COMMERCE RESOURCES CORP.

2001 DIAMOND DRILLING ON THE FIR PROPERTY

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

CLAIMS

FIR 1 to 12, Cheadle 3, 4, 13 to 16,
Neve Ice 1 to 10, Thunder 5, and Gum 1 to 6

Geographic Coordinates

52° 18' N
119° 10' W

NTS Sheet 83 D/6

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Date Submitted: 2002 07 30

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

LIST OF APPENDICES

1. INTRODUCTION

Throughout this report the term Fir Property refers to mineral claims Fir 1 to 12 which encompass the Tantalum-Niobium-Phosphate bearing Fir and Bone Creek carbonatites, about 26 km northeast of Blue River, British Columbia. Claims Fir 1 to 9 were acquired by Commerce Resources Corp. during February 2000 and claims Fir 10 to 12 during October 2000. In addition, the company acquired claims Cheadle 3, 4, 13 to 16 and Neve Ice 1 to 10 during May, 2001, Thunder 5 during April 2001 and Gum 1 to 6 during January 2001.

Work was conducted between October 28, 2001 and April 19, 2002 by Dahrouge Geological Consulting Ltd., on behalf of Commerce Resources Corp. It included the rehabilitation and construction of about 850 m of old logging roads and skidder trails to make them suitable for access by drill equipment. In addition, six HQ-sized diamond drill holes totaling 1245.21 m were completed, logged and sampled. Also during this period, independent consulting geologist James McCrea, conducted a resource estimate for the Fir Carbonatite.

As prior assessment reports (Dahrouge, 2001; Dahrouge and Reeder, 2002) include descriptions of the geographic setting and history and previous investigations, most of that information is not repeated herein. Throughout this report, attitudes of bedding and other planar features are given as A°/B° SW, where A° is the azimuth of the strike and B° is the amount of dip in the direction indicated. A magnetic declination of 20.4° was used.

1.1 GEOGRAPHIC SETTING

1.1.1 Location and Access

The Fir Property is within North Thompson River valley of east-central British Columbia, within NTS map area 83 D/6 (Fig. 1.1). The Fir Carbonatite is centered at approximately 52° 19′ N latitude and 119° 10′ W longitude. Both the Fir and the Bone Creek carbonatites are located within the Fir claims, with the Bone Creek showing situated about 2 km south- to southeast of the Fir showing.

The property is approximately 26 km north of Blue River, British Columbia and is accessible from B. C. Highway 5 (Yellowhead South Highway). The Fir Carbonatite can be reached from the Gum Creek logging road which branches from Highway 5 about 23 km north of Blue River. The main line of the Canadian National Railway passes through the western part of the property. Limited supplies and accommodations are available at either Blue River or Valemount, that later of which is 68 km north of the property.

1.1.2 Topography, Vegetation, Climate and Geographic Names

The Fir Property is between 720 m and 1240 m elevation above sea level and is located along the steep, west-facing slopes of the Monashee Mountains. Slopes are typically covered by a thick undergrowth consisting of buckbrush, devil's club and huckleberry. Areas not subjected to recent logging are covered by dense stands of hemlock, cedar, fir and white pine. Within the area timber line is at about 2000 m elevation. Precipitation averages 120 cm per year and snowfall is generally heavy.

TABLE 1.1: LIST OF MINERAL CLAIMS

Claim Name	Tenure Number	Units/Claim	Record Date	Actual or Expected Expiry Date
FIR 1	374663	1	2000-02-15	2007-02-15
FIR 2	374664	1	2000-02-15	2007-02-15
FIR 3	374665	1	2000-02-15	2007-02-15
FIR 4	374666	1	2000-02-15	2007-02-15
FIR 5	374667	1	2000-02-15	2007-02-15
FIR 6	374668	1	2000-02-15	2007-02-15
FIR 7	374669	1	2000-02-15	2007-02-15
FIR 8	374670	1	2000-02-15	2007-02-15
FIR 9	374671	1	2000-02-15	2007-02-15
FIR 10	382163	20	2000-10-28	2006-10-28
FIR 11	382164	20	2000-10-28	2006-10-28
FIR 12	382165	20	2000-10-28	2006-10-28
Cheadle 3	386658	10	2001-05-28	2003-05-28
Cheadle 4	386659	10	2001-05-28	2003-05-28
Cheadle 13	386660	20	2001-05-28	2003-05-28
Cheadle 14	386661	18	2001-05-28	2003-05-28
Cheadle 15	386662	15	2001-05-28	2003-05-28
Cheadle 16	386663	10	2001-05-28	2003-05-28
Neve Ice 1	386648	15	2001-05-24	2003-05-24
Neve Ice 2	386649	15	2001-05-24	2003-05-24
Neve Ice 3	386650	15	2001-05-24	2003-05-24
Neve Ice 4	386651	9	2001-05-24	2003-05-24
Neve Ice 5	386652	2	2001-05-24	2003-05-24
Neve Ice 6	386653	5	2001-05-24	2003-05-24
Neve Ice 7	386654	20	2001-05-24	2003-05-24
Neve Ice 8	386655	8	2001-05-24	2003-05-24
Neve Ice 9	386656	16	2001-05-24	2003-05-24
Neve Ice 10	386657	4	2001-05-24	2003-05-24
Thunder 5	385831	20	2001-04-23	2005-04-23
Gum 1	383846	16	2001-12-23	2002-12-23
Gum 2	383847	16	2001-12-23	2002-12-23
Gum 3	383848	16	2001-12-23	2002-12-23
Gum 4	383849	16	2001-12-23	2002-12-23
Gum 5	383850	16	2001-12-23	2002-12-23
Gum 6	383851	16	2001-12-23	2002-12-23
	Totals	377		

1.2 PROPERTY

The Fir Property is held under nine contiguous 2-post mineral claims (Fir 1 - 9) and three 4-post mineral claims (Fir 10 - 12). An additional twenty-three 4-post mineral claims (Cheadle 3, 4, 13 - 16, Neve Ice 1 - 10, Thunder 5, Gum 1 - 6) are contiguous with the Fir Property. The combined area, which encompasses about 94.25 km^2 is situated within Kamloops Mining Division (Fig. 1.2; Table 1.1). The claims are held 100 per cent by Commerce Resources Corp.

1.3 HISTORY AND PREVIOUS INVESTIGATIONS

As previous assessment reports (Dahrouge, 2001; Dahrouge and Reeder, 2002) contain detailed accounts of prior exploration of the Fir Carbonatite and the Blue River area, most of that information is not repeated herein. Both the Fir and Bone Creek showings were discovered during an exploration program initiated in 1980 by Anschutz (Canada) Mining Ltd. Studies by Campbell (1968), Pell and Simony (1981), and Pell (1987) contain information on the geology of the Blue River area.

Exploration of the Fir Carbonatite during the fall of 2000, by Commerce Resources Corp. included re-staking of the known carbonatite occurrences and subsequent reconnaissance-scale examinations to confirm known tantalum mineralization (Dahrouge, 2001). This work included the collection of samples for mineralogical determination, geochemical analyses and the acquisition of digital topographic data. The mineralogy and geochemistry confirmed the carbonatite nature of the samples and the highly anomalous 'tantalum - niobium - phosphate' mineralization. Two distinct populations of pyrochlore were identified.

The 2000 exploration was followed by more extensive exploration during the summer of 2001; including geological mapping, soil sampling, pan concentrate sampling and ground magnetic surveys (Dahrouge and Reeder, 2002). Pan concentrates were an effective method at tracing the source of Ta-Nb mineralization, while soil sampling was successful at detecting buried carbonatite bodies. Ground magnetic surveys were unable to delineate the Fir Carbonatite due to lack of sufficient magnetic minerals.

1.4 PURPOSE OF SURVEY

The exploration described herein, including diamond drilling, was used to confirm previous results by Anschutz (Canada) Mining Ltd. (Aaquist, 1982a; 1982b) for the Fir Carbonatite, and to establish the size and grade of the intrusion.

1.5 SUMMARY OF WORK

Between October 2001 and April, 2002, Jeff Reeder, P.Geo. and Jody Dahrouge, B.Sc., P.Geol. of Dahrouge Geological Consulting Ltd., supervised the exploration of the Fir Property. Work included the construction of six drill pads and the rehabilitation of approximately 850 m of old logging roads and skidder trails to make them suitable for access by drill equipment. In addition, six HQ-sized diamond drill holes totaling 1245.32 m were completed during November, 2001. Some 241 core samples were analyzed for tantalum, niobium, phosphate and uranium at two separate laboratories (Section 4.2), with an additional eight samples of a known standard submitted as a check. In addition, 10 of the samples were checked at a third laboratory.

The work was authorized by Commerce Resources Corp. and approved under reclamation permit MX-15-183. Based on this drill program and the previous four holes conducted by Anschutz (Canada) Mining Ltd. a resource estimate was calculated for the Fir Carbonatite by independant consulting geologist James McCrea, P.Geo.

1.6 FIELD OPERATIONS

Field work was conducted by a 2-person crew between October 2001 and April, 2002. Personnel were based either at Summit River Lodge, approximately 20 km north of the property, or in a motel in Valemount, British Columbia. Four-wheel-drive vehicles were used for transportation to the property. A differential "GPS" instrument provided detailed survey information for the drill holes with the accuracy generally less than a few metres. Upon completion of the drilling, the core was shipped to Edmonton, Alberta for logging and splitting.

2. REGIONAL GEOLOGY

The Fir Property is within 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 belt, which predominantly 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

The following descriptions of geology of the Fir Property are mostly summarized from prior assessment reports by Dahrouge (2001) and Dahrouge and Reeder (2002).

3.1 STRATIGRAPHY, STRUCTURE AND LITHOLOGY

The Fir Property is underlain by interlayered metasediments and metabasites of the Proterozoic Horsethief Creek Group. (Fig. 2.1). Near the Fir Carbonatite, the gneisses have a general strike of 360° and a moderate dip of 11° to 26° east (Aaquist, 1982b). They are locally folded and cut by later faults. The Horsethief Creek rocks are intruded by sills of carbonatite and later pegmatitic sills and dikes. The carbonatite is either sovite (calcite-dominated) or beforsite (dolomite-dominated). Aaquist (1982a) indicated that the most significant tantalum-niobium mineralization is confined to the beforsites. The carbonatite sills found to be composed of sovite are usually thin and barren. Both rock types are medium- to coarse- grained. Most exposures display layering defined by varying quantities of accessory minerals.

The Fir Carbonatite has been identified in outcrop and intersected by ten core holes over an area measuring 350 m east-west and 450 m north-south. It consists of two sub-parallel beforsite sills; the upper sill is up to 22 m thick and the lower sill is between 26 – 50 m thick. The carbonatites contain accessory minerals including Na-amphibole, pyroxene, phylogopite, olivine, magnetite, pyrite, pyrrhotite, apatite and the tantalum-niobium bearing minerals.

Amphibolite and glimmerite (biotite-rich 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 Fir Property are carbonatites, which are igneous rock bodies composed of more than 50% carbonate minerals. Typically, they are relatively enriched 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 carbonatite bodies were formed by primary magmatic concentration. The non-carbonate minerals tend to segregate into bands, thus a diffuse igneous layering is present with bands richer and poorer in 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 potentially form in economic concentrations.

The main carbonatite body on the Fir claims was discovered in 1981 by a surface outcrop and four subsequent drill holes. The sill possesses the highest concentrations of tantalum and niobium of any of the carbonatites discovered in the Blue River area (Aaquist, 1982a). The surface outcrop was identified as a result of a fortuitous landslide (Ahroon, 1980).

Knox (2000) determined that at the Fir Property, tantalum and niobium could be found in three minerals, pyrochlore ($(Ca,Na)_2Nb_2O_6(OH,F)$), columbite ($FeNb_2O_6$) and fersmite ($(Ca,Na)Nb_2(O,OH,F)_6$). Tantalum substitution for niobium occurs in all three of the minerals. A mineralogical study (Aaquist, 1982a) ascertained that virtually all the tantalum is hosted by pyrochlore. Pyrochlore crystals range in size from 0.2 to 2 mm and occur in two habits (Knox, 2000). Typically, the pyrochlore crystals are dark red in color (Aaquist, 1982a; Knox, 2000) but black and yellow colored varieties have been recognized (Aaquist, 1982a; Mariano, 2000).

Samples from the surface outcrop have returned values of up to 250 ppm Ta_2O_5 and 0.30% Nb_2O_5 (Aaquist, 1982a; Dahrouge, 2001). The best intersection obtained from prior drilling was from Hole BC-19: 7.9 m of 0.037% Ta_2O_5, 0.064% Nb_2O_5 and 3.25% P_2O_5 (Aaquist, 1982b). This intersection is probably the same carbonatite horizon found at the surface exposure. At least ten intersections grading greater then 200 ppm Ta_2O_5 over potentially mineable widths were cut in the four holes. The most significant finding of the analytical results from the Fir Carbonatite is the overall higher tantalum concentrations when compared with other carbonatites in the Blue River area. The Fir Carbonatite is characterized by concentrations of tantalum greater than 100 ppm with generally low U and Th.

4. 2001 AND 2002 EXPLORATION

4.1 CONSTRUCTION AND IMPROVEMENTS TO ACCESS TRAILS

After soliciting and evaluating quotations for rehabilitation of logging roads and skidder trails, the work was awarded to B&G Logging of Valemount, B.C. During the period from October, 2001 to April, 2002 the following equipment was used:

- Chain saw and brush saw for clearing,
- Low bed for transportation,
- D-6 Bulldozer for rehabilitation of logging roads and skidder trails, and
- Excavator for reclaiming logging roads and skidder trails.

The D-6 Bulldozer was used intermittently during the above noted period to rehabilitate access trails, construct drill pads and move the drill rig and equipment from site to site. The D-6 was also used for upgrading existing access trails and roads, ditching within wet and poorly drained areas, and for installing culverts where required. The Excavator was used for deactivating drill trails.

A total of about 850 m of road was rehabilitated on the Fir Property (Fig. 4.1).

TABLE 4.1: LOCATIONS OF THE 2001 CORE HOLES

Drill Hole Number	UTM Easting (m)	UTM Northing (m)	Azimuth/Dip	Depth (m)
FDDH-1	352018	5797712	000°/090°	199.00
FDDH-2	352057	5797813	000°/090°	208.00
FDDH-3	352064	5797919	000°/090°	181.92
FDDH-4	352120	5797697	000°/090°	208.29
FDDH-5	352125	5797774	000°/090°	227.00
FDDH-6	352131	5797612	000°/090°	221.00
			Totals	1245.21

4.2 DIAMOND DRILLING, SAMPLING AND ANALYTICAL PROCEDURES

Diamond drilling was approved under reclamation permit MX-15-183, obtained during 2001. Six HQ sized core holes (Table 4.1) totaling 1245.21 m were diamond drilled during November, 2001. Core holes were located east and upslope of the Fir outcrop and north and east of the previous drill holes (Fig. 4.1). Drillhole collars were surveyed by topofilling relative to known points and by a differential "GPS" instrument.

Diamond drilling was contracted to Beaupre Diamond Drilling Ltd. of Princeton, B.C. Access to drill sites was obtained along Gum Creek logging road and a rehabilitated cat trail. Water for drilling was obtained from nearby creeks draining the property.

The core was logged and split at a storage facility in Edmonton, Alberta. Core logging involved both geological and geotechnical aspects. Geological descriptions included lithology, mineralogy and structure (Appendix 3A). Geotechnical logging involved measured recoveries, Rock Quality Indices (RQDs) and fracture densities (Appendix 3B). All the core was photographed. After logging, the core was split with half of the core replaced in the core box. One half of the core was sampled and sent for lithogeochemical analyses by ICP-MS techniques to Acme Analytical Laboratories Ltd. in Vancouver (Appendices 2A and 2B) and by INAA techniques by Activation Laboratories in Ancaster, Ontario (Appendix 2C). Results were checked by X-Ray Fluorescence at Teck Cominco Metals Ltd. (Appendix 2D).

Comparison of analytical results (Table 4.2) by Acme Analytical Laboratories Ltd., Activation Laboratories in Ancaster, and Teck Cominco Metals Ltd. shows a good correlation between Ta determinations by Neutron Activation and X-Ray Fluorescence; ICP-MS methods show greater variability.

TABLE 4.2: COMPARISON OF ANALYTICAL RESULTS BY ACME ANALYTICAL LABORATORIES, ACTIVATION LABORATORIES, AND TECK-COMINCO

Sample	ICP-MS*				INAA (ppm)°				X-Ray (ppm)[1]			
	Ta (ppm)	Nb (ppm)	P_2O_5 (%)	U (ppm)	Ta (ppm)	Nb (ppm)	P_2O_5 (%)	U (ppm)	Ta (ppm)	Nb (ppm)	P_2O_5 (%)	U (ppm)
12671	143.3	423.9	2.9	58.5	140	-	-	50.7	126	412	3.34	-
12706	157.3	617.1	2.71	29.7	130	-	-	26.9	138	523	2.92	-
12729	398.4	4577	3.29	14.6	510	-	-	13	505	5080	3.61	-
12730	13.2	416.2	1.34	0.8	12	-	-	< 0.5	< 3	366	1.37	-
12813	373.7	608.4	4.12	68.7	345	-	-	54.8	359	548	4.28	-
15602	187	1306	3.66	39.3	242	-	-	41.7	247	1477	3.93	-
15607	76.4	154.8	4.7	90.1	81	-	-	91	80	175	4.75	-
15642	80.6	611.7	3.18	2.8	91	-	-	4.4	44	644	3.33	-
15651	261.4	1685	3.97	29.2	340	-	-	23.7	342	2077	4.03	-

* Acme Analytical Laboratories Ltd.
° Activation Laboratories Ltd.
[1] Teck-Comico Metals Ltd.

The dominant rock type of interest in core holes FDDH-1 to 6 was a rusty weathered, coarse-grained beforsite (dolomite-dominated) carbonatite. All six core holes were drilled at an orientation of 000°/90° which is approximately perpendicular to the flat-lying Fir Sill. Thus, reported intersections are interpreted as representative of true thickness. Drill intersections indicate that the Fir Carbonatite is composed of an upper and lower sill. Carbonatite intersections were sampled at approximately 1 m intervals, and along zones of fenite alteration in the adjacent footwall and hangingwall contacts.

TABLE 4.3: SUMMARY OF ANALYTICAL RESULTS FOR THE 2001 CORE HOLES*

Hole	From (m)	To (m)	Length (m)	Ta_2O_5 (g/t)	Nb_2O_5 (g/t)	P_2O_5 (wt%)
FDDH-1	108.62	122.32	13.70	193	1153	3.64
	135.37	156.16	20.79	196	1154	3.19
	164.03	185.09	21.06	209	1260	3.30
(inclusive)	108.62	185.09	55.55	201	1200	3.34
FDDH-2	110.90	129.80	18.90	215	1157	4.00
	150.70	159.95	9.25	242	1443	4.08
	172.30	202.55	30.25	182	1253	3.97
(inclusive)	110.90	202.55	58.40	202	1252	3.99
FDDH-3	100.90	112.68	11.78	224	1218	4.09
FDDH-4	158.16	179.56	21.40	213	824	3.98
	192.00	199.15	7.15	251	1140	4.68
(inclusive)	158.16	199.15	28.55	223	903	4.16
FDDH-5	152.40	188.80	36.40	215	1163	3.19
	201.40	207.30	5.90	170	722	2.65
(inclusive)	152.40	207.30	42.30	208	1108	3.11
FDDH-6	169.77	177.40	7.63	223	1243	3.81
	183.25	196.90	13.65	229	748	3.43
(inclusive)	169.77	196.99	21.28	226	927	3.56

*See Appendix 4A for complete results

4.2.1 FDDH-1

FDDH-1 was located approximately 100 m north of Anschutz Mining (Canada) Ltd. BC-19 (Aaquist, 1982b) (Figure 4.1). The hole was collared in overburden and intersected 2 main zones of carbonatite before bottoming in gneiss (Appendix 3A). Both the upper and lower sills are beforsite in composition with intersections of significant Ta-Nb-P mineralization. The upper sill is 13.70 m thick with average concentrations of 197 g/t Ta_2O_5, 1153 g/t Nb_2O_5 and 3.64 wt% P_2O_5. The lower sill is approximately 49.07 m thick with concentrations of 190 g/t Ta_2O_5, 1122 g/t Nb_2O_5 and 3.08 wt% P_2O_5. Within the lower sill are two fenitized gneissic zones, each about 1 m across, interpreted as country rock xenoliths.

TABLE 4.4: INTERSECTIONS OF SIGNIFICANT Ta-Nb-P MINERALIZATION

Hole	From (m)	To (m)	Length (m)	Ta_2O_5 (g/t)	Nb_2O_5 (g/t)	P_2O_5 (wt%)
FDDH-1	165.03	173.03	8.00	313	1781	3.75
FDDH-2	118.55	122.00	3.45	336	778	5.63
FDDH-2	150.70	156.5	5.80	302	2036	5.07
FDDH-3	102.00	105.00	3.00	297	1038	5.16
FDDH-4	165.00	170.00	5.00	317	1815	3.27
FDDH-5	162.00	167.00	5.00	303	2193	2.71
FDDH-6	186.10	190.00	3.90	311	1576	2.72

4.2.2 FDDH-2

FDDH-2 was located approximately 100 m north of FDDH-1 (Figure 4.1). The hole was collared in overburden and intersected 2 main zones of carbonatite before bottoming in gneiss (Appendix 3A). Both the upper and lower sills are beforsite in composition with intersections of significant Ta-Nb-P mineralization. The upper sill is 18.90 m thick with average concentrations of 217 g/t Ta_2O_5, 1151 g/t Nb_2O_5 and 4.00 wt% P_2O_5. The upper sill is cut by an approximately 1 m thick pegmatite dike. The lower sill is approximately 51.80 m thick with average concentrations of 177 g/t Ta_2O_5, 1297 g/t Nb_2O_5 and 4.00 wt% P_2O_5. The lower sill includes a 3 m fenitized gneissic zone and two cross-cutting pegmatite dikes: 1m thick and 12 m thick.

4.2.3 FDDH-3

FDDH-3 was the northern-most hole located approximately 100 m north of FDDH-2 (Figure 4.1). The hole was collared in overburden and intersected a zone of carbonatite before bottoming in gneiss (Appendix 3A). The beforsite sill is 11.40 m thick with average concentrations of 219 g/t Ta_2O_5, 1305 g/t Nb_2O_5 and 3.96 wt% P_2O_5. This hole may not have been drilled deep enough to intersect the lower sill.

4.2.4 FDDH-4

FDDH-4 was located upslope, approximately 100 m east of FDDH-1 (Figure 4.1). The hole was collared in overburden and intersected two sills of carbonatite before bottoming in gneiss (Appendix 3A). Both the upper and lower sills are beforsite in composition with intersections of significant Ta-

Nb-P mineralization. The upper sill is 21.35 m thick with average concentrations of 197 g/t Ta_2O_5, 824 g/t Nb_2O_5 and 3.98 wt% P_2O_5. The lower sill is approximately 5.75 m thick with average concentrations of 232 g/t Ta_2O_5, 1140 g/t Nb_2O_5 and 4.68 wt% P_2O_5.

4.2.5 FDDH-5

FDDH-5 was located about 100 m north of FDDH-4 (Figure 4.1). The hole was collared in overburden and like FDDH-4 intersected a large upper sill and a small lower sill of carbonatite before bottoming in gneiss (Appendix 3A). Both the upper and lower sills are beforsite with significant Ta-Nb-P mineralization. The upper sill is 37.75 m thick with average concentrations of 221 g/t Ta_2O_5, 1210 g/t Nb_2O_5 and 3.28 wt% P_2O_5. This intersection also included a small, 0.5 m piece of fenitized gneissic country rock. The lower sill is approximately 6.00 m thick with average concentrations of 145 g/t Ta_2O_5, 721 g/t Nb_2O_5 and 2.65 wt% P_2O_5.

4.2.6 FDDH-6

FDDH-6 was located approximately 100 m south of FDDH-5 (Figure 4.1). The hole was collared in overburden and intersected two small sills of carbonatite before bottoming in gneiss (Appendix 3A). Both the upper and lower sills were beforsite in composition and intersected significant Ta-Nb-P mineralization. The upper sill is 7.63 m thick with average concentrations of 217 g/t Ta_2O_5, 1243 g/t Nb_2O_5 and 3.81 wt% P_2O_5. The lower sill is approximately 12.75 m thick with average concentrations of 214 g/t Ta_2O_5, 738 g/t Nb_2O_5 and 3.43 wt% P_2O_5.

4.3 RESOURCE ESTIMATE FOR THE FIR CARBONATITE

A resource estimate for the Fir Carbonatite was completed by independent consulting geologist James McCrea, P.Geo., of Vancouver, British Columbia (Appendix 4). The calculations were made using Gemcom software and based upon four NQ-sized core holes completed in 1981 by Anschutz (Canada) Mining Ltd (Aaquist, 1982a and 1982b) and six HQ-sized core holes completed in 2001 by Commerce Resources Corp. The resource estimate was completed for an area immediately encompassing the drill holes and does not extend to, nor include, known outcrops of tantalum bearing carbonatite, located approximately 135 to 200 m to the west of the drill holes. The model was also constrained down dip and along strike extrapolation by distance of 25 metres, and by a distance of 50 metres in the up dip direction. Hence, the Fir Carbonatite remains open in all directions.

Using a cut-off grade of 150 g/t Ta_2O_5, the Fir Carbonatite contains an inferred resource of 5.2 million tonnes grading 194 g/t Ta_2O_5, 897 g/t Nb_2O_5 and 3.50% P_2O_5 (Appendix 4). The deposit has the potential to be mined by open-pit techniques.

5. DISCUSSION AND CONCLUSIONS

Drilling conducted during 2001 confirms prior drill results reported by Anschutz Mining (Canada) Ltd. (Aaquist, 1982b). The Fir Carbonatite possesses the highest concentrations of Tantalum and Niobium mineralization of the known carbonatites within the Blue River area and warrants additional drilling. An initial resource calculation using a cut-off grade of 150 g/t Ta_2O_5 indicates the Fir Carbonatite contains about 5.2 million tonnes grading 194 g/t Ta_2O_5, 897 g/t Nb_2O_5 and 3.50% P_2O_5. (McCrea, 2002). Further delineation drilling during the summer of 2002 between the current resource area and the surface outcrops will provide a more accurate determination of size and grade of the deposit. Metallurgical and mineral processing work is required to determine if material from the mineralized zones are amenable to simple gravity concentration techniques.

Mark David Smith, M.Sc.,Geol.I.T.

PROFESSIONAL GEOLOGIST OF ALBERTA
J.R. DAHROUGE

Jody R. Dahrouge, B.Sc.,P.Geol.

2002-07-30

Edmonton, Alberta

6. REFERENCES

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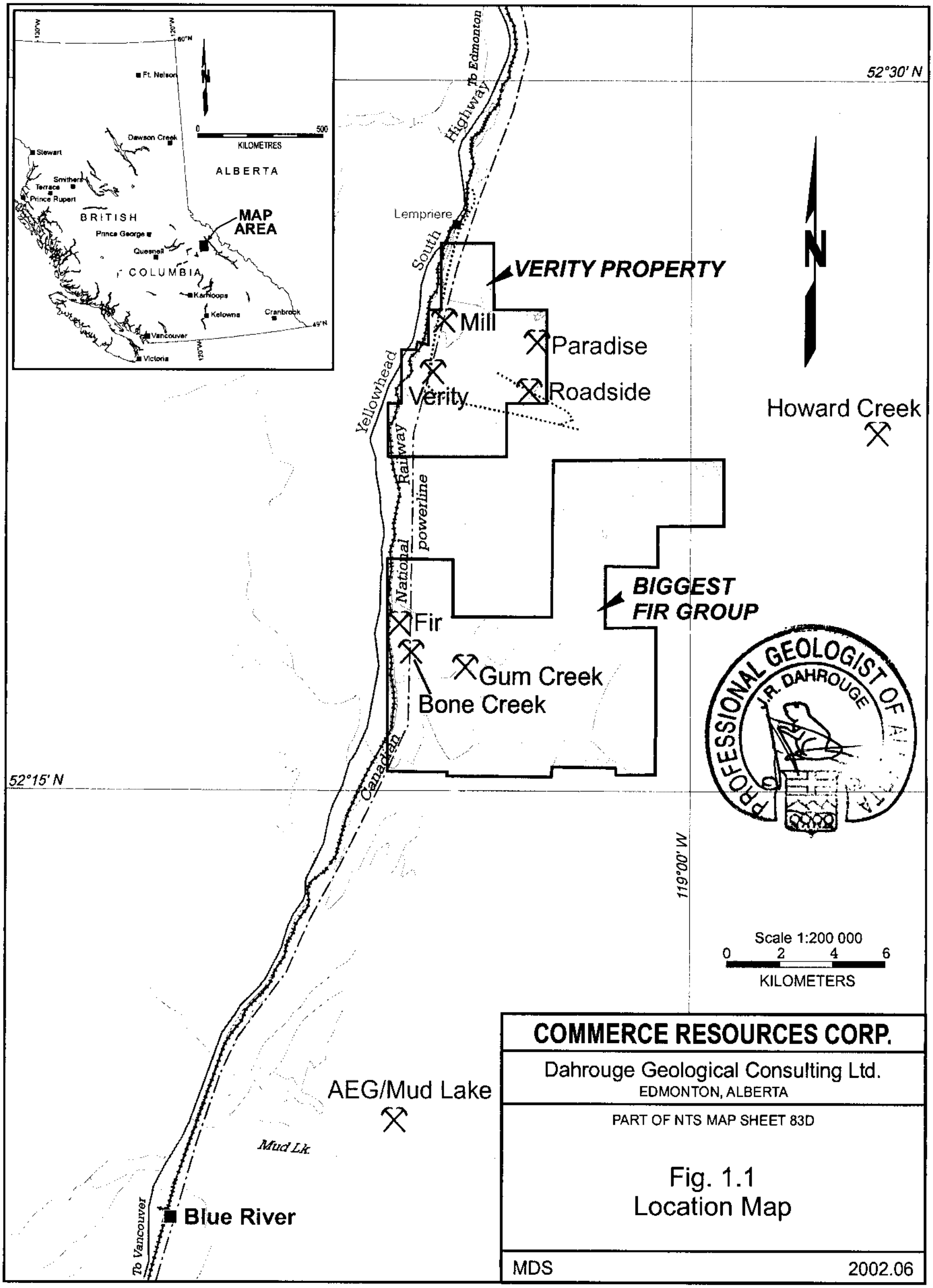
F1



ALBERTA
BRITISH
COLUMBIA
MAP AREA
KILOMETRES
Ft. Nelson
Dawson Creek
Stewart
Smithers
Terrace
Prince Rupert
Prince George
Quesnel
Kamloops
Kelowna
Cranbrook
Vancouver
Victoria
52°30' N
52°15' N
119°00' W
To Edmonton
South Yellowhead Highway
Lempriere
VERITY PROPERTY
Mill
Paradise
Roadside
Verity
Howard Creek
Canadian National Railway
powerline
BIGGEST
FIR GROUP
Fir
Gum Creek
Bone Creek
PROFESSIONAL GEOLOGIST OF ALBERTA
J.R. DAHROUGE
Scale 1:200 000
0 2 4 6
KILOMETERS
AEG/Mud Lake
Mud Lk.
Blue River
To Vancouver
COMMERCE RESOURCES CORP.
Dahrouge Geological Consulting Ltd.
EDMONTON, ALBERTA
PART OF NTS MAP SHEET 83D
Fig. 1.1
Location Map
MDS
2002.06

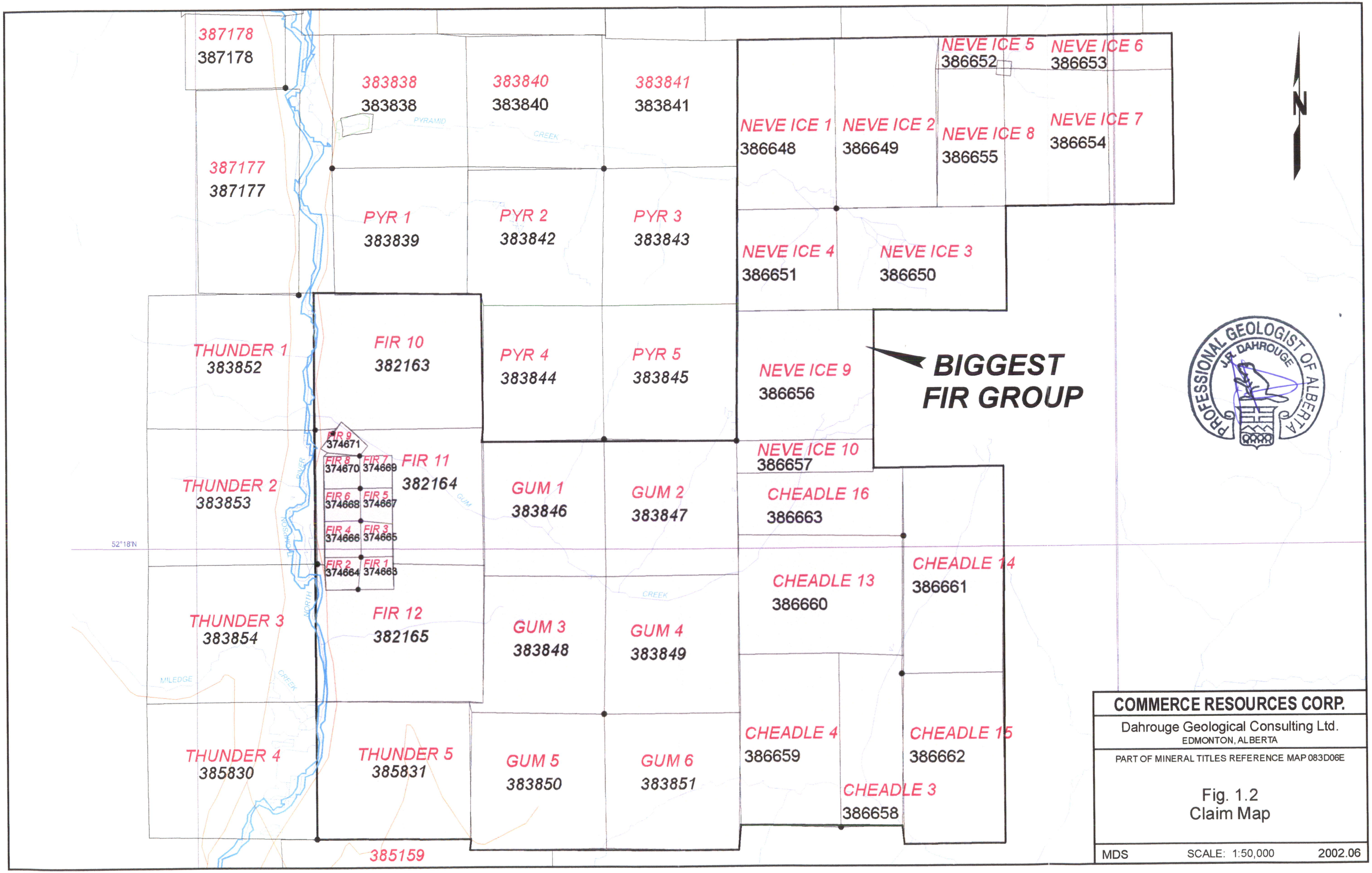
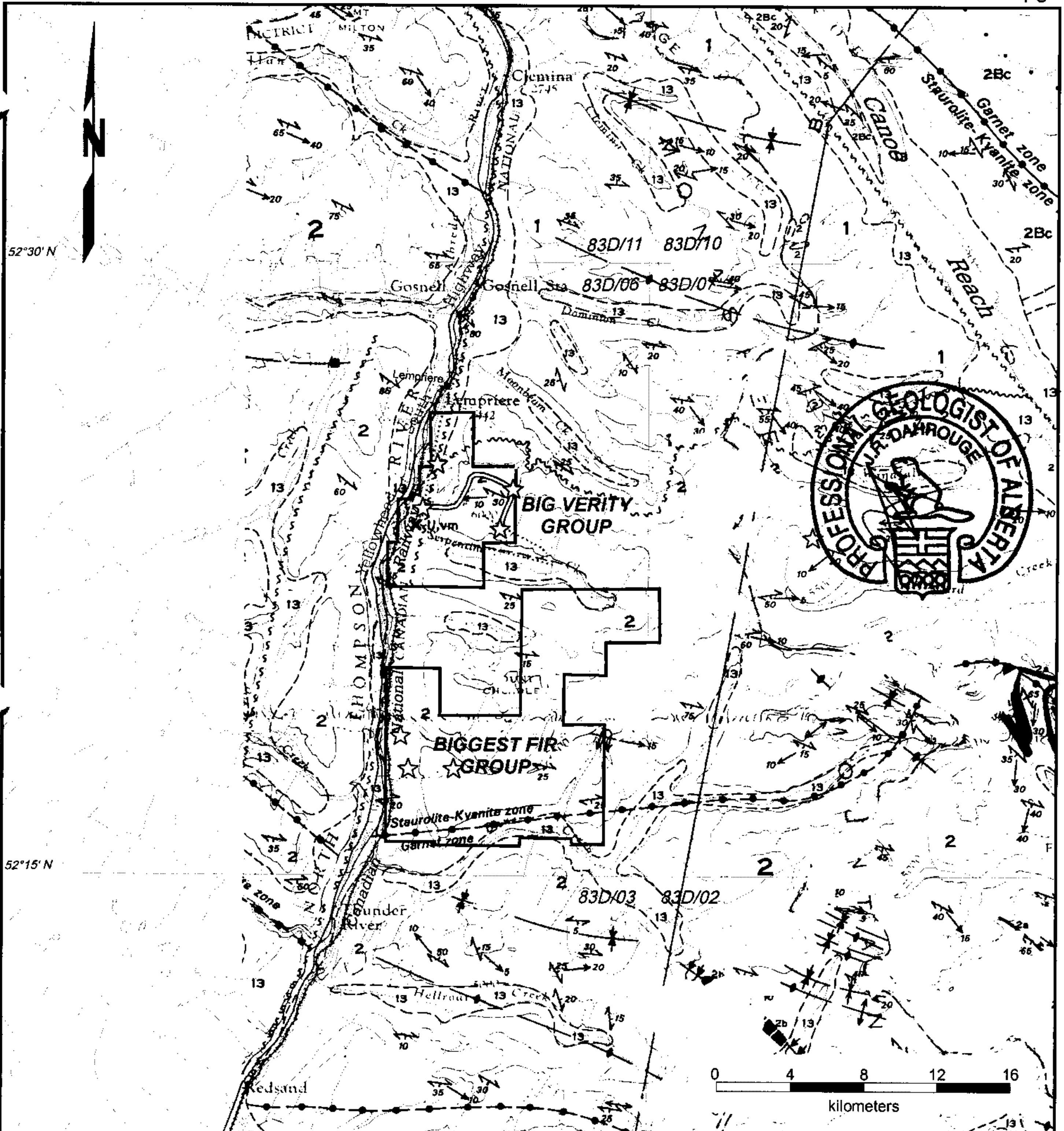


Fig. 1.2
Claim Map



LEGEND AND SYMBOLS

☆ Carbonatite (location approx.)

PLEISTOCENE AND RECENT

13	Alluvium and glacial deposits

WINDERMERE

2	**Horsethief Creek Group:** quartzite, phyllite, schist, garnet, gneiss, 2a - marble, 2b - amphibolite

AGE UNKNOWN

1	Gneiss, amphibolite, schist, minor quartz

Geology after R.B.Campbell (1963-65).

