

ARIS SUMMARY SHEET

District Geologist, Nelson

Off Confidential: 91.10.12

ASSESSMENT REPORT 20376

MINING DIVISION: Nelson

PROPERTY: Libby 1  
LOCATION: LAT 49 00 30 LONG 117 11 00  
UTM 11 5428179 486592  
NTS 082F03E  
CLAIM(S): Libby 1  
OPERATOR(S): Worthington Res.  
AUTHOR(S): Yorston, R.  
REPORT YEAR: 1990, 28 Pages  
COMMODITIES  
SEARCHED FOR: Zinc, Lead  
KEYWORDS: Cambrian, Nelway Formation, Dolomites, Galena, Sphalerite, Shear zones  
WORK  
DONE: Geochemical  
SOIL 196 sample(s) ;ME  
MINFILE: 082FSW003

LOG NO: 10-24	RD.
ACTION:	
FILE NO:	

GEOLOGICAL AND GEOCHEMICAL REPORT

on the  
LIBBY 1 CLAIM

NELSON MINING DIVISION  
BRITISH COLUMBIA

<b>SUB-RECORDER</b> RECEIVED <b>OCT 12 1990</b> M.R. # _____ \$ _____ VANCOUVER, B.C.
---------------------------------------------------------------------------------------------------

NTS 82F/3E  
49°N 117° 10'W

for

WORTHINGTON RESOURCES  
#368 - 1199 W. Pender St.  
Vancouver, B.C.  
V6E 2R1

by

Guinet Management

R. Yorston  
Geologist

September, 1990

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

20,376

## TABLE OF CONTENTS

	page
Summary	1
Introduction	1
Location and Access	1
Topography	2
Claims	2
History	2
Regional Geology	3
Claim Geology and Mineralization	3
Geochemical Survey	6
Recommendations	7
Certificate	Follows page 8
Statement of Costs	
Bibliography	
Certificates of Analysis	
List of Figures	
Figure 1 Location Map	Follows page 1
Figure 2 Property Access Map	" " 1
Figure 3 Adit and Shaft Plan	" " 4
Figure 4 Trench Showing	" " 5
Figure 5 North Ridge Showing	" " 5
Figure 6 South Grid Geochemistry	" " 6
Figure 7 North Grid Geochemistry	" " 6
Figure 8 Base Map	" " 8

## SUMMARY

Sphalerite and galena mineralization occurs on ridges above the Lead creek drainage and within one kilometre south of the South Salmo river.

Mineralization varies from thin layered replacements and disseminations conformable to dolomitized zones; mineralization in breccia zones; and mineralization occupying weak northwest trending shears.

Samples analysed by rock geochemistry returned values equivalent to 9.9% zinc and 2.7% lead across 50 cm. and 9.2% zinc across 1.2 metres.

## INTRODUCTION

Guinet management of Vancouver, B.C. was retained by Worthington Resources to do a preliminary sampling and geological evaluation on the Libby 1 claim.

The current work program involved locating and sampling old workings consisting of a shallow shaft, an adit, and some trenches and blast pits. Several other unworked showings also occur on the property.

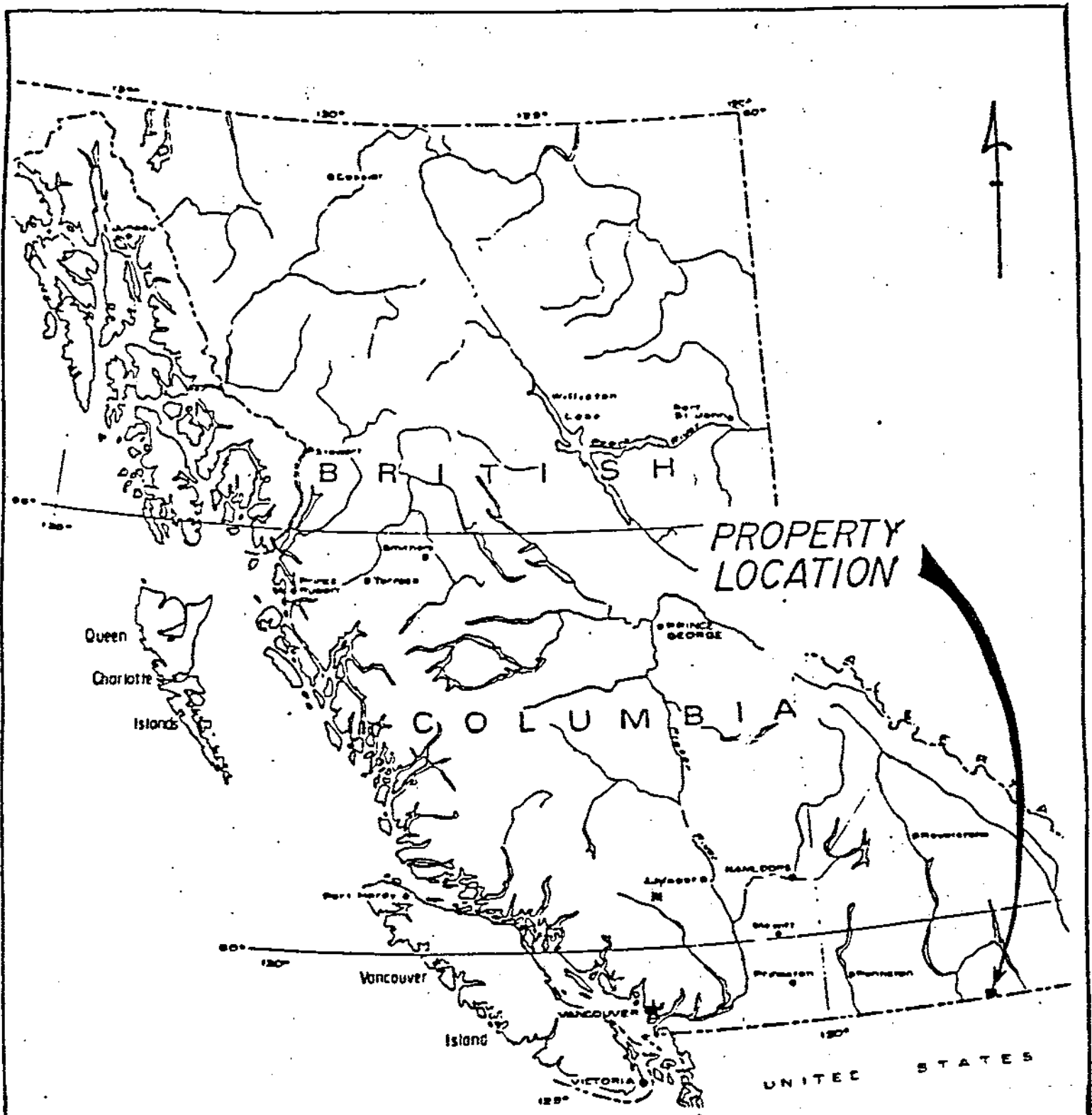
Soil samples were collected from grid areas and from some road cuts.

The work was done between August 20 to August 26, 1990.

## LOCATION AND ACCESS

The property is located 20 km south of Salmo which is in turn about 40 km south of Nelson, B.C. The southern claim boundary is on the international border with the state of Washington, U.S.A.

The property can be accessed by following the Salmo-Creston highway for about 20 km along the north side of the South Salmo river to where the highway swings northward up Stagleap creek.



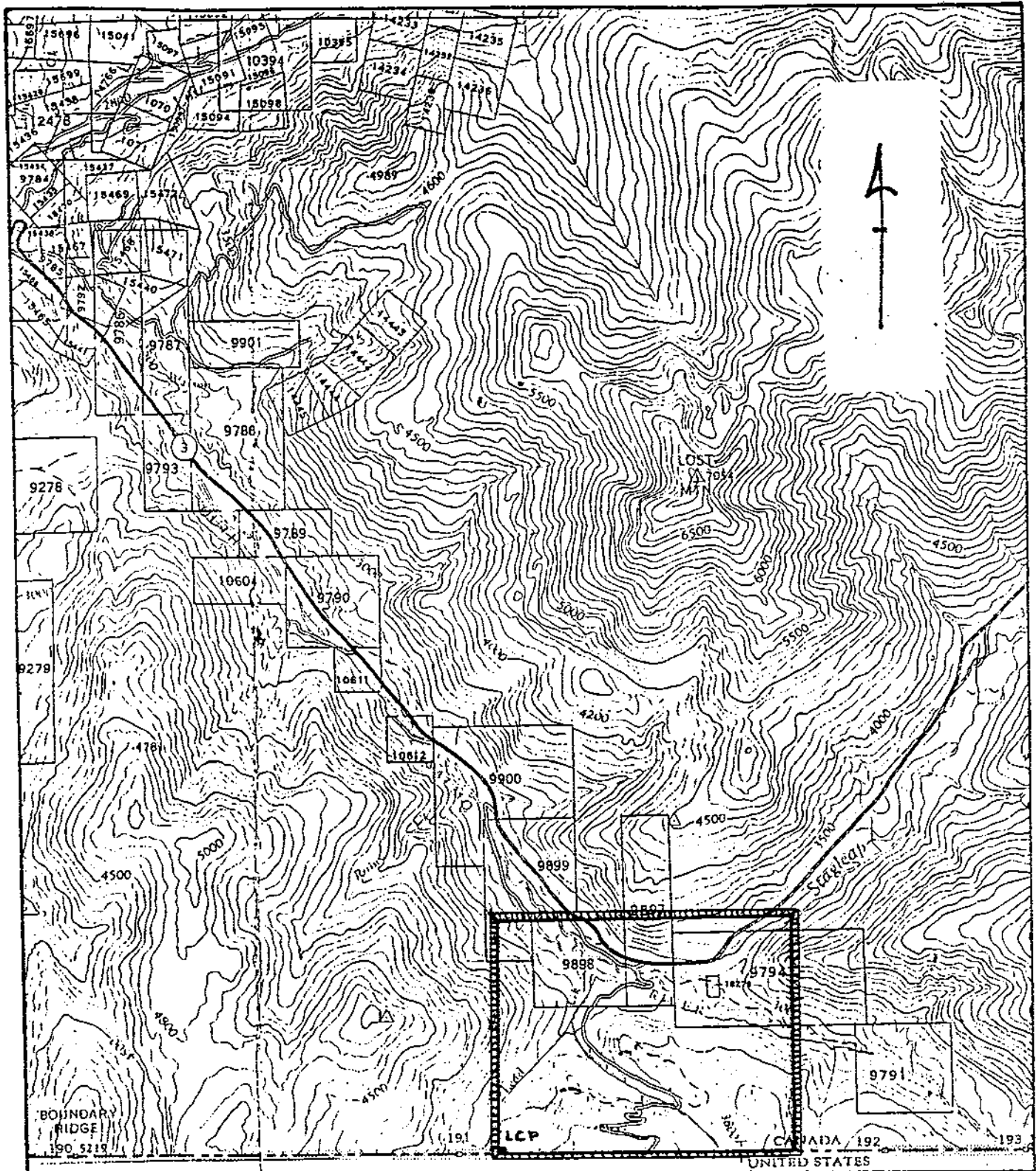
WORTHINGTON RESOURCES INC

LOCATION MAP  
LIBBY 1 CLAIM

GUINET MANAGEMENT

FIGURE 1

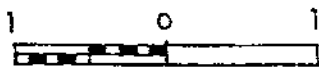
SEPTEMBER 1990



BOUNDARY RIDGE  
190 5219

CANADA, 192 193  
UNITED STATES

NTS 82F/3E



Kilometres

WORTHINGTON RESOURCES INC.

