TUZEX CLAIMS: Report No. 2
Continued Geological and Geochemical Survey
(Enzyme Leach)

Minfile 092C-119

Alberni Mining Division
Southern Vancouver Island, B.C.

NTS 92C-087
Lat. 48° 53'
Long. 124° 41'

Owned and Operated by
H. Wahl and J. Ruza

By H.J. Wahl, P.Eng., B.C.
November 2000

LIST of FIGURES

APPENDICES

SUMMARY

Current work on the south Vancouver Island Tuzex Property was performed during the period 23-26 August 2001 inclusive. The work consisted of geological and enzyme leach geochemical surveys.

The Tuzex claims embrace a + 1km diameter quartz-sericite-pyrite aureole within Bonanza Volcanics, cross-cut by major fault/shear zones. This feature contains large untested Pb Zn Ag soil anomalies (conventional) plus a number of high-grade Pb Zn Ag (CuAu) massive sulphide showings.

Results of current work include discovery of a sharp-edged, +2,000 kg boulder, carrying massive pyrite-sphalerite mineralization (17% Zn) as massive bands within a quartz gangue. The boulder occurs within a newly detected enzyme leach Cu-Zn halo containing an oxidation cell.

The source of 1999 high-grade massive sulphide boulders was traced to the former Camp Showing. New road grading shows this zone to have overall width in excess of 30 m. Within this zone a 25 meter interval of bank soil samples @ 5 m spacing averages 172 ppb Au. A 3 m chip sample from this zone returned 2.26% Pb, 4.75% Zn, 103.9 g/t Ag, and 1.35 g/t Au. Grabs of the 40 cm thick massive sulphide vein returned 14.59% Pb, 24.22% Zn, 103.9 g/t Ag, and 1.35 g/t Au. Costs of the current program are $ 8,994.30.

INTRODUCTION

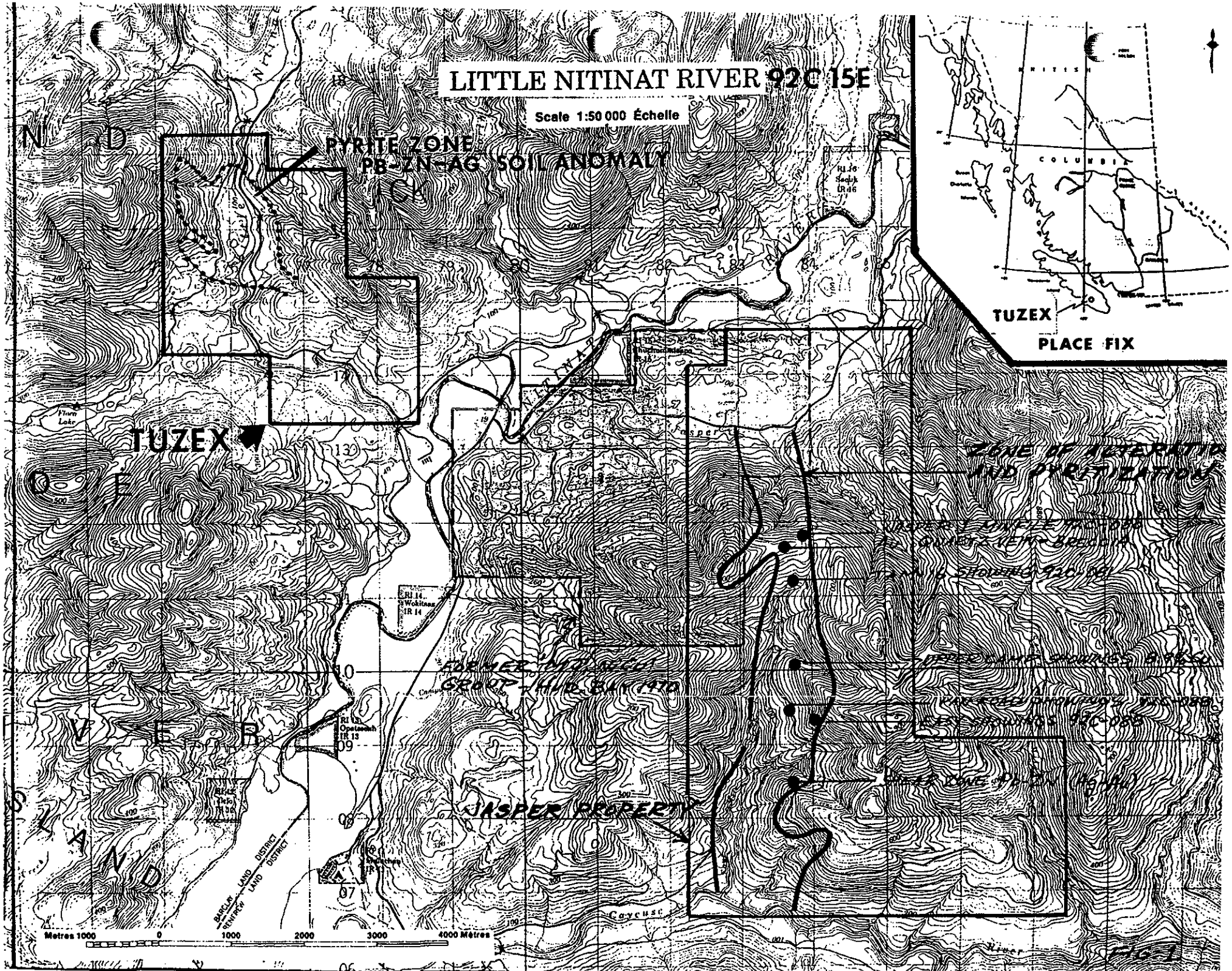
During the period 23-26 August 2001 inclusive, expanded geological and geochemical surveys (Enzyme Leach) were conducted over the River Deformation Zone in the central area of the Tuzex claims.

This was a follow-up program to the work completed in 1999 (Ref. 11).

LOCATION AND ACCESS: (Fig. 1)

The Tuzex claims (40 units) are located on Vancouver Island straddling the Little Nitinat River, 45 km WNW of Lake Cowichan and 40 km south of Port Alberni. Specific locational details are:

NTS 92C 087
Lat. 48° 53'
Long. 124° 41'


LITTLE NITINAT RIVER 92C 15E
Scale 1:50 000 Échelle
PYRITE ZONE
PB-ZN-AG SOIL ANOMALY
TUZEX
PLACE FIX
JASPER PROPERTY
Metres 1000
0
1000
2000
3000
4000 Metres

The property is accessible from Lake Cowichan by all weather gravel logging roads operated by Timber West and MacMillan Bloedel. Travel time from Cowichan Lake is about 1 hour. The South Nitinat ML runs through the approximate center of the claim group, with numerous spur roads providing fair to good access to the balance of the claimed area.

The claims are sited on Tree Farm License 44, Block 2 operated by MacMillan Bloedel. Extensive logging has occurred in the past and is ongoing.

PROPERTY: (Figs. 1,2,3)

The property consists of 3 metric claim blocks as follows:

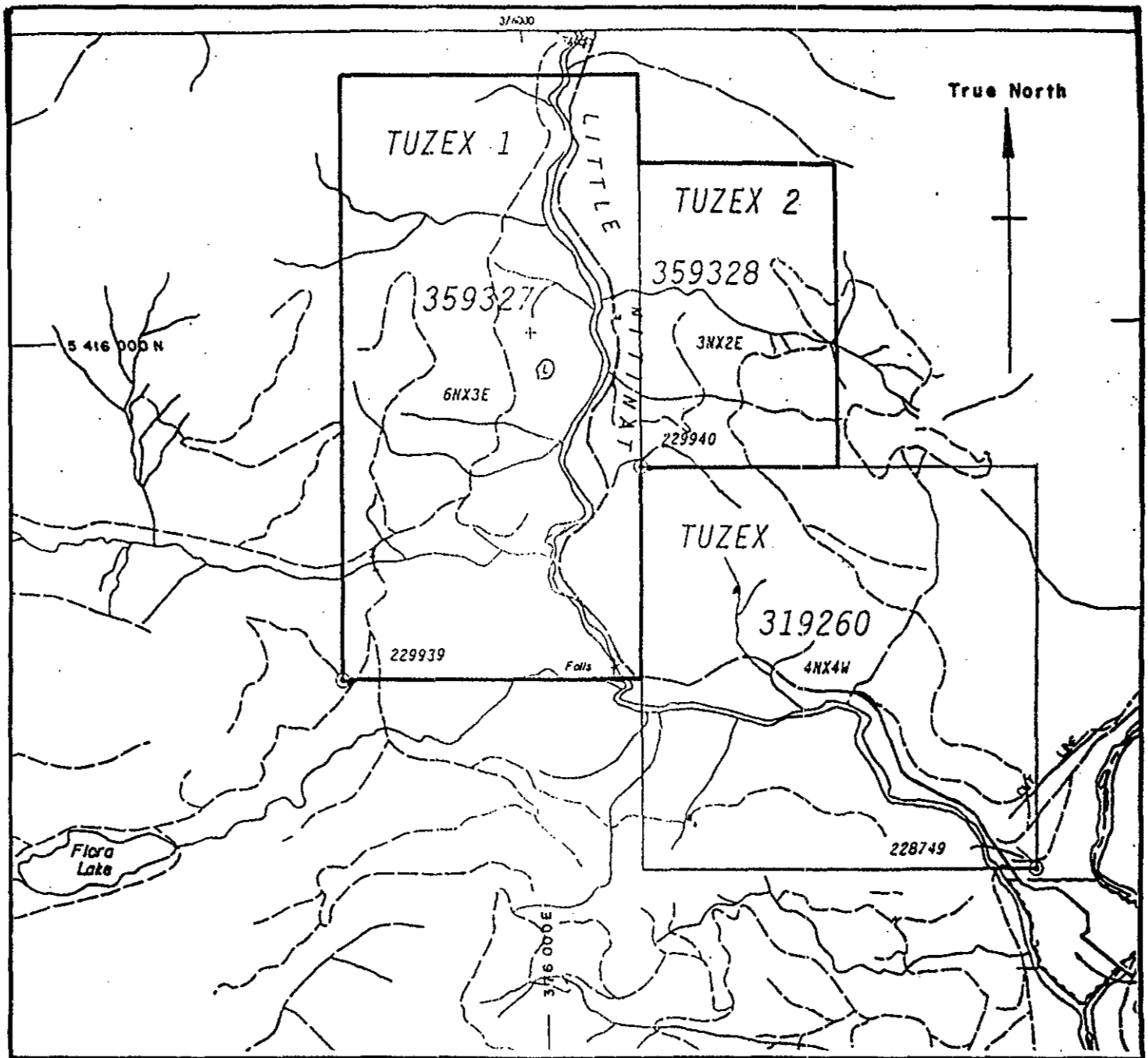
Claim	Units	Record No.	Good To Date
Tuzex	16 (4Nx4W)	319260	15 Dec. 2002
Tuzex-1	18 (6Nx3E)	359327	15 Dec. 2002
Tuzex-2	6 (3Nx2E)	359328	15 Dec. 2002
Total:	40 units		

The above are situated in the Alberni M.D. and are currently in good standing.

