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**GEOCHEMICAL REPORT**

**FILMED**

**ON CLAIM 2276 (GAP)**

**SITUATED AT CAMBORNE**

**REVELSTOKE MINING DIVISION**

NTS 82K/13E  
50° 47' GEOLOGICAL BRANCH  
117° 39' 30" ASSESSMENT REPORT

**19,101**

**HELD UNDER OPTION TO**

**GRANGES INC.  
2300-885 WEST GEORGIA STREET  
VANCOUVER, B.C.  
V6C 3E8**

**SEPTEMBER 14, 1989**

**A.J. O'DONNELL  
(E.J. SEAGEL)**

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FIGURES

- Figure 1     Location Map
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ENCLOSURES

Geochemical Survey Assay Results, Gap Grid, Scale 1:2,500

## INTRODUCTION

A geochemical survey was completed during the months of September and October 1988 over a portion of the Gap claim, recorded number 2276. The program was carried out under the supervision of P.J. Deveaux, consulting geologist, on behalf of Granges Inc. of Vancouver, B.C.

## LOCATION AND ACCESS

The claim group is located 4 air kilometres north of Camborne, and approximately 35km southeast of Revelstoke, B.C., at latitude 50°N and longitude 117° 39.5'W on NTS map sheet 82K/13E.

The property is accessible by the Trans Canada Highway at Revelstoke or Nakusp on Provincial Route 23. The survey site is within an active logging area, with well maintained haulage and branch roads which traverse the claim.

The claim is located in the rugged Selkirk Mountain system. Much of the property consists of heavily timbered and logged-over slopes with some rock bluffs and more open alpine areas at higher elevations. Most of the rock outcrop is covered by a heavy layer of moss, making prospecting and geological mapping a slow process.

The area has a high snowfall, but due to a southeastern exposure is usually snowfree from early May until late October.

## GEOLOGY

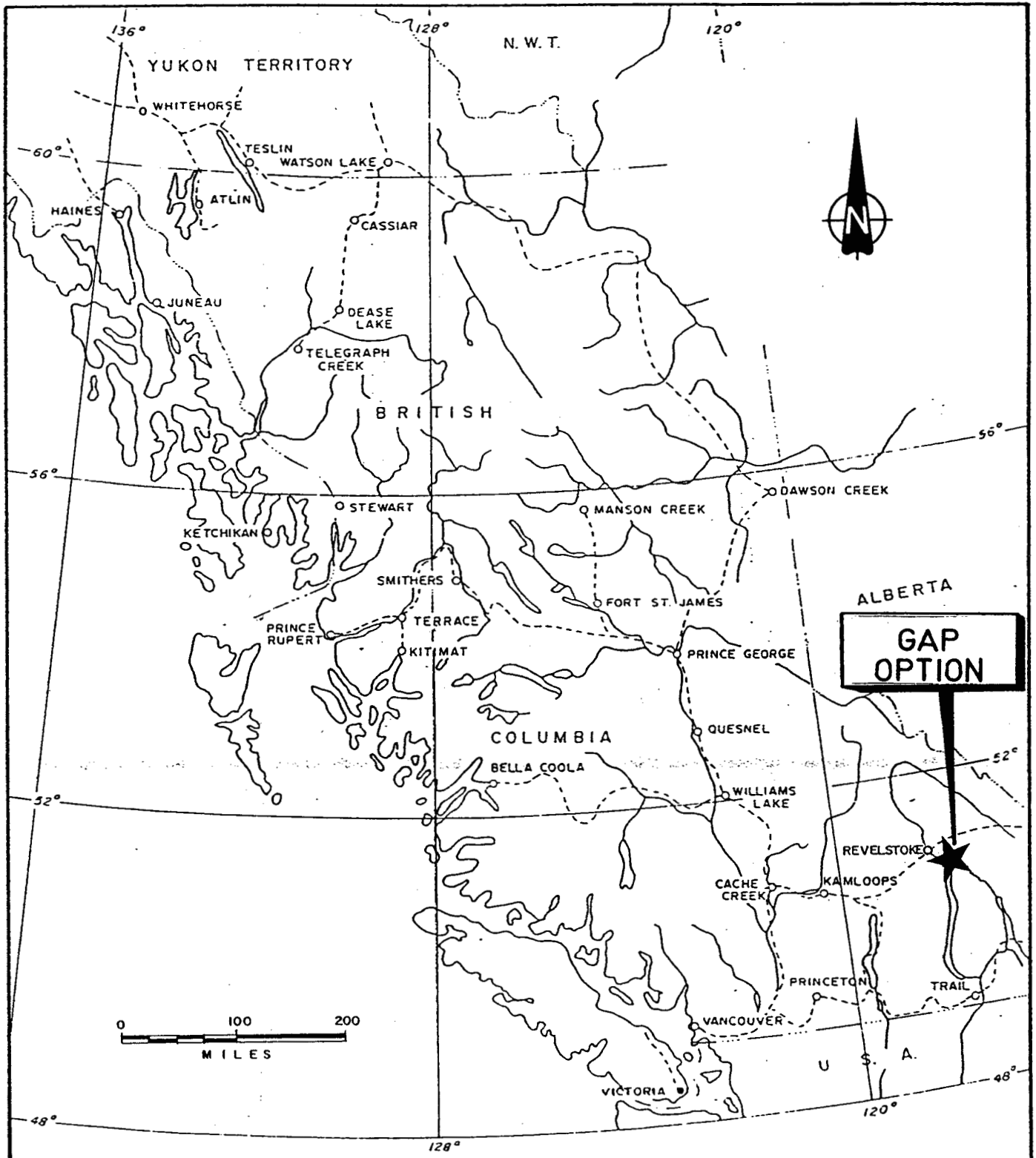
The geology of the area consist of phyllites and altered greenstone of the Lardeau Group which are early Paleozoic in age. Within this package is the Broadview formation which trends in a northwesterly direction and is the host to many gold prospects and past producers. This formation has been traced over a strike length of 160km.

## GEOCHEMICAL SURVEY

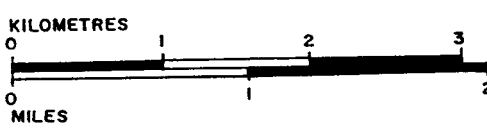
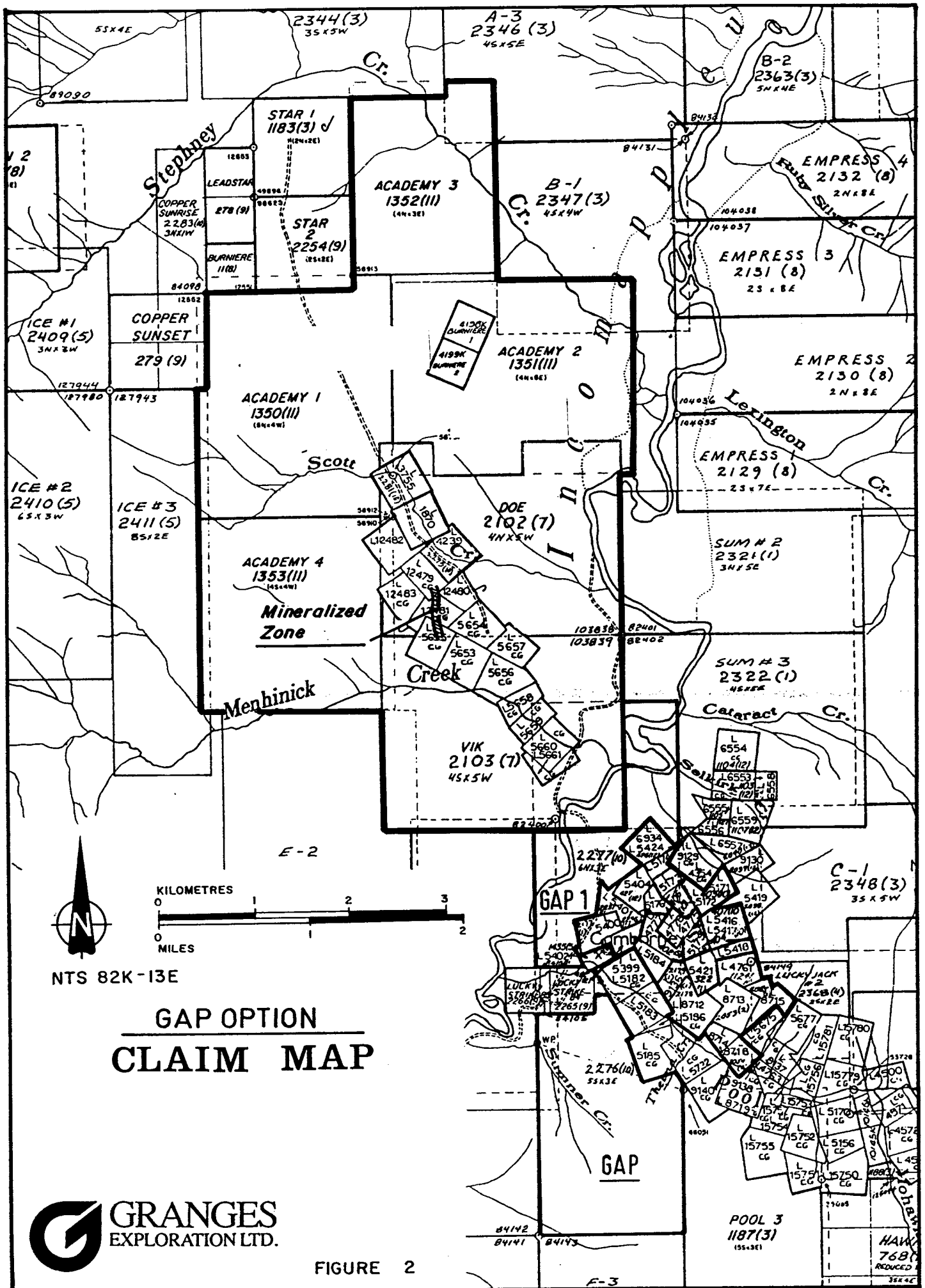
Soil samples were taken from the "B" horizon, where possible, every 23m at a depth of 5 to 30cm on section lines from 50 to 100 meters apart.

The compass and topochained section lines were flagged every 25m with the soil sample number being noted.

In order to obtain a better tie in for the survey, three previously-cut control lines that were established across the property from the 3900 north section line located at the 3100EBL (3550N to 5000N) 3600EBL (3500N to 6200N) and the 4100EBL (3190N to 6050N) were used.



