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**PERMIT NUMBER: P 6793**  
The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

**COMMERCE RESOURCES CORP.**

**2000 GEOLOGIC MAPPING AND SAMPLING  
ON THE VERITY PROPERTY**

NORTH OF BLUE RIVER, BRITISH COLUMBIA  
(KAMLOOPS MINING DIVISION)

CLAIMS: VERITY 1 to 9

Geographic Coordinates

52° 24' N  
119° 09' W

NTS Sheet 83 D/6

Owner/Operator: Commerce Resources Corp.  
600, 789 West Pender Street  
Vancouver, B.C. V6C 1H2

Consultant: Dahrouge Geological Consulting Ltd.  
18, 10509 - 81 Avenue  
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Date Submitted: 2001 05 11

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**26,550**

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## 1.

### INTRODUCTION

Throughout this report the term Verity Property refers to those mineral claims which encompass the Tantalum-Niobium-Phosphate bearing Verity Carbonatite, about 40 km south of Valemount, British Columbia. The claims were acquired by Commerce Resources Corp. during February, 2000.

Between August 14 and 20, 2000, Commerce Resources Corp. conducted geologic mapping and collected 7 rock samples from the Verity Property. In addition, digital topographic information encompassing the property was acquired.

Throughout this report attitudes of bedding and other planar features are given as  $A^\circ/B^\circ$  SW, where  $A^\circ$  is the azimuth of the strike and  $B^\circ$  is the amount of dip in the direction indicated. A magnetic declination of  $23\frac{1}{2}^\circ$  east was used.

#### 1.1 GEOGRAPHIC SETTING

##### 1.1.1 Location and Access

The Verity Property, which includes the Verity Carbonatite, is located in the North Thompson River valley of east-central B.C. (Fig. 1.1), within NTS map area 83 D/6. The Verity Carbonatite is centred at about  $52^\circ 24'$  north latitude and  $119^\circ 09'$  longitude. A second carbonatite, Mill, is about 2 km north of the Verity showing.

The property is accessible from B.C. Highway 5 (Yellowhead South Highway) and is approximately 56 km south of Valemount, British Columbia and about 38 km north of Blue River. Limited supplies and accommodations are available at both locations. The main line of the Canadian National Railway passes through the western part of the property. The Verity Carbonatite is accessible from Serpentine Creek logging road, which branches from Highway 5 about 35 km south of Valemount.

##### 1.1.2 Topography, Vegetation, Climate, and Geographic Names

The Verity Carbonatite outcrops (Specimen Pit) at about 880 m elevation above sea level. It is located along the steep, west-facing slope of the Monashee Mountains. At the Verity Property elevations range from about 720 m to 1,320 m. The peak immediately to the east of the Verity Property attains an elevation of about 2725 m.

The steep slopes at the Verity Property are typically covered by thick undergrowth consisting of buckbrush, devils club, and huckleberry. Areas not affected by recent logging are covered by dense stands of hemlock, cedar, fir, and white pine. Timber line is about 2,000 m elevation. Precipitation averages about 50 inches per year, and snowfall is generally heavy.

## 1.2 PROPERTY

The property is held under 9 contiguous 2-post mineral claims (Verity 1 to 9) which encompass an area of about 2¼ km<sup>2</sup>, within Kamloops Mining Division. The claims are held 100 per cent by Commerce Resources Corp.

**TABLE 1.1 LIST OF MINERAL CLAIMS**

Claim Name	Tenure Number	Units/Claim	Record Date	Actual or Expected Expiry Date
VERITY 1	374654	1	2000-02-15	2007-02-15
VERITY 2	374655	1	2000-02-15	2007-02-15
VERITY 3	374656	1	2000-02-15	2007-02-15
VERITY 4	374657	1	2000-02-15	2007-02-15
VERITY 5	374658	1	2000-02-15	2007-02-15
VERITY 6	374659	1	2000-02-15	2007-02-15
VERITY 7	374660	1	2000-02-17	2007-02-17
VERITY 8	374661	1	2000-02-17	2007-02-17
VERITY 9	374662	1	2000-02-17	2007-02-17
	Totals	9		

## 1.3 HISTORY AND PREVIOUS INVESTIGATIONS

According to Knox (2000), the Verity Property

"... was originally staked for its vermiculite potential in 1950, by Mr. O.E. French (McCammon, 1950). Several trenches were completed, these showed that the vermiculite occurs in association with interbedded layers of coarse limestone (carbonatite) and gneiss (Table 4.1). In 1952, following the discovery of pyrochlore-bearing dolomitized limestone (carbonatite), St. Eugene Mining Corporation Ltd. optioned the property (McCammon, 1952). They abandoned the property in about 1955, after conducting geologic mapping, prospecting, stripping and trenching, and sampling.

In 1976, the area was re-staked by John Kruszewski as the Verity and AR claims, who conducted additional stripping and trenching, and ground geophysical surveys (Jackson et al., 1978 and Ahroon, 1980).

In 1980 Anschutz (Canada) Mining Ltd. optioned the property from John Kruszewski, primarily for its tantalum and niobium potential. An aggressive exploration program was initiated in 1980, it resulted in the discovery of the Fir and Bone Creek carbonatites which were in addition to the Verity and Mill carbonatites. Exploration work included drilling 13 holes totalling 571.5 m at the Verity Carbonatite, 7 holes totalling 183.5 m at the Mill Carbonatite, and 11 holes totalling 311.8 m at Bone Creek ...

During 1981, Anschutz (Canada) Mining Ltd., completed an additional 2,964.9 m of drilling (Aquist, 1982a ...). Based primarily upon the 1980 and 1981 drilling Aquist (1982a, p.1) concluded that

The carbonatite occurrences at Blue River, British Columbia have the highest tantalum concentrations of any carbonatite in the world."

## 1.4 PURPOSE OF SURVEY

The work described in this report was undertaken to provide information on the mineralogy, and major- and trace-element composition of the Verity Carbonatite. Prior documented exploration by Anschutz (Canada) Mining Ltd. provided few details on the trace-element composition of the Blue River area carbonatites.