TERRAIN/ TOPOGRAPHY (Fig. 1)

The property is located within rugged, forested, mountain terrain common to the B.C. Coastal Zone. Elevations range from 40 meters ASL in the Little Nitinat River Valley to 800 meters ASL in the adjacent ridge lines. Much of the area is regenerating cut blocks, while the main soil-anomalous zone is largely covered by 70 to 80-year-old stand of second growth timber. The river valley itself is densely brushed and full of large, rotting, timber debris.

Overburden consists of glacial drift estimated at 2-10 meters in thickness. Some thin, crudely stratified outwash was also observed. Much of the drift is stained orangey in color, reflective of the large oxidizing alteration system on the claims. Most of the secondary roads are still in good condition or could easily be restored. Road width on the secondary trails is usually 6-7 meters.



TUZEX PROPERTY

ALBERNI MINING DIVISION, B.C.

CLAIMS MAP

MINERAL TITLES REFERENCE MAP 092 C087

Date: Sept., 2001	Scale: 1 : 30 400
	Figure: 2

WORK PERFORMED:

Soils Survey	23 ea for Enzyme Leach 16 ea for Conventional I C P assay
Silts	1 only, conventional assay
Rock Samples	7 ea for I C P and wet assays
Line Cutting	1,068 meters

HISTORY

Full details of previous activity on and around the Tuzex Claims have been detailed in Ref. (11).

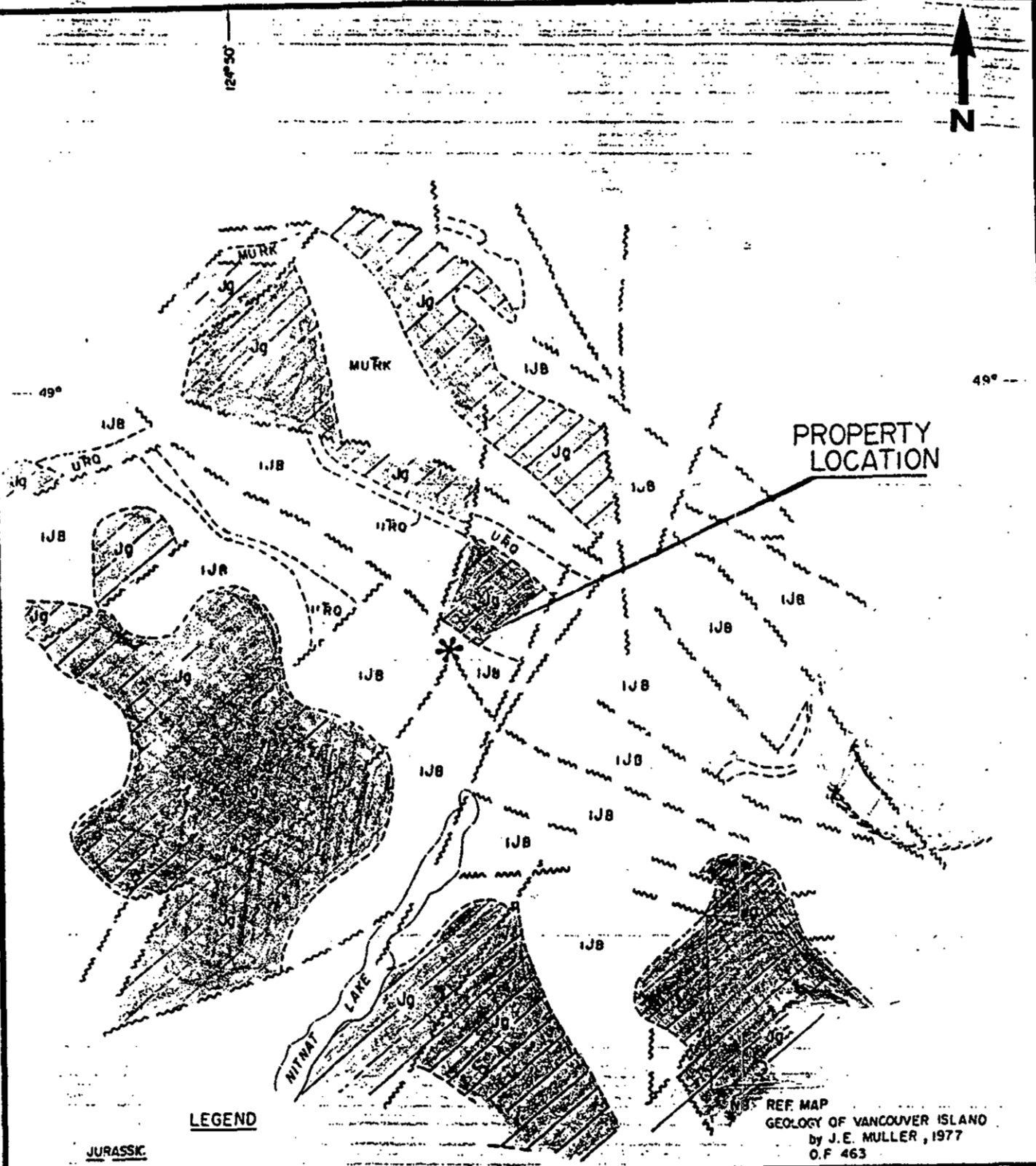
REGIONAL GEOLOGY (Fig. 2)

The Tuzex claims are contained within the Insular Belt which includes strata ranging from Late Paleozoic to Tertiary. The foregoing are cut by a quartz dioritic to granodioritic intrusive suite referred to as the Island Intrusions, of stock-like to batholithic dimensions.

All of the above are heavily faulted by a series of NW to NE trending breaks. The Tuzex claims are located at a NW-NNE fault intersection within acid to intermediate volcanics of the Bonanza sub group of early Jurassic age. The Bonanza Group is host unit to the Island Copper Mine, a former producer operated by BHP, located at the north end of Vancouver Island.

PROPERTY GEOLOGY (Fig. A)

Full details of previous work are documented in Ref. (11). New findings include the identification of quartz "reefs" up to 150 m wide exposed along the Nitinat M.L. These are whitish, to grey to bluish, fractured but solid quartz zones carrying 1-10% disseminated and stringer pyrite The larger of the two reefs was



TUZEX CLAIMS

REGIONAL GEOLOGY

H.J. WAHL, P.ENG. B.C. | AUG. 1999 | FIG. 3

the apparent objective of summit Pass drill hole 80-2, which returned assay results as follows:

DDH No.	Au oz/ton	Ag oz/ton	Cu%	Pb%	Zn%	Width	Interval
80-2	0.008	Trace	N/A	0.01	0.01	3.0'	41.0 - 44.0
	0.010	Trace	N/A	0.15	0.09	3.0'	83.0 - 86.0
	0.016	Trace	N/A	0.01	0.05	5.0'	108.0 - 113.0
	0.018	Trace	N/A	0.04	0.30	6.0'	137.0 -1 43.0
	0.001	0.06	N/A	0.01	0.03	2.0'	221.5 - 223.5
	0.010	0.02	N/A	0.02	0.01	12.0'	289.0 - 300.0
	0.002	0.05	N/A	0.03	0.16	6.4'	330.6 - 337.0
	0.004	0.04	N/A	0.01	0.02	10.0'	341.7 - 351.7
	0.010	Trace	N/A	0.11	0.56	9.3'	351.7 - 361.0
	0.001	Trace	N/A	0.01	0.72	5.0'	361.0 - 366.0

Additionally, the southeastern continuation of the Flora Deformation Zone was identified outcropping along the east bank of the Nitinat M.L. starting around the area of hydro pole #200. A grab sample of rusty, grey quartz alteration rock here returned:

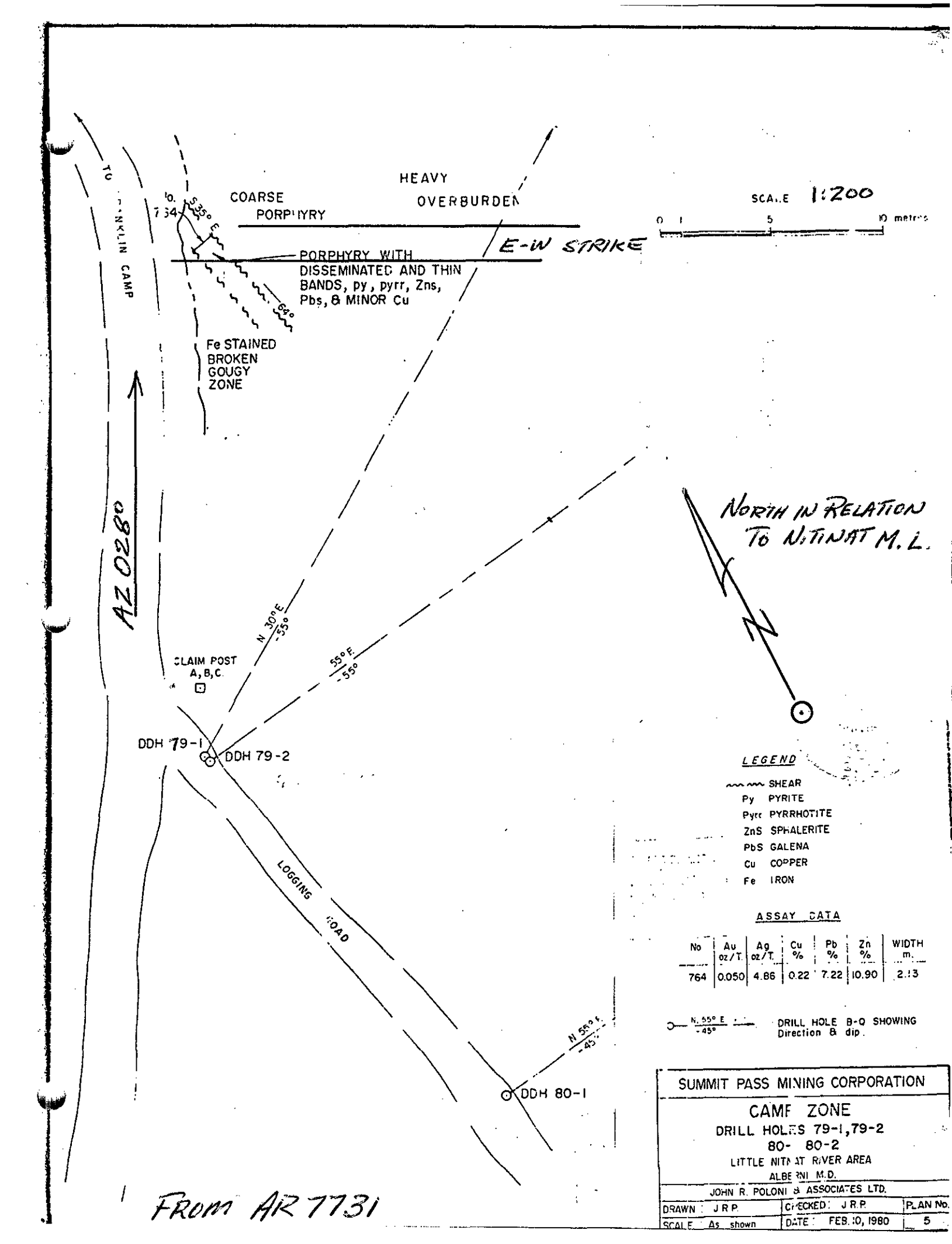
ML 200 ppm Cu 170, Pb 374, Zn 3,212, Ag 2.2, and Au 61.3 ppb.

