

**Ministry of Energy & Mines**  
Energy & Minerals Division  
Geological Survey Branch**ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY**

TITLE OF REPORT [type of survey(s)]	TOTAL COST
Assessment Report: Cariboo Goldfields Property, Cariboo Mining Division, BC,	\$39,666.00

AUTHOR(S) Stephen Wetherup, BSc., P.Geo. SIGNATURE(S) \_\_\_\_\_NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) \_\_\_\_\_ YEAR OF WORK 2010STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) SOW #4808091, #4816439PROPERTY NAME Cariboo Goldfields PropertyCLAIM NAME(S) (on which work was done) 575522, 612963, 555073, 575531, 575542, 573954, 553666, 587244, 587255, 587246, 587248, 587250, 587257, 587254, 573954COMMODITIES SOUGHT Au, Cu, Mo, Ag

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN \_\_\_\_\_

MINING DIVISION Cariboo NTS 093A/02, 03, and 06LATITUDE 52 ° 16 ' 32 " LONGITUDE 120 ° 58 ' 59 " (at centre of work)

OWNER(S)

1) Bullion Gold Corp. (FMC # 204877) 2) \_\_\_\_\_

MAILING ADDRESS

307-1500 Hardy Street  
Kelowna, BC, V1Y 8H2

OPERATOR(S) [who paid for the work]

1) Bullion Gold Corp. 2) \_\_\_\_\_

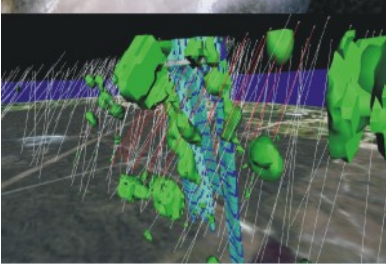
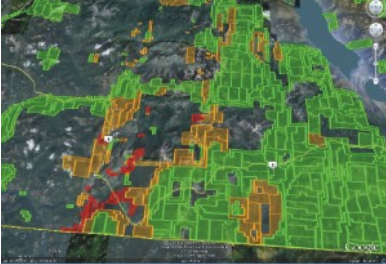
MAILING ADDRESS

As above

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Nicola Group, Triassic to Jurassic, sedimentary rocks, Takomkane Batholith, Sediment hosted Au, stratabound Au, Cu-Au-Mo porphyry.REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS British Columbia Ministry of Energy, Mines, andARIS # 3483,31105, 31572, 29919

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 _____			
GEOCHEMICAL			
(number of samples analysed for ...)	1028 MMI samples	575522, 612963, 555073, 575531, 575542, 573954, 553666, 587244, 587255, 587246, 587248, 587250, 587257, 587254, 573954	\$39,666
Soil _____			
Silt _____			
Rock _____			
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			\$39,666



**BC Geological Survey  
Assessment Report  
31994**

**ASSESSMENT REPORT**

**HORSEFLY MOUNTAIN, JAMBOREE AND BULLION PROJECTS**

Cariboo Goldfields Property  
Cariboo Mining Division, British Columbia



**BULLION GOLD CORP.**  
Suite 307-1500 Hardy Street  
Kelowna, British Columbia V1Y 8H2  
Phone (250) 869-1607

**LOCATED:**

50 km northeast of the village of Horsefly, BC  
52°16'32" North Lat. and 120°58'59" West Long.  
NTS: 93A/02, 03, and 06

February 4<sup>th</sup>, 2011

Prepared By:

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*This report has been prepared by  
Caracle Creek International Consulting Inc. (CCIC) on  
behalf of Bullion Gold Corp.*

*2011*

*Issued by: Vancouver Office*



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## 1.0 SUMMARY

Caracle Creek International Consulting Inc. ("CCIC") was contracted by Bullion Gold Corp. ("Bullion") to review and compile historical data and write an Assessment Report documenting the field work conducted in 2009 and 2010 on its Horsefly Mountain, Jamboree and Bullion Projects (the "Projects"). All of these Projects are lie within a mostly contiguous claim package totalling 92 claims and ~137,651 ha that Bullion calls the Cariboo Goldfields Property.

Bullion collected a total of 1048 MMI soil samples in 2009 and due to budgetary constraints had them analyzed in the fall of 2010. The results of this soil sampling program constitute the basis of this Assessment Report.

The Cariboo Goldfields Property lies along the eastern margin of the Intermontane Belt along its tectonic boundary with the Omineca Belt. The property area is almost entirely within Quesnellia, alternatively referred to as Quesnel Terrane. The western terrane boundary of Quesnellia rocks with Cache Creek Terrane rocks is marked by a zone of high-angle, strike-slip faulting that is probably the southern extension of the Pinchi fault system. Along the eastern margin of the property area, rocks of Quesnellia and a thin slice of underlying Crooked amphibolite, part of the Slide Mountain Terrane, are structurally coupled and tectonically emplaced by the Eureka thrust onto the Barkerville subterrane of the Omineca Belt.

The Quesnel Trough in the area of the Cariboo Goldfields Property is a well mineralized region that hosts a wide variety of deposit types. The principal recent exploration and economic development targets on the property are gold-bearing quartz veins and gold-silver bearing stratabound zones of quartz and carbonate-altered quartz-veined phyllite that occur in the basal, black phyllite metasedimentary succession of the Nicola Group (e.g. Spanish Mountain, Frasersgold, Kusk). The mineralization in some black phyllite members have potential to be mined as large, bulk-tonnage deposits.

Alkalic intrusion-related porphyry copper-gold deposits (e.g. Mount Polley mine, MINFILE 093A 008) and gold-bearing propylitic alteration zones formed in volcanic rocks peripheral to some of the intrusions (e.g. QR, MINFILE 093A 121) could also be important targets. These types of intrusions are less commonly emplaced in rocks of the basal phyllite unit but exploration for them should not be discounted. Nickel mineralization is documented in serpentinite and sheared ultramafic rocks of the Crooked amphibolite (Sovereign Creek, MINFILE 093A 013). Possible epithermal targets in Nicola Group basalts



may exist. Vuggy, chalcedonic quartz-carbonate veins with elevated values of arsenic, barium and antimony outcrop on the Horsefly River near the Hobson's pit placer (MINFILE 093A 042).

In 2009 Bullion conducted several reconnaissance MMI soil sampling survey lines over their Cariboo Goldfields Property. These surveys were intended to test for possible Cu-Au-Mo porphyry style and/or stratabound gold mineralization in areas predominantly covered with glaciofluvial sediments.

In the Bosk Lake area numerous zones of anomalous high copper responses in the soils were encountered which locally coincide with elevated Au in soil. Limited work has been done previously in this area and from the initial results it appears to have significant potential to contain Cu-Au porphyry style mineralization. A follow up soil grid on the south end of Bosk Lake is recommended as is a grid on the west and north sides of the lake. IP-mag may also be warranted.

Results from the Crooked Lake area returned isolated Cu or Au in soil responses. However, samples in this area produced highly anomalous Ag responses which commonly coincided with high Pb and Zn responses. Hence, this area does not appear to be prospective for Cu-Au or Au mineralization but Ag, Pb, Zn mineralization may be present. At this point prospecting and geological mapping should be conducted in the Crooked Lake area to determine the geological setting and style of possible mineralization.

The southern line on the Horsefly Mountain area produced consistently high Cu responses in the soil which appear to intensify toward the east. This area is underlain by a syenite intrusive body (with an associated magnetic high) and the geochemical soil results suggest Cu mineralization may occur in the area. Along with the Bosk Lake area, the Horsefly Mountain area is highly prospective to contain Cu-Au-Mo porphyry style mineralization. A follow-up soil grid around the south line as well as reconnaissance widely spaced IP-Mag is suggested.

Both surveys in the Moffat Lakes area returned very low responses in all elements. Regional aeromagnetic data suggests the Takomkane batholith exists at depth but it is covered by significant glaciofluvial material as well as possibly Nicola Group sedimentary rocks in this area. Hence, the geochemical responses are likely muted with respect to other areas in the Cariboo. A few local elevated Cu and Au values were returned and they should be looked at carefully as they may indicate mineralization at depth although their intensity low and they lack surrounding anomalous samples. A detailed interpretation of the magnetic data for this area is recommended to focus on areas of interest and attempt deep penetrative IP-Mag reconnaissance surveys.



## 2.0 INTRODUCTION

### 2.1 Introduction

Caracle Creek International Consulting Inc. ("CCIC") was contracted by Bullion Gold Corp. ("Bullion") to review and compile historical data and write an Assessment Report documenting the field work conducted in 2009 and 2010 on its Horsefly Mountain, Jamboree and Bullion Projects (the "Projects"). All of these Projects are lie within a mostly contiguous claim package totalling 92 claims and ~137,651 ha that Bullion calls the Cariboo Goldfields Property.

Bullion collected a total of 1048 MMI soil samples in 2009 and due to budgetary constraints had them analyzed in the fall of 2010. The results of this soil sampling program constitute the basis of this Assessment Report.

### 2.2 Units

The Metric System is the primary system of measure and length used in this Report and is generally expressed in kilometres (km), metres (m) and centimetres (cm); volume is expressed as cubic metres (m<sup>3</sup>), mass expressed as metric tonnes (t), area as hectares (ha), and gold and silver concentrations as g/t (g/t). Conversions from the Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent documents now use the Metric System but older documents almost exclusively refer to the Imperial System. Metals and minerals acronyms in this report conform to mineral industry accepted usage and the reader is directed to [www.maden.hacettepe.edu.tr/dmmrt/index.html](http://www.maden.hacettepe.edu.tr/dmmrt/index.html) for a glossary.

Conversion factors utilized in this report include:

- 1 troy ounce/ton = 34.285714 grams/tonne
- 1 gram/tonne = 0.029167 troy ounces/ton
- 1 troy ounce = 31.103477 grams
- 1 gram = 0.032151 troy ounces

The term gram/tonne or g/t is expressed as "g/t" where 1 gram/tonne = 1 ppm (part per million) = 1000 ppb (part per billion). The mineral industry accepted terms Au g/t and g/t Au are substituted for "grams gold per metric tonne" or "g Au/t". Other abbreviations include ppb = parts per billion; ppm = parts per



million; oz/t = troy ounce per short ton; Moz = million ounces; Mt = million tonne; t = tonne (1000 kilograms); SG = specific gravity; lb/t = pound/ton; and, st = short ton (2000 pounds).

Dollars are expressed in Canadian currency (CAD\$) unless otherwise noted. Zinc (Zn), copper (Cu) and lead (Pb) are reported in US\$ per pound (US\$/lb) or US\$ per metric tonne (US\$/t). Gold (Au) and silver (Ag) are stated in US\$ per troy ounce (US\$/oz). Where quoted, Universal Transverse Mercator (UTM) coordinates are provided in the datum of Canada, NAD83, Zone 10U North.

### 3.0 PROPERTY DESCRIPTION AND LOCATION

The Cariboo Goldfields Property covers a large area (~137,651 ha) within the Cariboo region of British Columbia and is approximately 107 km long in a NW-SE direction and on average ~ 20 km wide (Figure 3-1). The northern end of the Property encompasses the town of Likely and covers an area ~ 8 km north of the town. From there it continues to an area~ 17 km southeast of Crooked Lake. Currently, the Property is almost contiguous with a small gap just south of Likely (Figure 3-2).

Bullion Gold Corp is the 100% owner of all of the claims that comprise the Cariboo Goldfields Property.

Table 3-1. Mineral tenure summary data for the Cariboo Goldfields Property (February 3, 2011).

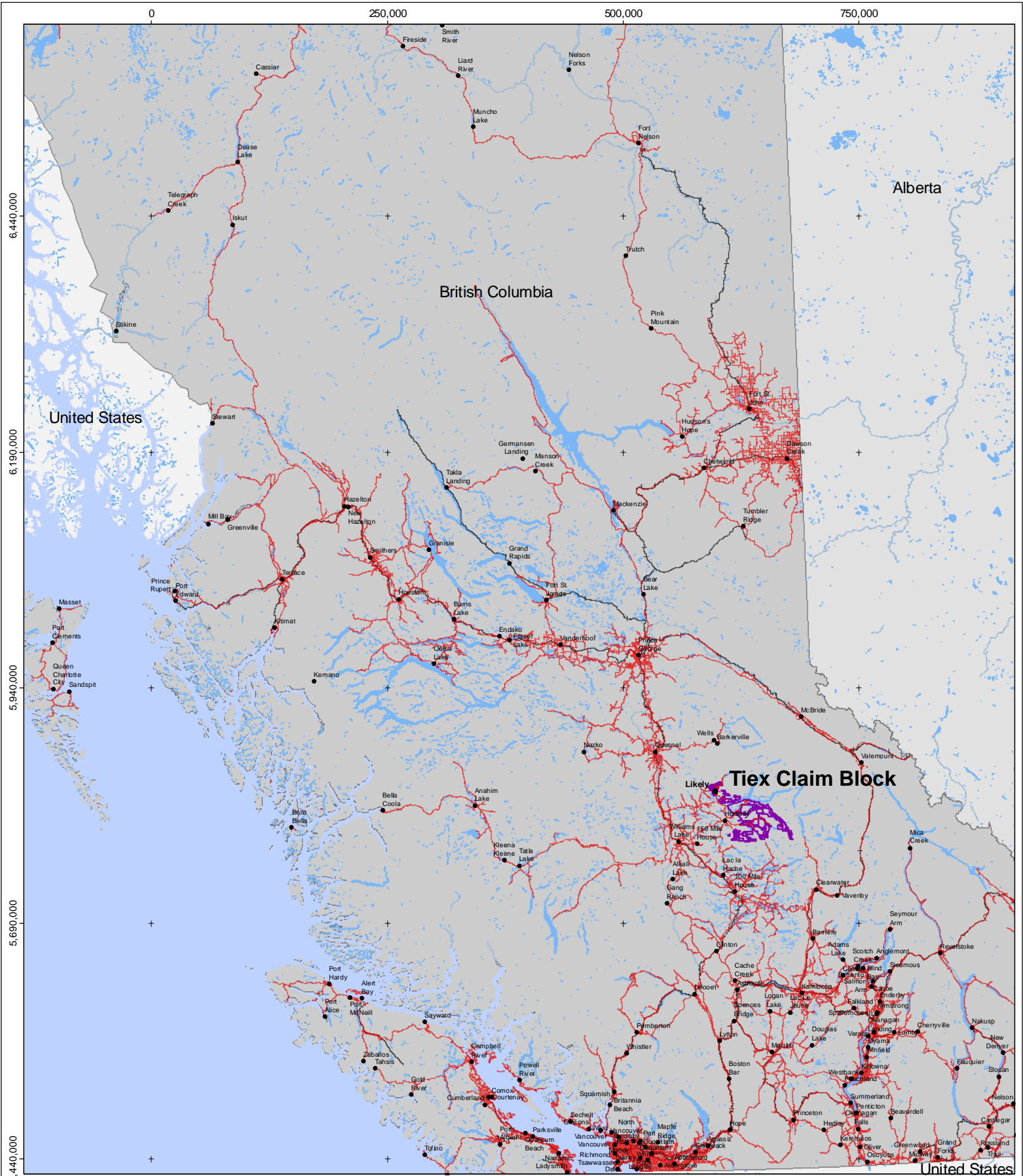
Tenure Number	Claim Name	Owner	Tenure Type	Issue Date	Good To Date	Area (ha)
553790	PETER 10	204887 (100%)	Mineral	2007/mar/07	2011/apr/08	197.945
616264	GOLDEN DONKEY #3	204887 (100%)	Mineral	2009/aug/08	2011/apr/08	396.3601
745203	CEDAR S	204887 (100%)	Mineral	2010/apr/11	2011/apr/11	196.8039
580540	LOUIS 1	204887 (100%)	Mineral	2008/apr/06	2011/apr/28	78.659
580543	LOUIS 2	204887 (100%)	Mineral	2008/apr/06	2011/apr/28	393.1826
580546	CEDAR1	204887 (100%)	Mineral	2008/apr/06	2011/apr/28	491.8417
580550	LOUIS 3	204887 (100%)	Mineral	2008/apr/06	2011/apr/28	39.3203
580552	CEDAR 2	204887 (100%)	Mineral	2008/apr/06	2011/apr/28	491.7431
580553	LOUIS 3	204887 (100%)	Mineral	2008/apr/06	2011/apr/28	19.6573
580589	CEDAR 3	204887 (100%)	Mineral	2008/apr/06	2011/apr/28	649.1534
581629	LOUIS 5	204887 (100%)	Mineral	2008/apr/18	2011/apr/28	19.6553
555075	LLOYD 4	204887 (100%)	Mineral	2007/mar/26	2011/apr/30	892.395
587246	PEGGY 4	204887 (100%)	Mineral	2008/jul/02	2011/apr/30	495.5866
587248	PEGGY 5	204887 (100%)	Mineral	2008/jul/02	2011/apr/30	495.4324
587250	PEGGY 6	204887 (100%)	Mineral	2008/jul/02	2011/apr/30	356.5943
587255	PEGGY 3	204887 (100%)	Mineral	2008/jul/02	2011/apr/30	495.7119
831512	CEDAR N FR	204887 (100%)	Mineral	2010/aug/14	2011/aug/14	39.3282
553666	SHORTS 6	204887 (100%)	Mineral	2007/mar/06	2011/feb/11	456.2196
554959	BRIAN	204887 (100%)	Mineral	2007/mar/24	2011/feb/11	2488.869
555064	LLOYD 1	204887 (100%)	Mineral	2007/mar/26	2011/feb/11	3171.1965
555067	LLOYD 2	204887 (100%)	Mineral	2007/mar/26	2011/feb/11	1221.599
555070	CROOKED LAKE 1	204887 (100%)	Mineral	2007/mar/26	2011/feb/11	3444.072



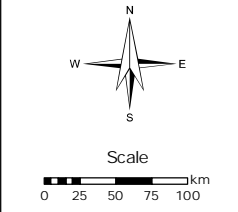
555073	LLOYD 3	204887 (100%)	Mineral	2007/mar/26	2011/feb/11	3643.109
555109	SHORT FR	204887 (100%)	Mineral	2007/mar/26	2011/feb/11	59.456
559680	MMM	204887 (100%)	Mineral	2007/jun/01	2011/feb/11	59.3235
565908	BRIAN 2	204887 (100%)	Mineral	2007/sep/12	2011/feb/11	4661.4706
565909	BOND	204887 (100%)	Mineral	2007/sep/12	2011/feb/11	5424.8912
565911	TEAPOT	204887 (100%)	Mineral	2007/sep/12	2011/feb/11	2960.0638
565993	MAX	204887 (100%)	Mineral	2007/sep/14	2011/feb/11	2926.1775
572217	PETER 11	204887 (100%)	Mineral	2007/dec/20	2011/feb/11	237.8333
573951	MCKUSKY CREEK	204887 (100%)	Mineral	2008/jan/17	2011/feb/11	872.5347
573954	MOFFAT CREEK	204887 (100%)	Mineral	2008/jan/17	2011/feb/11	8049.2688
575522	FORK 3	204887 (100%)	Mineral	2008/feb/07	2011/feb/11	27246.337
575531	BABO 2	204887 (100%)	Mineral	2008/feb/07	2011/feb/11	12238.924
575535	FORK	204887 (100%)	Mineral	2008/feb/07	2011/feb/11	24036.632
706128	D 1	204887 (100%)	Mineral	2010/feb/11	2011/feb/11	295.0878
575538	BABO	204887 (100%)	Mineral	2008/feb/07	2011/feb/15	7156.9595
575540	PETER	204887 (100%)	Mineral	2008/feb/07	2011/feb/15	1465.9623
575541	PETER 1	204887 (100%)	Mineral	2008/feb/07	2011/feb/15	991.9715
575542	PETER 2	204887 (100%)	Mineral	2008/feb/07	2011/feb/15	1785.9839
575545	BRIAN 1	204887 (100%)	Mineral	2008/feb/07	2011/feb/15	3683.0676
575570	BRIAN 11	204887 (100%)	Mineral	2008/feb/07	2011/feb/15	551.0277
580647	JC	204887 (100%)	Mineral	2008/apr/07	2011/feb/15	117.8575
586636		204887 (100%)	Mineral	2008/jun/21	2011/feb/15	78.4353
587244	PEGGY 1	204887 (100%)	Mineral	2008/jul/02	2011/feb/15	476.056
587254	PEGGY 2	204887 (100%)	Mineral	2008/jul/02	2011/feb/15	495.4763
587257	PEGGY 8	204887 (100%)	Mineral	2008/jul/02	2011/feb/15	99.1554
587427	FRAN B	204887 (100%)	Mineral	2008/jul/05	2011/feb/15	196.3078
587428	FRAN 1	204887 (100%)	Mineral	2008/jul/05	2011/feb/15	314.3122
587737	FRAN SOUTH 4	204887 (100%)	Mineral	2008/jul/09	2011/feb/15	137.5223
587739	FRAN SOUTH 2	204887 (100%)	Mineral	2008/jul/09	2011/feb/15	157.12
587741	FRAN SOUTH 3	204887 (100%)	Mineral	2008/jul/09	2011/feb/15	157.1234
587743	FRAN SOUTH 1	204887 (100%)	Mineral	2008/jul/09	2011/feb/15	157.1152
587744	FRAN NORTH	204887 (100%)	Mineral	2008/jul/09	2011/feb/15	255.2086
590114	FRAN 3	204887 (100%)	Mineral	2008/aug/17	2011/feb/15	392.7128
593917	MOOREHEAD 24	204887 (100%)	Mineral	2008/nov/06	2011/feb/15	314.0772
612963	C LAKE	204887 (100%)	Mineral	2009/jul/28	2011/feb/15	435.1466
706129	B 1	204887 (100%)	Mineral	2010/feb/11	2011/feb/15	374.4328
806864	SP FR 1A	204887 (100%)	Mineral	2010/jul/02	2011/jul/02	58.8895
806924	SP FR 2A	204887 (100%)	Mineral	2010/jul/02	2011/jul/02	58.9303
806942	FR SP	204887 (100%)	Mineral	2010/jul/02	2011/jul/02	58.8952
806963	SP FR 1C	204887 (100%)	Mineral	2010/jul/02	2011/jul/02	491.1696
807002	SP FR 1D	204887 (100%)	Mineral	2010/jul/02	2011/jul/02	216.1684
807042	FR SP 2	204887 (100%)	Mineral	2010/jul/02	2011/jul/02	19.6323
807062	SP FR 1E	204887 (100%)	Mineral	2010/jul/02	2011/jul/02	19.6323
809082	SP FR 1F	204887 (100%)	Mineral	2010/jul/05	2011/jul/05	19.6317
785342	MOFFAT	204887 (100%)	Mineral	2010/jun/03	2011/jun/03	119.0677
785382	MOFFAT	204887 (100%)	Mineral	2010/jun/03	2011/jun/03	19.8443
782663	FAR 1	204887 (100%)	Mineral	2010/may/31	2011/may/31	274.7639
593919	MOOREHEAD 27	204887 (100%)	Mineral	2008/nov/06	2011/nov/01	19.6312
842480	MOFFAT E	204887 (100%)	Mineral	2011/jan/05	2012/jan/05	79.3907
514859	ORO	204887 (100%)	Mineral	2005/jun/20	2012/nov/01	392.374



514935	ORO 2	204887 (100%)	Mineral	2005/jun/21	2012/nov/01	411.747
519042	AFI 11	204887 (100%)	Mineral	2005/aug/14	2012/nov/01	294.11
519043	AFI 12	204887 (100%)	Mineral	2005/aug/14	2012/nov/01	470.453
519044	AFI 13	204887 (100%)	Mineral	2005/aug/14	2012/nov/01	470.46
519056	AFI 14	204887 (100%)	Mineral	2005/aug/14	2012/nov/01	235.228
519576	AFI 15	204887 (100%)	Mineral	2005/aug/31	2012/nov/01	450.727
519613	AFI FR	204887 (100%)	Mineral	2005/sep/01	2012/nov/01	19.628
537740	AFI 1	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	470.869
537744	AFI 3	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	490.442
537745	AFI 4	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	490.262
537746	AFI 5	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	470.733
537747	AFI 6	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	451.298
537748	AFI 7	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	470.652
537749	AFI 8	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	490.212
537750	AFI 9	204887 (100%)	Mineral	2006/jul/24	2012/nov/01	451.001
544520	AFI 2	204887 (100%)	Mineral	2006/oct/27	2012/nov/01	529.896
408756	MAR 1	204887 (100%)	Mineral	2004/mar/13	2016/mar/01	25
408757	MAR 2	204887 (100%)	Mineral	2004/mar/13	2016/mar/01	25
408758	MAR 3	204887 (100%)	Mineral	2004/mar/13	2016/mar/01	25
408759	MAR 4	204887 (100%)	Mineral	2004/mar/13	2016/mar/01	25
<b>92 Claims</b>						<b>137651.21</b>



- Legend:
- Communities
  - Roads
  - Rail lines
  - Lake/Pond
  - River/Stream
  - Ocean



**TIEX INC**

Property Location Map,  
Tiex Property, British Columbia, Canada.

Date: 04/02/11	Scale: 1:5,250,000	Figure: 3-1
Projection: UTM, Nad83, Zone 15N, Office/Author: Vancouver/gcn		

**CCIC** Caracle Creek International Consulting Inc.  
Geological & Geophysical Consultants





## **4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **4.1 Access**

The area around Horsefly and Likely, BC has seen continuous forestry activity and there is an extensive network of logging roads and access trail throughout the Cariboo Region. As a result almost all areas on the Property can be accessed by 4x4 trucks and helicopter support to conduct exploration work is rarely utilized in the region.

### **4.2 Climate and Vegetation**

The climate of the Likely-Horsefly area is modified continental, with cold, snowy winters and long warm summers. Being located just east of the Interior dry belt, the area receives about 40 cm of precipitation, with most of it falling in the winter as snow. Snow depths in the Cariboo Plateau are typically 1 to 2 m.

Flora on the Property consists mainly of mixed forests with spruce, pine and poplar being the most common trees. Dense undergrowth is common on the northern end of the Property where generally precipitation is greater than in the south where lodge pole pine forests become increasingly more dominant. At elevations greater than ~1200 to 1200 m sub-alpine flora occur progressing up slope to alpine flora.

### **4.3 Physiography**

The Cariboo Gold fields Property lies in a transitional zone between the Cariboo Plateau, the easternmost part of the larger region of Interior Plateaus and the Cariboo Mountains to the east. In general the Property physiography consists of gently undulating hills, valleys and low mountains, with higher and steeper sub-alpine and alpine terrain of the Cariboo Mountains on the extreme eastern margin of the Property. Elevations on the Property range between 900 to 1100 m above sea level except for the eastern portions of the Property where locally elevations can reach ~ 2000 m ASL. The Cariboo Plateau is deeply incised by the Quesnel Lake and Quesnel River valley where elevations are ~ 300 to 500 m lower than the Plateau. At the Forks of the Quesnel and Cariboo Rivers the elevation is ~ 640 m ASL.

Bedrock exposure throughout the region is very poor with large areas are covered by glaciofluvial deposits, till sheets and moraines with trains of large glacial erratics. North-westerly glacial transport is consistent throughout the area with local zones showing more westerly ice movement trends.

#### **4.4 Infrastructure and Local Resources**

The nearest major city centre is Williams Lake a resource (mining, logging, and ranching) based community with an experienced labour force. It is the main supplies and services point for fuel, groceries, accommodation and heavy construction equipment. It has regular scheduled air and train service. The village of Likely with 350-400 residents, is serviced with power and offers accommodations, a small grocery store and local small equipment contractors for mineral exploration purposes. A major electrical transmission line serves the Mount Polley copper-gold mining operations located some 8 km due south-southwest of Likely. The town of Horsefly is another small community (~300 people) that provides accommodations, fuel, and some small equipment operators.

### **5.0 PROPERTY HISTORY**

Taken from a previous assessment report written on Tiex Inc. and Bullion Gold Corp.'s behalf, by John Buckle (2010).

Records of gold mining in the Quesnel River area date back to the earliest history of placer mining in British Columbia. There is mention as early as 1852 of natives trading gold nuggets from unknown sources at the Hudson's Bay Company trading post at Kamloops.

In 1859, rich river-bar placer gold was first found in the Quesnel River in an area what was to become the settlement of Quesnel Forks. Shortly after, placer gold was found at the confluence of Horsefly and Little Horsefly rivers, prospectors reportedly took out 101 ounces in one week. The news of rich placers in the Cariboo travelled quickly and the great Cariboo gold rush began. In 1860, prospectors from Quesnel Forks worked up the Cariboo River to Cariboo Lake where rich placer was found on Keithley and Antler creeks. The following season saw further prospecting up the creeks and over the divide into Williams Creek. The phenomenal richness of the gravels in this creek surpassed all the previous diggings to date. Nearly a thousand miners descended the area and for four years the surface gravels produced unheard of amounts of gold, approximately \$2,000,000 worth (117,647 ounces at \$17.00 per ounce). Between 1874 and 1945, a recorded 827,741 ounces of gold, valued at \$14,898,601, was recovered from the Cariboo goldfields (Holland, 1950).

The Bullion pit located on the south side of the Quesnel River, about 8 km downstream from Likely, was the largest hydraulic mine in the Cariboo region and one of the largest in the world. Work began in the early 1870's, continued through to the 1940's. The greatest amount of production was through the



periods 1894 to 1905 and 1934 to 1941. Approximately 171,000 ounces (5320 kg) was recovered up to 1942 (Panteleyev, et al, 1997).

The main activity took place in the Wells-Barkerville, Lighting Creek, Keithley Creek, Quesnel Forks-Likely and Horsefly River regions. These areas are still being worked for placer gold, though at a much reduced scale.

In more recent times the principal exploration and economic development targets in the central Quesnel belt-Cariboo Goldfields region have been for lode gold- copper type deposits. This includes: alkaline intrusion-related porphyry copper- gold deposits; gold-bearing propylitic alteration zones formed in volcanic rocks peripheral to some of the intrusions; auriferous quartz veins in the black phyllite metasedimentary succession.

Mount Polley copper-gold porphyry (i) deposit (formerly Cariboo-Bell) is located 56 km northeast of Williams Lake and 8 km southwest of Likely. The deposit was discovered in 1964. The initial pit reserves are stated to be 48.8 million tonnes of material with an average grade of 0.38% copper and 0.56 g/t gold (Nikic et al., 1995). The geological resource is estimated at 230 million tonnes with an average grade of 0.25% copper and 0.34 g/t gold (MINFILE). Total proven and probable reserves as of January 1, 2007 are 59.9 million tonnes of 0.36% copper, 0.27 gram per tonne gold and 0.73 gram per tonne silver ([www.imperialmetals.com](http://www.imperialmetals.com)) The QR is a 'porphyry-related propylite (ii) skarn gold deposit' (Panteleyev et al., 1997). It represents a new type of bulk-mineable gold occurrence in the Canadian Cordillera.

The QR is 58 km southeast of Quesnel and 10 km west of Quesnel Forks. It was discovered in 1975 by multi-element geochemical soil surveys. In 1986, mineable reserves in three zones were 1.3 million tonnes with 4.7 g/t gold (Fox and Cameron, 1995). As of 1998, 1.06 Mt of ore grading 4.1 g/t gold had been processed. Mine operations were subsequently suspended due to low gold prices. Cross Lake Minerals Ltd. recently obtained the mine and conducted an aggressive exploration program. As of March 2006, the mineable reserves are 566,300 tonnes averaging 6 g/t gold. In September 2007, the company resumed mining operations.

Auriferous-bearing quartz veins (iii) hosted in metasedimentary rocks (e.g. phyllite/black shale units) have been found on Spanish Mountain 7 km southeast of Likely and Eureka (Frasergold) 57 km east of the community of Horsefly. In 1933, gold-quartz veins were first discovered on Spanish Mountain. During the 1980s a series of exploration programs was conducted in this area by a number of various mining companies. Presently, Skygold Ventures Ltd. is undertaking an aggressive drilling program and has outlined a gold mineralized system measuring 1200 m by 500 m (Main Zone) with thickness



between 10 to 135 m and grades averaging around 1.0 g/t gold (March 27, 2008, [www.skygold.ca](http://www.skygold.ca)). In the 1980s gold veins were discovered on Frasergold property. Between 1980 and 1994, exploratory drilling delineated an auriferous-bearing horizon traceable for 10 km along strike. Within this horizon, a zone 800 m to a depth of 100 m was defined containing a resource of 3.2 million tonnes grading 1.71 g/t Au (Panteleyev et al, 1997).

Some of the earliest (circa 1920s and earlier) reported gold placer workings on the Property were on Lawless Creek and Rose Gulch near Quesnel Forks and on Poquette Creek two km east of Likely. These workings were small intermittent operations and no records exist for the amount of gold recovered. Gold Creek, a small stream (usually dry or to a small trickle in summer months) which empties into Poquette Creek about 2.5 km north of Likely, is reported (Beaton, ARIS 07635A, 1978) to have been worked some time during the early part of the 1900s. At the point where the creek emerges from a gully to merge with Poquette valley, early prospectors noted a system of quartz stringers occurred in bedrock at, and just above the creek level. Subsequently these stringers were investigated by an adit (and winze?) now concealed under talus; and later by blasting and cat trenching to open the showings. Unfortunately results of this early work are not known to the author and no records appear to be in existence.

In 1977, prospector R. Mickle staked ground including the Gold Creek old workings and the quartz showings noted above. These showings are also referred to as the Moose' showings (Owsiacki, 2007). In 2006, Mickle sold the claims to Bullion Gold Corp. covering the Gold Creek area.

From 1978 through to the late 1980's the ground now covered by the Property experienced various stages of exploration surveys by several different exploration and mining companies.

In 1978, Silver Standard Mines Ltd. initially optioned the claims from Mickle and conducted limited geochemical soil surveys followed by four diamond drill holes in the Gold Creek-Poquette valley area. On the east slope of Poquette valley parallel to Gold Creek, geochemical results were as high as 620 ppb and 900 ppb Au. Directly across the valley on the west slope, some of the more anomalous geochemical values ranged between 120 ppb to 1800 ppb Au. Four widely spaced drill holes were positioned to test the geochemical anomalies on either side of the valley and also to test the gold-bearing quartz veins near the old workings. The drill results returned low gold values this is probably due to the poor core recovery and badly broken rock, one hole was abandoned and the other three did not reach their planned targets. No further drilling was carried out.

In October 1979, the author along with Dr. John Godfrey of the University of Alberta examined the Gold Creek showing as well as number of other gold anomalous areas Mickle had uncovered including



workings on Spanish Mountain. Continuous chip sampling was carried out along an exposed rock face adjacent to Gold Creek in the area of the former old workings. Samples were collected from both of the mineralized quartz veins and host rock. Results from this sampling included 1.7 g/t gold and 8.7 g/t silver across 20.7 m. Within this interval was 2.3 g/t gold across 12.48 m. The altered host rock was also found to carry gold and silver averaging between 0.815 g/t and 8.7 g/t respectively. Between 1980 through to 1993 various mining and exploration companies examined ground primarily concentrating in a 75 km<sup>2</sup> (approximately 15 km by 5 km) area, from Quesnel Forks and to Spanish Mountain including the Property now owned by Bullion Gold Corp.

In 1980, Aquarius Resources Ltd acquired most of the claims in the Likely area from Mickle and partnered with Carolin Mines Ltd.

Between 1980 and 1994 reconnaissance geochemical soil surveys and airborne EM and magnetometer surveys were completed. Between the Forks and Poquette valley several isolated gold geochemical highs were out lined with a magnetic anomaly trending north-westerly between the Forks and Spanish Mountain. Some limited trenching was conducted but with marginal success due to the thickness of overburden. Majority of the gold highs are believed to be glacial or placer related with basaltic rocks encountered in the shallower trenches producing the magnetic signature.

In 1984-1986, Mt. Calvery Resources Ltd. in joint venture with Carolin conducted a comprehensive geochemical exploration program which included backhoe trenching of gold anomalous areas. Eleven backhoe trenches were dug to test some of the better gold soil anomalies located between Rossette Lake (east of the Forks) north to the Cariboo River, now part of the Property, but only 4 reached bedrock. The old 'LK' prospect located by Mickle was trenched and chip samples collected from altered (epidote, carbonate, silica) basalt, some of the better values included one 4 meter chip assaying 535 ppb and a grab sample returned 3100 ppb (3.1 g/t Au). Mickle reported initially obtaining a grab sample from this prospect with gold values of 7100 ppb. Gold Creek was also soil sampled with gold values peaking to 89,000 ppb. Mt. Calvery describes the Gold Creek mineralization as contained within a prophylic alteration haloe surrounding a poorly exposed diorite stock located just west of Poquette Creek.

Eighteen additional test pits were completed in the Murderer Creek area north of the Cariboo River and west of Poquette Creek and Potter's Mill. Ten reached bedrock encountering basalt or andesitic rocks. Majority of the isolated gold soil highs are believed to be glacial or placer related. Mt. Calvery concluded due to the thick mantle of glacial till it severely restricted the effectiveness of the geochemical survey.



One of the test pits encountered elevated values in gold (245 ppb), silver (1.5 ppm), copper (310 ppm) and arsenic (1942 ppm) near bedrock located about 300 m northwest of Potters Mill.

A total of 45 test pits were completed to test both geochemical and I.P. anomalies. Majority of the pits encountered weakly (silicified) altered basaltic rocks. Some of the basalt is weakly (1-3%) pyritized which may be sufficient to explain some of the I.P. anomalies.

In 1987, Dome Exploration (Canada) Ltd. conducted a 28 percussion drill hole program on four of the soil anomalies outlined from Mt. Calvery surveys. Five foot (1.5 m) continuous chip sample intervals were collected from surface to bottom of each hole. Most of the holes were positioned east of Poquette Lake along the south side of the Cariboo River and east of Murderer Creek. In addition, a 15 meter trench was dug and sampled over an area where visible gold was found in float sample. Majority of the holes encountered 20 feet (6.1 m) of overburden or greater before hitting bedrock with one hole going 150 feet in overburden. Some of the holes were abandoned in overburden most encountered dark green augite porphyry basalt with negligible gold values. The best results came from hole 329- P25. It is described as encountering 20 feet of overburden with bedrock as light grey-green, fine grained andesite tuff and trace amounts of pyrite, epidote and mariposite drilled to a depth of 200 feet (61 m). Local zones of quartz and calcite to 10% noted throughout. A section from top of bedrock to a depth of 135 feet (41 m) returned elevated gold, copper and arsenic values, which included a 7.6 meter section (25'-50') ranging 91-1115 ppb gold. This hole is located near the south end of Poquette Lake and some 150 m west of Porter's Mill. The geological description of the hole resembles that of the auriferous-bearing host rock found on Gold Creek.

In 1989, Corona Corporation optioned the ground from Carolin Mines Ltd. Corona also concentrated its exploration efforts on ground Mt. Calvery and Dome had previously sampled, ground now covered by the Property. Corona sampled the Gold Creek exposed section across 6.2 m averaging 3.43 g/t gold. Additional rock sampling and limited geological mapping was also conducted on the west side of Poquette Creek south of the road to Potter's Mill. Two samples were collected from altered, hematite stained diorite which returned low gold values but high silver values of 71.8 and 27.7 ppm. This is also in the approximate area where Silver Standard Mines Ltd. (1978) obtained several elevated gold values in soil including one soil sample containing 1.8 g/t gold. Corona also sampled the LK trench. Anomalous gold values (320 ppb to 2150 ppb) were returned for all but three of the rocks assayed. Silicified vesicular basalts with chalcopyrite, disseminated pyrite, 2mm quartz veinlets and carbonate clots assayed 2.15 and 1.72 g/t gold. Much of the work conducted by Corona was of reconnaissance in nature and to investigate



and verify previous gold anomalous areas the above noted companies had already tested and defined. Corona subsequently dropped their option.

Other than a small block of claims covering Gold Creek held by Mickle, the surrounding ground eventually came open and lay dormant for several years. In 2006, with the introduction by BC Ministry of Energy, Mines and Petroleum Resources of Mineral Titles Online (MTO), companies including Bullion Gold Corp. began acquiring ground in the Likely area. In 2006-07, Skygold Ventures Ltd announced a series of positive gold results from its drilling program on Spanish Mountain this, along with a dramatic increase in the price of gold, spurred a lot of interest along the Quesnel Belt. In the summer of 2006, Bullion Gold Corp. purchased the Gold Creek claims from Mickle, now part of the Property.

During the summer of 2007, the author conducted detail mapping and sampling surveys of the Gold Creek section as well as research and compilation of previous work and preliminary field investigation on parts of the property. Continuous chip samples taken from the Gold Creek section across 20.5 m returned a weighted average assay of 4.34 g/t gold included in this section is 9.55 g/t gold across 8.5 m. In 2008, Bullion plans to aggressively drill the Gold Creek section and test both the east and west sides of Poquette Creek valley.

In 2008, Bullion Gold Corp. on behalf of Tiex Inc. conducted an 11 hole drill program on the Gold Creek zone on the west side of the Poquette Valley. Due to poor recoveries of drill core the zone was not thoroughly investigated. However, sampling of the core indicated a significant gold zone in drill holes GC08-1, 2, 3, 4, 5 and 6. Drill hole GC08-11 on the west side of the Poquette valley encountered a short section of the Gold Creek zone near the top of the hole. Also, in 2008, Bullion undertook an MMI soil sampling survey on the west side of Poquette Valley. A gold anomaly was identified and drilling was recommended on this anomaly.

## **6.0 GEOLOGICAL SETTING**

The “Geological Setting” section presented here is taken from a NI 43-101 report written for Tiex Inc. and Bullion Gold Corp. by G. Owsicki (2007).

### **6.1 Regional Geology**

The Cariboo Goldfields Property lies along the eastern margin of the Intermontane Belt along its tectonic boundary with the Omineca Belt. The property area is almost entirely within Quesnellia, alternatively



referred to as Quesnel Terrane. The western terrane boundary of Quesnellia rocks with Cache Creek Terrane rocks is marked by a zone of high-angle, strike-slip faulting that is probably the southern extension of the Pinchi fault system. Along the eastern margin of the property area, rocks of Quesnellia and a thin slice of underlying Crooked amphibolite, part of the Slide Mountain Terrane, are structurally coupled and tectonically emplaced by the Eureka thrust onto the Barkerville subterrane of the Omineca Belt.

The predominantly Triassic and Early Jurassic volcanic and related volcanoclastic rocks that characterize Quesnellia overlie a thin, discontinuous slice of Crooked amphibolite. Struik (1986, 1988a) regards the amphibolite as the basal unit of Quesnellia and considers the contact between Quesnel rocks and the amphibolite to be structural, as does Bloodgood (1988). On the other hand, Struik (1981, 1985a) refers to a depositional contact in some places. Also Rees (1987) suggests that the two map units have a depositional contact and were linked as a single composite terrane by the Late Triassic. He considers the amphibolite to be correlative with rocks of the Slide Mountain Terrane but refers to it as the Antler Formation in order to suppress the implication that it might be tectonically separated from Quesnellia. Basement for Quesnellia is probably rocks of the Harper Ranch Subterrane. These are Devonian to Permian oceanic marginal basin or arc volcanics and sediments that locally contain mafic intrusions and alpine-type ultramafic rocks. Along the Eureka thrust, the eastern boundary of Quesnel Terrane, rocks of Quesnellia are superimposed on the intensely deformed, variably metamorphosed Proterozoic and Paleozoic pericratonic rocks of the Barkerville Subterrane. The western part of the Intermontane Belt, Stikinia, is separated from Quesnellia by rocks of the Cache Creek Terrane. It is composed of mainly Mississippian to Middle Triassic oceanic and island arc volcanics and sediments.

The Quesnel Lake area contains four main tectonic assemblages. The principal assemblage in Quesnellia, the predominant unit in the Cariboo Goldfields Property area, is the Triassic-Jurassic Nicola island arc - marginal basin sequence. The underlying rocks are the Crooked amphibolite, part of the Slide Mountain assemblage, a mylonitized mafic and ultramafic unit of oceanic marginal basin volcanic and sedimentary rocks. The Barkerville Subterrane to the east, a continental prism sequence, is made up of two units, the Snowshoe Group and Quesnel Lake gneiss. The Snowshoe rocks are Hadrynian Upper Proterozoic to Upper Devonian metasediments that are considered to be correlative in age with Eagle Bay rocks of the adjoining Kootenay Terrane to the south. The Quesnel Lake gneiss, found locally near Quesnel Lake within regions of predominantly Snowshoe rocks, is a Devonian to Mississippian intrusive unit. Further to the east of the Barkerville Subterrane are Kaza and Cariboo groups rocks of the Upper Proterozoic to Carboniferous Cariboo Subterrane, a continental margin assemblage. To the west of Quesnellia are

Permian and (?) older limestone and Mississippian to Upper Triassic sedimentary rocks of the Cache Creek assemblage, an oceanic melange. Two other minor map units in the northern part of the Quesnel Trough include small fault bounded, fragments of tectonic assemblages. These are oceanic ultramafic rocks, part of the Slide Mountain Group, exposed along a northern segment of the Eureka thrust, and a small wedge of Cambrian shale, sandstone and limestone by Dragon Lake near Quesnel.

Some parts of the main tectonic assemblages in Quesnellia and the adjoining terranes are extensively overlapped by younger successions of sedimentary and volcanic rocks and intruded by post-accretionary plutons. Within the Quesnel Trough, near Quesnel and near its western margin along the Fraser River, these units include Lower and Middle Jurassic arc derived clastic rocks. The rocks are considered to be equivalent to the Hall and Ashcroft formations of south-eastern and southern Quesnellia. This unit in the Quesnel River area contains a number of undifferentiated clastic successions including rocks as young as Cretaceous. Subaerial volcanic rocks and the clastic aprons and lacustrine deposits derived from them include Palaeogene Kamloops Group transtensional arc volcanics and Neogene Chilcotin Group back-arc volcanics. Locally Neogene Fraser alluvial sediments are exposed through a regionally widespread cover of Quaternary deposits.

Intrusive rocks in Quesnellia include pre-accretionary and accretionary Early Jurassic plutons and also some mid-Cretaceous post-accretionary stocks. Early Jurassic intrusions (182-214 Ma) include both calcalkaline plutons that are equated with intrusions of the Guichon Creek batholith as well as high-level alkaline stocks similar to the Copper Mountain suite. Some other unclassified intrusions form suites of dioritic and granodioritic stocks. Postaccretionary intrusions (87-130 Ma) are equivalent to the Bayonne granitic suite as well as some additional unclassified granodioritic intrusions. Tertiary plutonic rocks have not been discovered in the area, although Eocene alkalic volcanic rocks and lamprophyric dikes are known to occur.

The terminology used for the Mesozoic volcanic arc rocks in Quesnellia has been inconsistent in the past. The usage for all the Triassic-Jurassic volcanic arc and related rocks in Quesnellia currently preferred and advocated is Nicola Group (Gabrielse and Yorath, 1991; Wheeler and McFeely, 1991).

### *6.1.1 Structure*

The structures of the central Quesnel belt were initially produced during accretion of Quesnellia arc rocks and the underlying Crooked amphibolite with rocks of the North American continental prism and is interpreted to have taken place from 186 to 180 Ma (Nixon et al., 1993). Subsequent tectonic activity



resulted in a number of overlapping and dominating phases of deformation. Folds are most evident in basal phyllite underlying and interfingering with Nicola Group arc volcanics, and thin sedimentary units interbedded with overlying basaltic volcanic rocks. The volcanic rocks are extensively block faulted but the massive appearance of the volcanic assemblages does not readily allow the definition of folds and the resolution of fold patterns within the volcanic units.

Previous workers have identified from two to five phases of folding and Elsby (1985) suggested that normal faulting represents a sixth phase of regional deformation. In the eastern part of the Quesnel Terrane, Rees (1987) has described five deformational episodes which he relates to the development of the arc, its subsequent accretion with cratonic North America and to later tectonism involving pericratonic and cratonic rock of the Omineca Belt as well as allochthonous Quesnellia. McMullin considered that five phases of deformation can be recognized in the Quesnel Lake area, mainly in the well stratified metasedimentary successions of the Barkerville Subterrane which is not part of Quesnellia. The first four phases produced coaxial folds with north-westerly trending axes and variably dipping axial planes. These folds are overprinted by north-easterly striking folds with vertical axial planes. McMullin's phase one structures are present only in rocks of Barkerville Subterrane and possibly the Crooked amphibolite, the basal oceanic rocks on which Quesnellia evolved. He considered that the oldest structures in Quesnellia formed during the second phase of regional deformation, producing tight to isoclinal folds with a well developed axial planar fabric. The attitudes of these folds are affected by later deformation, but generally fold axes trend to the northwest. Rees (1987) suggested that these folds have north-easterly to easterly vergence.

The third phase of regional deformation recognized by McMullin generated upright to semi-recumbent, westward-verging 'backfolds' that are considered to be responsible for the major map-scale features in the property area. The fold axes trend north-westerly and that axial planes generally dip steeply to the northeast. A second cleavage is a non-penetrative crenulation that is indistinguishable from the older cleavage. At higher structural levels the rocks have either a crenulation or spaced-fracture cleavage. Some metamorphic mineral growth is evident with this deformation but the events are generally post-metamorphic. Late deformation with possibly two separate, possibly conjugate fold systems, is described by McMullin. The late deformation produced open small-scale buckles and warps. In one system upright axial planes of folds with poorly developed fracture cleavage trend north or northwest. The youngest fold axes trend north-eastward. The late deformation postdates peak metamorphism and some retrogression is evident.





Faulting of three types and discrete periods is evident: thrust faulting that coincides with accretion outlines the major crustal structures and defines the terrane and major map unit boundaries; high angle to listric normal faults that either follow the north-westerly trend of stratigraphic units or are transverse to them and strike easterly to north-easterly; and late strike-slip movements along the western terrane boundary and related extensional faulting within the associated transtensional basins.

The major, early low angle thrust fault in the property area is the Eureka thrust, a boundary fault between the Crooked amphibolite of Quesnellia and the underlying rocks of Barkerville Subterrane. Brown and Rees (1981) and Rees (1987) refer to the Eureka thrust as the Quesnel Lake shear zone. Struik (1988a) also suggests that one and probably more thrusts are internally present in the Quesnel basal sedimentary unit. In the volcanic units low-angle faulting is difficult to document but evidence for it is available in a number of places. For example, during periods of low water flow in the Quesnel River near Likely, a flat lying, sinuous fault and 1-metre wide shear zone mark the contact between older hangingwall basaltic rocks and footwall sedimentary rocks. Also at the QR deposit, 13 km northwest of Likely, one or more reverse fault structures are present and are cut by younger, steeply dipping normal faults.

North-easterly and north-westerly striking normal faults are rarely seen in outcrop but are interpreted from outcrop distribution and patterns of map units and their aeromagnetic expression (Panteleyev et al., 1996). A case for early, east-side-down, normal fault structures that trend along the axis of the volcanic belt has been made by Bailey (1978). The faults outline the trends and form contacts of many of the volcanic units and appear to have controlled the distribution of eruptive centres. Reactivation of these high-angle extensional faults postdates thrusting but is no later than Cretaceous as granitic rocks of this age do not appear to be cut by them.

A third set of faults is present as a number of major, strike-slip structures along the poorly exposed terrane boundary of the western Quesnel belt with Cache Creek rocks. Narrow belts of Middle Jurassic and younger clastic deposits are preserved along the fault zones. These faults are part of the Pinchi and Fraser fault systems; a subsidiary fault system along the Quesnel River, its location only inferred, is informally named the Quesnel fault. Extensional faulting in the Quesnel central volcanic belt during the mid-Tertiary is possibly also related to the large scale strike-slip faulting. The structural extension has produced a number of small, north to north-westerly trending grabens that are probably transtensional basins. They were sites of Eocene sedimentation and volcanism.



Figure 6-2. Map legend.



Fractures, many filled with quartz, are common features at all scales in the Eureka Peak and Spanish Lake areas. Some quartz veins are deformed and others are not, indicating that fracturing occurred throughout the deformational history. It is likely that veins formed as part of a continuum during the evolution in structural development. The quartz veins most commonly vary from 1 to 20 mm in width and tens of cm in length but can be up to a metre wide and several m long. Small, early quartz veins outline rootless isoclinal folds, the limbs of which have been removed, probably as a result of pressure solution along the cleavage surfaces. Extensional, quartz-filled fractures and dilations oriented at low angles to bedding and cleavage, as well as sigmoidal fractures perpendicular to fold axes, occur predominantly in the metasedimentary successions.

Un-deformed, spaced fractures are developed in all rock types throughout the region. Spacing of fractures varies from 1 to 100 centim and varies in rocks of different competency. Open joints have also been recognized throughout the area. They are oriented perpendicular to the fold axis and axial plane of the mesoscopic folds and dip steeply to the north and south.

Metamorphic grade of the rocks of the central Quesnel belt is, for the most part, sub-greenschist facies. Read et al., (1991) assigns the rocks to mainly the prehnite-pumpellyite zone. Prehnite has been infrequently noted but the volcanic rocks are characterized by the widespread occurrence of zeolite mineral assemblages, typical of burial metamorphic conditions. Sedimentary rocks are metamorphosed to greenschist facies in the easternmost part of the property area. The higher grade in the eastern part of the belt is attributed to crustal thickening caused by thrusting of Quesnellia over the Omineca Belt and to subsequent deformation at the Barkerville-Quesnellia contact.

## 6.2 Property Geology

The Cariboo Goldfield Project are primarily underlain by one fundamental element of the Quesnel belt - a basal, Middle to Late Triassic fine grained sedimentary unit (Nicola Group) that represents a basin-fill succession and commonly referred to as the 'black phyllite unit'. This sedimentary succession has been subdivided into separate map units by Bloodgood (1990) and Panteleyev et al., (1996). The clastic rocks are weakly metamorphosed and weakly to strongly deformed at deeper structural levels. In the eastern part of the property the rocks dip toward the southwest; in the western part, they dip to the northeast. The Frasergold (Eureka) and Spanish Mountain auriferous quartz vein deposits (MINFILE 093A 150, 043) are hosted in the 'black phyllite unit'. These deposits do not occur on Cariboo Goldfields Property claims but either adjoins or is adjacent to them.

Along the Property's eastern boundary the 'black phyllite unit' structurally overlies a thin, tectonically emplaced oceanic crustal slice, the Mississippian-Permian Crooked amphibolite. The basal unit of dominantly black phyllitic rocks overlies Crooked amphibolite along a variably tectonized depositional contact or unconformity. Locally, as in the Spanish Lake area, the contact is folded and imbricated by a number of thrust faults. The amphibolite defines the Quesnel Terrane boundary with Barkerville Subterranean metamorphic rocks of the Snowshoe Group and Quesnel Lake gneiss. The amphibolite is separated from the underlying Barkerville Subterranean rocks along a thrust fault. The fault, or more generally a wide zone of mylonitization, has been termed the Quesnel Lake shear zone or Eureka thrust. The amphibolite forms a thin, recessive unit about 250 m thick; locally it is only a few m in thickness or discontinuous. Crooked amphibolite is distinguished from other metamorphic rocks by its shear fabric, highly strained contacts, mechanical imbrication, mylonitic fabric and abundance of amphibolite. Rees (1987) describes three major (schistose) constituent rock types: greenstone, metagabbro and meta-ultramafite. In the Eureka Peak area map units consist of coarse grained hornblende schist, talc-chlorite schist and actinolite schist. Along strike, north of Quesnel Lake, there are units of mafic metavolcanics, amphibolite, chlorite schist, serpentinite and ultramafic rocks; pillow lavas are present locally. Hadrynian to upper Devonian Snowshoe Group rocks are commonly finely foliated due to strong deformation and dynamic recrystallization, especially near lithologic contacts and the top of the unit. Major lithologies include peliticto semipelitic (quartzose) schist, micaceous quartzite, feldspathic schist, metasiltite and phyllite with lesser grit, calcareous phyllite, micritic limestone, marble, calc-silicate, amphibolite and amphibolitic gneiss. Devonian to Mississippian Quesnel Lake gneiss forms tabular to sill-like intrusive bodies of megacrystic quartz-feldspar augen gneiss. The gneiss along the Quesnel-Barkerville terrane boundary has a well developed mylonitic fabric in places and is mechanically intercalated with Crooked amphibolite. Quesnel Lake gneiss shows considerable variation in composition from diorite to granite to syenite.

A main Late Triassic to Early Jurassic volcanic assemblage occupies the central, north-westerly trending elongate axis of the Quesnel belt and lies along the western border of the property boundary. The Nicola Group volcanic assemblage comprises three main units: a main volcanic edifice of basaltic flows, breccia and flanking volcanic-source detritus; an upper, more differentiated pyroclastic and volcanoclastic unit; and a small flow unit of subaerial basalt. These rocks are overlain by various successions of late Early Jurassic rocks and younger, possibly Cretaceous, coarse clastic deposits. Late Triassic to Early Jurassic alkalic intrusive rocks are coeval with the youngest periods of arc volcanism in the Nicola rocks and represent the most common type of intrusions in the area. The intrusive bodies can occur as plutons and smaller stocks and plugs, dikes and sills. Stocks ranging from diorite to syenite in composition intrude



sedimentary rocks of the 'black phyllite unit' and the older overlying volcanics. A number of the dioritic bodies are composite stocks or are zoned due to differentiation into monzonite and syenite phases. The most abundant intrusive rock type is fine to medium grained, equigranular to weakly porphyritic syenodiorite and less commonly diorite. The Spanish Mountain and Frasersgold deposits consist of auriferous quartz veins and are hosted in the 'black phyllite unit'. Bloodgood (1990) and Panteleyev et al. (1996) have identified and described the map units within this sedimentary succession and their descriptions are provided below. Contacts between the lithologic units appear to be gradational but the package is strongly tectonized internally. The Middle to Late Triassic sedimentary units that overlie the Crooked amphibolite and that underlie or interfinger with the Quesnel arc volcanics are considered part of the 'black phyllite unit'. Spatially restricted volcanic deposits and proximal volcanoclastic components derived from them occur near the top of the unit.

Micaceous quartzite: This is the basal unit of the metasedimentary assemblage ('black phyllite unit') that overlies Crooked amphibolite. The unit crops out along the limbs of the Eureka Peak syncline. It varies in thickness from 10 to 150 m, either as a result of sedimentary deposition or structural thickening due to imbrication and/or folding. Bedding is well defined by pale grey, laminated quartzite beds 0.5 to 6 centim thick. A bedding parallel schistosity is defined by planar alignment of rusty weathering muscovite. The contact of the micaceous quartzite with the underlying Crooked amphibolites is sharp, although both concordant and discordant relationships have been documented. The contact is imbricated near Crooked Lake. No correlative unit has been recognized in the Spanish Lake area.

Micaceous black phyllite and tuff: Siliceous dark grey to black, graphitic phyllite has a well developed phyllitic foliation with characteristic silvery fresh surfaces. Bedding is rarely seen. Where present it is defined by thin, rusty to dark grey quartzite or siltstone beds up to 20 centim in thickness and discontinuous tuffaceous lenses. Small porphyroblasts of chalky weathering plagioclase occur throughout the unit. On the south limb of the Eureka Peak syncline porphyroblasts of garnet up to 0.5 centim in size are abundant within 10 m of the base of the unit. The contact with the underlying micaceous quartzite is not exposed but may be faulted, judging from the noticeable break in slope and the discordant contact relationship observed on the north limb of the Eureka Peak syncline. No lithologic equivalent to this unit in the Eureka Peak area has been recognized in the Spanish Lake area.

Phyllitic siltstone: This unit contains interbedded pale to dark grey silty slates and lesser phyllitic siltstone and minor siliceous limestone. Bedding is well defined by fine banding, thin beds of laminated quartz sandstone and minor interbeds of siliceous limestone. Well developed cleavage is defined by a



planar, slaty parting. Narrow bedding-parallel quartz veinlets occur throughout. This unit has not been recognized outside the Eureka Peak area.

Laminated phyllite and porphyroblastic phyllite: Finely laminated grey phyllite is gradational with the underlying and overlying units. Bedding is outlined by pale grey to rusty weathering quartz sandstone beds commonly 1 to 3 millim but up to 1 centimetre in thickness. A well developed phyllitic foliation is accentuated by graphitic material. Porphyroblasts of garnet, plagioclase and chloritoid occur in these rocks on the south limb of the Eureka Peak syncline; chloritoid is associated with ankerite on the north limb. Bedding parallel quartz lenses, up to 2 m in thickness and several m in length, are present. They are most evident along the north limb of the Eureka Peak syncline, most notably in the Fraser gold property area. No stratigraphically equivalent units have been recognized in the Spanish Lake area.

Silty slate: The porphyroblastic phyllite unit (see above) grades upward into coarser grained, dark grey to black weathering silty slates with interbedded dark grey quartz sandstone. Bedding is shown by dark grey, dull quartz sandstone beds, most commonly 10 to 12 centim in thickness. Thinner, pale layers of laminated quartz sandstone are interbedded throughout the unit. Pale weathering quartzite and pale grey to green weathering tuffs form discontinuous lenses. Silty slates have well developed planar slaty parting. In outcrop they are rusty weathering to locally speckled with limonite, probably due to the presence of fine-grained siderite or authigenic iron sulphide minerals. These rocks are the basal map unit and the dominant rock type in the Spanish Lake area.

Graphitic black phyllite: This unit forms a sequence of grey, graphitic phyllite that grade upward through black phyllite, grey silty phyllite and an upper succession of graphitic phyllite. There are minor interbedded quartz sandstone and limestone beds. Bedding is defined invariably by prominent pale laminated quartz siltstone beds that rarely exceed 2 centim in thickness. The rocks are exposed south of Horsefly Lake, on the south limb of the Eureka Peak syncline and in small synclinal cores north of Spanish Lake.

Banded slate and tuff: This is the uppermost phyllitic unit in the metasedimentary succession and contains a significant volcanic component. Where volcanic rocks or their eroded products are the dominant lithology, the successions are included in the volcanic and epiclastic rocks unit. The Banded slates and tuffs unit crops out continuously along both the northern and southern limbs of the Eureka Peak syncline, and underlies much of the western part of the basal sedimentary belt along Horsefly River, between Horsefly and Quesnel lakes and northwest of Quesnel Lake. The contact with the underlying rocks, at least locally in the area north of Quesnel Lake, is interpreted to be a fault. In the Eureka Peak -



Horsefly River area, and probably generally throughout the belt, there is a progressive increase in volcanic components at higher stratigraphic levels in this unit. Dark green to black phyllite with interbedded grey to green tuffs comprise the lowermost 50 m of the succession. Siliceous, banded aquagene tuff become more abundant stratigraphically upwards and are interbedded with grey to black banded slates, massive pale quartz sandstone and minor limestone. The uppermost part of the unit consists of fissile graphitic phyllite interbedded with tuff, and minor quartzose sandstone beds. The phyllite within this section is recessive, black and sooty in outcrop. Locally they are strongly silicified, but throughout the region they are typically rusty weathering and pyritiferous. North of Quesnel Lake, in the Spanish Lake area, black slaty to phyllitic, rusty weathering metasediments are interbedded with gritty, dark brown to black weathering grey limestone.

The volcanic component includes discontinuous lenses of banded tuff, volcanic conglomerate, flow breccia, pillow lava and a few dikes. The banded tuffs in the Spanish Lake area are lithologically identical to the banded aquagene tuffs in the Eureka Peak area but the Spanish Lake succession also includes volcanic conglomerate, breccia and flows as discontinuous lenses up to several km in strike length. The volcanic rocks appear to be identical to the pyroxene-bearing flows of the overlying, volcanic unit in the Eureka Peak area and in the main Quesnel volcanic belt to the south and west.

Volcaniclastic breccia: This breccia unit crops out to the west of Eureka Peak where it overlies the tuff-phyllite sequence of the banded slate and tuff unit. It consists of dark grey, angular clasts in a paler grey matrix. Chloritization is extensive and readily evident in a cleavage defined by well developed chloritic parting. Both the lower and upper contacts with the Banded slates and tuffs unit and the overlying volcanics are faults. The volcaniclastic breccia unit is now considered to be an intra-formational breccia, and part of the volcanic and epiclastic rocks unit.

Volcanic sandstone and wacke: North of Quesnel Lake, the Banded slates and tuffs unit is overlain by this unit of coarse grained, dark green volcanic sandstones and wacke with interbedded siltstone, sandstone and minor argillite. The argillaceous sediments are interbedded in beds 3 millim to 2 centim thick with dominant green sandstone and wacke and give rise to a compositionally defined, colour-banded sequence, parallel to bedding. A rough fracture cleavage parallel to the bedding is locally developed but no penetrative cleavage is recognized.

Volcanic and epiclastic rocks: Hornblende pyroxene basalt flows, breccia, related volcaniclastic deposits and conglomerate comprise this unit. Pyroxene-bearing hornblende porphyry members also form small intrusive bodies and intrusive breccias within it. This unit has been defined as a discrete volcanic subunit



within the predominantly sedimentary 'black phyllite unit'. It is found at Horn Bluff on Horsefly Lake and in the thin belt of volcanic rocks between Horsefly Lake and Quesnel Lake, centred on Viewland Mountain. The volcanic rocks of this unit are not considered to be part of the overlying succession of alkali olivine basalt, alkali basalt and hornblende bearing basalt because these volcanic rocks form a succession near the top, but entirely within, the 'black phyllite unit'. The volcanic deposits of the Quesnel belt island arc succession are subdivided into three major map units. The volcanic rocks generally form lithologically similar prisms, wedges or lens-like deposits. In general, the volcanic succession consists of subaqueous pyroxene-phyric basalt flows and breccias, an overlying sequence of pyroclastic and debris-flow (laharic?) deposits, and an upper unit of subaerial analcite-bearing olivine basalt flows. Shallow-water sedimentary rocks overlap and flank the volcanic accumulations. The two most voluminous volcanic assemblages are the pyroclastic and debris-flow deposits, and subaerial analcite-bearing olivine basalt flows. This volcanic succession predominantly lies along the western boundary of the Cariboo Goldfields Property.

A durable blanket of one or more tills, local ablation moraine and widespread glaciofluvial deposits with an extensive thin cover of colluvium and other overburden is present throughout much of the property area. Drumlins and crag-and-tail features that indicate north-westerly ice-flow directions are common on the plateau. Glaciofluvial deposits and some thick accumulations of glacial silt are found in the major valleys occupied by the Horsefly and Quesnel rivers.

## 7.0 DEPOSIT TYPE

The "Deposit Type" section presented here is taken from a NI 43-101 report written for Tiex Inc. and Bullion Gold Corp. by G. Owsiaci (2007).

The Quesnel Trough in the area of the Cariboo Goldfields Property is a well mineralized region that hosts a wide variety of deposit types. The principal recent exploration and economic development targets on the property are gold-bearing quartz veins and gold-silver bearing stratabound zones of quartz and carbonate-altered quartz-veined phyllite that occur in the basal, black phyllite metasedimentary succession of the Nicola Group (e.g. Spanish Mountain, Frasergold, Kusk). The mineralization in some black phyllite members have potential to be mined as large, bulk-tonnage deposits.

Records of gold mining in the Quesnel River area date back to the earliest history of placer mining in British Columbia. Placer mining for gold, said to locally occur together with platinum, has been of major historical and economic importance to this region. It continues to have importance because of continuing

gold production in the district and exploration for buried placer channels, especially those with cemented gravels that are amenable to exploitation by underground mining methods.

Significant known mineralization on the Cariboo Goldfields Property or nearby in areas of similar geological setting represent key deposit types that are targets for exploration. The Triassic Nicola Group basal black phyllite host auriferous quartz veins of two main types. The first type, characterized by the Frasergold deposit (MINFILE 093A 150), comprises the partially concordant, deformed, early forming veins that are localized in a distinctive stratigraphic interval. The second type is represented by fracture-controlled vein mineralization that is associated with quartz-carbonate alteration, such as that in the Spanish Mountain area (MINFILE 093A 043). The two styles of mineralization are thought to be similar in age and related to deformation during regional metamorphism but the fracture controlled type may be younger.

Alkalic intrusion-related porphyry copper-gold deposits (e.g. Mount Polley mine, MINFILE 093A 008) and gold-bearing propylitic alteration zones formed in volcanic rocks peripheral to some of the intrusions (e.g. QR, MINFILE 093A 121) could also be important targets. These types of intrusions are less commonly emplaced in rocks of the basal phyllite unit but exploration for them should not be discounted. Nickel mineralization is documented in serpentinite and sheared ultramafic rocks of the Crooked amphibolite (Sovereign Creek, MINFILE 093A 013). Possible epithermal targets in Nicola Group basalts may exist. Vuggy, chalcedonic quartz-carbonate veins with elevated values of arsenic, barium and antimony outcrop on the Horsefly River near the Hobson's pit placer (MINFILE 093A 042).

The vuggy textures, banded chalcedony, crustiform calcite, as well as the association of metals noted above, is characteristic of epithermal mineralization. Other deposits like the Eaglet fluorite vein prospect (MINFILE 093A 046) consists of a series of steeply dipping mineralized zones within a 1500 by 900 metre area in gneissic and pegmatitic rocks of the Snowshoe Group.

The **Spanish Mountain** deposit is not part of the Cariboo Goldfields Property but occurs central to and adjoins the claim holdings and provides an excellent example of the current exploration focus for a large, bulk-tonnage gold deposit, possibly amenable to open-pit mining methods. Quartz veins containing gold and minor base metals occur to the southwest of Spanish Lake, about 7 km southeast of Likely, in the basal phyllite unit. The main lithologies in the area are phyllitic to massive siltstones and interbedded tuffs. Much of the area is affected by pervasive carbonate-silica replacements and listwanite (green mica-quartz-carbonate) alteration associated with quartz veins or fractures. In the more intensely altered zones there are quartz stockworks and larger veins, a number of which define a consistent northeast to east

trend. Gold occurs in the quartz veins which range in thickness from 0.01 to 4 m, dip steeply and trend to the northeast. The veins are typically crystalline to vuggy quartz with lesser carbonate intergrowths and associated minor galena, chalcopyrite, pyrite and sphalerite. Gold is frequently visible as fine particles rimming cavities or as wires where sulphide minerals are oxidized. The fracture-controlled style of the mineralization suggests that the veins and stockwork postdate metamorphism and deformation. The deposit is located on the northeast limb of a northwest-trending anticline that is cut by numerous north-westerly trending, syn-deformational thrust faults. The lithologic units and northwest trending structures are crosscut by a series of prominent northeast to east-trending normal faults. These crosscutting structures and faults control the mineralization.

In 2006, Skygold Ventures Ltd. and Wildrose Resources Ltd. completed a 27,000 metre drilling program on the Spanish Mountain property. Drill hole 523, drilled on the eastern edge of the Main zone, intersected 50.5 m grading 1.98 g/t gold including 19.5 m of 4.02 g/t gold (Skygold Ventures Ltd. Press Release - [www.skygold.ca/news/press\\_releases/](http://www.skygold.ca/news/press_releases/)).

The **Frasergold** or **Eureka** deposit is not part of the Cariboo Goldfields Property but is located near the southeast end and adjoins the claim holdings. The deposit is located on north-facing slopes in the upper reaches of the MacKay River valley. Gold occurs in quartz veins and as a geochemical enrichment in a specific lithological unit within the Nicola Group basal phyllite. The veins are localized in distinctive porphyroblastic phyllite with underlying graphitic-banded phyllite in the basal 100 m of a 300-metre succession of lustrous porphyroblastic phyllite. The siderite, ankerite and chloritoid-bearing host rocks are commonly referred to as 'knotted phyllite'. The veins are localized in this unit over a distance of at least 1.5 km along the moderately southwest dipping Eureka Peak syncline. Equivalent rocks can be traced to the southern limb of the syncline where they contain garnet, albite and chloritoid.

Auriferous quartz veins with some carbonate range from 2 to 20 cm in thickness and usually extend from 1 to 10 m along strike. They form lenses, rolls and saddle reefs. A few large rods or quartz knots up to a metre across are also present. The quartz is generally milky white in colour and forms massive to coarse granular intergrowths commonly containing dolomite and siderite. The veins also contain a small amount of pyrite, less common pyrrhotite and traces of other sulphide minerals. Gold is associated with the sulphide minerals or occurs in quartz near the margins of veins, stringers and boudins as fine, anhedral grains. Gold smears on fold hinges in phyllite suggest that some remobilization took place during folding. The formation of the quartz veins was synchronous with regional metamorphism and deformation. Deformed and un-deformed veins occur on all scales, along the limbs and within the hinge regions of folds.

The lithological control, possibly through fluid-rock interactions in the graphitic sedimentary rocks, has produced a zone of geochemical gold enrichment that is defined by a soil and rock geochemical anomaly 10 km long. Company reports (Eureka Resources Inc., J. Kerr, written communication, 1992) that summarize the economic potential state that drilling at 25 metre intervals and to a depth of 100 m over an 800-metre zone has established reserves in the order of 3.2 million tonnes grading 1.71 g/t gold. The quoted resource estimate is not compliant with National Instrument 43-101 standards. Drilling at wider intervals, over a 3 kilometre strike length, indicates mineral reserves with similar gold content in a larger zone are possibly amenable to open-pit mining. Exploration potential at depth and over an additional 7 kilometre strike of the anomalous zone remains to be tested (Panteleyev et al., 1996).

The **Kusk** showing (MINFILE 093A 061) is not part of the Cariboo Goldfields Property but adjoins and is located in the southeast portion of the claim holdings, about 4 km south of the Frasergold deposit. It is a gold-silver prospect described as a stratabound zone of quartz and carbonate-altered and quartz-veined phyllites. Quartz-carbonate pods, laminations and veins are common in the basal phyllite sequence. Most of the quartz occurs as pods and discontinuous laminations conformable to bedding. Locally, thin late stage quartz veins crosscut bedding. The quartz is milky white with clusters of coarse carbonate, principally ankerite. Pyrite, pyrrhotite and minor sphalerite, galena and chalcopyrite are associated with the carbonate. Strong vein zones tend to occur near the contact of knotted phyllite, cherty laminated phyllites and metavolcanics. Moderate to strong sericite and carbonate alteration is commonly found in the phyllite unit.

The **Moose** showing (MINFILE 093A 127) is located on Cariboo Goldfields Property along Gold Creek about 6 km northwest of the Spanish Mountain deposit. Quartz stringers cut basal phyllite unit rocks which in this area are dominated by limonitic, siliceous, fine grained greywacke/siltstone; pervasive pyritization is evident. Some quartz stringers contain minor amounts of pyrite, chalcopyrite, sphalerite, galena and arsenopyrite with anomalous gold and silver values.

The **Forks** showing (093A 092) is located on Cariboo Goldfields Property and is along strike of the predicted north western extension of the geologically similar Frasergold deposit 19 km to the southeast. Mineralization is associated with the ‘knotted’ or porphyroblastic black phyllite unit which occurs in a 200 to 300 metre wide zone within the basal phyllite sequence. Gold mineralization typically occurs near the base of the ‘knotted’ phyllite. The quartz veins host gold mineralization (rarely visible) and quartz-carbonate material. Based on diamond drilling completed in 1988-89, the mineralized zone can be traced over a strike length of 238 m with grades ranging from 0.44 to 9.39 g/t gold over widths of 0.8 to 1.5 m.



The character, type and possible stratigraphic position of the gold mineralization are similar to that of the Frasergold deposit (Howard,1989b).

## **8.0 MINERALIZATION**

Portions of the “Mineralization” section presented here are taken from a NI 43-101 report written for Tiex Inc. and Bullion Gold Corp. by G. Owsiaci (2007).

The Cariboo Goldfields Property covers a significant portion of the Quesnel Trough, a well mineralized region typical of other Late Triassic – Early Jurassic volcano-plutonic island arcs in the Cordillera. It hosts a wide variety of mineral deposits. The principal recent exploration and economic development targets on the property are gold-bearing quartz veins and gold-silver bearing stratabound zones of quartz and carbonate-altered quartz-veined phyllite that occur in the basal black phyllite metasedimentary succession. The veins in some black phyllite members have potential to be mined as large tonnage, bulk mineable gold deposits. The quartz veins are of two main types: the first type comprises partially concordant, deformed, early forming veins that are localized in a distinctive stratigraphic interval (e.g. Frasergold); the second type is represented by fracture-controlled vein mineralization that is associated with quartz-carbonate alteration (e.g. Spanish Mountain). Potential for other deposit types may become more apparent as new deposit models are developed.

Placer mining for gold, reported to locally occur together with platinum, has been of major historical and economic importance to the region. It is estimated that total production between 77.7 and 93.3 million grams of gold has been achieved in the Cariboo district, more than any other placer area in the province (British Columbia Department of Mines Bulletin 21, 1946; Levson and Giles, 1993). The main activity took place in the Wells-Barkerville, Lightning Creek, Keithley Creek, Quesnel Forks - Likely and Horsefly River regions. These areas are still being worked for placer gold, though at a much reduced scale. The placer gold that occurs in the Horsefly and parts of the Quesnel River watershed differs from most of the other placer deposits in the Quesnel River workings and the more extensive Cariboo goldfields to the north. Many of the Horsefly deposits are buried Tertiary placers, probably Miocene in age. The Cariboo placers represent mainly a post-glacial reworking of older placers or erosion of original lode gold deposits. The Horsefly placers are contained in fluvial gravels under Miocene basalt flows and have an undetermined source to the east (Johnston and Uglow, 1926, 1933; Levson and Giles, 1993).

There are 4 documented mineral occurrences on the Cariboo Goldfields Property. With the exception of the McKee and Zed showings, the Forks and Moose showings are gold-quartz veins hosted in the basal phyllite unit.

*Table 8-1. Summary of Minfile showings on the Cariboo Goldfields Property.*

<b>MinFile No.</b>	<b>Name</b>	<b>Status</b>	<b>Commodities</b>	<b>Deposit Type</b>
093A 012	Zed	Showing	Cu	Hydrothermal veins
093A 092	Forks	Showing	Au	Stratabound Au veins
093A 096	McKee	Showing	Cu, Au	Hydrothermal veins
093A 189	Park	Showing	Ag	Stratabound veins
093A 190	Jamboree	Showing	Au	Hydrothermal veins
093A 127	Moose/Gold Creek	Prospect	Au, Ag, Cu, Pb, Zn	Hydrothermal veins/Stratabound veins

### **8.1 Zed**

The showing is located just north of Suey Bay on Horsefly Lake. It is underlain by Nicola Group basalt and sedimentary rocks that have been intruded by small stocks and dikes of intermediate composition which are possibly of Jurassic age. Mineralization comprises chalcopyrite, bornite, pyrrhotite, pyrite and pyrolusite associated with quartz and calcite in a 3 metre wide fracture zone striking northwest.

### **8.2 McKee**

The showing is located in the southern part of the property, 2.5 km northeast of Elbow Lake. It is hosted in basaltic breccias and tuffs typical of the lower part of Nicola Group stratigraphy. Weak pyrite and carbonate alteration has affected the basalt. A shaft has been dug on a shear zone containing quartz veins mineralized with native gold, chalcopyrite, pyrite and abundant sericite. Minor amounts of pyrite, malachite and chalcopyrite are present near the shaft. A sample (assumed to be a chip sample) across 3.58 m of a quartz vein assayed 10.28 g/t gold (Minister of Mines Annual Report 1934, page C32).

### **8.3 Moose**

The Moose or Easy showing is located along Gold Creek about 6 km northwest of the Spanish Mountain deposit. Quartz stringers cut basal phyllite unit rocks which in this area are dominated by limonitic, siliceous, fine-grained greywacke/siltstone; pervasive pyritization is evident. Some quartz stringers contain minor amounts of pyrite, chalcopyrite, sphalerite, galena and arsenopyrite with anomalous gold and silver values. In the fall of 2006, five rock grab samples were taken in this area by the author. Four samples yielded anomalous gold values with one grading 15.65 g/t gold.

## 8.4 Forks

In 1988, Armada Gold and Minerals Ltd. conducted a program of extensive trenching coupled with 918 m of diamond drilling in five holes which resulted in the discovery of a new gold showing. The Forks showing is located on the south side of Horsefly Lake along a logging road cut, north of Archie and Teapot creeks. It occurs along the predicted north-western extension of the geologically similar Frasergold deposit, 19 km to the southeast. The area is underlain mainly by basal black phyllite with minor interbedded limestone and quartzite of the Nicola Group. The rocks form the upright northeast limb of the major northwesterly trending Eureka syncline. Locally the rocks form asymmetric drag folds which contain quartz ‘sweats’ in the hinges. Mineralization is associated with a ‘knotted’ or porphyroblastic black phyllite unit which occurs in a 200 to 300 metre wide zone within the phyllite sequence. Gold mineralization typically occurs near the base of the ‘knotted’ phyllite. The quartz ‘sweats’, striking at 130 degrees and dipping 30 degrees to vertically west, host gold (rarely visible) and quartz-carbonate material.

Chip/channel sampling of the mineralized zone in the discovery trench (Trench 8) yielded a weighted assay of 3.77 g/t gold over 13 m. Diamond drilling of the zone below the discovery trench yielded lower grades over narrower widths, but still confirmed the presence of a wide gold-bearing zone. In 1989, a 616 metre diamond drill program consisting of four holes was conducted on behalf of Armada Gold and Minerals Ltd. and Arrowfield Resources Ltd. Two holes drilled in the original discovery area extended the strike length of gold mineralization an additional 135 m. The mineralized zone can now be traced by drill holes over a strike length of 238 m with grades ranging from 0.44 to 9.39 g/t gold over widths of 0.8 to 1.5 m (Howard, 1989b).

## 8.5 Jamboree

This showing is located approximately 4.5 km north of Elbow Lake. The Jamboree area is underlain by Nicola Group sedimentary rocks consisting of a lower argillite tuff sequence, a middle volcanic breccias and an upper argillite sequence, which have been intruded by a diorite stock. Imperial Metals worked in the area between 1987 and 1991 and completed 1062 soil samples and 2 drill holes. The drilling intersected 2.1 m of 0.88 g/t Au and 1494 ppm As that is hosted within a chloritic fault zone.

## 8.6 Park

The Park showing is located at the headwaters of McKlusky Creek near the boundary of Wells Gray Park. This is one of the helicopter access only areas on the Cariboo Goldfields Property. It is underlain by



black to dark grey phyllite belonging to the Nicola Group. Metamorphism is interpreted to be upper greenschist with biotite-garnet mineral assemblages occurring locally.

The showing consists of a cross-cutting quartz vein which is 23 m wide and approximately 240 m long that had an adit drifted into it for approximately 25 m. A 1.1 m chip sample across the vein returned 9.9 g/t Ag.

## 9.0 EXPLORATION

In 2009 Bullion conducted several reconnaissance MMI soil sampling survey lines over their Cariboo Goldfields Property. These surveys were intended to test for possible Cu-Au-Mo porphyry style and/or stratabound gold mineralization in areas predominantly covered with glaciofluvial sediments. Due to budgetary restrictions Bullion was unable to analyze the samples until the fall of 2010. Five areas were tested by the survey (Figure 9-1):

1. Jamboree Project – Bosk Lake area – 246 samples
2. Jamboree Project – Crooked Lake area – 131 samples
3. Horsefly Mountain Project – 286 samples
4. Bullion Project – Moffat Lake west line – 255 samples
5. Bullion Project – Moffat Lake east line – 130 samples

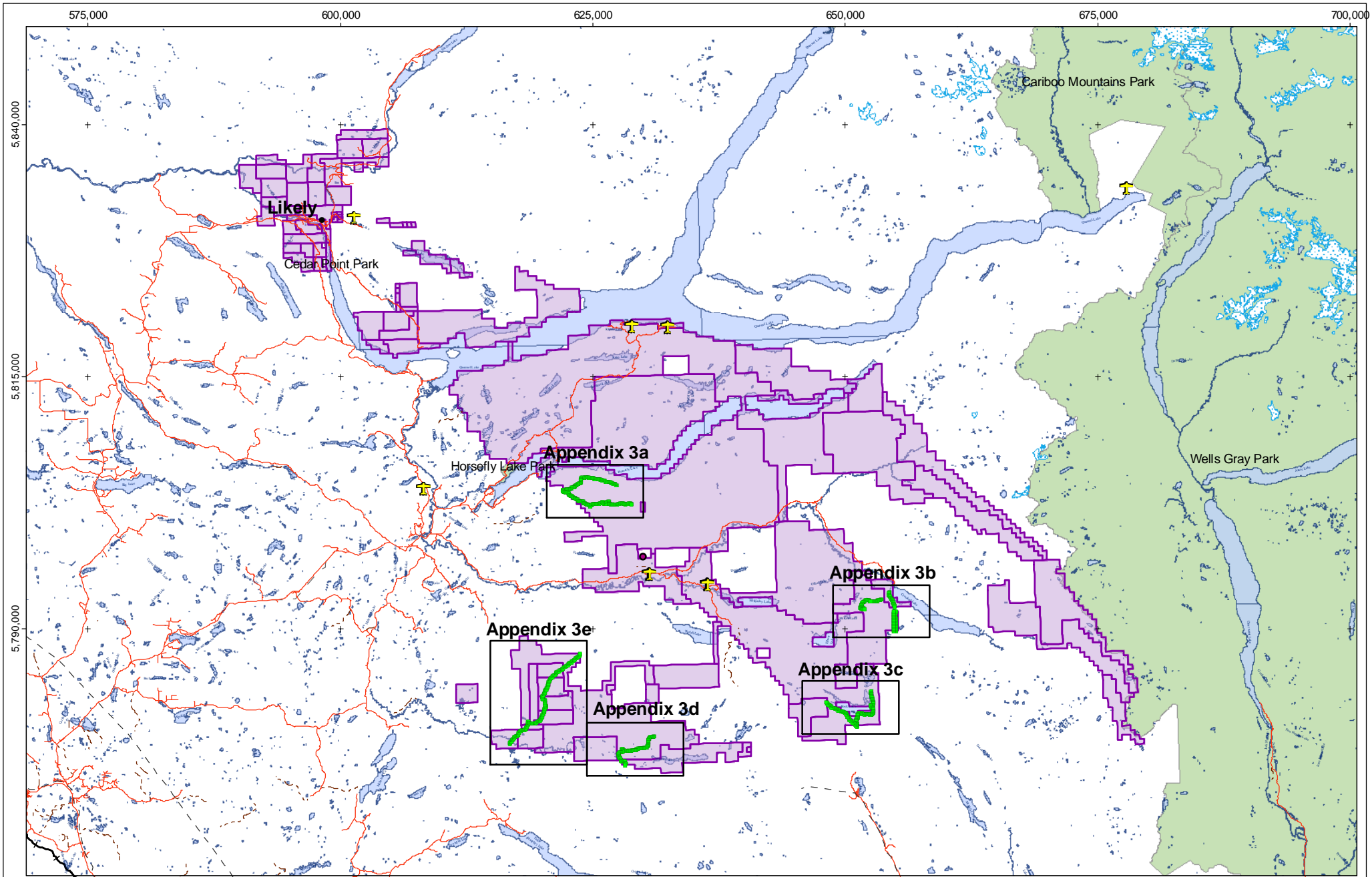
The sample locations maps and the Cu response ratios are provided in Appendix 3.

### 9.1 Results

Table 9-1 is a summary statistical analysis of 7 selected elements from the data collected. In general the response for gold, arsenic and molybdenum was low and most analyses were below detection for those elements. Several local anomalously high vales for Au, As and Mo were observed in the data however they were mainly isolated samples that were rarely correlated with other elements. Notably several isolated Au > 5 times background (x B) samples also returned elevated Cu and these may warrant follow up work.

Correlation between elements was very low (Table 9-2) with Cu showing the best correlation Au, Mo As and Ag in that order.

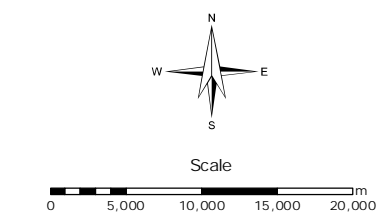




- Legend:**
- Communities
  - ✈ Runway
  - Mines
  - MMI Sample Locations

- - Powerline
- + Railway
- - Roads
- - Trails
- - Utility Line

- Ice
- Lakes/Ponds
- Provincial Parks
- Tiex Claims



**TIEX INC**

MMI Survey Sample Locations,  
Tiex Property, British Columbia, Canada.

Date: 04/02/11	Scale: 1:12,500	Figure: 9-1
Projection: UTM, Nad83, Zone 15N   Office/Author: Vancouver/gcn		

**CCIC** Caracle Creek International Consulting Inc.  
Geological & Geophysical Consultants



Table 9-1. Summary statistics for Response Ratios of selected elements from MMI data.

