PROSPECTING REPORT

85-718-15

13923

ON

DELTA 1 MINERAL CLAIM

OMINECA MINING DIVISION 93M/7 55 22'N 126 55'W OWNED BY: COLIN HARIVEL

OPERATOR: ATNA RESOURCES LTD.

WRITTEN BY: COLIN HARIVEL

DATED: SEPTEMBER 1985.

GEOLOGICAL BRANCH ASSESSMENT REPORT

L3,923

TABLE OF CONTENTS

INTRODUCTION	
(i) Location and Access	· · · · ·
(ii) History, Ownership and Economic Assessment	1.
(iii) Summary	١.
(iv) Claim Information	١.
DISCUSSION AND CONCLUSIONS	2.
STATEMENT OF COSTS	З,

LIST OF FIGURES

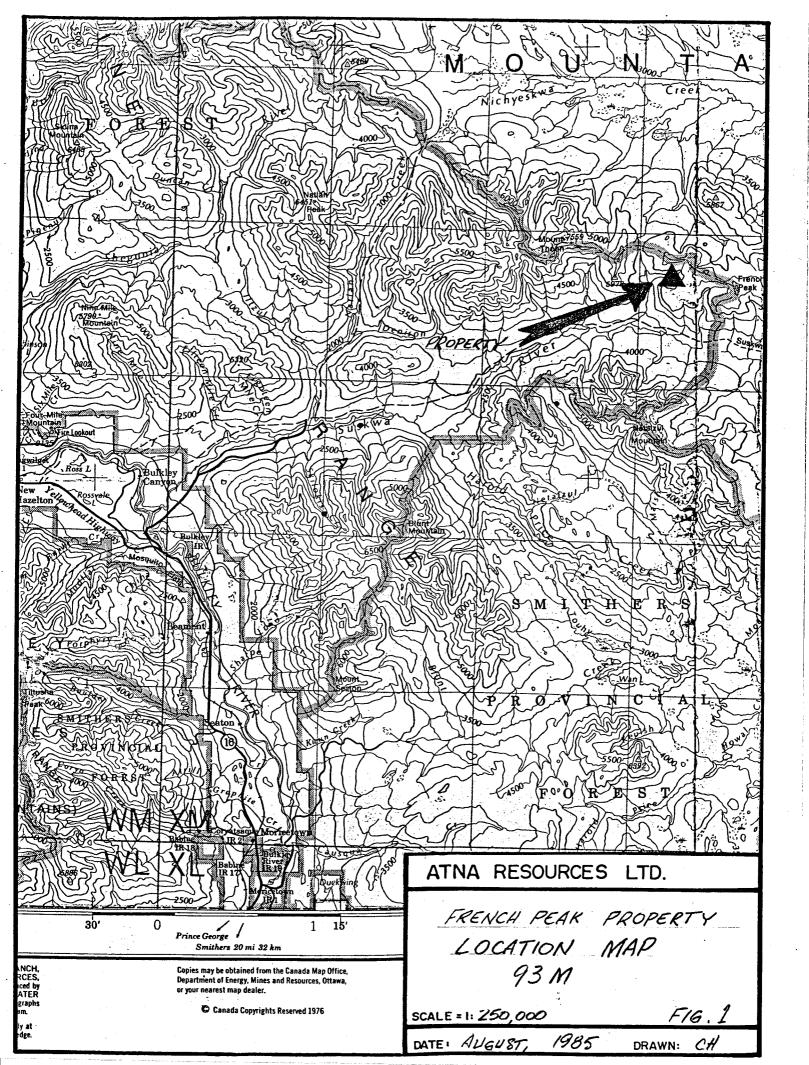
FIG.	1	Index	Map
FIG.	2	Claim	Map

FIG. 3 Sample Location Sketch

APPENDICES

APPENDIX 1 Analytical Results

APPENDIX 2 Statement of Qualifications of Author



INTRODUCTION

1.

(i) Location and Access.