## 1.5 SUMMARY OF WORK

Between August 14 and 20, 2000, Jody Dahrouge, B.Sc., P.Geol., Todd Faragher, B.Sc., and Dinu Pana, Ph.D., conducted reconnaissance-scale examinations of the known carbonatite occurrences. They collected 7 rock samples (Fig. 3.1). Geological observations and measurements of structural elements accompanied the sampling. To assist in the field examinations and interpretation of results, digital topographic data was acquired and a detailed topographic map was produced at a scale of 1:10,000 (Fig. 3.1).

## 1.6 FIELD OPERATIONS

Field work was conducted by a three-man crew between August 14 and 20, 2000. Personnel were based in a motel in Valemount with transportation to the property by either two- or four-wheel-drive vehicles.

## 2. REGIONAL GEOLOGY

The Verity Property is within the Omineca Crystalline Belt of the Canadian Cordillera. The eastern flank of the Cordillera has previously been recognized as a locus of alkaline igneous activity (Currie, 1976). Pell (1987) has subdivided the Omineca Alkaline Province, within British Columbia, into three northwest trending belts:

- a) an eastern belt, east of the Rocky Mountain Trench and encompassing most of the Main and Western Ranges of the Rocky Mountains;
- b) a central carbonatite belt, which predominately encompasses the Rocky Mountain Trench and eastern part of the Omineca; and
- c) a western belt.

The central carbonatite belt generally hosts multiple deformed and metamorphosed, sill-like bodies hosted by Late Precambrian to Early Cambrian metasedimentary rocks (Pell, 1987). This belt

includes the Blue River area carbonatites: Fir, Verity and Paradise Lake; Howard Creek; and Mud Lake-Blue River.

### 3. PROPERTY GEOLOGY

#### 3.1 STRATIGRAPHY, STRUCTURE AND LITHOLOGY

The Verity Property is underlain by metasedimentary rocks and derived gneisses of the Proterozoic Horsethief Creek Group (Fig. 5.1). At Verity, the gneisses have a general strike of  $300^{\circ}$  and dip  $15^{\circ}$  to  $30^{\circ}$  southwest (Aaquist, 1982b). They are locally folded and cut by later faults. The Horsethief Creek rocks are intruded by sills of carbonatite. The carbonatite is either sovite (calcite-dominated) or beforsite (dolomite-dominated). Aaquist (1982a) indicates that the most significant tantalum-niobium mineralization is confined to the beforsites. The carbonatite sills discovered which were composed of sovite are generally thin and universally barren. Both rock types are medium- to coarse-crystalline. Most exposures display layering defined by varying quantities of accessory minerals.

The carbonatites contain accessory minerals including Na-amphibole, pyroxene, phyllogopite, olivine, magnetite, pyrite/pyrrhotite and apatite, as well as the niobium and tantalum bearing minerals.

Amphibolite and glimmerite (biotite rock) are closely associated with the carbonatite bodies. Nepheline syenite has been found in the area (Aaquist 1982b).

#### 3.2 MINERALIZATION

The host rocks to the mineral occurrences on the Verity Property are carbonatites, which are igneous rock bodies composed of more than 50% carbonate minerals. They are typically relatively rich in alkali elements and occur with other under-saturated alkaline rocks (feldspathoidal syenites and rocks of the ijolite suite).

Deposits of tantalum and niobium within carbonate bodies were formed by primary magmatic concentration. The non-carbonate mineralogy in a carbonatite tends to segregate into bands thus a diffuse igneous layering is formed with bands richer and poorer in non-carbonate minerals. This process is enhanced by the relatively low viscosity of the carbonatite magma. If a magma pulse rich in tantalum and niobium is intruded, the minerals may segregate into non-carbonate mineral rich layers, and thus form potentially economic concentrations.

According to Knox (2000), at Verity

"... the tantalum and niobium are found in three minerals, pyrochlore  $(Ca,Na)_2Nb_2O_6(OH,F)$ , columbite  $(FeNb_2O_6)$  and fersmite  $(Ca,Na)Nb_2(O,OH,F)_6$ , which occur exclusively in the carbonatite. Tantalum may substitute for niobium in any of these minerals. Mineralogical study (Aaquist 1982a) suggests that virtually all the tantalum is found in the pyrochlore. The variable Nb/Ta ratios found in the analytical data from this property probably reflect different mineralogical ratios. The pyrochlore in samples the author examined from this property is typically dark red, although, Mariano (2000; Aaquist 1982a) recognizes black and yellowish coloured pyrochlore as well. The pyrochlore seems to occur in two habits, as euhedral to subhedral octahedrons and as anhedral porous masses. The pyrochlore is between 0.2 and 2 mm in diameter and should present no concentration problems."

The upper carbonatite sill at Verity, which is poorly exposed at surface, has been exposed by at least two trenches (Columbite Pit and Specimen Pit) near its western end. It has been intersected by 19 drill holes (of 30 total), completed in 1980 and 1981, totalling 2,060 m, with 715 samples collected from split drill core and analyzed for tantalum, niobium and phosphate. The Verity Carbonatite is composed of beforsite and tectonic beforsite breccia. Layering of accessory minerals is commonly displayed in outcrops (Aaquist 1982a). Aaquist (1982a, p.24) indicates that the thick beforsite sill is interpreted to have formed from a series of magmatic pluses, each varying slightly in mineral content. The central part of this sill contains the best mineralization. A tonnage was calculated for this central zone, which was divided into 10 blocks for calculation purposes. The result of this calculation is a mineral resource of 2.1 million tonnes grading 0.126%  $Nb_2O_5$  and 0.02%  $Ta_2O_5$  (Aaquist, 1982b).