Statistic	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
Mean	5.115	0.411	0.127	3.711	0.735	6.505	9.373
Median	2.647	0.250	0.050	2.418	0.250	3.864	4.000
Mode	0.806	0.250	0.025	1.722	0.250	0.909	0.667
Std Dev.	7.712	0.510	0.437	3.846	1.040	7.191	17.622
Variance	59.472	0.260	0.191	14.791	1.081	51.717	310.529
Kurtosis	31.493	67.106	888.869	10.760	52.793	6.260	104.847
Skewness	4.577	6.587	28.673	2.806	5.826	2.159	7.634
Range	88.780	7.750	13.675	30.549	13.550	53.409	323.167
Minimum	0.058	0.250	0.025	0.073	0.250	0.227	0.167
Maximum	88.838	8.000	13.700	30.623	13.800	53.636	323.333
Sum	5360.472	430.750	133.125	3889.231	770.700	6817.273	9823.000
Count	1048.000	1048.000	1048.000	1048.000	1048.000	1048.000	1048.000
90 <sup>th</sup> %ile	11.3	1.0	2.5	8.0	1.6	15	22

Samples collected south and east of Bosk Lake returned more than 39 analyses > 8 x B for Cu (90<sup>th</sup> percentile) and 66 samples > 5 x B. There are several strings of successive high Cu responses mainly on the south shore of the lake and one string of 8 samples (#974273 to 974281) also have elevated Au responses up to 137 x B.

Table 9-2. Correlation table of Response Ratios for selected elements from MMI data.

	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
Ag RR	1						
As RR	0.092	1					
Au RR	0.097	0.077	1				
Cu RR	0.111	0.118	0.298	1			
Mo RR	0.271	0.222	0.018	0.157	1		
Pb RR	0.315	0.296	-0.044	-0.196	0.172	1	
Zn RR	0.177	0.186	-0.030	0.088	0.104	0.200	1

In the Crooked Lake area copper response ratios were generally very low with a few exceptions. 4 samples near the shores of Crooked Lake returned >5 x B Cu in soil two of which had Au responses >6.5 x B. Another area with four successive samples returned >5 x B for Cu west of Crooked Lake and these are associated with high response ratios for Pb and Zn (> 8 x B). Samples in the Crooked Lake area were highly anomalous in Ag with 53 samples of the 131 collected returning >11 x B (> 90<sup>th</sup> percentile). These anomalous Ag samples commonly have associated anomalous Pb (> 15 x B) and Zn (>22 x B).

On the Horsefly Mountain MMI line there were 39 samples that returned Cu responses > 39 x B and 132 sample >5 x B from the 286 samples collected. This line of samples was in roughly a V shaped pattern with the northern limb returning very low Cu responses overall with a few isolated exceptions. In contrast, the southern limb of the line was a nearly continuous string of > 5 x B samples. Au responses

are generally low with none reaching 5 x B. There are a few elevated > 5 x B Mo and > 10 x B Zn responses scattered within anomalous high Cu responses.

The Moffat Lake west area is covered by a thick layer of glaciofluvial sediments and from the MMI results it does not appear that the technique was able to penetrate the cover. Only two samples of the 255 returned >5 x B for Cu and only 7 samples returned >2.5 x B for Au.

Moffat Lake east returned better responses for Cu and Au than the west area with 25 samples >5 x B for Cu (four >8 x B) and 37 samples >2.5 x B for Au. Generally the elevated Cu responses coincided with elevated Au responses. Most of the elevated Cu responses occur at either end of the Moffat Lake east line.

## **10.0 SAMPLING METHOD AND APPROACH**

### **10.1 Sample Collection**

The MMI survey collected 1048 samples at ~ 50 m spacing over 5 lines totalling approximately 52 line-km. The sampling procedure was to first remove the organic material from the sample site (A0 layer) and then dig a pit over 25 cm deep with a shovel. Sample material was then scraped from the sides of the pit over the measured depth interval of 10 cm to 25 cm. About 250 grams of sample material was collected and then placed into a plastic Zip-loc sandwich bag with the sample location marked thereon. The 964 samples were then packaged and sent to SGS Minerals located at 1885 Leslie Street, Toronto, Ontario. This is only one of two labs in the world that do MMI analysis, the other being in Perth, Australia where the MMI method was developed.

### **10.2 Analytical Methods**

At SGS Minerals, the testing procedure begins with weighing 50 grams of the sample into a plastic vial fitted with a screw cap. 50 ml of the MMI-M solution is then added to the sample, and then placed in trays and put into a shaker for 20 minutes. These are allowed to sit overnight and subsequently centrifuged for 10 minutes. The solution is then diluted 20 times for a total dilution factor of 200 times and then transferred into plastic test tubes, which are then analyzed on ICP-MS instruments.

Results from the instruments for the 46 elements are processed automatically, loaded into the LIMS (laboratory information management system which is computer software used by laboratories) where the quality control parameters are checked before final reporting.

### 10.3 Compilation of Data

Seven elements were chosen out of the 46 reported and these are silver, arsenic, gold, copper, molybdenum, lead, and zinc. The mean background value was calculated for each of the elements by averaging the lower 25% of the data and this number is shown in the table below. In the cases of As, Mo and Au this average was below the detection limit for the element so twice the detection limit was used for the mean background value (Table 10-1).

All values reported for each of the 7 elements were then divided by the mean background value which gives the response ratio. This is essentially a multiple of the background for that element in the data set.

Bullion has collected a significant number of MMI samples (4547) on its Cariboo Goldfields Property and all of these were used to determine the background levels for the 7 elements chosen.

*Table 10-1. Calculated mean background and the mean background values used in calculating the Response Ratio (RR).*

	Ag (ppb)	As (ppb)	Au (ppb)	Cu (ppb)	Mo (ppb)	Pb (ppb)	Zn (ppb)
Calculated Mean Background	8.69	5	0.059	273	2.5	22	60
Detection Limit	1	10	0.1	10	5	10	10
Background Value for RR	8.69	20	0.2	273	10	22	60

## 11.0 CONCLUSIONS

The MMI survey conducted in 2009 was intended as a series of reconnaissance geochemical survey lines 6to explore for Cu-Au-Mo porphyry and Stratabound Au mineralization beneath glaciofluvial cover.

In the Bosk Lake area numerous zones of anomalous high copper responses in the soils were encountered which locally coincide with elevated Au in soil. Limited work has been done previously in this area and from the initial results it appears to have significant potential to contain Cu-Au porphyry style mineralization. A follow up soil grid on the south end of Bosk Lake is recommended as is a grid on the west and north sides of the lake. IP-mag may also be warranted.

Results from the Crooked Lake area returned isolated Cu or Au in soil responses. However, samples in this area produced highly anomalous Ag responses which commonly coincided with high Pb and Zn responses. Hence, this area does not appear to be prospective for Cu-Au or Au mineralization but Ag, Pb, Zn mineralization may be present. At this point prospecting and geological mapping should be conducted in the Crooked Lake area to determine the geological setting and style of possible mineralization.



The southern line on the Horsefly Mountain area produced consistently high Cu responses in the soil which appear to intensify toward the east. This area is underlain by a syenite intrusive body (with an associated magnetic high) and the geochemical soil results suggest Cu mineralization may occur in the area. Along with the Bosk Lake area, the Horsefly Mountain area is highly prospective to contain Cu-Au-Mo porphyry style mineralization. A follow-up soil grid around the south line as well as reconnaissance widely spaced IP-Mag is suggested.

Both surveys in the Moffat Lakes area returned very low responses in all elements. Regional aeromagnetic data suggests the Takomkane batholith exists at depth but it is covered by significant glaciofluvial material as well as possibly Nicola Group sedimentary rocks in this area. Hence, the geochemical responses are likely muted with respect to other areas in the Cariboo. A few local elevated Cu and Au values were returned and they should be looked at carefully as they may indicate mineralization at depth although their intensity low and they lack surrounding anomalous samples. A detailed interpretation of the magnetic data for this area is recommended to focus on areas of interest and attempt deep penetrative IP-Mag reconnaissance surveys.

## 12.0 EXPLORATION EXPENDITURES

Exploration Work type	Units	No.	Rate	Subtotal	Total
<b>Geochemical Analyses</b>					
Drill (cuttings, core, etc.)			\$0.00	\$0.00	
Stream sediment			\$0.00	\$0.00	
Soil 1048 - MMI SAMPLES	samples	1048.0	\$40.57	\$42,517.36	
Rock			\$0.00	\$0.00	
Water			\$0.00	\$0.00	
Biogeochemistry			\$0.00	\$0.00	
Whole rock			\$0.00	\$0.00	
Petrology			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$42,517.36	<b>\$42,517.36</b>

### 13.0 STATEMENT OF AUTHORSHIP

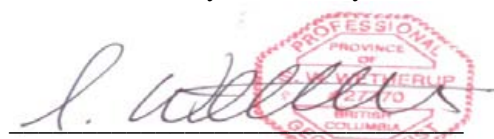
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#### CERTIFICATE OF AUTHOR

I, Stephen Wetherup, do hereby certify that,

1. I am a graduate of the University of Manitoba ((Winnipeg) with a B.Sc. Honours in Geology.
2. I am a member of the Association of Association of Professional Engineers and Geoscientists of British Columbia (APEGBC, #27770) and Association of Professional Geoscientists of Ontario, (APGO#1705). I am a member of the Society of Economic Geologists and the Vancouver Mining Exploration Group.
3. I have been operating a business as a geological consultant under my own name since June, 2001, and under the name of Caracle Creek International Consulting Inc. since March, 2004.
4. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission to disclose which makes the Report misleading.
5. I am responsible for the preparation of the Report titled "Assessment Report: Horsefly Mountain, Jamboree, and Bullion Projects, Cariboo Goldfields Property, Cariboo Mining Division, British Columbia", (the "Report"), dated February 4<sup>th</sup>, 2011.

Dated this 4<sup>th</sup> Day of February, 2011.



Stephen William Wetherup,  
BSc., P.Ge. (APEGBC, #27770)

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Wheeler, J.O. and McFeely, P. (1991): Tectonic Assemblage Map of the Canadian Cordillera and Adjacent Parts of the United States of America; Geological Survey of Canada, Map 1712A, 1:2 000 000.



## APPENDIX 1

### Sample Location and Selected Analytical Results

## Appendix 1

## Sample Location and Selected Analytical Results

Sample								Ag	As	Au	Cu	Mo	Pb	Zn							
No.	Date	Type	Datum	Easting	Northing	Elev.	Area	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
974433	05-Aug-09	MMI	NAD83	631051	5779361	1388	Moffat Lake	15	5	0.2	820	2.5	180	460	1.73	0.25	1.00	3.00	0.25	8.18	7.67
974434	05-Aug-09	MMI	NAD83	631005	5779340	1390	Moffat Lake	31	5	0.7	610	12	160	20	3.57	0.25	3.50	2.23	1.20	7.27	0.33
974435	05-Aug-09	MMI	NAD83	630958	5779319	1387	Moffat Lake	23	5	0.3	890	2.5	190	80	2.65	0.25	1.50	3.26	0.25	8.64	1.33
974436	05-Aug-09	MMI	NAD83	630907	5779309	1384	Moffat Lake	23	20	0.2	1410	7	220	120	2.65	1.00	1.00	5.16	0.70	10.00	2.00
974437	05-Aug-09	MMI	NAD83	630858	5779298	1370	Moffat Lake	17	5	0.2	1200	2.5	100	50	1.96	0.25	1.00	4.40	0.25	4.55	0.83
974438	05-Aug-09	MMI	NAD83	630811	5779280	1369	Moffat Lake	52	5	0.1	890	2.5	180	70	5.98	0.25	0.50	3.26	0.25	8.18	1.17
974439	05-Aug-09	MMI	NAD83	630764	5779260	1365	Moffat Lake	78	5	0.5	1290	12	110	20	8.98	0.25	2.50	4.73	1.20	5.00	0.33
974440	05-Aug-09	MMI	NAD83	630715	5779245	1375	Moffat Lake	45	5	0.4	750	10	160	10	5.18	0.25	2.00	2.75	1.00	7.27	0.17
974441	05-Aug-09	MMI	NAD83	630665	5779244	1370	Moffat Lake	64	5	0.2	320	9	140	20	7.36	0.25	1.00	1.17	0.90	6.36	0.33
974442	05-Aug-09	MMI	NAD83	630614	5779248	1363	Moffat Lake	14	20	0.2	880	11	100	30	1.61	1.00	1.00	3.22	1.10	4.55	0.50
974443	05-Aug-09	MMI	NAD83	630570	5779224	1372	Moffat Lake	21	5	0.05	670	2.5	270	190	2.42	0.25	0.25	2.45	0.25	12.27	3.17
974444	05-Aug-09	MMI	NAD83	630542	5779182	1388	Moffat Lake	29	5	0.2	750	2.5	190	70	3.34	0.25	1.00	2.75	0.25	8.64	1.17
974445	05-Aug-09	MMI	NAD83	630537	5779131	1401	Moffat Lake	23	5	0.05	510	2.5	320	100	2.65	0.25	0.25	1.87	0.25	14.55	1.67
974446	05-Aug-09	MMI	NAD83	630526	5779083	1418	Moffat Lake	15	5	0.8	4290	2.5	40	190	1.73	0.25	4.00	15.71	0.25	1.82	3.17
974447	05-Aug-09	MMI	NAD83	630513	5779033	1430	Moffat Lake	35	5	0.1	680	2.5	180	50	4.03	0.25	0.50	2.49	0.25	8.18	0.83
974448	05-Aug-09	MMI	NAD83	630507	5778983	1439	Moffat Lake	36	5	0.2	380	2.5	230	50	4.14	0.25	1.00	1.39	0.25	10.45	0.83
974449	05-Aug-09	MMI	NAD83	630515	5778933	1443	Moffat Lake	10	10	0.2	390	9	110	70	1.15	0.50	1.00	1.43	0.90	5.00	1.17
974450	05-Aug-09	MMI	NAD83	630507	5778883	1448	Moffat Lake	38	5	0.5	650	8	120	30	4.37	0.25	2.50	2.38	0.80	5.45	0.50
974451	05-Aug-09	MMI	NAD83	630502	5778833	1454	Moffat Lake	17	5	0.2	440	5	150	20	1.96	0.25	1.00	1.61	0.50	6.82	0.33
974452	05-Aug-09	MMI	NAD83	630495	5778783	1453	Moffat Lake	16	30	0.3	2000	6	180	290	1.84	1.50	1.50	7.33	0.60	8.18	4.83
974453	07-Aug-09	MMI	NAD83	630487	5778734	1379	Moffat Lake	6	5	0.6	2520	2.5	20	150	0.69	0.25	3.00	9.23	0.25	0.91	2.50
974454	07-Aug-09	MMI	NAD83	630470	5778686	1380	Moffat Lake	30	5	0.6	1430	2.5	140	80	3.45	0.25	3.00	5.24	0.25	6.36	1.33
974455	07-Aug-09	MMI	NAD83	630465	5778636	1381	Moffat Lake	18	5	1	900	2.5	150	60	2.07	0.25	5.00	3.30	0.25	6.82	1.00
974456	07-Aug-09	MMI	NAD83	630474	5778586	1379	Moffat Lake	15	5	0.2	490	2.5	50	50	1.73	0.25	1.00	1.79	0.25	2.27	0.83
974457	07-Aug-09	MMI	NAD83	630482	5778535	1378	Moffat Lake	16	5	0.3	570	7	120	40	1.84	0.25	1.50	2.09	0.70	5.45	0.67
974458	07-Aug-09	MMI	NAD83	630463	5778489	1377	Moffat Lake	24	5	0.05	590	2.5	180	50	2.76	0.25	0.25	2.16	0.25	8.18	0.83
974459	07-Aug-09	MMI	NAD83	630444	5778442	1379	Moffat Lake	14	5	0.4	950	11	110	10	1.61	0.25	2.00	3.48	1.10	5.00	0.17
974460	07-Aug-09	MMI	NAD83	630437	5778393	1379	Moffat Lake	22	5	0.6	990	16	110	20	2.53	0.25	3.00	3.63	1.60	5.00	0.33
974461	07-Aug-09	MMI	NAD83	630410	5778349	1376	Moffat Lake	23	5	0.7	820	7	80	10	2.65	0.25	3.50	3.00	0.70	3.64	0.17
974462	07-Aug-09	MMI	NAD83	630378	5778310	1376	Moffat Lake	18	5	0.2	1000	6	130	60	2.07	0.25	1.00	3.66	0.60	5.91	1.00
974463	07-Aug-09	MMI	NAD83	630335	5778283	1376	Moffat Lake	8	5	0.05	510	2.5	300	110	0.92	0.25	0.25	1.87	0.25	13.64	1.83
974464	07-Aug-09	MMI	NAD83	630293	5778256	1378	Moffat Lake	10	5	0.4	470	8	90	20	1.15	0.25	2.00	1.72	0.80	4.09	0.33
974465	07-Aug-09	MMI	NAD83	630245	5778238	1379	Moffat Lake	19	5	0.4	680	8	100	40	2.19	0.25	2.00	2.49	0.80	4.55	0.67
974466	07-Aug-09	MMI	NAD83	630195	5778237	1382	Moffat Lake	15	5	0.05	750	2.5	150	200	1.73	0.25	0.25	2.75	0.25	6.82	3.33
974467	07-Aug-09	MMI	NAD83	630145	5778232	1383	Moffat Lake	4	5	0.05	370	2.5	110	290	0.46	0.25	0.25	1.36	0.25	5.00	4.83
974468	07-Aug-09	MMI	NAD83	630095	5778226	1385	Moffat Lake	14	5	0.5	700	7	110	40	1.61	0.25	2.50	2.56	0.70	5.00	0.67
974469	07-Aug-09	MMI	NAD83	630045	5778216	1385	Moffat Lake	4	5	0.05	480	2.5	230	620	0.46	0.25	0.25	1.76	0.25	10.45	10.33
974470	07-Aug-09	MMI	NAD83	629994	5778208	1385	Moffat Lake	3	5	0.05	400	2.5	130	320	0.35	0.25	0.25	1.47	0.25	5.91	5.33
974471	07-Aug-09	MMI	NAD83	629944	5778199	1385	Moffat Lake	17	5	0.2	560	2.5	120	40	1.96	0.25	1.00	2.05	0.25	5.45	0.67
974472	07-Aug-09	MMI	NAD83	629894	5778191	1386	Moffat Lake	7	5	0.05	770	2.5	200	310	0.81	0.25	0.25	2.82	0.25	9.09	5.17
974473	07-Aug-09	MMI	NAD83	629844	5778185	1385	Moffat Lake	12	5	0.3	520	2.5	140	90	1.38	0.25	1.50	1.90	0.25	6.36	1.50
974474	07-Aug-09	MMI	NAD83	629794	5778174	1384	Moffat Lake	5	5	0.05	490	2.5	220	210	0.58	0.25	0.25	1.79	0.25	10.00	3.50
974475	07-Aug-09	MMI	NAD83	629742	5778170	1385	Moffat Lake	11	5	0.4	1050	6	70	10	1.27	0.25	2.00	3.85	0.60	3.18	0.17
974476	07-Aug-09	MMI	NAD83	629694	5778154	1386	Moffat Lake	11	5	0.4	2070	2.5	130	70	1.27	0.25	2.00	7.58	0.25	5.91	1.17

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974477	07-Aug-09	MMI	NAD83	629644	5778164	1385	Moffat Lake	11	5	0.1	430	7	110	50	1.27	0.25	0.50	1.58	0.70	5.00	0.83
974478	07-Aug-09	MMI	NAD83	629593	5778171	1385	Moffat Lake	18	5	0.3	930	7	120	50	2.07	0.25	1.50	3.41	0.70	5.45	0.83
974479	07-Aug-09	MMI	NAD83	629542	5778172	1384	Moffat Lake	22	5	0.4	660	9	140	30	2.53	0.25	2.00	2.42	0.90	6.36	0.50
974480	07-Aug-09	MMI	NAD83	629498	5778146	1380	Moffat Lake	10	5	0.05	560	2.5	330	160	1.15	0.25	0.25	2.05	0.25	15.00	2.67
974481	07-Aug-09	MMI	NAD83	629454	5778121	1375	Moffat Lake	4	5	0.8	3250	2.5	110	60	0.46	0.25	4.00	11.90	0.25	5.00	1.00
974482	07-Aug-09	MMI	NAD83	629404	5778125	1371	Moffat Lake	6	20	0.1	830	5	240	220	0.69	1.00	0.50	3.04	0.50	10.91	3.67
974483	07-Aug-09	MMI	NAD83	629356	5778108	1371	Moffat Lake	12	10	0.2	760	8	150	160	1.38	0.50	1.00	2.78	0.80	6.82	2.67
974484	07-Aug-09	MMI	NAD83	629317	5778078	1370	Moffat Lake	20	5	0.3	550	15	110	40	2.30	0.25	1.50	2.01	1.50	5.00	0.67
974485	07-Aug-09	MMI	NAD83	629278	5778044	1368	Moffat Lake	9	5	0.3	940	7	110	90	1.04	0.25	1.50	3.44	0.70	5.00	1.50
974486	07-Aug-09	MMI	NAD83	629231	5778027	1364	Moffat Lake	15	5	0.2	710	9	140	70	1.73	0.25	1.00	2.60	0.90	6.36	1.17
974487	07-Aug-09	MMI	NAD83	629183	5778042	1360	Moffat Lake	23	5	0.2	1250	9	200	80	2.65	0.25	1.00	4.58	0.90	9.09	1.33
974488	07-Aug-09	MMI	NAD83	629136	5778023	1356	Moffat Lake	11	5	0.05	890	2.5	240	170	1.27	0.25	0.25	3.26	0.25	10.91	2.83
974489	07-Aug-09	MMI	NAD83	629091	5778000	1350	Moffat Lake	15	5	0.05	540	6	140	100	1.73	0.25	0.25	1.98	0.60	6.36	1.67
974490	07-Aug-09	MMI	NAD83	629045	5777977	1351	Moffat Lake	4	5	0.7	670	5	130	20	0.46	0.25	3.50	2.45	0.50	5.91	0.33
974491	07-Aug-09	MMI	NAD83	628994	5777975	1347	Moffat Lake	19	5	0.2	470	12	80	30	2.19	0.25	1.00	1.72	1.20	3.64	0.50
974492	07-Aug-09	MMI	NAD83	628945	5777985	1345	Moffat Lake	5	5	0.4	1580	2.5	110	40	0.58	0.25	2.00	5.79	0.25	5.00	0.67
974493	07-Aug-09	MMI	NAD83	628896	5777975	1340	Moffat Lake	7	5	0.2	460	2.5	50	20	0.81	0.25	1.00	1.68	0.25	2.27	0.33
974494	07-Aug-09	MMI	NAD83	628846	5777970	1341	Moffat Lake	23	5	0.05	480	5	130	150	2.65	0.25	0.25	1.76	0.50	5.91	2.50
974495	07-Aug-09	MMI	NAD83	628797	5777962	1341	Moffat Lake	13	5	0.1	600	5	80	200	1.50	0.25	0.50	2.20	0.50	3.64	3.33
974496	07-Aug-09	MMI	NAD83	628747	5777956	1345	Moffat Lake	8	5	0.2	620	8	100	40	0.92	0.25	1.00	2.27	0.80	4.55	0.67
974497	07-Aug-09	MMI	NAD83	628698	5777949	1344	Moffat Lake	6	5	0.3	530	11	70	20	0.69	0.25	1.50	1.94	1.10	3.18	0.33
974498	07-Aug-09	MMI	NAD83	628647	5777955	1338	Moffat Lake	7	5	0.3	470	6	100	20	0.81	0.25	1.50	1.72	0.60	4.55	0.33
974499	07-Aug-09	MMI	NAD83	628598	5777967	1342	Moffat Lake	14	5	0.4	1070	2.5	80	40	1.61	0.25	2.00	3.92	0.25	3.64	0.67
974500	07-Aug-09	MMI	NAD83	628546	5777973	1344	Moffat Lake	4	5	0.9	1760	2.5	20	110	0.46	0.25	4.50	6.45	0.25	0.91	1.83
974501	07-Aug-09	MMI	NAD83	628495	5777965	1341	Moffat Lake	10	5	0.2	560	6	130	90	1.15	0.25	1.00	2.05	0.60	5.91	1.50
974502	07-Aug-09	MMI	NAD83	628443	5777957	1339	Moffat Lake	10	5	0.2	470	7	110	10	1.15	0.25	1.00	1.72	0.70	5.00	0.17
974503	07-Aug-09	MMI	NAD83	628392	5777950	1338	Moffat Lake	9	5	0.05	390	8	70	30	1.04	0.25	0.25	1.43	0.80	3.18	0.50
974504	07-Aug-09	MMI	NAD83	628342	5777938	1335	Moffat Lake	8	5	0.6	1010	2.5	70	40	0.92	0.25	3.00	3.70	0.25	3.18	0.67
974505	07-Aug-09	MMI	NAD83	628291	5777932	1334	Moffat Lake	11	5	0.2	390	2.5	120	120	1.27	0.25	1.00	1.43	0.25	5.45	2.00
974506	07-Aug-09	MMI	NAD83	628243	5777945	1333	Moffat Lake	14	5	0.4	810	2.5	130	60	1.61	0.25	2.00	2.97	0.25	5.91	1.00
974507	07-Aug-09	MMI	NAD83	628193	5777949	1331	Moffat Lake	16	5	0.4	840	7	130	50	1.84	0.25	2.00	3.08	0.70	5.91	0.83
974508	07-Aug-09	MMI	NAD83	628144	5777962	1330	Moffat Lake	15	5	0.4	720	2.5	170	130	1.73	0.25	2.00	2.64	0.25	7.73	2.17
974509	07-Aug-09	MMI	NAD83	628103	5777989	1329	Moffat Lake	8	5	0.4	980	2.5	70	30	0.92	0.25	2.00	3.59	0.25	3.18	0.50
974510	07-Aug-09	MMI	NAD83	628060	5778015	1328	Moffat Lake	9	5	0.05	330	8	70	180	1.04	0.25	0.25	1.21	0.80	3.18	3.00
974511	07-Aug-09	MMI	NAD83	628020	5778044	1326	Moffat Lake	23	5	0.3	490	19	110	40	2.65	0.25	1.50	1.79	1.90	5.00	0.67
974512	07-Aug-09	MMI	NAD83	627975	5778068	1324	Moffat Lake	7	5	0.2	480	7	80	30	0.81	0.25	1.00	1.76	0.70	3.64	0.50
974513	07-Aug-09	MMI	NAD83	627933	5778097	1321	Moffat Lake	25	5	0.5	1220	11	90	10	2.88	0.25	2.50	4.47	1.10	4.09	0.17
974514	07-Aug-09	MMI	NAD83	627887	5778117	1323	Moffat Lake	20	10	0.1	350	2.5	150	190	2.30	0.50	0.50	1.28	0.25	6.82	3.17
974515	07-Aug-09	MMI	NAD83	627846	5778088	1318	Moffat Lake	14	5	0.1	570	2.5	170	230	1.61	0.25	0.50	2.09	0.25	7.73	3.83
974516	07-Aug-09	MMI	NAD83	627826	5778042	1316	Moffat Lake	14	5	0.6	720	6	140	140	1.61	0.25	3.00	2.64	0.60	6.36	2.33
974517	07-Aug-09	MMI	NAD83	627845	5777995	1316	Moffat Lake	10	5	0.6	650	6	80	30	1.15	0.25	3.00	2.38	0.60	3.64	0.50
974518	07-Aug-09	MMI	NAD83	627881	5777959	1310	Moffat Lake	12	10	0.3	960	6	190	70	1.38	0.50	1.50	3.52	0.60	8.64	1.17
974519	07-Aug-09	MMI	NAD83	627901	5777913	1308	Moffat Lake	10	5	0.3	1180	8	130	40	1.15	0.25	1.50	4.32	0.80	5.91	0.67
974520	07-Aug-09	MMI	NAD83	627918	5777866	1303	Moffat Lake	5	10	1.5	870	2.5	20	100	0.58	0.50	7.50	3.19	0.25	0.91	1.67

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974521	07-Aug-09	MMI	NAD83	627906	5777817	1299	Moffat Lake	7	5	0.6	1630	2.5	80	190	0.81	0.25	3.00	5.97	0.25	3.64	3.17
974522	07-Aug-09	MMI	NAD83	627862	5777791	1296	Moffat Lake	2	5	0.05	590	2.5	150	1670	0.23	0.25	0.25	2.16	0.25	6.82	27.83
974523	07-Aug-09	MMI	NAD83	627810	5777785	1291	Moffat Lake	11	5	0.2	1450	8	60	500	1.27	0.25	1.00	5.31	0.80	2.73	8.33
974524	07-Aug-09	MMI	NAD83	627762	5777768	1288	Moffat Lake	11	5	0.3	710	2.5	100	330	1.27	0.25	1.50	2.60	0.25	4.55	5.50
974525	07-Aug-09	MMI	NAD83	627712	5777753	1288	Moffat Lake	7	5	0.8	2020	6	10	220	0.81	0.25	4.00	7.40	0.60	0.45	3.67
974526	07-Aug-09	MMI	NAD83	627663	5777738	1284	Moffat Lake	9	30	0.4	2110	18	60	280	1.04	1.50	2.00	7.73	1.80	2.73	4.67
974527	07-Aug-09	MMI	NAD83	627614	5777726	1287	Moffat Lake	24	10	0.4	770	2.5	110	240	2.76	0.50	2.00	2.82	0.25	5.00	4.00
974528	07-Aug-09	MMI	NAD83	627566	5777708	1288	Moffat Lake	14	5	0.1	600	2.5	110	880	1.61	0.25	0.50	2.20	0.25	5.00	14.67
974529	07-Aug-09	MMI	NAD83	627525	5777679	1291	Moffat Lake	17	5	0.3	450	2.5	100	470	1.96	0.25	1.50	1.65	0.25	4.55	7.83
974530	07-Aug-09	MMI	NAD83	627510	5777632	1294	Moffat Lake	15	5	0.3	1790	2.5	40	370	1.73	0.25	1.50	6.56	0.25	1.82	6.17
974531	07-Aug-09	MMI	NAD83	627505	5777582	1295	Moffat Lake	3	5	1	1690	2.5	40	40	0.35	0.25	5.00	6.19	0.25	1.82	0.67
974532	07-Aug-09	MMI	NAD83	627517	5777534	1299	Moffat Lake	5	5	0.8	1850	2.5	50	150	0.58	0.25	4.00	6.78	0.25	2.27	2.50
974533	07-Aug-09	MMI	NAD83	627537	5777486	1300	Moffat Lake	3	5	0.7	1560	2.5	20	30	0.35	0.25	3.50	5.71	0.25	0.91	0.50
974534	07-Aug-09	MMI	NAD83	627558	5777440	1304	Moffat Lake	10	5	0.4	610	8	50	20	1.15	0.25	2.00	2.23	0.80	2.27	0.33
974535	07-Aug-09	MMI	NAD83	627577	5777394	1307	Moffat Lake	10	5	0.05	420	2.5	130	130	1.15	0.25	0.25	1.54	0.25	5.91	2.17
974536	07-Aug-09	MMI	NAD83	627594	5777347	1307	Moffat Lake	13	5	0.2	410	2.5	70	50	1.50	0.25	1.00	1.50	0.25	3.18	0.83
974537	07-Aug-09	MMI	NAD83	627609	5777300	1307	Moffat Lake	10	5	0.4	1000	5	210	170	1.15	0.25	2.00	3.66	0.50	9.55	2.83
974538	07-Aug-09	MMI	NAD83	627624	5777252	1307	Moffat Lake	3	5	0.9	2000	2.5	20	250	0.35	0.25	4.50	7.33	0.25	0.91	4.17
974539	07-Aug-09	MMI	NAD83	627654	5777211	1309	Moffat Lake	5	5	0.6	720	2.5	100	70	0.58	0.25	3.00	2.64	0.25	4.55	1.17
974540	07-Aug-09	MMI	NAD83	627687	5777173	1314	Moffat Lake	10	5	0.6	470	2.5	80	180	1.15	0.25	3.00	1.72	0.25	3.64	3.00
974541	07-Aug-09	MMI	NAD83	627716	5777135	1315	Moffat Lake	15	5	0.05	250	2.5	160	100	1.73	0.25	0.25	0.92	0.25	7.27	1.67
974542	07-Aug-09	MMI	NAD83	627753	5777099	1315	Moffat Lake	2	5	0.4	1030	7	40	10	0.23	0.25	2.00	3.77	0.70	1.82	0.17
974543	07-Aug-09	MMI	NAD83	627760	5777049	1317	Moffat Lake	9	5	0.3	550	6	90	90	1.04	0.25	1.50	2.01	0.60	4.09	1.50
974544	07-Aug-09	MMI	NAD83	627775	5777000	1322	Moffat Lake	9	5	0.5	320	8	70	100	1.04	0.25	2.50	1.17	0.80	3.18	1.67
974545	07-Aug-09	MMI	NAD83	627792	5776951	1324	Moffat Lake	9	5	0.05	210	2.5	70	40	1.04	0.25	0.25	0.77	0.25	3.18	0.67
974546	07-Aug-09	MMI	NAD83	627818	5776908	1326	Moffat Lake	8	5	0.05	390	2.5	40	130	0.92	0.25	0.25	1.43	0.25	1.82	2.17
974547	07-Aug-09	MMI	NAD83	627853	5776872	1328	Moffat Lake	4	30	0.5	2900	2.5	40	100	0.46	1.50	2.50	10.62	0.25	1.82	1.67
974548	07-Aug-09	MMI	NAD83	627896	5776846	1332	Moffat Lake	8	20	1	1230	2.5	70	40	0.92	1.00	5.00	4.51	0.25	3.18	0.67
974549	07-Aug-09	MMI	NAD83	627946	5776855	1334	Moffat Lake	2	5	0.05	760	2.5	80	360	0.23	0.25	0.25	2.78	0.25	3.64	6.00
974550	07-Aug-09	MMI	NAD83	627992	5776874	1336	Moffat Lake	4	50	1	1620	2.5	140	70	0.46	2.50	5.00	5.93	0.25	6.36	1.17
974551	07-Aug-09	MMI	NAD83	628041	5776890	1339	Moffat Lake	4	5	0.05	310	2.5	20	1510	0.46	0.25	0.25	1.14	0.25	0.91	25.17
974552	07-Aug-09	MMI	NAD83	628091	5776903	1339	Moffat Lake	11	5	0.05	260	2.5	100	120	1.27	0.25	0.25	0.95	0.25	4.55	2.00
974553	07-Aug-09	MMI	NAD83	628139	5776887	1342	Moffat Lake	4	5	1.5	1910	2.5	10	100	0.46	0.25	7.50	7.00	0.25	0.45	1.67
974554	07-Aug-09	MMI	NAD83	628181	5776861	1344	Moffat Lake	3	5	1	2250	2.5	40	100	0.35	0.25	5.00	8.24	0.25	1.82	1.67
974555	07-Aug-09	MMI	NAD83	628207	5776818	1344	Moffat Lake	10	5	0.05	700	2.5	40	1240	1.15	0.25	0.25	2.56	0.25	1.82	20.67
974556	07-Aug-09	MMI	NAD83	628223	5776772	1346	Moffat Lake	2	5	0.6	1080	2.5	50	140	0.23	0.25	3.00	3.96	0.25	2.27	2.33
974557	07-Aug-09	MMI	NAD83	628230	5776722	1348	Moffat Lake	5	10	0.2	1030	2.5	70	70	0.58	0.50	1.00	3.77	0.25	3.18	1.17
974558	07-Aug-09	MMI	NAD83	628239	5776672	1348	Moffat Lake	8	5	0.4	1790	2.5	50	200	0.92	0.25	2.00	6.56	0.25	2.27	3.33
974559	07-Aug-09	MMI	NAD83	628244	5776622	1350	Moffat Lake	3	5	0.6	1190	2.5	5	50	0.35	0.25	3.00	4.36	0.25	0.23	0.83
974560	07-Aug-09	MMI	NAD83	628235	5776572	1356	Moffat Lake	6	5	0.5	1330	2.5	50	120	0.69	0.25	2.50	4.87	0.25	2.27	2.00
974561	07-Aug-09	MMI	NAD83	628225	5776522	1356	Moffat Lake	3	5	0.5	1880	2.5	80	20	0.35	0.25	2.50	6.89	0.25	3.64	0.33
974562	07-Aug-09	MMI	NAD83	628202	5776477	1357	Moffat Lake	11	5	0.6	790	2.5	80	90	1.27	0.25	3.00	2.89	0.25	3.64	1.50
974623	09-Aug-09	MMI	NAD83	616746	5778612	1150	Moffat Lake	10	5	0.2	730	2.5	20	70	1.15	0.25	1.00	2.67	0.25	0.91	1.17
974624	09-Aug-09	MMI	NAD83	616750	5778665	1151	Moffat Lake	10	5	0.5	1320	2.5	20	800	1.15	0.25	2.50	4.84	0.25	0.91	13.33

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974625	09-Aug-09	MMI	NAD83	616768	5778711	1152	Moffat Lake	10	5	0.5	1390	8	90	220	1.15	0.25	2.50	5.09	0.80	4.09	3.67
974626	09-Aug-09	MMI	NAD83	616782	5778760	1150	Moffat Lake	13	5	0.05	570	2.5	60	520	1.50	0.25	0.25	2.09	0.25	2.73	8.67
974627	09-Aug-09	MMI	NAD83	616819	5778794	1149	Moffat Lake	5	5	0.3	400	2.5	60	20	0.58	0.25	1.50	1.47	0.25	2.73	0.33
974628	09-Aug-09	MMI	NAD83	616860	5778825	1150	Moffat Lake	4	5	0.1	690	2.5	40	130	0.46	0.25	0.50	2.53	0.25	1.82	2.17
974629	09-Aug-09	MMI	NAD83	616899	5778858	1150	Moffat Lake	9	5	0.1	310	2.5	50	40	1.04	0.25	0.50	1.14	0.25	2.27	0.67
974630	09-Aug-09	MMI	NAD83	616936	5778892	1149	Moffat Lake	3	5	0.2	470	2.5	10	70	0.35	0.25	1.00	1.72	0.25	0.45	1.17
974631	09-Aug-09	MMI	NAD83	616974	5778926	1149	Moffat Lake	3	5	0.05	280	2.5	20	60	0.35	0.25	0.25	1.03	0.25	0.91	1.00
974632	09-Aug-09	MMI	NAD83	617007	5778963	1148	Moffat Lake	3	5	0.1	730	2.5	20	150	0.35	0.25	0.50	2.67	0.25	0.91	2.50
974633	09-Aug-09	MMI	NAD83	617039	5779003	1147	Moffat Lake	6	5	0.2	200	2.5	5	140	0.69	0.25	1.00	0.73	0.25	0.23	2.33
974634	09-Aug-09	MMI	NAD83	617069	5779044	1148	Moffat Lake	4	5	0.05	180	2.5	5	100	0.46	0.25	0.25	0.66	0.25	0.23	1.67
974635	09-Aug-09	MMI	NAD83	617100	5779084	1148	Moffat Lake	6	5	0.05	240	2.5	20	250	0.69	0.25	0.25	0.88	0.25	0.91	4.17
974636	09-Aug-09	MMI	NAD83	617134	5779122	1148	Moffat Lake	3	5	0.1	160	2.5	10	60	0.35	0.25	0.50	0.59	0.25	0.45	1.00
974637	09-Aug-09	MMI	NAD83	617159	5779165	1149	Moffat Lake	3	5	0.1	810	2.5	5	20	0.35	0.25	0.50	2.97	0.25	0.23	0.33
974638	09-Aug-09	MMI	NAD83	617193	5779203	1154	Moffat Lake	7	5	0.05	570	2.5	50	30	0.81	0.25	0.25	2.09	0.25	2.27	0.50
974639	09-Aug-09	MMI	NAD83	617220	5779245	1158	Moffat Lake	6	5	0.2	540	2.5	80	20	0.69	0.25	1.00	1.98	0.25	3.64	0.33
974640	09-Aug-09	MMI	NAD83	617254	5779282	1162	Moffat Lake	9	5	0.05	760	2.5	60	170	1.04	0.25	0.25	2.78	0.25	2.73	2.83
974641	09-Aug-09	MMI	NAD83	617292	5779315	1162	Moffat Lake	5	5	0.05	730	2.5	70	30	0.58	0.25	0.25	2.67	0.25	3.18	0.50
974642	09-Aug-09	MMI	NAD83	617335	5779343	1163	Moffat Lake	2	5	0.9	760	2.5	30	190	0.23	0.25	4.50	2.78	0.25	1.36	3.17
974643	09-Aug-09	MMI	NAD83	617386	5779354	1166	Moffat Lake	2	5	0.1	420	2.5	20	60	0.23	0.25	0.50	1.54	0.25	0.91	1.00
974644	09-Aug-09	MMI	NAD83	617431	5779380	1168	Moffat Lake	10	5	0.05	310	2.5	100	100	1.15	0.25	0.25	1.14	0.25	4.55	1.67
974645	09-Aug-09	MMI	NAD83	617478	5779403	1167	Moffat Lake	9	5	0.1	340	2.5	30	250	1.04	0.25	0.50	1.25	0.25	1.36	4.17
974646	09-Aug-09	MMI	NAD83	617525	5779431	1169	Moffat Lake	6	5	0.1	430	2.5	30	260	0.69	0.25	0.50	1.58	0.25	1.36	4.33
974647	09-Aug-09	MMI	NAD83	617546	5779479	1169	Moffat Lake	7	5	0.7	1070	2.5	40	120	0.81	0.25	3.50	3.92	0.25	1.82	2.00
974648	09-Aug-09	MMI	NAD83	617569	5779525	1171	Moffat Lake	2	5	0.3	520	2.5	10	120	0.23	0.25	1.50	1.90	0.25	0.45	2.00
974649	09-Aug-09	MMI	NAD83	617592	5779571	1174	Moffat Lake	4	5	0.3	340	2.5	10	20	0.46	0.25	1.50	1.25	0.25	0.45	0.33
974650	09-Aug-09	MMI	NAD83	617620	5779616	1177	Moffat Lake	4	5	0.2	570	2.5	50	80	0.46	0.25	1.00	2.09	0.25	2.27	1.33
974651	09-Aug-09	MMI	NAD83	617647	5779662	1180	Moffat Lake	4	5	0.2	450	2.5	120	80	0.46	0.25	1.00	1.65	0.25	5.45	1.33
974652	09-Aug-09	MMI	NAD83	617670	5779708	1184	Moffat Lake	7	5	0.1	390	2.5	70	30	0.81	0.25	0.50	1.43	0.25	3.18	0.50
974653	09-Aug-09	MMI	NAD83	617693	5779756	1187	Moffat Lake	7	5	0.7	450	2.5	80	60	0.81	0.25	3.50	1.65	0.25	3.64	1.00
974654	09-Aug-09	MMI	NAD83	617713	5779804	1189	Moffat Lake	8	5	0.1	580	2.5	80	120	0.92	0.25	0.50	2.12	0.25	3.64	2.00
974655	09-Aug-09	MMI	NAD83	617739	5779849	1191	Moffat Lake	8	5	0.1	400	2.5	40	200	0.92	0.25	0.50	1.47	0.25	1.82	3.33
974656	09-Aug-09	MMI	NAD83	617780	5779885	1193	Moffat Lake	3	5	0.3	560	2.5	20	70	0.35	0.25	1.50	2.05	0.25	0.91	1.17
974657	09-Aug-09	MMI	NAD83	617828	5779901	1194	Moffat Lake	4	5	0.4	820	2.5	40	130	0.46	0.25	2.00	3.00	0.25	1.82	2.17
974658	09-Aug-09	MMI	NAD83	617879	5779911	1197	Moffat Lake	7	5	0.2	290	2.5	50	370	0.81	0.25	1.00	1.06	0.25	2.27	6.17
974659	09-Aug-09	MMI	NAD83	617930	5779921	1198	Moffat Lake	7	5	0.1	670	2.5	110	40	0.81	0.25	0.50	2.45	0.25	5.00	0.67
974660	09-Aug-09	MMI	NAD83	617980	5779926	1198	Moffat Lake	7	5	0.1	460	2.5	130	120	0.81	0.25	0.50	1.68	0.25	5.91	2.00
974661	09-Aug-09	MMI	NAD83	618029	5779937	1194	Moffat Lake	3	5	0.05	440	2.5	50	160	0.35	0.25	0.25	1.61	0.25	2.27	2.67
974662	09-Aug-09	MMI	NAD83	618079	5779947	1198	Moffat Lake	3	5	0.05	590	2.5	50	300	0.35	0.25	0.25	2.16	0.25	2.27	5.00
974663	09-Aug-09	MMI	NAD83	618128	5779960	1194	Moffat Lake	3	5	0.2	470	2.5	5	30	0.35	0.25	1.00	1.72	0.25	0.23	0.50
974664	09-Aug-09	MMI	NAD83	618176	5779975	1196	Moffat Lake	2	5	0.05	350	2.5	60	80	0.23	0.25	0.25	1.28	0.25	2.73	1.33
974665	09-Aug-09	MMI	NAD83	618223	5779995	1195	Moffat Lake	2	5	0.05	310	2.5	60	200	0.23	0.25	0.25	1.14	0.25	2.73	3.33
974666	09-Aug-09	MMI	NAD83	618269	5780015	1194	Moffat Lake	3	5	0.1	380	2.5	10	40	0.35	0.25	0.50	1.39	0.25	0.45	0.67
974667	09-Aug-09	MMI	NAD83	618294	5780059	1197	Moffat Lake	2	5	0.1	240	2.5	10	30	0.23	0.25	0.50	0.88	0.25	0.45	0.50
974668	09-Aug-09	MMI	NAD83	618322	5780101	1198	Moffat Lake	8	5	0.1	230	2.5	20	150	0.92	0.25	0.50	0.84	0.25	0.91	2.50

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974669	09-Aug-09	MMI	NAD83	618353	5780140	1203	Moffat Lake	7	5	0.2	830	2.5	20	100	0.81	0.25	1.00	3.04	0.25	0.91	1.67
974670	09-Aug-09	MMI	NAD83	618380	5780183	1206	Moffat Lake	4	5	0.05	310	2.5	10	50	0.46	0.25	0.25	1.14	0.25	0.45	0.83
974671	09-Aug-09	MMI	NAD83	618408	5780225	1210	Moffat Lake	8	5	0.2	340	2.5	10	40	0.92	0.25	1.00	1.25	0.25	0.45	0.67
974672	09-Aug-09	MMI	NAD83	618428	5780271	1213	Moffat Lake	11	5	0.05	240	2.5	70	60	1.27	0.25	0.25	0.88	0.25	3.18	1.00
974673	09-Aug-09	MMI	NAD83	618453	5780315	1218	Moffat Lake	6	5	0.2	440	2.5	70	10	0.69	0.25	1.00	1.61	0.25	3.18	0.17
974674	09-Aug-09	MMI	NAD83	618473	5780362	1221	Moffat Lake	11	5	0.1	120	2.5	120	30	1.27	0.25	0.50	0.44	0.25	5.45	0.50
974675	09-Aug-09	MMI	NAD83	618487	5780412	1223	Moffat Lake	12	5	0.2	290	2.5	80	60	1.38	0.25	1.00	1.06	0.25	3.64	1.00
974676	09-Aug-09	MMI	NAD83	618498	5780462	1228	Moffat Lake	7	5	0.05	260	2.5	80	30	0.81	0.25	0.25	0.95	0.25	3.64	0.50
974677	09-Aug-09	MMI	NAD83	618511	5780511	1228	Moffat Lake	8	5	0.1	360	2.5	50	40	0.92	0.25	0.50	1.32	0.25	2.27	0.67
974678	09-Aug-09	MMI	NAD83	618523	5780561	1228	Moffat Lake	9	5	0.1	660	2.5	50	130	1.04	0.25	0.50	2.42	0.25	2.27	2.17
974679	09-Aug-09	MMI	NAD83	618529	5780611	1230	Moffat Lake	4	5	0.1	260	2.5	20	40	0.46	0.25	0.50	0.95	0.25	0.91	0.67
974680	09-Aug-09	MMI	NAD83	618534	5780661	1231	Moffat Lake	9	5	0.2	310	6	90	30	1.04	0.25	1.00	1.14	0.60	4.09	0.50
974681	09-Aug-09	MMI	NAD83	618536	5780713	1232	Moffat Lake	8	5	0.1	660	2.5	40	120	0.92	0.25	0.50	2.42	0.25	1.82	2.00
974682	09-Aug-09	MMI	NAD83	618540	5780764	1234	Moffat Lake	3	5	0.1	680	2.5	5	220	0.35	0.25	0.50	2.49	0.25	0.23	3.67
974683	09-Aug-09	MMI	NAD83	618574	5780802	1235	Moffat Lake	11	5	0.05	440	2.5	40	310	1.27	0.25	0.25	1.61	0.25	1.82	5.17
974684	09-Aug-09	MMI	NAD83	618625	5780792	1238	Moffat Lake	5	5	0.1	280	2.5	60	50	0.58	0.25	0.50	1.03	0.25	2.73	0.83
974685	09-Aug-09	MMI	NAD83	618663	5780753	1244	Moffat Lake	5	5	0.05	260	2.5	60	30	0.58	0.25	0.25	0.95	0.25	2.73	0.50
974686	09-Aug-09	MMI	NAD83	618701	5780717	1246	Moffat Lake	6	5	0.05	260	2.5	40	20	0.69	0.25	0.25	0.95	0.25	1.82	0.33
974687	09-Aug-09	MMI	NAD83	618745	5780690	1251	Moffat Lake	10	5	0.05	280	2.5	150	30	1.15	0.25	0.25	1.03	0.25	6.82	0.50
974688	09-Aug-09	MMI	NAD83	618793	5780669	1248	Moffat Lake	9	5	0.05	340	2.5	60	50	1.04	0.25	0.25	1.25	0.25	2.73	0.83
974689	09-Aug-09	MMI	NAD83	618844	5780651	1250	Moffat Lake	4	5	0.05	200	2.5	20	30	0.46	0.25	0.25	0.73	0.25	0.91	0.50
974690	09-Aug-09	MMI	NAD83	618894	5780633	1249	Moffat Lake	7	5	0.05	180	2.5	20	160	0.81	0.25	0.25	0.66	0.25	0.91	2.67
974691	09-Aug-09	MMI	NAD83	618942	5780618	1250	Moffat Lake	10	5	0.05	290	2.5	40	10	1.15	0.25	0.25	1.06	0.25	1.82	0.17
974692	09-Aug-09	MMI	NAD83	618992	5780607	1252	Moffat Lake	6	5	0.05	270	2.5	40	40	0.69	0.25	0.25	0.99	0.25	1.82	0.67
974693	10-Aug-09	MMI	NAD83	619042	5780616	1250	Moffat Lake	5	5	0.1	410	2.5	30	40	0.58	0.25	0.50	1.50	0.25	1.36	0.67
974694	10-Aug-09	MMI	NAD83	619090	5780635	1252	Moffat Lake	2	5	0.2	500	2.5	20	10	0.23	0.25	1.00	1.83	0.25	0.91	0.17
974695	10-Aug-09	MMI	NAD83	619139	5780656	1252	Moffat Lake	4	5	0.05	450	2.5	60	60	0.46	0.25	0.25	1.65	0.25	2.73	1.00
974696	10-Aug-09	MMI	NAD83	619188	5780667	1258	Moffat Lake	3	5	0.1	470	2.5	30	40	0.35	0.25	0.50	1.72	0.25	1.36	0.67
974697	10-Aug-09	MMI	NAD83	619237	5780683	1258	Moffat Lake	2	5	0.1	390	2.5	30	10	0.23	0.25	0.50	1.43	0.25	1.36	0.17
974698	10-Aug-09	MMI	NAD83	619285	5780697	1258	Moffat Lake	3	5	0.2	450	2.5	40	40	0.35	0.25	1.00	1.65	0.25	1.82	0.67
974699	10-Aug-09	MMI	NAD83	619335	5780710	1258	Moffat Lake	5	5	0.1	470	2.5	30	80	0.58	0.25	0.50	1.72	0.25	1.36	1.33
974700	10-Aug-09	MMI	NAD83	619383	5780730	1257	Moffat Lake	4	5	0.2	410	2.5	5	30	0.46	0.25	1.00	1.50	0.25	0.23	0.50
974701	10-Aug-09	MMI	NAD83	619429	5780750	1259	Moffat Lake	12	5	0.2	380	2.5	50	70	1.38	0.25	1.00	1.39	0.25	2.27	1.17
974702	10-Aug-09	MMI	NAD83	619472	5780778	1259	Moffat Lake	4	5	0.3	1160	2.5	50	150	0.46	0.25	1.50	4.25	0.25	2.27	2.50
974703	10-Aug-09	MMI	NAD83	619516	5780804	1258	Moffat Lake	6	5	0.2	560	2.5	20	140	0.69	0.25	1.00	2.05	0.25	0.91	2.33
974704	10-Aug-09	MMI	NAD83	619565	5780820	1262	Moffat Lake	3	5	0.5	660	2.5	30	90	0.35	0.25	2.50	2.42	0.25	1.36	1.50
974705	10-Aug-09	MMI	NAD83	619606	5780849	1268	Moffat Lake	1	5	0.2	1430	2.5	20	60	0.12	0.25	1.00	5.24	0.25	0.91	1.00
974706	10-Aug-09	MMI	NAD83	619648	5780878	1271	Moffat Lake	2	5	0.1	780	2.5	20	90	0.23	0.25	0.50	2.86	0.25	0.91	1.50
974707	10-Aug-09	MMI	NAD83	619692	5780903	1275	Moffat Lake	2	5	0.1	390	2.5	30	100	0.23	0.25	0.50	1.43	0.25	1.36	1.67
974708	10-Aug-09	MMI	NAD83	619735	5780932	1278	Moffat Lake	6	5	0.3	610	2.5	40	180	0.69	0.25	1.50	2.23	0.25	1.82	3.00
974709	10-Aug-09	MMI	NAD83	619766	5780972	1281	Moffat Lake	9	5	0.2	410	2.5	70	770	1.04	0.25	1.00	1.50	0.25	3.18	12.83
974710	10-Aug-09	MMI	NAD83	619795	5781013	1280	Moffat Lake	5	5	0.05	250	2.5	40	130	0.58	0.25	0.25	0.92	0.25	1.82	2.17
974711	10-Aug-09	MMI	NAD83	619820	5781058	1283	Moffat Lake	5	5	0.05	360	2.5	30	230	0.58	0.25	0.25	1.32	0.25	1.36	3.83
974712	10-Aug-09	MMI	NAD83	619845	5781101	1285	Moffat Lake	6	5	0.1	520	2.5	40	250	0.69	0.25	0.50	1.90	0.25	1.82	4.17



## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974713	10-Aug-09	MMI	NAD83	619861	5781149	1287	Moffat Lake	2	5	0.2	440	2.5	20	40	0.23	0.25	1.00	1.61	0.25	0.91	0.67
974714	10-Aug-09	MMI	NAD83	619886	5781193	1289	Moffat Lake	5	5	0.1	350	2.5	50	120	0.58	0.25	0.50	1.28	0.25	2.27	2.00
974715	10-Aug-09	MMI	NAD83	619901	5781241	1292	Moffat Lake	4	5	0.05	360	2.5	40	250	0.46	0.25	0.25	1.32	0.25	1.82	4.17
974716	10-Aug-09	MMI	NAD83	619919	5781288	1295	Moffat Lake	6	5	0.1	400	2.5	40	370	0.69	0.25	0.50	1.47	0.25	1.82	6.17
974717	10-Aug-09	MMI	NAD83	619945	5781332	1297	Moffat Lake	7	5	0.05	420	2.5	40	170	0.81	0.25	0.25	1.54	0.25	1.82	2.83
974718	10-Aug-09	MMI	NAD83	619951	5781382	1297	Moffat Lake	3	5	0.05	330	2.5	30	270	0.35	0.25	0.25	1.21	0.25	1.36	4.50
974719	10-Aug-09	MMI	NAD83	619984	5781420	1297	Moffat Lake	6	5	0.05	590	2.5	40	370	0.69	0.25	0.25	2.16	0.25	1.82	6.17
974720	10-Aug-09	MMI	NAD83	619996	5781469	1301	Moffat Lake	9	5	0.3	610	2.5	100	210	1.04	0.25	1.50	2.23	0.25	4.55	3.50
974721	10-Aug-09	MMI	NAD83	620022	5781514	1303	Moffat Lake	7	5	0.1	680	2.5	80	230	0.81	0.25	0.50	2.49	0.25	3.64	3.83
974722	10-Aug-09	MMI	NAD83	620054	5781554	1306	Moffat Lake	10	5	0.05	320	2.5	80	280	1.15	0.25	0.25	1.17	0.25	3.64	4.67
974723	10-Aug-09	MMI	NAD83	620078	5781599	1307	Moffat Lake	7	5	0.05	420	2.5	120	340	0.81	0.25	0.25	1.54	0.25	5.45	5.67
974724	10-Aug-09	MMI	NAD83	620094	5781647	1311	Moffat Lake	7	5	0.1	290	2.5	40	340	0.81	0.25	0.50	1.06	0.25	1.82	5.67
974725	10-Aug-09	MMI	NAD83	620112	5781697	1315	Moffat Lake	7	5	0.3	720	2.5	80	280	0.81	0.25	1.50	2.64	0.25	3.64	4.67
974726	10-Aug-09	MMI	NAD83	620124	5781746	1313	Moffat Lake	5	5	0.05	330	2.5	50	230	0.58	0.25	0.25	1.21	0.25	2.27	3.83
974727	10-Aug-09	MMI	NAD83	620136	5781796	1314	Moffat Lake	8	5	0.05	680	2.5	50	190	0.92	0.25	0.25	2.49	0.25	2.27	3.17
974728	10-Aug-09	MMI	NAD83	620142	5781846	1317	Moffat Lake	8	5	0.05	670	2.5	70	470	0.92	0.25	0.25	2.45	0.25	3.18	7.83
974729	10-Aug-09	MMI	NAD83	620147	5781897	1319	Moffat Lake	9	5	0.4	490	2.5	60	280	1.04	0.25	2.00	1.79	0.25	2.73	4.67
974730	10-Aug-09	MMI	NAD83	620150	5781948	1316	Moffat Lake	6	5	0.2	470	2.5	50	190	0.69	0.25	1.00	1.72	0.25	2.27	3.17
974731	10-Aug-09	MMI	NAD83	620154	5781999	1315	Moffat Lake	6	5	0.05	420	2.5	90	520	0.69	0.25	0.25	1.54	0.25	4.09	8.67
974732	10-Aug-09	MMI	NAD83	620180	5782048	1317	Moffat Lake	7	5	0.4	1060	2.5	50	280	0.81	0.25	2.00	3.88	0.25	2.27	4.67
974733	10-Aug-09	MMI	NAD83	620206	5782093	1313	Moffat Lake	7	5	0.2	820	2.5	80	250	0.81	0.25	1.00	3.00	0.25	3.64	4.17
974734	10-Aug-09	MMI	NAD83	620233	5782136	1311	Moffat Lake	3	5	0.05	590	2.5	210	1140	0.35	0.25	0.25	2.16	0.25	9.55	19.00
974735	10-Aug-09	MMI	NAD83	620262	5782177	1310	Moffat Lake	6	5	0.3	620	2.5	50	130	0.69	0.25	1.50	2.27	0.25	2.27	2.17
974736	10-Aug-09	MMI	NAD83	620281	5782223	1305	Moffat Lake	7	5	0.2	470	2.5	70	290	0.81	0.25	1.00	1.72	0.25	3.18	4.83
974737	10-Aug-09	MMI	NAD83	620293	5782274	1307	Moffat Lake	2	5	0.1	430	2.5	30	80	0.23	0.25	0.50	1.58	0.25	1.36	1.33
974738	10-Aug-09	MMI	NAD83	620299	5782325	1303	Moffat Lake	9	5	0.05	340	2.5	70	320	1.04	0.25	0.25	1.25	0.25	3.18	5.33
974739	10-Aug-09	MMI	NAD83	620280	5782374	1305	Moffat Lake	9	5	0.3	1120	2.5	120	250	1.04	0.25	1.50	4.10	0.25	5.45	4.17
974740	10-Aug-09	MMI	NAD83	620256	5782417	1306	Moffat Lake	9	5	0.05	180	2.5	190	930	1.04	0.25	0.25	0.66	0.25	8.64	15.50
974741	10-Aug-09	MMI	NAD83	620236	5782464	1302	Moffat Lake	11	5	0.1	720	2.5	90	410	1.27	0.25	0.50	2.64	0.25	4.09	6.83
974742	10-Aug-09	MMI	NAD83	620226	5782514	1306	Moffat Lake	6	5	0.3	330	2.5	50	400	0.69	0.25	1.50	1.21	0.25	2.27	6.67
974743	10-Aug-09	MMI	NAD83	620205	5782562	1303	Moffat Lake	11	5	0.2	710	2.5	40	230	1.27	0.25	1.00	2.60	0.25	1.82	3.83
974744	10-Aug-09	MMI	NAD83	620206	5782614	1302	Moffat Lake	6	5	0.1	540	2.5	90	420	0.69	0.25	0.50	1.98	0.25	4.09	7.00
974745	10-Aug-09	MMI	NAD83	620216	5782664	1301	Moffat Lake	6	5	0.3	580	2.5	230	50	0.69	0.25	1.50	2.12	0.25	10.45	0.83
974746	10-Aug-09	MMI	NAD83	620240	5782708	1302	Moffat Lake	8	5	0.05	510	2.5	30	340	0.92	0.25	0.25	1.87	0.25	1.36	5.67
974747	10-Aug-09	MMI	NAD83	620264	5782752	1298	Moffat Lake	6	5	0.2	510	2.5	30	110	0.69	0.25	1.00	1.87	0.25	1.36	1.83
974748	10-Aug-09	MMI	NAD83	620249	5782800	1300	Moffat Lake	0.5	5	0.05	380	2.5	90	460	0.06	0.25	0.25	1.39	0.25	4.09	7.67
974749	10-Aug-09	MMI	NAD83	620232	5782848	1300	Moffat Lake	5	5	0.05	260	2.5	80	350	0.58	0.25	0.25	0.95	0.25	3.64	5.83
974750	10-Aug-09	MMI	NAD83	620217	5782897	1304	Moffat Lake	7	5	0.2	730	2.5	50	200	0.81	0.25	1.00	2.67	0.25	2.27	3.33
974751	10-Aug-09	MMI	NAD83	620197	5782945	1303	Moffat Lake	32	5	0.2	400	2.5	60	40	3.68	0.25	1.00	1.47	0.25	2.73	0.67
974752	10-Aug-09	MMI	NAD83	620151	5782968	1306	Moffat Lake	20	5	0.05	430	2.5	70	170	2.30	0.25	0.25	1.58	0.25	3.18	2.83
974753	10-Aug-09	MMI	NAD83	620105	5782989	1310	Moffat Lake	15	5	0.1	220	2.5	140	210	1.73	0.25	0.50	0.81	0.25	6.36	3.50
974754	10-Aug-09	MMI	NAD83	620064	5783019	1314	Moffat Lake	16	5	0.05	280	2.5	120	570	1.84	0.25	0.25	1.03	0.25	5.45	9.50
974755	10-Aug-09	MMI	NAD83	620028	5783054	1317	Moffat Lake	13	5	0.3	250	2.5	70	240	1.50	0.25	1.50	0.92	0.25	3.18	4.00
974756	10-Aug-09	MMI	NAD83	619999	5783096	1322	Moffat Lake	22	5	0.05	150	2.5	140	40	2.53	0.25	0.25	0.55	0.25	6.36	0.67

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974757	10-Aug-09	MMI	NAD83	619975	5783142	1326	Moffat Lake	9	5	0.1	240	2.5	100	300	1.04	0.25	0.50	0.88	0.25	4.55	5.00
974758	10-Aug-09	MMI	NAD83	619955	5783188	1325	Moffat Lake	11	5	0.1	370	2.5	40	20	1.27	0.25	0.50	1.36	0.25	1.82	0.33
974759	10-Aug-09	MMI	NAD83	619939	5783237	1324	Moffat Lake	7	5	0.2	420	2.5	40	360	0.81	0.25	1.00	1.54	0.25	1.82	6.00
974760	10-Aug-09	MMI	NAD83	619947	5783287	1327	Moffat Lake	16	5	0.2	450	2.5	70	30	1.84	0.25	1.00	1.65	0.25	3.18	0.50
974761	10-Aug-09	MMI	NAD83	619978	5783327	1331	Moffat Lake	5	5	0.05	220	2.5	30	10	0.58	0.25	0.25	0.81	0.25	1.36	0.17
974762	10-Aug-09	MMI	NAD83	620014	5783362	1335	Moffat Lake	6	5	0.05	230	2.5	80	20	0.69	0.25	0.25	0.84	0.25	3.64	0.33
974763	11-Aug-09	MMI	NAD83	620038	5783406	1340	Moffat Lake	12	5	0.05	180	2.5	60	20	1.38	0.25	0.25	0.66	0.25	2.73	0.33
974764	11-Aug-09	MMI	NAD83	620075	5783442	1343	Moffat Lake	15	5	0.05	200	2.5	60	200	1.73	0.25	0.25	0.73	0.25	2.73	3.33
974765	11-Aug-09	MMI	NAD83	620108	5783481	1344	Moffat Lake	8	5	0.05	290	2.5	50	410	0.92	0.25	0.25	1.06	0.25	2.27	6.83
974766	11-Aug-09	MMI	NAD83	620137	5783522	1348	Moffat Lake	5	5	0.05	300	2.5	20	20	0.58	0.25	0.25	1.10	0.25	0.91	0.33
974767	11-Aug-09	MMI	NAD83	620162	5783565	1353	Moffat Lake	15	5	0.05	220	2.5	50	90	1.73	0.25	0.25	0.81	0.25	2.27	1.50
974768	11-Aug-09	MMI	NAD83	620184	5783610	1356	Moffat Lake	12	5	0.05	190	2.5	40	520	1.38	0.25	0.25	0.70	0.25	1.82	8.67
974769	11-Aug-09	MMI	NAD83	620198	5783659	1361	Moffat Lake	7	5	0.7	420	2.5	10	10	0.81	0.25	3.50	1.54	0.25	0.45	0.17
974770	11-Aug-09	MMI	NAD83	620211	5783708	1365	Moffat Lake	2	5	0.2	480	2.5	20	10	0.23	0.25	1.00	1.76	0.25	0.91	0.17
974771	11-Aug-09	MMI	NAD83	620228	5783755	1369	Moffat Lake	4	5	0.05	300	2.5	60	10	0.46	0.25	0.25	1.10	0.25	2.73	0.17
974772	11-Aug-09	MMI	NAD83	620240	5783806	1374	Moffat Lake	5	5	0.05	280	2.5	30	90	0.58	0.25	0.25	1.03	0.25	1.36	1.50
974773	11-Aug-09	MMI	NAD83	620251	5783854	1379	Moffat Lake	6	5	0.1	100	2.5	60	10	0.69	0.25	0.50	0.37	0.25	2.73	0.17
974774	11-Aug-09	MMI	NAD83	620265	5783903	1381	Moffat Lake	7	5	0.05	300	2.5	60	30	0.81	0.25	0.25	1.10	0.25	2.73	0.50
974775	11-Aug-09	MMI	NAD83	620289	5783948	1380	Moffat Lake	14	5	0.05	140	2.5	50	100	1.61	0.25	0.25	0.51	0.25	2.27	1.67
974776	11-Aug-09	MMI	NAD83	620327	5783981	1380	Moffat Lake	7	5	0.05	200	2.5	110	520	0.81	0.25	0.25	0.73	0.25	5.00	8.67
974777	11-Aug-09	MMI	NAD83	620365	5784014	1381	Moffat Lake	7	5	0.05	190	2.5	30	50	0.81	0.25	0.25	0.70	0.25	1.36	0.83
974778	11-Aug-09	MMI	NAD83	620396	5784055	1382	Moffat Lake	14	5	0.05	200	2.5	50	270	1.61	0.25	0.25	0.73	0.25	2.27	4.50
974779	11-Aug-09	MMI	NAD83	620414	5784102	1382	Moffat Lake	8	5	0.05	180	2.5	40	40	0.92	0.25	0.25	0.66	0.25	1.82	0.67
974780	11-Aug-09	MMI	NAD83	620443	5784144	1382	Moffat Lake	13	5	0.05	140	2.5	60	70	1.50	0.25	0.25	0.51	0.25	2.73	1.17
974781	11-Aug-09	MMI	NAD83	620465	5784190	1381	Moffat Lake	15	5	0.05	320	2.5	50	70	1.73	0.25	0.25	1.17	0.25	2.27	1.17
974782	11-Aug-09	MMI	NAD83	620486	5784236	1383	Moffat Lake	8	5	0.05	200	2.5	50	60	0.92	0.25	0.25	0.73	0.25	2.27	1.00
974783	11-Aug-09	MMI	NAD83	620506	5784284	1382	Moffat Lake	18	5	0.05	210	2.5	40	190	2.07	0.25	0.25	0.77	0.25	1.82	3.17
974784	11-Aug-09	MMI	NAD83	620527	5784329	1383	Moffat Lake	19	5	0.1	260	2.5	40	40	2.19	0.25	0.50	0.95	0.25	1.82	0.67
974785	11-Aug-09	MMI	NAD83	620543	5784378	1383	Moffat Lake	10	5	0.2	340	2.5	40	180	1.15	0.25	1.00	1.25	0.25	1.82	3.00
974786	11-Aug-09	MMI	NAD83	620582	5784414	1382	Moffat Lake	5	5	0.2	500	2.5	30	80	0.58	0.25	1.00	1.83	0.25	1.36	1.33
974787	11-Aug-09	MMI	NAD83	620592	5784464	1383	Moffat Lake	18	5	0.05	150	2.5	40	20	2.07	0.25	0.25	0.55	0.25	1.82	0.33
974788	11-Aug-09	MMI	NAD83	620590	5784515	1386	Moffat Lake	15	5	0.05	140	2.5	60	340	1.73	0.25	0.25	0.51	0.25	2.73	5.67
974789	11-Aug-09	MMI	NAD83	620583	5784565	1385	Moffat Lake	20	5	0.05	120	2.5	40	60	2.30	0.25	0.25	0.44	0.25	1.82	1.00
974790	11-Aug-09	MMI	NAD83	620578	5784617	1383	Moffat Lake	12	5	0.05	120	2.5	40	10	1.38	0.25	0.25	0.44	0.25	1.82	0.17
974791	11-Aug-09	MMI	NAD83	620574	5784668	1381	Moffat Lake	9	5	0.05	150	2.5	60	270	1.04	0.25	0.25	0.55	0.25	2.73	4.50
974792	11-Aug-09	MMI	NAD83	620585	5784717	1376	Moffat Lake	9	5	0.1	210	2.5	40	50	1.04	0.25	0.50	0.77	0.25	1.82	0.83
974793	11-Aug-09	MMI	NAD83	620621	5784754	1374	Moffat Lake	15	5	0.05	220	2.5	30	120	1.73	0.25	0.25	0.81	0.25	1.36	2.00
974794	11-Aug-09	MMI	NAD83	620647	5784798	1375	Moffat Lake	4	5	0.05	190	2.5	20	20	0.46	0.25	0.25	0.70	0.25	0.91	0.33
974795	11-Aug-09	MMI	NAD83	620674	5784842	1376	Moffat Lake	14	5	0.05	170	2.5	30	10	1.61	0.25	0.25	0.62	0.25	1.36	0.17
974796	11-Aug-09	MMI	NAD83	620690	5784890	1376	Moffat Lake	7	5	0.05	200	2.5	70	280	0.81	0.25	0.25	0.73	0.25	3.18	4.67
974797	11-Aug-09	MMI	NAD83	620703	5784939	1377	Moffat Lake	14	5	0.05	310	2.5	50	90	1.61	0.25	0.25	1.14	0.25	2.27	1.50
974798	11-Aug-09	MMI	NAD83	620728	5784985	1380	Moffat Lake	9	5	0.05	220	2.5	30	80	1.04	0.25	0.25	0.81	0.25	1.36	1.33
974799	11-Aug-09	MMI	NAD83	620747	5785033	1380	Moffat Lake	7	5	0.05	70	2.5	50	530	0.81	0.25	0.25	0.26	0.25	2.27	8.83
974800	11-Aug-09	MMI	NAD83	620771	5785078	1381	Moffat Lake	13	5	0.1	180	2.5	70	50	1.50	0.25	0.50	0.66	0.25	3.18	0.83

## Appendix 1

## Sample Location and Selected Analytical Results

Sample								Ag	As	Au	Cu	Mo	Pb	Zn							
No.	Date	Type	Datum	Easting	Northing	Elev.	Area	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR	
974801	11-Aug-09	MMI	NAD83	620799	5785123	1380	Moffat Lake	5	5	0.05	160	2.5	20	10	0.58	0.25	0.25	0.59	0.25	0.91	0.17
974802	11-Aug-09	MMI	NAD83	620832	5785161	1383	Moffat Lake	14	5	0.05	210	2.5	60	40	1.61	0.25	0.25	0.77	0.25	2.73	0.67
974803	11-Aug-09	MMI	NAD83	620870	5785193	1382	Moffat Lake	4	5	0.05	320	2.5	60	580	0.46	0.25	0.25	1.17	0.25	2.73	9.67
974804	11-Aug-09	MMI	NAD83	620914	5785218	1381	Moffat Lake	7	5	0.05	120	2.5	70	360	0.81	0.25	0.25	0.44	0.25	3.18	6.00
974805	11-Aug-09	MMI	NAD83	620957	5785244	1381	Moffat Lake	5	5	0.1	190	2.5	50	50	0.58	0.25	0.50	0.70	0.25	2.27	0.83
974806	11-Aug-09	MMI	NAD83	620995	5785277	1381	Moffat Lake	8	5	0.05	260	2.5	30	210	0.92	0.25	0.25	0.95	0.25	1.36	3.50
974807	11-Aug-09	MMI	NAD83	621025	5785318	1377	Moffat Lake	2	5	0.05	290	2.5	130	1920	0.23	0.25	0.25	1.06	0.25	5.91	32.00
974808	11-Aug-09	MMI	NAD83	621066	5785348	1375	Moffat Lake	8	5	0.05	230	2.5	100	160	0.92	0.25	0.25	0.84	0.25	4.55	2.67
974809	11-Aug-09	MMI	NAD83	621104	5785383	1371	Moffat Lake	12	5	0.1	220	2.5	70	10	1.38	0.25	0.50	0.81	0.25	3.18	0.17
974810	11-Aug-09	MMI	NAD83	621139	5785418	1366	Moffat Lake	19	5	0.05	240	2.5	90	320	2.19	0.25	0.25	0.88	0.25	4.09	5.33
974811	11-Aug-09	MMI	NAD83	621176	5785453	1363	Moffat Lake	11	5	0.05	260	2.5	120	40	1.27	0.25	0.25	0.95	0.25	5.45	0.67
974812	11-Aug-09	MMI	NAD83	621220	5785478	1359	Moffat Lake	5	5	0.1	170	2.5	100	10	0.58	0.25	0.50	0.62	0.25	4.55	0.17
974813	11-Aug-09	MMI	NAD83	621265	5785502	1361	Moffat Lake	13	5	0.05	80	2.5	60	100	1.50	0.25	0.25	0.29	0.25	2.73	1.67
974814	11-Aug-09	MMI	NAD83	621305	5785537	1363	Moffat Lake	7	5	0.05	270	2.5	40	570	0.81	0.25	0.25	0.99	0.25	1.82	9.50
974815	11-Aug-09	MMI	NAD83	621322	5785585	1365	Moffat Lake	3	5	0.05	680	2.5	50	540	0.35	0.25	0.25	2.49	0.25	2.27	9.00
974816	11-Aug-09	MMI	NAD83	621329	5785635	1367	Moffat Lake	13	5	0.05	160	2.5	60	50	1.50	0.25	0.25	0.59	0.25	2.73	0.83
974817	11-Aug-09	MMI	NAD83	621352	5785679	1369	Moffat Lake	9	5	0.05	220	2.5	70	40	1.04	0.25	0.25	0.81	0.25	3.18	0.67
974818	11-Aug-09	MMI	NAD83	621394	5785706	1368	Moffat Lake	8	5	0.05	340	2.5	90	440	0.92	0.25	0.25	1.25	0.25	4.09	7.33
974819	11-Aug-09	MMI	NAD83	621436	5785734	1365	Moffat Lake	5	5	0.05	220	2.5	30	150	0.58	0.25	0.25	0.81	0.25	1.36	2.50
974820	11-Aug-09	MMI	NAD83	621481	5785756	1367	Moffat Lake	5	5	0.05	680	2.5	60	90	0.58	0.25	0.25	2.49	0.25	2.73	1.50
974821	11-Aug-09	MMI	NAD83	621528	5785771	1367	Moffat Lake	9	5	0.05	140	2.5	80	40	1.04	0.25	0.25	0.51	0.25	3.64	0.67
974822	11-Aug-09	MMI	NAD83	621575	5785789	1365	Moffat Lake	6	5	0.05	350	2.5	40	70	0.69	0.25	0.25	1.28	0.25	1.82	1.17
974823	11-Aug-09	MMI	NAD83	621622	5785810	1366	Moffat Lake	7	5	0.05	220	2.5	50	30	0.81	0.25	0.25	0.81	0.25	2.27	0.50
974824	11-Aug-09	MMI	NAD83	621669	5785826	1366	Moffat Lake	9	5	0.05	280	2.5	40	200	1.04	0.25	0.25	1.03	0.25	1.82	3.33
974825	11-Aug-09	MMI	NAD83	621715	5785851	1368	Moffat Lake	13	5	0.05	120	2.5	100	90	1.50	0.25	0.25	0.44	0.25	4.55	1.50
974826	11-Aug-09	MMI	NAD83	621762	5785872	1364	Moffat Lake	8	5	0.05	190	2.5	40	470	0.92	0.25	0.25	0.70	0.25	1.82	7.83
974827	11-Aug-09	MMI	NAD83	621812	5785884	1365	Moffat Lake	13	5	0.1	290	2.5	30	290	1.50	0.25	0.50	1.06	0.25	1.36	4.83
974828	11-Aug-09	MMI	NAD83	621852	5785916	1364	Moffat Lake	2	5	0.05	480	2.5	110	1640	0.23	0.25	0.25	1.76	0.25	5.00	27.33
974829	11-Aug-09	MMI	NAD83	621888	5785952	1358	Moffat Lake	11	5	0.05	410	2.5	90	640	1.27	0.25	0.25	1.50	0.25	4.09	10.67
974830	11-Aug-09	MMI	NAD83	621927	5785988	1354	Moffat Lake	19	5	0.05	570	2.5	170	420	2.19	0.25	0.25	2.09	0.25	7.73	7.00
974831	11-Aug-09	MMI	NAD83	621961	5786025	1352	Moffat Lake	18	5	0.1	390	2.5	80	300	2.07	0.25	0.50	1.43	0.25	3.64	5.00
974832	11-Aug-09	MMI	NAD83	622006	5786053	1356	Moffat Lake	15	5	0.05	590	2.5	150	460	1.73	0.25	0.25	2.16	0.25	6.82	7.67
974833	11-Aug-09	MMI	NAD83	622044	5786087	1357	Moffat Lake	17	5	0.2	1150	2.5	220	430	1.96	0.25	1.00	4.21	0.25	10.00	7.17
974834	11-Aug-09	MMI	NAD83	622081	5786124	1357	Moffat Lake	14	5	0.05	570	2.5	130	360	1.61	0.25	0.25	2.09	0.25	5.91	6.00
974835	11-Aug-09	MMI	NAD83	622120	5786155	1357	Moffat Lake	32	5	0.1	320	2.5	170	590	3.68	0.25	0.50	1.17	0.25	7.73	9.83
974836	11-Aug-09	MMI	NAD83	622164	5786183	1355	Moffat Lake	24	5	0.2	1240	2.5	320	770	2.76	0.25	1.00	4.54	0.25	14.55	12.83
974837	11-Aug-09	MMI	NAD83	622208	5786210	1359	Moffat Lake	11	5	0.2	450	2.5	70	150	1.27	0.25	1.00	1.65	0.25	3.18	2.50
974838	11-Aug-09	MMI	NAD83	622248	5786242	1367	Moffat Lake	11	5	0.05	460	2.5	110	620	1.27	0.25	0.25	1.68	0.25	5.00	10.33
974839	11-Aug-09	MMI	NAD83	622285	5786276	1368	Moffat Lake	13	5	0.05	220	2.5	80	380	1.50	0.25	0.25	0.81	0.25	3.64	6.33
974840	11-Aug-09	MMI	NAD83	622321	5786314	1374	Moffat Lake	10	5	0.4	1000	9	20	40	1.15	0.25	2.00	3.66	0.90	0.91	0.67
974841	11-Aug-09	MMI	NAD83	622360	5786347	1379	Moffat Lake	7	5	0.05	440	2.5	120	530	0.81	0.25	0.25	1.61	0.25	5.45	8.83
974842	11-Aug-09	MMI	NAD83	622407	5786369	1381	Moffat Lake	4	5	0.05	410	2.5	60	990	0.46	0.25	0.25	1.50	0.25	2.73	16.50
974843	12-Aug-09	MMI	NAD83	622446	5786401	1381	Moffat Lake	10	5	0.05	540	2.5	70	410	1.15	0.25	0.25	1.98	0.25	3.18	6.83
974844	12-Aug-09	MMI	NAD83	622482	5786435	1380	Moffat Lake	6	5	0.1	270	2.5	130	240	0.69	0.25	0.50	0.99	0.25	5.91	4.00

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974845	12-Aug-09	MMI	NAD83	622524	5786463	1382	Moffat Lake	32	5	0.1	330	2.5	260	350	3.68	0.25	0.50	1.21	0.25	11.82	5.83
974846	12-Aug-09	MMI	NAD83	622563	5786496	1382	Moffat Lake	22	5	0.1	370	2.5	300	500	2.53	0.25	0.50	1.36	0.25	13.64	8.33
974847	12-Aug-09	MMI	NAD83	622602	5786528	1380	Moffat Lake	35	5	0.05	190	2.5	210	240	4.03	0.25	0.25	0.70	0.25	9.55	4.00
974848	12-Aug-09	MMI	NAD83	622631	5786568	1377	Moffat Lake	15	5	0.05	140	2.5	250	210	1.73	0.25	0.25	0.51	0.25	11.36	3.50
974849	12-Aug-09	MMI	NAD83	622660	5786609	1376	Moffat Lake	8	5	0.05	490	2.5	60	120	0.92	0.25	0.25	1.79	0.25	2.73	2.00
974850	12-Aug-09	MMI	NAD83	622698	5786641	1380	Moffat Lake	12	5	0.05	120	2.5	210	230	1.38	0.25	0.25	0.44	0.25	9.55	3.83
974851	12-Aug-09	MMI	NAD83	622747	5786654	1381	Moffat Lake	3	5	0.05	120	2.5	180	210	0.35	0.25	0.25	0.44	0.25	8.18	3.50
974852	12-Aug-09	MMI	NAD83	622796	5786665	1385	Moffat Lake	3	5	0.05	120	2.5	180	20	0.35	0.25	0.25	0.44	0.25	8.18	0.33
974853	12-Aug-09	MMI	NAD83	622842	5786684	1386	Moffat Lake	9	5	0.1	180	2.5	200	70	1.04	0.25	0.50	0.66	0.25	9.09	1.17
974854	12-Aug-09	MMI	NAD83	622877	5786720	1384	Moffat Lake	11	5	0.1	390	2.5	50	320	1.27	0.25	0.50	1.43	0.25	2.27	5.33
974855	12-Aug-09	MMI	NAD83	622909	5786758	1388	Moffat Lake	20	5	0.05	170	2.5	160	80	2.30	0.25	0.25	0.62	0.25	7.27	1.33
974856	12-Aug-09	MMI	NAD83	622948	5786789	1391	Moffat Lake	27	5	0.05	140	2.5	110	110	3.11	0.25	0.25	0.51	0.25	5.00	1.83
974857	12-Aug-09	MMI	NAD83	622989	5786819	1396	Moffat Lake	10	5	0.05	160	2.5	190	150	1.15	0.25	0.25	0.59	0.25	8.64	2.50
974858	12-Aug-09	MMI	NAD83	623030	5786848	1400	Moffat Lake	3	5	0.05	100	2.5	70	10	0.35	0.25	0.25	0.37	0.25	3.18	0.17
974859	12-Aug-09	MMI	NAD83	623072	5786875	1402	Moffat Lake	8	5	0.05	120	2.5	160	100	0.92	0.25	0.25	0.44	0.25	7.27	1.67
974860	12-Aug-09	MMI	NAD83	623113	5786905	1399	Moffat Lake	13	5	0.05	130	2.5	180	110	1.50	0.25	0.25	0.48	0.25	8.18	1.83
974861	12-Aug-09	MMI	NAD83	623155	5786932	1397	Moffat Lake	8	5	0.05	90	2.5	170	20	0.92	0.25	0.25	0.33	0.25	7.73	0.33
974862	12-Aug-09	MMI	NAD83	623194	5786966	1395	Moffat Lake	10	5	0.05	100	2.5	220	140	1.15	0.25	0.25	0.37	0.25	10.00	2.33
974863	12-Aug-09	MMI	NAD83	623234	5787001	1391	Moffat Lake	14	5	0.05	330	2.5	50	560	1.61	0.25	0.25	1.21	0.25	2.27	9.33
974864	12-Aug-09	MMI	NAD83	623273	5787038	1392	Moffat Lake	13	5	0.1	380	2.5	30	40	1.50	0.25	0.50	1.39	0.25	1.36	0.67
974865	12-Aug-09	MMI	NAD83	623317	5787067	1395	Moffat Lake	8	5	0.05	170	2.5	150	210	0.92	0.25	0.25	0.62	0.25	6.82	3.50
974866	12-Aug-09	MMI	NAD83	623361	5787096	1393	Moffat Lake	12	5	0.05	880	2.5	100	30	1.38	0.25	0.25	3.22	0.25	4.55	0.50
974867	12-Aug-09	MMI	NAD83	623402	5787131	1391	Moffat Lake	6	5	0.2	480	2.5	20	10	0.69	0.25	1.00	1.76	0.25	0.91	0.17
974868	12-Aug-09	MMI	NAD83	623438	5787169	1389	Moffat Lake	3	5	0.05	420	2.5	110	240	0.35	0.25	0.25	1.54	0.25	5.00	4.00
974869	12-Aug-09	MMI	NAD83	623471	5787210	1385	Moffat Lake	5	5	0.1	270	2.5	60	50	0.58	0.25	0.50	0.99	0.25	2.73	0.83
974870	12-Aug-09	MMI	NAD83	623516	5787243	1380	Moffat Lake	9	5	0.05	160	2.5	160	110	1.04	0.25	0.25	0.59	0.25	7.27	1.83
974871	12-Aug-09	MMI	NAD83	623560	5787268	1378	Moffat Lake	7	5	0.05	110	2.5	120	320	0.81	0.25	0.25	0.40	0.25	5.45	5.33
974872	12-Aug-09	MMI	NAD83	623599	5787307	1375	Moffat Lake	5	5	0.05	110	2.5	210	40	0.58	0.25	0.25	0.40	0.25	9.55	0.67
974873	12-Aug-09	MMI	NAD83	623634	5787346	1374	Moffat Lake	3	5	0.2	170	2.5	40	70	0.35	0.25	1.00	0.62	0.25	1.82	1.17
974874	12-Aug-09	MMI	NAD83	623656	5787392	1378	Moffat Lake	5	5	0.05	170	2.5	180	3990	0.58	0.25	0.25	0.62	0.25	8.18	66.50
974875	12-Aug-09	MMI	NAD83	623671	5787441	1378	Moffat Lake	8	5	0.05	160	2.5	120	550	0.92	0.25	0.25	0.59	0.25	5.45	9.17
974876	12-Aug-09	MMI	NAD83	623675	5787493	1381	Moffat Lake	4	5	0.2	470	2.5	30	130	0.46	0.25	1.00	1.72	0.25	1.36	2.17
974877	12-Aug-09	MMI	NAD83	623672	5787546	1383	Moffat Lake	0.5	5	0.05	440	2.5	140	510	0.06	0.25	0.25	1.61	0.25	6.36	8.50
759110	13-Jun-09	MMI	NAD83	627307	5804264	964	Horsefly	52	5	0.1	490	2.5	210	1230	5.98	0.25	0.50	1.79	0.25	9.55	20.50
759111	13-Jun-09	MMI	NAD83	627267	5804297	968	Horsefly	78	5	0.2	630	2.5	110	1100	8.98	0.25	1.00	2.31	0.25	5.00	18.33
759112	13-Jun-09	MMI	NAD83	627215	5804310	972	Horsefly	102	5	0.2	600	8	110	560	11.74	0.25	1.00	2.20	0.80	5.00	9.33
759113	13-Jun-09	MMI	NAD83	627168	5804325	969	Horsefly	59	5	0.05	450	2.5	120	320	6.79	0.25	0.25	1.65	0.25	5.45	5.33
759114	13-Jun-09	MMI	NAD83	627116	5804340	973	Horsefly	65	5	0.2	430	2.5	110	690	7.48	0.25	1.00	1.58	0.25	5.00	11.50
759115	13-Jun-09	MMI	NAD83	627077	5804351	967	Horsefly	56	5	0.3	1270	9	30	270	6.44	0.25	1.50	4.65	0.90	1.36	4.50
759116	13-Jun-09	MMI	NAD83	627027	5804368	962	Horsefly	22	5	0.05	920	2.5	90	1330	2.53	0.25	0.25	3.37	0.25	4.09	22.17
759117	13-Jun-09	MMI	NAD83	626982	5804384	956	Horsefly	1	5	0.05	590	2.5	160	3430	0.12	0.25	0.25	2.16	0.25	7.27	57.17
759118	13-Jun-09	MMI	NAD83	626935	5804395	952	Horsefly	5	5	0.05	410	2.5	150	1900	0.58	0.25	0.25	1.50	0.25	6.82	31.67
759119	13-Jun-09	MMI	NAD83	626898	5804429	946	Horsefly	62	5	0.2	1280	2.5	70	1170	7.13	0.25	1.00	4.69	0.25	3.18	19.50
759120	13-Jun-09	MMI	NAD83	626860	5804467	937	Horsefly	0.5	5	0.05	270	2.5	120	5870	0.06	0.25	0.25	0.99	0.25	5.45	97.83