The Delta 1 mineral claim is located on the west flank of French Peak on a tributary of the Suskwa River near the headwaters. The center of the claim lies some 20km west northwest of the village of Fort Babine, B.C.

Elevations on the claim range from 1280m (4200') to 1737m (5700'). The forest cover is spruce.

Access was by helicopter from Smithers.

(ii) History, Ownership and Economic Assessment.

The property was staked in June 1984 as a result of the release of government Regional Geochemical Survey data. A single sample stream sediment anomaly (see location, Fig. 3) was deemed to be of significant interest.

The claim is owned by Colin Harivel of Smithers, B.C. and funds for the exploration of the ground were provided by Atna Resources Ltd.

The property was deemed to have low economic potential.

(iii) Summary.

Work on the claim consisted of a helicopter supported visit during which the anaomaly source-area was prospected. Mineralized samples were collected by two Atna representatives and the analyses of these samples is reported in Appendix).

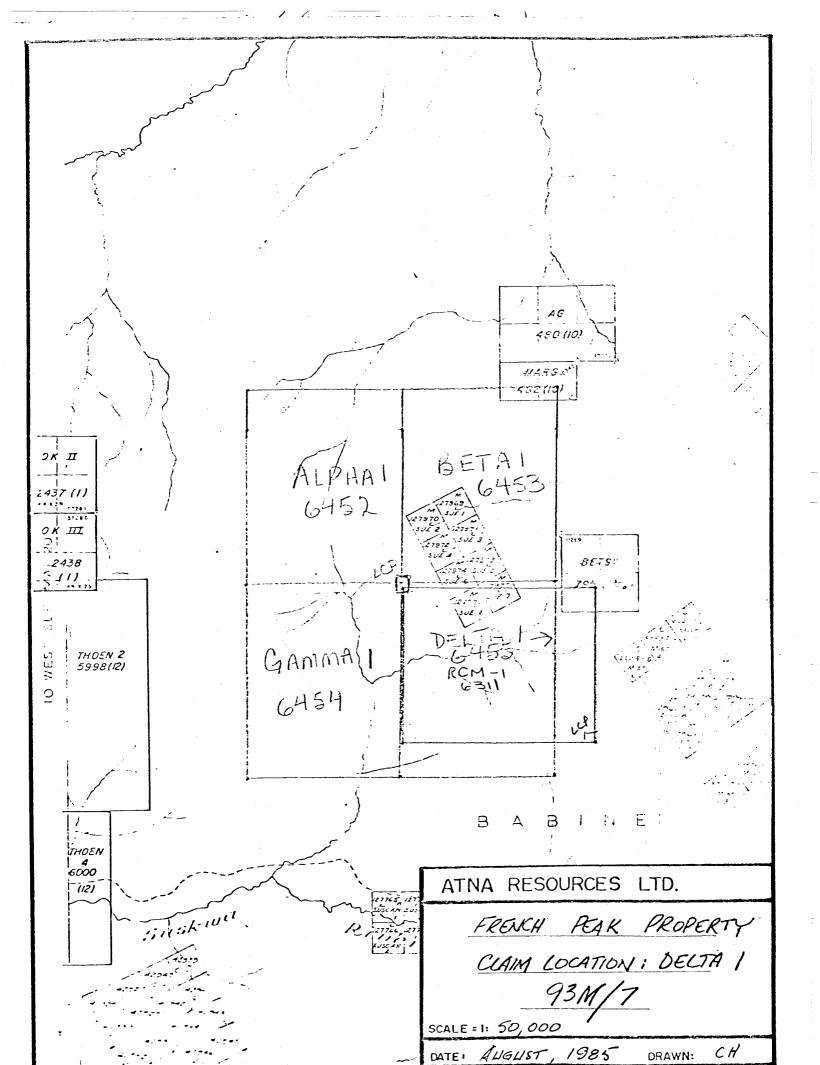
 ϵ_{194t} rock chip samples were taken and submitted for analysis.

(iv) Claim Information.

Delta 1

6455 July 24

20 units.