PROPERTY ACCESS MAP  
LIBBY 1 CLAIM

GUINET MANAGEMENT

Figure 2

September 1990

From here truck access along a jeep trail ends at the South Salmo river. Access to the showings is by hiking or by ATV across the river and up the jeep trail to the south.

#### TOPOGRAPHY

The topography is moderately steep in most areas and elevations range between 3 and 4000 feet.

Outcrop is mainly confined to the steep areas along the upper ridges. Jeep roads in lower areas cut thick glacial overburden and the rest of the claim area is mostly covered in a dense second growth of cedar, fir, spruce, and hemlock.

#### CLAIMS

<u>Claim</u>	<u>Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Libby 1	20	5981	Oct. 24, 1990

#### HISTORY

The first recorded work on the property is from the report of the Minister of Mines 1952. In 1952 a jeep road was built to the showings and bulldozer stripping was done around the old prospects south of Lead creek.

In 1953 hand cobbled high grade galena was mined from surface at one of the showings and 1.5 tons of ore was shipped with a gross content of 5 ounces of silver, 2357 pounds of lead, and 44 pounds of zinc.

Also in 1953 an adit was driven in an attempt to intersect the mined area subsurface.

## REGIONAL GEOLOGY

The Libby 1 claim is within part of the Kootenay Arc, a north-trending belt of lime-bearing sedimentary rocks of Lower to Middle Cambrian age.

The Kootenay Arc is favourable to lead-zinc mineralization and within the Salmo area most production has been from the Reeves MacDonald, Jersey and H.B mines. The deposits are replacements of sphalerite, galena, and pyrite in dolomitized zones in the Reeves limestone, a member of the Laib Formation.

Combined total production from the three mines to the end of 1957 was about 600,000 ounces of silver, 171 million pounds of lead, 471 million pounds of zinc, and 8.25 million pounds of cadmium (Fyles 1959).

The lead-zinc mines of northeastern Washington also fall within the domain of the Kootenay Arc. The Metaline district is about 15 kilometres south of the international boundary and lead-zinc production has been almost entirely from the Pend Oreille, Grandview and Metaline mines.

From 1906 through 1969 the district has produced 657,109 ounces of silver, 394 million pounds of lead, and 837 million pounds of zinc (Addie 1970).

The mines are in dolomitized zones of the Metaline Limestone Formation. The Nelway Formation in the Salmo area is equivalent to the Metaline Formation in north-eastern Washington state.

## CLAIM GEOLOGY AND MINERALIZATION

The Libby 1 claim is underlain by dolomite of the Nelway Formation and the conformably overlying Active Formation consisting of argillite and subordinate limy members.



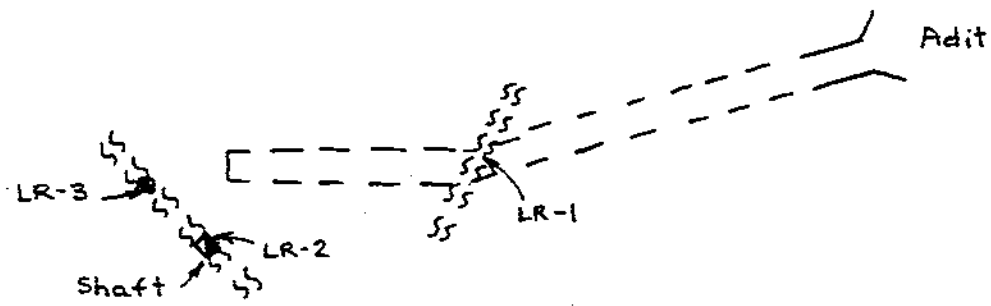
The Nelway Formation is subdivided into a lower member limestone, a middle member dolomite, and an upper member limestone, and it is the upper member that correlates with the productive part of the Metaline Formation of Washington state.

The Libby 1 claim area has been mapped as the middle member dolomite but because of the conformable presence of the overlying Active Formation it is concluded that the upper Nelway limestone in this area has been dolomitized and is indistinguishable from the middle dolomite (Fyles 1959). Geological and structural information has largely been erased in the claim area by recrystallization and dolomitization. Bedding attitudes are occasionally displayed by thin siliceous resistant weathering layers. Most measurements indicate a strike of about  $030^{\circ}$  with steep dips to the southeast.

Previous development on the property is from two showings south of Lead creek and one on the north ridge (Base map).

One of the south showings consists of sphalerite and galena mineralization within a northwest trending shear. A 2-3 metre deep shaft was sunk on the shear and a lower adit was driven to intersect the shear subsurface (Figure 3). The shear is up to 70 cm wide and strikes at  $315^{\circ}$  with a vertical to steep southwest dip.

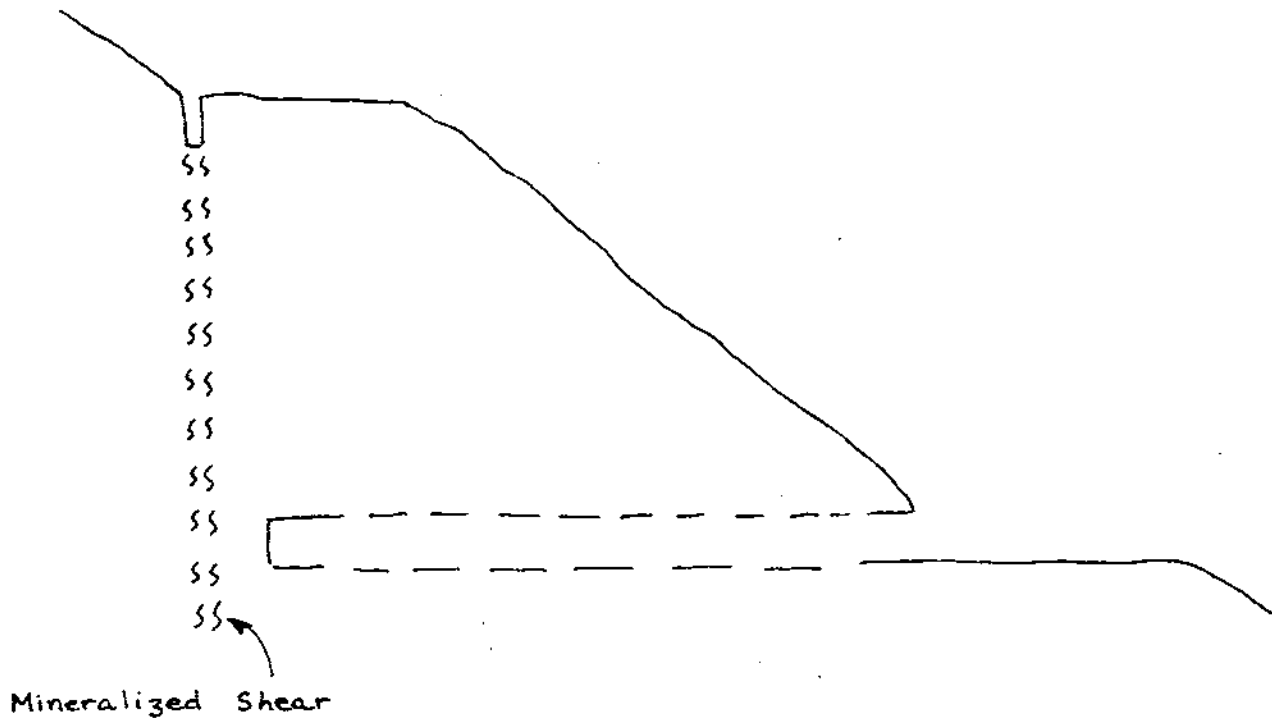
Galena in the shear is coarse grained and usually irregularly distributed in wavy veinlets and fist sized masses. Sphalerite is more evenly distributed as blebs, disseminations, replacement veinlets and narrow rims on dolomite fragments. The total combined galena and sphalerite at the shaft appears to be about 10-15%. Three metres to the northwest a blast pit exposes similar mineralization but no further development was done along the strike of the shear.



Sample	Width	Pb ppm	Zn ppm
LR-1	65cm	8	40
LR-2	70cm	25177	88453
LR-3	50cm	27106	99999

ADIT AND SHAFT PLAN

Scale 1:300



ADIT AND SHAFT CROSS SECTION

Scale 1:300

FIGURE 3

Measurements taken from the surface and from within the adit indicate that the underground work had not been advanced far enough to intersect the mineralized shear. (Figure 3). The adit intersects a barren northeast trending shear but is otherwise of no consequence.

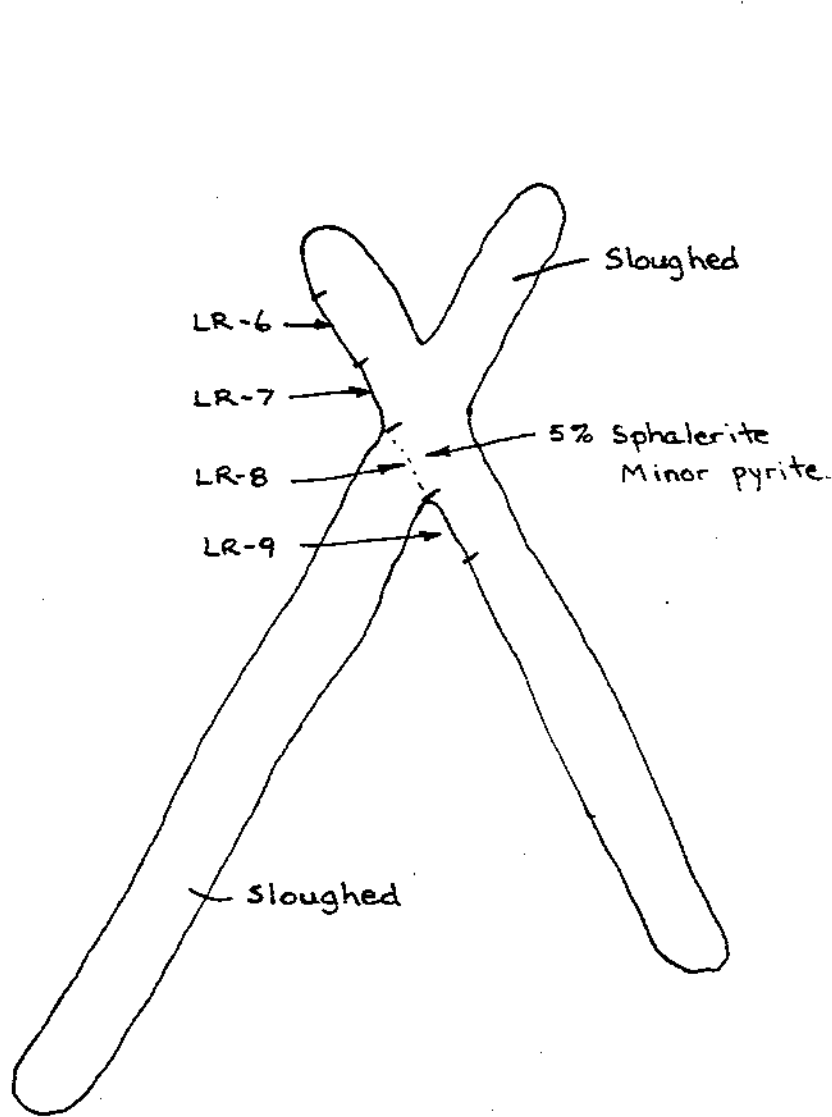
A second southern showing consists of two old criss-crossing trenches exposing thin, layered sphalerite replacements and minor disseminations of sphalerite and lesser pyrite (Figure 4).