# LOCATION MAP



NTS 82K-13E

# GAP OPTION CLAIM MAP



FIGURE 2

F-3

Method Employed

The samples were analyzed for Au, Ag, Cu, Pb, Zn and As by the semi-quantitative multi-element ICP analysis, which is suitable for trace elements in the soil. To determine the metal content, the sample is first dried and sieved through a minus 80 mesh screen and submitted for a trace element analysis. A nitric-aqua regia digestion of 0.5gm of material liberates the metals in the soil which are then analyzed by the ICP method. For a gold determination a 10 gram sample is assayed by fire and finished by atomic absorption which has a detection limit of 5ppb.

Results Obtained

Nine hundred and two soil samples and four rock samples from quartz veins were submitted for assay, with several areas indicating anomalous gold values. Because of their suspicious appearance, several of the anomalous readings were resampled and reassayed with the results not being duplicated. A good example of this is line 5500N from 3850E to 4100N where the original assays along with the resamples yielded the following results:

<u>Co-ordinates</u>	<u>Original Sample</u>	<u>Resampled</u>
3850E	365 ppb	95 ppb
3875E	280 ppb	65 ppb
3900E	105 ppb	40 ppb
3925E	595 ppb	55 ppb
3950E	880 ppb	60 ppb
3975E	335 ppb	20 ppb
4025E	315 ppb	25 ppb
4050E	255 ppb	20 ppb
4075E	175 ppb	20 ppb
4100E	75 ppb	25 ppb

The four grab samples from quartz veins did not indicate anomalous gold values.

CONCLUSIONS AND RECOMMENDATIONS

Forty samples were collected on previously-outlined anomalous gold zones and submitted for assay. Assaying did not confirm or indicate any anomalous gold areas which would warrant further exploration.

As a result of the negative results from the resampling of selected areas further exploration is not recommended on the remaining elevated gold values indicated on the accompanying map.

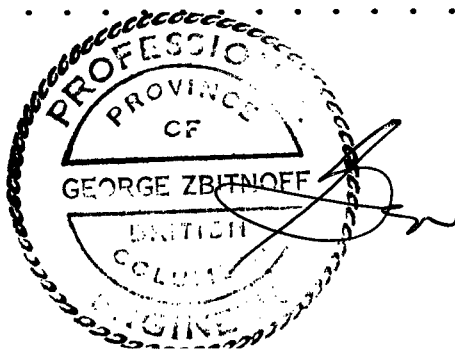
STATEMENT OF EXPENDITURES

Expenditures are submitted for two time periods: before October 14 anniversary date; and after anniversary date.

For 1988/89 assessment we wish to apply \$5,136.60 expenditures incurred during the post-anniversary date period. Please credit the pre-anniversary expenditures of \$27,907.51 to the Granges Inc. PAC account.

Claim 2276, Gap

	<u>Sept 1 - Oct 13</u>	<u>Oct 14 - Nov 1</u>
<b>Geochemical Survey Personnel:</b>		
T. Boruch - 21 days @ \$ 60.00 per day	720.00	540.00
J. Gillard - 21 days @ \$ 60.00 per day	1,260.00	-
J. Bouchard - 10 days @ \$ 60.00 per day	600.00	-
K. Johnson - 29 days @ \$ 60.00 per day	1,320.00	420.00
G. Gowanlock - 17 days @ \$ 60.00 per day	1,020.00	-
N. Kat - 6 days @ \$ 60.00 per day	360.00	-
S. MacIntyre - 19 days @ \$ 60.00 per day	1,140.00	-
P. Lamour - 6 days @ \$ 60.00 per day	360.00	-
P.J. Deveaux - 15 days @ \$175.00 per day	1,750.00	875.00
 <b>Board and Lodging:</b>		
144 man days @ \$40.00 per day. . . . .	4,920.00	840.00
 <b>Assaying:</b>		
Eco-Tech Laboratories Ltd., Kamloops, B.C.		
902 Au/Ag/Cu/Pb/Zn/As geochem @ \$14.05 . . . . .	10,706.10	1,967.00
4 Au/Ag geochem @ \$10.50 . . . . .	42.00	-
 Report Preparation and Drafting. . . . .	 950.00	 250.00
 Office Overhead. . . . .	 <u>2,759.41</u>	 <u>244.60</u>
 TOTAL	 \$27,907.51	 \$5,136.60

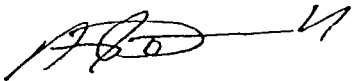


## CERTIFICATE OF QUALIFICATIONS

I Arthur John O'Donnell, of Delta, British Columbia do hereby certify that:

- 1) I am Exploration Manager for Granges Inc. with office at 2300-885 West Georgia Street, Vancouver, B.C., V6C 3E8.
- 2) I am a graduate of Saint Francis Xavier University, Antigonish, N.S. with a BSc degree in geology. I also took an extra year of geology at Dalhousie University, Halifax, N.S.
- 3) That I have practised my profession for thirty years.
- 4) I have been a member in good standing of the Association of Professional Engineers of the Province of Ontario since 1970 and the Association of Professional Engineers Province of Manitoba since 1980.

Dated at Vancouver, B.C. this 24th day of May 1989.



A. J. O'Donnell, P.Eng.



STATEMENT OF QUALIFICATIONS  
GEORGE W. ZBITNOFF  
5160 CLIFF PLACE  
DELTA, B.C.

Name: Zbitnoff, George William

Birth Date: August 15, 1938

Birthplace: Saskatoon, Saskatchewan

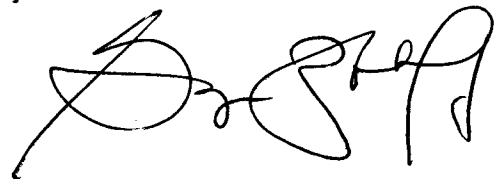
Graduated with Grade 12 matriculation from  
Blaine Lake High School in 1955.

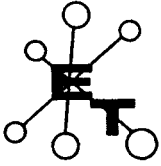
Graduated from University of Saskatchewan with a  
B.A. (Geology and chemistry majors) in 1963.

Professional

- Associations:
- Member of the Association of Professional Engineers of the Province of Manitoba.
  - Member of the Association of Professional Engineers of the Province of British Columbia since 1973.
  - Member of the Canadian Institute of Mining and Metallurgy.

- Experience:
- Pre-graduation experience in geology with the Department of Mineral Resources of Saskatchewan.
  - May 1962 - Two and one half years, field geologist with Hudson Bay Exploration and Development, Flin Flon area.
  - January 1965 - Six years, field and resident geologist with Noranda Exploration Ltd., Flin Flon area.
  - February 1971 - Twelve and one half years, Assistant Manager, Granges Exploration Aktiebolag in Vancouver, B.C.
  - November 1983 to present - Vice President Exploration, Granges Exploration Ltd. in Vancouver, B.C.
  - Active geological experience in all provinces of Canada and parts of the United States and Mexico.
  - Participated in the discovery of Trout Lake Mine.





# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

September 15, 1988

## CERTIFICATE OF ANALYSIS ETK #88-464

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

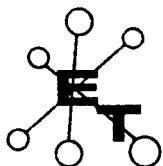
Attention: George Zbitnoff

GAP

SAMPLE IDENTIFICATION: 45 SOIL samples received September 6, 1988  
PROJECT NO: ~~19~~ GS

229

ETK#	Description	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
464 - 1	4900 N 3650 E	<5	.2	32	103	23
464 - 2	3675 E	<5	.1	10	77	27
464 - 3	3700 E	5	<.1	49	101	27
464 - 4	3725 E	5	.2	25	86	28
464 - 5	3750 E	<5	<.1	25	79	26
464 - 6	3775 E	<5	.1	16	62	26
464 - 7	3800 E	<5	.1	24	138	28
464 - 8	3825 E	10	<.1	50	96	26
464 - 9	3850 E	<5	<.1	18	82	29
464 - 10	3875 E	<5	<.1	8	61	27
464 - 11	3900 E	<5	<.1	6	60	27
464 - 12	3925 E	<5	<.1	24	108	27
464 - 13	3950 E	5	.1	26	113	28
464 - 14	3975 E	<5	.1	11	108	29
464 - 15	4000 E	5	.1	12	57	27
464 - 16	4025 E	<5	.1	31	60	28
464 - 17	4050 E	<5	<.1	25	75	25
464 - 18	4075 E	<5	.2	13	46	23
464 - 19	4100 E	<5	<.1	15	78	24
464 - 20	4125 E	<5	.1	8	45	25
464 - 21	4150 E	5	<.1	10	34	23
464 - 22	4175 E	<5	<.1	11	42	25
464 - 23	4200 E	<5	<.1	11	61	24
464 - 24	4225 E	15	.1	12	58	26
464 - 25	4250 E	5	<.1	7	54	25
464 - 26	4275 E	5	<.1	23	85	27
464 - 27	4300 E	10	<.1	46	93	26
464 - 28	4325 E	10	<.1	5	72	25
464 - 29	4350 E	20	<.1	20	100	26
464 - 30	4375 E	15	<.1	20	120	24



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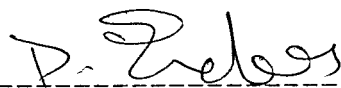
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

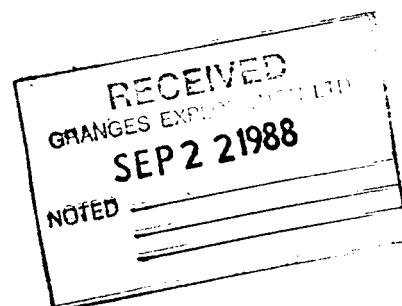
SEPTEMBER 15, 1988

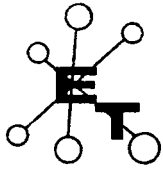
ETK#	Description	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
464 - 31	4400 E	5	<.1	50	107	26
464 - 32	4425 E	15	<.1	53	103	27
464 - 33	4450 E	10	.3	41	117	31
464 - 34	4475 E	15	<.1	64	117	26
464 - 35	4500 E	20	.1	28	87	23
464 - 36	4525 E	<5	<.1	11	80	27
464 - 37	4550 E	10	<.1	38	117	29
464 - 38	4575 E	10	<.1	23	107	31
464 - 39	4600 E	<5	<.1	27	119	26
464 - 40	4625 E	5	.1	100	155	29
464 - 41	4650 E	15	<.1	45	105	26
464 - 42	4675 E	10	.1	13	84	25
464 - 43	4700 E	15	.1	30	120	26
464 - 44	4725 E	25	<.1	27	101	27
464 - 45	4750 E	15	<.1	67	111	25

NOTE: < = less than

*for*   
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

FAX: PAT DEVEAUX  
REVELSTOKE, B.C.  
SC88/GR-G3





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10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

*pd*

September 27, 1988

## CERTIFICATE OF ANALYSIS ETK #88-484

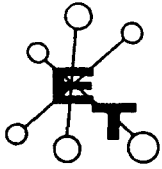
Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