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
759121	13-Jun-09	MMI	NAD83	626831	5804509	932	Horsefly	5	40	0.05	570	15	160	4100	0.58	2.00	0.25	2.09	1.50	7.27	68.33
759122	13-Jun-09	MMI	NAD83	626786	5804535	931	Horsefly	125	5	0.8	1970	6	20	310	14.38	0.25	4.00	7.22	0.60	0.91	5.17
759123	13-Jun-09	MMI	NAD83	626743	5804557	932	Horsefly	3	5	0.05	490	2.5	60	1820	0.35	0.25	0.25	1.79	0.25	2.73	30.33
759124	13-Jun-09	MMI	NAD83	626695	5804572	930	Horsefly	6	5	0.05	320	2.5	50	1350	0.69	0.25	0.25	1.17	0.25	2.27	22.50
759125	13-Jun-09	MMI	NAD83	626639	5804573	928	Horsefly	60	5	0.4	1010	13	10	70	6.90	0.25	2.00	3.70	1.30	0.45	1.17
759126	13-Jun-09	MMI	NAD83	626588	5804582	928	Horsefly	45	5	0.3	1230	5	40	280	5.18	0.25	1.50	4.51	0.50	1.82	4.67
759127	13-Jun-09	MMI	NAD83	626542	5804598	931	Horsefly	10	5	0.1	1270	2.5	40	130	1.15	0.25	0.50	4.65	0.25	1.82	2.17
759128	13-Jun-09	MMI	NAD83	626492	5804604	939	Horsefly	64	5	0.4	1490	7	20	340	7.36	0.25	2.00	5.46	0.70	0.91	5.67
759129	13-Jun-09	MMI	NAD83	626444	5804583	936	Horsefly	35	5	0.05	220	2.5	160	590	4.03	0.25	0.25	0.81	0.25	7.27	9.83
759130	13-Jun-09	MMI	NAD83	626398	5804570	935	Horsefly	24	5	0.3	410	7	210	50	2.76	0.25	1.50	1.50	0.70	9.55	0.83
759131	13-Jun-09	MMI	NAD83	626347	5804586	932	Horsefly	31	5	0.1	1030	2.5	210	570	3.57	0.25	0.50	3.77	0.25	9.55	9.50
759132	13-Jun-09	MMI	NAD83	626296	5804602	931	Horsefly	19	5	0.3	1180	2.5	50	40	2.19	0.25	1.50	4.32	0.25	2.27	0.67
759133	13-Jun-09	MMI	NAD83	626252	5804616	928	Horsefly	21	5	0.05	860	5	90	170	2.42	0.25	0.25	3.15	0.50	4.09	2.83
759134	13-Jun-09	MMI	NAD83	626209	5804644	926	Horsefly	58	5	0.4	1710	5	20	120	6.67	0.25	2.00	6.26	0.50	0.91	2.00
759135	13-Jun-09	MMI	NAD83	626162	5804662	926	Horsefly	38	5	0.1	920	2.5	200	310	4.37	0.25	0.50	3.37	0.25	9.09	5.17
759136	13-Jun-09	MMI	NAD83	626112	5804669	927	Horsefly	35	10	0.05	360	2.5	110	440	4.03	0.50	0.25	1.32	0.25	5.00	7.33
759137	13-Jun-09	MMI	NAD83	626062	5804677	924	Horsefly	35	5	0.05	370	2.5	130	840	4.03	0.25	0.25	1.36	0.25	5.91	14.00
759138	13-Jun-09	MMI	NAD83	626015	5804685	923	Horsefly	223	5	0.1	620	2.5	80	1030	25.66	0.25	0.50	2.27	0.25	3.64	17.17
759139	13-Jun-09	MMI	NAD83	625962	5804692	924	Horsefly	14	5	0.3	430	2.5	260	1850	1.61	0.25	1.50	1.58	0.25	11.82	30.83
759140	13-Jun-09	MMI	NAD83	625921	5804721	925	Horsefly	39	5	0.05	460	2.5	160	1050	4.49	0.25	0.25	1.68	0.25	7.27	17.50
759141	13-Jun-09	MMI	NAD83	625880	5804743	929	Horsefly	12	5	0.2	540	2.5	160	210	1.38	0.25	1.00	1.98	0.25	7.27	3.50
759142	13-Jun-09	MMI	NAD83	625838	5804774	932	Horsefly	5	5	0.1	400	2.5	140	1150	0.58	0.25	0.50	1.47	0.25	6.36	19.17
759143	13-Jun-09	MMI	NAD83	625788	5804789	935	Horsefly	73	5	0.3	1520	2.5	60	380	8.40	0.25	1.50	5.57	0.25	2.73	6.33
759144	13-Jun-09	MMI	NAD83	625740	5804798	938	Horsefly	45	5	0.2	1390	2.5	10	140	5.18	0.25	1.00	5.09	0.25	0.45	2.33
759145	13-Jun-09	MMI	NAD83	625698	5804831	940	Horsefly	182	5	0.5	2020	6	30	130	20.94	0.25	2.50	7.40	0.60	1.36	2.17
759146	13-Jun-09	MMI	NAD83	625657	5804866	938	Horsefly	11	5	0.4	120	2.5	50	70	1.27	0.25	2.00	0.44	0.25	2.27	1.17
759147	13-Jun-09	MMI	NAD83	625609	5804885	937	Horsefly	8	5	0.3	350	2.5	30	30	0.92	0.25	1.50	1.28	0.25	1.36	0.50
759148	13-Jun-09	MMI	NAD83	625558	5804875	941	Horsefly	20	5	0.3	310	7	130	170	2.30	0.25	1.50	1.14	0.70	5.91	2.83
759149	13-Jun-09	MMI	NAD83	625511	5804853	944	Horsefly	184	5	0.8	1690	2.5	10	50	21.17	0.25	4.00	6.19	0.25	0.45	0.83
759150	13-Jun-09	MMI	NAD83	625457	5804859	944	Horsefly	38	5	0.3	350	2.5	180	200	4.37	0.25	1.50	1.28	0.25	8.18	3.33
759151	13-Jun-09	MMI	NAD83	625407	5804843	946	Horsefly	31	5	0.5	540	2.5	70	190	3.57	0.25	2.50	1.98	0.25	3.18	3.17
759152	13-Jun-09	MMI	NAD83	625363	5804839	946	Horsefly	19	5	0.1	880	2.5	130	170	2.19	0.25	0.50	3.22	0.25	5.91	2.83
759153	13-Jun-09	MMI	NAD83	625307	5804842	946	Horsefly	18	5	0.6	970	5	40	160	2.07	0.25	3.00	3.55	0.50	1.82	2.67
759154	13-Jun-09	MMI	NAD83	625257	5804853	942	Horsefly	31	5	0.4	1140	8	30	190	3.57	0.25	2.00	4.18	0.80	1.36	3.17
759155	13-Jun-09	MMI	NAD83	625209	5804869	938	Horsefly	43	10	0.2	660	7	140	460	4.95	0.50	1.00	2.42	0.70	6.36	7.67
759156	13-Jun-09	MMI	NAD83	625160	5804883	935	Horsefly	20	5	0.1	560	2.5	70	110	2.30	0.25	0.50	2.05	0.25	3.18	1.83
759157	13-Jun-09	MMI	NAD83	625116	5804898	929	Horsefly	101	5	0.5	1870	2.5	80	200	11.62	0.25	2.50	6.85	0.25	3.64	3.33
759158	13-Jun-09	MMI	NAD83	625072	5804907	927	Horsefly	51	5	0.3	1340	2.5	80	260	5.87	0.25	1.50	4.91	0.25	3.64	4.33
759159	13-Jun-09	MMI	NAD83	625015	5804919	921	Horsefly	34	5	0.3	1030	6	20	120	3.91	0.25	1.50	3.77	0.60	0.91	2.00
759160	14-Jun-09	MMI	NAD83	624966	5804934	924	Horsefly	35	5	0.4	980	5	40	170	4.03	0.25	2.00	3.59	0.50	1.82	2.83
759161	14-Jun-09	MMI	NAD83	624921	5804925	919	Horsefly	48	5	0.4	1090	23	40	160	5.52	0.25	2.00	3.99	2.30	1.82	2.67
759162	14-Jun-09	MMI	NAD83	624869	5804918	916	Horsefly	100	5	0.4	1760	38	80	80	11.51	0.25	2.00	6.45	3.80	3.64	1.33
759163	14-Jun-09	MMI	NAD83	624817	5804918	913	Horsefly	32	5	0.4	1500	23	60	200	3.68	0.25	2.00	5.49	2.30	2.73	3.33
759164	14-Jun-09	MMI	NAD83	624766	5804934	912	Horsefly	29	5	0.5	1030	10	30	120	3.34	0.25	2.50	3.77	1.00	1.36	2.00

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
759165	14-Jun-09	MMI	NAD83	624718	5804936	910	Horsefly	94	5	0.3	3110	9	50	210	10.82	0.25	1.50	11.39	0.90	2.27	3.50
759166	14-Jun-09	MMI	NAD83	624673	5804955	906	Horsefly	70	5	0.5	810	35	30	40	8.06	0.25	2.50	2.97	3.50	1.36	0.67
759167	14-Jun-09	MMI	NAD83	624624	5804959	907	Horsefly	87	5	0.2	1220	20	20	90	10.01	0.25	1.00	4.47	2.00	0.91	1.50
759168	14-Jun-09	MMI	NAD83	624574	5804967	909	Horsefly	79	5	0.4	280	9	10	60	9.09	0.25	2.00	1.03	0.90	0.45	1.00
759169	14-Jun-09	MMI	NAD83	624525	5804986	909	Horsefly	111	5	0.1	1090	29	5	60	12.77	0.25	0.50	3.99	2.90	0.23	1.00
759170	14-Jun-09	MMI	NAD83	624476	5804996	910	Horsefly	44	5	0.1	680	7	20	1010	5.06	0.25	0.50	2.49	0.70	0.91	16.83
759171	14-Jun-09	MMI	NAD83	624428	5805009	914	Horsefly	11	5	0.05	840	2.5	5	110	1.27	0.25	0.25	3.08	0.25	0.23	1.83
759172	14-Jun-09	MMI	NAD83	624378	5805016	918	Horsefly	66	5	0.2	1780	20	5	3480	7.59	0.25	1.00	6.52	2.00	0.23	58.00
759173	14-Jun-09	MMI	NAD83	624332	5805030	922	Horsefly	181	5	0.5	5540	2.5	20	2680	20.83	0.25	2.50	20.29	0.25	0.91	44.67
759174	14-Jun-09	MMI	NAD83	624280	5805043	925	Horsefly	47	5	0.2	2120	2.5	70	2350	5.41	0.25	1.00	7.77	0.25	3.18	39.17
759175	14-Jun-09	MMI	NAD83	624233	5805030	927	Horsefly	77	5	0.2	1480	10	10	4880	8.86	0.25	1.00	5.42	1.00	0.45	81.33
759176	14-Jun-09	MMI	NAD83	624188	5804999	929	Horsefly	77	5	0.3	640	2.5	150	340	8.86	0.25	1.50	2.34	0.25	6.82	5.67
759177	14-Jun-09	MMI	NAD83	624162	5804958	931	Horsefly	65	5	0.5	1430	7	20	60	7.48	0.25	2.50	5.24	0.70	0.91	1.00
759178	14-Jun-09	MMI	NAD83	624109	5804970	937	Horsefly	0.5	5	0.05	210	2.5	60	4410	0.06	0.25	0.25	0.77	0.25	2.73	73.50
759179	14-Jun-09	MMI	NAD83	624062	5804981	941	Horsefly	3	5	0.05	460	2.5	120	2380	0.35	0.25	0.25	1.68	0.25	5.45	39.67
759180	14-Jun-09	MMI	NAD83	624006	5804982	944	Horsefly	9	5	0.05	390	2.5	100	4290	1.04	0.25	0.25	1.43	0.25	4.55	71.50
759181	14-Jun-09	MMI	NAD83	623966	5804995	952	Horsefly	51	5	0.05	510	2.5	80	1480	5.87	0.25	0.25	1.87	0.25	3.64	24.67
759182	14-Jun-09	MMI	NAD83	623907	5804998	954	Horsefly	37	5	0.3	1380	2.5	50	250	4.26	0.25	1.50	5.05	0.25	2.27	4.17
759183	14-Jun-09	MMI	NAD83	623864	5804980	959	Horsefly	34	5	0.1	3750	2.5	30	1790	3.91	0.25	0.50	13.74	0.25	1.36	29.83
759184	14-Jun-09	MMI	NAD83	623833	5804939	956	Horsefly	9	5	0.05	630	2.5	100	1580	1.04	0.25	0.25	2.31	0.25	4.55	26.33
759185	14-Jun-09	MMI	NAD83	623798	5804899	960	Horsefly	80	5	0.2	1490	2.5	50	560	9.21	0.25	1.00	5.46	0.25	2.27	9.33
759186	14-Jun-09	MMI	NAD83	623800	5804850	965	Horsefly	57	5	0.3	2130	2.5	10	360	6.56	0.25	1.50	7.80	0.25	0.45	6.00
759187	14-Jun-09	MMI	NAD83	623807	5804790	973	Horsefly	47	5	0.3	2030	2.5	40	550	5.41	0.25	1.50	7.44	0.25	1.82	9.17
759188	14-Jun-09	MMI	NAD83	623804	5804754	977	Horsefly	29	5	0.4	1270	2.5	80	450	3.34	0.25	2.00	4.65	0.25	3.64	7.50
759189	14-Jun-09	MMI	NAD83	623791	5804708	981	Horsefly	28	10	0.2	1080	7	260	710	3.22	0.50	1.00	3.96	0.70	11.82	11.83
759190	14-Jun-09	MMI	NAD83	623767	5804666	986	Horsefly	23	5	0.1	1160	32	40	220	2.65	0.25	0.50	4.25	3.20	1.82	3.67
759191	14-Jun-09	MMI	NAD83	623774	5804615	988	Horsefly	12	5	0.1	530	2.5	30	170	1.38	0.25	0.50	1.94	0.25	1.36	2.83
759192	14-Jun-09	MMI	NAD83	623762	5804560	990	Horsefly	52	5	0.4	1200	2.5	70	160	5.98	0.25	2.00	4.40	0.25	3.18	2.67
759193	14-Jun-09	MMI	NAD83	623751	5804505	990	Horsefly	19	5	0.1	910	2.5	90	90	2.19	0.25	0.50	3.33	0.25	4.09	1.50
759194	14-Jun-09	MMI	NAD83	623743	5804457	990	Horsefly	17	5	0.1	870	2.5	260	520	1.96	0.25	0.50	3.19	0.25	11.82	8.67
759195	14-Jun-09	MMI	NAD83	623711	5804424	988	Horsefly	43	5	0.2	870	5	230	500	4.95	0.25	1.00	3.19	0.50	10.45	8.33
759196	14-Jun-09	MMI	NAD83	623657	5804406	989	Horsefly	32	5	0.2	510	2.5	140	130	3.68	0.25	1.00	1.87	0.25	6.36	2.17
759197	14-Jun-09	MMI	NAD83	623609	5804394	991	Horsefly	13	5	0.05	410	2.5	110	230	1.50	0.25	0.25	1.50	0.25	5.00	3.83
759198	14-Jun-09	MMI	NAD83	623567	5804370	985	Horsefly	1	5	0.05	660	2.5	130	2280	0.12	0.25	0.25	2.42	0.25	5.91	38.00
759199	14-Jun-09	MMI	NAD83	623521	5804349	977	Horsefly	61	5	0.1	370	2.5	150	910	7.02	0.25	0.50	1.36	0.25	6.82	15.17
759200	14-Jun-09	MMI	NAD83	623472	5804329	976	Horsefly	3	5	0.05	190	2.5	80	5600	0.35	0.25	0.25	0.70	0.25	3.64	93.33
759201	14-Jun-09	MMI	NAD83	623425	5804310	972	Horsefly	24	5	0.2	770	2.5	50	870	2.76	0.25	1.00	2.82	0.25	2.27	14.50
759202	14-Jun-09	MMI	NAD83	623380	5804298	968	Horsefly	4	5	0.05	450	2.5	150	2180	0.46	0.25	0.25	1.65	0.25	6.82	36.33
759203	14-Jun-09	MMI	NAD83	623318	5804279	966	Horsefly	4	5	0.05	320	2.5	160	4400	0.46	0.25	0.25	1.17	0.25	7.27	73.33
759204	14-Jun-09	MMI	NAD83	623277	5804257	966	Horsefly	37	5	0.3	2290	2.5	20	420	4.26	0.25	1.50	8.39	0.25	0.91	7.00
759205	14-Jun-09	MMI	NAD83	623234	5804219	965	Horsefly	58	5	0.2	1570	2.5	20	460	6.67	0.25	1.00	5.75	0.25	0.91	7.67
759206	14-Jun-09	MMI	NAD83	623204	5804179	964	Horsefly	12	5	0.05	270	2.5	110	2270	1.38	0.25	0.25	0.99	0.25	5.00	37.83
759207	14-Jun-09	MMI	NAD83	623179	5804133	962	Horsefly	27	5	0.1	900	114	60	1050	3.11	0.25	0.50	3.30	11.40	2.73	17.50
759208	14-Jun-09	MMI	NAD83	623152	5804092	961	Horsefly	96	5	0.2	2100	7	5	200	11.05	0.25	1.00	7.69	0.70	0.23	3.33



## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
759209	14-Jun-09	MMI	NAD83	623119	5804051	962	Horsefly	35	5	0.2	1250	2.5	5	80	4.03	0.25	1.00	4.58	0.25	0.23	1.33
759210	14-Jun-09	MMI	NAD83	623081	5804017	965	Horsefly	2	5	0.05	220	2.5	30	1680	0.23	0.25	0.25	0.81	0.25	1.36	28.00
759211	14-Jun-09	MMI	NAD83	623039	5803986	967	Horsefly	16	5	0.05	1760	2.5	110	2360	1.84	0.25	0.25	6.45	0.25	5.00	39.33
759212	14-Jun-09	MMI	NAD83	622988	5803989	970	Horsefly	65	5	0.3	2650	7	20	400	7.48	0.25	1.50	9.71	0.70	0.91	6.67
759213	14-Jun-09	MMI	NAD83	622939	5803981	974	Horsefly	10	5	0.05	390	2.5	50	1480	1.15	0.25	0.25	1.43	0.25	2.27	24.67
759214	14-Jun-09	MMI	NAD83	622889	5803974	978	Horsefly	34	5	0.1	780	2.5	110	920	3.91	0.25	0.50	2.86	0.25	5.00	15.33
759215	14-Jun-09	MMI	NAD83	622846	5803944	979	Horsefly	29	5	0.1	1400	2.5	20	300	3.34	0.25	0.50	5.13	0.25	0.91	5.00
759216	14-Jun-09	MMI	NAD83	622800	5803923	983	Horsefly	24	5	0.05	570	2.5	70	1160	2.76	0.25	0.25	2.09	0.25	3.18	19.33
759217	14-Jun-09	MMI	NAD83	622763	5803889	988	Horsefly	13	5	0.05	330	6	20	150	1.50	0.25	0.25	1.21	0.60	0.91	2.50
759218	14-Jun-09	MMI	NAD83	622725	5803866	994	Horsefly	91	5	0.2	1330	2.5	30	1350	10.47	0.25	1.00	4.87	0.25	1.36	22.50
759219	14-Jun-09	MMI	NAD83	622672	5803873	995	Horsefly	44	5	0.4	4090	20	20	80	5.06	0.25	2.00	14.98	2.00	0.91	1.33
759220	14-Jun-09	MMI	NAD83	622621	5803872	995	Horsefly	19	5	0.3	1690	8	10	200	2.19	0.25	1.50	6.19	0.80	0.45	3.33
759221	14-Jun-09	MMI	NAD83	622568	5803860	1000	Horsefly	96	5	0.4	1540	22	10	250	11.05	0.25	2.00	5.64	2.20	0.45	4.17
759222	14-Jun-09	MMI	NAD83	622519	5803851	1005	Horsefly	54	5	0.5	1530	10	20	180	6.21	0.25	2.50	5.60	1.00	0.91	3.00
759223	14-Jun-09	MMI	NAD83	622472	5803847	1007	Horsefly	59	5	0.2	2090	2.5	20	430	6.79	0.25	1.00	7.66	0.25	0.91	7.17
759224	14-Jun-09	MMI	NAD83	622417	5803848	1013	Horsefly	26	5	0.05	940	10	30	130	2.99	0.25	0.25	3.44	1.00	1.36	2.17
759225	14-Jun-09	MMI	NAD83	622373	5803846	1015	Horsefly	30	5	0.1	1080	9	30	200	3.45	0.25	0.50	3.96	0.90	1.36	3.33
759226	14-Jun-09	MMI	NAD83	622317	5803835	1018	Horsefly	57	5	0.2	1470	5	40	350	6.56	0.25	1.00	5.38	0.50	1.82	5.83
759227	14-Jun-09	MMI	NAD83	622275	5803822	1021	Horsefly	35	5	0.3	2460	5	20	190	4.03	0.25	1.50	9.01	0.50	0.91	3.17
759228	14-Jun-09	MMI	NAD83	622225	5803799	1023	Horsefly	36	5	0.2	1720	9	10	240	4.14	0.25	1.00	6.30	0.90	0.45	4.00
759229	14-Jun-09	MMI	NAD83	622184	5803779	1025	Horsefly	32	5	0.2	970	7	10	90	3.68	0.25	1.00	3.55	0.70	0.45	1.50
759230	14-Jun-09	MMI	NAD83	622126	5803768	1025	Horsefly	47	5	0.2	1550	9	20	220	5.41	0.25	1.00	5.68	0.90	0.91	3.67
759231	14-Jun-09	MMI	NAD83	622077	5803765	1022	Horsefly	59	5	0.4	1350	10	20	60	6.79	0.25	2.00	4.95	1.00	0.91	1.00
759232	14-Jun-09	MMI	NAD83	622027	5803758	1022	Horsefly	31	5	0.2	2230	17	30	100	3.57	0.25	1.00	8.17	1.70	1.36	1.67
759233	14-Jun-09	MMI	NAD83	621980	5803755	1022	Horsefly	98	5	0.3	1030	26	10	90	11.28	0.25	1.50	3.77	2.60	0.45	1.50
759234	15-Jun-09	MMI	NAD83	621981	5803719	1029	Horsefly	13	5	0.05	340	2.5	90	1090	1.50	0.25	0.25	1.25	0.25	4.09	18.17
759235	15-Jun-09	MMI	NAD83	622017	5803669	1033	Horsefly	16	5	0.2	2030	20	5	70	1.84	0.25	1.00	7.44	2.00	0.23	1.17
759236	15-Jun-09	MMI	NAD83	622046	5803634	1036	Horsefly	59	5	0.3	2070	5	20	130	6.79	0.25	1.50	7.58	0.50	0.91	2.17
759237	15-Jun-09	MMI	NAD83	622093	5803600	1045	Horsefly	56	5	0.1	2030	10	10	180	6.44	0.25	0.50	7.44	1.00	0.45	3.00
759238	15-Jun-09	MMI	NAD83	622146	5803594	1048	Horsefly	42	5	0.1	1430	10	50	70	4.83	0.25	0.50	5.24	1.00	2.27	1.17
759239	15-Jun-09	MMI	NAD83	622192	5803574	1053	Horsefly	20	5	0.1	1380	7	20	160	2.30	0.25	0.50	5.05	0.70	0.91	2.67
759240	15-Jun-09	MMI	NAD83	622241	5803565	1057	Horsefly	35	5	0.2	1500	2.5	20	260	4.03	0.25	1.00	5.49	0.25	0.91	4.33
759241	15-Jun-09	MMI	NAD83	622287	5803531	1060	Horsefly	51	5	0.2	1220	15	10	40	5.87	0.25	1.00	4.47	1.50	0.45	0.67
759242	15-Jun-09	MMI	NAD83	622332	5803516	1066	Horsefly	16	5	0.1	1780	2.5	20	310	1.84	0.25	0.50	6.52	0.25	0.91	5.17
759243	15-Jun-09	MMI	NAD83	622382	5803514	1071	Horsefly	16	5	0.1	1750	2.5	20	360	1.84	0.25	0.50	6.41	0.25	0.91	6.00
759244	15-Jun-09	MMI	NAD83	622439	5803502	1078	Horsefly	26	5	0.1	1070	7	20	230	2.99	0.25	0.50	3.92	0.70	0.91	3.83
759245	15-Jun-09	MMI	NAD83	622485	5803490	1082	Horsefly	57	5	0.4	3490	2.5	110	740	6.56	0.25	2.00	12.78	0.25	5.00	12.33
759246	15-Jun-09	MMI	NAD83	622529	5803473	1084	Horsefly	30	5	0.3	1260	6	20	210	3.45	0.25	1.50	4.62	0.60	0.91	3.50
759247	15-Jun-09	MMI	NAD83	622573	5803453	1089	Horsefly	45	5	0.2	2140	7	20	690	5.18	0.25	1.00	7.84	0.70	0.91	11.50
759248	15-Jun-09	MMI	NAD83	622577	5803404	1093	Horsefly	42	5	0.1	530	2.5	5	610	4.83	0.25	0.50	1.94	0.25	0.23	10.17
759249	15-Jun-09	MMI	NAD83	622594	5803353	1097	Horsefly	8	5	0.05	360	2.5	90	1050	0.92	0.25	0.25	1.32	0.25	4.09	17.50
759250	15-Jun-09	MMI	NAD83	622636	5803318	1100	Horsefly	65	5	0.4	2180	13	20	50	7.48	0.25	2.00	7.99	1.30	0.91	0.83
759251	15-Jun-09	MMI	NAD83	622682	5803288	1106	Horsefly	8	5	0.3	1830	2.5	50	760	0.92	0.25	1.50	6.70	0.25	2.27	12.67
759252	15-Jun-09	MMI	NAD83	622723	5803266	1108	Horsefly	22	5	0.2	1090	2.5	10	320	2.53	0.25	1.00	3.99	0.25	0.45	5.33

## Appendix 1

## Sample Location and Selected Analytical Results

Sample No.	Date	Type	Datum	Easting	Northing	Elev.	Area	Ag (ppb)	As (ppb)	Au (ppb)	Cu (ppb)	Mo (ppb)	Pb (ppb)	Zn (ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
759253	15-Jun-09	MMI	NAD83	622763	5803240	1112	Horsefly	11	5	0.4	2710	2.5	5	40	1.27	0.25	2.00	9.93	0.25	0.23	0.67
759254	15-Jun-09	MMI	NAD83	622803	5803202	1117	Horsefly	11	5	0.4	2930	2.5	5	150	1.27	0.25	2.00	10.73	0.25	0.23	2.50
759255	15-Jun-09	MMI	NAD83	622847	5803175	1121	Horsefly	21	5	0.4	2040	15	10	70	2.42	0.25	2.00	7.47	1.50	0.45	1.17
759256	15-Jun-09	MMI	NAD83	622893	5803134	1123	Horsefly	23	5	0.2	2300	12	5	50	2.65	0.25	1.00	8.42	1.20	0.23	0.83
759257	15-Jun-09	MMI	NAD83	622944	5803131	1126	Horsefly	22	5	0.3	3240	2.5	5	330	2.53	0.25	1.50	11.87	0.25	0.23	5.50
759258	15-Jun-09	MMI	NAD83	622987	5803116	1136	Horsefly	7	5	0.05	690	2.5	80	2830	0.81	0.25	0.25	2.53	0.25	3.64	47.17
759259	15-Jun-09	MMI	NAD83	623031	5803090	1139	Horsefly	23	5	0.3	3030	2.5	20	970	2.65	0.25	1.50	11.10	0.25	0.91	16.17
759260	15-Jun-09	MMI	NAD83	623066	5803051	1144	Horsefly	11	5	0.1	640	2.5	40	430	1.27	0.25	0.50	2.34	0.25	1.82	7.17
759261	15-Jun-09	MMI	NAD83	623109	5803035	1146	Horsefly	3	5	0.05	570	2.5	40	2490	0.35	0.25	0.25	2.09	0.25	1.82	41.50
759262	15-Jun-09	MMI	NAD83	623159	5803028	1152	Horsefly	28	5	0.5	3140	2.5	5	220	3.22	0.25	2.50	11.50	0.25	0.23	3.67
759263	15-Jun-09	MMI	NAD83	623205	5802994	1155	Horsefly	20	5	0.5	3590	2.5	5	160	2.30	0.25	2.50	13.15	0.25	0.23	2.67
759264	15-Jun-09	MMI	NAD83	623234	5802957	1159	Horsefly	19	5	0.05	600	2.5	10	110	2.19	0.25	0.25	2.20	0.25	0.45	1.83
759265	15-Jun-09	MMI	NAD83	623254	5802920	1162	Horsefly	42	5	0.3	1450	2.5	5	70	4.83	0.25	1.50	5.31	0.25	0.23	1.17
759266	15-Jun-09	MMI	NAD83	623304	5802887	1167	Horsefly	17	5	0.8	7150	2.5	20	770	1.96	0.25	4.00	26.19	0.25	0.91	12.83
759267	15-Jun-09	MMI	NAD83	623348	5802862	1171	Horsefly	0.5	5	0.05	640	2.5	60	3520	0.06	0.25	0.25	2.34	0.25	2.73	58.67
759268	15-Jun-09	MMI	NAD83	623390	5802837	1173	Horsefly	16	5	0.2	1720	2.5	5	40	1.84	0.25	1.00	6.30	0.25	0.23	0.67
759269	15-Jun-09	MMI	NAD83	623438	5802818	1179	Horsefly	15	5	0.4	3610	2.5	5	130	1.73	0.25	2.00	13.22	0.25	0.23	2.17
759270	15-Jun-09	MMI	NAD83	623485	5802796	1185	Horsefly	31	5	0.2	2340	2.5	5	80	3.57	0.25	1.00	8.57	0.25	0.23	1.33
759271	15-Jun-09	MMI	NAD83	623522	5802779	1189	Horsefly	12	5	0.2	1550	2.5	5	150	1.38	0.25	1.00	5.68	0.25	0.23	2.50
759272	15-Jun-09	MMI	NAD83	623568	5802754	1196	Horsefly	7	5	0.05	980	2.5	30	390	0.81	0.25	0.25	3.59	0.25	1.36	6.50
759273	15-Jun-09	MMI	NAD83	623616	5802729	1203	Horsefly	22	5	0.05	1330	2.5	40	540	2.53	0.25	0.25	4.87	0.25	1.82	9.00
759274	15-Jun-09	MMI	NAD83	623646	5802694	1210	Horsefly	21	5	0.5	1810	2.5	5	10	2.42	0.25	2.50	6.63	0.25	0.23	0.17
759275	15-Jun-09	MMI	NAD83	623692	5802665	1214	Horsefly	28	5	0.6	3550	2.5	30	290	3.22	0.25	3.00	13.00	0.25	1.36	4.83
759276	15-Jun-09	MMI	NAD83	623745	5802659	1220	Horsefly	4	5	0.2	680	2.5	20	30	0.46	0.25	1.00	2.49	0.25	0.91	0.50
759277	15-Jun-09	MMI	NAD83	623785	5802642	1222	Horsefly	17	5	0.4	1460	2.5	90	40	1.96	0.25	2.00	5.35	0.25	4.09	0.67
759278	15-Jun-09	MMI	NAD83	623839	5802645	1227	Horsefly	11	5	0.2	1460	2.5	30	1230	1.27	0.25	1.00	5.35	0.25	1.36	20.50
759279	15-Jun-09	MMI	NAD83	623890	5802647	1232	Horsefly	18	5	0.4	4130	2.5	20	250	2.07	0.25	2.00	15.13	0.25	0.91	4.17
759280	15-Jun-09	MMI	NAD83	623939	5802645	1239	Horsefly	3	20	0.3	970	2.5	140	1130	0.35	1.00	1.50	3.55	0.25	6.36	18.83
759281	15-Jun-09	MMI	NAD83	623988	5802642	1246	Horsefly	22	5	0.2	1650	5	20	310	2.53	0.25	1.00	6.04	0.50	0.91	5.17
759282	15-Jun-09	MMI	NAD83	624034	5802622	1251	Horsefly	6	5	0.2	1080	2.5	60	20	0.69	0.25	1.00	3.96	0.25	2.73	0.33
759283	15-Jun-09	MMI	NAD83	624061	5802578	1255	Horsefly	30	5	0.3	1930	2.5	20	160	3.45	0.25	1.50	7.07	0.25	0.91	2.67
759284	15-Jun-09	MMI	NAD83	624074	5802529	1261	Horsefly	21	5	0.1	1630	16	5	30	2.42	0.25	0.50	5.97	1.60	0.23	0.50
759285	15-Jun-09	MMI	NAD83	624118	5802526	1268	Horsefly	2	10	0.05	560	8	200	7860	0.23	0.50	0.25	2.05	0.80	9.09	131.00
759286	15-Jun-09	MMI	NAD83	624158	5802482	1270	Horsefly	72	5	0.6	3840	2.5	5	60	8.29	0.25	3.00	14.07	0.25	0.23	1.00
759287	15-Jun-09	MMI	NAD83	624200	5802476	1273	Horsefly	45	5	0.3	1470	2.5	20	880	5.18	0.25	1.50	5.38	0.25	0.91	14.67
759288	15-Jun-09	MMI	NAD83	624247	5802452	1279	Horsefly	21	5	0.2	1000	2.5	50	430	2.42	0.25	1.00	3.66	0.25	2.27	7.17
759289	15-Jun-09	MMI	NAD83	624280	5802414	1283	Horsefly	4	10	0.05	1560	2.5	260	7350	0.46	0.50	0.25	5.71	0.25	11.82	122.50
759290	15-Jun-09	MMI	NAD83	624314	5802380	1283	Horsefly	26	5	0.8	3670	2.5	5	10	2.99	0.25	4.00	13.44	0.25	0.23	0.17
759291	15-Jun-09	MMI	NAD83	624363	5802363	1285	Horsefly	20	5	0.3	1730	2.5	20	140	2.30	0.25	1.50	6.34	0.25	0.91	2.33
759292	15-Jun-09	MMI	NAD83	624412	5802359	1289	Horsefly	18	5	0.2	2730	2.5	20	140	2.07	0.25	1.00	10.00	0.25	0.91	2.33
759293	15-Jun-09	MMI	NAD83	624463	5802352	1293	Horsefly	9	5	0.1	1460	2.5	30	290	1.04	0.25	0.50	5.35	0.25	1.36	4.83
759294	15-Jun-09	MMI	NAD83	624509	5802335	1294	Horsefly	8	5	0.1	1150	2.5	80	440	0.92	0.25	0.50	4.21	0.25	3.64	7.33
759295	15-Jun-09	MMI	NAD83	624552	5802311	1292	Horsefly	14	5	0.2	1950	2.5	30	1150	1.61	0.25	1.00	7.14	0.25	1.36	19.17
759296	15-Jun-09	MMI	NAD83	624590	5802288	1289	Horsefly	21	5	0.2	1050	2.5	20	80	2.42	0.25	1.00	3.85	0.25	0.91	1.33

## Appendix 1

## Sample Location and Selected Analytical Results

Sample No.	Date	Type	Datum	Easting	Northing	Elev.	Area	Ag (ppb)	As (ppb)	Au (ppb)	Cu (ppb)	Mo (ppb)	Pb (ppb)	Zn (ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
759297	15-Jun-09	MMI	NAD83	624636	5802255	1285	Horsefly	27	5	0.3	1390	2.5	5	20	3.11	0.25	1.50	5.09	0.25	0.23	0.33
759298	15-Jun-09	MMI	NAD83	624675	5802217	1281	Horsefly	27	5	0.3	2070	2.5	5	210	3.11	0.25	1.50	7.58	0.25	0.23	3.50
759299	15-Jun-09	MMI	NAD83	624697	5802179	1278	Horsefly	28	5	0.1	2770	2.5	5	270	3.22	0.25	0.50	10.15	0.25	0.23	4.50
759300	15-Jun-09	MMI	NAD83	624739	5802146	1273	Horsefly	53	5	0.1	7170	26	40	110	6.10	0.25	0.50	26.26	2.60	1.82	1.83
759301	15-Jun-09	MMI	NAD83	624775	5802191	1276	Horsefly	50	5	0.2	4200	26	20	740	5.75	0.25	1.00	15.38	2.60	0.91	12.33
759302	15-Jun-09	MMI	NAD83	624795	5802233	1279	Horsefly	34	5	0.2	620	2.5	5	70	3.91	0.25	1.00	2.27	0.25	0.23	1.17
759303	15-Jun-09	MMI	NAD83	624833	5802262	1281	Horsefly	4	5	0.05	540	11	50	1760	0.46	0.25	0.25	1.98	1.10	2.27	29.33
759304	15-Jun-09	MMI	NAD83	624867	5802298	1279	Horsefly	47	5	0.1	1390	2.5	40	150	5.41	0.25	0.50	5.09	0.25	1.82	2.50
759305	16-Jun-09	MMI	NAD83	624907	5802333	1273	Horsefly	20	5	0.2	3200	11	10	50	2.30	0.25	1.00	11.72	1.10	0.45	0.83
759306	16-Jun-09	MMI	NAD83	624945	5802368	1272	Horsefly	7	5	0.1	940	2.5	90	150	0.81	0.25	0.50	3.44	0.25	4.09	2.50
759307	16-Jun-09	MMI	NAD83	625003	5802372	1272	Horsefly	145	5	0.2	710	2.5	40	490	16.69	0.25	1.00	2.60	0.25	1.82	8.17
759308	16-Jun-09	MMI	NAD83	625051	5802372	1270	Horsefly	34	5	0.2	770	2.5	5	50	3.91	0.25	1.00	2.82	0.25	0.23	0.83
759309	16-Jun-09	MMI	NAD83	625103	5802382	1269	Horsefly	15	5	0.05	690	2.5	30	1470	1.73	0.25	0.25	2.53	0.25	1.36	24.50
759310	16-Jun-09	MMI	NAD83	625143	5802408	1271	Horsefly	24	5	0.2	1110	2.5	90	250	2.76	0.25	1.00	4.07	0.25	4.09	4.17
759311	16-Jun-09	MMI	NAD83	625191	5802424	1272	Horsefly	40	5	0.1	530	2.5	90	270	4.60	0.25	0.50	1.94	0.25	4.09	4.50
759312	16-Jun-09	MMI	NAD83	625233	5802419	1273	Horsefly	1	5	0.05	300	2.5	20	1890	0.12	0.25	0.25	1.10	0.25	0.91	31.50
759313	16-Jun-09	MMI	NAD83	625283	5802400	1274	Horsefly	2	5	0.05	570	27	10	540	0.23	0.25	0.25	2.09	2.70	0.45	9.00
759314	16-Jun-09	MMI	NAD83	625337	5802395	1277	Horsefly	44	5	0.4	2800	2.5	5	210	5.06	0.25	2.00	10.26	0.25	0.23	3.50
759315	16-Jun-09	MMI	NAD83	625386	5802410	1281	Horsefly	71	5	0.1	610	2.5	5	40	8.17	0.25	0.50	2.23	0.25	0.23	0.67
759316	16-Jun-09	MMI	NAD83	625435	5802417	1284	Horsefly	5	5	0.05	1550	45	20	120	0.58	0.25	0.25	5.68	4.50	0.91	2.00
759317	16-Jun-09	MMI	NAD83	625490	5802420	1287	Horsefly	22	5	0.3	2540	8	10	280	2.53	0.25	1.50	9.30	0.80	0.45	4.67
759318	16-Jun-09	MMI	NAD83	625532	5802418	1289	Horsefly	37	5	0.05	540	2.5	70	460	4.26	0.25	0.25	1.98	0.25	3.18	7.67
759319	16-Jun-09	MMI	NAD83	625585	5802436	1292	Horsefly	44	5	0.05	910	2.5	10	540	5.06	0.25	0.25	3.33	0.25	0.45	9.00
759320	16-Jun-09	MMI	NAD83	625624	5802445	1295	Horsefly	44	5	0.05	1000	7	5	470	5.06	0.25	0.25	3.66	0.70	0.23	7.83
759321	16-Jun-09	MMI	NAD83	625671	5802467	1298	Horsefly	26	5	0.3	1400	2.5	20	270	2.99	0.25	1.50	5.13	0.25	0.91	4.50
759322	16-Jun-09	MMI	NAD83	625719	5802486	1299	Horsefly	44	5	0.2	600	6	50	60	5.06	0.25	1.00	2.20	0.60	2.27	1.00
759323	16-Jun-09	MMI	NAD83	625769	5802486	1296	Horsefly	17	5	0.5	1090	13	5	40	1.96	0.25	2.50	3.99	1.30	0.23	0.67
759324	16-Jun-09	MMI	NAD83	625816	5802501	1294	Horsefly	24	5	0.2	1130	2.5	30	140	2.76	0.25	1.00	4.14	0.25	1.36	2.33
759325	16-Jun-09	MMI	NAD83	625862	5802521	1291	Horsefly	84	5	0.4	1960	8	5	20	9.67	0.25	2.00	7.18	0.80	0.23	0.33
759326	16-Jun-09	MMI	NAD83	625906	5802544	1290	Horsefly	45	5	0.2	2230	9	10	180	5.18	0.25	1.00	8.17	0.90	0.45	3.00
759327	16-Jun-09	MMI	NAD83	625947	5802568	1286	Horsefly	8	20	0.1	1560	2.5	70	1130	0.92	1.00	0.50	5.71	0.25	3.18	18.83
759328	16-Jun-09	MMI	NAD83	626003	5802546	1283	Horsefly	41	10	0.3	3030	12	20	360	4.72	0.50	1.50	11.10	1.20	0.91	6.00
759329	16-Jun-09	MMI	NAD83	626033	5802520	1280	Horsefly	40	5	0.1	2130	22	10	280	4.60	0.25	0.50	7.80	2.20	0.45	4.67
759330	16-Jun-09	MMI	NAD83	626066	5802482	1276	Horsefly	37	5	0.3	2230	8	5	230	4.26	0.25	1.50	8.17	0.80	0.23	3.83
759331	16-Jun-09	MMI	NAD83	626115	5802444	1275	Horsefly	61	5	0.2	1260	2.5	5	170	7.02	0.25	1.00	4.62	0.25	0.23	2.83
759332	16-Jun-09	MMI	NAD83	626153	5802433	1272	Horsefly	28	5	0.3	2350	2.5	20	540	3.22	0.25	1.50	8.61	0.25	0.91	9.00
759333	16-Jun-09	MMI	NAD83	626209	5802433	1271	Horsefly	79	10	0.2	850	2.5	30	40	9.09	0.50	1.00	3.11	0.25	1.36	0.67
759334	16-Jun-09	MMI	NAD83	626249	5802456	1275	Horsefly	38	5	1.1	500	2.5	5	220	4.37	0.25	5.50	1.83	0.25	0.23	3.67
759335	16-Jun-09	MMI	NAD83	626300	5802485	1283	Horsefly	42	5	0.2	1590	16	10	220	4.83	0.25	1.00	5.82	1.60	0.45	3.67
759336	16-Jun-09	MMI	NAD83	626348	5802506	1291	Horsefly	59	5	0.3	3560	50	10	300	6.79	0.25	1.50	13.04	5.00	0.45	5.00
759337	16-Jun-09	MMI	NAD83	626374	5802545	1295	Horsefly	20	5	0.4	3480	2.5	20	250	2.30	0.25	2.00	12.75	0.25	0.91	4.17
759338	16-Jun-09	MMI	NAD83	626411	5802564	1296	Horsefly	34	5	0.2	550	2.5	30	800	3.91	0.25	1.00	2.01	0.25	1.36	13.33
759339	16-Jun-09	MMI	NAD83	626453	5802608	1303	Horsefly	38	5	0.4	1520	2.5	40	40	4.37	0.25	2.00	5.57	0.25	1.82	0.67
759340	16-Jun-09	MMI	NAD83	626505	5802625	1314	Horsefly	35	5	0.1	450	2.5	70	210	4.03	0.25	0.50	1.65	0.25	3.18	3.50

## Appendix 1

## Sample Location and Selected Analytical Results

Sample								Ag	As	Au	Cu	Mo	Pb	Zn							
No.	Date	Type	Datum	Easting	Northing	Elev.	Area	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR	
759341	16-Jun-09	MMI	NAD83	626548	5802622	1321	Horsefly	12	5	0.05	140	2.5	5	210	1.38	0.25	0.25	0.51	0.25	0.23	3.50
759342	16-Jun-09	MMI	NAD83	626555	5802578	1328	Horsefly	23	10	0.1	1000	2.5	100	2150	2.65	0.50	0.50	3.66	0.25	4.55	35.83
759343	16-Jun-09	MMI	NAD83	626559	5802520	1336	Horsefly	77	10	0.5	2150	2.5	30	130	8.86	0.50	2.50	7.88	0.25	1.36	2.17
759344	16-Jun-09	MMI	NAD83	626555	5802479	1339	Horsefly	73	10	0.3	1270	2.5	20	410	8.40	0.50	1.50	4.65	0.25	0.91	6.83
759345	16-Jun-09	MMI	NAD83	626559	5802426	1344	Horsefly	66	5	0.3	4220	87	5	370	7.59	0.25	1.50	15.46	8.70	0.23	6.17
759346	16-Jun-09	MMI	NAD83	626568	5802377	1348	Horsefly	45	5	0.05	670	8	30	180	5.18	0.25	0.25	2.45	0.80	1.36	3.00
759347	16-Jun-09	MMI	NAD83	626612	5802373	1357	Horsefly	57	5	0.1	620	6	40	190	6.56	0.25	0.50	2.27	0.60	1.82	3.17
759348	16-Jun-09	MMI	NAD83	626660	5802387	1365	Horsefly	66	10	0.1	720	6	80	500	7.59	0.50	0.50	2.64	0.60	3.64	8.33
759349	16-Jun-09	MMI	NAD83	626707	5802372	1372	Horsefly	13	5	0.05	980	2.5	40	760	1.50	0.25	0.25	3.59	0.25	1.82	12.67
759350	16-Jun-09	MMI	NAD83	626752	5802348	1377	Horsefly	21	20	0.3	2780	17	10	1170	2.42	1.00	1.50	10.18	1.70	0.45	19.50
759351	16-Jun-09	MMI	NAD83	626807	5802347	1383	Horsefly	65	5	0.4	1770	6	5	10	7.48	0.25	2.00	6.48	0.60	0.23	0.17
759352	16-Jun-09	MMI	NAD83	626855	5802356	1389	Horsefly	28	5	0.2	2960	7	5	200	3.22	0.25	1.00	10.84	0.70	0.23	3.33
759353	16-Jun-09	MMI	NAD83	626903	5802365	1395	Horsefly	26	10	0.05	680	2.5	60	620	2.99	0.50	0.25	2.49	0.25	2.73	10.33
759354	16-Jun-09	MMI	NAD83	626945	5802337	1402	Horsefly	14	5	0.05	690	2.5	60	1490	1.61	0.25	0.25	2.53	0.25	2.73	24.83
759355	16-Jun-09	MMI	NAD83	626991	5802315	1408	Horsefly	38	5	0.05	700	2.5	40	1110	4.37	0.25	0.25	2.56	0.25	1.82	18.50
759356	16-Jun-09	MMI	NAD83	627040	5802326	1415	Horsefly	19	20	0.2	2310	7	5	140	2.19	1.00	1.00	8.46	0.70	0.23	2.33
759357	16-Jun-09	MMI	NAD83	627089	5802334	1419	Horsefly	17	20	0.1	3220	10	60	3840	1.96	1.00	0.50	11.79	1.00	2.73	64.00
759358	16-Jun-09	MMI	NAD83	627140	5802348	1423	Horsefly	22	5	0.05	2040	2.5	40	1990	2.53	0.25	0.25	7.47	0.25	1.82	33.17
759359	16-Jun-09	MMI	NAD83	627184	5802352	1428	Horsefly	1	5	0.05	390	2.5	5	310	0.12	0.25	0.25	1.43	0.25	0.23	5.17
759360	16-Jun-09	MMI	NAD83	627238	5802328	1429	Horsefly	67	5	0.05	1560	19	10	140	7.71	0.25	0.25	5.71	1.90	0.45	2.33
759361	16-Jun-09	MMI	NAD83	627292	5802324	1433	Horsefly	29	5	0.05	850	2.5	70	330	3.34	0.25	0.25	3.11	0.25	3.18	5.50
759362	16-Jun-09	MMI	NAD83	627338	5802338	1435	Horsefly	26	5	0.05	1410	2.5	50	80	2.99	0.25	0.25	5.16	0.25	2.27	1.33
759363	16-Jun-09	MMI	NAD83	627388	5802357	1436	Horsefly	75	5	0.1	1180	10	30	740	8.63	0.25	0.50	4.32	1.00	1.36	12.33
759364	16-Jun-09	MMI	NAD83	627435	5802373	1436	Horsefly	6	5	0.05	320	6	20	150	0.69	0.25	0.25	1.17	0.60	0.91	2.50
759365	16-Jun-09	MMI	NAD83	627481	5802395	1441	Horsefly	28	5	0.4	6140	30	5	340	3.22	0.25	2.00	22.49	3.00	0.23	5.67
759366	16-Jun-09	MMI	NAD83	627527	5802418	1444	Horsefly	13	5	0.05	810	2.5	90	570	1.50	0.25	0.25	2.97	0.25	4.09	9.50
759367	16-Jun-09	MMI	NAD83	627574	5802431	1445	Horsefly	12	5	0.05	1000	2.5	70	1080	1.38	0.25	0.25	3.66	0.25	3.18	18.00
759368	16-Jun-09	MMI	NAD83	627625	5802439	1444	Horsefly	8	5	0.5	1940	2.5	5	50	0.92	0.25	2.50	7.11	0.25	0.23	0.83
759369	16-Jun-09	MMI	NAD83	627674	5802449	1445	Horsefly	49	10	0.4	3630	2.5	50	560	5.64	0.50	2.00	13.30	0.25	2.27	9.33
759370	16-Jun-09	MMI	NAD83	627722	5802458	1446	Horsefly	66	5	0.1	830	2.5	80	570	7.59	0.25	0.50	3.04	0.25	3.64	9.50
759371	16-Jun-09	MMI	NAD83	627776	5802464	1448	Horsefly	36	5	0.05	1580	2.5	100	2380	4.14	0.25	0.25	5.79	0.25	4.55	39.67
759372	16-Jun-09	MMI	NAD83	627821	5802473	1451	Horsefly	23	5	0.05	750	2.5	60	1360	2.65	0.25	0.25	2.75	0.25	2.73	22.67
759373	16-Jun-09	MMI	NAD83	627872	5802488	1453	Horsefly	199	10	0.2	4140	21	5	19400	22.90	0.50	1.00	15.16	2.10	0.23	323.33
759374	16-Jun-09	MMI	NAD83	627920	5802487	1453	Horsefly	251	10	0.4	2630	36	30	900	28.88	0.50	2.00	9.63	3.60	1.36	15.00
759375	16-Jun-09	MMI	NAD83	627971	5802487	1457	Horsefly	78	10	0.3	4020	23	10	320	8.98	0.50	1.50	14.73	2.30	0.45	5.33
759376	16-Jun-09	MMI	NAD83	628013	5802462	1453	Horsefly	67	5	0.4	1260	15	5	640	7.71	0.25	2.00	4.62	1.50	0.23	10.67
759377	16-Jun-09	MMI	NAD83	628051	5802425	1463	Horsefly	25	5	0.1	900	2.5	40	490	2.88	0.25	0.50	3.30	0.25	1.82	8.17
759378	16-Jun-09	MMI	NAD83	628092	5802394	1466	Horsefly	41	5	0.05	740	2.5	70	890	4.72	0.25	0.25	2.71	0.25	3.18	14.83
759379	16-Jun-09	MMI	NAD83	628136	5802367	1469	Horsefly	18	10	0.2	4130	2.5	120	890	2.07	0.50	1.00	15.13	0.25	5.45	14.83
759380	16-Jun-09	MMI	NAD83	628181	5802355	1475	Horsefly	59	5	0.1	1860	2.5	80	500	6.79	0.25	0.50	6.81	0.25	3.64	8.33
759381	16-Jun-09	MMI	NAD83	628232	5802370	1480	Horsefly	30	10	0.3	3960	2.5	40	130	3.45	0.50	1.50	14.51	0.25	1.82	2.17
759382	16-Jun-09	MMI	NAD83	628277	5802398	1486	Horsefly	25	10	0.2	2360	2.5	60	120	2.88	0.50	1.00	8.64	0.25	2.73	2.00
759383	16-Jun-09	MMI	NAD83	628324	5802406	1492	Horsefly	29	10	0.1	4220	20	10	260	3.34	0.50	0.50	15.46	2.00	0.45	4.33
759384	16-Jun-09	MMI	NAD83	628371	5802419	1497	Horsefly	32	5	0.3	1960	2.5	40	40	3.68	0.25	1.50	7.18	0.25	1.82	0.67

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
759385	16-Jun-09	MMI	NAD83	628417	5802428	1504	Horsefly	30	5	0.4	5330	12	20	420	3.45	0.25	2.00	19.52	1.20	0.91	7.00
759386	16-Jun-09	MMI	NAD83	628472	5802440	1508	Horsefly	9	5	0.3	1610	2.5	40	30	1.04	0.25	1.50	5.90	0.25	1.82	0.50
759387	16-Jun-09	MMI	NAD83	628521	5802453	1513	Horsefly	24	5	0.3	2000	14	40	390	2.76	0.25	1.50	7.33	1.40	1.82	6.50
759388	16-Jun-09	MMI	NAD83	628570	5802453	1518	Horsefly	3	5	0.05	610	2.5	100	5130	0.35	0.25	0.25	2.23	0.25	4.55	85.50
759389	16-Jun-09	MMI	NAD83	628620	5802459	1520	Horsefly	8	5	0.05	780	2.5	60	2220	0.92	0.25	0.25	2.86	0.25	2.73	37.00
759390	16-Jun-09	MMI	NAD83	628673	5802450	1520	Horsefly	122	5	0.3	2290	13	10	20	14.04	0.25	1.50	8.39	1.30	0.45	0.33
759391	16-Jun-09	MMI	NAD83	628721	5802445	1524	Horsefly	143	5	0.2	1400	46	10	10	16.46	0.25	1.00	5.13	4.60	0.45	0.17
759392	16-Jun-09	MMI	NAD83	628769	5802442	1527	Horsefly	20	5	0.05	1100	19	70	680	2.30	0.25	0.25	4.03	1.90	3.18	11.33
759393	16-Jun-09	MMI	NAD83	628809	5802428	1532	Horsefly	55	10	0.3	5010	22	40	410	6.33	0.50	1.50	18.35	2.20	1.82	6.83
759394	16-Jun-09	MMI	NAD83	628791	5802389	1539	Horsefly	63	10	0.3	3410	2.5	100	730	7.25	0.50	1.50	12.49	0.25	4.55	12.17
759395	16-Jun-09	MMI	NAD83	628752	5802351	1544	Horsefly	86	10	0.9	2310	2.5	30	890	9.90	0.50	4.50	8.46	0.25	1.36	14.83
762477	13-Aug-09	MMI	NAD83	652455	5792766	1041	Crooked Lake	48	5	0.05	1270	22	460	2760	5.52	0.25	0.25	4.65	2.20	20.91	46.00
762478	13-Aug-09	MMI	NAD83	652404	5792777	1037	Crooked Lake	20	5	0.05	570	5	510	3020	2.30	0.25	0.25	2.09	0.50	23.18	50.33
762479	13-Aug-09	MMI	NAD83	652359	5792803	1036	Crooked Lake	150	10	0.3	520	11	430	810	17.26	0.50	1.50	1.90	1.10	19.55	13.50
762480	13-Aug-09	MMI	NAD83	652312	5792825	1035	Crooked Lake	63	40	0.8	840	39	820	1390	7.25	2.00	4.00	3.08	3.90	37.27	23.17
762481	13-Aug-09	MMI	NAD83	652266	5792847	1036	Crooked Lake	51	30	0.3	690	31	330	1400	5.87	1.50	1.50	2.53	3.10	15.00	23.33
762482	13-Aug-09	MMI	NAD83	652215	5792849	1033	Crooked Lake	87	30	0.3	780	55	540	1850	10.01	1.50	1.50	2.86	5.50	24.55	30.83
762483	13-Aug-09	MMI	NAD83	652166	5792833	1035	Crooked Lake	74	30	0.4	630	48	450	1470	8.52	1.50	2.00	2.31	4.80	20.45	24.50
762484	13-Aug-09	MMI	NAD83	652116	5792829	1035	Crooked Lake	59	30	0.2	500	20	530	1180	6.79	1.50	1.00	1.83	2.00	24.09	19.67
762485	13-Aug-09	MMI	NAD83	652065	5792831	1034	Crooked Lake	148	5	0.4	470	12	440	1270	17.03	0.25	2.00	1.72	1.20	20.00	21.17
762486	13-Aug-09	MMI	NAD83	652015	5792820	1029	Crooked Lake	93	5	0.6	490	16	310	690	10.70	0.25	3.00	1.79	1.60	14.09	11.50
762487	13-Aug-09	MMI	NAD83	651968	5792799	1027	Crooked Lake	72	10	0.05	390	42	300	2030	8.29	0.50	0.25	1.43	4.20	13.64	33.83
762488	13-Aug-09	MMI	NAD83	651921	5792780	1028	Crooked Lake	21	20	0.05	160	8	230	780	2.42	1.00	0.25	0.59	0.80	10.45	13.00
762489	13-Aug-09	MMI	NAD83	651873	5792766	1029	Crooked Lake	56	10	0.05	320	14	550	1260	6.44	0.50	0.25	1.17	1.40	25.00	21.00
762490	13-Aug-09	MMI	NAD83	651825	5792746	1032	Crooked Lake	39	5	0.05	740	26	360	590	4.49	0.25	0.25	2.71	2.60	16.36	9.83
762491	13-Aug-09	MMI	NAD83	651799	5792703	1033	Crooked Lake	58	10	0.5	650	8	560	700	6.67	0.50	2.50	2.38	0.80	25.45	11.67
762492	13-Aug-09	MMI	NAD83	651773	5792660	1040	Crooked Lake	146	10	0.3	410	12	310	960	16.80	0.50	1.50	1.50	1.20	14.09	16.00
762493	13-Aug-09	MMI	NAD83	651729	5792633	1043	Crooked Lake	174	5	0.1	190	2.5	360	1610	20.02	0.25	0.50	0.70	0.25	16.36	26.83
762494	13-Aug-09	MMI	NAD83	651690	5792602	1040	Crooked Lake	270	5	0.4	930	2.5	390	480	31.07	0.25	2.00	3.41	0.25	17.73	8.00
762495	13-Aug-09	MMI	NAD83	651659	5792563	1048	Crooked Lake	131	5	0.1	510	7	380	1090	15.07	0.25	0.50	1.87	0.70	17.27	18.17
762496	13-Aug-09	MMI	NAD83	651643	5792515	1052	Crooked Lake	103	10	0.2	890	15	280	950	11.85	0.50	1.00	3.26	1.50	12.73	15.83
762497	13-Aug-09	MMI	NAD83	651627	5792467	1060	Crooked Lake	34	40	0.3	430	35	360	980	3.91	2.00	1.50	1.58	3.50	16.36	16.33
762498	13-Aug-09	MMI	NAD83	651608	5792421	1063	Crooked Lake	63	5	0.05	490	2.5	270	1180	7.25	0.25	0.25	1.79	0.25	12.27	19.67
762499	13-Aug-09	MMI	NAD83	651585	5792375	1063	Crooked Lake	30	5	0.2	340	2.5	710	1660	3.45	0.25	1.00	1.25	0.25	32.27	27.67
762500	13-Aug-09	MMI	NAD83	651552	5792338	1065	Crooked Lake	128	20	0.4	530	9	200	310	14.73	1.00	2.00	1.94	0.90	9.09	5.17
974001	30-Jul-09	MMI	NAD83	655002	5789748	1091	Crooked Lake	8	10	0.05	970	9	310	1190	0.92	0.50	0.25	3.55	0.90	14.09	19.83
974002	30-Jul-09	MMI	NAD83	654999	5789800	1087	Crooked Lake	45	5	0.05	260	2.5	340	190	5.18	0.25	0.25	0.95	0.25	15.45	3.17
974003	30-Jul-09	MMI	NAD83	655000	5789848	1080	Crooked Lake	191	5	0.2	740	2.5	20	160	21.98	0.25	1.00	2.71	0.25	0.91	2.67
974004	30-Jul-09	MMI	NAD83	655001	5789900	1075	Crooked Lake	2	5	0.05	1440	21	120	290	0.23	0.25	0.25	5.27	2.10	5.45	4.83
974005	30-Jul-09	MMI	NAD83	655001	5789950	1075	Crooked Lake	9	5	0.05	1020	47	160	30	1.04	0.25	0.25	3.74	4.70	7.27	0.50
974006	30-Jul-09	MMI	NAD83	655002	5790002	1073	Crooked Lake	2	5	0.05	1340	68	210	120	0.23	0.25	0.25	4.91	6.80	9.55	2.00
974007	30-Jul-09	MMI	NAD83	654999	5790051	1087	Crooked Lake	76	5	0.2	680	10	290	580	8.75	0.25	1.00	2.49	1.00	13.18	9.67
974008	30-Jul-09	MMI	NAD83	654999	5790101	1097	Crooked Lake	220	5	0.05	400	10	150	380	25.32	0.25	0.25	1.47	1.00	6.82	6.33
974009	30-Jul-09	MMI	NAD83	655002	5790151	1109	Crooked Lake	152	5	0.1	290	15	400	300	17.49	0.25	0.50	1.06	1.50	18.18	5.00

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974010	30-Jul-09	MMI	NAD83	655003	5790203	1122	Crooked Lake	18	5	0.05	1590	2.5	150	40	2.07	0.25	0.25	5.82	0.25	6.82	0.67
974011	30-Jul-09	MMI	NAD83	655000	5790249	1136	Crooked Lake	32	20	0.05	550	12	160	30	3.68	1.00	0.25	2.01	1.20	7.27	0.50
974012	30-Jul-09	MMI	NAD83	655001	5790300	1148	Crooked Lake	151	30	0.05	980	2.5	370	390	17.38	1.50	0.25	3.59	0.25	16.82	6.50
974013	30-Jul-09	MMI	NAD83	655000	5790350	1157	Crooked Lake	45	5	0.05	790	12	200	220	5.18	0.25	0.25	2.89	1.20	9.09	3.67
974014	30-Jul-09	MMI	NAD83	655000	5790399	1163	Crooked Lake	157	30	0.05	1650	5	360	240	18.07	1.50	0.25	6.04	0.50	16.36	4.00
974015	30-Jul-09	MMI	NAD83	654999	5790450	1170	Crooked Lake	113	5	0.05	400	7	520	500	13.00	0.25	0.25	1.47	0.70	23.64	8.33
974016	30-Jul-09	MMI	NAD83	655000	5790501	1169	Crooked Lake	51	5	0.05	190	8	530	640	5.87	0.25	0.25	0.70	0.80	24.09	10.67
974017	30-Jul-09	MMI	NAD83	655000	5790550	1172	Crooked Lake	37	5	0.2	550	12	380	90	4.26	0.25	1.00	2.01	1.20	17.27	1.50
974018	30-Jul-09	MMI	NAD83	655001	5790601	1171	Crooked Lake	70	5	0.05	720	14	290	410	8.06	0.25	0.25	2.64	1.40	13.18	6.83
974019	30-Jul-09	MMI	NAD83	655000	5790650	1173	Crooked Lake	195	5	0.2	470	7	450	260	22.44	0.25	1.00	1.72	0.70	20.45	4.33
974020	30-Jul-09	MMI	NAD83	655001	5790701	1178	Crooked Lake	72	5	0.1	360	13	660	140	8.29	0.25	0.50	1.32	1.30	30.00	2.33
974021	30-Jul-09	MMI	NAD83	654998	5790750	1177	Crooked Lake	62	10	0.2	1130	7	330	380	7.13	0.50	1.00	4.14	0.70	15.00	6.33
974022	30-Jul-09	MMI	NAD83	655000	5790799	1180	Crooked Lake	105	5	0.2	740	20	470	190	12.08	0.25	1.00	2.71	2.00	21.36	3.17
974023	30-Jul-09	MMI	NAD83	655000	5790849	1178	Crooked Lake	123	5	0.2	490	8	400	280	14.15	0.25	1.00	1.79	0.80	18.18	4.67
974024	30-Jul-09	MMI	NAD83	655000	5790899	1171	Crooked Lake	86	5	0.1	230	6	260	290	9.90	0.25	0.50	0.84	0.60	11.82	4.83
974025	30-Jul-09	MMI	NAD83	654999	5790951	1167	Crooked Lake	94	5	0.05	410	2.5	330	410	10.82	0.25	0.25	1.50	0.25	15.00	6.83
974026	30-Jul-09	MMI	NAD83	655000	5791000	1166	Crooked Lake	51	5	0.05	250	11	370	230	5.87	0.25	0.25	0.92	1.10	16.82	3.83
974027	30-Jul-09	MMI	NAD83	655001	5791051	1171	Crooked Lake	63	5	0.05	520	15	340	680	7.25	0.25	0.25	1.90	1.50	15.45	11.33
974028	30-Jul-09	MMI	NAD83	655000	5791100	1168	Crooked Lake	31	5	0.05	320	6	350	940	3.57	0.25	0.25	1.17	0.60	15.91	15.67
974029	30-Jul-09	MMI	NAD83	654999	5791154	1161	Crooked Lake	100	5	0.05	250	13	210	670	11.51	0.25	0.25	0.92	1.30	9.55	11.17
974030	30-Jul-09	MMI	NAD83	655000	5791199	1155	Crooked Lake	58	5	0.1	270	13	220	320	6.67	0.25	0.50	0.99	1.30	10.00	5.33
974031	30-Jul-09	MMI	NAD83	655000	5791251	1143	Crooked Lake	46	5	0.3	300	14	220	370	5.29	0.25	1.50	1.10	1.40	10.00	6.17
974032	30-Jul-09	MMI	NAD83	655000	5791300	1137	Crooked Lake	39	10	0.05	350	10	400	1100	4.49	0.50	0.25	1.28	1.00	18.18	18.33
974033	30-Jul-09	MMI	NAD83	655000	5791350	1125	Crooked Lake	42	5	0.1	320	7	310	420	4.83	0.25	0.50	1.17	0.70	14.09	7.00
974034	30-Jul-09	MMI	NAD83	654999	5791400	1110	Crooked Lake	19	5	0.05	680	8	210	260	2.19	0.25	0.25	2.49	0.80	9.55	4.33
974035	30-Jul-09	MMI	NAD83	655000	5791449	1111	Crooked Lake	32	5	0.05	150	10	480	660	3.68	0.25	0.25	0.55	1.00	21.82	11.00
974036	30-Jul-09	MMI	NAD83	655000	5791501	1104	Crooked Lake	45	5	0.1	340	7	390	250	5.18	0.25	0.50	1.25	0.70	17.73	4.17
974037	30-Jul-09	MMI	NAD83	654999	5791550	1092	Crooked Lake	74	5	0.05	410	8	210	190	8.52	0.25	0.25	1.50	0.80	9.55	3.17
974038	30-Jul-09	MMI	NAD83	655000	5791600	1083	Crooked Lake	20	5	0.05	470	2.5	520	270	2.30	0.25	0.25	1.72	0.25	23.64	4.50
974039	30-Jul-09	MMI	NAD83	655001	5791649	1072	Crooked Lake	34	20	0.4	1350	7	310	220	3.91	1.00	2.00	4.95	0.70	14.09	3.67
974040	30-Jul-09	MMI	NAD83	655002	5791700	1061	Crooked Lake	53	5	0.05	260	8	540	400	6.10	0.25	0.25	0.95	0.80	24.55	6.67
974041	30-Jul-09	MMI	NAD83	655000	5791750	1056	Crooked Lake	32	5	0.05	260	8	390	880	3.68	0.25	0.25	0.95	0.80	17.73	14.67
974042	30-Jul-09	MMI	NAD83	654333	5793706	946	Crooked Lake	69	10	0.05	420	15	240	2000	7.94	0.50	0.25	1.54	1.50	10.91	33.33
974043	30-Jul-09	MMI	NAD83	654337	5793647	955	Crooked Lake	89	5	0.1	450	8	270	810	10.24	0.25	0.50	1.65	0.80	12.27	13.50
974044	30-Jul-09	MMI	NAD83	654329	5793602	955	Crooked Lake	45	20	0.05	320	16	230	1060	5.18	1.00	0.25	1.17	1.60	10.45	17.67
974045	30-Jul-09	MMI	NAD83	654320	5793552	953	Crooked Lake	27	20	0.05	390	29	340	860	3.11	1.00	0.25	1.43	2.90	15.45	14.33
974046	30-Jul-09	MMI	NAD83	654310	5793500	950	Crooked Lake	24	30	0.1	250	26	230	470	2.76	1.50	0.50	0.92	2.60	10.45	7.83
974047	30-Jul-09	MMI	NAD83	654311	5793450	949	Crooked Lake	40	5	0.05	890	119	50	190	4.60	0.25	0.25	3.26	11.90	2.27	3.17
974048	30-Jul-09	MMI	NAD83	654308	5793404	948	Crooked Lake	3	5	0.05	820	18	90	320	0.35	0.25	0.25	3.00	1.80	4.09	5.33
974049	30-Jul-09	MMI	NAD83	654312	5793355	946	Crooked Lake	38	10	0.3	820	12	310	630	4.37	0.50	1.50	3.00	1.20	14.09	10.50
974050	30-Jul-09	MMI	NAD83	654337	5793313	950	Crooked Lake	23	10	1.1	1810	14	90	180	2.65	0.50	5.50	6.63	1.40	4.09	3.00
974051	30-Jul-09	MMI	NAD83	654379	5793278	950	Crooked Lake	51	10	0.3	880	7	330	290	5.87	0.50	1.50	3.22	0.70	15.00	4.83
974052	30-Jul-09	MMI	NAD83	654410	5793240	956	Crooked Lake	29	30	0.8	1760	11	280	240	3.34	1.50	4.00	6.45	1.10	12.73	4.00
974053	30-Jul-09	MMI	NAD83	654444	5793206	958	Crooked Lake	36	40	1.3	2430	9	920	280	4.14	2.00	6.50	8.90	0.90	41.82	4.67



## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974054	30-Jul-09	MMI	NAD83	654475	5793167	959	Crooked Lake	64	5	0.1	320	5	450	260	7.36	0.25	0.50	1.17	0.50	20.45	4.33
974055	30-Jul-09	MMI	NAD83	654504	5793123	964	Crooked Lake	82	5	0.5	280	7	320	30	9.44	0.25	2.50	1.03	0.70	14.55	0.50
974056	30-Jul-09	MMI	NAD83	654531	5793079	967	Crooked Lake	19	10	0.3	360	5	200	80	2.19	0.50	1.50	1.32	0.50	9.09	1.33
974057	30-Jul-09	MMI	NAD83	654556	5793042	968	Crooked Lake	58	30	2.2	2650	18	400	80	6.67	1.50	11.00	9.71	1.80	18.18	1.33
974058	30-Jul-09	MMI	NAD83	654567	5792992	966	Crooked Lake	56	5	0.1	170	10	280	580	6.44	0.25	0.50	0.62	1.00	12.73	9.67
974059	30-Jul-09	MMI	NAD83	654586	5792939	970	Crooked Lake	13	5	0.3	640	7	170	150	1.50	0.25	1.50	2.34	0.70	7.73	2.50
974060	30-Jul-09	MMI	NAD83	654598	5792897	974	Crooked Lake	38	5	0.1	460	7	410	160	4.37	0.25	0.50	1.68	0.70	18.64	2.67
974061	30-Jul-09	MMI	NAD83	654638	5792864	975	Crooked Lake	45	10	0.1	480	10	350	140	5.18	0.50	0.50	1.76	1.00	15.91	2.33
974878	13-Aug-09	MMI	NAD83	653599	5792893	1042	Crooked Lake	176	5	0.1	240	9	220	1890	20.25	0.25	0.50	0.88	0.90	10.00	31.50
974879	13-Aug-09	MMI	NAD83	653548	5792888	1045	Crooked Lake	70	5	0.05	190	20	310	1360	8.06	0.25	0.25	0.70	2.00	14.09	22.67
974880	13-Aug-09	MMI	NAD83	653499	5792878	1046	Crooked Lake	588	5	0.1	310	30	250	1890	67.66	0.25	0.50	1.14	3.00	11.36	31.50
974881	13-Aug-09	MMI	NAD83	653449	5792869	1048	Crooked Lake	530	5	0.4	790	9	240	1830	60.99	0.25	2.00	2.89	0.90	10.91	30.50
974882	13-Aug-09	MMI	NAD83	653398	5792865	1052	Crooked Lake	190	5	0.3	240	22	290	770	21.86	0.25	1.50	0.88	2.20	13.18	12.83
974883	13-Aug-09	MMI	NAD83	653348	5792855	1057	Crooked Lake	379	5	0.4	330	17	610	1650	43.61	0.25	2.00	1.21	1.70	27.73	27.50
974884	13-Aug-09	MMI	NAD83	653301	5792833	1059	Crooked Lake	285	5	0.4	480	30	460	440	32.80	0.25	2.00	1.76	3.00	20.91	7.33
974885	13-Aug-09	MMI	NAD83	653254	5792812	1062	Crooked Lake	772	5	0.9	1070	24	440	2380	88.84	0.25	4.50	3.92	2.40	20.00	39.67
974886	13-Aug-09	MMI	NAD83	653205	5792795	1064	Crooked Lake	392	10	0.3	1470	28	220	1100	45.11	0.50	1.50	5.38	2.80	10.00	18.33
974887	13-Aug-09	MMI	NAD83	653156	5792780	1062	Crooked Lake	166	20	0.5	1300	17	510	1350	19.10	1.00	2.50	4.76	1.70	23.18	22.50
974888	13-Aug-09	MMI	NAD83	653104	5792771	1059	Crooked Lake	311	5	0.6	540	20	660	880	35.79	0.25	3.00	1.98	2.00	30.00	14.67
974889	13-Aug-09	MMI	NAD83	653053	5792768	1057	Crooked Lake	215	10	0.5	410	23	340	1140	24.74	0.50	2.50	1.50	2.30	15.45	19.00
974890	13-Aug-09	MMI	NAD83	653002	5792760	1059	Crooked Lake	280	5	0.6	850	9	440	680	32.22	0.25	3.00	3.11	0.90	20.00	11.33
974891	13-Aug-09	MMI	NAD83	652952	5792749	1058	Crooked Lake	220	5	0.2	270	24	370	850	25.32	0.25	1.00	0.99	2.40	16.82	14.17
974892	13-Aug-09	MMI	NAD83	652903	5792735	1056	Crooked Lake	368	5	0.3	350	23	490	1250	42.35	0.25	1.50	1.28	2.30	22.27	20.83
974893	13-Aug-09	MMI	NAD83	652853	5792730	1058	Crooked Lake	185	5	0.3	490	17	610	2920	21.29	0.25	1.50	1.79	1.70	27.73	48.67
974894	13-Aug-09	MMI	NAD83	652802	5792721	1054	Crooked Lake	479	5	0.4	720	11	430	2200	55.12	0.25	2.00	2.64	1.10	19.55	36.67
974895	13-Aug-09	MMI	NAD83	652751	5792730	1051	Crooked Lake	260	20	0.7	2640	35	360	2490	29.92	1.00	3.50	9.67	3.50	16.36	41.50
974896	13-Aug-09	MMI	NAD83	652701	5792739	1047	Crooked Lake	85	10	0.2	2240	21	890	3640	9.78	0.50	1.00	8.21	2.10	40.45	60.67
974897	13-Aug-09	MMI	NAD83	652653	5792756	1047	Crooked Lake	279	5	0.3	4580	15	440	2980	32.11	0.25	1.50	16.78	1.50	20.00	49.67
974898	13-Aug-09	MMI	NAD83	652601	5792756	1044	Crooked Lake	6	5	0.05	2320	2.5	180	1160	0.69	0.25	0.25	8.50	0.25	8.18	19.33
974899	13-Aug-09	MMI	NAD83	652551	5792765	1044	Crooked Lake	84	10	0.4	550	22	380	3360	9.67	0.50	2.00	2.01	2.20	17.27	56.00
974900	13-Aug-09	MMI	NAD83	652503	5792783	1042	Crooked Lake	43	5	0.2	740	27	410	2660	4.95	0.25	1.00	2.71	2.70	18.64	44.33
<b>974977</b>	13-Aug-09	MMI	NAD83	651551	5792287	1072	Crooked Lake	<b>133</b>	<b>5</b>	<b>0.1</b>	<b>400</b>	<b>9</b>	<b>310</b>	<b>530</b>	15.30	0.25	0.50	1.47	0.90	14.09	8.83
<b>974978</b>	13-Aug-09	MMI	NAD83	651536	5792240	1070	Crooked Lake	<b>169</b>	<b>5</b>	<b>1.2</b>	<b>1120</b>	<b>8</b>	<b>150</b>	<b>540</b>	19.45	0.25	6.00	4.10	0.80	6.82	9.00
<b>974979</b>	13-Aug-09	MMI	NAD83	651519	5792189	1076	Crooked Lake	<b>209</b>	<b>5</b>	<b>1.1</b>	<b>1010</b>	<b>12</b>	<b>140</b>	<b>370</b>	24.05	0.25	5.50	3.70	1.20	6.36	6.17
<b>974980</b>	13-Aug-09	MMI	NAD83	651490	5792148	1080	Crooked Lake	<b>59</b>	<b>5</b>	<b>0.05</b>	<b>190</b>	<b>8</b>	<b>170</b>	<b>980</b>	6.79	0.25	0.25	0.70	0.80	7.73	16.33
<b>974981</b>	13-Aug-09	MMI	NAD83	651449	5792118	1086	Crooked Lake	<b>49</b>	<b>5</b>	<b>0.05</b>	<b>210</b>	<b>2.5</b>	<b>40</b>	<b>660</b>	5.64	0.25	0.25	0.77	0.25	1.82	11.00
<b>974982</b>	13-Aug-09	MMI	NAD83	651446	5792067	1091	Crooked Lake	<b>233</b>	<b>5</b>	<b>0.2</b>	<b>550</b>	<b>14</b>	<b>190</b>	<b>1100</b>	26.81	0.25	1.00	2.01	1.40	8.64	18.33
<b>974983</b>	13-Aug-09	MMI	NAD83	651482	5792032	1095	Crooked Lake	<b>205</b>	<b>20</b>	<b>0.1</b>	<b>220</b>	<b>13</b>	<b>230</b>	<b>1520</b>	23.59	1.00	0.50	0.81	1.30	10.45	25.33
<b>974984</b>	13-Aug-09	MMI	NAD83	651532	5792017	1098	Crooked Lake	<b>286</b>	<b>5</b>	<b>1</b>	<b>1370</b>	<b>67</b>	<b>80</b>	<b>30</b>	32.91	0.25	5.00	5.02	6.70	3.64	0.50
<b>974985</b>	13-Aug-09	MMI	NAD83	651575	5792042	1102	Crooked Lake	<b>202</b>	<b>5</b>	<b>0.9</b>	<b>1540</b>	<b>23</b>	<b>110</b>	<b>360</b>	23.25	0.25	4.50	5.64	2.30	5.00	6.00
<b>974986</b>	13-Aug-09	MMI	NAD83	651611	5792078	1106	Crooked Lake	<b>239</b>	<b>5</b>	<b>0.5</b>	<b>870</b>	<b>14</b>	<b>120</b>	<b>660</b>	27.50	0.25	2.50	3.19	1.40	5.45	11.00
<b>974987</b>	13-Aug-09	MMI	NAD83	651645	5792116	1108	Crooked Lake	<b>58</b>	<b>20</b>	<b>0.2</b>	<b>420</b>	<b>8</b>	<b>420</b>	<b>2050</b>	6.67	1.00	1.00	1.54	0.80	19.09	34.17
<b>974988</b>	13-Aug-09	MMI	NAD83	651696	5792120	1115	Crooked Lake	<b>209</b>	<b>5</b>	<b>0.4</b>	<b>430</b>	<b>6</b>	<b>330</b>	<b>1090</b>	24.05	0.25	2.00	1.58	0.60	15.00	18.17
<b>974989</b>	13-Aug-09	MMI	NAD83	651744	5792109	1120	Crooked Lake	<b>271</b>	<b>5</b>	<b>0.3</b>	<b>570</b>	<b>7</b>	<b>70</b>	<b>740</b>	31.19	0.25	1.50	2.09	0.70	3.18	12.33

## Appendix 1

## Sample Location and Selected Analytical Results

Sample No.	Date	Type	Datum	Easting	Northing	Elev.	Area	Ag (ppb)	As (ppb)	Au (ppb)	Cu (ppb)	Mo (ppb)	Pb (ppb)	Zn (ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
974990	13-Aug-09	MMI	NAD83	651796	5792104	1127	Crooked Lake	118	20	0.2	560	5	510	1160	13.58	1.00	1.00	2.05	0.50	23.18	19.33
974991	13-Aug-09	MMI	NAD83	651779	5792054	1128	Crooked Lake	349	5	0.5	480	16	20	190	40.16	0.25	2.50	1.76	1.60	0.91	3.17
974992	13-Aug-09	MMI	NAD83	651741	5792019	1133	Crooked Lake	228	20	0.2	340	16	220	740	26.24	1.00	1.00	1.25	1.60	10.00	12.33
974993	13-Aug-09	MMI	NAD83	651725	5791971	1140	Crooked Lake	23	80	0.1	390	13	600	2110	2.65	4.00	0.50	1.43	1.30	27.27	35.17
974994	13-Aug-09	MMI	NAD83	651730	5791921	1143	Crooked Lake	190	30	0.05	340	7	880	1720	21.86	1.50	0.25	1.25	0.70	40.00	28.67
974995	13-Aug-09	MMI	NAD83	651774	5791891	1151	Crooked Lake	663	5	1.7	720	23	230	190	76.29	0.25	8.50	2.64	2.30	10.45	3.17
974996	13-Aug-09	MMI	NAD83	651826	5791894	1158	Crooked Lake	285	20	0.3	710	12	270	1450	32.80	1.00	1.50	2.60	1.20	12.27	24.17
974997	13-Aug-09	MMI	NAD83	651862	5791930	1162	Crooked Lake	78	30	0.05	270	10	430	1440	8.98	1.50	0.25	0.99	1.00	19.55	24.00
974998	13-Aug-09	MMI	NAD83	651906	5791954	1166	Crooked Lake	106	20	0.2	270	8	460	3450	12.20	1.00	1.00	0.99	0.80	20.91	57.50
974999	13-Aug-09	MMI	NAD83	651939	5791916	1172	Crooked Lake	46	70	0.2	240	16	640	1160	5.29	3.50	1.00	0.88	1.60	29.09	19.33
974062	31-Jul-09	MMI	NAD83	654675	5792822	987	Bosk Lake	27	10	0.05	200	13	460	1650	3.11	0.50	0.25	0.73	1.30	20.91	27.50
974063	31-Jul-09	MMI	NAD83	654678	5792779	989	Bosk Lake	7	5	0.1	1200	17	790	2630	0.81	0.25	0.50	4.40	1.70	35.91	43.83
974064	31-Jul-09	MMI	NAD83	654671	5792726	990	Bosk Lake	16	5	0.05	510	2.5	620	160	1.84	0.25	0.25	1.87	0.25	28.18	2.67
974065	31-Jul-09	MMI	NAD83	654686	5792682	994	Bosk Lake	39	10	0.1	520	8	280	480	4.49	0.50	0.50	1.90	0.80	12.73	8.00
974066	31-Jul-09	MMI	NAD83	654706	5792627	999	Bosk Lake	15	5	0.6	930	49	170	290	1.73	0.25	3.00	3.41	4.90	7.73	4.83
974067	31-Jul-09	MMI	NAD83	654732	5792591	1006	Bosk Lake	22	5	0.5	770	19	210	260	2.53	0.25	2.50	2.82	1.90	9.55	4.33
974068	31-Jul-09	MMI	NAD83	654758	5792547	1009	Bosk Lake	7	5	0.6	1100	9	220	100	0.81	0.25	3.00	4.03	0.90	10.00	1.67
974069	31-Jul-09	MMI	NAD83	654777	5792502	1005	Bosk Lake	36	50	0.1	1010	31	370	90	4.14	2.50	0.50	3.70	3.10	16.82	1.50
974070	31-Jul-09	MMI	NAD83	654793	5792459	1004	Bosk Lake	41	5	0.05	290	13	150	360	4.72	0.25	0.25	1.06	1.30	6.82	6.00
974071	31-Jul-09	MMI	NAD83	654817	5792409	1007	Bosk Lake	49	5	0.05	460	9	460	300	5.64	0.25	0.25	1.68	0.90	20.91	5.00
974072	31-Jul-09	MMI	NAD83	654829	5792372	1010	Bosk Lake	41	5	0.05	360	14	530	230	4.72	0.25	0.25	1.32	1.40	24.09	3.83
974073	31-Jul-09	MMI	NAD83	654849	5792318	1013	Bosk Lake	61	5	0.05	310	7	210	240	7.02	0.25	0.25	1.14	0.70	9.55	4.00
974074	31-Jul-09	MMI	NAD83	654861	5792272	1015	Bosk Lake	56	5	0.05	260	6	670	780	6.44	0.25	0.25	0.95	0.60	30.45	13.00
974075	31-Jul-09	MMI	NAD83	654857	5792224	1016	Bosk Lake	22	20	0.6	3040	24	340	250	2.53	1.00	3.00	11.14	2.40	15.45	4.17
974076	31-Jul-09	MMI	NAD83	654849	5792167	1018	Bosk Lake	28	5	0.05	360	14	310	1280	3.22	0.25	0.25	1.32	1.40	14.09	21.33
974077	31-Jul-09	MMI	NAD83	654799	5789748	1097	Bosk Lake	34	5	0.05	450	5	190	680	3.91	0.25	0.25	1.65	0.50	8.64	11.33
974078	31-Jul-09	MMI	NAD83	654798	5789801	1093	Bosk Lake	19	5	0.1	380	2.5	140	580	2.19	0.25	0.50	1.39	0.25	6.36	9.67
974079	31-Jul-09	MMI	NAD83	654799	5789849	1088	Bosk Lake	48	5	0.3	2920	2.5	5	10	5.52	0.25	1.50	10.70	0.25	0.23	0.17
974080	31-Jul-09	MMI	NAD83	654801	5789901	1082	Bosk Lake	39	5	0.05	710	2.5	900	320	4.49	0.25	0.25	2.60	0.25	40.91	5.33
974081	31-Jul-09	MMI	NAD83	654800	5789950	1081	Bosk Lake	3	5	0.1	2800	11	40	170	0.35	0.25	0.50	10.26	1.10	1.82	2.83
974082	31-Jul-09	MMI	NAD83	654800	5790000	1082	Bosk Lake	81	20	0.05	640	11	280	350	9.32	1.00	0.25	2.34	1.10	12.73	5.83
974083	31-Jul-09	MMI	NAD83	654801	5790051	1089	Bosk Lake	33	40	0.05	1670	14	140	220	3.80	2.00	0.25	6.12	1.40	6.36	3.67
974084	31-Jul-09	MMI	NAD83	654800	5790101	1097	Bosk Lake	35	5	0.05	490	6	170	140	4.03	0.25	0.25	1.79	0.60	7.73	2.33
974085	31-Jul-09	MMI	NAD83	654800	5790150	1113	Bosk Lake	72	20	0.1	480	9	130	50	8.29	1.00	0.50	1.76	0.90	5.91	0.83
974086	31-Jul-09	MMI	NAD83	654801	5790201	1126	Bosk Lake	44	30	0.1	1150	15	120	90	5.06	1.50	0.50	4.21	1.50	5.45	1.50
974087	31-Jul-09	MMI	NAD83	654800	5790250	1137	Bosk Lake	62	5	0.1	370	16	630	240	7.13	0.25	0.50	1.36	1.60	28.64	4.00
974088	31-Jul-09	MMI	NAD83	654801	5790300	1146	Bosk Lake	24	20	0.1	540	12	220	180	2.76	1.00	0.50	1.98	1.20	10.00	3.00
974089	31-Jul-09	MMI	NAD83	654800	5790350	1151	Bosk Lake	29	5	0.05	340	2.5	590	820	3.34	0.25	0.25	1.25	0.25	26.82	13.67
974090	31-Jul-09	MMI	NAD83	654799	5790400	1160	Bosk Lake	39	30	0.1	830	16	50	40	4.49	1.50	0.50	3.04	1.60	2.27	0.67
974091	31-Jul-09	MMI	NAD83	654800	5790451	1161	Bosk Lake	14	10	0.3	1130	14	100	60	1.61	0.50	1.50	4.14	1.40	4.55	1.00
974092	31-Jul-09	MMI	NAD83	654801	5790498	1167	Bosk Lake	51	20	0.1	900	8	160	100	5.87	1.00	0.50	3.30	0.80	7.27	1.67
974093	31-Jul-09	MMI	NAD83	654799	5790549	1182	Bosk Lake	74	5	0.05	570	2.5	240	210	8.52	0.25	0.25	2.09	0.25	10.91	3.50
974094	31-Jul-09	MMI	NAD83	654799	5790600	1193	Bosk Lake	73	10	0.05	860	6	580	400	8.40	0.50	0.25	3.15	0.60	26.36	6.67
974095	31-Jul-09	MMI	NAD83	654800	5790650	1199	Bosk Lake	100	5	0.1	430	8	640	510	11.51	0.25	0.50	1.58	0.80	29.09	8.50