The mineralized zone is variable, up to three metres wide, and appears to be conformable to the dolomitized stratigraphy. A one metre section contains about 5% sphalerite.

Bulldozer stripping around the trenched outcrop has had little effect in developing the mineralized zone.

The showing north of Lead creek has been developed by blast pits and some side caving along a 4 metre high bluff at the west edge of the showing (Figure 5). The mineralization in this area is unique in that it is associated with a breccia zone.

Breccia clasts average 2-3 cm and are usually cemented by semi-transparent, fine grained, blue-grey calcite or quartz-calcite. The breccia, with apophyses, imparts a local diatreme type occurrence. The sulphides are contained within and outside the blue-grey quartz-calcite cemented breccia. Sphalerite especially has penetrated and often cemented the surrounding heavily fractured host rock. Galena is usually erratic, coarse grained, globular and often rims or occasionally completely encloses sphalerite. The showing appears restricted but further trenching is required for a complete evaluation of stratigraphic potential.



<u>Sample</u>	<u>Width</u>	<u>Pb ppm</u>	<u>Zn ppm</u>
LR-6	1 metre	172	861
LR-7	"	206	7507
LR-8	"	47	18465
LR-9	"	6	232

TRENCH SHOWING  
Scale 1:100


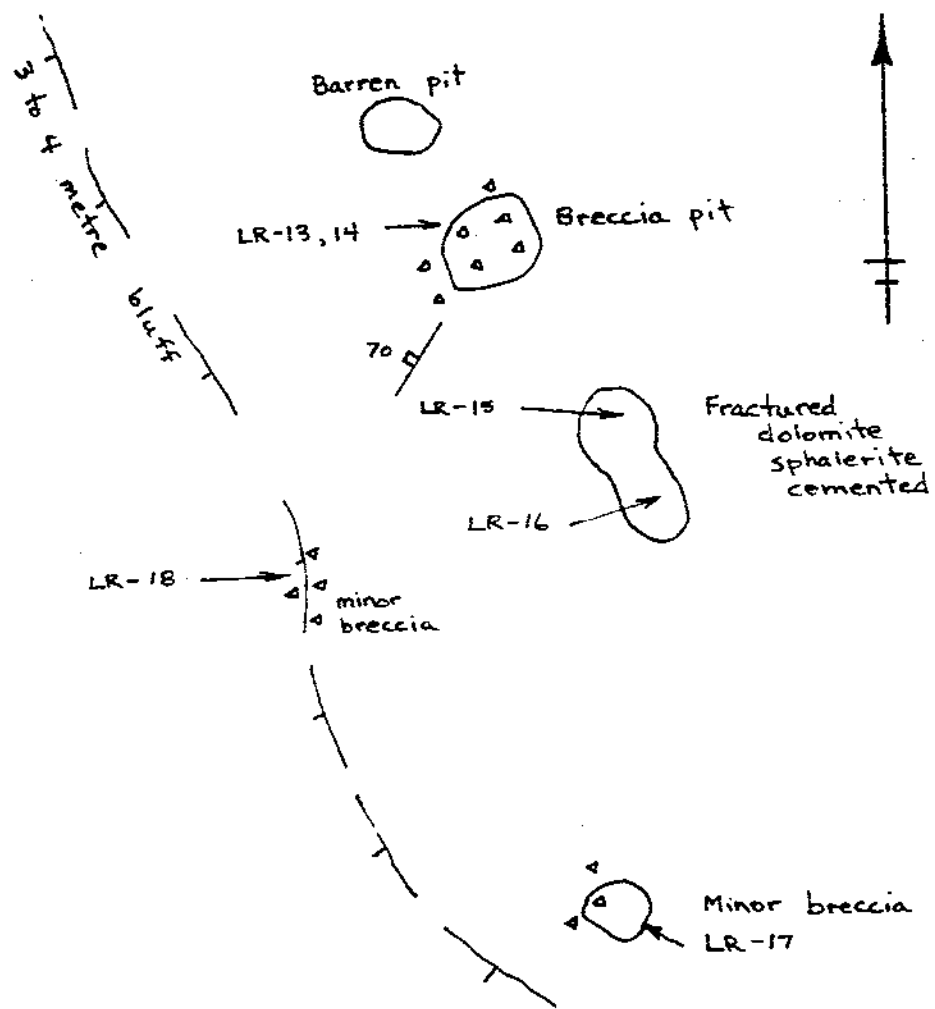
0  4 Metres

FIGURE 4



Sample	Width	Pb ppm	Zn ppm
LR-13	grab	123	54620
LR-14	1 metre	27284	39922
LR-15	"	100	39312
LR-16	1.2 metre	228	92771
LR-17	70 cm	20	15342
LR-18	1 metre	423	1311

NORTH RIDGE SHOWING  
Scale 1:100

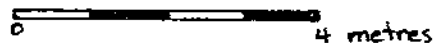


FIGURE 5

A new galena showing was discovered during the current property examination (Base map). The showing is on the south side of Lead creek near the criss-crossing trenches and consists of a 30 cm by 5 cm lens of galena in a small northwest trending shear. Blue-grey quartz-calcite stringers to 3 cm widths also occupy the shear. Analysis of a select sample of massive galena returned 1 ounce per ton silver.

A significant zinc showing that has not been developed occurs west of the breccia showing on the ridge north of Lead creek. About 5% stratiform type sphalerite occurs over a width of at least 1 metre and is traceable for several metres along strike. (Sample LR-19).

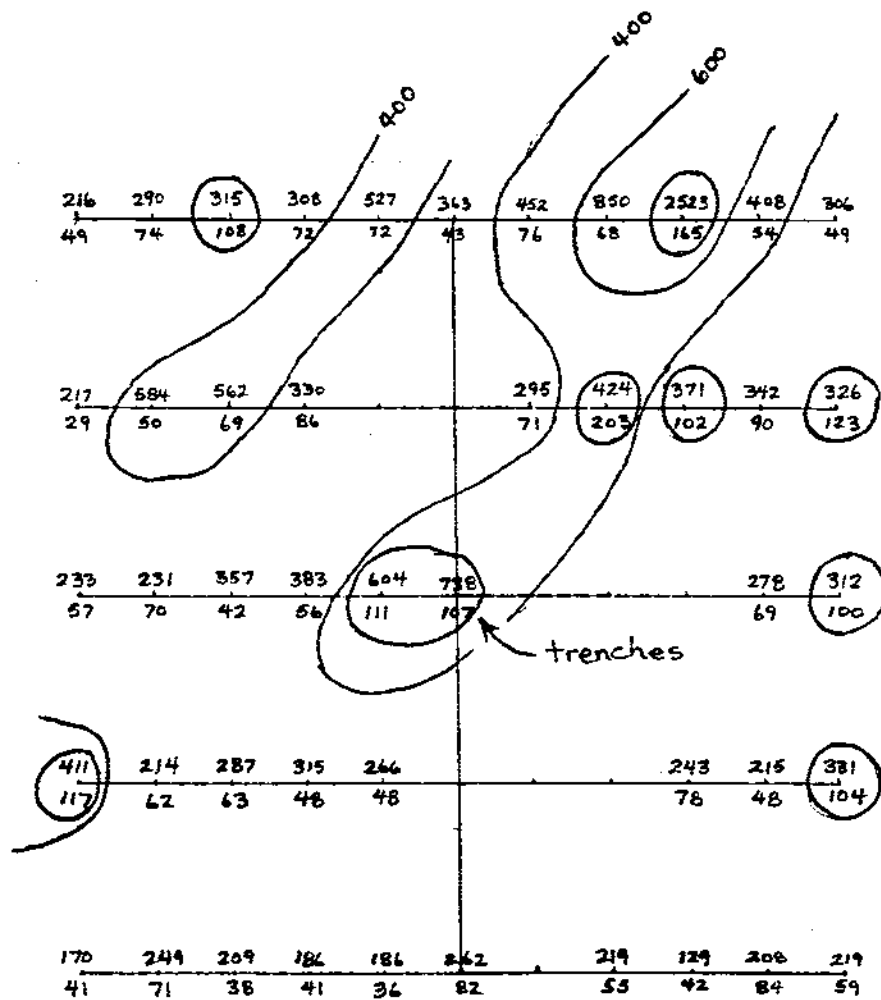
In another area on the north ridge a sample taken of hackly, siliceous, iron stained material from an east-west trending small shear contained anomalous zinc and gold. (Sample LR-12).

Numerous other minor occurrences of sphalerite are within fractures on the north ridge.

Select grab samples and continuous rock chip samples were taken from the significant showings. The total number of rock samples taken was 19 and all samples were analysed by the 30 element ICP rock geochemical method by Acme Labs of Vancouver, B.C.


#### GEOCHEMICAL SURVEY

Small soil sample grids were placed over the breccia showing on the north ridge and the criss-cross trenches south of Lead creek. Soil samples at 25 metre spacing were also taken along some road cuts south of Lead creek. (Base map).