#### 4. SAMPLING AND ANALYTICAL PROCEDURES

The carbonatite samples (Samples 11827 to 32, and 38) collected during 2000 consist of chip and grab samples from both the Columbite and Specimen Pits (Verity Carbonatite). The samples were sent to Acme Analytical Laboratories Ltd. in Vancouver, B.C. for preparation and analyses for both whole rock and trace element constituents by standard ICP techniques and LOI. Alex Knox, P.Geol. of Calgary, AB provided mineralogical descriptions for the samples. The analytical report from Acme Analytical Laboratories Ltd. is in Appendix 2 and a description of the samples is in Appendix 3.

## 5. DISCUSSION AND CONCLUSIONS

Sampling and mapping during 2000, confirmed that those samples derived from the Verity Carbonatite are highly anomalous in Nb (up to 3582 ppm), Ta (up to 402 ppm), and P. Additionally, enrichment in Uranium and the Rare Earth Elements was noted (Appendix 2).

Furthermore, the textures, mineralogy and analytical chemistry confirm that these rocks are carbonatites. The mineral pyrochlore is present in the samples, with two distinct habits; as euhedral to subhedral octahedrons, and as porous, anhedral masses.

Edmonton, Alberta  
2001 05 11



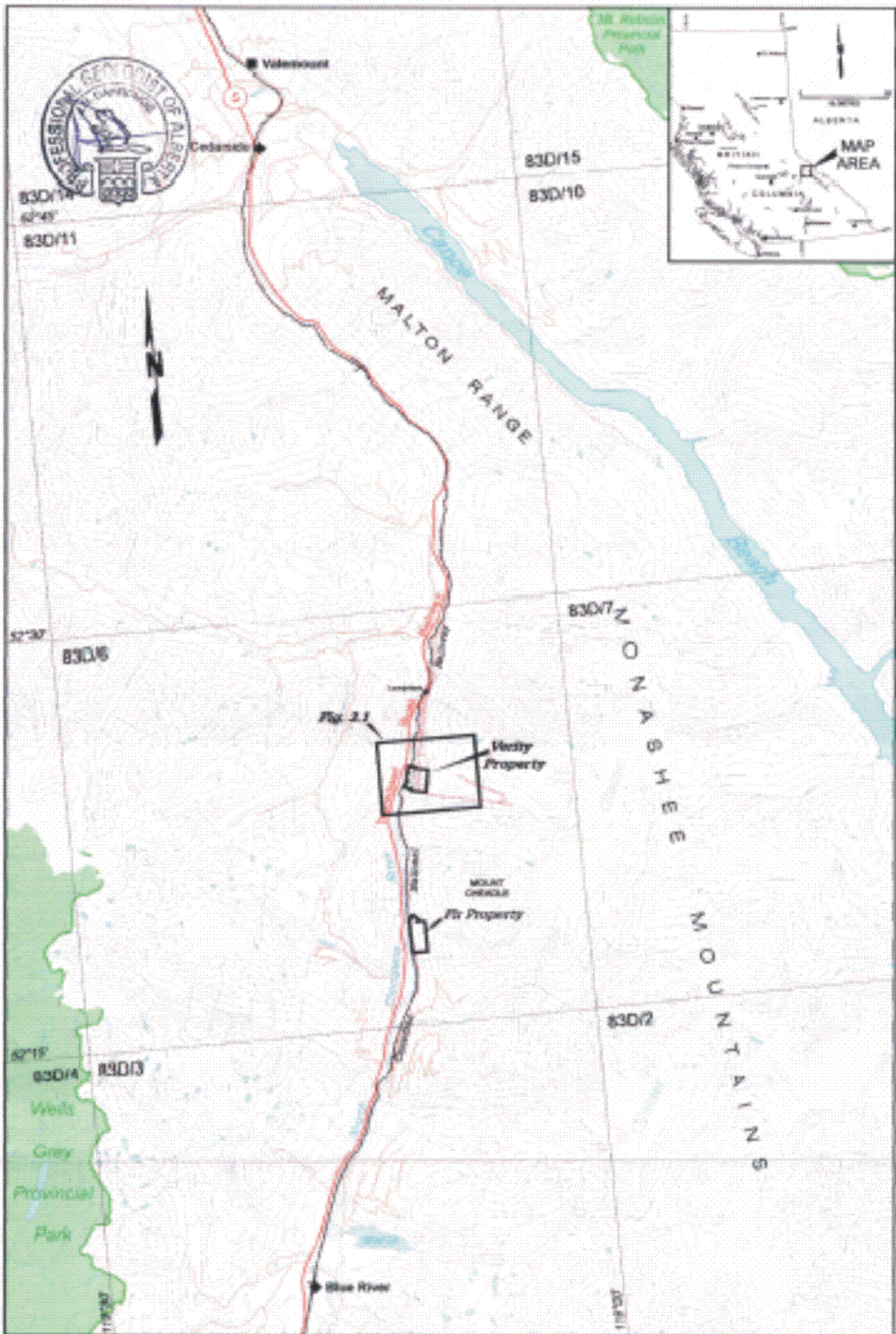
J. P. DARRIDGE B.Sc., P.Geol.



## 6.

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**SYMBOLS**

- CN Rail Line
- Access Road
- Secondary Road or Trail
- Major Highway
- Provincial Parks



