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SOIL GEOCHEMISTRY AND DOZER TRENCHING LAKESIDE AND LAKESIDE FRACTION MINERAL CLAIMS SLOCAN MINING DIVISION

ZINCTON, B.C. NTS 82 K/3 E

FILMED

LATITUDE 50°03'N, LONGITUDE 117°12'W

Prepared for TOUCHSTONE RESOURCES LTD.



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Analytical Procedures Geochemical Analyses

MAPS:

Soil Geochemistry: Ag Pb Zn



Pocket inside back cover

SOIL GEOCHEMISTRY AND DOZER TRENCHING LAKESIDE AND LAKESIDE FRACTION MINERAL CLAIMS SLOCAN MINING DIVISION ZINCTON, B.C.

SUMMARY

Anomalous silver, lead, and zinc values were obtained in soil sampling. An adit which had been unknown was reopened. Additional soil sampling and geological mapping is recommended at a cost of \$15,400 in the next Phase. If results are encouraging, a second Phase of detailed soil sampling and dozer trenching may be warranted at an estimated cost of \$30,000, for a total cost of \$45,400 in the next two Phases.

PROPERTY, LOCATION, ACCESS

The Lakeside and Lakeside Fraction mineral claims are situated at Zincton summit and the northern slope of the pass on Highway 31A between New Denver and Kaslo, B.C. A dirt road departs northerly from Highway 31A near the southeastern corner of the Lakeside claim and climbs through the central part of the property. Elevations range from 1083 m (3550') to 1615 m (5800').

Claim Name	Record Number	Number of Units	Record Date
Lakeside	4558(12)	8	December 5, 1984
Lakeside Fr.	4559(12)	1	11 11 11 1

HISTORY

No history is available concerning previous exploration of the claims. The Lucky Jim mine, approximately 1 km to the south, was one of the larger producers in the district. MINDEP computer files of the University of British Columbia list the output as follows:

	Ag	Pb	Zn
Short Tons	oz/ton	%	%
174,190	0.508	0.34	7.83

A ground magnetic survey over the southeastern portion of the Lakeside claim did not detect anomalies which could be related to extensions of Lucky Jim-type mineralization (Goldsmith, 1985).

Soil geochemistry and trenching were completed between November 6 and December 2, 1989.

GEOLOGY

The claims are underlain by argillite and possibly limestone of the Triassic-Jurassic Slocan Group. Thrust faulting and folding have produced diverse bedding attitudes, although the prevalent strike is northwesterly.

Productive zones at the Lucky Jim mine have been mined to widths of 50 feet or more in limestones where replacement has occurred adjacent to northeasterly trending, steeply dipping fractures. Mineralization consists of pyrite-sphalerite-galena with subordinate pyrrhotite and arsenopyrite (Cairnes, 1935, p. 73). A projection of these fractures to the northeast could pass through the eastern part of the Lakeside claim.



LAKESIDE & LAKESIDE FR. MINERAL CLAIMS ZINCTON B.C. SLOCAN MINING DIVISION N.T.S. 82K-3E



TO ACCOMPANY REPORT BY LOCKE B. GOLDSMITH, P.Eng., CONSULTING GEOLOGIST,

ARCTEX ENGINEERING SERVICES

January 1989

TOUCHSTONE RESOURCES LTD.



LAKESIDE & LAKESIDE FR. MINERAL CLAIMS ZINCTON B.C. SLOCAN MINING DIVISION N.T.S. 82K-3E



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SOIL GEOCHEMISTRY

A grid was commenced above the valley fill, on the slope to the north of Bear Lake. Initial line spacing was 100 metres with samples at 50-metre intervals. After an adit was found, the sample spacing was decreased on line 2+00N to 25 metres. A long narrow spade was used to collect soils from depths of 25 to 35 cm (C horizon) below the organic debris. Analytical procedures and results are included in the Appendix.

The following table displays statistical data concerning metal abundance derived from lognormal probability plots. Years of soil sampling results over Slocan Group rocks have been compiled into this information.

	Ag	Pb	Zn
	ppm	ppm	ppm
Background	<2.3	<38	Possibly two
Threshold	2.3 to 4.9	38 to 150	populations
Anomalous	>4.9	>150	>980

No anomalous metals were detected along the new road in the vicinity of the adit.

Silver

One anomalous value of 8.4 ppm Ag was obtained on the northernmost line of the grid at $2+00N \ 0+75W$. Threshold values at $0+00 \ 0+00$ and $0+00 \ 0+50W$ are considered to be contamination from a road which was previously the Kaslo and Slocan Railway grade.