*GAP*

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 103 SOIL samples received September 15, 1988  
PROJECT NO: 229 - 65

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
484 - 1	4750 N 3650E	5	.1	29	30	78	14
484 - 2	3675E	10	.3	28	30	92	16
484 - 3	3700E	5	.6	46	36	94	11
484 - 4	3725E	20	.2	27	25	146	29
484 - 5	3750E	15	.6	43	28	67	15
484 - 6	3775E	5	.2	33	25	105	18
484 - 7	3800E	5	.4	21	17	91	16
484 - 8	3825E	40	.1	25	24	85	17
484 - 9	3850E	15	.3	18	34	73	18
484 - 10	3875E	5	.1	12	19	60	16
484 - 11	3900E	5	.2	18	27	62	16
484 - 12	3925E	<5	.3	18	23	62	17
484 - 13	3950E	<5	.4	16	20	58	11
484 - 14	3975E	<5	.2	16	22	73	14
484 - 15	4000E	10	.3	9	29	58	10
484 - 16	4025E	<5	.4	13	22	43	17
484 - 17	4050E	5	.2	14	27	47	18
484 - 18	4075E	<5	.1	14	20	48	16
484 - 19	4100E	<5	.3	15	19	36	14
484 - 20	4800 N 3650E	<5	.2	23	26	134	18
484 - 21	3675E	<5	.1	39	23	330	26
484 - 22	3700E	<5	.3	32	26	243	21
484 - 23	3725E	<5	.3	37	23	294	33
484 - 24	3750E	<5	.2	18	23	42	17
484 - 25	3775E	10	.3	21	21	46	14
484 - 26	3800E	5	.3	41	32	106	26
484 - 27	3825E	<5	.1	21	19	84	19
484 - 28	3850E	<5	.3	22	20	70	18
484 - 29	3875E	5	.3	20	18	93	22
484 - 30	3900E	<5	.1	12	20	53	21



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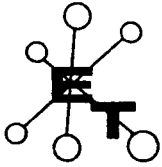
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Granges Exploration Ltd.

SEPTEMBER 27, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
484 - 31	3925E	<5	.1	16	19	60	22
484 - 32	3950E	<5	.1	24	18	109	24
484 - 33	3975E	<5	<.1	11	27	88	23
484 - 34	4000E	<5	.3	60	8	77	24
484 - 35	4025E	<5	.1	15	15	35	22
484 - 36	4050E	<5	.3	13	23	51	20
484 - 37	4075E	<5	.3	18	14	46	18
484 - 38	4100E	10	.1	17	12	50	20
484 - 39	4700 N 3225E	5	<.1	20	12	35	19
484 - 40	3250E	<5	.1	25	32	51	28
484 - 41	3275E	<5	<.1	6	13	20	15
484 - 42	3300E	<5	.4	26	34	78	22
484 - 43	3325E	5	.2	24	26	70	21
484 - 44	3350E	5	.1	44	23	62	22
484 - 45	3375E	5	.2	28	20	60	18
484 - 46	3400E	<5	.3	27	23	41	24
484 - 47	3425E	<5	.2	21	29	52	23
484 - 48	3450E	<5	.2	41	35	83	29
484 - 49	3475E	<5	.5	27	30	51	24
484 - 50	3500E	5	.9	25	41	50	23
484 - 51	3525E	5	.1	49	27	90	24
484 - 52	3550E	10	<.1	38	19	163	22
484 - 53	3575E	5	.2	12	16	119	15
484 - 54	3600E	15	<.1	9	15	55	15
484 - 55	3625E	25	.2	56	43	72	28
484 - 56	3650E	10	.1	48	26	85	24
484 - 57	3675E	10	.2	18	19	49	21
484 - 58	3700E	5	.3	23	26	93	19
484 - 59	3725E	5	.2	43	17	161	30
484 - 60	3750E	5	.3	25	23	53	20
484 - 61	3775E	25	.4	13	22	60	16
484 - 62	3800E	15	.1	19	18	60	17
484 - 63	3825E	5	.1	25	25	104	19
484 - 64	3850E	5	.1	15	23	62	6
484 - 65	3875E	5	.3	14	24	49	6
484 - 66	3900E	<5	.5	29	28	108	8
484 - 67	3925E	<5	.6	25	23	60	7
484 - 68	3950E	<5	.1	14	21	25	15
484 - 69	3975E	<5	.2	13	19	28	15
484 - 70	4000E	<5	.8	21	22	36	6
484 - 71	4025E	<5	.2	17	21	45	8
484 - 72	4050E	5	.4	19	19	109	6
484 - 73	4075E	5	.2	14	18	55	6
484 - 74	4850 N 3875E	<5	.3	24	24	70	5
484 - 75	3900E	5	.2	32	19	86	7



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ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

September 30, 1988

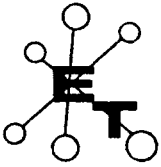
## CERTIFICATE OF ANALYSIS ETK #88-516

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 59 SOIL samples received September 23, 1988  
PROJECT NO: 229

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
516 - 1	4500 N	3650E	<5	.2	14	21	21	7
516 - 2		3675E	<5	.1	37	30	60	10
516 - 3		3700E	<5	<.1	40	31	62	10
516 - 4		3725E	<5	.1	15	26	38	7
516 - 5		3750E	<5	<.1	13	24	28	7
516 - 6		3775E	<5	.2	12	24	34	6
516 - 7		3800E	<5	.5	28	30	39	7
516 - 8		3825E	<5	.9	51	26	47	7
516 - 9		3850E	<5	.3	8	17	9	5
516 - 10		3875E	<5	<.1	18	23	60	6
516 - 11		3900E	<5	<.1	20	21	52	18
516 - 12		3925E	5	1.3	16	24	29	17
516 - 13		3950E	<5	<.1	35	24	63	22
516 - 14		3975E	<5	.3	15	25	34	19
516 - 15		4000E	<5	.2	25	29	45	20
516 - 16		4025E	<5	1.5	20	20	48	18
516 - 17		4050E	<5	.5	8	23	3	17
516 - 18		4075E	15	.2	14	23	33	16
516 - 19	4300 N	3600E	<5	.3	5	10	1	16
516 - 20		3625E	<5	<.1	6	15	1	14
516 - 21		3650E	<5	<.1	10	12	2	16
516 - 22		3675E	10	<.1	36	26	56	18
516 - 23		3700E	<5	.2	23	22	15	15
516 - 24		3725E	<5	.2	14	19	17	16
516 - 25		3750E	<5	<.1	27	23	31	18
516 - 26		3775E	10	<.1	20	17	10	16
516 - 27		3800E	10	.5	54	33	42	22
516 - 28		3825E	10	<.1	28	40	45	20
516 - 29		3850E	10	.2	37	34	46	21
516 - 30		3875E	5	.5	44	17	1	17



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

SEPTEMBER 30, 1988

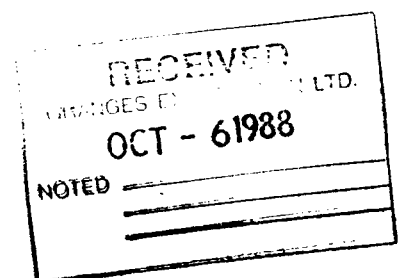
ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
516 - 31		15	<.1	25	24	27	19
516 - 32		15	<.1	41	34	104	24
516 - 33		10	.1	32	21	38	22
516 - 34		10	.7	22	25	26	18
516 - 35		15	<.1	16	27	24	17
516 - 36		15	.4	12	17	7	17
516 - 37		15	<.1	10	18	15	18
516 - 38		15	.9	31	34	44	24
516 - 39		20	.6	31	29	47	16
516 - 40	4400 N	10	.2	18	25	32	18
516 - 41		10	.1	12	25	18	17
516 - 42		5	<.1	17	24	33	19
516 - 43		10	<.1	11	24	14	16
516 - 44		5	<.1	16	27	47	21
516 - 45		10	.3	15	27	47	17
516 - 46		<5	.7	19	23	40	19
516 - 47		<5	.2	13	19	17	18
516 - 48		5	<.1	15	22	23	20
516 - 49		5	<.1	33	22	30	18
516 - 50		5	.2	5	10	1	17
516 - 51		5	<.1	4	23	21	18
516 - 52		10	<.1	8	19	37	16
516 - 53		15	<.1	42	29	53	27
516 - 54		20	<.1	6	18	10	20
516 - 55		5	<.1	20	22	41	20
516 - 56		5	<.1	5	28	25	19
516 - 57		10	<.1	10	24	14	21
516 - 58		10	1.2	34	26	99	22
516 - 59		5	.3	32	34	92	21

NOTE: < = less than

*Frank J. Pezzotti*  
FRANK J. PEZZOTTI  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX

SC88/GR-G3



*pd*

10041 E. TRANS CANADA HIGHWAY  
 KAMLOOPS, B.C. V2S 2T3  
 OCTOBER 1, 1980

*GAP OPTION*

Granges Exploration Ltd.  
 2370, 885 W. Georgia St.  
 VANCOUVER, B.C.  
 V6C 3E6

Attention: George Zbitnuff

SAMPLE IDENTIFICATION: 77 SOIL samples received September 23, 1980  
 PROJECT NO: 229

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
517 - 1	4700 N	4100E	10	.5	16	17	47	20
517 - 2		4125E	10	.5	16	28	62	22
517 - 3		4150E	10	.6	14	16	54	21
517 - 4		4175E	10	1	13	15	46	21
517 - 5		4200E	5	.4	14	14	47	21
517 - 6		4225E	25	.5	22	13	55	23
517 - 7		4250E	5	.5	9	11	32	21
517 - 8		4300E	10	.8	12	24	45	23
517 - 9		4325E	10	2.2	14	29	65	24
517 - 10		4350E	15	.9	30	26	102	28
517 - 11		4375E	10	<.1	35	18	39	27
517 - 12		4400E	15	.3	57	39	100	50
517 - 13		4425E	10	.4	15	19	60	22
517 - 14		4450E	25	.1	23	14	81	22
517 - 15		4475E	<5	.1	20	15	60	23
517 - 16		4500E	10	.3	15	16	69	24
517 - 17		4525E	20	.5	26	13	79	22
517 - 18		4550E	15	.1	11	12	74	22
517 - 19		4575E	5	.1	37	9	62	23
517 - 20		4600E	10	.3	19	16	64	24
517 - 21		4625E	5	.2	12	17	57	22
517 - 22		4650E	5	.1	15	12	97	22
517 - 23	4750 N	3475E	15	.3	31	31	50	26
517 - 24		3500E	10	.7	32	20	40	23
517 - 25		3525E	5	.2	13	12	60	16
517 - 26		3550E	10	.2	6	7	27	20
517 - 27		3575E	10	<.1	24	10	50	23
517 - 28		3600E	5	.2	22	10	74	24
517 - 29	4800 N	3475E	5	.3	29	33	60	20
517 - 30		3500E	15	.4	22	33	54	20



Granges Exploration Ltd.