A more complete sampling and geological investigation needs to be completed in this area.

MINERALIZATION (Figs. A, B)

The source of ore grade Cu Pb Zn Ag Au boulders located in 1999 on the west edge of the Nitinat M.L. (Fig. 5, Ref. (11)) was traced across the road to gossanized outcrop showing containing massive veins of galena/sphalerite to 40 cm thick assaying up to 12% PbZn, 152 g/t Ag, and 1.89 g/t Au. A chip sample over 3 m returned: OITX-3R Pb 2.26%, Zn 4.75%, Ag 104 g/t, and Au 1.35 g/t.

This showing would appear to be the original "Camp Zone." Hand stripping shows the veins to strike E-W as opposed to the NW-SE strike given in Fig. 5, AR 7731. A rusty gossanous zone is exposed in the planed-off road bed for a distance of 75 meters. Bank samples (soil, rusty rubble) TBC-1 -16 show definitely anomalous values for Cu, Pb, Zn and Au between samples TBC-2 & 8, a distance of some 30 meters.


HEAVY
OVERBURDEN
COARSE
PORPHYRY
SCALE 1:200
0 1 5 10 metres
E-W STRIKE
PORPHYRY WITH
DISSEMINATED AND THIN
BANDS, py, pyrr, Zns,
Pbs, & MINOR Cu
S35° E
64°
Fe STAINED
BROKEN
GOUGY
ZONE
TO FRANKLIN CAMP
AZ 028°
NORTH IN RELATION
TO NITINAT M.L.
N
N 30° E
-55°
55° E
-55°
CLAIM POST
A, B, C.
DDH 79-1
DDH 79-2
LOGGING ROAD
N 55° E
-45°
DDH 80-1
LEGEND
SHEAR
Py PYRITE
Pyrr PYRRHOTITE
ZnS SPHALERITE
PbS GALENA
Cu COPPER
Fe IRON
ASSAY DATA
No | Au oz/T. | Ag oz/T. | Cu % | Pb % | Zn % | WIDTH m.
764 | 0.050 | 4.86 | 0.22 | 7.22 | 10.90 | 2.13
N. 55° E -45° DRILL HOLE B-Q SHOWING Direction & dip.
SUMMIT PASS MINING CORPORATION
CAMP ZONE
DRILL HOLES 79-1, 79-2
80-1, 80-2
LITTLE NITINAT RIVER AREA
ALBERNI M.D.
JOHN R. POLONI & ASSOCIATES LTD.
DRAWN: J.R.P. CHECKED: J.R.P. PLAN No. 5
SCALE: As shown DATE: FEB. 10, 1980
FROM AR 7731

New high-grade boulder find:

On line TA at station 0+500 (line cut along old overgrown rail grade) a new float discovery was made being a +2,000 kg sharp-edged boulder carrying banded zones of near massive ZnS 8-10 cm thick. Grab samples from this boulder returned:

TA-1R ppm Cu 501, Pb 1,469, Zn 99,999, Ag 12.8 and Au 514.8 ppb

TA-1RA ppm Cu 902, Pb 4,378, Zn 99,999, Ag 17.6, and Au 563 ppb

Wet assays averaged 17.43% Zn.

GEOCHEMISTRY (Fig. A, Appendix 4)

Soil samples, collected at average depth of 20 cm by intrenching tool, were taken from cut lines TA, TC and TD at 50 meter spacings. These were shipped to Acme Analytical Laboratories in Vancouver for air drying and seiving, for furtherance to Actlabs of Ancaster, Ontario for analysis. Results of analysis are given in Appendix 2. Data interpretation was performed by Greg Hill of Reno, Nevada.

Due to the one-line nature of sampling, projection of anomalous zones is not possible. Nonetheless, an oxidation anomaly was identified between stations TA 300-350 contained within a broader Cu-Zn halo. Further prospecting and/or trenching in this area is required to determine if this is the source of the high-grade zinc boulder located at station TA-500.

CONCLUSIONS

Current work has located the source of high grade massive sulphide float boulders found in 1999, and related these to what is apparently the old "Camp Showing" drilled by Summit Pass Mining Corporation in 1979. There is a discrepancy in the drill hole bearings as shown on Plan No. 5 of AR 7731, as the true azimuth of the Nitinat M.L. is 028°, whereas the referenced plan shows the road to strike 0° / 360°.

Figure B (this report) shows the holes plotted per the given bearings. Also the showing strikes E-W as opposed to southeasterly, thus only holes 79-1 and 2 may have tested this zone. More work needs to be done to the west where alteration rock sub-crops and carries anomalous Pb-Zn values.

The main highlight of the current program is the discovery of the angular +2,000 kg mineralized boulder averaging 17% Zn.

RECOMMENDATIONS

Continued work is required on the Tuzex Claims to consist of expanded enzyme leach surveys, rock sampling of the Flora Deformation Zone, and prospecting/ trenching to locate the source of the 17% zinc boulder.

Prepared by

H. Wahl, P.Eng. B.C.

STATEMENT OF COSTS

Work on the Tuzex Project was performed by:
H.J. Wahl, P.Eng. B.C.
RR#10, 1416 Ocean Beach Esplanade,
Gibsons, B.C. VON 1V3

and

Varoslav Ruza
#508-1415 St. Georges St.,
North Vancouver, B.C. V7L 4R9

H.J. Wahl, field work, 4 days @ $600/day		$2,400.00
H.J. Wahl, reporting, 4 days @ $400/day		$1,600.00
J. Ruza, field work including prospecting, 4 days @$300/day		1,200.00
	Sub Total:	$5,200.00
Field Vehicle, 2001 Cummins Dodge Quad Cab 4x4 @ $140/day, 4 days		560.00
Travel Expense		537.63
Maps, prints, copying charges		164.24
Postage, freight, communications		26.31
Field equipment and supplies		53.68
Permits, fees and licenses		165.52
Assaying charges including EZL Consultants Report		2,086.92
Secretarial		200.00
	Sub Total:	$3,794.30
	Grand Total:	**$8,994.30**

Certified True and Correct
H.J. Wahl, P.Eng. B.C.

REFERENCES

1) Osborne, W.W, *Geological Report on the Little Nitinat Area*, Noranda Exploration Co., 06 Oct. 1972 (un-catalogued file B.C.D.M. Victoria, B.C.

2) Osborne, W.W., *Supplement to the 1972 Report on the Little Nitinat Property,* Noranda Exploration Co., 31 May 1973 (as above)

3) Noel, G.A., P.Eng., *Report on the IKE Claims,* Nitinat River Area, Vancouver Island, Alberni M.D. for Admiral Energy & Resources Ltd., 10 March 1981.

4) Jones, H.M., P.Eng. *Jumbo Claim*, Nitinat River area, Vancouver Island, Alberni M.D. For Admiral Energy & Resources Ltd., 08 June 1982. AR 11, 143.

5) Chandler, T.E., *Geological, Geochemical and Geophysical Assessment Report on the Nitinat Claims, Alberni M.D.* for Falconbridge Ltd. 1985. AR 13,706.

6) Mehner, D., F.G.A.C., *Assessment Report on a VLF Geophysical Survey and Soil Geochem Sampling of the N.I. 1,2, & 3 claims for Lucky 7 Exploration Ltd.* April 1988. AR 17,406

7) Verzosa, R.S., *1989 Geochemical Survey on the Tuzex, Explor 1, and Explor II Mineral Claims, for Wellington-Young Resources*, Ar 19,849.

8) Sookochoff, L. P.Eng., *Geological Assessment Report on the Tuzex Mineral Claim,* 04 November 1996.

9) Allen, G.J., P. Geo., *Report on Geological Mapping, Prospecting and Rock and Moss Mat Sampling on the Tuzex Claim Group for Lenka Ruza*, 25 Sept. 1998.

10) Poloni, John R., P.Eng., *Report on the Diamond Drill Program (1979-80)* Summit et al claims, for Summit Pass Mining Corporation, 10 Feb 1980 AR 7731.

11) Wahl, H.J., P. Eng., *Tuzex Claims, Report of Field Work, Enzyme Leach Soils Survey and Data Compilation*, August 1999.