Lead

Two anomalous values of 370 and 185 ppm Pb at 2+00N 0+75W and 2+00N 0+50W coincide with the anomalous silver value. Contamination on the road at 0+00 0+00 and 0+00 0+50W is the probable cause of anomalous lead.

Zinc

Although no results contain anomalous (>980 ppm) zinc, a value of 550 ppm Zn which is higher than the remainder of the meaningful results occurs at 2+00N 0+75W, coincident with anomalous silver and lead. As with silver and lead, elevated zinc values were obtained along the road/railway grade.

DOZER TRENCHING

An adit was located at approximately 0+80N 1+95W on the soil geochemistry grid. A road was extended uphill form the old railway grade to the adit, and the portal was cleared of slumped soil and debris. A road and a trench which were excavated above the adit have not yet been soil sampled. Approximately 200 m of road and trench were completed.

CONCLUSIONS

Productive lode systems in the vicinity trend northeasterly. The adit and the anomalous metals at 2+00N 0+75W may be on the expression of a mineralized structure which if projected southwesterly would pass through the Lucky Jim mine.

RECOMMENDATIONS

The adit should be mapped and sampled. Soil sampling should be continued upslope to the north and west to cover the remainder of the claims, with detailed sampling near 2+00N 0+75W, followed by geological mapping. Anomalous results may require follow-up sampling and dozer trenching.

COST ESTIMATE

Phase 1

Soil sampling, grid	\$2,500	
Geological mapping	2,500	
Analyses	3,000	
Vehicles	1,500	
Room, board	1,000	
Supplies	500	
Engineering, supervision	1,000	
Report	2.000	
	14,000	
Contingencies at 10%	1,400	
Total Phase 1	\$15,400	\$15,400

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Phase 2

Detailed soil geochemistry,		
dozer trenching, allow	\$30,000	<u>30,000</u>
Total, Phases 1 and 2		\$45,400

Results of Phase 1 should be compiled into an engineering report; continuance to Phase 2 should be contingent upon favourable conclusions and recommendations from an Engineer.

2ROFESSIONA, Respectfully submitted, mill 7,1 Locke B. Goldsmith, P.Eng. Consulting Geologist

Vancouver, B.C. January 21, 1989

ENGINEER'S CERTIFICATE LOCKE B. GOLDSMITH

- 1. I, Locke B. Goldsmith, am a registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
- 2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
- 3. I have been engaged in mining exploration for the past 30 years.
- I have authored the report entitled, "Soil Geochemistry and Dozer Trenching, Lakeside and Lakeside Fraction Mineral Claims, Slocan Mining Division, Zincton, B.C.", dated January 21, 1989. The report is based upon fieldwork and research supervised by the author.
- 5. I have no ownership in the property, nor in the stocks of Touchstone Resources Ltd..
- 6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds. Sheets of analyses in the Appendix could be omitted from a prospectus because all values are plotted on maps.

Respectfully submitted, Locke B. Goldsmith, P.Eng. Consulting Geologist

Vancouver, B.C. January 21, 1989 8

REFERENCES

Cairnes, C.E. 1935. Description of properties, Slocan Mining Camp, B.C. GSC Memoir 184.

Goldsmith, L.B. 1985. Magnetic survey, Lakeside and Lakeside Fraction Mineral Claims, Slocan Mining Division, Zincton, B.C.

University of British Columbia MINDEP Computer Files.

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COST STATEMENT, 1988 PROGRAMME

Personnel:		
L.B. Goldsmith, 1/4 Nov. 6, 1/4 18, 1/4 30 1/4 Dec. 2, total 1 day @ \$440/day	\$440.00	
G. Bennett, Nov. 7, 8 30, total 3 days at \$260/day	<u>780.00</u> \$1,220.00	\$ 1,220.00
Food, Accommodation:		
\$20.00 divided by 5 man days = \$4.00/day		20.00
Transportation:		
4x4 - 2 days at \$45/day 95 km at \$0.30/km Gas	\$ 90.00 28.50 <u>15.00</u> 133.50	133.50
133.50 divided by 2 days = \$66.75/day		
Physical:		
Dozer, JD350, 16 hr at \$50/hr Lowbed, 3 hr at \$50/hr Supervision 4x4 truck, 2 days at \$45/day Gas 130 km at \$0.30/km	800.00 150.00 260.00 90.00 35.00 <u>39.00</u> \$1 374.00	1 374 00
A	\$1,574.00	1,574.00
Analyses:		
\$232.00 divided by 40 samples = \$5.00/sample		232.00
Report:		
Typing, drafting, photocopying, materials		270.40
	Total:	\$3,249.90

APPENDIX





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212 BROOKSBANK AVE., NORTH VANCOUVER. BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (664) 984-6221

GOLDSMITH, MR. L. B.