OCTOBER 1, 1968


ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
517 - 31		5	<.1	36	25	65	28
517 - 32		<5	.1	28	19	79	23
517 - 33		10	.2	13	20	60	23
517 - 34		10	.3	37	20	152	23
517 - 35	4850 N	5	<.1	17	18	73	22
517 - 36		5	.6	21	38	60	24
517 - 37		<5	<.1	49	37	129	29
517 - 38		5	.1	32	20	90	27
517 - 39		5	.1	31	43	103	27
517 - 40		<5	<.1	31	39	207	27
517 - 41		5	<.1	36	30	86	28
517 - 42		<5	.3	55	47	175	26
517 - 43		15	.1	34	38	113	26
517 - 44		<5	.5	21	34	144	20
517 - 45		5	.3	23	25	98	19
517 - 46		5	.4	14	26	109	23
517 - 47		<5	.1	25	36	69	25
517 - 48		<5	.1	44	27	65	24
517 - 49		<5	.2	34	26	58	22
517 - 50		<5	.3	33	23	107	23
517 - 51		<5	.3	33	29	111	22
517 - 52	4950 N	5	.2	55	51	143	30
517 - 53		<5	.3	32	46	107	26
517 - 54		<5	<.1	42	35	86	29
517 - 55		5	.1	33	45	105	29
517 - 56		5	.1	28	44	124	53
517 - 57		<5	.1	32	32	132	99
517 - 58		<5	.3	29	29	124	45
517 - 59		15	.4	14	28	109	20
517 - 60		10	<.1	13	32	76	22
517 - 61		<5	.2	8	21	34	17
517 - 62		<5	.1	21	26	113	22
517 - 63		<5	.3	19	37	45	22
517 - 64		<5	.7	19	41	133	19
517 - 65		<5	<.1	41	32	87	26
517 - 66		10	.1	13	28	37	22
517 - 67		<5	.5	12	24	51	17
517 - 68		15	<.1	15	31	47	20
517 - 69		<5	<.1	11	24	32	21
517 - 70		10	.7	11	33	76	19
517 - 71		<5	.2	24	21	77	18
517 - 72		<5	<.1	8	22	30	17
517 - 73		5	.3	19	37	77	21
517 - 74		10	.4	15	28	61	20
517 - 75		<5	.3	26	18	26	18

Granges Exploration Ltd.

OCTOBER 1, 1989

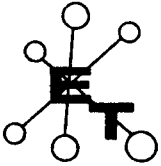
ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
517 - 76	4075E	<5	<.1	12	18	42	17
517 - 77	4100E	5	.1	10	21	30	18

NOTE: < means less than

*per*   
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 ECO-TECH LABORATORIES LTD.  
 Frank J. Pezzotti, A.Sc.T.  
 B.C. Certified Assayer

c.c. Granges Exploration  
 VIA FAX  
 ATTENTION: PAT DEVEAUX

1000 100-80



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

September 30, 1988

## CERTIFICATE OF ANALYSIS ETK #88-518

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 22 SOIL samples received September 23, 1988  
PROJECT NO: 229

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
518 - 1	4600 N	3600E	10	.3	30	15	59	12
518 - 2		3625E	<5	.1	37	22	66	17
518 - 3		3650E	<5	.1	34	22	87	17
518 - 4		3675E	10	.5	35	14	54	13
518 - 5		3700E	<5	.3	39	21	43	15
518 - 6		3725E	10	.6	36	9	42	11
518 - 7		3750E	5	.2	20	9	60	11
518 - 8		3775E	10	.4	28	15	35	14
518 - 9		3800E	<5	.8	27	12	40	11
518 - 10		3825E	5	.2	33	15	50	16
518 - 11		3850E	5	.8	17	26	44	15
518 - 12		3875E	10	.8	12	25	22	14
518 - 13		3900E	15	.3	13	29	33	17
518 - 14		3925E	15	.2	13	26	44	16
518 - 15		3950E	5	.6	8	26	46	12
518 - 16		3975E	5	.4	16	28	50	19
518 - 17		4000E	<5	.3	25	22	52	16
518 - 18		4025E	10	.1	100	253	101	30
518 - 19		4050E	<5	.6	10	27	48	13
518 - 20		4075E	<5	.7	20	26	61	15
518 - 21		4100E	<5	.5	16	19	29	14
518 - 22	4900 N	3600E	5	.3	21	22	103	16

NOTE: < = less than

*P. Deves*  
-----  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX

SC88/GR-G3

RECEIVED  
GRANGES EXPLORATION LTD.  
OCT - 6 1988  
NOTED \_\_\_\_\_

*pd*

ECC TECH LABORATORIES LTD.

ETK 519

10041 E. TRANS CANADA HIGHWAY  
VANCOUVER, B.C. V2C 2J6  
OCTOBER 1, 1988

Granges Exploration Ltd.  
2000, 385 W. Georgia St.  
VANCOUVER, B.C.  
V6C 2E4

Attention: George Zblinoff

SAMPLE IDENTIFICATION: 22 SOIL samples received September 21, 1988  
PROJECT NO: 229 - GS GAP OPTION

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
519	1 4750 N	4125E	5	.3	20	22	35	14
519	2	4150E	20	.4	27	23	67	19
519	3	4175E	5	.1	17	17	59	20
519	4	4200E	30	.6	26	18	49	36
519	5	4225E	25	<.1	19	16	60	18
519	6	4250E	<5	<.1	31	16	110	20
519	7	4275E	<5	<.1	15	22	65	18
519	8	4300E	5	<.1	23	17	58	20
519	9	4325E	<5	<.1	14	15	60	15
519	10	4350E	5	<.1	85	23	87	25
519	11	4375E	5	<.1	51	19	79	24
519	12	4400E	<5	<.1	41	20	75	22
519	13	4425E	<5	.1	52	23	87	29
519	14	4450E	5	<.1	105	18	102	22
519	15	4475E	<5	<.1	35	16	74	18
519	16	4500E	15	.2	23	26	61	22
519	17	4525E	<5	<.1	30	30	70	25
519	18	4550E	15	.1	41	29	106	23
519	19	4575E	<5	.1	44	24	89	23
519	20	4600E	10	<.1	55	19	85	20
519	21	4625E	15	<.1	58	18	90	25
519	22	4650E	10	.1	55	30	100	22

*pr*

NOTE: < = less than

*D. Zblinoff*

*per* ECC TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX

SC88/GR-GS

RECEIVED  
GRANGES EXPLORATION LTD  
OCT - 61988  
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ECO-TECH LABORATORIES LTD. - ETK 519

10041 E. TRANS-CANADA HIGHWAY  
 KAMLOOPS, B.C. V2C 2J3  
 OCTOBER 1, 1988

Granges Exploration Ltd.  
 2300, 885 W. Georgia St.  
 VANCOUVER, B.C.  
 V6C 3E6

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 22 SOIL samples received September 28, 1988  
 PROJECT NO: 229

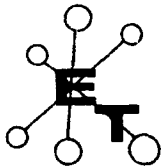
ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
519 - 1	4750 N 4125E	5	.3	20	22	35	16
519 - 2	4150E	20	.4	27	23	67	19
519 - 3	4175E	5	.1	17	17	39	20
519 - 4	4200E	30	.6	26	18	49	26
519 - 5	4225E	25	<.1	19	16	60	18
519 - 6	4250E	<5	<.1	31	16	110	20
519 - 7	4275E	<5	<.1	15	22	65	18
519 - 8	4300E	5	<.1	23	19	58	20
519 - 9	4325E	<5	<.1	14	15	63	15
519 - 10	4350E	5	<.1	85	23	87	25
519 - 11	4375E	5	<.1	51	19	79	24
519 - 12	4400E	<5	<.1	41	20	75	22
519 - 13	4425E	<5	.1	52	23	87	29
519 - 14	4450E	5	<.1	105✓	18	132	22
519 - 15	4475E	<5	<.1	35	16	94	18
519 - 16	4500E	15	.2	23	26	61	22
519 - 17	4525E	<5	<.1	30	33	70	25
519 - 18	4550E	15	.1	41	29	106	23
519 - 19	4575E	<5	.1	44	24	89	23
519 - 20	4600E	10	<.1	55	19	85	20
519 - 21	4625E	15	<.1	58	18	98	25
519 - 22	4650E	10	.1	55	30	100	22

NOTE: < = less than

*P. Pezzotti*  
 ECO-TECH LABORATORIES LTD.  
 Frank J. Pezzotti, A.Sc.T.  
 B.C. Certified Assayer

c.c. Granges Exploration  
 VIA FAX  
 ATTENTION: PAT DEVEAUX

SC88/GR-G3



# ECO-TECH LABORATORIES LTD.

*pd*

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

September 30, 1988

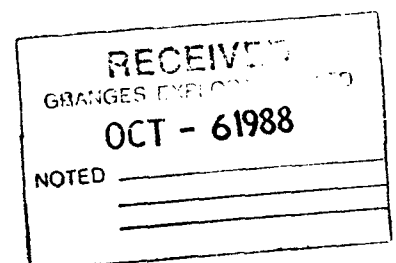
## CERTIFICATE OF ANALYSIS ETK #88-521

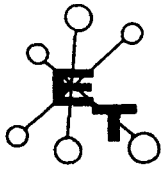
Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 102 SOIL samples received September 23, 1988  
PROJECT NO: 229 -

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
521 - 1	4550 N	4100E	<5	.6	10	25	41	13
521 - 2		4125E	5	.9	8	25	22	16
521 - 3		4150E	<5	.3	9	20	17	14
521 - 4		4175E	5	.2	25	21	60	19
521 - 5		4200E	<5	<.1	49	25	70	21
521 - 6		4225E	<5	.4	15	20	30	15
521 - 7		4250E	5	.8	19	15	34	9
521 - 8		4275E	<5	.7	19	17	49	13
521 - 9		4300E	5	1	18	23	39	13
521 - 10		4325E	<5	.4	22	20	59	18
521 - 11		4350E	<5	.5	21	22	37	17
521 - 12		4375E	<5	1.1	16	20	50	15
521 - 13		4400E	10	.8	12	20	46	15
521 - 14		4425E	<5	.3	21	31	51	17
521 - 15		4450E	5	.3	21	23	45	19
521 - 16		4475W	15	.3	50	52	91	33
521 - 17		4500E	<5	.2	26	23	58	47
521 - 18		4525E	<5	.7	37	36	93	57
521 - 19		4550E	5	.3	31	30	77	29
521 - 20		4575E	<5	.3	25	24	73	20
521 - 21		4600E	<5	.4	34	39	84	21
521 - 22		4625E	<5	.6	40	42	81	22
521 - 23		4650E	<5	.8	14	25	44	19
521 - 24		4675E	<5	.3	29	26	55	19
521 - 25	4600 N	4100E	5	.5	7	21	27	11
521 - 26		4125E	<5	.2	10	23	57	13
521 - 27		4150E	<5	.5	10	15	17	11
521 - 28		4175E	<5	.3	16	21	30	17
521 - 29		4200E	<5	.6	14	21	58	15
521 - 30		4225E	<5	.3	30	21	48	17