COMMERCE RESOURCES CORP.  
 DAVENCOE GEOLOGICAL CONSULTING LTD.  
 Edmonton, Alberta

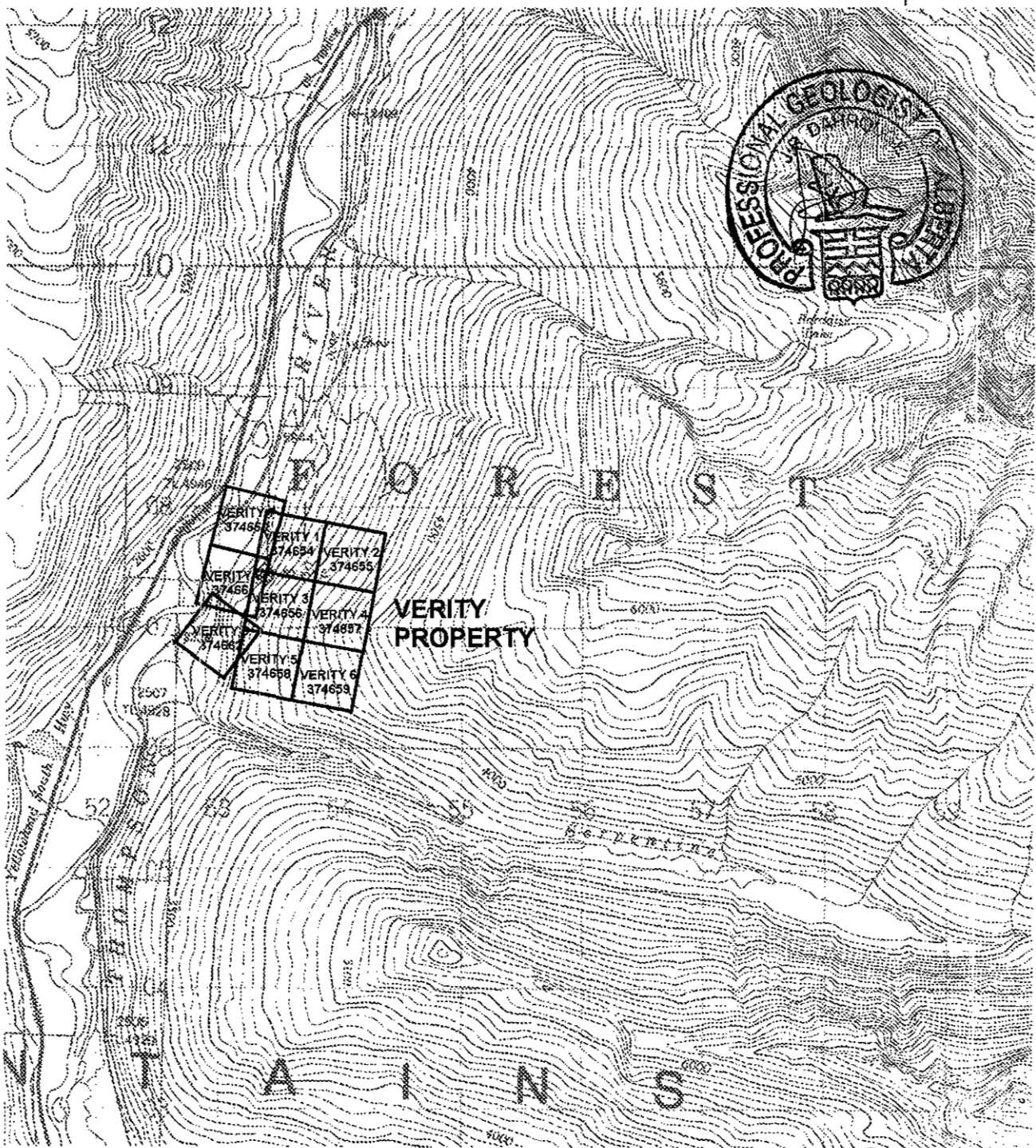
VERITY PROPERTY, EAST-CENTRAL BRITISH COLUMBIA

Figure 1.1  
 Location and Index Map



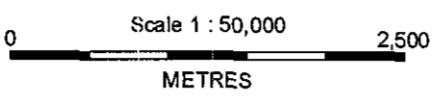
119°05'

52°25'



**SYMBOLS**

- Verity 1  Claim; identifier
- Contour interval 100 feet



**COMMERCE RESOURCES CORP.**

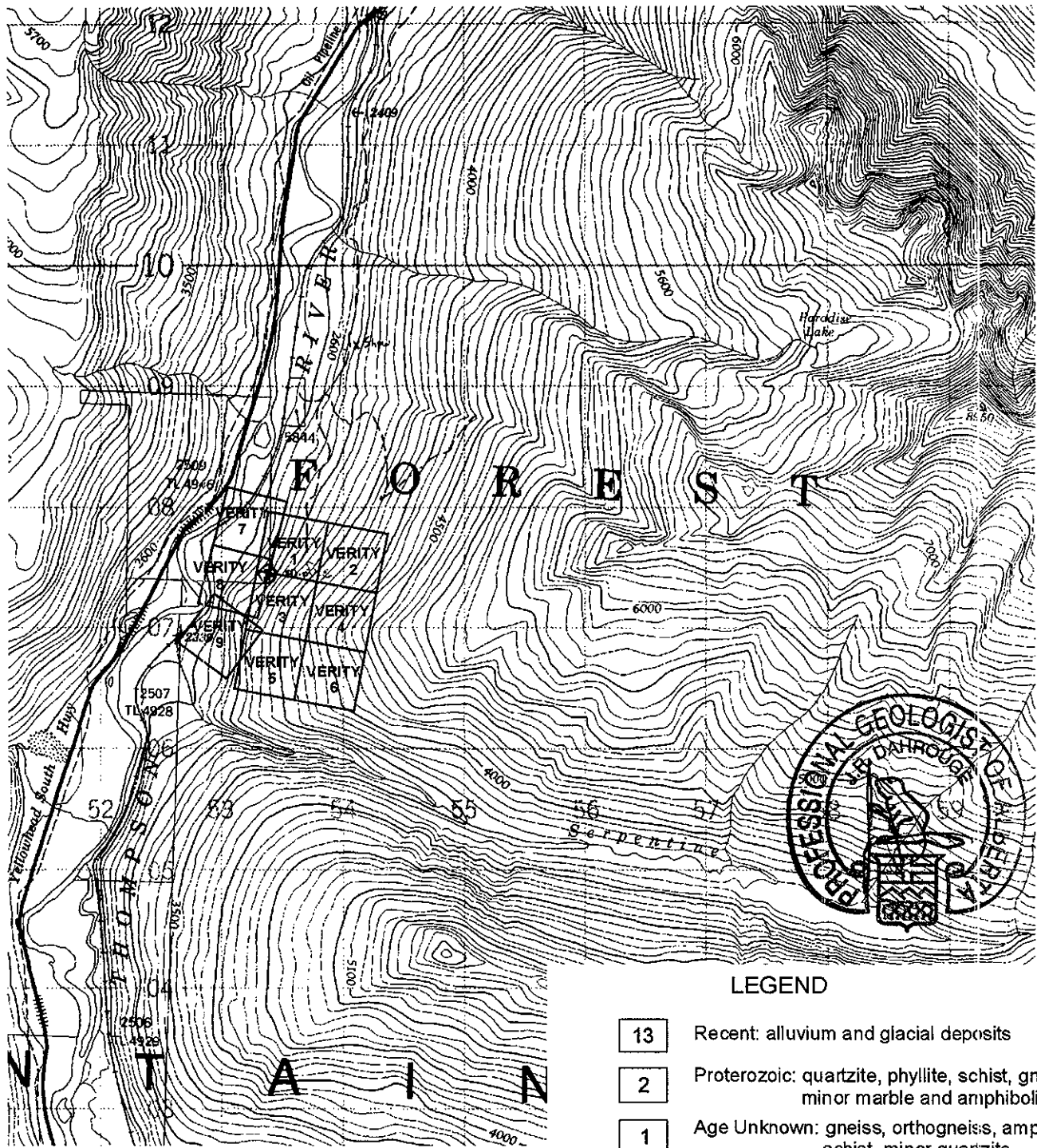
DAHROUGE GEOLOGICAL CONSULTING LTD.  
EDMONTON, ALBERTA