301 - 1855 BALSAM ST. VANCOUVER, B.C. V6K 3M3

Co

A8829092

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ANALYTICAL PROCEDURES

	CHFMEX CODE	NUMBER			DESCR	IPTIO		METHOD		DETECTION LIMIT	UPPER LIMIT
BC.	4 5 6	40 40 40	Pb Za Ag	ppm: ppm: ppm:	HNO3–aqua HNO3–aqua HNO3–aqua	regia regia regia	digest digest digest	AAS-BKGD AAS AAS-BKGD	CORR	i 5 0.2	10000 10000 200
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GOLDSMITH, MR. L. B. PROJECT : LAKESIDE P.O.# : NONE

Samples submitted to our lab in Vancouver. This report was printed on 17-DEC-88.

CERTIFICATE A8829092

	SAME	LE PREPARATION
CHEME: CODE	X NUMBER SAMPLES	DESCRIPTION
201	34	Dry. sieve -80 mesh: soil. sed.
217	6	Geochem:Ring only.no crush/split
	1	

* NOTE 1:

Code 1000 is used for repeat gold analyses It shows typical sample variability due to coarse gold effects. Each value is correct for its particular subsample.

" GOLDSMITH, MR. L. B.



Chemex Labs Ltd.

212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7.1-2CI

PHONE (604) 984-0221

301 - 1855 BALSAM ST. VANCOUVER, B.C. V6K 3M3 Project : LAKESIDE Comments: Page Nc 1 Tot. Pa_____1 Date :17-DEC-88 Invoice #:1-8829092 P.O. # :NONE

CERTIFICATE OF ANALYSIS A8829092

SAMPLE DESCRIPTION	PREP CODE	РЬ ррт	Zn ppm	Ag ppm Aqua R		-		· · · · · · · · · · · · · · · · · · ·	
LS 0+00N 0+00W LS 0+00N 0+50W LS 0+00N 1+00W LS 0+00N 1+50W LS 0+00N 2+00W	201 201 201 201 201 201 201	469 185 46 19 36	650 790 450 290 310	3.8 2.3 0.8 0.4 0.8		• • •			
LS 0+00N 2+50W LS BLIN LS IN 0+50E LS IN 1+00E LS IN 0+50W	201 217 201 201 201 201	4 4 1 8 6 2 3 0 6 4	2 5 5 2 5 0 3 9 0 2 1 6 3 8 8	0.5 0.5 0.9 2.1 0.9					
LS IN 1+00W LS IN 1+50W LS IN 2+00W LS 1+50N 2+00W LS 1+50N 2+50W	201 201 201 201 201 201	3 5 3 1 2 7 3 2 2 7	2 4 5 2 2 0 1 5 8 2 4 2 1 8 0	1 . 3 0 . 3 0 . 3 0 . 5 0 . 5					
LS 2N BL0+00W LS 2N 0+25W LS 2N 0+50W LS 2N 0+75W LS 2N 0+75W LS 2N 1+00W	201 201 201 201 201 201 217	48 69 185 370 17	312 290 340 550 128	0.8 2.0 0.5 8.4 0.3	ł !	· · · · · · · · · · · · · · · · · · ·		 !	
LS 2N 1+25W LS 2N 1+50W LS 2N 1+75W LS 2N 2+00W LS 2N 2+25W	201 201 201 201 201 201	58 32 27 16 26	i 3 6 2 8 8 i 1 6 i 2 i 1 6 0	0.4 0.3 0.3 0.1 0.3					
LS 2N 2+50W LS 2N 2+75W LS 2N 3+00W LS 2N 3+25W LS TR 01	201 201 217 217 201	2 5 2 6 5 0 7 2 1 3	206 168 128 13 152	0.2 0.1 0.5 0.8 0.1					
LS TR 02 LS TR 03 LS TR 04 LS TR 04 LS TR 05 LS TR 06	201 201 201 201 201 201	2 1 2 9 4 0 5 2 2 6	800 462 810 368 378	0.1 0.2 0.3 0.2 0.3					
LS TR 07 LS TR 08 LS TR 09 LS TR 10 LS TR 11	201 201 201 201 201 201	17 33 28 46 36	168 243 315 263 222	0.4 0.7 0.4 1.0 1.0					

CERTIFICATION : Hart Backler





GEOLOGICAL BRANCH ASSESSMENT REPORT

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THRESHOLD 38-150 ppm ANOMALOUS >150 ppm background <38 ppm





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