.059	6	15.3	4.70	753	.037	4	.48	.009	.03	.2	1.11	2.1	.4	.11	2	<.5	15
WE LINE 1 0+004N	1.9	22.1	207.8	1038	.9	21.7	5.9	399	2.03	15.4	.7	1.0	1.7	104	6.7	2.0	.1	32	14.64	.060	6	13.5	4.15	966	.032	2	.44	.012	.03	.1	2.28	1.8	.6	.12	1	.7	15
WE LINE 1 0+003N	3.3	38.4	894.6	4665	2.6	31.8	9.3	494	3.38	38.2	1.2	1.0	3.3	114	23.4	3.9	.1	31	11.81	.080	9	14.0	4.38	1337	.029	2	.49	.008	.04	.3	6.90	2.5	1.9	.12	2	.7	15
WE LINE 1 0+002N	2.0	34.8	264.1	1499	.5	31.5	9.1	511	2.45	12.9	.8	2.0	2.3	101	5.2	1.5	.1	52	10.93	.065	8	22.8	2.93	1326	.051	2	.86	.009	.05	.1	.75	3.3	.3	<.05	3	<.5	15
WE LINE 1 0+001N	3.4	38.8	7010.4	>10000	7.6	34.4	8.4	713	4.02	47.0	3.8	1.7	1.8	147	57.5	6.2	.1	31	10.73	.076	8	16.1	2.25	596	.029	2	1.03	.008	.04	.2	6.97	3.7	3.5	.36	2	1.4	15
WE LINE 1 ON	20.0	52.4	249.5	781	.6	79.3	8.8	349	2.19	35.1	3.0	2.6	2.4	118	3.7	8.0	.1	51	6.30	.086	9	12.0	3.32	1755	.011	1	.42	.005	.06	.4	.91	2.0	1.1	.15	1	2.7	15
STANDARD DS5	12.8	148.0	25.5	141	.3	25.3	12.4	805	3.00	18.9	6.1	42.6	2.7	45	5.7	3.8	6.0	62	.77	.094	12	192.2	.69	148	.100	17	1.96	.034	.14	4.9	.17	3.4	1.2	<.05	7	5.0	15

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample gm
WE LINE 1 0S	19.5	52.8	356.0	935	1.2	65.7	8.0	438	2.44	35.0	3.0	4.0	1.6	107	3.1	5.5	.1	59	7.60	.090	9	16.4	3.38	1288	.014	2	.48	.006	.06	.5	2.00	2.0	1.4	.08	1	2.6	15
WE LINE 1 0+001S	2.2	15.2	2360.2	2697	4.7	25.0	7.4	853	3.71	21.7	.8	3.1	1.1	125	19.6	3.9	.1	39	11.80	.069	11	20.3	4.77	502	.019	1	.81	.006	.04	.3	16.33	2.2	.2	.10	2	.9	15
WE LINE 1 0+002S	2.1	17.4	49.3	182	.1	41.8	6.4	437	1.69	10.5	.8	3.6	1.1	83	.6	1.5	<.1	37	14.26	.052	5	18.2	6.50	590	.033	1	.41	.008	.03	.2	.20	1.5	.1	<.05	2	.5	15
WE LINE 1 0+003S	2.9	27.6	61.1	102	.3	44.4	9.9	536	2.54	11.7	1.0	1.9	1.4	48	.4	1.8	.1	65	6.58	.090	10	37.3	3.58	293	.039	1	.84	.009	.04	.3	.21	2.9	.2	<.05	3	.8	15
WE LINE 1 0+004S	2.1	20.3	42.2	78	.1	23.7	5.2	395	1.31	6.7	.7	1.2	1.0	97	.7	1.3	<.1	34	18.65	.046	5	19.7	6.18	1025	.041	1	.41	.008	.04	.1	.16	1.6	.1	<.05	1	<.5	15
WE LINE 1 0+005S	2.5	22.7	89.4	95	.4	27.0	7.3	593	2.03	9.9	.9	2.0	.6	58	.5	2.0	.1	49	11.14	.082	11	25.3	5.06	307	.028	3	.82	.010	.04	.3	.21	2.1	.1	<.05	2	.7	15
WE LINE 1 0+006S	2.5	30.1	32.6	102	.1	36.5	8.1	453	1.96	8.3	.8	2.1	1.6	83	.8	1.5	<.1	48	13.30	.060	7	22.7	3.71	306	.049	1	.62	.009	.05	.2	.19	2.3	.2	<.05	2	.6	15
WE LINE 1 0+007S	2.0	29.3	23.8	200	.1	62.8	7.6	353	1.60	8.4	.8	1.6	1.4	80	.9	1.5	<.1	39	16.26	.052	6	18.6	2.59	725	.044	1	.54	.008	.05	.1	.09	2.3	.2	<.05	2	<.5	15
WE LINE 1 0+008S	1.9	27.6	49.2	72	.2	29.7	7.1	434	1.84	6.9	.9	2.7	1.3	99	.6	1.4	<.1	48	14.90	.061	7	22.1	3.44	670	.045	1	.57	.009	.05	.1	.13	2.0	.1	<.05	2	.6	15
WE LINE 1 0+009S	3.1	38.8	121.6	55	.3	29.4	13.8	554	3.03	15.9	.8	1.2	3.1	118	.3	2.6	<.1	51	12.74	.109	19	19.7	4.22	994	.088	2	.71	.008	.11	.3	.20	2.8	.3	<.05	2	.5	15
WE LINE 1 0+010S	3.5	31.7	178.3	65	.5	28.5	10.9	571	2.54	18.8	1.0	2.3	1.9	100	.5	4.9	.1	45	13.54	.079	12	17.3	5.73	1699	.034	1	.64	.009	.05	.4	.20	2.5	.2	<.05	2	.7	15
WE LINE 1 0+011S	2.6	22.0	123.2	73	.3	19.3	5.5	494	1.50	7.8	.9	1.0	1.3	111	.5	3.3	<.1	30	18.43	.050	6	11.7	7.97	1262	.030	1	.37	.010	.04	.3	.14	1.7	.1	<.05	1	.5	15
RE WE LINE 1 0+011S	2.3	19.1	117.9	66	.3	17.4	5.0	430	1.38	8.5	.8	.6	1.2	106	.5	3.1	<.1	26	18.62	.044	6	9.8	7.64	1178	.028	<1	.35	.009	.04	.3	.12	1.5	.1	.06	1	<.5	15
WE LINE 1 0+012S	1.6	19.7	41.8	52	.1	16.0	4.3	470	1.26	5.2	.7	4.4	1.2	80	.3	1.1	<.1	30	16.22	.033	5	13.0	9.35	917	.039	2	.47	.012	.05	.1	.06	1.9	.1	.06	2	.5	15
WE LINE 1 0+013S	11.0	28.7	4120.0	109	3.5	32.6	10.7	627	2.18	14.4	1.3	2.4	3.1	108	.7	13.6	.1	43	13.76	.114	9	18.7	7.63	1707	.038	2	.82	.011	.07	1.0	.23	2.6	.3	.11	2	1.6	15
WE LINE 1 0+014S	3.6	52.0	160.3	116	.3	45.8	12.7	741	2.78	10.9	.8	2.9	2.9	73	.6	2.5	.1	65	8.12	.065	10	31.4	3.33	1327	.069	1	1.07	.012	.10	.3	.30	4.3	.2	<.05	4	.7	15
WE LINE 1 0+015S	6.2	41.0	138.2	155	.3	57.1	10.7	629	2.38	12.8	1.2	1.8	2.4	66	1.1	3.6	.1	59	8.05	.068	9	31.2	4.76	1391	.070	2	.97	.011	.10	.3	.33	3.6	.3	.06	3	.9	15
WE LINE 1 0+016S	5.6	43.7	315.8	242	.7	57.7	10.6	721	2.59	12.5	1.0	2.9	2.0	69	2.1	4.5	.1	67	7.52	.068	10	39.9	4.66	1498	.070	2	1.06	.011	.09	.5	.95	3.4	.2	.06	4	.7	15
WE LINE 1 0+017S	15.1	35.5	578.7	572	.8	47.3	9.8	771	2.13	12.8	1.2	1.8	2.0	110	3.8	5.4	.1	56	13.13	.056	9	24.3	8.13	1618	.063	2	.83	.012	.09	.7	1.87	3.2	.3	.07	3	.8	15
WE LINE 1 0+018S	12.1	66.9	19.7	185	.8	68.7	12.3	544	3.36	22.5	2.2	1.7	4.1	39	.8	4.4	.2	90	.52	.095	15	35.3	.59	710	.067	2	1.31	.010	.10	.2	.33	4.5	.5	<.05	4	1.9	15
WE LINE 1 0+019S	21.2	56.7	32.6	191	.5	109.8	12.6	449	2.78	22.9	3.2	1.0	3.5	27	1.4	5.0	.1	65	.89	.084	19	26.6	.51	735	.044	1	.88	.005	.09	.4	.46	4.6	.6	<.05	2	1.8	15
WE LINE 1 0+020S	9.7	59.4	11.2	335	.8	75.6	11.6	4836	2.73	16.1	4.2	1.0	2.3	133	1.4	2.1	.1	72	4.65	.436	10	29.0	.62	2046	.050	36	1.08	.015	.32	.2	.06	3.3	.4	<.05	3	1.1	15
WE LINE 1 0+021S	3.6	49.1	9.2	71	.3	33.5	8.8	480	2.77	9.1	1.1	3.5	3.1	35	.2	1.1	.1	68	.51	.066	14	33.2	.42	1136	.076	3	1.00	.008	.12	.1	.20	3.4	.2	<.05	3	1.3	15
WE LINE 1 0+022S	6.8	44.0	39.1	112	.4	41.5	7.7	758	1.96	11.5	10.9	3.0	1.2	60	1.0	1.7	.1	40	2.72	.086	8	25.7	1.11	768	.030	5	.72	.008	.10	.1	.24	2.3	.3	.11	2	2.8	15
WE LINE 1 0+023S	2.0	12.1	8.3	54	.2	11.9	3.1	139	1.90	4.9	.6	.9	2.3	19	.2	.4	.1	57	.33	.083	12	20.6	.19	228	.033	1	.87	.005	.07	.1	.02	1.5	.1	<.05	4	.5	15
WE LINE 1 0+024S	4.3	54.4	10.7	79	.6	43.9	9.8	491	2.76	12.3	1.6	3.9	3.4	34	.2	1.5	.1	57	.36	.071	15	28.9	.42	699	.051	1	1.07	.007	.07	.2	.14	2.9	.2	<.05	3	1.4	15
WE LINE 1 0+025S	5.7	54.2	12.2	94	.6	35.5	7.7	404	2.49	13.5	1.5	4.0	3.3	34	.3	1.6	.2	53	.25	.069	14	25.2	.29	449	.039	1	.84	.005	.07	.1	.17	2.5	.2	<.05	3	1.8	15
WE LINE 1 0+026S	10.3	39.8	10.5	80	.7	32.2	6.7	278	2.69	14.6	1.4	4.6	3.3	59	.3	3.4	.1	52	.21	.069	10	25.8	.30	277	.041	1	.78	.006	.11	.1	.31	1.9	.7	.07	3	4.0	15
WE LINE 1 0+027S	10.8	25.2	14.9	35	1.6	14.1	2.6	90	2.14	12.0	2.0	3.3	2.8	37	.2	3.2	.2	43	.09	.045	10	18.8	.11	346	.028	<1	.43	.006	.08	.1	.32	1.5	.5	.12	2	4.7	15
WE LINE 1 0+028S	19.6	46.3	19.3	93	.7	47.3	5.7	229	2.51	14.8	1.7	3.3	3.3	44	.2	2.6	.2	46	.18	.051	11	18.2	.23	364	.018	<1	.62	.008	.07	.1	.50	2.6	1.1	.06	2	2.6	15
WE LINE 1 0+029S	9.8	43.5	14.2	76	<.1	26.4	4.6	153	2.38	13.6	1.5	4.1	3.1	59	.1	2.2	.2	42	.16	.055	9	19.8	.21	424	.028	1	.60	.010	.09	.1	.43	2.0	.9	.15	2	3.6	15
WE LINE 1 0+030S	13.3	55.4	15.4	60	<.1	27.4	5.3	208	2.74	14.6	1.9	4.5	3.7	46	.3	3.4	.2	60	.24	.043	11	30.1	.36	814	.053	<1	.79	.011	.11	.1	.73	3.9	.7	.12	3	4.1	15
WE LINE 1 0+031S	13.9	38.9	14.8	62	<.1	34.4	6.3	156	2.95	15.4	1.8	3.3	3.0	48	.2	3.2	.2	62	.25	.091	10	32.0	.30	484	.039	1	.91	.010	.09	.1	.41	2.4	.8	.11	3	4.4	15
WE LINE 1 0+032S	79.2	39.8	27.8	50	<.1	14.3	1.9	79	5.73	126.4	5.4	2.6	11.5	209	<.1	8.7	.3	66	.10	.212	6	40.8	.12	348	.017	<1	.37	.027	.18	.3	1.20	2.4	1.8	.38	3	32.0	15
STANDARD DS5	13.7	142.4	25.9	140	.3	23.6	11.6	745	3.01	20.3	6.3	44.9	3.0	47	5.7	3.9	6.3	62	.77	.085	14	181.9	.70	144	.101	18	1.95	.036	.17	4.9	.21	3.5	1.2	<.05	7	5.0	15

