



Ministry of Energy & Mines Energy & Minerals Division Geological Survey Branch

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

Assessment Report on a Soil and Rock Sampling Program, River Jurdan Property \$30635 2
AUTHOR(S) Chris Solic SIGNATURE(S)
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) N/A YEAR OF WORK 2010 STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) 4787020, August 24, 2010
PROPERTY NAME <u>River Jurdan Property</u> CLAIM NAME(S) (on which work was done) <u>S24937, S59186, S59187, S47839, S30114, S68843,</u> <u>S68844, 605895</u>
COMMODITIES SOUGHT Silver-Lead-Zinc, Pare Earth Elements
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN <u>082M001</u> MINING DIVISION <u>Revelsfoke</u> NTS <u>BCGS 082M.018 and 019</u> LATITUDE <u>S1 ° 07 ' 30 "</u> LONGITUDE <u>118 ° 24 ' 44 "</u> (at centre of work) OWNER(S) 1) <u>Silver Phoenix Resources Inc</u> 2)
MAILING ADDRESS <u>Box 134</u> <u>Canoe, BC VOE 1 KO</u> OPERATOR(S) [who paid for the work] 1) <u>Silver Phoenix Resources Inc</u> 2)
MAILING ADDRESS. Box 134 Cance, BC VOE1KO
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude): High grade metamorphic rocks, biotife schist, (alc-silicate gneiss, marble, carbonatife, Copeland Synchine, massive sulphide layer, schalerife, galena, eyrrhotite, eyrite with quartz and barite, lead-zinc-silver mineralization, rare-earth-element mineralization
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS 1788, 8752, 20513, 2079, 30374

(OVER)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping		-	
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL			
(number of samples analysed for)	1.1.1	construction of	
Soil98 5	oil samples	530114,568845,559181	24508.18
Silt	1	¥	(1000 L
Rock 15 g	rab Samples	530114,568845	6127.0*
Other			
DRILLING			
(total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail	-		
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST	\$30635.22

BC Geological Survey Assessment Report 31754

ASSESSMENT REPORT

on a

SOIL AND ROCK SAMPLING PROGRAM

RIVER JORDAN PROPERTY

REVELSTOKE MINING DIVISION, BC BCGS 82M.018, 019

Exploration Work was done on MTO claims: 524937, 530114, 568843, 559187

Assessment Work was filed on: 524937, 530114, 547839, 559186, 559187, 568843 568844, 605895

NTS: 82M/01W LATITUDE: 51°07'30''N LONGITUDE: 118°24'44'' W OWNER: Silver Phoenix Resources Inc OPERATOR: Silver Phoenix Resources Inc CONSULTANTS: X-Mark Minerals AUTHOR: Chris Solic, B.Sc Geology DATE: November 10, 2010

TABLE OF CONTENTS

1.0	SUMMARY	. 3
2.0	INTRODUCTION	. 3
3.0	LOCATION AND ACCESS	. 4
4.0	TOPOGRAPHY	. 4
5.0	PROPERTY DESCRIPTION	.4
6.0	EXPLORATION HISTORY	. 6
7.0	REGIONAL GEOLOGY	. 8
8.0	PROPERTY GEOLOGY	. 9
8.1	STRUCTURE	10
9.0	MINERALIZATION	12
10.0	DEPOSIT TYPE	13
11.0	WORK PROGRAM	13
11.1	Sample Methodology	14
12.0	GEOCHEMICAL SURVEY	14
12.1	River Jordan Deposit	14
12.2	Copeland North	23
12.3	Copeland South	31
13.0	ROCK SAMPLING	31
13.1	River Jordan Deposit	31
13.2	Copeland North	31
13.3	Copeland South	31
14.0	DISCUSSIONS AND CONCLUSIONS	34
15.0	RECOMMENDATIONS	34
16.0	REFERENCES	35
17.0	STATEMENT OF COSTS	37
18.0	STATEMENT OF QUALIFICATIONS	39

LIST OF FIGURES

Figure 1:	River Jordan Property Location Map	. 5
Figure 2:	River Jordan Claim Location Map	. 7
Figure 3:	River Jordan Property Geology Map	11
Figure 4:	Soil transect 1A Pb ppm	16
Figure 5:	Soil transect 1A Zn ppm	17
Figure 6:	Soil transect 1A Ag ppm	18
Figure 7:	Soil transect 1A Y ppm	19
Figure 8:	Soil transect 1A La ppm	20
Figure 9:	Soil transect 1A Sr ppm	21
Figure 10:	Soil transect 1A Nb ppm	22
Figure 11:	Soil Copeland North Pb ppm	24
Figure 12:	Soil Copeland North Zn ppm	25

Figure 13:	Soil Copeland North Ag ppm	. 26
Figure 14:	Soil Copeland North Y ppm	. 27
Figure 15:	Soil Copeland North La ppm	. 28
Figure 16:	Soil Copeland North Sr ppm	. 29
Figure 17:	Soil Copeland North Nb ppm	. 30
Figure 18:	River Jordan Rock Sample Locations and Select ppm	. 32
Figure 19:	Copeland North Rock Sample Locations and Select ppm.	. 33

LIST OF TABLES

Table 1:	Tenure Description		б
----------	---------------------------	--	---

APPENDICES

Appendix I	Soil Sample Locations
Appendix II	Rock Sample Locations and Descriptions
Appendix III	Soil Sample Assay Results

Appendix IV Rock Sample Assay Results

1.0 SUMMARY

Note: Portions of this report have been taken, with modification, from Koffyberg (2008).

A soil and rock sampling program was performed on the River Jordan Property ("Property") from August 15 to August 23, 2010. The property is owned by Silver Phoenix Resources Inc. ("Silver Phoenix"). The property consists of seven MTO claims.

The Property is located 19 km northwest of Revelstoke, BC, and covers Copeland Ridge between Copeland and Hiren Creeks as well as the Copeland Creek valley to the north.

The Property covers the River Jordan deposit, which is a metamorphic rock-hosted massive sulphide deposit. Exploration work has been carried out on the River Jordan deposit since the 1890s and has defined Pb-Zn-Ag-Ba zones. This "Shuswap-type" zinclead deposit can be considered as a subdivision of the larger class of clastic and carbonate hosted sedimentary exhalative deposits. The Shuswap deposits are a transitional type in that they are hosted by both clastic and carbonate rocks, often within a single deposit. The deposit consists of a sulphide layer ranging up to 6 metres in thickness within calcsilicate gneiss.

More recent work in the 1990s has defined a light-rare-earth-element (LREE) bearing extrusive carbonatite layer beneath the massive sulphides. At the present time the carbonatite layer is only of geologic rather than economic interest.

Exploration carried out between August 15 and August 23, 2010 included soil and rock sampling. Soil samples were collected at the River Jordan deposit over areas of known sulphide and LREE surface mineralization to provide reference for soil samples collected over areas of unknown mineralization. Rock samples at the River Jordan deposit were collected from the extrusive carbonatite in areas with little or no historic sampling. Exploration was conducted at the River Jordan deposit and at Copeland North and Copeland South, two target areas regarded as having potential for the discovery of new Pb-Zn-Ag and/or LREE mineralization. Although Pb-Zn-Ag mineralization was not identified in these areas, a LREE-bearing outcrop was successfully discovered and sampled at Copeland North, adding a new area of REE mineralization to the property. Soil samples from this area also suggest the potential for additional buried Pb-Zn-Ag and LREE mineralization.

2.0 INTRODUCTION

This assessment report has been prepared by X-Mark Minerals, at the request of Mr. William Murray of Silver Phoenix, the owner/operator of the Property.

X-Mark Minerals was retained by Silver Phoenix to:

- Conduct a soil and rock sampling program over the River Jordan deposit and Copeland North and Copeland South target areas.

- Report on results of sampling program for assessment purposes.

This report describes the 2010 soil and rock sampling program, sampling procedures, analytical results and conclusions.

3.0 LOCATION AND ACCESS

The Property is situated within the central Monashee Mountains in south-central British Columbia. It is roughly centred at latitude 510 OT 30" N and longitude 1180 24' 44" W within BCGS Map Sheets 82M.018 and 019 and National Topographic System (NTS) Map Sheets 082M/01W. The Property is located 19 km northwest of the town of Revelstoke, BC. Figure 1 shows the regional location of the Property.

Access to the Property can be gained via helicopter from the town of Revelstoke. A road providing access to the former Mount Copeland molybdenum mine along Hiren Creek lies within 10 km of the River Jordan Deposit. A pack trail leads off this road at Hiren Creek and proceeds up the Jordan River and Copeland Creek to the River Jordan Deposit. Both road and trail have long since fallen into disrepair.

4.0 TOPOGRAPHY

The claim area is mostly rugged mountainous landscape rising above east-west steeply walled valleys, with the majority of the claims along Copeland Ridge in alpine terrain. Elevations range from around 1,130 m in the Copeland Creek valley to in excess of 2,530 m at Mount Copeland. The Jordan River on the southeast side of the Property is at an elevation of 670 m. The claims are drained to the north and south by Copeland and Hiren Creeks, respectively. These creeks drain east into the Jordan River, which flows south to join the Columbia River just north of Revelstoke.

The treeline is at approximately 1700 to 1800 m in elevation (Goggle Earth). Above this are alpine conditions, with glaciers and with snowpack on the shaded north-facing slopes remaining all year. The area is subjected to heavy snowfall during the winter months.

5.0 PROPERTY DESCRIPTION

The Property comprises seven mineral claims containing 3123.6 hectares (Table 1 and Figure 2). The MTO mineral claims are owned 100% by Silver Phoenix. The mineral cell titles were acquired online and as such there are no posts or lines marking the location of the Property on the ground.



 Table 1: Tenure Description

Title Name	Tenure No.	Area (ha)	Registered Owner	Good To Date
River Jordan	530114	365.12	Silver Phoenix	1-Jul-13
River Jordan 2	547839	486.93	Silver Phoenix	1-Jul-13
Silver Deep 1	524937	283.95	Silver Phoenix	1-Jul-13
River Jordan East	559186	507.07	Silver Phoenix	1-Jul-13
Jordan River				
Eastsouth	559187	507.23	Silver Phoenix	1-Jul-13
JR6	568843	506.93	Silver Phoenix	1-Jul-13
RJ7	568844	466.37	Silver Phoenix	1-Jul-13
Metal Land 2	605895	182.5	Silver Phoenix	1-Jul-13

The Property is host to the River Jordan (King Fissure) deposit, a lead-zinc-silver developed prospect. The River Jordan deposit is located on the north-facing side of Copeland Ridge, at an elevation of 2133 m. It is located within Tenure 530114.

6.0 EXPLORATION HISTORY

The earliest reported work in the River Jordan - Mt. Copeland area was carried out in the 1890s, following the discovery of placer gold in the Jordan River. Brief mentions of work in the area are contained in the BC Ministry of Mines reports for 1895, 1896 and 1898.

No further work was carried out until 1956 when American Standard Mines Ltd. optioned the property and carried out a sampling and trenching program. In 1958 the property was optioned to Bunker Exploration Ltd., which carried out a trenching program.

In 1961, C. Riley mapped the mineralization (West, Cliff and East Zones). He reported a measured geological reserve of 2.6 million tonnes grading 37.7 grams per tonne silver, 5.1 per cent lead and 5.6 per cent zinc at ten per cent dilution (Riley, 1961). This historical estimate predates NI 43-101 legislation.

In 1963, the property was under option to Bralorne Pioneer Mines Limited which carried out a 5-hole diamond drilling program totaling 1502 m. The deepest hole completed was 457 m in length. The company continued exploration in 1965, by completing a mapping program and drilling an additional 904 m in two holes. This work was followed in 1966 by a further 2,432 m with four holes drilled in the western part and one in the eastern part of the mineralized area.



River Jordan Claim Location Map

In 1970, the Property as well as the Mount Copeland molybdenum deposit, located 300 m to the west, was geologically mapped by government geologist Fyles (1970). The Mount Copeland deposit was subsequently mined from 1971 to 1974. Fyles mentioned a further drill hole on the River Jordan deposit which encountered "encouraging grades". No mention was made however of when or by whom this program was carried out or a definition of "encouraging grades".

In 1990, First Standard Mining Ltd. carried out a limited geological mapping and prospecting program (AR 20513). A light rare-earth bearing extrusive carbonatite layer was recognized, located stratigraphically below the sulphide horizon, and several new Pb-Zn-Ag-Ba zones were identified. The company continued in 1991 with a program of mapping, sampling and geophysical surveying on various mineralized zones on the property, including the West, Cliff, and East Zones. The company also examined two new zones of mineralization named the Northeast and Lake Zones (AR 22029).

The current Property was acquired in 2006 by William J. Murray, who subsequently transferred title to Silver Phoenix later that same year.

In 2008, Discovery Consultants from Vernon, BC, were contracted by Silver Phoenix to conduct a rock sampling program on the River Jordan deposit. During the month of August, 152 rock and channel samples were collected over various zones of the exposed

sulphide layer, the underlying carbonatite and other potentially mineralized layers. Best intervals were:

- 9.1% Pb, 10.4% Zn and 58 g/t Ag across 3.5 m
- 3.4% Pb, 2.4% Zn and 27 g/t Ag across 5.0 m
- 15.6% Pb, 2.7% Zn and 128 g/t Ag across 1.0 m

Preliminary geological mapping visually confirmed both the general accuracy of historical mapping and the presence of a mineralized horizon on the property.

7.0 REGIONAL GEOLOGY

The regional geology of the Property is shown on the Geological Survey of Canada (GSC) Map 1964-12, mapped by J.O. Wheeler at a scale of 1:253,440, (Wheeler, 1965). J.T. Fyles, of the British Columbia Geological Survey, mapped the area at a scale of 1:24,000 (Fyles (1970). Recent work includes a regional correlation study of the Sedex-Broken Hill-type deposits in the area by Hay (2001).

The area of the Property is part of the Monashee Metamorphic Complex within the Omineca Terrane, comprising regionally metamorphosed rocks of amphibolite grade. The Monashee Complex, as described by Hay (1987), consists of a series of granitic gneissic domes of probable Aphebian age overlain unconformably by a succession of mainly metasedimentary rocks.

The Property lies on the south-eastern flank of the northernmost of these domes, the Frenchman Cap gneissic dome. This dome consists predominantly of medium to dark grey, medium-grained, granitic biotite-feldspar gneiss. Within the granitic gneiss are found inclusions of biotite-hornblende gneiss and light grey granitic gneiss.

The overlying metasedimentary rocks consist of a basal sequence of quartzites, calcareous and pelitic schists. These rocks are in turn overlain by layers of marble, a carbonatite layer and micaceous schists and gneisses (Hay, 2001). These units are described in detail below. In the area of the River Jordan deposit, vertical fault structures host pods and lenses of high-grade Pb-Zn-Ag mineralization within these sequences.

The youngest rocks recognized in the area are Tertiary-aged lamprophyre dykes. These range from less than 1 m to over 3 m in thickness and tend to fill northerly trending faults and structures.

Most of the rocks have been regionally metamorphosed to amphibolite grade and underwent several phases of folding. Compressive tectonics from Late Paleozoic to Jurassic time was followed by extensional faulting in the Cretaceous and Early Tertiary. These events have produced an exceedingly complex structural setting, making correlation of units difficult.

8.0 PROPERTY GEOLOGY

The following geology has been largely excerpted and adapted from Clarke and Laird (1991), who carried out geological mapping and prospecting program for First Standard Mining in 1991 (Figure 3).

The River Jordan (King Fissure) deposit lies within a southeasterly trending, southwesterly dipping syncline with an overturned southern limb, known as the Copeland Synform (Fyles, 1970). Folding is open and concentric at the western end, but tightens considerably towards the east. The synform has approximate dimensions of 2.5 km long by 0.8 km wide. Stratiform massive sulphides are seen on both limbs of the fold. Several zones within the deposit have been established by Riley (1961); the West, Cliff, and East Zones as well as the Northeast, Peak and Lake Zones, which were established in the 1991 exploration program

At the bottom of the sequence, Unit 4, grey-green gneiss, quartzites and quartz-biotite schists, form virtually inaccessible cliffs along the overturned southern limb of the deposit. Commonly weathering to grey and black, these rocks are unusually rusty above the Cliff Zone.

Above Unit 4, Unit 5m basal marble is commonly less than I m thick. In gradational contact with the basal marble is the extrusive 5c carbonatite unit. Best exposures of the carbonatite occur in the Cliff and Northeast Zones. In the Cliff Zone the carbonatite is approximately 5 m thick and almost entirely tuffaceous in nature. Rare fragments less than 2 cm in size tend to occur along discrete horizons. Repetitive centimetre-scale interlayering of fine and medium grain sizes indicates several episodes of deposition. In the Northeast Zone, the carbonatite is highly fragmental and reaches 10 m in thickness. Poorly sorted, matrix-supported fragments up to 25 cm in size form approximately 20% of the volume, and are interpreted to be indicative of a proximal source vent. Light-rare-earth element content is markedly higher in the Northeast Zone samples than in the Cliff Zone samples, particularly with respect to Ce, La, and Nd.

Discontinuous medium to coarse-grained amphibolite layers are often present within the immediate carbonatite stratigraphy, and probably represent metamorphosed basic volcanics and related intrusives (Hoy, 1987). Amphibolite samples from the River Jordan Deposit are chemically similar to basic metavolcanic rocks near Blais Creek in the Cotton belt area (Hoy, 1987).