Legend

$\frac{850 \text{ Zn ppm}}{68 \text{ Pb ppm}}$  , Zn values  
 contoured

 Pb over 100 ppm  
 highlighted

SOUTH GRID GEOCHEMISTRY

Scale 1:1000

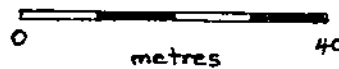
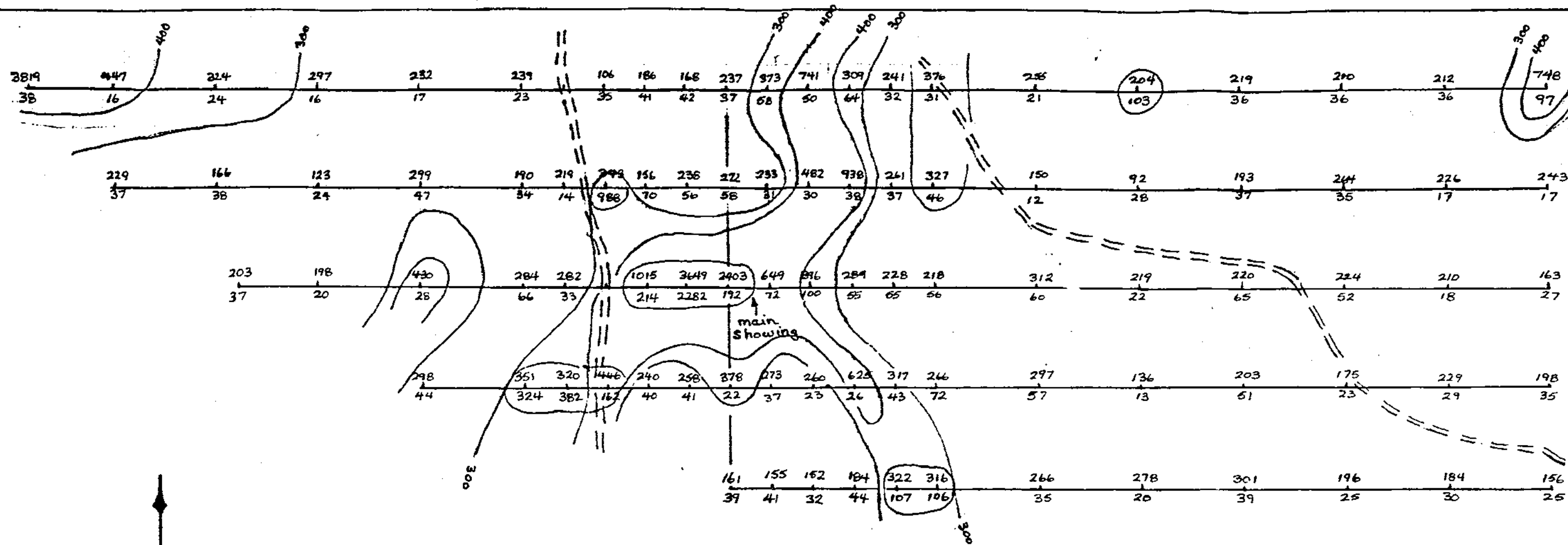


FIGURE 6



Legend

327  
46
 

 Zn ppm  
Pb ppm
 

 , Zn values  
contoured

351  
324
 

 Pb over 100 ppm  
highlighted

road

NORTH GRID GEOCHEMISTRY  
Scale 1 1000

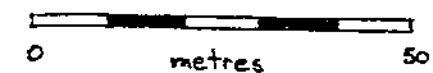


FIGURE 7



The soil samples were taken with a mattock from an average depth of 25 cm. A well developed orangy-brown B horizon is usually present and was taken for analysis. A total of 196 soil samples were taken and were analysed by the 30 element ICP method by Acme Labs.

The results from the soil sampling appear to indicate that exploration geochemistry is effective for this property. Grid orientation samples correlate well with the known mineralization and the soil anomalies trend approximately parallel to the regional stratigraphy indicating potential for roughly stratigraphic mineralization.

Insolated soil anomalies on the grids and from road cut samples should be reliable indicators in the search for new showings.

#### RECOMMENDATIONS

Prospecting and more detailed sampling should be done in areas of current soil anomalies. On the north grid these areas include L50N-2+00E, L50N-1+72W, L25N-0+30E, and L25S-0+30W to 0+50W. On the south grid L50N-10E to 40E is very anomalous.

The road cut samples LS-51 to 55 and samples LS-20 and 21 on the road below probably reflect an undiscovered mineralized zone.

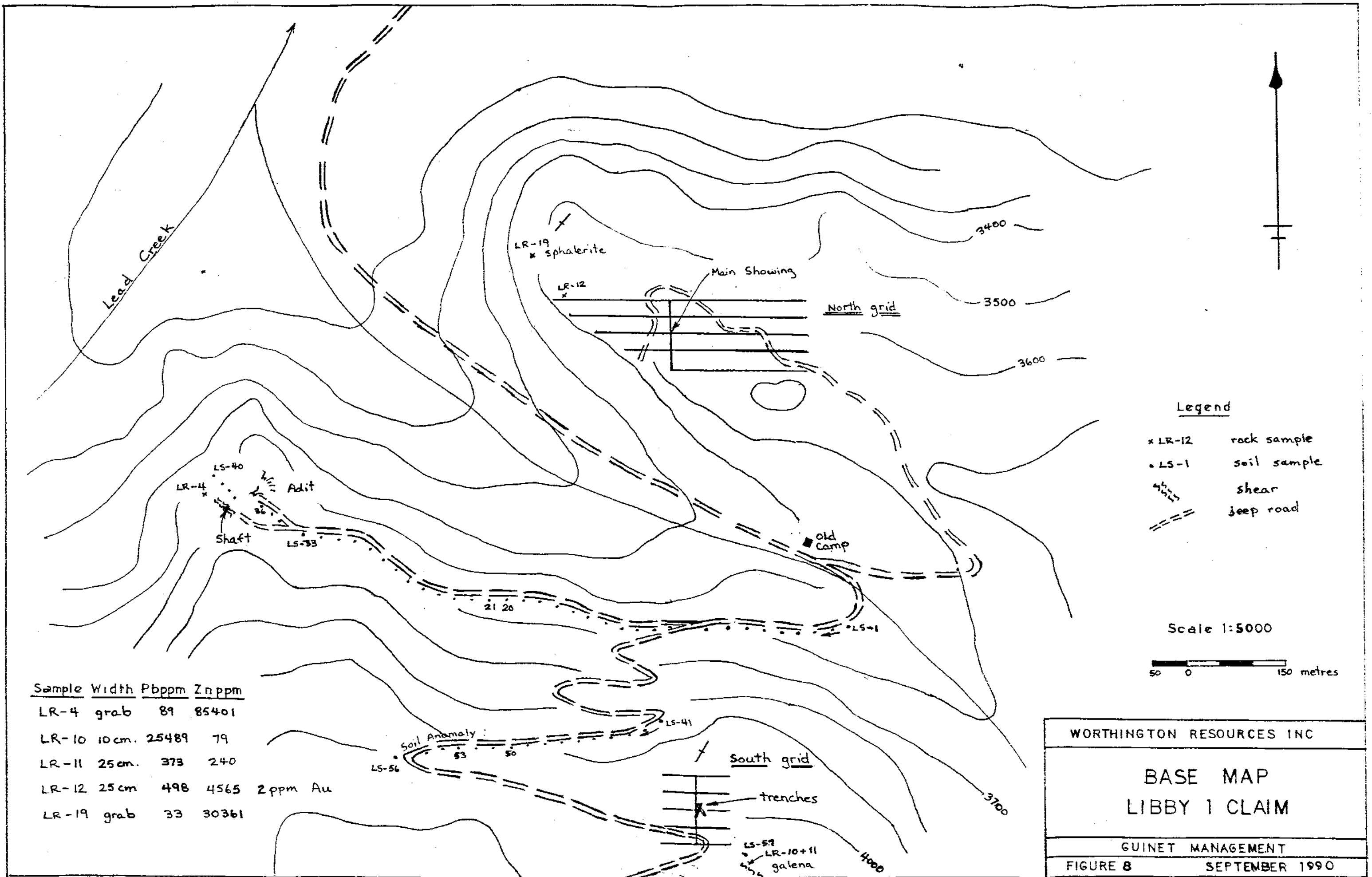
In conjunction with current follow-up work a large grid should cover the entire north ridge top with some crosslines extending to the Active Formation to the east.

A contour soil sample line should also cover the north base of the ridge in the South Salmo river drainage.

Another large grid should cover the road area south of Lead creek with some crosslines extending from the shaft showing to the Active argillite. All future soil anomalies should be followed up with detailed sampling and prospecting.

After the geochemistry, excavator trenching should be done at all present and future showings and drilling and blasting done as required.

All showings and significant geology should be mapped at grid detail.

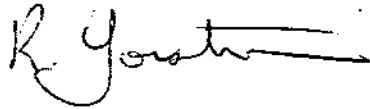


WORTHINGTON RESOURCES INC  
**BASE MAP  
 LIBBY 1 CLAIM**  
 GUINET MANAGEMENT  
 FIGURE 8 SEPTEMBER 1990

CERTIFICATE

I, R. YORSTON OF DUNCAN, B.C. CERTIFY THAT:

- 1) I am a graduate of the University of British Columbia; BSc in 1972.
- 2) I have practiced my profession since 1972.
- 3) I have no interest, direct or indirect in Worthington Resources
- 4) I have personally conducted the work program discussed in this report.



R. Yorston  
5970 Stoltz Road  
RR 2  
Duncan, B.C.  
V9L 1N9

September 1990

STATEMENT OF COSTS - LIBBY CLAIM

Wages and Benefits

R. Yorston - Geologist	9.5 days @ \$300./day	\$ 2,850.00
------------------------	-----------------------	-------------

Transportation

Trail Bike Rental	9 days @ \$20./day	180.00
4 x 4 Truck Rental	9 days @ \$75./day	675.00
Fuel		237.09

Accommodation

Hotel	154.00
Meals	168.32
Miscellaneous	99.39

Analytical

Acme Analytical	914.15
-----------------	--------

Report Preparation & Drafting	600.00
Word Processing & Reproduction	250.00

<u>TOTAL</u>	<u>\$ 6,127.95</u>
--------------	--------------------

## BIBLIOGRAPHY

Fyles, J.T. and Hewlett, C.G. 1959. Stratigraphy and Structure of the Salmo Lead-Zinc Area Bulletin No. 41. B.C. Department of Mines.

Society of Economic Geologists 1970. Lead-Zinc Deposits in the Kootenay Arc. Bulletin No. 61. State of Washington Department of Natural Resources.

