

NOV 01 '11 11:07

**EL07032**  
**Assessment Work Report**  
**Somerset Gold District**  
**Humps Hill**  
**Lunenburg County, Nova Scotia**

**2011 Exploration**

**Prepared by Ken Hiltz**

**15 Cambridge Court**  
**Stillwater Lake**  
**Nova Scotia**  
**B3Z 1G2**

**November 2011**

## CONTENTS

<b>1 SUMMARY.....</b>	<b>3</b>
<b>2 INTRODUCTION.....</b>	<b>3</b>
<b>3 LOCATION AND ACCESS.....</b>	<b>4</b>
<b>4 LICENCE TABULATION.....</b>	<b>4</b>
<b>5 Quartz Float and Vein Survey and Sampling.....</b>	
<b>5.1 Methodology.....</b>	<b>5</b>
<b>5.2 Samples.....</b>	<b>5</b>
<b>5.3 Results.....</b>	<b>5</b>
<b>6 CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER EXPLORATION.....</b>	<b>6</b>

## **LIST OF FIGURES**

**Figure 1 - Project Location.....**

**Figure 2 – Quartz Vein and Sample Locations.....**

## **LIST OF TABLES**

**Table 1 - Exploration Licence Details.....4**

## **List of Appendices**

**Appendix 1 – Analytical Methods**

**Appendix 2 – Assay Certificates**

**Appendix 3 – Samples Data**

# 1 Summary

The program consisted of searching for quartz veins and float by extensive traversing of the claim by compass bearing and via a survey line. A number quartz veins were located and two instances of float. Three veins were sampled and assayed for Au as was one of the quartz float. Only one sample was slightly positive.

# 2 Introduction

The Somerset Gold District is an un-proclaimed gold district that has several areas of extensive old workings but no record of any gold production. None of the old workings are on this claim. The claim is just east of a large drumlin, Humps Hill, which sits on top of the Indian Path Antcline.

This claim was part of a large area explored by Seabright Resources in 1987 and 1988 when they did extensive reconnaissance soil and till sampling plus soil and till sampling on two grids one of which took in the area of this claim. This claim had soil assays as high as 722 ppb Au and till assays as high as 624 ppb Au in 1987. And a reconnaissance soil assay in 2008 in the same general area was (203 ppb).

The aim this year was to identify quartz veins and float on the claim and determine if there was gold in the quartz.

### **3 Location and Access**

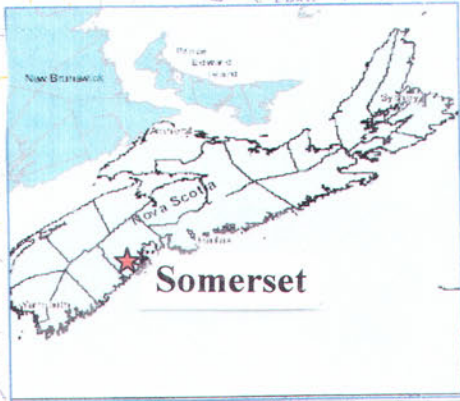
The property is located approximately 90 km southwest of Halifax and about three km east of Sommerset(Figure 1). Road access to the property is good from Halifax via 103 highway then Crousetown exit to Somerset Road; a distance of about 120 km. The licence area can be reached by 4 wheel drive to within about 300 meters by a logging road off the Somerset road.

### **4 Licence Tabulation**

EL 07032 is held by Ken Hiltz. Exploration Licence details are at Table 1.