# ECO-TECH LABORATORIES LTD.

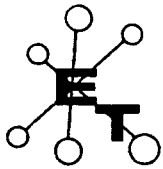
ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

SEPTEMBER 30, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
521 - 31		<5	.6	29	20	54	16
521 - 32		<5	.8	25	17	47	13
521 - 33		5	.4	44	25	69	19
521 - 34		<5	.6	19	20	39	13
521 - 35		<5	.1	37	18	56	14
521 - 36		<5	.7	23	20	57	12
521 - 37		10	.3	17	23	57	18
521 - 38		<5	.8	12	29	38	18
521 - 39		<5	.7	18	26	68	15
521 - 40		<5	1.5	33	28	76	28
521 - 41		<5	.8	35	35	76	26
521 - 42		<5	.1	33	29	55	23
521 - 43		<5	.4	40	30	81	22
521 - 44		<5	.7	40	25	93	21
521 - 45		10	.3	32	15	90	20
521 - 46		5	.3	28	19	63	22
521 - 47		<5	.2	14	16	71	17
521 - 48		5	.1	33	23	81	32
521 - 49	4650 N	<5	.5	10	19	39	13
521 - 50		5	.3	11	23	35	15
521 - 51		<5	.8	11	18	43	15
521 - 52		15	.6	29	16	72	20
521 - 53		<5	.4	11	16	90	13
521 - 54		5	.4	12	24	72	14
521 - 55		20	.5	26	36	52	16
521 - 56		5	.3	23	29	65	16
521 - 57		15	.1	26	20	48	15
521 - 58		<5	.1	44	38	75	16
521 - 59		<5	.2	22	24	54	17
521 - 60		<5	.1	42	24	73	15
521 - 61		<5	<.1	46	25	79	15
521 - 62		5	.2	25	28	58	15
521 - 63		<5	.4	25	29	63	19
521 - 64		<5	.2	28	22	67	14
521 - 65		5	.5	33	27	53	18
521 - 66		5	.1	39	29	77	18
521 - 67		10	.6	16	20	78	10
521 - 68		<5	.3	20	20	75	12
521 - 69		5	.2	13	17	44	13
521 - 70		<5	.3	22	15	61	12
521 - 71		<5	.3	8	21	48	11
521 - 72		<5	.3	30	20	70	17
521 - 73	5000 N	<5	.2	12	18	52	18
521 - 74		15	.2	11	18	48	12
521 - 75		<5	.4	20	31	41	15



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

SEPTEMBER 30, 1988

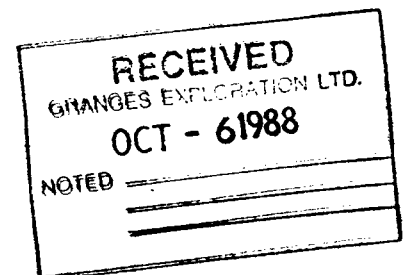
ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
521 - 76	3400E	5	.4	15	24	43	18
521 - 77	3425E	10	<.1	35	27	98	19
521 - 78	3450E	5	.1	23	24	64	18
521 - 79	3475E	5	.2	25	33	114	23
521 - 80	3500E	<5	.1	34	31	89	22
521 - 81	3525E	<5	.2	59	49	186	44
521 - 82	3550E	<5	.1	14	36	73	37
521 - 83	3575E	<5	.2	31	34	126	22
521 - 84	3600E	<5	.2	16	24	61	18
521 - 85	3675E	5	.3	17	26	90	22
521 - 86	3700E	<5	.4	19	20	82	16
521 - 87	3725E	<5	.2	18	20	68	13
521 - 88	3750E	5	.6	26	27	102	13
521 - 89	3775E	5	.4	21	19	96	14
521 - 90	3800E	<5	.4	18	24	79	15
521 - 91	3825E	5	.5	19	31	94	15
521 - 92	3850E	<5	.4	15	21	113	12
521 - 93	3875E	5	.2	50	16	97	17
521 - 94	3900E	5	.3	21	22	35	14
521 - 95	3925E	5	<.1	16	18	69	13
521 - 96	3950E	10	.1	28	14	68	13
521 - 97	3975E	<5	.2	16	14	67	13
521 - 98	4000E	<5	.3	12	18	68	12
521 - 99	4025E	10	.2	11	19	67	15
521 - 100	4050E	5	.2	7	23	23	14
521 - 101	4075E	5	.2	28	17	58	12
521 - 102	4100E	<5	.3	10	12	71	12

NOTE: < = less than

*P. Pezzotti*  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX

SC88/GR-G3





*pd*

ICO-TECH LABORATORIES LTD.

ETK 527

10041 E. TRANS-CANADA HIGHWAY  
KAMLOOPS, B.C. V2C 2J3  
OCTOBER 3, 1988

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 87 SOIL samples received September 27, 1988  
PROJECT NO: 229 - G5

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
527 - 1	4000 N	3600E	10	<.1	5	26	37	21
527 - 2		3625E	15	.3	8	18	29	16
527 - 3		3650E	5	.1	9	16	16	19
527 - 4		3675E	<5	.5	10	21	40	23
527 - 5		3700E	5	.5	18	17	35	22
527 - 6		3725E	5	.8	22	13	44	19
527 - 7		3750E	10	.4	11	13	36	21
527 - 8		3775E	<5	.8	14	15	37	18
527 - 9		3800E	<5	.4	17	26	50	20
527 - 10		3825E	10	.3	1	20	42	19
527 - 11		3850E	15	.2	7	27	27	20
527 - 12		3875E	<5	.4	23	16	67	23
527 - 13		3900E	5	.5	7	8	17	18
527 - 14		3925E	<5	1	20	27	88	23
527 - 15		3950E	<5	.5	12	28	57	23
527 - 16		3975W	<5	.5	8	7	16	18
527 - 17		4000E	<5	.6	6	16	60	19
527 - 18		4025E	<5	.4	5	20	49	19
527 - 19		4050E	5	.7	5	16	33	22
527 - 20		4075E	5	.5	8	18	40	19
527 - 21		4100E	5	.4	16	12	31	21
527 - 22	4100 E	3625E	10	.4	21	16	34	16
527 - 23		3650E	5	.6	22	29	40	10
527 - 24		3675E	<5	.5	6	13	31	15
527 - 25		3700E	<5	.6	17	25	40	13
527 - 26		3725E	10	.3	19	27	79	24
527 - 27		3750E	5	.2	7	30	74	21
527 - 28		3775E	<5	.4	18	30	41	19
527 - 29		3800E	<5	.2	9	23	49	18
527 - 30		3825E	<5	.3	17	33	53	21

Granges Exploration Ltd.

OCTOBER 3, 198

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
527 - 31		3850	<5	.4	5	26	74	22
527 - 32		3875	<5	.2	6	44	88	19
527 - 33		3900	<5	<.1	11	37	76	18
527 - 34		3925	<5	.4	10	20	44	20
527 - 35		3950	<5	.9	6	21	43	17
527 - 36		3975	<5	.7	2	20	52	16
527 - 37		4000	<5	.5	10	22	52	21
527 - 38		4025	<5	.2	7	26	45	20
527 - 39		4050	<5	.4	25	31	53	22
527 - 40		4075	<5	.5	28	23	64	21
527 - 41		4100	10	.5	94	31	87	17
527 - 42	4200 N	3675	<5	.5	33	28	58	20
527 - 43		3700	<5	.4	24	18	37	19
527 - 44		3725	5	.4	21	15	62	18
527 - 45		3750	<5	.1	28	16	74	16
527 - 46		3775	<5	.3	19	18	34	17
527 - 47		3800	5	.7	18	16	32	19
527 - 48		3825	<5	.5	10	8	10	17
527 - 49		3850	<5	.2	12	27	58	22
527 - 50		3875	<5	.5	18	25	43	19
527 - 51		3900	5	.8	20	28	43	23
527 - 52		3925	<5	.5	14	36	70	20
527 - 53		3950	<5	.2	17	33	79	24
527 - 54		3975	<5	.3	15	29	49	20
527 - 55		4000	<5	.7	28	33	49	18
527 - 56		4025	<5	.8	16	20	51	20
527 - 57		4050	<5	.5	8	18	29	20
527 - 58		4075	<5	.6	16	6	16	18
527 - 59		4100	<5	.4	4	27	19	17
527 - 60	4200 N	3100	<5	.2	9	27	40	14
527 - 61		3125	5	.5	20	13	66	17
527 - 62		3150	<5	<.1	12	11	48	12
527 - 63		3175	5	.3	12	29	56	17
527 - 64		3200	<5	.2	22	37	75	21
527 - 65		3225	5	<.1	15	36	43	20
527 - 66		3250	<5	.1	10	33	38	19
527 - 67		3275	<5	<.1	20	22	42	17
527 - 68		3300	<5	<.1	17	18	53	19
527 - 69		3325	10	.3	20	13	44	17
527 - 70		3350	15	<.1	19	15	55	20
527 - 71		3375	<5	.3	16	17	33	17
527 - 72		3400	15	.2	5	21	39	17
527 - 73		3425	20	.2	18	16	36	22
527 - 74		3450	10	.1	13	22	45	26
527 - 75		3475	5	.2	17	29	54	21

ECO-TECH LABORATORIES LTD.


ETK 527

Granges Exploration Ltd.