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
G-1	1.7	2.6	2.4	45	<.1	4.3	4.0	564	2.11	<.5	2.0	<.5	4.9	91	<.1	<.1	.1	45	.64	.087	11	15.1	.63	246	.140	1	1.05	.114	.51	2.6	<.01	2.6	.3	<.05	5	<.5
WE LINE 1 0+033S	3.5	132.0	17.2	174	.6	60.7	12.6	348	3.19	11.9	1.3	.8	4.1	41	.3	1.5	.2	47	.21	.099	9	27.8	.42	1019	.039	2	.93	.006	.08	.1	.38	4.3	.3	<.05	2	13.0
WE LINE 1 0+034S	4.2	152.0	33.5	135	1.3	53.7	10.5	312	4.51	36.0	1.7	3.9	6.4	52	.1	2.6	.3	35	.15	.177	7	22.7	.16	675	.004	1	.68	.005	.08	.1	.52	3.9	.8	.09	1	8.5
WE LINE 1 0+035S	2.9	69.1	17.0	90	.3	45.9	12.7	784	3.06	11.3	1.5	4.8	4.0	38	.3	1.1	.2	66	.42	.077	14	36.7	.64	1377	.064	4	1.12	.007	.06	.1	.12	3.6	.1	<.05	3	1.0
WE LINE 1 0+036S	7.8	124.5	11.6	210	1.3	73.3	9.5	316	3.44	16.0	4.4	4.4	4.4	65	.3	1.6	.2	47	.27	.087	13	28.0	.34	478	.038	1	.86	.008	.08	.1	.33	4.0	.2	.07	2	4.9
WE LINE 1 0+037S	14.9	107.5	18.8	190	2.4	58.4	6.6	316	3.01	32.8	7.0	4.8	6.0	76	.5	2.6	.2	21	.16	.088	10	14.9	.08	832	.008	1	.34	.008	.06	.1	.91	3.6	1.0	.08	1	5.8
STANDARD DS5	12.5	137.1	24.8	136	.3	22.8	11.9	765	2.92	18.0	5.9	41.4	2.7	50	5.9	3.4	6.1	62	.72	.089	12	183.6	.67	146	.094	19	1.97	.035	.14	4.5	.18	3.3	1.0	<.05	6	4.9

Sample type: SOIL SS80 60C.

Data NO FA ___

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

JUL 2 1 2004

Cross Lake Minerals File # A402987

1255 W. Pender St., Vancouver BC V6E 2V1

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
SI M-04-	.1	8.5	.9	3	.1	.4	<.1	1	.03	.8	<.1	1.7	<.1	2	<.1	<.1	<.1	1	.07	<.001	<1	<1	<.01	2	<.001	1	<.01	.363	<.01	.1	<.01	.1	<.1	.06	<1	<.5
C152667 1	1.0	420.5	2.0	146	.7	24.3	5.0	341	1.87	<.5	.9	6.0	1.5	43	.7	.1	.1	13	.72	.023	5	9.3	.23	32	.002	3	.20	.009	.12	<.1	.07	3.1	<.1	1.93	1	11.1
C152668 2	8.4	44.0	1.2	17	.2	12.3	.7	13	.45	1.8	.9	1.7	.6	5	.1	.4	.1	11	.01	.005	2	20.4	<.01	4135	.003	<1	.48	.003	.01	1.1	.04	.8	<.1	<.05	1	1.2
C152669 3	.8	27.4	19.0	53	.1	3.1	3.3	42	1.05	4.0	1.6	1.2	9.2	10	.1	1.4	.2	3	.07	.063	19	4.7	.02	166	.002	2	.21	.021	.21	<.1	.10	.7	<.1	.42	1	.5
C152670 4	.9	10.2	6607.7	>10000	18.9	5.5	.5	156	8.75	64.0	.9	1.0	.8	39	178.2	7.5	<.1	<1	2.24	.003	<1	2.2	1.29	4	<.001	<1	.01	.002	<.01	.2	9.45	.5	22.2	8.77	2	1.0
C152671 5	.5	179.9	>10000	>10000	65.4	4.2	1.3	291	15.72	116.5	.6	8.8	<.1	52	165.5	180.6	.3	6	9.65	.003	2	<1	5.65	11	<.001	<1	.01	.005	<.01	.1	74.71	.1	3.1	>10	2	2.0
C152672 6	1.8	6.8	72.3	123	.2	3.7	.8	86	.15	2.6	13.4	<.5	3.1	1222	1.5	1.6	<.1	29	5.30	1.151	3	5.2	1.50	640	.004	15	.08	.007	.03	.1	.38	.5	.2	.08	<1	<.5
C152675 9	8.2	38.7	43.1	287	1.6	61.6	9.4	131	2.85	6.1	2.7	3.8	1.6	23	1.2	.8	.2	13	.03	.012	5	11.2	.11	48	.001	1	1.40	.005	.09	.4	.49	3.8	.1	1.65	2	5.8
C152676 10	5.0	64.4	8.7	73	.2	38.4	56.3	194	7.22	<.5	.4	<.5	1.9	57	.1	.3	.1	88	.55	.303	9	41.7	.61	20	.006	<1	1.51	.026	.02	<.1	.11	4.7	<.1	2.42	9	3.8
STA[illegible]D DS5	12.5	143.0	24.8	139	.3	23.0	11.9	776	2.99	18.9	6.2	40.9	2.7	46	5.7	3.5	6.3	59	.74	.090	12	188.5	.67	146	.098	17	2.03	.034	.14	4.7	.18	3.4	1.1	<.05	7	4.7