Part of Map Sheet 83 D/6  
BRITISH COLUMBIA

**Figure 1.2  
Claim Map**

JD

2001.04



LEGEND

- 13 Recent: alluvium and glacial deposits
- 2 Proterozoic: quartzite, phyllite, schist, gneiss; minor marble and amphibolite
- 1 Age Unknown: gneiss, orthogneiss, amphibolite, schist, minor quartzite

SYMBOLS

- Verity property
  - Sample; identifier
  - Carbonatite occurrence
  - Contour interval 100 feet
  - Fault
- Scale 1 : 50,000
- 0  2,500
- METRES

<b>COMMERCE RESOURCES CORP.</b>	
DAHROUGE GEOLOGICAL CONSULTING LTD. EDMONTON, ALBERTA	
Part of Map Sheet 83 D/6 BRITISH COLUMBIA	
<b>Figure 2.1</b> <b>Property Geology</b>	
TF	2000.10

## APPENDIX 1: ITEMIZED COST STATEMENT

a) Personnel

J. Dahrouge, geologist				
1.75	days	field work and travel August 14-16		
1.00		ship samples, report preparation		
<u>2.75</u>	days	@ \$ 428.00	\$	1,177.00
D. Pana, geologist				
2.0	days	field work and travel between August 14-20		
<u>2.0</u>	days	@ \$ 428.00	\$	856.00
T. Faragher, geologist				
2.0	days	field work and travel between August 14-20		
1.0	days	field preparation, ordering digital data, and data compilation		
<u>3.0</u>	days	@ \$ 374.50	\$	1,123.50
W. McGuire, draftsman				
3.0	days	compiling field data, preparing base and final maps		
<u>3.0</u>	days	@ \$ 374.50	\$	1,123.50
				<hr/>
				\$ 4,280.00

b) Food and Accommodation

6 man-days	@ \$ 79.05	accommodations	\$	474.29
9 man-days	@ \$ 42.61	groceries, meals and other	\$	383.51
				<hr/>
				\$ 857.80

c) Transportation

Vehicles:	4x4 sports utility truck 314 km @ 0.41 (BC Portion Only)	\$	128.74	
	4x4 sports utility truck 443 km @ 0.38½ (BC Portion Only)	\$	170.56	
				<hr/>
				\$ 299.30

d) Instrument Rental - Subcontractors

n/a

e) Drilling

n/a

f) Analyses

7 samples	@ \$ 40.37	ICP analyses and whole rock analyses (Acme)	\$	282.56
7 samples	@ \$ 31.78	Analytical services (Loring mineralogy)	\$	222.46
				<hr/>
				\$ 505.02

g) Report

Reproduction and assembly

\$	58.85
<hr/>	
\$	58.85

h) Other

Courier and Shipping	\$	27.20
Digital Base Maps (1 at 1:20,000)	\$	470.80
Long distance telephone	\$	6.61
Map reproductions	\$	107.00
<hr/>		
\$ 611.61		

Total\$ 6,612.57



WHOLE ROCK ICP ANALYSIS



Dahrouge Geological Consulting File # A003197  
18 - 10509 - 81 Ave, Edmonton, AB T6E 1T7 Submitted by: Todd Faragher