The marker marble, Unit 5m, ranging from 3 to 10 m in thickness, is composed almost entirely of coarse-grained white calcite, and may also be of exhalative origin.

Above the marker marble lies feldspar-porphyroblastic grey mica schist with lesser calcsilicate schist, Unit 5. This unit is uniformly nondescript, notable only in that it directly underlies the massive sulphides. The massive sulphide horizon, Unit 5s, can be traced throughout the entire River Jordan deposit with the exception of talus and snow covered intervals. Greatest known primary massive sulphide thicknesses occur in the West and Cliff Zones. Mineralogy consists mostly of fine to coarse grained pyrrhotite, sphalerite, galena and pyrite, often within a siliceous or calcareous matrix. Massive barite occurs with sulphides in the Northeast and West Zones.

Directly overlying the sulphide horizon are more grey mica schists and calc-silicate gneisses, in turn overlain by interlayered quartzites and mica schists of Unit 5q. The quartzites are generally white to tan coloured and have well-developed micaceous partings. Most of the mica is muscovite, although green mica (fuchsite?) is often present. Biotite schist layers become more prevalent up section, leading into biotite-sillimanite schist and quartzite of Unit 6 occurring in the core of the Copeland Synform. This highly tectonized and locally migmatitic unit weathers to a strongly Fe-oxidized surface. Chaotic ptygmatic folding is common, and displacement along foliation planes may be significant, but is difficult to measure.

Several northerly trending late stage lamprophyre dykes cut through the deposit, particularly in the central and eastern regions of the Copeland Synform. These dykes, which often occur in swarms, weather to a dark brown colour. Textures consist of finegrained biotite and subordinate amphibole within an aphanitic groundmass. Thickness of individual dykes range from less than 0.5 m to 3 m.

8.1 STRUCTURE

The River Jordan deposit lies within a southeasterly trending, southwesterly dipping syncline, which is approximately 2.5 km long by 0.8 km wide in area. The fold has been named the Copeland Synform by Fyles (1970).

The Copeland Synform is open and concentric in the western end, but tightens considerably to the east. In the western end, an anticline superimposed on the keel of the Copeland Synform has created a "W" shaped folding pattern, effectively raising the structural level of the keel and establishing easterly plunges to folds. Structural measurements in the West Zone indicate that the Copeland Synform plunges approximately 30° towards 150° southeast (Fyles, 1970). The central antiform, plunging more steeply than the Copeland Synform, diminishes in magnitude towards the east, at some point disappearing entirely as three fold axes coalesce into one. Near this point on the surface a major northerly trending fault zone, known as the Camp fault, cuts across the synform with a dextral offset of approximately 20 m. This late structure may be related to stress created at the junction of the earlier folding. East of the Camp Fault, the Copeland Synform is assumed to have a near horizontal keel. East of the River Jordan



deposit, structural mapping by Fyles indicates that fold axes in Unit 4 rocks plunge approximately 15° to the west.

9.0 MINERALIZATION

Historic exploration on the River Jordan deposit has focused primarily on stratiform base metal (Pb-Zn-Ag) massive sulphides that occur near the top of a carbonate sequence. The sulphide horizon is well exposed along both limbs of the Copeland Synform. Numerous trenches and shallow adits occur in the Cliff, East, and Northeast Zones. The following descriptions of the zones are taken from AR 22029.

Cliff Zone:

In the Cliff Zone, massive sulphides range from 1.5 m to more than 3 m thick. A vertical zonation within the massive sulphide layer is recognizable; at the base is a dark weathering 0.2 to 1.0 m layer of mostly sphalerite and galena, with minor pyrrhotite. This is overlain by 0.5 to 2 m of rusty weathering, massive, fine-grained pyrrhotite containing eyes of grey quartz and fine-grained sphalerite and galena. Above the pyrrhotite-dominant middle layer is a 0.2 to 1.0 m siliceous horizon hosting coarse grained pyrite with galena, sphalerite, and minor pyrrhotite. This siliceous upper layer is most easily distinguished by its abundant pyrite and light grey to white weathered surfaces. Brecciation and footwall sulphide stockworks were noted in this zone. Barite has not been recognized.

East Zone:

In the East Zone, massive sulphide layers are approximately 0.5 to 1.0 m thick, consisting mostly of sphalerite and galena with lesser pyrrhotite and pyrite within a siliceous matrix. Barite has not been noted. On the north limb is a pyrrhotite-rich zone containing wall rock breccia fragments. This zone is similar in mineralogy and appearance to the middle layer of the Cliff Zone massive sulphide unit. Multiple layering over an interval of 3 m occurs on the north limb. The extrusive carbonatite layer is also present in the East zone.

West Zone:

Massive sulphides layers in the West Zone consist of galena, sphalerite, pyrite and pyrrhotite. Massive barite is interbedded with the sulphides and contains a fine-grained mesh of galena. The mineralized horizon also contains brecciated fragments of wall rock, up to 10 cm in size, in a massive sulphide-barite matrix. The extrusive carbonatite is also present in this zone.

Northeast Zone:

In the Northeast Zone, up to three massive sulphide layers are separated by calcareous and siliceous layers containing barite; in total the layers reach 1.5 m to 3.0 m in thickness. Three sulphide layers were intersected in diamond drill holes by Bralorne Pioneer Mines Ltd., and were interpreted to be structural repetitions of the same unit. The carbonatite layer is well exposed here and reaches about 5 m in thickness. Large fragments exceeding 25 cm are present.

Lake Zone:

Mineralization in this zone consists of galena, sphalerite and pyrite; pyrrhotite is notably absent. The massive sulphide layer does not exceed one metre in thickness. A rare green silicate mineral, identified as gahnite, a zinc-bearing spinel, has been observed. The carbonatite layer is well exposed in this zone.

10.0 DEPOSIT TYPE

The River Jordan deposit, along with other similar deposits to the northwest (Ruddock Creek, Cottonbelt) and to the south (Big Ledge) have been variously described as Broken Hill type (Lefebure and Hoy, 1996) and Sedex type deposit (Hoy, 2001). The River Jordan deposit appears to be more closely related to Sedex deposits.

Sedex type deposits are found in intracratonic or continental margin environments. The deposits are stratabound, tabular to lens shaped, normally shale-hosted sedimentary deposits of zinc, lead and silver with minor copper and barite. They normally comprise many beds of sulphide laminae. Frequently the lenses are stacked and more than one horizon is economic.

Ore lenses and mineralized beds often are part of a sedimentary succession up to hundreds of metres in thickness with a horizontal extent much greater than the vertical extent. Individual laminae or beds may extend over tens of kilometres within the depositional basin.

The major metallogenic Sedex events occurred during the middle Proterozoic, early Cambrian, early Silurian and middle to late Devonian to Mississippian. The middle Proterozoic and Devonian-Mississippian events are recognized world wide. One of the type examples of a Sedex deposit is the former world-class Sullivan Mine near the town of Kimberly in southeast BC.

"Shuswap-type" zinc-lead deposits can be considered as a subdivision of the larger class of clastic and carbonate hosted sedimentary exhalative deposits. The Shuswap deposits are a transitional type in that they are hosted by both clastic and carbonate rocks, often within a single deposit.

11.0 WORK PROGRAM

Between August 15 and August 23, 2010, a rock and soil sampling program was carried out on the River Jordan Property by personnel of X-Mark Minerals. The program comprised soil and rock sample collection over zones of both known and unknown mineralization. Primary objectives were to collect rock samples from previously untested areas of the LREE-enriched carbonatite from the River Jordan Pb-Zn deposit area, and to conduct exploratory rock and soil sampling at Copeland North and Copeland South (Figure 4). Locations of historic drill collars at the River Jordan deposit were also ground confirmed. In total, 97 soil samples and 14 rock samples were collected.

11.1 Sample Methodology

Soil samples were collected from variably developed "B" horizon between depths of 10 and 20 cm. Approximately 500 grams of material was collected at each site and placed in paper sample bags, tagged, and then placed in an ore bag. Location and sample ID were recorded on paper and in GPS and sample ID was written on flagging tape and secured to the location site. Sample locations were navigated to using hand-held GPS and once at the sample station, exact location was chosen based on best availability of "B" horizon soil. Sample locations were either 25 or 50 m apart along transect lines that ranged from 70 to 700 m in length. All sampling equipment was cleaned with brush and, if available, water to reduce possibility of contamination. Finally, samples were placed in securely sealed rice bags and shipped via courier to Eco-Tech Labs in Kamloops, BC, where they were dried and sieved at -80 mesh before 58-element ICP AES/MS analysis.

Rock grab samples were collected by breaking off approximately 500 grams of material from outcrop with a geo-pick hammer. Grab samples were placed in ore bags, tagged and location and description recorded on paper and in GPS. Sample ID was written on flagging tape and secured to actual location site. Whenever possible, rock samples with the least amount of oxidized surface were chosen for assay. Finally, samples were placed in securely sealed rice bags and shipped via courier to Eco-Tech Labs in Kamloops, BC, where they were jaw crushed to -10 mesh before 58-element ICP AES/MS analysis.

12.0 GEOCHEMICAL SURVEY

12.1 River Jordan Deposit

A total of 22 soil samples over two transects were collected at the River Jordan deposit over zones of known or inferred sulphide exposure to provide reference data for soils collected over areas of unknown mineralization at Copeland North and Copeland South. Transect 1A tested the northern limb of the exposed sulphide and carbonatite layers with 18 samples spaced at approximately 25 meters. Transect 1B was intended to test a buried, but inferred to be near-surface zone of the sulphide layer; however, the transect was abandoned due to location along an overgrown scree slope void of any suitable sampling medium. The four samples collected at transect 1B did not return anomalous values and have not been plotted. In general, "B" horizon soil at the River Jordan deposit is not well developed due to the area's high elevation and glacial influence.

The exposed sulphide layer at transect 1A is approximately 30cm wide and did not return anomalous Pb-Zn-Ag values in soil samples collected nearest to it. Transect 1A crosses a strongly mineralized north-south trending fault with grab sample assays from previous operators (Laird, report#20513) containing up to 45% combined Pb-Zn. Soil samples across the fault contained anomalous Pb-Zn-Ag values. Compared to the exposed sulphide layer, where mature soils are generally absent, the mineralized fault is overlain by thicker, more mature soils and contains mineralization of a much higher grade, factors that likely contribute to the more anomalous Pb-Zn-Ag soils found there. Plotting of LREE element Lanthanum (La), as well as Yttrium (Y), Strontium (Sr) and Niobium (Nb) reveal somewhat indistinct and muted responses, particularly over the exposed carbonatite layer (north end of the transect). Factors possibly affecting this are the thin, poorly developed soils found along much of the transect, low actual LREE grades in the carbonatite and a limited sample population. Assay results for Pb, Zn, Ag, Y, La, Sr and Nb are plotted in Figures 4-10, respectively.















12.2 Copeland North

North Copeland Ridge (referred to as 'Copeland North' in this report) was targeted for soil sampling by Silver Phoenix Resources due to the reported presence of Pb-Zn-Ag showings (Figure 3) near an exposed marble, Unit 5m. Given the regional extent of stratigraphy in this area, the outcropping Unit 5m at Copeland North could be an extension of the marker marble found at the River Jordan deposit and if so, the associated sulphide and/or carbonatite layers might be found in near vicinity. Ground work at Copeland North by X-Mark Minerals personnel confirmed the general accuracy of existing mapping data, the presence of the marble unit and its similarity to the marker marble at River Jordan; however, except for one location where REE-bearing outcrop was discovered and sampled, no exposures of the sulphide layer or additional carbonatite were located.

Three soil transects, 2A, 2B and 2C (from west to east), were orientated perpendicular to the marble unit to test for possible mineralized carbonatite and/or sulphide layers, assuming stratigraphic positions similar to those at the River Jordan deposit. In total, 62 soil samples along three transects were collected at Copeland North.

Pb-Zn-Ag assay values from the three transects returned numerous anomalous samples, although not in a pattern suggesting the presence of pervasive sulphide mineralization immediately higher up in the succession from the marble, as indicated by earlier mapping. In general, most of the anomalous samples are lower in the stratigraphy, immediately below (or to north of) the marble unit in the mica schist and calc-silicate gneiss of Unit 4. The possibility of the units being overturned relative to the River Jordan deposit was considered, but discovery of LREE-bearing outcrop (carbonatite?) in its expected position between Unit 5m marble and Unit 4 suggests otherwise. Certain Copeland North samples returned similar Zn and Ag assays as the most anomalous samples from the River Jordan deposit, suggesting the possibility of high grade, near surface mineralization in a stratigraphic position unlike that of the River Jordan. Many of the anomalous samples tend to follow the projected contact between Units 4 and the carbonatite/marble, a possible structure that mineralized fluids may have exploited.

All three transects had soil samples carrying anomalous LREE elements in a similar distribution to the Pb-Zn-Ag anomalies. Assuming a stratigraphic order the same as that at River Jordan, the carbonatite layer if present would be positioned near the outcropping marker marble and to its north (down section). This interpretation is supported by the soil sample results and by the discovery of a small LREE-bearing outcrop near soil sample CCSS082104. Despite the expectation of additional carbonatite(?) in a similar position relative to the marble unit, other outcrop could not be found. Based on the soil and rock sample results, the LREE-bearing unit is at least locally present at surface and likely regionally extensive, although buried, at Copeland North. Assay results for Pb, Zn, Ag, Y, La, Sr and Nb are plotted in Figures 11-17, respectively.









12.3 Copeland South

At Copeland South, two transects with a total of 15 soil samples tested a strongly magnetic feature identified from a Silver Phoenix airborne magnetic survey flown in 2009 which was not submitted for Assessment credit. No significant soil anomalies were detected.

13.0 ROCK SAMPLING

13.1 River Jordan Deposit

The carbonatite layer at the River Jordan deposit has not been extensively sampled in the past, despite it's LREE-enrichment, albeit at uneconomic grades. Given recent price improvements and market interest in rare earth elements, X-Mark Minerals personnel collected 11 rock samples from areas of the carbonatite that had little or no previous sampling (Figure 18). These areas included the Lake Zone (5 samples), West Zone (2 samples) and Northeast Zone (4 samples). Sample CSGS081601 from the Northeast Zone returned the highest REE grades, including 537.9 ppm Ce, 296.5 ppm La, 167.7 Nd and 18.3 ppm Y. Rock sample results from this program confirm the carbonatite to be LREE-enrichment; however, total combined rare earth grades remain uneconomic.

13.2 Copeland North

Although the marker marble, Unit 5m, is well exposed at Copeland North, neither the sulphide nor carbonatite layers were previously known to occur in outcrop. Despite being unable to locate the sulphide layer at surface (if present at all), X-Mark Minerals personnel were successful in locating small outcrops of possible carbonatite at rock sample locations CSGS082101 and CSGS082001 (Figure 19). Of the four rock samples collected at Copeland North, sample CSGS082101 returned the highest REE grades, including 1646 ppm Ce, 1105 ppm La, 438.4 ppm Nd and 24 ppm Y. These are amongst the best REE grades found on the River Jordan property, including historical samples, and while still uneconomic, add potential the Copeland North area, especially considering that small sample set. It is important to note that soil samples taken in the immediate vicinity of the LREE-bearing outcrops were, in general, anomalously LREE-enriched, therefore supporting the effectiveness of soil sampling in this area.

13.3 Copeland South

Nothing of economic interest was found in outcrop at Copeland South, and no rock samples were collected for assay.

14.0 DISCUSSIONS AND CONCLUSIONS

Soil sampling at the River Jordan deposit was performed over areas of known sulphide and LREE mineralization in order to test the effectiveness of the sampling method and to provide reference assay data for comparison with areas of unknown mineralization. Soil horizons are poorly developed at the high-elevation River Jordan deposit, but nevertheless a distinct Pb-Zn-Ag soil anomaly was seen over a strongly mineralized and partially exposed fault structure. Distinct anomalies are not apparent near the exposed sulphide and carbonatite layers; however, the sulphide layer at this location is only approximately 30 cm wide and may not have been detected by the 25 m spaced sample sites. A lack of REE signature in soil samples collected on or near the exposed carbonatite is unexpected but not seen as significant given the small number of samples in the sample set. Rock samples collected from the carbonatite during the 2010 program confirm the unit to be LREE-enriched, though grades continue to be uneconomic.

At Copeland North, soil and rock sampling defined both Pb-Zn-Ag and LREE anomalies. Although sulphide mineralization was not found in outcrop, soil anomalies with similar strength as that at the River Jordan deposit suggest the potential for near-surface Pb-Zn-Ag mineralization in the vicinity of the Unit 5m marble. LREE soil anomalies are closely associated with newly discovered outcrop of possible carbonatite, from which rock samples returned high LREE grades relative to other areas on the River Jordan property. Given the lateral continuity of rock units in the project area, it is likely that the carbonatite extends along strike throughout the Copeland North area.

Copeland South did not produce results of economic interest.

15.0 RECOMMENDATIONS

Further work at the River Jordan deposit should be directed towards drill testing the sulphide layer. The carbonatite could be drilled at the same time to test for better REE-enrichment at depth. Ground geophysics would be useful to help define drill targets, but is not considered necessary given the present availability of suitable targets. Additional soil sampling over the sulphide and carbonatite layers would be useful for better comparison to soil samples collected from areas of unknown mineralization such as at Copeland North.

Copeland North warrants addition exploration work. A program comprised of soil sampling, rock sampling, prospecting and mapping is needed to better understand the Pb-Zn-Ag and LREE soil anomalies and outcropping LREE mineralization. Such a program could be undertaken as a compliment to a River Jordan deposit drill program. The presence of marker marble and carbonatite(?) suggests that a mineralized sulphide horizon like that at the River Jordan deposit is likely present and in a similar stratigraphic position overlying the marker marble.