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974096	31-Jul-09	MMI	NAD83	654799	5790700	1208	Bosk Lake	138	5	0.2	450	11	600	820	15.88	0.25	1.00	1.65	1.10	27.27	13.67
974097	31-Jul-09	MMI	NAD83	654800	5790750	1219	Bosk Lake	47	5	0.2	1150	8	750	720	5.41	0.25	1.00	4.21	0.80	34.09	12.00
974098	31-Jul-09	MMI	NAD83	654801	5790800	1224	Bosk Lake	5	5	0.4	570	2.5	830	220	0.58	0.25	2.00	2.09	0.25	37.73	3.67
974099	31-Jul-09	MMI	NAD83	654801	5790850	1223	Bosk Lake	66	5	0.05	610	7	390	800	7.59	0.25	0.25	2.23	0.70	17.73	13.33
974100	31-Jul-09	MMI	NAD83	654799	5790902	1212	Bosk Lake	205	10	0.05	830	2.5	220	430	23.59	0.50	0.25	3.04	0.25	10.00	7.17
974101	31-Jul-09	MMI	NAD83	654801	5790954	1197	Bosk Lake	35	5	0.05	230	2.5	320	130	4.03	0.25	0.25	0.84	0.25	14.55	2.17
974102	31-Jul-09	MMI	NAD83	654800	5791000	1193	Bosk Lake	52	5	0.05	410	8	360	1270	5.98	0.25	0.25	1.50	0.80	16.36	21.17
974103	31-Jul-09	MMI	NAD83	654800	5791051	1184	Bosk Lake	17	5	0.05	500	2.5	80	160	1.96	0.25	0.25	1.83	0.25	3.64	2.67
974104	31-Jul-09	MMI	NAD83	654800	5791103	1179	Bosk Lake	18	5	0.05	360	7	240	250	2.07	0.25	0.25	1.32	0.70	10.91	4.17
974105	31-Jul-09	MMI	NAD83	654800	5791149	1171	Bosk Lake	17	30	0.1	470	18	300	180	1.96	1.50	0.50	1.72	1.80	13.64	3.00
974106	31-Jul-09	MMI	NAD83	654800	5791200	1164	Bosk Lake	15	40	0.1	1440	26	270	140	1.73	2.00	0.50	5.27	2.60	12.27	2.33
974107	31-Jul-09	MMI	NAD83	654801	5791250	1159	Bosk Lake	15	20	0.05	930	11	360	470	1.73	1.00	0.25	3.41	1.10	16.36	7.83
974108	31-Jul-09	MMI	NAD83	654800	5791300	1154	Bosk Lake	63	5	0.05	590	7	510	310	7.25	0.25	0.25	2.16	0.70	23.18	5.17
974109	31-Jul-09	MMI	NAD83	654800	5791350	1148	Bosk Lake	44	5	0.2	440	11	450	150	5.06	0.25	1.00	1.61	1.10	20.45	2.50
974110	31-Jul-09	MMI	NAD83	654799	5791401	1147	Bosk Lake	29	5	0.2	710	10	630	270	3.34	0.25	1.00	2.60	1.00	28.64	4.50
974111	31-Jul-09	MMI	NAD83	654801	5791449	1143	Bosk Lake	39	5	0.05	510	6	1090	160	4.49	0.25	0.25	1.87	0.60	49.55	2.67
974112	31-Jul-09	MMI	NAD83	654801	5791500	1137	Bosk Lake	36	5	0.2	660	7	580	420	4.14	0.25	1.00	2.42	0.70	26.36	7.00
974113	31-Jul-09	MMI	NAD83	654799	5791550	1122	Bosk Lake	203	10	0.05	1220	2.5	240	210	23.36	0.50	0.25	4.47	0.25	10.91	3.50
974114	31-Jul-09	MMI	NAD83	654801	5791600	1113	Bosk Lake	109	5	0.2	1060	13	550	220	12.54	0.25	1.00	3.88	1.30	25.00	3.67
974115	31-Jul-09	MMI	NAD83	654800	5791650	1108	Bosk Lake	87	5	0.05	670	6	600	700	10.01	0.25	0.25	2.45	0.60	27.27	11.67
974116	31-Jul-09	MMI	NAD83	654799	5791701	1103	Bosk Lake	30	5	0.1	490	10	810	1490	3.45	0.25	0.50	1.79	1.00	36.82	24.83
974117	31-Jul-09	MMI	NAD83	654799	5791750	1093	Bosk Lake	100	5	0.1	600	10	550	500	11.51	0.25	0.50	2.20	1.00	25.00	8.33
974118	01-Aug-09	MMI	NAD83	652570	5783821	1022	Bosk Lake	103	10	0.05	690	12	310	200	11.85	0.50	0.25	2.53	1.20	14.09	3.33
974119	01-Aug-09	MMI	NAD83	652542	5783760	1021	Bosk Lake	166	10	0.2	370	16	240	430	19.10	0.50	1.00	1.36	1.60	10.91	7.17
974120	01-Aug-09	MMI	NAD83	652536	5783700	1019	Bosk Lake	36	5	0.05	520	2.5	360	1020	4.14	0.25	0.25	1.90	0.25	16.36	17.00
974121	01-Aug-09	MMI	NAD83	652538	5783660	1018	Bosk Lake	65	20	0.05	400	7	390	520	7.48	1.00	0.25	1.47	0.70	17.73	8.67
974122	01-Aug-09	MMI	NAD83	652548	5783604	1019	Bosk Lake	34	5	0.05	630	2.5	230	530	3.91	0.25	0.25	2.31	0.25	10.45	8.83
974123	01-Aug-09	MMI	NAD83	652571	5783550	1019	Bosk Lake	15	10	0.05	770	2.5	360	310	1.73	0.50	0.25	2.82	0.25	16.36	5.17
974124	01-Aug-09	MMI	NAD83	652566	5783499	1019	Bosk Lake	81	20	0.4	2260	11	110	260	9.32	1.00	2.00	8.28	1.10	5.00	4.33
974125	01-Aug-09	MMI	NAD83	652566	5783450	1021	Bosk Lake	98	20	0.6	1060	9	310	260	11.28	1.00	3.00	3.88	0.90	14.09	4.33
974126	01-Aug-09	MMI	NAD83	652579	5783396	1024	Bosk Lake	17	10	0.1	1040	7	290	750	1.96	0.50	0.50	3.81	0.70	13.18	12.50
974127	01-Aug-09	MMI	NAD83	652573	5783365	1024	Bosk Lake	70	20	0.1	400	13	350	210	8.06	1.00	0.50	1.47	1.30	15.91	3.50
974128	01-Aug-09	MMI	NAD83	652583	5783310	1023	Bosk Lake	10	5	0.05	170	10	250	1480	1.15	0.25	0.25	0.62	1.00	11.36	24.67
974129	01-Aug-09	MMI	NAD83	652595	5783265	1022	Bosk Lake	116	5	0.1	700	6	50	250	13.35	0.25	0.50	2.56	0.60	2.27	4.17
974130	01-Aug-09	MMI	NAD83	652625	5783222	1027	Bosk Lake	81	10	0.2	780	9	140	180	9.32	0.50	1.00	2.86	0.90	6.36	3.00
974131	01-Aug-09	MMI	NAD83	652646	5783174	1026	Bosk Lake	64	30	0.2	950	9	300	220	7.36	1.50	1.00	3.48	0.90	13.64	3.67
974132	01-Aug-09	MMI	NAD83	652666	5783132	1024	Bosk Lake	102	30	0.05	330	13	380	250	11.74	1.50	0.25	1.21	1.30	17.27	4.17
974133	01-Aug-09	MMI	NAD83	652682	5783079	1023	Bosk Lake	69	20	0.05	540	6	230	840	7.94	1.00	0.25	1.98	0.60	10.45	14.00
974134	01-Aug-09	MMI	NAD83	652676	5783025	1026	Bosk Lake	9	5	0.2	670	2.5	170	4160	1.04	0.25	1.00	2.45	0.25	7.73	69.33
974135	01-Aug-09	MMI	NAD83	652695	5782983	1026	Bosk Lake	22	30	0.3	1570	18	160	300	2.53	1.50	1.50	5.75	1.80	7.27	5.00
974136	01-Aug-09	MMI	NAD83	652710	5782935	1025	Bosk Lake	24	5	0.6	1150	17	10	10	2.76	0.25	3.00	4.21	1.70	0.45	0.17
974137	01-Aug-09	MMI	NAD83	652711	5782879	1021	Bosk Lake	44	5	0.5	4030	17	30	160	5.06	0.25	2.50	14.76	1.70	1.36	2.67
974138	01-Aug-09	MMI	NAD83	652717	5782834	1021	Bosk Lake	51	30	0.4	1790	17	100	290	5.87	1.50	2.00	6.56	1.70	4.55	4.83
974139	01-Aug-09	MMI	NAD83	652718	5782778	1021	Bosk Lake	79	30	0.1	750	9	630	200	9.09	1.50	0.50	2.75	0.90	28.64	3.33

## Appendix 1

## Sample Location and Selected Analytical Results

Sample								Ag	As	Au	Cu	Mo	Pb	Zn							
No.	Date	Type	Datum	Easting	Northing	Elev.	Area	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR	
974140	01-Aug-09	MMI	NAD83	652719	5782731	1020	Bosk Lake	151	30	0.05	770	8	230	930	17.38	1.50	0.25	2.82	0.80	10.45	15.50
974141	01-Aug-09	MMI	NAD83	652744	5782693	1019	Bosk Lake	20	20	0.5	560	7	180	60	2.30	1.00	2.50	2.05	0.70	8.18	1.00
974142	01-Aug-09	MMI	NAD83	652774	5782658	1018	Bosk Lake	43	10	0.4	1600	16	100	480	4.95	0.50	2.00	5.86	1.60	4.55	8.00
974143	01-Aug-09	MMI	NAD83	652797	5782597	1016	Bosk Lake	30	5	0.5	850	2.5	70	40	3.45	0.25	2.50	3.11	0.25	3.18	0.67
974144	01-Aug-09	MMI	NAD83	652772	5782552	1016	Bosk Lake	89	20	0.2	670	5	290	960	10.24	1.00	1.00	2.45	0.50	13.18	16.00
974145	01-Aug-09	MMI	NAD83	652726	5782529	1017	Bosk Lake	42	30	0.4	1650	9	260	350	4.83	1.50	2.00	6.04	0.90	11.82	5.83
974146	01-Aug-09	MMI	NAD83	652679	5782506	1017	Bosk Lake	67	10	0.3	670	10	350	100	7.71	0.50	1.50	2.45	1.00	15.91	1.67
974147	01-Aug-09	MMI	NAD83	652630	5782494	1019	Bosk Lake	108	20	0.2	460	11	230	520	12.43	1.00	1.00	1.68	1.10	10.45	8.67
974148	01-Aug-09	MMI	NAD83	652581	5782482	1022	Bosk Lake	52	10	0.05	320	8	270	2790	5.98	0.50	0.25	1.17	0.80	12.27	46.50
974149	01-Aug-09	MMI	NAD83	652535	5782462	1026	Bosk Lake	69	20	0.1	480	11	160	640	7.94	1.00	0.50	1.76	1.10	7.27	10.67
974150	01-Aug-09	MMI	NAD83	652509	5782415	1024	Bosk Lake	123	10	0.1	670	7	230	210	14.15	0.50	0.50	2.45	0.70	10.45	3.50
974151	01-Aug-09	MMI	NAD83	652506	5782378	1024	Bosk Lake	58	10	0.1	310	5	160	270	6.67	0.50	0.50	1.14	0.50	7.27	4.50
974152	01-Aug-09	MMI	NAD83	652534	5782325	1023	Bosk Lake	56	30	0.4	590	18	210	70	6.44	1.50	2.00	2.16	1.80	9.55	1.17
974153	01-Aug-09	MMI	NAD83	652560	5782276	1022	Bosk Lake	57	10	0.05	190	8	190	80	6.56	0.50	0.25	0.70	0.80	8.64	1.33
974154	01-Aug-09	MMI	NAD83	652601	5782250	1021	Bosk Lake	77	5	0.1	990	10	150	160	8.86	0.25	0.50	3.63	1.00	6.82	2.67
974155	01-Aug-09	MMI	NAD83	652637	5782211	1022	Bosk Lake	55	20	0.2	810	11	260	120	6.33	1.00	1.00	2.97	1.10	11.82	2.00
974156	01-Aug-09	MMI	NAD83	652672	5782181	1022	Bosk Lake	132	5	0.1	470	6	130	110	15.19	0.25	0.50	1.72	0.60	5.91	1.83
974157	01-Aug-09	MMI	NAD83	652705	5782139	1021	Bosk Lake	77	5	0.05	1840	5	160	130	8.86	0.25	0.25	6.74	0.50	7.27	2.17
974158	01-Aug-09	MMI	NAD83	652722	5782082	1019	Bosk Lake	47	10	0.3	3130	17	110	240	5.41	0.50	1.50	11.47	1.70	5.00	4.00
974159	01-Aug-09	MMI	NAD83	652728	5782045	1018	Bosk Lake	35	20	0.05	1970	12	230	550	4.03	1.00	0.25	7.22	1.20	10.45	9.17
974160	01-Aug-09	MMI	NAD83	652729	5781986	1017	Bosk Lake	60	5	0.1	2220	7	140	380	6.90	0.25	0.50	8.13	0.70	6.36	6.33
974161	01-Aug-09	MMI	NAD83	652728	5781937	1016	Bosk Lake	70	20	0.1	670	6	280	2470	8.06	1.00	0.50	2.45	0.60	12.73	41.17
974162	01-Aug-09	MMI	NAD83	652733	5781893	1014	Bosk Lake	31	40	0.1	1280	12	500	1310	3.57	2.00	0.50	4.69	1.20	22.73	21.83
974163	01-Aug-09	MMI	NAD83	652736	5781842	1014	Bosk Lake	33	5	0.8	2680	11	60	330	3.80	0.25	4.00	9.82	1.10	2.73	5.50
974164	01-Aug-09	MMI	NAD83	652745	5781791	1012	Bosk Lake	73	5	0.05	1700	23	110	160	8.40	0.25	0.25	6.23	2.30	5.00	2.67
974165	01-Aug-09	MMI	NAD83	652749	5781739	1013	Bosk Lake	0.5	5	0.05	20	138	5	990	0.06	0.25	0.25	0.07	13.80	0.23	16.50
974166	01-Aug-09	MMI	NAD83	652740	5781690	1010	Bosk Lake	0.5	5	0.05	130	31	160	560	0.06	0.25	0.25	0.48	3.10	7.27	9.33
974167	01-Aug-09	MMI	NAD83	652707	5781644	1010	Bosk Lake	72	10	0.5	2110	20	60	440	8.29	0.50	2.50	7.73	2.00	2.73	7.33
974168	01-Aug-09	MMI	NAD83	652673	5781616	1010	Bosk Lake	34	110	0.3	3920	44	540	1230	3.91	5.50	1.50	14.36	4.40	24.55	20.50
974169	01-Aug-09	MMI	NAD83	652653	5781576	1015	Bosk Lake	216	5	0.2	800	13	390	290	24.86	0.25	1.00	2.93	1.30	17.73	4.83
974170	01-Aug-09	MMI	NAD83	652618	5781541	1022	Bosk Lake	38	5	0.05	280	11	460	1030	4.37	0.25	0.25	1.03	1.10	20.91	17.17
974171	01-Aug-09	MMI	NAD83	652569	5781515	1016	Bosk Lake	32	10	0.05	270	10	340	900	3.68	0.50	0.25	0.99	1.00	15.45	15.00
974172	01-Aug-09	MMI	NAD83	652524	5781506	1013	Bosk Lake	26	10	0.1	1310	7	290	580	2.99	0.50	0.50	4.80	0.70	13.18	9.67
974173	01-Aug-09	MMI	NAD83	652472	5781519	1014	Bosk Lake	53	20	0.05	480	7	370	1200	6.10	1.00	0.25	1.76	0.70	16.82	20.00
974174	01-Aug-09	MMI	NAD83	652423	5781521	1020	Bosk Lake	15	5	0.4	1170	9	20	80	1.73	0.25	2.00	4.29	0.90	0.91	1.33
974175	01-Aug-09	MMI	NAD83	652374	5781526	1013	Bosk Lake	19	5	0.9	3320	2.5	20	330	2.19	0.25	4.50	12.16	0.25	0.91	5.50
974176	01-Aug-09	MMI	NAD83	652328	5781535	1013	Bosk Lake	15	10	0.5	800	11	110	360	1.73	0.50	2.50	2.93	1.10	5.00	6.00
974177	01-Aug-09	MMI	NAD83	652272	5781560	1016	Bosk Lake	64	30	0.05	1220	14	240	2190	7.36	1.50	0.25	4.47	1.40	10.91	36.50
974178	01-Aug-09	MMI	NAD83	652226	5781564	1015	Bosk Lake	37	20	0.4	2150	6	170	90	4.26	1.00	2.00	7.88	0.60	7.73	1.50
974179	01-Aug-09	MMI	NAD83	652179	5781559	1015	Bosk Lake	385	10	0.3	3420	22	50	3870	44.30	0.50	1.50	12.53	2.20	2.27	64.50
974180	01-Aug-09	MMI	NAD83	652125	5781558	1015	Bosk Lake	27	20	0.05	810	10	440	7350	3.11	1.00	0.25	2.97	1.00	20.00	122.50
974181	01-Aug-09	MMI	NAD83	652073	5781561	1016	Bosk Lake	87	80	0.1	3920	33	250	7120	10.01	4.00	0.50	14.36	3.30	11.36	118.67
974182	01-Aug-09	MMI	NAD83	652029	5781553	1013	Bosk Lake	172	5	0.3	480	19	330	1000	19.79	0.25	1.50	1.76	1.90	15.00	16.67
974183	01-Aug-09	MMI	NAD83	651972	5781551	1010	Bosk Lake	42	60	0.2	320	19	320	1540	4.83	3.00	1.00	1.17	1.90	14.55	25.67

## Appendix 1

## Sample Location and Selected Analytical Results

Sample								Ag	As	Au	Cu	Mo	Pb	Zn							
No.	Date	Type	Datum	Easting	Northing	Elev.	Area	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR	
974184	01-Aug-09	MMI	NAD83	651934	5781524	1008	Bosk Lake	130	160	1.5	2100	25	270	3200	14.96	8.00	7.50	7.69	2.50	12.27	53.33
974185	01-Aug-09	MMI	NAD83	651876	5781531	1005	Bosk Lake	54	30	0.2	1590	9	320	1650	6.21	1.50	1.00	5.82	0.90	14.55	27.50
974186	01-Aug-09	MMI	NAD83	651838	5781553	1010	Bosk Lake	52	5	0.9	3760	11	30	680	5.98	0.25	4.50	13.77	1.10	1.36	11.33
974187	01-Aug-09	MMI	NAD83	651799	5781591	1007	Bosk Lake	94	5	0.2	1040	9	100	1290	10.82	0.25	1.00	3.81	0.90	4.55	21.50
974188	01-Aug-09	MMI	NAD83	651758	5781599	1007	Bosk Lake	103	20	0.5	390	13	210	940	11.85	1.00	2.50	1.43	1.30	9.55	15.67
974189	01-Aug-09	MMI	NAD83	651706	5781608	1005	Bosk Lake	24	50	0.1	920	6	460	2630	2.76	2.50	0.50	3.37	0.60	20.91	43.83
974190	01-Aug-09	MMI	NAD83	651657	5781612	1011	Bosk Lake	278	20	0.3	440	16	1180	1030	31.99	1.00	1.50	1.61	1.60	53.64	17.17
974191	01-Aug-09	MMI	NAD83	651603	5781608	1011	Bosk Lake	80	5	1.6	4940	19	60	150	9.21	0.25	8.00	18.10	1.90	2.73	2.50
974192	01-Aug-09	MMI	NAD83	651546	5781608	1012	Bosk Lake	97	5	0.2	5110	8	110	300	11.16	0.25	1.00	18.72	0.80	5.00	5.00
974193	01-Aug-09	MMI	NAD83	651496	5781613	1013	Bosk Lake	22	10	0.05	580	2.5	310	450	2.53	0.50	0.25	2.12	0.25	14.09	7.50
974194	01-Aug-09	MMI	NAD83	651450	5781606	1016	Bosk Lake	70	50	0.3	820	7	370	920	8.06	2.50	1.50	3.00	0.70	16.82	15.33
974195	01-Aug-09	MMI	NAD83	651402	5781606	1018	Bosk Lake	67	20	0.05	300	7	240	1110	7.71	1.00	0.25	1.10	0.70	10.91	18.50
974196	01-Aug-09	MMI	NAD83	651350	5781613	1019	Bosk Lake	37	30	0.5	1260	7	140	130	4.26	1.50	2.50	4.62	0.70	6.36	2.17
974197	01-Aug-09	MMI	NAD83	651297	5781612	1019	Bosk Lake	99	10	0.3	790	9	260	420	11.39	0.50	1.50	2.89	0.90	11.82	7.00
974198	02-Aug-09	MMI	NAD83	651248	5781585	1017	Bosk Lake	55	5	0.05	710	6	50	170	6.33	0.25	0.25	2.60	0.60	2.27	2.83
974199	02-Aug-09	MMI	NAD83	651214	5781549	1022	Bosk Lake	134	10	0.2	1060	15	310	690	15.42	0.50	1.00	3.88	1.50	14.09	11.50
974200	02-Aug-09	MMI	NAD83	651196	5781500	1023	Bosk Lake	26	30	0.7	2670	9	210	270	2.99	1.50	3.50	9.78	0.90	9.55	4.50
974201	02-Aug-09	MMI	NAD83	651196	5781456	1021	Bosk Lake	158	20	0.3	1070	11	270	160	18.18	1.00	1.50	3.92	1.10	12.27	2.67
974202	02-Aug-09	MMI	NAD83	651198	5781399	1020	Bosk Lake	122	20	0.2	800	11	170	280	14.04	1.00	1.00	2.93	1.10	7.73	4.67
974203	02-Aug-09	MMI	NAD83	651182	5781336	1027	Bosk Lake	56	40	0.6	1620	15	310	360	6.44	2.00	3.00	5.93	1.50	14.09	6.00
974204	02-Aug-09	MMI	NAD83	651210	5781303	1026	Bosk Lake	66	30	0.5	6850	12	110	2760	7.59	1.50	2.50	25.09	1.20	5.00	46.00
974205	02-Aug-09	MMI	NAD83	651213	5781263	1028	Bosk Lake	91	50	0.3	1520	32	250	1300	10.47	2.50	1.50	5.57	3.20	11.36	21.67
974206	02-Aug-09	MMI	NAD83	651209	5781216	1028	Bosk Lake	122	40	0.2	920	11	260	1360	14.04	2.00	1.00	3.37	1.10	11.82	22.67
974207	02-Aug-09	MMI	NAD83	651201	5781172	1027	Bosk Lake	50	20	0.4	2280	12	290	630	5.75	1.00	2.00	8.35	1.20	13.18	10.50
974208	02-Aug-09	MMI	NAD83	651162	5781129	1030	Bosk Lake	134	20	0.2	2390	19	310	730	15.42	1.00	1.00	8.75	1.90	14.09	12.17
974209	02-Aug-09	MMI	NAD83	651129	5781090	1026	Bosk Lake	107	5	0.7	5480	32	70	220	12.31	0.25	3.50	20.07	3.20	3.18	3.67
974210	02-Aug-09	MMI	NAD83	651103	5781036	1024	Bosk Lake	56	5	0.8	3020	29	20	170	6.44	0.25	4.00	11.06	2.90	0.91	2.83
974211	02-Aug-09	MMI	NAD83	651083	5780998	1025	Bosk Lake	99	30	0.2	420	11	210	730	11.39	1.50	1.00	1.54	1.10	9.55	12.17
974212	02-Aug-09	MMI	NAD83	651049	5780951	1027	Bosk Lake	106	30	0.2	1510	10	210	2660	12.20	1.50	1.00	5.53	1.00	9.55	44.33
974213	02-Aug-09	MMI	NAD83	651045	5780904	1027	Bosk Lake	69	20	0.1	570	13	210	380	7.94	1.00	0.50	2.09	1.30	9.55	6.33
974214	02-Aug-09	MMI	NAD83	651065	5780852	1027	Bosk Lake	77	20	0.1	890	8	260	590	8.86	1.00	0.50	3.26	0.80	11.82	9.83
974215	02-Aug-09	MMI	NAD83	651083	5780804	1030	Bosk Lake	294	5	0.4	3430	13	30	280	33.83	0.25	2.00	12.56	1.30	1.36	4.67
974216	02-Aug-09	MMI	NAD83	651088	5780760	1030	Bosk Lake	81	5	0.1	1170	2.5	240	730	9.32	0.25	0.50	4.29	0.25	10.91	12.17
974217	02-Aug-09	MMI	NAD83	651111	5780713	1028	Bosk Lake	79	5	0.2	1290	2.5	40	250	9.09	0.25	1.00	4.73	0.25	1.82	4.17
974218	02-Aug-09	MMI	NAD83	651132	5780662	1027	Bosk Lake	143	5	0.3	2730	2.5	50	200	16.46	0.25	1.50	10.00	0.25	2.27	3.33
974219	02-Aug-09	MMI	NAD83	651148	5780620	1029	Bosk Lake	67	10	0.05	1290	2.5	230	780	7.71	0.50	0.25	4.73	0.25	10.45	13.00
974220	02-Aug-09	MMI	NAD83	651135	5780571	1030	Bosk Lake	55	5	0.7	1180	13	20	30	6.33	0.25	3.50	4.32	1.30	0.91	0.50
974221	02-Aug-09	MMI	NAD83	651107	5780528	1034	Bosk Lake	32	5	0.05	220	8	30	330	3.68	0.25	0.25	0.81	0.80	1.36	5.50
974222	02-Aug-09	MMI	NAD83	651117	5780476	1032	Bosk Lake	72	20	0.3	2200	7	120	160	8.29	1.00	1.50	8.06	0.70	5.45	2.67
974223	02-Aug-09	MMI	NAD83	651137	5780423	1043	Bosk Lake	47	5	0.1	280	2.5	90	280	5.41	0.25	0.50	1.03	0.25	4.09	4.67
974224	02-Aug-09	MMI	NAD83	651139	5780381	1037	Bosk Lake	78	5	0.3	400	6	160	190	8.98	0.25	1.50	1.47	0.60	7.27	3.17
974225	02-Aug-09	MMI	NAD83	651129	5780333	1041	Bosk Lake	29	10	0.05	470	2.5	260	760	3.34	0.50	0.25	1.72	0.25	11.82	12.67
974226	02-Aug-09	MMI	NAD83	651097	5780367	1038	Bosk Lake	55	10	0.3	2240	5	90	510	6.33	0.50	1.50	8.21	0.50	4.09	8.50
974227	02-Aug-09	MMI	NAD83	651069	5780408	1034	Bosk Lake	44	5	0.6	1350	2.5	40	220	5.06	0.25	3.00	4.95	0.25	1.82	3.67

## Appendix 1

## Sample Location and Selected Analytical Results

Sample								Ag	As	Au	Cu	Mo	Pb	Zn							
No.	Date	Type	Datum	Easting	Northing	Elev.	Area	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR	
974228	02-Aug-09	MMI	NAD83	651041	5780443	1033	Bosk Lake	63	20	0.2	650	2.5	290	990	7.25	1.00	1.00	2.38	0.25	13.18	16.50
974229	02-Aug-09	MMI	NAD83	651002	5780488	1029	Bosk Lake	137	5	0.2	670	2.5	160	420	15.77	0.25	1.00	2.45	0.25	7.27	7.00
974230	02-Aug-09	MMI	NAD83	650972	5780520	1028	Bosk Lake	75	5	0.4	1530	2.5	90	550	8.63	0.25	2.00	5.60	0.25	4.09	9.17
974231	02-Aug-09	MMI	NAD83	650945	5780563	1026	Bosk Lake	84	5	0.1	310	2.5	230	380	9.67	0.25	0.50	1.14	0.25	10.45	6.33
974232	02-Aug-09	MMI	NAD83	650918	5780610	1026	Bosk Lake	83	5	0.1	270	2.5	110	140	9.55	0.25	0.50	0.99	0.25	5.00	2.33
974233	02-Aug-09	MMI	NAD83	650886	5780654	1025	Bosk Lake	44	5	0.1	250	2.5	260	170	5.06	0.25	0.50	0.92	0.25	11.82	2.83
974234	02-Aug-09	MMI	NAD83	650846	5780675	1024	Bosk Lake	43	5	0.1	230	2.5	240	160	4.95	0.25	0.50	0.84	0.25	10.91	2.67
974235	02-Aug-09	MMI	NAD83	650806	5780707	1026	Bosk Lake	39	10	0.2	2640	2.5	100	460	4.49	0.50	1.00	9.67	0.25	4.55	7.67
974236	02-Aug-09	MMI	NAD83	650761	5780732	1028	Bosk Lake	79	5	0.2	730	5	180	220	9.09	0.25	1.00	2.67	0.50	8.18	3.67
974237	02-Aug-09	MMI	NAD83	650723	5780762	1029	Bosk Lake	4	5	0.2	450	2.5	140	900	0.46	0.25	1.00	1.65	0.25	6.36	15.00
974238	02-Aug-09	MMI	NAD83	650680	5780792	1027	Bosk Lake	88	5	0.2	420	2.5	160	90	10.13	0.25	1.00	1.54	0.25	7.27	1.50
974239	02-Aug-09	MMI	NAD83	650641	5780818	1027	Bosk Lake	52	5	0.05	440	2.5	260	480	5.98	0.25	0.25	1.61	0.25	11.82	8.00
974240	02-Aug-09	MMI	NAD83	650602	5780854	1034	Bosk Lake	39	5	0.1	920	2.5	290	160	4.49	0.25	0.50	3.37	0.25	13.18	2.67
974241	02-Aug-09	MMI	NAD83	650565	5780883	1031	Bosk Lake	68	5	0.05	390	2.5	260	1580	7.83	0.25	0.25	1.43	0.25	11.82	26.33
974242	02-Aug-09	MMI	NAD83	650527	5780925	1030	Bosk Lake	74	10	0.2	390	2.5	280	450	8.52	0.50	1.00	1.43	0.25	12.73	7.50
974243	02-Aug-09	MMI	NAD83	650501	5780961	1031	Bosk Lake	14	5	0.6	3940	2.5	40	540	1.61	0.25	3.00	14.43	0.25	1.82	9.00
974244	02-Aug-09	MMI	NAD83	650458	5780976	1030	Bosk Lake	17	5	0.6	3330	2.5	20	520	1.96	0.25	3.00	12.20	0.25	0.91	8.67
974245	02-Aug-09	MMI	NAD83	650414	5781007	1026	Bosk Lake	33	5	0.9	2280	2.5	10	190	3.80	0.25	4.50	8.35	0.25	0.45	3.17
974246	02-Aug-09	MMI	NAD83	650392	5781056	1038	Bosk Lake	28	5	0.4	620	2.5	10	100	3.22	0.25	2.00	2.27	0.25	0.45	1.67
974247	02-Aug-09	MMI	NAD83	650367	5781104	1034	Bosk Lake	32	5	0.4	2370	2.5	70	310	3.68	0.25	2.00	8.68	0.25	3.18	5.17
974248	02-Aug-09	MMI	NAD83	650380	5781159	1036	Bosk Lake	64	5	0.1	470	2.5	300	410	7.36	0.25	0.50	1.72	0.25	13.64	6.83
974249	02-Aug-09	MMI	NAD83	650379	5781198	1040	Bosk Lake	98	5	0.2	610	2.5	380	100	11.28	0.25	1.00	2.23	0.25	17.27	1.67
974250	02-Aug-09	MMI	NAD83	650346	5781234	1036	Bosk Lake	49	5	0.2	810	2.5	210	1100	5.64	0.25	1.00	2.97	0.25	9.55	18.33
974251	02-Aug-09	MMI	NAD83	650309	5781260	1037	Bosk Lake	84	10	0.1	600	6	190	830	9.67	0.50	0.50	2.20	0.60	8.64	13.83
974252	02-Aug-09	MMI	NAD83	650252	5781276	1033	Bosk Lake	130	5	1.2	5730	2.5	30	2370	14.96	0.25	6.00	20.99	0.25	1.36	39.50
974253	02-Aug-09	MMI	NAD83	650217	5781312	1029	Bosk Lake	42	20	0.4	1320	6	170	530	4.83	1.00	2.00	4.84	0.60	7.73	8.83
974254	02-Aug-09	MMI	NAD83	650188	5781355	1027	Bosk Lake	8	5	0.05	740	2.5	240	870	0.92	0.25	0.25	2.71	0.25	10.91	14.50
974255	02-Aug-09	MMI	NAD83	650184	5781404	1028	Bosk Lake	12	10	0.1	430	2.5	270	4930	1.38	0.50	0.50	1.58	0.25	12.27	82.17
974256	02-Aug-09	MMI	NAD83	650173	5781452	1026	Bosk Lake	15	5	0.9	8070	6	50	1230	1.73	0.25	4.50	29.56	0.60	2.27	20.50
974257	02-Aug-09	MMI	NAD83	650161	5781508	1026	Bosk Lake	20	5	0.1	1030	6	170	2610	2.30	0.25	0.50	3.77	0.60	7.73	43.50
974258	02-Aug-09	MMI	NAD83	650131	5781532	1022	Bosk Lake	80	5	0.3	710	2.5	240	380	9.21	0.25	1.50	2.60	0.25	10.91	6.33
974259	02-Aug-09	MMI	NAD83	650084	5781560	1021	Bosk Lake	63	5	0.1	660	2.5	250	110	7.25	0.25	0.50	2.42	0.25	11.36	1.83
974260	02-Aug-09	MMI	NAD83	650054	5781612	1022	Bosk Lake	60	5	0.05	300	2.5	210	430	6.90	0.25	0.25	1.10	0.25	9.55	7.17
974261	02-Aug-09	MMI	NAD83	650011	5781635	1018	Bosk Lake	61	5	0.2	470	6	240	290	7.02	0.25	1.00	1.72	0.60	10.91	4.83
974262	02-Aug-09	MMI	NAD83	649970	5781663	1018	Bosk Lake	55	5	0.05	500	7	130	160	6.33	0.25	0.25	1.83	0.70	5.91	2.67
974263	02-Aug-09	MMI	NAD83	649924	5781680	1017	Bosk Lake	29	30	0.1	1390	7	190	470	3.34	1.50	0.50	5.09	0.70	8.64	7.83
974264	02-Aug-09	MMI	NAD83	649883	5781713	1022	Bosk Lake	39	5	0.3	750	2.5	90	90	4.49	0.25	1.50	2.75	0.25	4.09	1.50
974265	02-Aug-09	MMI	NAD83	649859	5781757	1020	Bosk Lake	51	5	0.05	500	2.5	110	520	5.87	0.25	0.25	1.83	0.25	5.00	8.67
974266	02-Aug-09	MMI	NAD83	649817	5781781	1019	Bosk Lake	26	5	0.05	360	2.5	240	1330	2.99	0.25	0.25	1.32	0.25	10.91	22.17
974267	02-Aug-09	MMI	NAD83	649773	5781774	1016	Bosk Lake	73	10	0.05	650	2.5	330	1410	8.40	0.50	0.25	2.38	0.25	15.00	23.50
974268	02-Aug-09	MMI	NAD83	649725	5781785	1017	Bosk Lake	129	5	0.4	1270	2.5	10	30	14.84	0.25	2.00	4.65	0.25	0.45	0.50
974269	02-Aug-09	MMI	NAD83	649679	5781811	1016	Bosk Lake	55	5	0.05	310	2.5	210	1930	6.33	0.25	0.25	1.14	0.25	9.55	32.17
974270	02-Aug-09	MMI	NAD83	649635	5781832	1014	Bosk Lake	65	10	0.2	340	2.5	160	100	7.48	0.50	1.00	1.25	0.25	7.27	1.67
974271	02-Aug-09	MMI	NAD83	649592	5781859	1016	Bosk Lake	60	5	0.2	460	16	160	120	6.90	0.25	1.00	1.68	1.60	7.27	2.00

## Appendix 1

## Sample Location and Selected Analytical Results

Sample		Type	Datum	Easting	Northing	Elev.	Area	Ag	As	Au	Cu	Mo	Pb	Zn	Ag RR	As RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
No.	Date							(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
974272	02-Aug-09	MMI	NAD83	649545	5781871	1016	Bosk Lake	25	10	0.1	740	2.5	280	1860	2.88	0.50	0.50	2.71	0.25	12.73	31.00
974273	02-Aug-09	MMI	NAD83	649496	5781872	1014	Bosk Lake	116	20	27.4	6880	2.5	20	410	13.35	1.00	137.00	25.20	0.25	0.91	6.83
974274	02-Aug-09	MMI	NAD83	649447	5781883	1017	Bosk Lake	33	40	0.8	3340	5	150	420	3.80	2.00	4.00	12.23	0.50	6.82	7.00
974275	02-Aug-09	MMI	NAD83	649395	5781900	1017	Bosk Lake	40	5	0.8	2880	2.5	30	460	4.60	0.25	4.00	10.55	0.25	1.36	7.67
974276	02-Aug-09	MMI	NAD83	649349	5781918	1021	Bosk Lake	26	5	0.9	6400	9	10	420	2.99	0.25	4.50	23.44	0.90	0.45	7.00
974277	02-Aug-09	MMI	NAD83	649303	5781934	1023	Bosk Lake	26	5	0.3	1500	2.5	90	110	2.99	0.25	1.50	5.49	0.25	4.09	1.83
974278	03-Aug-09	MMI	NAD83	649265	5781964	1040	Bosk Lake	175	5	1.6	8360	5	40	1210	20.14	0.25	8.00	30.62	0.50	1.82	20.17
974279	03-Aug-09	MMI	NAD83	649220	5781993	1039	Bosk Lake	89	5	0.2	680	6	240	440	10.24	0.25	1.00	2.49	0.60	10.91	7.33
974280	03-Aug-09	MMI	NAD83	649180	5782014	1035	Bosk Lake	75	5	0.6	1640	2.5	100	120	8.63	0.25	3.00	6.01	0.25	4.55	2.00
974281	03-Aug-09	MMI	NAD83	649140	5782046	1032	Bosk Lake	17	10	0.5	2260	2.5	30	470	1.96	0.50	2.50	8.28	0.25	1.36	7.83
974282	03-Aug-09	MMI	NAD83	649073	5782069	1028	Bosk Lake	29	10	0.2	1030	2.5	200	710	3.34	0.50	1.00	3.77	0.25	9.09	11.83
974283	03-Aug-09	MMI	NAD83	649040	5782076	1022	Bosk Lake	27	5	0.05	420	2.5	150	1140	3.11	0.25	0.25	1.54	0.25	6.82	19.00
974284	03-Aug-09	MMI	NAD83	648999	5782097	1020	Bosk Lake	14	10	0.05	540	2.5	150	4870	1.61	0.50	0.25	1.98	0.25	6.82	81.17
974285	03-Aug-09	MMI	NAD83	648953	5782121	1017	Bosk Lake	6	5	0.05	270	29	50	200	0.69	0.25	0.25	0.99	2.90	2.27	3.33
974286	03-Aug-09	MMI	NAD83	648904	5782126	1017	Bosk Lake	17	5	0.05	440	2.5	150	3940	1.96	0.25	0.25	1.61	0.25	6.82	65.67
974287	03-Aug-09	MMI	NAD83	648853	5782143	1013	Bosk Lake	14	5	0.05	640	2.5	70	700	1.61	0.25	0.25	2.34	0.25	3.18	11.67
974288	03-Aug-09	MMI	NAD83	648810	5782150	1017	Bosk Lake	39	5	0.1	490	7	40	240	4.49	0.25	0.50	1.79	0.70	1.82	4.00
974289	03-Aug-09	MMI	NAD83	648764	5782168	1014	Bosk Lake	55	5	0.2	1240	5	30	360	6.33	0.25	1.00	4.54	0.50	1.36	6.00
974290	03-Aug-09	MMI	NAD83	648718	5782191	1015	Bosk Lake	13	10	0.1	440	2.5	160	860	1.50	0.50	0.50	1.61	0.25	7.27	14.33
974291	03-Aug-09	MMI	NAD83	648674	5782224	1013	Bosk Lake	51	5	0.05	250	2.5	110	270	5.87	0.25	0.25	0.92	0.25	5.00	4.50
974292	03-Aug-09	MMI	NAD83	648635	5782250	1012	Bosk Lake	55	10	0.4	1560	2.5	110	390	6.33	0.50	2.00	5.71	0.25	5.00	6.50
974293	03-Aug-09	MMI	NAD83	648598	5782277	1013	Bosk Lake	36	5	0.2	860	2.5	240	60	4.14	0.25	1.00	3.15	0.25	10.91	1.00
974294	03-Aug-09	MMI	NAD83	648571	5782313	1016	Bosk Lake	21	5	0.4	1040	2.5	230	480	2.42	0.25	2.00	3.81	0.25	10.45	8.00
974295	03-Aug-09	MMI	NAD83	648537	5782357	1017	Bosk Lake	13	5	0.5	1370	2.5	10	130	1.50	0.25	2.50	5.02	0.25	0.45	2.17
974296	03-Aug-09	MMI	NAD83	648501	5782390	1018	Bosk Lake	71	5	0.2	1130	2.5	90	40	8.17	0.25	1.00	4.14	0.25	4.09	0.67
974297	03-Aug-09	MMI	NAD83	648458	5782428	1019	Bosk Lake	46	5	0.05	580	12	20	40	5.29	0.25	0.25	2.12	1.20	0.91	0.67
974298	03-Aug-09	MMI	NAD83	648417	5782459	1020	Bosk Lake	62	20	0.1	510	2.5	150	80	7.13	1.00	0.50	1.87	0.25	6.82	1.33
974299	03-Aug-09	MMI	NAD83	648381	5782484	1020	Bosk Lake	17	90	0.6	940	2.5	5	30	1.96	4.50	3.00	3.44	0.25	0.23	0.50
974300	03-Aug-09	MMI	NAD83	648347	5782502	1022	Bosk Lake	50	5	0.2	1330	2.5	20	110	5.75	0.25	1.00	4.87	0.25	0.91	1.83
974301	03-Aug-09	MMI	NAD83	648306	5782533	1024	Bosk Lake	65	20	0.6	3960	2.5	50	670	7.48	1.00	3.00	14.51	0.25	2.27	11.17
974302	03-Aug-09	MMI	NAD83	648267	5782567	1025	Bosk Lake	86	5	0.9	1630	2.5	60	240	9.90	0.25	4.50	5.97	0.25	2.73	4.00
974303	03-Aug-09	MMI	NAD83	648222	5782595	1030	Bosk Lake	35	5	0.5	1850	2.5	20	220	4.03	0.25	2.50	6.78	0.25	0.91	3.67
974304	03-Aug-09	MMI	NAD83	648178	5782623	1030	Bosk Lake	44	5	1.7	1840	6	20	40	5.06	0.25	8.50	6.74	0.60	0.91	0.67
974305	03-Aug-09	MMI	NAD83	648164	5782674	1018	Bosk Lake	32	5	0.7	1140	25	5	30	3.68	0.25	3.50	4.18	2.50	0.23	0.50
974306	03-Aug-09	MMI	NAD83	648148	5782715	1017	Bosk Lake	41	30	0.5	1570	2.5	110	150	4.72	1.50	2.50	5.75	0.25	5.00	2.50
974307	03-Aug-09	MMI	NAD83	648136	5782771	1019	Bosk Lake	28	5	0.7	1920	12	10	50	3.22	0.25	3.50	7.03	1.20	0.45	0.83





## APPENDIX 2

### Analytical Results

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974118	103	190	10 <0.1			950 <1		210	29	310	111	100	1.4	690	45	23.3	10.7	102	9	49
974119	166	194	10	0.2		1050 <1		100	16	140	112	100	3.5	370	19	9.1	5.2	79	11	21
974120	36	280 <10		<0.1		3000 <1		240	40	375	184	300	0.6	520	24	11.9	6.2	143	11	27
974121	65 >300		20 <0.1			2390	1	70	31	118	170	300	3	400	19	10.8	4.1	218	23	17
974122	34	206 <10		<0.1		2160 <1		300	47	198	112	200	0.6	630	29	15.8	6.6	129	8	31
974123	15	226	10 <0.1			1940 <1		300	64	141	208	100	0.8	770	43	26.2	8.2	155	12	41
974124	81	78	20	0.4		1290 <1		360	24	340	90	100 <0.5		2260	64	32.1	18.8	56	4	88
974125	98	252	20	0.6		2000 <1		250	32	478	199	300	0.6	1060	67	36.6	15.8	157	13	72
974126	17	197	10	0.1		1310 <1		400	71	242	219	300	0.5	1040	58	35.9	11.6	128	6	58
974127	70	223	20	0.1		770 <1		200	25	111	132	200	1.7	400	26	14.2	6.2	151	17	29
974128	10	155 <10		<0.1		2430 <1		480	102	84	84 <100		0.6	170	14	8.4	2.8	111	6	13
974129	116	63 <10		0.1		2460 <1		520	19	33	51 <100		2	700	9	4	3.1	16	1	14
974130	81	103	10	0.2		2360 <1		290	13	207	56	100	1.9	780	36	16.8	11.1	84	9	50
974131	64 >300		30	0.2		2310	2	70	14	714	238	500	1.8	950	37	15.9	10.6	317	25	44
974132	102 >300		30 <0.1			3010	1	60	29	161	187	500	8.3	330	16	8.4	4.8	270	22	17
974133	69	230	20 <0.1			1100 <1		260	63	120	400	200 <0.5		540	8	4.3	2	223	7	8
974134	9	155 <10		0.2		1970 <1		540	119	71	142	100 <0.5		670	18	10.8	3.8	109	4	18
974135	22	92	30	0.3		2280 <1		620	51	452	183	200 <0.5		1570	60	31.5	16.9	177	5	78
974136	24	7 <10		0.6		980 <1		420	14 <5		26 <100	<0.5		1150	4	2.1	0.8	4 <1		5
974137	44	38 <10		0.5		1230 <1		680	45	52	83 <100	<0.5		4030	15	8	5	26 <1		22
974138	51	79	30	0.4		840 <1		300	19	139	36 <100		1	1790	20	8.1	6.3	82	5	30
974139	79 >300		30	0.1		3260	1	150	39	525	234	400	4.4	750	49	25.3	10.7	245	20	47
974140	151 >300		30 <0.1			2140 <1		120	41	308	202	400	8.8	770	29	14.3	8.3	213	12	35
974141	20	99	20	0.5		3400 <1		60	10	545	87 <100		2.1	560	37	15.8	10.1	59	8	43
974142	43	70	10	0.4		920 <1		440	131	325	87 <100	<0.5		1600	61	29.7	18.1	72	3	83
974143	30	71 <10		0.5		1230 <1		460	15	147	46	100 <0.5		850	26	11.8	7.7	20	2	34
974144	89 >300		20	0.2		1600 <1		80	38	166	137	200	6.7	670	26	13.4	6.3	142	19	25
974145	42	165	30	0.4		1970	1	210	22	827	135	200	1.9	1650	134	62.4	40.2	111	13	182
974146	67 >300		10	0.3		1100 <1		90	16	221	82	100	5.7	670	49	23.4	9.7	124	13	44
974147	108 >300		20	0.2		900 <1		30	35	251	421	300	7.3	460	18	7.8	5	163	30	19
974148	52	276	10 <0.1			2090 <1		40	48	53	120	200	5.9	320	10	6.4	1.9	219	22	8
974149	69	291	20	0.1		1240 <1		80	40	276	71	300	4.2	480	33	16.5	8.6	172	21	36
974150	123	177	10	0.1		3510 <1		130	17	301	98	100	7.4	670	27	12.9	8.3	95	12	34
974151	58	188	10	0.1		4210 <1		110	6	497	69	200	3.9	310	19	8.4	5.6	85	9	21
974152	56	175	30	0.4		2540	2	220	10	357	114	300	4.3	590	25	11.4	7.2	178	12	30
974153	57	236	10 <0.1			520 <1		140	10	92	98	200	4.7	190	12	6.1	3.1	161	19	13
974154	77	149 <10		0.1		880 <1		220	14	101	118 <100		2.8	990	35	19.1	8.2	50	4	41
974155	55	165	20	0.2		1560	1	140	8	888	106	200	4.4	810	57	25.6	15.4	106	11	70
974156	132	125 <10		0.1		1150 <1		250	13	49	133 <100		3.7	470	17	8.4	4.2	17	3	20
974157	77	171 <10		<0.1		1460 <1		500	170	57	35 <100		2.3	1840	39	21.9	7.4	26	3	39
974158	47	96	10	0.3		1810 <1		440	24	352	76	200 <0.5		3130	57	28.6	15.8	68	4	74
974159	35	263	20 <0.1			1750	1	200	45	463	210	300	3.3	1970	42	22.3	8.8	253	13	39
974160	60	158 <10		0.1		1420 <1		430	63	222	72 <100	<0.5		2220	82	50.3	13.7	137	3	73
974161	70	279	20	0.1		3620 <1		190	91	98	190	200	1.3	670	19	9.4	3.8	246	10	16
974162	31 >300		40	0.1		2560	2	80	46	366	314	300	4.2	1280	52	28.2	9.9	306	25	46

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974118	<1	<0.5	47.8	137 <5		14	7620	12	3.1	194	480	2.5	310 <1		45 <1		61	1	62
974119	<1	<0.5	51.7	56 <5		8	3190	16	2.4	80	82	5.1	240 <1		17 <1		158 <1		56
974120	<1	<0.5	65.9	129 <5		53	4720 <5		4.2	128	272	3.9	360 <1		31 <1		54 <1		49
974121	<1	<0.5	47.5	43 <5		12	6110	7	7.6	59	298	13.6	390 <1		13 <1		122	1	63
974122	<1	<0.5	42.1	77 <5		41	4760 <5		3.4	110	276	1.3	230 <1		25 <1		57 <1		53
974123	<1	<0.5	84	79 <5		44	8110 <5		3.3	127	398	2.5	360 <1		27 <1		21 <1		58
974124	<1	<0.5	22.6	246 <5		36	4850	11	1	365	587	1.7	110 <1		80 <1		22	1	58
974125	2 <0.5		48.8	229 <5		27	9910	9	4.6	295	718	4.2	310 <1		69 <1		79	1	102
974126	1 <0.5		94.5	152 <5		40	18400	7	2.1	201	432	3	290 <1		46 <1		134 <1		81
974127	<1	<0.5	36.2	86 <5		14	4170	13	5.5	116	193	7.4	350 <1		27 <1		89 <1		52
974128	2 <0.5		40	33 <5		35	20200	10	2.5	43	303	1.9	250 <1		10 <1		37 <1		30
974129	<1	<0.5	46.7	26 <5		48	2930	6 <0.5		47	196	0.8	50 <1		10 <1		97 <1		9
974130	<1	<0.5	55.2	158 <5		48	1940	9	2.8	218	136	2.9	140 <1		49 <1		104	2	35
974131	<1	<0.5	74.9	222 <5		25	3680	9	12.1	225	362	16.3	300 <1		56 <1		95 <1		82
974132	<1	<0.5	22.5	79	7	10	2830	13	8.1	78	255	8.9	380 <1		19 <1		170 <1		70
974133	<1	<0.5	46.5	18 <5		39	9770	6	2.2	27	263	12.3	230 <1		6 <1		16 <1		46
974134	<1	<0.5	29.5	40 <5		53	6730 <5		1.2	61	397	2	170 <1		13 <1		62 <1		46
974135	<1	<0.5	79.2	288	7	48	15300	18	2.3	376	1650	1.5	160 <1		87 <1		8	2	73
974136	<1	<0.5	22.7 <1		11	71	1170	17 <0.5		1	156 <0.1		10 <1	<1	<1		8 <1		8
974137	<1	<0.5	21.7	38	5	88	4040	17 <0.5		77	1230	1.3	30 <1		15 <1	<5	<1		23
974138	<1	<0.5	22	112 <5		41	1520	17	2.2	141	225	1.4	100 <1		33 <1		50 <1		15
974139	<1	<0.5	34.1	176 <5		21	3090	9	8.3	208	340	5.7	630 <1		50 <1		251 <1		107
974140	<1	<0.5	41.3	133 <5		17	4200	8	4.6	166	396	11.3	230 <1		39 <1		226	1	87
974141	<1	<0.5	19.2	179 <5		2	4970	7	1.6	230	45	2.1	180 <1		55 <1		200 <1		41
974142	<1	<0.5	21.8	278 <5		69	6530	16	0.5	386	844	2.1	100 <1		84 <1		27	1	59
974143	<1	<0.5	19	87 <5		125	1140 <5	<0.5		127	120	0.5	70 <1		27 <1		128	1	36
974144	<1	<0.5	32.1	75 <5		9	3220	5	5.3	102	234	8.8	290 <1		23 <1		209 <1		83
974145	<1	<0.5	34.9	737 <5		45	7140	9	3.9	950	382	4.2	260 <1		218 <1		130	2	234
974146	<1	<0.5	15.3	124 <5		8	2000	10	2.7	169	298	2.2	350 <1		38 <1		228 <1		54
974147	1 <0.5		11.1	83 <5		2	7420	11	4.3	95	244	10.9	230 <1		23 <1		110 <1		60
974148	<1	<0.5	44.2	20 <5		6	11300	8	5.4	27	234	17.9	270 <1		6 <1		241 <1		54
974149	1 <0.5		68.1	108 <5		9	20700	11	5.6	150	236	13.6	160 <1		34 <1		291	1	105
974150	<1	<0.5	27.1	117 <5		9	4270	7	3.1	156	70	5.3	230 <1		36 <1		385 <1		56
974151	<1	<0.5	34.4	88 <5		6	3560	5	2.7	96	109	7.2	160 <1		24 <1		175 <1		35
974152	<1	<0.5	45.6	118 <5		23	2820	18	7	137	69	4.1	210 <1		32 <1		318	2	62
974153	<1	<0.5	21.7	43 <5		6	2590	8	5.5	54	81	12.3	190 <1		13 <1		208 <1		48
974154	<1	<0.5	49	78 <5		27	2780	10	0.7	136	116	0.7	150 <1		28 <1		306 <1		67
974155	<1	<0.5	48.9	276 <5		17	3850	11	3.3	340	77	5.9	260 <1		81 <1		212 <1		112
974156	<1	<0.5	57.9	35 <5		13	2570	6 <0.5		62	69	1	130 <1		13 <1		331 <1		31
974157	<1	<0.5	35.5	79 <5		36	6470	5 <0.5		118	857	0.5	160 <1		26 <1		182 <1		46
974158	<1	<0.5	40.4	208 <5		67	4260	17	1	316	747	1.9	110 <1		69 <1	<5		1	93
974159	<1	<0.5	40.9	102 <5		25	9170	12	4.7	140	978	9.1	230 <1		32 <1		119	1	130
974160	<1	<0.5	139	120 <5		60	5200	7	0.5	202	1510	0.8	140 <1		43 <1		7 <1		134
974161	<1	<0.5	43.5	50 <5		36	6620	6	4.1	56	342	8.9	280 <1		13 <1		169 <1		50
974162	1 <0.5		39.7	142 <5		14	12900	12	9	178	628	18.9	500 <1		42 <1		213	2	119

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974118	46 <1		630 <1		8 <10		78.8	642	0.5	54	1	210	20	200	106
974119	20 <1		210 <1		3 <10		34	617 <0.5		20	1	79	8	430	121
974120	27 <1		1180 <1		4 <10		62.1	835 <0.5		24 <1		113	9	1020	117
974121	15 <1		370 <1		3 <10		47	1660 <0.5		19 <1		86	9	520	109
974122	28 <1		1120 <1		5 <10		45.8	977 <0.5		31 <1		142	14	530	74
974123	34 <1		1170 <1		7 <10		43.6	841 <0.5		26 <1		256	23	310	46
974124	83 <1		1420 <1		12 <10		79.2	236 <0.5		39	1	348	29	260	74
974125	70 <1		990 <1		12 <10		97.3	1220	0.7	40	1	346	32	260	116
974126	51 <1		1530 <1		10 <10		59.7	450	1.1	114	1	343	32	750	92
974127	27 <1		530 <1		5 <10		39.5	1290 <0.5		24 <1		137	12	210	86
974128	11 <1		2390 <1		2 <10		22.1	349	0.5	27 <1		79	8	1480	39
974129	13 <1		2280 <1		2 <10		12	26 <0.5		16 <1		47	3	250	14
974130	50 <1		1230 <1		7 <10		33.2	829 <0.5		21 <1		184	14	180	54
974131	49	1	440 <1		7 <10		98.8	2940 <0.5		24	1	149	13	220	139
974132	18 <1		440 <1		3 <10		51.6	1970	0.6	18	1	73	7	250	149
974133	7 <1		850 <1		1 <10		25	518 <0.5		15 <1		34	4	840	37
974134	16 <1		2560 <1		3 <10		18.4	199	0.6	16 <1		106	10	4160	27
974135	80 <1		2680 <1		12 <10		70.3	375	0.8	60	1	334	29	300	85
974136	2 <1		2530 <1		<1	<10	1	7 <0.5		7 <1		23	2 <20	<5	
974137	20 <1		2860 <1		3 <10		19	12 <0.5		63 <1		101	8	160	20
974138	31 <1		1030 <1		4 <10		27.6	512	0.6	35	1	90	7	290	43
974139	47 <1		930 <1		8 <10		80.2	2220	0.7	40	1	229	21	200	165
974140	37 <1		610 <1		5 <10		47.6	1130	0.7	31 <1		139	12	930	114
974141	49 <1		280 <1		7 <10		113	423	1.3	20	2	152	12	60	78
974142	82 <1		1800 <1		12 <10		61.1	105 <0.5		37 <1		333	25	480	47
974143	31 <1		3660 <1		5 <10		47.9	23 <0.5		16 <1		120	9	40	53
974144	25 <1		320 <1		4 <10		36.8	1170	0.7	25	2	134	11	960	120
974145	199 <1		900 <1		26 <10		143	1280	1.1	61	3	684	50	350	149
974146	42 <1		440 <1		8 <10		40.9	734	0.7	24	2	241	17	100	88
974147	21 <1		130 <1		3 <10		56.2	862	0.6	20	4	72	6	520	111
974148	7 <1		310 <1		2 <10		29.5	1290 <0.5		14 <1		51	6	2790	85
974149	35 <1		260 <1		6 <10		51.9	1480	0.8	26	2	162	14	640	173
974150	35 <1		620 <1		5 <10		44.7	729	0.7	17	2	138	10	210	128
974151	22 <1		720 <1		4 <10		42.7	527 <0.5		11	3	86	7	270	85
974152	32 <1		1000 <1		5 <10		104	2500	0.6	28	1	102	9	70	140
974153	14 <1		390 <1		2 <10		32.6	859 <0.5		17	1	63	5	80	134
974154	36 <1		620 <1		6 <10		16.3	165 <0.5		21 <1		203	15	160	47
974155	76 <1		640 <1		11 <10		110	831	1	43	2	248	20	120	188
974156	18 <1		620 <1		3 <10		8.8	39 <0.5		15 <1		80	7	110	33
974157	32 <1		1430 <1		7 <10		13	36	0.8	63 <1		253	16	130	29
974158	73 <1		1130 <1		11 <10		59	180 <0.5		57 <1		312	24	240	96
974159	36 <1		700 <1		7 <10		72.4	1240	1.2	42	1	214	18	550	126
974160	56 <1		1510 <1		12 <10		33	88 <0.5		79 <1		517	41	380	57
974161	14 <1		940 <1		3 <10		41.9	903 <0.5		22 <1		83	7	2470	50
974162	43	1	530 <1		8 <10		112	2720	0.9	48	2	247	23	1310	194

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974163	33		61 <10		0.8	2210 <1		440	827		35 <100	<0.5		2680	110	48.2	29.3	21	4	146
974164	73		116 <10	<0.1		1510 <1		590	77	900	18 <100		1.1	1700	73	38.9	14.1	15	3	75
974165	<1		8 <10	<0.1		640 <1		520	7	<5	24 <100	<0.5		20 <1	<0.5	<0.5		1	<1	<1
974166	<1		97 <10	<0.1		550 <1		490	20	11	13 <100	<0.5		130	6	4.1	0.9	10	4	4
974167	72		106	10	0.5	1270 <1		430	35	52	69 <100	<0.5		2110	40	20.7	12.2	19	4	52
974168	34		187	110	0.3	2400	4	150	37	2240	311	400	3.7	3920	80	36.6	23	309	29	99
974169	216		239 <10		0.2	890 <1		10	32	195	71 <100		4.2	800	41	21.3	8.5	97	14	40
974170	38		282 <10	<0.1		1160 <1		40	53	93	208	100	5.3	280	20	12.5	3.7	144	31	16
974171	32	>300		10 <0.1		1320	1	50	64	73	183	200	2.2	270	16	9.7	2.8	210	26	11
974172	26		280	10	0.1	2020 <1		110	61	223	137	100	5.6	1310	97	55.3	12.1	244	12	62
974173	53	>300		20 <0.1		1670	1	50	48	147	106	200	5.1	480	24	13.8	4.8	190	34	20
974174	15		11 <10		0.4	3060 <1		270	5	79	48 <100	<0.5		1170	18	7.3	6.5	14	<1	29
974175	19		21 <10		0.9	2760 <1		240	6	47	8 <100	<0.5		3320	94	35.1	31.3	12	3	146
974176	15		83	10	0.5	3790 <1		370	8	205	65	100	0.6	800	29	13.1	8.9	58	5	39
974177	64		227	30 <0.1		2260	1	280	99	405	148	200	1.5	1220	27	14.6	6.4	281	13	28
974178	37		116	20	0.4	1380	1	120	12	1180	93	100	2.7	2150	64	26.3	19.2	58	10	82
974179	385		57	10	0.3	860 <1		460	946	63	135 <100	<0.5		3420	41	21.9	12.4	23	1	58
974180	27		296	20 <0.1		1850 <1		110	732	57	324	100	0.9	810	18	13.3	2	242	12	9
974181	87		273	80	0.1	2210	1	140	813	193	264	100	0.9	3920	62	41.8	9.8	293	12	43
974182	172		168 <10		0.3	1220 <1		120	225	140	103 <100		2.7	480	21	9.7	5.8	26	4	25
974183	42		251	60	0.2	1910	1	250	158	158	120	200 <0.5		320	27	12.6	6.3	166	11	29
974184	130		210	160	1.5	1490	1	150	290	515	243	100	2	2100	75	32.2	24.6	141	10	95
974185	54		292	30	0.2	1620 <1		120	63	126	229	100	3	1590	28	14.9	4.9	214	14	22
974186	52		58 <10		0.9	1110 <1		390	41	69	33 <100	<0.5		3760	46	20.7	15	15	2	69
974187	94		160 <10		0.2	2160 <1		360	71	46	40 <100		2.1	1040	19	9.9	4.3	36	4	19
974188	103		147	20	0.5	1610 <1		210	41	58	95 <100		1.3	390	9	4.3	2.7	54	4	10
974189	24	>300		50	0.1	3830	2	70	82	206	474	200	1.2	920	25	15.2	5.2	267	15	19
974190	278		254	20	0.3	1420 <1		170	110	303	307	100	2.2	440	28	13.8	6.7	129	11	29
974191	80		45 <10		1.6	1900 <1		780	44	28	198	100 <0.5		4940	60	32.4	12.9	16	<1	69
974192	97		126 <10		0.2	950 <1		500	87	18	80 <100		1.8	5110	17	9.9	3.9	18	2	20
974193	22	>300		10 <0.1		1270 <1		50	46	48	227	200	3.6	580	17	10.6	2.3	164	13	10
974194	70		178	50	0.3	1490 <1		250	42	145	183	200	1.7	820	19	9.5	4.6	137	9	20
974195	67		238	20 <0.1		1060 <1		110	76	51	78 <100		2.1	300	15	8.8	3	125	18	13
974196	37		58	30	0.5	1290 <1		160	9	353	133	200 <0.5		1260	93	39.2	29	52	6	128
974197	99		204	10	0.3	680 <1		130	28	344	111 <100		3.2	790	38	19.1	9.6	89	13	42
974198	55		97 <10	<0.1		930 <1		510	33	31	26 <100		1.1	710	6	2.9	1.8	34	3	8
974199	134		228	10	0.2	1330 <1		60	29	200	161	100	4.4	1060	41	21.3	10	97	14	44
974200	26		65	30	0.7	1050 <1		90	10	469	172 <100		3	2670	77	31.8	23.3	44	7	97
974201	158		121	20	0.3	2740 <1		80	17	558	231 <100		2.7	1070	39	18.3	10.9	51	6	45
974202	122		138	20	0.2	770 <1		80	21	278	203 <100		2.7	800	27	12.2	7.1	58	7	31
974203	56		131	40	0.6	930	1	130	18	1320	252	200	3.4	1620	50	20.1	13.6	91	10	57
974204	66		93	30	0.5	980 <1		270	54	215	315	100	0.7	6850	123	50.7	36.8	62	6	167
974205	91		231	50	0.3	730 <1		50	44	385	322	200	3.5	1520	49	22.1	12.5	180	18	54
974206	122		257	40	0.2	1540 <1		110	56	145	167	200	3.1	920	25	12.5	6	192	13	25
974207	50		180	20	0.4	2420 <1		160	39	282	174	200	3.2	2280	44	19.4	13.1	79	7	55

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974163	<1	<0.5	35.5	234	7	118	1890	11	<0.5	472	849	0.2	60	<1	94	<1	88	<1	32
974164	<1	<0.5	46.4	132	<5	62	6630	23	<0.5	226	1370	0.2	110	<1	48	<1	118	<1	29
974165	<1	<0.5	10.9	<1	<5	67	24500	138	<0.5	<1	55	0.9	<10	<1	<1	<1	9	<1	<5
974166	<1	<0.5	4	4	<5	62	6160	31	<0.5	8	147	0.4	160	<1	2	<1	7	<1	8
974167	<1	<0.5	41.4	59	<5	52	3430	20	<0.5	134	187	1.3	60	1	23	<1	14	2	58
974168	<1	<0.5	34.1	368	<5	22	7950	44	12	483	711	8.8	540	<1	113	<1	176	8	99
974169	<1	<0.5	27	73	<5	4	1150	13	2.6	137	156	2.4	390	<1	27	<1	261	<1	50
974170	<1	<0.5	13.5	36	<5	4	3040	11	4.6	52	170	3.2	460	<1	11	<1	215	2	53
974171	<1	<0.5	31.3	26	<5	19	2830	10	8	36	247	7.5	340	<1	8	<1	162	<1	63
974172	<1	<0.5	52.7	98	<5	33	5950	7	5.6	183	524	5	290	<1	37	<1	289	1	118
974173	<1	<0.5	27.2	45	<5	6	6480	7	7.4	69	269	10.1	370	<1	15	<1	161	3	62
974174	<1	<0.5	34.2	73	21	25	1490	9	<0.5	127	45	0.4	20	<1	25	<1	15	3	16
974175	2	<0.5	24.5	411	10	44	310	<5	<0.5	698	40	0.1	20	<1	141	<1	31	<1	98
974176	<1	<0.5	18.5	119	<5	29	1750	11	1.7	176	143	1	110	<1	38	<1	97	1	30
974177	<1	<0.5	36.8	87	<5	13	15700	14	7.9	115	691	10.9	240	<1	27	<1	88	3	68
974178	<1	<0.5	33.1	320	<5	13	3810	6	1.9	427	178	2.7	170	<1	102	<1	102	1	70
974179	2	<0.5	43.7	34	<5	46	8040	22	<0.5	109	1080	1.9	50	<1	18	<1	10	3	30
974180	<1	<0.5	37	16	<5	25	10100	10	3.5	23	484	8.9	440	<1	5	<1	75	3	44
974181	<1	<0.5	23.4	70	<5	13	9270	33	4.4	116	1220	7.7	250	<1	24	<1	103	25	88
974182	<1	<0.5	32.8	52	<5	3	1190	19	0.6	83	97	1.1	330	<1	17	<1	185	1	41
974183	<1	<0.5	38.8	48	<5	14	12100	19	4	79	391	6.4	320	<1	17	<1	16	7	50
974184	<1	<0.5	26.7	224	<5	7	8330	25	2.7	359	627	6.5	270	<1	79	<1	123	16	73
974185	<1	<0.5	18.7	32	<5	9	7480	9	3.7	55	345	7.4	320	<1	11	<1	149	2	69
974186	2	<0.5	13.1	88	<5	41	1450	11	<0.5	189	385	0.3	30	<1	33	<1	43	<1	28
974187	<1	<0.5	28.2	30	<5	18	2240	9	0.9	54	197	1.2	100	<1	11	<1	268	<1	24
974188	<1	<0.5	12.9	23	<5	3	1800	13	1.3	34	46	2.2	210	<1	7	<1	132	<1	25
974189	<1	0.5	35	52	<5	13	15100	6	6.9	69	284	9.3	460	<1	16	<1	68	2	55
974190	<1	<0.5	16.9	91	<5	5	5950	16	3.7	121	249	3.4	1180	<1	28	<1	106	2	50
974191	1	<0.5	38.9	63	<5	53	4830	19	<0.5	158	346	0.2	60	1	28	<1	7	2	59
974192	<1	<0.5	33.4	37	7	17	2460	8	<0.5	58	282	0.3	110	<1	11	<1	117	<1	22
974193	<1	<0.5	27.3	17	<5	17	3020	<5	2.7	25	298	3.8	310	<1	5	<1	175	<1	53
974194	<1	<0.5	29.8	34	<5	20	9620	7	2.4	61	195	7.7	370	<1	12	<1	142	7	54
974195	<1	<0.5	19.6	21	<5	5	9150	7	2.9	38	171	3	240	<1	8	<1	139	2	61
974196	<1	<0.5	17.9	457	<5	26	4590	7	1.6	608	74	2.2	140	<1	135	<1	58	3	94
974197	<1	<0.5	23.8	90	<5	8	3950	9	1.9	152	63	4.5	260	<1	33	<1	175	1	85
974198	<1	<0.5	21.9	16	<5	25	1550	6	<0.5	27	163	0.7	50	<1	6	<1	76	1	8
974199	<1	<0.5	51.5	70	<5	5	4520	15	2	141	117	3.4	310	<1	28	<1	251	3	102
974200	<1	<0.5	17.6	298	<5	16	4510	9	1.3	447	83	2.3	210	<1	100	<1	71	3	96
974201	<1	<0.5	29.4	116	<5	6	2990	11	1.3	189	190	2.7	270	<1	40	<1	137	3	53
974202	<1	<0.5	41.6	90	<5	7	2390	11	1.2	131	88	2.7	170	<1	29	<1	99	2	40
974203	<1	<0.5	37.8	173	<5	9	4810	15	2.9	243	91	3.8	310	<1	55	<1	115	6	78
974204	1	<0.5	37.4	422	<5	39	2560	12	1.1	690	348	1.6	110	<1	142	<1	93	4	145
974205	<1	<0.5	18.3	91	<5	2	4050	32	3.5	188	164	10.3	250	<1	39	<1	111	5	98
974206	<1	<0.5	84.2	48	<5	11	3140	11	3.5	82	210	9.1	260	<1	17	<1	179	3	82
974207	<1	<0.5	55.7	125	<5	15	3170	12	1.7	208	134	2.4	290	<1	44	<1	133	4	71

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974163	130 <1		2190 <1		21 <10		59.6	12 <0.5		125 <1		539	32	330	26
974164	62 <1		2210 <1		12 <10		11.5	12	0.6	141 <1		419	28	160	28
974165	<1	<1	2970 <1	<1	<10	<0.5		5 <0.5		2 <1	<5	<1		990 <5	
974166	3 <1		2350 <1	<1	<10		2.1	18 <0.5		7 <1		40	4	560	6
974167	40 <1		2200 <1		7 <10		13.3	55 <0.5		15 <1		245	15	440	59
974168	108 <1		610 <1		16 <10		205	3860	1.5	68	7	339	32	1230	219
974169	36 <1		100 <1		7 <10		37.1	719	0.6	20 <1		215	16	290	53
974170	13 <1		300 <1		3 <10		24.1	1320 <0.5		11 <1		108	10	1030	67
974171	9	1	520 <1		2 <10		32.2	2490 <0.5		21	1	78	9	900	113
974172	49 <1		950 <1		14 <10		80.6	1590	1	63	1	524	41	580	114
974173	18 <1		250 <1		4 <10		44.5	2430	0.5	18	2	123	12	1200	126
974174	30 <1		2070 <1		4 <10		23	38 <0.5		23	1	94	5	80	10
974175	150 <1		3050 <1		20 <10		42.7	19 <0.5		39	2	437	22	330	35
974176	40 <1		3330 <1		6 <10		82.8	490 <0.5		22	2	128	10	360	60
974177	27 <1		1500 <1		5 <10		66.2	1580	0.6	28	2	130	12	2190	128
974178	93 <1		810 <1		13 <10		129	501	1.2	36	4	259	20	90	121
974179	40 <1		2000 <1		8 <10		22.4	18	1.5	53 <1		257	21	3870	43
974180	7 <1		790 <1		2 <10		27.8	974	0.6	20 <1		98	12	7350	84
974181	33 <1		1230 <1		9 <10		65.3	1470	1.8	62	1	387	36	7120	151
974182	22 <1		530 <1		4 <10		16.8	210	0.7	11 <1		98	7	1000	42
974183	24 <1		980 <1		5 <10		55.2	943 <0.5		21 <1		114	11	1540	105
974184	92 <1		460 <1		14 <10		67.1	1040	2.4	30	2	362	25	3200	139
974185	16 <1		600 <1		4 <10		42.8	1290 <0.5		26 <1		133	11	1650	119
974186	54 <1		1680 <1		9 <10		14.3	15 <0.5		10 <1		286	14	680	12
974187	16 <1		1120 <1		3 <10		10.5	280 <0.5		14 <1		102	7	1290	36
974188	9 <1		390 <1		2 <10		10	526 <0.5		9 <1		40	3	940	45
974189	18 <1		480 <1		4 <10		68.5	2070 <0.5		18	2	115	13	2630	132
974190	29 <1		530 <1		5 <10		73.1	788 <0.5		20 <1		112	12	1030	124
974191	48 <1		4430 <1		10 <10		19.9	7 <0.5		38 <1		313	25	150	29
974192	15 <1		2010 <1		3 <10		3.2	19 <0.5		37 <1		145	7	300	14
974193	7 <1		530 <1		2 <10		16.3	969 <0.5		10 <1		89	8	450	95
974194	18 <1		850 <1		3 <10		27.1	927 <0.5		14	2	87	7	920	68
974195	11 <1		420 <1		2 <10		21.6	913 <0.5		18 <1		80	8	1110	132
974196	131 <1		1640 <1		19 <10		99.6	720	0.7	38	4	420	28	130	93
974197	40 <1		280 <1		7 <10		35.3	521	0.5	27	1	179	15	420	123
974198	7 <1		2170 <1		1 <10		6	33 <0.5		7 <1		34	2	170	11
974199	38 <1		140 <1		7 <10		30.9	711	0.6	23	2	198	17	690	169
974200	103 <1		1180 <1		15 <10		83.7	566	1.3	30	4	329	23	270	103
974201	46 <1		510 <1		7 <10		37.9	428 <0.5		16	2	191	14	160	101
974202	31 <1		370 <1		5 <10		33.9	500 <0.5		14	2	126	10	280	152
974203	58 <1		780 <1		9 <10		138	1700	1	30	4	192	15	360	185
974204	160 <1		1990 <1		24 <10		41.6	658	1.1	38	2	571	32	2760	67
974205	50 <1		180 <1		9 <10		43.2	1660	0.8	29	3	203	16	1300	202
974206	22 <1		390 <1		4 <10		31.8	1260	0.5	21	2	112	10	1360	163
974207	51 <1		660 <1		8 <10		38.8	810	0.7	20	2	209	15	630	107



## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974208	134	137	20	0.2	650 <1		190	46	836	382	100	2.2	2390	60	27.9	17.6	67	7	75
974209	107	50 <10		0.7	1270 <1		710	65	85	214	100 <0.5		5480	48	25.9	13.5	24	1	64
974210	56	18 <10		0.8	740 <1		590	39 <5		39 <100	<0.5		3020	9	5.5	1.4	8 <1		9
974211	99	278	30	0.2	1260 <1		120	84	101	154	300	1.9	420	22	11.5	5	218	22	21
974212	106	189	30	0.2	1940 <1		250	73	234	171	200	1	1510	57	29.3	15.6	156	7	64
974213	69	233	20	0.1	770 <1		170	47	87	88	200	1.8	570	13	6.3	3	143	13	13
DUP-974124	82	81	20	0.4	1250 <1		350	24	324	107	100 <0.5		2250	63	32.5	18.7	53	3	86
DUP-974142	39	61	10	0.4	910 <1		400	92	325	60 <100	<0.5		1460	58	27.1	18.3	62	3	83
DUP-974147	106 >300		20 <0.1		910 <1		40	33	244	410	300	6.9	430	17	7.4	4.7	151	29	19
DUP-974167	75	112	10	0.7	1270 <1		440	35	49	75 <100	<0.5		2220	39	20.3	12.2	19	4	51
DUP-974172	20	270	10	0.1	2020 <1		120	60	239	105 <100		5.3	1190	100	53.9	13.8	218	11	68
DUP-974185	47	290	30	0.2	1780 <1		130	73	112	226	100	3.1	1660	27	15.2	4.4	216	13	19
DUP-974197	100	205	10	0.3	670 <1		130	28	356	101 <100		3	760	41	19.1	10.3	88	13	44
DUP-974213	82	238	10	0.2	790 <1		150	56	82	94	200	2.1	630	15	7.7	3.1	138	13	13
MMISRM16	23	61	20	28	80 <1		280	5	20	80 <100		13.3	900	3	1.1	1.2	2 <1		5
AMIS0169	9	94	20	0.4	860 <1		40	2	924	146	100	8.5	4960	36	15.2	13.4	64	17	54
MMISRM18	26	42	20	7.4	160 <1		220	94	33	97 <100		6.3	1050	5	1.9	1.7	4 <1		7
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974623	10	59 <10		0.2	5350 <1		380	9	849	10 <100	<0.5		730	118	63.9	31.7	56	5	128
974624	10	11 <10		0.5	4490 <1		570	12	159	40 <100	<0.5		1320	50	29.6	12.8	9	1	59
974625	10	17 <10		0.5	5620 <1		680	24	131	81 <100	<0.5		1390	88	58	19.5	4	1	93
974626	13	135 <10	<0.1		7380 <1		300	19	288	36 <100		1.1	570	66	37.5	18.1	77	5	70
974627	5	62 <10		0.3	16500 <1		250	3	98	15 <100		2.5	400	10	4.9	5.3	7	4	15
974628	4	61 <10		0.1	14500 <1		300	5	175	23 <100		0.9	690	38	19.3	14.1	12	4	48
974629	9	83 <10		0.1	5490 <1		150	3	111	19 <100		2.3	310	15	7.4	5.5	12	4	18
974630	3	76 <10		0.2	11600 <1		240	1	291	79 <100		1.9	470	20	9.4	8	68	4	25
974631	3	55 <10	<0.1		8700 <1		260	2	119	24 <100		0.8	280	12	5.8	4.8	37	4	14
974632	3	57 <10		0.1	10400 <1		240	2	477	32 <100		1.1	730	44	20.1	17.5	44	7	56
974633	6	31 <10		0.2	7720 <1		260	3	44	16 <100		0.6	200	5	2.5	2.2	39	2	6
974634	4	34 <10	<0.1		3390 <1		290	5	108	8 <100	<0.5		180	12	6	4.2	32	2	14
974635	6	55 <10	<0.1		3790 <1		210	5	151	17 <100		1.3	240	17	8.1	6	53	4	21
974636	3	37 <10		0.1	7690 <1		270	2	78	13 <100	<0.5		160	10	5.6	4.2	24	3	13
974637	3	19 <10		0.1	9910 <1		270	1	95	10 <100		0.5	810	21	9.2	8.4	18	2	28
974638	7	65 <10	<0.1		9150 <1		270	4	178	25 <100		2	570	24	12.3	9.4	28	5	32
974639	6	62 <10		0.2	22000 <1		260	2	240	19 <100		1.4	540	19	8.6	8.1	13	5	24
974640	9	81 <10	<0.1		11100 <1		200	5	108	31 <100		1.6	760	31	17.8	10.1	18	3	36
974641	5	63 <10	<0.1		12700 <1		220	3	56	21 <100		1.8	730	15	7.7	5.7	6	2	19
974642	2	43 <10		0.9	10300 <1		240	2	293	59 <100		1.8	760	35	15.7	13.8	43	5	46
974643	2	57 <10		0.1	8180 <1		220	1	168	54 <100		1.6	420	15	7.5	6.2	55	4	19
974644	10	91 <10	<0.1		8530 <1		210	5	138	15 <100		2.1	310	18	8.7	6.7	22	5	22
974645	9	113 <10		0.1	8330 <1		240	5	221	18 <100		2.7	340	26	12.5	9.5	36	6	30
974646	6	91 <10		0.1	9870 <1		250	4	219	28 <100		1.8	430	27	13.5	9.7	44	5	32
974647	7	16 <10		0.7	7790 <1		550	5	218	24 <100	<0.5		1070	78	47.2	21.1	16	2	90

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974208	<1	<0.5	56.6	154	<5	24	5320	19	1.2	284	263	3	310	<1	58	<1	88	3	109
974209	<1	<0.5	29.7	81	<5	55	4260	32	<0.5	179	836	0.6	70	1	32	<1	9	3	46
974210	2	<0.5	19.5	<1	7	47	1040	29	<0.5	2	203	<0.1	20	1	<1	<1	12	2	18
974211	1	<0.5	25.2	40	<5	11	5980	11	5.1	63	189	11.4	210	<1	13	<1	216	2	76
974212	<1	<0.5	89.2	124	<5	33	8020	10	2.7	221	372	6.7	210	<1	45	<1	45	3	110
974213	<1	<0.5	45.8	29	<5	11	4020	13	3.1	40	105	8.7	210	<1	9	<1	158	2	58
DUP-974124	<1	<0.5	21.8	241	<5	36	5650	11	1	351	576	1.5	120	<1	76	<1	21	1	59
DUP-974142	<1	<0.5	19.5	300	<5	64	4130	16	0.6	404	672	2.1	80	<1	88	<1	30	1	55
DUP-974147	1	<0.5	10.9	82	<5	2	7130	10	4	93	245	10	210	<1	23	<1	109	<1	56
DUP-974167	<1	<0.5	43.8	57	<5	53	3680	20	<0.5	128	201	1.2	60	<1	22	<1	13	2	60
DUP-974172	<1	<0.5	49.1	102	<5	32	5030	5	4.6	206	519	4	300	<1	41	<1	272	<1	106
DUP-974185	<1	<0.5	20.3	29	<5	10	7620	8	3.5	48	383	6.9	300	<1	10	<1	158	2	67
DUP-974197	<1	<0.5	23.5	94	<5	8	3700	9	1.9	158	59	4.4	260	<1	34	<1	169	1	84
DUP-974213	<1	<0.5	52.5	28	<5	12	3730	11	2.5	39	114	7.1	240	<1	9	<1	185	2	64
MMISRM16	14	<0.5	48.6	5	<5	45	150	61	<0.5	17	366	0.3	130	34	3	<1	376	<1	12
AMIS0169	<1	<0.5	52.5	506	<5	42	4900	5	4	467	586	3.2	140	<1	121	<1	280	1	83
MMISRM18	5	<0.5	30.6	10	<5	103	820	38	<0.5	26	680	0.9	400	16	5	6	162	<1	7
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
974623	<1	<0.5	12.5	219	<5	128	1000	<5	<0.5	420	1000	0.1	20	<1	84	<1	44	<1	110
974624	1	<0.5	17.5	42	19	259	3060	<5	<0.5	116	613	0.2	20	<1	19	<1	38	1	16
974625	2	<0.5	36.9	55	43	266	4840	8	<0.5	169	1610	0.6	90	<1	25	<1	55	<1	18
974626	<1	<0.5	34.2	134	<5	101	3090	<5	<0.5	226	462	1.1	60	<1	46	<1	75	<1	76
974627	<1	<0.5	33.4	43	<5	43	160	<5	<0.5	61	16	0.5	60	<1	13	<1	129	<1	13
974628	<1	<0.5	11.8	96	<5	96	600	<5	<0.5	173	59	0.3	40	<1	33	<1	75	<1	37
974629	<1	<0.5	19.4	40	<5	21	580	<5	<0.5	73	16	0.6	50	<1	15	<1	103	<1	34
974630	<1	<0.5	19.8	117	<5	72	1370	<5	1.1	132	106	1.5	10	<1	30	<1	85	<1	34
974631	<1	<0.5	18.2	52	<5	90	320	<5	0.8	71	75	1	20	<1	15	<1	73	<1	16
974632	<1	<0.5	14.8	237	<5	76	720	<5	0.8	308	98	0.7	20	<1	71	<1	63	<1	47
974633	<1	<0.5	25.4	18	<5	108	340	<5	0.5	28	90	1.1	<10	<1	6	<1	93	<1	8
974634	<1	<0.5	22.7	37	5	127	740	<5	<0.5	65	170	0.4	<10	<1	14	<1	74	<1	11
974635	<1	<0.5	26.5	77	<5	85	500	<5	0.9	102	109	1.8	20	<1	23	<1	85	<1	18
974636	<1	<0.5	19	37	<5	111	240	<5	<0.5	61	74	0.5	10	<1	12	<1	53	<1	9
974637	<1	<0.5	24.5	90	<5	101	190	<5	<0.5	132	79	0.3	<10	<1	28	<1	74	<1	10
974638	<1	<0.5	32.8	83	<5	85	770	<5	0.6	137	65	1	50	<1	28	<1	117	<1	19
974639	<1	<0.5	15.9	80	<5	52	220	<5	<0.5	111	22	1.1	80	<1	23	<1	84	<1	17
974640	<1	<0.5	13.6	71	<5	55	220	<5	<0.5	129	51	0.2	60	<1	26	<1	65	<1	35
974641	<1	<0.5	27.7	31	<5	39	150	<5	<0.5	60	19	0.2	70	<1	11	<1	112	<1	17
974642	<1	<0.5	9.7	182	<5	83	1120	<5	1.1	243	102	0.8	30	<1	54	<1	65	<1	33
974643	<1	<0.5	15.5	80	<5	91	1260	<5	0.9	99	89	1.1	20	<1	23	<1	73	<1	23
974644	<1	<0.5	21.3	57	<5	47	440	<5	<0.5	88	42	1	100	<1	18	<1	103	<1	27
974645	<1	<0.5	27.2	100	<5	64	210	<5	0.8	140	99	0.9	30	<1	31	<1	101	<1	29
974646	<1	<0.5	32.7	96	<5	85	680	<5	0.6	140	135	0.7	30	<1	30	<1	81	<1	34
974647	<1	<0.5	20.1	113	18	240	1670	<5	<0.5	234	759	0.2	40	<1	42	<1	31	<1	22