**Table 1 – Exploration Licence Details**

<b>EL</b>	<b>NTS Sheet</b>	<b>Tracts</b>	<b>Claims</b>	<b>Date of Issue</b>
07032	21A2D	73	L	29 November 2006

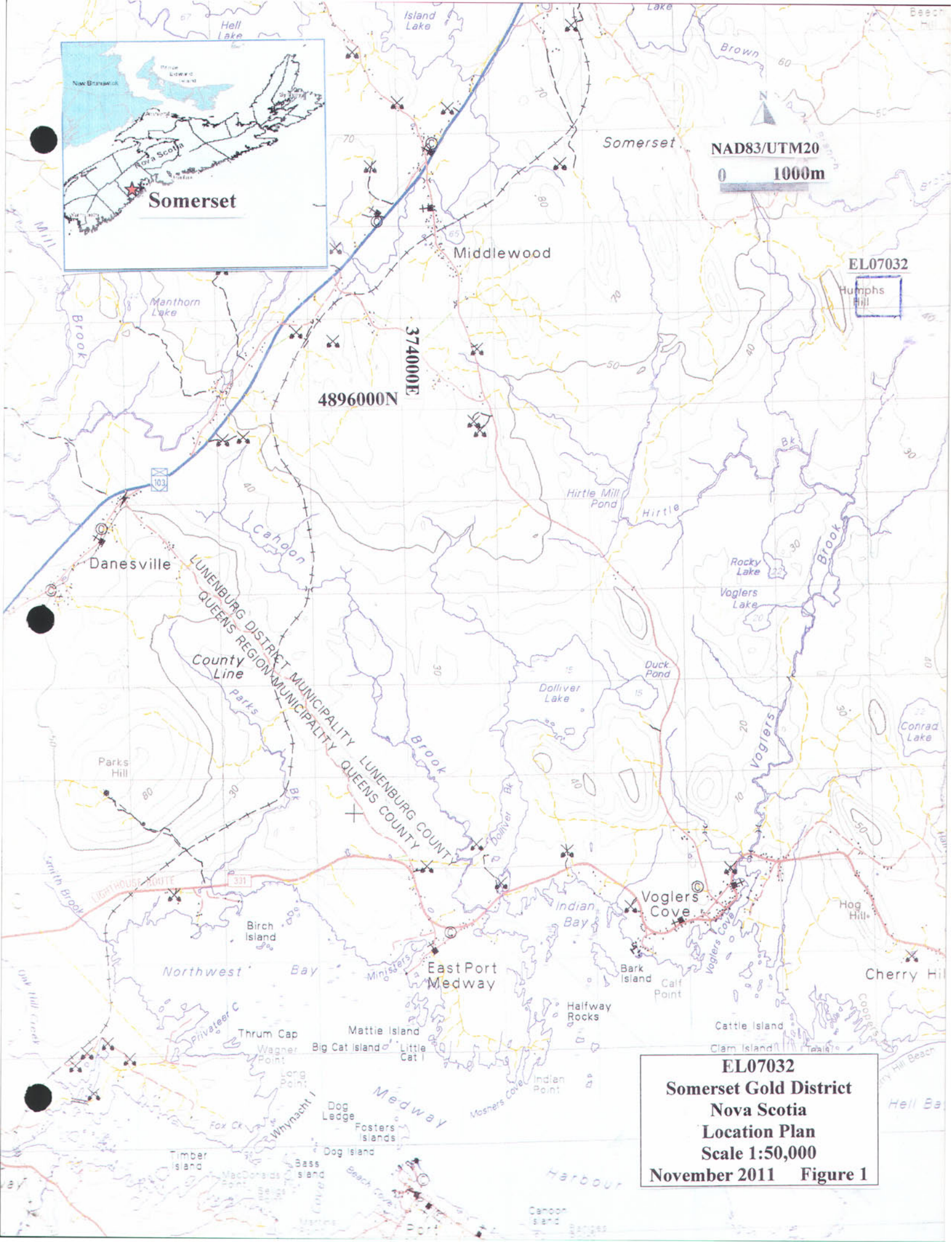


NAD83/UTM20  
0 1000m

EL07032  
Humphs Hill

4896000N  
374000E

**EL07032**  
**Somerset Gold District**  
**Nova Scotia**  
**Location Plan**  
**Scale 1:50,000**  
**November 2011 Figure 1**