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

Wahl, Herb PROJECT TUZEX File # A102931
R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

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 %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm	Au* ppb
TA-1R	2.5	501	1469	99999	12.8	2	3	7849	12.78	109	<1	<4	2	63	854.6	2	3	27	10.50	.025	1	34	.85	15	.050	2.14	.029	.52	<2	5.1	3	<.5	2.5	1.3	<.5	<1	2	2	14.97	24	1	514.8
TA-1RA	2.5	902	4378	99999	17.6	1	2	6470	12.18	112	<1	<4	2	50	1247.0	4	6	24	9.43	.017	1	37	.66	13	.037	1.60	.021	.35	17	3.6	3	<.5	2.2	1.1	.6	<1	2	1	16.93	13	<1	563.0
01TX-1R	9.2	294	3592	15901	14.4	7	20	8877	7.32	52	1	<4	4	23	131.4	8	<1	158	1.76	.138	14	35	1.06	46	.368	9.15	.069	3.71	8	11.2	23	3.8	12.7	2.8	<.5	1	14	3	4.22	280	<1	118.0
01TX-2R	42.8	2606	30731	55005	158.1	9	16	2632	12.15	135	<1	<4	2	15	352.2	39	<1	107	.29	.085	4	65	.48	8	.216	5.75	.043	2.23	10	6.6	14	1.7	4.7	<.2	.6	1	9	1	11.66	141	<1	1601.8
01TX-3R	31.6	1000	24025	50263	104.4	7	17	4098	10.14	187	1	<4	3	29	353.2	24	<1	128	1.01	.104	10	43	.83	17	.296	7.37	.160	2.66	16	10.0	19	2.0	9.0	1.3	<.5	1	10	2	7.82	170	<1	1176.2
ML-200	4.5	170	374	3212	2.2	14	19	2244	5.31	19	2	<4	4	478	25.7	<1	2	224	3.20	.096	15	57	3.00	178	.358	10.21	3.210	1.65	<2	6.8	30	3.1	10.7	2.3	<.5	1	20	7	1.79	65	<1	61.3
MLHG	9.0	5456	28003	99999	278.4	<1	<1	3454	13.79	186	<1	<4	1	18	1609.5	124	1	21	.07	.010	<1	29	.18	4	.029	1.03	.019	.27	2	1.2	4	4.4	1.6	<.2	.6	<1	2	<1	24.09	12	<1	2685.5
RE MLHG	9.1	5314	29303	99999	273.8	<1	<1	3384	13.44	160	<1	<4	1	21	1601.1	120	1	18	.07	.012	<1	32	.17	187	.027	1.00	.010	.25	16	1.6	4	5.6	1.6	<.2	.7	<1	2	<1	23.33	12	<1	2617.6
STANDARD CT3/DS3	26.1	63	44	186	6.0	39	13	1076	4.42	60	24	<4	28	243	21.9	22	21	141	1.56	.109	28	284	.97	1090	.375	7.12	1.929	1.96	28	41.4	41	21.3	11.9	18.5	<.5	5	10	34	.04	73	<1	22.2
STANDARD G-2	1.7	3	18	53	<.2	7	5	900	3.06	4	4	<4	9	863	<.2	<1	<1	58	3.32	.107	30	117	.81	1135	.267	8.63	2.919	3.31	<2	7.2	47	1.4	14.1	19.2	<.5	3	6	32	<.02	155	<1	-

GROUP 1EX - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: ROCK R150 60C AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 GM)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 29 2001 DATE REPORT MAILED: Sept 10/01 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ASSAY RECOMMENDED for Zn > 1%
Pb > 5000 ppm
Ag > 30 ppm

Data N FA ____

APPENDIX - 1

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

Wahl, Herb PROJECT TUZEX File # A102931R
R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

SAMPLE#	PB %	ZN %	Ag** gm/mt	Au** gm/mt
TA-1R	-	12.07	-	-
TA-1RA	-	17.92	-	-
01TX-1R	.31	1.72	19.8	.10
01TX-2R	7.40	5.11	151.6	1.89
01TX-3R	2.26	4.75	103.9	1.35
MLHG	14.59	24.22	248.6	2.92
RE MLHG	14.53	24.35	254.3	2.81
STANDARD R-1	1.21	2.26	-	-
STANDARD PBC-1	28.75	1.59	-	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: ROCK PULP AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 20 2001 **DATE REPORT MAILED:** Oct 9/01 **SIGNED BY.** C. Leong .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data A FA ___

APPENDIX-1

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

Wahl, Herb PROJECT TUZEX File # A102931R
R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

SAMPLE#	PB %	ZN %	Ag** gm/mt	Au** gm/mt
TA-1R	-	12.07	-	-
TA-1RA	-	17.92	-	-
01TX-1R	.31	1.72	19.8	.10
01TX-2R	7.40	5.11	151.6	1.89
01TX-3R	2.26	4.75	103.9	1.35
MLHG	14.59	24.22	248.6	2.92
RE MLHG	14.53	24.35	254.3	2.81
STANDARD R-1	1.21	2.26	-	-
STANDARD PBC-1	28.75	1.59	-	-

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
- SAMPLE TYPE: ROCK PULP AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 20 2001 **DATE REPORT MAILED:** Oct 9/01 **SIGNED BY** C. Leong .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data A FA

APPENDIX-1

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

Wahl, Herb PROJECT TUZEX File # A102932
R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

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 %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm	Au* ppb
TBC-1	2.3	66	94	106	.6	6	9	644	5.22	17	2	<4	3	181	.7	1	<1	159	1.18	.086	10	32	.74	296	.436	8.25	1.897	.63	<2	30.3	19	.5	8.9	4.7	<.5	1	15	7	.11	10	<1	29.2
TBC-2	2.9	368	144	125	.3	10	29	1732	8.34	47	2	<4	5	202	.9	<1	<1	134	1.16	.160	16	29	1.17	435	.359	7.66	1.879	1.27	2	24.1	45	1.4	12.2	4.4	<.5	1	16	5	.06	36	<1	109.5
TBC-3	41.4	1868	67	121	.8	5	55	1244	23.44	98	<1	<4	9	106	1.6	<1	9	97	.17	.473	<1	33	.79	406	.272	6.83	.966	1.53	3	19.1	80	<.5	15.1	8.2	1.7	2	13	2	.20	57	3	194.9
TBC-4	10.5	298	526	186	1.4	7	25	1621	8.81	51	2	<4	5	171	1.3	3	<1	147	1.06	.179	16	34	.99	308	.407	8.45	1.633	.88	<2	27.2	38	2.5	13.5	4.9	.5	1	18	5	.08	26	<1	295.8
TBC-5	17.9	369	467	235	.6	9	23	1270	9.13	111	2	<4	5	184	1.3	2	<1	154	1.21	.169	20	31	1.15	330	.407	8.71	1.625	.88	<2	28.1	43	<.5	16.6	5.3	<.5	1	18	4	.09	25	<1	85.8
TBC-6	17.5	391	10698	5767	31.5	6	29	4144	9.30	190	2	<4	5	223	37.3	9	<1	148	1.30	.131	13	28	1.05	495	.365	8.41	1.704	1.19	<2	24.1	39	<.5	14.3	3.8	.8	1	18	4	.63	47	<1	240.4
TBC-7	8.5	226	1546	406	2.7	7	28	3259	8.30	84	2	<4	5	184	2.7	<1	<1	148	1.17	.173	20	28	1.12	459	.414	8.58	1.668	1.33	2	28.0	49	<.5	14.4	4.8	<.5	1	19	4	.12	48	1	105.2
TBC-8	5.5	604	88	204	1.5	14	44	6876	11.29	68	2	<4	5	201	4.6	<1	<1	135	1.25	.167	11	27	1.03	525	.364	7.94	1.851	1.14	2	26.2	51	1.5	17.3	5.1	1.4	1	18	4	.08	38	1	79.0
RE TBC-8	6.2	596	85	199	.8	14	43	6732	11.08	67	2	<4	5	201	4.4	<1	<1	135	1.23	.166	13	26	1.01	527	.366	7.82	1.836	1.17	2	26.6	53	.5	17.4	5.3	.9	1	18	3	.09	39	1	77.0
TBC-9	1.5	94	59	178	.2	11	15	1128	4.93	16	2	<4	4	246	1.1	<1	<1	161	1.91	.105	15	33	1.25	411	.418	7.90	2.269	.95	<2	30.3	29	1.8	15.5	4.9	<.5	1	18	4	.03	22	<1	54.0
TBC-10	3.9	101	32	133	.3	10	16	1000	5.79	16	2	<4	5	193	.9	<1	<1	175	1.34	.152	18	37	1.04	354	.457	8.31	1.877	.86	2	31.3	37	1.8	28.5	5.0	<.5	1	19	4	.06	16	<1	74.8
TBC-11	4.5	99	30	131	.2	11	17	1051	6.44	15	2	<4	4	198	.8	<1	<1	192	1.31	.156	19	41	1.01	360	.479	8.38	1.810	.89	<2	30.7	39	2.3	30.8	5.7	<.5	1	19	5	.06	17	<1	67.7
TBC-12	1.7	66	37	99	<.2	8	11	650	4.55	9	2	<4	4	211	.6	<1	<1	148	1.58	.092	18	31	.98	363	.424	7.40	2.124	.81	<2	28.2	29	1.4	13.3	5.2	<.5	1	15	4	.04	17	<1	48.7
TBC-13	2.1	84	37	89	<.2	9	11	718	5.07	16	2	<4	4	249	.4	<1	<1	152	1.75	.094	17	30	1.05	394	.417	7.78	2.339	.91	<2	26.9	28	<.5	14.9	4.8	<.5	1	16	4	.05	20	<1	25.5
TBC-14	.8	78	27	125	<.2	9	15	1071	5.12	13	2	<4	5	280	.7	<1	<1	173	2.16	.113	18	34	1.19	399	.448	8.46	2.545	.90	<2	29.1	31	<.5	16.7	5.0	<.5	1	19	4	.03	18	<1	34.6
TBC-15	1.0	72	27	105	<.2	9	15	1009	4.95	14	2	<4	4	267	.6	<1	<1	166	2.09	.110	20	34	1.14	393	.437	8.11	2.459	.87	2	28.7	32	.6	16.3	5.6	<.5	1	18	3	.03	18	<1	42.5
TBC-16	1.1	67	20	82	.2	10	13	852	4.50	6	2	<4	4	266	.6	<1	<1	156	1.97	.113	14	37	1.12	388	.447	7.80	2.544	.84	<2	30.8	27	3.7	14.1	5.0	<.5	1	19	4	.06	17	1	35.9
STANDARD CT3/DS3	27.2	67	40	185	5.9	40	13	1029	4.32	59	21	<4	27	230	25.7	21	23	143	1.57	.099	25	286	.95	1070	.398	7.23	1.907	1.93	30	44.2	38	20.6	11.8	17.1	<.5	5	11	32	.02	71	<1	22.0
STANDARD G-2	1.6	3	23	53	<.2	8	5	848	2.94	<2	4	<4	8	786	.7	<1	<1	57	3.23	.095	23	99	.76	1096	.261	8.82	2.847	3.10	2	7.5	36	2.3	13.6	19.6	.8	3	7	37	<.02	143	<1	<.2

GROUP 1EX - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: SOIL SS80 60C AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 GM)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 29 2001 **DATE REPORT MAILED:** Sept 11/01 **SIGNED BY:** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA

APPENDIX-1

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

Wahl, Herb PROJECT TUZEX File # A102933
R.R. 10, 1416 Ocean Beach, Gibson BC V0N 1V3 Submitted by: Herb Wahl

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 %	Al %	Na %	K %	W ppm	Zr ppm	Ce ppm	Sn ppm	Y ppm	Nb ppm	Ta ppm	Be ppm	Sc ppm	Li ppm	S %	Rb ppm	Hf ppm	Au* ppb
TD 275N	<.5	25	7	32	<.2	6	8	621	3.14	2	2	<4	4	288	.5	<1	<1	109	2.34	.065	21	22	.71	426	.357	6.66	2.921	.79	<2	23.1	31	2.0	14.3	4.5	<.5	1	13	2	.04	14	<1	6.5
RE TD 275N	<.5	24	7	34	<.2	6	8	614	3.11	3	2	<4	4	285	.3	<1	<1	105	2.30	.066	20	23	.70	423	.360	6.52	2.910	.79	<2	24.6	28	<.5	13.5	5.0	<.5	1	13	3	.05	14	<1	2.2

GROUP 1EX - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: SILT SS80 60C AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 GM)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 29 2001 **DATE REPORT MAILED:** Sept 11/01 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

APPENDIX-1

APPENDIX - 2

Quality Analysis... Actlabs Innovative Technologies

Invoice No.: 22779
Work Order: 23029
Invoice Date: 21-SEP-01
Date Submitted: 06-SEP-01
Your Reference: A102934
Account Number: 477

ACME ANALYTICAL LABORATORIES LTD
852 EAST HASTINGS
VANCOUVER, B.C.
V6A 1R6
ATT: CLARENCE LEONG

CERTIFICATE OF ANALYSIS

23 SOILS were submitted for analysis.

The following analytical packages were requested. Please see our current fee schedule for elements and detection limits.