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: ROCK R150 60C

Data VK FA ____ **DATE RECEIVED:** JUN 24 2004 **DATE REPORT MAILED:** July 9/04

Assay recommend for Pb. Zn > 1%

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE

JUL 21 2004

Cross Lake Minerals File # A402987R
1255 W. Pender St., Vancouver BC V6E 2V1

	SAMPLE#	Pb %	Zn %
M-04-4	C152670	.88	6.47
M-04-5	C152671	3.63	1.87
	STANDARD R-2a	1.49	4.17

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: ROCK PULP

Data dh FA ____ DATE RECEIVED: JUL 13 2004 DATE REPORT MAILED: July 15/04

BRITISH COLUMBIA CERTIFIED ASSAYER
C.L.
Clarence Leong

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

WHOLE ROCK ICP ANALYSIS

JUL 21 2004

Cross Lake Minerals File # A402988

1255 W. Pender St., Vancouver BC V6E 2V1

	SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ni ppm	Sc ppm	LOI %	TOT/C %	TOT/S %	SUM %
M-04-7	C152673	39.84	10.83	6.47	4.87	12.89	.54	5.06	2.27	.77	.11	.009	53	21	15.7	4.15	.42	99.37
M-04-8	C152674	42.01	11.10	6.44	4.21	13.11	.05	4.62	2.27	.79	.09	.009	81	22	14.6	3.89	1.02	99.31
M-04-11	C152677	35.60	13.58	11.11	6.38	10.80	.58	4.81	3.53	.98	.13	.015	129	30	11.6	3.09	2.48	99.14
	STANDARD SO-17/CSB	61.39	13.96	5.82	2.33	4.73	4.21	1.41	.60	.99	.53	.445	35	23	3.4	2.42	5.33	99.83

GROUP 4A - 0.200 GM SAMPLE BY LIBO2 FUSION, ANALYSIS BY ICP-ES. LOI BY LOSS ON IGNITION.
TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)
- SAMPLE TYPE: ROCK R150 60C

ata A FA ____ **DATE RECEIVED:** JUN 24 2004 **DATE REPORT MAILED:** July 15/04

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Cross Lake Minerals File # A402988 (a)

1255 W. Pender St., Vancouver BC V6E 2V1

SAMPLE#	Be ppm	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	V ppm	W ppm	Zr ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Ba ppm
C152673 (M-04-7)	3	29.3	1.7	17.3	7.1	138.8	88.3	2	301.4	7.0	18.4	3.5	251	3.3	291.6	36.1	115.4	238.9	23.59	84.7	12.9	3.78	10.42	1.48	7.05	1.19	3.15	.43	2.67	.37	3700.6
C152674 (M-04-8)	3	40.9	1.1	17.1	8.4	140.9	64.4	2	229.1	7.0	15.1	4.5	237	4.0	334.8	35.1	115.8	244.5	23.44	90.2	12.8	3.61	10.25	1.48	6.62	1.15	3.08	.41	3.03	.37	4534.3
C152677 (M-04-11)	5	54.0	5.5	19.3	8.0	172.5	145.3	2	411.4	8.7	17.3	3.4	311	8.3	327.0	36.8	119.0	249.2	24.92	94.2	13.9	3.97	10.47	1.53	7.01	1.23	2.88	.40	2.75	.36	4782.6
STANDARD SO-17	<1	19.9	3.8	20.9	12.7	26.4	24.1	12	307.5	4.3	12.7	12.1	128	11.0	367.6	26.8	10.5	23.6	3.02	13.6	3.2	1.08	3.74	.69	4.18	.92	2.71	.40	2.93	.44	425.1

GROUP 4B - REE - 0.200 GM BY LiBO2 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: ROCK R150 60C

Data ✓ FA ____ DATE RECEIVED: JUN 24 2004 DATE REPORT MAILED: July 15/04

BRITISH COLUMBIA CERTIFIED ASSAYER
C.L.
Clarence Leong

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Cross Lake Minerals File # A402988 (b)

1255 W. Pender St., Vancouver BC V6E 2V1

	SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm	Ag ppm	Au ppb	Hg ppm	Tl ppm	Se ppm
M-04-7	C152673	2.8	27.6	5.8	12	33.3	8.4	.2	.7	<.1	.1	.8	.04	.1	.7
M-04-8	C152674	3.6	46.5	8.4	12	53.4	14.1	.2	1.7	.1	.1	.8	.08	.1	.7
M-04-11	C152677	2.8	70.8	13.2	64	102.8	36.8	.2	1.4	<.1	.1	.8	.09	.7	.5
	STANDARD DS5	12.7	146.4	26.1	142	24.5	19.2	5.7	3.4	6.4	.3	40.0	.20	1.1	5.0

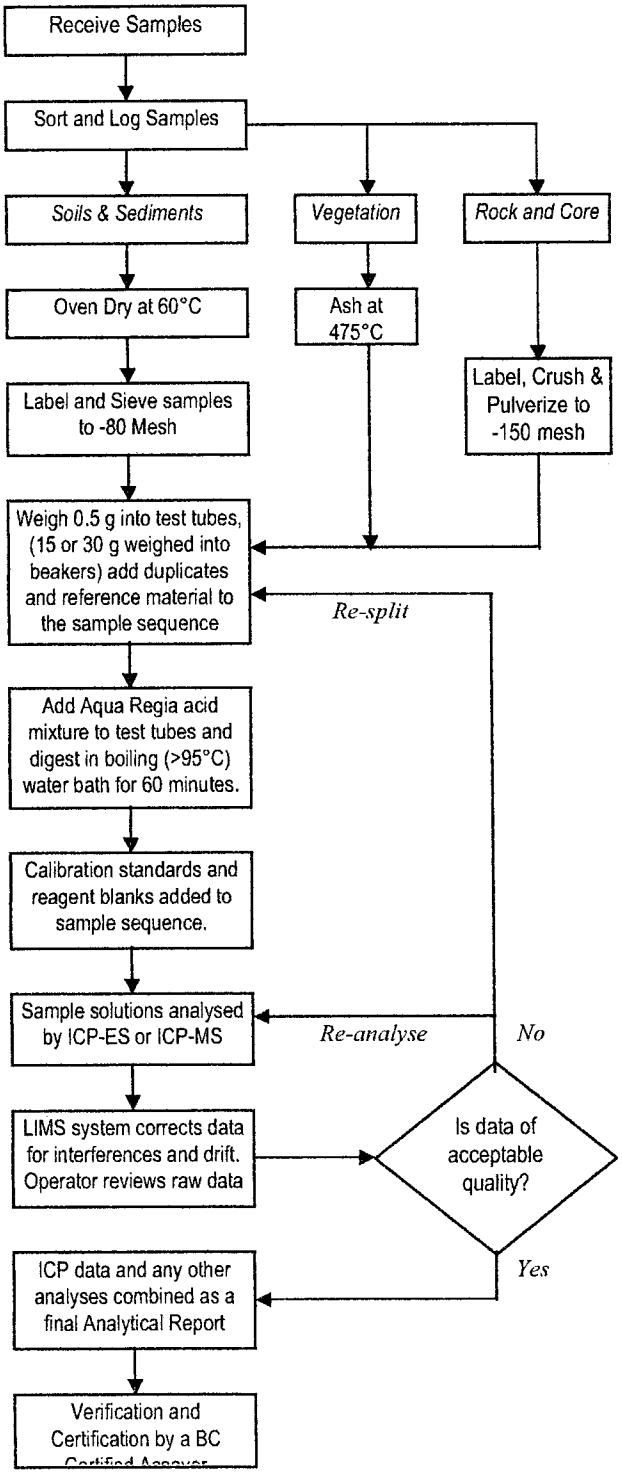
GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: ROCK R150 60C

ata d FA ____ **DATE RECEIVED:** JUN 24 2004 **DATE REPORT MAILED:** July 15/04

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D & 1DX – ICP & ICP-MS ANALYSIS – AQUA REGIA

Analytical Process



Comments

Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-177 μm). Moss-mats are disaggregated then sieved to yield -80 mesh sediment. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100 μm) in a mild-steel ring-and-puck mill. Pulp splits of 0.5 g are weighed into test tubes, 15 and 30 g splits are weighed into beakers.