## GEOCHEMICAL ANALYSIS CERTIFICATE

Guinet Management File # 90-3938 Page 1

305 - 850 W. Hastings St., Vancouver BC V6C 1E1

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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
S 50N-50W	1	12	49	216	.2	17	7	340	2.96	4	5	ND	4	18	.8	2	5	35	.37	.153	14	14	.22	131	.19	5	5.92	.03	.03	1
S 50N-40W	1	9	74	290	.4	15	6	1847	2.81	3	7	ND	2	24	4.2	4	2	29	4.01	.156	13	14	1.98	199	.11	7	2.87	.03	.07	1
S 50N-30W	1	9	108	315	.2	18	7	1651	3.36	5	5	ND	2	21	3.2	2	2	36	2.12	.156	18	17	.93	154	.13	9	3.72	.03	.06	1
S 50N-20W	1	9	72	308	.1	17	8	516	3.34	8	5	ND	4	20	1.7	2	2	42	.65	.155	15	15	.34	125	.17	9	5.01	.04	.04	1
S 50N-10W	1	12	72	527	.1	22	6	1150	2.81	9	5	ND	2	23	1.6	2	2	31	2.70	.197	14	13	1.27	210	.13	7	3.35	.04	.07	1
S 50N-00W	1	9	43	363	.2	23	8	442	3.13	6	5	ND	5	20	1.8	2	2	39	.66	.169	16	14	.35	161	.18	6	5.28	.03	.05	1
S 50N-10E	1	7	76	452	.2	24	9	403	3.10	4	5	ND	4	13	1.0	2	2	40	.28	.088	10	19	.39	170	.14	5	3.84	.02	.05	1
S 50N-20E	1	8	68	850	.2	22	10	489	3.01	5	5	ND	4	17	3.1	2	2	44	.30	.146	7	16	.26	172	.17	5	4.60	.03	.04	2
S 50N-30E	4	11	165	2523	.5	35	13	1706	4.35	26	6	ND	3	24	9.9	2	2	90	2.02	.122	18	17	.87	202	.15	9	4.04	.04	.08	1
S 50N-40E	1	12	54	408	.2	26	9	651	3.17	7	5	ND	5	25	1.9	2	3	42	.79	.096	20	17	.46	174	.17	4	4.78	.04	.05	1
S 50N-50E	1	9	49	306	.2	20	9	1019	3.35	6	5	ND	4	21	1.4	4	2	45	1.58	.143	15	20	.79	163	.17	5	4.89	.03	.05	2
S 25N-50W	1	13	29	217	.3	16	7	473	3.01	7	5	ND	4	21	2.9	4	2	35	.48	.147	16	13	.26	135	.19	4	5.84	.04	.04	1
S 25N-40W	1	13	50	584	.1	22	9	2142	3.74	7	7	ND	3	23	6.6	2	2	39	.87	.195	16	17	.46	306	.17	6	4.14	.04	.07	1
S 25N-30W	1	9	69	562	.4	22	8	2317	4.69	13	5	ND	2	22	4.6	2	2	52	3.90	.205	17	16	1.86	250	.11	8	3.21	.03	.06	1
S 25N-20W	1	20	86	330	.1	32	11	530	3.50	8	5	ND	6	17	1.6	2	2	42	.65	.094	20	21	.65	195	.13	5	4.50	.02	.07	3
S 25N-10E	1	10	71	295	.2	27	10	442	3.28	2	5	ND	4	13	1.1	2	2	40	.29	.106	9	19	.42	169	.14	7	4.35	.02	.06	1
S 25N-20E	1	10	203	424	.2	16	8	859	2.59	4	5	ND	3	21	2.1	2	4	34	.46	.159	8	14	.25	153	.17	5	4.13	.04	.05	2
S 25N-30E	1	8	102	371	.1	14	7	1249	2.33	3	5	ND	2	15	1.4	2	3	29	.32	.169	8	15	.21	207	.14	3	3.38	.03	.04	1
S 25N-40E	1	15	90	342	.1	27	11	467	3.83	3	5	ND	6	17	.8	2	2	41	.42	.133	23	21	.49	182	.14	5	4.97	.03	.06	1
S 25N-50E	1	13	123	326	.3	28	10	1004	4.13	5	5	ND	6	21	1.8	2	2	46	1.00	.105	18	21	.77	241	.15	10	3.76	.03	.06	1
S L0-50W	1	10	57	233	.4	20	10	541	3.09	2	5	ND	4	12	1.1	2	2	42	.21	.096	12	20	.28	186	.13	5	3.47	.02	.05	1
S L0-40W	1	22	70	231	.1	32	11	1045	3.28	2	5	ND	5	21	.4	2	2	36	2.19	.091	22	22	1.57	197	.08	5	2.66	.02	.10	1
S L0-30W	1	10	42	357	.1	26	9	1194	2.99	4	5	ND	4	22	1.2	2	6	36	.63	.289	14	15	.32	220	.17	7	4.89	.04	.06	1
S L0-20W	1	13	56	383	.4	20	7	2690	2.73	7	9	ND	2	24	2.2	3	2	32	5.46	.230	16	14	2.89	198	.07	9	2.47	.03	.06	1
S L0-10W	1	14	111	604	.3	38	12	2868	4.26	11	13	ND	4	19	3.1	3	2	46	2.15	.161	24	19	1.18	238	.12	9	3.74	.03	.06	1
S L0-00W	1	14	107	738	.2	24	8	2300	3.37	13	5	ND	1	18	5.6	2	3	35	3.78	.148	12	16	2.37	212	.09	8	2.79	.02	.07	1
S L0-40E	1	12	69	278	.1	21	8	354	2.73	2	5	ND	3	13	1.3	2	2	34	.49	.110	10	15	.40	151	.13	7	3.79	.02	.06	1
S L0-50E	1	14	100	312	.2	28	10	500	3.09	3	5	ND	6	17	1.8	2	2	35	.86	.141	20	18	.68	162	.10	5	2.92	.02	.08	1
S 25S-50W	1	21	117	411	.1	33	14	1099	3.82	8	5	ND	6	16	1.0	2	3	41	.43	.118	22	26	.66	263	.08	2	2.89	.02	.09	1
S 25S-40W	1	10	62	214	.3	22	10	612	2.99	8	5	ND	5	13	.8	3	2	39	.18	.119	10	18	.28	157	.14	6	4.21	.02	.05	1
S 25S-30W	1	9	63	287	.1	20	9	741	3.05	4	5	ND	4	13	.8	2	2	39	.23	.188	12	19	.32	175	.14	5	4.26	.02	.05	1
S 25S-20W	1	9	48	315	.1	24	10	793	3.41	3	6	ND	4	14	.8	2	2	43	.30	.231	8	20	.29	190	.14	6	4.79	.02	.06	1
S 25S-10W	1	9	48	266	.1	24	10	811	2.93	3	5	ND	4	15	.8	2	2	39	.23	.117	10	19	.31	186	.13	5	3.65	.03	.08	1
S 25S-30E	1	18	78	243	.2	25	11	692	3.08	3	5	ND	4	14	1.0	2	2	39	.38	.102	14	21	.47	183	.12	7	3.40	.03	.07	1
S 25S-40E	1	13	48	215	.1	23	9	471	2.76	3	5	ND	5	13	.9	2	6	37	.16	.109	6	16	.29	139	.16	4	4.73	.02	.05	1
S 25S-50E	1	13	104	331	.1	25	10	921	3.03	5	5	ND	4	13	.4	2	2	34	.33	.096	14	21	.47	245	.09	4	2.98	.02	.06	1
STANDARD C	18	59	35	129	6.7	73	31	1049	3.95	40	21	7	36	52	18.9	19	22	55	.51	.095	36	57	.90	180	.07	38	1.91	.06	.14	11

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: P1-6 SOIL P7 ROCK

DATE RECEIVED: AUG 28 1990 DATE REPORT MAILED: Sept 1/90 SIGNED BY: *Cherry* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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
S 50S-50W	1	9	41	170	.3	14	7	345	2.18	2	5	ND	4	14	1.3	2	6	33	.42	.113	11	12	.24	143	.14	7	5.09	.04	.04	5
S 50S-40W	1	16	71	249	.4	20	9	336	2.89	2	8	ND	7	14	1.4	2	2	41	.30	.124	33	16	.32	168	.12	12	4.58	.02	.07	2
S 50S-30W	1	8	38	209	.4	14	7	621	2.42	2	5	ND	4	11	1.1	2	2	35	.15	.211	8	11	.18	164	.13	5	5.44	.03	.05	2
S 50S-20W	1	11	41	186	.2	17	8	511	2.65	2	5	ND	4	13	1.3	2	2	39	.19	.125	11	14	.24	182	.15	2	6.84	.03	.06	4
S 50S-10W	1	8	36	186	.2	12	6	686	2.03	7	5	ND	3	8	1.2	2	2	34	.11	.117	6	11	.12	139	.12	7	2.91	.01	.05	2
S 50S-00W	1	15	82	262	.5	24	10	1298	2.94	3	5	ND	3	15	1.4	2	2	33	.64	.114	17	22	.57	222	.07	9	3.14	.02	.11	1
S 50S-20E	1	12	55	219	.4	16	7	1056	2.61	3	5	ND	4	15	1.6	2	2	35	.47	.126	14	17	.36	186	.11	4	3.77	.03	.08	1
S 50S-30E	1	10	42	129	.2	16	7	296	2.31	4	6	ND	4	12	.9	2	3	37	.16	.092	7	13	.20	131	.14	2	5.68	.03	.04	4
S 50S-40E	1	14	84	208	.2	23	10	356	2.82	5	5	ND	5	13	.9	2	2	34	.17	.073	14	19	.38	251	.10	2	3.77	.03	.07	3
S 50S-50E	2	8	59	219	.6	17	8	574	2.38	2	6	ND	5	14	2.1	2	4	33	.21	.146	9	13	.23	150	.13	11	4.79	.03	.05	4
N 50N-1+72W	1	6	38	3819	.3	12	5	567	2.91	13	5	ND	3	27	7.4	5	2	36	3.15	.603	14	19	1.16	140	.12	4	3.61	.05	.07	1
N 50N-1+50W	1	11	16	447	.4	15	6	150	1.99	2	8	ND	4	23	2.4	2	5	34	.25	.140	11	7	.14	129	.18	7	6.23	.05	.04	1
N 50N-1+25W	1	6	24	324	.1	12	7	308	2.16	9	5	ND	3	12	1.6	2	2	31	.12	.296	5	12	.13	130	.14	3	4.41	.03	.06	2
N 50N-1+00W	1	8	16	297	.7	27	9	694	2.13	4	5	ND	3	18	1.1	2	2	31	.28	.126	10	18	.28	203	.11	2	3.33	.03	.09	2
N 50N-75W	1	10	17	232	.5	24	8	398	2.15	5	6	ND	5	17	.9	2	2	31	.24	.169	12	17	.28	194	.10	11	3.30	.03	.08	1
N 50N-50W	1	26	23	239	.8	42	12	309	2.97	2	6	ND	7	23	1.3	2	3	43	.24	.113	17	30	.54	351	.11	4	5.00	.04	.15	4
N 50N-30W	1	10	35	106	.2	13	6	417	1.97	3	5	ND	4	27	1.0	2	2	30	.51	.133	21	11	.29	193	.15	3	5.48	.06	.06	1
N 50N-20W	1	5	41	186	.4	14	6	1268	2.16	2	5	ND	3	16	1.4	2	3	30	1.20	.107	13	17	.68	259	.11	13	3.14	.04	.07	1
N 50N-10W	1	9	42	168	.2	17	9	410	2.63	2	11	ND	6	16	1.4	2	2	45	.26	.072	14	15	.32	206	.16	7	5.83	.04	.07	1
N 50N-00W	1	8	37	237	.1	16	8	468	2.54	5	6	ND	3	17	2.6	2	5	42	.23	.117	9	14	.25	181	.17	2	6.28	.05	.04	3
N 50N-10E	1	9	58	373	.2	14	7	499	2.38	2	5	ND	5	20	7.1	2	3	38	.50	.136	14	12	.32	172	.17	4	5.94	.05	.04	3
N 50N-20E	1	8	50	741	.2	15	7	615	2.31	3	8	ND	5	20	10.8	2	6	35	.63	.084	20	15	.43	205	.14	8	4.97	.05	.06	1
N 50N-30E	1	11	64	309	.1	16	8	308	2.50	5	8	ND	4	15	2.8	2	2	40	.17	.153	9	13	.23	159	.16	2	6.16	.05	.05	3
N 50N-40E	1	9	32	241	.1	16	8	520	2.30	7	6	ND	4	13	1.8	2	3	33	.19	.151	11	18	.28	181	.12	2	3.27	.03	.06	1
N 50N-50E	1	9	31	376	.3	15	7	1156	2.07	3	5	ND	4	15	4.4	2	2	33	.23	.227	9	13	.18	203	.14	11	3.80	.04	.08	1
N 50N-75E	1	8	21	255	.5	14	8	468	2.24	6	10	ND	4	10	.9	2	4	33	.10	.191	9	13	.19	138	.12	11	4.02	.04	.05	1
N 50N-1+00E	1	6	103	204	.1	13	5	719	1.98	6	5	ND	2	19	1.4	2	2	28	.92	.078	10	13	.50	141	.12	3	2.84	.04	.06	4
N 50N-1+25E	1	8	36	219	.1	16	8	301	2.49	5	9	ND	4	16	1.1	2	4	40	.25	.129	10	16	.28	175	.14	2	4.89	.04	.07	2
N 50N-1+50E	1	8	36	210	.1	15	8	426	2.37	3	8	ND	4	17	1.2	2	2	34	.34	.203	11	16	.21	168	.14	7	5.17	.04	.06	1
N 50N-1+75E	1	11	36	212	.3	17	8	498	2.50	2	10	ND	6	13	1.2	2	6	38	.19	.137	17	14	.25	210	.13	11	4.94	.04	.06	1
N 50N-2+00E	1	8	97	748	.2	21	8	505	2.90	5	9	ND	5	16	1.6	2	6	36	.22	.155	11	14	.26	192	.12	4	3.77	.04	.06	1
N 25N-1+50W	1	12	37	229	.1	16	8	328	2.86	4	11	ND	5	21	1.8	2	2	46	.51	.132	19	15	.33	129	.21	2	7.50	.06	.05	1
N 25N-1+25W	1	8	38	166	.2	17	8	513	2.48	3	7	ND	4	18	.6	2	2	35	.89	.105	19	19	.67	148	.12	4	4.29	.04	.07	1
N 25N-1+00W	1	12	24	123	.5	17	7	361	1.98	2	15	ND	5	18	1.6	2	4	36	.17	.125	8	8	.15	131	.18	8	6.67	.06	.04	1
N 25N-75W	1	11	47	299	.3	18	9	658	2.36	2	8	ND	5	15	2.2	2	4	32	.20	.166	13	17	.29	245	.11	8	3.05	.03	.08	1
N 25N-50W	1	16	34	190	.1	28	10	283	2.92	3	10	ND	7	12	.4	2	2	39	.12	.038	27	27	.61	194	.08	2	2.02	.02	.10	1
STANDARD C	19	58	40	133	7.1	73	32	1055	3.99	40	21	7	40	52	18.5	15	20	58	.51	.099	40	60	.89	187	.08	38	1.89	.08	.13	11