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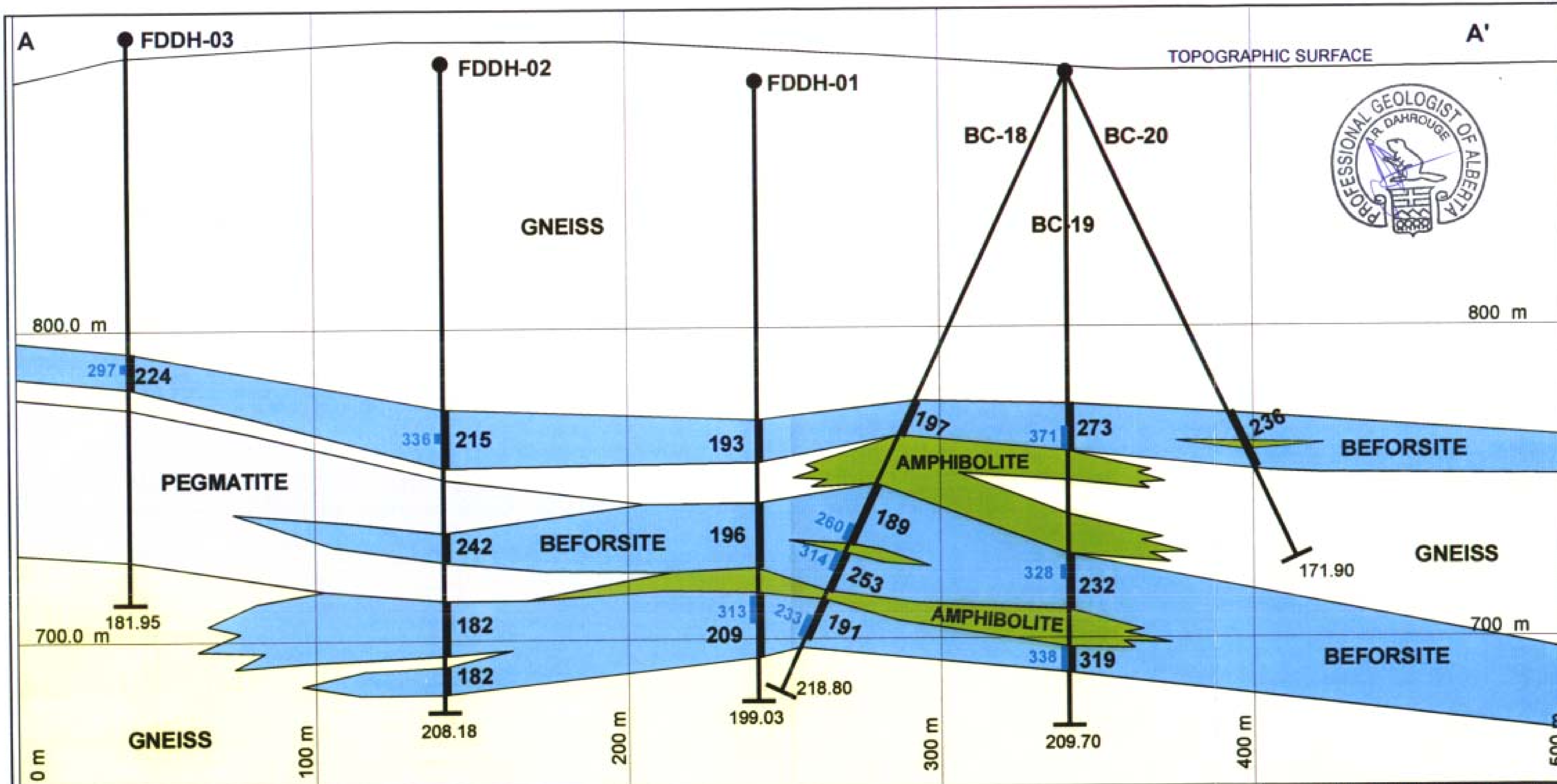
EDMONTON, ALBERTA

BLUE RIVER AREA, BRITISH COLUMBIA

Fig. 2.1
Regional Geology

WM 2001.12



0 100 m

Scale: 1:1250

338 ▮ COMPOSITE CORE SAMPLE; Ta_2O_5 (ppm)

NOTES

1) Plane of section is north-south.
2) Composite samples are grams per tonne Ta_2O_5.
3) See Appendix 3A for complete analytical results.
3) See Aaquist (1982a & b) for results for holes BC-18 to BC-21.

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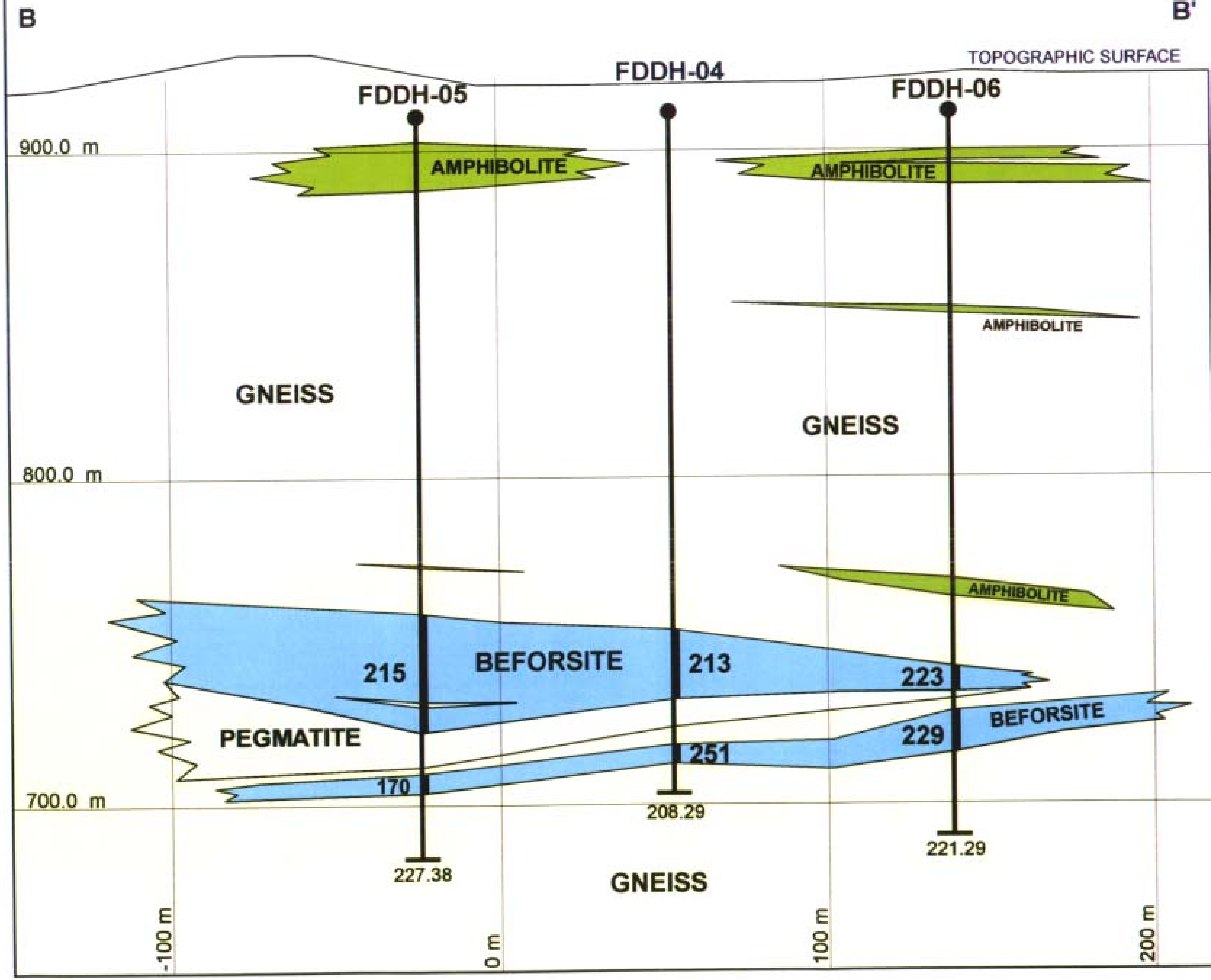
FIR PROPERTY, BLUE RIVER, B.C.

Fig. 4.2
North-South Cross-Section A-A'

MDS 2002.07



0 100 m

Scale: 1:1250

338 COMPOSITE CORE SAMPLE; Ta_2O_5 (ppm)

NOTES

1) Plane of section is north-south.
2) Composite samples are grams per tonne Ta_2O_5.
3) See Appendix 3A for complete analytical results.

PROFESSIONAL GEOLOGIST OF ALBERTA J.R. DAHROUGE

COMMERCE RESOURCES CORP.

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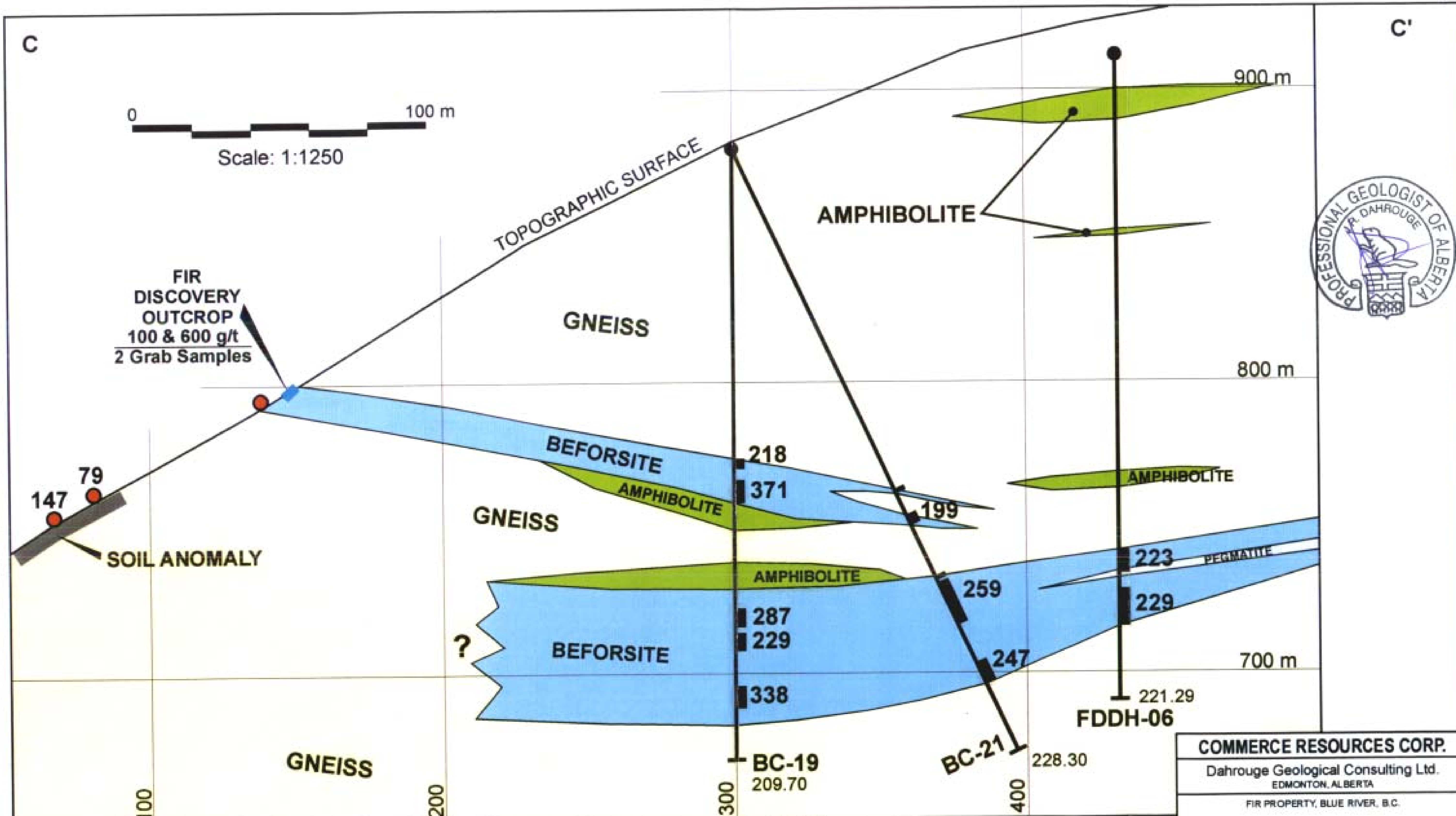
Fig. 4.3
North-South Cross-Section B-B'

MDS 2002.07

F6



118 ● SURFACE SAMPLE; Ta_2O_5 (ppm)

338 ▮ COMPOSITE CORE SAMPLE; Ta_2O_5 (ppm)

NOTES

1) Plane of section is 90° w.r.t. grid north.
2) Composite samples are grams per tonne Ta_2O_5.
3) See Appendix 3A for complete analytical results.
4) See Aaquist (1982a & b) for results for holes BC-18 to BC-21.

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EDMONTON, ALBERTA

FIR PROPERTY, BLUE RIVER, B.C.

Fig. 4.4
East-West Cross-Section C-C'

MDS 2002.07

APPENDIX 1: ITEMIZED COST STATEMENT

a) Personnel

J. Dahrouge, geologist					
23.90	days		supervise exploration program, arrange for equipment and supplies, review results, and report preparation		
23.90	days	@	$ 481.50	$ 11,507.85	
S. Fraser, geologist					
8.00	days		field work and travel November 9 to 16		
2.50	days		prepare for field work, arrange for GPS Survey equipment, download survey information		
10.50	days	@	$ 444.05	$ 4,662.53	
J. Reeder, geologist					
17.00	days		field work and travel November 1 to 16		
28.80	days		prepare applications for drill permits and road work, prepare for field work, arrange for transportation of drill core, logging of drill core		
45.80	days	@	$ 428.00	$ 19,602.40	
M. Smith, geologist					
19.20	days		assist with logging and sawing drill core, editing of drill logs, and report edits and preparation		
19.20	days	@	$ 299.60	$ 5,752.32	
R. Grywul, geologist					
15.50	days		assist with logging, sawing and shipping drill core		
15.50	days	@	$ 294.25	$ 4,560.88	
S. Cook, assistant					
10.00	days		field work November 1,2, 5 to 8, and 12 to 15		
10.00	days	@	$ 149.80	$ 1,498.00	
W. McGuire, draftsman					
20.80	days		compiling field data, drafting, preparing and plotting maps, figures and cross-sections, other		
20.80	days	@	$ 406.60	$ 8,457.28	
					$ 56,041.25

b) Food and Accommodation

25	man-days	@	$ 44.98	accommodations and meals	$ 1,124.54	
25	man-days	@	$ 12.05	groceries and other	$ 301.30	
						$ 1,425.84

c) Transportation

Vehicles:	4 x 4 Truck Rental (5,234 km)	$ 1,947.74	
			$ 1,947.74

d) Instrument Rental - Subcontractors

16	unit-days	@	$ 22.50	Laptop Computer	$ 360.00	
8	unit-days	@	$ 102.99	GPS Rental	$ 823.90	
				Rock Saw and Generator Rental(s)	$ 1,702.41	
						$ 2,886.31

APPENDIX 1: CONTINUED

e) **Drilling**							
				Drilling: 1245.21 m of HQ Core, Mob/Demob and Other			
				Beaupre Diamond Drilling, Princeton, B.C.	$ 78,339.91		
				Drill Moves, and Drill Pad and Road Construction			
				B&G Logging, Valemount, B.C.	$ 11,076.64		
				Shipping and Transportation			
				Thunder Valley Contracting, McBride,B.C.	$ 1,070.00		
							$ 90,486.55
f) **Analyses**							
69	samples	@	$ 29.96	ICP Analyses (Groups 4A and 4B, Acme)	$ 2,067.24		
95	samples	@	$ 37.45	ICP Analyses (Groups 4A and 4B, Acme)	$ 3,557.75		
85	samples	@	$ 17.76	ICP Analyses (Group 4A, Acme)	$ 1,509.77		
85	samples	@	$ 13.91	ICP Analyses (Group 4B, Acme)	$ 1,182.35		
249	samples	@	$ 13.96	INAA Analyses (Group 5A, Acme)	$ 3,476.91		
125	samples	@	$ 4.33	Core Sample Preparation	$ 541.69		
149	samples	@	$ 4.55	Core Sample Preparation	$ 677.58		
10	samples	@	$ 24.08	XRF (Oxides, Teck Cominco Ltd.)	$ 240.75		
10	samples	@	$ 4.28	XRF (Ta, Teck Cominco Ltd.)	$ 42.80		
10	samples	@	$ 2.14	XRF (Nb, Teck Cominco Ltd.)	$ 21.40		
							$ 13,318.24
g) **Report**				Reproduction and assembly	$ 147.13		
							$ 147.13
h) **Other**							
				Courier and Shipping	$ 1,638.05		
				Field Equipment and Supplies	$ 938.20		
				Fuel	$ 90.74		
				Long distance telephone	$ 94.04		
				Plots	$ 441.38		
				Reproductions and photocopying	$ 159.10		
				Storage Locker	$ 773.33		
							$ 4,134.85
Total							$ 170,387.90

APPENDIX 2A:

ANALYTICAL REPORTS FOR WHOLE ROCK ICP BY ACME ANALYTICAL LABORATORIES LTD.

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT

To Commerce Resources Corp.

Acme file # A104395 Page 1 Received: DEC 18 2001 * 75 samples in this disk file.

ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sc	LOI	TOT/C	TOT/S	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	%	%	%	%
15601	59.64	18.02	8.49	2.40	0.85	4.80	3.15	0.81	0.20	0.12	0.012	1248	30	17	1.3	0.05	0.33	99.94
15602	3.49	0.28	7.91	14.34	31.36	0.12	0.15	0.03	3.66	0.81	0.005	66	< 20	3	37.5	11.00	0.38	99.67
15603	2.53	0.08	7.65	14.44	31.63	0.17	0.03	0.02	3.97	0.74	0.004	42	< 20	4	38.6	11.00	0.31	99.87
15604	2.52	0.06	7.73	14.29	31.54	0.34	0.04	0.02	4.13	0.71	0.003	38	< 20	4	38.6	11.20	0.22	99.99
15605	2.39	0.10	7.75	13.92	31.69	0.35	< .02	0.03	4.77	0.59	0.003	45	< 20	5	38.5	11.00	0.11	100.11
15606	2.35	0.12	8.14	13.68	32.15	0.29	0.04	0.03	4.85	0.59	0.004	49	< 20	4	37.9	11.00	0.21	100.15
15607	8.48	0.35	7.21	13.61	31.70	0.14	0.07	0.02	4.70	0.61	0.005	35	< 20	3	33.3	9.56	0.33	100.20
15608	35.71	1.27	7.70	12.19	25.88	0.41	0.34	0.04	2.82	0.67	< .001	17	< 20	5	13.1	3.72	0.21	100.14
15609	7.97	0.14	8.19	14.34	30.37	0.04	0.08	0.02	2.56	0.84	0.005	30	< 20	5	35.2	10.40	0.47	99.76
15610	3.05	0.07	8.66	14.35	30.43	0.35	0.05	0.02	3.14	0.80	0.006	39	< 20	6	38.7	11.30	0.22	99.63
RE 15610	3.00	0.07	8.81	14.32	30.31	0.35	0.05	0.02	3.15	0.80	0.004	38	< 20	5	38.7	11.10	0.23	99.59
RRE 15610	2.99	0.08	8.75	14.29	30.31	0.36	0.06	0.02	3.19	0.80	0.004	35	< 20	5	38.8	11.20	0.21	99.65
15611	3.03	0.06	8.83	14.38	30.57	0.38	0.05	0.02	3.37	0.84	0.007	37	< 20	5	38.1	11.30	0.35	99.64
15612	3.37	0.06	8.41	14.32	30.72	0.33	0.07	0.01	3.69	0.87	0.007	45	< 20	5	37.8	10.90	0.31	99.66
15613	2.76	0.04	8.69	14.75	30.57	0.11	0.04	0.01	2.66	0.90	0.007	47	< 20	4	39.1	11.60	0.42	99.64
15614	5.92	0.11	8.39	14.39	30.14	0.14	0.08	0.01	2.86	0.89	0.003	48	< 20	4	36.6	10.60	0.46	99.53
15615	21.36	0.75	7.61	13.28	27.55	0.53	0.34	0.04	3.91	0.68	0.002	59	< 20	4	23.8	6.54	0.44	99.86
15616	39.58	11.72	12.69	11.46	8.57	2.84	4.48	0.98	2.13	0.20	0.017	994	80	14	5.4	1.27	0.79	100.19
15617	39.48	10.68	14.22	14.71	8.07	0.89	5.53	0.96	2.61	0.21	0.020	965	74	14	2.4	0.41	0.48	99.90
15618	8.12	0.36	7.75	14.17	30.48	0.11	0.20	0.01	2.94	0.86	0.002	53	< 20	3	34.6	9.95	0.36	99.61
15600A PULP	2.29	< .03	6.75	16.45	30.09	0.12	0.10	0.04	2.73	0.33	0.004	121	< 20	18	40.8	11.60	0.05	99.72
15619	10.06	0.11	7.77	14.33	30.43	0.11	0.09	0.01	3.27	0.83	0.004	41	< 20	4	32.8	9.59	0.54	99.82
15620	3.85	0.04	8.73	14.76	30.90	0.01	0.02	0.01	2.86	0.95	0.006	40	< 20	5	37.3	11.10	0.65	99.45
15621	9.01	0.12	8.07	14.33	30.27	0.06	0.04	0.01	3.07	0.90	0.003	39	< 20	4	33.7	10.00	0.41	99.59
15622	9.39	0.21	8.15	13.97	30.13	0.08	0.06	0.02	3.57	0.80	0.001	50	< 20	5	33.3	9.46	0.37	99.69
15623	31.61	6.64	5.40	9.44	18.97	2.52	0.46	0.07	2.33	0.43	0.002	130	< 20	5	22.0	6.01	0.20	99.89
15624	3.03	0.10	7.71	14.49	31.12	0.29	0.04	0.02	4.36	0.69	0.004	48	26	5	38.1	10.80	0.24	99.97
15625	2.35	0.06	7.70	14.52	31.79	0.27	0.03	0.02	4.37	0.69	0.008	43	< 20	5	38.2	11.00	0.23	100.02
15626	7.32	0.17	8.42	15.06	27.80	0.97	0.12	0.04	2.22	0.65	0.030	36	143	9	37.1	10.70	0.24	99.92
15627	7.59	0.10	7.75	15.55	27.68	0.92	0.13	0.04	2.26	0.64	0.036	49	189	7	37.1	10.60	0.25	99.82
15628	11.04	0.14	7.25	17.21	25.03	1.09	0.16	0.04	0.32	0.56	0.052	50	395	6	36.7	10.30	0.31	99.65
STD SO-17/CSB	61.81	13.90	5.90	2.35	4.70	4.11	1.36	0.62	0.96	0.54	0.414	398	36	23	3.4	2.45	5.25	100.11
15629	21.79	2.05	9.16	13.12	25.97	0.46	0.76	0.08	3.50	0.62	0.019	189	87	6	22.0	6.36	0.56	99.57
15630	20.51	1.10	7.74	13.00	28.36	0.34	0.35	0.04	4.76	0.64	< .001	78	29	4	23.0	6.67	0.41	99.86
15631	7.54	0.15	7.92	14.21	29.98	0.24	0.07	0.01	3.73	0.76	0.001	46	< 20	4	35.0	10.50	0.31	99.62
15632	33.85	0.09	7.85	13.73	25.45	0.35	0.03	0.01	2.01	0.64	0.001	28	< 20	3	15.7	4.59	0.32	99.72

* As received by e-mail

APPENDIX 2A: CONTINUED

ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sc	LOI	TOT/C	TOT/S	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	%	%	%	%
15633	10.07	0.06	7.62	14.75	29.49	0.17	0.03	0.01	3.00	0.77	0.001	47	< 20	3	33.6	9.93	0.34	99.58
15634	2.90	0.03	8.39	14.73	30.78	0.13	0.04	0.01	3.69	0.85	0.001	52	< 20	4	37.8	11.20	0.64	99.36
15635	6.97	0.80	8.26	13.99	29.50	0.19	0.57	0.02	3.32	0.85	0.004	168	< 20	4	34.6	10.00	0.57	99.09
15636	5.06	0.42	7.74	14.20	30.26	0.16	0.35	0.02	2.21	0.91	< .001	104	< 20	3	38.0	11.20	0.27	99.34
15637	3.89	0.17	7.88	14.44	30.17	0.15	0.14	0.01	3.08	0.89	< .001	75	< 20	3	38.6	11.10	0.24	99.43
15638	10.78	1.57	8.04	13.34	28.30	0.28	0.99	0.04	3.35	0.80	0.002	207	< 20	5	31.5	9.03	0.38	99.02
RE 15638	10.81	1.54	7.96	13.31	28.21	0.30	1.01	0.04	3.61	0.80	< .001	202	< 20	5	31.4	8.92	0.39	99.01
RRE 15638	10.60	1.52	8.07	13.41	28.52	0.28	1.04	0.04	3.37	0.81	0.005	204	< 20	5	31.3	9.13	0.39	98.99
15639	42.59	12.16	12.78	9.12	8.36	3.39	3.69	1.42	0.73	0.22	0.031	1142	96	35	4.1	1.16	0.51	98.74
15640	49.20	13.64	8.39	6.80	6.24	5.66	2.26	0.76	1.11	0.18	0.009	600	48	16	4.5	1.25	0.60	98.83
15641	5.77	0.27	8.01	14.34	29.95	0.24	0.23	0.02	3.40	0.87	< .001	67	< 20	4	36.3	10.60	0.33	99.41
15642	10.38	0.11	7.67	14.12	29.75	0.43	0.09	0.01	3.18	0.88	0.001	41	< 20	4	32.9	9.76	0.63	99.53
15643	14.51	1.36	7.76	14.19	27.18	0.51	0.96	0.04	3.47	0.74	< .001	172	28	5	28.6	8.27	0.59	99.35
15644	7.09	0.33	7.70	13.95	29.78	0.29	0.29	0.02	3.55	0.85	< .001	73	23	4	35.6	10.40	0.34	99.46
15645	38.10	11.69	12.55	13.00	6.79	1.65	6.96	1.01	1.51	0.21	0.023	1467	65	14	5.9	1.01	0.25	99.57
15600B PULP	2.39	< .03	6.94	16.12	29.52	0.13	0.10	0.04	2.81	0.33	< .001	122	< 20	18	41.1	12.00	0.04	99.50
15646	4.08	0.19	7.42	14.36	30.84	0.14	0.20	0.01	3.12	0.84	0.001	57	< 20	4	38.3	11.10	0.23	99.50
15647	19.23	1.36	8.18	13.84	26.30	0.50	0.67	0.06	3.00	0.74	0.002	121	< 20	4	25.5	7.47	0.47	99.40
15648	6.33	0.27	7.82	13.72	30.81	0.29	0.08	0.02	3.25	0.88	< .001	45	< 20	4	36.0	10.70	0.29	99.47
15649	2.79	0.05	7.79	14.62	30.36	0.35	0.06	0.01	4.11	0.81	0.006	51	< 20	4	38.4	11.20	0.31	99.36
15650	2.73	0.06	8.72	14.27	30.66	0.33	0.10	0.02	4.27	0.84	0.002	52	< 20	4	37.3	10.90	0.45	99.31
15651	2.99	0.07	9.18	14.08	29.64	0.38	0.08	0.03	3.97	0.83	0.006	55	< 20	4	37.3	11.10	0.45	98.56
15652	2.94	0.07	9.71	14.36	29.90	0.31	0.05	0.03	3.25	0.87	0.002	56	< 20	4	37.7	11.10	0.79	99.20
15653	5.99	0.20	9.18	14.22	30.34	0.46	0.14	0.03	3.81	0.87	0.001	55	< 20	4	33.9	10.30	0.94	99.15
15654	3.05	0.10	7.86	14.60	30.87	0.25	0.08	0.01	4.33	0.82	0.003	56	< 20	4	37.5	11.40	0.38	99.48
15655	2.32	0.05	7.74	14.58	30.89	0.18	0.06	0.01	3.26	0.90	0.001	53	< 20	3	39.4	11.40	0.19	99.39
15656	6.88	1.11	8.35	14.31	28.59	0.35	0.67	0.02	2.80	0.84	< .001	125	< 20	4	35.4	10.20	0.32	99.34
15657	15.88	2.75	8.34	12.76	25.93	0.80	1.73	0.04	2.67	0.70	0.004	231	22	5	27.5	7.52	0.45	99.14
STD SO-17/CSB	61.10	13.94	5.85	2.30	4.61	4.12	1.39	0.62	0.96	0.53	0.419	402	27	23	3.4	2.45	5.32	99.29
15658	6.65	0.28	7.70	14.53	30.30	0.43	0.16	0.01	2.27	0.87	0.003	58	< 20	3	36.0	10.70	0.53	99.22
15659	7.48	0.16	8.10	14.52	29.98	0.63	0.06	0.02	3.52	0.82	< .001	45	22	5	33.9	10.20	0.55	99.19
15660	3.03	0.11	8.46	13.96	31.63	0.36	0.05	0.02	4.04	0.77	0.008	68	30	4	36.9	10.90	0.43	99.35
15661	10.23	0.22	9.09	14.80	26.42	1.35	0.21	0.04	2.84	0.66	0.049	56	162	9	33.5	9.64	0.20	99.44
15662	2.62	0.15	8.04	14.35	30.85	0.30	0.10	0.02	3.54	0.79	0.006	63	< 20	3	38.5	11.30	0.20	99.28
15663	3.95	0.09	7.01	14.61	31.09	0.18	0.02	< .01	2.90	0.78	0.003	48	< 20	3	38.6	11.30	0.12	99.25
15664	2.45	0.08	8.55	15.09	30.58	0.09	< .02	< .01	1.63	0.91	0.005	45	34	2	39.9	11.90	0.51	99.30
RE 15664	2.37	0.09	8.57	15.15	30.59	0.10	0.04	< .01	1.66	0.91	0.005	45	22	3	39.8	12.00	0.54	99.29
RRE 15664	2.33	0.06	8.57	15.26	30.69	0.09	< .02	< .01	1.68	0.91	0.004	45	43	2	39.7	12.10	0.56	99.32
15665	1.90	0.07	7.29	14.91	31.16	0.18	0.04	0.01	3.43	0.78	< .001	48	< 20	4	39.5	11.90	0.20	99.28
15666	3.51	0.28	7.85	14.38	31.05	0.09	0.18	0.02	2.82	0.85	0.002	57	23	3	38.2	11.40	0.31	99.24
15667	38.15	10.93	14.14	13.39	7.98	1.42	6.01	1.04	2.91	0.16	0.025	971	78	16	3.3	0.65	0.50	99.57
STD SO-17/CSB	61.57	13.96	5.83	2.37	4.66	4.12	1.41	0.63	0.94	0.53	0.443	399	31	23	3.4	2.44	5.34	99.92

APPENDIX 2A: **CONTINUED***

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT																							
To Commerce Resources Corp.																							
Acme file # A200589 Received: MAR 8 2002 * 29 samples in this disk file.																							
ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sc	Sr	Zr	Y	Nb	Ta	LOI	TOT/C	TOT/S	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
12676	44.08	3.13	8.59	12.89	22.60	0.67	0.72	0.12	1.85	0.59	0.002	72	< 20	4	1078	< 10	24	320	61	4.7	1.20	0.05	100.13
12677	10.23	0.57	7.92	15.33	30.38	0.10	0.21	0.03	2.45	0.81	< .001	53	< 20	3	3991	< 10	25	1665	165	31.4	9.23	0.58	100.15
12678	5.35	0.32	8.10	15.61	30.66	0.08	0.11	0.02	2.49	0.84	< .001	51	< 20	3	4565	< 10	24	1546	126	35.8	10.68	0.45	100.15
12679	2.31	< .03	7.88	15.35	32.13	0.03	0.02	0.01	3.29	0.85	0.001	38	< 20	3	4856	< 10	29	1830	110	37.4	11.27	0.45	100.13
12680	14.48	1.53	8.23	15.42	27.69	0.28	0.44	0.07	2.14	0.71	< .001	113	< 20	3	3512	< 10	26	995	124	28.5	8.11	0.34	100.06
12681	2.34	0.05	7.89	15.78	31.57	0.06	0.03	0.01	3.17	0.76	0.003	53	< 20	3	4602	< 10	32	1510	160	37.7	11.37	0.56	100.13
14452 PULP	1.88	< .03	6.33	17.27	30.41	0.12	0.07	0.04	2.48	0.30	0.002	109	< 20	13	4172	< 10	17	714	73	40.6	11.56	0.07	100.12
12682	11.93	0.15	7.42	15.40	29.99	0.17	0.04	0.01	2.61	0.75	0.003	49	< 20	3	3913	< 10	27	935	111	31.0	9.20	0.35	100.08
12683	12.26	0.15	7.61	15.05	30.10	0.13	0.04	0.01	2.90	0.77	0.002	48	< 20	3	3930	< 10	27	850	82	30.5	8.91	0.33	100.11
12684	3.05	0.03	7.41	15.29	32.02	0.10	0.03	0.01	3.22	0.83	< .001	48	< 20	3	5026	< 10	30	1693	122	37.3	10.98	0.31	100.14
12685	5.77	0.05	8.45	15.40	30.68	0.08	0.03	0.01	2.29	0.86	0.002	45	< 20	3	4740	< 10	23	1910	103	35.6	10.49	0.63	100.06
12686	2.15	0.03	7.04	15.69	31.97	0.12	0.03	< .01	2.73	0.81	< .001	50	< 20	3	4878	< 10	27	573	78	38.9	11.56	0.22	100.14
12687	4.36	0.23	7.11	14.96	31.91	0.18	0.13	0.01	3.09	0.81	0.001	51	< 20	3	5011	< 10	30	1047	87	36.7	10.58	0.26	100.24
12688	37.07	10.41	14.52	13.61	8.97	1.72	4.82	1.11	2.08	0.21	0.022	988	67	16	1098	50	28	710	27	5.1	0.93	0.45	100.00
RE 12688	36.86	10.36	14.34	13.53	8.93	1.71	4.93	1.10	2.24	0.20	0.026	990	60	16	1093	54	29	679	24	5.4	0.92	0.47	99.99
RRE 12688	36.80	10.32	14.34	13.50	9.02	1.71	4.89	1.10	2.35	0.20	0.023	984	64	16	1108	66	29	602	26	5.4	0.96	0.45	100.00
12689	4.17	0.43	7.55	15.12	31.23	0.09	0.27	0.02	2.95	0.81	0.004	91	< 20	3	4974	10	32	1069	104	36.7	10.68	0.41	100.11
12690	5.12	0.36	7.61	15.35	30.61	0.15	0.24	0.01	2.49	0.80	0.002	72	< 20	3	4823	< 10	27	1074	87	36.6	10.68	0.34	100.08
12691	36.79	5.67	6.58	11.46	21.33	1.70	0.56	0.06	1.40	0.56	< .001	155	< 20	4	2874	39	31	358	56	13.5	3.66	0.09	100.03
12692	29.82	0.61	7.51	13.74	28.25	0.22	0.09	0.02	2.88	0.70	0.001	28	< 20	3	2301	< 10	31	846	102	15.9	4.74	0.29	100.15
12693	10.73	0.55	7.69	14.69	30.61	0.17	0.11	0.02	3.64	0.72	< .001	49	< 20	3	3852	< 10	33	854	111	30.7	9.06	0.36	100.22
12694	71.63	14.86	1.18	0.48	2.03	4.28	4.25	0.06	0.26	0.03	0.002	600	< 20	2	433	19	19	< 10	< 20	0.7	0.12	< .01	99.89
14453 PULP	2.02	< .03	6.38	17.28	30.13	0.11	0.08	0.03	2.47	0.30	< .001	115	< 20	14	4260	< 10	18	747	75	40.7	11.56	0.06	100.14
12695	43.03	8.87	5.51	7.14	18.05	2.35	0.94	0.04	2.10	0.36	0.002	197	< 20	3	2138	25	31	204	66	11.3	3.16	0.11	100.00
12696	3.60	0.19	15.63	4.28	40.29	0.50	0.06	0.24	4.71	0.58	< .001	420	< 20	5	5407	57	74	569	166	29.4	9.07	0.76	100.26
12697	2.56	0.08	10.34	6.74	40.70	0.37	0.04	0.13	4.20	0.65	0.002	348	< 20	6	5259	169	66	644	171	33.6	10.09	0.48	100.20
12698	3.42	0.11	9.48	4.52	43.45	0.48	0.04	0.12	4.47	0.62	< .001	429	< 20	5	5549	61	75	548	137	32.6	9.90	0.59	100.11
12699	2.85	0.08	8.49	10.57	36.83	0.42	0.04	0.05	4.90	0.63	0.003	198	25	4	4309	28	50	486	129	34.8	10.39	0.56	100.28
12700	2.44	0.09	8.13	13.84	33.11	0.35	0.04	0.03	3.94	0.71	0.003	77	< 20	4	4396	< 10	34	982	155	36.8	10.88	0.36	100.16
STD SO-17/CSB	61.64	13.69	5.86	2.35	4.69	4.13	1.42	0.63	0.93	0.54	0.426	402	22	22	309	353	26	< 10	< 20	3.4	2.47	5.31	99.84

* As received by e-mail

APPENDIX 2A: **CONTINUED***

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT
To Commerce Resources Corp.
Acme file # A200590 Received: MAR 8 2002 * 29 samples in this disk file.

ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	Ta	LOI	TOT/C	TOT/S	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
12651	53.25	17.56	9.91	4.76	3.90	3.07	3.41	1.02	0.83	0.13	0.019	1071	52	373	188	41	284	19	< 20	1.9	0.19	0.20	100.01
12652	9.45	0.23	6.68	14.48	30.62	0.18	0.06	0.02	3.88	0.59	0.001	45	21	3613	< 10	32	345	3	69	33.7	9.62	0.18	100.38
12653	2.37	0.12	9.15	12.39	33.88	0.09	0.04	0.08	5.48	0.68	0.001	84	< 20	3823	29	42	715	4	189	35.5	10.49	0.33	100.36
12654	3.52	0.11	9.35	10.68	36.02	0.23	0.03	0.09	4.92	0.65	0.009	125	51	3904	64	49	512	5	135	34.1	10.09	0.53	100.28
12655	2.95	0.14	22.53	4.30	37.52	0.18	0.04	0.46	5.09	0.54	0.003	306	< 20	4561	36	68	575	4	184	26.0	8.05	0.81	100.42
12656	2.90	0.16	8.36	13.51	32.39	0.09	0.07	0.04	3.59	0.73	0.006	91	43	4014	30	33	638	4	93	37.8	10.98	0.25	100.24
12657	5.12	1.07	7.95	14.74	29.25	0.19	0.85	0.08	4.14	0.69	0.002	94	26	3748	< 10	31	834	3	130	35.5	10.19	0.22	100.17
14454 PULP	2.13	< .03	6.51	16.84	30.28	0.13	0.09	0.04	2.66	0.31	0.002	116	< 20	4153	< 10	19	660	14	83	40.5	11.47	0.05	100.12
12658	2.70	0.26	7.16	15.06	31.19	0.24	0.20	0.03	3.72	0.72	0.002	64	< 20	4301	< 10	32	626	4	91	38.4	11.07	0.23	100.30
12659	1.76	< .03	7.01	15.21	31.99	0.21	0.04	< .01	3.66	0.75	0.001	57	< 20	4574	< 10	33	628	4	89	38.9	11.47	0.19	100.20
12660	5.09	0.66	7.40	14.56	31.71	0.14	0.52	0.01	3.97	0.81	0.001	97	< 20	4740	< 10	36	748	3	108	34.8	10.19	0.46	100.36
12661	15.69	3.72	7.76	15.79	23.52	0.20	3.11	0.05	3.01	0.61	< .001	388	< 20	3614	< 10	29	1171	2	125	26.0	7.17	0.32	100.10
12662	5.76	0.20	7.82	15.01	30.55	0.17	0.14	0.02	2.93	0.84	< .001	49	< 20	4791	< 10	29	1375	3	89	35.9	10.49	0.45	100.12
RE 12662	5.84	0.20	7.94	15.17	30.61	0.15	0.14	0.02	2.94	0.85	0.002	48	< 20	4840	< 10	28	1320	3	65	35.6	10.49	0.45	100.23
RRE 12662	5.78	0.20	7.80	15.11	30.68	0.15	0.14	0.02	2.97	0.85	0.002	49	< 20	4810	< 10	28	1434	3	103	35.6	10.58	0.43	100.09
12663	35.40	9.83	13.84	17.74	7.14	0.37	8.34	0.81	3.92	0.14	0.020	665	46	918	10	26	328	2	< 20	2.4	0.62	0.58	100.19
12664	71.85	15.20	1.20	0.35	1.64	4.73	4.13	0.07	0.03	0.03	< .001	453	< 20	258	15	13	< 10	2	< 20	0.6	0.12	0.01	99.92
12665	76.26	13.21	1.36	0.07	0.80	4.27	2.97	0.02	0.12	0.01	< .001	36	< 20	51	21	62	< 10	2	< 20	0.7	0.05	0.33	99.82
14455 PULP	2.01	< .03	6.51	17.03	30.41	0.14	0.08	0.03	2.80	0.30	0.004	114	< 20	4392	< 10	19	747	14	83	40.2	11.66	0.06	100.16
12666	55.89	18.13	8.65	3.80	1.53	5.98	3.27	0.86	0.57	0.06	0.013	1233	31	531	165	23	257	12	< 20	0.9	0.06	0.31	99.92
12667	23.99	8.27	10.35	11.68	18.12	1.70	2.26	0.48	1.93	0.53	0.008	619	24	2655	88	28	599	10	58	20.2	5.66	0.21	100.01
12668	5.33	0.94	8.25	15.04	29.82	0.18	0.83	0.07	3.88	0.75	0.003	152	< 20	4650	< 10	29	1408	3	99	34.7	10.09	0.38	100.57
12669	3.13	0.09	6.62	16.29	30.90	0.27	0.04	0.01	3.28	0.60	0.012	52	84	4025	< 10	28	284	3	97	38.5	11.37	0.33	100.28
12670	2.25	< .03	5.68	16.72	31.42	0.17	0.03	0.01	3.53	0.55	0.005	44	45	3721	48	31	341	3	135	39.3	11.66	0.21	100.20
12671	2.71	0.04	6.01	16.73	30.96	0.05	0.02	0.02	2.90	0.58	0.005	39	72	3727	20	29	372	3	81	39.6	11.47	0.21	100.14
12672	34.07	2.63	7.13	10.16	28.22	0.43	0.80	0.14	3.65	0.57	< .001	127	< 20	2317	21	48	367	4	84	12.0	3.28	0.06	100.15
12673	14.14	0.25	7.70	14.87	29.81	0.09	0.04	0.02	2.88	0.72	0.003	20	< 20	3268	13	28	374	3	85	29.2	8.74	0.62	100.17
12674	14.65	0.26	7.19	13.99	30.91	0.11	0.03	0.02	4.38	0.68	0.001	19	< 20	3333	18	39	380	3	102	27.6	8.24	0.49	100.28
12675	19.33	1.22	7.58	13.80	28.48	0.20	0.36	0.05	3.26	0.69	< .001	46	< 20	3033	< 10	31	327	3	62	24.8	7.31	0.33	100.19
STD SO-17/CSB	61.59	13.96	5.84	2.35	4.67	4.12	1.39	0.65	0.95	0.53	0.426	401	< 20	291	363	27	17	22	< 20	3.4	2.40	5.42	100.01

* As received by e-mail

APPENDIX 2A: **CONTINUED***

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT																							
To Commerce Resources Corp.																							
Acme file # A200693 Received: MAR 15 2002 * 33 samples in this disk file.																							
ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	Ta	LOI	TOT/C	TOT/S	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
12701	3.49	0.11	8.62	13.96	31.05	0.53	0.04	0.02	4.03	0.70	0.008	44	31	3558	37	30	376	5	121	37.1	11.08	0.27	91.23
12702	2.03	0.05	7.83	14.13	31.71	0.30	0.02	0.01	3.85	0.71	0.006	48	21	3678	15	30	885	4	225	38.8	11.56	0.14	90.52
12703	3.60	0.23	8.13	13.01	32.87	0.13	0.11	0.03	6.01	0.68	0.005	46	< 20	3597	29	41	556	5	171	35.0	10.34	0.32	92.76
12704	66.49	17.46	1.14	0.65	1.95	4.17	6.71	0.11	0.08	0.03	0.004	1002	< 20	1130	11	11	< 10	3	22	0.9	0.13	< .01	104.52
12705	18.19	3.93	9.26	12.95	25.65	0.31	1.62	0.18	3.73	0.63	0.004	309	< 20	3123	< 10	38	810	6	61	23.3	6.70	0.31	94.04
12706	11.06	0.25	8.81	15.22	27.04	0.85	0.18	0.05	2.71	0.66	0.062	50	318	3473	56	23	555	9	124	32.5	9.87	0.39	92.57
12707	13.78	0.25	8.54	17.60	23.08	1.39	0.22	0.05	0.54	0.58	0.078	32	436	3640	14	10	262	9	87	33.3	10.25	0.31	90.53
12708	4.57	0.10	7.37	16.22	28.93	0.46	0.07	0.02	2.11	0.67	0.023	43	131	4113	< 10	21	130	4	69	39.0	11.80	0.13	89.17
12709	2.76	0.08	8.02	14.56	31.24	0.35	0.03	0.02	3.59	0.72	0.007	41	32	3889	< 10	28	782	6	164	38.3	11.85	0.23	90.58
12710	2.64	0.05	7.40	15.23	30.84	0.28	0.03	0.01	2.98	0.68	0.008	41	42	4099	< 10	27	225	4	107	39.5	11.93	0.22	89.76
14456 PULP	2.18	< .03	6.67	16.44	30.24	0.14	0.08	0.03	2.77	0.32	0.003	115	< 20	4305	< 10	18	788	15	97	40.6	12.10	0.05	88.15
12711	45.80	13.79	12.58	6.99	7.06	3.97	3.05	1.45	0.84	0.19	0.019	939	54	920	136	38	181	28	< 20	4.0	0.92	0.89	96.87
12713	44.70	14.09	10.15	6.50	9.25	2.74	3.47	0.93	1.00	0.27	0.014	895	42	1337	176	41	796	17	39	6.4	1.78	0.41	97.28
12714	4.52	0.94	8.85	14.85	29.50	0.11	0.48	0.05	2.97	0.85	0.003	160	< 20	4635	< 10	27	1024	3	84	36.2	11.14	0.54	89.80
12715	2.35	0.07	7.74	14.38	31.12	0.31	0.04	0.01	3.71	0.80	0.003	46	< 20	4576	< 10	31	1100	4	147	38.9	11.51	0.19	90.45
12716	2.43	0.15	7.49	14.07	32.16	0.27	0.03	0.02	4.57	0.63	0.002	47	< 20	3456	154	33	212	5	90	38.1	11.29	0.16	91.07
12717	10.94	0.27	7.36	13.55	31.12	0.09	0.06	0.02	4.58	0.63	0.003	35	< 20	2994	35	36	223	4	83	31.3	9.34	0.18	95.69
12718	6.34	1.59	7.25	13.16	30.77	0.45	0.10	0.02	4.55	0.58	0.001	58	< 20	3372	74	35	231	4	106	35.1	10.29	0.19	92.04
12719	47.10	9.98	6.99	7.15	14.36	2.00	2.41	0.30	2.72	0.33	0.004	276	< 20	1393	42	141	108	10	41	6.6	1.79	0.08	104.29
12720	3.65	0.18	7.67	13.98	32.30	0.12	0.04	0.04	5.08	0.59	< .001	40	< 20	3174	52	37	255	4	112	36.3	10.73	0.22	91.88
RE 12720	3.70	0.17	7.65	13.98	32.23	0.13	0.05	0.04	5.07	0.59	< .001	41	< 20	3195	68	38	273	4	116	36.3	10.70	0.21	91.85
RRE 12720	4.06	0.20	7.75	13.92	32.00	0.13	0.05	0.05	5.02	0.58	< .001	41	< 20	3172	89	37	313	5	132	36.2	10.97	0.23	92.10
12721	8.09	0.61	11.79	13.48	27.51	0.39	0.26	0.13	4.56	0.52	< .001	49	< 20	2854	128	33	519	10	238	27.7	9.24	2.04	88.59
12722	5.90	0.29	11.60	14.18	30.96	0.43	0.05	0.06	5.06	0.55	< .001	33	< 20	3160	54	37	422	8	194	30.8	9.88	1.93	92.47
14457 PULP	2.15	< .03	6.67	16.41	30.31	0.13	0.08	0.03	2.75	0.32	< .001	117	< 20	4175	< 10	19	677	15	95	40.7	11.76	0.04	88.24
12723	2.46	0.16	8.07	13.93	32.20	0.29	0.04	0.03	4.65	0.60	< .001	41	< 20	3219	42	33	258	6	94	37.4	11.55	0.25	91.09
12724	3.16	0.13	7.81	14.43	31.52	0.44	0.04	0.03	3.99	0.63	0.008	38	51	3309	50	30	209	6	76	37.7	11.53	0.17	90.81
12725	6.97	0.10	8.30	14.81	28.88	0.92	0.07	0.03	3.23	0.67	0.020	46	119	3298	27	24	321	7	128	35.8	10.63	0.28	91.58
12726	6.71	0.08	7.69	13.85	32.15	0.08	0.03	0.02	4.50	0.75	0.006	29	28	3413	26	31	356	5	111	34.0	10.33	0.45	93.68
12727	38.89	3.11	8.48	12.17	23.42	0.68	0.53	0.09	2.37	0.60	0.017	54	67	1515	13	32	240	6	86	9.5	2.82	0.33	106.25
12728	43.61	2.62	9.52	12.68	20.90	0.58	0.50	0.12	2.30	0.56	0.082	58	253	928	34	32	202	8	56	6.4	1.72	0.38	108.52
12729	4.74	0.16	8.08	14.31	30.98	0.05	0.08	0.02	3.29	0.88	0.004	50	< 20	4817	< 10	32	4532	3	360	36.3	11.00	0.48	91.87
12730	40.55	13.25	14.93	12.24	5.33	1.82	6.06	1.37	1.34	0.21	0.022	1467	60	902	92	23	310	16	< 20	2.6	0.32	0.44	88.73
STD SO-17/CSB	61.70	13.84	5.85	2.35	4.68	4.13	1.40	0.60	0.96	0.53	0.415	401	27	301	351	27	30	23	< 20	3.4	2.54	5.46	110.32

* As received by e-mail

APPENDIX 2A: **CONTINUED***

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT
To Commerce Resources Corp.
Acme file # A200802 Page 1 Received: MAR 28 2002 * 102 samples in this disk file.

ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
12751	6.03	0.78	7.47	14.13	30.18	0.10	0.37	0.03	4.84	0.72	< .001	72	22	3965	16	40	1457	4	34.40	99.75
12752	8.69	1.36	8.47	14.65	27.43	0.10	0.95	0.12	3.43	0.73	0.003	120	< 20	3592	< 10	28	1028	3	33.30	99.82
12753	2.46	0.06	8.30	14.05	31.31	0.13	0.03	0.02	4.58	0.78	< .001	52	< 20	4051	24	36	1066	3	37.50	99.87
12754	5.51	0.08	8.48	13.46	31.11	0.14	0.02	0.03	5.32	0.70	0.002	41	31	3441	40	37	579	3	34.50	99.86
12755	7.83	0.93	7.90	13.66	29.59	0.26	0.16	0.02	3.81	0.73	0.001	64	< 20	3798	< 10	35	1227	4	34.30	99.83
12756	70.99	11.37	1.41	1.94	4.32	3.60	2.54	0.04	0.52	0.10	0.003	208	< 20	808	21	16	91	2	2.80	99.77
12757	7.06	0.71	6.89	14.25	30.27	0.27	0.05	0.01	3.39	0.73	< .001	40	30	3886	10	30	467	3	35.80	99.97
12758	19.45	0.34	6.90	13.79	28.55	0.17	0.07	0.01	3.43	0.70	0.002	36	24	3013	< 10	34	430	4	26.00	99.84
12759	3.30	0.21	7.13	14.63	30.99	0.17	0.03	< .01	3.70	0.79	0.002	48	21	4358	11	32	596	4	38.40	99.97
12760	2.68	0.03	7.22	14.90	30.86	0.11	< .02	< .01	3.29	0.88	0.001	51	< 20	4792	10	32	834	3	39.10	99.78
RE 12760	2.62	0.03	7.32	14.93	30.99	0.11	< .02	< .01	3.31	0.89	0.001	49	< 20	4813	< 10	30	763	3	39.00	99.91
RRE 12760	2.79	0.03	7.30	14.93	30.81	0.12	< .02	< .01	3.25	0.88	0.003	48	< 20	4797	< 10	30	761	3	39.10	99.91
12761	2.42	< .03	7.41	14.95	30.91	0.11	< .02	0.01	3.40	0.89	0.002	50	< 20	4833	< 10	31	1144	3	39.00	99.87
12762	11.83	0.14	7.63	13.94	29.52	0.18	0.04	0.01	2.95	0.77	0.002	46	< 20	3484	< 10	30	573	3	32.40	99.92
12763	2.12	0.08	7.91	14.00	31.61	0.14	0.03	0.01	4.25	0.77	0.002	49	32	3671	11	30	866	3	38.40	99.90
12764	8.27	1.68	7.71	12.26	29.32	0.56	0.50	0.03	5.02	0.61	0.002	258	< 20	3019	30	34	256	4	33.50	99.89
12765	2.19	0.12	8.47	14.11	31.64	0.29	< .02	0.02	4.36	0.70	0.003	34	< 20	3409	23	30	166	4	37.60	99.95
12766	2.12	0.07	8.46	13.07	32.68	0.27	< .02	0.02	6.98	0.64	0.004	34	< 20	3409	< 10	41	405	4	35.10	99.89
12767	5.78	0.53	7.59	12.85	31.49	0.20	0.33	0.02	6.08	0.65	0.001	65	< 20	3256	< 10	38	307	3	34.00	99.96
12768	8.73	1.48	7.92	12.72	29.83	0.33	0.56	0.06	5.27	0.65	0.001	106	20	3091	13	35	321	4	32.00	99.98
12769	4.09	0.57	7.65	12.69	32.37	0.17	0.35	0.02	6.92	0.66	0.011	61	38	3510	10	41	146	3	33.90	99.85
12770	4.26	0.42	8.27	14.06	30.83	0.23	0.23	0.03	4.52	0.69	0.008	50	67	3373	< 10	30	389	4	35.90	99.92
12771	16.62	0.65	10.96	16.70	23.81	1.16	0.30	0.07	0.97	0.65	0.089	51	550	3456	41	15	294	12	27.40	99.92
12772	9.74	0.32	9.23	16.10	26.86	0.63	0.13	0.04	2.10	0.70	0.040	36	152	3799	18	23	400	12	33.50	99.93
12773	19.40	0.35	9.35	20.81	19.18	1.16	0.31	0.07	0.05	0.60	0.125	38	702	3455	22	10	50	10	28.00	99.92
12774	27.39	0.39	11.32	23.82	13.38	1.57	0.43	0.08	0.06	0.55	0.195	30	1226	2524	34	< 10	30	13	20.20	99.85
12775	3.66	0.09	6.76	16.82	29.02	0.24	0.06	0.01	2.19	0.66	0.018	41	121	4604	< 10	25	351	4	39.80	99.95
12776	13.04	3.26	9.89	14.71	23.38	0.24	2.30	0.25	4.60	0.58	0.003	269	44	3211	43	32	707	3	27.00	99.78
14458 PULP	2.14	< .03	6.69	16.84	29.22	0.14	0.09	0.04	2.89	0.33	0.003	121	< 20	4535	< 10	20	689	15	40.90	99.94
12777	2.69	0.05	7.89	14.77	30.19	0.30	0.04	0.01	3.79	0.89	< .001	46	< 20	5528	11	35	2258	4	38.20	99.81
12778	2.74	0.24	7.59	15.03	30.19	0.11	0.04	0.01	2.93	0.87	< .001	37	< 20	5317	< 10	31	1835	4	39.20	99.85
STD SO-17	61.41	14.05	5.90	2.37	4.74	4.04	1.36	0.63	0.95	0.53	0.434	390	34	297	355	27	27	23	3.40	99.96
12779	51.98	20.25	8.67	4.06	3.72	2.54	3.77	0.94	1.08	0.11	0.013	948	42	604	187	41	409	19	2.80	100.21
12780	5.25	1.25	8.32	14.23	29.29	0.16	0.33	0.06	3.76	0.79	0.001	176	< 20	4260	20	31	1476	4	35.60	99.79
12781	7.42	1.03	8.29	13.56	29.51	0.32	0.44	0.09	3.98	0.78	0.002	140	< 20	4307	29	35	1969	4	33.60	99.84
12782	4.75	0.37	8.69	14.91	30.23	0.29	0.18	0.02	2.66	0.73	0.011	84	101	4032	< 10	26	332	5	36.60	99.99
12783	7.32	0.39	8.93	14.78	28.68	0.50	0.19	0.03	2.99	0.70	0.027	61	160	3511	11	26	456	6	34.90	99.95
12784	1.85	0.07	8.10	14.14	31.36	0.26	0.04	0.01	4.40	0.71	0.004	46	22	3665	11	33	300	4	38.40	99.84

* As received by e-mail

APPENDIX 2A: CONTINUED

ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
12785	2.19	0.13	8.48	13.60	31.98	0.28	0.05	0.03	5.24	0.72	0.001	55	21	3562	90	37	799	4	36.70	99.96
12786	7.74	1.54	8.79	14.90	27.26	0.22	1.13	0.15	3.40	0.70	0.001	167	< 20	3765	23	29	632	4	33.50	99.89
12787	2.88	0.04	8.42	14.60	30.39	0.20	0.05	0.01	3.48	0.92	< .001	50	< 20	5244	< 10	33	4073	4	37.6	99.80
12788	18.12	4.41	10.17	15.59	20.50	0.31	3.09	0.24	3.58	0.56	0.005	567	32	3348	< 10	30	1588	3	22.7	99.97
12789	42.87	12.30	13.24	10.13	8.41	2.88	3.74	1.13	1.63	0.21	0.021	1262	75	1106	91	32	439	21	3.3	100.22
RE 12789	42.95	12.32	13.27	10.16	8.51	2.90	3.63	1.13	1.62	0.21	0.024	1253	68	1118	86	32	455	21	3.1	100.18
RRE 12789	43.13	12.26	13.18	10.20	8.50	2.86	3.52	1.13	1.64	0.21	0.023	1240	72	1107	117	33	356	21	3.0	100.01
12801	48.85	15.44	11.98	8.00	4.05	3.45	4.37	0.92	1.52	0.14	0.014	1074	57	621	145	34	461	14	1.3	100.33
12802	4.08	0.77	8.65	14.42	29.54	0.13	0.44	0.05	3.12	0.89	< .001	153	< 20	5384	< 10	32	1532	4	36.8	99.77
12803	2.62	0.12	7.83	14.68	30.65	0.33	0.09	0.02	3.70	0.82	< .001	68	< 20	5035	< 10	35	936	4	38.3	99.90
12804	2.39	0.04	7.38	14.72	30.83	0.31	0.04	0.01	3.68	0.80	0.003	48	< 20	4611	< 10	32	478	4	39.1	99.93
12805	2.09	< .03	7.46	14.81	30.89	0.30	0.03	0.01	3.96	0.76	0.001	48	< 20	4251	13	33	303	4	39.0	99.89
12806	3.24	0.20	8.25	14.35	30.33	0.32	0.07	0.02	3.87	0.71	0.003	44	< 20	3911	23	33	156	4	38.0	99.86
12807	4.24	0.15	9.13	14.43	29.72	0.19	0.05	0.02	3.00	0.79	0.002	46	< 20	4208	14	31	141	6	37.7	99.96
12808	2.24	0.08	8.48	13.92	30.76	0.31	0.04	0.02	3.15	0.79	0.002	40	< 20	4819	< 10	25	513	4	39.4	99.84
12809	2.86	0.09	8.94	14.64	29.55	0.47	0.05	0.02	3.14	0.85	< .001	43	< 20	4782	< 10	30	1947	5	38.5	99.97
12810	3.20	0.07	9.37	14.76	29.25	0.48	0.06	0.02	2.75	0.86	0.002	44	< 20	4804	< 10	28	1386	5	38.4	100.00
12811	2.77	0.08	8.69	14.65	29.75	0.41	0.06	0.02	3.16	0.85	0.002	43	< 20	4790	< 10	30	1618	4	38.7	99.95
12812	2.48	0.07	8.58	14.67	29.75	0.39	0.07	0.02	3.11	0.83	0.001	45	< 20	4675	< 10	30	1228	4	39.2	99.91
12813	2.49	0.10	8.39	14.20	30.23	0.38	0.06	0.02	4.12	0.77	0.002	43	< 20	4449	< 10	36	638	4	38.5	99.89
12814	2.72	0.13	8.56	14.49	30.31	0.42	0.08	0.02	3.96	0.72	0.004	45	< 20	4100	11	36	201	5	38.0	99.94
12815	2.17	0.09	7.91	14.51	30.89	0.34	0.04	0.02	4.67	0.69	0.003	40	< 20	4110	30	39	221	4	38.1	99.97
12816	2.60	0.14	8.25	14.41	30.84	0.36	0.06	0.03	4.50	0.66	0.002	48	< 20	3814	55	36	281	6	37.6	99.97
14459 PULP	2.27	0.03	6.88	16.82	29.30	0.14	0.12	0.04	2.69	0.33	0.001	125	< 20	4480	< 10	20	813	16	40.6	99.89
12817	2.49	0.20	8.36	14.38	30.67	0.35	0.06	0.03	4.31	0.66	< .001	54	< 20	3775	18	33	448	5	37.9	99.94
12818	3.49	0.41	7.97	14.10	30.35	0.22	0.14	0.03	4.72	0.65	0.002	85	< 20	3795	42	37	238	6	37.4	99.99
STD SO-17	61.50	14.12	5.83	2.33	4.59	4.17	1.39	0.62	0.94	0.53	0.423	406	30	291	362	27	24	23	3.4	99.99
12819	2.52	0.15	7.63	14.06	30.77	0.26	< .02	0.02	5.10	0.62	0.006	46	< 20	3156	17	34	234	5	38.1	99.66
12820	2.53	0.19	7.18	14.21	30.73	0.31	0.05	0.03	5.21	0.61	0.005	50	< 20	3052	15	34	136	5	38.4	99.85
12821	2.29	0.20	7.15	14.16	31.07	0.25	0.07	0.03	5.00	0.59	0.004	54	< 20	2945	17	34	215	5	38.6	99.80
12822	7.00	0.34	7.57	14.38	29.39	0.20	0.12	0.05	4.77	0.55	0.004	44	< 20	2635	52	32	324	7	35.1	99.85
12823	68.06	16.04	1.46	1.65	2.60	4.92	2.90	0.07	0.12	0.05	0.006	560	< 20	803	11	18	79	2	2.2	100.25
12824	32.85	7.01	11.41	14.72	16.27	0.34	4.18	0.41	3.48	0.41	0.014	631	59	1364	34	34	1396	5	8.5	100.04
12825	14.43	2.23	8.59	14.09	25.78	0.20	1.46	0.14	3.93	0.65	0.008	283	< 20	2573	20	29	778	3	28.0	99.96
12826	6.16	0.08	8.03	13.98	29.98	0.31	0.08	0.04	4.96	0.67	0.017	40	99	3009	127	33	452	5	35.1	99.87
12827	3.35	0.11	8.96	11.86	32.37	0.41	0.07	0.07	5.99	0.68	0.009	78	41	3219	183	40	727	5	35.3	99.71
12828	2.13	0.05	8.75	13.50	31.23	0.28	0.05	0.03	5.25	0.73	0.003	44	< 20	3316	18	32	561	3	37.3	99.78
12829	3.12	0.11	10.25	9.98	34.88	0.41	0.07	0.10	5.32	0.67	0.003	176	< 20	3902	57	51	1184	4	34.1	99.68
12830	54.89	20.22	9.45	3.50	1.76	3.53	2.86	0.94	0.40	0.08	0.022	1011	56	338	206	59	144	24	2.2	100.07
12851	46.19	14.42	12.14	8.44	5.33	3.52	4.09	0.90	1.96	0.20	0.015	1404	48	809	150	34	555	11	2.8	100.37
12852	5.39	0.46	8.11	14.69	29.34	0.14	0.26	0.04	3.29	0.83	0.002	81	< 20	4384	12	30	1534	4	36.5	99.80

APPENDIX 2A: CONTINUED

ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
12853	5.58	0.09	7.30	14.60	29.83	0.40	0.05	0.01	3.83	0.80	< .001	39	< 20	4168	14	31	1861	4	36.5	99.76
12854	2.45	0.05	7.40	14.81	30.51	0.28	0.03	0.01	4.06	0.78	0.001	45	< 20	4109	< 10	31	1313	3	38.8	99.86
12855	2.01	0.03	7.00	15.03	30.85	0.25	0.02	0.01	4.05	0.71	0.003	37	< 20	3618	< 10	30	468	4	39.3	99.77
RE 12855	1.97	0.03	6.90	15.06	30.92	0.25	0.02	0.01	4.08	0.71	0.004	36	< 20	3604	10	30	466	4	39.3	99.76
RRE 12855	2.23	0.06	6.91	14.77	30.86	0.29	0.03	0.01	4.64	0.69	0.004	37	< 20	3620	< 10	33	520	4	38.8	99.80
12856	2.65	< .03	6.87	15.20	31.21	0.13	0.03	0.01	3.84	0.75	0.004	34	< 20	3819	< 10	30	388	4	38.6	99.83
12857	10.02	2.47	6.66	13.79	28.55	0.56	0.20	0.02	3.60	0.69	0.001	64	< 20	3964	< 10	27	438	3	32.8	99.90
12858	24.47	1.79	7.69	13.38	27.37	0.32	0.37	0.05	4.01	0.64	0.004	45	< 20	2202	< 10	36	353	4	19.5	99.92
12859	37.34	4.50	10.15	13.13	19.23	0.47	1.92	0.22	2.88	0.64	0.006	161	< 20	895	36	47	319	8	9.5	100.17
12860	41.05	2.61	7.96	12.02	23.81	0.61	0.29	0.07	3.52	0.61	0.003	29	< 20	1020	14	36	176	5	7.2	99.91
12861	7.92	0.15	7.22	14.19	30.91	0.09	0.06	0.03	4.81	0.61	0.002	31	< 20	2923	70	34	207	4	33.4	99.79
12862	2.44	0.07	8.36	14.72	30.46	0.13	0.03	0.01	2.54	0.77	0.005	33	< 20	3727	< 10	23	296	4	39.8	99.83
12863	3.02	0.13	8.92	14.73	29.72	0.13	0.04	0.01	2.47	0.80	0.007	38	< 20	4351	< 10	27	362	4	39.2	99.76
12864	5.57	0.18	8.67	14.55	28.97	0.22	0.07	0.02	2.58	0.79	0.001	39	< 20	4127	11	27	1640	5	37.4	99.75
12865	3.89	0.10	9.00	14.83	29.38	0.42	0.06	0.02	2.92	0.81	0.001	39	< 20	4444	< 10	28	1142	5	37.6	99.72
12866	2.89	0.07	8.78	14.98	29.80	0.25	0.03	0.02	2.61	0.80	< .001	36	< 20	4404	< 10	26	673	5	39.0	99.86
12867	5.71	0.11	8.28	14.57	29.39	0.19	0.04	0.02	3.02	0.79	0.001	33	< 20	4161	< 10	30	1043	4	37.0	99.78
12868	2.35	0.08	8.66	14.98	29.63	0.31	0.04	0.02	2.45	0.79	< .001	30	< 20	4162	< 10	24	156	4	40.0	99.83
STD SO-17	61.02	14.42	5.81	2.32	4.62	4.13	1.37	0.61	1.01	0.53	0.442	394	26	295	359	27	24	24	3.4	99.82
12869	2.56	0.09	8.62	14.72	30.49	0.32	0.03	0.02	3.32	0.74	0.001	35	< 20	3990	< 10	29	385	5	38.5	99.95
12870	2.18	0.13	7.77	14.22	31.59	0.19	0.02	0.03	4.78	0.61	0.003	36	< 20	3379	74	35	316	5	37.9	99.89
12871	1.98	0.14	8.00	13.99	31.97	0.18	0.03	0.03	4.75	0.59	0.002	43	< 20	3123	108	33	296	4	37.8	99.90
12872	1.79	0.13	7.31	14.25	32.49	0.09	0.06	0.02	5.36	0.58	0.004	41	< 20	3304	41	36	269	3	37.4	99.93
12873	20.57	4.27	5.94	11.23	23.80	2.18	0.17	0.04	3.07	0.51	0.003	86	39	2873	18	29	247	3	27.6	99.78
12874	54.91	13.91	8.12	4.45	6.06	2.99	2.46	0.68	0.81	0.17	0.017	917	49	778	176	36	178	14	4.5	99.33
STD SO-17	61.13	13.87	5.80	2.33	4.64	4.09	1.38	0.62	1.01	0.53	0.444	398	36	297	371	27	23	23	3.4	99.39

APPENDIX 2B: ANALYTICAL REPORTS FOR TRACE ELEMENT ICP BY ACME ANALYTICAL LABORATORIES LTD.*

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT																															
To Commerce Resources Corp.																															
Acme file # A104395 Page 1 (a) Received: DEC 18 2001 * 76 samples in this disk file.																															
ELEMENT	Co	Cs	Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	Tl	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
SAMPLES	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	ppm
SI	1.5	< .1	1.7	3.0	3.2	3.7	3.0	176.5	0.1	0.5	0.2	0.5	< 5	< 1	106.9	4.4	3.80	6.70	0.61	2.50	0.50	0.26	0.63	0.14	0.52	0.10	0.33	< .05	0.39	0.07
15601	20.6	4.5	25.1	6.4	93.1	165.2	2.0	312.9	2.8	26.5	0.4	2.7	86.0	2.0	201.1	31.3	86.40	132.60	14.68	55.80	8.50	1.76	6.52	1.07	5.65	1.18	3.03	0.49	3.24	0.49
15602	14.2	1.0	1.4	< .5	1305.6	9.1	< 1	4192.2	187.0	7.9	0.1	39.3	< 5	1.0	5.9	33.0	148.10	269.20	32.27	139.90	22.10	6.59	15.69	1.91	8.28	1.25	2.53	0.30	1.85	0.27
15603	13.6	0.1	1.5	1.5	454.9	2.0	< 1	3682.9	172.2	3.2	0.1	134.1	< 5	< 1	105.2	31.5	132.90	238.80	29.02	126.60	20.20	6.42	14.78	1.82	8.01	1.22	2.49	0.32	1.61	0.23
15604	11.0	< .1	0.9	< .5	246.0	2.7	< 1	3393.1	105.5	2.2	< .1	75.7	5.0	< 1	15.5	32.6	137.90	248.20	30.34	132.40	21.30	6.59	15.50	1.83	8.34	1.22	2.52	0.31	1.77	0.22
15605	11.9	< .1	1.0	1.0	259.3	1.0	< 1	3008.5	128.0	3.8	< .1	143.0	10.0	< 1	45.2	39.8	175.90	307.80	37.26	164.80	25.50	7.96	19.46	2.22	10.20	1.42	3.13	0.39	2.09	0.30
15606	9.4	< .1	1.2	0.6	279.9	1.8	< 1	2918.7	137.0	3.3	< .1	164.4	7.0	< 1	23.3	37.6	162.30	285.80	34.77	152.70	24.00	7.50	17.76	2.14	9.94	1.42	2.98	0.39	1.87	0.27
15607	12.1	0.9	1.7	< .5	154.8	5.1	< 1	2761.9	76.4	3.5	0.1	90.1	7.0	2.0	15.9	38.1	153.50	275.30	33.72	146.80	22.80	7.05	17.36	2.12	9.42	1.36	2.79	0.36	2.05	0.28
15608	12.6	5.1	5.8	0.6	239.4	34.9	2.0	1505.6	140.3	5.0	0.1	39.4	17.0	2.0	28.4	37.1	82.90	155.40	19.23	85.00	15.20	4.20	11.65	1.60	7.63	1.25	2.78	0.39	2.35	0.32
15609	14.1	0.8	1.2	< .5	640.7	7.8	< 1	3893.8	138.5	7.3	< .1	7.4	7.0	3.0	6.7	27.3	115.50	213.50	25.47	110.10	17.10	5.32	12.39	1.52	6.80	0.98	2.03	0.27	1.53	0.21
15610	13.2	0.1	0.8	< .5	1489.9	2.1	< 1	4101.2	131.1	4.9	< .1	3.0	8.0	< 1	6.9	30.7	138.20	247.90	30.20	130.40	20.90	6.32	14.58	1.73	8.00	1.14	2.28	0.30	1.54	0.21
RE 15610	14.0	< .1	1.1	< .5	1765.1	1.9	< 1	4195.9	156.5	5.3	< .1	5.0	7.0	< 1	7.2	31.3	136.10	247.00	29.92	130.40	20.30	6.33	14.80	1.73	7.73	1.09	2.31	0.31	1.52	0.23
RRE 15610	16.0	< .1	1.0	< .5	1455.1	2.1	< 1	4083.2	130.7	5.1	< .1	3.1	7.0	< 1	6.4	30.7	137.10	254.10	30.49	131.50	20.70	6.18	15.04	1.78	7.79	1.18	2.33	0.29	1.59	0.22
15611	16.7	< .1	0.7	< .5	1552.3	1.4	< 1	4123.2	161.6	7.5	0.1	10.0	5.0	< 1	5.2	30.7	139.50	250.80	30.33	130.60	20.70	6.44	15.44	1.78	7.96	1.16	2.34	0.30	1.67	0.23
15612	14.0	< .1	0.8	< .5	1420.7	1.1	< 1	4300.0	127.7	8.4	< .1	4.6	< 5	< 1	2.9	32.0	148.00	265.60	32.38	141.20	22.00	6.77	15.95	1.90	8.24	1.15	2.38	0.31	1.76	0.23
15613	14.4	< .1	0.5	< .5	848.5	1.4	< 1	4211.1	113.5	5.9	< .1	8.0	< 5	< 1	3.4	25.4	115.00	207.60	24.83	103.20	17.30	5.16	11.96	1.51	6.53	0.96	1.98	0.26	1.38	0.18
15614	14.3	0.4	1.1	< .5	1424.1	3.6	< 1	4397.4	109.8	7.3	< .1	3.9	< 5	< 1	2.6	27.5	129.00	227.30	27.14	114.40	18.50	5.60	13.21	1.64	7.13	1.07	2.25	0.27	1.51	0.19
15615	14.9	2.8	3.4	< .5	1037.4	17.3	1.0	3483.2	123.7	4.7	0.1	5.7	29.0	1.0	4.2	36.6	163.20	299.50	36.57	160.50	24.50	7.56	17.24	2.19	9.68	1.39	2.85	0.36	2.05	0.26
15616	47.2	14.0	20.3	3.0	234.3	168.5	< 1	1092.8	13.3	7.6	0.3	1.1	133.0	< 1	96.1	35.6	99.80	177.00	21.00	88.80	15.10	4.26	11.40	1.49	7.46	1.25	3.01	0.42	2.46	0.37
15617	46.2	18.5	22.3	0.8	398.8	223.4	< 1	906.1	24.5	4.4	0.3	2.4	127.0	< 1	36.3	27.8	97.90	174.60	20.80	89.20	14.30	4.23	10.78	1.34	6.30	1.02	2.20	0.29	1.66	0.25
15618	15.1	1.2	2.0	< .5	954.9	11.2	< 1	4440.6	138.0	3.4	< .1	7.2	< 5	1.0	9.1	30.1	132.10	241.40	29.03	123.60	20.00	5.89	13.34	1.67	7.54	1.12	2.30	0.29	1.57	0.23
15600A PULP	22.9	0.1	2.9	< .5	657.9	4.0	< 1	4031.5	101.6	2.1	0.1	63.6	27.0	< 1	1.9	18.6	152.40	264.60	30.54	127.40	18.30	5.25	11.72	1.30	5.44	0.65	1.31	0.13	0.86	0.10
15619	14.3	0.2	0.9	< .5	614.7	2.5	< 1	4093.5	102.8	2.3	0.1	8.5	5.0	< 1	3.9	31.4	135.00	243.00	29.52	125.20	19.60	6.06	14.06	1.74	7.95	1.13	2.34	0.27	1.71	0.24
15620	14.0	0.2	0.8	< .5	1891.8	2.6	< 1	4492.4	131.7	7.5	0.1	3.9	< 5	3.0	2.5	27.9	128.30	236.00	27.53	116.80	18.20	5.74	13.08	1.60	7.01	0.99	2.03	0.26	1.61	0.18
15621	13.1	0.4	1.4	< .5	1545.0	3.9	< 1	3980.5	179.3	6.4	0.1	12.6	< 5	3.0	2.7	29.7	126.90	233.00	27.84	117.00	18.60	5.55	12.85	1.65	7.53	1.09	2.15	0.30	1.65	0.22
15622	15.4	0.9	2.1	< .5	1327.2	7.2	< 1	3724.7	197.1	11.1	0.2	25.5	7.0	2.0	4.8	34.0	141.30	257.60	31.33	134.30	20.90	6.34	14.84	1.85	8.44	1.21	2.53	0.32	1.77	0.25
15623	11.0	2.9	8.4	< .5	236.0	30.6	1.0	2513.5	133.6	6.0	0.2	87.3	9.0	1.0	7.8	38.6	103.10	185.30	21.55	94.00	15.30	4.53	11.84	1.59	7.85	1.35	3.03	0.45	2.56	0.36
15624	15.2	0.1	1.3	0.6	241.2	0.9	< 1	3648.2	111.7	3.6	0.1	81.4	9.0	< 1	28.8	37.6	164.80	299.50	35.64	154.20	24.10	7.44	17.58	2.15	9.18	1.38	2.86	0.35	1.98	0.27
15625	13.9	< .1	0.8	< .5	183.3	1.0	< 1	3518.3	101.4	3.0	0.1	60.0	9.0	< 1	5.9	35.7	157.20	283.70	34.12	146.40	23.40	7.27	16.52	2.08	9.32	1.37	2.82	0.32	1.82	0.25
15626	16.5	< .1	1.7	1.5	120.9	0.8	< 1	3002.5	52.1	1.0	0.1	48.3	22.0	< 1	95.8	19.7	81.50	148.50	17.69	75.20	11.80	3.73	8.77	1.10	4.64	0.74	1.51	0.22	1.13	0.14
15627	15.8	< .1	1.8	0.7	278.5	0.6	< 1	3195.8	87.5	1.3	0.1	57.5	17.0	< 1	29.1	19.9	85.70	153.10	18.24	77.80	12.00	3.78	9.04	1.09	4.93	0.75	1.55	0.21	1.19	0.17
15628	19.7	< .1	2.3	< .5	19.4	1.6	< 1	3216.1	5.8	0.2	0.1	3.6	16.0	< 1	14.9	9.0	40.10	69.70	7.54	31.10	4.80	1.50	3.25	0.42	2.02	0.30	0.68	0.08	0.49	0.08
STD SO-17	18.8	3.8	18.8	11.6	24.6	22.7	9.0	296.1	4.2	11.1	0.2	13.2	120.0	12.0	348.2	27.0	11.70	23.10	2.95	14.00	3.40	1.03	3.77	0.66	4.23	0.90	2.76	0.43	2.81	0.46
15629	19.8	4.6	5.8	0.8	306.6	50.1	1.0	2334.1	83.4	3.1	0.1	66.6	23.0	1.0	35.9	34.5	104.90	199.60	23.98	95.60	17.90	5.01	13.90	1.70	7.54	1.22	3.10	0.38	2.31	0.33
15630	14.8	1.5	3.6	0.5	449.9	17.2	< 1	2561.0	132.5	4.3	0.1	86.1	13.0	2.0	22.4	42.4	139.20	278.90	33.47	137.90	26.00	6.93	18.43	2.33	10.00	1.60	3.53	0.42	2.55	0.35
15631	14.7	0.2	1.3	< .5	766.4	2.8	2.0	3599.5	166.2	4.4	< .1	56.0	6.0	< 1	3.9	32.9	130.40	250.00	29.52	120.50	21.40	6.06	15.42	1.88	7.46	1.23	2.80	0.29	1.82	0.24
15632	15.6	< .1	2.7	< .5	664.7	0.9	< 1	1837.8	96.4	3.5	0.1	3.8	< 5	1.0	2.9	24.4	85.90	170.20	20.76	83.20	15.50	4.00	10.70	1.32	5.90	0.89	2.01	0.23	1.40	0.18