REPORT 22779 RPT.XLS CODE 7-ENZYME LEACH ICP/MS(ENZYME.REV1)

CERTIFIED BY :

DR E.HOFFMAN/GENERAL MANAGER

ACTIVATION LABORATORIES LTD.
1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL ancaster@actlabs.com ACTLABS GROUP WEBSITE http://www.actlabs.com

Enzyme Leach Job #: 23029 Report#: 22779 **Customer: Acme** **Customer's Job #:A102934**

Trace element values are in parts per billion. Negative values equal NOT DETECTED at that lower limit. Elements arranged by suite and by atomic mass.
Values = 999999 are greater than the working range of the instrument. S.Q. = That element is determined SEMIQUANTITATIVELY.

Regular Package:	***Oxidation Suite:***															***Base Metals:***					***Base Metal - Chalcophile Association Indicators:***								***High-Field St***	
Sample ID:	S.Q. Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	S.Q. Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	S.Q. Ti	S.Q. Cr
TA 0+50	37900	235	69	33	42	-5	15	1.1	-1	1	0.01	-0.05	-1	1.0	0.2	177	21	223	12500	36	1	-0.5	-0.2	177.0	0.9	-0.8	0.9	-0.8	342	-20
TA 0+100	28500	722	204	50	1	7	3	0.2	-1	-1	0.01	-0.05	-1	0.4	0.4	14	15	26	168	7	-1	-0.5	-0.2	5.6	-0.1	-0.8	0.3	-0.8	165	-20
TA 0+150	80700	1200	200	56	4	20	3	0.4	-1	-1	0.02	-0.05	-1	0.6	0.6	15	14	33	196	14	-1	-0.5	-0.2	7.7	-0.1	-0.8	0.5	-0.8	410	-20
TA 0+200	51600	1570	229	41	2	7	2	0.3	-1	-1	0.01	-0.05	-1	0.2	0.4	21	7	22	110	21	-1	-0.5	-0.2	6.2	-0.1	-0.8	0.3	-0.8	-100	-20
TA 0+250	15600	549	196	21	2	-5	2	0.4	-1	-1	0.05	-0.05	-1	0.4	0.4	271	16	75	92	7	2	-0.5	-0.2	6.5	-0.1	-0.8	1.3	-0.8	259	-20
TA 0+300	186000	375	119	109	15	7	13	0.9	-1	-1	0.02	-0.05	-1	1.0	0.4	90	30	128	401	8	1	0.7	-0.2	6.1	-0.1	-0.8	0.6	-0.8	624	-20
TA 0+350	16500	277	66	52	3	-5	4	0.4	-1	-1	-0.01	-0.05	-1	0.3	0.4	84	22	135	227	6	-1	-0.5	-0.2	7.9	-0.1	-0.8	0.6	-0.8	414	-20
TA 0+400	26300	576	50	68	3	-5	4	0.3	-1	-1	-0.01	-0.05	-1	0.3	0.3	106	17	46	205	14	-1	0.9	-0.2	19.4	-0.1	-0.8	0.9	-0.8	281	-20
TA 0+450	38200	1000	185	69	3	10	2	0.4	-1	-1	0.02	-0.05	-1	0.7	0.7	20	20	59	291	8	-1	-0.5	-0.2	9.3	-0.1	-0.8	0.6	-0.8	378	-20
TA 0+500	22500	553	200	12	9	-5	5	0.6	-1	-1	0.02	-0.05	-1	1.3	0.8	105	26	231	2310	165	-1	-0.5	-0.2	27.5	-0.1	-0.8	0.7	-0.8	256	-20
TA 0+550	32300	143	72	26	139	-5	12	1.3	-1	1	-0.01	-0.05	-1	0.5	0.3	101	31	257	1010	29	-1	-0.5	-0.2	14.5	-0.1	-0.8	0.5	-0.8	192	-20
TA 0+5850	34800	403	225	118	7	10	4	1.0	-1	-1	-0.01	-0.05	-1	2.4	0.3	19	28	32	456	9	2	-0.5	-0.2	4.7	-0.1	-0.8	0.1	-0.8	720	-20
TC 0+50	24600	1000	256	35	4	20	1	0.6	-1	-1	0.03	-0.05	-1	0.9	0.6	36	32	54	484	19	-1	-0.5	-0.2	16.7	-0.1	-0.8	1.2	-0.8	406	-20
TC 0+100	40900	1510	361	30	9	30	1	0.6	-1	-1	0.01	-0.05	-1	1.0	0.8	14	24	36	158	10	-1	-0.5	-0.2	3.9	-0.1	-0.8	0.5	-0.8	457	-20
TC 0+150	18800	1440	206	17	3	12	2	0.4	-1	-1	-0.01	-0.05	-1	0.5	0.8	34	15	39	191	11	-1	-0.5	-0.2	8.2	-0.1	-0.8	1.1	-0.8	486	-20
TC 0+200	12100	826	180	52	2	-5	1	0.2	-1	-1	-0.01	-0.05	-1	0.2	0.3	6	4	19	23	5	-1	-0.5	-0.2	1.5	-0.1	-0.8	0.4	-0.8	188	-20
TD 0+00	18600	976	260	24	4	10	-1	0.3	-1	-1	0.01	-0.05	-1	1.1	0.4	14	14	23	181	3	-1	-0.5	-0.2	2.5	-0.1	-0.8	0.6	-0.8	415	-20
TD 0+50N	18200	680	244	27	3	13	-1	0.4	-1	-1	-0.01	-0.05	-1	1.4	0.8	7	17	19	142	7	1	-0.5	-0.2	4.1	-0.1	-0.8	0.5	-0.8	325	-20
TD 0+100N	24800	1670	381	14	3	21	-1	0.4	-1	-1	0.02	-0.05	-1	1.3	0.8	8	24	18	123	4	-1	-0.5	-0.2	5.4	-0.1	-0.8	0.2	-0.8	432	-20
TD 0+150N	27700	1910	309	31	3	21	3	0.4	-1	-1	0.02	-0.05	-1	1.2	1.8	15	43	18	152	2	3	-0.5	-0.2	7.7	-0.1	-0.8	0.3	-0.8	2680	-20
TD 0+200N	22000	841	225	36	8	11	4	0.7	-1	-1	-0.01	-0.05	-1	0.9	0.8	73	23	111	702	11	2	-0.5	-0.2	6.2	-0.1	-0.8	0.5	-0.8	559	-20
TD 0+250N	20200	1570	252	59	2	9	-1	0.3	-1	-1	0.02	-0.05	-1	0.5	0.6	16	9	45	76	3	-1	-0.5	-0.2	3.1	-0.1	-0.8	0.4	-0.8	499	-20
TD 0+283N	12800	1250	266	56	3	7	1	0.5	-1	-1	-0.01	-0.05	-1	0.9	0.9	61	28	80	183	6	2	-0.5	-0.2	9.4	-0.1	-0.8	0.5	-0.8	865	23

Certified By:

D. D'Anna, Dipl. T.
ICPMS Technical Manager, Activation Laboratories Ltd.

Date Received: 6-Sep-01

Date Reported: 21-Sep-01

APPENDIX -2

Enzyme Leach Job #: 23029 Rep

Trace element values are in parts per

Values = 999999 are greater than the

Regular Package:	***trength Elements:***					***Rare Earth Elements:***													***Lithophile Elements:***									***P.G.E.s:***			
Sample ID:	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	S.Q. Li	Be	S.Q. Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
TA 0+50	13.5	3	2	-0.1	0.1	1.8	4.1	0.8	4.3	1.4	0.8	1.5	0.3	1.6	0.4	1.3	0.2	1.6	0.3	11	-2	-100	15100	48	335	0.5	498	-1	-1	-1	-1
TA 0+100	5.1	6	1	0.2	-0.1	1.5	3.1	0.6	3.2	0.7	0.3	0.7	0.2	1.0	0.2	0.6	-0.1	0.7	-0.1	2	-2	-100	3690	68	160	0.2	302	-1	-1	-1	-1
TA 0+150	5.8	8	1	0.2	-0.1	2.9	6.0	0.9	4.3	1.2	0.4	1.1	0.2	1.2	0.2	0.7	-0.1	0.6	-0.1	-2	-2	-100	9000	58	147	0.1	282	-1	-1	-1	-1
TA 0+200	18.1	5	-1	0.1	-0.1	3.5	3.9	2.0	11.6	3.1	0.8	2.8	0.5	3.1	0.8	2.5	0.4	2.5	0.4	-2	-2	-100	6290	42	92	0.2	314	-1	-1	-1	-1
TA 0+250	14.3	6	1	0.1	-0.1	4.8	35.9	2.2	11.1	3.2	0.8	3.1	0.5	3.1	0.6	1.7	0.2	1.7	0.2	-2	-2	-100	99600	63	234	0.4	730	-1	-1	-1	-1
TA 0+300	16.8	6	2	0.2	0.1	8.0	17.5	2.8	12.6	3.1	0.9	3.0	0.5	2.7	0.6	1.8	0.2	1.4	0.2	5	-2	-100	15600	69	298	0.2	589	-1	-1	-1	-1
TA 0+350	12.3	4	1	-0.1	-0.1	5.0	10.2	1.7	8.7	2.1	0.6	2.0	0.3	1.8	0.4	1.2	0.2	1.0	0.1	3	-2	-100	10600	58	208	0.4	740	-1	-1	-1	-1
TA 0+400	37.0	2	1	-0.1	-0.1	14.7	21.7	4.4	22.7	5.0	1.2	4.9	0.8	4.6	1.1	3.4	0.5	2.9	0.4	-2	-2	-100	25200	69	240	0.2	892	-1	-1	-1	-1
TA 0+450	13.4	8	1	0.2	-0.1	5.9	11.5	2.4	11.5	2.8	0.7	2.5	0.4	2.6	0.5	1.5	0.2	1.3	0.2	-2	-2	-100	5270	72	150	0.3	344	-1	-1	-1	-1
TA 0+500	16.5	5	-1	0.2	-0.1	11.4	25.3	3.9	18.1	4.8	1.4	3.9	0.6	3.4	0.7	2.1	0.2	1.9	0.2	5	-2	-100	18000	65	120	0.2	250	-1	-1	-1	-1
TA 0+550	8.3	2	1	-0.1	-0.1	3.0	6.8	1.0	5.2	1.3	0.6	1.3	0.2	1.3	0.2	0.8	0.1	0.7	0.1	5	-2	-100	6500	34	323	0.3	571	-1	-1	-1	-1
TA 0+5850	3.0	7	1	0.2	-0.1	1.6	3.6	0.5	2.4	0.7	0.2	0.5	0.1	0.6	0.1	0.3	-0.1	0.4	-0.1	8	-2	-100	1390	13	251	-0.1	210	-1	-1	-1	-1
TC 0+50	6.1	10	-1	0.2	-0.1	2.7	7.4	1.1	5.2	1.5	0.5	1.3	0.3	1.4	0.3	0.8	0.1	0.8	0.1	-2	-2	-100	7600	73	142	0.2	352	-1	-1	-1	-1
TC 0+100	6.2	10	-1	0.3	-0.1	3.7	7.7	1.1	6.7	1.4	0.4	1.3	0.2	1.4	0.3	0.7	0.1	0.7	-0.1	-2	-2	-100	2780	68	315	0.2	216	-1	-1	-1	-1
TC 0+150	8.0	5	-1	0.1	-0.1	4.4	7.8	1.5	7.0	1.7	0.6	1.7	0.3	1.7	0.3	0.9	0.1	0.8	-0.1	-2	-2	-100	6630	120	171	0.5	286	-1	-1	-1	-1
TC 0+200	7.1	3	-1	-0.1	-0.1	3.7	7.5	1.4	7.3	1.9	0.5	1.7	0.3	1.7	0.3	1.0	0.1	1.0	0.1	-2	-2	-100	2560	61	136	0.2	202	-1	-1	-1	-1
TD 0+00	3.6	9	-1	0.2	-0.1	2.4	6.5	0.9	4.2	1.2	0.3	0.9	0.2	0.9	0.2	0.6	-0.1	0.6	-0.1	4	-2	-100	1640	52	192	0.3	209	-1	-1	-1	-1
TD 0+50N	5.2	6	-1	0.2	-0.1	4.4	9.8	1.5	5.5	1.4	0.4	1.2	0.2	1.4	0.2	0.7	0.1	0.5	-0.1	-2	-2	-100	1290	78	246	0.2	289	-1	-1	-1	-1
TD 0+100N	5.0	13	-1	0.3	-0.1	3.9	8.1	1.1	4.7	1.4	0.4	1.1	0.2	1.3	0.2	0.6	-0.1	0.6	-0.1	3	-2	-100	985	50	343	0.1	269	-1	-1	-1	-1
TD 0+150N	22.5	13	1	0.4	-0.1	14.5	14.8	3.6	17.4	4.4	1.4	4.6	0.9	4.5	0.9	2.1	0.3	1.6	0.2	-2	-2	-100	1420	85	238	0.1	383	-1	-1	-1	-1
TD 0+200N	10.1	9	-1	0.2	-0.1	4.5	11.3	1.6	7.4	2.1	0.6	1.8	0.3	1.9	0.4	1.2	0.2	1.2	0.2	4	-2	-100	11100	67	219	0.1	552	-1	-1	-1	-1
TD 0+250N	11.1	11	-1	0.3	-0.1	4.2	11.0	1.9	8.8	2.5	0.6	2.4	0.4	2.5	0.5	1.6	0.2	1.4	0.2	-2	-2	-100	2070	92	130	0.3	276	-1	-1	-1	-1
TD 0+283N	12.8	15	2	0.5	-0.1	5.5	12.6	1.9	9.8	2.5	0.7	2.3	0.5	2.9	0.6	1.6	0.2	1.4	0.2	-2	-2	-100	12000	79	164	0.2	458	-1	-1	-1	-1

APPENDIX-2

APPENDIX - 3

TUZEX PROJECT
23-26 August 2001
Rock Sample Descriptions

TA-1R, 1RA Line TA @ 500 N. ≈2,000 kg. sharp-edge boulder. Grey quartz, minor patchy calamine stain, irregular areas mauve-colored Qtz to 1-2 cm, 5-15% disseminated and aggregates Py, 1-10% dism and aggregate ZnS, scattered traces PbS, trace dism. Cpy. Secondary veining is 0.5-2.0 cm thick also carrying PbS, ZnS. Rock is nearly total silica, non-magnetic.

01TX-1R Original boulder showing. New find (15-20 kg angular boulder) Very fine-grained grey silica alteration rock, 10-15% Py, 1-2% dissm. PbS ZnS. Secondary 3-5 mm QVs with scattered lean PbS ZnS.

01TX-2R '197' showing. Grabs from 35-40 cm thick QV, massive PbS ZnS.

01TX-3R '197' showing. Chips over 3 m.

ML-200 By hydro pole #200, oxidized shear zone 1-5% dism. ZnS as dissems and micro stringers in grey Qtz.

MLHG *Selected higrade picks from 40 cm massive sulphide zone.*

APPENDIX - 4

Interpretation of Enzyme Leach[SM] Data for the Herb Wahl Tuzex Project

by: Gregory T. Hill, Enzyme Laboratories, Inc.

7 November 2001

Summary

An oxidation anomaly has been identified beneath Line TA-TD and is centered at samples TA 0+3-00 to TA 0+350. This anomaly is defined by zoned oxidation suite and lithophile element patterns. Copper and zinc are enriched within the oxidation anomaly suggesting the presence of these metals in the subsurface. An oxidation anomaly corresponding with the massive sulfide zone near the southern end of Line TA-TD was not identified. This is probably because the present sample distribution does not extend far enough to the south to detect the southern portion of the anomaly that should be associated with this massive sulfide zone. Peaks in several elements near the northern margin of this massive sulfide zone suggest that an oxidation halo is associated with this mineralization. An expanded soil sampling and Enzyme Leach[SM] program at Tuzex is recommended.

Introduction

Data were generated by Enzyme Leach[SM] analysis for twenty-three *B*-horizon soil samples collected by H. Wahl along three roughly north-trending traverses, Lines TA, TC, and TD, on the Tuzex property (Figure 1). The majority of soil samples comprise glacial drift which occurs as a thin cover throughout most of the sampled area. The Line TA, TC, and TD soil traverses lay between Lines 57A and TX which were sampled in 1999. The Enzyme Leach[SM] results from Lines 57A and TX are discussed in a 12 November 1999 report by this author.

Interpretation

Data from the three sample lines (TA, TC, and TD) that comprise this soil survey were profiled for each detected element, and these profiles were viewed and compared as a means of interpreting these geochemical results. Lines TA and TD were combined because they form a continuous line of samples. Therefore, two sets of profiles have been produced, one for Lines TA and TD and another for Line TC. In order to facilitate the comparison and assessment of the profiles, each element was plotted relative to a standardized Y-axis for all three sample traverses. Thus, the traverse with the highest values for each element dictated the upper limit of

the Y-axis. For almost all elements, the maximum values were measured along Lines TA and TD.

An oxidation anomaly is present along Lines TA, TC, and TD (Figure 2). However, it is difficult to define because of the distribution of samples along essentially a single sample Line TA-TD. In the cases of several oxidation suite elements such as Th and U, the halos span the entire length of the sample line and appear to extend beyond the limits of the Line TA-TD sampling. While some oxidation suite elements, such as Th and U form broad halos that bracket a broad zone, roughly 700-800 m wide, other oxidation suite elements form narrower halos internal to these. Tungsten, Sb, Mo and As form 500 m wide halos and I and Br form the narrowest halos, about 250 m in width. A few of the oxidation suite elements mentioned above form nested halos. Of these, the iodine pattern is most recognizable as a nested halo. All of the halos discussed above are centered at about 600N (TA 0+300 to TA 0+ 350). Strontium, titanium, and nickel are depleted near the southern margin of the 250 m wide iodine central low, further establishing the presence of an oxidation anomaly in this area. Depletion zones typically occur at the edges of central lows in halos above mineralization.

Copper is also distributed into an oxidation halo that corresponds with the W, Sb, Mo, and As halo. But the Cu pattern varies from these elements because Cu also forms an apical high within the central low at TA 0+300 to TA 0+ 350. Barium, germanium, and niobium also form apical highs here, probably in response to alteration in the subsurface.

The REE appear to form halos centered between 300-400 N. These elements often form halos that are displaced from the oxidation suite halos. In many studies, the REE halos appear to indicate certain intrusive or extrusive units. At Tuzex, a distinct igneous unit may underlie the REE central low. The southern margin of the REE central low coincides with peaks in several elements including Zn and Cu (Figure 3). These highs suggest a fault in the subsurface at about 300N.

In order to make the fullest use of these data, the 1999 Tuzex Enzyme Leach^{SM} results were compiled and compared with the new data. Variations in parameters such as the sampled soil horizon, date of sampling, weather conditions, and other factors could influence the differences noted between the two data sets. However, based on the spatial distribution of the observed anomalies at Tuzex, this does not appear to be a problem for most elements.

Figure 4 illustrates the distributions of the lithophile elements and some base metals. This figure suggests that rubidium is enriched along Line TX and strontium is more enriched on Line TA-TD. These lithophile element anomalies may reflect alteration zones in the subsurface. Perhaps more important are the copper and zinc highs that occur along Line TA-TD. These highs are of much greater contrast than any other Cu and Zn Enzyme Leach^{SM} highs found to date at Tuzex. They occur among strong Ba, Sr, and Li highs. Close inspection of Zn and Cu, along with Mn and Br indicate that these metals have been mobilized by the oxidation cell beneath Line TA-TD (Figure 3). Copper forms an apical high at TA 0+300 to TA 0+ 350 and Br, Zn, and Mn form central lows here. The Mn halo is relatively narrow, Br forms a slightly wider halo, and Cu and Zn form the widest halos (approximately 400 m wide).