16.0 REFERENCES

- British Columbia Ministry of Energy, Mines and Petroleum Resources Annual Reports 1895, 1896, 1898, 1956, 1958, 1963, 1965, 1966, 1968
- British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Reports 1788, 8752, 20513, 22029, 30374
- British Columbia Ministry of Energy, Mines and Petroleum Resources Exploration in British Columbia, 1978 - pp 137-138
- British Columbia Geological Survey Branch MapPlace
- British Columbia Ministry of Energy, Mines and Petroleum Resources Minfile
- Carpenter, T.H. (2008): Technical Report on Exploration Programs and Results on the River Jordan Property, Revelstoke Mining Division, with Recommendations for Further Exploration, for Silver Phoenix Resources Inc.
- Clark, T. and Laird, J. (1991): Report on geological, geochemical and geophysical surveys, Jordan River Property, for First Standard Mining Ltd., Assessment Report 22029
- Fyles, J.T. (1970): The Jordan River Area near Revelstoke, British Columbia, BC Dept. of Mines and Pet. Res., Bull. No. 57, 64 pp, map scale 1:24,000
- Hoy, T. (1987): Geology of the Cottonbelt Lead-Zinc-Magnetite Layer, Carbonatites and Alkalic Rocks in the Mount Grace Area, Frenchman Cap Dome, Southeastern British Columbia, B.C. Min. of Energy, Mines, and Pet. Res., Bull. 80, 99 pp
- Hay, T. (2001): Sedex and Broken Hill-Type deposits, Northern Monashee Mountains, Southern British Columbia, BC Min. of Energy, Mines, and Pet. Res. Geological Fieldwork 2000, Paper 2001-1, p.85-114
- Hoy, T. and Brown, R. L. (1980): Geology of Eastern Margin of Shuswap Complex, Frenchman Cap Area, BC Min. of Energy, Mines, and Pet. Res., Preliminary Map 43
- Lefebure, D.V. and Hay, T., Eds. 1996: Selected British Columbia Mineral Deposit Profiles, Volume 2 - Metallic Deposits, British Columbia Ministry of Employment and Investment - Energy and Minerals Division, Open File 1996-13, pp. 117-120
- Parrish, R. R., and Scammell, R. J. (1988): The Age of the Mount Copeland Syenite in Gneiss and its Metamorphic Zircons, Monashee Complex, Southeastern British

Columbia. In Radiogenic Age and Isotopic Studies: Report 2, Geological Survey of Canada, Paper 88-2, pp. 21-28

- Riley, C. R. (1961): The River Jordan Lead Zinc Deposit, Revelstoke Mining Division, B.C., Trans. Can. Inst. Min. Met., vol. 64, pp. 268-272
- Wheeler, J. O. (1965): Big Bend map-area, British Columbia 82M (east half), Geological Survey of Canada Paper 64-32, 37 pp, map scale 1: 253,440

17.0 STATEMENT OF COSTS

Professional Services:

Chris Solic, Project Geologist	
Program planning, preparation, fieldwork	
(August 15-23, 2010), data interpretation,	
report writing	
15 days @ \$500/day	\$7500
Carlos Chamale, Geologist	
Field program, sampling (August 15-23, 2010)	
7 days @ \$500/day	\$3500
Field Personnel:	
Shiloh Eddy, Sampling Assistant	
August 15-23, 2010	
7 days @ \$315/day	\$2205
Katy Fraser, Sampling Assistant	
August 15-23, 2010	
7 days @ \$315/day	\$2205
Expenses:	
Analysis	
Eco-Tech Rock Sample Prep and Assay	
15 samples @ \$54.5/sample	\$817.5
Eco-Tech Soil Sample Prep and Assay	
48 samples @ \$47.75/sample	\$2292
Eco-Tech Soil Sample Prep and Assay	
50 samples @ \$47.75/ sample	\$2387.5
Courier of samples to Eco-Tech Lab, Kamloops	\$75.87
Satellite Phone Rental	
2 phones @ \$225/each	\$450
VHF Radio Rental	
1 @ \$75	\$75
Soil and Rock Sampling Supplies (including	
Shipping)	\$152.52
Field Camp Rental	
August 15-23, 2010	
7 days @ \$150/day	\$1050
Large Format Colour Scan	
1 @ \$20	\$20

Poster Laminating 1 @ \$35	\$35
Transportation:	
Airfare Subsidy for Geologist C. Chamale One-way airfare to Kelowna, BC, from Thunder Bay, Ontario Truck Usage (All Inclusive) Three return trips from Enderby, BC, to Revelstoke, BC	\$383.93
3 days @ \$150/day	\$450
Helicopter	\$3040
Total:	\$26639.32
Administration Fee: @ 15%	\$3995.9

Total Exploration Expenditures:

\$30635.22

38

18.0 STATEMENT OF QUALIFICATIONS

I, Chris Solic, Geologist and owner of X-Mark Minerals, 207 Larsen Ave, Enderby, BC, V0E1V2

DO HEREBY CERTIFY that:

- 1. I am a geologist in mineral exploration.
- 2. I graduated with a B.Sc. degree in Geological Sciences from the University of Manitoba in 2006.
- 3. I have worked as a geologist for a total of 4 years since graduation from University.
- 4. This report is based upon knowledge of the Property gained from field experience at the Property and from a review of existing industry and government reports.

Dated this tenth day of December, 2010 in Enderby, BC

Signature of

they

Chris Solic, Geologist X-Mark Minerals

APPENDIX I

Soil Sample Locations

IDENT	LAT	LONG_	Y_PROJ	X_PROJ	ZONE	ALTITUDE(m)
CCSS081601	51.126696	-118.409933	5664858.681	401338.3744	11	2008
CCSS081602	51.126796	-118.409679	5664869.44	401356.3821	11	2004
CCSS081603	51.126913	-118.409398	5664882.057	401376.2908	11	2007
CCSS081604	51.127092	-118.409129	5664901.607	401395.4403	11	2008
CCSS081605	51.127229	-118.408895	5664916.493	401412.1478	11	2002
CCSS081606	51.127358	-118.408596	5664930.512	401433.3563	11	2010
CCSS081607	51.127523	-118.408278	5664948.356	401455.9056	11	1999
CCSS081608	51.127616	-118.408122	5664958.539	401467.0601	11	1989
CCSS081609	51.127746	-118.407851	5664972.594	401486.2978	11	1979
CCSS081610	51.127998	-118.407475	5665000.165	401513.1451	11	1962
CCSS081611	51.128043	-118.407297	5665004.905	401525.6568	11	1969
CCSS081612	51.128207	-118.407053	5665022.763	401543.0651	11	1975
CCSS081613	51.128301	-118.406785	5665032.918	401562.0458	11	1942
CCSS081614	51.128487	-118.406491	5665053.132	401582.9966	11	1945
CCSS081615	51.120363	-118.396665	5664136.69	402253.4354	11	1825
CCSS081616	51.12066	-118.396607	5664169.608	402258.1206	11	1811
CCSS081617	51.120741	-118.396557	5664178.63	402261.7951	11	1807
CCSS081618	51.12098	-118.396492	5664205.127	402266.7931	11	1792
CCSS082001	51.146064	-118.368222	5666957.294	404297.0914	11	1933
CCSS082002	51.145674	-118.367943	5666913.524	404315.8191	11	1932
CCSS082003	51.145326	-118.367813	5666874.655	404324.1861	11	1923
CCSS082004	51.144893	-118.367258	5666825.83	404362.1043	11	1899
CCSS082005	51.144492	-118.366902	5666780.731	404386.1745	11	1871
CCSS082006	51.144267	-118.366443	5666755.089	404417.8374	11	1852
CCSS082007	51.14381	-118.366061	5666703.777	404443.5822	11	1808
CCSS082008	51.143485	-118.36562	5666667.069	404473.7859	11	1786
CCSS082009	51.143301	-118.365407	5666646.379	404488.311	11	1780
CCSS082010	51.143163	-118.365184	5666630.711	404503.5745	11	1775
CCSS082011	51.142977	-118.365009	5666609.802	404515.4501	11	1767
CCSS082012	51.142826	-118.364851	5666592.819	404526.1852	11	1767
CCSS082013	51.142653	-118.364622	5666573.293	404541.8463	11	1760
CCSS082014	51.142499	-118.364437	5666555.865	404554.5088	11	1755
CCSS082015	51.14226	-118.364112	5666528.955	404576.7431	11	1739
CCSS082016	51.142133	-118.363948	5666514.603	404587.908	11	1727
CCSS082017	51.141974	-118.363758	5666496.619	404600.93	11	1722
CCSS082018	51.141757	-118.363458	5666472.08	404621.4726	11	1715
CCSS082019	51.141602	-118.363339	5666454.739	404629.4504	11	1708
CCSS082020	51.141357	-118.363066	5666427.103	404648.0416	11	1697
CCSS082021	51.141162	-118.362958	5666405.265	404655.1742	11	1688
CCSS082022	51.141014	-118.362751	5666388.592	404669.3882	11	1685
CCSS082023	51.140879	-118.362503	5666373.255	404686.4597	11	1681
CCSS082101	51.144224	-118.353578	5666733.737	405317.6005	11	1626
CCSS082102	51.143816	-118.353738	5666688.523	405305.5492	11	1638
CCSS082103	51.143461	-118.35418	5666649.648	405273.9074	11	1655
CCSS082104	51.143103	-118.354551	5666610.242	405247.2527	11	1672
CCSS082105	51.142787	-118.354789	5666575.437	405229.9602	11	1669
CCSS082106	51.142721	-118.355038	5666568.405	405212.3884	11	1673

IDENT	LAT	LONG_	Y_PROJ	X_PROJ	ZONE	ALTITUDE
CCSS082107	51.142483	-118.355239	5666542.23	405197.8534	11	1674
CCSS082108	51.142365	-118.355384	5666529.302	405187.4682	11	1674
CCSS082109	51.142121	-118.35568	5666502.494	405166.2996	11	1691
CCSS082110	51.141951	-118.355796	5666483.826	405157.8259	11	1689
CCSS082111	51.141752	-118.355872	5666461.769	405152.088	11	1692
CCSS082112	51.14162	-118.356176	5666447.508	405130.5757	11	1695
CCSS082113	51.141378	-118.356392	5666420.85	405114.9688	11	1696
CCSS082114	51.141219	-118.356499	5666403.299	405107.1088	11	1692
CCSS082115	51.140962	-118.356725	5666375.05	405090.7984	11	1686
CCSS082116	51.140807	-118.356877	5666358.021	405079.8444	11	1688
CCSS082117	51.140686	-118.357105	5666344.857	405063.6126	11	1691
CCSS082118	51.140624	-118.357151	5666338.019	405060.2781	11	1689
CCSS082119	51.140519	-118.357308	5666326.496	405049.1085	11	1672
CCSS082120	51.140333	-118.357428	5666305.95	405040.3188	11	1671
CCSS082121	51.14011	-118.357486	5666281.251	405035.7925	11	1660
CCSS082201	51.114283	-118.353216	5663403.795	405281.6942	11	1773
CCSS082202	51.114713	-118.352949	5663451.285	405301.2302	11	1774
CCSS082203	51.115037	-118.352868	5663487.223	405307.5831	11	1762
CCSS082204	51.115484	-118.352743	5663536.731	405317.2787	11	1763
CCSS082205	51.11606	-118.352359	5663600.327	405345.2959	11	1741
CCSS082206	51.1163	-118.352086	5663626.643	405364.8757	11	1723
CCSS082207	51.116895	-118.351955	5663692.594	405375.2598	11	1707
CCSS082208	51.117186	-118.351637	5663724.538	405398.1224	11	1690
CCSS082209	51.11755	-118.35142	5663764.813	405414.0904	11	1674
CSSS081601	51.128942	-118.405865	5665102.933	401627.8046	11	1932
CSSS081602	51.128708	-118.405978	5665077.07	401619.3952	11	1929
CSSS081603	51.128615	-118.406217	5665067.045	401602.4304	11	1938
CSSS082001	51.142294	-118.347559	5666511.38	405734.6995	11	1476
CSSS082002	51.141903	-118.347925	5666468.284	405708.3196	11	1502
CSSS082003	51.141563	-118.348281	5666430.936	405682.6962	11	1508
CSSS082004	51.141217	-118.348665	5666393.018	405655.1151	11	1519
CSSS082005	51.141331	-118.348605	5666405.57	405659.5683	11	1515
CSSS082006	51.141033	-118.348858	5666372.76	405641.253	11	1521
CSSS082007	51.140728	-118.348933	5666338.956	405635.4137	11	1513
CSSS082008	51.140498	-118.349152	5666313.717	405619.6183	11	1523
CSSS082009	51.140388	-118.349356	5666301.686	405605.1153	11	1507
CSSS082010	51.140161	-118.349383	5666276.479	405602.7706	11	1506
CSSS082011	51.139941	-118.349718	5666252.433	405578.8912	11	1497
CSSS082012	51.139745	-118.350005	5666231.039	405558.3737	11	1486
CSSS082013	51.139493	-118.350122	5666203.115	405549.6731	11	1486
CSSS082014	51.139363	-118.350291	5666188.968	405537.6298	11	1498
CSSS082015	51.139086	-118.350509	5666158.434	405521.76	11	1481
CSSS082016	51.13889	-118.350522	5666136.641	405520.4628	11	1479
CSSS082017	51.138742	-118.350742	5666120.425	405504.8088	11	1474
CSSS082018	51.138726	-118.350991	5666119.02	405487.356	11	1459
CSSS082201	51.115298	-118.36048	5663526.032	404775.3806	11	1931
CSSS082202	51.115672	-118.360047	5663567.033	404806.4088	11	1929

IDENT	LAT	LONG_	Y_PROJ	X_PROJ	ZONE	ALTITUDE
CSSS082203	51.116038	-118.359684	5663607.332	404832.5645	11	1927
CSSS082204	51.11639	-118.359559	5663646.327	404842.029	11	1906
CSSS082205	51.11676	-118.359299	5663687.075	404860.9915	11	1897
CSSS082206	51.117028	-118.35908	5663716.599	404876.9179	11	1875

APPENDIX II

Rock Sample Locations and Descriptions

AREA	IDENT	Y_PROJ	X_PROJ	Zone	TYPE	Grain Size	DESCRIPTION
Copeland North	CCGS082101	5666626	405250	11	Carbonatite?	Fine-medium	Pervasive orange/brown weathering surface; non-brecciated
Copeland North	CSGS082001	5666257	405578	11	Carbonatite?	Fine-medium	Pervasive orange/brown weathering surface; non-brecciated
Copeland North	CSGS082101	5666604	405245	11	Carbonatite?	Fine-medium	Outer surface heavily oxidized; small subcrop
Copeland North	CSGS082102	5666605	405267	11	Carbonatite?	Medium-coarse	Yellow, non-oxidized weathering surface; >95% med-coarse grained calcite
RJ (River Jordan)	CSGS081601	5665042	401585	11	Carbonatite	Fine-coarse	Collected 20 cm above basal marble contact; contains clast up to 3 cm
RJ	CSGS081602	5665073	401558	11	Carbonatite	Fine-medium	Contact margin with 60 cm wide cross-cutting quartz vein and carbonatie
RJ Lake Zone	CSGS081701	5665401	401229	11	Carbonatite	Fine-medium	Collected 1 m above contact with basal marble; lacks distinct phenocrysts
RJ Lake Zone	CSGS081702	5665446	401152	11	Carbonatite?	Medium	Base of a 60 cm carbonatite(?) layer, 5 m down-section of basal marble
RJ Lake Zone	CSGS081703	5665445	401153	11	Carbonatite?	Medium	Top margin of same unit sampled by CSGS081702
RJ Lake Zone	CSGS081704	5665496	401034	11	Carbonatite	Fine-medium	Collected 2 m above basal marble contact
RJ Lake Zone	CSGS081705	5665431	401150	11	Carbonatite	Fine-medium	Contact margin with 1.5 m, cross-cutting mafic dyke; no alteration at contact
RJ Northeast Zone	CCGS081701	5664652	401989	11	Carbonatite	Medium-coarse	Highly brecciated/pyroclastic in this zone and contains clasts < 30 cm
RJ Northeast Zone	CCGS081702	5664652	401988	11	Carbonatite	Medium-coarse	Highly brecciated/pyroclastic in this zone and contains clasts < 30 cm
RJ West Zone	CSGS082301	5665224	400223	11	Carbonatite	Medium-coarse	Collected near base of basal marble contact
RJ West Zone	CSGS082302	5665223	400232	11	Carbonatite	Medium-coarse	Contains visible barite; carbonatite highly brecciated/pyroclastic in this zone

APPENDIX III

Soil Sample Assay Results

Eco Tech Laboratory Ltd. 2953 Shuswap Road Kamloops, BC V2H 1S9 Canada Tel + 1 250 573 5700 Fax + 1 250 573 4557 Toll Free + 1 877 573 5755 www.stewartgroupglobal.com

WHOLE ROCK CERTIFICATE OF ANALYSIS AK 2010-0656

X-Mark Minerals 207 Larsen Ave Enderby, BC V0E 1V2

23-Sep-10

No. of samples received:48 Sample Type: Soil **Project: RJ** Shipment #: RJ Soil Samples # 2 Submitted by: Chris Solic