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
974208	70 <1		760 <1		11 <10		51.5	622	0.8	26		1	277	21	730	144
974209	50 <1		5090 <1		9 <10		21.9	9 <0.5		57 <1			310	21	220	38
974210	3 <1		5240 <1		1 <10		2.3	4 <0.5		15 <1			56	5	170	11
974211	18 <1		540 <1		4 <10		23.1	1980 <0.5		14		2	105	9	730	129
974212	58 <1		1110 <1		10 <10		38	820 <0.5		39		1	293	23	2660	103
974213	11 <1		500 <1		2 <10		22.2	846 <0.5		23		1	59	5	380	132
DUP-974124	80 <1		1390 <1		12 <10		76.9	210 <0.5		39		1	348	29	260	73
DUP-974142	84 <1		1650 <1		12 <10		64	149 <0.5		32 <1			320	22	370	48
DUP-974147	20 <1		130 <1		3 <10		52.9	800	0.6	19		4	70	6	550	103
DUP-974167	38 <1		2220 <1		7 <10		13.4	51 <0.5		15 <1			238	15	490	58
DUP-974172	55 <1		970 <1		15 <10		72	1260	0.8	53		1	534	39	600	91
DUP-974185	14 <1		670 <1		4 <10		39.1	1210 <0.5		24 <1			132	11	2070	105
DUP-974197	42 <1		270 <1		7 <10		35	496	0.5	26		1	183	15	380	124
DUP-974213	11 <1		530 <1		2 <10		21.3	676 <0.5		25 <1			71	6	410	129
MMISRM16	5 <1		560 <1		<1	<10	23.2	4 <0.5		49 <1			12 <1		390	20
AMIS0169	77	1	90 <1		8 <10		92.2	516	1.5	29		2	159	12	280	72
MMISRM18	7 <1		1240 <1		1 <10		27.7	10 <0.5		30 <1			29	1	890	42
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5		5 <0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
974623	108 <1		5490 <1		20 <10		11.9	15 <0.5		67 <1			639	48	70	61
974624	38 <1		7310 <1		8 <10		9.1	10	0.6	44 <1			291	23	800	20
974625	57 <1		8900 <1		14 <10		9.8	20	1.2	28		1	474	49	220	25
974626	55 <1		5070 <1		11 <10		13.8	72 <0.5		18 <1			355	28	520	60
974627	14 <1		3430 <1		2 <10		2.8	6 <0.5		3 <1			52	3	20	13
974628	42 <1		6000 <1		7 <10		3	4 <0.5		6 <1			207	13	130	17
974629	17 <1		1380 <1		3 <10		3.6	17 <0.5		5 <1			67	5	40	22
974630	26 <1		3770 <1		4 <10		14.1	290 <0.5		8 <1			92	7	70	86
974631	15 <1		4300 <1		2 <10		7.3	207 <0.5		5 <1			58	5	60	41
974632	60 <1		4280 <1		9 <10		14.6	292 <0.5		11 <1			202	14	150	66
974633	6 <1		3930 <1		<1	<10	5.6	108 <0.5		4 <1			23	2	140	28
974634	14 <1		3570 <1		2 <10		6.9	39 <0.5		6 <1			63	4	100	21
974635	21 <1		2830 <1		3 <10		7.4	269 <0.5		8 <1			86	6	250	43
974636	13 <1		4230 <1		2 <10		5.7	64 <0.5		5 <1			56	4	60	22
974637	28 <1		4450 <1		4 <10		8.4	43 <0.5		10 <1			104	7	20	24
974638	31 <1		4530 <1		5 <10		7.3	229 <0.5		7 <1			125	9	30	34
974639	24 <1		5320 <1		4 <10		7.7	14 <0.5		5 <1			87	6	20	25
974640	33 <1		3940 <1		5 <10		4.6	52 <0.5		8 <1			179	13	170	19
974641	16 <1		3380 <1		3 <10		1.7	3 <0.5		4 <1			78	6	30	10
974642	49 <1		4290 <1		7 <10		11.2	212 <0.5		12 <1			157	11	190	62
974643	20 <1		3380 <1		3 <10		11.1	274 <0.5		7 <1			77	6	60	64
974644	20 <1		3490 <1		3 <10		4.7	41 <0.5		5 <1			90	6	100	25
974645	30 <1		3420 <1		5 <10		11.6	287 <0.5		9 <1			125	8	250	60
974646	32 <1		3650 <1		5 <10		12.7	246 <0.5		8 <1			127	10	260	64
974647	65 <1		8880 <1		13 <10		14.4	11 <0.5		47 <1			448	38	120	35

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974648	2	33 <10		0.3	8590 <1		320	3	126	14 <100		0.6	520	27	13.3	10	27	3	34
974649	4	48 <10		0.3	8430 <1		380	3	113	12 <100		0.8	340	16	8.5	6	28	3	20
974650	4	47 <10		0.2	13600 <1		340	4	70	18 <100		0.7	570	29	13.4	10.6	10	3	38
974651	4	89 <10		0.2	6480 <1		250	5	567	34 <100		1.1	450	84	33.6	24.8	22	7	90
974652	7	73 <10		0.1	12600 <1		220	3	285	33 <100		1.7	390	22	9.9	9	16	5	29
974653	7	98 <10		0.7	8250 <1		240	3	69	21 <100		2.2	450	11	5.6	3.7	17	3	12
974654	8	128 <10		0.1	6120 <1		210	4	255	25 <100		2.5	580	52	26.2	13.9	47	5	50
974655	8	116 <10		0.1	5910 <1		220	4	214	38 <100		2	400	26	12.7	8.8	68	5	30
974656	3	39 <10		0.3	11000 <1		400	2	178	14 <100		0.6	560	30	15.3	10.7	17	3	39
974657	4	51 <10		0.4	12600 <1		330	2	136	15 <100		0.6	820	32	15.6	11.4	14	3	39
974658	7	56 <10		0.2	12400 <1		500	4	114	21 <100	<0.5		290	30	15	12.7	13	4	47
974659	7	77 <10		0.1	10200 <1		240	2	159	19 <100		1.3	670	40	21.1	12.8	11	4	46
974660	7	97 <10		0.1	8330 <1		230	4	161	30 <100		2.5	460	31	17.1	9.1	17	3	33
974661	3	186 <10	<0.1		4500 <1		60	2	335	61 <100		5.4	440	40	20.2	11.1	74	8	39
974662	3	163 <10	<0.1		6160 <1		120	2	720	46 <100		3.6	590	92	44.7	26.7	70	10	95
974663	3	22 <10		0.2	7980 <1		400	2	90	7 <100	<0.5		470	33	16.6	11.3	20	2	41
974664	2	113 <10	<0.1		6880 <1		160	4	234	19 <100		2.5	350	33	17	9.8	26	7	37
974665	2	111 <10	<0.1		5920 <1		110	3	435	24 <100		2.6	310	52	26	16.3	22	7	62
974666	3	33 <10		0.1	5520 <1		270	2	202	21 <100	<0.5		380	28	13.6	10	29	3	36
974667	2	55 <10		0.1	7200 <1		220	1	138	21 <100		2.1	240	12	5.5	5	32	4	15
974668	8	46 <10		0.1	5390 <1		370	10	163	12 <100	<0.5		230	24	11.7	8.8	14	2	31
974669	7	44 <10		0.2	6810 <1		440	5	547	26 <100	<0.5		830	92	49.9	28.8	27	5	114
974670	4	41 <10	<0.1		8980 <1		330	3	116	11 <100		0.8	310	15	7.8	6.2	21	3	20
974671	8	27 <10		0.2	5850 <1		410	2	149	13 <100	<0.5		340	24	11.9	9	17	2	32
974672	11	77 <10	<0.1		2420 <1		280	8	20	16 <100		1.8	240	3	1.4	1.1	13	3	4
974673	6	61 <10		0.2	13100 <1		320	3	176	27 <100	<0.5		440	21	10.4	8.1	13	3	27
974674	11	94 <10		0.1	3350 <1		150	5	98	23 <100		2.5	120	13	6.5	4.2	15	4	14
974675	12	86 <10		0.2	12000 <1		260	4	73	19 <100		1.9	290	12	6	4.3	10	3	13
974676	7	98 <10	<0.1		10400 <1		250	4	76	20 <100		2.3	260	10	5	3.8	14	3	11
974677	8	91 <10		0.1	7230 <1		280	1	475	21 <100		1.9	360	63	33.4	18.8	45	5	70
974678	9	66 <10		0.1	9160 <1		270	4	162	28 <100		2.2	660	28	14.4	9	45	4	32
974679	4	46 <10		0.1	6950 <1		240	2	133	15 <100		1.3	260	15	7.5	5.9	31	4	19
974680	9	75 <10		0.2	11100 <1		320	3	65	30 <100		1.7	310	8	4.2	3.4	10	3	11
974681	8	44 <10		0.1	9950 <1		320	4	73	19 <100		0.9	660	50	25.6	17.2	22	3	64
974682	3	28 <10		0.1	6170 <1		420	4	368	15 <100	<0.5		680	71	37.3	23.4	32	4	96
974683	11	98 <10	<0.1		5480 <1		260	14	532	66 <100		0.9	440	63	31.2	20.6	83	6	73
974684	5	98 <10		0.1	7030 <1		270	4	399	45 <100		1.6	280	39	18	13.5	40	7	49
974685	5	140 <10	<0.1		5550 <1		230	5	311	36 <100		1.9	260	40	19.3	13.5	52	7	44
974686	6	108 <10	<0.1		5290 <1		260	3	363	12 <100		2.5	260	50	24.7	16.2	32	5	57
974687	10	135 <10	<0.1		3280 <1		70	4	377	33 <100		2.6	280	83	44	20.2	31	9	76
974688	9	103 <10	<0.1		8510 <1		320	4	533	36 <100		2	340	163	87.6	32.4	78	5	127
974689	4	72 <10	<0.1		6890 <1		250	2	227	17 <100		1.4	200	24	12	9.1	32	5	30
974690	7	62 <10	<0.1		5900 <1		310	5	152	22 <100		1	180	15	6.9	6	26	5	20
974691	10	68 <10	<0.1		7020 <1		280	2	55	21 <100		1.2	290	7	2.9	2.8	14	3	9
974692	6	61 <10	<0.1		8740 <1		310	3	115	35 <100		0.7	270	25	12.4	9.4	28	4	33

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5	
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
974648	<1	<0.5	21.9	88 <5		132	410 <5		<0.5		142	149	0.2	10 <1		29 <1		73 <1		22
974649	<1	<0.5	19.7	47 <5		138	360 <5		<0.5		79	109	0.1	10 <1		16 <1		82 <1		15
974650	<1	<0.5	9	84 <5		131	190 <5		<0.5		136	59	0.3	50 <1		27 <1		48 <1		22
974651	<1	<0.5	15	288 <5		68	900 <5		<0.5		385	63	0.4	120 <1		88 <1		84 <1		63
974652	<1	<0.5	41.1	118 <5		70	470 <5		0.6		153	28	0.9	70 <1		34 <1		103 <1		22
974653	<1	<0.5	51.6	30 <5		50	180 <5		<0.5		40	27	0.5	80 <1		8 <1		157 <1		26
974654	<1	<0.5	20	129 <5		58	370 <5		1		181	121	0.9	80 <1		39 <1		97 <1		69
974655	<1	<0.5	22.9	97 <5		63	570 <5		1.4		133	148	1.3	40 <1		29 <1		92 <1		40
974656	<1	<0.5	18.2	100 <5		131	350 <5		<0.5		158	156	0.1	20 <1		32 <1		56 <1		20
974657	<1	<0.5	36.9	94 <5		108	80 <5		<0.5		154	107	0.2	40 <1		30 <1		59 <1		25
974658	<1	<0.5	12.4	133 <5		135	300 <5		<0.5		202	86	0.3	50 <1		39 <1		13 <1		23
974659	<1	<0.5	21.3	99 <5		83	130 <5		<0.5		168	38	0.4	110 <1		33 <1		64 <1		57
974660	<1	<0.5	19.7	75 <5		73	630 <5		<0.5		116	45	0.4	130 <1		24 <1		94 <1		58
974661	<1	<0.5	17.8	128 <5		23	790 <5		1.2		183	181	1.4	50 <1		41 <1		144 <1		61
974662	<1	<0.5	6.2	299 <5		42	170 <5		1.6		443	121	1.2	50 <1		97 <1		73 <1		89
974663	<1	<0.5	11.2	92	7	141	120 <5		<0.5		162	190 <0.1	<10	<1		32 <1		38 <1		16
974664	<1	<0.5	13.6	120 <5		32	250 <5		0.6		163	34	0.7	60 <1		35 <1		86 <1		55
974665	<1	<0.5	9.3	217 <5		26	200 <5		<0.5		300	50	0.6	60 <1		67 <1		77 <1		62
974666	<1	<0.5	18.4	115 <5		121	670 <5		<0.5		172	205	0.3	10 <1		36 <1		62 <1		14
974667	<1	<0.5	21.2	75 <5		84	240 <5		0.9		86	65	0.6	10 <1		20 <1		91 <1		14
974668	<1	<0.5	30.6	71 <5		161	930 <5		<0.5		126	237	0.4	20 <1		25 <1		43 <1		10
974669	<1	<0.5	47.2	213	9	189	2070 <5		<0.5		396	705	0.3	20 <1		79 <1		32	2	41
974670	<1	<0.5	22.4	61 <5		127	100 <5		<0.5		96	93	0.3	10 <1		20 <1		47 <1		10
974671	<1	<0.5	19	73 <5		195	360 <5		<0.5		131	217	0.2	10 <1		26 <1		32 <1		12
974672	<1	<0.5	55.8	11 <5		30	420 <5		<0.5		13	22	1	70 <1		3 <1		167 <1		7
974673	<1	<0.5	85.9	82 <5		131	190 <5		<0.5		117	61	0.9	70 <1		24 <1		38 <1		20
974674	<1	<0.5	22.6	41 <5		24	340 <5		<0.5		54	25	0.5	120 <1		12 <1		119 <1		29
974675	<1	<0.5	41.1	35 <5		57	180 <5		<0.5		46	28	0.3	80 <1		10 <1		85 <1		24
974676	<1	<0.5	40.8	32 <5		51	250 <5		<0.5		43	28	0.5	80 <1		9 <1		94 <1		20
974677	<1	<0.5	15.5	180 <5		112	810 <5		<0.5		284	231	0.3	50 <1		60 <1		117 <1		69
974678	<1	<0.5	43.3	72 <5		92	630 <5		0.5		120	111	0.8	50 <1		24 <1		76 <1		37
974679	<1	<0.5	21.2	67 <5		77	360 <5		0.7		96	83	0.7	20 <1		21 <1		70	2	15
974680	<1	<0.5	36.5	25 <5		70	270	6 <0.5			38	34	0.7	90 <1		7 <1		83 <1		10
974681	<1	<0.5	21.9	130 <5		116	240 <5		<0.5		232	139	0.7	40 <1		46 <1		58	2	24
974682	<1	<0.5	42.7	209	7	137	540 <5		<0.5		377	492	0.2 <10	<1		75 <1		74 <1		26
974683	<1	<0.5	37	210 <5		98	2940 <5		0.9		319	438	0.8	40 <1		69 <1		49 <1		65
974684	<1	<0.5	45	196 <5		89	880 <5		0.8		231	143	1	60 <1		53 <1		87 <1		38
974685	<1	<0.5	43.7	137 <5		54	460 <5		0.9		196	173	1.5	60 <1		43 <1		107 <1		36
974686	<1	<0.5	35.6	152 <5		84	840 <5		<0.5		238	229	0.8	40 <1		51 <1		116 <1		46
974687	<1	<0.5	59.9	151 <5		27	1310 <5		<0.5		305	108	0.5	150 <1		62 <1		158 <1		77
974688	<1	<0.5	38.8	210 <5		136	850 <5		<0.5		418	483	0.1	60 <1		87 <1		109 <1		109
974689	<1	<0.5	27	101 <5		83	420 <5		0.8		146	133	0.7	20 <1		32 <1		71 <1		28
974690	<1	<0.5	44.6	68 <5		71	520 <5		0.6		98	104	1.5	20 <1		21 <1		83 <1		13
974691	<1	<0.5	27	25 <5		49	120 <5		<0.5		35	29	1.3	40 <1		7 <1		76 <1		8
974692	<1	<0.5	42.1	91 <5		80	560 <5		<0.5		143	82	1.1	40 <1		30 <1		56 <1		18

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974648	33 <1		4970 <1		5 <10		6.8	36 <0.5		10 <1		128	10	120	33
974649	18 <1		5770 <1		3 <10		6.2	15 <0.5		9 <1		83	6	20	33
974650	32 <1		6770 <1		5 <10		6.4	4 <0.5		8 <1		138	9	80	23
974651	87 <1		3380 <1		15 <10		16.9	14 <0.5		14 <1		357	18	80	39
974652	30 <1		3700 <1		4 <10		9.5	162 <0.5		6 <1		105	6	30	39
974653	10 <1		3420 <1		2 <10		5.4	62 <0.5		6 <1		54	4	60	28
974654	44 <1		3010 <1		9 <10		20	347 <0.5		13 <1		251	18	120	79
974655	30 <1		2830 <1		5 <10		18.2	411 <0.5		9 <1		130	10	200	85
974656	35 <1		6360 <1		6 <10		9	4 <0.5		7 <1		168	11	70	26
974657	36 <1		5480 <1		6 <10		7.1	4 <0.5		7 <1		164	11	130	28
974658	42 <1		7820 <1		6 <10		3.2 <3	<0.5		5 <1		178	10	370	15
974659	41 <1		4170 <1		7 <10		4.3	8 <0.5		7 <1		209	14	40	25
974660	28 <1		3130 <1		5 <10		6.6	23 <0.5		7 <1		169	12	120	32
974661	39 <1		1110 <1		7 <10		20.6	359 <0.5		10 <1		199	14	160	100
974662	93 <1		1890 <1		16 <10		25.1	602	0.5	11 <1		454	32	300	112
974663	37 <1		6580 <1		6 <10		10	24 <0.5		11 <1		160	12	30	28
974664	35 <1		2080 <1		6 <10		9.6	269 <0.5		6 <1		189	12	80	43
974665	59 <1		1450 <1		10 <10		10.5	236 <0.5		7 <1		284	19	200	40
974666	35 <1		3840 <1		5 <10		9.7	57 <0.5		14 <1		146	10	40	36
974667	16 <1		3770 <1		2 <10		12.5	305 <0.5		7 <1		55	4	30	58
974668	29 <1		5750 <1		4 <10		6.3	11 <0.5		11 <1		117	8	150	23
974669	96 <1		7270 <1		16 <10		13.9	11 <0.5		82 <1		441	39	100	61
974670	20 <1		5900 <1		3 <10		6.7	24 <0.5		7 <1		77	5	50	31
974671	30 <1		6010 <1		4 <10		9.3	11 <0.5		16 <1		117	9	40	30
974672	3 <1		3490 <1		<1	<10	1.4	10 <0.5		5 <1		14 <1		60	11
974673	25 <1		6370 <1		4 <10		4.1	9 <0.5		5 <1		106	7 <20		19
974674	13 <1		1930 <1		2 <10		3.5	37 <0.5		5 <1		63	4	30	21
974675	11 <1		3900 <1		2 <10		4.4	14 <0.5		4 <1		57	4	60	29
974676	10 <1		4090 <1		2 <10		3.7	14 <0.5		4 <1		49	3	30	24
974677	64 <1		4480 <1		11 <10		14.6	51	0.5	11 <1		338	24	40	53
974678	28 <1		4120 <1		5 <10		7.6	82 <0.5		10 <1		138	11	130	47
974679	19 <1		3980 <1		3 <10		9.3	212 <0.5		5 <1		76	5	40	40
974680	9 <1		5110 <1		2 <10		2.1	6 <0.5		3 <1		44	3	30	10
974681	55 <1		4850 <1		9 <10		7.3	12 <0.5		10 <1		258	19	120	26
974682	84 <1		7160 <1		13 <10		8.2	8 <0.5		14 <1		427	28	220	30
974683	71 <1		4180 <1		11 <10		18.9	223 <0.5		22 <1		297	22	310	74
974684	47 <1		4150 <1		7 <10		13.7	279 <0.5		11 <1		177	12	50	57
974685	43 <1		3400 <1		7 <10		13.9	357 <0.5		11 <1		189	14	30	57
974686	53 <1		3930 <1		9 <10		21	210 <0.5		13 <1		240	18	20	57
974687	67 <1		1460 <1		13 <10		10.8	87 <0.5		10 <1		441	31	30	34
974688	97 <1		6840 <1		24 <10		38.7	11 <0.5		20 <1		871	58	50	38
974689	31 <1		4100 <1		5 <10		13.1	280 <0.5		7 <1		122	9	30	57
974690	21 <1		4900 <1		3 <10		7.7	159 <0.5		6 <1		69	5	160	30
974691	8 <1		3800 <1		1 <10		3.6	49 <0.5		4 <1		28	2 <20		16
974692	31 <1		5560 <1		5 <10		6.7	63 <0.5		7 <1		121	9	40	26

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974693	5	87 <10		0.1	8280 <1		280	3	279	38 <100		2.2	410	37	18.4	12	35	5	42
974694	2	46 <10		0.2	11200 <1		370	2	184	25 <100		0.9	500	39	18.5	14.4	13	4	51
974695	4	109 <10	<0.1		6060 <1		210	2	359	48 <100		1.9	450	114	61	20.6	78	3	83
974696	3	74 <10		0.1	8420 <1		270	2	458	42 <100		1.8	470	54	25.9	18.7	33	6	64
974697	2	78 <10		0.1	11000 <1		280	2	395	32 <100		2.1	390	44	21	16.1	24	6	53
974698	3	98 <10		0.2	12500 <1		300	4	250	35 <100		1.8	450	37	19.2	12.4	22	4	43
974699	5	114 <10		0.1	10000 <1		250	3	270	31 <100		2.8	470	39	19.9	13	40	6	44
974700	4	33 <10		0.2	8360 <1		300	2	104	12 <100		0.9	410	11	5.7	4.7	16	2	15
974701	12	141 <10		0.2	9860 <1		250	5	224	31 <100		2.8	380	29	14.3	9.8	37	5	32
974702	4	87 <10		0.3	15400 <1		280	4	200	40 <100		2	1160	33	18	11.4	21	3	37
974703	6	48 <10		0.2	4570 <1		330	7	558	36 <100		0.6	560	45	24.2	14.5	24	3	55
974704	3	47 <10		0.5	11500 <1		490	2	325	11 <100		<0.5	660	62	30.3	20.2	11	3	74
974705	1	33 <10		0.2	7400 <1		330	2	215	182 <100		0.9	1430	27	15.5	10	100	2	34
974706	2	57 <10		0.1	5250 <1		270	3	476	62 <100		1.4	780	80	40.7	26.3	56	5	94
974707	2	120 <10		0.1	6910 <1		210	2	197	30 <100		3	390	22	11.3	8	62	7	26
974708	6	90 <10		0.3	7810 <1		340	4	375	32 <100		1.4	610	55	31.6	15.9	40	3	59
974709	9	133 <10		0.2	5450 <1		230	12	225	90 <100		3.1	410	47	25.4	12.3	108	4	46
974710	5	166 <10	<0.1		6260 <1		220	8	32	67 <100		2.4	250	101	86.3	6.8	101	2	30
974711	5	145 <10	<0.1		7630 <1		220	5	19	55 <100		1.7	360	60	60.8	3.7	93	1	15
974712	6	126 <10		0.1	6070 <1		260	3	274	80 <100		3	520	33	16.5	10.5	70	4	36
DUP-974635	6	55 <10	<0.1		4250 <1		220	5	139	16 <100		1.5	230	15	7.5	5.6	54	4	19
DUP-974637	3	22 <10	<0.1		8990 <1		280	2	125	12 <100		<0.5	820	28	12.4	10.8	20	3	36
DUP-974660	8	95 <10		0.1	7760 <1		220	4	142	28 <100		2.5	460	27	14.8	8.1	17	3	29
DUP-974666	3	33 <10		0.1	5040 <1		270	2	198	20 <100		<0.5	370	26	12.4	9.5	29	3	34
DUP-974684	5	94 <10		0.2	6840 <1		270	4	392	42 <100		1.7	270	35	15.4	12.9	39	7	44
DUP-974700	4	30 <10		0.2	7570 <1		270	1	86	16 <100		0.9	380	9	4.5	4	18	2	12
DUP-974710	5	166 <10	<0.1		6230 <1		220	7	37	70 <100		2.6	280	112	88.2	8.6	102	2	40
MMISRM16	17	40 <10		23	80 <1		200	4	21	56 <100		10.7	610	3	1.1	1.3	1 <1		5
AMIS0169	8	55 <10		1.3	1110 <1		30	2	742	107 <100		7	3560	27	12	10.9	39	15	40
MMISRM18	24	24 <10		8.2	190 <1		160	78	26	67 <100		5.9	720	4	1.6	1.4	2 <1		6
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974713	2	125 <10		0.2	8040 <1		270	1	398	51 <100		3.6	440	38	19	13.8	61	5	45
974714	5	164 <10		0.1	6550 <1		230	1	365	64 <100		3.4	350	44	21.5	13.6	82	5	45
974715	4	151 <10	<0.1		6190 <1		240	4	327	56 <100		2.9	360	39	19.1	12.4	60	5	42
974716	6	163 <10		0.1	8990 <1		270	2	311	66 <100		4	400	33	16.3	10.9	66	5	37
974717	7	131 <10	<0.1		3930 <1		290	3	326	78 <100		2.3	420	33	17	10.5	79	4	38
974718	3	160 <10	<0.1		9380 <1		260	1	281	60 <100		3	330	30	14.7	9.9	78	6	33
974719	6	167 <10	<0.1		7350 <1		250	3	88	86 <100		2.9	590	83	54.6	9.9	121	2	43
974720	9	117 <10		0.3	7560 <1		360	8	302	59 100		1	610	113	74.2	23.5	132	5	96
974721	7	126 <10		0.1	7450 <1		310	4	285	47 100		1.9	680	72	41.9	17.3	106	4	66
974722	10	169 <10	<0.1		7130 <1		290	6	462	45 <100		2.5	320	69	34.8	19.4	71	6	71
974723	7	207 <10	<0.1		5870 <1		320	5	409	74 <100		4.1	420	70	35.3	18.1	78	7	66
974724	7	145 <10		0.1	6650 <1		310	3	276	44 <100		3.4	290	33	16.6	10.8	51	5	37



## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974693	<1	<0.5	23.6	114 <5		85	1560 <5		0.6	169	142	0.5	30 <1		36 <1		84 <1		35
974694	<1	<0.5	15.3	131 <5		120	180 <5		<0.5	211	74	0.2	20 <1		42 <1		50 <1		19
974695	<1	<0.5	27.2	126 <5		100	4370 <5		<0.5	256	404	0.2	60 <1		52 <1		109 <1		102
974696	<1	<0.5	20.1	192 <5		99	1010 <5		0.5	298	195	0.3	30 <1		64 <1		79 <1		47
974697	<1	<0.5	15.1	176 <5		102	370 <5		0.9	249	118	0.4	30 <1		54 <1		69 <1		37
974698	<1	<0.5	17	126 <5		101	460 <5		<0.5	171	117	0.4	40 <1		37 <1		56 <1		37
974699	<1	<0.5	25.1	125 <5		82	830 <5		0.9	186	130	1	30 <1		40 <1		90 <1		40
974700	<1	<0.5	22.8	37 <5		109	780 <5		<0.5	63	75	0.2 <10	<1		13 <1		74 <1		9
974701	<1	<0.5	17.6	106 <5		79	140 <5		1	137	124	1.1	50 <1		30 <1		87 <1		28
974702	<1	<0.5	22.1	86 <5		103	520 <5		<0.5	137	113	0.2	50 <1		28 <1		62 <1		45
974703	<1	<0.5	19.6	98 <5		152	2640 <5		<0.5	192	555	0.2	20 <1		37 <1		53 <1		28
974704	<1	<0.5	15.4	170	5	187	850 <5		<0.5	279	515	0.1	30 <1		56 <1		53 <1		48
974705	<1	<0.5	20.4	122	5	150	5120 <5		<0.5	162	267	0.2	20 <1		36 <1		49 <1		40
974706	<1	<0.5	16.9	250 <5		103	1590 <5		<0.5	381	388	0.3	20 <1		82 <1		80 <1		52
974707	<1	<0.5	16	89 <5		66	870 <5		1.4	119	140	0.9	30 <1		26 <1		77 <1		31
974708	<1	<0.5	19.7	126 <5		135	1110 <5		<0.5	205	582	0.1	40 <1		42 <1		75 <1		104
974709	<1	<0.5	29	90 <5		99	3100 <5		0.7	154	441	1.7	70 <1		32 <1		112 <1		59
974710	<1	<0.5	13.9	8 <5		123	860 <5		<0.5	42	618	0.2	40 <1		6 <1		120 <1		112
974711	<1	<0.5	17.1	5 <5		124	430 <5		<0.5	21	675	0.1	30 <1		3 <1		80 <1		89
974712	<1	<0.5	21.5	113 <5		107	1360 <5		0.9	148	373	1	40 <1		33 <1		83	1	51
DUP-974635	<1	<0.5	27.8	68 <5		87	490 <5		0.9	94	115	1.8	20 <1		21 <1		94 <1		18
DUP-974637	<1	<0.5	24.5	116 <5		106	280 <5		<0.5	174	98	0.3 <10	<1		37 <1		74 <1		12
DUP-974660	<1	<0.5	19.8	67 <5		71	380 <5		<0.5	104	44	0.4	120 <1		21 <1		95 <1		55
DUP-974666	<1	<0.5	18.1	111 <5		120	680 <5		<0.5	164	196	0.3	10 <1		35 <1		61 <1		14
DUP-974684	<1	<0.5	45.1	194 <5		86	920 <5		0.8	225	131	1.1	50 <1		52 <1		87 <1		35
DUP-974700	<1	<0.5	21.8	34 <5		97	1080 <5		<0.5	57	61	0.4 <10	<1		11 <1		75 <1		8
DUP-974710	<1	<0.5	14	9 <5		122	880 <5		<0.5	54	611	0.2	40 <1		8 <1		121 <1		113
MMISRM16		16 <0.5	33.5	5 <5		35	120	40 <0.5		19	247	0.2	130	24	3 <1		283 <1		9
AMIS0169	<1	<0.5	40.2	431 <5		30	3520 <5		2.3	355	406	2.1	120 <1		96 <1		228 <1		51
MMISRM18		4 <0.5	25.7	8 <5		90	640	28 <0.5		21	512	0.5	340	14	4	6	148 <1		<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
974713	<1	<0.5	17.4	169 <5		96	1360 <5		1	219	224	0.7	20 <1		49 <1		98	2	56
974714	<1	<0.5	11.2	162 <5		100	570 <5		1	201	336	1.1	50 <1		45 <1		80 <1		56
974715	<1	<0.5	23.2	142 <5		105	1110 <5		0.7	183	332	0.8	40 <1		41 <1		106 <1		47
974716	<1	<0.5	12.1	141 <5		105	590 <5		1	168	326	0.9	40 <1		37 <1		96 <1		45
974717	<1	<0.5	21	119 <5		134	2940 <5		1	157	526	1	40 <1		35 <1		69	1	56
974718	<1	<0.5	14.1	128 <5		105	280 <5		1.2	150	265	1.1	30 <1		34 <1		71	1	40
974719	<1	<0.5	22.3	21 <5		158	2560 <5		<0.5	91	846	0.3	40 <1		16 <1		106 <1		67
974720	<1	<0.5	35.9	142 <5		176	3380 <5		0.7	264	1540	0.5	100 <1		52 <1		69	1	155
974721	<1	<0.5	17.5	118 <5		157	2680 <5		<0.5	211	749	0.3	80 <1		42 <1		84 <1		149
974722	<1	<0.5	22.3	193 <5		120	1410 <5		<0.5	285	487	0.7	80 <1		60 <1		60 <1		83
974723	<1	<0.5	25	180 <5		140	750 <5		0.8	255	477	0.6	120 <1		55 <1		93 <1		72
974724	<1	<0.5	14.4	126 <5		122	1420 <5		0.7	158	282	0.7	40 <1		35 <1		86	2	44

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
974693	38 <1		5370 <1		6 <10		14		197 <0.5		10 <1		186	13	40	66
974694	47 <1		7520 <1		7 <10		8.3		6 <0.5		6 <1		199	13 <20		23
974695	64 <1		4780 <1		17 <10		30.7		19	0.5	22 <1		581	41	60	51
974696	65 <1		4490 <1		10 <10		16.4		164 <0.5		11 <1		249	18	40	58
974697	52 <1		6030 <1		8 <10		13		133 <0.5		9 <1		221	14 <20		60
974698	38 <1		6190 <1		7 <10		9.1		65 <0.5		8 <1		191	14	40	46
974699	41 <1		4330 <1		7 <10		15.5		329 <0.5		10 <1		185	14	80	76
974700	14 <1		5630 <1		2 <10		7.2		20 <0.5		6 <1		58	4	30	28
974701	30 <1		4160 <1		5 <10		12		303 <0.5		7 <1		136	10	70	58
974702	32 <1		5420 <1		6 <10		7.8		19 <0.5		11 <1		165	13	150	43
974703	48 <1		4950 <1		8 <10		14.8		18	0.7	19 <1		211	19	140	54
974704	64 <1		8760 <1		11 <10		11.6		9 <0.5		21 <1		267	21	90	30
974705	32 <1		5020 <1		5 <10		11.5		31 <0.5		18 <1		152	13	60	52
974706	84 <1		3730 <1		14 <10		15.1		68 <0.5		21 <1		414	29	90	45
974707	26 <1		2820 <1		4 <10		19.8		542 <0.5		8 <1		114	9	100	93
974708	50 <1		5100 <1		9 <10		16.7		22	0.6	18 <1		278	25	180	67
974709	38 <1		3290 <1		8 <10		19.9		171 <0.5		15 <1		229	19	770	71
974710	16 <1		4220 <1		10 <10		18.1		18	0.9	19 <1		494	70	130	19
974711	8 <1		4280 <1		5 <10		12.3		10	0.6	16 <1		305	52	230	16
974712	32 <1		3360 <1		6 <10		18.9		231 <0.5		16 <1		155	12	250	89
DUP-974635	19 <1		2960 <1		3 <10		7		241 <0.5		6 <1		78	6	310	42
DUP-974637	36 <1		4400 <1		5 <10		9.2		41 <0.5		11 <1		138	9	40	25
DUP-974660	24 <1		3040 <1		5 <10		6.3		28 <0.5		7 <1		149	11	120	34
DUP-974666	34 <1		3790 <1		5 <10		9.7		58 <0.5		13 <1		139	9	50	34
DUP-974684	45 <1		4050 <1		7 <10		13		306 <0.5		10 <1		165	10	80	56
DUP-974700	12 <1		5100 <1		2 <10		7.6		50 <0.5		6 <1		48	3	20	30
DUP-974710	21 <1		4280 <1		11 <10		17.8		14	0.9	19 <1		549	70	140	20
MMISRM16	6 <1		500 <1		<1	<10		22.5 <3	<0.5		43 <1		10 <1		230	12
AMIS0169	56 <1		90 <1		6 <10		67.8		341	1.3	23	1	114	9	200	42
MMISRM18	6 <1		1140 <1		<1	<10		20.8	7 <0.5		22 <1		21 <1		620	18
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
974713	47 <1		3540 <1		7 <10		20.9		256	0.5	12 <1		186	13	40	99
974714	44 <1		3090 <1		8 <10		24.7		250 <0.5		12 <1		217	15	120	91
974715	40 <1		3050 <1		7 <10		21.1		188 <0.5		11 <1		204	14	250	64
974716	36 <1		3740 <1		6 <10		19.4		264	0.5	10 <1		175	12	370	93
974717	34 <1		3750 <1		6 <10		17.6		207 <0.5		11 <1		177	13	170	96
974718	32 <1		3640 <1		5 <10		20		315 <0.5		10 <1		155	11	270	94
974719	27 <1		4740 <1		10 <10		15.1		18	0.9	15 <1		452	39	370	32
974720	71 <1		6180 <1		17 <10		23.5		71	0.8	38 <1		590	64	210	115
974721	53 <1		4170 <1		11 <10		33.1		31	0.8	34 <1		364	33	230	131
974722	64 <1		3750 <1		12 <10		27.5		81 <0.5		18 <1		355	25	280	78
974723	58 <1		3880 <1		12 <10		32.4		122 <0.5		18 <1		366	26	340	85
974724	34 <1		3880 <1		6 <10		16.3		120 <0.5		10 <1		175	12	340	68

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974725	7	86 <10		0.3	7870 <1		460	5	375	38 <100			1	720	94	59	23.5	45	3	93
974726	5	166 <10	<0.1		6670 <1		290	3	370	87 <100			3.3	330	51	25.8	15.4	60	5	55
974727	8	131 <10	<0.1		5660 <1		250	10	148	250 <100			2.5	680	59	38.5	9.9	127	3	38
974728	8	145 <10	<0.1		5840 <1		250	12	237	122 <100			0.6	670	91	56.2	16.5	163	4	68
974729	9	149 <10		0.4	5670 <1		260	7	394	95 <100			2.1	490	51	26.9	14.7	83	5	53
974730	6	127 <10		0.2	8440 <1		320	3	345	71 <100			2.9	470	39	20.4	13.3	65	4	46
974731	6	198 <10	<0.1		5600 <1		180	18	215	147 <100			0.8	420	71	41.9	12.7	127	6	51
974732	7	76 <10		0.4	8200 <1		420	10	658	38 <100			1.2	1060	72	43.5	20.9	57	5	78
974733	7	121 <10		0.2	7740 <1		310	11	549	84 <100			2.9	820	72	40.6	20.4	87	6	76
974734	3	192 <10	<0.1		5300 <1		310	35	202	195 <100			1.5	590	76	54.7	12.7	141	6	52
974735	6	81 <10		0.3	9030 <1		420	6	578	32 <100			1.1	620	75	41.1	23.1	26	5	87
974736	7	109 <10		0.2	7750 <1		380	14	466	44 <100			1	470	84	47.2	21.1	68	4	83
974737	2	100 <10		0.1	8380 <1		290	3	329	25 <100			2.3	430	38	17.8	14.1	42	5	46
974738	9	168 <10	<0.1		4610 <1		180	14	332	107 <100			2.3	340	68	33.8	16.7	100	5	64
974739	9	55 <10		0.3	8460 <1		600	16	583	41 <100		<0.5		1120	110	71	27.4	11	4	119
974740	9	202 <10	<0.1		4280 <1		130	36	75	129 <100			2.1	180	22	11.6	4.1	103	11	15
974741	11	150 <10		0.1	6090 <1		260	22	296	57 <100			1.8	720	121	79.1	22.4	127	5	93
974742	6	192 <10		0.3	9470 <1		210	7	273	64 <100			3.5	330	44	22.8	12.2	60	7	42
974743	11	133 <10		0.2	6860 <1		290	15	526	89	100		1.8	710	61	35.1	16.7	130	6	61
974744	6	154 <10		0.1	5210 <1		290	18	418	57 <100			1.2	540	101	60.1	23.4	118	5	93
974745	6	86 <10		0.3	16100 <1		570	4	777	44 <100			0.7	580	82	42.5	23.2	17	5	86
974746	8	105 <10	<0.1		5920 <1		300	13	432	84 <100			0.8	510	61	32.7	19.5	78	6	72
974747	6	101 <10		0.2	11600 <1		310	6	296	50 <100			1.7	510	36	18.9	12.7	45	5	45
974748 <1		179 <10	<0.1		4600 <1		170	31	106	161 <100			0.7	380	84	63.5	10.1	174	6	46
974749	5	141 <10	<0.1		9560 <1		210	11	319	48 <100			2.5	260	49	25.4	14.5	31	5	55
974750	7	66 <10		0.2	9680 <1		460	11	744	19 <100			0.6	730	103	58.9	32.3	42	6	120
974751	32	59 <10		0.2	5400 <1		160	6	59	17 <100			2.4	400	23	14.6	5.5	13	3	21
974752	20	106 <10	<0.1		9590 <1		350	10	204	31 <100			2.5	430	45	25.9	13.6	26	4	51
974753	15	143 <10		0.1	7480 <1		390	13	99	72 <100			0.6	220	16	8.2	4.4	39	3	15
974754	16	169 <10	<0.1		6810 <1		230	14	155	64 <100			2.6	280	34	19.5	8.7	58	6	32
974755	13	121 <10		0.3	9060 <1		380	9	189	36 <100			1.6	250	60	30	18	26	4	67
974756	22	113 <10	<0.1		4820 <1		60	9	216	18 <100			3.1	150	44	24.6	9.7	14	5	37
974757	9	161 <10		0.1	12400 <1		260	9	357	48 <100			2.2	240	59	32	15.4	46	5	57
974758	11	56 <10		0.1	9670 <1		420	3	22	32 <100		<0.5		370	3	1.4	1.6	7	2	4
974759	7	75 <10		0.2	7540 <1		440	10	527	31 <100			0.6	420	88	47.7	27.4	31	5	105
974760	16	106 <10		0.2	11800 <1		180	4	342	24 <100			3.2	450	66	38.7	18.3	18	5	67
974761	5	149 <10	<0.1		11400 <1		260	3	376	26 <100			3.6	220	51	26.3	16.1	34	5	55
974762	6	167 <10	<0.1		11500 <1		210	4	263	28 <100			3.8	230	39	21.3	12.5	41	6	42
974763	12	98 <10	<0.1		8360 <1		160	4	109	18 <100			2.2	180	12	6.4	5	10	5	15
974764	15	94 <10	<0.1		6740 <1		310	7	598	39 <100			1.5	200	63	32.8	20.2	38	7	74
974765	8	154 <10	<0.1		6040 <1		290	21	521	84 <100			1.3	290	76	40.6	23.7	110	7	84
974766	5	104 <10	<0.1		9870 <1		320	4	303	18 <100			2.5	300	50	26.6	17.8	46	5	61
974767	15	108 <10	<0.1		13300 <1		360	6	445	18 <100			1.6	220	44	22.5	16.7	19	5	56
974768	12	94 <10	<0.1		12200 <1		370	5	118	14 <100			1.7	190	18	9.7	6.9	17	4	22
974769	7	80 <10		0.7	19400 <1		390	2	297	20 <100			1.7	420	42	21.6	16.1	13	4	54

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974725	<1	<0.5	20.1	143 <5		202	2610 <5		<0.5		266	1060	0.2	80 <1		51 <1		65 <1	122
974726	<1	<0.5	21.8	176 <5		113	1410 <5			0.6	226	318	0.8	50 <1		49 <1		82 <1	63
974727	<1	<0.5	28.3	54 <5		124	15400 <5		<0.5		102	884	0.4	50 <1		20 <1		99 <1	106
974728	<1	<0.5	60.5	88 <5		117	7810 <5			0.6	183	861	0.7	70 <1		36 <1		55 <1	117
974729	<1	<0.5	20	150 <5		100	4430 <5			0.8	218	443	1.2	60 <1		47 <1		75 <1	74
974730	<1	<0.5	23.1	154 <5		111	3020 <5			0.6	202	411	0.7	50 <1		44 <1		71 <1	63
974731	<1	<0.5	48.3	77 <5		82	6570 <5			0.9	154	397	2	90 <1		30 <1		57 <1	65
974732	<1	<0.5	28	159 <5		152	3360 <5		<0.5		269	1080	0.3	50 <1		54 <1		81 <1	113
974733	<1	<0.5	23	183 <5		113	4540 <5			1	288	763	0.7	80 <1		60 <1		95 <1	107
974734	<1	<0.5	26.9	79 <5		130	11200 <5			0.7	154	561	0.7	210 <1		31 <1		88 <1	74
974735	<1	<0.5	23.5	193 <5		151	2290 <5		<0.5		325	714	0.2	50 <1		66 <1		72 <1	71
974736	<1	<0.5	30.9	170 <5		161	3800 <5		<0.5		282	770	0.2	70 <1		58 <1		69 <1	125
974737	<1	<0.5	13.3	164 <5		109	770 <5		<0.5		225	188	0.4	30 <1		50 <1		65 <1	35
974738	<1	<0.5	19.8	126 <5		89	3510 <5		<0.5		230	500	1.4	70 <1		48 <1		77 <1	58
974739	<1	<0.5	42.4	159 <5		285	3610 <5		<0.5		321	1770	0.3	120 <1		58 <1		28 <1	36
974740	<1	<0.5	44.9	25 <5		57	4210 <5			1.2	51	342	1.8	190 <1		10 <1		115 <1	42
974741	<1	<0.5	30.3	117 <5		125	4140 <5			0.5	253	1330	0.5	90 <1		48 <1		76 <1	113
974742	<1	<0.5	10.7	135 <5		94	520 <5			0.9	182	212	1	50 <1		39 <1		73 <1	45
974743	<1	<0.5	38.5	161 <5		116	7660 <5			2.1	244	708	1.3	40 <1		52 <1		69 <1	98
974744	<1	<0.5	24.2	164 <5		122	2810 <5			0.7	305	1340	0.9	90 <1		60 <1		59 <1	109
974745	<1	<0.5	17.8	244 <5		194	1090 <5		<0.5		333	587	0.3	230 <1		71 <1		88 <1	111
974746	<1	<0.5	17.9	199	6	110	2480 <5		<0.5		305	511	0.8	30 <1		64 <1		58 <1	61
974747	<1	<0.5	18.3	130 <5		106	1240 <5		<0.5		189	230	0.6	30 <1		40 <1		71 <1	43
974748	<1	<0.5	32.9	36 <5		84	3050 <5			0.9	104	866	1.6	90 <1		18 <1		43 <1	75
974749	<1	<0.5	27	163 <5		51	2450 <5			0.6	231	206	0.9	80 <1		49 <1		115 <1	94
974750	<1	<0.5	37.2	234	5	151	1550 <5		<0.5		426	921	0.3	50 <1		83 <1		54 <1	84
974751	<1	<0.5	21.8	43 <5		49	290 <5		<0.5		72	21	0.2	60 <1		14 <1		95 <1	29
974752	<1	<0.5	13.5	106 <5		127	690 <5		<0.5		178	223	0.4	70 <1		36 <1		65 <1	39
974753	<1	<0.5	69.4	48 <5		139	1040 <5		<0.5		55	367	0.7	140 <1		12 <1		54 <1	36
974754	<1	<0.5	28.3	67 <5		87	590 <5		<0.5		115	293	1.2	120 <1		23 <1		65 <1	43
974755	<1	<0.5	25.3	160 <5		131	310 <5		<0.5		240	276	0.5	70 <1		50 <1		68 <1	51
974756	<1	<0.5	39.5	118 <5		33	1400 <5		<0.5		186	46	0.2	140 <1		39 <1		112 <1	58
974757	<1	<0.5	9.8	180 <5		117	580 <5		<0.5		242	321	0.6	100 <1		52 <1		52 <1	57
974758	<1	<0.5	61.5	9 <5		123	270 <5		<0.5		11	27	0.7	40 <1		2 <1		84 <1	7
974759	<1	<0.5	29.1	249 <5		133	2040 <5		<0.5		403	971	0.3	40 <1		82 <1		48 <1	62
974760	<1	<0.5	17.4	169 <5		62	180 <5		<0.5		265	49	0.3	70 <1		53 <1		75 <1	65
974761	<1	<0.5	12.3	200 <5		87	350 <5		<0.5		262	154	0.5	30 <1		56 <1		93 <1	54
974762	<1	<0.5	19.2	139 <5		74	200 <5			0.8	187	153	0.9	80 <1		40 <1		84 <1	42
974763	<1	<0.5	26	48 <5		34	1140 <5		<0.5		80	20	0.6	60 <1		16 <1		115 <1	16
974764	<1	<0.5	54.4	211 <5		91	2980 <5		<0.5		318	394	0.3	60 <1		66 <1		124 <1	65
974765	<1	<0.5	20.1	247 <5		83	5720 <5			0.9	367	389	1.5	50 <1		80 <1		78 <1	73
974766	<1	<0.5	14.7	160 <5		90	640 <5		<0.5		257	196	0.4	20 <1		53 <1		91 <1	41
974767	<1	<0.5	18.1	188 <5		93	2250 <5		<0.5		256	105	0.5	50 <1		55 <1		70 <1	45
974768	<1	<0.5	31.1	61 <5		100	650 <5		<0.5		94	117	0.8	40 <1		19 <1		71 <1	26
974769	<1	<0.5	20.2	148 <5		97	180 <5		<0.5		223	77	0.1	10 <1		45 <1		66 <1	33

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974725	71 <1		6220 <1		15 <10		17.6	9	0.7	30 <1		501	49	280	77
974726	49 <1		3960 <1		9 <10		19.7	123 <0.5		13 <1		269	18	230	68
974727	29 <1		4310 <1		8 <10		25.8	28	0.8	28 <1		323	29	190	64
974728	51 <1		4180 <1		13 <10		26.1	113	0.6	21 <1		490	43	470	71
974729	49 <1		3910 <1		9 <10		21.9	185 <0.5		15 <1		260	19	280	69
974730	43 <1		4560 <1		7 <10		21.1	89	0.6	14 <1		202	15	190	85
974731	40 <1		3400 <1		10 <10		23.8	248 <0.5		15 <1		368	30	520	57
974732	67 <1		6460 <1		12 <10		19.3	24	0.9	31 <1		387	34	280	95
974733	67 <1		5190 <1		12 <10		27.8	143	0.9	25 <1		381	32	250	110
974734	41 <1		5650 <1		10 <10		23.2	121 <0.5		19 <1		447	45	1140	61
974735	78 <1		6900 <1		13 <10		16.5	16	0.7	30 <1		382	31	130	59
974736	70 <1		6250 <1		14 <10		20.8	19	0.6	34 <1		444	36	290	69
974737	48 <1		4400 <1		7 <10		13.2	104 <0.5		16 <1		186	13	80	50
974738	55 <1		2970 <1		11 <10		21.1	167 <0.5		20 <1		347	22	320	46
974739	87 <1		10700 <1		18 <10		19.1	9	0.7	41 <1		580	58	250	77
974740	12 <1		2670 <1		3 <10		10.4	257 <0.5		5 <1		113	8	930	48
974741	68 <1		5120 <1		18 <10		23.4	55	0.8	41 <1		693	62	410	81
974742	39 <1		4100 <1		7 <10		19.1	313 <0.5		13 <1		232	17	400	62
974743	56 <1		4720 <1		10 <10		30.9	330 <0.5		46 <1		323	28	230	145
974744	78 <1		5110 <1		16 <10		25.9	101	0.7	26 <1		571	49	420	103
974745	77 <1		11100 <1		14 <10		21.9	14	0.9	36 <1		369	29	50	107
974746	68 <1		4670 <1		11 <10		16.2	107 <0.5		23 <1		328	24	340	53
974747	42 <1		5440 <1		7 <10		15.3	121 <0.5		16 <1		182	14	110	49
974748	30 <1		3760 <1		10 <10		14	213	0.7	11 <1		497	55	460	57
974749	50 <1		3290 <1		9 <10		14.1	166	0.6	12 <1		260	18	350	56
974750	105 <1		7920 <1		18 <10		12.3	24	1.4	28 <1		568	45	200	73
974751	17 <1		3030 <1		4 <10		1.8	11 <0.5		5 <1		153	11	40	13
974752	42 <1		6550 <1		8 <10		7.3	17 <0.5		10 <1		262	20	170	42
974753	12 <1		6150 <1		3 <10		11.5	36 <0.5		7 <1		85	6	210	38
974754	27 <1		3940 <1		5 <10		12.1	143 <0.5		8 <1		195	15	570	46
974755	57 <1		6220 <1		10 <10		9.3	20 <0.5		12 <1		310	20	240	34
974756	35 <1		1470 <1		7 <10		4.8	32 <0.5		5 <1		279	17	40	16
974757	51 <1		6260 <1		10 <10		14.4	129 <0.5		9 <1		349	24	300	47
974758	3 <1		6760 <1		<1	<10	1.7	5 <0.5		2 <1		13 <1		20	5
974759	93 <1		8170 <1		15 <10		13.5	13	0.6	17 <1		469	38	360	64
974760	60 <1		3300 <1		11 <10		11.3	137	0.6	10 <1		385	27	30	46
974761	54 <1		5460 <1		9 <10		24.7	110 <0.5		13 <1		273	19 <20		87
974762	39 <1		4470 <1		7 <10		18.4	367 <0.5		10 <1		216	16	20	71
974763	17 <1		2170 <1		2 <10		5.6	28 <0.5		5 <1		63	5	20	29
974764	69 <1		5740 <1		11 <10		18.2	12	0.9	22 <1		354	22	200	68
974765	79 <1		6090 <1		13 <10		22	260 <0.5		15 <1		415	29	410	86
974766	56 <1		6690 <1		9 <10		11.1	86 <0.5		12 <1		274	20	20	57
974767	53 <1		8770 <1		8 <10		9	25 <0.5		9 <1		233	15	90	48
974768	21 <1		8040 <1		3 <10		5.6	18 <0.5		7 <1		92	7	520	35
974769	50 <1		9670 <1		8 <10		8.3	6 <0.5		7 <1		225	15 <20		37

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	0.5	10	1	0.5	0.5	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974770	2	28 <10		0.2	21300 <1		550	1	69	15 <100		<0.5		480	72	37.9	25.6	7	3	101
974771	4	110 <10	<0.1		9730 <1		260	2	198	28 <100			2.4	300	37	21	11.1	21	3	40
974772	5	110 <10	<0.1		10500 <1		240	4	644	84 <100			2.4	280	59	29.8	21.3	38	7	74
974773	6	88 <10		0.1	5470 <1		160	2	31	26 <100			1.7	100	4	2.2	1.7	10	3	4
974774	7	118 <10	<0.1		17500 <1		250	4	357	17 <100			2.1	300	32	15.8	11.7	14	4	39
974775	14	152 <10	<0.1		2700 <1		30	5	229	19 <100			3.8	140	32	15.6	8.3	26	8	29
974776	7	207 <10	<0.1		6190 <1		200	20	177	50 <100			1.1	200	45	23.2	9.8	70	8	37
974777	7	207 <10	<0.1		10100 <1		170	4	548	45 <100			4	190	66	31.5	20.6	54	9	69
974778	14	156 <10	<0.1		13200 <1		150	5	293	30 <100			2.3	200	39	19.6	11.8	31	6	38
974779	8	222 <10	<0.1		9750 <1		80	3	413	33 <100			3.7	180	45	22.3	13.2	52	10	45
974780	13	174 <10	<0.1		4520 <1		40	5	461	31 <100			2.8	140	64	31.5	17.1	36	9	58
974781	15	181 <10	<0.1		13100 <1		100	4	250	35 <100			3	320	28	13.6	8.6	32	6	29
974782	8	153 <10	<0.1		6970 <1		80	4	279	33 <100			2.8	200	33	16.5	10.5	34	6	34
974783	18	179 <10	<0.1		5010 <1		50	5	376	35 <100			5.1	210	43	20.6	12.9	55	10	45
974784	19	120 <10		0.1	7980 <1		140	4	556	17 <100			2.6	260	67	33.5	18.9	20	7	69
974785	10	122 <10		0.2	12200 <1		380	6	435	37 <100			0.7	340	105	63.1	31.8	28	5	116
974786	5	84 <10		0.2	23700 <1		420	2	670	22 <100			2.1	500	84	42.2	30	17	6	103
974787	18	86 <10	<0.1		4140 <1		90	5	204	9 <100			1.7	150	18	9	7.3	10	6	24
974788	15	199 <10	<0.1		2190 <1		60	12	84	24 <100			2.6	140	15	7.5	3.6	57	9	12
974789	20	143 <10	<0.1		2550 <1		60	6	198	17 <100			1.8	120	21	10.1	6.9	22	6	23
974790	12	68 <10	<0.1		2650 <1		70	3	246	6 <100			2	120	28	16.1	9.5	7	5	34
974791	9	193 <10	<0.1		3190 <1		100	10	300	37 <100		<0.5		150	44	20.7	12.3	42	12	45
974792	9	99 <10		0.1	10100 <1		160	4	197	16 <100			1.6	210	38	18.5	12.8	13	4	43
974793	15	133 <10	<0.1		5050 <1		140	5	162	16 <100			1.3	220	49	26.6	15.1	39	7	51
974794	4	104 <10	<0.1		4230 <1		110	4	270	29 <100			0.7	190	35	19.7	11.8	21	5	42
974795	14	87 <10	<0.1		3600 <1		90	6	428	14 <100			1.7	170	34	16.1	11.9	9	5	44
974796	7	228 <10	<0.1		4590 <1		50	12	190	91 <100			2.7	200	37	19	8.6	44	8	32
974797	14	140 <10	<0.1		13200 <1		190	5	502	27 <100			3	310	52	26.1	17.9	26	6	60
974798	9	151 <10	<0.1		8620 <1		90	6	351	42 <100			2.4	220	40	20.5	12.1	36	7	41
974799	7	243 <10	<0.1		3250 <1		90	12	22	123 <100			0.8	70	9	11.2	1.3	111	10	4
974800	13	119 <10		0.1	6240 <1		120	5	292	18 <100			1.7	180	34	17.4	10.7	20	6	39
974801	5	137 <10	<0.1		11000 <1		180	2	348	17 <100			2.4	160	38	19.9	13.6	34	6	44
974802	14	98 <10	<0.1		5840 <1		120	5	291	21 <100			1.6	210	59	29.6	17.5	12	6	65
DUP-974717	7	145 <10	<0.1		3790 <1		280	3	315	92 <100			2.2	470	39	20.6	11.6	88	4	41
DUP-974738	9	167 <10	<0.1		4520 <1		190	14	322	104 <100			1.8	360	67	33.9	16.2	104	5	63
DUP-974747	5	95 <10		0.2	11900 <1		310	6	301	51 <100			1.5	520	34	17.9	12.2	46	5	43
DUP-974753	15	139 <10		0.1	8330 <1		400	13	110	74 <100			0.6	210	16	8.5	4.7	38	3	16
DUP-974768	11	88 <10	<0.1		12600 <1		380	5	112	14 <100			1.6	180	17	8.2	6.5	16	4	20
DUP-974790	12	63 <10		0.1	2810 <1		70	3	208	7 <100			2	110	28	15.9	8.6	7	5	31
DUP-974802	16	83 <10	<0.1		5890 <1		100	5	317	20 <100			1.6	190	64	33.3	18.4	9	6	66
MMISRM16	19	38	10	25.2	70 <1		210	4	18	55 <100			10.2	650	2	0.9	1.1	1 <1		4
AMIS0169	7	51	10	0.3	1090 <1		30	1	677	100 <100			7	3380	25	10.8	9.6	37	15	37
MMISRM18	22	20 <10		7.5	170 <1		150	69	25	57 <100			5.5	640	4	1.3	1.3	2 <1		5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974770	<1	<0.5	12.8	164	5	170	420 <5	<0.5		316	225	0.2	20 <1		55 <1		30 <1		36
974771	<1	<0.5	11.9	105 <5		63	180 <5	<0.5		158	78	0.2	60 <1		32 <1		75 <1		53
974772	<1	<0.5	14.4	285 <5		79	1180 <5	<0.5		396	270	0.6	30 <1		86 <1		82 <1		58
974773	<1	<0.5	38	13 <5		19	2110 <5	<0.5		17	15	0.4	60 <1		4 <1		112 <1		15
974774	<1	<0.5	16.7	143 <5		54	610 <5	<0.5		195	44	0.3	60 <1		41 <1		93 <1		50
974775	<1	<0.5	14.4	96 <5		7	920 <5	<0.5		167	96	0.4	50 <1		36 <1		125 <1		36
974776	<1	<0.5	43.7	69 <5		45	6340 <5	<0.5		136	275	1.3	110 <1		27 <1		64 <1		34
974777	<1	<0.5	17.1	259 <5		46	1000 <5		0.9	361	185	1	30 <1		80 <1		73 <1		54
974778	<1	<0.5	13.2	152 <5		50	160 <5		0.7	199	77	0.4	50 <1		44 <1		60 <1		44
974779	<1	<0.5	10.6	172 <5		33	110 <5		1	259	163	0.7	40 <1		58 <1		57 <1		38
974780	<1	<0.5	10.6	183 <5		18	100 <5	<0.5		337	140	0.5	60 <1		75 <1		51 <1		51
974781	<1	<0.5	15.2	116 <5		33	150 <5		0.7	155	97	0.6	50 <1		34 <1		76 <1		31
974782	<1	<0.5	11.2	116 <5		27	500 <5	<0.5		178	137	0.3	50 <1		38 <1		67 <1		40
974783	<1	<0.5	13.4	149 <5		15	320 <5		0.8	250	136	0.9	40 <1		55 <1		98 <1		41
974784	<1	<0.5	10.3	260 <5		36	580 <5	<0.5		367	54	0.3	40 <1		79 <1		79 <1		54
974785	<1	<0.5	12.1	255 <5		97	3450 <5	<0.5		426	766	0.5	40 <1		83 <1		47 <1		141
974786	<1	<0.5	11.1	320 <5		117	740 <5	<0.5		460	159 <0.1		30 <1		95 <1		57 <1		77
974787	<1	<0.5	16.4	92 <5		10	510 <5	<0.5		144	12	0.2	40 <1		31 <1		69 <1		24
974788	<1	<0.5	14.7	32 <5		13	1020 <5	<0.5		59	157	1.3	60 <1		13 <1		106 <1		21
974789	<1	<0.5	17	99 <5		8	490 <5	<0.5		131	61	0.3	40 <1		29 <1		79 <1		32
974790	<1	<0.5	10.7	126 <5		9	230 <5	<0.5		198	8	0.2	40 <1		41 <1		86 <1		35
974791	<1	<0.5	11.4	136 <5		23	670 <5	<0.5		217	111	0.6	60 <1		46 <1		34 <1		35
974792	<1	<0.5	8.8	180 <5		26	300 <5	<0.5		223	20	0.1	40 <1		49 <1		64 <1		43
974793	<1	<0.5	11	119 <5		23	170 <5	<0.5		230	81	0.5	30 <1		46 <1		61 <1		47
974794	<1	<0.5	3.5	167 <5		24	570 <5	<0.5		240	62	0.1	20 <1		52 <1		20 <1		40
974795	<1	<0.5	6.5	193 <5		11	210 <5	<0.5		268	15	0.2	30 <1		59 <1		77 <1		35
974796	<1	<0.5	34.6	66 <5		14	1340 <5	<0.5		140	195	0.9	70 <1		29 <1		93 <1		38
974797	<1	<0.5	9	246 <5		48	750 <5		0.6	318	117	0.5	50 <1		70 <1		73 <1		58
974798	<1	<0.5	7	152 <5		25	290 <5	<0.5		213	146	0.2	30 <1		46 <1		45 <1		38
974799	<1	<0.5	12.9	9 <5		23	2450 <5		0.6	16	216	1.6	50 <1		3 <1		54 <1		34
974800	<1	<0.5	11.9	153 <5		18	640 <5	<0.5		200	39	0.3	70 <1		44 <1		74 <1		45
974801	<1	<0.5	12.3	176 <5		42	220 <5		0.7	228	52	0.5	20 <1		49 <1		61 <1		40
974802	<1	<0.5	15.5	183 <5		28	820 <5	<0.5		291	35	0.2	60 <1		59 <1		110 <1		53
DUP-974717	<1	<0.5	21.2	119 <5		135	3020 <5		1	165	597	1.1	40 <1		35 <1		68	1	62
DUP-974738	<1	<0.5	20.8	119 <5		93	3180 <5	<0.5		229	535	1.4	70 <1		46 <1		73 <1		60
DUP-974747	<1	<0.5	17.7	134 <5		103	1400 <5	<0.5		196	215	0.6	30 <1		41 <1		70 <1		41
DUP-974753	<1	<0.5	66	54 <5		143	1140 <5	<0.5		60	377	0.7	140 <1		13 <1		52 <1		38
DUP-974768	<1	<0.5	30.7	57 <5		102	700 <5	<0.5		87	114	0.7	40 <1		18 <1		70 <1		22
DUP-974790	<1	<0.5	10.8	109 <5		10	240 <5	<0.5		175	8	0.1	40 <1		36 <1		88 <1		33
DUP-974802	<1	<0.5	14.6	184 <5		23	510 <5	<0.5		296	28	0.1	60 <1		61 <1		104 <1		52
MMISRM16	15 <0.5		35.9	5 <5		37	130	41 <0.5		15	250	0.2	110	24	3 <1		299 <1		9
AMIS0169	<1	<0.5	38.3	382 <5		28	3240 <5		2.3	329	394	2.1	100 <1		86 <1		216 <1		48
MMISRM18	4 <0.5		22.7	7 <5		81	550	26 <0.5		21	527	0.4	290	12	4	5	137 <1		<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	<5



## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974770	79 <1		14300 <1			13 <10	8.4	6 <0.5		14 <1		403	25 <20		24
974771	35 <1		5390 <1			6 <10	10.5	69 <0.5		8 <1		217	15 <20		46
974772	77 <1		4940 <1			11 <10	14.9	219 <0.5		10 <1		302	21	90	45
974773	4 <1		2250 <1		<1	<10	2.6	8 <0.5		4 <1		19	2 <20		15
974774	40 <1		6100 <1			6 <10	12.8	48 <0.5		9 <1		154	11	30	56
974775	30 <1		930 <1			5 <10	8.7	149 <0.5		7 <1		165	11	100	29
974776	31 <1		4530 <1			7 <10	11.5	178 <0.5		6 <1		224	15	520	33
974777	70 <1		4590 <1			12 <10	22.2	432 <0.5		13 <1		336	21	50	80
974778	38 <1		3640 <1			7 <10	12.1	325 <0.5		9 <1		207	14	270	49
974779	47 <1		2540 <1			8 <10	16.4	578 <0.5		8 <1		233	15	40	63
974780	61 <1		1240 <1			11 <10	8.1	141 <0.5		8 <1		312	21	70	27
974781	30 <1		2980 <1			5 <10	16.5	373 <0.5		7 <1		144	10	70	63
974782	35 <1		1630 <1			6 <10	12.8	181 <0.5		7 <1		162	12	60	50
974783	47 <1		1430 <1			8 <10	13.6	393 <0.5		8 <1		217	14	190	57
974784	69 <1		3380 <1			12 <10	14.8	215 <0.5		10 <1		361	22	40	39
974785	103 <1		9790 <1			18 <10	12.7	49 <0.5		18 <1		602	51	180	78
974786	96 <1		12200 <1			16 <10	9.2	5	0.6	10 <1		448	28	80	39
974787	28 <1		1200 <1			4 <10	7.3	53 <0.5		5 <1		91	7	20	23
974788	13 <1		1170 <1			2 <10	7.5	206 <0.5		4 <1		69	5	340	35
974789	26 <1		610 <1			4 <10	7.3	79 <0.5		4 <1		108	7	60	31
974790	38 <1		850 <1			5 <10	3.3	5 <0.5		3 <1		172	11 <20		12
974791	44 <1		2380 <1			8 <10	8.1	310 <0.5		7 <1		212	13	270	23
974792	44 <1		3420 <1			7 <10	7.1	57 <0.5		6 <1		198	12	50	25
974793	51 <1		3060 <1			8 <10	10.7	240 <0.5		10 <1		265	19	120	41
974794	47 <1		2070 <1			7 <10	9.3	101 <0.5		5 <1		201	14	20	29
974795	50 <1		1120 <1			7 <10	6.8	29 <0.5		5 <1		162	11 <20		27
974796	29 <1		1310 <1			6 <10	9.3	272 <0.5		4 <1		190	13	280	35
974797	63 <1		4080 <1			10 <10	15.6	275 <0.5		8 <1		275	18	90	63
974798	41 <1		2480 <1			7 <10	12.6	255 <0.5		6 <1		224	14	80	45
974799	4 <1		2150 <1		<1	<10	6.5	205 <0.5		3 <1		46	13	530	29
974800	40 <1		2050 <1			6 <10	8.9	90 <0.5		5 <1		184	12	50	34
974801	45 <1		3890 <1			7 <10	13.2	419 <0.5		7 <1		213	13 <20		67
974802	62 <1		2070 <1			10 <10	6	49 <0.5		7 <1		293	19	40	17
DUP-974717	38 <1		3730 <1			7 <10	19.9	207 <0.5		13 <1		204	15	180	97
DUP-974738	54 <1		3070 <1			11 <10	20.9	132 <0.5		20 <1		356	23	340	41
DUP-974747	42 <1		5450 <1			7 <10	15.2	142 <0.5		16 <1		174	13	110	52
DUP-974753	13 <1		6500 <1			3 <10	11.7	39 <0.5		7 <1		91	6	210	40
DUP-974768	19 <1		8290 <1			3 <10	5.4	15 <0.5		6 <1		82	6	620	33
DUP-974790	33 <1		920 <1			5 <10	3	3 <0.5		3 <1		175	11 <20		11
DUP-974802	63 <1		1840 <1			11 <10	5.1	22 <0.5		6 <1		328	22	30	13
MMISRM16	4 <1		530 <1		<1	<10	21	4 <0.5		39 <1		9 <1		220	11
AMIS0169	52 <1		90 <1			5 <10	62.5	329	1.3	21	1	104	8	180	40
MMISRM18	5 <1		1060 <1		<1	<10	18.4	5 <0.5		19 <1		18 <1		560	17
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974803	4	261	<10	<0.1	4080	<1	70	18	34	121	<100	1.3	320	28	18.8	3.5	104	8	13
974804	7	237	<10	<0.1	2800	<1	70	12	20	37	<100	1.4	120	17	10.6	2.3	73	9	9
974805	5	92	<10	0.1	25800	<1	340	4	40	10	<100	1.9	190	23	11.1	10.8	5	3	34
974806	8	200	<10	<0.1	6050	<1	80	6	388	36	<100	2.4	260	31	14.4	10.2	43	11	34
974807	2	276	<10	<0.1	3250	<1	80	32	23	92	<100	1.3	290	17	11.9	1.9	71	12	7
974808	8	200	<10	<0.1	9330	<1	150	11	278	36	<100	2.9	230	52	26.1	14.1	32	8	51
974809	12	111	<10	0.1	15000	<1	230	3	291	13	<100	2.1	220	36	18	13.1	5	4	47
974810	19	260	<10	<0.1	2810	<1	50	11	196	47	<100	2.9	240	24	11.2	6.8	74	15	23
974811	11	203	<10	<0.1	2310	<1	50	7	111	30	<100	2.7	260	31	17.7	7.3	83	17	27
974812	5	179	<10	0.1	20400	<1	330	4	1040	14	<100	1.3	170	82	41.8	23.5	13	7	85
974813	13	175	<10	<0.1	5810	<1	120	8	199	29	<100	2.4	80	21	10.5	7.4	32	11	23
974814	7	266	<10	<0.1	10800	<1	110	6	199	55	<100	6	270	22	10.5	7.4	76	12	22
974815	3	184	<10	<0.1	6000	<1	180	25	419	221	<100	1.4	680	71	41	15.5	178	9	59
974816	13	150	<10	<0.1	6510	<1	170	7	208	12	<100	3.4	160	27	13.5	8.6	20	5	31
974817	9	95	<10	<0.1	14500	<1	280	4	182	15	<100	2.9	220	38	21.3	12.1	8	3	44
974818	8	197	<10	<0.1	7050	<1	170	22	199	49	<100	4.3	340	25	12.7	6.4	51	9	21
974819	5	188	<10	<0.1	15700	<1	310	6	485	49	<100	2.3	220	44	23.1	16.3	47	8	50
974820	5	93	<10	<0.1	28300	<1	470	3	1460	59	<100	2	680	145	75.4	48	10	10	175
974821	9	94	<10	<0.1	4030	<1	70	9	178	14	<100	3.8	140	41	22.7	9.6	18	7	33
974822	6	157	<10	<0.1	26300	<1	340	3	609	41	<100	4.3	350	70	36.5	24.8	35	7	76
974823	7	167	<10	<0.1	18900	<1	310	5	296	36	<100	3.3	220	42	22.1	14.1	25	5	45
974824	9	225	<10	<0.1	19700	<1	230	6	603	45	<100	5.6	280	65	33.2	20.4	38	8	66
974825	13	98	<10	<0.1	7570	<1	130	9	185	19	<100	3.1	120	38	19.5	9.7	15	7	33
974826	8	>300	<10	<0.1	10400	<1	100	2	339	79	<100	5.1	190	46	22.8	13.9	38	9	45
974827	13	102	<10	0.1	15900	<1	550	5	244	50	<100	1.5	290	34	16.5	12	25	3	39
974828	2	239	<10	<0.1	5490	<1	210	40	32	174	<100	<0.5	480	45	38.8	3.8	150	8	15
974829	11	202	<10	<0.1	8100	<1	280	21	461	22	<100	2.5	410	78	40.3	18.4	52	7	70
974830	19	187	<10	<0.1	8590	<1	240	10	438	45	<100	3.3	570	102	50	21.5	82	6	80
974831	18	125	<10	0.1	12300	<1	430	22	499	18	<100	4.4	390	75	39.8	21.5	38	5	75
974832	15	115	<10	<0.1	8880	<1	450	47	610	55	<100	2.2	590	128	73	32.1	85	7	118
974833	17	117	<10	0.2	8560	<1	440	32	517	49	<100	2.6	1150	131	82.2	28.6	89	5	109
974834	14	112	<10	<0.1	5830	<1	480	57	593	21	<100	1.5	570	127	67.8	29.3	54	6	114
974835	32	200	<10	0.1	10100	<1	330	47	284	118	<100	4.3	320	55	30.1	12.7	62	8	47
974836	24	146	<10	0.2	5190	<1	370	56	502	79	<100	1.7	1240	162	101	31.9	110	7	138
974837	11	68	<10	0.2	2530	<1	730	20	400	9	<100	<0.5	450	76	42.2	24.3	17	4	92
974838	11	72	<10	<0.1	1430	<1	710	73	454	15	<100	<0.5	460	94	53.1	28.5	39	4	111
974839	13	44	<10	<0.1	1190	<1	740	78	113	13	<100	<0.5	220	62	32.5	19.9	11	2	80
974840	10	8	<10	0.4	2020	<1	850	8	179	201	<100	<0.5	1000	37	20	10.2	3	1	41
974841	7	152	<10	<0.1	2420	<1	320	17	390	128	<100	2.2	440	66	35.3	18.2	104	6	65
974842	4	93	<10	<0.1	1580	<1	520	27	423	42	<100	<0.5	410	47	25.7	14.7	81	5	54
974843	10	80	<10	<0.1	1890	<1	490	30	538	78	<100	<0.5	540	51	28	13.5	118	4	52
974844	6	93	<10	0.1	3480	<1	510	10	207	49	<100	<0.5	270	27	13.8	8.3	42	3	30
974845	32	72	<10	0.1	6920	<1	290	7	311	47	<100	4	330	86	52.4	17.6	28	5	68
974846	22	73	<10	0.1	5380	<1	230	7	189	61	<100	4.3	370	67	44.3	11.2	27	5	47

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
974803	<1	<0.5	19.3	10	<5	26	1450	<5	0.6	32	281	1.7	60	<1	6	<1	55	<1	37
974804	<1	<0.5	14.3	7	<5	23	2090	<5	0.6	21	160	0.8	70	<1	4	<1	60	<1	30
974805	<1	<0.5	21.6	113	<5	53	170	<5	<0.5	144	15	0.1	50	<1	29	<1	93	<1	28
974806	<1	<0.5	35.3	141	<5	17	1380	<5	1.1	190	86	0.9	30	<1	43	<1	113	<1	47
974807	<1	<0.5	19.9	9	<5	27	2830	<5	0.6	18	397	2.1	130	<1	3	<1	90	<1	34
974808	<1	<0.5	23.3	173	<5	39	2290	<5	<0.5	266	203	0.6	100	<1	57	<1	105	<1	72
974809	<1	<0.5	14.4	202	<5	37	220	<5	<0.5	256	14	0.1	70	<1	54	<1	72	<1	34
974810	<1	<0.5	12.8	77	<5	11	1810	<5	1.7	113	138	3.5	90	<1	25	<1	92	<1	41
974811	<1	<0.5	25.2	60	<5	16	1030	<5	1	118	198	1.4	120	<1	24	<1	118	<1	63
974812	<1	<0.5	5.8	636	<5	83	1380	<5	<0.5	497	117	0.2	100	<1	118	<1	52	<1	110
974813	<1	<0.5	14	95	<5	29	970	<5	0.8	126	30	0.9	60	<1	28	<1	100	<1	35
974814	<1	<0.5	23.7	83	<5	29	830	<5	1.7	120	174	2.7	40	<1	26	<1	91	<1	30
974815	<1	<0.5	58	130	<5	60	6510	<5	1.7	233	895	2.4	50	<1	48	<1	87	<1	91
974816	<1	<0.5	46.3	138	<5	42	910	<5	<0.5	158	38	0.4	60	<1	36	<1	165	<1	45
974817	<1	<0.5	11.4	147	<5	72	880	<5	<0.5	201	26	0.1	70	<1	41	<1	69	<1	42
974818	<1	<0.5	35.4	58	<5	45	4290	<5	<0.5	105	792	0.9	90	<1	22	<1	163	<1	34
974819	<1	<0.5	24.6	242	<5	128	1260	<5	0.7	282	494	0.9	30	<1	63	<1	129	<1	54
974820	<1	<0.5	17.6	662	<5	145	3420	<5	<0.5	871	159	0.3	60	<1	188	<1	65	<1	134
974821	<1	<0.5	24.1	112	<5	37	480	<5	<0.5	196	63	0.3	80	<1	42	<1	127	<1	43
974822	<1	<0.5	13.9	309	<5	161	180	<5	0.5	386	345	0.5	40	<1	86	<1	91	<1	73
974823	<1	<0.5	13.8	203	<5	120	1180	<5	0.5	220	205	0.5	50	<1	49	<1	82	<1	57
974824	<1	<0.5	17.4	271	<5	101	620	<5	0.5	373	301	0.5	40	<1	83	<1	106	<1	54
974825	<1	<0.5	11.8	133	<5	37	370	<5	<0.5	191	58	<0.1	100	<1	43	<1	104	<1	56
974826	<1	<0.5	34.6	118	<5	49	2000	<5	0.5	241	374	1	40	<1	52	<1	149	<1	35
974827	<1	<0.5	46.7	146	<5	195	640	<5	<0.5	167	146	0.3	30	<1	37	<1	102	<1	41
974828	<1	<0.5	28.4	13	5	85	3930	<5	0.5	31	275	2.5	110	<1	6	<1	32	<1	56
974829	<1	<0.5	17.5	163	<5	147	3340	<5	<0.5	285	663	0.8	90	<1	60	<1	81	<1	87
974830	<1	<0.5	28.6	137	<5	163	1340	<5	<0.5	331	933	0.6	170	<1	67	<1	122	<1	105
974831	<1	<0.5	33.6	230	<5	224	1030	<5	<0.5	318	536	0.3	80	<1	68	<1	151	<1	72
974832	<1	<0.5	37.6	260	<5	240	5110	<5	0.5	437	1130	0.3	150	<1	91	<1	109	<1	115
974833	<1	<0.5	29.9	188	<5	234	3130	<5	0.8	358	1590	0.2	220	<1	70	<1	117	<1	142
974834	<1	<0.5	47.2	238	<5	287	640	<5	<0.5	404	1420	0.2	130	<1	84	<1	123	<1	77
974835	<1	<0.5	39.8	152	<5	180	1090	<5	0.6	217	696	1	170	<1	48	<1	115	<1	50
974836	<1	<0.5	27.4	239	<5	199	2080	<5	0.7	432	2010	0.3	320	<1	86	<1	106	<1	168
974837	<1	<0.5	39.8	166	6	320	870	<5	0.5	312	1550	0.2	70	<1	61	<1	85	<1	37
974838	<1	<0.5	74.9	194	7	317	1570	<5	0.6	368	2800	0.5	110	<1	72	<1	47	<1	58
974839	<1	<0.5	53.3	103	14	308	970	<5	<0.5	225	4590	0.5	80	<1	42	<1	60	<1	15
974840	<1	<0.5	51.7	26	13	376	6360	9	<0.5	83	1460	0.2	20	<1	13	<1	28	<1	15
974841	<1	<0.5	52.4	169	<5	139	5380	<5	1.1	273	995	1.7	120	<1	57	<1	125	<1	71
974842	<1	<0.5	84.8	140	11	235	3270	<5	1.7	214	1320	1.6	60	<1	46	<1	79	<1	66
974843	<1	<0.5	49.6	117	11	258	9340	<5	1.4	189	1500	0.7	70	<1	40	<1	39	<1	79
974844	<1	<0.5	48.6	82	8	251	1080	<5	0.5	118	487	0.6	130	<1	26	<1	68	<1	35
974845	<1	<0.5	14.8	135	<5	133	530	<5	<0.5	244	157	0.2	260	<1	46	<1	88	<1	111
974846	<1	<0.5	15.9	78	<5	111	870	<5	<0.5	154	286	0.1	300	<1	29	<1	120	<1	79

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
BLANK	<1	<1	<10	<1	<1	<10	<0.5	3 <0.5	<1	<1	<5	<1	<20	<5	
974803	1920	<1	1920	<1	3	<10	7.7	249	<0.5	4	<1	154	14	580	29
974804	6	<1	1470	<1	2	<10	5	251	<0.5	3	<1	94	8	360	24
974805	32	<1	7860	<1	5	<10	3.3	9	<0.5	4	<1	141	7	50	20
974806	38	<1	1550	<1	6	<10	17.6	526	<0.5	7	<1	165	10	210	92
974807	5	<1	1390	<1	2	<10	6.4	219	<0.5	3	<1	91	9	1920	33
974808	50	<1	4030	<1	9	<10	13.1	219	<0.5	7	<1	300	18	160	54
974809	49	<1	4290	<1	7	<10	6	30	<0.5	5	<1	229	11	<20	27
974810	24	<1	940	<1	4	<10	17.3	747	<0.5	8	<1	116	8	320	86
974811	26	<1	1260	<1	5	<10	8.7	389	<0.5	6	<1	203	13	40	51
974812	86	<1	9730	<1	14	<10	16.7	75	0.6	11	<1	524	29	<20	79
974813	25	<1	3100	<1	4	<10	12	288	<0.5	6	<1	118	7	100	61
974814	23	<1	2690	<1	4	<10	16.8	756	<0.5	8	<1	113	8	570	97
974815	54	<1	4240	<1	11	<10	24.8	510	0.7	13	<1	384	31	540	130
974816	33	<1	2200	<1	5	<10	13.3	125	<0.5	8	<1	147	9	50	58
974817	41	<1	8540	<1	7	<10	4.2	19	<0.5	4	<1	255	14	40	21
974818	21	<1	3970	<1	4	<10	10.8	122	<0.5	8	<1	142	9	440	51
974819	53	<1	8490	<1	8	<10	15.9	246	<0.5	12	<1	256	17	150	102
974820	175	<1	14800	<1	26	<10	5.9	11	1.1	16	<1	780	52	90	49
974821	35	<1	2390	<1	6	<10	2.9	46	<0.5	5	<1	262	16	40	15
974822	79	<1	10800	<1	12	<10	17.2	188	0.6	16	<1	392	26	70	104
974823	44	<1	9150	<1	7	<10	17.1	199	<0.5	13	<1	245	16	30	92
974824	67	<1	8200	<1	11	<10	17.1	244	<0.5	13	<1	390	24	200	87
974825	34	<1	3550	<1	6	<10	5.2	18	0.6	6	<1	222	13	90	20
974826	46	<1	3450	<1	8	<10	14	161	<0.5	11	<1	252	15	470	63
974827	36	<1	14200	<1	6	<10	7.8	22	<0.5	12	<1	185	11	290	58
974828	10	<1	5070	<1	5	<10	9.6	177	<0.5	9	<1	254	32	1640	31
974829	61	<1	7310	<1	13	<10	38	48	<0.5	20	<1	427	29	640	62
974830	73	<1	6090	<1	16	<10	29.2	27	0.7	40	<1	527	34	420	58
974831	70	<1	9520	<1	13	<10	15.6	31	<0.5	43	<1	411	29	300	75
974832	103	<1	10300	<1	20	<10	18.2	48	0.7	56	<1	741	54	460	85
974833	92	<1	9800	<1	20	<10	26.2	35	1.4	94	<1	734	65	430	164
974834	98	<1	9780	<1	20	<10	20.4	21	<0.5	67	<1	717	46	360	57
974835	44	<1	8620	<1	9	<10	17	95	<0.5	23	<1	338	21	590	83
974836	108	<1	8110	<1	25	<10	43.8	51	0.9	84	<1	983	82	770	136
974837	78	<1	11500	<1	14	<10	8.2	20	0.7	108	<1	400	31	150	71
974838	92	<1	9420	<1	17	<10	8	21	<0.5	306	<1	536	40	620	58
974839	64	<1	8710	<1	11	<10	4.1	13	<0.5	215	<1	330	25	380	28
974840	28	<1	11800	<1	6	<10	8.6	14	0.5	73	<1	167	15	40	26
974841	63	<1	4910	<1	11	<10	18.4	146	<0.5	20	<1	340	26	530	96
974842	50	<1	7130	<1	8	<10	13	109	0.6	28	<1	241	20	990	111
974843	46	<1	7790	<1	8	<10	12.2	86	<0.5	41	<1	261	22	410	88
974844	28	<1	8470	<1	5	<10	11	32	<0.5	16	<1	138	10	240	49
974845	55	<1	9210	<1	13	<10	4.3	18	1.2	12	<1	534	38	350	32
974846	35	<1	6560	<1	9	<10	2.5	15	1.4	6	<1	435	34	500	19