SAMPLE#	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sc	LOI	TOT/C	TOT/S	SUM
	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	%	%	%	%
11826	74.39	14.86	1.50	.59	2.93	4.25	1.18	.16	.02	.03	.001	182	<20	2	.4	.03	<.01	100.33
*11827	3.46	.20	10.82	16.34	27.20	.24	.19	.12	1.77	.35	.004	120	<20	22	38.8	10.86	.08	99.51
*11828	3.19	.03	11.80	15.40	27.35	.18	.17	.24	3.20	.33	.003	115	<20	23	37.1	10.03	.02	99.01
*11829	3.37	.20	5.84	17.12	29.09	.16	.27	.04	1.72	.37	.002	151	<20	24	41.3	11.50	.10	99.50
*11830	2.88	<.03	5.55	16.75	29.83	.26	.17	.03	3.10	.34	.001	109	<20	27	40.6	11.50	.07	99.54
*11831	1.10	<.03	5.65	18.14	30.25	.13	.09	.01	1.45	.37	.001	113	<20	14	42.4	12.33	.22	99.63
*11832	8.49	.08	5.60	16.53	28.98	.15	.08	.02	2.65	.33	.001	125	<20	18	36.7	10.40	<.01	99.63
11833	17.51	.56	6.65	12.67	30.86	.22	.18	.40	3.12	.24	.005	145	22	19	27.4	7.43	<.01	99.84
11834	4.91	.41	8.11	10.76	35.00	.10	<.04	3.02	1.36	.20	.013	284	62	20	35.9	9.84	.01	99.86
RE 11834	4.84	.38	7.91	10.77	35.17	.09	<.04	3.02	1.38	.20	.016	280	68	20	35.9	9.84	<.01	99.74
11835	.69	.15	3.14	16.78	33.44	.05	<.04	.03	3.72	.44	.002	52	<20	8	41.0	11.50	<.01	99.45
11836	2.60	.06	6.85	14.23	32.07	.15	<.04	.03	5.06	.80	.005	43	<20	4	37.3	10.58	.05	99.18
11837	3.24	.08	9.74	14.12	29.98	.41	<.04	.04	3.34	1.02	.001	70	28	6	37.1	10.67	.32	99.11
*11838	2.95	<.03	6.43	16.16	29.38	.24	.16	.04	3.23	.36	.003	137	<20	23	39.9	11.13	.02	98.89
STANDARD SD-15/CSB	50.01	12.40	7.18	7.14	6.06	2.37	1.74	1.81	2.65	1.37	1.042	1981	64	13	5.9	2.39	5.30	99.90

GROUP 4A - 0.200 GM SAMPLE BY LIBO2 FUSION, ANALYSIS BY ICP-ES. LOI BY LOSS ON IGNITION.  
TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)  
- SAMPLE TYPE: ROCK R150 60C  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 24 2000

DATE REPORT MAILED: Sept 8/00

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data *KL* FA

APPENDIX 2: ANALYTICAL REPORTS FROM ACME ANALYTICAL LABORATORIES LTD.  
FOR SAMPLES COLLECTED IN 2000



GEOCHEMICAL ANALYSIS CERTIFICATE



Dahrouge Geological Consulting File # A003197 (a)  
18 - 10509 - 81 Ave, Edmonton AB T6E 1T7 Submitted by: Todd Faragher

SAMPLE#	Co	Cs	Ga	Hf	Nb	Rb	Sr	Ta	Th	Tl	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
11826	2.1	2.8	14.2	<.5	5.0	45.0	5	407.7	.7	4.6	.7	1.0	10	2	7.6	2.1	14.5	26.3	2.75	9.8	1.9	2.43	1.18	.15	.64	.10	.18	<.05	.12	.01
*11827	39.0	.1	4.0	<.5	1350.1	4.7	<1	3685.2	153.5	5.0	.1	72.7	138	<1	3.9	15.8	140.4	283.3	30.53	107.7	18.0	5.41	10.41	1.13	4.52	.69	1.27	.14	.73	.08
*11828	32.1	.2	7.0	.6	3582.8	6.6	<1	3742.4	402.7	16.6	.4	182.5	197	<1	7.7	22.5	208.1	421.5	44.24	153.5	28.2	8.61	15.82	1.62	6.87	1.01	1.96	.21	1.20	.09
*11829	20.9	2.0	3.6	<.5	1029.0	17.7	<1	3866.1	89.7	4.5	.1	17.4	17	<1	4.8	17.6	138.1	279.5	29.49	105.4	17.3	5.31	9.95	1.13	4.55	.69	1.33	.14	.98	.09
*11830	18.1	<.1	2.2	<.5	683.3	1.9	<1	3507.2	116.0	3.0	.2	40.9	12	<1	2.4	21.0	175.3	355.0	37.75	134.3	24.5	7.03	12.74	1.41	6.19	.91	1.61	.17	1.02	.09
*11831	22.2	<.1	.9	<.5	127.6	1.2	<1	3522.5	38.8	.9	.1	16.9	5	<1	2.1	12.5	102.0	206.3	22.00	86.9	14.3	4.26	7.95	.82	3.50	.54	.97	.12	.65	.07
*11832	14.6	<.1	1.8	<.5	324.8	1.5	2	3257.9	122.8	2.3	.2	61.3	16	<1	2.1	17.8	147.0	295.2	32.66	115.1	20.7	6.01	11.57	1.26	5.07	.80	1.43	.15	.94	.08
11833	21.9	1.2	5.3	14.6	163.3	7.9	4	1580.8	28.2	.4	.6	22.7	89	<1	539.1	22.1	108.5	224.7	25.21	98.7	18.3	5.41	10.84	1.20	5.50	.87	1.81	.20	1.23	.14
11834	35.0	.3	5.5	11.0	240.5	1.7	3	1384.8	49.6	.3	.1	.4	158	<1	387.7	28.8	117.5	233.0	25.13	96.8	17.6	5.71	11.34	1.35	6.55	1.08	2.39	.27	1.55	.21
RE 11834	35.9	.3	5.6	9.7	243.0	1.4	7	1316.6	48.8	.3	.2	.3	158	<1	344.9	28.3	118.0	230.6	25.22	100.1	18.4	5.91	11.98	1.38	6.53	1.09	2.42	.26	1.53	.18
11835	4.3	<.1	.7	.8	544.6	<.5	3	3519.5	144.5	10.8	.1	79.9	7	<1	19.1	28.7	136.6	325.0	37.87	139.8	28.3	8.44	15.96	1.85	7.84	1.26	2.42	.26	1.60	.14
11836	9.7	<.1	.8	<.5	1538.1	<.5	2	3824.0	201.9	9.1	.1	8.0	<5	<1	4.5	42.3	194.1	421.2	45.60	159.9	31.9	9.80	19.92	2.32	11.06	1.72	3.81	.39	2.73	.27
11837	21.9	<.1	.7	.5	2082.4	.6	<1	3966.4	204.6	13.9	.1	4.1	<5	<1	17.7	31.2	154.8	336.3	36.49	127.3	23.4	7.57	14.01	1.73	8.04	1.23	2.72	.29	1.86	.20
*11838	18.0	<.1	1.3	<.5	1687.5	3.8	<1	3403.3	192.7	6.3	.1	421.6	7	<1	5.1	18.4	159.5	333.7	35.59	131.5	22.2	6.73	12.29	1.28	5.70	.81	1.41	.14	.86	.07
STANDARD SO-15	21.7	2.7	17.4	26.9	33.3	66.9	19	394.2	2.0	23.7	.7	21.0	159	22	1076.8	23.8	30.8	59.5	6.19	23.8	4.6	1.02	3.94	.61	3.77	.80	2.42	.38	2.49	.41