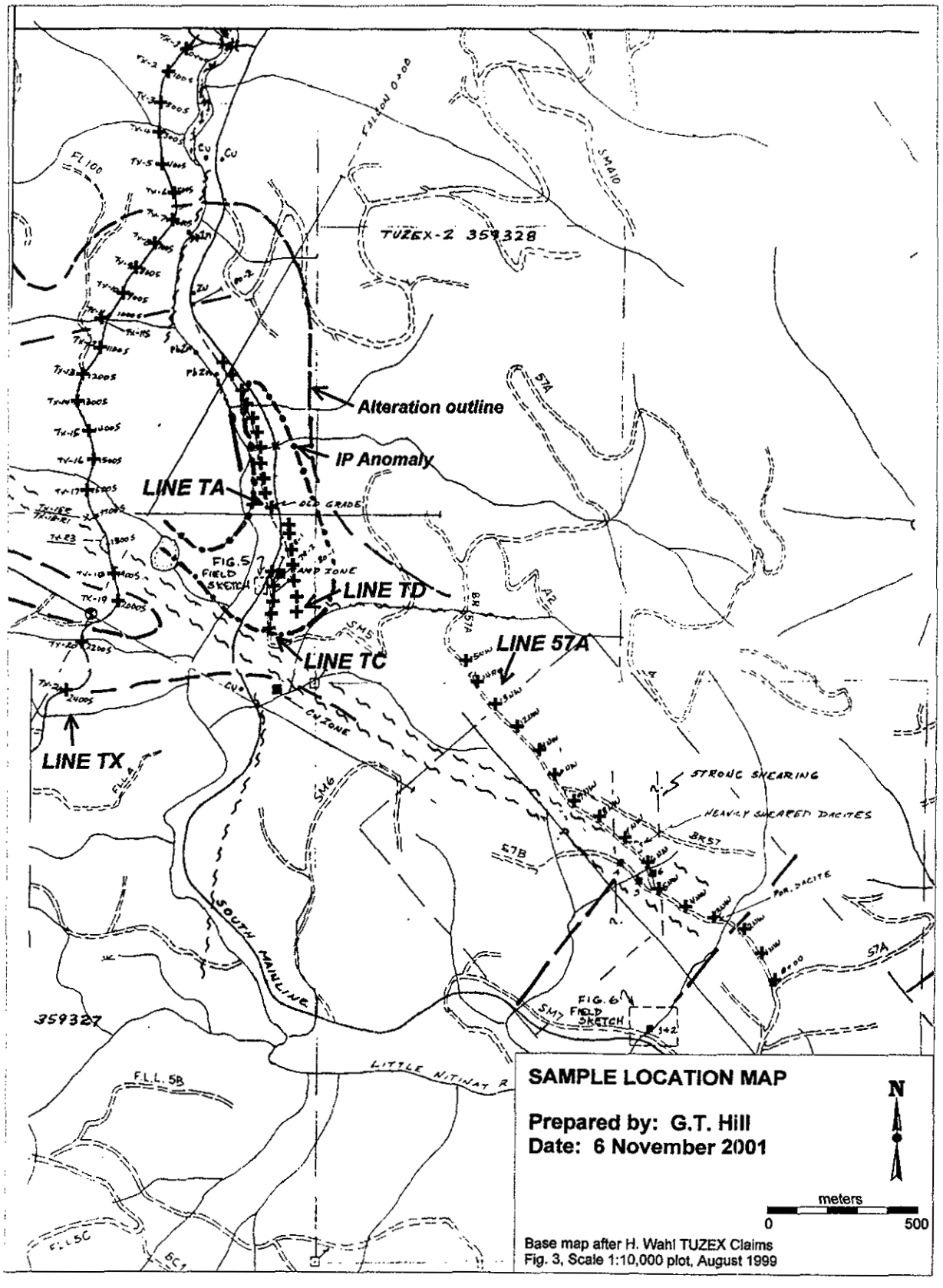


Figure 1. Sample location map showing 1999 samples (Lines TX and 57A) and 2001 samples (Lines TA, TC, and TD).

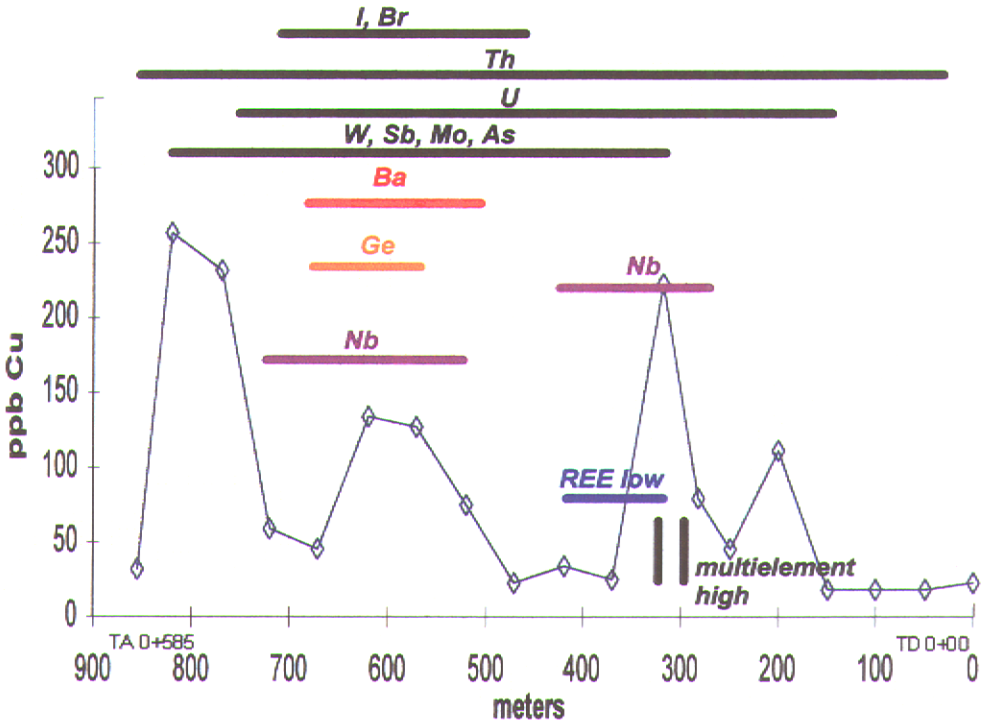


Figure 2. Summary diagram of Line TA-TD traverse overlaid on Cu distribution. Positions of oxidation suite anomalies (black) and anomalies formed by other elements with distinctive patterns are shown (colors).

Conclusions and Recommendations

An oxidation anomaly is present beneath Line TA-TD and is centered at samples TA 0+3-00 to TA 0+350. The oxidation suite elements are distributed into halos of varying dimensions and commodity metals such as Cu and Zn are also enriched within the oxidation anomaly. Although an oxidation anomaly has been detected, the current sample distribution does not allow for a comprehensive understanding of the surface geochemistry at Tuzex. Oxidation halos tend to be discontinuous and asymmetrical. Therefore, profiles of individual sample lines should not be over interpreted. The oxidation anomaly identified herein (centered at TA 0+3-00 to TA 0+350) occurs within an IP anomaly thus reinforcing the significance of this geochemical feature.

An oxidation anomaly corresponding with the massive sulfide zone near the southern end of Line TA-TD was not identified. It is possible that an anomaly is present but the southern portion was not detected because the sampling does not extend far enough to the south. Peaks in several

elements suggest that this may be the case. In order to gain a better understanding of the surface geochemistry, and thus the subsurface geology and mineralization, an expanded soil sampling and Enzyme Leach[SM] program is recommended.

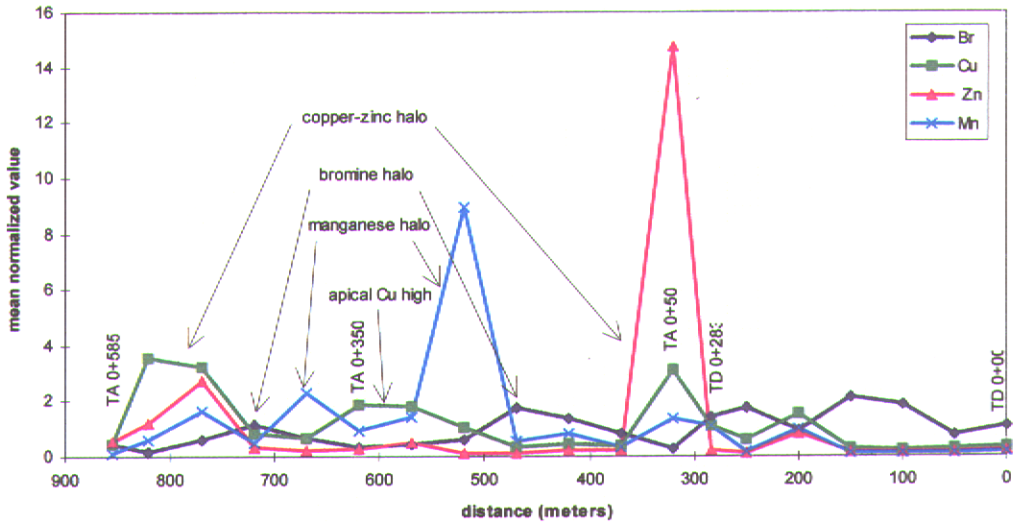


Figure 3. Profiles of bromine, copper, zinc, and manganese on Line TA-TD. These elements demonstrate zoning within an oxidation anomaly centered at about TA 0+300 to TA 0+350. The asymmetry of the Zn and Mn patterns could have a variety of causes including variations in sampled soil horizons or differences in cover thickness. Alternatively, the strong Mn and Zn peaks could indicate primary zoning of these elements in bedrock.