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974847	35	138 <10	<0.1	6170 <1	220	8	268	21 <100	5.9	190	42	21.8	10.3	25	4	59	8	13	
974848	15	225 <10	<0.1	4770 <1	120	17	54	105 <100	3.1	140	22	13.2	4	59	8	13			
974849	8	42 <10	<0.1	1110 <1	490	27	549	115 <100	<0.5	490	133	91.5	32.2	13	4	139			
974850	12	177 <10	<0.1	4820 <1	320	10	70	63 <100	4.1	120	15	8.8	4.2	60	5	14			
974851	3	215 <10	<0.1	4150 <1	290	10	126	89 <100	2.5	120	23	11.9	4.9	69	8	18			
974852	3	141 <10	<0.1	9270 <1	230	4	300	25 <100	4.3	120	29	14.7	8.2	25	5	28			
974853	9	109 <10		0.1	9440 <1	350	4	172	26 <100	4.5	180	25	13.2	7.4	15	3	26		
974854	11	99 <10		0.1	3770 <1	510	11	258	24 <100	1.4	390	67	33.7	22.4	24	4	80		
974855	20	112 <10	<0.1	2860 <1	200	6	127	29 <100	2.7	170	44	25.6	11.5	34	6	42			
974856	27	135 <10	<0.1	5610 <1	250	8	74	15 <100	2.8	140	14	8	3.7	15	4	11			
974857	10	194 <10	<0.1	10000 <1	300	9	189	41 <100	4	160	24	13.1	6.8	36	5	21			
974858	3	145 <10	<0.1	12200 <1	460	3	252	15 <100	2.6	100	30	16.2	7.5	17	4	26			
974859	8	162 <10	<0.1	3160 <1	230	6	105	37 <100	2.6	120	18	9.8	3.8	56	4	14			
974860	13	153 <10	<0.1	10300 <1	280	4	149	15 <100	3.7	130	20	10.4	5.5	25	3	17			
974861	8	130 <10	<0.1	8930 <1	160	3	144	11 <100	3.5	90	17	9.5	4.8	17	3	16			
974862	10	188 <10	<0.1	13200 <1	210	9	322	24 <100	5	100	34	17.4	8.8	20	4	30			
974863	14	69 <10	<0.1	2160 <1	410	26	674	9 <100	<0.5	330	167	113	40.2	70	5	160			
974864	13	22 <10		0.1	1620 <1	540	9	53	22 <100	<0.5	380	86	51	29.6	7	115			
974865	8	169 <10	<0.1	8740 <1	320	7	139	50 <100	5.5	170	22	11.2	7	43	5	21			
974866	12	60 <10	<0.1	2280 <1	550	21	124	25 <100	<0.5	880	274	202	62.3	29	4	251			
974867	6	42 <10		0.2	2040 <1	450	3	121 <5	<100	<0.5	480	135	76.2	46	13	4	174		
974868	3	188 <10	<0.1	7650 <1	240	16	358	81 <100	1.7	420	45	24.2	10.5	92	6	37			
974869	5	80 <10		0.1	8880 <1	490	5	172	23 <100	0.9	270	35	19.3	13.3	29	3	43		
974870	9	235 <10	<0.1	9820 <1	190	11	354	115 <100	3.2	160	27	12.3	8.1	29	6	24			
974871	7	192 <10	<0.1	7940 <1	210	7	95	33 <100	4.5	110	17	9.8	5.2	33	6	15			
974872	5	132 <10	<0.1	9240 <1	130	4	709	21 <100	2.9	110	60	30.1	14.4	15	7	55			
974873	3	124 <10		0.2	8660 <1	450	5	243	23 <100	1.9	170	27	13.5	10.8	31	4	34		
974874	5	257 <10	<0.1	7810 <1	300	38	13	63 <100	<0.5	170	12	9.8	1.6	103	11	4			
974875	8	232 <10	<0.1	10000 <1	420	14	231	78 <100	4.1	160	32	17.1	8.9	53	126	35			
974876	4	69 <10		0.2	7320 <1	720	6	490	25	100 <0.5	470	71	35.8	23.5	22	81	90		
974877 <1		128 <10	<0.1	3870 <1	430	104	57	137 <100	0.8	440	74	102	6.7	165	3	28			
DUP-974815	3	179 <10	<0.1	6230 <1	180	26	408	207 <100	1.3	670	73	43.1	15.8	170	9	60			
DUP-974826	8 >300	<10	<0.1	11400 <1	110	2	311	78 <100	5.3	190	51	24.6	14.2	38	8	45			
DUP-974834	15	115 <10	<0.1	5700 <1	480	55	634	20 <100	1.6	550	120	62.4	29.3	50	6	114			
DUP-974843	11	78 <10	<0.1	1840 <1	500	26	578	67 <100	<0.5	510	46	25.6	13	111	4	50			
DUP-974867	8	45 <10		0.1	2050 <1	470	5	147 <5	<100	<0.5	520	165	93.7	55.8	13	4	209		
DUP-974873	3	121 <10		0.1	8960 <1	450	5	236	21 <100	1.7	170	27	13.4	10.6	30	4	33		
MMISRM16	21	46	10	23.4	80 <1	210	4	23	55 <100	10.3	600	3	1.1	1.4	2 <1	5			
AMIS0169	8	66	10	0.3	1070 <1	40	2	830	108 <100	7	3460	30	12.9	11.6	43	16	44		
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974878	176	104 <10		0.1	1260 <1	180	85	49	36 <100	9.6	240	16	9	4.2	13	3	19		
974879	70	235 <10	<0.1	730 <1	60	166	197	57 <100	11.9	190	24	12.9	5.7	64	11	22			
974880	588	70 <10		0.1	890 <1	220	124	94	44 <100	3.5	310	17	6.8	4.8	30	5	21		
974881	530	116 <10		0.4	1090 <1	190	71	95	31 <100	10.6	790	19	9	5.7	29	4	25		

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974847	<1	<0.5	47.8	148 <5		102	510 <5	<0.5		196	73	0.2	210 <1		44 <1		137 <1		53
974848	<1	<0.5	18.1	17 <5		52	340 <5	<0.5		47	291	0.6	250 <1		9 <1		98 <1		35
974849	<1	<0.5	23.3	141	20	380	5140 <5	<0.5		353	3240 <0.1		60 <1		63 <1		41 <1		34
974850	<1	<0.5	20.9	37 <5		290	450 <5	<0.5		55	250	1	210 <1		11 <1		84 <1		35
974851	<1	<0.5	49.2	38 <5		166	1770 <5	<0.5		79	442	1	180 <1		17 <1		263 <1		43
974852	<1	<0.5	25.7	155 <5		130	240 <5	<0.5		147	85	0.3	180 <1		34 <1		133 <1		67
974853	<1	<0.5	24.2	96 <5		133	420 <5	<0.5		111	56	0.2	200 <1		24 <1		120 <1		53
974854	<1	<0.5	53.3	168	7	225	750 <5	<0.5		301	570	0.7	50 <1		61 <1		122 <1		47
974855	<1	<0.5	61.9	107 <5		99	560 <5	<0.5		187	147	0.4	160 <1		37 <1		195 <1		46
974856	<1	<0.5	51.3	44 <5		113	320 <5	<0.5		52	39	0.2	110 <1		12 <1		133 <1		38
974857	<1	<0.5	56.9	78 <5		124	970 <5	<0.5		104	172	0.7	190 <1		24 <1		162 <1		44
974858	<1	<0.5	30.1	139 <5		157	420 <5	<0.5		131	36	0.1	70 <1		31 <1		128 <1		48
974859	<1	<0.5	67.6	42 <5		126	3110 <5	<0.5		63	279	0.7	160 <1		13 <1		179 <1		33
974860	<1	<0.5	54.4	77 <5		97	500 <5	<0.5		78	81	0.4	180 <1		18 <1		186 <1		46
974861	<1	<0.5	33.2	67 <5		77	250 <5	<0.5		83	36	0.2	170 <1		19 <1		159 <1		36
974862	<1	<0.5	33.7	147 <5		95	630 <5	<0.5		184	113	0.2	220 <1		43 <1		159 <1		41
974863	<1	<0.5	32.5	177	10	312	1710 <5	<0.5		437	2030	0.2	50 <1		78 <1		145 <1		106
974864	<1	<0.5	25.1	78	10	422	1850 <5	<0.5		274	1110	0.4	30 <1		41 <1		96 <1		42
974865	<1	<0.5	33.3	83 <5		111	1060 <5	<0.5	0.6	95	180	0.9	150 <1		21 <1		191 <1		40
974866	<1	<0.5	32	166	10	331	1280 <5	<0.5		533	3170	0.2	100 <1		87 <1		138 <1		138
974867	<1	<0.5	27.3	165	9	270	330 <5	<0.5		476	859	0.3	20 <1		78 <1		120 <1		36
974868	<1	<0.5	36.8	102 <5		114	1620 <5	<0.5	0.9	176	866	1.1	110 <1		38 <1		101 <1		62
974869	<1	<0.5	15.6	115 <5		295	290 <5	<0.5		175	394	0.3	60 <1		36 <1		69 <1		39
974870	<1	<0.5	30	126 <5		74	600 <5	<0.5		161	508	0.7	160 <1		38 <1		95 <1		44
974871	<1	<0.5	32.4	45 <5		81	900 <5	<0.5		68	171	0.5	120 <1		15 <1		209 <1		35
974872	<1	<0.5	15.1	330 <5		59	160 <5	<0.5		374	45	0.2	210 <1		89 <1		107 <1		61
974873	<1	<0.5	20.1	132 <5		187	350 <5	<0.5		167	268	0.5	40 <1		37 <1		64 <1		34
974874	<1	<0.5	27.8	5	12	70	17700 <5	<0.5		11	367	1.8	180 <1		2 <1		45 <1		29
974875	<1	<0.5	22.7	126 <5		231	370 <5	<0.5	0.5	153	407	1.2	120 <1		32 <1		72 <1		45
974876	<1	<0.5	27.2	191 <5		420	1230 <5	<0.5		302	744	0.2	30 <1		59 <1		49 <1		46
974877	<1	<0.5	13.6	24	20	285	1510 <5	<0.5		61	769	0.6	140 <1		11 <1		42 <1		76
DUP-974815	<1	<0.5	56.3	125 <5		60	5790 <5	<0.5	1.5	236	859	2.5	50 <1		48 <1		85 <1		91
DUP-974826	<1	<0.5	36.1	103 <5		52	1930 <5	<0.5		234	381	0.8	40 <1		49 <1		155 <1		35
DUP-974834	<1	<0.5	45.5	253 <5		282	640 <5	<0.5		408	1370	0.2	120 <1		86 <1		119 <1		76
DUP-974843	<1	<0.5	50.3	118	12	259	8350 <5	<0.5	1.4	188	1440	0.7	60 <1		40 <1		39 <1		74
DUP-974867	<1	<0.5	27.9	197	10	282	420 <5	<0.5		572	1070	0.3	20 <1		94 <1		117 <1		39
DUP-974873	<1	<0.5	20.6	128 <5		186	460 <5	<0.5	0.5	164	266	0.4	40 <1		36 <1		65 <1		35
MMISRM16	18	<0.5	34.3	5 <5		36	120	41 <0.5		20	231	0.2	120	26	3 <1		295 <1		10
AMIS0169	<1	<0.5	39.4	464 <5		34	3550 <5	<0.5	2.8	390	416	2.4	130 <1		104 <1		222	1	57
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	
974878	<1	<0.5	15.8	48 <5		11	1050	9 <0.5		74	86	0.2	220 <1		15 <1		186 <1		14
974879	<1	<0.5	17.2	72 <5		5	1330	20	2	99	102	0.8	310 <1		22 <1		157 <1		27
974880	<1	<0.5	23.2	35 <5		33	3370	30	0.9	60	149	0.8	250 <1		13 <1		118 <1		14
974881	<1	<0.5	20.1	69 <5		16	870	9	0.6	102	201	0.6	240 <1		22 <1		175 <1		19

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974847	36 <1		4690 <1		7 <10		9.5	37	0.6	9 <1		253	14	240	38
974848	11 <1		4000 <1		3 <10		6	71 <0.5		6 <1		118	10	210	20
974849	103 <1		8210 <1		21 <10		5.1	25 <0.5		205 <1		716	81	120	46
974850	12 <1		7550 <1		2 <10		8.6	48 <0.5		6 <1		90	7	230	44
974851	17 <1		8360 <1		4 <10		12.9	57 <0.5		5 <1		119	9	210	59
974852	26 <1		6630 <1		5 <10		15.2	49	0.6	7 <1		182	9	20	75
974853	23 <1		7460 <1		4 <10		8.9	16 <0.5		6 <1		150	9	70	47
974854	73 <1		8890 <1		12 <10		5.6	18 <0.5		21 <1		343	24	320	47
974855	38 <1		4820 <1		7 <10		4.3	25 <0.5		7 <1		296	18	80	25
974856	11 <1		5650 <1		2 <10		7.9	21 <0.5		6 <1		81	6	110	40
974857	19 <1		7860 <1		4 <10		10.2	55 <0.5		5 <1		146	9	150	60
974858	23 <1		12700 <1		5 <10		8.6	16 <0.5		6 <1		199	11 <20		41
974859	13 <1		4160 <1		3 <10		8.4	68 <0.5		6 <1		104	7	100	40
974860	16 <1		5750 <1		3 <10		10.5	59 <0.5		6 <1		118	7	110	55
974861	16 <1		4500 <1		3 <10		8	37 <0.5		4 <1		107	7	20	35
974862	30 <1		5740 <1		6 <10		9.4	40	0.5	5 <1		204	12	140	42
974863	121 <1		7230 <1		26 <10		7.8	18	0.7	66 <1		984	95	560	72
974864	87 <1		9280 <1		15 <10		8.5	27	0.5	74 <1		478	44	40	49
974865	20 <1		6480 <1		4 <10		10.1	98 <0.5		9 <1		113	8	210	56
974866	176 <1		8920 <1		40 <10		7.1	20 <0.5		106	1	1500	189	30	49
974867	138 <1		6860 <1		24 <10		6	21 <0.5		70 <1		712	61 <20		48
974868	35 <1		6590 <1		7 <10		18.6	141	0.7	8 <1		246	17	240	91
974869	40 <1		8510 <1		6 <10		6.4	17 <0.5		15 <1		186	15	50	53
974870	27 <1		5810 <1		5 <10		10.9	59 <0.5		6 <1		136	8	110	45
974871	14 <1		5490 <1		3 <10		11.8	48	0.5	8 <1		96	7	320	49
974872	58 <1		3900 <1		10 <10		9.7	39 <0.5		5 <1		374	19	40	33
974873	34 <1		8470 <1		5 <10		8.6	29 <0.5		11 <1		143	10	70	57
974874	3 <1		5230 <1		1 <10		6.5	98	0.8	3 <1		61	8	3990	30
974875	31 <1		9540 <1		6 <10		10.3	46 <0.5		10 <1		190	12	550	54
974876	74 <1		12200 <1		14 <10		8.2	13 <0.5		35 <1		365	26	130	57
974877	18 <1		8280 <1		7 <10		5.4	61	0.8	18 <1		460	123	510	38
DUP-974815	55 <1		4380 <1		11 <10		22.9	482	0.7	13 <1		412	33	550	122
DUP-974826	46 <1		3700 <1		9 <10		12.9	125 <0.5		11 <1		266	17	460	55
DUP-974834	97 <1		9490 <1		20 <10		20.2	24 <0.5		67 <1		660	43	360	59
DUP-974843	45 <1		7940 <1		8 <10		12.1	84 <0.5		41 <1		241	20	360	89
DUP-974867	165 <1		7030 <1		29 <10		5.5	10 <0.5		81 <1		871	74 <20		47
DUP-974873	34 <1		8450 <1		5 <10		8.3	39 <0.5		11 <1		141	10	70	56
MMISRM16	6 <1		500 <1	<1	<10		24.7	5 <0.5		43 <1		12 <1		250	14
AMIS0169	61 <1		100 <1		7 <10		77.6	440	1.4	24	1	122	10	200	49
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
974878	18 <1		770 <1		3 <10		7.6	11 <0.5		19 <1		103	7	1890	13
974879	24 <1		230 <1		4 <10		24.6	367 <0.5		18 <1		120	10	1360	34
974880	18 <1		770 <1		3 <10		17.4	126 <0.5		55 <1		66	5	1890	18
974881	25 <1		620 <1		4 <10		22.4	95 <0.5		95 <1		94	7	1830	16

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974882	190		<10	0.3	1510		2	20	42	84	50 <100		7.3	240	12	5.6	3.6	155	23	13
974883	379		<10	0.4	700 <1			30	71	120	77 <100		6.7	330	17	8.7	4.1	55	8	16
974884	285		<10	0.4	640		1	130	103	213	37 <100		5.5	480	18	7.1	4.5	90	12	19
974885	772		<10	0.9	1140 <1			120	112	295	74 <100		7.1	1070	65	26.8	16	26	4	76
974886	392		10	0.3	1500		1	160	186	753	70 <100		5.4	1470	96	40.3	29.2	59	11	140
974887	166		20	0.5	2600		3	120	92	1660	138 <100		6.2	1300	214	86.2	63.1	90	23	291
974888	311		<10	0.6	2660 <1			20	54	1160	75 <100		10.5	540	67	28	19.6	34	13	83
974889	215		10	0.5	1550		1	20	49	606	165 <100		11.1	410	28	11.8	7.8	67	12	31
974890	280		<10	0.6	1500 <1			80	53	762	76 <100		9.5	850	40	16.6	11.4	34	7	50
974891	220		<10	0.2	1790 <1			20	38	357	63 <100		13.7	270	51	21.2	16.2	21	10	66
974892	368		<10	0.3	1020 <1			40	83	227	82 <100		12.1	350	50	23.8	14.6	14	8	65
974893	185		<10	0.3	2780		3	40	95	376	155 <100		6.7	490	30	12.7	8.2	143	22	33
974894	479		<10	0.4	1750 <1			60	231	1440	118 <100		9.2	720	43	17.6	12.6	34	9	57
974895	260		20	0.7	1890		2	100	251	827	76 <100		5.9	2640	109	46.4	33.8	93	13	152
974896	85		10	0.2	1570		3	130	340	1050	182 <100		4.9	2240	126	59.3	28.6	160	13	142
974897	279		<10	0.3	1740		1	210	617	664	43 <100		7.1	4580	210	105	35.6	84	8	193
974898	6		<10	<0.1	960 <1			360	751	70	56 <100	<0.5		2320	118	102	9.2	159	4	58
974899	84		10	0.4	2080 <1			180	279	311	89 <100		2	550	46	23.1	10.6	109	10	45
974900	43		<10	0.2	1700 <1			250	248	509	125 <100		3.4	740	77	34.8	20.9	76	7	90
762477	48		<10	<0.1	1210 <1			160	296	461	83 <100		5.2	1270	107	57.2	19.8	137	8	95
762478	20		<10	<0.1	1360 <1			140	237	250	228 <100		5.7	570	70	40	12.2	68	9	58
762479	150		10	0.3	3010		1	40	85	523	125 <100		7.9	520	33	13.9	10.8	77	7	42
762480	63		40	0.8	3410		1	40	85	963	162 <100		6.5	840	55	22	16.7	100	9	65
762481	51		30	0.3	1630 <1			220	126	948	84 <100		2.3	690	155	73	48.2	68	12	212
762482	87		30	0.3	1680		2	180	129	649	150 <100		2.1	780	94	46.8	22.8	153	13	98
762483	74		30	0.4	3770		3	50	30	709	50	100	8.9	630	72	32.3	22.2	199	19	93
762484	59		30	0.2	3030		2	40	75	358	94	100	7.6	500	48	23	12.3	224	13	53
762485	148		<10	0.4	2590 <1			50	49	375	81 <100		10	470	41	19.3	12.6	42	7	52
762486	93		<10	0.6	2830 <1			10	27	572	61 <100		8.9	490	55	23.8	17.6	20	8	74
762487	72		10 <0.1		1630		2	120	60	289	55 <100		9.2	390	37	17.1	8.8	132	16	40
762488	21 >300		20 <0.1		1010		1	20	48	377	150	200	13.6	160	25	11.4	7.5	132	19	28
762489	56		10 <0.1		1050		2	130	82	198	87 <100		6.7	320	25	12.7	5.8	173	25	26
762490	39		<10	<0.1	810 <1			200	153	1300	49 <100		3.7	740	123	57.3	26.1	71	11	134
762491	58		10	0.5	2430		1	30	78	685	142 <100		7.8	650	47	18.1	13.4	54	9	56
762492	146		10	0.3	1840		2	40	43	381	125	100	9.2	410	34	15.2	9.5	103	14	41
762493	174		<10	0.1	1480 <1			50	70	279	138 <100		5.4	190	25	11.4	6.7	48	9	27
762494	270		<10	0.4	1030 <1			260	97	70	43 <100		11.6	930	100	49.6	30.8	23	4	134
762495	131		<10	0.1	580 <1			90	225	436	127 <100		6.1	510	32	13.7	8.3	70	8	37
762496	103		10	0.2	1490 <1			220	166	325	29 <100		7.2	890	134	53.9	37.6	46	8	177
762497	34		40	0.3	2510		3	90	26	761	127 <100		7	430	45	17.3	15.1	134	16	64
762498	63		<10	<0.1	1650 <1			240	129	317	69 <100		3.2	490	81	33.2	25.2	44	8	114
762499	30		<10		2520		2	80	68	569	252 <100		6.3	340	36	15.7	10.6	92	8	43
762500	128		20	0.4	3150 <1			160	61	884	113	100	16.7	530	15	6.1	4.8	70	6	17
974977	133		<10	0.1	1590 <1			70	39	224	88	100	8.4	400	19	8.3	5.6	77	11	21
974978	169		<10	1.2	1500 <1			220	63	186	51 <100		1.4	1120	71	32	24.6	21	4	106



## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974882	<1	<0.5	19.9	32 <5	2	3740	22	4.3	47	144	11.7	290 <1	10 <1	12 <1	181 <1	266 <1			31
974883	<1	<0.5	14.6	32 <5	1	780	17	1.2	57	178	0.7	610 <1	12 <1	17 <1	169 <1				21
974884	<1	<0.5	17.2	64 <5	9	920	30	3.8	72	150	2.3	460 <1	17 <1		169 <1				19
974885	<1	<0.5	18.1	140 <5	11	1800	24	0.5	253	209	0.3	440 <1	54 <1		213 <1				44
974886	<1	<0.5	21.4	370 <5	26	4000	28	2.7	615	457	1.5	220 <1	134 <1		167 <1				21
974887	1 <0.5	24.1	1480 <5	16	4500	17	4.5	1670	428	2.5	510 <1	413 <1	263 <1						93
974888	<1	<0.5	14.4	386 <5	3	1130	20	1.2	446	65	1.2	660 <1	109 <1		238 <1				34
974889	<1	<0.5	11.2	112 <5	2	3820	23	2	160	115	2.4	340 <1	38 <1		188 <1				29
974890	<1	<0.5	30.4	212 <5	5	580	9	1.1	235	117	0.6	440 <1	57 <1		343 <1				30
974891	<1	<0.5	20.6	218 <5	2	1940	24	0.6	337	67	0.6	370 <1	78 <1		295 <1				29
974892	<1	<0.5	23.5	149 <5	3	1640	23 <0.5		268	56	0.2	490 <1	55 <1		457 <1				30
974893	<1	<0.5	54.9	126 <5	6	3870	17	7	142	238	4.4	610 <1	34 <1		257 <1				40
974894	<1	<0.5	19.8	230 <5	7	1210	11	0.9	298	163	0.4	430 <1	71 <1		278 <1				28
974895	<1	<0.5	8.5	479 <5	17	3680	35	3.1	655	669	1.5	360 <1	151 <1		200		2		58
974896	<1	<0.5	23.4	361 <5	16	7180	21	3.2	550	2000	2.8	890 <1	126 <1		158		1		58
974897	<1	<0.5	22.2	295 <5	52	3870	15	1.1	522	2990	0.8	440 <1	111 <1		196 <1				68
974898	<1	<0.5	30.1	50 <5	123	2150 <5	<0.5		112	452	0.5	180 <1	21 <1		31 <1				27
974899	<1	<0.5	48.1	127 <5	15	4240	22	1.6	169	887	2.9	380 <1	38 <1		73		1		27
974900	<1	<0.5	20.2	203 <5	43	3110	27	0.8	336	1080	1.9	410 <1	73 <1		148		1		35
762477	<1	<0.5	39.6	162 <5	32	4920	22	1.2	286	1060	2.5	460 <1	61 <1		247		1		46
762478	<1	<0.5	26.4	115 <5	44	4350	5	1.2	187	312	1.7	510 <1	41 <1		148 <1				25
762479	<1	<0.5	7.7	196 <5	<1	780	11	1.9	217	136	0.9	430 <1	53 <1		181 <1				33
762480	1 <0.5	8.9	383 <5	3	1750	39	2.1	357	240	2.4	820 <1	91 <1	228		3				37
762481	<1	<0.5	53.5	717 <5	23	5150	31	1.4	1040	808	2.3	330 <1	232 <1		136		2		50
762482	1 <0.5	33.5	286 <5	16	6700	55	3	395	938	3.9	540 <1	91 <1	85		2				48
762483	<1	<0.5	18.6	366 <5	7	2260	48	6.1	479	278	4.3	450 <1	113 <1		276		2		51
762484	<1	<0.5	11.1	220 <5	3	1710	20	7	257	203	5	530 <1	61 <1		218		1		39
762485	<1	<0.5	13.2	189 <5	4	1170	12	1.6	260	210	1.5	440 <1	60 <1		265 <1				36
762486	<1	<0.5	10.2	379 <5	<1	1020	16	0.6	434	49	0.7	310 <1	109 <1		224 <1				39
762487	<1	<0.5	22.6	108 <5	15	2560	42	5.8	160	258	4.3	300 <1	36 <1		224 <1				26
762488	<1	<0.5	4.5	168 <5	2	2010	8	5.3	163	78	3.6	230 <1	42 <1		209 <1				46
762489	<1	<0.5	7.4	77 <5	8	780	14	8	106	226	2.5	550 <1	24 <1		110 <1				29
762490	<1	<0.5	12.4	220 <5	35	4110	26	1.3	468	517	0.8	360 <1	98 <1		106 <1				47
762491	<1	<0.5	13.7	315 <5	2	1670	8	2.3	295	109	1.5	560 <1	75 <1		230 <1				39
762492	1 <0.5	25.6	162 <5	5	2120	12	4.1	199	138	3.9	310 <1	47 <1	278 <1						35
762493	<1	<0.5	14	113 <5	2	1020 <5		2.2	134	144	2.1	360 <1	33 <1		226 <1				30
762494	<1	<0.5	16.5	270 <5	21	1100 <5		0.6	415	250	0.2	390 <1	86 <1		216 <1				29
762495	<1	<0.5	9	115 <5	5	970	7	2.8	154	235	1.6	380 <1	36 <1		199 <1				22
762496	<1	<0.5	14	502 <5	38	1550	15	1.7	734	290	0.7	280 <1	165 <1		343 <1				31
762497	<1	<0.5	9.4	331 <5	13	5740	35	6.3	379	140	2.7	360 <1	94 <1		309		1		25
762498	<1	<0.5	17.5	378 <5	44	2280 <5		1.8	527	246	0.9	270 <1	122 <1		129 <1				21
762499	<1	<0.5	16	168 <5	6	3000 <5		3.8	210	134	1.3	710 <1	50 <1		174 <1				34
762500	<1	<0.5	60.3	64 <5	21	3650	9	2.5	72	226	3.6	200 <1	18 <1		165 <1				28
974977	<1	<0.5	20.2	82 <5	5	1780	9	2.7	96	113	2.7	310 <1	23 <1		328 <1				34
974978	<1	<0.5	24.6	236 <5	53	2910	8	1.3	395	528	0.5	150 <1	78 <1		102 <1				37

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974882	12 <1		80 <1		2 <10		32.1	1290 <0.5		15 <1		49	5	770	65
974883	16 <1		80 <1		3 <10		21.5	260 <0.5		14 <1		79	7	1650	32
974884	18 <1		330 <1		3 <10		33	1170 <0.5		21 <1		69	5	440	42
974885	70 <1		390 <1		12 <10		71.6	139	0.6	112 <1		255	20	2380	83
974886	139 <1		830 <1		20 <10		70.8	768	1	113 <1		467	29	1100	49
974887	331 <1		970 <1		45 <10		208	1090	1.6	88	2	934	60	1350	77
974888	93 <1		390 <1		14 <10		93.1	293	1.7	33 <1		296	20	880	53
974889	36 <1		80 <1		5 <10		122	396	1.3	28 <1		103	9	1140	62
974890	53 <1		250 <1		8 <10		77.5	183	0.9	34 <1		168	11	680	28
974891	77 <1		130 <1		11 <10		38.5	141	0.8	24 <1		215	16	850	31
974892	67 <1		160 <1		10 <10		23.9	39	0.9	22 <1		250	17	1250	23
974893	34 <1		150 <1		6 <10		88.7	1760	0.6	25 <1		120	9	2920	57
974894	65 <1		230 <1		9 <10		56.7	138	0.6	27 <1		181	12	2200	24
974895	149 <1		440 <1		23 <10		88.6	826	2	99	1	506	36	2490	90
974896	134 <1		680 <1		23 <10		155	721	1.4	95	1	616	44	3640	75
974897	151 <1		1260 <1		34 <10		90.5	230	1.7	323	1	1090	75	2980	45
974898	35 <1		2640 <1		14 <10		21.6	44	0.8	251 <1		816	85	1160	15
974899	43 <1		930 <1		8 <10		53.3	396 <0.5		46 <1		237	18	3360	63
974900	86 <1		1200 <1		15 <10		69.5	240	0.6	93 <1		376	27	2660	42
762477	82 <1		970 <1		17 <10		83.4	363	0.6	87 <1		539	45	2760	44
762478	50 <1		940 <1		11 <10		51.9	286	0.7	31 <1		356	31	3020	28
762479	48 <1		160 <1		7 <10		86.3	349	0.7	25 <1		134	11	810	75
762480	73 <1		180 <1		11 <10		129	418	0.7	46 <1		219	18	1390	115
762481	225 <1		1000 <1		31 <10		78.3	356	0.7	60 <1		779	59	1400	65
762482	97 <1		770 <1		17 <10		91.8	679	0.7	46 <1		452	37	1850	75
762483	104 <1		280 <1		15 <10		166	1700	1	46	1	327	25	1470	155
762484	56 <1		250 <1		9 <10		75.8	1090	0.6	22 <1		238	17	1180	65
762485	58 <1		210 <1		8 <10		63.2	352	1	28 <1		202	14	1270	66
762486	85 <1		120 <1		11 <10		63	121	1.2	27 <1		261	18	690	36
762487	39 <1		470 <1		7 <10		89.2	1550	0.5	37	1	171	12	2030	46
762488	35 <1		140 <1		5 <10		88.1	930	0.6	18	1	100	9	780	57
762489	26	1	970 <1		4 <10		66.5	2340 <0.5		36 <1		119	10	1260	45
762490	122 <1		1610 <1		22 <10		67.8	293	0.8	210 <1		650	40	590	32
762491	61 <1		270 <1		10 <10		109	456	1.2	29 <1		186	13	700	60
762492	44 <1		190 <1		7 <10		104	1060	1.1	28 <1		143	11	960	84
762493	30 <1		210 <1		5 <10		43	458	0.6	14 <1		113	8	1610	69
762494	113 <1		1430 <1		19 <10		26.8	105	0.6	129 <1		598	37	480	28
762495	37 <1		440 <1		6 <10		61.1	564 <0.5		29 <1		144	9	1090	54
762496	174 <1		1220 <1		27 <10		71.1	393	0.7	168 <1		622	35	950	34
762497	76 <1		610 <1		10 <10		141	1520	0.8	43	1	179	12	980	91
762498	119 <1		1670 <1		17 <10		47.4	404 <0.5		65 <1		375	23	1180	25
762499	47 <1		680 <1		7 <10		104	657	0.7	17 <1		146	11	1660	60
762500	17 <1		790 <1		3 <10		52.8	490	1.6	9 <1		54	5	310	58
974977	23 <1		290 <1		4 <10		36.2	655 <0.5		13 <1		77	7	530	101
974978	97 <1		1810 <1		15 <10		31.2	215	0.6	23 <1		368	24	540	23

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974979	209		41 <10		1.1	2070 <1		140	33	156	42 <100		1.9	1010	76	30.6	25.8	16	4	110
974980	59	120 <10		<0.1		690 <1		330	70	23	89	100	4.8	190	4	2.3	1.1	71	3	4
974981	49 >300		<10		<0.1	5370 <1		420	52	205	785 <100		2.1	210	29	15.5	5.6	60	4	26
974982	233	90 <10			0.2	2930 <1		100	38	517	53 <100		4.5	550	29	12.6	8.9	34	8	36
974983	205	128	20		0.1	2380	2	150	64	219	48	100	2.9	220	14	6.6	4.4	143	16	17
974984	286	14 <10			1	2300 <1		440	106	78	180 <100	<0.5		1370	27	10.7	9.3	3	1	44
974985	202	29 <10			0.9	2060 <1		430	103	257	256 <100	<0.5		1540	38	17	11.2	8	2	54
974986	239	27 <10			0.5	4570 <1		240	74	463	118 <100		1.3	870	67	26.9	25.2	10	4	114
974987	58	213	20		0.2	4180	1	100	37	194	220 <100		8.4	420	15	7.4	4.5	103	10	16
974988	209	90 <10			0.4	4820 <1		130	42	400	74 <100		3.9	430	23	9.3	8.2	35	5	31
974989	271	19 <10			0.3	2110 <1		310	57	112	36 <100		2.1	570	17	6.3	6.4	12	2	28
974990	118	244	20		0.2	2320	2	130	151	840	104 <100		6	560	50	21.5	14.3	124	38	66
974991	349	14 <10			0.5	590 <1		470	129	19	24 <100		0.8	480	8	3.2	2.4	6 <1		12
974992	228	116	20		0.2	1130	1	60	39	225	112 <100		8.1	340	18	7.7	6	88	11	23
974993	23	277	80		0.1	2060	2	90	62	78	353	300	1	390	10	5.1	2.3	352	42	10
974994	190	189	30 <0.1			2540	2	120	65	99	169 <100		4.7	340	13	5.9	3.9	186	11	15
974995	663	26 <10			1.7	1610 <1		320	88	95	180 <100		1	720	47	19.6	14.6	9	2	69
974996	285	130	20		0.3	2040 <1		60	81	473	81 <100		5.3	710	44	20.4	15.8	64	9	57
974997	78	259	30 <0.1			2050	1	10	54	73	119 <100		5.5	270	10	4.5	3	174	13	11
974998	106	209	20		0.2	2980	2	130	224	107	142 <100		8.1	270	10	4.5	3	147	10	11
974999	46	204	70		0.2	1470	2	20	50	107	101	100	7.3	240	15	7.6	4.2	237	18	15
DUP-974883	346	156 <10			0.3	720 <1		30	60	118	65 <100		6.4	310	17	8.5	4.1	64	10	16
DUP-974900	36	183 <10			0.2	1840 <1		230	323	429	166 <100		3.2	880	89	43.5	21	74	6	95
DUP-762491	57	170 <10			0.7	2630	1	30	79	749	161 <100		7.1	760	52	19.7	15.1	44	9	61
DUP-974977	135	176 <10			0.3	1510 <1		60	36	207	83	100	7.9	420	18	8.2	5.4	73	10	21
DUP-974982	238	95 <10			0.2	3070 <1		100	39	530	54 <100		4.2	570	30	12.9	9.2	38	8	37
DUP-974995	636	25 <10			2.1	1590 <1		310	93	92	217 <100		1	740	52	21.4	15.4	8	1	74
MMISRM16	20	43	10	24.5		80 <1		220	4	21	55 <100		10.3	630	2	1	1.2	2 <1		4
AMIS0169	8	61	10	0.3		1120 <1		40	2	817	108 <100		7	3500	28	11.7	11.1	43	16	41
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	<1
759110	52	179 <10			0.1	1920 <1		190	18	94	189	100	3.3	490	21	11.6	4.7	109	6	19
759111	78	195 <10			0.2	1860 <1		210	22	94	122 <100		2.9	630	17	9	3.3	77	3	14
759112	102	116 <10			0.2	2850 <1		200	8	112	67 <100		2.7	600	38	20.5	8.3	47	4	36
759113	59	124 <10		<0.1		2280 <1		360	27	49	52 <100		3.2	450	34	19.6	6.4	37	2	31
759114	65	130 <10			0.2	1710 <1		280	15	27	55 <100		3.5	430	7	4.2	1.6	57	3	7
759115	56	50 <10			0.3	860 <1		620	18	53	24 <100	<0.5		1270	60	32.6	13.1	11	1	65
759116	22	121 <10		<0.1		1070 <1		430	73	55	38 <100		1.3	920	47	29.8	8.5	52	3	42
759117	1	199 <10		<0.1		1190 <1		300	94	27	135 <100		0.7	590	29	22.3	2.8	120	7	15
759118	5	136 <10		<0.1		1330 <1		440	89	43	34 <100		0.9	410	32	21.9	4.7	55	3	24
759119	62	151 <10			0.2	1480 <1		320	40	67	32 <100		2.3	1280	34	21	6.7	48	3	31
759120 <1		179 <10		<0.1		2390 <1		350	118	10	134 <100	<0.5		270	10	9.2	0.8	158	7	4
759121	5	139	40 <0.1			1570 <1		1290	177	109	423	200 <0.5		570	46	30.1	10.3	125	4	45
759122	125	43 <10			0.8	430 <1		490	34 <5		203 <100		0.5	1970	12	8.9	1.9	9 <1		10
759123	3	98 <10		<0.1		770 <1		580	57	59	62 <100		1.2	490	47	30.5	9.1	43	2	42

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974979	<1	<0.5	20.5	295	<5	36	1350	12	1.1	499	70	0.4	140	<1	106	<1	138	<1	36
974980	<1	<0.5	16.6	8	<5	60	2680	8	0.8	13	161	1.9	170	<1	3	<1	128	<1	19
974981	<1	<0.5	13.4	37	<5	329	4220	<5	<0.5	77	2130	0.3	40	<1	15	<1	71	<1	53
974982	<1	<0.5	28.8	139	<5	8	830	14	1.6	173	41	1.2	190	<1	41	<1	216	<1	28
974983	1	<0.5	15.2	78	<5	11	5120	13	9.3	84	175	6.7	230	<1	21	<1	120	<1	24
974984	1	<0.5	37.8	37	6	110	10700	67	<0.5	96	750	<0.1	80	<1	16	<1	34	<1	12
974985	<1	<0.5	33.8	64	<5	118	11700	23	<0.5	131	934	0.1	110	<1	24	<1	45	<1	17
974986	<1	<0.5	28.5	273	6	63	4110	14	<0.5	454	154	0.2	120	<1	92	<1	124	<1	17
974987	<1	<0.5	17.3	59	<5	6	3210	8	3.8	70	210	3.8	420	<1	17	<1	299	<1	28
974988	<1	<0.5	23.9	124	<5	8	1290	6	2.2	151	39	1	330	<1	36	<1	198	<1	19
974989	<1	<0.5	16	56	6	37	1990	7	<0.5	107	98	0.3	70	<1	21	<1	118	<1	6
974990	<1	<0.5	11.4	216	<5	6	2870	5	4.5	258	142	4.7	510	1	63	<1	163	<1	34
974991	<1	<0.5	14.9	12	12	69	3170	16	<0.5	29	126	0.3	20	<1	5	<1	38	<1	<5
974992	<1	<0.5	17.3	86	<5	2	3890	16	2.9	105	90	8	220	<1	26	<1	164	<1	31
974993	<1	0.6	13.3	29	14	16	7120	13	6.3	32	333	8.4	600	<1	8	<1	54	<1	38
974994	<1	<0.5	21.7	37	8	10	1450	7	3.7	48	179	6.4	880	<1	11	<1	129	<1	22
974995	<1	<0.5	18.4	75	<5	47	4500	23	<0.5	151	132	0.2	230	<1	28	<1	53	<1	15
974996	<1	<0.5	21	203	<5	4	1140	12	2.1	261	110	4.1	270	<1	60	<1	176	<1	46
974997	<1	<0.5	14.7	31	5	2	1780	10	3.6	38	167	5.9	430	<1	9	<1	148	<1	27
974998	1	<0.5	30.6	46	<5	8	8890	8	3.6	49	248	8.6	460	<1	12	<1	225	<1	21
974999	<1	<0.5	20.8	48	<5	2	4080	16	4.5	59	186	13.9	640	<1	14	<1	133	1	35
DUP-974883	<1	<0.5	13.6	33	<5	1	800	19	1.8	57	146	0.9	610	<1	12	<1	172	<1	22
DUP-974900	<1	<0.5	20.9	180	<5	45	3450	20	0.6	315	1110	1.9	500	<1	66	<1	145	<1	38
DUP-762491	<1	<0.5	13.8	352	<5	2	1870	7	2.1	328	102	1.3	560	<1	85	<1	226	<1	40
DUP-974977	<1	<0.5	19.6	76	<5	5	1620	9	2.4	90	102	2.5	300	<1	22	<1	325	<1	34
DUP-974982	<1	<0.5	28.9	145	<5	8	820	14	1.8	183	43	1.3	210	<1	43	<1	206	<1	30
DUP-974995	<1	<0.5	19	75	<5	47	5010	22	<0.5	154	146	0.1	250	<1	28	<1	54	<1	16
MMISRM16	16	<0.5	36.4	6	<5	37	130	42	<0.5	18	223	0.2	120	26	3	<1	303	<1	9
AMIS0169	<1	<0.5	38.7	458	<5	31	3550	<5	3	389	407	2.3	120	<1	103	<1	218	<1	56
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
759110	<1	<0.5	20	34	<5	16	3090	<5	1.6	52	156	1.8	210	<1	11	<1	210	<1	48
759111	<1	<0.5	32.2	21	<5	13	1780	<5	0.7	33	68	1.9	110	<1	7	<1	201	<1	36
759112	1	<0.5	21.3	44	<5	22	820	8	1.4	86	23	1.6	110	<1	16	<1	142	<1	67
759113	<1	<0.5	23	32	<5	31	600	<5	<0.5	61	76	0.5	120	<1	12	<1	145	<1	48
759114	<1	<0.5	19.5	10	<5	18	2030	<5	<0.5	16	40	1.7	110	<1	3	<1	158	<1	28
759115	3	<0.5	19.3	38	<5	50	1070	9	<0.5	103	150	0.2	30	<1	17	<1	39	<1	46
759116	<1	<0.5	28.6	39	<5	23	4380	<5	<0.5	81	290	0.7	90	<1	15	<1	72	<1	61
759117	<1	<0.5	20.8	12	<5	30	6450	<5	<0.5	28	130	0.9	160	<1	5	<1	47	<1	45
759118	<1	<0.5	36	20	<5	38	6390	<5	<0.5	45	173	0.5	150	<1	8	<1	75	<1	47
759119	<1	<0.5	24.2	40	<5	28	1620	<5	<0.5	71	116	1.4	70	<1	14	<1	98	<1	77
759120	<1	<0.5	38.2	3	<5	50	7780	<5	<0.5	6	88	2	120	<1	1	<1	29	<1	26
759121	2	<0.5	30.6	62	<5	70	23700	15	1	113	129	4	160	<1	22	<1	47	4	105
759122	1	<0.5	19.4	2	5	9	4000	6	<0.5	6	134	0.3	20	<1	<1	<1	13	<1	10
759123	<1	<0.5	22.8	38	<5	35	7760	<5	<0.5	82	201	0.7	60	<1	15	<1	48	<1	47

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974979	116 <1		2570 <1		16 <10		37.8	174 <0.5		50 <1		335	21	370	32
974980	4 <1		1900 <1	<1	<10		5.3	222 <0.5		4 <1		18	2	980	11
974981	20 <1		4080 <1		5 <10		10	14	3.8	4 <1		151	12	660	10
974982	40 <1		490 <1		6 <10		32.2	437	0.7	17 <1		122	9	1100	59
974983	18 <1		730 <1		3 <10		44.1	2130 <0.5		11 <1		66	6	1520	73
974984	34 <1		4640 <1		6 <10		5.3	7	0.9	32 <1		124	7	30	6
974985	40 <1		4120 <1		7 <10		14.8	8	0.7	29 <1		171	12	360	8
974986	108 <1		2920 <1		15 <10		19.9	23 <0.5		32 <1		326	18	660	14
974987	16 <1		560 <1		3 <10		57.5	737 <0.5		13 <1		65	6	2050	95
974988	33 <1		1550 <1		5 <10		49.5	353 <0.5		19 <1		91	7	1090	50
974989	27 <1		3560 <1		4 <10		20.6	22 <0.5		35 <1		73	5	740	17
974990	59 <1		1160 <1		11 <10		102	638 <0.5		70 <1		199	17	1160	152
974991	9 <1		3780 <1		2 <10		3.6	11 <0.5		23 <1		44	3	190 <5	
974992	25 <1		390 <1		4 <10		42.7	560	0.5	17 <1		74	6	740	92
974993	8 <1		790 <1		2 <10		24.5	954 <0.5		9 <1		44	5	2110	55
974994	13 <1		930 <1		3 <10		23.6	848 <0.5		20 <1		52	5	1720	82
974995	48 <1		3690 <1		10 <10		20	34 <0.5		64 <1		202	14	190	19
974996	57 <1		360 <1		9 <10		33.5	494 <0.5		20 <1		216	16	1450	101
974997	10 <1		120 <1		2 <10		28.5	768 <0.5		9 <1		39	3	1440	117
974998	12 <1		620 <1		2 <10		30.2	704 <0.5		10 <1		42	4	3450	68
974999	15 <1		100 <1		3 <10		42.6	946 <0.5		12 <1		68	6	1160	120
DUP-974883	15 <1		90 <1		3 <10		24.1	375 <0.5		15 <1		75	7	1480	35
DUP-974900	83 <1		1300 <1		16 <10		75.3	181	0.5	105 <1		451	33	3210	39
DUP-762491	69 <1		290 <1		11 <10		121	437	1.3	33 <1		203	15	740	60
DUP-974977	21 <1		280 <1		4 <10		34.9	639 <0.5		13 <1		72	6	490	99
DUP-974982	40 <1		500 <1		6 <10		35.6	458	0.6	18 <1		128	9	1150	65
DUP-974995	51 <1		3600 <1		10 <10		20.1	9 <0.5		67 <1		218	15	210	20
MMISRM16	5 <1		530 <1	<1	<10		24.1	12 <0.5		40 <1		10 <1		270	13
AMIS0169	62 <1		100 <1		6 <10		74.8	456	1.3	22	1	121	10	190	50
BLANK	<1	<1	<10	<1	<1	<10	<0.5	3 <0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
759110	15 <1		790 <1		3 <10		21.7	1290 <0.5		7 <1		107	9	1230	58
759111	10 <1		1050 <1		3 <10		10.6	728 <0.5		6 <1		81	7	1100	38
759112	26 <1		1220 <1		6 <10		8.4	1510 <0.5		8 <1		199	15	560	61
759113	20 <1		1440 <1		5 <10		6.8	116 <0.5		8 <1		194	14	320	19
759114	5 <1		1080 <1		1 <10		5.2	244 <0.5		4 <1		37	3	690	22
759115	37 <1		2230 <1		10 <10		8.1	16 <0.5		8 <1		338	22	270	8
759116	27 <1		1340 <1		7 <10		7.7	47 <0.5		31 <1		345	22	1330	21
759117	9 <1		1350 <1		3 <10		11.2	153 <0.5		6 <1		169	18	3430	15
759118	15 <1		1580 <1		4 <10		8.3	58 <0.5		11 <1		206	16	1900	13
759119	21 <1		1470 <1		5 <10		9.3	161 <0.5		10 <1		208	16	1170	28
759120	2 <1		2050 <1	<1	<10		5.5	192 <0.5		2 <1		57	9	5870	12
759121	35 <1		3880 <1		8 <10		13.4	291 <0.5		48 <1		300	26	4100	59
759122	4 <1		1640 <1		2 <10		1.8	17 <0.5		3 <1		73	7	310 <5	
759123	27 <1		2050 <1		7 <10		6	20 <0.5		6 <1		296	23	1820	12

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	0.5	10	1	0.5	0.5	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
759124	6	99 <10	<0.1		930 <1		500	48	41	63 <100		1	320	12	7.5	2.5	40	2	11
759125	60	19 <10		0.4	440 <1		530	13 <5		26 <100	<0.5		1010	9	4.9	1.6	5 <1		10
759126	45	36 <10		0.3	880 <1		440	17	54	23 <100	<0.5		1230	79	39.7	19.8	9	2	97
759127	10	28 <10		0.1	940 <1		260	4	178	12 <100	<0.5		1270	128	59.3	37	9	3	173
759128	64	34 <10		0.4	1010 <1		640	23	23	67 <100	<0.5		1490	25	12.8	5.4	8 <1		27
759129	35	190 <10	<0.1		1530 <1		160	14	65	60	100	1.6	220	15	8.3	3.3	114	10	13
759130	24	115 <10		0.3	3090 <1		120	5	181	80 <100		4.3	410	18	8.3	5.2	39	5	21
759131	31	193 <10		0.1	1480 <1		170	25	139	132 <100		3.5	1030	33	19.2	6.1	85	6	27
759132	19	49 <10		0.3	1010 <1		460	5	59	14 <100		0.8	1180	53	25.6	12.7	9	1	62
759133	21	21 <10	<0.1		1060 <1		500	27	24	430 <100	<0.5		860	11	5.5	2.3	5 <1		11
759134	58	25 <10		0.4	650 <1		760	20	10	143 <100	<0.5		1710	5	2.7	0.9	6 <1		5
759135	38	155 <10		0.1	1520 <1		130	8	221	48 <100		3.6	920	47	23.4	11.1	45	6	47
759136	35	192	10 <0.1		2310 <1		170	7	91	135	100	4.1	360	16	8.7	3.9	131	9	15
759137	35	238 <10	<0.1		1340 <1		70	30	27	172 <100		4.9	370	12	7.7	2	113	10	8
759138	223	141 <10		0.1	1370 <1		260	26	69	69 <100		10.9	620	15	8.5	3.6	48	4	16
759139	14	117 <10		0.3	1420 <1		500	47	212	79	100	0.6	430	29	14.2	6.8	42	2	31
759140	39	149 <10	<0.1		1000 <1		240	30	26	58 <100		2.3	460	8	4.4	1.6	110	7	6
759141	12	88 <10		0.2	2800 <1		250	3	722	47 <100		3.3	540	58	23.2	16	24	5	66
759142	5	129 <10		0.1	1690 <1		440	33	146	73	100 <0.5		400	53	29.6	11.5	95	4	52
759143	73	72 <10		0.3	1100 <1		440	10	111	31 <100		0.9	1520	53	26.3	14.3	21	2	65
759144	45	6 <10		0.2	330 <1		290	14 <5		36 <100		0.7	1390	23	15.7	4.1	8 <1		25
DUP-759115	54	48 <10		0.9	890 <1		610	17	57	19 <100	<0.5		1240	58	31	13.7	11	1	67
DUP-759135	39	158 <10		0.1	1560 <1		130	8	235	54 <100		3.8	950	46	22.8	11.2	49	7	46
DUP-759136	38	194 <10	<0.1		2250 <1		170	7	88	136	100	4.2	380	16	9	3.8	129	9	16
MMISRM16	19	47	10	23.7	70 <1		210	4	19	57 <100		11.7	640	3	1.1	1.4	1 <1		5
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974118	103	190	10 <0.1		950 <1		210	29	310	111	100	1.4	690	45	23.3	10.7	102	9	49
974119	166	194	10	0.2	1050 <1		100	16	140	112	100	3.5	370	19	9.1	5.2	79	11	21
974120	36	280 <10	<0.1		3000 <1		240	40	375	184	300	0.6	520	24	11.9	6.2	143	11	27
974121	65 >300		20 <0.1		2390	1	70	31	118	170	300	3	400	19	10.8	4.1	218	23	17
974122	34	206 <10	<0.1		2160 <1		300	47	198	112	200	0.6	630	29	15.8	6.6	129	8	31
974123	15	226	10 <0.1		1940 <1		300	64	141	208	100	0.8	770	43	26.2	8.2	155	12	41
974124	81	78	20	0.4	1290 <1		360	24	340	90	100 <0.5		2260	64	32.1	18.8	56	4	88
974125	98	252	20	0.6	2000 <1		250	32	478	199	300	0.6	1060	67	36.6	15.8	157	13	72
974126	17	197	10	0.1	1310 <1		400	71	242	219	300	0.5	1040	58	35.9	11.6	128	6	58
974127	70	223	20	0.1	770 <1		200	25	111	132	200	1.7	400	26	14.2	6.2	151	17	29
974128	10	155 <10	<0.1		2430 <1		480	102	84	84 <100		0.6	170	14	8.4	2.8	111	6	13
974129	116	63 <10		0.1	2460 <1		520	19	33	51 <100		2	700	9	4	3.1	16	1	14
974130	81	103	10	0.2	2360 <1		290	13	207	56	100	1.9	780	36	16.8	11.1	84	9	50
974131	64 >300		30	0.2	2310	2	70	14	714	238	500	1.8	950	37	15.9	10.6	317	25	44
974132	102 >300		30 <0.1		3010	1	60	29	161	187	500	8.3	330	16	8.4	4.8	270	22	17
974133	69	230	20 <0.1		1100 <1		260	63	120	400	200 <0.5		540	8	4.3	2	223	7	8
974134	9	155 <10		0.2	1970 <1		540	119	71	142	100 <0.5		670	18	10.8	3.8	109	4	18
974135	22	92	30	0.3	2280 <1		620	51	452	183	200 <0.5		1570	60	31.5	16.9	177	5	78
974136	24	7 <10		0.6	980 <1		420	14 <5		26 <100	<0.5		1150	4	2.1	0.8	4 <1		5

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5	
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
759124	<1	<0.5	68.6	11 <5		16	6750 <5		<0.5	24	142	1.7	50 <1		5 <1		55 <1		21	
759125		2 <0.5	20.7 <1	<5		12	1590		13 <0.5	3	48	0.2	10 <1	<1	<1		21 <1		8	
759126		4 <0.5	23.7	71 <5		59	800		5 <0.5	184	87	0.2	40 <1		31 <1		48 <1		36	
759127		4 <0.5	18.3	215 <5		78	340 <5		<0.5	468	68	0.3	40 <1		82 <1		40 <1		45	
759128		2 <0.5	37	6 <5		15	2610		7 <0.5	30	124	0.2	20 <1		4 <1		10 <1		13	
759129	<1	<0.5	18.8	30 <5		5	1570 <5		1.4	41	60	4.7	160 <1		9 <1		137 <1		49	
759130	<1	<0.5	29.6	45 <5		5	2070		7	1.1	71	29	1.1	210 <1		15 <1		191	1	36
759131	<1	<0.5	30.8	35 <5		14	4810 <5		0.6	62	156	1.8	210 <1		13 <1		136	3	97	
759132		2 <0.5	10.8	68 <5		46	340 <5		<0.5	135	28	0.2	50 <1		24 <1		63 <1		45	
759133		13 <0.5	16.2	2	29	35	12400		5 <0.5	11	424 <0.1		90 <1		1 <1		57	1	7	
759134		2 <0.5	22.7 <1	<5		31	5440		5 <0.5	4	200	0.1	20 <1	<1	<1		21 <1		6	
759135		1 <0.5	36.9	81 <5		11	1040 <5		<0.5	133	18	1.7	200 <1		27 <1		160 <1		103	
759136	<1	<0.5	26.6	28 <5		11	4030 <5		1	44	57	6.2	110 <1		9 <1		134 <1		69	
759137	<1	<0.5	24.8	12 <5		8	2120 <5		<0.5	20	115	4.3	130 <1		4 <1		113 <1		63	
759138	<1	<0.5	43.9	23 <5		17	2860 <5		<0.5	40	39	2.7	80 <1		8 <1		167 <1		47	
759139	<1	<0.5	9.8	58 <5		49	700 <5		<0.5	93	205	0.2	260 <1		20 <1		97 <1		54	
759140		1 <0.5	29.3	10 <5		20	3080 <5		0.8	16	143	4.5	160 <1		3 <1		141 <1		47	
759141	<1	<0.5	14.3	219 <5		41	900 <5		<0.5	252	25	0.7	160 <1		58 <1		108 <1		67	
759142		1 <0.5	63.9	110 <5		63	5710 <5		0.6	156	517	1.6	140 <1		34 <1		20 <1		112	
759143		1 <0.5	31.1	82 <5		58	930 <5		<0.5	172	48	0.7	60 <1		32 <1		60 <1		49	
759144		6 <0.5	7.6 <1	<5		10	2650 <5		<0.5	10	76	0.2	10 <1	<1	<1		30 <1		25	
DUP-759115		2 <0.5	19.1	40 <5		50	870		9 <0.5	109	149	0.1	30 <1		18 <1		41 <1		40	
DUP-759135		1 <0.5	36.9	85 <5		11	1140 <5		0.5	139	19	1.8	200 <1		29 <1		164 <1		106	
DUP-759136	<1	<0.5	27.1	27 <5		11	3990 <5		0.9	43	57	5.8	120 <1		9 <1		135 <1		69	
MMISRM16		18 <0.5	34.7	4 <5		32	110		43 <0.5	17	251	0.3	110	30	3 <1		300 <1		9	
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5		
974118	<1	<0.5	47.8	137 <5		14	7620		12	3.1	194	480	2.5	310 <1		45 <1		61	1	62
974119	<1	<0.5	51.7	56 <5		8	3190		16	2.4	80	82	5.1	240 <1		17 <1		158 <1		56
974120	<1	<0.5	65.9	129 <5		53	4720 <5			4.2	128	272	3.9	360 <1		31 <1		54 <1		49
974121	<1	<0.5	47.5	43 <5		12	6110		7	7.6	59	298	13.6	390 <1		13 <1		122	1	63
974122	<1	<0.5	42.1	77 <5		41	4760 <5			3.4	110	276	1.3	230 <1		25 <1		57 <1		53
974123	<1	<0.5	84	79 <5		44	8110 <5			3.3	127	398	2.5	360 <1		27 <1		21 <1		58
974124	<1	<0.5	22.6	246 <5		36	4850		11	1	365	587	1.7	110 <1		80 <1		22	1	58
974125		2 <0.5	48.8	229 <5		27	9910		9	4.6	295	718	4.2	310 <1		69 <1		79	1	102
974126		1 <0.5	94.5	152 <5		40	18400		7	2.1	201	432	3	290 <1		46 <1		134 <1		81
974127	<1	<0.5	36.2	86 <5		14	4170		13	5.5	116	193	7.4	350 <1		27 <1		89 <1		52
974128		2 <0.5	40	33 <5		35	20200		10	2.5	43	303	1.9	250 <1		10 <1		37 <1		30
974129	<1	<0.5	46.7	26 <5		48	2930		6 <0.5	47	196	0.8	50 <1		10 <1		97 <1		9	
974130	<1	<0.5	55.2	158 <5		48	1940		9	2.8	218	136	2.9	140 <1		49 <1		104	2	35
974131	<1	<0.5	74.9	222 <5		25	3680		9	12.1	225	362	16.3	300 <1		56 <1		95 <1		82
974132	<1	<0.5	22.5	79	7	10	2830		13	8.1	78	255	8.9	380 <1		19 <1		170 <1		70
974133	<1	<0.5	46.5	18 <5		39	9770		6	2.2	27	263	12.3	230 <1		6 <1		16 <1		46
974134	<1	<0.5	29.5	40 <5		53	6730 <5			1.2	61	397	2	170 <1		13 <1		62 <1		46
974135	<1	<0.5	79.2	288	7	48	15300		18	2.3	376	1650	1.5	160 <1		87 <1		8	2	73
974136	<1	<0.5	22.7 <1		11	71	1170		17 <0.5	1	156 <0.1		10 <1	<1	<1		8 <1		8	

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759124	8 <1		2090 <1		2 <10		4.4	28 <0.5		5 <1		68	6	1350	11
759125	4 <1		2340 <1		2 <10		2.5 <3	<0.5		6 <1		47	3	70 <5	
759126	63 <1		2270 <1		14 <10		15.4	4 <0.5		12 <1		393	25	280	9
759127	131 <1		2200 <1		24 <10		17.9	5 <0.5		17 <1		657	37	130	12
759128	13 <1		3270 <1		4 <10		5.3 <3	<0.5		7 <1		136	9	340 <5	
759129	11 <1		790 <1		2 <10		13.8	831 <0.5		6 <1		76	6	590	58
759130	19 <1		660 <1		3 <10		22.2	834 <0.5		7 <1		81	6	50	47
759131	20 <1		780 <1		5 <10		20.8	802 <0.5		7 <1		176	14	570	54
759132	43 <1		2800 <1		9 <10		20.3	9 <0.5		10 <1		266	16	40	22
759133	5 <1		3160 <1		2 <10		3 <3		0.6	4 <1		55	5	170 <5	
759134	2 <1		2540 <1		<1	<10	1.4 <3	<0.5		3 <1		31	2	120 <5	
759135	37 <1		560 <1		8 <10		25.9	457 <0.5		11 <1		225	16	310	97
759136	13 <1		820 <1		3 <10		17.8	723 <0.5		6 <1		78	7	440	71
759137	6 <1		490 <1		2 <10		6.8	502 <0.5		4 <1		64	6	840	46
759138	12 <1		840 <1		3 <10		7.8	265 <0.5		6 <1		74	6	1030	40
759139	26 <1		2190 <1		5 <10		30.9	34 <0.5		11 <1		115	11	1850	24
759140	5 <1		1070 <1		1 <10		7.2	455 <0.5		5 <1		41	3	1050	22
759141	60 <1		2340 <1		11 <10		28.8	428 <0.5		10 <1		232	15	210	49
759142	41 <1		2140 <1		9 <10		19.2	384 <0.5		12 <1		285	23	1150	39
759143	50 <1		3200 <1		10 <10		24.9	11 <0.5		14 <1		269	20	380	24
759144	8 <1		2250 <1		4 <10		3.5 <3		0.6	6 <1		185	15	140	9
DUP-759115	39 <1		2250 <1		10 <10		8 <3	<0.5		8 <1		337	20	270	8
DUP-759135	39 <1		560 <1		8 <10		26.5	510 <0.5		12 <1		227	16	330	103
DUP-759136	13 <1		800 <1		3 <10		17.7	668 <0.5		7 <1		81	7	450	69
MMISRM16	5 <1		460 <1		<1	<10	23.5 <3	<0.5		49 <1		12 <1		270	20
BLANK	<1	<1	<10	<1	<1	<10	<0.5	4 <0.5	<1	<1	<5	<1	<20	<5	
974118	46 <1		630 <1		8 <10		78.8	642	0.5	54	1	210	20	200	106
974119	20 <1		210 <1		3 <10		34	617 <0.5		20	1	79	8	430	121
974120	27 <1		1180 <1		4 <10		62.1	835 <0.5		24 <1		113	9	1020	117
974121	15 <1		370 <1		3 <10		47	1660 <0.5		19 <1		86	9	520	109
974122	28 <1		1120 <1		5 <10		45.8	977 <0.5		31 <1		142	14	530	74
974123	34 <1		1170 <1		7 <10		43.6	841 <0.5		26 <1		256	23	310	46
974124	83 <1		1420 <1		12 <10		79.2	236 <0.5		39	1	348	29	260	74
974125	70 <1		990 <1		12 <10		97.3	1220	0.7	40	1	346	32	260	116
974126	51 <1		1530 <1		10 <10		59.7	450	1.1	114	1	343	32	750	92
974127	27 <1		530 <1		5 <10		39.5	1290 <0.5		24 <1		137	12	210	86
974128	11 <1		2390 <1		2 <10		22.1	349	0.5	27 <1		79	8	1480	39
974129	13 <1		2280 <1		2 <10		12	26 <0.5		16 <1		47	3	250	14
974130	50 <1		1230 <1		7 <10		33.2	829 <0.5		21 <1		184	14	180	54
974131	49	1	440 <1		7 <10		98.8	2940 <0.5		24	1	149	13	220	139
974132	18 <1		440 <1		3 <10		51.6	1970	0.6	18	1	73	7	250	149
974133	7 <1		850 <1		1 <10		25	518 <0.5		15 <1		34	4	840	37
974134	16 <1		2560 <1		3 <10		18.4	199	0.6	16 <1		106	10	4160	27
974135	80 <1		2680 <1		12 <10		70.3	375	0.8	60	1	334	29	300	85
974136	2 <1		2530 <1		<1	<10	1	7 <0.5		7 <1		23	2 <20	<5	



## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974137	44	38 <10		0.5	1230 <1		680	45	52	83 <100	<0.5		4030	15	8	5	26 <1		22
974138	51	79	30	0.4	840 <1		300	19	139	36 <100		1	1790	20	8.1	6.3	82	5	30
974139	79 >300		30	0.1	3260	1	150	39	525	234	400	4.4	750	49	25.3	10.7	245	20	47
974140	151 >300		30 <0.1		2140 <1		120	41	308	202	400	8.8	770	29	14.3	8.3	213	12	35
974141	20	99	20	0.5	3400 <1		60	10	545	87 <100		2.1	560	37	15.8	10.1	59	8	43
974142	43	70	10	0.4	920 <1		440	131	325	87 <100	<0.5		1600	61	29.7	18.1	72	3	83
974143	30	71 <10		0.5	1230 <1		460	15	147	46	100 <0.5		850	26	11.8	7.7	20	2	34
974144	89 >300		20	0.2	1600 <1		80	38	166	137	200	6.7	670	26	13.4	6.3	142	19	25
974145	42	165	30	0.4	1970	1	210	22	827	135	200	1.9	1650	134	62.4	40.2	111	13	182
974146	67 >300		10	0.3	1100 <1		90	16	221	82	100	5.7	670	49	23.4	9.7	124	13	44
974147	108 >300		20	0.2	900 <1		30	35	251	421	300	7.3	460	18	7.8	5	163	30	19
974148	52	276	10 <0.1		2090 <1		40	48	53	120	200	5.9	320	10	6.4	1.9	219	22	8
974149	69	291	20	0.1	1240 <1		80	40	276	71	300	4.2	480	33	16.5	8.6	172	21	36
974150	123	177	10	0.1	3510 <1		130	17	301	98	100	7.4	670	27	12.9	8.3	95	12	34
974151	58	188	10	0.1	4210 <1		110	6	497	69	200	3.9	310	19	8.4	5.6	85	9	21
974152	56	175	30	0.4	2540	2	220	10	357	114	300	4.3	590	25	11.4	7.2	178	12	30
974153	57	236	10 <0.1		520 <1		140	10	92	98	200	4.7	190	12	6.1	3.1	161	19	13
974154	77	149 <10		0.1	880 <1		220	14	101	118 <100		2.8	990	35	19.1	8.2	50	4	41
974155	55	165	20	0.2	1560	1	140	8	888	106	200	4.4	810	57	25.6	15.4	106	11	70
974156	132	125 <10		0.1	1150 <1		250	13	49	133 <100		3.7	470	17	8.4	4.2	17	3	20
974157	77	171 <10	<0.1		1460 <1		500	170	57	35 <100		2.3	1840	39	21.9	7.4	26	3	39
974158	47	96	10	0.3	1810 <1		440	24	352	76	200 <0.5		3130	57	28.6	15.8	68	4	74
974159	35	263	20 <0.1		1750	1	200	45	463	210	300	3.3	1970	42	22.3	8.8	253	13	39
974160	60	158 <10		0.1	1420 <1		430	63	222	72 <100	<0.5		2220	82	50.3	13.7	137	3	73
974161	70	279	20	0.1	3620 <1		190	91	98	190	200	1.3	670	19	9.4	3.8	246	10	16
974162	31 >300		40	0.1	2560	2	80	46	366	314	300	4.2	1280	52	28.2	9.9	306	25	46
974163	33	61 <10		0.8	2210 <1		440	29	827	35 <100	<0.5		2680	110	48.2	29.3	21	4	146
974164	73	116 <10	<0.1		1510 <1		590	77	900	18 <100		1.1	1700	73	38.9	14.1	15	3	75
974165 <1		8 <10	<0.1		640 <1		520	7 <5		24 <100	<0.5		20 <1	<0.5	<0.5		1 <1	<1	
974166 <1		97 <10	<0.1		550 <1		490	20	11	13 <100	<0.5		130	6	4.1	0.9	10	4	4
974167	72	106	10	0.5	1270 <1		430	35	52	69 <100	<0.5		2110	40	20.7	12.2	19	4	52
974168	34	187	110	0.3	2400	4	150	37	2240	311	400	3.7	3920	80	36.6	23	309	29	99
974169	216	239 <10		0.2	890 <1		10	32	195	71 <100		4.2	800	41	21.3	8.5	97	14	40
974170	38	282 <10	<0.1		1160 <1		40	53	93	208	100	5.3	280	20	12.5	3.7	144	31	16
974171	32 >300		10 <0.1		1320	1	50	64	73	183	200	2.2	270	16	9.7	2.8	210	26	11
974172	26	280	10	0.1	2020 <1		110	61	223	137	100	5.6	1310	97	55.3	12.1	244	12	62
974173	53 >300		20 <0.1		1670	1	50	48	147	106	200	5.1	480	24	13.8	4.8	190	34	20
974174	15	11 <10		0.4	3060 <1		270	5	79	48 <100	<0.5		1170	18	7.3	6.5	14 <1		29
974175	19	21 <10		0.9	2760 <1		240	6	47	8 <100	<0.5		3320	94	35.1	31.3	12	3	146
974176	15	83	10	0.5	3790 <1		370	8	205	65	100	0.6	800	29	13.1	8.9	58	5	39
974177	64	227	30 <0.1		2260	1	280	99	405	148	200	1.5	1220	27	14.6	6.4	281	13	28
974178	37	116	20	0.4	1380	1	120	12	1180	93	100	2.7	2150	64	26.3	19.2	58	10	82
974179	385	57	10	0.3	860 <1		460	946	63	135 <100	<0.5		3420	41	21.9	12.4	23	1	58
974180	27	296	20 <0.1		1850 <1		110	732	57	324	100	0.9	810	18	13.3	2	242	12	9
974181	87	273	80	0.1	2210	1	140	813	193	264	100	0.9	3920	62	41.8	9.8	293	12	43

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc		
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5		
DETECTION	1	0.5	0.1	1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1		
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb		
974137	<1	<0.5	21.7	38	5	88	4040	17	<0.5	77	1230	1.3	30	<1	15	<1	<5	<1	23		
974138	<1	<0.5	22	112	<5	41	1520	17	2.2	141	225	1.4	100	<1	33	<1		50	<1	15	
974139	<1	<0.5	34.1	176	<5	21	3090	9	8.3	208	340	5.7	630	<1	50	<1		251	<1	107	
974140	<1	<0.5	41.3	133	<5	17	4200	8	4.6	166	396	11.3	230	<1	39	<1		226		87	
974141	<1	<0.5	19.2	179	<5	2	4970	7	1.6	230	45	2.1	180	<1	55	<1		200	<1	41	
974142	<1	<0.5	21.8	278	<5	69	6530	16	0.5	386	844	2.1	100	<1	84	<1		27		59	
974143	<1	<0.5	19	87	<5	125	1140	<5	<0.5	127	120	0.5	70	<1	27	<1		128		36	
974144	<1	<0.5	32.1	75	<5	9	3220	5	5.3	102	234	8.8	290	<1	23	<1		209	<1	83	
974145	<1	<0.5	34.9	737	<5	45	7140	9	3.9	950	382	4.2	260	<1	218	<1		130		234	
974146	<1	<0.5	15.3	124	<5	8	2000	10	2.7	169	298	2.2	350	<1	38	<1		228	<1	54	
974147	1	<0.5	11.1	83	<5	2	7420	11	4.3	95	244	10.9	230	<1	23	<1		110	<1	60	
974148	<1	<0.5	44.2	20	<5	6	11300	8	5.4	27	234	17.9	270	<1	6	<1		241	<1	54	
974149	1	<0.5	68.1	108	<5	9	20700	11	5.6	150	236	13.6	160	<1	34	<1		291		105	
974150	<1	<0.5	27.1	117	<5	9	4270	7	3.1	156	70	5.3	230	<1	36	<1		385	<1	56	
974151	<1	<0.5	34.4	88	<5	6	3560	5	2.7	96	109	7.2	160	<1	24	<1		175	<1	35	
974152	<1	<0.5	45.6	118	<5	23	2820	18	7	137	69	4.1	210	<1	32	<1		318		62	
974153	<1	<0.5	21.7	43	<5	6	2590	8	5.5	54	81	12.3	190	<1	13	<1		208	<1	48	
974154	<1	<0.5	49	78	<5	27	2780	10	0.7	136	116	0.7	150	<1	28	<1		306	<1	67	
974155	<1	<0.5	48.9	276	<5	17	3850	11	3.3	340	77	5.9	260	<1	81	<1		212	<1	112	
974156	<1	<0.5	57.9	35	<5	13	2570	6	<0.5	62	69	1	130	<1	13	<1		331	<1	31	
974157	<1	<0.5	35.5	79	<5	36	6470	5	<0.5	118	857	0.5	160	<1	26	<1		182	<1	46	
974158	<1	<0.5	40.4	208	<5	67	4260	17	1	316	747	1.9	110	<1	69	<1	<5			93	
974159	<1	<0.5	40.9	102	<5	25	9170	12	4.7	140	978	9.1	230	<1	32	<1		119		130	
974160	<1	<0.5	139	120	<5	60	5200	7	0.5	202	1510	0.8	140	<1	43	<1		7	<1	134	
974161	<1	<0.5	43.5	50	<5	36	6620	6	4.1	56	342	8.9	280	<1	13	<1		169	<1	50	
974162	1	<0.5	39.7	142	<5	14	12900	12	9	178	628	18.9	500	<1	42	<1		213		119	
974163	<1	<0.5	35.5	234		7	118	1890	11	<0.5	472	849	0.2	60	<1	94	<1		88	<1	32
974164	<1	<0.5	46.4	132	<5	62	6630	23	<0.5	226	1370	0.2	110	<1	48	<1		118	<1	29	
974165	<1	<0.5	10.9	<1	<5	67	24500	138	<0.5	<1	55	0.9	<10	<1	<1	<1		9	<1	<5	
974166	<1	<0.5	4	4	<5	62	6160	31	<0.5	8	147	0.4	160	<1	2	<1		7	<1	8	
974167	<1	<0.5	41.4	59	<5	52	3430	20	<0.5	134	187	1.3	60		1	23	<1	14		58	
974168	<1	<0.5	34.1	368	<5	22	7950	44	12	483	711	8.8	540	<1	113	<1		176		99	
974169	<1	<0.5	27	73	<5	4	1150	13	2.6	137	156	2.4	390	<1	27	<1		261	<1	50	
974170	<1	<0.5	13.5	36	<5	4	3040	11	4.6	52	170	3.2	460	<1	11	<1		215		53	
974171	<1	<0.5	31.3	26	<5	19	2830	10	8	36	247	7.5	340	<1	8	<1		162	<1	63	
974172	<1	<0.5	52.7	98	<5	33	5950	7	5.6	183	524	5	290	<1	37	<1		289		118	
974173	<1	<0.5	27.2	45	<5	6	6480	7	7.4	69	269	10.1	370	<1	15	<1		161		62	
974174	<1	<0.5	34.2	73		21	25	1490	9	<0.5	127	45	0.4	20	<1	25	<1		15		16
974175	2	<0.5	24.5	411		10	44	310	<5	<0.5	698	40	0.1	20	<1	141	<1		31	<1	98
974176	<1	<0.5	18.5	119	<5	29	1750	11	1.7	176	143	1	110	<1	38	<1		97		30	
974177	<1	<0.5	36.8	87	<5	13	15700	14	7.9	115	691	10.9	240	<1	27	<1		88		68	
974178	<1	<0.5	33.1	320	<5	13	3810	6	1.9	427	178	2.7	170	<1	102	<1		102		70	
974179	2	<0.5	43.7	34	<5	46	8040	22	<0.5	109	1080	1.9	50	<1	18	<1		10		30	
974180	<1	<0.5	37	16	<5	25	10100	10	3.5	23	484	8.9	440	<1	5	<1		75		44	
974181	<1	<0.5	23.4	70	<5	13	9270	33	4.4	116	1220	7.7	250	<1	24	<1		103		88	

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974137	20 <1		2860 <1		3 <10		19	12 <0.5		63 <1		101	8	160	20
974138	31 <1		1030 <1		4 <10		27.6	512	0.6	35	1	90	7	290	43
974139	47 <1		930 <1		8 <10		80.2	2220	0.7	40	1	229	21	200	165
974140	37 <1		610 <1		5 <10		47.6	1130	0.7	31 <1		139	12	930	114
974141	49 <1		280 <1		7 <10		113	423	1.3	20	2	152	12	60	78
974142	82 <1		1800 <1		12 <10		61.1	105 <0.5		37 <1		333	25	480	47
974143	31 <1		3660 <1		5 <10		47.9	23 <0.5		16 <1		120	9	40	53
974144	25 <1		320 <1		4 <10		36.8	1170	0.7	25	2	134	11	960	120
974145	199 <1		900 <1		26 <10		143	1280	1.1	61	3	684	50	350	149
974146	42 <1		440 <1		8 <10		40.9	734	0.7	24	2	241	17	100	88
974147	21 <1		130 <1		3 <10		56.2	862	0.6	20	4	72	6	520	111
974148	7 <1		310 <1		2 <10		29.5	1290 <0.5		14 <1		51	6	2790	85
974149	35 <1		260 <1		6 <10		51.9	1480	0.8	26	2	162	14	640	173
974150	35 <1		620 <1		5 <10		44.7	729	0.7	17	2	138	10	210	128
974151	22 <1		720 <1		4 <10		42.7	527 <0.5		11	3	86	7	270	85
974152	32 <1		1000 <1		5 <10		104	2500	0.6	28	1	102	9	70	140
974153	14 <1		390 <1		2 <10		32.6	859 <0.5		17	1	63	5	80	134
974154	36 <1		620 <1		6 <10		16.3	165 <0.5		21 <1		203	15	160	47
974155	76 <1		640 <1		11 <10		110	831	1	43	2	248	20	120	188
974156	18 <1		620 <1		3 <10		8.8	39 <0.5		15 <1		80	7	110	33
974157	32 <1		1430 <1		7 <10		13	36	0.8	63 <1		253	16	130	29
974158	73 <1		1130 <1		11 <10		59	180 <0.5		57 <1		312	24	240	96
974159	36 <1		700 <1		7 <10		72.4	1240	1.2	42	1	214	18	550	126
974160	56 <1		1510 <1		12 <10		33	88 <0.5		79 <1		517	41	380	57
974161	14 <1		940 <1		3 <10		41.9	903 <0.5		22 <1		83	7	2470	50
974162	43	1	530 <1		8 <10		112	2720	0.9	48	2	247	23	1310	194
974163	130 <1		2190 <1		21 <10		59.6	12 <0.5		125 <1		539	32	330	26
974164	62 <1		2210 <1		12 <10		11.5	12	0.6	141 <1		419	28	160	28
974165 <1	<1		2970 <1		<1	<10	<0.5	5 <0.5		2 <1	<5	<1		990 <5	
974166	3 <1		2350 <1		<1	<10	2.1	18 <0.5		7 <1		40	4	560	6
974167	40 <1		2200 <1		7 <10		13.3	55 <0.5		15 <1		245	15	440	59
974168	108 <1		610 <1		16 <10		205	3860	1.5	68	7	339	32	1230	219
974169	36 <1		100 <1		7 <10		37.1	719	0.6	20 <1		215	16	290	53
974170	13 <1		300 <1		3 <10		24.1	1320 <0.5		11 <1		108	10	1030	67
974171	9	1	520 <1		2 <10		32.2	2490 <0.5		21	1	78	9	900	113
974172	49 <1		950 <1		14 <10		80.6	1590	1	63	1	524	41	580	114
974173	18 <1		250 <1		4 <10		44.5	2430	0.5	18	2	123	12	1200	126
974174	30 <1		2070 <1		4 <10		23	38 <0.5		23	1	94	5	80	10
974175	150 <1		3050 <1		20 <10		42.7	19 <0.5		39	2	437	22	330	35
974176	40 <1		3330 <1		6 <10		82.8	490 <0.5		22	2	128	10	360	60
974177	27 <1		1500 <1		5 <10		66.2	1580	0.6	28	2	130	12	2190	128
974178	93 <1		810 <1		13 <10		129	501	1.2	36	4	259	20	90	121
974179	40 <1		2000 <1		8 <10		22.4	18	1.5	53 <1		257	21	3870	43
974180	7 <1		790 <1		2 <10		27.8	974	0.6	20 <1		98	12	7350	84
974181	33 <1		1230 <1		9 <10		65.3	1470	1.8	62	1	387	36	7120	151

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974182	172	168 <10		0.3	1220 <1		120	225	140	103 <100		2.7	480	21	9.7	5.8	26	4	25	
974183	42	251	60	0.2	1910		1	250	158	120	158	200 <0.5		320	27	12.6	6.3	166	11	29
974184	130	210	160	1.5	1490		1	150	290	515	243	100	2	2100	75	32.2	24.6	141	10	95
974185	54	292	30	0.2	1620 <1		120	63	126	229	100		3	1590	28	14.9	4.9	214	14	22
974186	52	58 <10		0.9	1110 <1		390	41	69	33 <100		<0.5		3760	46	20.7	15	15	2	69
974187	94	160 <10		0.2	2160 <1		360	71	46	40 <100			2.1	1040	19	9.9	4.3	36	4	19
974188	103	147	20	0.5	1610 <1		210	41	58	95 <100			1.3	390	9	4.3	2.7	54	4	10
974189	24 >300		50	0.1	3830		2	70	82	206	474	200	1.2	920	25	15.2	5.2	267	15	19
974190	278	254	20	0.3	1420 <1		170	110	303	307	100		2.2	440	28	13.8	6.7	129	11	29
974191	80	45 <10		1.6	1900 <1		780	44	28	198	100 <0.5			4940	60	32.4	12.9	16 <1		69
974192	97	126 <10		0.2	950 <1		500	87	18	80 <100			1.8	5110	17	9.9	3.9	18	2	20
974193	22 >300		10 <0.1		1270 <1		50	46	48	227	200		3.6	580	17	10.6	2.3	164	13	10
974194	70	178	50	0.3	1490 <1		250	42	145	183	200		1.7	820	19	9.5	4.6	137	9	20
974195	67	238	20 <0.1		1060 <1		110	76	51	78 <100			2.1	300	15	8.8	3	125	18	13
974196	37	58	30	0.5	1290 <1		160	9	353	133	200 <0.5			1260	93	39.2	29	52	6	128
974197	99	204	10	0.3	680 <1		130	28	344	111 <100			3.2	790	38	19.1	9.6	89	13	42
974198	55	97 <10		<0.1	930 <1		510	33	31	26 <100			1.1	710	6	2.9	1.8	34	3	8
974199	134	228	10	0.2	1330 <1		60	29	200	161	100		4.4	1060	41	21.3	10	97	14	44
974200	26	65	30	0.7	1050 <1		90	10	469	172 <100			3	2670	77	31.8	23.3	44	7	97
974201	158	121	20	0.3	2740 <1		80	17	558	231 <100			2.7	1070	39	18.3	10.9	51	6	45
974202	122	138	20	0.2	770 <1		80	21	278	203 <100			2.7	800	27	12.2	7.1	58	7	31
974203	56	131	40	0.6	930	1	130	18	1320	252	200		3.4	1620	50	20.1	13.6	91	10	57
974204	66	93	30	0.5	980 <1		270	54	215	315	100		0.7	6850	123	50.7	36.8	62	6	167
974205	91	231	50	0.3	730 <1		50	44	385	322	200		3.5	1520	49	22.1	12.5	180	18	54
974206	122	257	40	0.2	1540 <1		110	56	145	167	200		3.1	920	25	12.5	6	192	13	25
974207	50	180	20	0.4	2420 <1		160	39	282	174	200		3.2	2280	44	19.4	13.1	79	7	55
974208	134	137	20	0.2	650 <1		190	46	836	382	100		2.2	2390	60	27.9	17.6	67	7	75
974209	107	50 <10		0.7	1270 <1		710	65	85	214	100 <0.5			5480	48	25.9	13.5	24	1	64
974210	56	18 <10		0.8	740 <1		590	39 <5		39 <100	<0.5			3020	9	5.5	1.4	8 <1		9
974211	99	278	30	0.2	1260 <1		120	84	101	154	300		1.9	420	22	11.5	5	218	22	21
974212	106	189	30	0.2	1940 <1		250	73	234	171	200		1	1510	57	29.3	15.6	156	7	64
974213	69	233	20	0.1	770 <1		170	47	87	88	200		1.8	570	13	6.3	3	143	13	13
DUP-974124	82	81	20	0.4	1250 <1		350	24	324	107	100 <0.5			2250	63	32.5	18.7	53	3	86
DUP-974142	39	61	10	0.4	910 <1		400	92	325	60 <100	<0.5			1460	58	27.1	18.3	62	3	83
DUP-974147	106 >300		20 <0.1		910 <1		40	33	244	410	300		6.9	430	17	7.4	4.7	151	29	19
DUP-974167	75	112	10	0.7	1270 <1		440	35	49	75 <100	<0.5			2220	39	20.3	12.2	19	4	51
DUP-974172	20	270	10	0.1	2020 <1		120	60	239	105 <100			5.3	1190	100	53.9	13.8	218	11	68
DUP-974185	47	290	30	0.2	1780 <1		130	73	112	226	100		3.1	1660	27	15.2	4.4	216	13	19
DUP-974197	100	205	10	0.3	670 <1		130	28	356	101 <100			3	760	41	19.1	10.3	88	13	44
DUP-974213	82	238	10	0.2	790 <1		150	56	82	94	200		2.1	630	15	7.7	3.1	138	13	13
MMISRM16	23	61	20	28	80 <1		280	5	20	80 <100			13.3	900	3	1.1	1.2	2 <1		5
AMISO169	9	94	20	0.4	860 <1		40	2	924	146	100		8.5	4960	36	15.2	13.4	64	17	54
MMISRM18	26	42	20	7.4	160 <1		220	94	33	97 <100			6.3	1050	5	1.9	1.7	4 <1		7
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974182	<1	<0.5	32.8	52 <5	3	1190	19	0.6	83	97	1.1	330 <1	17 <1	185	1	41			
974183	<1	<0.5	38.8	48 <5	14	12100	19	4	79	391	6.4	320 <1	17 <1	16	7	50			
974184	<1	<0.5	26.7	224 <5	7	8330	25	2.7	359	627	6.5	270 <1	79 <1	123	16	73			
974185	<1	<0.5	18.7	32 <5	9	7480	9	3.7	55	345	7.4	320 <1	11 <1	149	2	69			
974186	2 <0.5	13.1	88 <5	41	1450	11 <0.5	189	385	0.3	30 <1	33 <1	43 <1	28						
974187	<1	<0.5	28.2	30 <5	18	2240	9	0.9	54	197	1.2	100 <1	11 <1	268 <1	24				
974188	<1	<0.5	12.9	23 <5	3	1800	13	1.3	34	46	2.2	210 <1	7 <1	132 <1	25				
974189	<1	0.5	35	52 <5	13	15100	6	6.9	69	284	9.3	460 <1	16 <1	68	2	55			
974190	<1	<0.5	16.9	91 <5	5	5950	16	3.7	121	249	3.4	1180 <1	28 <1	106	2	50			
974191	1 <0.5	38.9	63 <5	53	4830	19 <0.5	158	346	0.2	60	1	28 <1	7	2	59				
974192	<1	<0.5	33.4	37	7	17	2460	8 <0.5	58	282	0.3	110 <1	11 <1	117 <1	22				
974193	<1	<0.5	27.3	17 <5	17	3020 <5	2.7	25	298	3.8	310 <1	5 <1	175 <1	53					
974194	<1	<0.5	29.8	34 <5	20	9620	7	2.4	61	195	7.7	370 <1	12 <1	142	7	54			
974195	<1	<0.5	19.6	21 <5	5	9150	7	2.9	38	171	3	240 <1	8 <1	139	2	61			
974196	<1	<0.5	17.9	457 <5	26	4590	7	1.6	608	74	2.2	140 <1	135 <1	58	3	94			
974197	<1	<0.5	23.8	90 <5	8	3950	9	1.9	152	63	4.5	260 <1	33 <1	175	1	85			
974198	<1	<0.5	21.9	16 <5	25	1550	6 <0.5	27	163	0.7	50 <1	6 <1	76	1	8				
974199	<1	<0.5	51.5	70 <5	5	4520	15	2	141	117	3.4	310 <1	28 <1	251	3	102			
974200	<1	<0.5	17.6	298 <5	16	4510	9	1.3	447	83	2.3	210 <1	100 <1	71	3	96			
974201	<1	<0.5	29.4	116 <5	6	2990	11	1.3	189	190	2.7	270 <1	40 <1	137	3	53			
974202	<1	<0.5	41.6	90 <5	7	2390	11	1.2	131	88	2.7	170 <1	29 <1	99	2	40			
974203	<1	<0.5	37.8	173 <5	9	4810	15	2.9	243	91	3.8	310 <1	55 <1	115	6	78			
974204	1 <0.5	37.4	422 <5	39	2560	12	1.1	690	348	1.6	110 <1	142 <1	93	4	145				
974205	<1	<0.5	18.3	91 <5	2	4050	32	3.5	188	164	10.3	250 <1	39 <1	111	5	98			
974206	<1	<0.5	84.2	48 <5	11	3140	11	3.5	82	210	9.1	260 <1	17 <1	179	3	82			
974207	<1	<0.5	55.7	125 <5	15	3170	12	1.7	208	134	2.4	290 <1	44 <1	133	4	71			
974208	<1	<0.5	56.6	154 <5	24	5320	19	1.2	284	263	3	310 <1	58 <1	88	3	109			
974209	<1	<0.5	29.7	81 <5	55	4260	32 <0.5	179	836	0.6	70	1	32 <1	9	3	46			
974210	2 <0.5	19.5 <1	7	47	1040	29 <0.5	2	203 <0.1	20	1 <1	<1	12	2	18					
974211	1 <0.5	25.2	40 <5	11	5980	11	5.1	63	189	11.4	210 <1	13 <1	216	2	76				
974212	<1	<0.5	89.2	124 <5	33	8020	10	2.7	221	372	6.7	210 <1	45 <1	45	3	110			
974213	<1	<0.5	45.8	29 <5	11	4020	13	3.1	40	105	8.7	210 <1	9 <1	158	2	58			
DUP-974124	<1	<0.5	21.8	241 <5	36	5650	11	1	351	576	1.5	120 <1	76 <1	21	1	59			
DUP-974142	<1	<0.5	19.5	300 <5	64	4130	16	0.6	404	672	2.1	80 <1	88 <1	30	1	55			
DUP-974147	1 <0.5	10.9	82 <5	2	7130	10	4	93	245	10	210 <1	23 <1	109 <1	56					
DUP-974167	<1	<0.5	43.8	57 <5	53	3680	20 <0.5	128	201	1.2	60 <1	22 <1	13	2	60				
DUP-974172	<1	<0.5	49.1	102 <5	32	5030	5	4.6	206	519	4	300 <1	41 <1	272 <1	106				
DUP-974185	<1	<0.5	20.3	29 <5	10	7620	8	3.5	48	383	6.9	300 <1	10 <1	158	2	67			
DUP-974197	<1	<0.5	23.5	94 <5	8	3700	9	1.9	158	59	4.4	260 <1	34 <1	169	1	84			
DUP-974213	<1	<0.5	52.5	28 <5	12	3730	11	2.5	39	114	7.1	240 <1	9 <1	185	2	64			
MMISRM16	14 <0.5	48.6	5 <5	45	150	61 <0.5	17	366	0.3	130	34	3 <1	376 <1	12					
AMIS0169	<1	<0.5	52.5	506 <5	42	4900	5	4	467	586	3.2	140 <1	121 <1	280	1	83			
MMISRM18	5 <0.5	30.6	10 <5	103	820	38 <0.5	26	680	0.9	400	16	5	6	162 <1	7				
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	
BLANK	<1	<0.5	0.1 <1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5		