26 0 LCP DELTA 1 ĨΕ M.C. (5E, 4S)+ TR 23 TR 26 TR 28 sondstone, siltstone & conglomerate/+21 TR ZZ with common + feldspar porphry 33 dykes TR 37 *35 TR 20 × 131 bleached feldspor porphyry granodiorite 12-24 1258 D-1438 1227R/ tenching 1A29 A DE IR 14-30¹⁴; A DE ZR Abot ¢ 15 fue, 200 m Serfens 64 REY ATNA RESOURCES LTD. claim : ROCK SAMPLE, FLOAT boundary A,A FRENCH PEAK PROPERTY STREAM SEDIMENT SAMPLE SAMPLE LOCATION SKETCH GEOLOGICAL CONTACT : INTRUSNE FIG. 3 SCALE = 1: 5,000 DATE: ALIGUST 1985 CH DRAWN:

DISCUSSION AND CONCLUSIONS

2.

The area traversed was underlain by sandstones, siltstones, and conglomerates of the Bowser Lake Group which were intruded by feldspar porphyry granodiorite assigned to the Bulkley Intrusions of Cretaceous age.

Mineralized samples, most commonly disseminated pyrite, were sent for analysis and the results appear as an appendix. Inspection of the results reveals that two samples are anomalous for precious metals viz., TR30R and TR50R which ran 57.0 ppm Ag and 13.6 Ag respectively. In addition, TR30R ran 130 ppb Au. Both samples were well mineralized with galena and sphalerite.

The area is deemed to be of no further interest as a potential precious metals vein deposit site.

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STATEMENT OF COSTS

Wages:

Tom Richards, PhD, geologist, July 9, 1985 One day @ \$450/day	\$450
Dan Ethier, prospector, July 9, 1985 One day @ \$175/day	\$175

Helicopter:

Portion of Flight Invoice from Northern Mountain Hel. Prorated from total bill of \$997 \$310

Expended Supplies:

To replace flagging, hip-chain filament, sample bags Total \$89

Office Expenses:

Phone calls, preparation of photocopies and maps, \$48

Report Preparation:

1 day @ \$300/day Drafting and typing

TOTAL

\$1444

\$300

\$72

3.

APPENDIX 1

VGC	MAIN OFFIC 1521 PEMBERTON NORTH VANCOUVER, B (604) 986-5211 TELEX	N AVE. 3.C. V7P 2S3	(BRANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. V5L 1L6 (604) 251-5656
REPORT NUMBER: 85-75-003	JOB NUMBER: 85183	TON RICHARDS	page 1 of
SAMPLE #	Au	Au	
	oz/st	ррь	
lte IR		5	
$\mathcal{L}_{F} \left\{ \begin{array}{c} DE \ \mathbf{1R} \\ DE \ \mathbf{2R} \end{array} \right\}$		(5	
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H 314R H 315R	. 034	1160	
H 316R	. 009	300	
NET 1R		(5	
NET 2R		5	
NET 3R	1992 (1997 	(5	
NET 4R		(5	
NET BR	. 006	200	*
NET BR			
NET 10R		(5	
NET 11R	. 009	300	×
NET 12R	· · · · · · · · · · · · · · · · · · ·	75	
NET 14R	.012	400	
NET 15R		230	
	· · · · · · · · · · · · · · · · · · ·		
(PS 35R		10	
PS 38R		130	
ous PS 39R	n an the second seco Second second	5	
PS 43R	.856		×
PS 45R	. 009	300	

- signed:

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	VGC	MAIN OFFICI 1521 PEMBERTON NORTH VANCOUVER, B (604) 986-5211 TELEX	E AVE. .C. V7P 2S3	AB LIMITED BRANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. V5L 1L6 (604) 251-5656	
	REPORT NUMBER: 85-75-003	JOB NUMBER: 85183	TOM RICHARDS	PAGE 1	 0f 2
	SAMPLE #	Au oz/st	Au ppb		
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elto {	DE 1R DE 2R		J (5		
. (.082	2800		
lokie	✓ H 314R H 315R	.034	1160		
	H 316R	.009	300		
6	NET 1R		(5		1
· [*	NET 2R		5		
	NET 3R		(5		
6	NET 4R		(5		
	NET 8R	. 006	200	* .'	
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	NET 1ØR		(5		
	NET 11R	. ଉଦ୍ଧାର	300	×	
c (NET 12R		75		
	NET 14R	.012	400	X • •	
	NET 15R		230		
		· · ·			
ſ	PS 35R		10		
	PS 38R		130		,
lokes	PS 39R		5		
	PS 43R	. 856	> 10000	×.	19 s 19 s
	PS 45R	. 009	300		

DETECTION LIMIT 1 Troy oz/short ton = 34.28 ppm

- signed:

. 005 1 ppa = 0.0001%

ppm / parts per million

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5

(= less than

Suskwa River

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 253 PH: (604)986-5211 TELEX:04-352578 BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH: (604)251-5656

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ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:3 HCL TO HNO3 TO H20 AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM. IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

COMPANY: TOM RICHARDSREPORT#: $8575-003A$ ATTENTION: ATNA RESOURCESJOB#: 85183PROJECT:INVOICE#: 8717											DATE RECEIVED: 85/07/15 DATE COMPLETED: 85/07/17 COPY SENT TO: T. RICHARDS & C. HARIVEL ANALYST											wes							
									-													PAGE 1 OF 1							
SAMPLE NAME	AG PPN	AL 1	AS PPN	AU PPN	BA PPN	BI PPM	CA I	CD PPM	CO PPM	CR PPN	CU PPH	FE 1	K I	N6 1	HN PPH	ND PPN	NA Z	NI PPM	P X	PB PPM	PD PPN	PT PPN	SB PPM	SN PPH	SR PPN	U PP h	W PPN	ZN PPN	
DE-1R DE-2R H-314R H-315R H-316R	.2 4.0 7.8)100 .8		38 100 49659 25381 5204	ND ND ND ND	57 69 ND 17 4	3 3 11 41 ND	.55 .02 .01 .05 .08	.1 6.5 53.0 27.1 4.4	7 13 8 5 2	51 66 182 95 91	44 160 46 394 11	2.60 3.04 6.11 4.42 1.85	.10 .07 .09 .10 .09	.62 .04 .01 .04 .02	767 39 54 52 44	1 9 4 6	.09 .01 .01 .01 .08	7 8 7 5 3	.05 .01 .01 .04 .06	7 255 145 756 21	ND ND ND ND	ND ND ND ND	ND 71 75 228 13	ND ND ND ND ND	16 7 3 19 2	ND ND ND ND	ND ND ND ND ND	49 1385 122 72 9	