OCTOBER 3, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
527 - 76	3500	5	<.1	11	17	49	21
527 - 77	3525	5	.3	17	27	66	18
527 - 78	3550	<5	.2	35	31	62	20
527 - 79	3575	5	.1	12	21	32	20
527 - 80	4200 N 2900	5	<.1	22	20	71	16
527 - 81	2925	5	<.1	16	26	68	23
527 - 82	2950	<5	<.1	28	22	58	23
527 - 83	2975	<5	.1	18	19	95	18
527 - 84	3000	5	.2	15	23	70	16
527 - 85	3025	<5	.1	7	35	34	13
527 - 86	3050	10	.2	11	24	43	14
527 - 87	3075	<5	.1	10	25	41	16

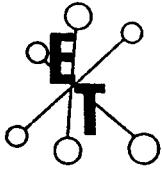
NOTE: < = less than

*per*   
 ECO-TECH LABORATORIES LTD.  
 Frank J. Pezzotti, A.Sc.T.  
 B.C. Certified Assayer

c.c. Granges Exploration  
 VIA FAX  
 ATTENTION: PAT DEVEAUX

SC88/GR-G3

RECEIVED  
 GRANGES EXPLORATION LTD.  
 OCT - 6 1988  
 NOTES \_\_\_\_\_



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

*pd*  
*GAP*

OCTOBER 12, 1988

## CERTIFICATE OF ANALYSIS ETK #88-553

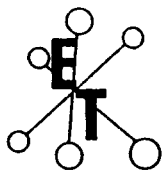
Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 136 SOIL samples received October 5, 1988  
PROJECT NO: 229 - *GS*

*GAP OPTION*

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
553 - 1	4600 N	3125E	<5	.4	53	77	77	18
553 - 2		3150E	<5	<.1	17	26	22	20
553 - 3		3175E	<5	<.1	29	24	41	22
553 - 4		3200E	<5	.2	30	56	178	22
553 - 5		3225E	<5	<.1	33	35	63	23
553 - 6		3250E	5	<.1	19	23	80	20
553 - 7		3275E	5	.3	24	20	34	22
553 - 8		3300E	5	.3	12	20	18	18
553 - 9		3325E	15	<.1	17	19	37	20
553 - 10		3350E	5	<.1	16	15	27	22
553 - 11		3375E	20	<.1	15	10	27	17
553 - 12		3400E	5	<.1	15	19	22	22
553 - 13		3425E	15	.3	20	28	51	24
553 - 14		3450E	10	.3	43	59	58	30
553 - 15		3475E	10	<.1	24	35	53	30
553 - 16		3500E	10	.1	51	39	58	26
553 - 17		3525E	20	.3	86	47	325	36
553 - 18		3550E	20	.1	56	33	117	20
553 - 19		3575E	5	<.1	18	24	62	16
553 - 20	4500 N	3225E	10	.1	7	22	25	14
553 - 21		3250E	<5	.2	9	6	13	7
553 - 22		3275E	<5	.4	9	34	27	12
553 - 23		3300E	<5	<.1	29	30	37	20
553 - 24		3325E	<5	<.1	27	11	34	12
553 - 25		3350E	<5	<.1	23	18	53	14
553 - 26		3375E	5	<.1	34	20	72	15
553 - 27		3400E	<5	<.1	16	24	27	13
553 - 28		3425E	5	<.1	25	16	44	17
553 - 29		3450E	10	<.1	21	22	33	11
553 - 30		3475E	5	.1	51	33	93	30



# ECO-TECH LABORATORIES LTD.

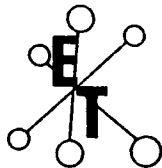
ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

OCTOBER 12, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
553 - 31	3500E	5	.4	34	23	36	21
553 - 32	3525E	5	<.1	265	152	172	28
553 - 33	3550E	10	<.1	42	27	67	24
553 - 34	3575E	5	<.1	50	34	79	19
553 - 35	3600E	<5	<.1	35	32	63	24
553 - 36	4400 N 3100E	<5	<.1	18	21	42	15
553 - 37	3125E	55	<.1	40	13	65	14
553 - 38	3150E	<5	<.1	22	17	41	19
553 - 39	3175E	5	<.1	18	27	40	18
553 - 40	3200E	5	<.1	16	35	55	18
553 - 41	3225E	15	<.1	20	12	34	16
553 - 42	3250E	<5	<.1	17	26	64	22
553 - 43	3275E	15	<.1	11	20	43	18
553 - 44	3300E	5	<.1	19	25	37	14
553 - 45	3325E	10	<.1	21	17	45	16
553 - 46	3350E	10	<.1	18	17	41	16
553 - 47	3375E	<5	<.1	12	20	26	12
553 - 48	3400E	15	<.1	16	22	63	18
553 - 49	3425E	10	<.1	10	35	45	22
553 - 50	3450E	5	<.1	6	19	25	20
553 - 51	3475E	10	<.1	14	17	36	20
553 - 52	3500E	5	<.1	16	17	47	22
553 - 53	3525E	15	<.1	9	21	38	20
553 - 54	3550E	15	<.1	12	26	89	22
553 - 55	3575E	10	<.1	5	14	24	18
553 - 56	5200 N 3600E	<5	.2	22	12	24	11
553 - 57	3600E	15	<.1	27	45	109	26
553 - 58	3650E	10	<.1	27	24	122	18
553 - 59	3675E	20	<.1	12	13	145	16
553 - 60	3700E	10	<.1	23	15	118	20
553 - 61	3725E	15	<.1	27	12	110	16
553 - 62	3750E	10	<.1	67	14	100	24
553 - 63	3775E	10	<.1	15	16	88	24
553 - 64	3800E	15	<.1	60	20	123	24
553 - 65	3825E	10	<.1	12	27	91	20
553 - 66	3850E	15	<.1	29	20	146	20
553 - 67	3875E	10	<.1	24	18	144	22
553 - 68	3900E	5	<.1	26	13	113	22
553 - 69	3925E	15	<.1	18	15	106	22
553 - 70	3950E	10	<.1	13	15	103	16
553 - 71	3975E	5	<.1	8	14	46	16
553 - 72	4000E	20	<.1	40	20	99	24
553 - 73	4025E	10	<.1	54	15	91	22
553 - 74	4050E	20	<.1	18	16	95	20
553 - 75	4075E	20	<.1	15	25	65	22



# ECO-TECH LABORATORIES LTD.

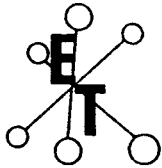
ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

OCTOBER 12, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
553 - 76		4100E	15	<.1	18	15	84	24
553 - 77	5100 N	3675E	15	.1	32	50	125	20
553 - 78		3700E	10	<.1	26	32	132	21
553 - 79		3725E	5	<.1	81	27	105	19
553 - 80		3750E	15	.1	47	13	112	16
553 - 81		3775E	20	.2	38	21	78	19
553 - 82		3800E	5	<.1	19	17	73	15
553 - 83		3825E	15	.2	42	18	106	13
553 - 84		3850E	<5	.1	12	29	57	15
553 - 85		3875E	<5	.1	38	19	109	15
553 - 86		3900E	45	.1	22	20	98	13
553 - 87		3925E	20	<.1	55	18	111	13
553 - 88		3950E	15	<.1	17	27	83	12
553 - 89		3975E	10	.1	14	18	48	13
553 - 90		4000E	25	.2	28	20	66	16
553 - 91		4025E	10	.1	26	17	84	15
553 - 92		4050E	15	.2	17	13	67	9
553 - 93		4075E	10	.1	38	18	71	13
553 - 94		4100E	<5	<.1	33	16	95	16
553 - 95	4300 N	3100E	25	<.1	12	21	53	13
553 - 96		3125E	20	<.1	20	20	73	13
553 - 97		3150E	25	<.1	22	14	53	11
553 - 98		3175E	20	.1	33	21	42	13
553 - 99		3200E	25	.3	34	40	86	12
553 - 100		3225E	35	<.1	8	14	17	9
553 - 101		3250E	30	<.1	12	15	23	11
553 - 102		3275E	30	<.1	18	20	42	12
553 - 103		3300E	25	.1	25	32	61	11
553 - 104		3325E	10	.1	25	10	95	11
553 - 105		3350E	10	.1	29	13	36	9
553 - 106		3375E	5	<.1	21	14	30	11
553 - 107		3400E	10	.1	21	17	51	11
553 - 108		3425E	20	.2	20	24	66	12
553 - 109		3450E	15	<.1	15	28	34	13
553 - 110		3475E	10	.3	13	22	29	12
553 - 111		3500E	10	.4	17	14	31	12
553 - 112		3525E	15	.1	31	18	71	12
553 - 113		3550E	10	<.1	18	13	36	12
553 - 114		3575E	15	.2	36	21	49	12
553 - 115		3600E	<5	.1	18	14	38	12
553 - 116	4100 N	3275E	10	.1	16	23	32	9
553 - 117		3300E	5	.3	55	17	40	9
553 - 118		3325E	10	.2	34	21	49	9
553 - 119		3375E	5	.3	26	15	71	12
553 - 120		3400E	5	.1	24	19	25	12



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

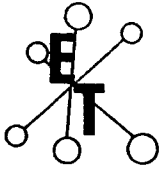
OCTOBER 12, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
553 - 121		5	.1	15	21	28	13
553 - 122		<5	.2	24	12	39	9
553 - 123		15	.1	39	18	40	11
553 - 124		5	<.1	14	18	18	11
553 - 125		10	.1	30	22	60	12
553 - 126		10	.2	32	25	55	15
553 - 127		5	<.1	26	20	59	12
553 - 128		5	<.1	26	18	61	9
553 - 129	4000 N	10	<.1	27	15	46	11
553 - 130		15	.1	21	25	40	12
553 - 131		5	.1	18	17	74	11
553 - 132		10	<.1	17	22	38	11
553 - 133		15	.2	17	28	30	12
553 - 134		5	<.1	10	18	53	12
553 - 135		15	<.1	37	21	77	15
553 - 136		5	.4	20	22	46	12

NOTE: < = LESS THAN

*D. Deveau*  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

cc: PAT DEVEAUX  
VIA FAX  
SC88/GR-G4



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

*pd*

October 13, 1988

## CERTIFICATE OF ANALYSIS ETK #88-555

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

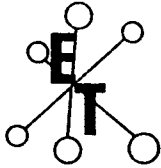
Attention: George Zbitnoff

*GAP-OPTION*

SAMPLE IDENTIFICATION: 40 SOIL samples received October 5, 1988  
PROJECT NO: 229-65

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
555 - 1	5300 N	3650E	65	<.1	75	3	84	11
555 - 2		3675E	30	.1	87	16	116	14
555 - 3		3700E	25	<.1	41	15	112	14
555 - 4		3725E	15	<.1	34	17	97	15
555 - 5		3750E	25	.1	27	13	70	14
555 - 6		3775E	20	.1	21	16	84	18
555 - 7		3800E	20	<.1	18	16	62	17
555 - 8		3825E	35	.1	57	19	99	21
555 - 9		3850E	65	.1	12	12	57	17
555 - 10		3875E	55	.1	26	16	137	17
555 - 11		3900E	30	.2	22	15	155	20
555 - 12		3925E	30	.2	36	18	128	18
555 - 13		3950E	15	.1	7	21	34	15
555 - 14		3975E	5	<.1	17	13	50	12
555 - 15		4000E	55	<.1	5	8	18	12
555 - 16		4025W	15	.1	45	9	78	14
555 - 17		4050E	45	.3	23	16	104	17
555 - 18		4075E	20	.6	14	20	68	15
555 - 19		4100E	15	.3	12	13	37	15
555 - 20	5400 N	3600E	20	.1	26	12	104	12
555 - 21		3625E	10	.1	19	36	96	16
555 - 22		3650E	10	.1	37	17	124	13
555 - 23		3675E	<5	.1	35	22	99	16
555 - 24		3700E	<5	.1	12	46	29	11
555 - 25		3725E	<5	.1	86	33	48	13
555 - 26		3750E	<5	.2	31	17	111	17
555 - 27		3775E	<5	.1	43	29	110	16
555 - 28		3800E	<5	.2	21	24	108	13
555 - 29		3825E	<5	.1	40	22	92	16
555 - 30		3850E	<5	.2	63	26	117	17





# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

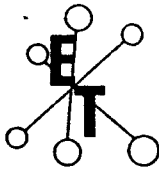
OCTOBER 13, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
555 - 31	3875E	10	.1	33	29	153	17
555 - 32	3900E	10	.1	45	21	128	13
555 - 33	3925E	20	<.1	17	19	105	12
555 - 34	3950E	30	<.1	23	15	96	9
555 - 35	3975E	30	.1	48	12	95	8
555 - 36	4000E	10	.1	29	20	67	13
555 - 37	4025E	20	.1	27	26	128	16
555 - 38	4050E	10	.1	29	27	82	17
555 - 39	4075E	20	.1	18	12	42	14
555 - 40	4100E	30	.1	24	25	78	16

NOTE: < = less than

*pe*  
*D. Pezzotti*  
-----  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX  
SC88/GR-63



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

*pd*

OCTOBER 19, 1988

## CERTIFICATE OF ANALYSIS ETK #88-569

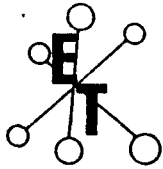
Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

*GAP OPTION*

SAMPLE IDENTIFICATION: 78 SOIL samples received October 11, 1988  
PROJECT NO: 229 - GS

ETK#	Description	Au ppb	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
569 - 1	4100 N	3000E	115	.5	68	19	63	12
569 - 2		3025E	30	1.2	24	12	28	11
569 - 3		3050E	75	.4	22	27	30	12
569 - 4		3075E	20	<.1	19	24	34	11
569 - 5		3100E	75	.2	24	43	36	16
569 - 6		3125E	60	.7	18	24	38	12
569 - 7		3150E	40	.1	23	22	38	16
569 - 8		3175E	30	.1	45	15	29	17
569 - 9		3200E	95	<.1	30	20	36	13
569 - 10		3225E	80	<.1	25	30	41	14
569 - 11		3250E	20	.1	24	25	58	13
569 - 12	4000 N	3100E	125	.2	29	29	72	23
569 - 13		3125E	40	.3	36	19	91	30
569 - 14		3150E	20	.1	32	22	71	33
569 - 15		3175E	40	.4	22	25	62	22
569 - 16		3200E	180	<.1	61	22	95	37
569 - 17		3225E	45	.2	61	38	100	27
569 - 18		3250E	65	.1	70	31	88	27
569 - 19		3275E	60	.3	53	36	105	31
569 - 20		3300E	70	.4	51	35	106	28
569 - 21		3325E	10	.2	58	54	109	28
569 - 22		3350E	105	.7	34	29	76	29
569 - 23		3375E	15	.1	74	28	94	26
569 - 24	4400 N	2825E	10	.3	27	19	78	17
569 - 25		2850E	70	.3	20	22	43	20
569 - 26		2875E	25	.4	22	15	61	17
569 - 27		2900E	165	.1	21	19	50	18
569 - 28		2925E	100	.4	30	19	76	16
569 - 29		2950E	55	.4	18	22	58	17
569 - 30		2975E	85	.3	13	20	38	18



# ECO-TECH LABORATORIES LTD.

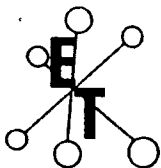
ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

OCTOBER 19, 1988

ETK#	Description	Au ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
569 - 31	3000E	40	<.1	16	20	48	20
569 - 32	3025E	60	.2	17	22	34	16
569 - 33	3050E	30	.4	17	17	12	14
569 - 34	3075E	70	.6	13	18	25	15
569 - 35	3100E	240	.4	19	21	20	17
569 - 36	4300 N 2800E	10	.5	13	21	76	19
569 - 37	2825E	30	.5	30	17	66	16
569 - 38	2850E	30	.1	26	21	49	16
569 - 39	2875E	75	.3	46	25	35	11
569 - 40	2900E	60	.3	30	31	73	10
569 - 41	2925E	120	.2	25	25	56	12
569 - 42	2950E	70	.2	17	27	64	10
569 - 43	2975E	60	.5	30	32	56	9
569 - 44	3000E	35	.2	27	51	77	10
569 - 45	3025E	55	.2	21	33	41	12
569 - 46	3050E	70	.3	11	36	41	13
569 - 47	3075E	50	.1	8	35	28	10
569 - 48	3100E	50	.1	5	53	16	10
569 - 49	5000 N 4125E	115	.2	28	25	96	29
569 - 50	4150E	10	.2	41	45	133	25
569 - 51	4175E	5	.2	29	30	90	22
569 - 52	4200E	40	.7	13	46	38	21
569 - 53	4225E	85	.8	37	33	95	33
569 - 54	4250E	40	.7	34	31	110	30
569 - 55	4275E	185	.6	42	100	97	37
569 - 56	4300E	15	.4	31	37	108	34
569 - 57	4325E	10	<.1	42	25	84	24
569 - 58	4350E	10	.1	32	23	143	24
569 - 59	4375E	10	.2	16	25	94	18
569 - 60	4400E	10	.2	22	36	55	36
569 - 61	4425E	105	.3	29	25	130	63
569 - 62	4450E	45	.6	57	36	148	48
569 - 63	5100 N 4175E	5	.2	23	27	101	25
569 - 64	4200E	130	.3	29	28	78	44
569 - 65	4225E	165	.4	25	16	109	53
569 - 66	4250E	85	.2	32	25	70	34
569 - 67	4275E	100	.3	23	28	77	30
569 - 68	5500 N 3800E	40	.1	24	40	97	12
569 - 69	3850E	365	.3	27	24	69	19
569 - 70	3875E	280	.2	19	18	115	17
569 - 71	3900E	105	.4	12	22	43	13
569 - 72	3925E	595	.6	40	12	145	13
569 - 73	3950E	880	.8	37	12	159	15
569 - 74	3975E	335	.4	92	18	93	13
569 - 75	4025E	315	.4	21	18	30	17



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING


10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

OCTOBER 19, 1988

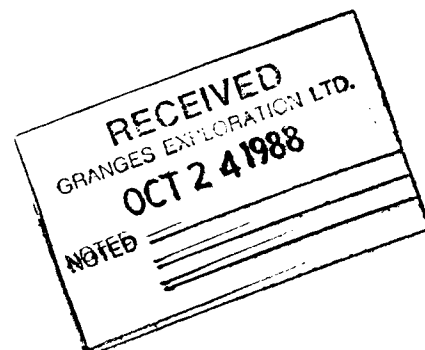
ETK#	Description	Au ppb	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
569 - 76	4050E	255	.4	17	25	31	16
569 - 77	4075E	175	.8	12	25	94	13
569 - 78	4100E	75	.1	61	20	78	14

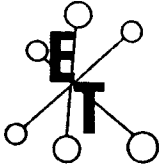
NOTE: < = less than

*fr*   
-----  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX

SC88/GR-G3





*pd*

**ECO-TECH LABORATORIES LTD.**

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

OCTOBER 23, 1988

CERTIFICATE OF ANALYSIS ETK #88-582  
-----

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

SAP

Attention: George Zbitnoff  
-----

SAMPLE IDENTIFICATION: 4 ROCK samples received October 15, 1988  
-----  
PROJECT NO: 229-PM

ETK#	Description	Au (ppb)	Ag (ppm)
582 - 1	6951	5	.1
582 - 2	6952	15	.3
582 - 3	6953	25	<.1
582 - 4	6954	5	<.1

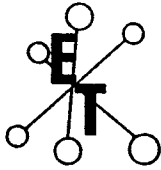
NOTE: < = less than

*D. Pezzotti*

*Mr* ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX

SC88/GR-G4



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

OCTOBER 24, 1988

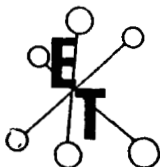
## CERTIFICATE OF ANALYSIS ETK #88-583

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

SAMPLE IDENTIFICATION: 32 SOIL samples received October 15, 1988  
PROJECT NO: 229 *GAP*

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
583 - 1	5550 N 4125E	10	.3	53	23	104	13
583 - 2	4150E	60	.4	25	29	128	9
583 - 3	4175E	20	.1	30	20	76	8
583 - 4	4200E	5	.5	21	25	95	8
583 - 5	4225E	5	.1	36	18	135	14
583 - 6	4250E	15	.1	19	28	100	14
583 - 7	4275E	15	.2	49	25	114	17
583 - 8	4300E	15	.7	27	23	149	15
583 - 9	4325E	30	.5	46	34	95	19
583 - 10	4350E	60	.6	46	24	119	22
583 - 11	5600 N 4100E	10	.3	50	36	177	16
583 - 12	5650 N 4175E (1)	15	.2	43	32	170	14
583 - 13	4200E	30	.7	21	42	90	19
583 - 14	4225E (1)	30	.2	14	34	50	22
583 - 15	4250E	20	.8	21	26	106	18
583 - 16	4275W	20	.5	24	28	128	20
583 - 17	4300E	25	.3	37	36	90	20
583 - 18	4325E	15	.8	24	20	72	35
583 - 19	4350E	20	.2	50	34	94	24
583 - 20	4450 N 2875E	80	.3	29	24	110	8
583 - 21	2925E	60	.3	20	23	60	5
583 - 22	2950E	75	.4	21	28	47	5
583 - 23	2975E	35	.4	21	14	61	6
583 - 24	3000E	35	.2	21	22	52	9
583 - 25	3025E	70	.3	14	25	28	5
583 - 26	3050E	40	.1	21	21	40	5
583 - 27	3075E	85	.1	4	17	8	4
583 - 28	4750 N 3825E (2)	30	.3	22	24	68	14
583 - 29	4150E (2)	20	.6	20	18	66	14
583 - 30	4200E (2)	20	.7	32	14	49	17



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

OCTOBER 25, 1988

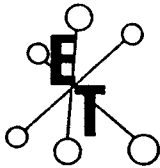
ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
583 - 31	4225E (2)	20	.2	23	13	53	15
583 - 32	4700 N 3775E (2)	30	.5	16	26	67	12