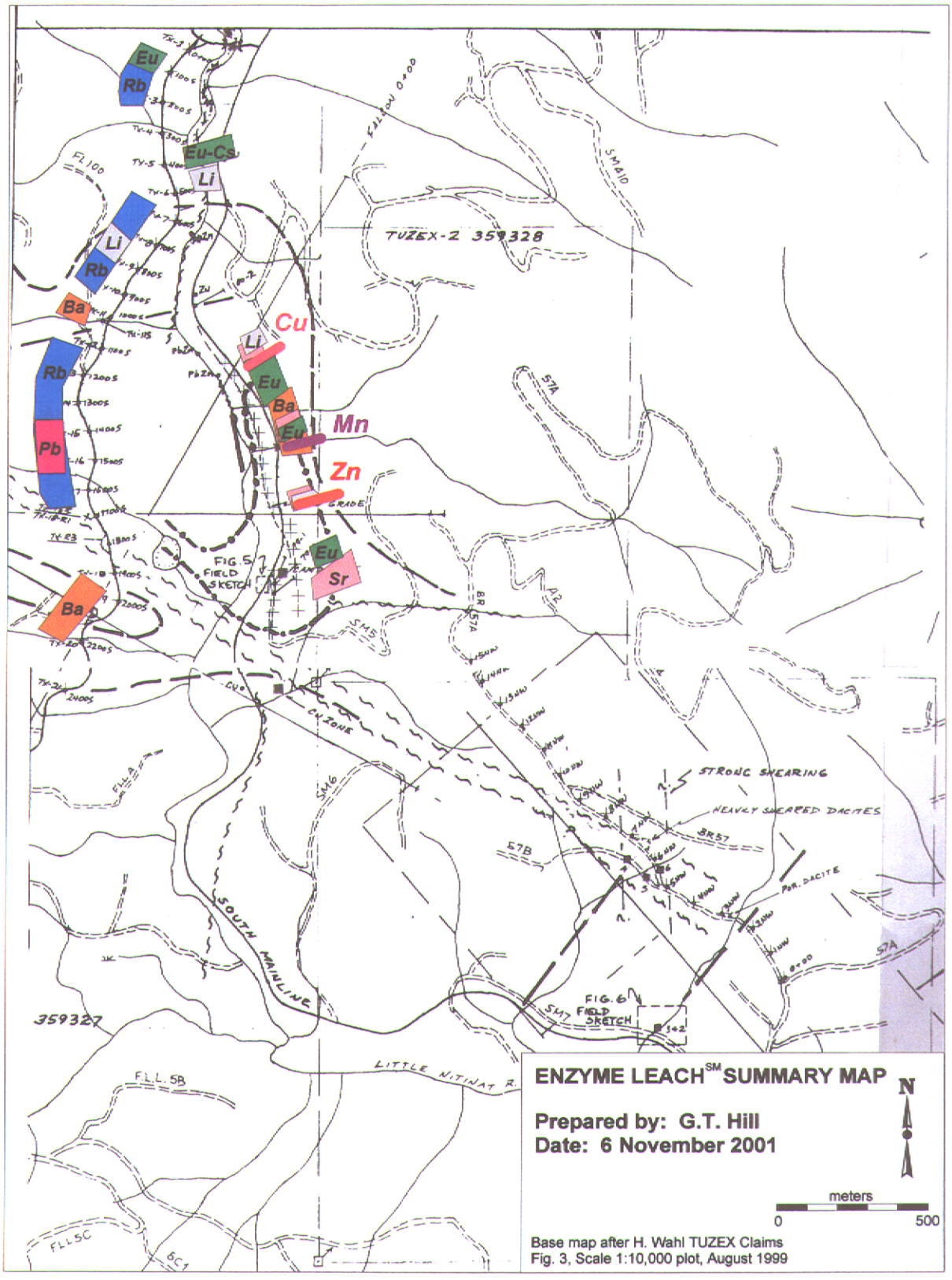


Figure 4. Summary map of lithophile element anomalies and some base metals on the Tuzex property showing that the highest lithophile element values occur in the western portion of the figure. Copper and zinc are most enriched along Lines TA-TD where these highs partially coincide with the IP anomaly defined on the base map.

Table 1. Univariate statistics generated from the Tuzex project Enzyme Leach[SM] (ICP-MS) data (Enzyme Leach[SM] job #23029, report #22779), Lines TA, TC, and TD. n/a - not applicable due to too few or no detected values. Statistics calculated after ½ detection limit values substituted for not detected values.

Element	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re
Det. Limit (ppb)	2000	5	2	1	1	5	1	0.1	1	1	0.01
Maximum	186000	1910	381	118	139	30	15	1.3	n/a	n/a	0.05
Mean	35287	925	206.7	45	12	10	3.7	0.52	n/a	n/a	0.014
Median	24800	841	206	36	3	9	2	0.4	n/a	n/a	0.01
Std. Dev.	36119.2	511.8	87.6	27.3	29	7.7	4	0.29	n/a	n/a	0.01
StdDev+Median	60919.2	1352.	293.6	63.7	32.1	16.4	6.3	0.72	n/a	n/a	0.024

Element	Au	Hg	Th	U	Co	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd
Det. Limit (ppb)	0.05	1	0.1	0.1	1	2	2	10	1	1	0.5	0.2	0.2
Maximum	n/a	n/a	2.4	1.8	271	43	257	12500	165	3	0.9	n/a	177
Mean	n/a	n/a	0.82	0.6	56.8	20.9	75.2	886.1	17.5	0.9	n/a	n/a	15.6
Median	n/a	n/a	0.9	0.6	21	21	45	191	8	1	n/a	n/a	6.5
Std. Dev.	n/a	n/a	0.51	0.34	64.7	9	72.8	2577	33.2	0.7	n/a	n/a	35.6
StdDev+Median	n/a	n/a	1.38	0.94	85.4	29.8	117.5	2768	41.6	1.2	n/a	n/a	42.1

Element	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta
Det. Limit (ppb)	0.1	0.8	0.1	0.5	100	20	0.5	1	1	0.1	0.1
Maximum	0.9	n/a	1.3	n/a	2680	23	37	15	2	0.5	n/a
Mean	n/a	n/a	0.59	n/a	495.8	n/a	11.38	7.1	n/a	0.19	n/a
Median	n/a	n/a	0.5	n/a	410	n/a	10.1	6	n/a	0.2	n/a
Std. Dev.	n/a	n/a	0.3	n/a	510.5	n/a	7.62	3.7	n/a	0.12	n/a
StdDev+Median	n/a	n/a	0.83	n/a	920.5	n/a	17.72	10.1	n/a	0.3	n/a

Element	La	Ce	Pr	Nd	Sm	Eu	Gd	Dy	Ho	Er	Tm	Yb	Lu
Det. Limit (ppb)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Maximum	14.7	35.9	4.4	22.7	5	1.4	4.9	0.9	4.6	1.1	3.4	0.5	2.9
Mean	5.1	11	1.8	8.7	2.2	0.7	2.1	0.4	2.1	0.4	1.3	0.2	1.2
Median	4.2	8.1	1.5	7.3	1.9	0.6	1.7	0.3	1.7	0.4	1.2	0.2	1
Std. Dev.	3.7	7.8	1	5.2	1.2	0.3	1.2	0.2	1.1	0.3	0.7	0.1	0.7
StdDev+Median	7.8	15.9	2.5	12.5	3.1	0.9	2.9	0.5	2.8	0.6	1.9	0.3	1.7

Element	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Det. Limit (ppb)	2	2	100	1	1	1	0.1	1	1	1	1	1
Maximum	11	n/a	n/a	99600	120	343	0.5	892	n/a	n/a	n/a	n/a
Mean	2.7	n/a	n/a	11578.9	64.5	211	0.24	400.6	n/a	n/a	n/a	n/a
Median	1	n/a	n/a	6500	67	208	0.2	314	n/a	n/a	n/a	n/a
Std. Dev.	2.6	n/a	n/a	20203.8	21	74.7	0.11	194.3	n/a	n/a	n/a	n/a
StdDev+Median	3.6	n/a	n/a	26703.8	88	282.7	0.33	508.3	n/a	n/a	n/a	n/a

TX-4 3005

QTZ. REEF

QTZ. REEF

80-2

NTS 92C-087

EZL OXIDATION ANOMALY 1999

0+58SN

TA-1R, 2R

Cu-Zn HALO

FLORA MAINLINE

OLD ROAD — BRUSHED-IN

NORANDA IP ZONE

NORANDA BL 1972

EZL OXIDATION ANOMALY 1999

LINE TA 0+00

283N

REFER FIG. 5 FOR DETAIL

MASSIVE SULPHIDE ZONE

BR 57A

0+00 (NS)

0+50

0+100

LINE TD 0+00

ML 200

0+150

0+200

LINE TC

TX-20 2200S

FLORA DEFORMATION ZONE

15 NW

LITTLE NITINAT RIVER

NITINAT MAINLINE

FALCON BL 1984

☆ ENZYME LEACH OXIDATION ANOMALY

100 50 0 100 200 300

SCALE: METERS
1:5000

FIG. A

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,736 (1)

TUZEX CLAIMS
ALBERNI MINING DIVISION
VANCOUVER ISLAND, B.C.

LOCATION 2001 ENZYME LEACH SOILS LINES, ROCK, FLOAT SAMPLES & OTHER FEATURES

H. WAHL, P.ENG. B.C. | SEPT. 2001

NTS 92C-087

ASSAY RESULTS*

SMPL. NO		CU	PB	ZN	AG	AU
ROCK	01TX-1R	294	3592	15901	14.4	118
	01TX-2R	2606	30731	55005	158	1602
	01TX-3R	1000	24025	50263	104	1176
	MLHG	5456	28003	99999	278	2686
BANK SAMPLES	TBC-1	66	94	106	0.6	29
	-2	368	144	125	0.3	110
	-3	1868	67	121	0.8	195
	-4	298	526	186	1.4	296
	-5	369	467	235	0.6	86
	-6	391	10698	5767	32	240
	-7	226	1546	406	2.7	105
	-8	604	88	204	1.5	79
	-9	94	59	178	0.2	54
	-10	101	32	133	0.3	75
	-11	99	30	131	0.2	68
	-12	66	37	99	0.2	49
	-13	84	37	89	0.2	26
	-14	78	27	125	0.2	35
	-15	72	27	105	0.2	43
	TBC-16	67	20	82	0.2	36

* ALL PPM EXCEPT AU PPB

OLD RAIL GRADE BRUSHED-IN

LINE TA 0+00

LITTLE NITINAT RIVER (APPROX)

NITINAT MAIN LINE

15 R

E.O.L. 283N

SILT TD275N
CU 25 - PB 7 - ZN 32 - AG 0.2 - AU 6.5 (PPB)

No. 196

250N

LIMITS RUSTY, GOSSAN ZONE

TBC-16

DH 79-1 -55°

1.20 PBZN X 5.5M

DH 79-2 -55°

DH 80-1 -45°

13.48 PBZN X 1.34M

01TX-2R
01TX-3R
MLHG

No. 197

01TX-1R

TBC-1

1999 BOULDER DISCOVERY AREA

HEAVY BRUSH

0+50 LINE TC

200N

150N

LINE TD

100N

N

LEGEND

B.C. HYDRO POLE & No. No. 196

LINE OF BANK SOIL SAMPLES ACROSS SHOWING AND GOSSAN ZONE 5 METER INTERVALS

DDH DATA FROM AR7731 FIG. No. 5

0 50M

SCALE 1:500

26736 (2) FIG. B

TUZEX CLAIMS

ALBERNI MINING DIVISION
VANCOUVER ISLAND, B.C.

RESULTS OF ROCK AND SOIL SAMPLING - CAMP ZONE

H.J. WAHL, P.ENG.B.C. | SEPT. 2001