* As received by e-mail

APPENDIX 2B: CONTINUED

ELEMENT	Co	Cs	Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	Tl	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
SAMPLES	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	ppm
15633	16.2	< .1	1.4	< .5	639.2	1.4	< 1	3542.6	132.0	5.8	< .1	9.2	< 5	< 1	3.0	31.1	131.20	247.60	28.99	114.30	20.80	5.88	15.07	1.78	7.70	1.12	2.73	0.30	1.92	0.23
15634	18.0	< .1	0.9	< .5	1314.5	< .5	< 1	4224.0	185.7	10.2	< .1	13.6	< 5	< 1	3.5	34.5	156.60	301.90	34.39	139.30	24.00	7.01	17.48	2.00	8.34	1.28	2.93	0.36	1.95	0.24
15635	14.6	7.0	3.9	< .5	1716.4	62.6	< 1	4584.7	182.5	9.6	0.1	6.4	6.0	2.0	2.4	32.4	144.30	269.50	31.03	122.50	21.40	6.30	15.14	1.86	7.60	1.17	2.71	0.30	1.84	0.23
15636	10.4	3.0	3.6	< .5	898.9	32.1	< 1	4543.5	112.5	3.3	0.1	11.1	< 5	< 1	2.3	26.0	115.00	214.00	24.37	93.20	15.90	4.82	11.76	1.42	5.93	0.92	2.31	0.25	1.45	0.20
15637	10.6	0.8	1.8	< .5	613.7	12.3	< 1	4384.4	103.8	3.5	< .1	15.3	< 5	< 1	2.3	29.1	127.00	240.70	28.05	108.90	19.50	5.58	13.90	1.60	7.01	1.07	2.50	0.28	1.59	0.21
15638	13.1	9.8	5.6	0.6	1525.8	90.7	< 1	4105.6	166.8	7.4	0.1	10.8	13.0	2.0	10.7	39.7	148.80	280.60	32.72	130.70	23.30	6.57	17.15	2.12	8.87	1.42	3.42	0.42	2.33	0.31
RE 15638	12.8	9.1	6.0	0.7	1688.7	89.1	< 1	4068.8	172.3	7.8	0.1	10.0	13.0	2.0	10.2	39.8	143.80	275.30	32.29	125.70	22.50	6.37	17.50	2.11	9.37	1.44	3.35	0.39	2.33	0.30
RRE 15638	13.1	9.9	5.5	0.6	1801.7	91.1	< 1	4221.4	173.4	13.7	0.1	10.0	14.0	2.0	10.5	40.6	150.80	288.20	33.56	133.80	23.50	6.51	16.89	2.10	9.15	1.44	3.51	0.44	2.49	0.31
15639	52.6	8.5	16.4	2.1	182.0	103.1	< 1	1019.6	5.1	2.4	0.2	0.5	264.0	< 1	81.4	33.0	54.60	97.60	11.10	43.90	8.30	2.45	7.46	1.10	5.64	1.12	3.32	0.45	2.85	0.44
15640	28.3	6.9	19.9	5.4	159.1	80.0	< 1	1487.9	8.4	12.9	0.1	1.1	99.0	< 1	171.7	38.2	78.00	146.00	16.56	65.90	11.70	2.75	9.47	1.28	6.87	1.37	3.90	0.52	3.60	0.54
15641	12.9	0.6	2.0	< .5	1052.0	9.0	< 1	4436.0	98.5	4.9	< .1	4.1	< 5	< 1	2.6	31.1	136.80	256.40	30.81	120.90	21.10	6.13	15.11	1.75	7.82	1.17	2.66	0.32	1.86	0.23
15642	12.2	< .1	1.9	< .5	611.7	2.0	< 1	4372.6	80.6	2.5	< .1	2.8	< 5	< 1	1.6	30.9	126.70	248.40	29.14	114.40	19.90	5.91	14.54	1.77	7.59	1.12	2.57	0.31	1.96	0.23
15643	15.9	7.1	9.4	< .5	703.6	71.5	< 1	4005.8	104.0	4.2	< .1	7.1	12.0	1.0	11.0	34.5	138.90	267.50	31.86	126.00	22.20	6.43	15.64	1.93	8.17	1.24	2.72	0.37	1.96	0.27
15644	12.5	1.4	3.1	< .5	981.9	15.5	< 1	4689.0	133.0	3.9	0.2	6.9	6.0	1.0	2.3	35.9	147.10	284.90	33.56	131.70	23.60	6.92	16.68	2.06	8.71	1.35	3.07	0.36	1.87	0.25
15645	43.9	29.3	22.4	2.3	311.2	258.2	1.0	1219.5	12.4	4.9	0.6	0.8	130.0	< 1	90.6	24.9	69.20	127.70	14.89	59.60	10.10	2.75	8.40	1.06	5.12	0.93	2.55	0.34	2.23	0.34
15600B PULP	23.7	0.1	3.5	< .5	673.9	3.1	< 1	4219.3	91.9	2.6	0.1	73.5	29.0	< 1	2.8	19.1	152.40	281.80	31.76	121.70	18.90	5.42	13.13	1.43	5.65	0.69	1.40	0.17	0.91	0.10
15646	11.8	1.5	1.9	< .5	473.7	11.1	< 1	4575.5	86.4	2.2	0.1	10.2	< 5	< 1	2.1	33.7	138.80	268.80	31.19	121.50	21.30	6.34	15.30	1.90	7.69	1.20	2.76	0.33	1.94	0.23
15647	14.9	7.2	6.0	< .5	1070.4	46.3	< 1	3420.6	171.6	4.7	0.2	24.5	12.0	3.0	5.4	31.0	116.70	225.20	26.91	105.50	19.10	5.40	14.04	1.73	7.31	1.10	2.55	0.31	1.75	0.23
15648	11.8	0.2	2.3	< .5	962.1	1.2	< 1	4452.2	163.2	6.8	0.1	26.4	< 5	1.0	8.1	35.5	149.40	284.00	32.56	128.50	23.40	6.35	16.50	1.98	8.16	1.28	3.09	0.35	2.02	0.26
15649	16.0	< .1	1.2	< .5	1432.5	2.7	< 1	4392.3	186.1	5.2	0.1	19.1	< 5	< 1	28.8	41.6	181.10	349.60	40.40	155.40	28.20	7.98	19.62	2.33	9.94	1.54	3.59	0.38	2.19	0.28
15650	17.8	< .1	1.5	< .5	1169.3	1.7	< 1	4486.5	173.1	6.9	0.4	19.3	6.0	< 1	4.5	39.5	174.90	333.50	38.80	152.70	27.60	7.70	18.71	2.29	9.63	1.42	3.33	0.41	2.12	0.27
15651	16.3	< .1	2.0	< .5	1685.1	1.3	< 1	4288.5	261.4	7.5	< .1	29.2	9.0	< 1	5.7	36.6	162.00	308.80	35.71	138.50	25.20	7.04	17.50	2.06	9.11	1.29	3.13	0.38	1.99	0.23
15652	17.2	< .1	1.4	< .5	1422.9	1.9	< 1	4257.8	195.7	4.8	0.2	15.3	8.0	1.0	5.9	32.2	141.50	271.30	31.28	121.40	21.60	6.19	15.06	1.82	7.83	1.19	2.76	0.30	1.78	0.24
15653	16.2	1.0	2.6	< .5	1342.0	11.1	< 1	4296.1	186.1	4.8	0.1	15.3	7.0	2.0	5.2	34.1	147.10	282.40	32.85	127.90	22.20	6.37	16.37	1.99	8.07	1.24	2.90	0.33	2.03	0.25
15654	14.0	0.5	1.4	< .5	872.5	5.6	< 1	4155.0	173.3	5.3	0.1	23.5	< 5	< 1	3.7	40.7	179.00	343.60	39.48	152.80	27.20	7.72	19.99	2.32	10.05	1.53	3.34	0.39	2.30	0.28
15655	9.6	0.1	1.4	< .5	808.2	1.7	< 1	4333.3	141.4	3.4	0.1	17.7	< 5	< 1	2.2	31.4	130.20	250.80	29.10	114.00	19.60	5.81	14.38	1.74	7.31	1.10	2.84	0.31	1.73	0.21
15656	12.5	7.6	5.0	< .5	432.2	59.6	< 1	3986.7	78.4	2.2	0.2	10.3	7.0	< 1	2.5	30.4	119.60	231.00	26.65	105.50	18.60	5.22	13.57	1.68	7.03	1.08	2.60	0.33	1.67	0.24
15657	14.4	18.4	12.2	< .5	641.3	160.4	< 1	3622.0	104.5	3.8	0.3	9.8	14.0	< 1	6.7	40.1	129.40	243.80	27.77	108.60	18.90	5.50	14.21	1.94	8.75	1.31	3.29	0.40	2.66	0.35
STD SO-17	18.4	3.8	18.3	11.4	24.4	23.5	9.0	300.1	4.0	11.0	0.4	11.8	124.0	11.0	354.6	27.5	12.00	23.40	2.93	13.00	3.30	1.03	3.88	0.68	4.26	0.97	2.84	0.42	2.89	0.43
15658	12.7	1.8	2.2	< .5	426.2	16.9	< 1	4189.5	76.3	1.7	0.1	7.6	< 5	< 1	1.6	26.0	104.80	191.90	23.12	99.00	16.60	4.90	10.95	1.40	5.90	0.95	1.95	0.27	1.54	0.21
15659	13.9	< .1	1.6	< .5	1079.0	0.8	< 1	4228.2	150.7	4.4	0.1	12.2	7.0	2.0	4.3	36.3	156.00	283.00	34.41	142.30	23.80	7.48	16.93	2.10	8.54	1.34	2.71	0.34	1.97	0.27
15660	15.2	< .1	1.5	< .5	604.8	0.5	< 1	3529.1	153.4	4.5	0.2	30.3	6.0	< 1	8.8	35.4	140.70	250.80	30.32	129.20	21.50	6.70	16.29	1.97	8.56	1.28	2.77	0.33	2.09	0.27
15661	16.0	< .1	3.0	0.6	575.8	2.0	2.0	3094.2	131.9	4.0	0.1	33.9	17.0	< 1	19.6	26.2	105.90	192.50	22.94	98.80	16.20	4.99	11.72	1.44	6.24	0.95	2.02	0.25	1.55	0.19
15662	12.4	0.1	1.4	< .5	936.0	2.4	1.0	3800.6	153.6	4.9	0.4	18.4	< 5	< 1	6.3	30.7	129.20	234.00	28.61	120.40	21.00	6.19	14.65	1.76	7.51	1.15	2.25	0.26	1.68	0.21
15663	9.0	0.1	0.6	< .5	426.0	0.9	1.0	3927.9	87.5	1.9	0.4	12.3	< 5	< 1	2.2	26.9	113.60	205.90	24.78	105.30	17.60	5.29	12.75	1.43	6.26	0.98	1.97	0.26	1.49	0.19
15664	21.8	0.1	1.0	< .5	547.4	0.9	< 1	4047.4	71.0	1.4	1.0	3.4	< 5	< 1	1.3	19.7	81.90	149.60	17.55	72.10	11.60	3.75	8.75	1.08	4.64	0.68	1.60	0.21	1.24	0.16
RE 15664	16.8	0.1	1.0	< .5	504.9	1.0	< 1	4161.7	68.7	1.7	0.6	3.6	< 5	< 1	1.3	20.2	84.90	152.20	18.07	76.00	12.40	3.89	9.36	1.07	4.73	0.73	1.62	0.20	1.20	0.17
RRE 15664	17.5	< .1	0.9	< .5	476.8	0.8	1.0	4249.2	60.5	2.3	0.2	2.8	< 5	< 1	1.0	20.4	85.10	155.30	18.18	77.90	12.50	3.90	9.47	1.07	4.84	0.73	1.54	0.20	1.17	0.15
15665	12.2	< .1	0.7	< .5	766.6	0.5	< 1	4019.0	136.3	2.8	0.2	12.1	< 5	< 1	3.9	31.9	136.00	246.20	29.68	125.40	21.70	6.48	15.50	1.78	8.04	1.19	2.46	0.30	1.77	0.23
15666	11.5	1.0	1.6	< .5	971.2	9.4	2.0	3923.3	111.3	3.5	0.1	6.7	< 5	< 1	2.2	27.2	116.20	212.40	25.39	107.40	18.50	5.53	13.65	1.58	6.42	1.02	2.18	0.30	1.49	0.20
15667	47.2	7.7	19.5	1.0	305.7	169.9	3.0	888.8	12.8	4.8	0.4	1.0	147.0	< 1	37.6	33.2	111.20	199.90	23.96	101.90	16.90	4.94	13.23	1.57	7.16	1.21	2.69	0.35	1.94	0.29
STD SO-17	18.0	3.7	22.8	11.9	24.4	22.4	8.0	299.0	3.7	11.0	0.8	11.8	127.0	10.0	355.1	27.3	11.50	23.10	2.88	13.50	3.30	1.03	4.00	0.68	4.10	0.92	2.70	0.44	2.84	0.45

APPENDIX 2B: CONTINUED*

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC							
	V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT						
To Commerce Resources Corp.							
Acme file # A200589R	Received: MAR 26 2002 *	31 samples in this disk file.					
ELEMENT	Nb	Ta	U	Zr			
SAMPLES	ppm	ppm	ppm	ppm			
SI	0.7	< .1	0.3	75.9			
12676	304.9	73.2	22.7	7.6			
12677	1782.9	262.9	11.8	4.6			
12678	1424.8	193.5	7.6	4.0			
12679	2032.8	236.2	8.2	3.6			
12680	974.7	154.4	4.2	4.8			
12681	1450.6	216.8	10.7	3.1			
14452 PULP	718.9	114.8	64.9	2.2			
12682	974.3	169.5	7.9	3.8			
12683	992.2	154.5	14.4	4.2			
12684	1767.1	198.1	13.5	2.8			
12685	1883.3	160.1	5.0	3.1			
12686	569.6	118.3	10.2	4.7			
12687	1104.5	148.4	3.5	5.3			
12688	702.3	44.5	2.4	55.8			
RE 12688	649.0	41.2	1.3	57.9			
RRE 12688	573.1	34.0	1.5	52.7			
12689	1077.9	138.2	4.8	15.5			
12690	1021.1	118.1	4.1	2.3			
12691	371.1	78.5	15.2	37.5			
12692	793.4	140.2	22.8	8.9			
12693	846.8	168.3	19.2	4.0			
12694	51.3	10.1	7.8	20.7			
14453 PULP	719.7	116.0	63.7	2.6			
12695	217.4	72.4	32.0	23.4			
12696	563.1	221.7	116.4	71.7			
12697	507.0	187.2	89.8	134.2			
12698	514.9	196.8	86.4	80.3			
12699	465.9	187.7	92.7	39.2			
12700	846.3	218.1	65.7	8.8			
.STD TAN-1	0.0	2308.0	0.0	0.0			
STANDARD SO-17	25.7	4.3	12.4	353.6			

* As received by e-mail

APPENDIX 2B: **CONTINUED***

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC							
	V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT						
To Commerce Resources Corp.							
Acme file # A200590R	Received: APR 2 2002 *		31 samples in this disk file.				
ELEMENT	Nb	Ta	U	Zr			
SAMPLES	ppm	ppm	ppm	ppm			
SI	1.1	1.1	0.3	72.6			
12651	322.7	6.0	4.0	169.1			
12652	412.5	111.3	37.4	10.3			
12653	862.8	256.0	73.6	23.9			
12654	623.4	196.1	78.6	56.8			
12655	689.6	258.3	103.2	33.4			
12656	781.0	151.0	35.3	25.7			
12657	1025.4	156.7	9.7	3.1			
14454 PULP	830.8	96.7	63.7	2.9			
12658	797.4	125.7	10.6	3.4			
12659	763.8	123.0	7.1	2.4			
12660	875.1	115.1	7.2	1.2			
12661	1414.4	163.9	6.4	1.7			
12662	1397.5	40.6	4.1	2.1			
RE 12662	1429.5	50.9	4.4	2.0			
RRE 12662	1406.7	30.4	3.9	2.2			
12663	386.6	15.2	4.1	8.0			
12664	30.8	3.3	7.2	13.2			
12665	21.7	6.2	39.9	2.2			
14455 PULP	870.8	95.5	71.7	2.6			
12666	323.0	8.4	3.1	168.5			
12667	695.7	34.9	1.5	80.4			
12668	1149.5	20.0	14.0	7.8			
12669	353.4	126.1	46.5	6.4			
12670	370.8	181.9	79.5	48.0			
12671	423.9	143.3	58.5	15.3			
12672	424.1	134.5	46.5	17.4			
12673	405.7	109.4	58.7	16.0			
12674	416.3	150.3	67.6	25.9			
12675	356.0	110.8	49.0	5.4			
.STD TAN-1	0.0	2387.0	0.0	0.0			
STANDARD SO-17	25.1	4.4	12.1	357.6			

* As received by e-mail

APPENDIX 2B: **CONTINUED***

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC							
	V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT						
To Commerce Resources Corp.							
Acme file # A200693R	Received: APR 2 2002 *		35 samples in this disk file.				
ELEMENT	Nb	Ta	U	Zr			
SAMPLES	ppm	ppm	ppm	ppm			
SI	0.6	0.1	0.4	84.5			
12701	407.0	161.6	39.4	34.1			
12702	923.7	303.6	60.4	5.0			
12703	620.1	214.2	38.2	27.2			
12704	35.3	9.0	13.4	6.2			
12705	894.4	78.7	2.4	10.9			
12706	617.1	157.3	29.7	46.4			
12707	285.1	111.1	25.2	17.3			
12708	151.1	88.1	32.7	7.6			
12709	841.3	247.7	23.1	6.1			
12710	259.4	112.1	22.7	4.1			
14456 PULP	883.5	121.5	67.9	2.6			
12711	210.3	7.1	0.8	137.2			
12713	910.7	57.7	2.5	180.9			
12714	1144.0	90.5	1.6	3.7			
12715	1190.2	164.8	25.0	9.9			
12716	260.2	132.9	111.0	163.5			
12717	266.6	127.5	101.4	38.2			
12718	292.7	148.6	137.1	78.2			
12719	141.0	48.8	86.1	40.9			
12720	283.0	142.3	137.3	54.7			
RE 12720	301.8	149.0	141.2	73.5			
RRE 12720	363.9	177.5	181.7	100.1			
12721	664.9	357.8	298.9	140.5			
12722	479.0	256.2	216.8	57.6			
14457 PULP	860.8	112.6	64.6	2.1			
12723	339.1	144.1	139.8	51.9			
12724	227.8	110.7	93.7	56.6			
12725	381.3	150.5	100.4	25.3			
12726	423.1	149.1	97.8	25.8			
12727	314.0	86.2	36.5	14.0			
12728	268.0	89.3	38.2	33.7			
12729	4576.8	398.4	14.6	4.6			
12730	416.2	13.2	0.8	99.6			
.STD TAN-1	0.0	2408.6	0.0	0.0			
STANDARD SO-17	25.8	4.8	11.5	365.1			

* As received by e-mail

APPENDIX 2B: CONTINUED*

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC							
	V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT						
To Commerce Resources Corp.							
Acme file # A200802 Received: MAR 28 2002 * 106 samples in this disk file.							
ELEMENT	Nb	Ta	U	Zr			
SAMPLES	ppm	ppm	ppm	ppm			
SI	0.6	< .1	0.5	76.6			
12751	1625.3	371.0	40.4	10.7			
12752	1155.9	156.2	9.5	3.7			
12753	1193.9	224.6	25.4	19.9			
12754	651.6	192.0	38.8	37.6			
12755	1335.0	202.9	19.6	7.0			
12756	100.4	25.5	17.5	11.5			
12757	522.6	121.7	16.9	2.6			
12758	484.0	108.9	17.6	2.4			
12759	652.6	123.9	9.1	10.5			
12760	926.5	126.0	4.0	2.4			
RE 12760	846.5	121.6	3.0	2.7			
RRE 12760	855.7	123.0	3.3	2.4			
12761	1280.4	176.1	3.8	2.7			
12762	647.0	112.7	9.7	3.3			
12763	940.0	179.2	26.1	7.1			
12764	293.4	150.9	66.6	23.1			
12765	189.4	101.0	31.6	19.3			
12766	464.4	215.0	86.3	7.3			
12767	373.4	134.9	42.4	5.6			
12768	386.5	157.7	60.8	17.7			
12769	175.5	70.8	25.9	4.8			
12770	451.7	175.4	59.2	7.6			
12771	302.5	93.6	20.0	33.3			
12772	425.1	131.5	15.8	13.3			
12773	56.7	29.4	12.7	14.0			
12774	33.0	9.4	6.5	26.4			
12775	368.9	143.8	28.7	4.0			
12776	743.3	139.1	13.0	41.3			
14458 PULP	716.1	119.7	66.0	2.1			
12777	2328.8	170.1	2.5	2.7			
12778	1902.1	144.1	1.4	2.8			
STANDARD SO-17	25.6	4.2	11.6	351.9			
STANDARD TAN-1	0.0	2250.9	0.0	0.0			
12779	401.7	14.9	3.7	189.0			
12780	1410.9	96.2	0.9	15.2			
12781	1822.6	240.5	21.4	28.3			
12782	323.6	103.7	17.6	7.5			
12783	439.9	154.6	18.5	8.4			
12784	298.4	127.8	22.1	4.3			
12785	769.3	263.4	49.0	100.9			
12786	604.4	149.3	12.8	14.8			
12787	3703.5	198.2	2.6	3.6			
12788	1548.3	155.5	6.2	6.3			

* As received by e-mail

APPENDIX 2B: **CONTINUED**

ELEMENT	Nb	Ta	U	Zr			
SAMPLES	ppm	ppm	ppm	ppm			
12789	444.1	27.3	1.3	96.9			
RE 12789	454.7	27.0	1.0	97.3			
RRE 12789	349.2	17.7	1.3	110.2			
12801	462.3	35.1	51.5	153.7			
12802	1391.3	131.7	2.4	6.2			
12803	870.0	189.5	43.1	5.2			
12804	442.6	152.6	60.4	6.2			
12805	280.0	117.0	75.7	19.0			
12806	145.6	81.6	46.4	19.6			
12807	127.2	134.8	18.2	7.1			
12808	630.8	278.6	13.7	4.7			
12809	1770.0	279.1	9.4	6.1			
12810	1286.9	206.8	10.4	4.4			
12811	1503.9	247.9	12.9	4.6			
12812	1175.4	294.1	28.1	4.6			
12813	608.4	373.7	68.7	6.2			
12814	199.1	154.4	66.3	6.9			
12815	220.6	142.8	95.8	30.2			
12816	280.2	145.2	130.9	52.0			
14459 PULP	805.0	121.9	71.1	2.6			
12817	441.0	220.7	210.9	16.8			
12818	236.9	117.3	107.5	43.2			
STANDARD SO-17	25.0	4.1	11.5	353.3			
STANDARD TAN-1	0.0	2443.3	0.0	0.0			
12819	197.7	109.4	101.4	14.4			
12820	122.2	65.3	65.3	15.2			
12821	186.3	95.6	104.2	17.9			
12822	277.5	140.7	128.8	57.6			
12823	71.3	33.2	44.1	15.0			
12824	1210.1	194.5	49.4	34.7			
12825	683.6	170.5	45.9	23.7			
12826	418.3	165.9	95.0	141.8			
12827	685.9	243.7	85.4	194.2			
12828	526.9	158.9	40.7	18.8			
12829	1111.3	311.9	102.4	62.5			
12830	133.4	2.5	5.3	205.4			
12851	498.3	19.6	2.0	151.8			
12852	1449.0	147.7	4.6	11.5			
12853	1764.0	256.8	16.3	8.5			
12854	1310.8	258.2	24.0	5.3			
12855	461.0	224.2	57.0	4.0			
RE 12855	471.4	213.4	53.1	4.1			
RRE 12855	529.2	224.7	55.9	4.6			
12856	399.6	130.7	49.1	9.3			
12857	430.9	143.1	45.5	6.6			
12858	343.9	140.0	51.1	7.5			
12859	331.7	68.2	30.6	40.0			
12860	177.7	72.5	44.7	13.8			

APPENDIX 2B: **CONTINUED**

ELEMENT	Nb	Ta	U	Zr			
SAMPLES	ppm	ppm	ppm	ppm			
12861	217.5	157.3	118.2	77.9			
12862	310.8	175.0	10.4	3.9			
12863	347.3	187.1	7.1	4.7			
12864	1625.5	457.8	29.2	7.4			
12865	1171.9	203.2	4.7	7.1			
12866	697.1	205.7	7.5	4.2			
12867	1073.4	289.7	13.4	6.1			
12868	162.2	114.5	12.9	4.6			
STANDARD SO-17	24.7	4.1	11.5	350.3			
STANDARD TAN-1	0.0	2345.6	0.0	0.0			
12869	360.8	140.6	29.7	15.3			
12870	310.8	183.7	176.1	79.4			
12871	282.9	159.7	166.6	111.7			
12872	277.4	141.5	149.4	80.4			
12873	242.2	110.6	68.2	21.2			
12874	179.5	23.4	5.8	171.6			
STANDARD SO-17	25.7	4.5	11.6	355.2			

APPENDIX 2C:

ANALYTICAL REPORTS FOR NEUTRON ACTIVATION BY ACTIVATION LABORATORIES LTD.*

Acme file # A104395 Received: DEC 18 2001 * 75 samples in this disk file.																																			
Sample ID	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu
	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
15601	<2	<5	1.3	1100	<0.5	<1	21	98	3	5.58	5	<1	<5	10	3.47	<29	153	<0.1	16.2	<3	<0.02	<0.05	4	23.9	2.6	6	67	76	128	41	8.4	1.6	<0.5	2.9	0.45
15602	4	<5	<0.5	<50	<0.5	19	14	6	1	4.94	<1	<1	<5	<1	0.08	<29	<15	<0.1	5.6	<3	<0.02	0.59	242	6.9	41.7	<1	<50	133	255	110	18.7	5.9	1.6	2.6	0.40
15603	11	<5	<0.5	<50	<0.5	21	13	<5	<1	4.75	1	<1	<5	<1	0.13	<27	<15	<0.1	5.5	<3	<0.01	0.56	209	3.1	135.0	4	<50	122	214	97	16.3	5.7	2.0	2.4	0.35
15604	<2	<5	2.1	<50	<0.5	19	10	<5	<1	4.77	<1	<1	<5	<1	0.23	<24	<15	0.2	5.1	<3	<0.01	0.50	114	2.6	73.0	<1	78	123	223	110	17.6	5.4	1.6	2.1	0.31
15605	<2	<5	<0.5	<50	<0.5	21	10	<5	<1	4.86	1	<1	<5	<1	0.25	<26	<15	<0.1	7.1	3.0	<0.02	0.42	134	2.8	135.0	<1	<50	158	276	110	20.4	7.2	2.0	2.5	0.38
15606	3	<5	<0.5	<50	<0.5	19	9	6	<1	5.02	<1	<1	<5	<1	0.21	<26	<15	0.3	6.2	<3	<0.01	0.39	148	3.0	162.0	<1	<50	143	261	110	18.6	6.9	1.8	2.4	0.35
15607	<2	<5	<0.5	490	<0.5	20	10	<5	<1	4.38	<1	<1	<5	<1	0.11	<22	<15	0.3	4.9	<3	<0.01	0.40	81	2.9	91.0	<1	<50	133	245	95	18.7	6.0	1.6	2.4	0.35
15608	2	<5	<0.5	<50	<0.5	16	12	<5	5	4.82	<1	<1	<5	<1	0.28	<24	39	<0.1	6.9	<3	<0.01	0.21	147	4.3	39.0	<1	133	71	138	57	12.1	3.5	1.5	3.0	0.44
15609	<2	<5	<0.5	<50	<0.5	22	14	6	2	5.42	<1	<1	<5	3	0.06	<26	<15	<0.1	6.6	<3	<0.01	0.55	162	6.6	7.6	<1	65	99	186	79	15.1	4.3	1.6	2.4	0.36
15610	5	<5	<0.5	<50	<0.5	19	14	<5	<1	5.60	<1	<1	<5	<1	0.26	<28	<15	<0.1	8.1	<3	<0.01	0.61	208	4.7	4.5	<1	<50	125	238	100	18.2	5.1	1.2	2.2	0.34
15611	3	<5	<0.5	<50	<0.5	20	15	<5	<1	5.49	<1	<1	<5	3	0.26	<26	<15	<0.1	6.8	<3	<0.01	0.61	199	6.6	8.6	<1	<50	124	228	92	17.5	5.1	1.2	2.1	0.31
15612	9	<5	<0.5	<50	<0.5	20	14	9	<1	5.41	<1	<1	<5	<1	0.27	<25	<15	<0.1	7.2	<3	<0.01	0.67	157	7.7	4.9	<1	51	139	262	100	20.0	5.8	1.7	2.3	0.33
15613	5	<5	<0.5	<50	<0.5	21	14	<5	2	5.51	<1	<1	<5	9	0.10	<23	<15	<0.1	5.7	<3	<0.01	0.63	131	5.6	6.9	<1	68	107	200	87	14.9	4.3	1.1	2.0	0.30
15614	2	<5	<0.5	<50	<0.5	21	13	6	1	5.45	<1	<1	<5	<1	0.11	<23	<15	0.2	6.2	<3	0.06	0.65	122	7.2	5.1	<1	86	116	214	90	16.0	4.7	1.4	2.4	0.36
15615	6	<5	2.1	<50	<0.5	17	14	5	3	4.75	<1	<1	<5	<1	0.38	<25	<15	0.4	5.7	<3	<0.01	0.45	157	5.6	6.3	<1	82	138	267	120	20.8	6.3	2.0	2.6	0.40
15616	4	<5	<0.5	1000	<0.5	6	43	149	13	8.27	3	<1	<5	<1	2.00	<26	148	<0.1	14.1	<3	<0.01	0.20	9	8.4	<0.5	<1	201	89	165	76	13.3	3.9	1.6	2.8	0.42
15617	7	<5	<0.5	1200	<0.5	6	43	152	19	9.59	1	<1	<5	6	0.63	<25	185	0.6	14.2	<3	<0.01	0.10	22	4.3	2.3	2	255	87	165	71	12.9	4.0	1.5	1.9	0.26
15618	<2	<5	<0.5	<50	<0.5	20	12	<5	1	4.89	<1	<1	<5	4	0.10	<23	<15	<0.1	4.4	<3	<0.01	0.66	140	3.1	5.4	<1	70	112	213	90	16.4	4.7	1.5	2.1	0.31
15619	<2	<5	<0.5	160	<0.5	20	13	<5	<1	4.87	<1	<1	<5	7	0.11	<22	<15	<0.1	5.2	<3	<0.01	0.64	105	2.8	8.8	<1	63	119	218	96	17.0	5.0	1.5	2.2	0.33
15620	<2	<5	<0.5	<50	<0.5	20	15	<5	<1	5.71	<1	<1	<5	6	0.04	<25	<15	<0.1	7.1	<3	<0.01	0.66	157	7.6	4.9	5	<50	121	221	91	16.8	4.9	1.7	2.4	0.35
15621	7	<5	<0.5	<50	<0.5	20	14	<5	<1	5.35	<1	<1	<5	11	0.06	<26	<15	<0.1	5.9	<3	<0.01	0.60	219	6.9	11.3	5	<50	119	220	94	16.9	5.3	1.6	2.3	0.30
15622	<2	<5	<0.5	<50	<0.5	19	16	<5	<1	5.53	<1	<1	<5	<1	0.08	<29	<15	<0.1	6.1	<3	<0.01	0.53	245	8.5	25.7	6	<50	133	251	110	18.9	5.6	2.0	2.5	0.38
15623	5	<5	<0.5	300	<0.5	12	10	19	3	3.72	<1	<1	<5	<1	1.78	<25	<15	0.3	6.2	<3	<0.01	0.41	157	5.8	85.4	<1	<50	96	174	85	13.0	4.2	1.5	3.0	0.45
15624	<2	<5	<0.5	350	<0.5	20	13	22	<1	5.12	<1	<1	<5	<1	0.21	<22	<15	<0.1	6.2	<3	<0.01	0.57	135	2.5	79.9	<1	<50	147	262	110	19.3	6.4	2.1	2.5	0.38
15625	6	<5	2.2	320	<0.5	19	13	8	<1	5.00	<1	<1	<5	<1	0.19	<21	<15	<0.1	5.9	<3	<0.01	0.51	110	3.0	60.5	<1	<50	136	253	110	18.9	5.9	1.8	2.3	0.35
15626	<2	<5	<0.5	200	<0.5	18	14	193	<1	5.48	<1	<1	<5	<1	0.62	149	<15	<0.1	9.9	<3	<0.01	0.46	63	1.0	53.1	<1	<50	71	130	52	9.3	3.1	0.9	1.4	0.20
15627	8	<5	<0.5	<50	<0.5	18	15	230	<1	4.98	<1	<1	<5	<1	0.63	114	<15	0.2	8.6	<3	<0.01	0.45	103	1.4	63.1	<1	<50	75	138	54	9.8	3.4	1.1	1.7	0.25
15628	<2	<5	<0.5	<50	<0.5	18	19	393	<1	4.98	<1	<1	<5	<1	0.76	442	<15	<0.1	8.6	<3	<0.01	0.55	10	<0.2	3.9	<1	<50	37	65	27	4.3	1.2	<0.5	0.6	0.09
15629	<2	<5	2.6	340	<0.5	17	19	113	4	5.96	<1	<1	<5	<1	0.29	<22	45	0.2	7.1	<3	<0.01	0.29	126	3.5	68.8	5	56	103	180	82	13.8	4.3	1.7	2.7	0.41
15630	3	<5	2.1	<50	<0.5	18	13	18	<1	4.95	<1	<1	<5	<1	0.21	<23	<15	<0.1	5.7	5.0	<0.01	0.33	185	3.8	65.9	<1	75	126	237	110	19.2	5.9	1.6	3.0	0.45
15631	4	<5	<0.5	<50	<0.5	20	14	<5	<1	5.24	<1	<1	<5	<1	0.17	<23	<15	0.3	5.3	<3	<0.01	0.52	205	4.1	61.3	<1	<50	126	231	93	16.9	5.5	1.3	2.0	0.31
15632	<2	<5	1.9	<50	<0.5	16	15	7	<1	5.15	<1	<1	<5	6	0.23	<20	<15	<0.1	4.3	<3	<0.01	0.28	118	4.8	3.6	<1	<50	79	154	60	12.6	3.4	1.2	1.8	0.26
15633	4	<5	<0.5	<50	<0.5	18	16	9	<1	5.05	<1	<1	<5	7	0.13	<29	27	<0.1	4.9	<3	<0.02	0.58	182	5.9	11.6	<1	71	129	242	100	18.3	5.1	1.6	2.6	0.40
15634	5	<5	<0.5	<50	<0.5	19	16	<5	<1	5.64	<1	<1	<5	<1	0.10	<32	41	0.3	5.3	<3	<0.02	0.67	255	11.6	13.3	<1	<50	153	285	110	20.5	6.1	1.9	2.5	0.38
15635	<2	<5	<0.5	260	<0.5	19	14	5	8	5.47	<1	<1	<5	<1	0.14	<32	51	<0.1	6.1	<3	<0.02	0.64	246	9.7	8.2	<1	<50	131	252	100	17.7	5.4	1.5	2.5	0.38
15636	<2	<5	<0.5	<50	<0.5	20	10	<5	4	4.97	<1	<1	<5	<1	0.10	<27	32	<0.1	4.0	<3	<0.01	0.60	146	4.2	12.3	<1	<50	103	190	70	13.6	4.1	1.3	2.0	0.30
15637	<2	<5	2.1	<50	<0.5	20	11	5	1	5.14	<1	<1	<5	<1	0.11	<26	<15	<0.1	4.8	<3	<0.01	0.65	110	3.3	14.9	<1	61	121	226	88	16.7	5.3	1.3	2.2	0.33
15638	<2	<5	<0.5	<50	<0.5	18	13	<5	10	5.45	<1	<1	<5	<1	0.21	<32	89	0.4	7.5	<3	<0.02	0.71	218	9.0	10.5	<1	<50	142	268	120	20.4	5.9	1.7	3.3	0.50
15639	<2	<5	<0.5	1200	<0.5	6	47	213	8	9.01	2	<1	<5	<2	2.30	<32	94	<0.1	31.2	<3	<0.01	<0.05	5	4.3	<0.5	<1	278	50	93	40	7.4	2.3	1.0	2.9	0.41
15640	5	<5	<0.5	760	<0.5	3	25	79	7	5.44	4	<1	<5	<2	3.77	<28	90	<0.1	14.2	<3	<0.02	0.24	11	11.5	1.7	<1	143	70	131	55	10.2	2.5	1.2	3.6	0.51
15641	<2	<5	1.0	280	<0.5	21	13	11	<1	5.28	<1	<1	<5	9	0.17	<27	<15	<0.1	5.1	<3	<0.01	0.68	146	5.9	7.8	<1	<50	134	245	99	18.3	5.6	1.7	2.3	0.35
15642	3	<5	<0.5	<50	<0.5	20	13	5	<1	5.12	<1	<1	<5	8	0.29	<25	<15	<0.1	5.2	<3	<0.01	0.60	91	2.8	4.4	<1	68	121	232	99	17.5	5.1	1.7	2.5	0.39
15643	3	<5	<0.5	<50	<0.5	20	15	12	7	5.15	<1	<1	<5	<1	0.35	<28	76	0.6	6.7	<3	<0.02	0.64	137	3.2	5.4	<1	115	129	241	110	18.8	5.9	1.5	2.2	0.31
15644	6	<5	1.5	<50	<0.5	20	12	<5	1	5.05	<1	<1	<5	6	0.19	<28	<15	0.5	6.1	<3	<0.02	0.68	160	3.7	5.8	<1	<50	129	247	110	18.3	5.4	1.4	2.3	0.33
15645	7	<5	<0.5	1400	<0.5	4	41	167	27	9.22	2	<1	<5	<1	1.15	<27	241	0.6	13.6	<3	<0.02	0.14	14	6.4	2.6	<1	204	61	113	45	9.0	2.8	1.1	1.9	0.29
15646	12	<5	1.4	130	<0.5	19	10	<5	1	4.66	<1	<1	<5	5	0.10	<26	<15	<0.1	4.9	<3	<0.01	0.69	110	1.7	9.3	<1	55	118	230	100	17.0	4.9	1.8	2.5	0.39
15647	10	<5	<0.5	<50	<0.5	17	16	<5	7	5.23	<1	<1	<5	<1	0.31	<30	30	<0.1	5.8	<3	<0.02	0.46	238	4.4	23.9	<1	<50	101	199	88	15.4	4.4	1.3	2.4	0.38
15648	9	<5	<0.5	330	<0.5	18	12	<5	<1	4.94	<1	<1	<5	<1	0.18	<29	<15	<0.1	5.0	<3	<0.02	0.62	217	4.7	22.7	<1	70	133	247	100	17.6	5.4	1.6	2.5	0.36
15649	12	<5	2.0	220	<0.5	18	15	9	<1	5.02	<1	<1	<5	6	0.22	<31	<15	<0.1	5.0	<3	<0.02	0.65	254	5.1	16.4	<1	70	163	295	120	21.6	6.5	1.6	2.6	0.39
15650	22	<5	1.6	290	<0.5	21	17	<5	<1	5.57	<1	<1	<5	<1	0.22	<30	<15	<0.1	5.4	<3	<0.02	0.69	242	5.9	19.5	<1	<50	152	280	130	20.0	6.1	1.9	2.4	0.36
15651	6	<5	3.2	270	<0.5	20	16	<5	<1	5.74	<1	<1	<5	<1	0.19	<35	<15	<0.1	5.3	<3	<0.02	0.59	340	6.7	23.7	<1	<50	146	275	110	19.8	5.9	2.0	2.3	0.34
15652	4	<5	<0.5	<50	<0.5	19	17	<5	<1	6.44	<1	<1	<5	<1	0.23	<32	<15	<0.1	5.4	4.0	<0.02	0.62	248	5.3	17.0	<1	<50	135	252	97	18.0	5.5	<0.5	2.4	0.36
15653	3	<5	<0.5	<50	<0.5	20	16	<5	<1	6.05	<1	<1	<5	8	0.31	<33	<15	<0.1	5.8	<3	<0.02	0.67	284	5.6	17.5	<1	<50	140	261	110	19.2	5.7	1.7	2.4	0.34
15654	<2	<5	1.4	<50	<0.5	23	15	8	2	5.68	<1	<1	<5	<1	0.19	<33	<15	<0.1	5.9	<3	<0.02	0.71	229	4.9	20.2	<1	<50	184	349	140	24.3	7.7	1.8	3.3	0.50
15655	4	<5	1.7	<50	<0.5	25	10	<5	<1	5.65	<1	<1	<5	<1	0.15	<29	<15	<0.1	5.4	<3	<0.02	0.75	167	3.7	19.1	<1	64	139	257	110	18.1	6.1	1.6	2.5	0.39