GROUP 4B - REE - LIBO2 FUSION, ICP/MS FINISHED.  
- SAMPLE TYPE: ROCK R150 60C  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 24 2000 DATE REPORT MAILED: *Sept 8/00* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Date: *[Signature]* FA

\* Verity Property

APPENDIX 2: CONTINUED

A3



GEOCHEMICAL ANALYSIS CERTIFICATE



Dahrouge Geological Consulting File # A003197 (b)

18 - 10509 - 81 Ave, Edmonton AB T6E 1T7 Submitted by: Todd Faragher

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm
11826	2	5	12	29	4	12	<.2	<.5	<.5
*11827	1	<1	<3	29	1	<2	.3	1.9	<.5
*11828	<1	<1	3	35	<1	<2	.4	.5	.6
*11829	<1	<1	6	19	<1	<2	.2	<.5	1.5
*11830	<1	<1	<3	16	<1	<2	<.2	<.5	.7
*11831	<1	<1	<3	19	<1	<2	.2	<.5	<.5
*11832	<1	<1	4	18	<1	<2	<.2	1.5	1.3
11833	<1	14	3	17	14	<2	<.2	<.5	.8
11834	<1	77	<3	19	49	<2	<.2	<.5	<.5
RE 11834	<1	81	<3	21	49	<2	<.2	.8	.8
11835	1	<1	4	21	<1	<2	.3	<.5	1.3
11836	<1	<1	4	26	7	<2	.4	1.2	1.7
11837	1	<1	<3	32	1	<2	.5	<.5	1.7
*11838	<1	<1	3	18	<1	<2	<.2	<.5	2.0
STANDARD C3	26	62	34	161	34	58	25.0	14.0	23.0
STANDARD G-2	1	2	<3	43	7	<2	<.2	<.5	<.5

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 24 2000

DATE REPORT MAILED: *Sept 8/00*

SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## APPENDIX 3:

**DESCRIPTIONS AND COMPOSITIONS OF SAMPLES COLLECTED IN 2000  
FROM THE VERITY PROPERTY**

Notes: Coordinates are UTM NAD 27; see Appendix 2 for analytical results.

Sample	Coordinates		Sample		Description	Counts Per Second	Analysis	
	Easting	Northing	Type	Length (m)			Nb <sub>2</sub> O <sub>5</sub> (%)	Ta <sub>2</sub> O <sub>5</sub> (%)
11827	353413	5807399	chip outcrop	1.25	Specimen Pit: carbonatite; buff weathered, yellow/brown fresh, friable, rusty calcite (?) crystals up to 2 cm, moderate HCl fizz, abundant dark lath shaped minerals (hornblende ?), rare biotite flecks, nodules and clots magnetite to 5 cm wide, sample from base of exposure south of pegmatite	12,000	0.193	0.019
11828	353413	5807399	chip outcrop	1.5	Specimen Pit: as 11827, well defined magnetite layers cm's thick 15-20 cm apart, offset 3 m NE along exposed face from 11827, sample to top of exposure	15,000	0.513	0.049
11829	353413	5807399	chip outcrop	1.5	Specimen Pit: as 11827, hard competent unaltered block, at top of exposure north of pegmatite	8,000	0.147	0.011
--	--	--	--	--	The following microscopic descriptions were completed by Alex Knox (2000): Sample consists of: Medium to dark green coarse-grained, subhedral crystals of diopside (?), which cleaves into splinters. Anhedral, medium-grained, reddish brown phyllogopite in a matrix of very coarse-grained calcite.	--	--	--
11830	353413	5807399	chip outcrop	1.0	Specimen Pit: as 11827, continuous down exposure from 11829	10,500	0.098	0.014
11831	353413	5807399	chip outcrop	1.5	Specimen Pit: as 11827, locally massive, continuous down exposure from 11830 to base	9,000	0.018	0.005
--	--	--	--	--	The following microscopic descriptions were completed by Alex Knox (2000): Most abundant to least abundant: Very dark green, coarse-grained phyllogopite. Glassy, pale yellow, subhedral coarse apatite. Dark purple amphibole. Coarse-grained, anhedral pyrite. Dark reddish-brown, subhedral pyrochlore-trace. In a matrix of fine- to medium-grained calcite.	--	--	--
11832	353475	5807498	grab outcrop	--	Columbite Pit(?): carbonatite; buff weathered, white/buff fresh, medium-grained calcite-dolomite crystals, weak HCl fizz, abundant amphibole laths, small magnetite clots, rare clear brown/grey elongate egg shaped crystals to 2 mm.	10,500	0.046	0.015
--	--	--	--	--	The following microscopic descriptions were completed by Alex Knox (2000): Most abundant to least abundant: Diopside (salite) (?) Apatite, magnetite, medium-grained, subhedral pyrochlore. In a medium-coarse grained calcite. Sample displays no preferred orientation.	--	--	--

APPENDIX 3:

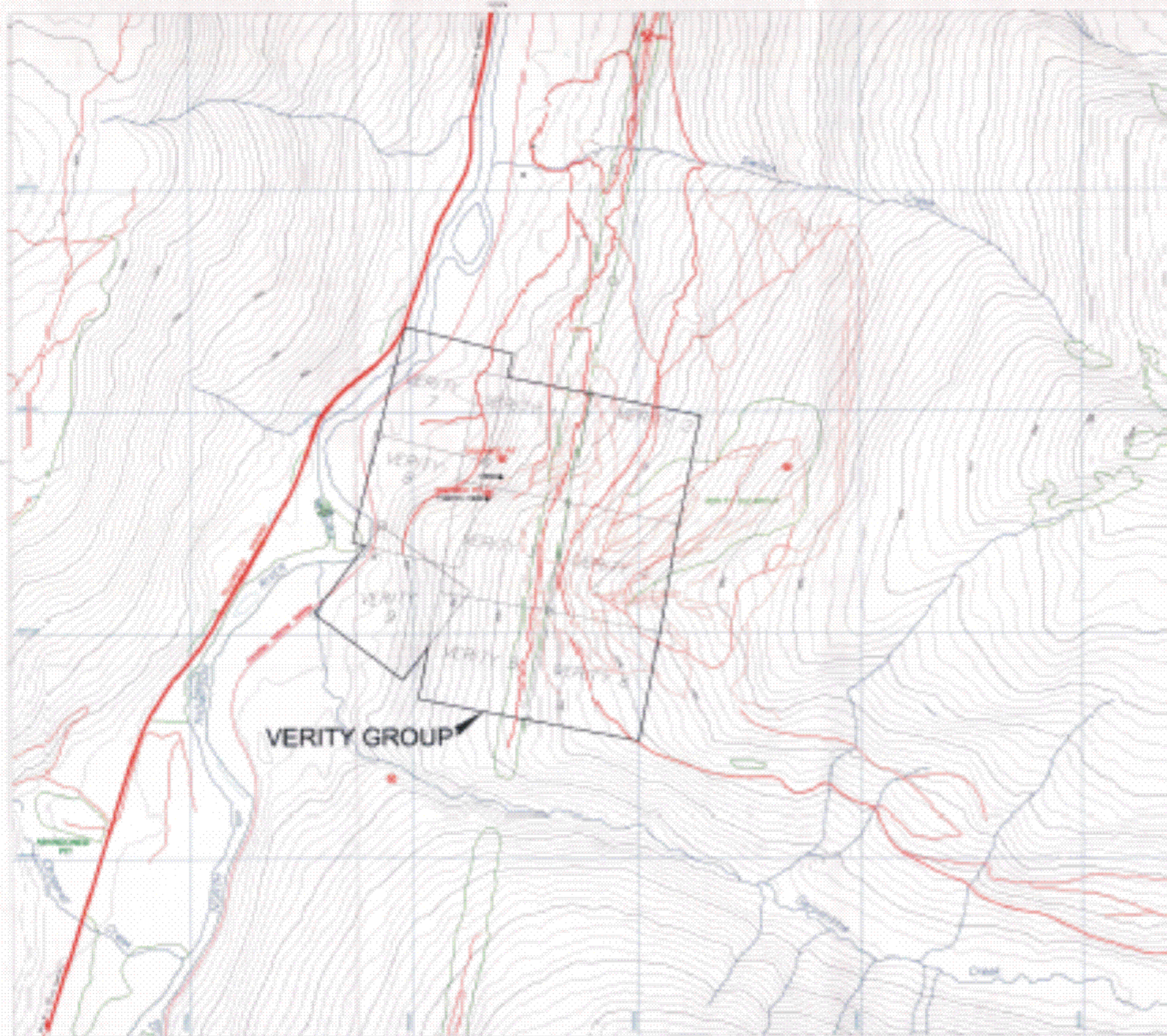
CONTINUED

Sample	Coordinates		Sample		Description	Counts Per Second	Analysis	
	Easting	Northing	Type	Length (m)			Nb <sub>2</sub> O <sub>5</sub> (%)	Ta <sub>2</sub> O <sub>5</sub> (%)
11838	353413	5807399	grab outcrop	--	Specimen Pit: carbonatite; buff weathered, yellow/brown fresh, friable, rusty calcite (?) crystals up to 2 cm, moderate HCl fizz, abundant dark lath shaped minerals ( <i>hornblende</i> ?), rare biotite flecks, nodules and clots magnetite to 5 cm wide, local rare pyrochlore crystals to 5 mm, sample at top of exposure 3 m north of 11827	22,500	0.241	0.024
--	--	--	--	--	The following microscopic descriptions were completed by Alex Knox (2000): Most abundant to least abundant: Reddish-brown phylogopite. Apatite. Coarse grained pyrochlore. Green splintery diopside (?). Anhydrous magnetite. In a matrix of calcite. This sample was the richest in phylogopite of all of them.	--	--	--

**APPENDIX 4: STATEMENT OF QUALIFICATIONS**

The field work described in this report was supervised by J.R. Dahrouge. J.R. Dahrouge is an independent geological consultant with Dahrouge Geological Consulting Ltd. based in Edmonton, Alberta. He obtained degrees in geology and computing science from the University of Alberta, Edmonton in 1988 and 1994, respectively. He has more than 10 years of experience in mineral exploration. He is a member of the Canadian Institute of Mining and Metallurgy and is registered as P. Geol. with the Association of Professional Engineers, Geologists, and Geophysicists of Alberta.





**SYMBOLS**

Paved highway	
All-weather gravel road	
Dry-weather gravel road	
Rough road or trail	
Trail or cut line	
Elevation contour (interval = 20 metres)	
Mineral claim boundary, name	
Property boundary	
Mineral claim post location	
Mineral occurrence, name	
Trench	
Sample location, number	

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**NOTES**

- 1) 500 m North American Datum, 1983.
- 2) Parts of 1:25,000 scale TRM-top sheets 83D 038 and 83D 048.

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DAHROUGE GEOLOGICAL CONSULTING LTD.  
Edmonton, Alberta

VERITY PROPERTY, BLUE RIVER, BRITISH COLUMBIA

Fig. 3.1  
Topography and  
Sample Locations