NET-18 NET-28 NET-38 NET-48 NET-88	.8 .5 .8 .8 43.0	1.26 .61 5.54 4.03 .01	155 39 ND ND 23	ND ND ND ND ND	486 42 11 230 ND	ND ND ND 5 99	.61 .28 3.08 1.51 .03	.1 .1 .1 .1 .6	5 7 88 13 7	175 65 52 68 130 (26 58 1253 132 25887	2.17 2.31 10.23 3.06 4.54	.10 .08 .25 .21 .08	.37 .35 .08 .44 .01	370 171 200 318 30	2 4 5 4 5	.15 .12 .12 .20 .03	9 6 18 8 5	.04 .08 .11 .05 .01	8 8 10 8 59	ND ND ND ND ND	ND ND ND ND	3 4 ND ND 13	ND ND 2 4 ND	63 16 136 97 3	ND ND 12 6 ND	ND ND 15 6 6	54 56 15 36 49	
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PS-35R PS-38R PS-39R PS-43R PS-45R	17.1 7.5 3.7 11.1 ()100	.88 .69 1.62 .21 .01	135 402 59 >102 6654	ND ND ND 29 ND	91 19 3 14 ND	8 96 6 (1089 '16	.21 1.58 3.86 1.27 .04	1.5 .1 6.0 577.5 131.1	2 5916 84	68 89 21 13 42	1113 71 852 25 553	1.83 1.14 3.70 24.36 .72	.09 .11 .15 .43 .02	.50 .33 1.55 .13 .01	265 387 966 79 22	2 109 53 86 4	.13 .12 .01 .01 .01	353 467 9 109 6	.05 .03 .11 .01 .01	73 60 60 23 20761	ND ND ND ND	ND ND ND ND	155 33 30 135 39678	3 ND 2 ND ND	18 27 40 280 10	4 5 30 ND ND	3 ND ND ND	111 27 724 23 3711	
PS-46R PS-47R TR-24R TR-25R TR-27R	6.5 11.3 1.2 .8 1.7	.68 .18 .62 .55 .29	326 159 136 19 68	ND ND ND ND	5 25 46 86 75	5 ND ND 3 5	3.57 8.56 .18 1.18 2.47	,8 209.3 2.2 .5 .1	14 1 23 4 12	19 32 16 23 33	482 171 90 11 24	4.48 .73 6.35 1.40 2.57	.21 .14 .14 .11 .15	.86 .05 .26 .41 .73	688 2372 279 508 2646	4 52 2 1 1	.56 .01 .03 .09 .11	80 4 54 5 19	.07 .01 .03 .05 .10	454 1060 79 24 30	ND ND ND ND	ND ND ND ND	268 108 41 12 15	ND ND ND ND	42 146 14 57 142	25 ND ND 7 11	ND ND ND ND ND	56 3788 82 169 80	
TR-29R TR-30R TR-50R	6.8 57.0 13.6	.17 .22 .18	55 365 73	ND ND ND	44 46 40	ND 5 22	.19 .48 .27	18.2 277.5 669.5	6 2 5	51 39 63	124 4226 620	2.52 2.55 2.08	.09 .09 .07	.03 .13 .03	136 1139 1042	2 5 12	.01 .01 5.08	405 11 308	.06 .06 .04	1957 15968 1804	ND ND ND	ND ND ND	16 132 16	ND 5 9	8 17 13	ND ND ND	ND 52 620	3208 36939 69447	et i g