Sample Digestion

A modified Aqua Regia solution of equal parts concentrated ACS grade HCl and HNO_3 and de-mineralised H_2O is added to each sample to leach for one hour in a hot water bath (>95°C). After cooling the solution is made up to final volume with 5% HCl. Sample weight to solution volume is 1 g per 20 mL.

Sample Analysis

Group 1D: solutions aspirated into a Jarrel Ash AtomComp 800 or 975 ICP emission spectrometer are analysed for 30 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Group 1DX: solutions aspirated into a Perkin Elmer Elan6000 ICP mass spectrometer are analysed for 36 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, *Ga*, *Hg*, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, *S*, Sb, *Sc*, *Se*, *Tl*, Sr, Th, Ti, U, V, W, Zn.

Quality Control and Data Verification

An Analytical Batch (1 page) comprises 34 samples. QA/QC protocol incorporates a sample-prep blank (SI or G-1) carried through all stages of preparation and analysis as the first sample, a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), two reagent blanks to measure background and aliquots of in-house Standard Reference Materials like STD DS5 to monitor accuracy.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Leo Arciaga, Marcus Lau, Ken Kwok, Dean Toye and Jacky Wang.

852 East Hastings Street • Vancouver • British Columbia • CANADA • V6A 1R6
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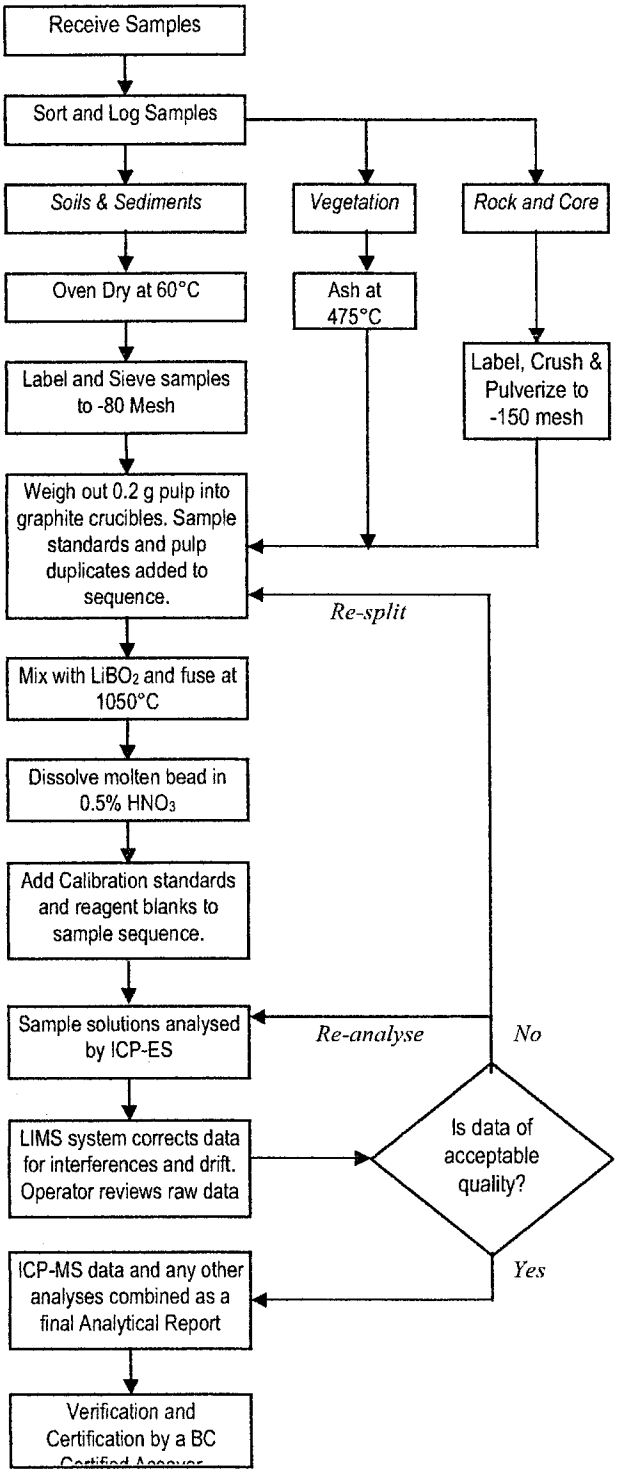
METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 4A - WHOLE ROCK ANALYSIS BY ICP-ES

Analytical Process



Comments

Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-177 μm). Moss-mats are disaggregated then sieved to yield -80 mesh material. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100 μm) in a mild-steel ring-and-puck mill.

Sample Digestion

A 0.2 g sample aliquot is weighed into a graphite crucible and mixed with 1.5 g of $LiBO_2$ flux. The flux/sample charge is heated in a muffle furnace for 15 minutes at 1050°C. The molten mixture is removed and immediately poured into 100 mL of 5% HNO_3 (ACS grade nitric acid in de-mineralised water). The solution is shaken for 2 hours then an aliquot is poured into a polypropylene test tube. Calibration standards, verification standards and reagent blanks are added to the sample sequence.

Sample Analysis

Sample solutions are aspirated into an ICP emission spectrometer (Jarrel Ash Atomcomp Model 975) for the determination of the basic package consisting of the following 18 major oxides and elements: SiO_2, Al_2O_3, Fe_2O_3, CaO, MgO, Na_2O, K_2O, MnO, TiO_2, P_2O_5, Cr_2O_3, Ba, Ni, Sr, Sc, Y and Zr. The extended package will also include: Ce, Co, Cu, Ta and Zn. A 1 g sample split is ignited for 90 minutes at 950°C, cooled in a desiccator then weighed with the difference expressed as percent Loss on Ignition (% LOI). A 0.1 g sample split is analysed for total Carbon and Sulphur by the LECO method.

Quality Control and Data Verification

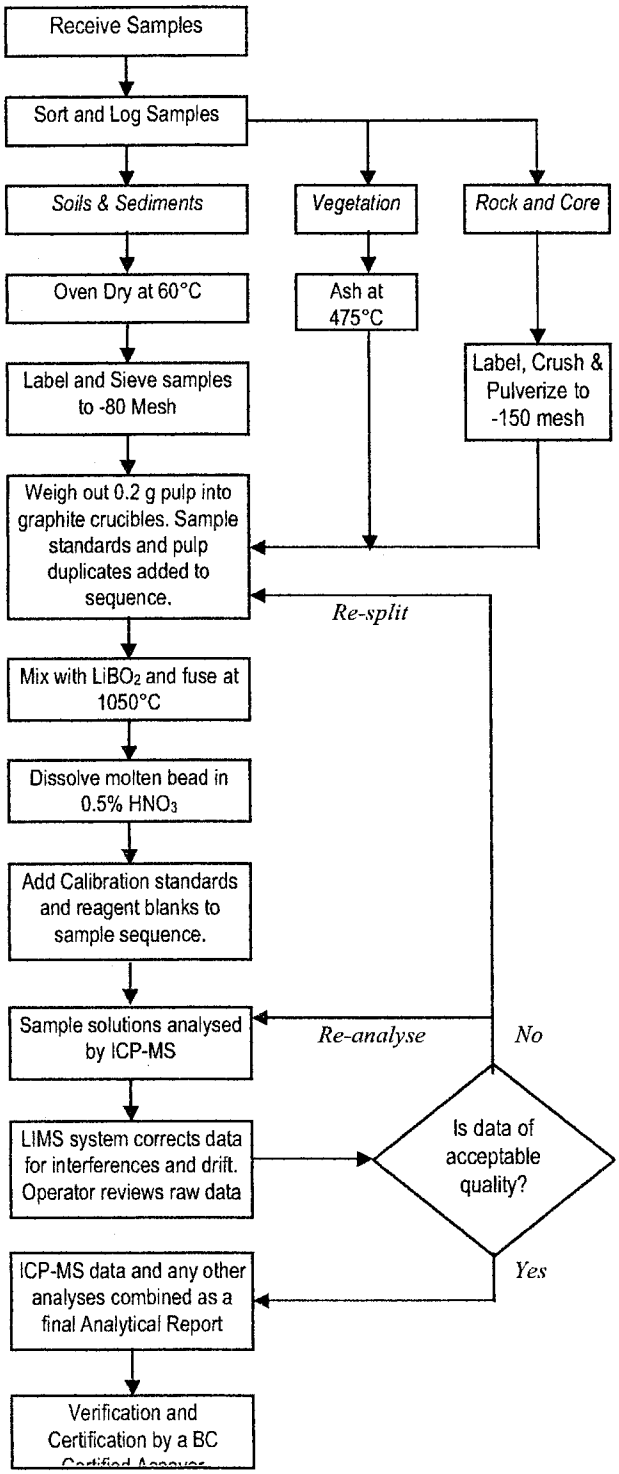
An Analytical Batch (1 page) comprises 31 samples. QA/QC protocol incorporates a sample-prep blank (SI or G-1) carried through all stages of preparation and analysis as the first sample, a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), two reagent blanks to measure background and aliquots of in-house Standard Reference Materials like STD SO-17 to monitor accuracy. STD SO-17 was certified in-house against 38 Certified Reference Materials including CANMET SY-4 and USGS AGV-1, G-2, GSP-2 and W-2.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye, Jacky Wang and Ken Kwock.