Note: Values expressed in percent

		%	%	%	%	%	%	%	%	%	%	%	%	
ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	AI2O3	CaO	TiO2	Na2O	K2O	Cr2O3	L.O.I.
1	CCSS082001	0.06	0.47	44.27	0.28	8.44	9.26	11.51	4.25	1.96	1.24	1.88	0.02	17.0
2	CCSS082002	0.08	0.45	49.20	0.14	6.35	1.95	12.18	1.28	1.11	1.77	2.61	0.01	23.3
3	CCSS082003	0.08	0.25	48.88	1.77	11.51	3.46	13.43	1.54	1.15	1.98	2.40	0.01	13.4
4	CCSS082004	0.21	0.28	54.34	0.29	5.63	4.16	13.14	2.25	0.85	1.50	3.88	0.01	13.8
5	CCSS082005	0.17	0.32	49.99	0.17	7.67	1.95	13.87	1.39	1.07	2.01	2.81	0.01	18.6
6	CCSS082006	0.08	0.35	45.19	0.06	10.81	1.59	13.97	0.94	1.13	1.39	2.55	0.01	21.9
7	CCSS082007	0.12	0.54	42.43	0.42	9.22	3.51	16.01	1.75	0.85	2.76	2.05	0.02	20.8
8	CCSS082008	0.11	0.52	46.80	0.39	8.48	3.21	14.40	1.67	0.95	2.82	2.22	0.01	19.1
9	CCSS082009	0.12	0.45	51.72	0.19	8.69	2.76	13.90	1.87	1.00	2.32	2.53	0.01	15.2
10	CCSS082010	0.10	0.25	49.75	0.09	7.42	1.95	12.67	1.54	1.07	2.23	2.55	0.01	20.2
11	CCSS082011	0.08	0.32	42.90	0.10	7.09	2.61	11.10	1.77	1.05	1.26	2.13	0.02	2 9 .8
12	CCSS082012	0.05	0.22	46.12	0.14	7.63	3.70	11.99	2.53	1.43	1.30	2.02	0.02	23.6
13	CCSS082013	0.05	0.34	43.85	0.15	9.99	4.70	13.41	3.52	1.61	2.44	1.65	0.02	18.6
14	CCSS082014	0.05	0.47	45.64	0.42	4.80	6.46	11.19	3.44	0.64	1.49	1.35	0.01	24.4
15	CCSS082015	0.06	0.40	37.90	0.41	7.17	3.34	15.10	2.10	0.74	1.35	1.61	0.01	29.1
16	CCSS082016	0.05	0.23	30.70	0.05	4.48	2.85	20.50	3.24	0.48	0.83	1.48	0.01	34.3
17	CCSS082017	0.08	0.25	44.27	0.09	5.20	2.59	11.53	2.96	0.74	1.45	2.46	0.01	27.5
18	CCSS082018	0.07	0.19	42.64	0.11	6.18	2.08	13.90	1.49	0.78	1.69	2.04	0.01	28.2
19	CCSS082019	0.09	0.29	40.97	0.08	5.97	2.16	12.71	1.37	0.72	1.43	2.00	0.01	32.6
20	CCSS082020	0.06	0.27	33.30	0.05	4.89	2.16	12.30	2.30	0.62	1.12	1.79	0.01	41.4
21	CCSS082021	0.10	0.19	45.90	0.10	5.98	1.85	12.50	1.32	0.83	1.51	2.22	0.01	27.1
22	CCSS082022	0.06	0.37	32.80	0.08	5.55	1.82	13.80	0.85	0.59	0.97	1.53	0.01	41.5
23	CCSS082023	0.09	0.16	50.06	0.08	7.01	1.99	12.99	1.54	0.90	1.76	2.36	0.01	21.0
24	CCSS082101	0.17	0.21	54.40	0.06	4.35	2.77	11.20	2.21	1.04	1.88	3.00	0.02	18.4
25	CCSS082102	0.09	0.44	39.30	0.08	4.96	3.36	10.70	2.56	0.81	1.47	2.47	0.01	33.1

ECO-TECH LABORATORY LTD. Norman Monteith B.C. Certified Assayer

All business is undertaken subject to the Company's General Conditions of Business which are available of request. Registered Office: Eco Tech Laboratory Ltd., 2953 Shuswap Road, Kamloops, BC V2H 1S9 Canada.

Eco Tech Laboratory Ltd. 2953 Shuswap Road Kamloops, BC V2H 1S9 Canada Tel + 1 250 573 5700 Fax + 1 250 573 4557 Toll Free + 1 877 573 5755 www.stewartgroupglobal.com

23-Sep-10

X-Mark Minerals AK10-0656

		%	%	%	%	%	%	%	%	%	%	%	%	
ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	AI2O3	CaO	TiO2	Na2O	K20	Cr2O3	L.O.I.
26	CCSS082103	0.07	0.21	54.75	0.05	2.52	0.95	15.51	1.56	0.63	3.90	2.03	<0.01	19.6
27	CCSS082106	0.43	0.69	47.86	0.12	8.15	5.27	12.16	3.36	1.42	1.99	3.77	0.04	14.9
28	CCSS082107	0.55	0.80	49.82	0.12	8.42	7.47	12.38	4.65	1.43	2.21	4.37	0.06	8.8
29	CCSS082108	0.12	0.61	47.86	0.08	6.84	2.16	13.17	1.72	1.09	2.74	2.19	0.01	21.9
30	CCSS082109	0.75	0.67	46.93	0.11	6.70	7.62	11.98	5.52	1.10	1.54	4.94	0.05	12.4
31	CCSS082110	0.07	0.16	54.77	0.04	2.67	0.59	15.20	1.22	0.48	4.01	2.23	<0.01	19.0
32	CCSS082111	0.06	0.45	42.90	0.04	3.85	0.93	12.30	1.18	0.62	2.80	1.76	<0.01	33.7
33	CCSS082112	0.08	0.33	51.80	0.04	4.87	1.01	11.50	1.23	0.85	2.06	2.06	0.01	24.8
34	CCSS082113	0.09	0.44	39.10	0.04	6.24	2.34	9.85	0.83	0.61	1.01	1.85	0.01	37.7
35	CCSS082114	0.09	0.57	31.72	0.04	4.91	1.26	9.42	0.62	0.51	0.88	1.57	0.01	48.9
36	CCSS082115	0.22	0.38	47.63	0.05	5.62	2.32	12.22	2.17	1.00	2.28	2.58	0.01	23.7
37	CCSS082116	0.14	0.51	30.31	0.03	6.05	1.30	8.73	1.75	0.50	0.85	1.43	0.01	48.1
38	CCSS082117	0.19	0.36	36.65	0.03	3.63	0.82	8.12	0.68	0.51	1.11	1.74	<0.01	45.3
39	CCSS082118	0.09	0.24	48.90	0.06	7.62	1.25	13.70	1.36	0.94	2.19	2.24	0.01	22.0
40	CCSS082119	0.09	0.47	47.00	0.0 9	8.49	1.73	13.03	1.26	0.95	1.56	2.32	0.01	22.8
41	CCSS082120	0.20	0.26	43.96	0.06	5.63	1.72	11.78	1.39	0.70	1.40	2.14	0.01	30.8
42	CCSS082121	0.27	0.21	51.91	0.07	7.87	2.29	14.01	1.93	1.01	2.04	2.98	0.01	15.8
43	CCSS082201	0.13	0.49	53.30	0.19	6.21	4.26	12.45	2.58	0.99	1.16	3.34	0.01	15.0
44	CCSS082202	0.20	0.22	51.77	0.12	6.56	2.86	12.58	1.76	0.97	1.63	3.40	0.01	18.0
45	CCSS082203	0.08	0.99	48.79	0.57	6.01	2.02	14.76	1.56	0.82	2.75	2.18	0.01	19.7
46	CCSS082205	0.07	0.51	49.20	0.31	7.23	2.15	13.86	1.20	0.98	1.16	2.61	0.01	21.1
47	CCSS082208	0.08	0.36	51.41	0.06	6.15	2.23	13.23	1.66	1.13	2.59	2.65	0.01	18.8
48	CCSS082209	0.07	0.24	48.50	0.03	3.69	1.03	10.00	0.52	0.50	1.24	2.08	<0.01	32.4
<u>QC D/</u> Repea	ATA: at:													
1	CCSS082001	0.07	0.46	43.62	0.28	8.53	9.29	11.58	4.14	1.96	1.27	1.89	0.02	17.0
10	CCSS082010	0.10	0.24	49.89	0.09	7.29	1.98	12.73	1.59	1.03	2.19	2.51	0.01	20.4
19	CCSS082019	0.08	0.28	40.78	0.08	6.03	2.11	12.77	1.29	0.70	1.39	1.97	0.01	32.8
33	CCSS082112	0.08	0.33	52.00	0.05	4.85	1.00	11.60	1.20	0.85	2.06	2.07	0.01	24.6
42	CCSS082121	0.27	0.22	51.90	0.06	7.96	2.32	14.10	1.87	1.04	2.00	3.06	0.01	15.7
Stand	ard:													
LOI ST	D													32.6
LOI ST	ſD													32.5
TDB1		0.03	0.24	50.59	0.20	14.56	6.24	13.45	8.25	2.31	2.32	0.97	0.04	
SY4		0.04	0.14	50.09	0.12	6.33	0.57	20.81	7.23	0.29	7.32	1.84	<0.01	

df/wr XLS/10

ECO TECH LABORATORY LTD.

Norman Monteith B.C. Certified Assayer

Phone: 250-573-5700 Fax : 250-573-4557 X-Mark Minerals 207 Larsen Ave Enderby, BC V0E 1V2

No. of samples received:48 Sample Type: Soil Project: RJ Shipment #: RJ Soil Samples # 2 Submitted by: Chris Solic