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A .5 GRAM SAMPLE IS DISESTED WITH 5 ML DF 3:1:3 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,W,PT AND SR. AU AND PD DETECTION IS 3 PPM. IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, -= NOT ANALYZED

ł	COMPANY: TOM RICHARDS ATTENTION: TOM RICHARDS PROJECT:						JDB#: 85184										CEIVE MPLET NT TO	TED:			2 ** **	ANALYST CO. Access								
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	SAMPLE NAME	A5 PPN	AL.	AS PPM	- AU PPM		BI PPN	CA Z	.CD PPM	CO PPM	CR	CU PPN	FE	K I	H6 1	NN PPM	ND PPN	NA I	NI PPH	P	PB PPN	PD PPN	PT PPN	SB PPN	SN PPH	SR PPN	U PPM	N PPH	ZN PPM	
	95 H314 85 H315 85 TR31C 85 TR32 85 TR33	5.9 4.8 .6 .2 .1	2.91 1.84	588 458 23 31	ND ND ND ND	108 93 281 173 177	5 4 ND ND ND	.80 1.31 1.28 .42 .58	5.0 3.5 .8 1.6	13 13 6 17 16	20 10 6 9	128 112 25 182 40	5.57 3.54 2.79 5.04 5.42	.19 .18 .15 .14 .16	.97 .93 .28 .61 .68	789 725 1244 1346 1570	3 8 2 6 1	.11 .13 .19 .09	8 7 7 15 11	.13 .14 .15 .09 .09	299 199 14 40 11	ND ND ND ND	ND ND ND ND	(15) (11) ND 4 ND	3 1 ND ND	119 195 116 45 61	13 21 9 3 5	ND ND ND ND	256 173 87 262 120	
	85 TR35 85 TR36 85 TR37 85 TR38 85 TR38 85 TR39	.4 .5 .8 .5 1.1	1.39	65 90 124 57 154	ND ND ND ND	298 121 157 135 160	ND ND ND 3 ND	.48 .26 .54 .26 .52	7.0 5.9 5.9 7.9 9.3	24 17 21 16 21	8 9 9 9	36 75 81 103 104	4.94 4.11 4.79 3.58 5.34	.13 .13 .16 .12 .15	.39 .49 .46 .45 .45	7870 2428 2915 2800 3339	4 5 5 3 4	.10 .11 .17 .11	8 9 10 11	.15 .09 .14 .07 .16	81 86 121 115 209	ND ND ND ND	ND ND ND ND	3 7 6 5 5	ND ND ND ND	50 24 58 24 53	ND ND 7 3 	ND ND ND ND	390 551 587 541 762	
	85 TR20 SILT 85 TR21 85 TR22 85 TR22 85 TR23 85 TR26	.2 .5 .1 1.2 .2	2.34 2.47 1.35	29 17 36 77 41	ND ND ND ND	194 237 245 154 157	ND ND ND ND	.44 .76 .80 .29 .26	.8 .3 1.7 2.7	18 7 15 24 16	11 9 17 10 10	37 22 34 458 146	5.90 3.40 4.83 7.28 4.22	.16 .12 .15 .15 .15	.74 .37 .66 .41 .56	1588 956 1986 1467 952	1 2 5 21 8	.08 .11 .10 .08 .08	18 7 15 12 10	.09 .14 .12 .12 .08	19 14 15 118 66	ND ND ND ND ND	ND ND ND ND	5 ND ND 16 6	ND ND ND ND ND	41 128 87 44 31	3 6 7 ND ND	3 ND ND	140 118 127 357 244	
	85 TR28 85 NET1 85 NET2 85 NET3 85 NET3	.2 .4 .1 .3 1.2	3.05 3.84 2.56	51 182 68 322 63	ND ND ND ND	161 176 176 213 156	ND ND ND ND	.23 .41 .36 .57 .62	6.3 5.8 2.7 7.5 6.3	22 18 22 23 13	7 12 13 12 13	71 66 46 41 97	4.07 5.09 6.33 7.35 3.91	.10 .14 .15 .17 .14	.38 .75 .83 .71 .71	3554 1825 3665 7818 1084	4 9 67 7 12	.08 .09 .08 .10 .12	11 12 11 15 9	.07 .09 .11 .10 .11	48 78 33 33 54	ND ND ND ND	ND ND ND ND	4 13 ND 6 7	ND ND 1 2 ND	36 71 53 115 9 9	ND ND ND ND	ND ND 7 ND ND	338 351 185 206 383	
	85 NET5	1.2	3.15	73	ND	144	ND	.63	9.8	19	16	135	4.78	.15	.85	1670	15	.11	25	.11	73	ND	ND	8	1	98	ND	7	624	

5.11-s? x

APPENDIX 2

STATEMENT OF QUALIFICATIONS

I, Colin Harivel, of business address Box 233, Smithers, B.C. do certify that;

1. I am a geologist and have practised my profession in the mining exploration industry in Australia, Canada and the United States of America.

2. I am a graduate in geology from the University of British Columbia with the degree of Bachelor of Science (1972).

3. I am a Fellow of the Geological Association of Canada.

4. I have, in the course of my professional work in Canada, explored for deposits of the type that may exist on the property described.

5. This report was prepared from notes taken by me and by other competent geologists and prospectors who have worked on the claims described in this report.

Signed:

€olin/Ha BSc, FGAC.

STATEMENT OF QUALIFICATIONS

We, the undersigned, do hereby state that;

1. This prospecting report was prepared from notes made by us during the prospecting of the claims described in this report.

2. We are qualified, experienced prospectors and have worked in west central British Columbia in the mineral exploration industry for at least seven years.

3. This report accurately reflects our observations with respect to the claims which are the subject of this report.

Tom Richards, PhD, geologist, prospector

.

Pat Suratt, prospector

Bruce Holden, prospector

Colin Harivel, BSc, geologist, prospector

Dan Ethier, prospector