## **5 Quartz Float and Vein Survey and Sampling**

### **5.1 Methodology**

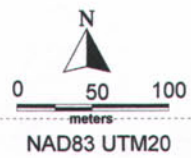
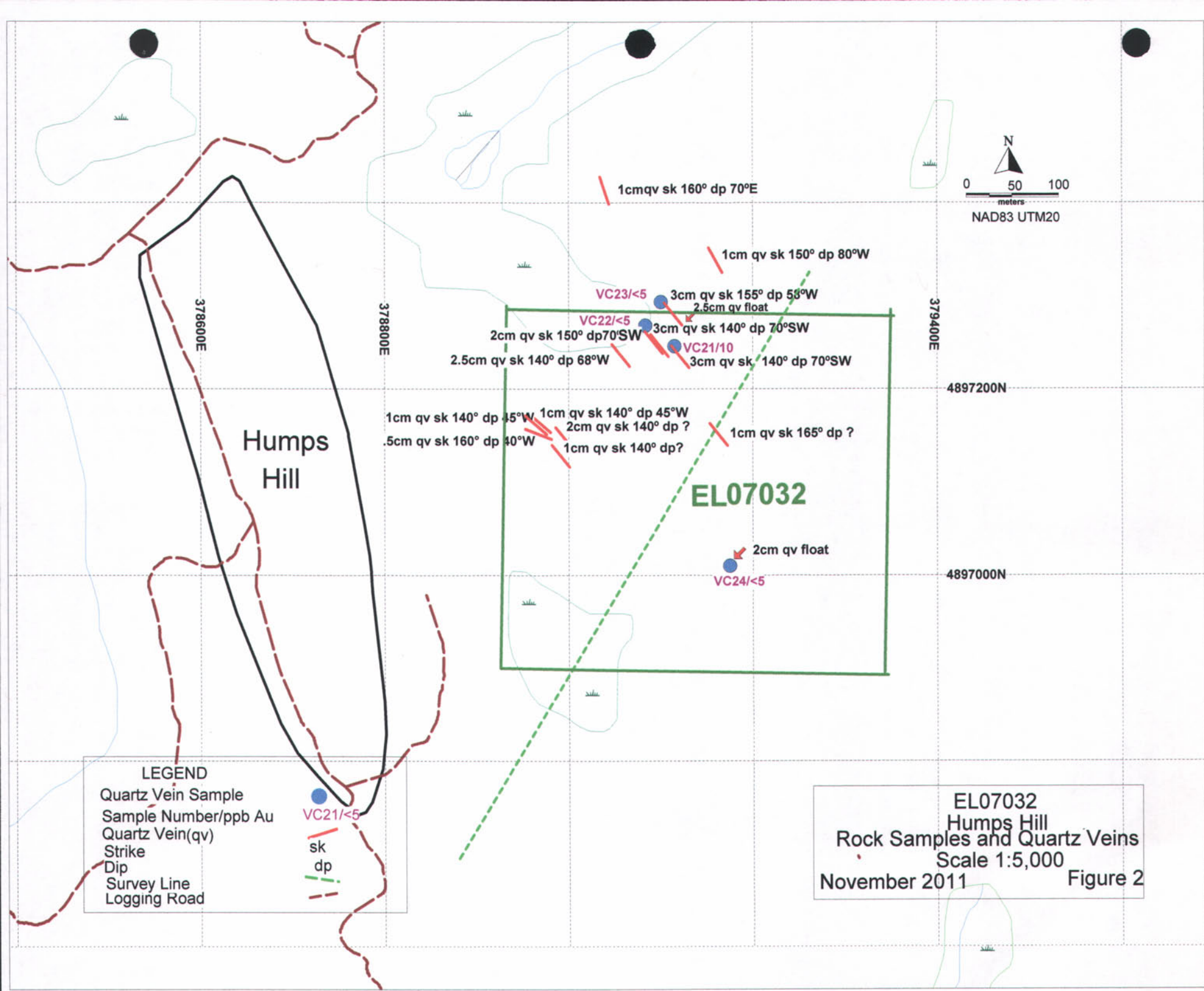
The exploration area was extensively traversed by compass bearing and via a survey line passing through the claim. The aim was to find quartz veins and float and to try and find the source of gold in the till and soil discovered in previous exploration.