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	As	Ba	Be	Bi	Cd	Сө	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Но	La	Lu	Мо	Nb	Nd	NI Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Та	Тb	Th	П	Tm !	י ט	v w	Y	Yb	Zn	Zr
1	CCSS082001	<0.1	6.3	589.0	3.3	0.08	0.02	193.50	23.0	177.5	7.48	32.3	7.588	3.604	3.43	23.0	11	10.68	1.288	95.5	0.43	1.38	80.88	79.3	73.5 22.00	22.42	96.2	1.08	1.6	13.42	4.3	159.5	6.05	1.496	23.2 (0.38 (0.46 4	1.3 1	66 7.8	37.19	2 75	118.0	342.00
2	CCSS082002	0.2	6.4	693.0	1.92	0.54	<0.01	107.60	9.9	63.0	8.38	22.8	5.692	3.22	1.62	28.4	7.054	9.96	1.068	54.0	0.47	2.69	32.78	43.67	21.8 29.91	12.36	103.0	1.40	1.2	8.142	4.3	169.0	2.40 (0.995	16.4 (0.46 (0.44 4	1.0 1	44 3.6	32.79	2.875	74.2	303.50
3	CCSS082003	0.3	7.0	650.5	2.01	80.0	0.09	127.40	64.8	81.0	8.60	18.8	6.722	4.12	1.68	27.6	7.937	10.30	1.329	63.5	0.63	1.71	22.46	50.91	60.6 57.98	14.53	113.1	1.90	1.5	9.178	4.8	175.5	2.05	1.137	19.1 (0.44 (0.58 3	1.8 1	86 3.4	38.78	3 755	108.5	342 21
4	CCSS082004	0.2	6.9	1778.0	2.23	0.08	0.10	96.96	13.2	48.5	7.88	19.9	5.034	3.11	1.11	25.7	6.059	8.72	0.983	49.5	0.48	1.53	16.24	38.82	22.8 35.43	11.07	156.1	1.38	1.0	7 033	39	171.0	1.50 (0 887	13.8	0.42 (0.42 3	16 1	16 30	29.98	2 873	116.4	281 00
5	CCSS082005	1.4	6.9	1414.0	1.96	0.06	0.10	147.90	13.8	82.0	5.36	31.5	6.065	3.676	1.53	27.1	8.033	9.40	1.211	78.0	0.53	2.18	22.52	57.84	23.4 111.10	16.95	118.1	1 48	14	9 749	37	317.5	1 75	1 109	20.8	0.38 (0.53 5	;0,1	40 27	35.83	3 297	89.2	315.34
																						20		0.101				1.10		0.140	0.7	011.0	1		20.0	2.00 0	7.00 0	.0 ,-	10 2.7	00.00	0.207	00.2	010.00
6	CCSS082006	0.1	7.0	698.0	2.34	0.06	<0.01	176.10	7.4	78.0	4.30	34.5	7.852	4.694	1.73	31.3	10.11	10.08	1.514	92.0	0.7	2.81	18.24	69.46	17.5 20.20	19.98	91.4	0.88	17	12 02	39	162.0	1.65	1 423	267	0.34 (0.68 E	34 1 [°]	72 28	46 28	4 227	91 7	336.8/
7	CCSS082007	0.2	10.2	983.0	2.08	0.10	<0.01	689.60	22.1	111.5	9.40	37.1	3.641	1.804	2.98	34.9	10.59	5.18	0.599	453.5	0.2	3.52	45.32	174.1	43.1 69.63	61.06	132.1	1 44	22	15.34	33	591.0	1 75 (0.891	15.5	0.38 (0.22 3	3 1	34 21	16.85	1.318	280.1	178.20
8	CCSS082008	<0.1	10.1	963.5	1.81	0.06	0.04	419.30	19.6	100.5	6.96	29.8	3.397	1.953	1.99	31.6	7,389	5.18	0.648	272.5	0.28	2.54	34.60	111.2	387 3774	38.81	120.7	1.62	16	10.47	3.8	378.0	175 (0.752	14.0	0.38 (0.26 2	28 1	64 23	18.98	1 684	103.7	166.34
9	CCSS082009	0.2	9.6	1070.0	2.29	0.06	< 0.01	208.00	16.4	92.5	5.90	23.8	4,492	2.342	1.79	29.5	7.003	7.16	0.81	117.5	0.34	3.45	46.94	64.28	36.1 53.41	20.21	111.0	1 74	12	8 681	69	273.0	230 0	0.882	15.7	040 (0.31 2	20 1 20 1	96 29	24.27	2 004	422 A	233.20
10	CCSS082010	0.1	7.4	862.0	1.74	0.08	< 0.01	186.30	9.1	82.5	5.14	20.8	4.266	2.416	1.65	29.2	6.024	7.60	0.819	116.0	0.36	2 32	29.00	58 82	191 2343	18.83	96.3	0.94	15	7 984	42	225.0	175 (0.002	15.6	0.30 (0.33 3	1 6.1	60 2.3	24.20	2.004	78 0	252 0
																								00.01			0010	0.01		7.001	1.22	220.0		0.014	10.0	<i></i> .	7.00 0	.0 1	00 2.7	24.20	2.000	/0.5	202.0
11	CCSS082011	0.5	6.6	663.5	1.5	0.10	<0.01	98.16	12.1	111.0	4.18	25.5	4.463	2.584	1.44	22.1	5.486	7.82	0.868	54.5	0.38	1.78	19.88	37.98	28.1 28.35	11.07	74.9	1.66	11	6 327	3.5	153.5	1.80 (0 773	123 (0.26 (0.35 2	35 1	74 28	25.94	2 334	61.5	256.20
12	CCSS082012	0.1	4.0	499.0	2.23	0.04	0.03	76.26	21.8	157.0	4.70	20.3	4.024	2.23	1.59	23.3	5.129	6.02	0.752	39.5	0.31	1.81	26.38	33.96	48.5 10.52	9.128	84.9	1.36	1.0	6.038	3.1	159.0	2.25 (0.725	9.3	0.24	03 2	28 2	36 31	21.56	1 873	78.9	203.80
13	CCSS082013	0.2	5.7	499.0	1.59	0.04	<0.01	132.00	30.9	142.5	6.38	51.2	4.05	2.075	2.09	25.7	6.443	6.22	0.747	69.0	0.28	1.44	31.54	55.9	43.1 34.73	15 74	84.0	1.84	11	8 894	3.1	397.0	3 10 0	0 789	146	0.24 (0.27 2	16 3	26 17	19.89	1 674	97.6	206.60
14	CCSS082014	0.9	3.6	459.0	1.7	0.08	<0.01	65.18	14.8	41.5	3.16	16.8	2.685	1.411	0.98	18.9	3.41	4.46	0.483	28.0	0.21	1.80	10.94	23.65	19.9 37.55	6 598	50.0	1 20	0.5	43	2.6	188.0	0.95 (0.499	81 /	0.22 (0.10 2	28 S	20 15	14 14	1 231	184 1	154 0
15	CCSS082015	<0.1	4.0	505.5	1.97	0.08	< 0.01	124.70	25.6	57.0	5.88	51.8	4.569	2.361	2.74	21.4	6.715	6.00	0 794	56.5	0.31	2 42	10.96	44 41	33 0 23 48	12 71	69.6	1.54	13	8 212	29	184.0	120 (0.400	147	0.22	03 4	12 5	10 10	23.56	1 07	1/04.1	102.5
																											00.0	1.01		0.212	2.0	10110	1.20	0.007	14.7		0.0 4			20.00	1.57	140.4	100.0
16	CCSS082016	0.7	2.8	395.5	2.33	0.06	0.39	91.85	11.4	56.0	4.00	27.6	3.655	1.892	1.25	26.3	4.995	3.92	0.664	51.0	0.25	0.85	5.84	37.76	28.0 56.61	11.35	50.0	1 12	12	6 205	22	250.5	0.35 (0 682	147	0.20 /	0.25 2	27 F	8 11	19 20	1 614	145 9	122 8
17	CCSS082017	1.2	4.5	881.0	1.67	0.36	0.08	110.50	12.5	72.0	5.30	24.0	4,741	2.762	1.43	32.0	6.353	7.24	0.887	61.0	0.39	1.86	22.62	46.3	24.0 19.00	13.54	121.9	2 24	0.9	8 013	46	308.0	1 60 0	0.000	16.6	0.40 (0.37 4	15 1	28 21	26 44	2 374	156 1	227 5
18	CCSS082018	0.5	3.5	619.5	1.93	0.06	0.04	88.04	10.9	58.0	5.18	23.8	3.722	1.977	1.12	25.4	5.136	5.44	0.673	48.0	0.29	1 47	11.00	37 22	26.2 6.37	10.79	86.4	1.58	12	6.396	33	173.0	1 10 0	0.602	14.3	0.22 (0.27 3	3A (18 15	10.95	1 739	96.5	171 10
19	CCSS082019	<0.1	3.5	771.0	1.82	0.08	0.04	82.19	11.5	63.5	6.22	27.0	3.836	2.18	1.15	25.3	4.68	5.64	0.744	44.5	0.33	1.34	18.28	33.65	25.1 10.30	9 188	87.5	0.88	10	5 709	34	185.0	1.35 (0.052	112	0.24 (0.31 2	. 3 33 (,0 1.0 20 2.2	21 10	1.750	73.8	105.6
20	CCSS082020	0.4	3.1	582.5	1.15	0.08	< 0.01	71.56	9.1	50.5	5.02	22.8	3.26	1.784	1.05	21.6	4.213	5.36	0.615	40.0	0.22	1.38	8 40	30.59	19.6 16.10	8 911	69.0	0.82	1.0	5.328	29	163.0	0.75 (0.600	104	0.18 (023 2	.000 2025	A 17	17.86	1.314	63.4	170 //
																					0.22		00	00.00	10.0	0.017	00.0	0.02	1.0	0.020	2.0	100.0	0.70	0.011	10.4	5.10	J.20 0		,, ,,	17.00	1.40	00.4	175.4
21	CCSS082021	0.2	2.8	862.5	1.55	0.08	<0.01	115.80	9.8	58.5	5.50	20.7	4.367	2.508	1.27	25.6	5.527	9.06	0.813	68.0	0.37	1.49	14.36	43.45	21.1 10.86	12.93	99.3	1.68	12	6 902	39	197.5	1.35 (0 777	13.3	0.22 (0.35 2	35 1	00 21	24 56	2 239	75 1	208.2/
22	CCSS082022	<0.1	2.7	498.5	1.78	0.04	0.02	58.67	12.7	58.0	5.68	23.9	3.029	1.661	0.9	20.5	3.729	4.66	0.555	32.0	0.24	2.94	7.88	24.71	25.0 5.38	7.262	80.6	0.82	0.9	4.39	3.0	113.5	0.65 (0 544	10.0	0.16	0.23 3	3.3 5	30 19	16.60	1 429	83.2	151.3
23	CCSS082023	<0.1	2.6	706.5	1.44	0.06	0.05	96.34	9.9	57.0	5.00	20.4	4.002	2.211	1.06	27.9	5.137	7.10	0.742	54.0	0.35	2.09	16.12	38.92	20.4 15.77	11.21	86.6	1 66	1.3	6.316	41	191.5	1 40 (0 731	13.5	0.20	03 2	35 1	10 20	22.00	1 072	76.2	235.6
24	CCSS082101	5.8	2.5	1476.0	2.9	0.06	0.27	100.90	7.4	115.5	5.52	11.4	3.665	2.038	1.18	21.4	4.628	11.74	0.69	56.5	0.34	1.84	20.64	36 13	174 1531	11 13	85.4	1 44	12	6.056	3.0	377.5	1 45 /	0.653	127	0.24	0.0 0	35 (10 2.0	20.37	1 025	58.2	400.1
25	CCSS082102	<0.1	4.0	828.0	1.62	0.06	0.04	66.88	7.3	45.5	3.68	17.0	4.519	2.317	1.4	17.5	5.153	5.20	0.808	33.5	0.31	1.59	19.44	28.83	18.0 <0.01	7.77	49.3	1.00	13	5 829	27	172.0	1 45 (0.825	12.3	0.14	0.31 2	32 8	30 30	20.07	1 979	39.2	173.4
																			0.000	0010	0.07			20.00	10.0 10.01	,,	10.0	1.00	1.0	0.020	.	172.0	1.40	0.020	12.0	J.14 (U	0 0.0	<u> </u>	1.573	03.2	170.4
26	CCSS082103	0.2	2.6	553.0	1.2	0.06	0.02	44.13	4.1	8.0	2.84	15.6	3.315	1.97	0.95	23.3	3.589	6.56	0.646	21.0	0.3	1.06	6.18	20.49	5.2 7.10	5.611	37.8	1.10	1.0	4.026	2.9	278.5	0.60	0.565	62	0.12 /	0.28 2	25 2	88 07	18 13	1 757	32.3	203.0
27	CCSS082106	1.1	4.6	4115.0	4.26	0.06	< 0.01	153.50	20.2	308.0	4.84	23.3	4.928	2.46	2.43	24.0	7.424	15.86	0.859	79.5	0.36	1.97	34.30	62.29	55.3 92.10	17.64	115.9	1.80	1.5	10	37	821.0	2.05 (0.959	13.8	0.32	0.32 2	36 1	98 22	25.98	2 119	147.9	600.1/
28	CCSS082107	0.7	3.3	4940.0	4.27	0.06	<0.01	167.00	25.5	373.0	4.56	25.3	5.414	2.685	2.73	20.2	8.643	17.36	0.931	85.5	0.38	1.12	34.16	68.63	78.6 62.55	19.27	141 0	1.26	1.6	11.39	31	878.5	215	1 093	15.0	0.42	0.34 2	35 1	94 21	27.87	2.088	104.6	652.0
29	CCSS082108	0.1	3.9	1053.0	1.69	0.06	<0.01	56.19	10.6	99.5	5.88	19.7	3.467	1.905	1.09	27.8	3.731	7.78	0.616	29.0	0.29	2.77	15.60	23.7	22.3 13.55	6.676	74.8	1 74	1.0	4 38	3.5	303.5	1.35 (0 585	92	0.16	0.27 3	31 1	10 1 9	18.61	1 720	60.1	252.0
30	CCSS082109	0.4	3.6	7313.0	4.32	0.08	0.33	154.90	24.3	363.0	3.74	30.9	5.334	2.457	2.47	19.3	8.381	16.08	0.895	79.5	0.34	1.21	30.16	67.14	77.0 20.21	18.76	79.8	1 20	1.6	11.52	3.1	1215.0	1 90	1 073	13.0	0.24	0.32 2	35 1	68 12	26.28	2 004	75.4	609.20
																								••••							0.1	1210.0	1.00		10.0	<i>3.</i>	<i></i> 0		00 1.2	20.20	2.004	/0.4	003-20
31	CCSS082110	<0.1	2.5	644.0	1.05	0.06	<0.01	40.65	2.8	3.5	2.92	16.3	3.253	1.902	0.84	22.1	3.31	6.24	0.644	20.0	0.3	2.00	5.98	19.35	2.0 12.92	5.119	42.4	1.02	0.9	3.717	2.7	243.5	0.55	0.538	5.9	0.08	0.27 2	2.4 2	8 1.1	19.05	1 789	36.5	196.0
32	CCSS082111	0.3	2.5	597.0	1.29	0.08	< 0.01	38.85	4.6	18.5	3.94	15.7	2.714	1.643	0.73	24.6	2.926	5.66	0.527	20.5	0.27	2.33	7.32	17.16	7.3 13.45	4,753	45.9	0.98	0.9	3.18	3.1	224.0	0.75	0.423	5.8	0.12	0.23 2	25 2	14 12	15.53	1 505	33.5	182.3
33	CCSS082112	<0.1	2.7	716.0	1.56	0.10	<0.01	160.40	5.1	43.0	4.34	13.9	5.16	2.604	2.73	27.3	5.842	5.44	0.906	79.5	0.39	3.09	15.02	59.35	10.7 16.63	18.41	64.5	1.16	1.6	10.03	42	201.0	130	1 078	21.6	014	0.35 4	41 (14 21	25.11	2 205	50.5	186.0
34	CCSS082113	0.7	3.2	859.0	0.94	0.04	<0.01	142.90	8.4	71.0	4.76	23.9	3.264	1.791	1.47	23.8	5.655	4.36	0.597	85.5	0.27	2.92	11.00	52.22	22.9 35.84	16.15	65.7	1.16	1.1	8.108	29	122.5	0.70	0.663	33.4	0.10	0.23 2	33 1	10 10	17 76	1 427	69.8	142 1
35	CCSS082114	<0.1	4.2	856.5	0.97	0.02	<0.01	69.67	5.9	41.0	5.54	19.3	3.017	1.643	0.88	17.2	3.925	4.46	0.565	38.0	0.26	1.73	8.90	28.71	14.8 20.45	8.365	67.3	1.38	0.9	4,993	2.8	97.0	0.30	0.538	20.3	0.14	0.23 3	30 F	56 1.3	16.20	1 452	40.2	138.4
																															2.0			0.000	20.0		,			10.20		10.2	100.4
36	CCSS082115	<0.1	3.7	2096.0	2.79	0.04	0.13	99.51	9.4	104.5	5.12	17.4	4.14	2.004	1.46	26.9	5.585	9.36	0.732	52.5	0.31	2.63	17.38	41.81	24.8 24.02	12.12	76.6	1.58	1.3	7.479	3.5	419.0	1.30	0.76	20.7	0.12	0.26 ?	3.8 1	10 1.8	20.92	1.755	67.8	325 4
37	CCSS082116	0.4	2.9	1382.0	1.59	0.10	<0.01	72.05	5.7	53.0	3.82	29.4	2.951	1.526	0.75	19.3	3.879	4.58	0.523	40.0	0.23	11.07	7.70	30.46	15.6 30.50	8.592	57.2	1.04	1.0	5.311	2.7	131.0	0.25	0.547	15.5	0.12	0.2 4	4.9 1	46 1.2	15.36	1.304	59.7	150.3
38	CCSS082117	<0.1	2.2	1814.0	1.45	<0.02	0.02	51.95	4.2	36.0	4.28	20.7	2.525	1.597	0.57	15.8	3.043	4.58	0.504	29.0	0.28	10.34	9.08	22.07	12.5 3.02	6.272	62.5	1.68	1.0	3.738	3.0	142.0	0.50	0.43	10.8	0.12	0.24 2	3.8 1	44 2.3	16.14	1,549	40.0	144.3
39	CCSS082118	0.7	3.4	827.0	2.3	<0.02	<0.01	118.10	6.1	51.0	7.24	42.6	4.552	2.565	1.37	30.2	6.203	8.24	0.836	65.0	0.37	4.17	12.94	46.77	11.9 51.56	13.85	88.9	1.76	1.8	7.767	4.2	241.5	1.25	0.868	18.7	0.18	0.33 4	4.1 1	18 2.3	24.81	2,206	58.9	267 2
40	CCSS082119	<0.1	3.4	899.5	1.6	0.02	<0.01	144.40	10.0	72.5	7.46	22.6	5.155	2.675	1.67	30.7	7.791	7.32	0.93	76.5	0.38	2.97	18.74	59.29	23.0 33.85	16.82	113.3	1.68	1.5	10.17	4.1	223.0	1.45	0.985	22.5	0.24	0.36 4	4.4 1	30 2.9	26.60	2.25	75.6	246.7

ICP CERTIFICATE OF ANALYSIS AK 2010-0656

X-Mark Minerals

<u>Et #.</u>	Tag #	Ag	As	Ba	Be	Bi	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Но	La	Lu	Mo	Nb	Nd	NI	Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Та	ТЪ	Th	Π	Tm	U	V V	N	Y	Yb	Zn	Zr
41	CCSS082120	<0.1	1.7	1886	5.0 1.54	\$ 0.06	0.04	91.25	8.3	59.0	5.20	24.0	4.399	2.512	1.22	23.7	5.405	6.18	0.846	49.0	0.38	6.87	11.24	38.21	22.0	21.67	10.71	83.2	0.96	1.3	6.802	3.3	214.5	0.90	0.799	14.2	0.10	0.32	4.8	146 2	.0 24	1.73 2	.169	65.0	201.90
42	CCSS082121	0.2	2 3.4	2560).0 3.8 [.]	0.04	0.08	148.10	9.3	89.5	6.12	18.7	5.646	3.171	1.49	32.2	7.35	9.08	1.072	79.5	0.49	3.66	21.44	59.12	26.1	6.81	16.66	109.2	1.84	1.5	9.552	4.4	355.0	1.65	1.039	20.3	0.20	0.43	4.3	144 3	.7 32	2.02 2	.792 1	74.7	303.20
43	CCSS082201	<0.1	5.0	1305	5.0 2.98	3 <0.02	2 0.02	148.90	17.9	101.5	5 6.78	24.6	6.098	3.361	2.25	21.2	8.349	7.30	1.142	76.0	0.44	1.94	21.60	61.95	34.3	60.26	17.47	133.0	1.58	1.8	10.68	4.4	265.5	1.75	1.125	15.8	0.22	0.44	4.5	112 2	.4 33	3.02 2	.724 1	113.2	251.50
44	CCSS082202	0.1	I 3.5	1928	3.0 1.87	7 0.02	0.18	212.40	9.4	58.0	6.64	13.5	6.319	3.266	2.34	29.4	8.99 9	11.50	1.103	112.0	0.5	2.08	33.34	79.26	16.1	6.85	23.9	117.3	2.34	1.9	12.48	4.5	213.0	1.90	1.192	21.2	0.18	0.45	4.5	106 3	.2 31	1.27 2	.829	67.1	366.90
45	CCSS082203	<0.1	4.6	766	.0 2.52	2 <0.02	2 <0.01	528.00	12.0	45.5	7.46	24.5	7.087	3.372	4.93	30.3	14.06	7.72	1.185	316.5	0.47	5.41	191.80) 166.5	14.9	10.10	54.7	103.1	1.44	2.7	20.25	4.3	262.0	1.80	1.567	19.6	0.14	0.42	4.2	76 1	.7 34	4.07 2	.566 1	111.6	246.40
46	CCSS082205	<0.1	1 3.5	610	.0 2.7	5 0.04	0.08	187.80	12.9	81.5	12.78	3 28.3	7.87	4.437	2.17	26.3	10.37	10.70	1.458	98.5	0.69	2.69	26.90	76.56	23.4	<0.01	22.09	172.2	1.82	2.1	13.22	4.1	120.5	2.00	1.454	27.6	0.24	0.64	5.9	116 2	.9 43	3.17 3	3.94	91.0	354.10
47	CCSS082208	0.3	3 2.7	765	.5 1.7	0.06	0.17	127.70	10.1	71.0	8.82	16.6	4.885	2.416	2.18	25.7	7.155	8.44	0.884	64.5	0.33	3.55	31.66	54.23	30.7	3.37	15.2	156.5	1.66	1.3	9.158	4.2	312.5	2.90	0.937	17.7	0.10	0.35	4.0	100 2	2.1 23	3.96 2	.061	50.6	277.00
48	CCSS082209	0.9	9 1.3	659	.5 1.10	5 0.04	<0.01	47.20	3.9	23.0	3.10	10.4	3.291	1.918	0.85	18.5	3.638	5.78	0.629	24.0	0.27	1.93	9.92	20.8	6.9	3.22	5.721	53.1	1.10	0.9	3.975	2.7	112.5	0.75	0.574	8.9	80.0	0.26	2.8	46 0	.8 18	3.78 1	.659	30.7	184.80
QC D	ATA:																																												

Repeat:

 1
 CCSS08201
 0.1
 7.9
 601.0
 3.08
 0.12
 <0.01</th>
 188.70
 23.5
 17.0
 8.68
 38.2
 7.699
 3.63
 3.52
 24.4
 11.37
 9.88
 1.361
 95.5
 0.46
 1.56
 78.76
 78.32
 7.59
 20.92
 21.85
 98.6
 1.42
 1.8
 13.54
 4.4
 161.5
 5.65
 1.558
 22.3
 0.30
 0.47
 4.1
 160
 6.2
 37.94
 2.845
 122.6
 339.60

 10
 CCSS082010
 0.1
 5.1
 874.5
 1.92
 0.66
 0.03
 191.50
 8.4
 78.5
 2.22
 1.56
 28.3
 6.093
 8.16
 0.752
 118.5
 0.33
 2.66
 1.97
 94.8
 1.34
 1.3
 7.863
 3.7
 22.85
 1.60
 0.24
 0.31
 3.4
 154
 2.8
 2.18
 0.40
 1.3
 7.863
 3.7
 28.5
 1.60
 0.783
 1.36
 0.47
 1.4
 1.4
 1.4
 1.4
 1.4
 1.4
 1.4
 1.4
 1.4
 1.4
 1.4

Standard:

STSD3 0.1 6.8 1566.0 2.31 0.14 0.41 64.41 16.5 76.0 5.28 43.1 5.39 3.344 1.48 16.7 5.962 5.68 1.086 38.5 0.53 6.25 13.72 34.59 30.9 11.94 9.453 66.4 4.28 1.5 6.869 4.6 248.5 1.05 0.93 7.2 0.20 0.45 10.1 138 3.0 34.96 3.049 200.8 202.90

Lithlum Metaborite Fusion/ICPMS Finish

ECO TECH LABORATORY LTD.