Document: Method and Specifications for Group 4A.doc	Date: Mar 22, 2004	Prepared By: J. Gravel

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 4B - WHOLE ROCK TRACE ELEMENTS BY ICP-MS

Analytical Process



Comments

Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-177 μm). Moss-mats are disaggregated then sieved to yield -80 mesh sediment. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100 μm) in a mild-steel ring-and-puck mill.

Sample Digestion

A 0.2 g sample aliquot is weighed into a graphite crucible and mixed with 1.5 g of $LiBO_2$ flux. The flux/sample charge is heated in a muffle furnace for 15 minutes at 1050°C. The molten mixture is removed and immediately poured into 100 mL of 5% HNO_3 (ACS grade nitric acid in de-mineralised water). The solution is shaken for 2 hours then an aliquot is poured into a polypropylene test tube. Calibration standards, verification standards and reagent blanks are added to the sample sequence.

Sample Analysis

Sample solutions are aspirated into an ICP mass spectrometer (Perkin-Elmer Elan 6000) for the determination of the basic package consisting of the following 34 elements: Ba, Co, Cs, Ga, Hf, Nb, Rb, Sn, Sr, Ta, Th, Tl, U, V, W, Y, Zr, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu. A second sample split of 0.5 g is digested in Aqua Regia and analysed by ICP-MS (see Group 1DX) to determine: Au, Ag, As, Bi, Cd, Cu, Hg, Mo, Ni, Pb, Sb, Se, Tl and Zn.

Quality Control and Data Verification

An Analytical Batch (1 page) comprises 31 samples. QA/QC protocol incorporates a sample-prep blank (SI or G-1) carried through all stages of preparation and analysis as the first sample, a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), two reagent blanks to measure background and aliquots of in-house Standard Reference Materials like STD SO-17 to monitor accuracy. STD SO-17 was certified in-house against 38 Certified Reference Materials including CANMET SY-4 and USGS AGV-1, G-2, GSP-2 and W-2.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye, Jacky Wang and Ken Kwock.

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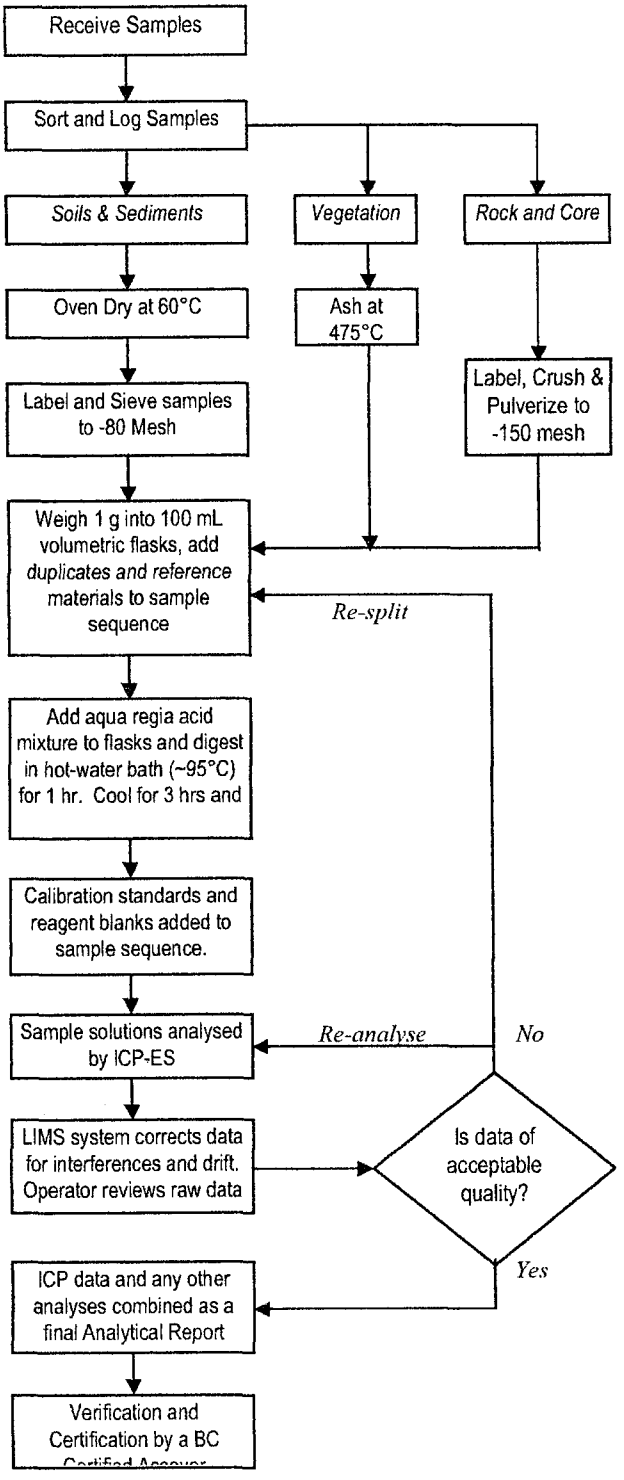
METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 7AR – MULTI-ELEMENT ASSAY BY ICP-ES • AQUA REGIA DIGESTION

Analytical Process



Comments

Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-177 μm). Moss-mats are disaggregated then sieved to yield -80 mesh sediment. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100 μm) in a mild-steel ring-and-puck mill. Pulp splits of 1 g are weighed into 100 mL volumetric flasks.

Sample Digestion

A 30 mL aliquot of modified aqua regia solution (equal parts ACS-grade HCl and HNO_3 acids and de-mineralized H_2O) is added and heated in a hot water bath (~95°C) for 1 hour. After cooling for 3 hours the solutions are transferred to 100 mL volumetric flasks and made to volume with 5% HCl. Very high grade samples may require a 1 g per 250 mL or 0.25 g per 250 mL sample to solution ratio for through digestion and accurate determination.

Sample Analysis

Solutions aspirated into a Jarrel Ash Atomcomp model 800 or 975 ICP atomic-emission spectrometer are analysed for a 23 element package comprising: Ag, Al, As, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, W and Zn.

Quality Control and Data Verification

An Analytical Batch (1 page) comprises 33 samples. QA/QC protocol incorporates a sample-prep blank (SI or G-1) carried through all stages of preparation and analysis as the first sample, a pulp duplicate to monitor analytical precision, a prep duplicate from the -10 mesh rejects to monitor sub-sampling variation (drill core only), two reagent blanks to measure background and aliquots of in-house Standard Reference Materials like STD R-2 to monitor accuracy.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Leo Arciaga, Ken Kwok, Marcus Lau, Dean Toye and Jacky Wang.