* As received by e-mail

APPENDIX 2C: CONTINUED

Sample ID	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu
	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
15656	5	<5	0.9	240	<0.5	22	13	<5	7	6.16	<1	<1	<5	8	0.26	<27	73	0.2	5.4	<3	<0.02	0.67	104	2.7	11.2	<1	<50	122	230	86	16.8	4.9	1.3	2.7	0.41
15657	<2	<5	<0.5	440	<0.5	20	15	<5	20	6.09	<1	<1	<5	<1	0.57	<30	145	0.6	7.3	4.0	<0.02	0.58	118	3.3	11.8	<1	108	131	243	100	17.4	5.0	1.5	3.5	0.53
15658	3	<5	<0.5	<50	<0.5	22	15	<5	2	5.76	<1	<1	<5	<1	0.33	<25	43	<0.1	4.9	<3	<0.01	0.71	78	2.0	6.5	<1	74	107	206	84	14.6	4.9	1.6	2.1	0.31
15659	8	<5	<0.5	<50	<0.5	19	15	<5	<1	5.96	<1	<1	<5	5	0.47	<31	<15	<0.1	7.1	<3	<0.02	0.62	173	4.6	14.5	<1	<50	153	290	120	20.9	6.7	<0.5	2.9	0.42
15660	3	<5	<0.5	<50	<0.5	19	17	27	<1	5.56	<1	<1	<5	8	0.26	<29	<15	<0.1	6.0	<3	<0.02	0.51	163	4.0	28.8	<1	<50	131	242	110	17.7	5.7	1.2	2.3	0.35
15661	3	<5	2.1	<50	2.7	19	17	330	<1	6.63	<1	<1	<5	<1	0.94	177	<15	0.4	12.5	<3	<0.02	0.46	128	3.8	25.2	<1	<50	104	191	78	14.2	4.3	1.4	2.2	0.32
15662	5	<5	1.3	370	<0.5	23	14	24	<1	5.93	<1	<1	<5	8	0.23	<30	<15	<0.1	6.1	<3	<0.02	0.58	179	4.7	17.4	<1	60	133	251	110	18.0	5.7	1.5	2.4	0.36
15663	<2	<5	1.1	<50	<0.5	24	10	<5	<1	5.15	<1	<1	<5	6	0.16	<25	<15	<0.1	5.1	5.0	<0.01	0.65	102	1.4	10.3	<1	<50	117	226	96	15.7	5.0	1.2	2.1	0.31
15664	<2	<5	1.1	<50	<0.5	21	19	5	<1	6.08	<1	<1	<5	<1	0.10	<23	<15	<0.1	3.8	<3	<0.01	0.59	75	1.8	3.5	<1	61	86	156	67	11.2	3.2	0.9	1.8	0.26
15665	5	<5	1.9	<50	<0.5	23	15	<5	<1	5.20	<1	<1	<5	<1	0.16	<32	<15	0.6	5.9	<3	<0.02	0.62	173	3.4	11.6	2	<50	137	257	110	19.0	5.9	1.6	2.3	0.35
15666	4	<5	<0.5	240	<0.5	23	14	8	2	5.55	<1	<1	<5	<1	0.11	<29	<15	0.3	4.9	<3	<0.02	0.69	126	4.3	6.8	<1	<50	119	228	100	16.4	4.9	1.4	2.1	0.31
15667	<2	<5	<0.5	1200	<0.5	6	55	180	8	10.50	<1	<1	<5	<1	1.05	<36	162	0.6	17.2	<3	<0.02	0.12	17	4.5	2.8	<1	205	109	215	93	16.1	4.7	1.2	2.2	0.33
15600A	<2	<5	<0.5	560	<0.5	22	24	<5	<1	5.07	<1	<1	<5	<1	0.11	<33	<15	<0.1	21.0	<3	<0.02	0.61	120	1.8	61.6	<1	<50	147	258	110	15.9	5.1	<0.5	1.5	0.23
15600B	<2	<5	<0.5	<50	<0.5	23	29	<5	<1	5.34	<1	<1	<5	<1	0.14	<41	<15	0.5	23.8	8.0	<0.02	0.68	130	3.1	72.4	<1	85	164	307	130	18.5	6.1	1.4	1.4	0.21
DMMAS-15-517	604	<5	2440	430	2.1	9	71	145	2	8.58	3	<1	<5	<2	0.79	179	35	7.0	19.6	<3	<0.03	<0.05	<0.5	1.6	<0.5	19	230	13	22	9	4.0	1.2	<0.5	3.6	0.54
DMMAS-15-516	519	<5	2360	530	<0.7	9	64	133	2	7.96	2	<1	16	<1	0.73	<30	40	6.8	18.3	<3	<0.02	<0.05	<0.5	1.3	2.3	20	286	11	23	12	3.7	1.3	0.6	3.5	0.52
DMMAS-15-515	593	<5	2320	450	3.4	8	64	132	1	7.93	2	<1	<5	<1	0.75	<24	41	8.4	18.2	<3	<0.02	<0.05	<0.5	1.2	2.6	19	254	11	18	13	3.6	1.1	<0.5	3.6	0.52
TAN-1-7	<15	<10	45.6	<280	23.4	<1	11	<8	819	0.99	26	<3	<18	<1	4.55	<207	2670	23.2	4.2	<10	<0.11	<0.1	2340	<0.7	<1.8	<6	<69	11	15	<9	1.0	<0.2	<0.5	<0.4	<0.07
TAN-1-8	<13	<9	32.5	<250	<2.7	<1	11	<7	866	<0.1	23	<3	<16	<1	4.65	<189	2800	23.1	4.0	<9	<0.1	<0.09	2370	5.4	26.0	<5	<65	11	10	<5	0.8	<0.2	<0.5	<0.3	<0.06
TAN-1-5	<15	<9	32.4	<260	<3.4	<1	11	<7	818	0.56	23	<3	<16	<1	4.26	<187	2630	23.5	3.0	<9	<0.1	<0.09	2360	4.7	29.5	<8	<60	10	16	<5	0.9	<0.2	<0.5	<0.4	<0.06
TAN-1-4	<20	<9	33.1	<270	<3.5	<1	<1	<8	817	<0.1	24	<3	<15	<1	4.41	<197	2720	22.2	3.4	<9	0.48	<0.1	2360	6.4	30.8	<8	<62	12	14	<5	0.5	<0.2	<0.5	<0.4	<0.07
TAN-1-3	<11	<7	31.9	<200	<2.4	<1	<1	<6	824	0.46	22	<2	<13	<1	4.27	<150	2750	22.2	3.9	<7	<0.08	<0.07	2350	5.6	28.3	<5	<50	12	15	<5	0.5	<0.2	<0.5	<0.3	0.19
TAN-1-2	<25	<8	33.1	<240	<2.6	<1	<1	<7	832	0.63	23	<3	<15	<1	4.47	<170	2620	22.4	3.8	<8	<0.09	<0.08	2360	5.3	27.9	<5	<57	10	15	<5	0.7	<0.2	<0.6	<0.3	<0.06
TAN-1-1	<12	<8	27.4	<230	<2.5	<1	<1	<7	828	0.72	23	<3	<15	<1	4.36	<170	2750	22.2	3.9	<8	<0.09	<0.08	2400	6.5	28.0	<5	<57	11	16	<5	0.6	<0.2	<0.5	<0.3	<0.06

APPENDIX 2C: CONTINUED*

Acme file # A200589 Received: MAR 8 2002 * 27 samples in this disk file.

ELEMENT	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni
SAMPLES	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm
12676	5	< 5	1.4	< 50	< .5	17	15	11	14	6.94	< 1	< 1	< 5	< 1	0.59	< 20
12677	5	< 5	< .5	< 50	< .5	25	15	< 5	4	6.47	< 1	< 1	< 5	6	0.11	< 20
12678	< 2	< 5	2.4	< 50	< .5	21	16	< 5	< 1	6.09	1	< 1	< 5	< 1	0.09	< 20
12679	< 2	< 5	2.2	< 50	< .5	23	16	< 5	2	5.80	< 1	< 1	< 5	< 1	0.04	< 20
12680	< 2	< 5	3.3	< 50	< .5	20	17	< 5	6	6.28	< 1	< 1	< 5	< 1	0.25	161
12681	4	< 5	< .5	< 50	< .5	21	22	< 5	< 1	6.02	< 1	< 1	< 5	< 1	0.06	< 20
14452	< 2	< 5	< .5	< 50	< .5	23	21	9	< 1	4.58	< 1	< 1	< 5	< 1	0.10	< 20
12682	< 2	< 5	3.0	< 50	< .5	22	16	< 5	< 1	5.54	< 1	< 1	< 5	4	0.13	< 20
12683	11	< 5	2.2	< 50	< .5	21	17	7	1	5.86	< 1	< 1	< 5	< 1	0.15	< 20
12684	8	< 5	1.6	300	< .5	23	13	< 5	< 1	5.48	< 1	< 1	< 5	< 1	0.10	< 20
12685	< 2	< 5	3.7	< 50	< .5	19	16	< 5	< 1	6.39	< 1	< 1	< 5	< 1	0.09	< 20
12686	< 2	< 5	< .5	< 50	< .5	23	12	< 5	< 1	5.22	< 1	< 1	< 5	< 1	0.13	< 20
12687	3	< 5	< .5	< 50	< .5	22	11	7	< 1	5.38	< 1	< 1	< 5	< 1	0.16	< 20
12688	< 2	< 5	< .5	990	< .5	6	44	180	19	10.30	< 1	< 1	< 5	< 1	1.36	< 20
12689	< 2	< 5	1.4	< 50	< .5	22	15	< 5	3	5.50	< 1	< 1	< 5	< 1	0.07	< 20
12690	< 2	< 5	2.4	< 50	< .5	18	14	< 5	3	5.57	< 1	< 1	< 5	< 1	0.13	< 20
12691	< 2	< 5	1.4	300	< .5	16	11	< 5	10	4.60	1	< 1	< 5	< 1	1.33	< 20
12692	4	< 5	1.7	160	< .5	19	13	< 5	< 1	5.08	< 1	< 1	< 5	< 1	0.18	< 20
12693	5	< 5	< .5	< 50	< .5	20	13	< 5	3	5.30	< 1	< 1	< 5	12	0.13	< 20
12694	< 2	< 5	2.5	630	< .5	< 1	2	11	33	0.80	< 1	< 1	< 5	< 1	3.08	< 20
14453	10	< 5	1.3	< 50	< .5	23	23	< 5	< 1	4.65	< 1	< 1	< 5	33	0.11	< 20
12695	< 2	< 5	3.8	410	< .5	14	7	9	9	4.06	1	< 1	< 5	< 1	1.77	< 20
12696	23	< 5	2.4	970	< .5	29	24	11	< 1	10.70	< 1	< 1	< 5	< 1	0.40	< 20
12697	10	< 5	2.3	< 50	< .5	32	16	< 5	< 1	7.54	2	< 1	< 5	< 1	0.31	< 20
12698	< 2	< 5	2.9	770	< .5	42	23	< 5	< 1	7.31	< 1	< 1	< 5	< 1	0.44	< 20
12699	24	< 5	2.9	780	< .5	27	21	14	< 1	6.63	1	< 1	< 5	< 1	0.38	< 20
12700	< 2	< 5	1.0	< 50	< .5	29	16	8	< 1	6.57	< 1	< 1	< 5	< 1	0.32	< 20

ELEMENT	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu
SAMPLES	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
12676	61	< .1	8.2	< 3	< .01	0.13	83	3.1	22.7	< 1	< 50	71	128	56	10.2	3.2	0.8	1.9	0.28
12677	< 15	< .1	6.7	< 3	< .01	0.62	300	8.2	11.6	< 1	< 50	103	202	69	15.5	4.5	1.8	1.8	0.25
12678	< 15	< .1	6.8	3.0	< .01	0.58	230	7.6	5.6	< 1	< 50	115	218	80	15.7	4.8	< .5	1.6	0.23
12679	< 15	< .1	6.3	< 3	< .01	0.64	270	10.4	8.4	< 1	< 50	145	263	110	19.3	5.6	2.1	2.0	0.31
12680	< 15	< .1	7.2	< 3	< .01	0.53	170	4.4	4.2	3	< 50	103	197	76	15.5	4.4	1.5	2.5	0.37
12681	< 15	< .1	6.4	< 3	< .01	0.63	270	12.0	11.8	< 1	< 50	172	303	120	21.8	6.4	1.6	2.5	0.38
14452	< 15	< .1	20.2	< 3	< .01	0.55	120	2.6	57.9	< 1	< 50	140	239	88	14.0	4.6	< .5	1.2	0.18
12682	< 15	< .1	6.0	< 3	< .01	0.61	180	6.7	8.0	< 1	< 50	136	256	93	17.0	4.8	< .5	2.0	0.29
12683	< 15	< .1	5.5	< 3	< .01	0.59	150	4.8	14.3	< 1	< 50	136	238	94	17.4	5.0	< .5	2.2	0.35
12684	< 15	< .1	6.1	< 3	< .01	0.75	220	6.6	10.1	4	< 50	139	259	100	19.2	5.6	< .5	2.0	0.30
12685	< 15	< .1	6.2	< 3	< .01	0.68	170	5.8	3.3	< 1	< 50	110	203	79	14.8	4.3	< .5	2.1	0.32
12686	< 15	< .1	5.3	< 3	< .01	0.63	130	2.3	11.8	< 1	< 50	124	226	87	16.7	5.1	1.9	2.2	0.33
12687	< 15	< .1	6.1	4.0	< .01	0.70	140	4.3	5.4	< 1	< 50	139	260	110	19.5	5.9	1.3	2.2	0.34
12688	162	< .1	21.0	< 3	< .01	0.21	47	7.5	3.0	< 1	216	87	161	73	12.3	3.9	< .5	1.6	0.40
12689	34	< .1	5.6	< 3	< .01	0.72	140	4.9	5.3	< 1	< 50	133	245	110	18.3	5.3	1.7	2.3	0.35
12690	< 15	0.3	5.8	< 3	< .01	0.61	130	4.1	3.2	< 1	< 50	119	218	86	16.2	4.7	1.8	2.1	0.30
12691	< 15	< .1	6.1	< 3	< .01	0.41	79	9.7	15.1	< 1	64	97	175	65	12.3	3.2	1.6	2.7	0.41
12692	< 15	< .1	5.4	< 3	< .01	0.32	150	5.4	21.0	< 1	< 50	107	194	76	15.2	3.9	1.2	2.3	0.38
12693	< 15	< .1	5.4	< 3	< .01	0.54	170	3.7	18.9	< 1	< 50	136	257	100	18.8	5.8	1.8	2.3	0.37
12694	132	0.8	2.4	< 3	< .01	< .05	10	3.8	8.3	< 1	< 50	13	27	14	2.5	0.7	0.6	1.2	0.18
14453	< 15	< .1	21.0	< 3	< .01	0.62	120	2.5	60.0	< 1	< 50	147	251	100	14.6	4.9	1.3	1.1	0.16
12695	80	0.5	4.3	< 3	< .01	0.37	71	4.1	28.6	7	< 50	77	144	51	10.4	3.3	1.4	2.2	0.32
12696	< 15	< .1	7.2	< 3	< .01	0.65	250	3.4	122.0	< 1	< 50	243	407	150	27.8	10.0	3.3	6.2	0.83
12697	< 15	0.7	7.1	< 3	< .01	0.65	230	4.0	101.0	< 1	91	220	384	150	25.7	8.8	3.2	5.4	0.78
12698	< 15	< .1	7.9	< 3	< .01	0.82	230	3.1	100.0	< 1	< 50	258	435	170	30.0	10.3	3.9	6.7	0.94
12699	< 15	< .1	7.1	< 3	< .01	0.61	210	4.4	89.8	< 1	< 50	196	350	140	23.4	8.8	3.3	4.3	0.65
12700	< 15	< .1	8.4	< 3	< .01	0.65	250	6.2	69.3	< 1	< 50	150	273	99	19.4	6.1	2.2	3.0	0.45

* As received by e-mail

APPENDIX 2C: CONTINUED*

Acme file # A200590 Received: MAR 8 2002 * 27 samples in this disk file.

ELEMENT	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu
SAMPLES	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
12651	< 2	< 5	< .5	1500	< .5	3	31	149	5	7.49	5	< 1	< 5	< 1	2.40	239	128	< .1	21.2	< 3	< .01	< .05	9	32.4	2.3	< 1	127	99	165	55	11.5	2.7	1.6	4.2	0.62
12652	< 2	< 5	< .5	< 50	< .5	22	16	12	< 1	5.10	< 1	< 1	< 5	< 1	0.14	< 20	< 15	< .1	5.7	< 3	< .01	0.53	120	4.1	34.5	< 1	< 50	150	271	110	20.1	6.0	1.7	2.0	0.29
12653	6	< 5	< .5	550	< .5	23	17	< 5	< 1	6.82	< 1	< 1	< 5	< 1	0.08	< 20	< 15	< .1	5.9	< 3	< .01	0.58	270	6.8	73.2	< 1	< 50	178	311	130	23.0	7.9	2.0	2.9	0.45
12654	7	< 5	0.8	360	< .5	23	19	53	< 1	6.57	< 1	< 1	< 5	< 1	0.14	< 20	< 15	< .1	7.0	< 3	< .01	0.54	210	3.3	74.1	< 1	< 50	164	284	110	20.5	7.2	2.1	3.2	0.45
12655	< 2	< 5	< .5	840	< .5	26	30	< 5	< 1	15.80	< 1	< 1	< 5	< 1	0.14	< 20	< 15	< .1	6.1	< 3	< .01	0.63	250	4.1	94.4	< 1	< 50	214	352	130	25.6	9.0	2.6	5.2	0.74
12656	< 2	< 5	< .5	< 50	< .5	24	15	44	1	6.62	< 1	< 1	< 5	< 1	0.08	< 20	< 15	< .1	6.4	< 3	< .01	0.54	170	3.7	35.2	< 1	< 50	138	251	96	18.6	5.9	2.1	2.3	0.34
12657	8	< 5	< .5	260	< .5	21	15	15	2	5.95	< 1	< 1	< 5	8	0.15	< 20	< 15	< .1	4.5	5.0	< .01	0.49	180	5.2	11.0	< 1	< 50	137	246	95	18.9	5.7	1.1	1.4	0.22
14454	< 2	< 5	< .5	550	< .5	20	22	< 5	< 1	4.58	< 1	< 1	< 5	< 1	0.10	< 20	< 15	0.3	20.1	< 3	< .01	0.58	120	2.5	60.8	< 1	< 50	142	239	89	14.3	4.9	1.1	0.7	0.10
12658	< 2	< 5	< .5	< 50	< .5	23	13	11	< 1	5.49	< 1	< 1	< 5	< 1	0.20	< 20	< 15	< .1	6.2	< 3	< .01	0.65	150	2.8	11.4	< 1	< 50	137	255	110	19.2	5.8	1.7	1.9	0.27
12659	< 2	< 5	< .5	< 50	< .5	22	11	< 5	< 1	5.28	< 1	< 1	< 5	< 1	0.18	< 20	< 15	< .1	6.4	< 3	< .01	0.72	140	3.8	7.4	2	60	147	269	110	20.4	6.1	1.7	1.8	0.28
12660	< 2	< 5	< .5	< 50	< .5	23	12	< 5	6	5.36	< 1	< 1	< 5	5	0.11	< 20	76	< .1	6.0	< 3	< .01	0.73	150	2.9	6.0	< 1	< 50	153	290	100	21.9	6.3	1.9	2.1	0.31
12661	10	< 5	2.8	270	< .5	18	15	10	37	6.03	< 1	< 1	< 5	< 1	0.18	< 20	302	0.9	4.5	< 3	< .01	0.60	190	7.2	6.4	< 1	152	130	237	93	18.7	5.3	1.3	1.6	0.23
12662	9	< 5	2.0	< 50	< .5	22	13	8	2	5.64	< 1	< 1	< 5	3	0.14	< 20	< 15	0.6	5.2	< 3	< .01	0.74	150	5.1	3.2	< 1	74	126	223	94	17.5	5.0	1.2	2.0	0.30
12663	4	< 5	< .5	780	< .5	5	41	165	14	10.20	< 1	< 1	< 5	< 1	0.32	< 20	238	< .1	2.8	< 3	< .01	0.12	15	4.0	7.3	< 1	240	104	198	79	16.2	4.9	1.2	1.1	0.16
12664	< 2	< 5	2.5	450	< .5	< 1	3	9	4	0.88	1	< 1	< 5	< 1	3.44	< 20	125	< .1	1.7	< 3	< .01	< .05	< .5	3.2	8.5	< 1	< 50	8	16	< 5	1.4	0.7	0.6	1.0	0.15
12665	46	< 5	< .5	510	< .5	< 1	< 1	16	12	0.86	< 1	< 1	< 5	< 1	2.94	< 20	143	< .1	1.5	< 3	< .01	< .05	7	357.0	41.0	< 1	< 50	163	358	150	120.0	< .2	11.0	2.4	0.36
14455	4	< 5	< .5	570	< .5	20	24	< 5	< 1	4.90	< 1	< 1	< 5	< 1	0.12	< 20	< 15	< .1	21.8	< 3	< .01	0.60	130	2.0	67.4	< 1	< 50	152	260	110	15.5	4.7	< .5	1.5	0.23
12666	< 2	< 5	3.0	1200	< .5	< 1	22	82	3	5.97	4	< 1	< 5	7	4.24	< 20	137	< .1	11.8	< 3	< .01	0.10	10	17.9	3.4	< 1	< 50	73	124	45	8.8	2.1	1.0	2.0	0.32
12667	8	< 5	2.4	670	< .5	10	21	46	4	7.22	2	< 1	< 5	< 1	1.18	< 20	69	0.4	11.0	< 3	< .01	0.47	37	9.8	3.0	< 1	102	81	140	58	11.5	3.0	1.5	2.0	0.29
12668	5	< 5	2.9	390	< .5	20	17	11	< 1	5.96	< 1	< 1	< 5	< 1	0.15	< 20	< 15	< .1	5.2	< 3	< .01	0.63	270	6.5	15.1	< 1	< 50	135	255	97	18.8	5.5	1.3	1.4	0.20
12669	< 2	< 5	< .5	230	< .5	22	21	65	< 1	4.97	< 1	< 1	< 5	< 1	0.21	< 20	< 15	< .1	6.3	< 3	< .01	0.59	140	2.4	50.1	3	59	137	235	94	17.1	5.3	2.1	1.9	0.26
12670	< 2	< 5	< .5	410	< .5	22	20	18	< 1	4.22	< 1	< 1	< 5	< 1	0.13	< 20	< 15	< .1	5.2	< 3	< .01	0.59	190	1.9	74.2	< 1	< 50	145	248	96	17.0	5.7	2.0	2.1	0.31
12671	4	< 5	3.8	< 50	< .5	22	17	30	< 1	4.22	< 1	< 1	< 5	< 1	0.05	< 20	< 15	< .1	5.1	< 3	< .01	0.53	140	2.6	50.7	< 1	< 50	129	228	92	15.3	5.2	1.5	1.8	0.26
12672	10	< 5	< .5	250	< .5	20	14	7	12	5.08	< 1	< 1	< 5	< 1	0.31	< 20	59	< .1	6.9	< 3	< .01	0.30	130	2.8	47.7	< 1	67	93	183	86	16.0	4.9	2.0	3.8	0.55
12673	8	< 5	4.5	420	< .5	22	14	11	< 1	5.46	< 1	< 1	< 5	< 1	0.08	< 20	< 15	< .1	6.3	< 3	< .01	0.38	130	1.9	58.6	< 1	< 50	104	190	82	13.3	4.7	1.6	1.6	0.22
12674	6	< 5	< .5	150	< .5	20	12	< 5	< 1	5.02	1	< 1	< 5	< 1	0.09	< 20	< 15	< .1	6.1	< 3	< .01	0.47	160	3.7	70.7	< 1	< 50	156	281	130	20.1	6.8	1.7	1.9	0.31
12675	4	< 5	< .5	170	< .5	18	14	< 5	8	5.28	< 1	< 1	< 5	< 1	0.15	< 20	37	< .1	6.7	7.0	< .01	0.43	130	2.9	45.3	< 1	< 50	104	195	100	14.8	4.7	1.6	2.1	0.29

* As received by e-mail

APPENDIX 2C: CONTINUED*

Acme file # A200693 Received: MAR 15 2002 * 32 samples in this disk file.

ELEMENT	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu
SAMPLES	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
12701	7	< 5	< .5	200	< .5	25	16	26	< 1	6.17	1	< 1	< 5	< 1	0.36	< 20	< 15	< .1	8.0	< 3	< .01	0.51	160	5.4	39.0	< 1	< 50	119	213	86	15.5	4.8	1.6	1.8	0.25
12702	3	< 5	< .5	420	< .5	23	11	16	< 1	5.42	< 1	< 1	< 5	< 1	0.22	< 20	< 15	< .1	6.9	< 3	< .01	0.56	260	4.8	46.6	< 1	< 50	116	200	89	14.8	4.8	1.8	2.0	0.30
12703	5	< 5	1.5	< 50	< .5	22	17	< 5	< 1	5.83	< 1	< 1	< 5	< 1	0.11	< 20	< 15	< .1	6.9	3	< .01	0.51	210	5.9	32.4	< 1	< 50	162	288	130	22.2	6.6	2.2	2.6	0.38
12704	< 2	< 5	1.1	1000	< .5	2	1	15	5	0.74	< 1	< 1	< 5	< 1	2.93	< 20	151	< .1	3.2	< 3	< .01	0.19	7.3	4.2	13.4	< 1	< 50	13	23	< 5	1.7	0.8	< .5	1.3	0.19
12705	3	< 5	< .5	430	< .5	16	17	12	12	6.59	< 1	< 1	< 5	< 1	0.24	< 20	99	< .1	7.8	< 3	< .01	0.45	55	2.8	< .5	< 1	98	98	189	80	16.1	4.4	1.9	2.2	0.29
12706	6	< 5	1.4	< 50	< .5	15	17	432	< 1	6.17	1	< 1	5	< 1	0.61	331	< 15	0.3	12.2	< 3	< .01	0.41	130	3.5	26.9	< 1	59	93	165	62	11.1	3.6	< .5	1.6	0.24
12707	< 2	< 5	< .5	< 50	0.9	16	26	546	< 1	5.69	< 1	< 1	< 5	< 1	0.95	469	31	< .1	13.4	< 3	< .01	0.48	110	1.1	21.2	< 1	< 50	40	70	26	4.1	1.3	< .5	1.1	0.17
12708	< 2	< 5	0.8	< 50	< .5	18	16	157	< 1	4.91	< 1	< 1	< 5	< 1	0.32	< 20	< 15	< .1	6.3	< 3	< .01	0.54	64	2.2	23.3	2	< 50	86	155	61	10.6	3.5	1.1	1.3	0.18
12709	4	< 5	< .5	< 50	< .5	20	14	34	< 1	5.54	< 1	< 1	< 5	< 1	0.23	< 20	< 15	0.5	9.3	< 3	< .01	0.52	220	6.4	21.9	< 1	< 50	110	198	83	14.5	4.7	< .5	2.0	0.30
12710	< 2	< 5	< .5	< 50	< .5	21	16	52	< 1	5.26	< 1	< 1	< 5	< 1	0.20	< 20	< 15	< .1	6.9	< 3	< .01	0.62	100	2.5	22.3	< 1	< 50	110	195	74	13.9	4.1	1.3	1.7	0.26
14456 pulp	< 2	< 5	< .5	250	< .5	19	22	< 5	< 1	4.65	< 1	< 1	< 5	< 1	0.11	< 20	< 15	< .1	20.1	< 3	< .01	0.56	110	2.4	56.3	< 1	< 50	132	237	81	14.5	4.2	1.2	1.4	0.22
12711	4	< 5	< .5	930	< .5	5	47	132	6	9.19	4	< 1	< 5	< 1	2.93	< 20	95	< .1	31.2	< 3	< .01	0.21	9.6	16.1	< .5	< 1	149	80	130	38	9.6	2.8	1.7	3.2	0.47
12713	< 2	< 5	< .5	680	< .5	8	28	91	8	7.32	4	< 1	< 5	< 1	2.00	< 20	148	< .1	19.1	< 3	< .01	0.12	54	21.4	3.6	< 1	76	96	159	65	11.6	2.6	< .5	3.6	0.56
12714	4	< 5	1.8	< 50	< .5	21	16	< 5	2	6.20	< 1	< 1	< 5	< 1	0.08	< 20	< 15	< .1	4.4	< 3	< .01	0.71	95	4.9	2.1	< 1	< 50	104	191	77	14.2	4.2	< .5	1.9	0.28
12715	5	< 5	< .5	< 50	< .5	20	13	< 5	2	5.21	< 1	< 1	< 5	< 1	0.18	< 20	< 15	< .1	5.4	< 3	< .01	0.64	170	3.2	25.2	< 1	< 50	125	229	92	16.3	5.2	1.4	2.4	0.35
12716	5	< 5	< .5	< 50	< .5	23	10	< 5	< 1	5.30	< 1	< 1	< 5	< 1	0.19	< 20	< 15	< .1	5.6	< 3	< .01	0.47	120	1.7	96.2	< 1	< 50	135	238	100	16.9	5.5	1.8	2.6	0.40
12717	3	< 5	2.1	< 50	< .5	22	9	< 5	< 1	5.21	< 1	< 1	< 5	< 1	0.08	< 20	< 15	< .1	5.4	< 3	< .01	0.33	130	2.5	95.1	< 1	< 50	135	242	110	16.8	6.1	1.8	2.4	0.32
12718	7	< 5	< .5	< 50	< .5	19	10	5	2	5.00	1	< 1	< 5	< 1	0.29	< 20	< 15	< .1	5.4	< 3	< .01	0.38	130	3.3	115.0	4	< 50	134	233	100	16.1	5.9	1.3	2.2	0.33
12719	< 2	< 5	1.6	440	< .5	9	10	14	20	4.80	1	< 1	< 5	< 1	1.39	< 20	130	0.6	11.8	< 3	< .01	0.24	45	23.8	76.9	< 1	< 50	114	202	79	17.3	3.4	3.0	11.5	1.68
12720	5	< 5	< .5	< 50	< .5	21	12	< 5	< 1	5.57	< 1	< 1	< 5	< 1	0.09	< 20	< 15	< .1	5.7	< 3	< .01	0.44	130	2.8	123.0	< 1	< 50	159	269	94	18.1	6.3	1.5	2.7	0.41
RRE 12720	3	< 5	< .5	340	< .5	20	10	< 5	2	5.42	1	< 1	< 5	< 1	0.10	< 20	< 15	< .1	6.2	< 3	< .01	0.48	170	3.3	160.0	< 1	< 50	156	262	110	16.6	6.5	1.7	2.3	0.35
12721	< 2	< 5	< .5	< 50	< .5	20	49	< 5	< 1	8.95	3	< 1	< 5	662	0.30	< 20	< 15	< .1	15.6	< 3	< .01	0.51	310	3.9	277.0	< 1	< 50	146	244	100	13.6	6.4	1.5	2.5	0.37
12722	3	< 5	< .5	< 50	< .5	20	47	9	1	8.40	2	< 1	< 5	137	0.32	< 20	< 15	0.5	12.6	< 3	< .01	0.45	240	2.4	211.0	< 1	< 50	148	249	100	15.1	6.7	1.7	1.8	< .05
14457 pulp	5	< 5	< .5	300	< .5	22	24	< 5	< 1	4.87	< 1	< 1	< 5	< 1	0.12	< 20	< 15	< .1	21.3	< 3	< .01	0.64	120	2.6	58.8	< 1	< 50	149	259	95	15.4	4.8	1.5	1.6	0.25
12723	< 2	< 5	< .5	< 50	< .5	22	16	< 5	< 1	5.85	1	< 1	< 5	< 1	0.20	157	< 15	< .1	8.6	< 3	< .01	0.36	130	2.6	117.0	< 1	< 50	134	238	93	16.2	6.0	2.0	1.8	< .05
12724	3	< 5	< .5	310	< .5	23	13	50	< 1	5.32	< 1	< 1	< 5	< 1	0.30	< 20	< 15	< .1	8.0	< 3	< .01	0.40	83	1.0	69.3	< 1	< 50	115	203	81	14.2	4.8	1.5	1.4	0.22
12725	3	< 5	< .5	< 50	< .5	21	18	188	< 1	6.02	< 1	< 1	< 5	< 1	0.66	< 20	< 15	< .1	10.8	< 3	< .01	0.46	160	2.2	100.0	< 1	< 50	101	179	65	11.2	4.5	< .5	1.8	0.25
12726	4	< 5	1.2	200	< .5	22	13	52	1	5.44	< 1	< 1	< 5	< 1	0.07	< 20	< 15	< .1	7.7	< 3	< .01	0.47	150	2.4	92.1	< 1	< 50	110	197	87	14.3	5.2	1.8	1.6	0.24
12727	3	< 5	2.0	< 50	< .5	15	14	118	11	5.77	< 1	< 1	< 5	< 1	0.46	< 20	58	0.4	8.4	< 3	< .01	0.18	78	2.5	33.5	< 1	84	81	135	58	10.1	3.3	1.3	2.3	0.33
12728	< 2	< 5	1.7	250	< .5	14	22	471	8	6.75	1	< 1	< 5	< 1	0.44	228	38	0.4	11.2	< 3	< .01	< .05	70	3.0	25.9	< 1	73	91	156	63	11.3	3.3	1.4	2.2	0.32
12729	< 2	< 5	< .5	< 50	< .5	24	15	< 5	< 1	6.03	< 1	< 1	< 5	< 1	0.04	< 20	< 15	< .1	5.7	< 3	< .01	0.67	510	16.7	13.0	< 1	< 50	144	256	100	18.7	5.8	1.8	2.0	0.30
12730	3	< 5	< .5	1500	< .5	4	50	153	23	10.50	3	< 1	< 5	< 1	1.35	< 20	231	< .1	17.9	< 3	< .01	0.12	12	3.3	< .5	< 1	214	57	106	39	8.3	2.3	< .5	1.7	0.25

* As received by e-mail

APPENDIX 2C: CONTINUED*

Acme file # A200802 Page 1 Received: MAR 28 2002 * 95 samples in this disk file.