Norman Monteith B.C. Certified Assayer

NM/nw df/ms_WR656s XLS/10 **Eco Tech Laboratory Ltd.** 2953 Shuswap Road Kamloops, BC V2H 1S9 Canada Tel + 1 250 573 5700 Fax + 1 250 573 4557 Toll Free + 1 877 573 5755 www.stewartgroupglobal.com

WHOLE ROCK CERTIFICATE OF ANALYSIS AK 2010-0657

X-Mark Minerals 207 Larsen Ave Enderby, BC V0E 1V2

23-Sep-10

No. of samples received: 50 Sample Type: Soil **Project: RJ Shipment #: RJ Soil Samples #1** Submitted by: Chris Solic

Note: Values expressed in percent

		%	%	%	%	%	%	%	%	%	%	%	%	
ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	AI2O3	CaO	TiO2	Na2O	K2O	Cr2O3	L.O.I.
1	CCSS081601	0.18	0.45	55.15	0.10	6.97	3.22	14.44	2.56	0.89	1.52	3.39	0.01	11.1
2	CCSS081602	0.13	0.39	71.41	0.12	4.57	1.99	11.52	2.91	0.75	1.21	2.80	0.01	1.8
3	CCSS081603	0.12	0.39	74.01	0.12	4.39	1.92	10.96	2.89	0.75	1.17	2.54	0.01	0.4
4	CCSS081604	0.13	0.62	69.34	0.17	5.70	2.15	12.51	3.26	1.01	1.27	2.68	0.01	0.8
5	CCSS081605	0.17	0.39	68.54	0.24	5.89	1.62	13.57	2.05	0.69	1.26	3.00	0.01	2.9
6	CCSS081606	0.19	0.29	64.89	0.10	6.41	2.18	15.60	1.78	0.78	1.11	4.01	0.01	2.4
7	CCSS081607	0.19	0.29	63.99	0.09	6.61	2.16	15.68	1.89	0.77	1.20	3.82	0.01	3.5
8	CCSS081608	0.17	0.48	66.88	0.17	5.67	2.34	13.00	2.54	0.90	1.15	3.64	0.01	2.7
9	CCSS081609	0.18	0.39	67.57	0.12	5.22	2.30	13.33	2.15	0.77	1.15	3.73	0.01	3.3
10	CCSS081610	0.16	0.38	54.34	0.09	6.46	2.87	16.77	1.46	0.79	1.60	3.48	0.01	11.6
11	CCSS081611	0.18	0.43	53.63	0.0 9	6.83	3.01	16.62	1.41	0.82	1.46	3.55	0.01	12.4
12	CCSS081612	0.12	0.27	35.95	0.08	4.81	2.07	11.95	1.00	0.60	1.43	2.06	0.01	39.2
13	CCSS081613	0.08	0.34	43.16	0.08	6.15	2.89	18.91	5.70	0.69	1.32	2.33	0.01	17.7
14	CCSS081614	0.13	0.31	48.45	0.08	6.85	3.40	18.87	7.43	0.84	1.21	2.87	0.02	9.2
15	CCSS081615	0.04	0.48	50.79	0.11	4.99	10.86	9.20	11.19	1.64	1.03	2.47	0.01	6.1
16	CCSS081616	0.06	0.16	53.10	0.08	4.05	8.83	10.31	7.56	0.77	1.30	3.29	0.01	10.0
17	CCSS081617	0.07	0.29	56.15	0.06	4.31	5.96	11.47	2.72	1.13	0.68	4.19	0.01	13.4
18	CCSS081618	0.08	0.47	52.80	0.09	4.70	7.29	11.03	4.18	1.31	0.57	4.34	0.01	13.3
19	CCSS082104	0.18	1.14	50.50	0.28	7.62	2.95	15.50	1.13	0.73	5.11	1.36	0.01	13.4
20	CCSS082105	0.14	0.64	49.75	0.29	8.33	3.77	16.12	0.77	0.94	5.05	1.29	0.01	13.3
21	CCSS082204	0.06	0.51	40.58	0.06	5.3 9	1.26	12.12	0.64	0.77	1.56	2.05	0.01	35.3
22	CCSS082206	0.13	0.42	54.90	0.11	6.43	2.47	11.90	0.59	0.84	1.01	3.48	0.01	18.4
23	CCSS082207	0.12	0.44	52.30	0.07	5.63	1.52	12.60	1.31	0.95	2.58	2.78	0.01	19.2
24	CSSS081601	0.06	0.37	48.50	0.12	4.42	1.57	10.20	0.72	0.60	1.05	2.30	0.01	30.3

ECO TECH LABORATORY LTD.

Norman Monteith B.C. Certified Assayer

Page 1 of 2 All business is undertaken subject to the Company's General Conditions of Business which are available of request. Registered Office: Eco Tech Laboratory Ltd., 2953 Shuswap Road, Kamloops, BC V2H 159 Canada.

Eco Tech Laboratory Ltd.

2953 Shuswap Road Kamloops, BC V2H 1S9 Canada Tel + 1 250 573 5700 Fax + 1 250 573 4557 Toll Free + 1 877 573 5755 www.stewartgroupglobal.com

23-Sep-10

X-Mark Minerals AK10-0657

		%	%	%	%	%	%	%	%	%	%	%	%	
ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	AI2O3	CaO	TiO2	Na2O	K20	Cr2O3	L.O.I.
25	CSSS081602	0.06	0.46	45.69	0.07	5.60	2.08	12.61	0.83	0.79	1.46	2.52	0.01	28.4
26	CSSS081603	0.09	0.38	45.90	0.22	6.46	2.53	13.80	1.35	0.85	1.70	2.75	0.01	24.3
27	CSSS082001	0.07	0.36	53.36	0.05	3.10	1.09	9.64	0.79	0.59	1.22	3.12	<0.01	27.3
28	CSSS082002	0.06	0.45	46.35	0.19	3.19	1.47	9.41	1.43	0.57	1.33	2.21	<0.01	33.6
29	CSSS082003	0.10	0.19	66.80	0.06	3.18	1.52	10.70	1.22	0.80	1.55	3.81	<0.01	10.8
30	CSSS082004	0.08	0.17	67.87	0.05	2.86	1.27	8.87	1.02	0.57	1.23	3.43	<0.01	13.0
31	CSSS082005	0.07	0.28	61.82	0.05	3.35	1.65	8.80	1.25	0.59	1.22	3.15	<0.01	18.2
32	CSSS082006	0.09	0.20	62.24	0.07	3.97	1.20	10.71	1.08	0.81	1.85	3.44	<0.01	14.5
33	CSSS082007	0.07	0.43	49.90	0.05	3.72	1.18	10.60	0.86	0.69	1.66	2.53	0.01	28.0
34	CSSS082008	0.08	0.46	47.38	0.17	4.10	2.11	11.10	1.59	0.56	1.29	2.10	0.01	29.6
35	CSSS082009	0.09	0.43	52.50	0.08	5.26	1.62	10.62	1.43	0.80	1.74	3.06	0.01	22.5
36	CSSS082010	0.09	0.29	54.14	0.05	5.05	1.32	10.75	1.04	0.98	2.33	2.74	0.01	21.6
37	CSSS082011	0.04	0.55	38.42	0.20	9.42	5.50	7.33	3.35	0.99	0.52	1.65	0.02	32.4
38	CSSS082012	0.11	0.36	50.71	0.07	4.56	1.57	9.43	1.40	0.72	1.84	2.48	0.01	27.4
39	CSSS082013	0.11	0.41	55.49	0.09	5.99	1.81	11.58	1.50	1.01	1.92	3.15	0.01	17.2
40	CSSS082014	0.10	0.29	53.20	0.15	6.38	1.88	13.39	1.13	0.91	1.35	2.93	0.01	18.1
41	CSSS082015	0.09	0.35	53.72	0.10	5.56	1.79	11.21	1.18	0.93	1.72	3.23	0.01	20.6
42	CSSS082016	0.10	0.31	52.30	0.18	5.80	2.04	12.45	1.13	0.88	1.49	3.0 9	0.01	20.9
43	CSSS082017	0.0 9	0.23	53.68	0.09	5.54	1.83	11.53	1.64	0.91	1.49	3.08	0.01	20.4
44	CSSS082018	0.08	0.23	46.46	0.05	3.97	1.38	7.64	0.83	0.56	0.72	2.00	0.01	37.8
45	CSSS082201	0.08	0.38	44.60	0.04	3.57	1.87	13.60	1.60	0.66	2.16	1.83	0.01	30.0
46	CSSS082202	0.06	0.25	49.18	0.04	3.27	0.69	15.47	1.10	0.49	3.13	1.86	<0.01	25.0
47	CSSS082203	0.07	0.11	52.40	0.04	3.70	1.46	12.60	1.36	0.69	2.29	2.89	<0.01	22.0
48	CSSS082204	0.15	0.03	79.87	0.02	0.48	0.18	8.93	0.24	0.24	1.94	4.97	<0.01	3.2
49	CSSS082205	0.08	0.15	48.67	0.05	5.47	4.13	12.58	1.77	0.74	1.23	2.43	0.01	23.3
50	CSSS082206	0.07	0.08	64.65	0.04	2.14	0.81	12.97	1.35	0.71	3.29	2.47	<0.01	11.2
QC DA	TA:													
Repea	it:													
1	CCSS081601	0.18	0.48	55.55	0.10	6.88	3.29	14.48	2.53	0.88	1.57	3.42	0.01	10.6
10	CCSS081610	0.16	0.36	54.28	0.10	6.60	2.89	17.01	1.34	0.81	1.46	3.52	0.01	11.5
19	CCSS082104	0.19	1.09	50.49	0.29	7.75	3.02	15.61	1.04	0.75	5.00	1.42	0.01	13.4
33	CSSS082007	0.07	0.41	50.07	0.04	3.78	1.19	10.46	0.94	0.69	1.75	2.53	<0.01	28.0
42	CSSS082016	0.10	0.31	52.48	0.17	5.67	2.11	12.22	1.14	0.90	1.46	3.03	0.01	20.9
Standa	ard:													
LOIST	D													32.4
LOISI	U													32.7

0.20 14.60 6.25

6.28

0.58

0.10

13.50

20.50

(1901/	
FCO TECHA MORATORY I T	

8.38 2.45 2.44

7.09 0.27 7.11

ECO TECH L'ABORATORY LTD. Norman Monteith B.C. Certified Assayer

0.97

1.82 <0.01

0.04

df/wr XLS/10

TDB1

SY4

0.03

0.04

0.23

0.13 50.00

50.60

23-Sep-10 Stewart Group ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4

Phone: 250-573-5700 Fax : 250-573-4557 ICP CERTIFICATE OF ANALYSIS AK 2010-0657 Lithium Metaborate Fusion X-Mark Minerals 207 Larsen Ave Enderby, BC V0E 1V2

No. of samples received: 50 Sample Type: Soil **Project: RJ** Shipment #: RJ Soil Samples #1 Submitted by: Chris Solic