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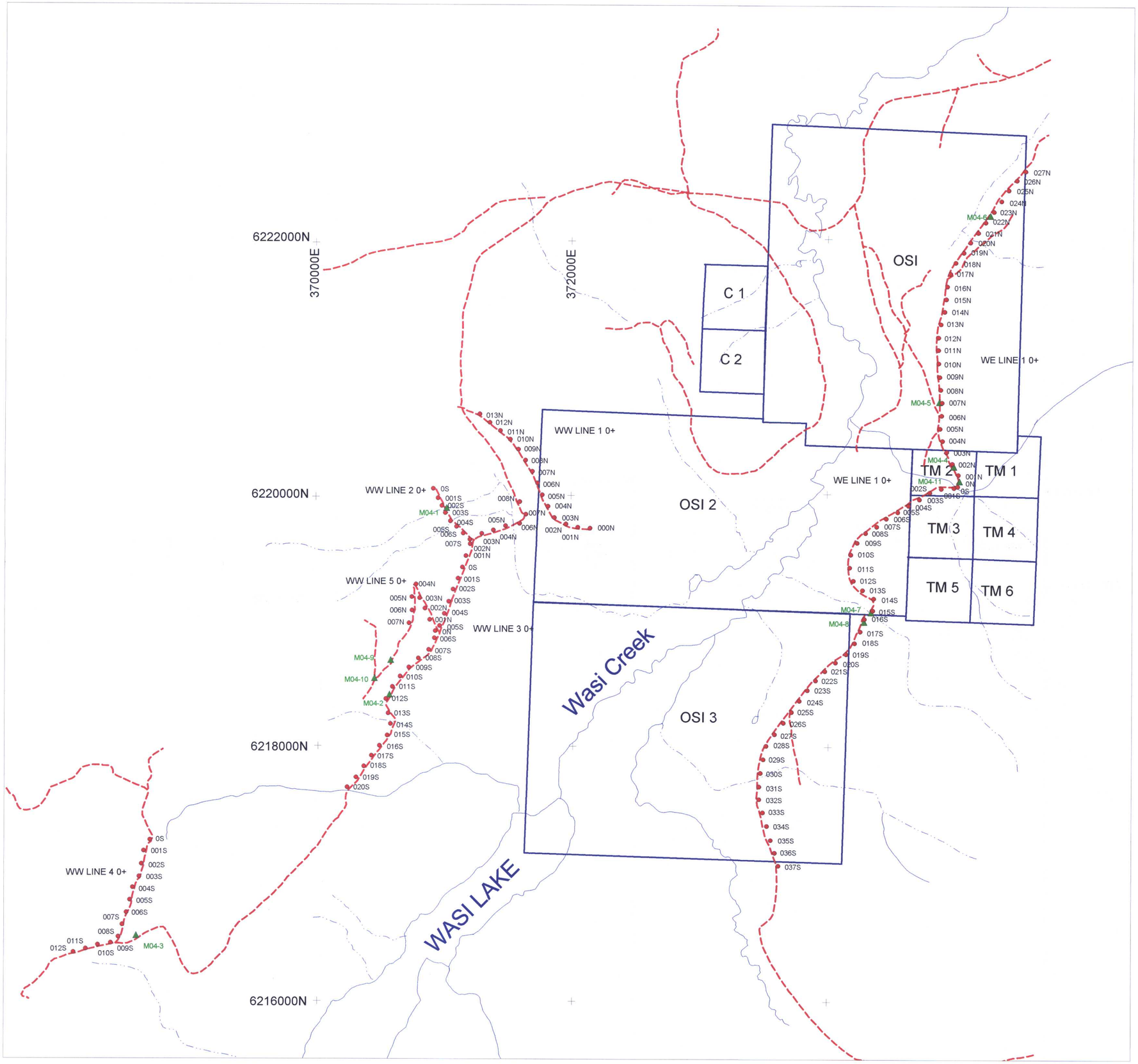
SECTION E: ILLUSTRATIONS

Plan Number	Title	Scale
WA-04-1 (after p.4)	General Location Plan	1:250 000
WA-04-2 (after p.4)	Location Plan with Topography	1:50 000
WA-04-3 (after p.4)	Mineral Claim Map	1:50 000
WA-04-4 (in pocket)	Soil & Rock Sample Locations	1:20 000
WA-04-5 (in pocket)	Soil & Rock Geochemistry: Cd ppm	1:20 000
WA-04-6 (in pocket)	Soil & Rock Geochemistry: Cu ppm	1:20 000
WA-04-7 (in pocket)	Soil & Rock Geochemistry: Pb ppm	1:20 000
WA-04-8 (in pocket)	Soil & Rock Geochemistry: Zn ppm	1:20 000
WA-04-9 (in pocket)	Soil & Rock Geochemistry: Ag ppm	1:20 000



LEGEND

C 1 — Claim outline and name

▲ Rock Station with sample number

● Soil Station with sample number

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27532

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
C.L. CHURCH
GEOSCIENTIST

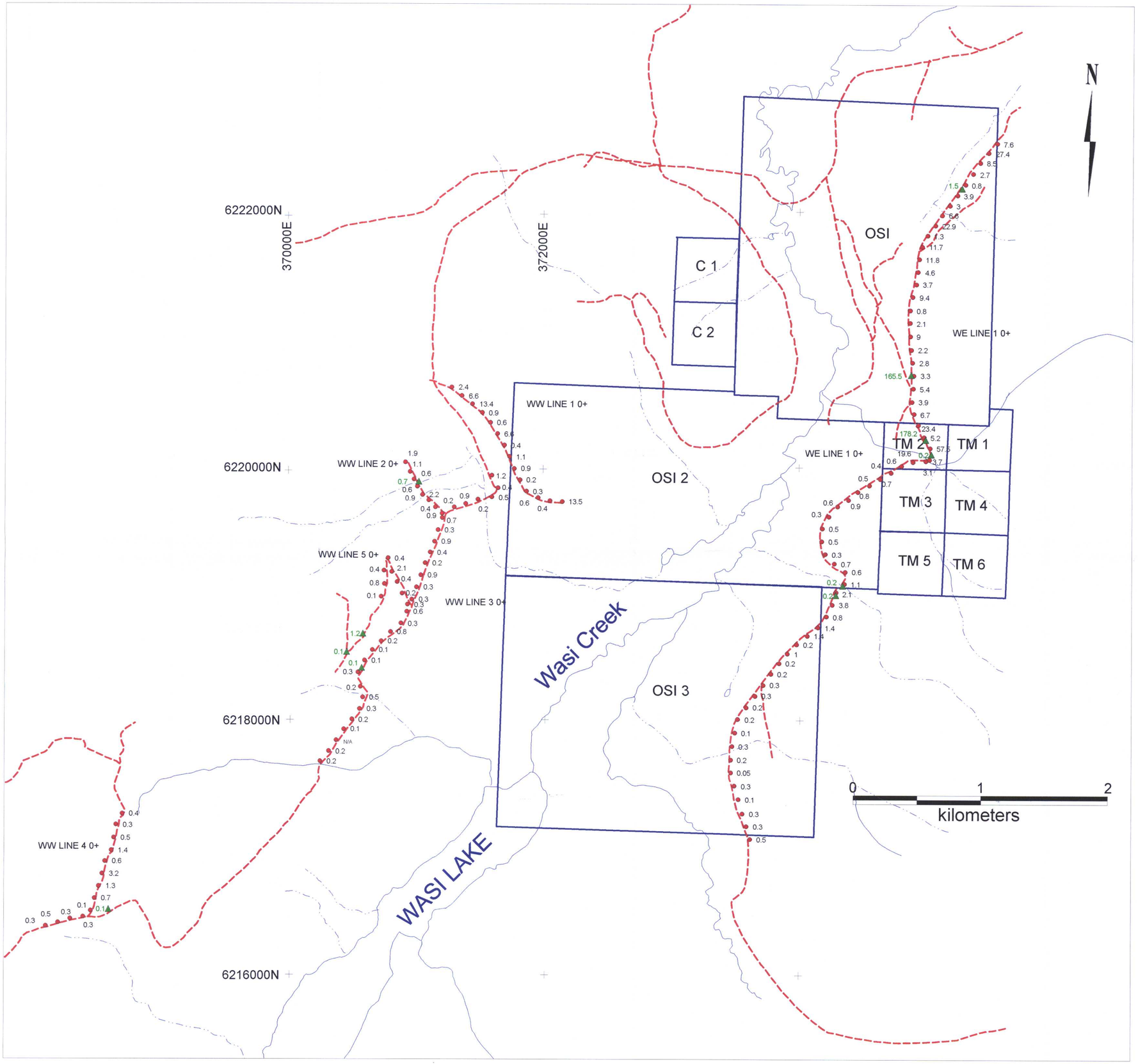
OCT 28 2004

CROSS LAKE MINERALS LTD.