### **5.2 Samples**

Sampling was done with a 1.5 Kg rock hammer with sample weigh averaging about 1 Kg. Samples were taken from three quartz veins and from one quartz float for assay at Dalhousie University (Appendix 1 and 2). Sample locations, sources, weights and dates are recorded at appendix 3.

### **5.3 Results**

Thirteen quartz veins and quartz float in two locations were discovered. Locations of quartz veins, float and samples taken are illustrated at figure 2. Only one assay was above the lower limit of <5 ppb and it was quite low at 10 ppb. See appendix 2 and 3.



Humps Hill

EL07032

**LEGEND**

- Quartz Vein Sample
- Sample Number/ppb Au
- Quartz Vein(qv)
- Strike
- Dip
- Survey Line
- Logging Road

VC21/<5

sk

dp

EL07032  
 Humps Hill  
 Rock Samples and Quartz Veins  
 Scale 1:5,000  
 November 2011 Figure 2

1cmqv sk 160° dp 70°E

1cm qv sk 150° dp 80°W

VC23/<5

3cm qv sk 155° dp 53°W  
 2.5cm qv float

VC22/<5

2cm qv sk 150° dp 70°SW

3cm qv sk 140° dp 70°SW

VC21/10

2.5cm qv sk 140° dp 68°W

3cm qv sk 140° dp 70°SW

1cm qv sk 140° dp 45°W

1cm qv sk 140° dp 45°W

.5cm qv sk 160° dp 40°W

2cm qv sk 140° dp ?

1cm qv sk 140° dp ?

1cm qv sk 165° dp ?

2cm qv float

VC24/<5

378600E

378800E

379400E

4897200N

4897000N

## **6 Conclusions and Recommendations for Further Exploration**

This is one more example of extensive quartz veining in the Somerset Gold District and considering the high level of ground cover it is very likely many were not found.

Trenching and drilling should be considered to try and find the source of the high till and soil assays.

# BIBLIOGRAPHY

**Gold, Voglers Cove, Lunenburg County, Nova Scotia. Report on Geological Mapping and Rock, Soil and Till Geochemical Surveys [Assessment Report on 1987 Exploration Program on General Exploration License 11864 Voglers Cove "B" ....], by Olshefsky, K F; Seabright Explorations Incorporated, Assessment Report ME 1987-174, 1987, 52 page(s), 11 map(s). ISN: 10196**

**Gold, Voglers Cove, Lunenburg County, Nova Scotia. Report on Rock Sampling and Assays, Geological Mapping, Soil and Till Geochemical Surveys and Magnetic and VLF-EM Surveys [Assessment Report on 1987 Exploration Program on General Exploration Licenses 12746-13481, Voglers Cove "B" ....], by Jones, K W; Seabright Explorations Incorporated, Assessment Report ME 1988-207, 1988, 106 page(s), 15 map(s). ISN: 10708**

**Gold, Voglers Cove, Lunenburg County, Nova Scotia. Report on Rock, Soil and Till Geochemical Surveys, and Magnetic and VLF-EM Surveys [Assessment Report on 1988 Exploration Program on General Exploration Licences 14717 and 13481, Voglers Cove "B" ....], by Jones, K W; Seabright Explorations Incorporated, Assessment Report ME 1988-361, 1988, 57 page(s), 13 map(s). ISN: 10805**  
**Jones Kevin W., Report on 1988 Exploration Program for Seabright Explorations Inc. Department of Natural Resources Open File Report AR 88 361.**

**Gold, Somerset, Lunenburg County, Nova Scotia. Prospector's Statement, Exploration Licence No. 07032, by Hiltz, K R, Assessment Report ME 2008-206, 2008, 12 page(s), 1 map(s). ISN: 22158**