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	As	Ba B	e Bi	Cd	Сө	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La	Lu	Mo N	Nb	Nd	NI P) Pr	Rb	Sb	Se	Sm	Sn	Sr	Та	Tb	Th	TI	Tm	U	<u>v</u>	N Y	Yb	Zn	Zr
1	CCSS081601	1.2	5.9	1590 2	4 0.82	0.45	167.4	14.3	80.5	6.5	47.1	6.4	3.6	1.9	22.3	8.6	11.6	1.2	87.0	0.5	3.52 2	7.1	68.8	39.8 281	.4 18.0	5 118.	8 5.3	1.1	10.2	4.9	278.0	2.2	1.2	18.2	0.9	0.5	4.9	106 E	.7 36.1	3.2	440.0	456.4
2	CCSS081602	1.3	3.0	1181 2	.2 0.84	0.42	187.3	10.1	62.5	1.7	19.7	8.3	4.8	2.4	16.0	11.3	13.6	1.6	93.5	0.6	1.39 22	2.1	77.2	24.1 52	4 21.0	6 73.0) 1.5	1.5	13.4	2.7	217.5	1.9	1.5	22.8	0.6	0.6	5.2	74 €	.2 40.8	4.1	171.1	461.7
3	CCSS081603	0.4	2.2	1059 2	.5 0.76	0.44	190.8	10.2	56.0	1.7	16.4	7.2	3.9	2.7	13.9	10.9	13.2	1.3	96.0	0.5	1.23 2	1.9	77.9	21.8 40	4 21.0	67.6	5 1.7	1.2	13.3	2.2	205.0	2.0	1.4	20.9	0.5	0.5	4.5	68 5	.5 33.7	3.3	153.6	472.6
4	CCSS081604	0.8	4.0	1130 2	.2 0.82	0.47	571.2	12.5	75.5	1.8	20.7	22.7	13.2	6.2	19.5	31.1	27.9	4.4	284.0	1.7	1.46 36	8.3 2	232.8	25.8 46	3 65.2	2 74.6	6 1.6	3.1	39.6	2.8	236.5	2.8	4.2	74.2	0.5	1.8	15.1	82 €	.4 112.5	11.3	151.1	996.7
5	CCSS081605	1.0	2.7	1431 2	.9 0.76	0.47	221.0	40.8	66.5	2.8	32.3	9.6	5.0	3.4	17.0	14.2	13.2	1.7	108.0	0.6	3.63 3	1.3	92.8	55.2 276	.3 25.	7 90.8	8 0.8	1.4	17.1	2.5	202.5	1.8	1.9	27.6	0.5	0.7	7.4	100 4	.8 44.3	4.0	326.2	478.6
~	0000001000	0.5	0.5	1000 0	0 0 70	0.00	1 40 0	40.0	00.5					~ ~	00.4	0.0	~ ~			~ -	0.50 4			40 7 40					10.0													
7	0000000000	0.5	2.5	1032 2	0 0.76	0.36	143.0	19.6	86.5	4.4	41.0	6.8	4.0	2.0	22.1	8.8	9.6	1.3	/1.5	0.5	3.52 1	5.1	59.2	43.7 104	.9 16.	2 135.	1 1.1	1.2	10.2	2.8	192.0	1.6	1.2	18.4	0.8	0.5	4.9	114 5	0.1 34.7	3.5	265.1	349.8
/	0000001607	1.0	1.7	1/09 3	2 0.84	0.46	205.7	17.4	94.5	4.6	33.8	8.7	4.8	2.7	23.5	12.1	11.9	1.0	100.5	0.6	4.28 1	5.5	86.7	42.0 47	1 23.	5 138.	8 1.2	1.2	14.7	2.9	210.5	1.6	1.6	26.7	0.8	0.6	6.6	130 5	0.2 41.5	4.0	188.9	418.3
0	0000001608	1.3	2.1	1400 0	.3 0.80	0.39	311.0	18.2	84.0	3.6	26.0	13.6	7.2	3.9	19.3	18.3	22.0	2.5	151.0	0.9	1.96 2	7.6 1	125.9	42.6 212	.1 35.	2 120.	0 2.0	1.8	21.7	3.5	231.0	2.4	2.5	38.4	0.8	1.0	8.2	92 6	64.4	6.0	488.4	800.3
9	0000001009	1.4	1.5	1499 2	.5 0.76	0.44	193.1	14.7	74.0	3.4	27.5	7.9	4.0	2.6	18.0	11.0	13.3	1.4	94.5	0.5	2.03 2	1.1	0.08	34.4 122	.1 22.0) 109. 107	1.4	1.3	14.3	2.8	201.5	1.8	1.5	22.7	0.7	0.5	5.3	82 5	0.4 35.8	3.3	332.4	4/8.5
10	CC35061610	1.0	1.7	1517 2	.7 0.84	0.60	118.7	16.4	84.0	0.0	40.2	5.1	2.1	0.1	25.8	7.3	7.0	0.9	60.0	0.4	2.43 14	4,3	49.8	41.9 110	.1 13.	5 127.	4 1.6	0.8	8.6	3.4	210.5	1.5	1.0	16.5	0.6	0.4	4.0	88 4	.8 23.2	2.3	243.0	279.4
11	CCSS081611	0.5	1.9	1543 2	.6 0.76	0.49	111.3	15.3	84.5	5.7	41.9	5.2	3.0	1.5	25.4	6.7	8.5	1.0	56.0	0.4	2.47 1	5.3	45.6	41.1 101	.8 12.	7 116.	8 1.6	0.9	8.0	3.2	184.0	1.5	1.0	16.1	0.6	0.4	4.4	92 4	.9 25.3	2.8	239.0	305.1
12	CCSS081612	0.2	2.2	1055 0	.9 0.74	0.46	67.5	8.8	43.0	5.5	23.8	3.1	1.7	0.8	21.2	4.1	4.8	0.6	35.5	0.2	2.77 7	7.3	27.4	19.7 21	7 7.8	84.9	9 1.3	0.4	4.8	2.6	164.5	0.9	0.5	10.2	0.5	0.2	2.6	58 3	.8 13.9	1.5	126.6	170.5
13	CCSS081613	0.4	0.4	690 3	9 0.76	0.40	97.4	20.6	71.5	4.8	60.1	5.3	3.3	1.4	26.9	6.1	4.4	1.1	53.0	0.5	1.53 1	1.4	41.2	49.6 20	7 11.	5 91.5	5 1.2	0.8	7.3	2.7	428.0	1.5	0.9	13.7	0.3	0.5	4.0	84 3	9 28.2	3.0	129.7	154.7
14	CCSS081614	0.5	1.3	1120 2	7 0.76	0.38	126.0	24.0	109.5	4.3	48.5	5.0	2.9	1.8	26.4	7.1	4.9	1.0	68.0	0.4	2.69 10	0.6	53.3	69.8 65	2 14.	3 114.	0 1.0	0.7	8.6	2.7	426.0	1.4	0.9	14.8	0.3	0.4	5.4	128 3	3.8 25.7	2.5	228.4	174.4
15	CCSS081615	0.7	1.8	405 4	2 0.82	0.42	421.8	16.8	64.0	3.5	53.8	16.5	9.3	5.7	20.7	22.9	17.1	3.2	223.0	1.2	3.21 5	4.2 1	150.4	41.8 23	8 43.	3 84.1	1.5	2.5	26.4	4.8	214.5	3.9	3.1	38.9	0.3	1.3	9.3	102 5	8 86.5	7.9	98.6	664.0
																																			0.0					,	00.0	00/10
16	CCSS081616	0.6	1.4	540 4	.3 0.82	0.45	219.8	13.4	62.0	4.9	33.8	6.4	3.6	2.7	20.2	9.6	12.0	1.2	117.0	0.5	2.19 2	9.5	77.0	28.7 29	1 23.	2 97.1	1.5	1.1	12.0	3.3	292.0	1.8	1.2	21.9	0.3	0.5	9.3	84 3	3.7 33.8	3.0	105.6	535.5
17	CCSS081617	0.8	1.2	698 4	.0 0.78	0.39	150.1	13.7	71.0	5.7	23.4	7.0	3.9	2.5	21.6	9.7	11.9	1.3	74.5	0.5	2.64 3	1.8	65.1	30.3 48	6 17.	4 135.	4 1.8	1.2	11.7	3.9	142.5	2.5	1.3	20.5	0.3	0.5	3.9	86 f	6.6 34.9	3.5	67.2	452.1
18	CCSS081618	0.7	3.2	751 4	.1 0.78	0.54	251.1	19.4	65.0	5.4	44.6	12.8	7.3	3.4	19.5	15.9	14.8	2.4	129.5	0.9	2.19 3	5.2 1	100.2	41.4 20	2 27.	9 135.	5 1.4	2.1	17.6	3.6	150.0	3.4	2.2	33.3	0.3	1.0	6.3	80 7	.5 65.3	6.2	87.9	554.0
19	CCSS082104	0.6	8.5	1706 2	.1 0.80	0.31	3813.0	11.5	74.0	5.4	80.6	5.4	2.6	8.4	48.2	33.2	5.5	0.8	2680.0	0.3	39.18 9	14.5 E	839.3	26.3 27	5 311	1 75.7	7 1.8	3.5	52.9	3.3	1417.0	2.7	2.0	19.7	0.2	0.3	5.7	82 2	1.0 18.3	1.5	169.6	228.6
20	CCSS082105	0.7	5.5	1359 4	.5 0.86	0.48	1557.0	17.7	106.0	6.0	25.6	3.3	1.7	3.7	35.3	14.7	5.7	0.6	1095.0	0.2	12.37 9	6.3 3	353.6	47.0 67	8 132	0 73.3	3 2.1	2.1	22.7	4.0	902.5	3.5	1.0	18.8	0.3	0.2	3.0	126 4	1.7 12.6	1.2	213.9	214.8
21	0055082204	0.0	12	563 2	4 0.82	0.30	128.6	70	46.5	69	28.4	6.8	10	1.9	22.2	70	80	12	64.0	0.6	2 27 2	4.9	61 2	161 6	5 14	5 01 1	. 16	0.0	0.0	22	164.0	10		10 1	0.2	0.6	50	74 1	2 226	26	60.0	201 0
22	0000002204	0.5	1.2	1170 0	2 0.02	0.30	076.6	0.6	40.J	76	17.2	11 4	4.0 6.2	7.1	20.2	7.5	146	2.0	609.0	0.0	224 2	.4.0 S	216.0	10.1 0.	0 00	5 31.4 5 101	2 1.U 2 2 1	0.9	35.0	3.3	104.0	1.5	1.1	64.9	0.2	0.0	5.0	- 14 - 3	0.7 00.0	3.0	02.0	201.0
22	0000002200	1 /	2.5	1080 1	7 0.79	0.40	314.0	5.0	42.0	5.6	17.0	5.0	0.3	2.1	29.0	24.4 00	14.0	0.0	156.0	0.9	407 2	H-0 0	116 1	176 25	. 3 33. 9 33.	D 121.	3 Z.I 7 10	2.3	30.9	4.7	102.0	2.3	2.5	04.0	0.3	0.0	5.0	76 4	1.7 DI.3	0.0	00.0	403.4
24	CSSS081601	1.4	17	551 1	., 0.70 8 0.74	0.30	76 7	15.2	38.0	6.5	16.0	5.0	2.5	1.0	16.4	5.5	7.0	1.1	29.6	0.3	4.57 3	20	20.9	1/ 6 33	7 96	9 100.	7 1.57	0.7	10.0 E 0	4.4	122.0	2.0	1.1	0.0	0.2	0.3	3.2	/0 c	0.0 20.0	2.1	50.9	302.7
25	CSSS081602	0.7	1.7	581 2	0 0.74	0.41	97.5	10.7	52.5	8.0	28.5	10	28	1.0	21.0	5.8	7.0	0.0	/0.5	0.5	207 1	5.0	30.0	22 1 26	0.U	n 101	1 1 2	1.0	0.0	2.0	179.0	1.2	0.0	9.0 10 A	0.2	0.5	3.5	02 0	0.1 29.1	0.4	0.00	209.2
20	0000001002	0.7	1.7	501 2	.0 0.74	0.40	37.5	10.7	52.5	0.0	20.5	4.5	2.0	1.0	21.3	5.0	7.2	0.3	43.5	0.4	2.37 1	0.0	09.1	22.1 20	.0 11.	5 101.	1 1.5	1.0	0.7	3.0	178.0	1.0	0.0	12.4	0.5	0.4	4.0	04 3	0.0 20.9	2.0	00.2	2/1.1
26	CSSS081603	0.9	1.3	803 2	.1 0.78	0.39	148.2	16.9	73.0	7.2	32.0	5.8	3.3	1.7	27.7	7.6	8.7	1.1	76.5	0.5	3.26 1	7.6	55.0	32.5 36	0 15.	9 132.	6 1.5	1.1	8.9	3.3	219.0	1.6	1.1	15.4	0.3	0.5	4.3	98 (3.2 28.7	2.9	129.4	326.2
27	CSSS082001	0.4	0.8	635 2	.3 0.74	0.47	73.8	4.6	23.5	5.3	11.6	4.2	2.4	1.2	18.4	4.9	11.5	0.8	34.5	0.3	2.64 1	0.6	31.4	7.5 23	9 8.5	106.	1 1.0	0.6	6.1	2.9	137.0	1.1	0.7	21.2	0.2	0.4	4.2	52 3	3.0 20.0	2.2	79.3	389.3
28	CSSS082002	0.6	1.7	633 2	.7 0.80	0.47	76.3	13.2	30.5	6.3	13.4	4.9	2.7	1.2	17.9	5.5	6.3	0.9	35.0	0.4	4.16 1	2.1	31.7	12.3 13	.1 8.4	90.5	5 1.5	1.1	5.9	2.9	159.5	1.1	0.8	9.4	0.2	0.4	6.6	54 f	5.3 23.3	2.4	42.3	215.9
29	CSSS082003	0.7	1.7	1001 2	.0 0.82	0.41	101.8	5.0	34.5	7.6	14.0	6.4	4.1	1.4	20.0	7.0	13.2	1.3	48.0	0.6	2.99 2	2.8	41.9	11.2 16	9 11.	5 116.	5 1.6	1.1	7.9	4.1	179.0	1.8	1.1	13.6	0.2	0.6	3.9	68	5.1 35.5	3.9	37.0	470.1
30	CSSS082004	0.7	3.3	837 1	.7 0.82	0.40	83.5	5.4	30.5	5.4	11.2	4.4	2.5	1.1	17.1	5.3	11.1	8.0	41.0	0.4	1.61 1	5.2	34.4	9.8 27	.6 9.4	102.	2 2.1	0.8	6.2	4.0	151.0	1.2	0.8	12.1	0.2	0.4	2.7	56 🤅	3.0 21.6	2.3	30.3	380.9
01	CEEEOPOOR	07	0 4	700 1	c 0.00	0.40	70.4	0.7	20.0	.	10.0	47			107	5.0	~ ~		60 0	~ •	0.00 4	~ ~	00 7	40.0.00						~ ^			~ ^			<u>.</u> .						
31	CSSS082005	0.7	2.1	703 1	.0 0.82	0.40	13.4	8.7	32.0	0.1	12.8	4.7	3.0	1.1	16.7	5.0	40.5	1.0	36.0	0.4	2.82 1	6.0	29.7	13.0 23	.1 8.3	94.	3 1.7	0.6	5.7	3.4	146.0	1.4	0.8	9.0	0.2	0.4	3.5	56 3	3.4 24.8	2.9	33.8	319.4
32	0555082006	0.9	2.2	959 2	.5 0.84	0.48	136.6	6.6	35.5	9.2	16.3	6.9	4.0	1.6	23.5	8.5	13.5	1.3	66.5	0.5	2.21 1	8.2	56.5	12.7 26	.1 15.	4 136.	1 2.2	1.1	10.1	4.5	201.5	2.1	1.2	18.6	0.3	0.6	4.2	74 3	3.1 34.4	3.6	45.2	474.9
33	00000000	0.6	2.7	003 1	.6 0.78	0.44	132.2	0.0	37.0	1.1	34.7	5.3	2.7	2.4	21.5	8.1	5.9	0.9	60.0	0.4	2.61 1	4.6	51.8	17.5 27	.6 15.	0 99.0	5 1.5	0.9	10.4	3.5	179.0	1.5	1.0	18.0	0.2	0.3	4.1	66 2	2.9 22.7	2.3	46.6	224.6
34	000000000000000000000000000000000000000	0.8	2.3	790 2	.2 0.84	0.56	99.0	26.4	82.5	12.3	19.2	5.4	3.0	1.7	20.6	6.7	6.0	1.0	4/.0	0.4	3.66 1	6.8	43.5	27.8 26	.6 11.	8 128.	2 1.4	0.9	8.1	3.0	242.5	1.2	1.0	29.1	0.2	0.4	3.3	68 2	2.7 25.5	2.7	84.0	215.9
35	0355082009	0.7	3.0	951 1	. o 0.82	0.50	130.7	9.0	/1.5	8.3	27.9	5.4	3.0	1./	28.9	7.4	9.1	1.0	63.0	0.4	4.08 1	7.5	53.2	22.3 48	.4 14.	8 151.	3 2.1	0.5	9.5	3.7	220.0	1.6	1.0	26.9	0.2	0.4	4.1	86 3	3.2 25.8	2.6	77.0	310.8
36	CSSS082010	0.6	2.4	947 1	.6 0.82	0.37	240.3	7.6	51.0	7.0	21.4	6.3	3.7	1.9	29.3	8.6	11.7	1.2	130.0	0.5	4.03 3	33.7	80.7	24.0 27	.0 24.	1 104.	5 1.8	0.6	11.1	4.0	370.5	2.5	1.1	24.1	0.2	0.6	4.0	98 :	3.7 30 7	3.5	50.7	414.1
37	CSSS082011	0.2	3.9	363 1	.1 0.72	0.37	71.4	18.5	137.0	2.6	29.3	3.6	1.8	1.7	15.1	4.9	4.2	0.7	35.0	0.2	3.72 1	7.4	30.6	45.0 72	4 8.0	53.3	3 2.6	0.7	5.7	2.0	87.5	1.6	0.7	12.9	0.2	0.2	3.7	176 (2.3 16.0	1.3	275.7	175.2
38	CSSS082012	0.5	2.0	1071 1	.3 0.80	0.38	157.3	8.2	63.5	4.8	16.7	4.1	1.9	2.0	24.1	7.4	5.3	0.7	76.5	0.2	1.78 2	1.2	62.1	21.5 24	1 17.	3 103	5 1.3	1.3	10.2	2.9	254.5	1.6	0.8	15.0	0.2	0.2	2.9	98	2.5 17 1	1.6	71.3	190.9
39	CSSS082013	0.8	2.3	1076 1	.9 0.80	0.37	201.6	10.9	81.0	8.1	26.9	6.5	3.7	2.0	29.5	8.8	10.1	1.3	105.5	0.5	3.02 3	3.4	67.9	29.3 53	5 20	1 188	1 1.9	1.2	10.6	3.7	234.0	2.4	1.1	18.5	0.3	0.5	4.7	142	3.3 324	33	88.9	362.3
40	CSSS082014	0.7	4.9	1054 2	.1 0.84	0.44	173.1	14.2	81.0	11.2	34.5	6.6	3.6	1.9	32.4	8.6	12.1	1.2	80.0	0.5	2.45 2	9.5	61.8	32.3 51	4 17	3 161	0 1.6	1.1	10.2	4.0	199.5	2.3	1.2	20.5	0.3	0.5	4.6	118	5.5 30.8	3.0	102.0	445.2
																																		2010	0.0	0.0				0.0	102.0	110.4

ICP CERTIFICATE OF ANALYSIS AK 2010-0657

X-Mark Minerals

<u>Et #.</u>	Tag #	Ag	As	Ba	Be	BI	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gđ	Hf	Но	La	Lu	Мо	Nb	Nd	NI	Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Та	Тb	Th	п	Tm	U	v	w y	Yb	Zn	Zr
41	CSSS082015	1.0	3.5	934	2.1	0.84	0.36	125.7	9.3	63.5	7.4	21.7	6.2	3.9	1.8	27.7	7.8	10.7	1.2	59.5	0.5	2.31	37.4	50.6	23.1	108.1	14.0	167.0	2.0	1.3	9.0	4.2	186.5	2.3	1.1	22.6	0.2	0.5	4.0	102	39 31	34	91.6	376.6
42	CSSS082016	0.4	2.6	940	2.0	0.78	0.50	139.3	12.9	68.0	6.8	18.4	6.2	3.4	1.9	27.4	8.2	10.2	1.2	67.5	0.4	2.02	22.3	54.6	26.9	18.9	15.2	179.4	1.3	1.1	97	3.7	180.5	21	11	17.7	0.2	0.5	43	94	16 284	30	93.1	361.7
43	CSSS082017	0.7	2.9	960	2.6	0.82	0.46	149.0	10.8	75.5	7.0	20.1	5. 9	3.3	1.8	27.4	8.6	11.2	1.1	72.0	0.5	2.19	26.4	59.3	29.2	20.6	16.2	179.3	1.5	13	10.4	34	188.0	24	1 1	19.6	0.2	0.5	4.0	118	16 28/	20	84.2	400.7
44	CSSS082018	0.4	2.8	775	1.1	0.76	0.40	112.8	7.7	61.0	3.9	26.9	3.2	2.0	0.9	17.0	4.3	4.2	0.6	65.0	0.3	1.45	16.0	37.8	22.3	20.3	11.0	91.0	14	0.9	61	23	130.0	1.9	0.6	0.0	0.2	0.3	26	02	26 16 20	10	60.2	160.7
45	CSSS082201	0.6	2.7	729	1.4	0.74	0.30	74.5	6.8	46.5	3.3	17.2	3.7	2.1	1.3	20.3	5.0	5.0	0.7	39.0	0.3	2.16	7.0	32.7	14.9	25.5	8.7	44.4	1.0	0.7	5.8	2.7	239.0	0.9	0.7	8.2	0.1	0.3	3.5	72	1.8 18.6	1.9	54.9	183.3
46	CSSS082202	<0.1	2.7	500	1.2	0.64	0.44	40.1	3.2	8.0	2.4	22.0	3.1	1.9	0.8	18.8	3.5	5.4	0.6	18.5	0.3	2.36	3.8	19.4	6.5	34.0	49	36.2	0.5	0.6	39	22	235.0	0.5	0.5	61	0.0	03	22	12	1 1 15/	17	36.0	190.0
47	CSSS082203	0.4	1.9	648	1.3	0.76	0.38	62.8	3.6	23.0	4.4	13.8	3.4	2.2	0.8	27.5	4.1	7.0	0.7	31.5	0.3	3.61	74	25.7	79	20.3	72	76.3	1.6	10	47	35	210.0	1 1	0.0	80	0.0	0.0	21	64	0 10-	20	30.0	251.0
48	CSSS082204	0.3	2.3	1513	2.0	0.76	0.44	183.4	0.9	2.5	1.1	5.7	2.0	1.0	1.7	12.9	5.0	6.7	0.3	94.0	0.2	1 48	17 1	68.7	2.5	174	20.1	70.1	1.0	0.5	89	2.5	368.0	0.5	0.0	10.6	0.1	0.0	16	20	10 90	2.0	14.7	201.0
49	CSSS082205	0.7	3.5	880	1.9	0.84	0.42	96.2	8.7	53.0	9.4	21.8	5.5	3.1	1.4	28.4	6.6	8.8	1.0	46.0	0.5	2.62	11.6	41.3	18.6	217	11 1	99.4	1.0	0.0	77	3.6	150.0	1.5	0.0	13.1	0.1	0.1	3.0	100	0.2	0.9	94.0	217.1
50	CSSS082206	0.2	2.6	634	1.9	0.72	0.31	80.2	3.6	18.0	3.1	10.1	4.6	2.7	1.1	20.6	5.5	7.9	0.9	37.0	0.4	1.59	12.1	33.6	4.8	14.9	93	54.4	12	0.6	61	29	257.5	1.0	0.3	11.3	0.2	0.5	34	54	20 230	2.5	30.5	264.0
<u>QC D</u>	ATA:																										0.0	01.7	110	0.0	0.1	2.0	207.0		0.0	11.0	0.1	0.4	0.4	<u> </u>	2.0 20.0	2.0	09.0	204.0
пере			• •										_																															
10	0000001001	1.3	3.8	1601	1.9	0.80	0.35	1/2.1	15.2	82.0	6.8	48.7	7.6	4.4	2.2	23.9	10.2	12.0	1.4	90.0	0.6	3.40	31.0	72.6	41.7	282.7	19.6	123.3	5.6	1.1	12.2	5.1	281.5	2.1	1.4	19.5	0.9	0.6	5.7	102	5.1 38.7	4.0	437.4	462.8
10	000000000000000000000000000000000000000	0.8	1.4	1536	2.6	0.84	0.57	122.7	16.7	86.0	5.9	41.4	5.4	3.0	1.7	26.6	7.5	8.0	1.0	62.0	0.4	2.31	14.7	51.0	43.1	106.7	14.3	131.5	1.6	0.9	9.3	3.2	208.0	1.5	1.0	18.5	0.5	0.4	4.1	92	4.2 26.2	2.7	244.6	283.9
19	000000000	0.6	7.2	1689	2.0	0.72	0.38	3786.0	11.3	73.5	5.4	78.0	4.9	2.6	6.8	41.2	26.8	6.2	0.8	264.0	0.3	37.16	95.9	812.3	26.1	24.8	308.7	74.5	1.3	3.2	43.3	3.0	1399.0	2.3	1.7	18.1	0.2	0.3	3.6	82	2.3 18.5	1.7	171.3	230.9
33	CSSS082007	0.7	3.0	672	2.0	0.82	0.52	127.8	7.1	39.0	7.9	36.0	5.1	2.8	1.6	21.9	6.2	7.2	1.0	56.5	0.4	2.78	15.7	48.1	19.4	245.0	13.5	103.3	1.5	1.0	7.4	3.7	183.5	1.4	0.9	16.2	0.1	0.4	4.0	70	2.7 24.4	2.6	48.9	229.6
42	CSSS082016	0.4	3.2	910	1.8	0.76	0.53	146.1	13.4	66.5	6.8	21.7	6.5	3.5	2.0	27.7	8.8	10.3	1.2	72.5	0.5	2.39	26.3	60.7	26.2	22.8	16.4	174.1	1.3	1.1	10.7	3.9	178.5	2.2	1.2	19.1	0.2	0.5	4.6	96	3.2 30.1	3.1	95.6	370.5
Stand	lard:		-		<u> </u>																																							
5150	3	0.6	<5	1475	3.5	10.9	0.32	59.6	14.8	82.6	5.59	38.4	5.7	3.5	1.4	18.2	6.4	10.3	1.1	31.0	0.5	6.00	12	34.9	35.9	42.0	9.3	63.7	3.4	1.7	7.1	2.6	234.2	1.3	1.0	8.5	0.3	0.5	10.5	131	3.4 35.8	3.2	198.7	208.4