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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 %	H ppm
N 25N-40W	1	5	14	219	.2	19	6	526	1.91	9	5	ND	2	17	1.2	3	9	24	.25	.183	6	12	.18	139	.12	3	2.87	.03	.06	3
N 25N-30W	1	12	988	343	.4	18	7	629	2.26	9	5	ND	4	19	2.5	3	2	28	.43	.168	13	15	.32	168	.13	2	3.38	.03	.07	2
N 25N-20W	1	14	70	156	.1	16	8	672	2.27	8	5	ND	3	25	1.8	2	3	24	.60	.093	17	14	.47	191	.13	5	3.76	.04	.08	1
N 25N-10W	1	17	56	238	.1	24	10	284	2.93	4	5	ND	6	14	1.7	2	2	37	.18	.082	13	20	.47	225	.14	4	4.24	.02	.07	1
N 25N-00W	1	16	58	272	.1	21	8	188	2.44	2	5	ND	5	14	2.4	2	2	30	.18	.118	11	16	.34	145	.15	4	4.09	.03	.06	1
N 25N-10E	1	9	31	233	.1	16	7	323	2.42	2	5	ND	4	15	3.0	2	2	29	.21	.156	6	12	.24	142	.17	5	5.85	.03	.04	1
N 25N-20E	1	10	30	482	.2	17	8	830	2.43	5	5	ND	3	14	5.6	2	2	30	.19	.132	10	15	.25	195	.16	2	4.41	.03	.05	1
N 25N-30E	1	16	38	938	.2	18	7	499	2.60	2	5	ND	5	16	5.0	2	4	29	.25	.129	15	16	.34	246	.13	8	3.88	.03	.06	1
N 25N-40E	1	10	37	261	.1	18	7	491	2.37	7	5	ND	4	16	1.9	2	2	28	.50	.240	10	15	.37	226	.12	4	3.49	.03	.06	2
N 25N-50E	1	7	46	327	.1	21	7	370	2.50	3	5	ND	4	16	1.6	2	2	27	.32	.223	10	16	.30	184	.12	4	3.12	.03	.07	1
N 25N-75E	1	7	12	150	.2	17	6	333	2.09	9	5	ND	4	13	.7	3	2	26	.21	.192	6	12	.15	122	.14	4	3.64	.03	.05	1
N 25N-1+00E	1	9	28	92	.2	13	5	659	1.86	3	5	ND	3	24	1.2	2	3	19	.40	.142	16	9	.20	147	.15	10	4.27	.05	.05	1
N 25N-1+25E	1	11	37	193	.1	19	7	432	2.45	2	5	ND	4	18	1.2	2	2	28	.30	.090	13	14	.29	178	.16	5	4.55	.03	.05	1
N 25N-1+50E	1	10	35	264	.3	22	10	344	2.52	5	6	ND	6	8	.8	2	2	32	.15	.109	15	21	.40	179	.07	5	1.87	.01	.06	1
N 25N-1+75E	1	7	17	226	.1	19	7	442	2.28	4	5	ND	4	18	1.3	2	2	27	.53	.103	14	15	.38	180	.14	8	3.96	.03	.05	1
N 25N-2+00E	1	10	17	243	.2	15	7	657	2.42	3	5	ND	4	16	1.4	2	2	32	.31	.225	6	15	.24	158	.14	5	3.84	.03	.06	1
N LO-1+20W	1	12	33	203	.1	30	11	269	3.54	10	5	ND	6	16	.7	2	2	36	.24	.037	16	25	.69	182	.11	3	4.41	.02	.08	1
N LO-1+00W	1	11	20	198	.3	14	6	181	2.27	2	5	ND	5	23	1.1	5	8	23	.43	.077	14	10	.29	137	.19	9	5.06	.05	.04	1
N LO-75W	1	9	28	430	.1	20	7	833	2.66	2	5	ND	4	16	3.7	2	2	31	.45	.105	12	16	.38	228	.16	7	4.04	.03	.06	1
N LO-50W	1	12	66	284	.1	25	9	347	2.86	3	5	ND	6	10	1.4	2	2	35	.17	.028	18	23	.58	175	.07	2	1.89	.01	.07	1
N LO-40W	1	8	33	282	.1	16	7	922	2.29	3	5	ND	2	15	1.7	2	2	29	.26	.251	7	13	.21	204	.14	3	3.57	.03	.05	2
N LO-20W	1	8	214	1015	.1	14	3	1041	1.52	5	5	ND	1	22	4.3	2	2	19	1.19	.183	15	9	.44	174	.11	8	2.27	.03	.06	1
N LO-10W	1	12	2282	3649	.2	18	7	822	2.46	5	5	ND	4	24	10.3	2	2	32	.70	.155	24	15	.41	158	.15	5	4.60	.04	.06	2
N LO-0+00	1	11	192	2403	.1	16	6	619	2.59	2	5	ND	4	15	6.1	2	9	34	.36	.229	12	17	.32	199	.13	7	3.47	.02	.06	2
N LO-10E	1	9	72	649	.1	14	6	867	2.30	3	5	ND	4	14	4.7	2	2	29	.23	.275	7	12	.20	190	.16	2	4.18	.03	.04	2
N LO-20E	1	6	100	396	.1	15	6	1067	2.11	4	5	ND	2	16	4.6	2	2	25	.38	.155	9	12	.25	247	.15	7	3.43	.03	.06	1
N LO-30E	1	12	55	289	.1	18	7	612	2.25	5	6	ND	3	19	2.3	2	2	27	.41	.260	11	13	.22	209	.15	8	4.46	.03	.06	1
N LO-40E	1	14	55	228	.1	22	11	418	2.85	2	5	ND	6	13	1.3	2	2	38	.19	.129	14	23	.46	200	.11	5	3.12	.02	.07	2
N LO-50E	1	14	56	218	.2	20	8	510	2.61	2	5	ND	5	17	.9	2	2	32	.32	.228	10	17	.33	217	.15	7	4.76	.03	.06	1
N LO-75E	1	11	60	312	.1	19	8	1161	2.24	8	5	ND	4	19	1.4	3	2	28	.38	.262	10	17	.25	210	.10	5	2.42	.02	.10	1
N LO-1+00E	1	12	22	219	.2	24	9	546	2.67	2	5	ND	5	14	.5	2	2	32	.20	.161	16	20	.37	216	.12	4	3.63	.03	.07	1
N LO-1+25E	1	16	65	220	.1	22	9	285	2.68	8	5	ND	5	17	.6	2	2	32	.49	.115	16	18	.48	237	.13	7	3.81	.03	.08	2
N LO-1+50E	1	10	52	224	.1	20	8	596	2.63	5	5	ND	4	14	1.0	2	2	33	.26	.167	9	16	.27	220	.14	4	4.12	.03	.06	1
N LO-1+75E	1	9	18	210	.1	19	7	1044	2.43	2	5	ND	4	18	1.2	2	2	29	.50	.206	12	14	.22	225	.16	5	4.92	.03	.05	1
N LO-2+00E	1	13	27	163	.2	16	7	756	2.39	4	7	ND	5	19	.7	2	2	29	.52	.214	12	14	.28	156	.15	10	4.38	.04	.05	2
N 25S-75W	1	8	44	298	.1	18	7	828	2.37	2	7	ND	4	20	1.2	3	2	27	.49	.037	12	15	.45	218	.14	5	3.55	.03	.09	2
STANDARD C	19	59	37	132	7.0	72	32	1054	3.98	40	21	7	38	53	19.0	15	20	56	.52	.097	38	61	.90	181	.07	37	1.89	.06	.14	11