# **AUTHOR**

Ken R. Hiltz

15 Cambridge Court  
Stillwater Lake  
Nova Scotia  
B3Z 1G2

902 482-6586  
krhiltz@eastlink.ca

Prospector ID # 567

12 years Prospecting Experience  
Natural Resources Basic Prospecting Course  
Natural Resources Advanced Prospecting Course

# **Appendix 1**

## **Analytical Method**

## Fire Assay Procedure – Gold

Sample Decomposition: Fire Assay Fusion

Analytical Method: Atomic Absorption Spectroscopy (AAS), Inductively Coupled Plasma Optical Emission Spectroscopy (ICPOES)

A prepared sample is fused with a neutral lead oxide flux inquartered with 4 mg of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested for one hour in 1.0ml of dilute nitric acid. Hydrochloric acid (1.0ml) is then added and the solution is digested for an additional hour. The digested solution is then cooled, diluted to 6.0 ml with double distilled water, mixed and then analyzed by AAS or ICPOES.

Certified reference samples from CANMET, West Coast Minerals, or Rocklabs are analyzed with each batch. In addition, duplicate check analysis and method blank analysis are also run with the samples. A CRM sample is inserted with every batch of 20 samples.

Au detection limit is 0.005 ppm, or 5 ppb, on a 30g sample.

## **Sample Preparation of Rocks and Core**

Samples undergo multiple stage crushing (minus 10.0 mm) with jaw crushers. For rock and core samples requiring gold analysis, samples may be crushed to <3mm using a BICO face plate pulverizer. Crushed samples are riffle split to 200-250 grams, then pulverized with a ring and puck pulverizer (Spex Industries Inc. Shatterbox) to approximately 100% passing 0.15 mm or 75% passing 0.075mm. Equipment is cleaned with jets of air and silica sand between samples.

# **Appendix 2**

## **Assay Certificates**

13-May-11


K. Hiltz  
15 Cambridge Court  
Stillwater Lake  
B3Z 1G2

minerals.engineering.dal.ca  
Tel: 902.494.3955  
Fax: 902.494.3506  
Email: mec@dal.ca

Re: Results of analysis on submitted rock samples.  
Au analysis using fire assay, lead collection, AAS finish.

Sample	Au (mg/kg)
VC-21	0.010
VC-22	<0.005
VC-23	<0.005
VC-24	<0.005
P133	0.017
P134	0.039
P135	0.046

Certified Reference Samples:	Au (mg/kg)	Recommended Value
OXG70	1.012	1.007±0.013
OXC72	0.203	0.205±0.003



Digitally signed by  
Daniel Chevalier  
Date: 2011.05.13  
10:55:25 -03'00'

Daniel Chevalier, MASC  
Manager, Minerals Engineering Centre

# **Appendix 3**

## **Sample Data**

Sample	Prospect	EL	NAD83North	NAD83East	Sample Method/Source	Au ppb	Date Taken	Prospector	Sample Description	Weight Kg	Assay Method	Au Lab	Au Lab Report
VC21	Somerset	EL07032	4897254	379107	Rock Chip/Outcrop	10	2-May-11	Ken Hiltz	25% GW, 75% l. gy fe stained qv	1.15	Fire Assay	Dalhousie	13-May-11
VC22	Somerset	EL07032	4897260	379087	Rock Chip/Outcrop	<5	2-May-11	Ken Hiltz	l. gy qv	1.08	Fire Assay	Dalhousie	13-May-11
VC23	Somerset	EL07032	4897290	379099	Rock Chip/Outcrop	<5	2-May-11	Ken Hiltz	l. gy qv	1.35	Fire Assay	Dalhousie	13-May-11
VC24	Somerset	EL07032	4897025	379175	Rock Chip/Outcrop	<5	2-May-11	Ken Hiltz	10% GW, 80% l. gy qv	0.755	Fire Assay	Dalhousie	13-May-11