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974182	22 <1		530 <1		4 <10		16.8	210	0.7	11 <1		98	7	1000	42
974183	24 <1		980 <1		5 <10		55.2	943 <0.5		21 <1		114	11	1540	105
974184	92 <1		460 <1		14 <10		67.1	1040	2.4	30	2	362	25	3200	139
974185	16 <1		600 <1		4 <10		42.8	1290 <0.5		26 <1		133	11	1650	119
974186	54 <1		1680 <1		9 <10		14.3	15 <0.5		10 <1		286	14	680	12
974187	16 <1		1120 <1		3 <10		10.5	280 <0.5		14 <1		102	7	1290	36
974188	9 <1		390 <1		2 <10		10	526 <0.5		9 <1		40	3	940	45
974189	18 <1		480 <1		4 <10		68.5	2070 <0.5		18	2	115	13	2630	132
974190	29 <1		530 <1		5 <10		73.1	788 <0.5		20 <1		112	12	1030	124
974191	48 <1		4430 <1		10 <10		19.9	7 <0.5		38 <1		313	25	150	29
974192	15 <1		2010 <1		3 <10		3.2	19 <0.5		37 <1		145	7	300	14
974193	7 <1		530 <1		2 <10		16.3	969 <0.5		10 <1		89	8	450	95
974194	18 <1		850 <1		3 <10		27.1	927 <0.5		14	2	87	7	920	68
974195	11 <1		420 <1		2 <10		21.6	913 <0.5		18 <1		80	8	1110	132
974196	131 <1		1640 <1		19 <10		99.6	720	0.7	38	4	420	28	130	93
974197	40 <1		280 <1		7 <10		35.3	521	0.5	27	1	179	15	420	123
974198	7 <1		2170 <1		1 <10		6	33 <0.5		7 <1		34	2	170	11
974199	38 <1		140 <1		7 <10		30.9	711	0.6	23	2	198	17	690	169
974200	103 <1		1180 <1		15 <10		83.7	566	1.3	30	4	329	23	270	103
974201	46 <1		510 <1		7 <10		37.9	428 <0.5		16	2	191	14	160	101
974202	31 <1		370 <1		5 <10		33.9	500 <0.5		14	2	126	10	280	152
974203	58 <1		780 <1		9 <10		138	1700	1	30	4	192	15	360	185
974204	160 <1		1990 <1		24 <10		41.6	658	1.1	38	2	571	32	2760	67
974205	50 <1		180 <1		9 <10		43.2	1660	0.8	29	3	203	16	1300	202
974206	22 <1		390 <1		4 <10		31.8	1260	0.5	21	2	112	10	1360	163
974207	51 <1		660 <1		8 <10		38.8	810	0.7	20	2	209	15	630	107
974208	70 <1		760 <1		11 <10		51.5	622	0.8	26	1	277	21	730	144
974209	50 <1		5090 <1		9 <10		21.9	9 <0.5		57 <1		310	21	220	38
974210	3 <1		5240 <1		1 <10		2.3	4 <0.5		15 <1		56	5	170	11
974211	18 <1		540 <1		4 <10		23.1	1980 <0.5		14	2	105	9	730	129
974212	58 <1		1110 <1		10 <10		38	820 <0.5		39	1	293	23	2660	103
974213	11 <1		500 <1		2 <10		22.2	846 <0.5		23	1	59	5	380	132
DUP-974124	80 <1		1390 <1		12 <10		76.9	210 <0.5		39	1	348	29	260	73
DUP-974142	84 <1		1650 <1		12 <10		64	149 <0.5		32 <1		320	22	370	48
DUP-974147	20 <1		130 <1		3 <10		52.9	800	0.6	19	4	70	6	550	103
DUP-974167	38 <1		2220 <1		7 <10		13.4	51 <0.5		15 <1		238	15	490	58
DUP-974172	55 <1		970 <1		15 <10		72	1260	0.8	53	1	534	39	600	91
DUP-974185	14 <1		670 <1		4 <10		39.1	1210 <0.5		24 <1		132	11	2070	105
DUP-974197	42 <1		270 <1		7 <10		35	496	0.5	26	1	183	15	380	124
DUP-974213	11 <1		530 <1		2 <10		21.3	676 <0.5		25 <1		71	6	410	129
MMISRM16	5 <1		560 <1		<1	<10	23.2	4 <0.5		49 <1		12 <1		390	20
AMIS0169	77	1	90 <1		8 <10		92.2	516	1.5	29	2	159	12	280	72
MMISRM18	7 <1		1240 <1		1 <10		27.7	10 <0.5		30 <1		29	1	890	42
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<1	<1	<10	<1	<1	<10	<0.5	5 <0.5	<1	<1	<5	<1	<20	<5	

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974214	77	182	20	0.1	1050	<1	120	52	112	104	200	2.3	890	22	12.4	5.4	121	13	23
974215	294	39	<10	0.4	1330	<1	510	135	145	127	<100	<0.5	3430	88	50	23.2	21	2	112
974216	81	173	<10	0.1	800	<1	180	166	66	105	<100	1.3	1170	46	26	9.1	105	7	43
974217	79	68	<10	0.2	1830	<1	380	50	78	48	<100	0.9	1290	17	8.3	5.4	24	2	23
974218	143	67	<10	0.3	1440	<1	490	133	70	23	<100	0.6	2730	27	12.7	7.7	15	2	35
974219	67	196	10	<0.1	930	<1	160	50	33	211	100	0.5	1290	10	5.4	1.9	159	6	8
974220	55	10	<10	0.7	1010	<1	510	30	<5	89	<100	<0.5	1180	5	3.2	1	6	<1	5
974221	32	30	<10	<0.1	1440	<1	730	98	<5	21	<100	<0.5	220	3	1.4	0.9	6	1	4
974222	72	106	20	0.3	560	<1	190	35	157	137	100	2.4	2200	36	16.4	11.1	42	4	45
974223	47	90	<10	0.1	1580	<1	350	41	12	73	<100	1	280	3	1.8	0.9	31	2	3
974224	78	129	<10	0.3	650	<1	170	42	20	52	<100	1.3	400	8	4.5	1.7	51	7	7
974225	29	183	10	<0.1	1680	<1	170	46	149	142	200	0.5	470	19	9.8	4.6	131	8	19
974226	55	87	10	0.3	1310	<1	260	45	155	51	100	<0.5	2240	73	39.4	21.5	38	4	93
974227	44	34	<10	0.6	1070	<1	240	23	74	49	<100	<0.5	1350	43	17.8	13.5	25	2	55
974228	63	268	20	0.2	2550	<1	70	63	137	318	200	4.8	650	18	8.4	3.9	114	8	15
974229	137	180	<10	0.2	1430	<1	160	72	68	85	<100	2.6	670	19	9.8	4	43	5	17
974230	75	120	<10	0.4	1720	<1	320	58	41	18	<100	1.1	1530	54	29.4	13.5	19	2	60
974231	84	222	<10	0.1	2680	<1	80	48	102	113	<100	2.6	310	27	14.3	5.4	54	7	22
974232	83	128	<10	0.1	1220	<1	150	36	49	79	<100	2.6	270	13	7.2	3.2	34	5	13
974233	44	149	<10	0.1	1090	<1	50	21	30	51	<100	0.9	250	17	9.4	3	64	12	13
974234	43	142	<10	0.1	1080	<1	50	20	30	44	<100	1	230	16	9.3	3.2	58	11	13
974235	39	98	10	0.2	2010	<1	290	22	255	85	100	0.6	2640	110	59.3	34.5	45	5	137
974236	79	127	<10	0.2	1470	<1	110	33	138	88	<100	3.8	730	29	14.7	8.7	39	8	34
974237	4	201	<10	0.2	1410	<1	90	70	38	140	<100	1.5	450	13	8.2	2.2	126	10	9
974238	88	126	<10	0.2	2630	<1	140	26	77	114	<100	4.6	420	23	11.7	6.8	24	5	26
974239	52	245	<10	<0.1	1860	<1	90	111	54	119	<100	0.9	440	22	12.4	3.7	115	12	15
974240	39	229	<10	0.1	1560	<1	60	47	128	122	<100	2.6	920	46	27.4	7.2	97	7	31
974241	68	196	<10	<0.1	1620	<1	130	62	33	95	<100	1.9	390	13	7.7	2	129	9	8
974242	74	248	10	0.2	3080	<1	90	56	157	180	100	3.4	390	29	14.4	7.5	71	7	29
974243	14	44	<10	0.6	1890	<1	370	13	73	49	<100	<0.5	3940	125	61	38.4	18	3	167
974244	17	30	<10	0.6	990	<1	310	21	84	41	<100	<0.5	3330	65	35	19.6	19	2	87
974245	33	13	<10	0.9	1080	<1	400	13	5	17	<100	<0.5	2280	26	15.5	5.2	7	<1	29
974246	28	11	<10	0.4	720	<1	390	36	<5	40	<100	<0.5	620	6	3.3	1.1	4	<1	6
974247	32	70	<10	0.4	2570	<1	270	8	83	23	<100	1.6	2370	31	13.8	9.9	11	3	41
974248	64	241	<10	0.1	1330	<1	50	70	46	144	<100	1	470	21	13.7	2.7	127	8	12
974249	98	103	<10	0.2	720	<1	40	11	75	40	<100	2.1	610	28	14.8	5.7	25	10	26
974250	49	220	<10	0.2	2090	<1	120	38	112	88	<100	2.6	810	24	12.9	5.2	105	7	22
974251	84	193	10	0.1	2040	<1	160	44	88	119	<100	2.4	600	18	9	4.4	112	8	18
974252	130	41	<10	1.2	1290	<1	690	444	22	81	<100	<0.5	5730	50	28.9	12	11	1	58
974253	42	123	20	0.4	1410	<1	160	21	363	152	100	6.4	1320	55	24.6	16.7	61	8	67
974254	8	191	<10	<0.1	1380	<1	260	196	42	138	<100	0.7	740	40	27.1	5.4	82	5	27
974255	12	186	10	0.1	2560	<1	260	205	98	93	200	1.7	430	25	14.6	5.2	101	7	23
974256	15	45	<10	0.9	900	<1	370	16	73	82	<100	0.7	8070	85	42.8	23.2	20	3	109
974257	20	184	<10	0.1	1550	<1	230	58	96	106	<100	2.1	1030	27	15.5	5.1	84	7	23

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
974214	<1	<0.5	39.4	<1	38 <5	15	5280	8	2.4	68	150	5.7	260 <1		14 <1		173	1	61
974215	<1	<0.5	29.1	98 <5		108	7420	13 <0.5		236	731	0.4	30 <1		42 <1		35	1	90
974216	<1	<0.5	43.6	52 <5		30	3650 <5		1.1	97	283	2.7	240 <1		19 <1		157 <1		60
974217	<1	<0.5	23.6	32 <5		21	1610 <5	<0.5		64	78	1.9	40 <1		12 <1		100 <1		16
974218	<1	<0.5	12.8	33 <5		24	1430 <5	<0.5		74	251	0.2	50 <1		13 <1		86 <1		20
974219	<1	<0.5	17.9	10 <5		15	3410 <5		0.5	17	437	6.6	230 <1		3 <1		94 <1		42
974220	<1	<0.5	14.6 <1			6	24	3690	13 <0.5	2	154	0.1	20 <1	<1	<1		10 <1		9
974221	<1	<0.5	19.9	4 <5		31	4720	8 <0.5		8	241	0.2	30 <1		1 <1		44 <1	<5	
974222	<1	<0.5	22.8	75 <5		19	3570	7 <0.5		133	117	2.3	120 <1		27 <1		99	1	50
974223	<1	<0.5	33.1	5 <5		16	2100 <5	<0.5		8	60	1.3	90 <1		2 <1		129 <1		13
974224	<1	<0.5	34	9 <5		8	890	6	0.6	16	61	1.9	160 <1		3 <1		148 <1		33
974225	<1	<0.5	14.7	32 <5		16	4490 <5		2	54	244	2.7	260 <1		12 <1		46 <1		47
974226	<1	<0.5	41.7	125 <5		45	2760	5	0.7	241	375	1.5	90 <1		46 <1		29	2	103
974227	<1	<0.5	15.1	180 <5		47	1550 <5	<0.5		205	112	0.9	40 <1		45 <1		40 <1		36
974228	<1	<0.5	11.1	32 <5		13	2980 <5		1.7	43	337	5.2	290 <1		10 <1		186 <1		33
974229	<1	<0.5	19.5	28 <5		17	2950 <5	<0.5		42	162	1.1	160 <1		9 <1		231 <1		49
974230	<1	<0.5	18.4	74 <5		43	640 <5	<0.5		136	173	0.2	90 <1		26 <1		131 <1		59
974231	<1	<0.5	22.5	41 <5		7	1670 <5		1	59	119	1.6	230 <1		13 <1		204 <1		58
974232	<1	<0.5	20	21 <5		9	1370 <5	<0.5		34	57	0.9	110 <1		7 <1		265 <1		44
974233	<1	<0.5	13.3	12 <5		5	1050 <5		0.7	26	91	1	260 <1		5 <1		145 <1		39
974234	<1	<0.5	12.7	12 <5		4	910 <5		0.7	27	84	0.9	240 <1		5 <1		142 <1		37
974235	1 <0.5		20.4	212 <5		11	3740 <5		0.9	375	260	1.2	100 <1		75 <1		72	1	133
974236	<1	<0.5	36.4	52 <5		14	3150	5 <0.5		98	71	1	180 <1		20 <1		241 <1		46
974237	<1	<0.5	46.5	13 <5		21	12300 <5		1.5	20	412	2.7	140 <1		4 <1		145 <1		34
974238	<1	<0.5	15.5	46 <5		18	1700 <5	<0.5		72	51	0.4	160 <1		15 <1		367 <1		44
974239	<1	<0.5	15	21 <5		13	2160 <5		2.5	37	282	1.8	260 <1		8 <1		96 <1		35
974240	<1	<0.5	11.4	40 <5		19	1210 <5		0.8	75	166	0.6	290 <1		15 <1		95 <1		52
974241	<1	<0.5	11.7	13 <5		12	1020 <5		1.8	20	246	2.9	260 <1		4 <1		241 <1		28
974242	<1	<0.5	40.7	58 <5		14	1450 <5		1.4	83	150	2.2	280 <1		18 <1		209 <1		53
974243	<1	<0.5	20.7	301 <5		58	1920 <5	<0.5		523	62	0.3	40 <1		102 <1		34 <1		158
974244	<1	<0.5	17.6	111 <5		45	1950 <5	<0.5		228	156	0.4	20 <1		41 <1		17 <1		62
974245	3 <0.5		16.3	10	17	99	540 <5	<0.5		33	95 <0.1		10 <1		5 <1		11 <1		25
974246	1 <0.5		15.9 <1		5	21	2410 <5	<0.5		1	104 <0.1		10 <1	<1	<1		6 <1		10
974247	<1	<0.5	16.8	63 <5		29	590 <5	<0.5		116	24	0.2	70 <1		22 <1		86 <1		31
974248	<1	<0.5	7.6	17 <5		12	510 <5		2	28	279	1.9	300 <1		6 <1		132 <1		44
974249	<1	<0.5	22.1	26 <5		5	600 <5	<0.5		58	28	0.7	380 <1		11 <1		229 <1		55
974250	<1	<0.5	22	37 <5		9	5430 <5		1.2	56	227	3.8	210 <1		12 <1		136 <1		49
974251	<1	<0.5	16.2	31 <5		14	4750	6	1.2	45	204	5.3	190 <1		10 <1		127 <1		40
974252	1 <0.5		16.5	32 <5		54	2360 <5	<0.5		87	117	0.2	30 <1		14 <1		24 <1		71
974253	<1	<0.5	20.3	130 <5		17	7050	6	1.1	210	75	2.1	170 <1		45 <1		152	2	89
974254	<1	<0.5	25.1	22 <5		27	5800 <5	<0.5		49	270	0.8	240 <1		10 <1		53 <1		60
974255	<1	<0.5	38.1	40 <5		35	14000 <5		2	60	333	2.8	270 <1		13 <1		107 <1		62
974256	<1	<0.5	22.4	184 <5		95	2050	6 <0.5		312	100	0.4	50 <1		62 <1		49 <1		92
974257	<1	<0.5	26.3	33 <5		19	10300	6	0.9	52	368	2.2	170 <1		11 <1		87 <1		54



## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	0.5	3	0.5	1	1	5	1	20	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
974214	18 <1		450 <1			4 <10	22.6	814 <0.5			17 <1		104	10	590	116
974215	71 <1		3350 <1			15 <10	18.3	9	0.7		89 <1		551	39	280	41
974216	28 <1		940 <1			7 <10	15.4	350 <0.5			18 <1		280	18	730	47
974217	17 <1		3280 <1			3 <10	8.4	17 <0.5			34 <1		85	6	250	22
974218	24 <1		3820 <1			5 <10	8.1	5 <0.5			36 <1		139	10	200	15
974219	5 <1		1050 <1			2 <10	11.3	265	0.5		15 <1		42	4	780	44
974220	2 <1		5510 <1		<1	<10	1.1	4 <0.5			11 <1		28	3	30	5
974221	3 <1		6880 <1		<1	<10	1.9	6 <0.5			37 <1		14 <1		330 <5	
974222	37 <1		950 <1			7 <10	22	315	0.8		15 <1		150	12	160	55
974223	2 <1		2700 <1		<1	<10	3.2	46 <0.5			7 <1		13	2	280	18
974224	5 <1		640 <1			1 <10	7.6	255 <0.5			13 <1		34	4	190	50
974225	15 <1		880 <1			3 <10	32.5	1020 <0.5			11 <1		78	7	760	51
974226	65 <1		1590 <1			13 <10	28.2	353 <0.5			19	1	383	31	510	63
974227	47 <1		1920 <1			8 <10	48.6	141 <0.5			21 <1		179	13	220	55
974228	12 <1		800 <1			3 <10	44.7	628	0.8		16 <1		64	6	990	58
974229	12 <1		1010 <1			3 <10	19	207 <0.5			19 <1		86	7	420	64
974230	39 <1		2140 <1			9 <10	6.4	40 <0.5			17 <1		318	20	550	24
974231	17 <1		510 <1			4 <10	15.6	440 <0.5			13 <1		117	11	380	93
974232	10 <1		500 <1			2 <10	7.3	129 <0.5			9 <1		58	6	140	40
974233	8 <1		380 <1			2 <10	9.1	390 <0.5			6 <1		80	7	170	22
974234	9 <1		360 <1			2 <10	8.8	337 <0.5			6 <1		77	7	160	22
974235	99 <1		2420 <1			20 <10	43.2	459	0.9		24	1	569	49	460	76
974236	27 <1		800 <1			5 <10	16.3	127	0.6		12 <1		130	11	220	47
974237	6 <1		940 <1			2 <10	15.1	395 <0.5			12 <1		55	7	900	45
974238	20 <1		970 <1			4 <10	19.6	111	0.6		15 <1		103	9	90	57
974239	10 <1		1030 <1			3 <10	13.1	817 <0.5			10 <1		99	9	480	58
974240	21 <1		870 <1			6 <10	14.6	414	0.6		12 <1		237	21	160	64
974241	6 <1		1330 <1			2 <10	11.4	566 <0.5			10 <1		60	6	1580	44
974242	22 <1		650 <1			5 <10	29.7	574	0.7		19 <1		122	11	450	87
974243	127 <1		4760 <1			23 <10	40.4	27 <0.5			38 <1		579	42	540	85
974244	60 <1		2840 <1			12 <10	20	124 <0.5			16 <1		386	26	520	38
974245	12 <1		3140 <1			4 <10	4.4 <3	<0.5			14 <1		139	12	190	9
974246	2 <1		3180 <1		<1	<10	0.8 <3	<0.5			3 <1		32	3	100 <5	
974247	31 <1		3430 <1			6 <10	23.2	44 <0.5			11 <1		131	10	310	49
974248	8 <1		540 <1			3 <10	18.8	688 <0.5			8 <1		95	11	410	46
974249	18 <1		220 <1			4 <10	7.5	44 <0.5			11 <1		127	11	100	28
974250	15 <1		960 <1			4 <10	28.9	382 <0.5			12 <1		103	10	1100	60
974251	12 <1		940 <1			3 <10	22.1	411 <0.5			13 <1		75	7	830	51
974252	30 <1		4000 <1			8 <10	9.5	3	1		24 <1		328	21	2370	22
974253	54 <1		1190 <1			10 <10	38	558	0.9		15	1	223	17	530	102
974254	16 <1		1710 <1			5 <10	22.5	124 <0.5			27 <1		225	21	870	39
974255	17 <1		1210 <1			4 <10	34.6	747	0.6		19 <1		111	12	4930	63
974256	78 <1		3700 <1			16 <10	27.6	13	0.6		35 <1		386	29	1230	43
974257	15 <1		1270 <1			4 <10	22.8	383	0.6		19 <1		125	12	2610	61

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974258	80	207 <10		0.3	1280 <1		100	17	123	126 <100		9.1	710	24	12.3	5.4	58	8	23
974259	63	188 <10		0.1	500 <1		30	36	75	86 <100		3.8	660	41	23.3	6.8	72	16	31
974260	60	191 <10	<0.1		1060 <1		150	27	61	87 <100		3.2	300	12	6.6	2.7	77	8	11
974261	61	214 <10		0.2	1080 <1		50	43	183	124	100	4.4	470	30	15.6	7	68	13	29
974262	55	199 <10	<0.1		1080 <1		180	28	86	105 <100		4.5	500	26	14.5	6.3	74	10	28
974263	29	186	30	0.1	1660	1	140	50	340	138	100	4.2	1390	64	36.9	13	194	10	57
974264	39	83 <10		0.3	2100 <1		60	6	358	53 <100		3.6	750	37	15.6	12.8	21	7	50
974265	51	208 <10	<0.1		1200 <1		40	87	52	102 <100		3.8	500	16	8.6	3	86	10	12
974266	26	299 <10	<0.1		2620 <1		20	48	94	263	100	3.2	360	20	11.8	4.3	145	26	15
974267	73	212	10 <0.1		1740 <1		70	53	64	179 <100		2	650	25	15.6	4.5	134	9	20
974268	129	51 <10		0.4	2340 <1		340	6	5	73 <100		1.6	1270	6	2.6	2.5	5	1	9
974269	55	261 <10	<0.1		2120 <1		80	77	73	311 <100		3.8	310	13	6.8	2.8	84	7	10
974270	65	246	10	0.2	2350 <1		90	22	246	109	200	5.3	340	30	14.2	8.5	69	12	32
974271	60	126 <10		0.2	910 <1		30	15	134	60 <100		5.6	460	21	9.4	6.7	18	15	26
974272	25 >300		10	0.1	1870 <1		20	17	82	192 <100		7.6	740	19	11.4	3.5	123	11	13
974273	116	34	20	27.4	120 <1		620	18	17	113 <100		8.3	6880	22	14.1	9.2	12 <1		26
974274	33	131	40	0.8	860 <1		130	16	646	175 <100		4.9	3340	79	36.3	24.2	68	11	98
974275	40	22 <10		0.8	1000 <1		680	41	21	180 <100	<0.5		2880	24	15	4.8	6 <1		26
974276	26	16 <10		0.9	860 <1		500	7	9	108 <100		1.5	6400	26	16.3	6.1	19	1	33
974277	26	121 <10		0.3	2010 <1		300	10	160	59	100	41.7	1500	26	14.3	7	36	3	31
974278	175	48 <10		1.6	3940 <1		520	25	64	297 <100		7.8	8360	96	62.7	26.4	25	1	104
974279	89	172 <10		0.2	2900 <1		130	16	132	98 <100		4	680	25	12.7	6.3	80	6	26
974280	75	95 <10		0.6	1910 <1		200	10	126	41 <100		2.7	1640	95	43.5	29.2	18	3	127
974281	17	25	10	0.5	2260 <1		220	8	78	39 <100	<0.5		2260	42	19	14.1	20	2	60
974282	29	240	10	0.2	1610 <1		90	36	159	133 <100		1.8	1030	55	30.7	11.7	99	12	53
974283	27	272 <10	<0.1		1160 <1		40	44	70	110 <100		2.6	420	22	11.2	3.9	98	12	17
974284	14	249	10 <0.1		1130 <1		120	90	131	115	100	2.9	540	28	16.2	6.1	96	14	25
974285	6	64 <10	<0.1		220 <1		440	49	6	10 <100	<0.5		270	4	2.8	0.7	14 <1		3
974286	17	247 <10	<0.1		1880 <1		140	69	40	95 <100		1.9	440	22	13	3.2	90	9	15
974287	14	113 <10	<0.1		970 <1		370	37	54	66 <100		1.4	640	15	7.9	3.9	16	2	17
974288	39	87 <10		0.1	1280 <1		590	45	22	25 <100		0.6	490	17	9.7	3.7	19	2	18
974289	55	85 <10		0.2	540 <1		510	63	24	45 <100		5.2	1240	27	16.2	7.6	18	1	34
974290	13	225	10	0.1	2070 <1		140	18	65	196 <100		4.3	440	16	8.5	3.4	132	9	14
974291	51	182 <10	<0.1		1100 <1		140	29	52	30 <100		2.4	250	12	6.3	3	95	12	12
974292	55	144	10	0.4	1750 <1		190	18	244	57 <100		3.4	1560	64	30.2	20.7	50	8	82
974293	36	181 <10		0.2	510 <1		70	9	138	97 <100		5.3	860	52	29.9	9.2	51	9	44
974294	21	202 <10		0.4	450 <1		60	28	47	263 <100		11.4	1040	21	13.5	3.1	68	9	14
974295	13	18 <10		0.5	2010 <1		280	4	13	16 <100	<0.5		1370	27	13.3	9.7	11 <1		40
974296	71	125 <10		0.2	1070 <1		270	65	156	73 <100		3.1	1130	24	13	5.8	27	2	26
974297	46	39 <10	<0.1		1200 <1		700	39	7	30 <100		0.9	580	8	4.2	2.2	6	1	11
974298	62	158	20	0.1	1700 <1		210	28	147	39 <100		3.9	510	31	17.8	7.2	40	3	32
974299	17	9	90	0.6	1420 <1		370	4 <5		23 <100	<0.5		940	4	1.9	0.9	4 <1		4
974300	50	50 <10		0.2	840 <1		470	19	16	17 <100	<0.5		1330	10	4.7	3	14	1	14
974301	65	96	20	0.6	1150 <1		430	43	74	53	100	0.6	3960	31	17.5	9.7	28	2	40
974302	86	97 <10		0.9	1470 <1		520	28	31	102	200 <0.5		1630	45	28.2	9.4	19	1	46

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974258	<1	<0.5	20.1	35 <5	9	2780 <5	<0.5	58	174	1.5	240 <1	12 <1	224 <1	61					
974259	<1	<0.5	17.5	34 <5	5	4970 <5	1.1	69	135	1.6	250 <1	13 <1	165 <1	33					
974260	<1	<0.5	15.5	23 <5	7	2310 <5	1.3	31	107	2.1	210 <1	7 <1	275 <1	48					
974261	<1	<0.5	17	50 <5	4	2500	6	1.3	86	86	1.6	240 <1	18 <1	195 <1	33				
974262	<1	<0.5	15.3	66 <5	17	2380	7	1.6	87	213	1.3	130 <1	19 <1	225 <1	74				
974263	<1	<0.5	30.1	104 <5	24	5040	7	3.4	162	477	1.4	190 <1	35 <1	169	3	45			
974264	<1	<0.5	18.2	133 <5	12	1740 <5	<0.5	197	31	1.2	90 <1	45 <1	156 <1	38					
974265	<1	<0.5	21.4	22 <5	4	5550 <5	1.2	34	212	1.7	110 <1	7 <1	197 <1	49					
974266	<1	<0.5	13.7	35 <5	5	2520 <5	5.6	49	187	3.6	240 <1	11 <1	179 <1	37					
974267	<1	<0.5	27	26 <5	11	3320 <5	2.1	49	201	3.7	330 <1	10 <1	172 <1	8					
974268	<1	<0.5	23	16 <5	30	700 <5	<0.5	32	50	0.2	10 <1	6 <1	94 <1	32					
974269	<1	<0.5	19	17 <5	6	2060 <5	1.2	24	225	4.7	210 <1	5 <1	147 <1	64					
974270	<1	<0.5	11.5	79 <5	3	2930 <5	1.5	110	98	2.8	160 <1	25 <1	196 <1	40					
974271	<1	<0.5	12.6	48 <5	1	2090	16 <0.5	92	44	0.8	160 <1	19 <1	168 <1	42					
974272	<1	<0.5	16.8	23 <5	4	2820 <5	1.9	36	76	5.4	280 <1	8 <1	179 <1	36					
974273	1 <0.5	34.3	12 <5	17	5530 <5	<0.5	43	60	0.6	20 <1	6 <1	27	1	129					
974274	<1	<0.5	29.5	208 <5	7	10300	5	1.6	320	79	1.9	150 <1	69 <1	112	3	23			
974275	3 <0.5	20.7	11	22	135	3500 <5	<0.5	32	369	0.1	30	1	5 <1	17 <1	31				
974276	6 <0.5	17.9	22 <5	52	2480	9 <0.5	58	169 <0.1	10 <1	9 <1	16 <1	50							
974277	<1	<0.5	22.1	52 <5	83	2670 <5	<0.5	93	61	0.6	90 <1	19 <1	125 <1	124					
974278	8 <0.5	23.5	56 <5	38	5290	5 <0.5	168	651	0.3	40	1	27 <1	29 <1	49					
974279	<1	<0.5	34.5	39 <5	10	3020	6	1	65	68	1.7	240 <1	14 <1	193 <1	116				
974280	1 <0.5	32.8	240 <5	27	1390 <5	<0.5	411	34	0.3	100 <1	84 <1	100 <1	100 <1	46					
974281	<1	<0.5	30.8	127	5	46	1930 <5	<0.5	210	56	1.1	30 <1	42 <1	23 <1	87				
974282	<1	<0.5	62.9	81 <5	14	9470 <5	1.9	140	531	4.4	200 <1	29 <1	119 <1	38					
974283	<1	<0.5	17.5	23 <5	8	4240 <5	1.3	42	369	5.4	150 <1	9 <1	106 <1	55					
974284	<1	<0.5	31.7	47 <5	15	11500 <5	2.7	74	361	2.3	150 <1	16 <1	178 <1	6	6				
974285	<1	<0.5	2.8	3 <5	35	2200	29 <0.5	6	158	0.2	50 <1	1 <1	<5	46					
974286	<1	<0.5	38.4	14 <5	19	7820 <5	0.8	29	303	2.7	150 <1	6 <1	103 <1	23					
974287	<1	<0.5	13.9	21 <5	33	4290 <5	<0.5	39	388	0.3	70 <1	8 <1	77 <1	26					
974288	<1	<0.5	12.4	19 <5	46	2590	7 <0.5	38	375	0.2	40 <1	7 <1	65 <1	28					
974289	<1	<0.5	10.4	26 <5	37	6860	5 <0.5	65	513	0.5	30 <1	11 <1	73 <1	52					
974290	<1	<0.5	41.3	20 <5	13	6020 <5	1.8	32	82	5.2	160 <1	7 <1	168 <1	39					
974291	<1	<0.5	22	20 <5	13	3850 <5	1.9	31	100	3.5	110 <1	7 <1	240 <1	116					
974292	<1	<0.5	44.5	198 <5	26	2860 <5	1.3	302	108	1.6	110 <1	64 <1	119	2	136				
974293	<1	<0.5	14.5	51 <5	8	2260 <5	<0.5	106	39	0.4	240 <1	20 <1	151 <1	64					
974294	<1	<0.5	44.2	14 <5	15	6200 <5	0.5	28	101	1.6	230 <1	6 <1	273 <1	7					
974295	1 <0.5	12.9	84 <5	53	520 <5	<0.5	145	30	0.2	10 <1	28 <1	13 <1	42						
974296	<1	<0.5	12	46 <5	19	1560 <5	<0.5	73	167	0.1	90 <1	16 <1	109 <1	41					
974297	<1	<0.5	26.3	13 <5	47	5240	12 <0.5	25	218	0.3	20 <1	5 <1	78 <1	58					
974298	<1	<0.5	12.2	72 <5	7	2090 <5	<0.5	105	73	0.3	150 <1	23 <1	157	9	8				
974299	<1	<0.5	12.9 <1	<5	23	640 <5	<0.5	2	31 <0.1	<10	<1	<1	<1	6	8				
974300	<1	<0.5	10.9	18 <5	39	970 <5	<0.5	40	305	0.2	20 <1	8 <1	27	2	10				
974301	<1	<0.5	51.6	64 <5	41	2940 <5	<0.5	114	648	0.9	50 <1	23 <1	<5	7	62				
974302	<1	<0.5	34.5	57 <5	68	3450 <5	<0.5	107	290	0.2	60 <1	21 <1	30	5	74				

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
974258	16 <1		460 <1			4 <10	15.9	309 <0.5			10 <1		104	10	380	66
974259		20 <1	260 <1			6 <10	15.6	702 <0.5			16 <1		197	17	110	50
974260		8 <1	540 <1			2 <10	20.2	460 <0.5			18 <1		51	5	430	74
974261		23 <1	220 <1			5 <10	27.6	446	0.6		17 <1		123	12	290	100
974262		21 <1	690 <1			4 <10	16.4	815 <0.5			13 <1		136	11	160	46
974263		43 <1	880 <1			10 <10	46.9	1230	0.9		26	2	332	29	470	91
974264		46 <1	590 <1			7 <10	24.9	200	0.8		11	2	153	11	90	51
974265		9 <1	270 <1			2 <10	10.2	304 <0.5			7 <1		78	7	520	53
974266		12 <1	340 <1			3 <10	19.4	1880 <0.5			11 <1		93	9	1330	102
974267		13 <1	390 <1			4 <10	15.5	627 <0.5			12 <1		148	12	1410	47
974268		8 <1	1650 <1			1 <10	5.1	14 <0.5			8 <1		28	2	30	10
974269		7 <1	510 <1			2 <10	15.6	412 <0.5			13 <1		51	5	1930	54
974270		27 <1	560 <1			5 <10	29.8	552	0.7		16	1	120	11	100	110
974271		24 <1	200 <1			4 <10	14.9	60 <0.5			13 <1		87	7	120	51
974272		10 <1	230 <1			3 <10	18.8	387 <0.5			12 <1		87	9	1860	77
974273		15 <1	2280 <1			4 <10	8.1	4 <0.5			8 <1		132	12	410	32
974274		80 <1	820 <1			15 <10	62	577	0.9		22	2	329	28	420	186
974275		12 <1	4080 <1			4 <10	3.3	5 <0.5			11 <1		131	11	460	5
974276		19 <1	2350 <1			4 <10	4.2	7 <0.5			23 <1		211	13	420	7
974277		24 <1	2580 <1			5 <10	14.1	100 <0.5			9 <1		131	11	110	60
974278		58 <1	2050 <1			15 <10	11.3 <3	<0.5			20 <1		672	52	1210	32
974279		19 <1	650 <1			4 <10	34.4	437 <0.5			16 <1		98	10	440	75
974280		105 <1	1750 <1			18 <10	41.9	73	0.9		32 <1		419	32	120	118
974281		48 <1	2390 <1			8 <10	28.5	236 <0.5			23	1	193	13	470	40
974282		38 <1	620 <1			9 <10	35.4	856	0.6		18 <1		281	24	710	83
974283		12 <1	310 <1			3 <10	16	495 <0.5			6 <1		94	8	1140	51
974284		21 <1	630 <1			4 <10	27.4	1390	0.8		14 <1		134	13	4870	74
974285		2 <1	1850 <1		<1	<10	0.8	8 <0.5			36 <1		26	3	200 <5	
974286		9 <1	1000 <1			3 <10	14.4	428 <0.5			10 <1		109	10	3940	38
974287		11 <1	1810 <1			2 <10	5.8	37 <0.5			10 <1		78	5	700	13
974288		12 <1	3330 <1			3 <10	4.2	12 <0.5			40 <1		90	7	240	14
974289		21 <1	1510 <1			5 <10	2.4	19 <0.5			31	1	162	13	360	12
974290		10 <1	660 <1			2 <10	19.3	651 <0.5			12 <1		73	7	860	86
974291		9 <1	430 <1			2 <10	10.6	834 <0.5			8 <1		57	5	270	41
974292		74 <1	1180 <1			12 <10	42	635	0.7		21	1	299	22	390	115
974293		30 <1	240 <1			8 <10	16.1	328 <0.5			12 <1		290	22	60	81
974294		9 <1	340 <1			3 <10	12.3	358 <0.5			14 <1		105	11	480	86
974295		33 <1	3350 <1			5 <10	16.8	9 <0.5			24	1	131	10	130	54
974296		20 <1	1250 <1			4 <10	12.8	34 <0.5			17 <1		122	9	40	25
974297		8 <1	2210 <1			1 <10	2.8	8 <0.5			51 <1		43	3	40 <5	
974298		26 <1	990 <1			5 <10	23.5	46	0.6		21 <1		170	14	80	72
974299		2 <1	2980 <1		<1	<10	0.9	5 <0.5			2 <1		18	2	30	6
974300		11 <1	2820 <1			2 <10	6.2	15 <0.5			13 <1		53	4	110	9
974301		30 <1	2530 <1			6 <10	20	59 <0.5			15 <1		192	15	670	45
974302		31 <1	3790 <1			7 <10	14.7	19 <0.5			26 <1		229	25	240	47

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974303	35	35 <10		0.5	1920 <1		570	11	19	60 <100	<0.5		1850	30	19.5	6	8 <1		31
974304	44	7 <10		1.7	1460 <1		350	10	8	30 <100		1.6	1840	10	4.7	2.9	12 <1		13
974305	32	11 <10		0.7	1180 <1		410	7 <5		17 <100	<0.5		1140	6	3.4	1.3	4 <1		7
974306	41	145	30	0.5	1120 <1		280	42	78	99 <100		5.3	1570	51	34.7	9.3	54	2	44
974307	28	11 <10		0.7	1320 <1		410	19	5	67 <100	<0.5		1920	7	3.7	1.5	10 <1		7
DUP-974221	10	35 <10	<0.1		1340 <1		770	128	5	32 <100	<0.5		190	3	1.5	0.8	6 <1		4
DUP-974233	18	70 <10	<0.1		420 <1	<10		11	5	50 <100	<0.5		180	5	4.6 <0.5		36	6	2
DUP-974244	17	32 <10		0.5	990 <1		320	22	85	48 <100	<0.5		3300	63	33.6	19.7	21	2	86
DUP-974253	48	130	20	0.3	1510 <1		160	23	382	149	100	6.7	1280	58	26	17.6	61	8	71
DUP-974277	28	125 <10		0.3	2170 <1		300	11	170	55	100	42.4	1500	29	15.7	7.8	36	3	33
DUP-974285	5	65 <10	<0.1		240 <1		480	51	7	13 <100	<0.5		300	4	3.3	0.8	29	1	4
DUP-974295	13	17 <10		0.7	2100 <1		280	4	12	14 <100	<0.5		1390	29	13.8	9.7	11 <1		42
DUP-974306	42	155	30	0.7	1140 <1		280	45	76	120 <100		5.4	1680	53	37	9.2	57	2	43
MMISRM16	18	43	10	26.2	60 <1		210	4	16	58 <100		11	700	3	1	1.1	1 <1		5
AMIS0169	8	67	10	0.3	770 <1		30	2	753	113 <100		7.5	3980	31	13.5	11.4	49	13	46
MMISRM18	22	31	10	8.5	150 <1		180	84	26	75 <100		5.8	960	4	1.8	1.4	3 <1		6
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974001	8 >300		10 <0.1		4460	5	450	33	536	432	500	37.4	970	46	37.7	8.8	402	120	42
974002	45	253 <10	<0.1		990 <1		90	21	83	92	100	5.1	260	14	7.5	3.1	75	17	13
974003	191	87 <10		0.2	2340 <1		460	73	38	43 <100		2.5	740	76	43.8	18.8	10	1	90
974004	2	97 <10	<0.1		400 <1		180	27	99	130 <100		0.7	1440	53	33.4	10.9	118	2	59
974005	9	145 <10	<0.1		250	4	150	23	302	69 <100		0.6	1020	228	104	49	100	11	264
974006	2	88 <10	<0.1		600 <1		180	13	239	99 <100		1.6	1340	106	58.7	26	70	4	130
974007	76	255 <10		0.2	1220	1	10	33	256	74 <100		6.1	680	38	19.4	8	72	10	35
974008	220	154 <10	<0.1		470 <1		80	23	161	94 <100		6.9	400	21	9.6	6.1	56	10	25
974009	152	121 <10		0.1	1090 <1		70	11	156	75 <100		7	290	21	10.8	5.7	30	8	23
974010	18	125 <10	<0.1		1220 <1		360	35	189	117 <100		7.2	1590	1210	895	84.2	50	6	547
974011	32	131	20 <0.1		3210	3	210	5	778	99	100	10.9	550	350	107	149	95	24	710
974012	151	131	30 <0.1		1430 <1		200	28	1160	98 <100		12.9	980	929	294	321	35	35	1550
974013	45	159 <10	<0.1		940	2	60	12	1240	174 <100		13.9	790	221	56.8	88	62	20	362
974014	157	129	30 <0.1		1960 <1		320	44	1100	55 <100		36	1650	1150	353	422	21	40	1930
974015	113	183 <10	<0.1		350	2	10	31	87	56 <100		12.4	400	20	9	3.9	80	10	19
974016	51	152 <10	<0.1		700 <1		100	26	55	48 <100		9.9	190	12	6	2.4	64	10	10
974017	37	119 <10		0.2	300 <1	<10		12	877	34 <100		8.9	550	131	63.5	43.2	11	20	182
974018	70	168 <10	<0.1		1510	1	190	32	1150	162 <100		15.2	720	166	49.2	65	82	17	303
974019	195	174 <10		0.2	2340 <1		10	16	985	67 <100		10	470	79	33.5	23.1	19	13	98
974020	72	130 <10		0.1	1090 <1	<10		11	727	43 <100		7.8	360	88	43.2	27.2	20	17	113
974021	62	215	10	0.2	730 <1		20	16	2000	157 <100		8.8	1130	436	127	165	34	27	755
974022	105	130 <10		0.2	1060 <1		70	13	969	69 <100		10.7	740	76	30	23.2	38	11	103
974023	123	118 <10		0.2	140 <1	<10		15	92	57 <100		8.7	490	26	14.5	4.4	39	15	20
974024	86	193 <10		0.1	3080	1	120	15	156	109	100	8	230	17	8.8	4.6	87	11	18
974025	94	155 <10	<0.1		100 <1	<10		26	50	102 <100		10.8	410	14	11.5	1.2	69	15	6
974026	51	197 <10	<0.1		1080	2	110	13	196	44 <100		7.3	250	27	13	7.5	113	18	32

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974303	<1	<0.5	29.6	21 <5		124	1350 <5		<0.5	49	146 <0.1		20	1	8 <1		13 <1		40
974304	<1	<0.5	11.2	5	13	47	160	6 <0.5		23	134	0.1	20 <1		3 <1		51	10	12
974305	1 <0.5		14.4 <1		5	70	670	25 <0.5		5	64 <0.1	<10	<1	<1	<1		8 <1		16
974306	<1	<0.5	13.2	39 <5		30	4650 <5		<0.5	76	839	0.2	110 <1		14 <1		110	6	148
974307	<1	<0.5	21.8 <1		10	76	2010	12 <0.5		6	173 <0.1		10 <1	<1	<1	<5	<1		8
DUP-974221	<1	<0.5	21.7	3 <5		34	6840	9 <0.5		7	286	0.2	30 <1		1 <1		37 <1	<5	
DUP-974233	<1	<0.5	5	2 <5		2	700 <5		<0.5	3	50	0.3	140 <1	<1	<1		56 <1		13
DUP-974244	<1	<0.5	18.2	110 <5		46	2260 <5		<0.5	230	165	0.4	20 <1		41 <1		17 <1		66
DUP-974253	<1	<0.5	21.4	137 <5		17	6770	6	1.1	226	71	2.1	180 <1		48 <1		161	2	93
DUP-974277	<1	<0.5	22.4	55 <5		86	2650 <5		<0.5	97	61	0.6	100 <1		20 <1		131 <1		54
DUP-974285	<1	<0.5	2.8	3 <5		37	1090	30 <0.5		8	180	0.2	70 <1		1 <1	<5		6	9
DUP-974295		1 <0.5	13.1	87 <5		53	460 <5		<0.5	149	29	0.2	10 <1		29 <1		12 <1		43
DUP-974306	<1	<0.5	13.9	38 <5		31	5110 <5		<0.5	76	869	0.2	110 <1		14 <1		119	7	155
MMISRM16		13 <0.5	35.8	4 <5		33	110	44 <0.5		14	262	0.2	120	24	2 <1		297 <1		9
AMIS0169	<1	<0.5	42.4	402 <5		32	3750 <5		2.8	361	457	2.6	130 <1		95 <1		233 <1		58
MMISRM18		4 <0.5	25.9	8 <5		89	640	31 <0.5		20	547	0.7	370	14	4	6	146 <1		5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
974001	1 <0.5		135	175	393	101	10400	9	90.6	200	443	6.7	310 <1		52 <1		786 <1		232
974002	<1	<0.5	27.6	38 <5		3	1750 <5		3.2	47	90	1.1	340 <1		11 <1		133 <1		32
974003	<1	<0.5	33.6	74 <5		35	1750 <5	<0.5		183	471	0.3	20 <1		32 <1		212 <1		26
974004	<1	<0.5	11.5	129 <5		12	7840	21	2.8	203	481	0.5	120 <1		44 <1		34 <1		33
974005	<1	<0.5	1	335 <5		15	2180	47	3.4	749	566	0.5	160 <1		147 <1		8 <1		29
974006	<1	<0.5	10.1	313 <5		25	14200	68	5.2	507	877	0.5	210 <1		112 <1		74	2	33
974007	<1	<0.5	18.7	107 <5		1	1120	10	2.3	141	146	2.7	290 <1		32 <1		242 <1		38
974008	<1	<0.5	36.1	61 <5		5	3370	10	1	96	158	2.3	150 <1		21 <1		293 <1		31
974009	<1	<0.5	23.5	56 <5		2	1070	15	1	96	210	0.8	400 <1		19 <1		282 <1		30
974010	<1	<0.5	22.9	317	8	59	350 <5	<0.5		982	969	0.2	150 <1		177 <1		165 <1		40
974011	<1	<0.5	13.5	1530 <5		19	2020	12	9.1	2900	461	1.4	160 <1		603 <1		219	1	26
974012	<1	<0.5	17.7	4360 <5		8	2390 <5		1.3	6440	168	1	370 <1		1400 <1		285 <1		48
974013	<1	<0.5	15.1	1130 <5		2	2030	12	2.8	1700	119	2	200 <1		385 <1		170 <1		30
974014	<1	<0.5	25.5	6000 <5		21	3630	5 <0.5		8560	461	0.9	360 <1		1900 <1		347 <1		45
974015	<1	<0.5	19.8	49 <5		2	1100	7	1	69	175	2	520 <1		15 <1		207 <1		16
974016	<1	<0.5	17.6	32 <5		3	1280	8	0.9	38	90	1.3	530 <1		8 <1		205 <1		15
974017	<1	<0.5	6.5	687 <5	<1		340	12 <0.5		1110	40	0.3	380 <1		254 <1		175 <1		54
974018	<1	<0.5	48.8	932 <5		8	3390	14	4.7	1310	235	1.6	290 <1		291 <1		235 <1		24
974019	<1	<0.5	17.7	446 <5	<1		450	7	0.9	535	97	0.7	450 <1		130 <1		274 <1		56
974020	<1	<0.5	24.1	473 <5		1	290	13	0.6	666	72	0.5	660 <1		155 <1		290 <1		61
974021	<1	<0.5	13.4	1810 <5		1	1570	7	1.6	3480	210	0.7	330 <1		733 <1		218 <1		46
974022	<1	<0.5	25	451 <5		3	830	20	0.9	510	103	1	470 <1		122 <1		269 <1		42
974023	<1	<0.5	13.2	34 <5	<1		640	8 <0.5		72	260	0.3	400 <1		14 <1		193 <1		26
974024	<1	<0.5	28.4	69 <5		14	1590	6	4.8	74	135	1.6	260 <1		18 <1		231 <1		35
974025	<1	<0.5	22.3	12 <5		1	1020 <5		0.5	21	201	0.9	330 <1		4 <1		231 <1		16
974026	<1	<0.5	30.5	114 <5		4	1150	11	7.3	145	60	3.9	370 <1		34 <1		238 <1		24

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
974303	15 <1		4980 <1		4 <10		7.1	5 <0.5		25 <1		147	16	220	16	
974304	8 <1		2220 <1		2 <10		5.8	40	1.1	7 <1		49	4	40	13	
974305	3 <1		3090 <1		1 <10		1.6	4 <0.5		26 <1		34	3	30	5	
974306	24 <1		1070 <1		7 <10		16.1	77 <0.5		16 <1		337	29	150	40	
974307	3 <1		2630 <1		1 <10		4.6	7 <0.5		9 <1		31	3	50	9	
DUP-974221	2 <1		7330 <1	<1	<10		2.3	8 <0.5		47 <1		15	1	490 <5		
DUP-974233	<1	<1	120 <1	<1	<10		1.5	129 <0.5		2 <1		25	5	140	6	
DUP-974244	60 <1		2900 <1		11 <10		20	134 <0.5		16 <1		382	26	520	41	
DUP-974253	58 <1		1200 <1		11 <10		37.3	578	0.9	15	2	242	18	530	103	
DUP-974277	26 <1		2740 <1		5 <10		14	93 <0.5		10 <1		147	12	110	64	
DUP-974285	2 <1		1960 <1	<1	<10		0.7	10 <0.5		44 <1		31	3	300	7	
DUP-974295	34 <1		3340 <1		6 <10		16.8	7 <0.5		24	1	134	11	130	54	
DUP-974306	24 <1		1140 <1		7 <10		15.6	91 <0.5		16 <1		371	30	160	42	
MMISRM16	4 <1		450 <1	<1	<10		23.7 <3	<0.5		50 <1		9 <1		260	16	
AMIS0169	59	1	80 <1		7 <10		85.9	377	1.5	28	2	118	11	240	53	
MMISRM18	5 <1		1050 <1	<1	<10		25.1	8 <0.5		29 <1		22	1	760	32	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
974001	40	16	1070		7	7 <10		114	17500	5.2	131	11	258	43	1190	111
974002	11 <1		160 <1		2 <10		20.9	757 <0.5		13 <1		65	6	190	34	
974003	58 <1		880 <1		13 <10		8.4	13 <0.5		107 <1		475	33	160	12	
974004	47 <1		280 <1		9 <10		34.2	140	1.4	132 <1		274	29	290	34	
974005	206 <1		430 <1		40 <10		39.5	304 <0.5		68	1	1150	73	30	32	
974006	116 <1		630 <1		19 <10		49.5	303	1.2	125 <1		468	43	120	42	
974007	31 <1		70 <1		7 <10		95.2	400 <0.5		26 <1		195	14	580	86	
974008	24 <1		150 <1		4 <10		36.9	227 <0.5		19 <1		88	7	380	39	
974009	23 <1		130 <1		4 <10		24.3	183 <0.5		12	1	93	9	300	33	
974010	304 <1		2980		2	129 <10		64	0.7	234	5	7150	540	40	11	
974011	656 <1		1660 <1		85 <10		80.9	1660	0.6	65	3	1350	62	30	102	
974012	1460 <1		850 <1		206 <10		66.4	332 <0.5		134	2	3490	162	390	33	
974013	402 <1		210 <1		52 <10		162	472 <0.5		55	2	589	36	220	128	
974014	1860 <1		2300 <1		258 <10		124	73 <0.5		246	2	4050	187	240	42	
974015	16 <1		110 <1		3 <10		30.8	253 <0.5		9 <1		87	6	500	28	
974016	9 <1		380 <1		2 <10		17.8	215 <0.5		8 <1		55	4	640	21	
974017	196 <1	<10	<1		27 <10		27.3	26 <0.5		17 <1		735	46	90	49	
974018	300 <1		640 <1		39 <10		61.1	1120 <0.5		38 <1		551	28	410	60	
974019	109 <1		90 <1		16 <10		77.8	154	0.5	26 <1		339	24	260	58	
974020	123 <1		70 <1		17 <10		33	137 <0.5		19 <1		496	31	140	39	
974021	775 <1		90 <1		100 <10		76.4	368 <0.5		55 <1		1680	69	380	59	
974022	108 <1		270 <1		16 <10		82.2	160 <0.5		25 <1		314	18	190	65	
974023	18 <1		20 <1		4 <10		21.2	70 <0.5		11 <1		131	11	280	18	
974024	17 <1		460 <1		3 <10		32	1060 <0.5		10	1	80	7	290	68	
974025	5 <1		20 <1		1 <10		19.1	127 <0.5		8 <1		64	9	410	22	
974026	32 <1		330 <1		5 <10		45.4	1690 <0.5		14	1	118	9	230	48	

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974027	63	183 <10	<0.1	2680	2	50	12	650	128 <100	7.3	520	25	11	6.9	2.9	95	12	11	
974028	31	222 <10	<0.1	1420	1	70	30	80	74 <100	6.5	320	13	6.9	2.9	95	12	11		
974029	100	228 <10	<0.1	1120	1	50	16	146	187 <100	14.2	250	19	9.7	4.9	101	16	20		
974030	58	142 <10	0.1	350 <1	20	12	142	80 <100	12.2	270	23	10.7	6.1	59	19	25			
974031	46	127 <10	0.3	890 <1	<10	12	276	145 <100	15.5	300	26	11.4	7.8	41	12	29			
974032	39	265	10 <0.1	2930	2	60	19	404	154	200	10.1	350	76	33.9	21.2	124	20	101	
974033	42	208 <10	0.1	1330	1	180	19	348	140 <100	11.8	320	67	26.5	21.3	75	14	102		
974034	19	126 <10	<0.1	1450 <1	250	19	37	27 <100	7.5	680	57	26.4	14.6	9	3	75			
974035	32	186 <10	<0.1	1590 <1	130	31	113	71 <100	8.7	150	16	8.9	3.7	62	12	16			
974036	45	151 <10	0.1	1420 <1	30	11	791	82 <100	9.3	340	79	36.7	21.3	20	18	94			
974037	74	129 <10	<0.1	1400 <1	250	13	262	40 <100	7.1	410	51	17.5	17.7	34	12	89			
974038	20	279 <10	<0.1	800	2	70	37	66	106 <100	7.3	470	22	12.2	3.2	125	29	15		
974039	34	119	20	0.4	2880	2	180	20	1520	188 <100	7.9	1350	194	73	64.6	40	17	311	
974040	53	264 <10	<0.1	1030	2	10	31	126	59 <100	14.8	260	32	19.2	4.9	129	24	24		
974041	32	232 <10	<0.1	2330	1	40	11	198	118	100	10.6	260	19	8.3	5.7	123	23	23	
DUP-974007	76	257 <10	0.1	1320	1	10	33	284	76 <100	6.6	710	41	20.5	8.4	74	11	38		
DUP-974022	109	126 <10	<0.1	970 <1	70	14	897	66 <100	10.6	720	75	28.7	23.8	36	11	101			
DUP-974036	43	156 <10	0.2	1790 <1	20	11	680	83 <100	9.2	340	74	34.7	19.7	19	15	83			
DUP-974040	41	237 <10	<0.1	2480	1	50	11	223	128	100	11.5	290	23	9.9	6.7	131	23	27	
MMISRM16	20	44	10	23.1	60 <1	230	4	19	62 <100	12.6	670	3	0.9	1.1	1 <1	1 <1	1 <1		
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974077	34	292 <10	<0.1	1220	3	40	31	75	189	100	7.9	450	20	10.8	3.4	92	32	15	
974078	19	284 <10	0.1	1620 <1	<10	33	48	156	156	100	16.7	380	22	16.3	2.4	63	35	11	
974079	48	30 <10	0.3	1160 <1	490	7	19	85 <100	3.4	2920	11	5.4	2.8	8	20	13			
974080	39	247 <10	<0.1	490	2	30	45	60	102 <100	4.5	710	13	7.8	1.9	427	14	8		
974081	3	88 <10	0.1	760	2	160	12	117	271 <100	1.5	2800	59	37.4	7.7	1150	14	43		
974082	81	214	20 <0.1	1640	4	260	24	769	127	200	10.4	640	255	75.9	109	96	40	514	
974083	33	172	40 <0.1	1010	2	230	26	995	193	200	10	1670	643	189	266	421	29	1210	
974084	35	166 <10	<0.1	1130	1	260	15	243	151	100	9	490	169	54.4	68.2	58	27	329	
974085	72	138	20	0.1	1260	2	210	9	599	165	100	12.5	480	249	62.2	120	60	32	551
974086	44	138	30	0.1	1310	3	230	8	2190	208	200	19.1	1150	616	153	291	58	30	1290
974087	62	151 <10	0.1	1500 <1	70	10	244	87 <100	8.1	370	35	15.7	10.7	27	34	47			
974088	24	167	20	0.1	1790	4	140	6	1930	144	200	14	540	203	48.2	96.1	93	43	431
974089	29	211 <10	<0.1	470	1	40	38	70	134 <100	8	340	29	18.6	3.6	362	28	18		
974090	39	80	30	0.1	1320	1	230	13	636	43 <100	5.8	830	564	118	307	40	28	1350	
974091	14	62	10	0.3	1800 <1	180	5	736	67 <100	3.8	1130	254	87.3	97.8	38	35	465		
974092	51	121	20	0.1	660 <1	60	5	1400	78 <100	13.1	900	722	173	359	42	21	1440		
974093	74	146 <10	<0.1	250 <1	210	15	395	66 <100	17.9	570	66	17.3	22.3	44	10	103			
974094	73 >300	10 <0.1	540	3	30	20	109	192 <100	46.3	860	37	17.2	6.4	528	30	32			
974095	100	148 <10	0.1	440 <1	20	9	156	83 <100	17.3	430	31	13.6	7.8	50	20	34			
974096	138	126 <10	0.2	240 <1	10	19	108	52 <100	18.3	450	24	10.4	6.5	42	16	27			
974097	47	215 <10	0.2	530	2	20	51	113	121 <100	17.6	1150	28	13.4	4.6	83	19	22		
974098	5	99 <10	0.4	670 <1	10	15	47	43 <100	22.7	570	129	68.8	8.7	42	14	51			
974099	66 >300	<10	<0.1	870	2	20	46	167	133	100	36.8	610	24	12.1	5.7	529	40	25	
974100	205	93	10 <0.1	1580 <1	630	469	404	62 <100	8.1	830	534	208	169	18	26	912			



## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974027	<1	<0.5	23.7	105 <5		2	1930	15	3.9	134	55	3.7	340 <1		32 <1	206 <1		24	
974028	<1	<0.5	22.3	31 <5		8	2990	6	3.7	40	111	4.2	350 <1		9 <1	183 <1		23	
974029	<1	<0.5	12.1	67 <5		2	4760	13	3.9	82	63	5.2	210 <1		19 <1	232 <1		44	
974030	<1	<0.5	13.9	66 <5	<1		6500	13	1.6	107	46	2.1	220 <1		23 <1	141 <1		39	
974031	<1	<0.5	13.1	89 <5	<1		3720	14	1.2	147	83	1.1	220 <1		34 <1	220 <1		34	
974032	<1	<0.5	21.2	399 <5		9	3390	10	7.4	468	112	5.1	400 <1		115 <1	253 <1		43	
974033	<1	<0.5	41.3	307 <5		8	3980	7	5	414	118	4.5	310 <1		94 <1	300 <1		28	
974034	<1	<0.5	40.1	205 <5		6	450	8 <0.5		285	60	0.2	210 <1		62 <1	335 <1		20	
974035	<1	<0.5	20.8	50 <5		2	810	10	3.5	57	63	2.3	480 <1		14 <1	261 <1		24	
974036	<1	<0.5	27.9	427 <5	<1		630	7	0.9	475	81	0.6	390 <1		120 <1	273 <1		79	
974037	<1	<0.5	86.8	286 <5		12	640	8	3.1	390	137	1.3	210 <1		85 <1	260 <1		14	
974038	<1	<0.5	45.7	40 <5		6	3180 <5		5.1	54	134	4.9	520 <1		12 <1	144 <1		24	
974039	<1	<0.5	59.9	1460 <5		24	3940	7	2.9	1770	269	1.9	310 <1		418 <1	270 <1		60	
974040	<1	<0.5	36.9	67 <5		2	560	8	5.6	92	106	2.3	540 <1		21 <1	231 <1		28	
974041	<1	<0.5	24.7	99 <5		1	1790	8	7.6	108	60	3.3	390 <1		27 <1	245 <1		30	
DUP-974007	<1	<0.5	19.7	116 <5		1	1070	8	2.4	149	143	2.9	290 <1		35 <1	255 <1		39	
DUP-974022	<1	<0.5	25.2	409 <5		3	850	19	0.8	494	111	0.9	480 <1		113 <1	275 <1		41	
DUP-974036	<1	<0.5	27	401 <5	<1		480	7	0.9	431	77	0.6	440 <1		107 <1	269 <1		74	
DUP-974040	<1	<0.5	25.8	118 <5		2	1950	8	8.4	128	68	3.4	430 <1		31 <1	252 <1		30	
MMISRM16	16 <0.5		37.2	4 <5		34	110	49 <0.5		17	255	0.2	110	26	3 <1	323 <1		9	
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	
974077	<1	<0.5	18.9	29	10	5	3300	5	3.7	37	173	2.8	190 <1		9 <1	152 <1		46	
974078	<1	<0.5	8	19 <5		2	1390 <5		1.3	25	180	1.5	140 <1		6 <1	133 <1		61	
974079	<1	<0.5	9.1	8	6	10	1370 <5	<0.5		23	361 <0.1	<10	<1		4 <1	118 <1		7	
974080	<1	<0.5	6.4	24 <5		3	820 <5		2.3	25	314	0.8	900 <1		7 <1	140 <1		21	
974081	<1	<0.5	13.9	112	14	31	9340	11	3.6	130	2320	0.5	40 <1		33 <1	254 <1		38	
974082	<1	<0.5	31	1330	5	28	1780	11	7.6	1930	548	2.9	280 <1		462 <1	355 <1		34	
974083	<1	<0.5	18.3	3460 <5		43	7880	14	8	5050	1930	2	140	1	1210 <1	397	3	66	
974084	<1	<0.5	24.3	811 <5		27	1950	6	5.7	1230	554	1.6	170 <1		304 <1	262	1	28	
974085	<1	<0.5	15.5	1920 <5		27	2320	9	6.7	2460	482	2.1	130 <1		603 <1	276	2	28	
974086	<1	<0.5	24.4	4090 <5		33	4970	15	8.1	5750	690	2.4	120 <1		1380 <1	338	1	50	
974087	<1	<0.5	28.3	118 <5		4	760	16	1.2	169	286	1	630 <1		40 <1	275 <1		33	
974088	<1	<0.5	18	1510 <5		18	2590	12	11.6	1890	279	7.5	220	1	481 <1	345	4	40	
974089	<1	<0.5	41.4	37 <5		6	1240 <5		1.6	53	207	1.9	590 <1		13 <1	287 <1		24	
974090	<1	<0.5	13.7	3960 <5		23	2440	16	5.7	6150	287	1.2	50 <1		1430 <1	221	1	18	
974091	<1	<0.5	19.1	1310 <5		38	1210	14	5.6	1820	147	0.8	100 <1		429 <1	230	7	46	
974092	<1	<0.5	8.5	3590 <5		3	1230	8	2.5	6460	61	1	160	1	1520 <1	242 <1		75	
974093	<1	<0.5	25.4	270 <5		9	670 <5		1.8	352	171	1.6	240 <1		90 <1	263 <1		27	
974094	<1	<0.5	30.2	100 <5		8	670	6	2.7	113	374	3.1	580 <1		29 <1	651 <1		27	
974095	<1	<0.5	16.9	65 <5	<1		1650	8	0.6	116	94	0.8	640 <1		25 <1	210 <1		25	
974096	<1	<0.5	25.1	47 <5		1	570	11 <0.5		88	107	0.7	600 <1		19 <1	175 <1		24	
974097	<1	<0.5	33	58 <5		4	6810	8	1.4	69	332	1.7	750 <1		17 <1	325 <1		29	
974098	<1	<0.5	37.5	56 <5		5	430 <5	<0.5		102	77	0.3	830 <1		23 <1	154 <1		15	
974099	<1	<0.5	19.6	126 <5		3	1690	7	5.3	111	308	4.5	390 <1		30 <1	212 <1		40	
974100	<1	<0.5	24.9	2430 <5		30	1600 <5	<0.5		3140	687	0.2	220 <1		729 <1	216 <1		37	

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974027	29 <1		240 <1		5 <10		68.1	898 <0.5		13	1	102	8	680	46
974028	10 <1		310 <1		2 <10		32	672 <0.5		8 <1		62	5	940	38
974029	19 <1		80 <1		3 <10		50.3	604 <0.5		14	2	77	8	670	99
974030	25 <1		30 <1		4 <10		39.6	352 <0.5		13 <1		90	8	320	55
974031	33 <1		40 <1		5 <10		57.7	196 <0.5		16 <1		94	9	370	50
974032	101 <1		380 <1		15 <10		91.1	1610	0.6	27	1	331	25	1100	75
974033	95 <1		460 <1		14 <10		88.9	1120	0.5	33 <1		283	17	420	43
974034	68 <1		960 <1		11 <10		19.1	86	0.7	36 <1		286	16	260	12
974035	13 <1		370 <1		3 <10		26.3	850 <0.5		10 <1		81	7	660	36
974036	98 <1		80 <1		15 <10		48.2	164	0.6	31 <1		356	27	250	89
974037	87 <1		710 <1		11 <10		24	898 <0.5		22 <1		210	11	190	18
974038	12 <1		470 <1		3 <10		28.3	1080	0.6	9 <1		110	9	270	33
974039	333 <1		1030 <1		43 <10		189	506	1.4	74	1	783	49	220	63
974040	22 <1		150 <1		5 <10		44.1	1300	0.6	18 <1		154	15	400	37
974041	23 <1		280 <1		4 <10		53.8	1600 <0.5		14	1	75	6	880	66
DUP-974007	34 <1		70 <1		7 <10		103	444	0.5	27	1	200	15	590	93
DUP-974022	103 <1		260 <1		16 <10		77.3	143 <0.5		24 <1		310	19	200	63
DUP-974036	86 <1		80 <1		14 <10		52.6	171	0.6	31 <1		321	26	220	86
DUP-974040	27 <1		310 <1		4 <10		55.9	1700	0.6	15	1	92	7	860	66
MMISRM16	5 <1		500 <1		<1	<10	22.6	4 <0.5		46 <1		11 <1		260	18
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
974077	11 <1		100 <1		3 <10		30.9	858 <0.5		10	3	90	8	680	46
974078	7 <1		30 <1		3 <10		14.8	560 <0.5		6 <1		125	14	580	31
974079	9 <1		410 <1		2 <10		11.3 <3	<0.5		23 <1		57	4 <20	<5	
974080	6 <1		110 <1		2 <10		17.4	369 <0.5		9	1	61	6	320	41
974081	32 <1		910 <1		9 <10		61.2	338 <0.5		102	1	352	26	170	47
974082	490 <1		1010 <1		69 <10		106	1470 <0.5		47	2	930	47	350	75
974083	1170 <1		830 <1		173 <10		168	1480 <0.5		120	3	2450	110	220	126
974084	303 <1		1190 <1		44 <10		60.3	990 <0.5		42	1	656	34	140	63
974085	558 <1		990 <1		73 <10		86.7	1320 <0.5		54	2	706	37	50	68
974086	1320 <1		1100 <1		178 <10		184	1370 <0.5		128	3	1640	92	90	115
974087	43 <1		220 <1		8 <10		35.3	218 <0.5		15 <1		153	12	240	35
974088	446 <1		810 <1		59 <10		224	2040 <0.5		65	2	515	29	180	181
974089	14 <1		370 <1		4 <10		29.2	382 <0.5		10 <1		145	14	820	34
974090	1400 <1		1130 <1		177 <10		106	951 <0.5		117	2	1320	66	40	74
974091	432 <1		2100 <1		65 <10		146	769 <0.5		119	2	958	54	60	74
974092	1580 <1		310 <1		210 <10		124	426 <0.5		145	2	1670	108	100	119
974093	95 <1		690 <1		16 <10		38.2	294 <0.5		31 <1		175	10	210	61
974094	27 <1		320 <1		7 <10		42.9	829 <0.5		19 <1		141	13	400	74
974095	31 <1		60 <1		6 <10		45.6	163 <0.5		13 <1		128	9	510	34
974096	25 <1		30 <1		5 <10		32	124 <0.5		13 <1		92	7	820	33
974097	17 <1		170 <1		5 <10		67	326 <0.5		24 <1		119	10	720	59
974098	32 <1		200 <1		16 <10		15.2	25 <0.5		15 <1		441	41	220	7
974099	23 <1		150 <1		5 <10		77.3	1420 <0.5		16 <1		114	9	800	117
974100	724 <1		3610 <1		126 <10		30.8	4 <0.5		171	1	3390	112	430	19

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974101	35	144 <10	<0.1		1220 <1		460	26	35	54 <100		6.6	230	58	27.7	16	24	23	89
974102	52	121 <10	<0.1		660 <1		60	232	86	50 <100		7.2	410	22	11.2	3.4	28	18	16
974103	17	101 <10	<0.1		820 <1		410	38	180	31 <100		5.6	500	119	44.2	45.9	18	16	239
974104	18	148 <10	<0.1		1080	1	270	19	362	97 <100		9.4	360	74	31	21.4	85	25	109
974105	17	243	30	0.1	1610	5	160	11	506	110	200	12.5	470	63	25.9	21.1	764	60	98
974106	15	280	40	0.1	1180	4	180	22	1740	127	200	7.5	1440	139	50.8	46.8	669	47	218
974107	15	262	20 <0.1		1180	3	150	20	869	69	100	13.6	930	108	44.1	30.2	372	37	147
974108	63	213 <10	<0.1		1790 <1		70	27	261	64 <100		13.5	590	64	31	15.3	50	38	76
974109	44	166 <10		0.2	150 <1	<10		15	127	35 <100		17.4	440	38	22	7.9	46	28	35
974110	29	165 <10		0.2	1690	1	20	11	375	104 <100		11.3	710	53	25	14	40	40	59
974111	39	264 <10	<0.1		900	2	20	27	303	112 <100		17.8	510	66	27.6	14.1	65	23	68
974112	36	238 <10		0.2	470	2	20	24	187	47 <100		20.4	660	32	14.7	6.6	93	21	30
974113	203	189	10 <0.1		670 <1		150	106	3900	115 <100		10.9	1220	1390	499	264	71	14	1310
974114	109	127 <10		0.2	1100 <1		30	13	554	84 <100		13.1	1060	74	31.6	22.6	12	36	104
974115	87	149 <10	<0.1		460 <1	<10		28	143	86 <100		23.1	670	33	16.1	5.7	33	17	27
974116	30	254 <10		0.1	1950	2	40	18	220	152	100	10.2	490	29	15.3	7.3	88	46	31
974117	100	232 <10		0.1	1280	4	70	17	273	127 <100		26	600	112	53	30.8	82	41	147
DUP-974085	73	137	20 <0.1		1230	2	210	8	609	172	100	12.8	480	247	62.8	120	62	32	549
DUP-974098	7	103 <10		0.4	690 <1		10	16	50	40 <100		22.2	580	143	69	10.7	43	14	63
DUP-974107	15	261	20	0.1	1200	3	150	21	869	72	100	13.4	950	110	44.7	30.3	375	38	150
DUP-974116	29	250 <10		0.1	1870	2	40	18	221	144	100	10.1	460	28	14.7	7.3	84	45	31
MMISRM16	16	55	20	25.6	80 <1		220	5	25	74 <100		14.1	770	3	1.3	1.5	2	2	6
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974042	69	245	10 <0.1		2460	2	140	68	364	72	100	16	420	42	21.5	10	137	28	45
974043	89	157 <10		0.1	2090 <1		180	27	503	71 <100		11.5	450	40	18.7	10.1	61	12	51
974044	45	222	20 <0.1		1760	2	70	39	1150	230	100	13.6	320	52	21	16.6	103	24	69
974045	27	238	20 <0.1		1460	3	100	38	212	82	200	13.4	390	35	15.4	8.5	279	30	39
974046	24 >300		30	0.1	3130	3	100	21	284	33	200	18.5	250	31	13.5	8.7	323	35	36
974047	40	73 <10	<0.1		860	2	90	58	449	16 <100		4.3	890	89	38.7	24.7	61	12	121
974048	3	77 <10	<0.1		940 <1		600	279	133	12 <100		1.8	820	124	72.8	20.5	34	2	121
974049	38	154	10	0.3	1350	2	170	30	866	132 <100		9.7	820	94	34.9	32.5	49	14	147
974050	23	52	10	1.1	2240	1	270	10	516	54 <100		0.8	1810	263	82.1	106	22	15	514
974051	51	228	10	0.3	1630	2	160	41	1140	151 <100		12.2	880	133	48.7	42.1	65	18	198
974052	29	126	30	0.8	2300	4	140	26	3180	207 <100		7.8	1760	381	119	143	53	34	644
974053	36	102	40	1.3	2190	4	110	15	4790	120 <100		9.9	2430	583	166	228	46	47	1000
974054	64	224 <10		0.1	700	1	50	37	225	150 <100		18.2	320	35	18	7.2	42	11	33
974055	82	180 <10		0.5	1630 <1		20	12	556	72 <100		23.9	280	55	22.7	14.3	31	19	63
974056	19	136	10	0.3	2010 <1		60	12	669	142 <100		13	360	60	25.9	16.4	38	20	77
974057	58	71	30	2.2	1600	4	100	7	10600	121 <100		10.1	2650	483	142	160	41	58	669
974058	56	105 <10		0.1	1560 <1		30	18	230	60 <100		17.6	170	32	15.2	8.9	6	12	36
974059	13	75 <10		0.3	1470 <1		170	23	374	39 <100		2.2	640	74	28.5	23.4	20	7	115
974060	38	239 <10		0.1	1230 <1		90	35	428	55 <100		14.3	460	51	24.4	11.9	61	15	55
974061	45	234	10	0.1	1620	2	120	16	862	83 <100		15.5	480	93	39.2	24.4	63	21	123
974062	27	299	10 <0.1		2250	3	110	20	452	144	100	22.5	200	29	13.8	6.4	120	25	30
974063	7 >300	<10		0.1	1270	11	640	621	569	218 <100		3.6	1200	465	267	72.8	203	15	407

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974101	<1	<0.5	26.5	205 <5	20	1400 <5			0.5	279	176	0.3	320 <1		66 <1		267 <1		19
974102	<1	<0.5	17.3	30 <5	1	790			8 <0.5	46	73	0.3	360 <1		11 <1		258 <1		22
974103	<1	<0.5	13.9	435 <5	25	1590 <5			<0.5	802	316	0.4	80 <1		183 <1		240 <1		9
974104	<1	<0.5	46	241 <5	20	2230		7	3.7	381	199	1.3	240 <1		94 <1		215	6	27
974105	<1	<0.5	21.9	304 <5	12	3190		18	16.3	418	157	7.1	300 <1		109 <1		299	7	35
974106	<1	<0.5	18.8	735	5	5810		26	16	958	348	7.1	270	1	257 <1		282	5	62
974107	<1	<0.5	22.3	386 <5	10	1630		11	8.7	536	223	3.3	360 <1		135 <1		321	1	40
974108	<1	<0.5	29.5	188 <5	4	540		7	2.6	259	63	0.8	510 <1		63 <1		302 <1		41
974109	<1	<0.5	13.4	49 <5	<1		280	11	1.9	101	78	0.7	450 <1		21 <1		250 <1		41
974110	<1	<0.5	28.4	146 <5	2	930		10	2.5	233	54	1.1	630 <1		58 <1		394 <1		52
974111	<1	<0.5	20.9	165 <5	3	380		6	2.1	235	212	0.9	1090 <1		58 <1		352 <1		33
974112	<1	<0.5	23.3	82 <5	4	960		7	2	107	133	1.5	580 <1		27 <1		239 <1		34
974113	<1	<0.5	34.9	1720 <5	23	1180 <5			1	3670	797	0.4	240 <1		814 <1		413 <1		83
974114	<1	<0.5	24.9	322 <5	1	570		13 <0.5		423	38	0.4	550 <1		106 <1		338 <1		57
974115	<1	<0.5	18.1	52 <5	2	1090		6 <0.5		91	119	0.3	600 <1		22 <1		420 <1		16
974116	<1	<0.5	47.1	79 <5	5	1300		10	6	113	85	4.7	810 <1		28 <1		311 <1		42
974117	<1	<0.5	46.1	368 <5	5	1570		10	4.2	512	59	1.9	550 <1		128 <1		429 <1		67
DUP-974085	<1	<0.5	14.8	1880 <5	27	2470		9	6.9	2410	481	2.1	130 <1		589 <1		277	1	28
DUP-974098	<1	<0.5	34.3	59 <5	5	380 <5		<0.5		116	84	0.3	900 <1		25 <1		146 <1		15
DUP-974107	<1	<0.5	22.4	393 <5	10	1740		12	9	534	228	3.3	360 <1		135 <1		324	1	40
DUP-974116	<1	<0.5	46.5	80 <5	5	1210		10	5.5	117	83	4.8	790 <1		29 <1		302 <1		41
MMISRM16	21 <0.5		38.2	6 <5	35	130		54 <0.5		19	341	0.3	150	28	4 <1		337 <1		11
BLANK	<1	<0.5	0.1 <1	<5	<1		10 <5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<1	<5	<1	<5
974042	1 <0.5		22.1	141 <5	12	11500		15	8.7	192	241	7.5	240 <1		45 <1		387 <1		40
974043	<1	<0.5	59.8	156 <5	10	3290		8	3.9	192	107	1.5	270 <1		45 <1		377 <1		41
974044	<1	<0.5	40.9	263 <5	4	5300		16	3.2	327	127	4.3	230 <1		79 <1		184 <1		41
974045	<1	<0.5	36.5	136 <5	12	6400		29	13.6	173	230	11.2	340 <1		40 <1		224 <1		35
974046	1 <0.5		13.9	198 <5	10	2430		26	15.9	191	196	8.3	230 <1		49 <1		170 <1		33
974047	<1	<0.5	4.5	485 <5	6	6250		119	3.4	607	225	4	50 <1		144 <1		72 <1		24
974048	<1	<0.5	13.6	173 <5	126	3340		18 <0.5		293	320	0.3	90 <1		60 <1		112 <1		21
974049	<1	<0.5	30.4	568 <5	8	4730		12	2.3	739	422	1.8	310 <1		172 <1		186 <1		47
974050	<1	<0.5	42.8	1700 <5	28	1390		14	1	2440	181	0.5	90 <1		530 <1		28 <1		32
974051	<1	<0.5	39.3	911 <5	7	5900		7	3.1	1060	726	3.9	330 <1		252 <1		283 <1		57
974052	<1	<0.5	85.8	3250 <5	16	4950		11	3.2	3760	684	2.1	280 <1		914 <1		275 <1		92
974053	<1	<0.5	42.9	5510 <5	13	2620		9	3.5	5960	525	1.5	920 <1		1480 <1		269	1	125
974054	<1	<0.5	51.8	93 <5	5	2590		5	1.2	130	301	1.3	450 <1		29 <1		409 <1		44
974055	<1	<0.5	33.2	238 <5	<1		1220	7	1.5	310	91	0.9	320 <1		75 <1		365 <1		46
974056	<1	<0.5	38.6	281 <5	2	2270		5	1.7	388	74	1.2	200 <1		91 <1		429 <1		34
974057	<1	<0.5	20.5	6390 <5	4	2400		18	2.9	4960	143	2.1	400 <1		1390 <1		261 <1		277
974058	<1	<0.5	20	93 <5	<1		890	10 <0.5		161	47	0.3	280 <1		36 <1		458 <1		28
974059	<1	<0.5	28.7	428 <5	15	1120		7	1.5	628	64	0.6	170 <1		141 <1		217 <1		39
974060	<1	<0.5	32.7	192 <5	2	2150		7	3.7	234	131	1.3	410 <1		54 <1		330 <1		56
974061	<1	<0.5	82.7	454 <5	8	2120		10	4.2	591	120	1.9	350 <1		139 <1		381 <1		46
974062	<1	<0.5	22.6	112 <5	6	2060		13	7.4	131	141	3	460 <1		32 <1		221 <1		27
974063	<1	<0.5	34.2	556	23	61	24000	17	1.5	1080	388	2	790 <1		223 <1		199 <1		80

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974101	68 <1		1590 <1		12 <10		18.8	33 <0.5		63 <1		363	18	130	15
974102	12 <1		340 <1		4 <10		15.2	19 <0.5		18 <1		102	8	1270	28
974103	201 <1		1370 <1		30 <10		30.1	43 <0.5		59 <1		547	28	160	15
974104	93 <1		840 <1		17 <10		68.1	692 <0.5		44 <1		335	21	250	40
974105	94	1	550 <1		15 <10		141	3740 <0.5		40	2	256	19	180	103
974106	217 <1		480 <1		34 <10		253	3560 <0.5		116	3	534	34	140	170
974107	133 <1		530 <1		24 <10		147	1870 <0.5		69	2	448	30	470	91
974108	63 <1		310 <1		13 <10		48.5	506 <0.5		25 <1		320	22	310	48
974109	28 <1		<10	<1	7 <10		33.6	558 <0.5		15 <1		202	19	150	39
974110	56 <1		130 <1		11 <10		119	508 <0.5		28 <1		243	20	270	51
974111	57 <1		210 <1		13 <10		69.8	384 <0.5		24 <1		284	18	160	28
974112	26 <1		110 <1		6 <10		61.7	327 <0.5		18 <1		135	10	420	50
974113	1030 <1		930	1	278 <10		172	166 <0.5		294	3	5040	269	210	34
974114	98 <1		160 <1		17 <10		50.9	68 <0.5		45 <1		317	25	220	107
974115	22 <1		60 <1		6 <10		16.2	73 <0.5		10 <1		153	11	700	23
974116	28 <1		380 <1		6 <10		85.3	1110 <0.5		17 <1		135	13	1490	31
974117	130 <1		270 <1		23 <10		83.8	779 <0.5		41 <1		517	39	500	76
DUP-974085	552 <1		980 <1		73 <10		88.3	1380 <0.5		55	2	699	37	50	67
DUP-974098	38 <1		200 <1		20 <10		15.9	27 <0.5		15 <1		490	40	230	8
DUP-974107	131 <1		540 <1		24 <10		147	1900 <0.5		70	1	467	30	470	92
DUP-974116	28 <1		380 <1		6 <10		80.3	1040 <0.5		16 <1		132	12	1420	30
MMISRM16	6 <1		490 <1		<1	<10	30.9	3 <0.5		62 <1		14 <1		270	22
BLANK	<1	<1	<10	<1	<1	<10	0.5 <3	<0.5	<1	<1	<5	<1	<20	<5	
974042	45	2	520 <1		8 <10		78.2	2970	0.8	32	2	212	17	2000	84
974043	46 <1		340 <1		8 <10		54.6	1120	1.1	26	1	177	13	810	35
974044	74 <1		180 <1		11 <10		111	722	1.3	31	2	192	16	1060	90
974045	40	1	540	1	6 <10		101	3680	0.7	36	2	145	11	860	52
974046	41	1	590	1	6 <10		90.7	3580	0.8	26	2	126	10	470	68
974047	129 <1		330 <1		18 <10		103	659	1.3	158	15	467	32	190	86
974048	85 <1		3240 <1		20 <10		11.9	15	0.7	294	1	900	55	320	8
974049	157 <1		380 <1		21 <10		132	540	1.5	61	2	376	25	630	58
974050	527 <1		2600 <1		63 <10		137	241	0.7	92	2	1070	49	180	25
974051	219 <1		490 <1		29 <10		175	555	1.7	66	1	536	35	290	74
974052	748 <1		880 <1		89 <10		339	715	1.9	146	3	1420	76	240	89
974053	1170 <1		1300 <1		140 <10		418	699	2.1	167	3	2030	100	280	116
974054	32 <1		190 <1		6 <10		49.6	237	1	20 <1		177	15	260	38
974055	70 <1		120 <1		10 <10		107	314	2.3	34	1	223	18	30	72
974056	84 <1		630 <1		12 <10		106	343	1.6	33	2	270	21	80	32
974057	857 <1		1510 <1		111 <10		1160	595	2.2	251	2	1640	84	80	124
974058	38 <1		210 <1		6 <10		33.3	43	1.3	18 <1		154	12	580	30
974059	134 <1		1320 <1		16 <10		106	285	1.2	63	1	307	20	150	17
974060	56 <1		280 <1		10 <10		100	891	1.5	36	1	249	19	160	51
974061	132 <1		450 <1		18 <10		159	1110	1.5	62	1	429	28	140	56
974062	29	1	520 <1		5 <10		91.3	1790	0.8	22	1	126	10	1650	30
974063	317 <1		2980 <1		73 <10		94.5	174	2.4	526	3	2400	203	2630	36