ELEMENT	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu
SAMPLES	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	pppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
12751	< 2	< 5	< .5	< 50	< .5	22	18	< 5	4	5.88	< 1	< 1	< 5	< 1	0.12	< 20	37	< .1	3.9	< 3	< .01	0.31	338	7.3	33.4	< 1	< 50	169	334	133	25.6	7.4	1.8	3.1	0.35
12752	< 2	< 5	< .5	240	< .5	18	16	16	6	6.73	< 1	< 1	< 5	< 1	0.10	< 20	59	< .1	3.4	< 3	< .01	0.26	141	3.9	8.7	< 1	< 50	120	244	92	18.4	5.3	1.5	1.8	0.16
12753	< 2	< 5	2.1	< 50	< .5	23	13	13	< 1	6.32	< 1	< 1	< 5	< 1	0.12	< 20	< 15	0.1	3.8	< 3	< .01	0.28	206	5.7	24.5	< 1	< 50	156	308	118	23.8	7.5	1.3	2.8	0.33
12754	2	< 5	< .5	< 50	< .5	22	15	9	3	6.21	< 1	< 1	< 5	< 1	0.12	< 20	< 15	< .1	3.3	< 3	< .01	0.28	165	5.4	30.4	< 1	< 50	145	280	127	22.2	7.0	1.2	2.5	0.27
12755	< 2	< 5	2.0	< 50	< .5	23	16	< 5	< 1	6.29	< 1	< 1	< 5	< 1	0.22	< 20	< 15	< .1	7.5	< 3	< .01	0.33	189	4.2	15.9	< 1	< 50	140	282	104	21.5	6.4	1.2	2.8	0.29
12756	3	< 5	2.4	< 50	< .5	4	3	38	3	1.14	< 1	< 1	< 5	< 1	2.60	< 20	123	< .1	3.1	< 3	< .01	0.06	20	1.6	20.0	< 1	< 50	20	42	11	3.0	0.9	< .5	1.9	0.28
12757	7	< 5	1.4	240	< .5	21	12	5	< 1	5.23	< 1	< 1	< 5	< 1	0.22	< 20	< 15	< .1	5.5	< 3	< .01	0.31	96	3.5	13.2	2	< 50	113	238	99	17.5	5.3	1.3	2.5	0.25
12758	< 2	< 5	< .5	190	< .5	21	11	11	< 1	5.21	< 1	< 1	< 5	8	0.15	< 20	< 15	< .1	6.4	< 3	< .01	0.24	96	3.3	13.2	< 1	< 50	125	256	106	18.4	5.2	1.3	2.5	0.25
12759	< 2	< 5	2.0	180	< .5	25	15	< 5	< 1	5.96	< 1	< 1	< 5	< 1	0.17	< 20	< 15	< .1	6.5	< 3	< .01	0.35	112	3.1	7.4	< 1	< 50	150	287	109	22.1	6.9	1.3	2.8	0.29
12760	< 2	< 5	< .5	< 50	< .5	22	12	< 5	< 1	5.88	< 1	< 1	< 5	< 1	0.11	< 20	< 15	< .1	5.4	< 3	< .01	0.39	102	3.5	3.0	< 1	< 50	140	270	106	20.4	6.2	1.7	2.2	0.23
12761	< 2	< 5	2.1	< 50	< .5	22	12	13	< 1	5.89	< 1	< 1	< 5	6	0.11	< 20	< 15	< .1	3.9	< 3	< .01	0.44	153	4.1	3.2	< 1	< 50	135	284	107	20.8	6.6	1.7	2.4	0.32
12762	5	< 5	< .5	< 50	< .5	22	14	7	< 1	6.48	< 1	< 1	< 5	6	0.19	< 20	< 15	< .1	6.2	< 3	< .01	0.30	104	3.3	7.5	< 1	< 50	119	243	100	17.8	5.1	1.1	2.5	0.23
12763	9	< 5	0.8	< 50	< .5	22	13	14	< 1	6.52	< 1	< 1	< 5	< 1	0.15	< 20	< 15	< .1	3.5	< 3	< .01	0.32	183	4.8	24.7	< 1	< 50	139	277	110	20.9	6.5	1.5	2.7	0.26
12764	3	< 5	1.6	< 50	< .5	23	14	10	3	6.04	< 1	< 1	< 5	< 1	0.50	< 20	< 15	< .1	7.2	< 3	< .01	0.28	145	4.9	54.8	< 1	55	146	290	117	22.0	6.9	1.3	2.6	< .05
12765	< 2	< 5	< .5	180	< .5	23	16	8	< 1	6.62	< 1	< 1	< 5	22	0.26	< 20	< 15	< .1	7.0	< 3	< .01	0.25	98	3.0	29.5	< 1	< 50	123	255	104	18.9	5.9	1.3	2.6	< .05
12766	3	< 5	0.9	< 50	< .5	21	19	7	2	6.78	< 1	< 1	< 5	< 1	0.29	< 20	< 15	0.4	4.4	< 3	< .01	0.24	188	3.5	74.5	< 1	< 50	185	356	157	27.8	9.2	1.7	2.9	< .05
12767	3	< 5	< .5	240	< .5	21	11	13	4	6.10	< 1	< 1	< 5	< 1	0.22	< 20	< 15	< .1	6.4	< 3	< .01	0.32	126	3.2	33.1	< 1	< 50	170	342	147	26.5	8.4	1.8	2.6	0.33
12768	< 2	< 5	< .5	< 50	< .5	19	13	< 5	4	5.98	< 1	< 1	< 5	< 1	0.29	< 20	45	< .1	7.1	< 3	< .01	0.24	141	5.0	58.2	< 1	< 50	138	273	121	20.8	6.9	1.0	2.6	0.34
12769	5	< 5	2.2	< 50	< .5	20	11	< 5	3	5.56	< 1	< 1	< 5	< 1	0.15	< 20	< 15	0.3	5.4	< 3	< .01	0.29	70	2.7	24.1	< 1	< 50	171	343	146	26.9	8.0	1.8	2.6	0.31
12770	2	< 5	< .5	< 50	< .5	22	15	50	3	6.62	< 1	< 1	< 5	< 1	0.22	< 20	< 15	< .1	7.9	< 3	< .01	0.24	150	3.8	51.1	5	< 50	132	257	109	19.7	6.5	1.2	2.6	0.27
12771	< 2	< 5	0.5	< 50	< .5	17	27	677	2	8.21	< 1	< 1	< 5	10	0.80	629	< 15	< .1	16.9	< 3	< .01	0.22	90	1.6	17.7	< 1	101	48	98	35	6.6	2.0	0.8	1.6	< .05
12772	5	< 5	< .5	< 50	< .5	20	18	288	2	6.91	< 1	< 1	< 5	8	0.44	< 20	< 15	< .1	16.8	< 3	< .01	0.25	124	2.6	12.0	< 1	< 50	82	163	61	11.6	3.7	< .5	1.8	0.16
12773	18	< 5	< .5	200	< .5	15	31	1000	2	7.54	< 1	< 1	< 5	< 1	0.84	691	< 15	0.2	13.6	< 3	< .01	0.20	28	< .2	9.2	< 1	178	32	60	19	3.5	1.1	< .5	0.8	< .05
12774	36	< 5	1.0	< 50	< .5	10	51	1460	3	8.71	1	< 1	< 5	4	1.16	1080	< 15	< .1	15.4	< 3	< .01	0.17	8	< .2	4.7	< 1	253	21	41	18	2.4	0.8	< .5	0.6	0.11
12775	< 2	< 5	1.3	< 50	< .5	22	17	135	1	5.30	< 1	< 1	< 5	< 1	0.21	< 20	< 15	< .1	7.1	< 3	< .01	0.31	123	1.0	27.2	< 1	< 50	103	200	79	14.0	4.5	1.3	1.8	0.18
12776	2	< 5	< .5	320	< .5	16	21	41	7	7.24	< 1	< 1	< 5	< 1	0.20	< 20	92	< .1	3.3	< 3	< .01	0.21	116	4.9	12.1	< 1	< 50	127	247	101	19.1	5.9	1.4	2.3	0.17
14458 PULP	4	< 5	< .5	340	< .5	22	25	12	< 1	5.14	< 1	< 1	< 5	< 1	0.12	< 20	< 15	0.2	22.2	< 3	< .01	0.32	115	2.0	58.2	< 1	< 50	152	279	111	17.6	5.3	0.9	1.2	< .05
12777	4	< 5	< .5	280	< .5	24	13	< 5	< 1	6.20	< 1	< 1	< 5	< 1	0.24	< 20	< 15	< .1	4.6	< 3	< .01	0.43	189	6.2	2.7	< 1	< 50	157	316	119	23.2	7.2	1.2	2.6	0.34
12778	4	< 5	1.2	< 50	< .5	24	13	< 5	< 1	5.91	< 1	< 1	< 5	< 1	0.12	< 20	< 15	1.2	6.6	< 3	< .01	0.42	127	3.3	< .5	< 1	< 50	13	269	111	19.2	5.9	1.1	2.2	0.22
12779	3	< 5	1.4	840	< .5	< 1	21	105	6	6.30	4	< 1	< 5	< 1	1.85	< 20	104	< .1	21.2	< 3	< .01	< .05	17	22.8	3.2	< 1	< 50	93	172	57	13.2	3.2	< .5	3.6	0.55
12780	2	< 5	1.4	190	< .5	23	13	14	2	6.32	< 1	< 1	< 5	< 1	0.15	< 20	< 15	0.4	7.1	< 3	< .01	0.36	87	7.3	< .5	< 1	77	138	279	117	21.1	6.4	1.3	2.1	0.29
12781	6	< 5	0.7	290	< .5	19	16	11	1	6.25	< 1	< 1	< 5	< 1	0.29	< 20	< 15	< .1	4.5	< 3	< .01	0.37	229	6.0	17.0	< 1	< 50	158	306	130	23.0	7.0	< .5	2.8	0.36
12782	< 2	< 5	< .5	< 50	< .5	24	21	74	1	6.50	< 1	< 1	< 5	< 1	0.23	159	< 15	< .1	8.2	< 3	< .01	0.31	85	2.3	12.1	< 1	< 50	108	204	84	15.0	4.8	0.9	2.0	0.19
12783	3	< 5	< .5	150	< .5	20	17	230	< 1	7.04	< 1	< 1	< 5	< 1	0.47	< 20	< 15	< .1	11.6	< 3	< .01	0.27	127	4.7	16.0	< 1	79	110	229	90	16.5	5.3	1.0	2.0	0.24
12784	2	< 5	< .5	< 50	< .5	24	13	8	< 1	6.44	< 1	< 1	< 5	< 1	0.23	< 20	< 15	< .1	6.8	< 3	< .01	0.29	104	4.0	20.1	< 1	< 50	145	278	110	21.7	6.8	1.6	2.1	0.31
12785	4	< 5	1.3	< 50	< .5	24	16	< 5	< 1	6.57	1	< 1	< 5	< 1	0.25	< 20	< 15	0.3	4.8	< 3	< .01	0.26	202	6.6	36.5	< 1	< 50	162	317	131	24.4	7.6	1.6	3.0	0.35
12786	3	< 5	< .5	< 50	< .5	22	18	17	4	7.04	< 1	< 1	< 5	5	0.22	< 20	40	< .1	7.2	< 3	< .01	0.30	130	4.8	9.5	4	< 50	131	261	103	19.3	6.0	< .5	2.2	0.17
12787	< 2	< 5	< .5	< 50	< .5	23	18	7	< 1	6.67	< 1	< 1	< 5	< 1	0.19	< 20	< 15	< .1	4.8	< 3	< .01	0.41	200	7.8	3.3	< 1	< 50	165	329	133	24.0	7.3	1.8	2.8	0.29
12788	2	< 5	< .5	530	< .5	18	28	53	14	8.20	< 1	< 1	< 5	< 1	0.30	< 20	133	< .1	2.8	< 3	< .01	0.26	156	7.5	4.3	< 1	103	140	276	122	21.0	6.7	1.3	2.5	0.25
12789	< 2	< 5	< .5	1100	< .5	6	48	174	7	9.95	3	< 1	< 5	10	2.15	< 20	127	0.5	25.8	< 3	< .01	0.09	20	4.7	< .5	< 1	165	86	155	59	12.1	3.6	1.1	2.6	0.41
12801	4	< 5	< .5	960	< .5	< 1	37	104	12	9.02	4	< 1	< 5	< 1	2.59	< 20	140	< .1	16.6	< 3	< .01	< .05	23	33.7	42.3	< 1	156	118	210	71	13.8	4.0	1.1	2.8	0.49
12802	< 2	< 5	< .5	220	< .5	22	17	< 5	4	7.06	< 1	< 1	< 5	< 1	0.15	< 20	23	< .1	3.9	< 3	< .01	0.44	134	3.9	3.1	< 1	< 50	139	275	111	20.5	6.4	1.3	2.7	0.28
12803	< 2	< 5	< .5	< 50	< .5	22	13	6	< 1	6.10	< 1	< 1	< 5	< 1	0.26	< 20	32	< .1	4.4	< 3	< .01	0.38	165	4.3	38.0	< 1	< 50	146	285	112	20.9	6.9	1.0	2.4	0.24
12804	< 2	< 5	0.8	< 50	< .5	24	14	< 5	< 1	5.86	< 1	< 1	< 5	< 1	0.26	< 20	< 15	< .1	4.2	< 3	< .01	0.40	140	2.0	54.6	< 1	< 50	133	281	108	20.1	6.9	1.6	2.5	< .05
12805	< 2	< 5	< .5	< 50	< .5	21	12	< 5	2	5.11	< 1	< 1	< 5	< 1	0.21	< 20	< 15	< .1	5.3	< 3	< .01	0.34	108	1.8	61.4	2	< 50	117	202	93	19.4	5.3	0.9	2.0	< .05
12806	< 2	< 5	< .5	< 50	< .5	25	15	8	< 1	6.09	< 1	< 1	< 5	< 1	0.23	< 20	< 15	1.0	6.7	< 3	< .01	0.33	85	2.4	44.4	< 1	< 50	127	220	95	21.1	5.7	1.5	1.9	0.20
12807	6	< 5	< .5	< 50	< .5	21	17	< 5	< 1	6.40	< 1	< 1	< 5	< 1	0.14	< 20	< 15	< .1	8.4	< 3	< .01	0.33	135	2.7	17.0	< 1	< 50	109	186	85	18.2	4.9	1.6	2.0	0.16
12808	5	< 5	< .5	< 50	< .5	21	18	< 5	< 1	6.20	< 1	< 1	< 5	< 1	0.24	< 20	< 15	< .1	7.2	< 3	< .01	0.34	216	5.7	10.6	< 1	< 50	103	174	76	16.6	4.4	1.4	2.0	0.16
12809	< 2	< 5	< .5	< 50	< .5	20	15	< 5	< 1	6.32	< 1	< 1	< 5	< 1	0.32	< 20	< 15	0.3	8.8	< 3	< .01	0.32	249	5.2	10.2	< 1	< 50	121	210	95	19.5	4.9	1.5	1.9	0.14
12810	3	< 5	< .5	< 50	< .5	19	21	< 5	< 1	6.72	< 1	< 1	< 5	< 1	0.34	< 20	< 15	< .1	8.5	< 3	< .01	0.41	202	7.1	7.6	< 1	< 50	113	194	77	18.0	4.8	< .5	1.9	0.19
12811	< 2	< 5	< .5	< 50	< .5	20	14	< 5	< 1	5.90	< 1	< 1	< 5	< 1	0.28	< 20	< 15	0.3	7.3	< 3	< .01	0.37	229	7.2	11.0	< 1	< 50	113	201	81	18.4	4.6	1.2	1.8	0.18
12812	4	< 5	< .5	340	< .5	21	14	< 5	< 1	5.62	< 1	< 1	< 5	< 1	0.25	< 20	< 15	< .1	6.5	< 3	< .01	0.37	273	6.4	22.1	< 1	< 50	109	190	71	17.6	4.5	1.0	1.7	0.19
12813	6	< 5	< .5	< 50	< .5	21	16	< 5	< 1	6.30	< 1	< 1	< 5	< 1	0.30	< 20	< 15	0.5	7.9	< 3	< .01	0.35	345	5.2	54.8	< 1	< 50	142	247	97	23.0	6.2	2.1	2.0	< .05
12814	3	< 5	< .5	< 50	< .5	23	16	6	< 1	6.01	< 1	< 1	< 5	< 1	0.30	< 20	< 15	< .1	8.2	< 3	< .01	0.34	134	2.4	50.9	< 1	< 50	137	234	105	21.8	5.9	1.8	2.3	< .05
12815	5	< 5	< .5	< 50	< .5	22	14	11	< 1	5.58	< 1	< 1	< 5	< 1	0.24	228	< 15	< .1	6.9	< 3	< .01	0.36	125	2.6	72.6	< 1	< 50	147	259	99	23.7	6.3	2.2	2.2	< .05
12816	6	< 5	< .5	< 50	< .5	23	16	< 5	< 1	5.73	< 1	< 1	< 5	< 1	0.25	< 20	< 15	0.3	9.3	< 3	< .01	0.28	143	2.3	111.0	< 1	< 50	135	230	92	21.8	6.2	1.7	1.9	< .05
14459 PULP	4	< 5	< .5	340	< .5	20	24	6	< 1	4.76	< 1	< 1	< 5	< 1	0.11	< 20	< 15	< .1	21.2	< 3	< .01	0.34	116	2.2	59.3	3	86	136	220	83	18.0	4.5	< .5	1.3	< .05

* As received by e-mail

APPENDIX 2C: CONTINUED

ELEMENT	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb
SAMPLES	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	pppm
12817	4	< 5	< .5	< 50	< .5	20	16	< 5	< 1	5.65	< 1	< 1	< 5	< 1	0.24	< 20	< 15
12818	< 2	< 5	< .5	390	< .5	21	14	6	2	5.24	< 1	< 1	< 5	< 1	0.15	< 20	< 15
12819	3	< 5	1.3	300	< .5	21	15	5	< 1	5.51	< 1	< 1	< 5	< 1	0.21	< 20	< 15
12820	7	< 5	< .5	< 50	< .5	23	13	< 5	< 1	5.25	< 1	< 1	< 5	< 1	0.25	< 20	< 15
12821	< 2	< 5	< .5	< 50	< .5	20	11	< 5	< 1	5.14	< 1	< 1	< 5	< 1	0.20	< 20	< 15
12822	< 2	< 5	1.8	< 50	< .5	21	14	< 5	< 1	5.40	< 1	< 1	< 5	< 1	0.15	< 20	22
12823	< 2	< 5	< .5	530	< .5	< 1	2	15	5	1.04	< 1	< 1	< 5	< 1	3.66	< 20	131
12824	6	< 5	< .5	840	< .5	10	31	70	22	8.05	< 1	< 1	< 5	< 1	0.27	< 20	223
12825	4	< 5	< .5	360	< .5	17	17	23	10	6.08	< 1	< 1	< 5	< 1	0.16	< 20	90
12826	< 2	< 5	< .5	< 50	< .5	22	17	106	< 1	6.11	1	< 1	< 5	< 1	0.25	< 20	< 15
12827	2	< 5	2.1	440	< .5	23	15	29	< 1	7.08	2	< 1	< 5	< 1	0.32	< 20	< 15
12828	7	< 5	< .5	< 50	< .5	21	16	11	< 1	6.60	< 1	< 1	< 5	< 1	0.23	< 20	< 15
12829	< 2	< 5	< .5	< 50	< .5	21	16	< 5	< 1	7.39	< 1	< 1	< 5	< 1	0.31	< 20	< 15
12830	3	< 5	< .5	1200	< .5	< 1	29	130	4	7.01	5	< 1	< 5	< 1	2.81	< 20	160
12851	< 2	< 5	1.1	1350	< .5	6	37	92	10	8.92	4	< 1	< 5	< 1	2.78	< 20	165
12852	2	< 5	< .5	< 50	< .5	21	16	< 5	2	5.74	< 1	< 1	< 5	< 1	0.12	< 20	36
12853	3	< 5	< .5	< 50	< .5	19	13	< 5	< 1	5.32	< 1	< 1	< 5	< 1	0.33	< 20	< 15
12854	5	< 5	< .5	< 50	< .5	20	14	< 5	< 1	5.70	< 1	< 1	< 5	< 1	0.25	< 20	< 15
12855	< 2	< 5	< .5	300	< .5	19	18	< 5	< 1	5.23	< 1	< 1	< 5	< 1	0.21	< 20	< 15
12856	4	< 5	< .5	310	< .5	24	14	29	< 1	5.41	< 1	< 1	< 5	< 1	0.15	< 20	< 15
12857	5	< 5	< .5	320	< .5	20	15	10	4	5.13	< 1	< 1	< 5	< 1	0.46	< 20	< 15
12858	6	< 5	< .5	< 50	< .5	19	13	< 5	6	5.57	< 1	< 1	< 5	< 1	0.25	< 20	< 15
12859	< 2	< 5	< .5	500	< .5	15	21	10	50	7.54	1	< 1	< 5	< 1	0.39	< 20	243
12860	5	< 5	< .5	270	< .5	15	12	9	5	5.72	< 1	< 1	< 5	< 1	0.47	< 20	< 15
12861	< 2	< 5	< .5	500	< .5	21	14	< 5	< 1	5.32	< 1	< 1	< 5	< 1	0.09	< 20	< 15
12862	< 2	< 5	< .5	210	< .5	26	18	< 5	< 1	6.45	< 1	< 1	< 5	< 1	0.12	< 20	< 15
12863	2	< 5	< .5	< 50	< .5	22	19	7	3	6.26	< 1	< 1	< 5	6	0.10	< 20	< 15
12864	< 2	< 5	< .5	380	< .5	21	16	6	< 1	6.10	< 1	< 1	< 5	< 1	0.17	< 20	< 15
12865	< 2	< 5	< .5	130	< .5	22	20	< 5	1	6.48	< 1	< 1	< 5	4	0.29	< 20	< 15
12866	< 2	< 5	< .5	< 50	< .5	21	16	< 5	< 1	6.24	< 1	< 1	< 5	< 1	0.19	< 20	< 15
12867	< 2	< 5	< .5	< 50	< .5	19	13	< 5	< 1	5.98	< 1	< 1	< 5	< 1	0.14	< 20	< 15
12868	< 2	< 5	< .5	240	< .5	18	18	< 5	< 1	6.05	< 1	< 1	< 5	7	0.22	292	< 15
12869	3	< 5	< .5	< 50	< .5	25	17	< 5	< 1	6.38	< 1	< 1	< 5	< 1	0.31	272	< 15
12870	< 2	< 5	2.1	740	< .5	19	9	< 5	< 1	5.30	1	< 1	< 5	< 1	0.17	< 20	< 15
12871	3	< 5	< .5	< 50	< .5	18	9	< 5	< 1	5.43	1	< 1	< 5	< 1	0.18	< 20	< 15
12872	< 2	< 5	< .5	< 50	< .5	20	12	< 5	< 1	5.23	< 1	< 1	< 5	< 1	0.13	< 20	< 15
12873	< 2	< 5	< .5	460	< .5	17	12	37	< 1	4.35	< 1	< 1	< 5	< 1	1.51	215	< 15
12874	< 2	< 5	3.0	970	< .5	< 1	26	113	7	5.51	3	< 1	< 5	< 1	2.13	< 20	99

ELEMENT	Sb	Sc	Se	Sn	Sr	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu
SAMPLES	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
12817	2.6	8.9	< 3	< .01	0.24	211	1.9	173.0	3	< 50	130	218	89	19.0	5.9	1.6	1.8	< .05
12818	0.3	7.6	< 3	< .01	0.28	109	2.4	88.3	< 1	< 50	131	221	92	21.3	5.6	1.1	1.8	< .05
12819	< .1	8.4	< 3	< .01	0.27	102	1.9	82.0	< 1	< 50	132	224	99	21.9	6.1	< .5	2.2	< .05
12820	< .1	8.0	< 3	< .01	0.27	70	2.1	60.0	< 1	< 50	130	231	89	22.0	6.1	1.8	1.9	< .05
12821	< .1	7.2	< 3	< .01	0.27	76	1.8	70.2	< 1	< 50	125	219	94	21.2	5.8	1.5	1.7	< .05
12822	< .1	11.1	< 3	< .01	0.26	139	2.5	120.0	< 1	58	116	186	78	17.8	5.1	1.3	1.9	< .05
12823	0.3	3.7	< 3	< .01	< .05	30	4.5	37.9	< 1	< 50	15	24	6	2.1	0.8	< .5	1.5	< .05
12824	< .1	8.2	< 3	< .01	0.11	180	5.6	40.9	< 1	171	130	212	87	18.0	4.1	1.4	2.6	0.27
12825	0.5	4.7	< 3	< .01	0.23	155	6.6	27.5	< 1	< 50	96	173	68	16.7	4.1	0.9	1.8	0.21
12826	< .1	8.2	< 3	< .01	0.26	167	2.7	85.0	< 1	99	131	226	87	20.7	5.7	1.6	2.3	< .05
12827	< .1	7.1	< 3	< .01	0.31	246	5.6	73.1	< 1	< 50	158	267	109	25.6	7.1	2.2	3.0	0.30
12828	0.5	5.7	< 3	< .01	0.32	165	5.0	33.1	< 1	< 50	123	212	89	20.7	5.6	1.7	1.9	0.20
12829	< .1	6.8	< 3	< .01	0.40	243	4.4	64.4	< 1	107	163	284	106	25.6	7.2	2.2	3.6	0.33
12830	< .1	29.0	< 3	< .01	< .05	3	142.0	4.5	< 1	< 50	263	345	94	18.1	3.8	< .5	5.3	0.80
12851	0.4	12.7	< 3	< .01	0.08	19	15.4	3.7	< 1	76	95	155	63	14.0	3.4	1.5	2.5	0.41
12852	0.4	7.3	< 3	< .01	0.39	145	12.0	3.2	< 1	89	121	202	87	18.3	4.8	1.2	2.1	0.22
12853	< .1	6.9	< 3	< .01	0.40	240	7.8	12.3	< 1	< 50	120	221	92	20.7	5.2	1.5	2.2	0.13
12854	< .1	6.7	< 3	< .01	0.41	250	10.4	19.6	< 1	< 50	139	245	109	22.4	5.9	1.7	2.3	0.23
12855	< .1	6.9	< 3	< .01	0.36	187	3.0	44.6	< 1	56	131	221	97	20.5	5.3	1.6	2.0	< .05
12856	< .1	6.8	< 3	< .01	0.38	131	1.6	43.7	< 1	< 50	122	211	97	20.9	5.6	1.3	2.1	< .05
12857	0.2	6.8	< 3	< .01	0.38	146	2.7	33.3	< 1	95	104	188	78	18.3	4.7	1.4	2.0	< .05
12858	< .1	7.6	< 3	< .01	0.20	160	5.3	36.9	< 1	< 50	117	204	92	20.0	4.9	1.7	2.6	0.30
12859	1.1	11.2	< 3	< .01	< .05	68	5.8	27.1	< 1	122	97	158	63	14.2	2.6	1.3	3.9	0.51
12860	0.2	8.1	< 3	< .01	0.08	64	3.2	35.4	2	135	63	111	48	13.3	3.2	1.3	2.9	0.34
12861	0.4	7.0	< 3	< .01	0.29	170	6.1	107.0	< 1	< 50	148	242	107	23.6	6.2	1.3	2.5	< .05
12862	< .1	6.8	< 3	< .01	0.39	180	4.1	9.4	< 1	< 50	99	177	67	17.6	4.2	1.3	2.0	0.14
12863	0.2	6.9	< 3	< .01	0.40	164	5.0	6.1	< 1	< 50	97	170	65	16.2	3.9	1.2	2.0	0.17
12864	0.2	8.6	< 3	< .01	0.34	395	8.4	23.6	< 1	< 50	102	176	61	16.8	4.2	< .5	1.9	< .05
12865	< .1	9.1	< 3	< .01	0.40	187	5.9	4.4	< 1	< 50	111	192	77	18.0	4.6	< .5	1.9	0.16
12866	0.3	7.9	< 3	< .01	0.36	176	5.5	5.6	< 1	< 50	106	178	82	16.5	4.3	< .5	1.6	0.13
12867	< .1	7.4	< 3	< .01	0.37	299	6.6	12.3	< 1	< 50	114	198	88	18.9	4.8	1.4	2.1	0.15
12868	0.4	7.2	< 3	< .01	0.31	123	2.4	11.3	< 1	< 50	85	147	67	14.3	3.7	0.9	1.6	0.12
12869	1.7	8.4	< 3	< .01	0.28	130	2.8	27.1	< 1	< 50	114	199	100	18.5	5.1	1.7	1.8	< .05
12870	1.0	7.1	< 3	< .01	0.23	149	2.5	127.0	< 1	< 50	135	222	105	20.1	5.8	< .5	2.0	< .05
12871	1.5	5.9	< 3	< .01	0.23	135	2.2	124.0	< 1	< 50	122	200	91	18.3	5.3	1.4	2.3	< .05
12872	1.5	5.6	< 3	< .01	0.24	137	1.8	130.0	< 1	< 50	143	231	117	22.0	6.2	1.5	2.3	< .05
12873	1.7	5.5	< 3	< .01	0.15	107	3.5	58.6	< 1	< 50	101	169	88	15.2	4.2	1.2	2.0	< .05
12874	1.0	14.9	< 3	< .01	< .05	20	16.6	6.5	< 1	< 50	75	118	54	10.4	2.3	< .5	2.6	0.42

* As received by e-mail

APPENDIX 2D: **ANALYTICAL REPORTS FOR CHECK ANALYSIS BY X-RAY FLUORESCENCE BY TECK COMINCO METALS LTD.***

COMMERCE RESOURCES-X02			
Job	V020120R		
ACME CHECK A	Date	8 MAY 2002	
LAB NO	FIELD	Ta(1)	Nb
	NUMBER	ppm	ppm
R0203305	12671	126	412
R0203306	12706	138	523
R0203307	12729	505	5080
R0203308	12730	<3	366
R0203309	12813	359	548
R0203310	14458	120	813
R0203311	15602	247	1477
R0203312	15607	80	175
R0203313	15642	44	644
R0203314	15651	342	2077
ANALYTICAL METHODS			
Ta(1) X-Ray fluorescence / pressed pellet			
Nb X-Ray fluorescence / pressed pellet			

COMMERCE RESOURCES-X02															
Job	V020120R														
ACME CHECK A	Date	8 MAY 2002													
LAB NO	FIELD	SiO2	TiO2	Al2O3	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	Ba(4)	LOI	TOTAL
	NUMBER	%	%	%	%	%	%	%	%	%	%	%	%	%	%
R0203305	12671	2.65	0.01	0.18	5.86		0.61	16.93	29.32	0.21	0.01	3.34	0.01	39.97	99.1
R0203306	12706	10.73	0.07	0.38	8.55		0.67	15.78	25.47	0.87	0.15	2.92	0.01	32.79	98.39
R0203307	12729	4.82	0.03	0.28	7.61		0.87	14.92	29.03	0.15	0.07	3.61	0.01	36.22	97.62
R0203308	12730	40.38	1.04	13.27	14.65		0.2	12.72	5.03	1.75	5.48	1.37	0.13	3.08	99.1
R0203309	12813	2.79	0.01	0.21	7.82		0.77	14.63	29.88	0.43	0.01	4.28	0.01	37.95	98.79
R0203310	14458	2.07	0.05	0.17	6.44		0.33	17.27	28.93	0.25	0.1	3.13	0.01	40.7	99.45
R0203311	15602	3.68	0.03	0.43	7.38		0.85	14.85	29.68	0.18	0.15	3.93	0.01	37.22	98.39
R0203312	15607	8.56	0.02	0.46	6.76		0.62	14.57	30.22	0.25	0.05	4.75	0.01	33.06	99.33
R0203313	15642	10.32	0.01	0.37	7.09		0.86	15.36	28.79	0.52	0.07	3.33	0.01	32.63	99.36
R0203314	15651	3.06	0.03	0.23	8.6		0.81	15.59	29.11	0.34	0.05	4.03	0.01	36.9	98.76
ANALYTICAL METHODS															
FeO determined by acid digestion /volumetric.LOI determined gravimetrically															
Other elements by Li borate fusion/XRF .Where no FeO value shown 'Fe2O3' is total Fe as Fe2O3															

* As received by e-mail

APPENDIX 3A: LITHOLOGICAL LOGS FOR DRILLHOLES FDDH-001 TO FDDH-006

Notes: For CaO, MgO, Nb_2O_5, and P_2O_5 analytical results are by Acme Analytical Laboratories Ltd (Appendix 2A). For Ta_2O_5 and U analytical results are by by Activation Laboratories Ltd (Appendix 2C). Nb is converted to Nb_2O_5 by dividing by 0.699. Ta is converted to Ta_2O_5 by dividing by 0.819.

Company:	**Commerce Resources Corp.**	**Date Started:**		**Core Size:**	HQ
Project:	**Fir Carbonatite 2001**	**Date Finished:**		**Depth:**	199.00
Claim:	**Fir 8**	**Logged By:**	Ryan Grywul		
				Co-ordinates (UTM NAD83)	
Hole No.:	**FDDH-1**	**Bearing:**	0.0°	**Easting (m):**	352,018
		Inclination:	90.0°	**Northing (m):**	5,797,712

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
0.00	4.88	Overburden										
4.88	91.00	**Gneiss:** composed of feldspar-biotite-muscovite-garnet mottled grey with bluish tinge in color, augen textures common areas of disseminated pyrrhotite and pyrite Structure: S1 mainly 060° - 070° ACA 10.80: qtz vein, 30 cm, sheared 13.80: shearing, pyrrhotite present 20.70: fine, dark green rich zones (amphibole?) 22.00 - 28.00: dissemintated pyrite and pyrrhotite, shearing and quartz rich intervals 34.30: 13 cm of green amphibole and biotite layer, garnet porphyroblasts present 35.50 - 36.50: intense deformation, py and po present 40.00: amphibole-biotite rich layer 41.00 - 41.50: amphibole-biotite layer with pyrrhotite blebs 55.10 - 55.70: qtz vein, fractured 77.00 - 79.00: garnet rich zone, distorted porphyroblasts 86.00: presence of cordierite										
91.00	92.90	**Amphibolite:** brecciated and sheared qtz in unit, upper contact irregular/distorted, lower contact sharp										
92.90	108.03	**Gneiss:** similar to unit 4.88 - 91.00 abundant sheared and brecciated quartz present 99.00 - 100.00: calcite present, amphibolite layers possible fenite alteration zone to lower contact										

APPENDIX 3A: CONTINUED

Hole No.: FDDH-1

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
108.03	123.50	**Carbonatite:** primarily coarse grained, mainly dolomitic	15601	107.62	108.62	1.00	0.9	2.4	5	133	2.7	0.20
		brecciation common with some amphibolite layers	15602	108.62	109.62	1.00	31.4	14.3	295	1868	39.3	3.66
		1-5% apatite, pyrochlore, columbite, pyrrhotite present	15603	109.62	110.62	1.00	31.6	14.4	255	651	134.1	3.97
			15604	110.62	111.62	1.00	31.5	14.3	139	352	75.7	4.13
		114.50 - 115.60: amphibolite layer (alteration?), calcite in matrix	15605	111.62	112.62	1.00	31.7	13.9	163	371	143.0	4.77
		121.74 - 122.32: amphibolite layer, calcite present	15606	112.62	113.62	1.00	32.2	13.7	180	400	164.4	4.85
			15607	113.62	114.62	1.00	31.7	13.6	98	221	90.1	4.70
			15608	114.62	115.62	1.00	25.9	12.2	179	342	39.4	2.82
			15609	115.62	116.62	1.00	30.4	14.3	197	917	7.4	2.56
			15610	116.62	117.62	1.00	30.4	14.4	253	2131	3.0	3.14
			15611	117.62	118.62	1.00	30.6	14.4	242	2221	10.0	3.37
			15612	118.62	119.62	1.00	30.7	14.3	191	2032	4.6	3.69
			15613	119.62	120.62	1.00	30.6	14.8	159	1214	8.0	2.66
			15614	120.62	121.62	1.00	30.1	14.4	148	2037	3.9	2.86
			15615	121.62	122.32	0.70	27.6	13.3	191	1484	5.7	3.91
			15616	122.32	123.32	1.00	8.6	11.5	10	335	1.1	2.13
123.50	135.23	**Gneiss:** near upper contact, amphiboles and calcite present (alt?)										
		mineralogy of feldspar-biotite-amphibole-garnet-calcite										
		garnet porphyroblasts up to 2 cm										
		pyrrhotite present, sheared quartz blebs										
135.23	156.16	**Carbonatite:** coarse grained, mainly dolomitic	15617	134.37	135.37	1.00	8.1	14.7	26	571	2.4	2.61
		brecciated in areas, amphiboles in fracture planes	15618	135.37	136.37	1.00	30.5	14.2	170	1366	7.2	2.94
		up to 5% apatite, columbite visible, rare pyrochlores and	15619	136.37	137.37	1.00	30.4	14.3	128	879	8.5	3.27
		pyrrhotite	15620	137.37	138.37	1.00	30.9	14.8	191	2706	3.9	2.86
			15621	138.37	139.37	1.00	30.3	14.3	267	2210	12.6	3.07
		138.80: 50 cm layer of amphibolite	15622	139.37	140.37	1.00	30.1	14.0	299	1899	25.5	3.57
		140.20: small 50 cm pegmatite dike, feldspar-qtz-biotite-epidote	15623	140.37	141.37	1.00	19.0	9.4	191	338	87.3	2.33
		146.81: 40 cm layer of amphibolite	15624	141.37	142.37	1.00	31.1	14.5	164	345	81.4	4.36
		148.80: fine grained, foliated carbonatite, 060° ACA	15625	142.37	143.37	1.00	31.8	14.5	134	262	60.0	4.37
		150.85 - 154.50: brecciated zone, visible columbite	15626	143.37	144.37	1.00	27.8	15.1	76	173	48.3	2.22
			15627	144.37	145.37	1.00	27.7	15.6	125	398	57.5	2.26

Hole No.: FDDH-1

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
			15628	145.37	146.37	1.00	25.0	17.2	11	28	3.6	0.32
			15629	146.37	147.37	1.00	26.0	13.1	153	439	66.6	3.50
			15630	147.37	148.37	1.00	28.4	13.0	225	644	86.1	4.76
			15631	148.37	149.37	1.00	30.0	14.2	250	1096	56.0	3.73
			15632	149.37	150.37	1.00	25.5	13.7	144	951	3.8	2.01
			15633	150.37	151.37	1.00	29.5	14.8	222	914	9.2	3.00
			15634	151.37	152.37	1.00	30.8	14.7	311	1881	13.6	3.69
			15635	152.37	153.37	1.00	29.5	14.0	300	2456	6.4	3.32
			15636	153.37	154.37	1.00	30.3	14.2	178	1286	11.1	2.21
			15637	154.37	155.37	1.00	30.2	14.4	134	878	15.3	3.08
			15638	155.37	156.16	0.79	28.3	13.3	266	2183	10.8	3.35
156.16	158.60	**Gneiss**: amphbiole-biotite gneiss, possible fenite zone	15639	156.16	157.30	1.14	8.4	9.1	6	260	0.5	0.73
			15640	157.30	158.60	1.30	6.2	6.8	13	228	1.1	1.11
158.60	162.88	**Carbonatite:** coarse grained	15641	158.60	159.60	1.00	30.0	14.3	178	1505	4.1	3.40
		trace apatite, pyrochlore, columbite, pyrrhotite	15642	159.60	160.60	1.00	29.8	14.1	111	875	2.8	3.18
		amphibole rich zones	15643	160.60	161.60	1.00	27.2	14.2	167	1007	7.1	3.47
			15644	161.60	162.88	1.28	29.8	14.0	195	1405	6.9	3.55
		161.15 - 161.27: clast of gneissic wallrock										
162.88	164.03	**Gneiss:** amphibole-biotite gneiss, possible fenite zone	15645	162.88	164.03	1.15	6.8	13.0	17	445	0.8	1.51
		sharp upper and lower contacts with carbonatite										
		calcite present and in veinlets										
164.03	184.30	**Carbonatite:** coarse grained, brecciated common	15646	164.03	165.03	1.00	30.8	14.4	134	678	10.2	3.12
		up to 4% apatite, trace pyrochlore and columbite	15647	165.03	166.03	1.00	26.3	13.8	290	1531	24.5	3.00
		amphibole rich zones	15648	166.03	167.03	1.00	30.8	13.7	264	1376	26.4	3.25
			15649	167.03	168.03	1.00	30.4	14.6	310	2049	19.1	4.11
		166.00: visible columbite crystals	15650	168.03	169.03	1.00	30.7	14.3	295	1673	19.3	4.27
		174.00: S1 foliation of amphiboles 050° - 060° ACA	15651	169.03	170.03	1.00	29.6	14.1	415	2411	29.2	3.97
		181.00 - 184.30: abundant brecciation	15652	170.03	171.03	1.00	29.9	14.4	302	2036	15.3	3.25
			15653	171.03	172.03	1.00	30.3	14.2	346	1920	15.3	3.81
			15654	172.03	173.03	1.00	30.9	14.6	279	1248	23.5	4.33
			15655	173.03	174.03	1.00	30.9	14.6	203	1156	17.7	3.26

Hole No.: FDDH-1

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
			15656	174.03	175.03	1.00	28.6	14.3	126	618	10.3	2.80
			15657	175.03	176.03	1.00	25.9	12.8	144	917	9.8	2.67
			15658	176.03	177.03	1.00	30.3	14.5	95	610	7.6	2.27
			15659	177.03	178.03	1.00	30.0	14.5	211	1544	12.2	3.52
			15660	178.03	179.03	1.00	31.6	14.0	199	865	30.3	4.04
			15661	179.03	180.03	1.00	26.4	14.8	156	824	33.9	2.84
			15662	180.03	181.03	1.00	30.9	14.4	218	1339	18.4	3.54
			15663	181.03	182.03	1.00	31.1	14.6	124	609	12.3	2.90
			15664	182.03	183.03	1.00	30.6	15.1	91	783	3.4	1.63
			15665	183.03	184.03	1.00	31.2	14.9	211	1097	12.1	3.43
184.30	199.00	Gneiss: feldspar-biotite-quartz gneiss	15666	184.03	185.09	1.06	31.1	14.4	153	1389	6.7	2.82
		sharp contact with carbonatite, upper contact seems to be a fenite alteration zone	15667	185.09	186.09	1.00	8.0	13.4	20	437	1.0	2.91
		sheared qtz bands, pyrrhotite stringers common										
		184.30 - 186.20: fenite alteration zone										
		187.60: fine green amphibole, deformed garnets										
		188.20: gneissosity stronger away from fenite zone, ~070° ACA										
		190.00: fine grained pyrrhotite and pyrite with qtz blebs										
		191.50: late stage calcite veinlets										
		195.20: pyrrhotite content up to 10%										
		196.00: intense folding, pyrrhotite growth along fractures										
	199.00	E.O.H.										