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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
N 25S-50W	1	10	324	351	.2	19	8	642	2.27	2	5	ND	3	18	2.1	2	2	29	.57	.144	11	15	.34	189	.13	7	3.14	.03	.06	1
N 25S-40W	1	19	382	320	.1	24	9	525	2.70	8	5	ND	5	16	1.9	3	2	34	.77	.150	17	21	.65	163	.11	7	2.94	.02	.08	1
N 25S-30W	1	9	162	446	.1	18	7	871	2.51	7	5	ND	3	21	2.2	2	2	29	.75	.247	11	15	.35	203	.14	9	3.57	.03	.07	1
N 25S-20W	1	5	40	240	.1	11	5	458	1.82	3	5	ND	2	24	.6	4	2	22	1.01	.151	12	9	.40	140	.14	11	3.26	.04	.05	1
N 25S-10W	1	4	41	258	.1	16	6	676	2.09	2	5	ND	2	20	1.7	2	2	28	.59	.109	10	14	.31	224	.14	8	2.97	.03	.06	1
N 25S-00W	1	7	22	378	.1	12	6	676	2.15	3	5	ND	2	20	2.2	3	2	25	.74	.292	10	13	.26	212	.14	5	3.35	.03	.05	1
N 25S-10E	1	6	37	273	.1	20	7	558	2.35	2	5	ND	4	17	1.5	2	2	33	.42	.158	11	18	.38	204	.13	6	3.46	.03	.07	1
N 25S-20E	1	9	23	260	.1	14	7	484	2.33	4	5	ND	4	16	1.2	5	2	31	.30	.185	7	12	.22	164	.17	6	4.86	.03	.04	1
N 25S-30E	1	5	26	625	.1	12	6	722	2.03	2	5	ND	3	22	1.5	3	2	27	.50	.142	10	11	.23	183	.16	11	3.61	.04	.05	1
N 25S-40E	1	5	43	317	.1	13	5	1303	2.10	6	6	ND	2	17	1.2	2	2	26	.65	.192	11	12	.33	273	.13	8	2.66	.03	.05	1
N 25S-50E	1	11	72	266	.3	21	9	650	2.61	4	5	ND	4	17	1.0	6	2	32	.37	.139	12	17	.32	193	.14	10	3.64	.03	.07	2
N 25S-75E	1	8	57	297	.1	17	7	411	2.26	3	5	ND	3	16	1.0	3	2	31	.40	.179	8	14	.23	146	.14	5	3.16	.03	.05	1
N 25S-1+00E	1	10	13	136	.2	13	6	383	2.22	3	5	ND	3	19	.7	3	2	28	.27	.273	9	10	.13	123	.18	7	5.10	.04	.04	1
N 25S-1+25E	1	17	51	203	.3	24	8	1342	2.62	7	5	ND	4	19	1.4	4	2	39	3.19	.267	17	20	1.64	246	.11	9	3.51	.03	.10	1
N 25S-1+55E	1	13	23	175	.2	14	7	950	2.04	3	5	ND	2	16	.6	2	3	29	.38	.234	7	12	.19	155	.14	8	3.36	.03	.04	1
N 25S-1+75E	1	6	29	229	.1	16	8	1398	2.36	8	5	ND	2	12	.3	2	3	31	.22	.209	8	15	.23	199	.13	4	2.87	.02	.06	1
N 25S-2+00E	1	13	35	198	.2	17	8	733	2.44	6	5	ND	4	20	1.0	6	4	33	.46	.159	15	13	.28	173	.17	5	4.33	.03	.06	2
N 50S-00	1	11	39	161	.3	17	8	333	2.69	2	5	ND	4	19	.9	6	2	32	.36	.296	10	14	.27	213	.20	8	5.40	.03	.04	2
N 50S-10E	1	11	41	155	.1	15	7	669	2.20	2	6	ND	3	19	1.0	3	5	29	.34	.160	10	12	.22	181	.17	7	4.21	.03	.05	1
N 50S-20E	1	13	32	152	.1	14	7	527	2.50	4	5	ND	4	17	1.0	7	5	33	.24	.202	9	13	.22	148	.17	7	5.03	.03	.04	1
N 50S-30E	1	11	44	184	.3	16	7	486	2.40	2	5	ND	4	20	1.2	3	8	30	.37	.167	11	13	.25	196	.18	6	4.45	.03	.05	1
N 50S-40E	1	12	107	322	.1	19	8	414	2.54	5	5	ND	3	20	1.4	4	2	32	.35	.100	12	16	.33	230	.14	9	3.67	.03	.06	1
N 50S-50E	1	12	106	316	.2	18	7	315	2.38	5	5	ND	4	16	.7	5	2	30	.24	.171	10	14	.28	152	.13	7	3.58	.03	.06	1
N 50S-75E	1	11	35	266	.2	18	7	599	2.24	3	5	ND	4	15	2.2	4	2	27	.40	.196	10	13	.24	115	.14	4	3.69	.03	.05	2
N 50S-1+00E	1	10	20	278	.1	14	6	931	2.11	2	5	ND	2	19	1.2	2	2	27	.40	.150	12	13	.23	214	.15	4	3.67	.04	.05	1
N 50S-1+25E	1	9	39	301	.1	23	8	1028	2.51	4	5	ND	3	20	.2	2	2	32	.49	.156	13	16	.32	219	.13	4	3.18	.04	.06	1
N 50S-1+50E	1	12	25	196	.1	16	8	835	2.58	7	5	ND	4	19	.2	2	2	32	.59	.218	13	14	.32	224	.16	8	3.97	.04	.05	1
N 50S-1+75E	1	17	30	184	.2	23	9	441	2.65	2	5	ND	4	15	.3	2	2	36	.25	.207	9	16	.29	157	.15	5	4.62	.03	.05	1
N 50S-2+00E	1	14	25	156	.2	15	7	363	2.09	7	5	ND	3	12	.6	5	2	28	.14	.205	8	13	.18	118	.13	2	3.79	.02	.04	2
LS-1	1	23	22	137	.5	28	10	276	2.60	5	5	ND	7	18	.3	3	3	31	.70	.078	21	18	.66	129	.05	4	2.23	.02	.06	1
LS-2	1	22	17	139	.2	27	10	213	2.59	6	5	ND	6	15	.2	3	2	33	.28	.079	19	18	.53	140	.05	4	2.14	.02	.05	1
LS-3	1	22	13	127	.2	32	10	215	2.49	2	5	ND	6	19	.2	2	2	33	.41	.061	21	18	.61	135	.03	4	1.60	.01	.05	2
LS-4	1	14	26	158	.1	26	9	595	2.45	8	5	ND	4	15	.6	2	6	34	.20	.150	10	15	.36	140	.09	6	2.46	.02	.05	2
LS-5	1	16	10	117	.8	18	7	263	2.18	6	5	ND	3	13	.4	3	2	33	.13	.174	7	12	.22	144	.13	2	3.62	.02	.04	2
LS-6	1	5	14	85	.2	9	4	209	1.59	5	5	ND	1	8	1.2	2	2	34	.15	.098	10	12	.18	84	.06	3	1.69	.01	.04	1
LS-7	1	17	13	114	.3	21	8	201	2.30	6	5	ND	5	14	.4	5	2	32	.23	.104	13	13	.32	144	.11	4	3.33	.03	.04	2
STANDARD C	19	59	43	130	6.9	72	31	1053	3.97	40	21	7	36	53	18.5	15	21	56	.53	.097	37	59	.90	179	.07	37	1.89	.06	.14	11