Wasi Creek Property

SOIL & ROCK SAMPLE LOCATIONS

Omineca Mining Division		*U.T.M. zone*	Nad 83 zone 10
Scale	1:20,000 1 cm = 200m	*N.T.S. Sheet* / *BCGS*	094C/3E 94C005.015
Plan Number	WA-04-4	*Date*	September 2004
		Drawn by	L. Erdmar



LEGEND

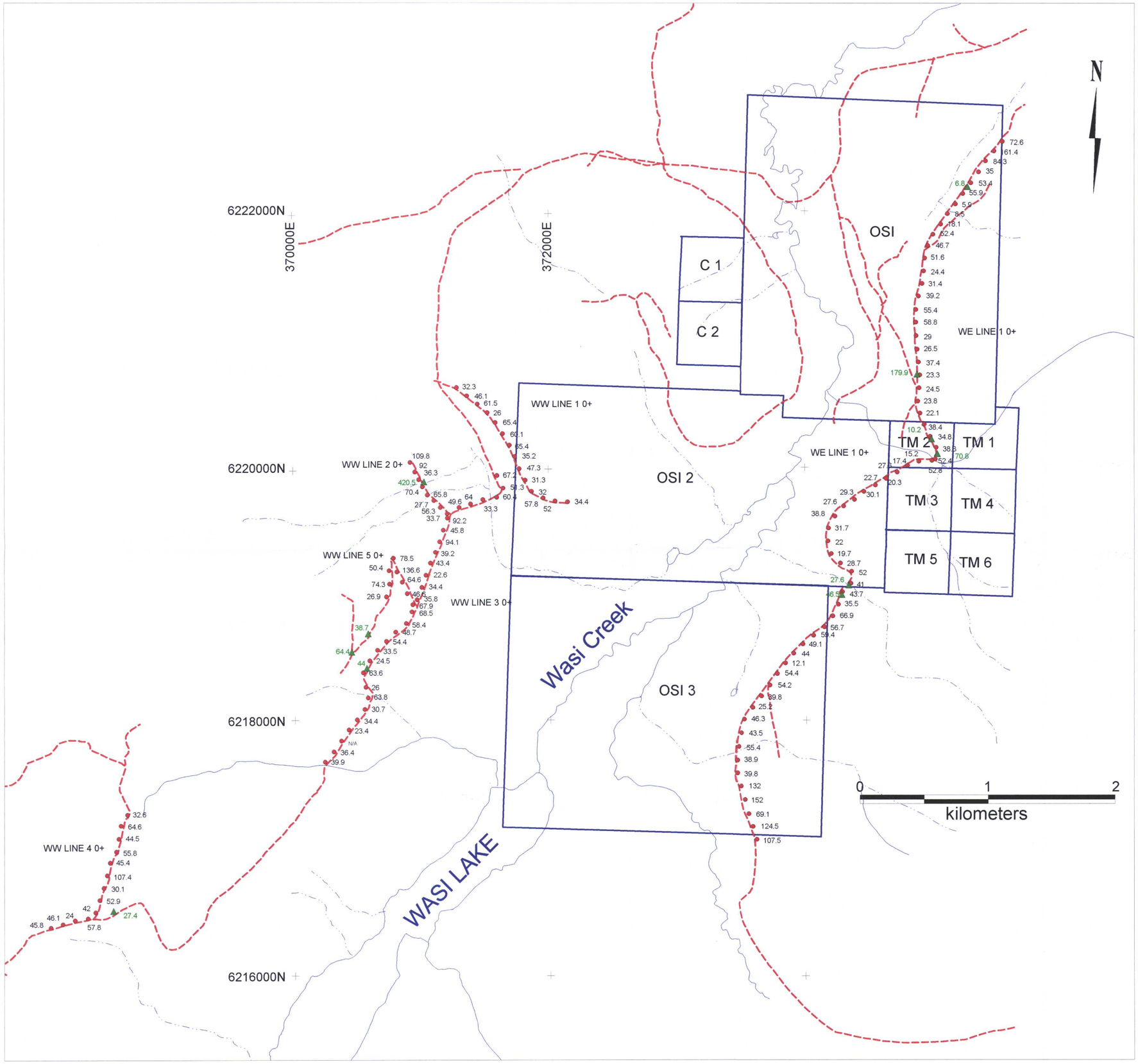
- C 1 — Claim outline and name
- ▲ — Rock Station with CD ppm
- ● — Soil Station with CD ppm

CROSS LAKE MINERALS LTD.

Wasi Creek Property

SOIL & ROCK GEOCHEMISTRY
CD PPM

Omineca Mining Division		*U.T.M. zone*	Nad 83 zone 10
Scale	1:20,000 1 cm = 200m	*N.T.S. Sheet* *BCGS*	094C/3E 94C005,015
Plan Number	WA-04-5	*Date*	September 2004
		Drawn by	L. Erdman



LEGEND

- C 1 — Claim outline and name
- ▲ Rock Station with CU ppm
- ● Soil Station with CU ppm

OCT 2 8 2004

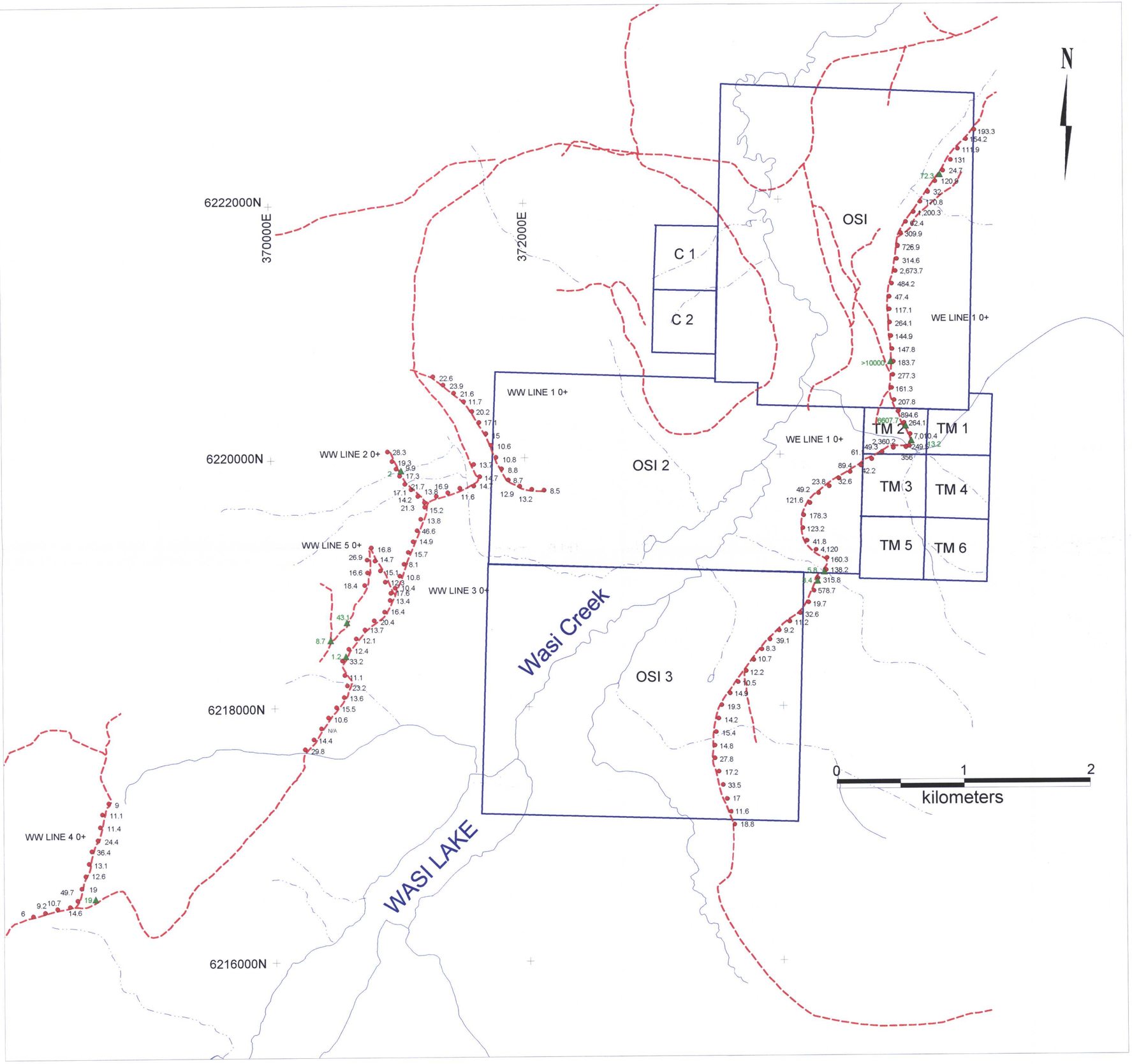
CROSS LAKE MINERALS LTD.