Company: Commerce Resources Corp.	Date Started:	Core Size:	HQ
Project: Fir Carbonatite 2001	Date Finished:	Depth:	208.11
Claim: FIR 8	Logged By: Jeff Reeder		
		Co-ordinates (UTM NAD83)	
Hole No.: FDDH-2	Bearing: 0.0°	Easting (m):	352057
	Inclination: 90.0°	Northing (m):	5797813

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
0.00	6.10	Overburden										
6.10	110.90	**Gneiss:** unit has a mottled white/grey/brown appearance from strong banding S1 textures contains zones of amphibolite which is massive in texture and/or sheared main mineralogy consists of biotite-feldspar with zones of garnet +/- mica, generally medium grained Alteration: generally is weak and confined to areas showing deformationand consists of biotite +/- chlorite, qtz veins - common, minor zones of silica flooding Structure: S1 between 70-90° ACA, but in places 45-60° ACA quartz veins/veinlets (0.5 - 15 cm) parallel to S1 7.90: qtz vein, 5cm, 090° ACA 8.00: S1 = 80°, chlorite increases parallel to S1 11.00 - 13.50: garnet ~ 20%, 1-2 cm 14.33: qtz vein, 8 cm, 065° ACA 14.33 - 14.88: massive amphibolite 18.00: qtz vein, 10 cm, 080° ACA 18.80: garnet porphyroblasts, ~3 cm 22.70 - 23.80: local zones of amphibolite (intense chl alteration) 26.80: qtz healed fractures 27.00: qtz vein, 3 cm, 090° ACA 27.00 - 31.70: biotite alteration parallel to S1 increases 31.00 - 38.00: garnet content increases, ~25%, S1 080° ACA 34.90: qtz vein, 1 cm, 075° ACA 38.25 - 38.45: amphibolite zone, chlorite/biotite alteration strong and parallel S1	12713	110.00	110.90	0.90	9.3	6.5	66	1303	3.6	1.00

APPENDIX 3A: **CONTINUED**

Hole No.: FDDH-2

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		38.45 - 44.30: mottled texture, increase in mica content 40.30: qtz vein, 0.5 cm, 080° ACA 40.90: qtz vein, 5 cm, 080° ACA 44.30 - 44.60: strong banded appearance, qtz-feldspar 45.00: qtz vein, 2.5 cm 45.80: qtz bands +/- feldspar 46.50 - 46.80: chlorite/biotite rich bands parallel S1, 080° ACA 47.90 - 48.40: qtz +/- chlorite-biotite, 080° ACA 49.00: S1 065° ACA 52.70 - 53.00: biotite rich mylonitic texture, mottled green/brown, shearing 045° ACA 53.00 - 58.00: S1 055° ACA, increase in garnet 53.70 - 54.00: amphibolite green-brown, strong chl-biot alt 58.00 - 62.00: strong biot alteration, garnet ~20%, S1 060° ACA 63.05 - 63.50: numerous qtz veins, 070° ACA 65.05: qtz vein, 15 cm 080° ACA 65.20 - 66.50: sericite alteration of plagioclase, apple green color 67.60 - 69.30: qtz-feldspar banded zone, 080° ACA 72.10 - 73.00: qtz vein 73.30 - 73.80: qtz veinlets, contains sericite/chlorite haloes 76.30 - 77.50: sericite/chlorite rich alteration parallel S1 79.00: biotite rich shear ~090° ACA 80.00: S1 080° ACA 83.68 - 88.05: biotite-feldspar rich gneiss with minor zones of silica flooding 88.05 - 88.40: qtz-feldspar flooded shear/mylonite 88.40 - 92.30: biotite rich gneiss 92.30 - 96.27: mylonitic texture, sheared 060° ACA 99.30 - 99.97: amphibolite 99.60: qtz vein, 1 cm, 080° ACA 99.80: S1 075° ACA, qtz-biot-feld gneiss 101.80: qtz-cc fragment										

Hole No.: FDDH-2

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		103.00 - 110.00: strong biotite alteration (fenite), lower contact with carbonatite is sheared & brecciated over 50 cm, biot rich										
110.90	116.41	**Carbonatite-Beforsite:** megacrystalline, mottled light green/beige	12714	110.90	112.00	1.10	29.5	14.9	116	1637	2.1	2.97
		white, 10-15% amphiboles (richterite) generally 070° ACA	12715	112.00	113.00	1.00	31.1	14.4	208	1703	25.2	3.71
		unit contains disseminated pyrrhotite ~1-2%, magnetite +/-	12716	113.00	114.00	1.00	32.2	14.1	147	372	96.2	4.57
		columbite, lower contact irregular 070° ACA	12717	114.00	115.00	1.00	31.1	13.6	159	381	95.1	4.58
			12718	115.00	116.40	1.40	30.8	13.2	159	419	115.0	4.55
116.41	118.55	**Pegmatite:** megacrystalline, contains ~60% feldspar, 20% quartz, 20% biotite, fragments of carbonatite	12719	116.40	117.30	0.90	14.4	7.2	55	202	76.9	2.72
118.55	129.80	**Carbonatite-Beforsite:** same as 110.90 - 116.41	12720	118.55	119.80	1.25	32.3	14.0	208	405	160.0	5.08
		contains higher amphibole content, aligned 070° ACA	12721	119.80	121.00	1.20	27.5	13.5	379	951	277.0	4.56
		pyrrhotite disseminated, ~1-2%	12722	121.00	122.00	1.00	31.0	14.2	293	685	211.0	5.06
			12723	122.00	123.00	1.00	32.2	13.9	159	485	117.0	4.65
		126.50 - 128.40: brecciated/amphibolite fragments	12724	123.00	124.05	1.05	31.5	14.4	101	326	69.3	3.99
			12725	124.05	125.10	1.05	28.9	14.8	195	545	100.0	3.23
			12726	125.10	126.50	1.40	32.2	13.9	183	605	92.1	4.50
			12727	126.50	127.50	1.00	23.4	12.2	95	449	33.5	2.37
			12728	127.50	128.40	0.90	20.9	12.7	85	383	25.9	2.30
			12729	128.40	129.80	1.40	31.0	14.3	623	6548	13.0	3.29
129.80	133.50	**Gneiss:** strong biotite alteration/fenite	12730	129.80	130.15	0.35	5.3	12.2	15	595	0.0	1.34
		S1 075° - 080° ACA										
		the unit is brown/white, contains a high biotite content ~70% with minor feldspar/qtz, shearing is parallel S1										
		lower contact irregular, ~045° ACA										
133.50	150.70	**Pegmatite:** megacrystalline, 60-70% feldspar, 20% quartz 10-15% biotite (large booklets, 3-5 cm)										
		upper 3 m contains ~50% quartz										
		lower contact contains higher qtz content										

APPENDIX 3A: CONTINUED

Hole No.: FDDH-2

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
150.70	156.20	**Carbonatite-Beforsite**: mottled light grey/beige/green, porphyritic	12751	150.70	152.00	1.30	30.2	14.1	453	2325	33.4	4.84
		texture with crystals ~2c cm, traces of pyrochlore	12752	152.00	153.00	1.00	27.4	14.7	191	1654	8.7	3.43
		fractures contain amphibole/chlorite with biotite	12753	153.00	154.00	1.00	31.3	14.1	274	1708	24.5	4.58
			12754	154.00	155.00	1.00	31.1	13.5	234	932	30.4	5.32
			12755	155.00	156.50	1.50	29.6	13.7	248	1910	15.9	3.81
156.20	157.40	**Pegmatite:** higher qtz content ~50%, feldspar 40%, amphibole - biotite 10%	12756	156.50	157.45	0.95	4.3	1.9	31	144	20.0	0.52
		contacts are irregular, ~070° ACA										
157.40	159.98	**Carbonatite-Beforsite:** same as 150.70 - 156.20	12757	157.45	158.65	1.20	30.3	14.3	149	748	13.2	3.39
		interval contains numerous amph-biot healed fractures and fragments of amphiboles	12758	158.65	159.95	1.30	28.6	13.8	133	692	13.2	3.43
159.98	172.40	**Pegmatite:** megacrystalline, ~50-60% quartz, feldspar 40%, +/- biotite										
		lower contact with carbonatite sharp 080° ACA										
172.40	190.05	**Carbonatite-Beforsite:** same as 150.70 - 156.20	12759	172.30	173.20	0.90	31.0	14.6	151	934	7.4	3.70
		in places, finer grained, amphiboles aligned 085° ACA	12760	173.20	174.00	0.80	30.9	14.9	154	1325	3.0	3.29
		traces of pyroclore +/- columbite	12761	174.00	175.00	1.00	30.9	15.0	215	1832	3.2	3.40
		sheared zones contain biotite +/- chlorite	12762	175.00	176.00	1.00	29.5	13.9	138	926	7.5	2.95
		grain size/crystal size increasing at depth	12763	176.00	177.00	1.00	31.6	14.0	219	1345	24.7	4.25
			12764	177.00	178.00	1.00	29.3	12.3	184	420	54.8	5.02
		175.50: amphibole rich, shear/brecciated	12765	178.00	179.00	1.00	31.6	14.1	123	271	29.5	4.36
		177.00 - 180.00: strong alignment of amphiboles 085° ACA	12766	179.00	180.00	1.00	32.7	13.1	263	664	74.5	6.98
		180.80: brecciated, amphibole/biotite healed	12767	180.00	181.00	1.00	31.5	12.9	165	534	33.1	6.08
		182.30: biotite rich bands 080° ACA	12768	181.00	182.00	1.00	29.8	12.7	193	553	58.2	5.27
		184.00 - 186.00: shearing, increased amphibole content	12769	182.00	183.00	1.00	32.4	12.7	86	251	24.1	6.92
		185.90 - 188.10: biotite/amphibole rich breccia, pyrochlore, biotite,	12770	183.00	184.00	1.00	30.8	14.1	214	646	51.1	4.52
		magnetite rich	12771	184.00	185.00	1.00	23.8	16.7	114	433	17.7	0.97
		189.30 - 189.60: biotite rich shear	12772	185.00	186.00	1.00	26.9	16.1	161	608	12.0	2.10
		lower contact 075° ACA	12773	186.00	187.00	1.00	19.2	20.8	36	81	9.2	0.05
			12774	187.00	188.00	1.00	13.4	23.8	11	47	4.7	0.06

APPENDIX 3A: CONTINUED

Hole No.: FDDH-2

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
			12775	188.00	189.00	1.00	29.0	16.8	176	528	27.2	2.19
			12776	189.00	190.00	1.00	23.4	14.7	170	1063	12.1	4.60
190.05	193.70	**Gneiss-fenite:** strong biotite alteration, banded S1 075° ACA	12777	190.00	191.00	1.00	30.2	14.8	208	3332	2.7	3.79
		similar to 129.80 - 133.50	12778	191.00	192.00	1.00	30.2	15.0	176	2721	< .5	2.93
			12779	192.00	193.70	1.70	3.7	4.1	18	575	3.2	1.08
193.70	202.50	**Carbonatite-Beforsite:** same as 172.40 - 190.05, coarser	12780	193.70	195.00	1.30	29.3	14.2	117	2018	< .5	3.76
			12781	195.00	196.00	1.00	29.5	13.6	294	2607	17.0	3.98
		194.85: 10 cm biotite rich zone, sheared	12782	196.00	197.00	1.00	30.2	14.9	127	463	12.1	2.66
		200.15: 10 cm biotite rich zone, sheared 070° ACA	12783	197.00	198.00	1.00	28.7	14.8	189	629	16.0	2.99
		lower contact brecciated	12784	198.00	199.00	1.00	31.4	14.1	156	427	20.1	4.40
			12785	199.00	200.00	1.00	32.0	13.6	322	1101	36.5	5.24
			12786	200.00	201.00	1.00	27.3	14.9	182	865	9.5	3.40
			12787	201.00	202.00	1.00	30.4	14.6	242	5298	3.3	3.48
			12788	202.00	202.55	0.55	20.5	15.6	190	2215	4.3	3.58
202.50	208.11	**Gneiss-fenite:** biotite-feldspar gneiss	12789	202.55	203.55	1.00	8.4	10.1	33	635	< .5	1.63
		upper contact contains strong biotite alteration and brecciation over 40 cm										
		205.00 - 205.10: 10 cm wide carbonatite zone, pyrrhotite along the contacts										
	208.11	E.O.H.										

APPENDIX 3A: **CONTINUED**

Company:	**Commerce Resources Corp.**	**Date Started:**		**Core Size:**	HQ
Project:	**Fir Carbonatite 2001**	**Date Finished:**		**Depth:**	181.92
Claim:	**FIR 8**	**Logged By:**	Jeff Reeder		
				Co-ordinates (UTM NAD83)	
Hole No.:	**FDDH-3**	**Bearing:**	0.0°	**Easting (m):**	352064
		Inclination:	90.0°	**Northing (m):**	5797919

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
0.00	6.10	Overburden										
6.10	37.00	<u>Gneiss:</u> unit has a mottled white/grey/brown appearance contains zones of amphibolite and/or sheared biotite rich mylonitic zones garnet rich zones are associated with deformation (mylonites) mineral assemblage consists of qtz-feldspar-biotite +/- mica Alteration: weak, mainly along fractures and deformation zones Structure: S1 ~ 070° - 080° ACA qtz veins: 070° ACA 6.10 - 7.00: oxidized fractured surfaces 8.90: biotite rich shear ~080° ACA 9.35 - 9.50: qtz vein, 075° ACA 9.95 - 10.05: biotite rich shear 14.20 - 14.80: garnet rich, sheared, amphibolite (richterite) 16.40: qtz vein, 15 cm, 085° ACA 18.70 - 19.20: garnet rich zone 19.20 - 23.05: mottled green/brown/white, 20-30% amphibole, S1 075° ACA 23.05 - 31.65: mottled white/brown/dark grey contains minor zones of strong amphibole 27.05: qtz vein, 2 cm, 080° ACA 27.80: qtz vein, 045° ACA 36.90: qtz vein, 10 cm, 070° ACA										
37.00	40.40	<u>Amphibolite:</u> massive texture, dark green, contains minor biotite rich zones/along fractured or shear faces mineralogy constists of pyroxene/amphibole, minor biotite Alteration: chlorite alteration, replacement of mafics										

Hole No.: FDDH-3

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		37.50: qtz vein, 080° ACA lower contact has high amphibole (70%) & banded 070° ACA										
40.40	70.40	**Gneiss:** same as 6.10 - 37.00 40.40 - 48.00: mottled green/brown/white gneiss 41.65 - 42.00: chlorite-cc veins 080° ACA 42.25: biotite rich shear, 090° irregular contacts 44.15: qtz-cc vein 45.90: qtz-pyrrhotite vein, brecciated 48.00 - 54.00: strong banded texture, 090° ACA 54.50: qtz vein, 080° ACA 56.50: chlorite-qtz brecciated zone 57.00 - 58.00: qtz veinlets parallel S1 075° ACA 62.05: qtz veinlets, 075° ACA 63.12 - 63.35: qtz-cc veinlets, 070° ACA 68.00: S1 070° ACA 70.10 - 70.20: qtz-pyrrhotite, 080° ACA										
70.40	75.00	**Amphibolite:** same as 37.00 - 40.40 73.90 - 74.80: strongly sheared zone, ~060° ACA 74.80 - 75.00: qtz vein/healed shear zone 75.50: S1 055° ACA										
75.00	101.30	**Gneiss:** same as 6.10 - 37.00 75.00 - 77.00: minor shearing, 020° ACA 78.00: qtz vein, 6 cm, 065° ACA 78.00 - 82.00: mottled green/white/brown amphibole rich gneiss 80.40: garnet rich zone 86.90 - 88.20: garnet rich zone 89.00 - 95.00: 10% garnet 91.00: S1 ~ 080° ACA	12651	99.66	100.90	1.34	3.9	4.8	11	462	2.3	0.83

APPENDIX 3A: **CONTINUED**

Hole No.: FDDH-3

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		97.00 - 97.20: qtz-cc vein, 070° ACA										
		97.20 - 100.90: strong shearing 060° ACA										
		contains high biotite content										
		100.90 - 101.30: breccia, amphibole-cc rich										
101.30	112.68	**Carbonatite:** mottled grey/white/black/green	12652	100.90	102.00	1.10	30.6	14.5	147	590	34.5	3.88
		mainly fine grained, amphibole (richterite) 0.5 cm laths	12653	102.00	103.00	1.00	33.9	12.4	330	1234	73.2	5.48
		groundmass generally dolomitic, in places is porphyritic	12654	103.00	104.00	1.00	36.0	10.7	256	892	74.1	4.92
		~3-5% apatite, high magnetite content	12655	104.00	105.00	1.00	37.5	4.3	305	987	94.4	5.09
		later healing breccias and open spaces	12656	105.00	106.00	1.00	32.4	13.5	208	1117	35.2	3.59
			12657	106.00	107.00	1.00	29.3	14.7	220	1467	11.0	4.14
		102.70 - 105.50: breccia zone, 5-10% mag-pyroclore/columbite	12658	107.00	108.00	1.00	31.2	15.1	183	1141	11.4	3.72
		109.90 - 111.36: breccia zones, amphibole rich	12659	108.00	109.00	1.00	32.0	15.2	171	1093	7.4	3.66
			12660	109.00	109.80	0.80	31.7	14.6	183	1252	6.0	3.97
			12661	109.80	111.36	1.56	23.5	15.8	232	2023	6.4	3.01
			12662	111.36	112.68	1.32	30.6	15.0	183	1999	3.2	2.93
112.68	119.30	**Gneiss-fenite:** strong biotite alteration, unit has a mottled green/	12663	112.68	113.37	1.11	7.1	17.7	18	553	7.3	3.92
		white/brown appearance										
		Alteration: strong biotite, chlorite along shear/fracture surfaces										
		Structure: S1 080° - 090° ACA										
		115.80: qtz vein, 3 cm, 080° ACA										
		116.00 - 117.00: garnet rich zone										
		117.50: S1 075° ACA										
119.30	167.30	**Pegmatite:** coarse grained, white/light pink/brown, 50% feldspar,										
		40% quartz, 10% biotite										
		119.30 - 127.00: ~3-4% biotite	12664	129.00	130.00	1.00	1.6	0.4	0	44	8.5	0.03
		127.00 - 130.50: 10-15% biotite, large booklets										
		130.50 - 132.50: 70% quartz										
		132.50 - 142.50: 5% biotite, elevated REE in geochem	12665	141.80	142.55	0.75	0.8	0.1	8	31	41.0	0.12
		142.50 - 143.00: pyroxene/augite crystals, 3 cm										

APPENDIX 3A: **CONTINUED**

Hole No.: FDDH-3

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
167.30	167.60	**Gneiss:** same as 112.68 - 119.30, S1 090° ACA										
167.60	168.20	**Pegmatite:** same as 119.30 - 167.30, contacts ~090° ACA										
168.20	181.92	**Gneiss:** unit is similar to the overlying gneiss but contains a higher bioite content near the upper contact unit is relatively unaltered near bottom of the interval 170.85: 10 cm pyrrhotite-qtz vein 080° ACA 181.40: S1 ~060° ACA										
	181.92	E.O.H.										

APPENDIX 3A: **CONTINUED**

Company: Commerce Resources Corp.
Project: Fir Carbonatite 2001
Claim: FIR 8

Hole No.: FDDH-4

Date Started:
Date Finished:
Logged By: Jeff Reeder

Bearing: 0.0°
Inclination: 90.0°

Core Size: HQ
Depth: 208.29

Co-ordinates (UTM NAD83)
Easting (m): 352120
Northing (m): 5797697

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
0.00	4.88	Overburden										
4.88	57.25	**Garnet-Mica Schist:** mottled black/white/green/pink coarse grained, contains large mica booklets garnet content varies, up to 20-30% some zones of mafic rich minerals (pyroxenes/amphiboles) leaving the core with a greenish appearance Alteration: weak, fragmental qtz veins parallel to S1 Structure: S1 065° - 070° ACA, poorly developed 4.88 - 8.00: oxidation on fractured surfaces 11.00 - 16.00: abundant garnet 20-30%, mottled pink/grey 16.80: qtz veinlets, 060° ACA 17.35 - 17.45: qtz vein, irregular contacts 23.20 - 23.50: qtz veins, 3 cm, 020° ACA 24.50: S1 065° ACA 31.00 - 34.90: mica-plagioclase schist, very coarse grained S1 060° - 070° ACA, difficult to determine 34.90 - 36.20: massive mottled texture 38.00 - 36.00: similar to 31.00 - 34.90 46.00 - 49.80: green/white/dark grey, weak S1 massive in places, garnets up to 3 cm 49.80 - 57.25: medium grained, poorly developed gneissic banding 070° - 080° ACA										
57.25	158.20	**Gneiss:** banded, augen texture, mottled appearance, dark grey/ light grey/white, fine to medium grained mineralogy mainly biotite-plagioclase +/- quartz Alteration: weak, contains zones of silica enrichment, leaves a bleach/washed appearance; biotite content increasing towards lower contact; pyrrhotite often associated with silica Structure: S1 080° ACA, qtz veins parallel to S1										

APPENDIX 3A: CONTINUED

Hole No.: FDDH-4

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		59.40 - 59.50: qtz vein, 10 cm, 060° ACA										
		63.50: S1 085° ACA										
		63.90: qtz vein, 080° ACA										
		66.00: qtz vein, 65 cm, pyrrhotite, contacts 080° ACA										
		67.00 - 71.80: mottled dark grey/black/white										
		73.45: qtz vein, 080° ACA										
		74.10 - 74.15: qtz-feldspar pegmatite dike										
		74.00 - 76.00: well developed augen texture										
		77.30 - 77.50: garnet rich shear zone										
		78.00 - 78.65: mottled green/brown sheared zone contains sericite/biotite, shear 080° ACA										
		79.90 - 84.00: strong banding (gneissic) 085° ACA										
		84.00 - 87.00: minor S1 banding										
		87.05 - 87.40: silica flooded zone										
		87.40 - 95.00: S1 banding 080° ACA										
		94.50: sheared zone, gouge, mica										
		95.00 - 104.00: dark grey massive texture, locally small zones of amphibolite										
		104.00 - 105.00: biotite alteration strong, shearing parallel to S1 080° ACA										
		105.00 - 113.00: strong banded appearance, S1 080° ACA										
		113.00 - 113.30: coarse pegmatite dike										
		115.40: qtz vein, 5 cm, 090° ACA										
		118.30 - 119.50: silica enriched zone										
		124.70 - 125.00: silica enriched zone										
		137.00 - 137.50: silica enriched zone										
		139.60: S1 070° ACA										
		139.60 - 140.00: silica enriched zone parallel to S1										
		140.00 - 146.00: numerous sheared zones containing biot/ser										
		150.40: biotite rich shear, 085° ACA										
		151.30 - 151.60: qtz-feldspar zone										
		151.60 - 154.00: qtz-feldspar bands 080° ACA										
		157.40 - 158.20: strong biotite alteration (fenite)	12801	157.00	158.16	1.16	4.1	8.0	42.86	661	42.3	1.52

Hole No.: FDDH-4

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
158.20	179.55	**Carbonatite-Beforsite:** dolomitic, light grey/white/green	12802	158.16	159.00	0.84	29.5	14.4	161	1990	3.1	3.12
		porphyritic texture - fine grained dolomitic groundmass with	12803	159.00	160.00	1.00	30.7	14.7	231	1245	38.0	3.70
		amphibole phenocrysts aligned perpendicular to core axis	12804	160.00	161.00	1.00	30.8	14.7	186	633	54.6	3.68
		coarse zones where carbonatite shows flow breccia texture	12805	161.00	162.00	1.00	30.9	14.8	143	401	61.4	3.96
		Alteration/Mineralization: pyrrhotite occurs as disseminations,	12806	162.00	163.00	1.00	30.3	14.4	100	208	44.4	3.87
		magnetite and pyrochlore are also present	12807	163.00	164.00	1.00	29.7	14.4	165	182	17.0	3.00
		Structure: lower contact 060° ACA, upper contact is irregular	12808	164.00	165.00	1.00	30.8	13.9	340	902	10.6	3.15
		at 045° ACA	12809	165.00	166.00	1.00	29.6	14.6	341	2532	10.2	3.14
			12810	166.00	167.00	1.00	29.3	14.8	253	1841	7.6	2.75
		158.20 - 159.40: coarse grained	12811	167.00	168.00	1.00	29.8	14.7	303	2152	11.0	3.16
		159.00: biotite rich shear 090° ACA	12812	168.00	169.00	1.00	29.8	14.7	359	1682	22.1	3.11
		159.40 - 162.90: fine grained	12813	169.00	170.00	1.00	30.2	14.2	456	870	54.8	4.12
		160.50 - 161.20: abundant pyrochlore	12814	170.00	171.00	1.00	30.3	14.5	189	285	50.9	3.96
		161.00: amphibole aligned at 085° ACA	12815	171.00	172.00	1.00	30.9	14.5	174	316	72.6	4.67
		162.90 - 163.80: coarse grained	12816	172.00	173.00	1.00	30.8	14.4	177	401	111.0	4.50
		163.80 - 172.50: fine grained	12817	173.00	174.00	1.00	30.7	14.4	269	631	173.0	4.31
		172.50 - 174.55: coarse grained	12818	174.00	175.00	1.00	30.4	14.1	143	339	88.3	4.72
			12819	175.00	176.00	1.00	30.8	14.1	134	283	82.0	5.10
			12820	176.00	177.00	1.00	30.7	14.2	80	175	60.0	5.21
			12821	177.00	178.00	1.00	31.1	14.2	117	267	70.2	5.00
			12822	178.00	179.56	1.56	29.4	14.4	172	397	120.0	4.77
179.55	188.00	**Pegmatite:** coarse grained, contains ~40% quartz, 50% feldspar, 10% biotite	12823	179.56	181.00	1.44	2.6	1.7	41	102	37.9	0.12
		leucocratic, massive, fragments of garnet rich gneiss located near lower contact										
188.00	191.15	**Gneiss:** strongly banded biotite-feldspar-quartz-garnet gneiss										
		strong biotite alteration leaving the core with a brown/white banded appearance										
191.15	193.40	**Mylonitic Zone:** strongly deformed zone containing sheared and stretched gnessisc and carbonatite fragments	12824	192.00	193.40	1.40	16.3	14.7	238	1731	40.9	3.48
		shearing at 065° ACA										

Hole No.: FDDH-4

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
193.40	199.15	**Carbonatite-Beforsite:** similar to 158.20 - 179.55	12825	193.40	195.00	1.60	25.8	14.1	208	978	27.5	3.93
			12826	195.00	196.00	1.00	30.0	14.0	203	598	85.0	4.96
		193.40 - 194.00: coarse grained	12827	196.00	197.00	1.00	32.4	11.9	298	981	73.1	5.99
		194.00 - 194.20: shear zone/biotite rich	12828	197.00	198.00	1.00	31.2	13.5	194	754	33.1	5.25
		194.20 - 195.80: coarse grained	12829	198.00	199.15	1.15	34.9	10.0	381	1590	64.4	5.32
		195.80 - 199.15: fine grained										
199.15	199.30	**Breccia:** sheared zone 045° ACA, numerous fractures	12830	199.15	200.00	0.85	1.8	3.5	3	191	4.5	0.40
199.30	208.79	**Gneiss:** banded texture, brown/white/grey color mineralogy of biotite-plagioclase-quartz similar to other gneissic units Structure: S1 070° ACA										
		206.00: biotite rich shear 060° ACA										
	208.79	E.O.H.										

APPENDIX 3A: CONTINUED

Company:	**Commerce Resources Corp.**	**Date Started:**		**Core Size:**	HQ
Project:	**Fir Carbonatite 2001**	**Date Finished:**		**Depth:**	227.38
Claim:	**FIR 8**	**Logged By:**	Jeff Reeder		
				Co-ordinates (UTM NAD83)	
Hole No.:	**FDDH-5**	**Bearing:**	0.0°	**Easting (m):**	352125
		Inclination:	90.0°	**Northing (m):**	5797774

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
0.00	4.27	Overburden										
4.27	8.20	**Gneiss:** mottled brown/white/light grey texture abundant plagioclase-biotite fragments (orthogneiss)										
8.20	28.30	**Amphibolite:** mafic rich unit, mottled white/green massive texture contains large augite porphyry fragments sheared texture in places 23.00 - 25.00: sheared zone 075° ACA										
28.30	29.30	**Garnet-mica Schist:** mottled black/white/pink medium to coarse grained mineralogy consists mainly of plagioclase-biotite-garnet S1 080° ACA										
29.30	41.10	**Amphibolite:** similar to 8.20 - 28.30 29.30 - 31.50: shearing 075° ACA 32.00: fracture surfaces containing epidote 34.50 - 34.70: large augite porphyry fragments 36.00 - 36.20: qtz-epidote zone 38.00 - 39.90: large fragments lower contact is marked by biotite rich shear										
41.10	51.50	**Garnet-mica Schist:** similar to 28.30 - 29.30 garnet content ~30% ranging in size from 0.1-0.5 cm 42.60: qtz vein, 5 cm, 080° ACA 43.50 - 44.50: augen gneiss texture in places 44.50 - 48.50: abundant mica 47.60: qtz-cc vein 065° ACA										

Hole No.: FDDH-5

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
51.50	93.80	**Gneiss:** mottled grey/brown banded texture, fine to med grained mineralogy consists of biotite-plagioclase +/- quartz Alteration: zones of silica enrichment parallel to S1, fracture surfaces contain sericite-chlorite with silica selvages Structure: S1 080° ACA, qtz veins generally parallel to S1 51.90: qtz-pyrrhotite vein, 3 cm, 065° ACA 53.40: qtz-pyrrhotite breccia, ~10 cm 54.00 - 54.30: qtz-pyrrhotite vein 59.30: biotite rich zone (shear) 61.30 - 61.50: qtz-garnet rich healed shear zones 64.90: qtz vein, 3 cm, 080° ACA, pyrite-pyrrhotite 67.00 - 67.10: qtz-pyrite-pyrrhotite vein, 075° ACA 74.30 - 74.80: blocks of mafic/amphibolite sheared 75.20: qtz vein, 3 cm, 070° ACA banding 070° ACA, pink feldspar zones with qtz-po veins 76.50 - 76.70: sheared amphibolite 77.50 - 85.50: contains zones with schistose textures S1 070° ACA throughout this zone 80.00: small zones of chlorite-silica enrichment 81.20: qtz vein irregular 83.80 - 84.00: amphibolite fragments 84.55 - 84.70: pegmatite dike, irregular contacts 86.00 - 86.20: qtz breccia 88.40 - 88.70: brecciated amphibolite 91.00: qtz vein 92.90: pegmatite dike										
93.80	95.00	**Biotite Schist:** similar to 41.10 - 51.50, but minor garnet (2-3%)										
95.00	104.70	**Gneiss:** similar to 51.50 - 93.80 strongly banded texture, 085° ACA, qtz veins 085° ACA										

Hole No.: FDDH-5

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
104.70	112.30	**Biotite Schist:** similar to previous schist, but very little garnet										
		poorly developed S1, black/brown/white in color										
112.30	151.05	**Gneiss:** similar to previous gnessic units	12666	150.05	151.00	0.95	1.5	3.8	12	462	17.9	0.57
		strongly developed banded texture										
		mineralogy consists of biotite-plagioclase										
		113.00: qtz vein, 090° ACA										
		115.00: S1 085° ACA										
		119.25 - 120.20: breccia zone, sheared chlorite, qtz flooded										
		122.10: qtz vein, 1 cm, 055° ACA										
		124.05 - 124.20: siliceous zone										
		128.00 - 129.50: breccia zone, amphibolite/epidote										
		133.80 - 134.00: siliceous zone										
		137.60 - 138.30: amphibolite fragments										
		139.80 - 139.95: qtz-pyrrhotite vein										
		141.10 - 142.40: qtz vein, 5 cm, 045° ACA										
		144.90 - 145.50: biotite-sericite-chlorite sheared zone										
151.05	151.80	**Carbonatite-Beforsite:** light grey/white/green	12667	151.00	152.40	1.40	18.1	11.7	45	995	9.8	1.93
		porphyritic texture, generally fine grained but coarser in areas										
		showing a flow type breccia										
		contains zones of amphibolite fragments										
		accessory minerals apatite/richterite and pyrrhotite/magnetite										
151.80	152.30	**Gneiss:** biotite-amphibole rich, sheared, contains pyrrhotite,										
		lower contact 045° ACA										
152.30	179.30	**Carbonatite-Beforsite:** similar to 151.05 - 151.80	12668	152.40	153.70	1.30	29.8	15.0	330	1644	6.5	3.88
			12669	153.70	155.00	1.30	30.9	16.3	171	506	2.4	3.28
		152.30 - 153.00: coarse grained	12670	155.00	156.00	1.00	31.4	16.7	232	530	1.9	3.53
		155.70 - 157.00: coarse grained	12671	156.00	157.00	1.00	31.0	16.7	171	606	2.6	2.90
		157.00 - 162.00: brecciated, contains amphibole rich fragments,	12672	157.00	158.10	1.10	28.2	10.2	159	607	2.8	3.65
		pyrrhotite and possible columbite	12673	158.10	159.00	0.90	29.8	14.9	159	580	1.9	2.88
		165.20 - 165.70: large fragment of amphibolite 000° ACA	12674	159.00	160.00	1.00	30.9	14.0	195	596	3.7	4.38

APPENDIX 3A: CONTINUED

Hole No.: FDDH-5

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		173.55 - 174.00: sheared zone biotite rich	12675	160.00	161.00	1.00	28.5	13.8	159	509	2.9	3.26
		176.00 - 178.00: carbonatite fragments, qtz healed breccia with	12676	161.00	162.00	1.00	22.6	12.9	101	436	22.7	1.85
		amphibolite fragments	12677	162.00	163.00	1.00	30.4	15.3	366	2551	11.6	2.45
		178.00 - 179.30: coarse grained carbonate	12678	163.00	164.00	1.00	30.7	15.6	281	2038	5.6	2.49
			12679	164.00	165.00	1.00	32.1	15.4	330	2908	8.4	3.29
			12680	165.00	166.00	1.00	27.7	15.4	208	1394	4.2	2.14
			12681	166.00	167.00	1.00	31.6	15.8	330	2075	11.8	3.17
			12682	167.00	168.00	1.00	30.0	15.4	220	1394	8.0	2.61
			12683	168.00	169.00	1.00	30.1	15.1	183	1419	14.3	2.90
			12684	169.00	170.00	1.00	32.0	15.3	269	2528	10.1	3.22
			12685	170.00	171.00	1.00	30.7	15.4	208	2694	3.3	2.29
			12686	171.00	172.20	1.20	32.0	15.7	159	815	11.8	2.73
			12687	172.20	173.35	1.15	31.9	15.0	171	1580	5.4	3.09
			12688	173.35	174.00	0.65	9.0	13.6	57	1005	3.0	2.08
			12689	174.00	175.00	1.00	31.2	15.1	171	1542	5.3	2.95
			12690	175.00	175.87	0.87	30.6	15.4	159	1461	3.2	2.49
			12691	175.87	177.00	1.13	21.3	11.5	96	531	15.1	1.40
			12692	177.00	178.15	1.15	28.3	13.7	183	1135	21.0	2.88
			12693	178.15	179.30	1.15	30.6	14.7	208	1211	18.9	3.64
179.30	180.90	**Pegmatite:** large carbonatite fragment from 180.10 - 180.55	12694	179.30	180.00	0.70	2.0	0.5	12	73	8.3	0.26
		containing qtz-pyrrhotite vein and amphibole	12695	180.00	180.90	0.90	18.1	7.1	87	311	28.6	2.10
180.90	188.80	**Carbonatite-Beforsite:** similar to previous units	12696	180.90	182.00	1.10	40.3	4.3	305	806	122.0	4.71
			12697	182.00	183.00	1.00	40.7	6.7	281	725	101.0	4.20
		180.90 - 185.10: 3-4% disseminated magnetite with pyrochlore	12698	183.00	184.00	1.00	43.5	4.5	281	737	100.0	4.47
		185.10 - 188.70: fine grained carbonatite pyrochlore and minor	12699	184.00	185.00	1.00	36.8	10.6	256	667	89.8	4.90
		magnetite observed	12700	185.00	186.00	1.00	33.1	13.8	305	1211	69.3	3.94
			12701	186.00	187.00	1.00	31.1	14.0	195	582	39.0	4.03
			12702	187.00	188.00	1.00	31.7	14.1	317	1321	46.6	3.85
			12703	188.00	188.80	0.80	32.9	13.0	256	887	32.4	6.01
188.80	199.40	**Pegmatite:** coarse grained containing equal amounts of quartz	12704	188.80	190.80	1.00	2.0	0.7	9	51	13.4	0.08
		and plagioclase, 10% biotite (large booklets)										

APPENDIX 3A: **CONTINUED**

Hole No.: **FDDH-5**

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
199.40	201.40	Gneiss-fenite: biotite altered, brown/white										
201.40	207.40	Carbonatite-Beforsite: similar to previous units	12705	201.40	202.15	0.75	25.7	13.0	67.16	1280	0.0	3.73
		entire unit is coarse grained containing pyrrhotite +/- magnetite	12706	202.15	203.15	1.00	27.0	15.2	158.7	883	26.9	2.71
			12707	203.15	204.00	0.85	23.1	17.6	134.3	408	21.2	0.54
			12708	204.00	205.00	1.00	28.9	16.2	78.15	216	23.3	2.11
			12709	205.00	206.20	1.20	31.2	14.6	268.6	1204	21.9	3.59
			12710	206.20	207.30	1.10	30.8	15.2	122.1	371	22.3	2.98
207.40	227.38	Gneiss: similar to previous units	12711	207.30	208.60	1.30	7.1	7.0	12	300.9	16.1	0.84
		strongly banded, upper contact contains strong biotite alteration over 4 meters										
		small siliceous zones which are parallel to S1										
	227.38	E.O.H.										

Company: Commerce Resources Corp.	Date Started:	Core Size:	HQ
Project: Fir Carbonatite 2001	Date Finished:	Depth:	221.29
Claim: FIR 8	Logged By: Jeff Reeder	Co-ordinates (UTM NAD83)	
Hole No.: FDDH-6	Bearing: 0.0°	Easting (m):	352131
	Inclination: 90.0°	Northing (m):	5797612

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
0.00	6.70	Overburden										
6.70	11.60	**Gneiss:** banded mottled texture, dark grey/brown/white fine to medium grained Structure: S1 080° ACA lower contact contains high garnet 6.70 - 11.00: oxidation 8.00: qtz vein, 5 cm, 070° ACA										
11.60	14.90	**Amphibolite:** massive texture in places, dark green/grey poorly developed S1, some shearing lower contact, over ~50 cm strongly sheared biotite-sericite rich										
14.90	16.20	**Gneiss:** similar to dark brown/grey mottled texture S1 085° ACA										
16.20	22.30	**Amphibolite:** similar to 11.60 - 14.90 21.00 - 22.00: strain/sheared, increase in biotite content 22.00 - 22.30: quartz vein marks lower contact										
22.30	59.70	**Gneiss:** similar to previous gneissic units mottled dark brown/bluish grey/banded appearance fine to medium grained Alteration: silica enrichment occurs along bands Structure: S1 080° ACA, qtz veins parallel to S1 22.90: qt vein, 7 cm, 075° ACA 24.50: S1 080° ACA 28.50: qtz vein, 3 cm, 080° ACA, pyrrhotite										

Hole No.: FDDH-6

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		38.15: qtz vein, 7.5 cm, 080° ACA 43.50: biotite rich shear 090° ACA 44.40 - 44.60: garnet rich shear, chl-bio 080° ACA 45.50: qtz vein fragments 48.00: S1 090° ACA 50.75 - 51.10: qtz veining, sheared, pyrrhotite 51.40 - 51.90: silica flooded zone 52.65: qtz vein, 2.5 cm 52.95: qtz vein, 2.5 cm 54.00: S1 090° ACA 55.15: qtz-pyrrhotite vein, 5 cm, 080° ACA 56.85: biotite-quartz sheared zone										
59.70	61.90	**Amphibolite:** garnetiferous massive texture, garnet rich, pink/dark grey/white clay on fractured surfaces upper and lower contacts parallel to S1 080° ACA										
61.90	114.90	**Gneiss:** similar to 22.30 - 59.70 63.80: S1 085° ACA 64.50 - 65.20: augen texture 66.50 - 66.80: silica enrichment 72.90: qtz vein, 10 cm, 075° ACA 73.00: S1 085° ACA 74.30: quartz veinlets, 080° ACA 80.00: biotite rich shear 83.40: qtz vein, 3 cm, 090° ACA 83.50 - 84.40: mylonitic texture, increase in garnet content (10%) 88.40 - 88.50: sheared zone 88.60 - 98.00: strong banded texture 085° ACA 100.80 - 101.10: biotite rich shears, 080° - 090° ACA										

APPENDIX 3A: CONTINUED

Hole No.: FDDH-6

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		102.85: biotite/chlorite/sericite sheared zones 105.25 - 105.60: biotite/chlorite/sericite sheared zones 080° ACA 109.50 - 109.85: strongly sheared, biotite rich 080° ACA lower contact contains abundant mica over 50 cm										
114.90	119.80	**Biotite Schist:** high mica content, coarse grained poorly developed foliation, S1 060° ACA does contain gneissic banding in places, gradational contacts										
119.80	140.05	**Gneiss:** similar to previous gneissic unit upper contact contains minor mica 125.80 - 126.05: qtz vein 126.80: shear-breccia zone, mica 133.00: S1 070° ACA 133.50: qtz vein, 070° ACA										
140.05	142.90	**Fault Zone:** strongly sheared, contains clay/chlorite on fractured surfaces 140.12 - 140.27: qtz vein, upper contact 045° ACA, lower contact 080° ACA 141.40 - 142.20: qtz-plagioclase sheared/stretched fragments										
142.90	148.44	**Amphibolite:** massive texture, dark green to army green contains pyroxene phenocrysts 146.25 - 146.75: sheared zone similar to 141.40 - 142.20										
148.44	169.77	**Gneiss:** similar to previous gneissic units 151.00 - 152.20: garnet rich ~20% 156.45 - 156.60: qtz vein 156.70 - 156.75: biotite rich shear 157.40 - 157.70: biotite rich shear, kink banding present	12851	168.77	169.77	1.00	5.3	8.4	24	713	3.7	1.96

APPENDIX 3A: **CONTINUED**

Hole No.: FDDH-6

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
		160.00: S1 085° ACA										
		162.50 - 163.50: strongly banded, 3 cm garnet localized along shear planes 060° ACA										
169.77	177.40	**Carbonatite-Beforsite:** fine to coarse grained	12852	169.77	171.00	1.23	29.3	14.7	180.4	2073	3.2	3.29
		amphiboles consist of 10-15% of the unit aligned 080° ACA	12853	171.00	172.00	1.00	29.8	14.6	313.6	2524	12.3	3.83
		apatite 3-5%, magnetite, pyrochlore and columbite	12854	172.00	173.00	1.00	30.5	14.8	315.3	1875	19.6	4.06
		upper contact 050° ACA	12855	173.00	174.00	1.00	30.9	15.0	274	660	44.6	4.05
			12856	174.00	175.00	1.00	31.2	15.2	160	572	43.7	3.84
		169.77 - 171.20: coarse grained	12857	175.00	176.00	1.00	28.6	13.8	175	616	33.3	3.60
		171.20 - 174.00: fine grained aphanitic groundmass	12858	176.00	177.40	1.40	27.4	13.4	171	492	36.9	4.01
		174.00 - 176.20: coarse grained										
		176.20 - 176.80: sheared minor, rich in amphibole										
177.40	179.80	**Pegmatite:** coarse grained, feldspar-quartz rich, 10% biotite in large booklets										
		does contain a mixture of carbonatite fragments (33%? Of unit)										
179.80	183.25	**Breccia:** interval contains a mixture of amphibolite, pegmatite and	12859	181.00	182.00	1.00	19.2	13.1	83	475	27.1	2.88
		carbonatite fragments ranging in size from 2 cm to several 10s of cm	12860	182.00	183.25	1.25	23.8	12.0	89	254	35.4	3.52
		fragments are both rounded and angular										
183.25	196.00	**Carbonatite-Beforsite:** same as previous unit 169.77 - 177.40	12861	183.25	184.15	0.90	30.9	14.2	192	311	107.0	4.81
		unit is uniform throughout containing mostly coarse zones	12862	184.15	185.00	0.85	30.5	14.7	214	445	9.4	2.54
			12863	185.00	185.90	0.90	29.7	14.7	228	497	6.1	2.47
		193.10 - 196.00: fractured/brecciated core, containing magnetite	12864	186.10	187.00	0.90	29.0	14.6	559	2325	23.6	2.58
		and ferrocolumbite	12865	187.00	188.00	1.00	29.4	14.8	248	1677	4.4	2.92
			12866	188.00	189.00	1.00	29.8	15.0	251	997	5.6	2.61
			12867	189.00	190.00	1.00	29.4	14.6	354	1536	12.3	3.02
			12868	190.00	191.00	1.00	29.6	15.0	140	232	11.3	2.45
			12869	191.00	192.00	1.00	30.5	14.7	172	516	27.1	3.32
			12870	192.00	193.00	1.00	31.6	14.2	224	445	127.0	4.78
			12871	193.00	194.00	1.00	32.0	14.0	195	405	124.0	4.75
			12872	194.00	195.00	1.00	32.5	14.3	173	397	130.0	5.36
			12873	195.00	196.90	1.90	23.8	11.2	135	346	58.6	3.07

Hole No.: FDDH-6

From (m)	To (m)	Description	Sample	From (m)	To (m)	Length (m)	CaO (%)	MgO (%)	Ta_2O_5 (ppm)	Nb_2O_5 (ppm)	U (ppm)	P_2O_5 (%)
196.00	209.00	**Gneiss:** biotite-felspar +/- quartz, mottled brown/white/dark grey similar to previous gneissic units 198.50 - 199.00: siliceous zone 199.80 - 199.90: qtz vein, 15 cm 201.70: S1 050° ACA 205.00: S1 045° ACA 206.00: S1 055° ACA 206.10 - 206.50: fractured core/gouge	12874	196.90	198.00	1.10	6.1	4.5	29	257	6.5	0.81
209.00	213.25	**Quartz Vein-Breccia**: the unit contains mainly quartz and is strongly brecciated/fractured minor clay/chlorite exists on fractured surfaces										
213.25	214.00	**Fault Zone:** consists of clay/chlorite on fractured surfaces appears later than shears/faults above										
214.00	221.29	**Gneiss-augen:** mottled white/brown grey/bluish coarse grained, feldspar crystals are stretched and elongated along the S1 direction, S1 085° ACA										
	221.29	E.O.H.										