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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
LS-8	1	14	26	155	.5	19	7	629	2.14	6	5	ND	4	16	1.4	2	2	33	.28	.153	11	15	.39	138	.12	4	3.12	.02	.05	1
LS-9	1	21	21	117	.3	29	9	198	2.57	5	5	ND	9	9	.4	2	2	34	.14	.067	21	18	.63	171	.06	4	2.20	.01	.06	1
LS-10	1	17	23	151	.4	22	8	304	2.56	2	5	ND	7	16	.6	2	2	34	.21	.123	17	17	.50	176	.14	2	3.45	.02	.07	1
LS-11	1	18	20	140	.5	20	8	267	2.60	2	5	ND	9	18	.9	2	2	35	.23	.112	17	16	.47	176	.17	3	4.08	.03	.05	1
LS-12	1	13	30	178	.5	22	9	214	2.76	2	5	ND	8	13	.7	2	2	38	.21	.066	17	18	.51	131	.14	2	3.47	.02	.05	1
LS-13	1	13	34	274	.5	15	6	493	2.27	4	5	ND	5	20	1.6	2	2	28	4.00	.114	14	14	1.98	132	.11	3	2.73	.03	.05	1
LS-14	1	13	18	271	.4	9	4	695	1.91	2	5	ND	4	25	1.8	2	2	23	3.11	.114	12	11	1.47	125	.16	2	3.79	.04	.04	1
LS-15	1	16	63	295	.3	23	9	525	3.04	2	5	ND	8	18	1.7	2	2	37	1.85	.096	24	19	1.20	172	.09	3	2.50	.02	.07	1
LS-16	1	12	61	208	.4	20	9	353	2.93	5	5	ND	8	15	.8	2	2	39	.37	.108	16	18	.48	159	.15	2	3.54	.02	.06	1
LS-17	1	16	76	206	.3	24	9	213	2.98	3	5	ND	8	13	.8	2	2	33	.39	.124	15	17	.61	184	.10	3	2.98	.02	.06	1
LS-18	1	18	43	190	.2	26	11	445	3.05	4	5	ND	8	18	.7	2	2	35	.41	.103	20	22	.65	217	.14	3	3.60	.03	.11	1
LS-19	1	17	62	275	.3	23	9	442	3.18	2	5	ND	8	21	1.3	2	2	39	.62	.109	23	21	.63	201	.15	4	3.66	.03	.09	1
LS-20	1	17	152	621	.4	25	9	353	4.54	7	5	ND	9	19	1.9	2	2	46	.39	.108	22	21	.59	195	.16	6	4.00	.03	.08	1
LS-21	1	14	120	402	.3	29	10	358	3.92	6	5	ND	8	15	1.1	2	3	42	.43	.067	19	22	.68	197	.13	6	3.24	.02	.09	1
LS-22	1	12	76	219	.3	26	10	389	3.14	6	5	ND	8	13	.8	2	2	37	.22	.101	16	20	.51	183	.12	2	3.01	.02	.07	1
LS-23	1	10	47	270	.2	23	9	375	3.03	3	5	ND	7	12	1.5	2	2	42	.24	.144	12	22	.47	189	.14	2	3.19	.02	.08	1
LS-24	1	8	49	294	.2	18	7	612	3.02	2	5	ND	6	14	2.1	2	2	39	.40	.197	15	18	.42	163	.15	3	3.77	.02	.05	1
LS-25	1	11	54	247	.3	22	8	272	3.09	4	5	ND	7	19	1.9	2	2	40	.62	.120	24	20	.60	133	.16	3	3.88	.03	.06	1
LS-26	1	14	59	211	.4	17	7	496	2.62	2	5	ND	6	16	2.1	2	2	35	2.55	.093	16	17	1.32	140	.12	3	2.98	.02	.06	1
LS-27	1	14	56	163	.4	16	7	682	2.39	2	5	ND	4	17	2.4	2	2	30	2.72	.097	19	16	1.39	146	.10	2	2.49	.02	.07	1
LS-28	1	9	62	205	.2	15	7	306	2.73	2	5	ND	7	16	2.2	2	2	35	.37	.127	13	15	.44	164	.18	3	4.13	.03	.05	1
LS-29	1	8	93	256	.3	18	7	223	2.76	2	5	ND	7	14	2.2	2	2	35	.34	.087	12	18	.51	179	.16	2	3.73	.02	.06	1
LS-30	1	10	24	119	.2	12	5	154	2.15	3	5	ND	6	24	1.8	3	2	25	.41	.107	14	10	.28	114	.22	2	5.01	.05	.04	1
LS-31	1	11	34	128	.3	12	5	346	2.02	3	5	ND	5	27	1.8	2	2	23	1.22	.118	13	12	.71	108	.16	2	3.49	.05	.05	1
LS-32	1	7	31	215	.1	13	5	355	2.20	2	5	ND	5	19	1.3	2	2	26	.59	.156	9	12	.46	176	.18	3	3.49	.03	.05	1
LS-33	1	7	39	141	.2	15	6	218	2.51	2	5	ND	6	14	1.4	2	2	32	.54	.141	12	16	.46	123	.15	2	3.34	.03	.05	1
LS-34	1	9	46	201	.2	12	5	554	1.98	5	5	ND	3	13	1.6	2	2	24	2.75	.094	10	13	1.38	133	.08	2	2.10	.02	.04	1
LS-35	1	10	72	237	.2	17	7	532	2.57	4	5	ND	5	17	2.0	2	3	32	1.07	.201	12	21	.75	198	.14	2	3.29	.02	.05	1
LS-36	1	6	38	550	.3	24	8	381	2.63	2	5	ND	7	18	2.0	2	2	30	.52	.107	13	20	.60	193	.15	2	3.38	.03	.08	1
LS-37	1	14	202	551	.2	34	12	351	3.46	6	5	ND	8	12	3.4	2	2	29	.98	.080	21	26	.97	158	.07	5	2.96	.02	.07	1
LS-38	1	6	65	885	.2	14	6	946	2.68	3	5	ND	4	19	4.1	2	2	34	.35	.132	7	13	.32	206	.21	3	3.50	.03	.05	1
LS-39	1	5	20	663	.3	17	7	273	2.77	2	5	ND	7	15	2.9	2	2	36	.30	.170	5	15	.34	188	.22	3	5.28	.02	.05	1
LS-40	1	6	32	456	.3	14	6	718	2.54	2	5	ND	5	19	2.2	2	2	34	.47	.133	12	14	.41	269	.21	4	4.30	.03	.05	1
LS-41	1	12	95	446	.2	19	8	498	3.12	6	5	ND	7	16	3.5	2	2	40	.87	.129	17	18	.65	159	.16	3	3.78	.03	.06	1
LS-42	1	12	40	237	.4	14	6	711	2.11	4	5	ND	2	18	2.6	2	2	27	5.68	.116	12	13	2.27	101	.07	2	1.87	.01	.04	1
LS-43	1	11	60	210	.3	17	7	745	2.67	4	5	ND	5	15	1.7	2	2	38	2.06	.157	15	18	1.05	149	.13	3	2.99	.02	.06	1
STANDARD C	19	59	39	131	6.9	73	31	1048	3.97	37	18	7	40	52	18.5	15	21	60	.49	.094	39	56	.89	182	.09	38	1.89	.06	.14	12

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	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	
LS-44	1	6	63	205	.1	18	8	623	3.01	4	5	ND	5	14	1.3	2	2	41	.56	.158	23	19	.38	167	.13	2	4.11	.04	.05	.05	2
LS-45	2	9	45	206	.2	16	8	324	2.45	5	5	ND	4	13	1.3	2	2	37	.62	.111	11	18	.47	155	.10	2	3.01	.03	.05	.05	1
LS-46	2	9	110	218	.1	21	9	420	3.09	5	5	ND	7	16	1.8	2	2	36	.52	.151	22	22	.46	213	.10	2	3.46	.04	.05	.05	2
LS-47	1	12	60	186	.2	15	8	494	2.57	2	5	ND	5	14	1.8	2	2	37	1.31	.098	16	19	.79	123	.11	2	3.12	.04	.06	.06	1
LS-48	1	9	55	243	.1	15	8	411	3.00	4	5	ND	5	11	1.7	2	3	44	.82	.067	12	21	.59	174	.12	2	3.40	.04	.05	.05	1
LS-49	1	13	62	234	.1	14	7	691	3.02	3	5	ND	5	19	2.5	2	2	39	2.50	.104	20	21	1.64	145	.09	3	2.55	.04	.05	.05	2
LS-50	1	11	64	362	.1	17	8	578	3.47	3	5	ND	5	15	3.3	2	2	46	.78	.099	18	19	.50	132	.13	4	3.46	.04	.05	.05	2
LS-51	2	11	71	392	.1	24	9	837	3.87	4	5	ND	6	18	6.0	2	2	51	.72	.086	26	23	.57	159	.13	2	3.49	.04	.06	.06	1
LS-52	1	16	48	625	.1	14	7	695	3.44	3	5	ND	5	21	9.5	2	2	37	3.86	.087	22	20	2.32	128	.12	3	3.08	.05	.06	.06	1
LS-53	1	11	76	617	.1	18	8	1011	4.21	8	5	ND	5	18	7.0	2	3	49	1.34	.174	17	25	.93	229	.13	2	3.41	.04	.07	.07	2
LS-54	2	13	109	739	.1	20	8	697	4.21	7	5	ND	6	19	8.8	2	2	52	.81	.098	21	22	.58	180	.15	4	4.05	.05	.06	.06	1
LS-55	1	14	77	508	.1	19	9	632	3.70	3	5	ND	6	22	5.6	2	2	48	.49	.076	30	20	.48	198	.15	2	4.07	.06	.06	.06	2
LS-56	1	12	807	184	.1	11	7	768	2.32	2	5	ND	3	17	1.2	2	2	37	.29	.180	9	12	.19	157	.16	2	4.00	.05	.06	.06	2
LS-57	1	13	75	568	.1	18	8	637	3.71	3	5	ND	6	17	5.4	2	2	48	.78	.133	22	22	.51	179	.16	3	4.43	.05	.07	.07	1
STANDARD C	20	61	39	131	7.0	72	31	1055	3.98	40	21	7	39	52	18.5	15	21	58	.51	.100	40	60	.89	187	.08	35	1.89	.08	.13	.13	12

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl %	B ppm	Al %	Na %	K %	W ppm
LR-1	1	1	8	40	.2	1	1	126	.13	2	5	ND	1	19	.7	2	2	1	17.80	.016	2	1	8.57	2	.01	2	.01	.05	.01	3
LR-2	1	56	25177	88453	2.6	1	1	75	.20	28	6	ND	1	13	449.9	6	3	1	8.88	.016	2	2	4.77	9	.01	2	.01	.03	.01	1
LR-3	1	79	27106	99999	5.6	1	1	96	.20	29	6	ND	1	10	1075.4	10	2	1	7.64	.028	2	2	4.19	7	.01	2	.01	.03	.01	1
LR-4	1	34	89	85401	1.7	1	1	76	.18	2	5	ND	1	11	397.6	2	2	1	8.67	.017	2	3	4.78	19	.01	2	.01	.03	.01	1
LR-5	4	1	614	627	.1	10	3	166	4.80	12	5	ND	1	93	2.7	4	2	4	1.82	.028	4	10	.38	17	.01	2	.21	.01	.01	1
LR-6	1	1	172	861	.2	1	1	292	.80	2	5	ND	1	22	4.0	2	5	3	17.52	.011	3	2	8.23	4	.01	2	.01	.05	.01	1
LR-7	1	1	206	7507	.3	2	1	313	1.04	2	5	ND	1	19	23.3	2	2	2	16.89	.012	2	1	7.88	3	.01	2	.01	.05	.01	1
LR-8	1	1	47	18465	.5	2	1	287	1.10	2	5	ND	1	18	49.7	2	4	1	16.16	.010	2	1	7.64	2	.01	2	.01	.04	.01	1
LR-9	1	1	6	232	.2	1	1	324	.63	2	5	ND	1	23	1.0	2	2	1	17.35	.003	2	1	8.18	4	.01	2	.01	.05	.01	1
LR-10	1	1	25489	79	34.9	1	1	32	.05	12	5	ND	1	4	14.8	111	2	8	.62	.151	2	4	.26	4	.01	4	.02	.01	.01	2
LR-11	1	1	373	240	.2	1	1	221	.25	2	6	ND	1	16	1.4	2	2	2	10.30	.025	3	1	5.46	5	.01	3	.03	.03	.02	1
LR-12	5	2	498	4565	1.5	12	5	198	16.35	99	8	2	1	12	8.2	9	2	5	6.83	.074	2	18	3.95	9	.01	2	.05	.02	.01	1
LR-13	1	8	123	54620	.2	1	1	123	.18	2	5	ND	1	14	398.4	2	2	1	8.67	.014	2	1	4.71	3	.01	2	.01	.03	.01	1
LR-14	1	5	27284	39922	1.9	2	1	98	.15	30	7	ND	1	16	277.9	4	2	1	9.71	.016	2	3	5.08	3	.01	2	.01	.03	.01	1
LR-15	1	1	100	39312	.1	1	1	122	.14	3	6	ND	1	34	145.4	2	2	1	11.47	.018	2	2	5.55	5	.01	2	.01	.03	.01	1
LR-16	1	9	228	92771	.4	1	1	105	.25	2	6	ND	1	28	502.7	2	3	2	10.94	.021	2	1	5.28	5	.01	2	.01	.03	.01	1
LR-17	1	1	20	15342	.2	1	1	115	.18	3	5	ND	1	38	67.5	2	2	1	15.91	.017	2	1	5.86	4	.01	2	.01	.03	.01	1
LR-18	2	1	423	1311	.2	1	1	97	.26	2	6	ND	1	35	6.9	2	2	2	12.40	.021	2	3	5.05	4	.01	2	.01	.03	.01	1
LR-19	1	1	33	30361	.7	1	1	110	.18	2	6	ND	1	14	63.4	2	4	2	9.25	.026	2	2	4.98	6	.01	2	.03	.04	.01	1