Wasi Creek Property

SOIL & ROCK GEOCHEMISTRY
CU PPM

Omineca Mining Division		U.T.M. zone	Nad 83 zone 10
Scale	1:20,000 1 cm = 200m	N.T.S. Sheet BCGS	094C/3E 94C005,015
Plan Number	WA-04-6	Date	September 2004
		Drawn by	L. Erdman

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT
27,132



LEGEND

- C 1 — Claim outline and name
- ▲ Rock Station with PB ppm
- ● Soil Station with PB ppm

C.L. CHURCH
BRITISH COLUMBIA
GEOSCIENTIST

OCT 2 8 2004

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

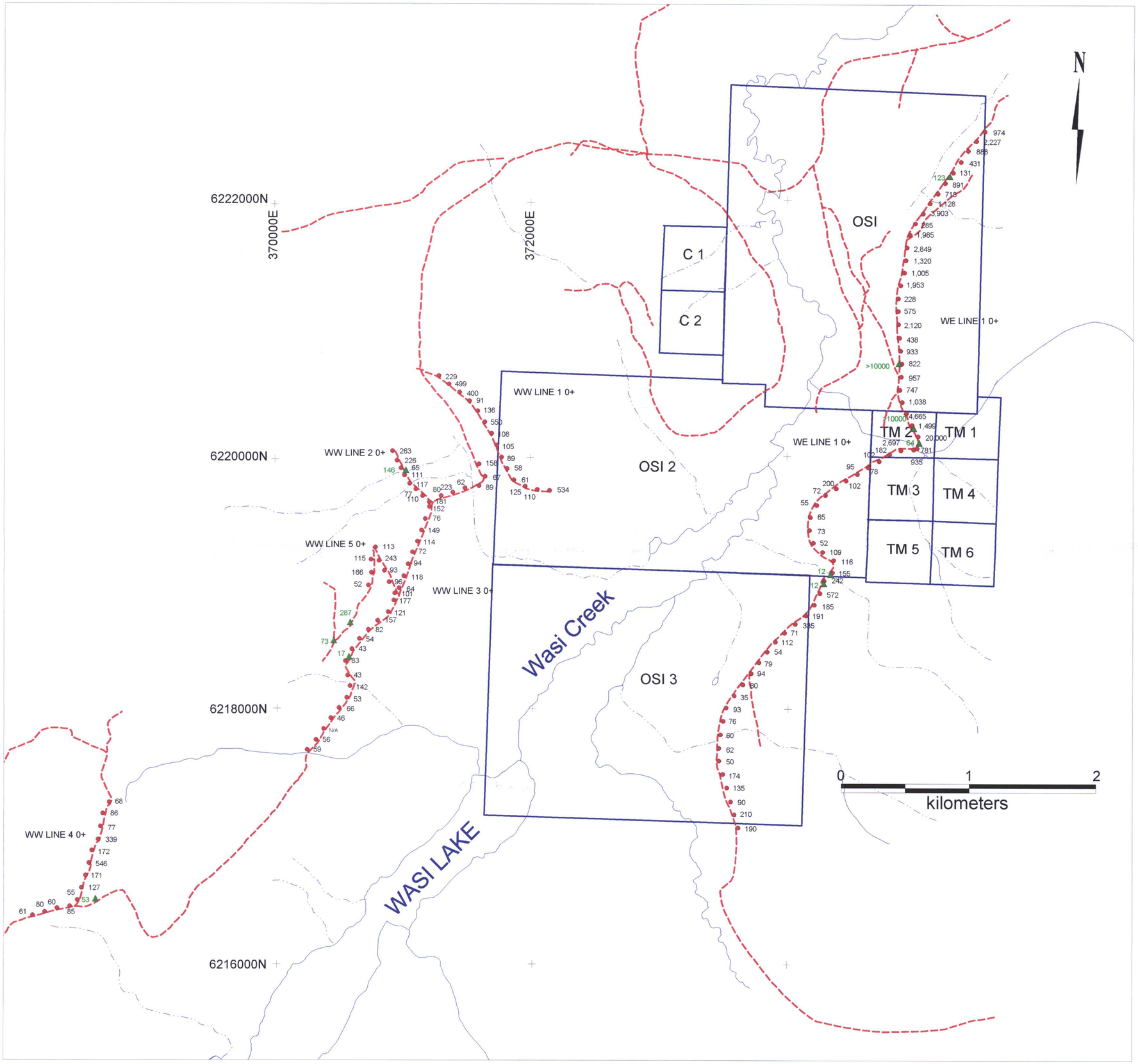
27,127

CROSS LAKE MINERALS LTD.

Wasi Creek Property

SOIL & ROCK GEOCHEMISTRY
PB PPM

Omineca Mining Division		U.T.M. zone	Nad 83 zone 10
Scale	1:20,000 1 cm = 200m	N.T.S. Sheet / BCGS	094C/3E / 94C005,015
Plan Number	WA-04-7	Date	September 2004
		Drawn by	L. Erdmar



LEGEND

C 1 — Claim outline and name

▲ Rock Station with ZN ppm

● Soil Station with ZN ppm

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
C.L. CHURCH
GEOSCIENTIST

OCT 2 8 2004

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

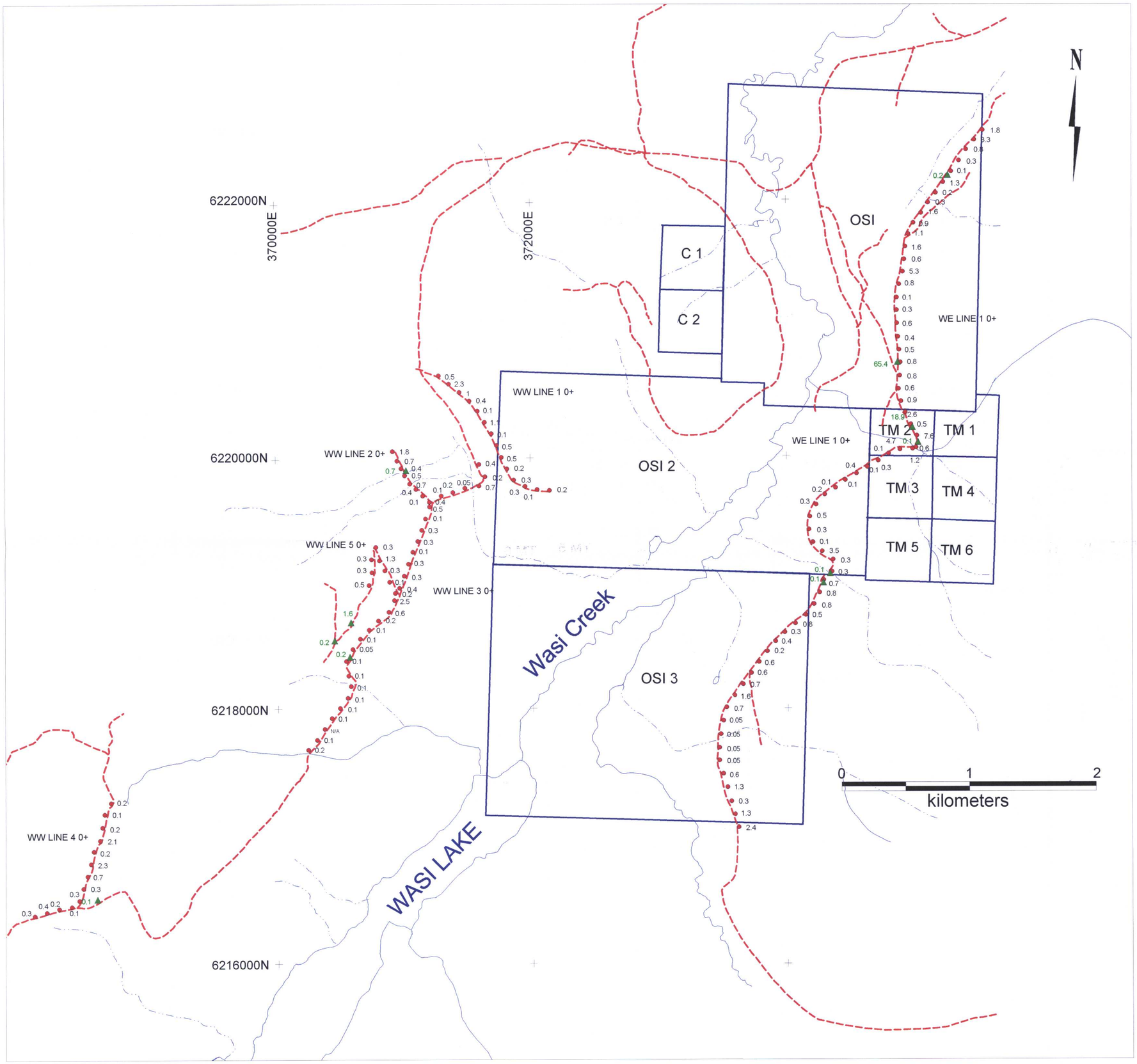
27232

CROSS LAKE MINERALS LTD.

Wasi Creek Property

SOIL & ROCK GEOCHEMISTRY
ZN PPM

Omineca Mining Division		*U.T.M. zone*	Nad 83 zone 10
Scale	1:20,000 1 cm = 200m	*N.T.S. Sheet* / *BCGS*	094C/3E 94C005,015
Plan Number	WA-04-8	*Date*	September 2004
		Drawn by	L. Erdmar



PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
C.L. CHURCH

OCT 28 2004

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27,527

CROSS LAKE MINERALS LTD.

Wasi Creek Property

SOIL & ROCK GEOCHEMISTRY
AG PPM

Omineca Mining Division		*U.T.M. zone*	Nad 83 zone 10
Scale	1:20,000 1 cm = 200m	*N.T.S. Sheet*	094C/3E
		BCGS	94C005,015
Plan Number	WA-04-9	*Date*	September 2004
		Drawn by	L. Erdmar