APPENDIX 3B: GEOTECHNICAL LOGS FOR DRILL HOLES FDDH-1 TO FDDH-6

Drill Hole: FDDH-1
Logged by: J. Reeder

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
0.00	4.88	4.88	0.73	0.00	96	15.0	Overburden
4.88	8.23	3.35	2.50	0.39	59	74.6	Gneiss
8.23	10.97	2.74	2.56	0.31	45	93.4	
10.97	13.72	2.75	2.51	0.35	48	91.3	
13.72	16.46	2.74	2.18	0.39	56	79.6	
16.46	17.37	0.91	0.68	0.00	39	74.7	
17.37	20.42	3.05	2.97	0.74	44	97.4	
20.42	23.47	3.05	2.98	1.35	31	97.7	
23.47	26.52	3.05	3.08	1.07	28	101.0	
26.52	29.57	3.05	2.93	1.57	15	96.1	
29.57	32.61	3.04	2.57	0.76	26	84.5	
32.61	35.66	3.05	2.99	1.07	32	98.0	
35.66	38.71	3.05	2.98	2.00	17	97.7	
38.71	41.76	3.05	2.91	1.55	23	95.4	
41.76	44.81	3.05	2.70	1.08	57	88.5	
44.81	47.85	3.04	2.77	0.47	60	91.1	
47.85	50.90	3.05	2.83	0.58	61	92.8	
50.90	53.95	3.05	3.02	1.59	19	99.0	
53.95	57.00	3.05	3.03	0.75	41	99.3	
57.00	60.04	3.04	2.89	1.16	40	95.1	
60.04	63.09	3.05	3.00	1.54	19	98.4	
63.09	66.14	3.05	3.02	2.30	10	99.0	
66.14	69.19	3.05	2.87	1.09	37	94.1	
69.19	72.24	3.05	2.91	0.64	40	95.4	
72.24	75.29	3.05	2.95	1.19	43	96.7	
75.29	78.33	3.04	3.01	2.13	11	99.0	
78.33	81.38	3.05	2.98	2.38	9	97.7	
81.38	84.43	3.05	3.01	2.29	21	98.7	
84.43	87.48	3.05	2.90	1.95	35	95.1	
87.48	90.53	3.05	3.08	1.64	21	101.0	
90.53	93.57	3.04	2.91	1.16	21	95.7	Amphibolite
93.57	96.62	3.05	2.99	1.89	18	98.0	Gneiss
96.62	99.66	3.04	2.93	1.22	30	96.4	
99.66	102.71	3.05	2.98	1.06	38	97.7	
102.71	105.76	3.05	2.99	0.15	52	98.0	
105.76	108.81	3.05	2.60	0.16	68	85.2	Carbonatite
108.81	111.86	3.05	2.96	0.92	23	97.0	
111.86	114.91	3.05	3.01	2.08	14	98.7	
114.91	117.96	3.05	3.04	1.88	14	99.7	
117.96	121.01	3.05	2.97	2.07	10	97.4	
121.01	124.05	3.04	2.79	0.76	26	91.8	Gneiss

APPENDIX 3B: **CONTINUED**

Drill Hole: **FDDH-1**
Logged by: **J. Reeder**

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
124.05	127.10	3.05	2.95	0.95	29	96.7	
127.10	130.15	3.05	2.95	0.30	71	96.7	
130.15	133.20	3.05	3.06	0.63	39	100.3	
133.20	136.25	3.05	2.97	1.28	31	97.4	Carbonatite
136.25	139.29	3.04	2.99	2.13	11	98.4	
139.29	142.34	3.05	2.99	1.07	37	98.0	
142.34	145.39	3.05	3.02	1.44	24	99.0	
145.39	148.44	3.05	3.03	1.88	27	99.3	
148.44	151.49	3.05	2.94	1.79	14	96.4	
151.49	154.53	3.04	3.03	1.22	24	99.7	
154.53	157.58	3.05	2.88	0.75	35	94.4	Gneiss
157.58	160.63	3.05	2.91	1.34	25	95.4	Carbonatite
160.63	163.68	3.05	2.87	1.80	13	94.1	Gneiss
163.68	166.73	3.05	3.05	1.44	22	100.0	Carbonatite
166.73	169.77	3.04	3.02	2.09	20	99.3	
169.77	172.82	3.05	3.07	2.15	13	100.7	
172.82	175.87	3.05	3.05	1.20	24	100.0	
175.87	178.92	3.05	2.97	2.27	12	97.4	
178.92	181.97	3.05	2.90	1.60	31	95.1	
181.97	185.01	3.04	3.05	1.29	36	100.3	Gneiss
185.01	188.06	3.05	2.99	0.70	58	98.0	
188.06	191.11	3.05	2.99	2.06	9	98.0	
191.11	194.16	3.05	2.98	1.10	28	97.7	
194.16	197.21	3.05	2.97	1.20	34	97.4	
197.21	199.03	1.82	2.06	0.58	27	113.2	

APPENDIX 3B: **CONTINUED**

Drill Hole: FDDH-2
Logged by: J. Reeder

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
6.10	7.62	1.52	1.39	0.80	12	91.4	Overburden
7.62	8.23	0.61	0.45	0.30	2	73.8	Gneiss
8.23	11.28	3.05	2.99	2.05	18	98.0	
11.28	14.33	3.05	3.01	2.60	7	98.7	
14.33	17.37	3.04	3.10	0.50	34	102.0	
17.37	20.42	3.05	3.05	1.50	24	100.0	
20.42	23.47	3.05	3.10	1.34	25	101.6	
23.47	26.52	3.05	3.06	1.80	20	100.3	
26.52	29.57	3.05	3.01	1.60	35	98.7	
29.57	32.61	3.04	2.90	1.47	38	95.4	
32.61	35.66	3.05	3.20	1.65	24	104.9	
35.66	38.71	3.05	3.00	1.87	24	98.4	
38.71	41.76	3.05	2.60	1.24	22	85.2	
41.76	44.81	3.05	3.01	1.80	14	98.7	
44.81	47.85	3.04	2.99	1.82	16	98.4	
47.85	50.90	3.05	3.10	1.86	16	101.6	
50.90	53.95	3.05	3.05	1.80	14	100.0	
53.95	57.00	3.05	3.04	2.40	11	99.7	
57.00	60.05	3.05	3.03	2.15	10	99.3	
60.05	63.09	3.04	2.99	2.16	17	98.4	
63.09	66.14	3.05	2.99	2.10	16	98.0	
66.14	69.19	3.05	3.13	2.60	7	102.6	
69.19	72.24	3.05	3.02	0.47	36	99.0	
72.24	75.29	3.05	3.05	1.82	24	100.0	
75.29	78.34	3.05	2.95	1.87	20	96.7	
78.34	81.38	3.04	3.03	1.80	29	99.7	
81.38	84.43	3.05	3.03	1.79	16	99.3	
84.43	87.48	3.05	2.93	1.25	22	96.1	
87.48	90.53	3.05	2.97	1.80	19	97.4	
90.53	93.57	3.04	3.05	1.27	29	100.3	
93.57	96.62	3.05	2.85	2.07	12	93.4	
96.62	99.67	3.05	2.98	1.80	21	97.7	
99.67	102.72	3.05	3.03	2.05	20	99.3	
102.72	105.77	3.05	3.20	1.60	20	104.9	
105.77	108.81	3.04	2.98	1.80	15	98.0	
108.81	111.86	3.05	2.92	1.10	31	95.7	
111.86	114.91	3.05	3.00	2.60	8	98.4	Beforsite
114.91	117.96	3.05	3.04	2.08	11	99.7	Pegmatite
117.96	121.01	3.05	3.00	2.20	13	98.4	Beforsite
121.01	124.05	3.04	3.05	1.79	12	100.3	
124.05	127.10	3.05	3.04	2.55	7	99.7	
127.10	130.15	3.05	2.95	2.20	8	96.7	

APPENDIX 3B: **CONTINUED**

Drill Hole: **FDDH-2**
Logged by: **J. Reeder**

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
130.15	133.20	3.05	2.93	1.22	21	96.1	Gneiss
133.20	136.25	3.05	2.93	1.84	16	96.1	Pegmatite
136.25	139.29	3.04	3.00	1.32	19	98.7	
139.29	142.34	3.05	3.06	2.40	11	100.3	
142.34	145.39	3.05	3.15	2.20	13	103.3	
145.39	148.44	3.05	2.90	2.00	10	95.1	
148.44	151.49	3.05	3.15	2.27	11	103.3	Beforsite
151.49	154.53	3.04	2.93	2.10	13	96.4	
154.53	157.58	3.05	3.02	0.92	26	99.0	Pegmatite
157.58	160.63	3.05	NO core				Beforsite
160.63	163.67	3.04	NO core				Pegmatite
163.67	166.72	3.05	NO core				
166.72	169.77	3.05	3.04	2.16	15	99.7	
169.77	172.82	3.05	3.04	1.93	16	99.7	Beforsite
172.82	175.87	3.05	3.00	2.60	9	98.4	
175.87	178.92	3.05	2.99	1.30	24	98.0	
178.92	181.97	3.05	2.98	1.19	22	97.7	
181.97	185.01	3.04	2.97	1.16	30	97.7	
185.01	188.06	3.05	3.05	2.15	12	100.0	
188.06	191.11	3.05	3.00	1.03	30	98.4	
191.11	194.16	3.05	3.05	1.56	23	100.0	Gneiss
194.16	197.21	3.05	2.85	1.86	14	93.4	Beforsite
197.21	200.25	3.04	3.00	1.05	23	98.7	
200.25	203.30	3.05	3.01	1.56	25	98.7	Gneiss
203.30	206.35	3.05	2.80	0.53	34	91.8	
206.35	208.11	1.76	1.70	0.32	30	96.6	

APPENDIX 3B: CONTINUED

Drill Hole: FDDH-3
Logged by: J. Reeder

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
0.00	6.10	6.10	0.00	0.00	>50	0.0	Overburden
6.10	8.23	2.13	1.80	0.32	>50	84.5	Gneiss
8.23	11.28	3.05	3.10	2.15	24	101.6	
11.28	14.33	3.05	2.93	1.80	17	96.1	
14.33	17.37	3.04	3.05	1.70	23	100.3	
17.37	20.42	3.05	3.00	1.80	16	98.4	
20.42	23.47	3.05	2.60	0.31	>50	85.2	
23.47	26.52	3.05	2.90	0.95	32	95.1	
26.52	29.57	3.05	3.05	1.84	15	100.0	
29.57	32.61	3.04	2.99	1.90	18	98.4	
32.61	35.66	3.05	3.05	1.10	28	100.0	
35.66	38.71	3.05	3.10	0.40	35	101.6	Amphibolite
38.71	41.76	3.05	3.04	0.95	24	99.7	Gneiss
41.76	44.81	3.05	2.97	2.00	18	97.4	
44.81	47.85	3.04	3.00	2.30	15	98.7	
47.85	50.90	3.05	2.99	1.67	19	98.0	
50.90	53.95	3.05	3.02	1.67	19	99.0	
53.95	57.00	3.05	2.98	0.55	35	97.7	
57.00	60.05	3.05	3.07	0.78	40	100.7	
60.05	63.09	3.04	2.91	1.15	28	95.7	
63.09	66.14	3.05	3.06	2.15	17	100.3	
66.14	69.19	3.05	2.91	0.95	36	95.4	
69.19	72.24	3.05	2.86	1.78	18	93.8	Amphibolite
72.24	75.29	3.05	2.98	1.70	21	97.7	
75.29	78.34	3.05	3.02	1.67	16	99.0	Gneiss
78.34	81.38	3.04	3.09	2.18	10	101.6	
81.38	84.43	3.05	2.98	1.44	16	97.7	
84.43	87.48	3.05	2.87	2.44	12	94.1	
87.48	90.53	3.05	2.80	1.60	17	91.8	
90.53	93.57	3.04	2.95	2.11	18	97.0	
93.57	96.62	3.05	2.90	0.97	34	95.1	
96.62	99.67	3.05	2.76	0.75	40	90.5	
99.67	102.72	3.05	2.71	0.70	39	88.9	Beforsite
102.72	105.77	3.05	2.80	0.58	45	91.8	
105.77	108.81	3.04	3.07	0.73	36	101.0	
108.81	111.86	3.05	2.84	2.07	12	93.1	
111.86	114.91	3.05	2.99	1.96	17	98.0	Gneiss
114.91	117.96	3.05	2.93	1.52	21	96.1	
117.96	121.01	3.05	2.91	2.04	13	95.4	Pegmatite
121.01	124.05	3.04	3.07	2.50	13	101.0	
124.05	127.10	3.05	3.08	2.65	7	101.0	
127.10	130.15	3.05	3.09	2.79	4	101.3	

APPENDIX 3B: **CONTINUED**

Drill Hole: **FDDH-3**
Logged by: **J. Reeder**

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
130.15	133.20	3.05	2.99	2.49	13	98.0	
133.20	136.25	3.05	3.08	2.76	6	101.0	
136.25	139.29	3.04	3.01	2.97	3	99.0	
139.29	142.34	3.05	2.92	2.50	10	95.7	
142.34	145.39	3.05	2.96	2.27	10	97.0	
145.39	148.44	3.05	3.04	2.37	10	99.7	
148.44	151.49	3.05	3.06	2.69	5	100.3	
151.49	154.53	3.04	2.98	2.45	11	98.0	
154.53	157.58	3.05	3.00	1.85	20	98.4	
157.58	160.63	3.05	2.97	1.00	23	97.4	
160.63	163.67	3.04	3.00	2.00	18	98.7	
163.67	166.72	3.05	2.74	2.74	7	89.8	
166.72	169.77	3.05	2.60	2.60	10	85.2	Gneiss/Peg
169.77	172.82	3.05	1.80	1.80	12	59.0	Gneiss
172.82	175.87	3.05	2.20	2.20	12	72.1	
175.87	178.92	3.05	1.98	1.98	17	64.9	
178.92	181.97	3.05	1.70	1.70	14	55.7	

APPENDIX 3B: CONTINUED

Drill Hole: FDDH-4
Logged by: J. Reeder

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
0.00	4.88	4.88	0.00	0.00	>50	0.0	Overburden
4.88	8.23	3.35	2.40	0.23	28	71.6	Garnet schist
8.23	11.28	3.05	2.84	0.76	30	93.1	
11.28	14.33	3.05	3.15	1.98	12	103.3	
14.33	17.37	3.04	2.92	1.14	22	96.1	
17.37	20.42	3.05	3.10	1.80	16	101.6	
20.42	23.47	3.05	3.05	2.10	14	100.0	
23.47	26.52	3.05	2.90	1.50	22	95.1	
26.52	29.57	3.05	2.90	0.46	38	95.1	
29.57	32.61	3.04	3.06	2.52	10	100.7	
32.61	35.66	3.05	3.05	2.38	8	100.0	
35.66	38.71	3.05	3.05	1.30	19	100.0	
38.71	41.76	3.05	3.08	1.73	14	101.0	
41.76	44.81	3.05	2.85	2.09	10	93.4	
44.81	47.85	3.04	3.09	1.98	14	101.6	
47.85	50.90	3.05	3.02	1.99	12	99.0	
50.90	53.95	3.05	2.94	1.68	11	96.4	
53.95	57.00	3.05	3.07	2.30	11	100.7	
57.00	60.05	3.05	3.00	1.16	24	98.4	Gneiss
60.05	63.09	3.04	3.02	0.88	22	99.3	
63.09	66.14	3.05	2.98	0.69	33	97.7	
66.14	69.19	3.05	2.96	1.92	20	97.0	
69.19	72.24	3.05	3.05	1.95	16	100.0	
72.24	75.29	3.05	3.04	1.43	23	99.7	
75.29	78.34	3.05	3.05	2.35	13	100.0	
78.34	81.38	3.04	2.98	1.87	17	98.0	
81.38	84.43	3.05	3.12	1.90	27	102.3	
84.43	87.48	3.05	2.90	2.00	17	95.1	
87.48	90.53	3.05	2.96	2.20	12	97.0	
90.53	93.57	3.04	3.08	1.78	22	101.3	
93.57	96.62	3.05	3.05	1.65	24	100.0	
96.62	99.67	3.05	3.00	2.08	8	98.4	
99.67	102.72	3.05	3.05	2.25	11	100.0	
102.72	105.77	3.05	2.98	1.77	15	97.7	
105.77	108.81	3.04	3.04	2.14	17	100.0	
108.81	111.86	3.05	3.03	2.29	15	99.3	
111.86	114.91	3.05	3.09	2.12	12	101.3	
114.91	117.96	3.05	2.86	1.69	20	93.8	
117.96	121.01	3.05	2.96	1.23	29	97.0	
121.01	124.05	3.04	2.90	1.72	16	95.4	
124.05	127.10	3.05	2.89	1.35	21	94.8	
127.10	130.15	3.05	3.12	2.38	8	102.3	

APPENDIX 3B: **CONTINUED**

Drill Hole: **FDDH-4**
Logged by: **J. Reeder**

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
130.15	133.20	3.05	2.95	2.19	15	96.7	
133.20	136.25	3.05	2.95	2.09	15	96.7	
136.25	139.29	3.04	3.02	1.40	18	99.3	
139.29	142.34	3.05	3.05	1.25	18	100.0	
142.34	145.39	3.05	2.93	1.15	20	96.1	
145.39	148.44	3.05	3.09	1.56	16	101.3	
148.44	151.49	3.05	3.00	1.67	23	98.4	
151.49	154.53	3.04	3.00	0.70	31	98.7	
154.53	157.58	3.05	2.96	0.04	48	97.0	
157.58	160.63	3.05	2.97	1.11	35	97.4	Beforsite
160.63	163.67	3.04	3.01	0.38	27	99.0	
163.67	166.72	3.05	3.04	2.32	15	99.7	
166.72	169.77	3.05	3.05	1.45	23	100.0	
169.77	172.82	3.05	3.03	1.56	15	99.3	
172.82	175.87	3.05	2.73	0.57	37	89.5	
175.87	178.92	3.05	2.87	0.75	34	94.1	
178.92	181.97	3.05	2.72	1.62	23	89.2	Pegmatite
181.97	185.01	3.04	2.85	1.69	20	93.8	
185.01	188.06	3.05	3.05	2.42	8	100.0	
188.06	191.11	3.05	3.05	1.34	37	100.0	Gneiss
191.11	194.16	3.05	2.99	1.59	17	98.0	Beforsite
194.16	197.21	3.05	3.04	1.66	16	99.7	
197.21	200.25	3.04	2.84	1.51	23	93.4	Gneiss
200.25	203.30	3.05	2.45	0.83	44	80.3	
203.30	206.35	3.05	2.40	1.26	35	78.7	
206.35	208.79	2.44	2.06	1.08	28	84.4	

APPENDIX 3B: CONTINUED

Drill Hole: FDDH-5
Logged by: J. Reeder

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
0.00	4.27	4.27	4.27	0.00	>50	100.0	Overburden
4.27	8.23	3.96	3.60	1.40	24	90.9	Gneiss
8.23	11.28	3.05	3.00	1.50	24	98.4	Amphibolite
11.28	14.33	3.05	3.05	1.50	26	100.0	
14.33	17.37	3.04	2.98	1.60	18	98.0	
17.37	20.42	3.05	3.01	1.89	16	98.7	
20.42	23.47	3.05	3.00	1.45	13	98.4	
23.47	26.52	3.05	3.04	2.71	10	99.7	Gneiss
26.52	29.57	3.05	3.04	1.85	17	99.7	
29.57	32.61	3.04	3.02	2.10	12	99.3	
32.61	35.66	3.05	3.05	2.10	14	100.0	
35.66	38.71	3.05	3.03	1.30	20	99.3	
38.71	41.76	3.05	3.01	1.67	17	98.7	
41.76	44.81	3.05	3.06	1.53	13	100.3	
44.81	47.85	3.04	3.06	1.34	15	100.7	
47.85	50.90	3.05	2.96	1.64	19	97.0	
50.90	53.95	3.05	3.10	1.49	23	101.6	
53.95	57.00	3.05	3.02	2.20	11	99.0	
57.00	60.05	3.05	3.05	2.56	11	100.0	
60.05	63.09	3.04	2.94	2.06	15	96.7	
63.09	66.14	3.05	3.18	2.59	11	104.3	
66.14	69.19	3.05	2.93	0.15	30	96.1	
69.19	72.24	3.05	2.92	1.97	16	95.7	
72.24	75.29	3.05	3.12	1.59	17	102.3	
75.29	78.34	3.05	3.03	1.62	17	99.3	
78.34	81.38	3.04	3.02	2.12	14	99.3	
81.38	84.43	3.05	2.91	2.10	14	95.4	
84.43	87.48	3.05	3.00	0.55	38	98.4	
87.48	90.53	3.05	3.00	0.42	29	98.4	
90.53	93.57	3.04	3.00	1.50	22	98.7	
93.57	96.62	3.05	2.87	1.00	35	94.1	
96.62	99.67	3.05	2.92	1.60	27	95.7	
99.67	102.72	3.05	3.02	2.20	13	99.0	
102.72	105.77	3.05	3.06	2.67	7	100.3	
105.77	108.81	3.04	3.00	1.75	13	98.7	
108.81	111.86	3.05	3.01	2.50	11	98.7	
111.86	114.91	3.05	3.00	2.02	13	98.4	
114.91	117.96	3.05	3.05	2.52	10	100.0	
117.96	121.01	3.05	3.05	1.54	22	100.0	
121.01	124.05	3.04	2.90	1.43	19	95.4	
124.05	127.10	3.05	3.10	0.60	34	101.6	
127.10	130.15	3.05	3.00	1.80	17	98.4	

APPENDIX 3B: **CONTINUED**

Drill Hole: **FDDH-5**
Logged by: **J. Reeder**

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
130.15	133.20	3.05	3.15	1.80	17	103.3	
133.20	136.25	3.05	3.10	0.67	40	101.6	
136.25	139.29	3.04	3.09	0.95	35	101.6	Amphibolite
139.29	142.34	3.05	3.05	2.05	17	100.0	Gneiss
142.34	145.39	3.05	2.93	1.40	20	96.1	
145.39	148.44	3.05	2.93	1.66	20	96.1	
148.44	151.49	3.05	3.09	1.24	24	101.3	
151.49	154.53	3.04	3.05	0.18	>50	100.3	Beforsite
154.53	157.58	3.05	2.70	1.69	19	88.5	
157.58	160.63	3.05	3.09	2.44	9	101.3	
160.63	163.67	3.04	3.00	2.49	7	98.7	
163.67	166.72	3.05	3.04	1.68	14	99.7	
166.72	169.77	3.05	3.12	2.53	7	102.3	
169.77	172.82	3.05	3.04	2.12	10	99.7	
172.82	175.87	3.05	3.02	1.25	25	99.0	Mylonite
175.87	178.92	3.05	3.05	2.57	5	100.0	Beforsite
178.92	181.97	3.05	3.00	2.60	11	98.4	Pegmatite
181.97	185.01	3.04	3.05	2.35	11	100.3	Beforsite
185.01	188.06	3.05	3.03	2.10	10	99.3	
188.06	191.11	3.05	3.01	1.92	11	98.7	Pegmatite
191.11	194.16	3.05	3.06	2.10	7	100.3	
194.16	197.21	3.05	2.10	2.30	8	68.9	
197.21	200.25	3.04	3.10	1.93	16	102.0	Gneiss
200.25	203.30	3.05	2.99	1.09	36	98.0	Beforsite
203.30	206.35	3.05	2.94	0.35	>50	96.4	
206.35	209.40	3.05	2.85	0.59	35	93.4	Gneiss
209.40	212.45	3.05	2.80	1.30	30	91.8	
212.45	215.49	3.04	2.50	0.54	31	82.2	
215.49	218.54	3.05	2.99	0.49	53	98.0	
218.54	221.59	3.05	2.80	1.15	31	91.8	
221.59	224.64	3.05	2.88	1.20	29	94.4	

APPENDIX 3B: **CONTINUED**

Drill Hole: **FDDH-6**
Logged by: **J. Reeder**

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
0.00	6.70	6.70	0.00	0.00	>50	0.0	Overburden
6.70	8.23	1.53	1.00	0.15	13	65.4	Gneiss
8.23	11.28	3.05	2.80	0.00	45	91.8	
11.28	14.33	3.05	2.75	0.85	21	90.2	Amphibolite
14.33	17.37	3.04	2.60	1.19	37	85.5	Gneiss
17.37	20.42	3.05	2.95	2.26	9	96.7	Amphibolite
20.42	23.47	3.05	3.03	1.45	18	99.3	Gneiss
23.47	26.52	3.05	3.00	0.33	>50	98.4	
26.52	29.57	3.05	3.06	0.84	26	100.3	
29.57	32.61	3.04	3.00	1.51	27	98.7	
32.61	35.66	3.05	3.05	2.08	14	100.0	
35.66	38.71	3.05	2.95	2.03	12	96.7	
38.71	41.76	3.05	3.03	2.30	11	99.3	
41.76	44.81	3.05	3.01	1.37	15	98.7	
44.81	47.85	3.04	3.00	2.15	13	98.7	
47.85	50.90	3.05	3.00	1.56	21	98.4	
50.90	53.95	3.05	3.00	1.38	19	98.4	
53.95	57.00	3.05	3.05	2.28	13	100.0	
57.00	60.05	3.05	2.96	1.43	30	97.0	Amphibolite
60.05	63.09	3.04	3.02	1.47	19	99.3	Gneiss
63.09	66.14	3.05	3.02	1.73	16	99.0	
66.14	69.19	3.05	3.03	1.45	20	99.3	
69.19	72.24	3.05	3.10	1.57	20	101.6	
72.24	75.29	3.05	2.90	1.20	26	95.1	
75.29	78.34	3.05	3.07	1.35	24	100.7	
78.34	81.38	3.04	2.94	1.95	17	96.7	
81.38	84.43	3.05	2.92	1.83	19	95.7	
84.43	87.48	3.05	2.90	1.66	22	95.1	
87.48	90.53	3.05	3.01	1.25	22	98.7	
90.53	93.57	3.04	2.95	1.25	23	97.0	
93.57	96.62	3.05	2.20	0.80	>50	72.1	
96.62	99.67	3.05	2.70	0.63	44	88.5	
99.67	102.72	3.05	3.10	1.40	26	101.6	
102.72	105.77	3.05	2.86	1.63	16	93.8	
105.77	108.81	3.04	2.96	1.00	33	97.4	
108.81	111.86	3.05	2.90	1.13	30	95.1	
111.86	114.91	3.05	2.90	1.26	25	95.1	
114.91	117.96	3.05	3.04	2.17	15	99.7	Mica Schist
117.96	121.01	3.05	3.04	1.56	17	99.7	Gneiss
121.01	124.05	3.04	2.99	2.18	11	98.4	
124.05	127.10	3.05	2.90	0.86	33	95.1	
127.10	130.15	3.05	3.00	1.20	23	98.4	

APPENDIX 3B: CONTINUED

Drill Hole: FDDH-6
Logged by: J. Reeder

From (m)	To (m)	Length of Interval	Measured Length	RQD	Number of Fractures	Percent Recovery	Rock Type
130.15	133.20	3.05	3.05	2.30	12	100.0	
133.20	136.25	3.05	2.92	1.76	21	95.7	
136.25	139.29	3.04	3.04	2.80	4	100.0	
139.29	142.34	3.05	2.95	1.59	22	96.7	Fault Zone
142.34	145.39	3.05	3.02	2.58	11	99.0	Amphibolite
145.39	148.44	3.05	2.99	2.04	10	98.0	
148.44	151.49	3.05	2.97	2.43	6	97.4	Gneiss
151.49	154.53	3.04	2.95	2.21	14	97.0	
154.53	157.58	3.05	3.00	0.44	42	98.4	
157.58	160.63	3.05	2.62	1.25	27	85.9	
160.63	163.67	3.04	3.00	0.87	28	98.7	
163.67	166.72	3.05	3.02	1.64	20	99.0	
166.72	169.77	3.05	3.00	0.85	37	98.4	
169.77	172.82	3.05	2.90	1.15	35	95.1	Beforsite
172.82	175.87	3.05	3.05	2.30	11	100.0	
175.87	178.92	3.05	3.05	2.26	15	100.0	Pegmatite
178.92	181.97	3.05	2.80	1.45	32	91.8	Hetero Breccia
181.97	185.01	3.04	2.92	2.80	18	96.1	Beforsite
185.01	188.06	3.05	2.97	1.60	19	97.4	Pegmatite
188.06	191.11	3.05	2.75	1.05	25	90.2	Beforsite
191.11	194.16	3.05	3.05	1.00	>50	100.0	
194.16	197.21	3.05	2.10	0.30	>50	68.9	Gneiss
197.21	200.25	3.04	3.05	0.80	38	100.3	
200.25	203.30	3.05	3.05	0.79	38	100.0	
203.30	206.35	3.05	0.92	0.92	40	30.2	
206.35	209.40	3.05	1.90	0.20	>50	62.3	Fault Zone
209.40	212.45	3.05	3.01	1.35	24	98.7	Brxx Qtz Vein
212.45	215.49	3.04	2.87	1.01	38	94.4	Fault Zone
215.49	218.54	3.05	2.94	1.80	21	96.4	Gneiss
218.54	221.29	2.75	2.72	1.99	11	98.9	

APPENDIX 4: ESTIMATES OF TANTALUM AND NIOBIUM RESOURCES FOR THE FIR CARBONATITE

James McCrea
Resource Geologist

Memo

To: Dave Hodge, Director, Commerce Resources Corp.

From: Jim McCrea

CC:

Date: May 23, 2002

Re: Fir Carbonatite Property, Resource Estimate

The resource estimate for the Fir Carbonatite is based on two phases of diamond drilling totaling 10 diamond drill holes. Anschutz Mining in 1981 drilled the first four holes and Commerce Resources drilled the subsequent six holes in 2001. The drill logs and sample data were made available to the author for completion of this estimate.

The drill hole data and assays were loaded into Gemcom software. North – south and east – west sections were cut through the deposit along the drill fences. The carbonatite units were correlated on section using 3D polylines that "snapped" to the true 3D locations of the contacts based on the drill holes. The sectional polylines were then stitched together to form a solid body model. The carbonatite unites were extrapolated 25 metres along strike (north and south) and 25 meters into the hill (east). The carbonatite unit was extrapolated 50 metres to the west towards the surface outcrop. This solid model was used to create a rock type model and percent model.

The drill holes were composited to 1.5 metres inside the carbonatite solid model and composite grades were calculated for Ta_2O_3, Nb_2O_3 and P_2O_5. The composite length was based on previous work completed on the Verity Carbonatite. Compositing produced 266 data points for the Fir deposit.

Univariant statistics were completed on the composited data. Histograms showed the deposit has a normal distribution and a log-normal distribution. Probability plots were inconclusive. Variogram analysis was not possible because of low data density.

A block model was created using 10x10x10 blocks and the grade was interpolated into the blocks using inverse distance squared method. The interpolation ranges used were 100 metres in the x-y direction and 50 meters in the z direction. These ranges were chosen to allow the interpolation to fill the blocks between drill fences. The model was also constrained by the down dip and along strike extrapolation distance of 25 metres and the up dip extrapolation distance of 50 metres.

APPENDIX 4: CONTINUED

The block model was visually checked to determine that there were no obvious anomalies in the interpolation. The resource was tabulated using a series of cut off grades based on Ta_2O_3. The resource is summarized in the following table.

Fir Carbonatite Resource, May 23, 2002:

Cut-off Ta_2O_3	Tonnes (x1000)	Ta_2O_3 (g/t)	Nb_2O_3 (g/t)	P_2O_5 (%)
150	5244.073	194.037	897.214	3.50

The deposit contains 5.2 million tonnes grading 194 grams per tonne Ta_2O_3, 897 grames per tonne Nb_2O_3, and 3.5% P_2O_5. This preliminary resource is classified as inferred. A copy of the resource tabulation is appended to the back of this report.

Recommendations for the Fir Carbonatite property are further delineation drilling. This should include a fence of holes between the current resource area and the surface out crop to the west as well as extensions of the drill grid along strike to the north and south.

Jim McCrea

APPENDIX 5: STATEMENT OF QUALIFICATIONS

The work described in this report was supervised by Jody Dahrouge of Dahrouge Geological Consulting Ltd.

Mr. Smith is a geological consultant with Dahrouge Geological Consulting Ltd. based in Edmonton, Alberta. He obtained a B.Sc. (Honors) and a M.Sc. in geology from the University of Alberta, Edmonton in 1998 and 2002, respectively. He is registered as a Geol.I.T. with the Association of Professional Engineers, Geologists and Geophysicists of Alberta. He has 4 years of experience in mineral exploration.

Mr. Dahrouge is a geological consultant with Dahrouge Geological Consulting Ltd. based in Edmonton, Alberta. He obtained a degrees in geology and computing science from the University of Alberta, Edmonton in 1988 and 1994, respectively. He is a member of the Canadian Institute of Mining and Metallurgy and is registered as a P.Geol. with the Association of Professional Engineers, Geologists and Geophysicists of Alberta. He has more than 10 years of experience in mineral exploration.

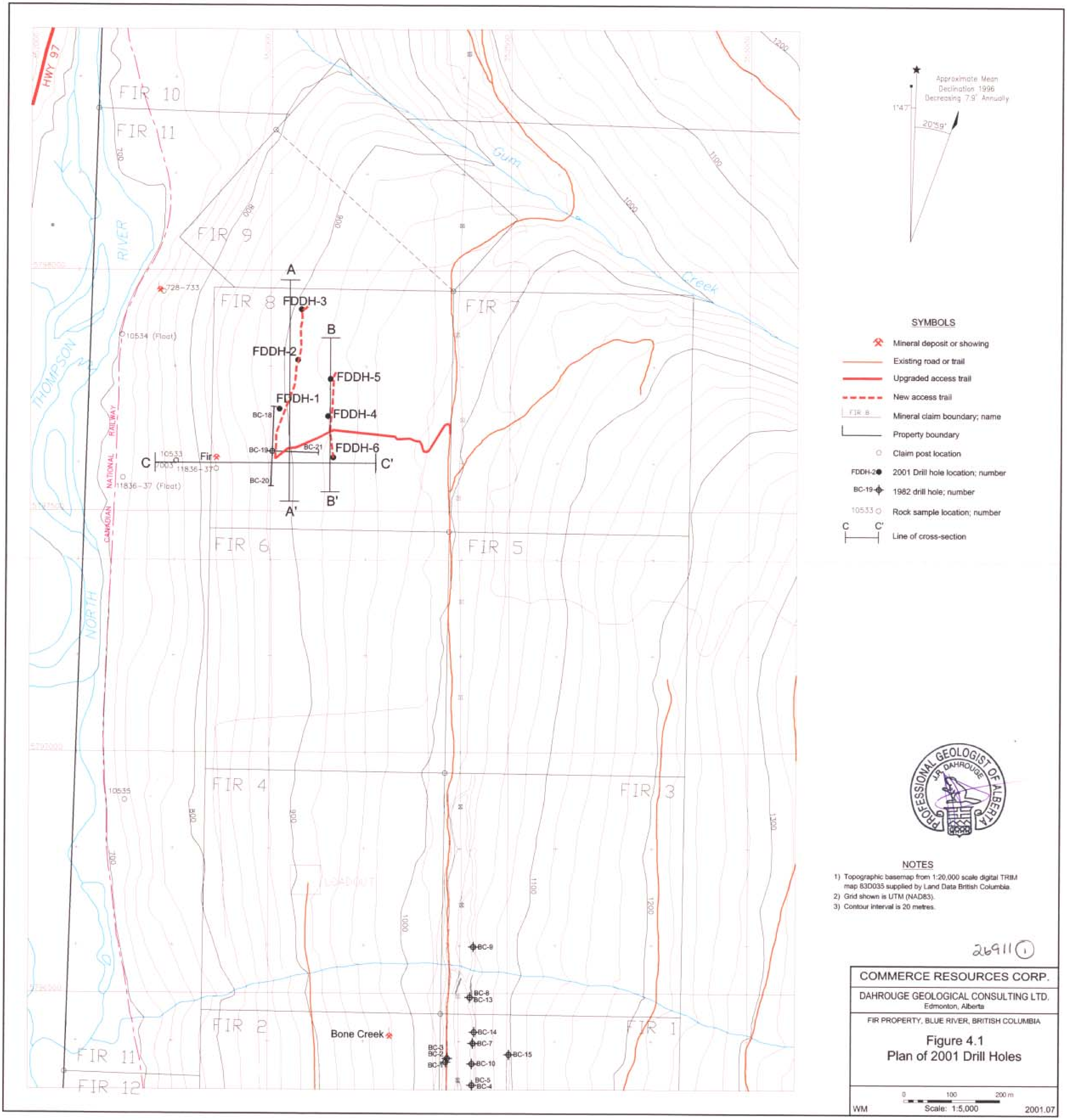

Figure 4.1
Plan of 2001 Drill Holes