Lithium Metaborite Fusion/ICPMS Finish

ECO TECH LARORATORY LTD.

ECO TECH LABORATORY LTD. Norman Monteith B.C. Certified Assayer

NM/nw df/ms_WR657S XLS/10

APPENDIX IV

Rock Sample Assay Results

Eco Tech Laboratory Ltd. 2953 Shuswap Road Kamloops, BC V2H 1S9 Canada Tet + 1 250 573 5700 Fax + 1 250 573 4557 Toll Free + 1 877 573 5755 www.stewartgroupglobal.com

WHOLE ROCK CERTIFICATE OF ANALYSIS AK 2010-0694

X-Mark Minerals 207 Larsen Ave Enderby, BC V0E 1V2

No. of samples received: 15 Sample Type: Rock **Project: RJ** Submitted by: Chris Solic

Note: Values expressed in percent

		%	%	%	%	%	%	%	%	%	%	%	%	
ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	AI2O3	CaO	TiO2	Na2O	K20	Cr2O3	L.O.I.
1	CSGS081701	0.16	0.03	21.70	0.06	3.28	4.14	8.73	34.70	0.29	0.69	1.54	0.01	25.0
2	CS-GS-0816-01	0.71	0.35	33.78	0.22	6.22	4.83	13.41	18.91	0.42	3.87	2.00	0.01	15.2
3	CSGS081705	0.22	0.06	20.40	0.04	3.71	4.11	10.35	30.65	0.33	0.63	3.46	0.01	25.7
4	CSGS081704	0.10	0.06	26.23	0.03	3.70	4.43	10.92	31.69	0.36	0.57	1.36	0.01	20.6
5	CSGS081703	0.30	0.19	26.77	0.18	4.08	3.22	8.87	28.42	0.33	2.78	1.02	0.02	23.1
6	CSGS081702	0.05	0.02	10.87	0.04	1.40	4.21	2.31	44.61	0.08	0.18	0.58	<0.01	34.9
7	CC-GS-0817-02	0.14	0.03	19.60	0.06	3.03	4.23	7.62	33.39	0.28	1.77	2.02	0.01	27.9
8	CC-GS-0817-01	0.15	0.01	7.69	0.01	1.01	4.71	2.76	44.90	0.10	0.25	0.93	<0.01	37.2
9	CS-GS-0816-02	0.11	0.09	50.40	0.05	8.04	3.05	21.60	10.50	0.68	1.48	2.75	0.02	1.9
10	CSGS082102	0.19	0.15	6.01	0.15	1.56	0.93	1.50	47.66	0.11	0.92	0.02	<0.01	40.2
11	CSGS082001	0.02	0.20	42.95	0.11	6.41	7.04	8.14	21.74	0.90	0.39	2.62	0.02	9.3
12	CC-GS-0821-01	0.57	0.23	33.99	0.24	5.70	3.76	11.95	19.26	0.55	4.53	1.78	0.01	17.3
13	CS-GS-0823-02	2.96	0.02	29.73	0.20	8.03	4.59	3.91	22.16	0.18	0.10	1.19	0.02	26.4
14	CS-GS-0823-01	0.10	0.47	18.35	0.25	3.59	4.97	6.26	31.07	0.28	0.07	1.59	0.01	32.5
15	CSGS082101	0.66	0.63	34.26	0.49	7.34	6.58	11.56	15.95	0.46	3.88	2.53	0.01	15.5
QC DA	IA:													

Reneat.

переа	£.,													
1	CSGS081701	0.15	0.03	21.90	0.05	3.14	4.19	8.64	34.10	0.29	0.67	1.52	0.01	25.0
Respli	it:													
9	CS-GS-0816-02	0.11	0.10	50 72	0.05	7 99	3 12	21.63	10 16	0.66	1.54	2 78	0.02	17

ECO TECH LABORATORY LTD.

ECO TECH LABORATORY LTD. Norman Monteith B.C. Certified Assayer

All business is undertaken subject to the Company's General Conditions of Business which are available and 1 of 2 request. Registered Office: Eco Tech Laboratory Ltd., 2953 Shuswap Road, Kamtoops, BC V2H 1S9 Canada.

Eco Tech Laboratory Ltd. 2953 Shuswap Road Kamloops, BC V2H 1S9 Canada Tel + 1 250 573 5700 Fax + 1 250 573 4557 Toll Free + 1 877 573 5755 www.stewartgroupglobal.com

X-Mark Minerals AK10-0694

		%	%	%	%	%	%	%	%	%	%	%	%	
ET #.	Tag #	BaO	P2O5	SiO2	MnO	Fe2O3	MgO	AI2O3	CaO	TiO2	Na2O	K20	Cr2O3	L.O.I.
Standard:														
LOISTD														32.5
TDB1		0.03	0.24	51.20	0.20	14.64	6.28	13.60	8.35	2.27	2.30	0.99	0.03	
SY4		0.04	0.13	49.85	0.11	6.25	0.56	20.84	7.26	0.27	7.27	1.88	<0.01	

ECO TECH LABORATORY LTD. Norman Monteith B.C. Certified Assayer

df/wr XLS/10 1-Oct-10 Stewart Group ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4

Phone: 250-573-5700 Fax : 250-573-4557 X-Mark Minerals 207 Larsen Ave Enderby, BC V0E 1V2

No. of samples received: 15 Sample Type: Rock **Project: RJ** Submitted by: Chris Solic

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	As	Ba	Be	BI	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Но	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Ta	Tb	Th	Π	Tm	<u> </u>	V	<u>W Y</u>	Yb	Zn	Zr
1	CSGS081701	0.3	4.8	1357.0	1.9	0.9	0.1	42.6	7.4	71.0	2.2	14.4	1.5	0.9	0.6	11.5	2.5	0.8	0.3	22.5	0.1	2.2	5.6	17.0	22.4	3.2	5.4	78.9	0.1	0.2	3.0	1.6	784.5	0.20	0.3	6.3	0.06	0.1	1.7	52.0 ().9 7.5	0.7	176.0	28.9
2	CS-GS-0816-01	0.2	5.1	6613.0	1.3	0.9	0.3	537.9	8.7	91.5	2.7	19.4	4.9	2.0	3.7	16.6	12.4	1.8	0.7	296.5	0.2	1.9	100.3	167.7	31.0	6.4	53.3	66.4	0.7	1.5	18.1	2.3	2656.0	1.65	1.2	18.1	0.18	0.2	0.9	48.0 (0.5 18.3	1.2	132.5	54.2
з	CSGS081705	0.4	4.5	1893.0	2.9	0.9	0.2	51.3	7.5	63.0	6.8	16.8	2.6	1.3	0.9	14.4	3.8	1.3	0.5	27.5	0.2	1.9	12.8	24.7	22.2	15.5	6.6	151.6	0.5	0.6	4.7	1.4	804.0	0.20	0.5	14.8	0.20	0.2	1.3	56.0	2.9 12.9	1.0	83.6	45.7
4	CSGS081704	0.1	4.4	942.0	2.2	0.9	0.2	44.7	7.5	85.0	3.4	11.1	1.7	1.0	0.6	15.8	2.4	1.5	0.3	25.0	0.1	1.8	7.0	19.3	24.6	<0.01	5.5	72.9	0.2	0.6	3.2	1.7	1117.0	0.30	0.3	11.2	0.06	0.1	1.5	72.0 ().9 8.6	0.8	83.6	47.6
5	CSGS081703	0.2	5.2	2588.0	2.1	0.9	0.3	353.9	2.8	108.5	1.2	12.9	7.1	3.1	4.3	13.5	13.6	0.4	1.2	181.5	0.3	5.3	52.3	136.4	14.6	50.9	38.9	34.8	0.5	1.5	18.6	2.1	974.5	0.15	1.5	5.3	0.04	0.3	0.8	72.0 ().7 28.9) 1.9	67.5	16.6
6	CSGS081702	<0.1	5.6	474.5	1.3	0.9	0.3	11.5	2.5	19.0	1.5	1.3	0.5	0.3	0.2	3.2	0.7	0.4	0.1	7.0	0.0	1.3	5.3	4.9	7.2	1.8	1.4	32.8	0.2	0.3	0.8	1.3	799.0	<0.05	0.1	2.3	0.04	0.0	0.6	34.0	1.0 3.4	0.3	18.8	15.1
7	CC-GS-0817-02	<0.1	5.3	1247.0	2.6	0.9	0.3	141.7	6.0	43.5	2.3	8.0	3.4	1.6	1.7	11.7	5.6	1.1	0.6	89.0	0.2	3.8	11.1	46.7	15.1	0.7	14.5	70.2	0.4	1.2	6.8	1.9	1133.0	0.10	0.7	46.9	0.06	0.2	3.4	44.0).2 14.8	5 1.1	76.7	40.6
8	CC-GS-0817-01	<0.1	5.9	1338.0	0.6	0.8	0.3	13.3	2.2	18.0	2.4	1.3	0.6	0.3	0.1	4.0	0.8	0.5	0.1	8.0	0.0	0.9	3.3	5.9	6.3	<0.01	1.7	40.8	0.1	0.7	1.0	1.3	1170.0	0.05	0.1	5.9	0.02	0.0	0.7	26.0).2 3.5	0.3	27.8	17.9
9	CS-GS-0816-02	<0.1	2. 9	941.0	3.3	0.9	0.3	78.1	18.0	158.0	4.9	46.5	3.3	1.9	1.1	27.4	4.4	1.7	0.6	44.5	0.3	2.2	9.3	35.0	49.4	<0.01	9.9	121.6	0.2	0.8	5.4	2.1	471.5	0.95	0.6	14.5	0.28	0.3	2.5	86.0	1.5 16.4	1.6	95.1	51.5
10	CSGS082102	<0.1	8.3	1677.0	1.4	0.9	0.2	281.0	3.5	28.5	0.2	14.0	8.0	3.3	5.7	6.0	15.3	0.2	1.3	113.5	0.2	1.2	9.3	133.7	6.6	10.5	34.4	1.7	0.3	1.9	22.0	0.9	1039.0	<0.05	1.8	1.4	<0.02	0.3	0.2	20.0).4 30.4	1.8	58.0	5.8
11	CSGS082001	0.4	5.9	219.5	2.1	0.9	0.2	50.9	12.0	151.0	2.7	35.8	2.5	1.3	1.2	11.3	3.5	2.4	0.5	24.5	0.2	7.4	11.7	23.4	34.5	38.3	6.2	73.0	0.5	0.7	4.1	1.6	218.5	1.50	0.5	6.6	0.32	0.2	4.4	198.0	0.7 13.7	7 1.0	232.4	80.7
12	CC-GS-0821-01	0.1	6.0	5169.0	2.5	0.9	0.9	728.9	12.6	100.5	3.2	22.7	8.3	3.6	5.7	19.8	18.4	1.8	1.3	408.5	0.3	2.1	35.8	230.1	34.8	1.5	71.6	68.6	0.4	2.5	26.3	2.2	1870.0	0.80	1.9	4.9	0.10	0.4	0.3	68.0	0.5 34.1	2.3	156.1	67.0
13	CS-GS-0823-02	0.3	6.4	26390.0	2.8	0.9	0.2	32.4	3.9	124.5	2.0	16.1	2.8	1.6	-1.1	5.9	2.1	0.8	0.5	16.5	0.2	6.5	4.5	17.0	19.3	9.3	4.3	52.6	0.8	0.8	3.6	1.1	359.5	0.15	0.5	3.6	0.20	0.2	1.4	112.0	D.5 16.8	5 1.3	3478.0	27.8
14	CS-GS-0823-01	0.4	10.6	874.0	3.4	0. 9	0.4	553.6	7.2	46.5	4.2	32.5	6.3	3.0	4.3	12.5	14.4	0.5	1.0	292.0	0.3	7.9	67.2	177.0	18.6	19.5	55.2	89.0	0.1	2.1	19.3	1.6	799.5	0.60	1.5	1.5	0.14	0.3	0.6	52.0	0.5 25.8	5 2.0	416.0	18.0
15	CSGS082101	0.2	7.5	5821.0	1.5	0.9	0.2	1646.0	13.2	104.5	3.3	37.3	6.4	3.1	6.9	26.7	25.6	1.2	1.0	1105.0	0.3	49.0	97.6	438.4	40.1	27.2	152.2	93.0	0.5	3.0	36.2	2.2	4760.0	1.55	1.9	5.5	0.06	0.3	2.3	56.0	0.8 24.8	3 1.7	176.0	43.9
	ATA:																																											
1	CSGS081701	<0.1	5.4	1338.0	1.6	0.9	0.2	39.1	6. 9	70.0	2.2	15.9	1.5	0.8	0.5	11.2	2.0	1.0	0.3	20.5	0.1	1.5	4.9	16.3	21.8	3.4	4.4	76.5	0.1	0.7	2.5	1.7	776.0	0.10	0.3	6.6	0.06	0.1	1.4	50.0	0.6 7.7	0.7	179.0	30.6
Resp	lits:																																											
9	CS-GS-0816-02	0.1	2.9	926.0	2.9	0.9	0.8	77.9	18.1	154.5	4.7	48.6	3.1	1.7	1.0	25.3	4.4	1.6	0.6	44.0	0.3	1.7	10.2	33.8	48.0	4.7	9.8	117.5	0.7	0.8	5.6	2.2	464.0	0.95	0.6	11.1	0.20	0.2	2.5	82.0	1.3 15.8	3 1.5	98.9	50.3
Stand	dard:																																											
STSD	03	0.5	6.8	1466.0	2.3	1.1	0.4	64.4	16.2	66.0	5.28	43.1	5.4	3.3	1.5	16.7	6.0	5.7	1.1	38.5	0.5	6.3	13.7	34.6	30.9	51.9	9.5	66.4	4.3	1.5	6.9	4.6	248.5	1.1	0.9	7.2	0.2	0.5	10.1	128	3.0 31.0) 3.0	200.8	202.9

STSD3 0.6 6.8 1475.1 3.0 1.2 0.5 59.6 14.8 72.6 5.59 38.4 5.7 3.5 1.4 18.2 6.4 10.3 1.1 37.0 0.5 6.0 12.1 34.9 32.9 42.0 9.3 63.7 3.4 1.7 7.1 2.6 251.2 1.3 1.0 8.5 0.3 0.5 10.5 131 3.4 30.5 3.2 203.7 208.4

Lithlum Metaborite Fusion/ICPMS Finish

ECO TECH LABORATORY LTD.

Norman Monteith B.C. Certified Assayer

NM/nw df/ms_WR784S XLS/10