Colour	Abbrev.	Mineral	Abbrev.	Rock	Abbrev.	Adjective	Abbrev.
black	blk	pyrrhotite	po.	greywacke	GW	light	l.
blue	bl.	pyrite	py.	argillite	AR	dark	dk
grey	gy	arsenopyrite	ap.	siltstone	zt	strongly	str.
green	gn	spalerite	Sp.	claystone	ct	moderately	mod.
yellow	y.	galena	gl.	quartz vein	qv	weakly	Weak.
brown	br.	chalcopyrite	cp.	graphite	Gr.	altered	alt.
Structure		carbonate	ca	mica	ml	Sed. Feature	
breccia	b	ankerite	ak	muscovite	mu	bedded	bdd
shear(ed)	sh	sericite	se.	Number	Meaning	bourna	bm
fault(ed)	fl	siliceous	sl.	1	trace	laminated	lm
contact	cn	General		2	weak	cross-bedded	x-bdd
foliation	fn.	strike	sk	3	moderate		
cleavage	cv.	dip	dp	4	strong		
				5	intense		

**Form 10 - Statement of Assessment Work Expenditure**  
(pursuant to the *Mineral Resources Act*, S.N.S. 1990, c. 18, s. 43(1))

(Complete as necessary to substantiate the total claimed.)  
Re: Licence No. EL07032 Date of issue 29 Nov 2006

Type of Work		Amount Spent
1. <del>Reprospecting</del> <i>Survey &amp; Sample Collection</i>	<u>1</u> days	\$ <u>275.00</u>
2. <del>Geological mapping</del> <i>Report Preparation &amp; assays</i>	<u>1</u> days	\$ <u>275.00</u>
3. Trenching/stripping/refilling	_____ m <sup>2</sup> / _____ m <sup>3</sup>	
4. Assaying & whole rock analysis	<u>4 X 23.50</u> #	\$ <u>94.00</u>
5. Other laboratory	_____ #	
6. Grid:		
(a) Line cutting	_____ km	
(b) Picket setting	_____ km	
(c) Flagging	_____ km	
7. Geophysical surveys		
Airborne:		
(a) EM/VLF	_____ km	
(b) Mag or Grad	_____ km	
(c) Radiometric	_____ km	
(d) Combination	_____ km	
(e) Other	_____ km	
8. Geophysical surveys		
Ground:		
(a) EM/VLF	_____ km	
(b) Seismic soundings	_____ #	
(c) Magnetic/telluric	_____ km	
(d) IP/resistivity	_____ km	
(e) Gravity	_____ km	
(f) Other	_____ km	
9. Geochemical surveys		
(a) Lake, stream, spring		
(i) Water	_____ samples	
(ii) Sediments	_____ samples	
(b) Rock		
(i) Core	_____ samples	
(ii) Chips	_____ samples	
(c) Soil	_____ samples	
(i) Overburden	_____ samples	
(d) Gas	_____ samples	
(e) Biogeochemistry	_____ samples	
(f) Sample collection	_____ days	
(g) Other		
10. Drilling:		
(a) Diamond (# holes/m)	_____ / _____ m	
(b) Percussion (# holes/m)	_____ / _____ m	
(c) Rotary (# holes/m)	_____ / _____ m	
(d) Auger (# holes/m)	_____ / _____ m	
(e) Reverse circulation (# holes/m)	_____ / _____ m	
(f) Logging, supervision, etc.	_____ days	
(g) Sealing (# holes)	_____ #	
11. Other (describe) <i>Mileage 244 km at 50¢ per km</i>		\$ <u>122.00</u>
Subtotal		<u>766.00</u>
<b>Overhead costs</b>		
12. Secretarial services		
13. Drafting services		
14. Office expenses (rent, heat, light, etc.)	✓	
15. Field supplies	✓	
16. Compensation paid to landowners		
17. Legal fees		
18. Other (describe) <i>10%<sub>a</sub></i>		<u>76.60</u>
Subtotal		
Grand total		<u>842.50</u>