NOTE: < = less than  
(1) ROCK FACE  
(2) RESAMPLING

*Frank J. Pezzotti*  
per \_\_\_\_\_  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

c.c. Granges Exploration  
VIA FAX  
ATTENTION: PAT DEVEAUX

SC88/GR-G4



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

OCTOBER 31, 1988

## CERTIFICATE OF ANALYSIS ETK #88-593

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

Attention: George Zbitnoff

*GAP*

SAMPLE IDENTIFICATION: 11 SOIL samples received October 20, 1988  
PROJECT NO: 229 RESAMPLING

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
593 - 1	4300 N 3225E RS ✓	30	.1	37	29	82	19
593 - 2	3250E	15	.2	20	17	30	14
593 - 3	3275E	15	.2	24	26	53	16
593 - 4	3300E	<5	.2	28	42	52	14
593 - 5	3325E RS ✓	10	.2	37	25	64	13
593 - 6*	* 4100 N * 4100E RS ✓	<5	1	38	33	81	20
593 - 7*	* 4125E RS ✓	10	.3	20	58	45	31
593 - 8*	* 4150E RS ✓	10	.2	16	11	603	250
593 - 9	3750 N 3750E RS ✓	10	.5	59	33	101	38
593 - 10	4500 N 4175E RS ✓	10	.9	20	21	34	22
593 - 11	4600 N 4250E RS ✓	5	.8	43	26	63	26

NOTE: < = less than

*Revised Nov. 17*

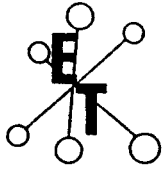
*D. Pezzotti*

*FR*

ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

SC88/GR-G4





# ECO-TECH LABORATORIES LTD.

*pd*

ASSAYING - ENVIRONMENTAL TESTING  
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

NOVEMBER 4, 1988

## CERTIFICATE OF ANALYSIS ETK #88-602

Granges Exploration Ltd.  
2300, 885 W. Georgia St.  
VANCOUVER, B.C.  
V6C 3E6

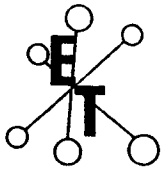
Attention: George Zbitnoff ✓

SAMPLE IDENTIFICATION: 51 SOIL samples received October 25, 1988  
PROJECT NO: 229 *GAP OPTION*

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	
602 - 1	5300 N	3825E**	20	<.1	55	23	104	21
602 - 2		3850E**	5	<.1	48	12	122	19
602 - 3		3875E**	10	<.1	48	22	116	28
602 - 4		3900E**	15	.1	69	27	109	27
602 - 5		3925E**	5	.1	58	16	115	17
602 - 6		4050E**	5	.1	44	19	104	21
602 - 7		4000E**	10	.3	20	10	69	14
602 - 8		3650E**	<5	.1	82	5	89	10
602 - 9		3675E**	<5	<.1	47	4	92	10
602 - 10	5400 N	3950E**	<5	<.1	35	13	105	13
602 - 11		3975E**	15	<.1	70	12	96	12
602 - 12	5500 N	3800E**	35	.1	45	8	113	14
602 - 13		3825E**	30	<.1	13	12	126	19
602 - 14		3850E**	95	<.1	37	13	99	24
602 - 15		3875E**	65	.2	30	20	126	23
602 - 16		3900E**	40	<.1	23	26	118	22
602 - 17	<i>RESAMPLE</i>	3925E**	55	.3	52	16	99	14
602 - 18		3950E**	60	.3	26	18	109	16
602 - 19		3975E**	20	.1	65	18	106	14
602 - 20		4000E**	15	<.1	101	13	100	15
602 - 21		4025E**	25	.1	22	26	99	18
602 - 22		4050E**	20	<.1	26	26	124	15
602 - 23		4075E**	20	.4	19	34	99	16
602 - 24		4100E**	25	<.1	19	15	73	13
602 - 25	5450 N	3825E**	35	<.1	35	20	111	16
602 - 26		3850E	35	<.1	50	22	120	15
602 - 27		3875E	25	<.1	26	18	130	14
602 - 28		3900E	15	<.1	62	26	121	23
602 - 29		3925E	25	<.1	17	15	111	13
602 - 30		3950E	25	<.1	19	18	108	15

*pr*  
*pr*  
*pr*  
*pr*

XX Resample



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

Granges Exploration Ltd.

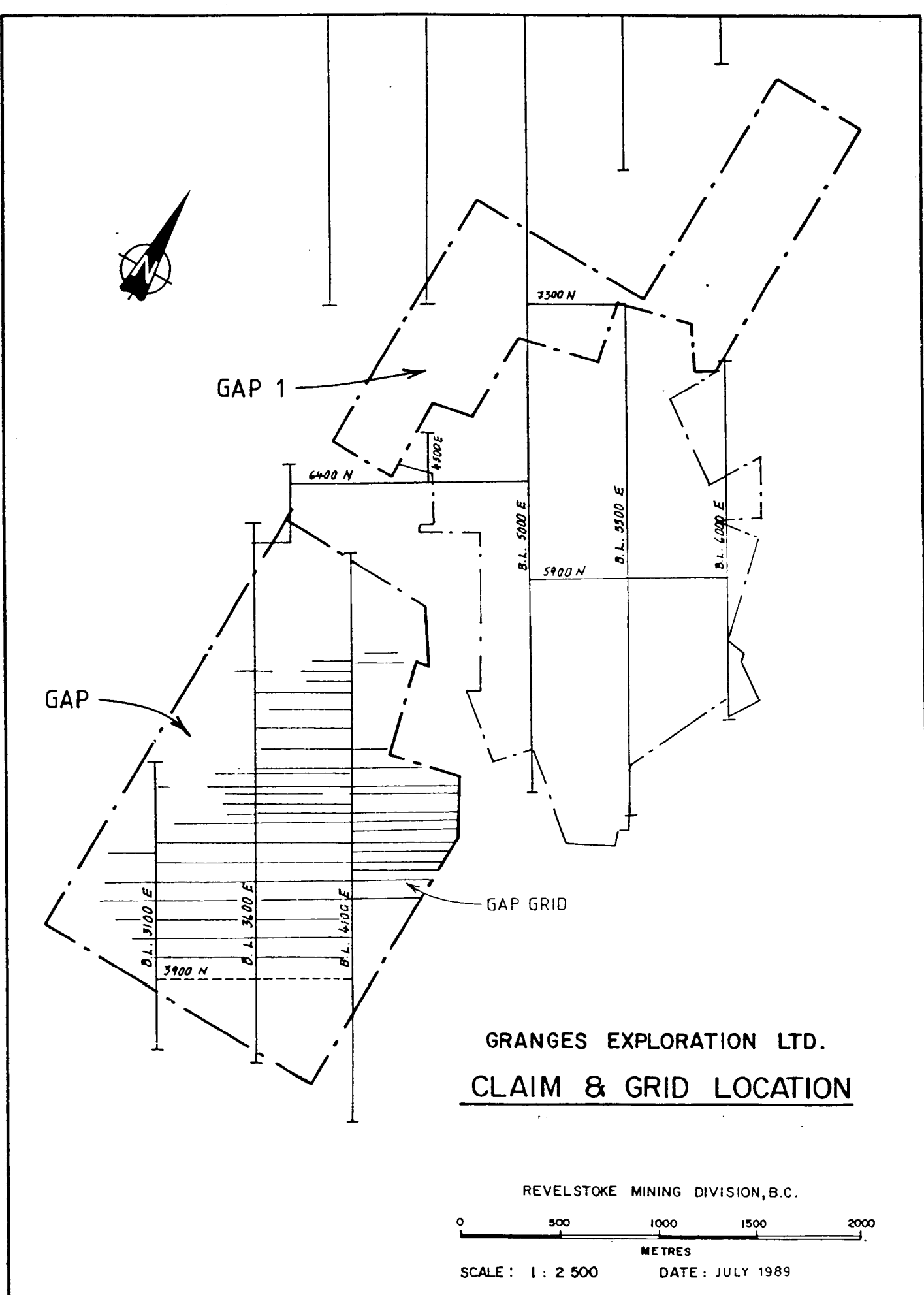
NOVEMBER 4, 1988

ETK#	Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As
602 - 31	5450H 3975E	15	.3	69	15	109	11
602 - 32	4000E	35 ✓	.1	75	30	112	30
602 - 33	4025E	55 ✓	<.1	35	26	107	43
602 - 34	4050E	20	.1	32	23	111	18
602 - 35	4075E	15	<.1	20	13	107	17
602 - 36	4100E	20	<.1	25	15	98	16
602 - 37	5550 N 3875E	35	<.1	13	16	110	10
602 - 38	3900E	20	<.1	22	17	85	17
602 - 39	3925E	20	.2	19	10	98	16
602 - 40	3950E	15	.1	25	17	119	11
602 - 41	3975E	20	1	27	81	136	17
602 - 42	4000E	20	.2	21	12	112	14
602 - 43	4025E	25	.3	25	32	111	14
602 - 44	4050E	15	.1	22	14	95	11
602 - 45	5500 N 3525E	10	<.1	16	26	108	14
602 - 46	3550E	10	.2	31	29	115	19
602 - 47	3575E	55	<.1	60	22	108	12
602 - 48	3600E	25	<.1	58	15	107	11
602 - 49	3625E ✓	75 ✓	.1	94	14	58	8
602 - 50	3650E ✓	130 ✓	.2	46	17	116	14
602 - 51	3675E ✓	205 ✓	.3	76	22	108	18

NOTE: < = less than  
\*\* = RESAMPLE

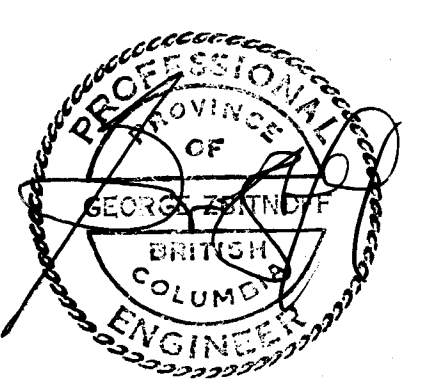
*Frank J. Pezzotti*  
ECO-TECH LABORATORIES LTD.  
Frank J. Pezzotti, A.Sc.T.  
B.C. Certified Assayer

SC88/GR-G4  
FAX: VCR



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,101



EXPLANATION:  
65-0.1-75 = Au-Ag-Cu  
S-Re-Mo = Pb-Zn-Ag  
AS 8-1488 (RESAMPLED)

DRAWN BY: P.V.
DATE: JAN 1989 / JUNE 1989

**GRANGES EXPLORATION LTD.**  
VANCOUVER, B.C.

**GEOCHEMICAL SURVEY-ASSAY RESULTS**  
GAP OPTION  
CAMBORNE AREA  
REVELSTOKE MINING DIVISION, B.C.

SCALE: 1:2500  
PROJECT No: 229  
N.T.S. No: 82 K/13 E