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974064	16	266 <10	<0.1		530	1	20	25	186	624	44 <100		14.8	510	80	38.8	11.6	89	18	62
974065	39	148	10	0.1	1560 <1		240	29	624	44 <100		4.2	520	125	54.8	34.5	52	11	178	
974066	15	44 <10		0.6	2500 <1		420	19	334	259 <100	<0.5		930	150	72.3	31.3	9	4	201	
974067	22	57 <10		0.5	2540 <1		370	24	533	78 <100	<0.5		770	299	136	69	9	8	419	
974068	7	43 <10		0.6	2680 <1		180	6	762	39 <100		2.4	1100	217	91.1	60.1	11	10	292	
974069	36	224	50	0.1	1550	8	110	30	3210	124	100	18.7	1010	388	135	135	126	43	623	
974070	41	147 <10	<0.1		1210 <1		320	33	250	38 <100		25.2	290	60	29	15.1	36	9	80	
974071	49	270 <10	<0.1		520	2	60	57	432	147 <100		12.7	460	71	28.9	14.8	110	18	71	
974072	41	220 <10	<0.1		370	1	90	53	65	58 <100		6.7	360	11	5.7	2.4	122	32	9	
974073	61	147 <10	<0.1		1270 <1		320	24	127	54 <100		6.5	310	13	5.1	3.6	24	3	17	
974074	56	249 <10	<0.1		1100	4	70	25	144	109 <100		8	260	23	12.4	5.1	154	37	21	
974075	22	55	20	0.6	3180 <1		330	15	5130	94 <100		0.6	3040	465	160	151	44	34	740	
974076	28	197 <10	<0.1		1240 <1		130	95	391	96 <100		17.2	360	30	13.6	8.1	31	11	35	
DUP-974053	37	108	40	1.3	2260	5	120	15	5430	141 <100		9.7	2510	594	171	230	54	50	1020	
DUP-974058	55	105 <10		0.2	1600 <1		30	17	224	61 <100		13.4	170	34	15.8	9.4	6	12	37	
DUP-974073	61	147 <10		0.1	1290 <1		330	25	138	61 <100		6.3	340	15	6.5	4.2	27	4	19	
MMISRM16	20	48	20	24.2	70 <1		240	4	23	61 <100		12.4	660	3	1.2	1.3	2 <1		5	
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	
759180	9	149 <10	<0.1		460 <1		150	70	5	129 <100		6.8	390	13	11	0.8	212	19	5	
759181	51	142 <10	<0.1		270 <1		390	33	13	51 <100		10.2	510	8	5.7	1.3	52	7	7	
759182	37	28 <10		0.3	660 <1		670	11	65	34 <100	<0.5		1380	142	79.1	28.8	9	13	158	
759183	34	72 <10		0.1	240 <1		1050	13	82	72 <100		3.2	3750	59	42.2	8.3	14	5	45	
759184	9	180 <10	<0.1		510 <1		160	49	12	94 <100		5.5	630	22	20.5	1.7	214	20	8	
759185	80	91 <10		0.2	540 <1		660	12	164	53 <100		3.1	1490	48	27.9	10.7	17	11	51	
759186	57	32 <10		0.3	280 <1		700	13	5	64 <100		0.8	2130	29	19.5	4.7	17	6	27	
759187	47	71 <10		0.3	510 <1		640	17	89	105 <100		2.2	2030	44	26.9	9.9	20	11	49	
759188	29	103 <10		0.4	690 <1		610	15	151	37 <100		1.8	1270	60	35.1	13.1	19	14	62	
759189	28	168	10	0.2	1150 <1		230	10	122	73	100	4.4	1080	47	25.9	9.8	68	28	46	
759190	23	34 <10		0.1	610 <1		660	58	39	389 <100	<0.5		1160	12	8	2.1	8	12	11	
759191	12	15 <10		0.1	610 <1		690	23	11	91 <100	<0.5		530	6	3.4	1.1	6	11	6	
759192	52	66 <10		0.4	780 <1		550	11	227	80 <100		1.5	1200	53	27	11.8	22	16	55	
759193	19	83 <10		0.1	1320 <1		540	7	171	43 <100		2.1	910	41	22.9	8.9	13	27	42	
759194	17	197 <10		0.1	650 <1		60	15	51	119 <100		5.7	870	46	31.7	5.3	64	20	25	
759195	43	165 <10		0.2	1570 <1		150	11	249	87 <100		4.4	870	76	47.5	15.6	44	35	72	
759196	32	163 <10		0.2	1620 <1		230	5	73	59	100	2.8	510	25	13.5	4.8	41	34	21	
759197	13	183 <10	<0.1		550 <1		110	12	11	63 <100		6.3	410	12	10	1.1	363	18	5	
759198	1	240 <10	<0.1		1560 <1		290	44	8	110 <100		4.7	660	17	14.9	1.1	445	35	6	
759199	61	221 <10		0.1	1300 <1		170	23	38	86 <100		4.4	370	16	9.5	2.2	72	31	10	
759200	3	112 <10	<0.1		970 <1		600	86	24	22 <100		0.9	190	13	8.7	2.4	38	21	11	
759201	24	137 <10		0.2	1400 <1		510	44	51	20 <100		1.3	770	28	15.9	5.4	24	28	24	
759202	4	139 <10	<0.1		1090 <1		590	137	31	75 <100		0.6	450	29	22.4	4.2	63	23	20	
759203	4	116 <10	<0.1		1260 <1		870	90	34	28 <100		0.8	320	31	23.4	5.3	48	26	25	
759204	37	39 <10		0.3	890 <1		710	30	191	54 <100	<0.5		2290	45	24.7	10.7	22	17	49	
759205	58	73 <10		0.2	770 <1		700	41	24	22 <100	<0.5		1570	31	18.4	7.2	11	15	34	
759206	12	226 <10	<0.1		770 <1		330	72	32	162 <100		3.2	270	34	18.8	4.2	365	20	20	

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974064	<1	<0.5	17.6	127 <5		5	510 <5		3.2	220	192	1.8	620 <1		46 <1		245 <1		39
974065	<1	<0.5	49.7	537 <5		21	2960		8	3	792	348	1.3	280 <1		178 <1		179 <1	53
974066	<1	<0.5	51.3	339	26	81	4090	49 <0.5		572	463	0.2	170 <1		112 <1		67	5	12
974067	<1	<0.5	42	768	20	59	1490	19 <0.5		1320	374	0.3	210 <1		263 <1		88	1	19
974068	<1	<0.5	31.7	1110 <5		36	1070	9 <0.5		1530	56	0.6	220 <1		341 <1		323	2	66
974069	<1	<0.5	31.7	1650 <5		6	11100	31	9.4	2890	357	2.4	370 <1		626 <1		295 <1		83
974070	<1	<0.5	20.3	168 <5		24	2580	13	2.9	287	156	1.5	150 <1		60 <1		258 <1		17
974071	<1	<0.5	36.8	193 <5		11	3910	9	4.2	290	280	2.6	460 <1		64 <1		247 <1		29
974072	<1	<0.5	15.3	34 <5		5	1480	14	3.8	38	126	4	530 <1		9 <1		144 <1		25
974073	<1	<0.5	42.1	48 <5		11	2510	7	1.5	61	86	0.6	210 <1		13 <1		279 <1		12
974074	<1	<0.5	42.2	71 <5		5	2920	6	7.5	84	193	6.6	670 <1		20 <1		145 <1		33
974075	<1	<0.5	31.1	2930	5	50	2670	24	1.5	3600	639	0.4	340 <1		822 <1		147 <1	2	44
974076	<1	<0.5	34.6	137 <5		2	710	14	1.8	158	108	1	310 <1		38 <1		217 <1		27
DUP-974053	<1	<0.5	43.6	5660 <5		13	3150	10	4.1	6170	552	1.7	970 <1		1530 <1		274	2	137
DUP-974058	<1	<0.5	19.8	98 <5	<1		820	10 <0.5		175	43	0.3	280 <1		38 <1		396 <1		28
DUP-974073	<1	<0.5	41.9	52 <5		11	2750	7	1.6	68	90	0.6	220 <1		15 <1		278 <1		13
MMISRM16	16 <0.5		38.1	5 <5		36	120	49 <0.5		18	240	0.3	110	29	3 <1		330 <1		11
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	
759180	<1	<0.5	28.9	2 <5		14	2100 <5	<0.5		5	124	1.9	100 <1		1 <1		128 <1		36
759181	<1	<0.5	59.3	5 <5		47	1450 <5	<0.5		11	83	2.4	80 <1		2 <1		152 <1		22
759182	12 <0.5		20.6	77	15	132	1060 <5	<0.5		221	163	0.2	50 <1		39 <1		20 <1		52
759183	1 <0.5		54	9 <5		91	1890 <5	<0.5		37	36 <0.1		30 <1		6 <1		44 <1		100
759184	<1	<0.5	59.7	4 <5		21	4880 <5	<0.5		11	76	1.3	100 <1		2 <1		200 <1		99
759185	<1	<0.5	31.7	42 <5		53	1540 <5	<0.5		93	46	0.3	50 <1		19 <1		78 <1		69
759186	<1	<0.5	9.5	2 <5		98	1490 <5	<0.5		19	44	0.1	10	1	2 <1		24 <1		70
759187	<1	<0.5	12.3	35 <5		46	3310 <5	<0.5		86	56	0.6	40 <1		16 <1		46 <1		81
759188	<1	<0.5	18.1	61 <5		67	820 <5	<0.5		118	79	0.2	80 <1		25 <1		65 <1		71
759189	<1	<0.5	16.1	72 <5		29	1490	7	1.2	105	75	2	260 <1		24 <1		172	1	92
759190	32 <0.5		20.7	3 <5		20	17200	32 <0.5		11	502 <0.1		40 <1		2 <1		25 <1		20
759191	37 <0.5		11 <1		23	42	5050 <5	<0.5		3	141 <0.1		30 <1	<1	<1		48 <1		8
759192	1 <0.5		16.4	62 <5		82	1370 <5	<0.5		109	50	0.3	70 <1		23 <1		175 <1		72
759193	<1	<0.5	12.8	39 <5		90	780 <5	<0.5		77	27	0.1	90 <1		16 <1		119 <1		59
759194	<1	<0.5	40.6	14 <5		15	4530 <5	<0.5		40	78	0.9	260 <1		8 <1		198 <1		123
759195	<1	<0.5	26.7	74 <5		32	1440	5	0.7	156	24	1.4	230 <1		32 <1		154 <1		181
759196	<1	<0.5	31.1	27 <5		34	1000 <5		0.7	43	24	0.9	140 <1		10 <1		162 <1		72
759197	<1	<0.5	24.1	3 <5		20	1170 <5	<0.5		9	59	1.1	110 <1		2 <1		178 <1		46
759198	<1	<0.5	36.6	3 <5		40	4070 <5	<0.5		7	134	1.7	130 <1		1 <1		133 <1		42
759199	<1	<0.5	38.4	10 <5		18	3430 <5	<0.5		19	94	2.7	150 <1		4 <1		173 <1		47
759200	<1	<0.5	166	11 <5		81	3190 <5	<0.5		21	138	1.5	80 <1		4 <1		112 <1		29
759201	<1	<0.5	9.5	31 <5		62	630 <5	<0.5		49	184	0.4	50 <1		11 <1		85 <1		67
759202	<1	<0.5	108	17 <5		69	5090 <5	<0.5		32	248	0.5	150 <1		7 <1		73 <1		58
759203	<1	<0.5	22.2	25 <5		84	4810 <5	<0.5		45	168	0.5	160 <1		10 <1		36 <1		56
759204	3 <0.5		10.5	26 <5		84	3490 <5	<0.5		78	240	0.1	20 <1		15 <1		43	1	63
759205	<1	<0.5	25.7	18 <5		74	1790 <5	<0.5		51	418	0.1	20 <1		10 <1		9 <1		29
759206	<1	<0.5	5	10 <5		40	290 <5	<0.5		32	399	0.6	110 <1		6 <1		55 <1		51

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974064	55 <1		200 <1		12 <10		44.8	906	1.1	35	1	428	25	160	31
974065	183 <1		930 <1		25 <10		118	700	1	77	1	643	36	480	31
974066	149 <1		3650 <1		27 <10		53.8	77 <0.5		103 <1		628	47	290 <5	
974067	339 <1		3220 <1		57 <10		60.4	31 <0.5		136	1	1330	91	260 <5	
974068	322 <1		3010 <1		43 <10		111	26	1.7	109 <1		968	62	100	9
974069	679 <1		490	1	86 <10		314	2320	1.4	136	4	1430	91	90	110
974070	70 <1		840 <1		11 <10		41.4	739	0.6	46 <1		340	20	360	29
974071	69 <1		370 <1		12 <10		86.2	956	0.6	33 <1		326	19	300	49
974072	9 <1		320 <1		2 <10		28.3	955 <0.5		11 <1		51	4	230	64
974073	15 <1		930 <1		3 <10		37.2	335 <0.5		19 <1		53	3	240	14
974074	19	1	300 <1		4 <10		59.8	2310 <0.5		18	1	111	9	780	41
974075	743 <1		3010 <1		102 <10		305	285	1.4	233	2	1790	94	250	28
974076	35 <1		330 <1		5 <10		59.2	305	0.9	16 <1		133	10	1280	33
DUP-974053	1190 <1		1310 <1		143 <10		466	840	2.1	175	3	2090	106	290	129
DUP-974058	42 <1		180 <1		6 <10		30.1	19	1.2	18 <1		163	13	600	31
DUP-974073	17 <1		970 <1		3 <10		41.3	366 <0.5		20 <1		62	4	250	16
MMISRM16	5 <1		520 <1	<1	<10		25.7	10 <0.5		54 <1		13 <1		250	20
BLANK	<1	<1	<10	<1	<1	<10	0.7 <3	<0.5	<1	<1	<5	<1	<20	<5	
759180	2 <1		850 <1		1 <10		2.2	140 <0.5		3 <1		84	9	4290	16
759181	4 <1		1440 <1		1 <10		1.7	32 <0.5		5 <1		53	4	1480	13
759182	84 <1		3980 <1		26 <10		11	6 <0.5		23 <1		688	52	250	6
759183	19 <1		9610 <1		9 <10		8.7 <3	<0.5		10 <1		301	35	1790	24
759184	4 <1		870 <1		3 <10		3.3	162 <0.5		5 <1		151	18	1580	25
759185	31 <1		3630 <1		9 <10		10.7	8 <0.5		10 <1		262	21	560	19
759186	11 <1		2770 <1		5 <10		6.3	5 <0.5		13 <1		158	16	360	26
759187	29 <1		3090 <1		8 <10		14.3	10 <0.5		13 <1		264	20	550	40
759188	39 <1		3710 <1		11 <10		11	6 <0.5		13 <1		343	26	450	28
759189	32 <1		1070 <1		8 <10		28	731 <0.5		13 <1		242	20	710	64
759190	5 <1		3690 <1		2 <10		4.1 <3	<0.5		10 <1		65	7	220 <5	
759191	3 <1		3240 <1		1 <10		1.4	4 <0.5		2 <1		39	3	170 <5	
759192	36 <1		3150 <1		10 <10		17.5	9 <0.5		13 <1		242	19	160	31
759193	26 <1		3630 <1		7 <10		10.7	8 <0.5		9 <1		208	16	90	25
759194	14 <1		460 <1		6 <10		10.9	192 <0.5		12 <1		278	25	520	50
759195	48 <1		940 <1		13 <10		11.1	740 <0.5		11 <1		497	34	500	75
759196	14 <1		1230 <1		4 <10		13.3	753 <0.5		10 <1		119	10	130	75
759197	3 <1		520 <1		1 <10		3.5	180 <0.5		5 <1		75	8	230	23
759198	3 <1		1450 <1		2 <10		3.5	115 <0.5		4 <1		113	13	2280	25
759199	6 <1		930 <1		2 <10		7.6	249 <0.5		6 <1		82	8	910	40
759200	7 <1		1970 <1		2 <10		2.6	46 <0.5		10 <1		88	6	5600	11
759201	16 <1		2060 <1		5 <10		6.4	20 <0.5		12 <1		159	11	870	27
759202	12 <1		2270 <1		4 <10		5	19 <0.5		12 <1		194	18	2180	14
759203	15 <1		3830 <1		5 <10		4.4	46 <0.5		19 <1		208	19	4400	17
759204	28 <1		3580 <1		8 <10		7.7	4 <0.5		16 <1		257	19	420	16
759205	20 <1		2840 <1		6 <10		2.3	4 <0.5		32 <1		203	14	460	11
759206	12 <1		1880 <1		5 <10		6.1	108 <0.5		8 <1		170	12	2270	20



## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
759207	27		<10	0.1	540	<1	2070	127	14	33	<100	0.7	900	17	9.6	4.4	20	10	21
759208	96	42	<10	0.2	530	<1	750	66	<5	25	<100	<0.5	2100	17	9.8	3.4	8	10	17
759209	35	30	<10	0.2	440	<1	860	37	<5	18	<100	<0.5	1250	7	4.6	1	8	8	6
759210	2	95	<10	<0.1	550	<1	860	37	14	22	<100	1.8	220	7	4.8	1.4	22	12	6
759211	16	211	<10	<0.1	610	<1	450	79	96	59	<100	1.6	1760	124	91.8	17.6	73	16	90
759212	65	55	<10	0.3	470	<1	810	21	9	72	<100	1	2650	41	27.4	6.7	14	9	38
759213	10	265	<10	<0.1	880	<1	120	19	28	184	<100	2.3	390	14	9.4	1.8	661	29	8
759214	34	300	<10	0.1	1830	<1	170	39	85	135	100	4.2	780	26	14.3	4.4	84	41	19
759215	29	41	<10	0.1	2180	<1	1060	9	<5	40	<100	2	1400	5	4	0.7	12	42	4
759216	24	275	<10	<0.1	790	<1	230	25	78	152	<100	5.4	570	26	16.1	4.8	383	24	21
759217	13	75	<10	<0.1	480	<1	630	12	18	11	<100	0.9	330	8	4.2	1.9	13	10	9
759218	91	77	<10	0.2	1680	<1	670	41	22	52	<100	1.5	1330	40	24	8.8	14	33	43
759219	44	16	<10	0.4	410	<1	680	40	<5	455	<100	<0.5	4090	9	6.4	0.9	12	8	6
759220	19	18	<10	0.3	470	<1	910	17	<5	33	<100	<0.5	1690	11	8.6	0.9	8	9	7
759221	96	23	<10	0.4	390	<1	830	55	<5	273	<100	<0.5	1540	12	9.7	1.1	8	7	8
759222	54	25	<10	0.5	330	<1	840	40	<5	481	<100	<0.5	1530	10	10.6	0.7	8	6	6
759223	59	54	<10	0.2	940	<1	680	29	12	28	<100	0.6	2090	36	20.8	7.9	16	18	39
759224	26	28	<10	<0.1	510	<1	760	48	31	456	<100	<0.5	940	11	8.1	1.4	7	9	9
759225	30	31	<10	0.1	390	<1	750	26	17	36	<100	<0.5	1080	23	13.3	4.3	8	7	23
759226	57	39	<10	0.2	450	<1	770	29	79	49	<100	<0.5	1470	75	44.7	15.7	11	8	80
759227	35	41	<10	0.3	520	<1	870	15	17	178	100	<0.5	2460	65	51	9.6	10	10	55
759228	36	28	<10	0.2	260	<1	710	38	13	71	<100	<0.5	1720	28	18	4.1	11	5	25
759229	32	39	<10	0.2	470	<1	720	22	85	46	<100	<0.5	970	23	12.1	5.7	14	9	27
759230	47	23	<10	0.2	340	<1	770	23	<5	45	<100	<0.5	1550	18	13	1.8	8	6	13
759231	59	31	<10	0.4	780	<1	730	20	<5	197	<100	<0.5	1350	17	14.1	2	12	15	13
759232	31	19	<10	0.2	440	<1	690	23	<5	226	<100	<0.5	2230	9	7.3	0.9	8	8	7
759233	98	37	<10	0.3	670	<1	840	60	19	627	<100	<0.5	1030	12	10.8	1.7	10	12	9
759234	13	90	<10	<0.1	630	<1	670	57	42	80	<100	0.6	340	35	21.6	7	17	13	34
759235	16	12	<10	0.2	160	<1	870	7	<5	107	<100	1.9	2030	3	2.6	<0.5	13	3	2
759236	59	52	<10	0.3	490	<1	680	22	25	225	100	<0.5	2070	54	40.7	9.8	16	9	50
759237	56	23	<10	0.1	490	<1	780	25	<5	432	<100	<0.5	2030	19	17.4	1.8	7	9	12
759238	42	21	<10	0.1	1250	<1	610	6	7	510	<100	1.5	1430	5	3.2	0.7	7	24	4
759239	20	18	<10	0.1	510	<1	910	14	<5	109	<100	<0.5	1380	13	9.2	1.3	7	9	9
759240	35	37	<10	0.2	510	<1	810	17	11	71	<100	<0.5	1500	40	26.2	5.8	11	9	34
759241	51	18	<10	0.2	380	<1	760	14	<5	124	<100	<0.5	1220	11	8	0.9	7	7	7
759242	16	46	<10	0.1	450	<1	730	14	<5	44	<100	<0.5	1780	36	25.3	4.6	10	8	29
759243	16	45	<10	0.1	610	<1	810	11	11	23	<100	<0.5	1750	70	46.7	10.3	12	12	60
759244	26	24	<10	0.1	330	<1	790	37	<5	64	<100	<0.5	1070	20	14.7	1.6	7	6	13
759245	57	142	<10	0.4	1610	<1	550	24	118	85	<100	2	3490	146	108	22.2	43	30	111
759246	30	22	<10	0.3	450	<1	860	24	<5	67	<100	<0.5	1260	25	17.6	2.4	7	8	18
759247	45	72	<10	0.2	430	<1	780	22	70	139	<100	0.9	2140	36	22.5	9	13	9	42
759248	42	35	<10	0.1	320	<1	760	36	18	47	<100	0.6	530	11	8.1	1.8	13	6	9
759249	8	>300	<10	<0.1	2360	<1	240	13	55	514	<100	2.3	360	32	17.8	4.1	53	49	17
759250	65	26	<10	0.4	290	<1	900	19	<5	83	<100	<0.5	2180	18	14	1.6	10	5	12
759251	8	109	<10	0.3	650	<1	930	10	421	28	<100	4.8	1830	121	69.5	34.4	33	16	128

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759207	<1	<0.5	16.8	15	<5	190	6280	114	<0.5	37	945	1.4	60	<1	7	<1	43	9	19
759208	<1	<0.5	6	3	<5	86	2270	7	<0.5	16	608	<0.1	<10	<1	2	<1	43	<1	18
759209	<1	<0.5	13.8	<5	<5	113	1930	<0.5	<0.5	3	707	0.2	<10	<1	<1	<1	81	<10	10
759210	<1	<0.5	63	6	<5	66	4090	<0.5	<0.5	12	149	0.9	30	<1	3	<1	125	<1	24
759211	<1	<0.5	55.8	49	<5	71	5440	<0.5	<0.5	131	370	0.9	110	<1	24	<1	96	<1	259
759212	1	<0.5	24.6	5	<5	111	1950	7	<0.5	29	68	0.2	20	<1	4	<1	57	<1	100
759213	<1	<0.5	27.6	10	<5	17	1080	<0.5	1.7	17	191	7.3	50	<1	4	<1	168	<1	50
759214	<1	<0.5	24.9	24	<5	36	1390	<0.5	1	41	185	2.1	110	<1	9	<1	203	<1	88
759215	<1	<0.5	47.6	<5	<5	127	960	<0.5	<0.5	1	63	<0.1	20	<1	<1	<1	38	<1	24
759216	<1	<0.5	20.3	24	<5	26	4670	<0.5	1.1	45	232	3.8	70	<1	10	<1	105	<1	80
759217	<1	<0.5	8.7	6	<5	78	1040	6	<0.5	14	118	0.2	20	<1	3	<1	49	<1	11
759218	<1	<0.5	35.9	32	<5	74	1530	<0.5	<0.5	71	148	0.2	30	<1	14	<1	105	<1	36
759219	2	<0.5	16.6	<5	<5	47	12100	20	<0.5	2	471	0.1	20	<1	<1	<1	18	<1	17
759220	12	<0.5	10.1	<1	<5	143	1680	8	<0.5	<1	159	<0.1	10	<1	<1	<1	15	<1	25
759221	17	<0.5	19	<1	<5	115	9310	22	<0.5	1	223	<0.1	10	<1	<1	<1	23	<1	31
759222	12	<0.5	22.7	<1	<5	109	14400	10	<0.5	<1	503	<0.1	20	<1	<1	<1	14	<1	32
759223	<1	<0.5	15.3	12	<5	100	950	<5	<0.5	50	232	0.1	20	<1	9	<1	44	<1	28
759224	27	<0.5	19	<1	14	89	26900	10	<0.5	4	368	<0.1	30	<1	<1	<1	16	1	20
759225	6	<0.5	23.5	4	<5	164	1860	9	<0.5	21	129	<0.1	30	<1	3	<1	30	<1	23
759226	15	<0.5	16.9	37	9	163	2160	5	<0.5	106	306	0.2	40	<1	19	<1	15	<1	47
759227	18	<0.5	28	9	<5	197	3260	5	<0.5	48	256	<0.1	20	<1	7	<1	22	<1	103
759228	5	<0.5	15.7	2	<5	119	3300	9	<0.5	15	188	<0.1	10	<1	2	<1	26	<1	36
759229	<1	<0.5	19.1	16	<5	113	2390	7	<0.5	44	124	0.4	10	<1	8	<1	20	<1	26
759230	4	<0.5	26.5	<1	6	142	1660	9	<0.5	3	141	<0.1	20	<1	<1	<1	8	<1	31
759231	<1	<0.5	22.4	1	<5	131	4350	10	<0.5	5	204	0.1	20	<1	<1	<1	34	<1	44
759232	5	<0.5	15.8	<1	<5	130	7910	17	<0.5	<1	185	<0.1	30	<1	<1	<1	31	<1	25
759233	<1	<0.5	24.2	2	<5	162	24200	26	<0.5	9	913	0.2	10	<1	2	<1	35	<1	36
759234	<1	<0.5	14	24	<5	152	3470	<5	<0.5	55	217	0.2	90	<1	11	<1	45	<1	34
759235	<1	<0.5	17.9	<1	<5	153	9180	20	<0.5	<1	280	<0.1	<10	<1	<1	<1	17	<1	11
759236	5	<0.5	26.8	22	<5	108	4980	5	<0.5	70	212	0.1	20	<1	13	<1	38	<1	104
759237	21	<0.5	17.2	<1	<5	189	7590	10	<0.5	3	426	<0.1	10	1	<1	<1	13	<1	42
759238	15	<0.5	18.5	<1	<5	103	12500	10	<0.5	2	395	<0.1	50	3	<1	<1	41	<1	20
759239	23	<0.5	13.5	<1	20	81	3200	7	<0.5	<1	168	<0.1	20	1	<1	<1	21	<1	18
759240	6	<0.5	16.6	3	<5	148	2670	<5	<0.5	21	154	<0.1	20	<1	3	<1	31	<1	45
759241	9	<0.5	12.7	<1	<5	95	5110	15	<0.5	<1	166	<0.1	10	<1	<1	<1	29	<1	27
759242	14	<0.5	26.6	2	<5	161	1360	<5	<0.5	14	75	<0.1	20	<1	2	<1	45	<1	69
759243	13	<0.5	22.7	7	<5	200	1000	<5	<0.5	39	132	<0.1	20	<1	6	<1	24	<1	76
759244	11	<0.5	11.1	<1	7	214	2820	7	<0.5	1	204	<0.1	20	<1	<1	<1	20	<1	21
759245	<1	<0.5	28.6	93	<5	63	1570	<5	<0.5	185	82	0.2	110	<1	38	<1	123	<1	187
759246	14	<0.5	14.5	<1	11	140	2230	6	<0.5	3	178	<0.1	20	<1	<1	<1	9	<1	28
759247	<1	<0.5	18.3	21	<5	85	4630	7	<0.5	64	155	0.3	20	<1	11	<1	15	<1	64
759248	<1	<0.5	9.3	2	<5	229	5690	<5	<0.5	9	290	0.2	<10	<1	1	<1	49	<1	25
759249	<1	<0.5	5.9	11	<5	67	1780	<5	<0.5	34	265	0.5	90	<1	7	<1	49	<1	58
759250	5	<0.5	7.4	<1	<5	217	4520	13	<0.5	2	345	<0.1	20	<1	<1	<1	63	<1	46
759251	<1	<0.5	8.9	172	<5	288	970	<5	<0.5	315	39	<0.1	50	<1	69	<1	26	<1	245

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
759207	13 <1		6640 <1			3 <10		2.7	30 <0.5		63 <1		119	8	1050	17
759208	8 <1		2910 <1			3 <10		1.8 <3	<0.5		26 <1		101	8	200	5
759209	2 <1		3270 <1			1 <10		0.9	3 <0.5		9 <1		47	4	80 <5	
759210	4 <1		2340 <1			1 <10		1.5	32 <0.5		8 <1		49	4	1680	9
759211	48 <1		2060 <1			19 <10		16.5	54 <0.5		21 <1		907	69	2360	69
759212	16 <1		4740 <1			7 <10		6.5	5 <0.5		19 <1		255	22	400	23
759213	5 <1		820 <1			2 <10		6	621 <0.5		4 <1		80	8	1480	53
759214	13 <1		1350 <1			4 <10		9.8	671 <0.5		7 <1		133	11	920	71
759215	1 <1		6530 <1		<1	<10		1.6	3 <0.5		6 <1		30	4	300	8
759216	14 <1		970 <1			4 <10		8.5	504 <0.5		6 <1		151	13	1160	70
759217	5 <1		1520 <1			2 <10		3.2	15 <0.5		5 <1		44	3	150	10
759218	25 <1		2640 <1			7 <10		3.5	8 <0.5		26 <1		244	18	1350	11
759219	2 <1		2660 <1			1 <10		4.1 <3	<0.5		20 <1		50	6	80 <5	
759220	1 <1		3500 <1			2 <10		1.4 <3	<0.5		9 <1		68	8	200 <5	
759221	2 <1		4160 <1			2 <10		1.4	3 <0.5		15 <1		76	9	250 <5	
759222	1 <1		3560 <1			1 <10		1.6 <3	<0.5		14 <1		56	11	180 <5	
759223	21 <1		2920 <1			7 <10		5	5 <0.5		24 <1		217	16	430	11
759224	3 <1		3970 <1			2 <10		2.3	9 <0.5		6 <1		62	8	130 <5	
759225	10 <1		2920 <1			4 <10		5.3	3 <0.5		12 <1		124	10	200	9
759226	41 <1		3300 <1			14 <10		9.7	6 <0.5		19 <1		418	32	350	10
759227	22 <1		4220 <1			10 <10		5.7	8 <0.5		40 <1		368	47	190	17
759228	9 <1		2720 <1			5 <10		6.6	4 <0.5		15 <1		161	14	240	11
759229	16 <1		2830 <1			4 <10		8.4	10 <0.5		15 <1		127	9	90	14
759230	3 <1		3670 <1			3 <10		2.1	5 <0.5		9 <1		99	11	220 <5	
759231	4 <1		3280 <1			3 <10		4.7	3 <0.5		29 <1		90	14	60	10
759232	1 <1		3600 <1			1 <10		1.7	3 <0.5		13 <1		53	7	100 <5	
759233	5 <1		4910 <1			2 <10		3.8	7 <0.5		20 <1		59	13	90	9
759234	20 <1		3180 <1			6 <10		4.2	16 <0.5		9 <1		204	17	1090	10
759235 <1	<1		3850 <1		<1	<10		0.6 <3	<0.5		4 <1		20	3	70 <5	
759236	27 <1		2670 <1			9 <10		8.8	4 <0.5		19 <1		297	38	130	24
759237	3 <1		5450 <1			3 <10		1.2	8 <0.5		9 <1		109	17	180 <5	
759238	1 <1		4890 <1		<1	<10		1	74 <0.5		2 <1		22	3	70 <5	
759239	2 <1		3310 <1			2 <10		0.8 <3	<0.5		5 <1		79	7	160 <5	
759240	12 <1		3750 <1			7 <10		4	4 <0.5		10 <1		217	19	260	7
759241	1 <1		4550 <1			2 <10		1.1 <3	<0.5		12 <1		60	7	40 <5	
759242	10 <1		3790 <1			6 <10		4.6	5 <0.5		13 <1		192	20	310	11
759243	23 <1		4090 <1			11 <10		5.4	5 <0.5		13 <1		384	34	360	11
759244	2 <1		3480 <1			3 <10		1.8 <3	<0.5		8 <1		101	12	230 <5	
759245	60 <1		3410 <1			22 <10		7.4	10 <0.5		31 <1		1100	80	740	32
759246	4 <1		3270 <1			4 <10		1.7	3 <0.5		9 <1		141	13	210 <5	
759247	23 <1		2060 <1			7 <10		5.4	7 <0.5		12 <1		226	17	690	28
759248	5 <1		2460 <1			2 <10		1.6	4 <0.5		6 <1		71	8	610	6
759249	11 <1		1950 <1			5 <10		5	89 <0.5		4 <1		165	13	1050	23
759250	2 <1		2900 <1			3 <10		2.9	4 <0.5		27 <1		98	13	50	10
759251	93 <1		11500 <1			22 <10		8.3	8 <0.5		20 <1		579	55	760	41

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
759252	22	42 <10		0.2	660 <1		790	6	28	84 <100		1.7	1090	24	14.2	5	12	13	22
759253	11	12 <10		0.4	240 <1		1210	4 <5		59 <100		<0.5	2710	19	17.8	1.4	10	4	11
759254	11	24 <10		0.4	260 <1		970	5 <5		183 <100		2.3	2930	28	24	3.9	11	5	21
759255	21	23 <10		0.4	270 <1		1100	12 <5		151 <100		<0.5	2040	10	8.1	0.9	9	5	6
759256	23	17 <10		0.2	190 <1		870	6 <5		112 <100		<0.5	2300	8	6.4	1	7	4	6
759257	22	45 <10		0.3	280 <1		960	11 <5		47 <100		2.3	3240	14	10.8	2.3	19	6	12
759258	7	220 <10	<0.1		690 <1		420	29	19	62 <100		4.7	690	20	14.4	2.6	424	19	12
759259	23	134 <10		0.3	390 <1		900	17	61	55 <100		8.8	3030	48	36	9.7	28	8	43
759260	11	130 <10		0.1	750 <1		900	24	62	67	100	10.2	640	21	13	4.1	22	15	17
759261	3	241 <10	<0.1		1030 <1		390	22	9	144 <100		6.5	570	21	17.5	1.7	482	25	8
759262	28	44 <10		0.5	300 <1		1240	12 <5		195 <100		4.3	3140	16	13.2	2.4	14	6	13
759263	20	29 <10		0.5	360 <1		1140	11 <5		86 <100		3.4	3590	20	18.8	2.1	15	7	15
759264	19	49 <10	<0.1		440 <1		880	28	10	22 <100		5.9	600	18	11.6	4.3	13	9	21
759265	42	56 <10		0.3	820 <1		1210	13	22	31 <100		14.7	1450	20	12.5	5.7	17	16	24
759266	17	61 <10		0.8	600 <1		980	8	19	58 <100		0.8	7150	41	27.9	9.8	19	12	44
759267 <1		184 <10	<0.1		730 <1		560	31	27	83 <100		2.9	640	32	29.5	3.7	78	17	17
759268	16	17 <10		0.2	250 <1		1060	7 <5		35 <100		<0.5	1720	4	3.7 <0.5		9	5	3
759269	15	30 <10		0.4	530 <1		1060	6 <5		39 <100		0.6	3610	45	32.3	7	14	10	39
759270	31	17 <10		0.2	210 <1		1010	8 <5		224 <100		<0.5	2340	7	6.6 <0.5		8	4	4
759271	12	18 <10		0.2	320 <1		860	6 <5		114 <100		9.3	1550	3	2.6 <0.5		14	6	2
759272	7	161 <10	<0.1		920 <1		580	12	91	151 <100		3.3	980	33	20	6.6	59	19	27
759273	22	202 <10	<0.1		1370 <1		330	5	83	146 <100		20.8	1330	39	23.5	7	56	29	28
759274	21	15 <10		0.5	350 <1		860	9 <5		34 <100		4.3	1810	6	5.5 <0.5		10	6	4
759275	28	99 <10		0.6	970 <1		900	9	107	47	200	16.9	3550	87	58.8	22.8	19	19	96
759276	4	121 <10		0.2	500 <1		280	2	131	40	100	13.3	680	22	10.8	7.1	16	13	26
759277	17	4 <10		0.4	6090 <1		1080	2	5	12 <100		<0.5	1460	18	12.6	5.6	9	110	21
759278	11	68 <10		0.2	670 <1		1000	18	45	96 <100		7.1	1460	20	12.5	5.5	26	13	24
759279	18	61 <10		0.4	960 <1		1000	5	87	32	100	7.4	4130	45	24.2	16.2	26	20	61
759280	3	178	20	0.3	1290 <1		350	68	20	129 <100		1.6	970	11	7.8	1.6	536	29	7
759281	22	77 <10		0.2	580 <1		860	12	78	30 <100		4.7	1650	28	15.3	8.4	21	12	37
759282	6	169 <10		0.2	1070 <1		540	5	212	150	100	5.1	1080	45	22.5	9.5	45	22	40
759283	30	95 <10		0.3	650 <1		820	15	50	80	100	11	1930	34	20.5	9.6	17	13	39
759284	21	19 <10		0.1	90 <1		440	15 <5		16 <100		16.9	1630	3	1.8	0.9	10	2	4
DUP-759181	46	136 <10		0.1	260 <1		360	32	13	47 <100		9.6	480	8	5.5	1.3	53	7	6
DUP-759204	38	45 <10		0.2	910 <1		680	31	204	54	100	0.6	2270	45	24.9	11.2	24	17	50
DUP-759215	26	38 <10	<0.1		2370 <1		1000	8 <5		43 <100		2.1	1290	6	3.9	0.8	12	44	5
DUP-759219	40	15 <10		0.2	420 <1		690	42 <5		463 <100		<0.5	4460	9	6.8	1.1	14	7	7
DUP-759233	96	43 <10		0.3	680 <1		880	66	20	676	100	<0.5	1050	11	10.6	1.8	11	13	9
DUP-759246	30	20 <10		0.2	380 <1		790	23 <5		58 <100		<0.5	1190	20	14.9	1.5	7	7	13
DUP-759268	17	16 <10		0.3	260 <1		1020	7 <5		34 <100		<0.5	1690	5	3.9 <0.5		9	5	3
DUP-759282	6	168 <10		0.3	1090 <1		530	5	222	147	100	5.2	1100	46	23.1	9.7	45	23	41
DUP-759284	8	23 <10		0.1	100 <1		450	20	8	21 <100		17.4	1760	4	2.3	1.1	15	2	4
MMISRM16	16	57	20	24.8	80 <1		230	5	28	70 <100		13.7	720	4	1.5	1.6	2	2	7
AMIS0169	8	94	20	0.5	750 <1		40	2	1060	156	200	9	4630	40	17.6	16	59	29	72
MMISRM18	22	35	10	8.8	170 <1		190	83	41	83 <100		6.7	1170	6	2.3	1.9	4	3	9

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5	
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
759252	2 <0.5		5.9	10 <5		226	1560 <5		<0.5		30	105 <0.1		10 <1		5 <1		42 <1		50
759253	8 <0.5		3.9 <1	<5		340	1900 <5		<0.5	<1		182 <0.1	<10		1 <1	<1	<5	<1		82
759254	15 <0.5		5.8	1 <5		160	2790 <5		<0.5		10	103 <0.1	<10	<1		1 <1		14 <1		116
759255	3 <0.5		4.5 <1	<5		119	4430	15 <0.5	<1			335 <0.1		10	1 <1	<1		19 <1		25
759256	29 <0.5		4.2 <1	<5		114	2660	12 <0.5		2		185 <0.1	<10		1 <1	<1		20 <1		39
759257	1 <0.5		12.4	1 <5		156	1440 <5		<0.5		6	208 <0.1	<10		1 <1	<1		24 <1		33
759258	<1	<0.5	6.8	7 <5		72	3150 <5		<0.5		21	223	1.4	80 <1		4 <1		83 <1		67
759259	<1	<0.5	20.5	33 <5		137	1870 <5		<0.5		82	140	0.3	20 <1		16 <1		57 <1		180
759260	<1	<0.5	5.9	14 <5		93	1360 <5		<0.5		33	140	0.2	40 <1		7 <1		38 <1		75
759261	<1	<0.5	20.8	2 <5		132	3920 <5		<0.5		9	326	0.8	40 <1		2 <1		48 <1		82
759262	1 <0.5		20.2 <1	<5		187	5580 <5		<0.5		6	235	0.2 <10		2 <1	<1		20 <1		87
759263	6 <0.5		5 <1	<5		244	2050 <5		<0.5		3	98 <0.1	<10		2 <1	<1		22 <1		96
759264	<1	<0.5	17.9	7 <5		103	2660 <5		<0.5		28	318	0.3	10 <1		5 <1		47 <1		16
759265	<1	<0.5	9.6	14 <5		135	680 <5		<0.5		47	140	0.2 <10	<1		9 <1		26 <1		31
759266	4 <0.5		17	13 <5		246	2000 <5		<0.5		62	80	0.1	20	2	10 <1		18 <1		139
759267	<1	<0.5	22.4	10 <5		84	6660 <5		<0.5		28	167	0.9	60 <1		6 <1		60 <1		92
759268	12 <0.5		7.9 <1	<5		84	1200 <5		<0.5	<1		84 <0.1	<10	<1	<1	<1		34	2	18
759269	10 <0.5		4.3	3 <5		148	1120 <5		<0.5		21	89 <0.1	<10		1	2 <1		40 <1		134
759270	9 <0.5		4.9 <1		5	160	4720 <5		<0.5	<1		258 <0.1	<10		2 <1	<1		54 <1		31
759271	<1	<0.5	5.9 <1	<5		97	3070 <5		<0.5	<1		156 <0.1	<10	<1	<1	<1		42	1	13
759272	<1	<0.5	29.4	28 <5		121	1020 <5		<0.5		59	208	0.3	30 <1		13 <1		31 <1		97
759273	<1	<0.5	8.5	25 <5		101	1440 <5		<0.5		68	205	0.4	40 <1		14 <1		48 <1		120
759274	2 <0.5		10.6 <1	<5		126	1310 <5		<0.5	<1		86 <0.1	<10	<1	<1	<1		66 <1		40
759275	1 <0.5		9.2	75 <5		202	1750 <5		<0.5		186	112	0.1	30	1	36 <1		41 <1		295
759276	<1	<0.5	10.2	32 <5		52	1690 <5		<0.5		71	20	0.2	20	1	16 <1		172 <1		82
759277	12 <0.5		35.4	4	30	578	110 <5		<0.5		26	1950 <0.1		90 <1		4 <1		19 <1		22
759278	<1	<0.5	22.9	21 <5		149	6080 <5		<0.5		51	381	0.5	30 <1		10 <1		56 <1		42
759279	<1	<0.5	5.6	75 <5		222	470 <5		<0.5		165	76	0.1	20 <1		34 <1		36 <1		90
759280	<1	<0.5	99.7	6 <5		48	16200 <5		<0.5		12	256	2.1	140 <1		3 <1		72 <1		74
759281	<1	<0.5	24.9	28 <5		134	1920	5 <0.5		75	216	0.7	20 <1		14 <1		72 <1		33	
759282	<1	<0.5	22.1	75 <5		177	420 <5		<0.5		100	187	0.3	60 <1		24 <1		94 <1		92
759283	<1	<0.5	8.9	35 <5		133	640 <5		<0.5		84	171	0.2	20 <1		17 <1		72 <1		70
759284	<1	<0.5	10.6	2 <5		43	3940	16 <0.5		8	452	0.2 <10	<1		1 <1		57	5		6
DUP-759181	<1	<0.5	56	5 <5		44	1410 <5		<0.5		11	82	2.7	80 <1		2 <1		147 <1		21
DUP-759204		2 <0.5	10.6	33 <5		80	3350 <5		<0.5		90	253	0.2	30 <1		17 <1		45	2	63
DUP-759215	<1	<0.5	46.5 <1	<5		115	1050 <5		<0.5		3	59 <0.1		20 <1	<1	<1		38 <1		22
DUP-759219		2 <0.5	16.4 <1	<5		45	13700	24 <0.5		2	533	0.1	20 <1	<1	<1		18 <1		17	
DUP-759233	<1	<0.5	25.3	2 <5		171	26200	26 <0.5		11	1020	0.2	10 <1		2 <1		38 <1		36	
DUP-759246		16 <0.5	14 <1		12	132	1980	6 <0.5	<1			169 <0.1		20 <1	<1	<1		9 <1		22
DUP-759268		11 <0.5	7.5 <1	<5		80	1190	5 <0.5	<1			83 <0.1	<10	<1	<1	<1		33	2	18
DUP-759282	<1	<0.5	21.8	79 <5		175	380 <5		<0.5		105	186	0.3	60 <1		25 <1		94 <1		92
DUP-759284	<1	<0.5	11.4	3 <5		43	5720	23 <0.5		11	582	0.3 <10	<1		2 <1		60	8		6
MMISRM16		19 <0.5	39.5	6 <5		37	140	50 <0.5		21	298	0.3	160	26	4 <1		333 <1		13	
AMIS0169	<1	<0.5	50.2	512 <5		43	5000 <5			4.6	498	598	3.6	170	1	148 <1		271	1	87
MMISRM18		5 <0.5	27.5	11 <5		94	730	34 <0.5		28	606	0.9	480	14	6	7	154 <1		5	

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759252	12 <1		3290 <1		4 <10		2.4	6 <0.5		5 <1		114	12	320	10
759253	2 <1		4000 <1		2 <10		1.1	5 <0.5		17 <1		121	17	40	9
759254	7 <1		4220 <1		4 <10		1.1 <3	<0.5		12 <1		165	24	150	9
759255	1 <1		2650 <1		1 <10		1.1 <3	<0.5		8 <1		49	7	70 <5	
759256	2 <1		2500 <1		1 <10		<0.5	<3	<0.5	4 <1		52	6	50 <5	
759257	4 <1		3020 <1		2 <10		2.6	4 <0.5		9 <1		84	10	330	9
759258	7 <1		1380 <1		3 <10		4.9	93 <0.5		6 <1		132	11	2830	29
759259	26 <1		3090 <1		8 <10		4.9	11 <0.5		17 <1		343	29	970	30
759260	11 <1		2170 <1		3 <10		4	12 <0.5		10 <1		110	11	430	22
759261	4 <1		1470 <1		3 <10		3.8	105 <0.5		4 <1		120	16	2490	20
759262	5 <1		3490 <1		2 <10		2.1	5 <0.5		20 <1		104	12	220	14
759263	3 <1		4280 <1		3 <10		1.6	4 <0.5		23 <1		129	18	160	14
759264	11 <1		2500 <1		3 <10		1.5	6 <0.5		30 <1		133	9	110	5
759265	16 <1		3230 <1		4 <10		4	4 <0.5		13 <1		123	10	70	9
759266	24 <1		4830 <1		7 <10		5.6	8 <0.5		25 <1		238	23	770	39
759267	10 <1		1740 <1		4 <10		5.6	41 <0.5		10 <1		211	25	3520	29
759268 <1	<1		3040 <1		<1	<10	<0.5	<3	<0.5	3 <1		28	3	40 <5	
759269	14 <1		5460 <1		7 <10		3.1 <3	<0.5		25 <1		229	27	130	16
759270 <1	<1		3950 <1		<1	<10	0.5 <3	<0.5		5 <1		41	7	80 <5	
759271 <1	<1		2890 <1		<1	<10	1.1	4 <0.5		5 <1		18	3	150 <5	
759272	19 <1		2490 <1		5 <10		7.2	54 <0.5		17 <1		176	15	390	45
759273	20 <1		2140 <1		6 <10		5.6	29 <0.5		13 <1		205	19	540	27
759274 <1	<1		3450 <1		<1	<10	0.9 <3	<0.5		23 <1		33	5 <20		6
759275	59 <1		3050 <1		16 <10		8	6 <0.5		41 <1		512	46	290	47
759276	21 <1		1200 <1		4 <10		15.1	84 <0.5		13 <1		88	9	30	115
759277	12 <1		4360 <1		3 <10		18.5	7 <0.5		15 <1		131	13	40	33
759278	16 <1		5360 <1		4 <10		3.2	8 <0.5		23 <1		130	11	1230	12
759279	46 <1		3250 <1		9 <10		9.7	8 <0.5		21 <1		238	18	250	28
759280	4 <1		1280 <1		2 <10		6.9	153 <0.5		6 <1		57	7	1130	19
759281	24 <1		2280 <1		6 <10		4	17 <0.5		19 <1		177	11	310	21
759282	28 <1		2350 <1		8 <10		9.3	39 <0.5		25 <1		220	15	20	47
759283	27 <1		3650 <1		6 <10		4.1	13 <0.5		33 <1		189	16	160	22
759284	2 <1		2070 <1		<1	<10	0.6 <3	<0.5		32 <1		19	2	30 <5	
DUP-759181	4 <1		1310 <1		1 <10		1.7	33 <0.5		5 <1		51	4	1440	13
DUP-759204	30 <1		3450 <1		8 <10		8.7	7 <0.5		16 <1		258	19	430	19
DUP-759215	2 <1		6250 <1		<1	<10	1.9	3 <0.5		6 <1		30	4	280	7
DUP-759219	2 <1		2630 <1		1 <10		5.1 <3	<0.5		20 <1		54	6	90	5
DUP-759233	5 <1		5070 <1		2 <10		3.8	28 <0.5		21 <1		57	14	110	9
DUP-759246	2 <1		3050 <1		3 <10		1.2 <3	<0.5		8 <1		109	12	190 <5	
DUP-759268 <1	<1		2970 <1		<1	<10	<0.5	<3	<0.5	3 <1		30	4	40 <5	
DUP-759282	29 <1		2410 <1		8 <10		9.5	39 <0.5		25 <1		221	15	20	47
DUP-759284	3 <1		2120 <1		<1	<10	0.9 <3	<0.5		38 <1		24	2	40 <5	
MMISRM16	6 <1		490 <1		<1	<10	30.4	4 <0.5		63 <1		15	1	430	23
AMIS0169	84	1	100 <1		10 <10		116	562 <0.5		36	2	170	14	300	77
MMISRM18	8 <1		1110 <1		1 <10		34.1	6 <0.5		37 <1		29	1	770	35

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	
759285	2	144		10 <0.1		1570 <1		1290	49	33	139	200	16.9	560	10	6.9	2.2	36	30	10
759286	72	33 <10			0.6	340 <1		1630	9 <5		24	100	8.1	3840	62	48.4	10.5	14	7	56
759287	45	107 <10			0.3	950 <1		1150	16	28	32	100	8.2	1470	29	16.6	6.9	16	18	32
759288	21	270 <10			0.2	1820 <1		450	3	282	275	100	14	1000	81	41.4	15.8	68	37	65
759289	4 >300			10 <0.1		1100 <1		700	63	36	448	100	4.5	1560	38	33.4	4.7	1360	39	22
759290	26	14 <10			0.8	420 <1		1170	2 <5		12 <100		5.8	3670	3	2.3 <0.5		8	8	2
759291	20	164 <10			0.3	1750 <1		850	10	60	22	100	5.5	1730	31	15.5	7.6	16	34	34
759292	18	139 <10			0.2	990 <1		890	10	9	39	100	39.4	2730	24	14.4	5.9	18	19	26
759293	9	159 <10			0.1	1490 <1		580	14	98	79	100	24.6	1460	38	22.2	8.1	42	30	36
759294	8	242 <10			0.1	2720 <1		360	11	66	212 <100		10.5	1150	26	13.8	5.4	29	54	24
759295	14	124 <10			0.2	650 <1		910	30	66	125 <100		19.3	1950	47	33.9	9.1	47	13	45
759296	21	113 <10			0.2	860 <1		570	6	73	37 <100		35.2	1050	40	22	10.4	20	1	41
759297	27	26 <10			0.3	840 <1		980	9 <5		26 <100		10.9	1390	7	4.1	1.4	11	16	7
759298	27	28 <10			0.3	700 <1		830	10 <5		32 <100		0.6	2070	16	10.4	2.4	9	14	14
759299	28	27 <10			0.1	880 <1		1060	11 <5		51 <100		0.7	2770	12	8.2	1.3	10	18	9
759300	53	18 <10			0.1	1410 <1		630	53	9	613 <100		0.6	7170	8	6.2	0.9	11	28	6
759301	50	50 <10			0.2	770 <1		970	26	5	190	200 <0.5		4200	25	22.7	2.7	9	15	18
759302	34	31 <10			0.2	2160 <1		520	12 <5		17 <100		1.4	620	6	2.9	1.5	8	43	7
759303	4	82 <10	<0.1			1080 <1		740	36	20	73 <100		1.6	540	14	11.8	2.4	20	23	12
759304	47	73 <10			0.1	1030 <1		690	103	42	19 <100		1.4	1390	49	32.1	7.5	12	22	39
759305	20	21 <10			0.2	880 <1		600	7	35	786	100	1.4	3200	28	18.5	5.7	13	18	28
759306	7	262 <10			0.1	1710 <1		90	10	74	45 <100		7.8	940	43	21.6	7.5	52	40	34
759307	145	181 <10			0.2	1640 <1		420	23	306	46 <100		4	710	498	271	98.3	36	34	451
759308	34	96 <10			0.2	1720 <1		940	8	31	12 <100		6.4	770	28	14.2	7.8	8	36	33
759309	15	252 <10	<0.1			840 <1		140	35	14	102 <100		8.8	690	42	25.1	4.1	59	23	19
759310	24	246 <10			0.2	2780 <1		270	21	139	57 <100		4.9	1110	50	23.5	7.9	55	62	38
759311	40	227 <10			0.1	1310 <1		120	26	77	53 <100		2.4	530	69	37.6	9.2	40	35	44
759312	1	261 <10	<0.1			2300 <1		220	27 <5		448 <100		3	300	8	13.6 <0.5		83	54	2
759313	2	13 <10	<0.1			100 <1		570	15 <5		28 <100	<0.5		570	1	0.7 <0.5		19	3	1
759314	44	42 <10			0.4	1180 <1		1160	20 <5		64 <100		0.5	2800	26	17.3	3.4	12	24	22
759315	71	80 <10			0.1	380 <1		860	121	12 <5	<100		2.7	610	30	19.1	5.5	8	7	29
759316	5	43 <10	<0.1			380 <1		490	41	11	37 <100	<0.5		1550	10	6.2	2.5	31	10	12
759317	22	17 <10			0.3	650 <1		820	18 <5		40 <100	<0.5		2540	14	10.7	1	7	13	10
759318	37	149 <10	<0.1			1750 <1		480	54	19	33 <100		3.2	540	28	16.1	4.5	26	36	22
759319	44	110 <10	<0.1			570 <1		520	67	23	5 <100		4.4	910	21	11.9	4.1	12	12	21
759320	44	31 <10	<0.1			390 <1		870	89	9	33 <100		2.3	1000	13	7.1	2.9	13	8	15
759321	26	97 <10			0.3	710 <1		480	22	22	37 <100		2	1400	14	8.2	3.1	27	15	15
759322	44	168 <10			0.2	550 <1		240	29	32	45 <100		4.1	600	22	12.6	3.4	39	15	17
759323	17	22 <10			0.5	1290 <1		840	10 <5		24 <100	<0.5		1090	6	3.8	0.7	8	26	4
759324	24	133 <10			0.2	2390 <1		540	30	117	25	100	2.3	1130	50	27.6	11	22	50	53
759325	84	27 <10			0.4	970 <1		750	22 <5		43 <100		0.6	1960	15	9.2	2	10	20	14
759326	45	25 <10			0.2	950 <1		990	17 <5		35 <100	<0.5		2230	9	6.2	0.7	8	19	6

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc		
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5		
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5		
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb		
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5		
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5		
759285	1	<0.5	78.3	13	8	156	89300	8	<0.5	23	190	2.8	200	<1		5	<1	181	2	33	
759286	4	<0.5	5.1	3	<5	91	1030	<5	<0.5	25	204	<0.1	<10		2	3	<1	12	<1	253	
759287	<1	<0.5	8.9	34	<5	139	1880	<5	<0.5	61	258	0.2	20	<1		12	<1	100	<1	67	
759288	<1	<0.5	16.9	118	<5	141	4880	<5	<0.5	158	280	0.8	50		1	34	<1	144	<1	299	
759289	<1		0.6	42.1	17	8	143	10300	<5	0.7	35	479	2.6	260	<1		7	<1	74	<1	150
759290	6	<0.5	10.6	<1		5	116	580	<5	<0.5	<1	84	<0.1	<10		1	<1	<1	53	3	27
759291	<1	<0.5	25.5	48	<5	123	510	<5	<0.5	73	51	0.3	20	<1		14	<1	192	<1	75	
759292	<1	<0.5	8.1	31	<5	109	1200	<5	<0.5	51	201	0.2	20	<1		10	<1	68	<1	104	
759293	<1	<0.5	20.6	51	<5	74	750	<5	<0.5	77	223	0.2	30	<1		16	<1	186		108	
759294	<1	<0.5	59.9	37	<5	65	1520	<5	<0.5	53	181	0.5	80	<1		11	<1	245	<1	80	
759295	<1	<0.5	17	41	<5	97	6660	<5	<0.5	74	446	0.5	30	<1		14	<1	62	<1	132	
759296	<1	<0.5	4.2	38	<5	138	400	<5	<0.5	94	101	0.1	20	<1		16	<1	34	<1	119	
759297	<1	<0.5	9.1	<1	<5	93	790	<5	<0.5	5	144	<0.1	<10	<1	<1	<1	<1	27	<1	19	
759298	8	<0.5	8.3	<1	<5	103	1080	<5	<0.5	6	78	<0.1	<10	<1	<1	<1	<1	18	<1	37	
759299	13	<0.5	7.7	<1	<5	174	1540	<5	<0.5	2	124	<0.1	<10		1	<1	<1	31	<1	34	
759300	17	<0.5	12	<1	<5	120	26000		26	<0.5	3	812	<0.1		40	1	<1	<1	38	2	15
759301	31	<0.5	17.8	1	<5	190	5460		26	<0.5	8	307	<0.1		20	2	<1	<1	30	<1	62
759302	<1	<0.5	24	6	<5	175	750	<5	<0.5	12	73	0.2	<10	<1		2	<1	186	<1	10	
759303	<1	<0.5	139	11	<5	48	21200		11	<0.5	21	216	1.3	50	<1	4	<1	241		45	
759304	<1	<0.5	15.6	30	<5	106	1770	<5	<0.5	53	437	0.1	40	<1		10	<1	81	<1	66	
759305	6	<0.5	10	20	<5	256	12000		11	<0.5	46	274	<0.1		10	2	8	<1	39	1	47
759306	<1	<0.5	19.6	31	<5	14	1880	<5	<0.5	63	77	0.6	90	<1		12	<1	127	<1	95	
759307	2	<0.5	17.6	231	<5	72	2390	<5	<0.5	533	810	1	40	<1		89	<1	121	<1	528	
759308	<1	<0.5	15.7	31	<5	127	510	<5	<0.5	56	50	0.1	<10	<1		10	<1	98	<1	70	
759309	<1	<0.5	9.3	5	<5	26	590	<5	<0.5	22	131	0.6	30	<1		3	<1	73	<1	109	
759310	<1	<0.5	68.9	64	<5	29	930	<5	<0.5	76	98	1	90	<1		17	<1	219	<1	104	
759311	<1	<0.5	12.9	37	<5	23	730	<5		0.7	81	83	0.8	90	<1		16	<1	92	<1	91
759312	<1	<0.5	46.1	2	<5	32	3560	<5	<0.5	3	114	0.6	20	<1	<1	<1	<1	101	<1	62	
759313	<1	<0.5	21.3	2	<5	41	11000		27	<0.5	3	159	0.2	10	<1	<1	<1	45		6 <5	
759314	14	<0.5	10.7	1	<5	71	2040	<5	<0.5	9	86	<0.1	<10	<1		1	<1	47	<1	65	
759315	<1	<0.5	11.9	24	<5	31	1820	<5	<0.5	44	467	0.2	<10	<1		8	<1	62	<1	23	
759316	<1	<0.5	11.1	23	<5	30	14300		45	<0.5	32	345	0.2	20	<1		6	<1	8	9	11
759317	23	<0.5	9.8	<1	<5	78	1250		8	<0.5	<1	128	<0.1	10	<1	<1	<1	22	<1	26	
759318	<1	<0.5	9.7	33	<5	27	610	<5	<0.5	42	209	0.1	70	<1		9	<1	112	<1	66	
759319	<1	<0.5	17.8	32	<5	28	930	<5	<0.5	40	275	0.3	10	<1		8	<1	111	<1	42	
759320	<1	<0.5	27.7	8	<5	36	6350		7	<0.5	19	438	0.3	<10	<1		3	<1	62	<1	7
759321	<1	<0.5	17.1	20	<5	33	820	<5	<0.5	30	142	0.2	20	<1		6	<1	62	<1	28	
759322	<1	<0.5	33.3	23	<5	14	310		6	<0.5	29	68	0.5	50	<1		6	<1	200	<1	58
759323	8	<0.5	15.4	<1	<5	32	1670		13	<0.5	<1	65	<0.1	<10	<1	<1	<1	42	<1	22	
759324	<1	<0.5	14.2	81	<5	51	660	<5	<0.5	111	146	0.3	30	<1		23	<1	158	<1	74	
759325	3	<0.5	17.8	<1	<5	36	2620		8	<0.5	5	158	<0.1	<10	<1	<1	<1	53	<1	29	
759326	12	<0.5	18.4	<1	<5	49	1280		9	<0.5	<1	99	<0.1		10	<1	<1	34	<1	23	



## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5	
	759285	7 <1	6880 <1			2 <10		4	149 <0.5		32 <1		70	7	7860	21
	759286	18 <1	7400 <1			9 <10		3.4	4 <0.5		86 <1		547	44	60	26
	759287	20 <1	6810 <1			5 <10		3.1	9 <0.5		35 <1		248	12	880	19
	759288	46 <1	2510 <1			13 <10		15.2	150 <0.5		51 <1		492	33	430	128
	759289	13 <1	4900 <1			5 <10		9.9	734 <0.5		32 <1		310	33	7350	56
	759290	<1	6190 <1		<1	<10	<0.5		3 <0.5		8 <1		26	2 <20		6
	759291	22 <1	4590 <1			6 <10		4.5	13 <0.5		24 <1		227	11	140	32
	759292	16 <1	4820 <1			4 <10		2.1	12 <0.5		33 <1		220	11	140	21
	759293	24 <1	2860 <1			6 <10		6.4	48 <0.5		25 <1		312	18	290	59
	759294	16 <1	1690 <1			4 <10		5.7	249 <0.5		8 <1		185	10	440	52
	759295	24 <1	4130 <1			8 <10		4.3	18 <0.5		26 <1		445	28	1150	35
	759296	30 <1	2520 <1			7 <10		5.2	26 <0.5		22 <1		239	16	80	48
	759297	3 <1	5410 <1			1 <10		3.3	3 <0.5		18 <1		40	4	20	8
	759298	5 <1	6650 <1			3 <10		1.8	8 <0.5		30 <1		132	8	210	13
	759299	2 <1	8460 <1			2 <10		1	8 <0.5		17 <1		96	6	270	7
	759300	2 <1	6180 <1			1 <10		1.1	18 <0.5		9 <1		62	6	110	6
	759301	5 <1	3620 <1			4 <10		1.8	5 <0.5		14 <1		183	22	740	11
	759302	4 <1	3670 <1			1 <10		1.5	6 <0.5		23 <1		44	2	70	7
	759303	7 <1	2390 <1			2 <10		2	25 <0.5		16 <1		114	13	1760	13
	759304	19 <1	3450 <1			7 <10		1.5 <3	<0.5		24 <1		416	23	150	13
	759305	15 <1	3360 <1			5 <10		4.6	10 <0.5		23 <1		186	16	50	12
	759306	20 <1	720 <1			7 <10		7	467 <0.5		7 <1		277	15	150	77
	759307	229 <1	1490 <1			83 <10		19.7	103 <0.5		27	2	4070	163	490	74
	759308	20 <1	3870 <1			5 <10		2.6	7 <0.5		5 <1		219	10	50	25
	759309	10 <1	850 <1			5 <10		1.9	212 <0.5		3 <1		279	18	1470	28
	759310	24 <1	2120 <1			8 <10		10.3	391 <0.5		9 <1		289	16	250	80
	759311	25 <1	820 <1			10 <10		5.1	749 <0.5		7 <1		463	27	270	73
	759312	1 <1	990 <1		<1	<10		1.7	167 <0.5		2 <1		59	21	1890	36
	759313	<1	1060 <1		<1	<10	<0.5	<3	<0.5		26 <1		12 <1		540 <5	
	759314	7 <1	5050 <1			4 <10		1.9	4 <0.5		9 <1		206	14	210	14
	759315	16 <1	1850 <1			5 <10		1.3 <3	<0.5		13 <1		355	14	40	8
	759316	8 <1	1100 <1			2 <10		1.5	14 <0.5		33 <1		103	5	120	7
	759317	1 <1	3930 <1			2 <10		0.5	4 <0.5		5 <1		116	8	280	5
	759318	13 <1	1720 <1			4 <10		4	15 <0.5		10 <1		225	11	460	20
	759319	12 <1	1340 <1			3 <10		1.7	17 <0.5		8 <1		196	8	540	12
	759320	8 <1	2180 <1			2 <10		1.1	5 <0.5		8 <1		126	5	470 <5	
	759321	9 <1	1230 <1			3 <10		1.4	18 <0.5		10 <1		127	6	270	11
	759322	9 <1	610 <1			3 <10		5.4	345 <0.5		9 <1		157	9	60	41
	759323	1 <1	3160 <1		<1	<10		0.7 <3	<0.5		6 <1		41	3	40	9
	759324	34 <1	2010 <1			9 <10		7.2	20 <0.5		18 <1		395	21	140	35
	759325	4 <1	3400 <1			2 <10		2.3	5 <0.5		18 <1		107	7	20	9
	759326	<1	4020 <1			1 <10		0.7 <3	<0.5		7 <1		65	4	180 <5	

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
759327	8	208	20	0.1	1740	<1	440	91	94	167	100	2	1560	65	45.5	7.7	806	40	40	
759328	41	45	10	0.3	1000	<1	950	23	77	235	100	<0.5	3030	92	68.4	14.5	11	20	84	
759329	40	20	<10	0.1	790	<1	910	29	<5	216	<100	<0.5	2130	15	11.4	1.1	7	16	9	
759330	37	24	<10	0.3	700	<1	970	12	<5	34	<100	<0.5	2230	23	15	2.8	7	14	19	
759331	61	14	<10	0.2	850	<1	850	32	<5	88	<100	<0.5	1260	4	2.3	<0.5	5	18	3	
759332	28	71	<10	0.3	1490	<1	830	12	76	13	<100		1.1	2350	36	18.9	8	10	31	40
759333	79	177	10	0.2	640	<1	310	19	242	51	100	4.8	850	27	14	7	29	21	31	
759334	38	43	<10	1.1	710	<1	800	16	<5	15	<100	0.9	500	5	2.7	0.9	9	15	5	
759335	42	15	<10	0.2	630	<1	720	34	<5	65	<100	0.5	1590	5	2.6	0.7	6	13	4	
759336	59	39	<10	0.3	830	<1	900	28	<5	231	<100	<0.5	3560	10	8.3	1	9	18	7	
759337	20	70	<10	0.4	1920	<1	740	9	49	16	<100	0.9	3480	67	36.2	13.5	10	41	72	
759338	34	128	<10	0.2	3090	<1	620	18	101	19	100	4.5	550	46	23.6	11.5	21	67	54	
759339	38	127	<10	0.4	2950	<1	300	8	39	36	<100	5.5	1520	64	29.9	16.5	9	63	76	
759340	35	195	<10	0.1	940	<1	90	23	21	74	<100	5.6	450	16	9	2	56	25	10	
759341	12	>300	<10	<0.1	880	<1	270	9	<5	171	<100	7.8	140	5	11	<0.5	89	21	1	
759342	23	296	10	0.1	2400	<1	280	21	52	158	100	4.8	1000	35	20.3	5.6	79	55	26	
759343	77	157	10	0.5	2690	<1	620	14	78	32	100	4	2150	89	43.8	22.4	14	57	105	
759344	73	141	10	0.3	1460	<1	590	27	103	23	100	13.1	1270	102	49.5	20.9	12	34	102	
759345	66	27	<10	0.3	470	<1	990	307	<5	81	<100	<0.5	4220	12	8.3	1.1	7	10	9	
759346	45	124	<10	<0.1	830	<1	640	111	19	30	<100	2.4	670	23	13.6	4.3	16	19	22	
759347	57	170	<10	0.1	520	<1	330	59	19	42	<100	3.3	620	16	9	2.4	45	16	12	
759348	66	231	10	0.1	750	<1	60	89	26	92	<100	10.2	720	21	12.2	2.5	82	23	12	
759349	13	>300	<10	<0.1	1020	<1	470	48	113	65	100	6.6	980	87	52.1	10.8	43	25	53	
759350	21	109	20	0.3	130	<1	470	233	205	33	<100	3.3	2780	430	269	84.6	42	4	437	
759351	65	59	<10	0.4	1060	<1	690	20	18	8	<100	0.8	1770	27	13.1	7	11	22	33	
759352	28	18	<10	0.2	1400	<1	710	13	<5	214	<100	<0.5	2960	6	3.9	0.6	7	29	4	
759353	26	276	10	<0.1	620	<1	60	31	36	82	<100	8.1	680	39	22.6	5.8	63	21	29	
759354	14	252	<10	<0.1	1800	<1	60	62	9	145	<100	4.3	690	16	11.6	1.4	78	43	6	
759355	38	152	<10	<0.1	1790	<1	390	56	13	30	<100	4.2	700	16	8.9	2.2	21	40	12	
759356	19	53	20	0.2	840	<1	380	7	8	8	<100	5.6	2310	5	2.7	1.4	14	18	6	
759357	17	>300	20	0.1	1920	<1	710	101	69	146	200	10.3	3220	36	21.1	6.5	192	46	30	
759358	22	293	<10	<0.1	460	<1	40	63	<5	117	<100	16.8	2040	11	9.2	<0.5	69	14	2	
759359	1	>300	<10	<0.1	440	<1	60	7	<5	104	<100	2.7	390	<1	1.7	<0.5	235	14	<1	
759360	67	95	<10	<0.1	160	<1	390	42	13	6	<100	6.2	1560	26	18	3.6	5	4	19	
759361	29	178	<10	<0.1	350	<1	300	77	11	94	<100	1.4	850	20	11.5	2.8	24	12	14	
759362	26	138	<10	<0.1	1000	<1	510	63	17	24	<100	6.1	1410	27	16.5	4.3	12	22	22	
759363	75	113	<10	0.1	1400	<1	490	66	18	10	<100	5.4	1180	14	8.5	2.8	6	30	14	
759364	6	35	<10	<0.1	370	<1	630	58	7	23	<100	<0.5	320	5	3.1	1.1	10	8	5	
759365	28	27	<10	0.4	700	<1	870	17	<5	130	<100	<0.5	6140	23	17.3	2.6	11	14	17	
759366	13	>300	<10	<0.1	820	<1	<10	18	25	73	<100	6.3	810	28	16.2	2.9	46	29	14	
759367	12	265	<10	<0.1	490	<1	60	34	20	104	<100	11.8	1000	19	10.8	2.2	45	20	10	
759368	8	45	<10	0.5	2310	<1	690	4	<5	7	<100	2.3	1940	4	1.8	0.9	7	47	4	
759369	49	127	10	0.4	4120	<1	370	13	132	20	<100	12.1	3630	50	22.4	12.9	14	88	60	
759370	66	162	<10	0.1	1510	<1	280	58	44	35	<100	5.4	830	50	28.8	8.3	19	33	42	
759371	36	213	<10	<0.1	370	<1	100	127	27	260	<100	3.5	1580	47	26.4	4.7	12	9	24	

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759327	<1	<0.5	33.2	46 <5		48	9480 <5		1.3	68	284	1.5	70 <1		14 <1		83	2	134
759328	28 <0.5		17.2	42 <5		163	6230	12 <0.5		99	324	0.1	20	1	17 <1		21 <1		91
759329	27 <0.5		10.9 <1		8	154	5390	22 <0.5	<1		400 <0.1		10	1 <1	<1		23 <1		28
759330	10 <0.5		18 <1		5	215	1040	8 <0.5		6	137 <0.1	<10	<1	<1	<1		11 <1		24
759331	6 <0.5		14.5 <1	<5		47	3930 <5	<0.5	<1		103 <0.1	<10	<1	<1	<1		20 <1		7
759332	8 <0.5		19.7	31 <5		169	390 <5	<0.5		62	73 <0.1		20 <1		11 <1		67 <1		48
759333	<1	<0.5	19	58 <5		17	2010 <5	<0.5		78	22	0.6	30 <1		17 <1		133 <1		59
759334	<1	<0.5	13.4 <1	<5		44	780 <5	<0.5		3	59 <0.1	<10	<1	<1	<1		52 <1		13
759335	11 <0.5		13.9 <1	<5		52	3230	16 <0.5	<1		101 <0.1		10 <1	<1	<1		43 <1		6
759336	16 <0.5		14.1 <1	<5		52	5030	50 <0.5		2	221 <0.1		10	1 <1	<1		38 <1		47
759337	18 <0.5		20.4	46 <5		164	430 <5	<0.5		104	75	0.1	20	1	18 <1		77 <1		98
759338	<1	<0.5	16.8	71 <5		52	1030 <5	<0.5		116	69	0.5	30 <1		23 <1		139 <1		39
759339	<1	<0.5	19.2	87 <5		26	570 <5	<0.5		154	24	0.2	40 <1		29 <1		152 <1		83
759340	<1	<0.5	33.9	10 <5		7	1480 <5	<0.5		17	62	0.5	70 <1		3 <1		180 <1		39
759341	<1	<0.5	10.8	1 <5		42	1660 <5	<0.5		2	71	0.2 <10	<1	<1	<1		161 <1		61
759342	<1	<0.5	36.4	35 <5		26	5560 <5	<0.5		50	74	1.9	100 <1		10 <1		171 <1		85
759343	<1	<0.5	23.7	113 <5		105	810 <5	<0.5		194	45	0.4	30 <1		36 <1		137 <1		135
759344	<1	<0.5	19.1	97 <5		89	1480 <5	<0.5		177	42	0.3	20 <1		33 <1		129 <1		106
759345	12 <0.5		14.5 <1	<5		41	1980	87 <0.5	<1		119 <0.1	<10	<1	<1	<1		29 <1		31
759346	<1	<0.5	8.6	24 <5		28	2010	8 <0.5		38	155	0.2	30 <1		7 <1		74 <1		43
759347	<1	<0.5	25.5	13 <5		17	1060	6 <0.5		21	92	0.5	40 <1		4 <1		81 <1		42
759348	<1	<0.5	38.1	13 <5		7	3660	6 <0.5		22	95	1.2	80 <1		4 <1		259 <1		58
759349	<1	<0.5	8.3	45 <5		290	3790 <5	<0.5		90	1090	0.7	40 <1		17 <1		29 <1		235
759350	48 <0.5		14	285 <5		27	2540	17 <0.5		653	2160	0.5	10 <1		110 <1		48	2	432
759351	1 <0.5		11.2	30 <5		45	460	6 <0.5		55	52	0.1 <10	<1	<1	10 <1		59 <1		32
759352	16 <0.5		15.1 <1	<5		28	4800	7 <0.5	<1		79 <0.1	<10	<1	<1	<1		28 <1		18
759353	<1	<0.5	10.8	21 <5		6	4080 <5	<0.5		48	162	1.8	60 <1		9 <1		162 <1		66
759354	<1	<0.5	24.4	4 <5		11	1210 <5	<0.5		10	181	0.8	60 <1		2 <1		116 <1		39
759355	<1	<0.5	24.6	12 <5		46	630 <5	<0.5		20	171	0.3	40 <1		4 <1		90 <1		33
759356	<1	<0.5	72.7	9 <5		38	1250	7 <0.5		15	116	2.3 <10	<1		3 <1		193	1	13
759357	1 <0.5		101	37 <5		66	12400	10	1.3	57	720	4.3	60 <1		12 <1		194	2	142
759358	<1	<0.5	40	2 <5		14	1850 <5	<0.5		2	126	1	40 <1	<1	<1		144 <1		49
759359	<1	<0.5	47.6 <1	<5		16	3590 <5	<0.5	<1		46	1 <10	<1	<1	<1		50 <1		31
759360	<1	<0.5	14.4	24 <5		20	3290	19 <0.5		32	205	0.2	10 <1		6 <1		40 <1		44
759361	<1	<0.5	23.6	14 <5		23	1030 <5	<0.5		22	189	0.3	70 <1		4 <1		45 <1		35
759362	<1	<0.5	26.7	33 <5		52	2280 <5	<0.5		37	193	0.2	50 <1		8 <1		165 <1		49
759363	<1	<0.5	189	21 <5		108	1660	10 <0.5		28	161	0.3	30 <1		6 <1		305 <1		26
759364	<1	<0.5	33.7	5 <5		46	3060	6 <0.5		9	140	0.2	20 <1		2 <1		67 <1	<5	
759365	24 <0.5		30.2 <1	<5		59	3980	30 <0.5		6	71 <0.1	<10		1 <1	<1		27 <1		72
759366	<1	<0.5	11.1	9 <5		2	1900 <5		0.7	22	85	1.2	90 <1		4 <1		137 <1		52
759367	<1	<0.5	19.1	10 <5		5	1490 <5	<0.5		19	154	0.8	70 <1		4 <1		180 <1		27
759368	<1	<0.5	15.3	2 <5		21	170 <5	<0.5		7	28 <0.1	<10	<1		1 <1		91 <1		8
759369	4 <0.5		49.2	157 <5		39	1470 <5	<0.5		153	37	0.2	50 <1		33 <1		175 <1		102
759370	<1	<0.5	12.5	66 <5		8	3000 <5	<0.5		83	99	0.2	80 <1		17 <1		116 <1		76
759371	<1	<0.5	14.7	10 <5		9	3110 <5	<0.5		33	141	0.3	100 <1		6 <1		78 <1		26

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759327	22 <1		1880 <1			9 <10	15.7	479 <0.5		12 <1		537	38	1130	78
759328	36 <1		4660 <1			14 <10	5.1	9 <0.5		14 <1		605	57	360	13
759329	2 <1		3140 <1			2 <10	0.8	4 <0.5		7 <1		100	10	280 <5	
759330	5 <1		4780 <1			3 <10	1.5	5 <0.5		12 <1		159	11	230	5
759331	<1	<1	3360 <1		<1	<10	<0.5	<3	<0.5	2 <1		28	2	170 <5	
759332	21 <1		4640 <1			6 <10	5.2	9 <0.5		9 <1		239	13	540	18
759333	22 <1		850 <1			5 <10	10.5	308 <0.5		7	1	160	11	40	62
759334	2 <1		3370 <1		<1	<10	2.4 <3	<0.5		8 <1		33	2	220	8
759335	1 <1		3060 <1		<1	<10	<0.5	<3	<0.5	1 <1		36	2	220 <5	
759336	2 <1		3120 <1			1 <10	0.9	8 <0.5		10 <1		62	8	300 <5	
759337	37 <1		4130 <1			12 <10	5.7	9 <0.5		15 <1		396	24	250	16
759338	35 <1		2170 <1			9 <10	4.6	14 <0.5		6 <1		341	14	800	18
759339	49 <1		1660 <1			12 <10	5.4	19 <0.5		9 <1		398	20	40	31
759340	5 <1		350 <1			2 <10	5.1	420 <0.5		5 <1		98	7	210	33
759341	<1	<1	1410 <1		<1	<10	1.9	16 <0.5		3 <1		32	19	210	10
759342	16 <1		900 <1			5 <10	8.6	432 <0.5		7 <1		262	14	2150	47
759343	64 <1		2630 <1			16 <10	6	28 <0.5		10 <1		620	29	130	39
759344	62 <1		3690 <1			18 <10	6.4	19 <0.5		12 <1		634	31	410	42
759345	1 <1		3560 <1			2 <10	0.8 <3	<0.5		8 <1		93	6	370 <5	
759346	12 <1		1610 <1			4 <10	2.3	7 <0.5		19 <1		189	10	180	15
759347	7 <1		700 <1			2 <10	3.5	540 <0.5		4 <1		115	7	190	30
759348	7 <1		380 <1			3 <10	4.5	325 <0.5		6 <1		133	9	500	27
759349	28 <1		1960 <1			12 <10	5.5	20 <0.5		10 <1		646	39	760	35
759350	241 <1		1160 <1			73 <10	4.9	84 <0.5		25	2	3650	221	1170	26
759351	19 <1		2670 <1			5 <10	5.3	8 <0.5		18 <1		191	9 <20		17
759352	1 <1		2510 <1		<1	<10	<0.5	<3	<0.5	2 <1		46	3	200 <5	
759353	17 <1		310 <1			6 <10	6.3	449 <0.5		6 <1		281	18	620	32
759354	4 <1		440 <1			2 <10	2	323 <0.5		3 <1		107	9	1490	11
759355	6 <1		1680 <1			2 <10	2.2	29 <0.5		6 <1		121	6	1110	9
759356	4 <1		1030 <1		<1	<10	2.1	31 <0.5		5 <1		37	2	140	7
759357	18 <1		1750 <1			6 <10	9.9	823 <0.5		9 <1		260	17	3840	69
759358	<1	<1	230 <1			1 <10	1.2	200 <0.5		<1	<1	73	8	1990	13
759359	<1	<1	240 <1		<1	<10	0.7	139 <0.5		1 <1		6	3	310	10
759360	10 <1		850 <1			4 <10	0.7 <3	<0.5		20 <1		277	13	140	7
759361	7 <1		1010 <1			3 <10	2.4	62 <0.5		6 <1		167	8	330	7
759362	11 <1		1520 <1			4 <10	2.6	14 <0.5		13 <1		211	11	80	11
759363	8 <1		1480 <1			2 <10	1.6	9 <0.5		17 <1		116	6	740	8
759364	3 <1		1310 <1		<1	<10	<0.5	6 <0.5		70 <1		42	2	150 <5	
759365	5 <1		3350 <1			3 <10	1	17 <0.5		21 <1		182	15	340	8
759366	7 <1		120 <1			4 <10	4.8	787 <0.5		6 <1		175	12	570	26
759367	6 <1		190 <1			3 <10	2.7	211 <0.5		5 <1		117	8	1080	22
759368	3 <1		1970 <1		<1	<10	3.1	4 <0.5		6 <1		19	1	50	9
759369	40 <1		4080 <1			10 <10	7.9	187 <0.5		15 <1		288	14	560	40
759370	24 <1		890 <1			8 <10	5.4	27 <0.5		15 <1		384	20	570	18
759371	12 <1		540 <1			6 <10	1	30 <0.5		2 <1		311	17	2380 <5	

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
759372	23 >300	174	<10	<0.1	870 <1		100	31	10	90 <100			1.3	750	20	12.6	1.5	47	27
759373	199	174	10	0.2	480 <1		610	3800	540	28 <100			19.6	4140	303	187	66.1	26	10
759374	251	45	10	0.4	890 <1		1440	171	107	539 <100			1.8	2630	44	22.8	10.8	9	19
759375	78	13	10	0.3	1110 <1		1330	92 <5		64 <100			4.1	4020	21	12.6	1.5	9	23
759376	67	40 <10		0.4	1770 <1		930	65 <5		11 <100		<0.5	1260	13	7.3	2.5	9	37	14
759377	25	256 <10		0.1	710 <1		60	130	64	43 <100			4.9	900	50	27.1	7.3	30	21
759378	41	262 <10		<0.1	1850 <1		420	411	38	33 <100			7.4	740	77	42.2	11.2	27	42
759379	18	255	10	0.2	3840 <1		370	29	144	107 <100			4.1	4130	75	44.1	11.8	59	84
759380	59 >300	<10		0.1	500 <1		20	62	52	94 <100			4.6	1860	47	24.1	6.3	50	20
759381	30	162	10	0.3	3050 <1		260	10	66	20 <100			5.5	3960	23	11.8	6.9	9	66
759382	25	200	10	0.2	2350 <1		220	16	107	58 <100			4.8	2360	34	17.4	8.9	43	58
759383	29	21	10	0.1	1290 <1		870	21 <5		69 <100		<0.5	4220	6	3.9	0.5	7	27	4
759384	32	162 <10		0.3	3000 <1		380	15	54	17 <100			8.5	1960	24	12.7	5.3	11	64
759385	30	41 <10		0.4	870 <1		850	15 <5		55 <100		<0.5	5330	21	15	2.8	8	18	18
759386	9	121 <10		0.3	3930 <1		390	7	18	11 <100			3.4	1610	13	6.9	3.5	7	84
759387	24	115 <10		0.3	1880 <1		660	64	68	37 <100			1.2	2000	27	15	5.9	17	39
759388	3	93 <10		<0.1	820 <1		730	54	15	48 <100			0.5	610	18	13	3	40	20
759389	8 >300	<10		<0.1	960 <1		170	43	7	67 <100		<0.5	780	16	11.8	1.1	78	29	6
759390	122	52 <10		0.3	1350 <1		730	23	24	51 <100			1.2	2290	9	4.5	2.4	8	28
759391	143	40 <10		0.2	450 <1		620	37	31	20 <100			0.8	1400	9	5.4	2.3	7	10
759392	20	67 <10		<0.1	820 <1		730	63	14	64 <100			0.6	1100	10	6.2	2.2	10	19
759393	55	116	10	0.3	3100 <1		1020	27	13	132 <100			0.8	5010	14	11.1	2.2	12	64
759394	63	204	10	0.3	1570 <1		490	53	64	29 <100			9.8	3410	112	75.5	16.3	33	35
759395	86	132	10	0.9	1680 <1		1070	25	180	26 <100			11.6	2310	75	47.1	16.3	13	34
DUP-759292	18	125 <10		0.2	960 <1		810	9	9	40	100	39.3	2630	23	13.6	5.8	16	18	25
DUP-759305	20	20 <10		0.3	800 <1		590	7	36	804 <100			1.2	3040	28	18.9	5.8	11	16
DUP-759319	43	106 <10		<0.1	570 <1		500	66	25 <5	<100			4.1	850	20	11	4.1	12	12
DUP-759329	40	20 <10		0.1	820 <1		930	27 <5		178 <100		<0.5	2050	16	11.6	1.3	7	16	11
DUP-759341	12 >300	<10		<0.1	930 <1		310	9 <5		187 <100			7.4	150	5	10.7 <0.5		95	23
DUP-759356	18	51	20	0.3	860 <1		370	6	6	6 <100			6.3	2310	5	2.5	1.2	14	19
DUP-759365	26	24 <10		0.4	570 <1		860	14 <5		79 <100		<0.5	6130	13	10.1	1.1	9	11	9
DUP-759382	28	197	10	0.2	2280 <1		210	20	109	67 <100			4.5	2240	36	18.7	8.5	54	56
DUP-759389	8 >300	<10		<0.1	990 <1		180	45	7	73 <100		<0.5	830	17	12.4	1.2	84	31	6
MMISRM16	19	60	30	22.4	100 <1		310	5	21	83	100	16.9	1000	3	1.2	1.2 <1		2	5
AMISO169	8	73	30	0.7	1010 <1		50	2	654	138	200	11	5000	32	13.7	11.4	47	36	56
MMISRM18	27	41	30	9.2	230 <1		270	107	31	114	100	9	1360	5	2	1.6	5	5	8
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
759145	182	21 <10		0.5	510 <1		390	23	83	74 <100		<0.5	2020	75	44.9	21.8	15	2	102
759146	11	91 <10		0.4	2010 <1		190	5	30	31 <100			1.7	120	5	2.2	1.5	36	3
759147	8	46 <10		0.3	2600 <1		160	3	131	27 <100			2.8	350	10	4.3	3.1	15	2
759148	20	153 <10		0.3	2760 <1		130	10	102	47	200	2.6	310	13	5.4	3.6	76	6	13
759149	184	10 <10		0.8	180 <1		620	9	10	81 <100		<0.5	1690	3	1.7	0.6	4 <1		3
759150	38	137 <10		0.3	1190 <1		230	8	208	45	100	1	350	31	15.4	8.2	54	5	34

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759372	<1	<0.5	14.5	4 <5	8	960 <5	<0.5	11	148	1.1	60 <1	2 <1	95 <1	23					
759373	110 <0.5	15.3	386 <5	23	3950	21 <0.5	602	2300	0.2 <10	<1	118 <1	93	1	302					
759374	31 <0.5	9.3	16 <5	94	6930	36 <0.5	51	472 <0.1	30 <1	7 <1	27 <1	17							
759375	18 <0.5	21.2 <1	<5	99	4270	23 <0.5	<1	150 <0.1	10 <1	<1	<1	43	1	11					
759376	3 <0.5	19.7	2 <5	51	560	15 <0.5	11	63 <0.1	<10	<1	1 <1	24 <1	24						
759377	<1	<0.5	24.8	35 <5	5	1250 <5	<0.5	70	237	0.4	40 <1	13 <1	178 <1	63					
759378	<1	<0.5	8.3	58 <5	34	1840 <5	<0.5	98	219	0.3	70 <1	18 <1	86 <1	74					
759379	<1	<0.5	36.8	105 <5	58	6040 <5	<0.5	114	256	0.8	120 <1	23 <1	100 <1	167					
759380	<1	<0.5	21.8	26 <5	3	1080 <5	0.5	53	371	2	80 <1	10 <1	155 <1	65					
759381	<1	<0.5	20.5	78 <5	14	880 <5	<0.5	78	33	0.2	40 <1	17 <1	101 <1	65					
759382	<1	<0.5	14.6	95 <5	13	3780 <5	0.6	99	48	0.8	60 <1	21 <1	119 <1	82					
759383	14 <0.5	18.2 <1	<5	50	3100	20 <0.5	<1	94 <0.1	10	1 <1	<1	26 <1	15						
759384	<1	<0.5	31.5	52 <5	31	800 <5	<0.5	53	32	0.2	40 <1	11 <1	175 <1	66					
759385	16 <0.5	35.5	1 <5	77	1910	12 <0.5	7	100 <0.1	20	1 <1	<1	24 <1	31						
759386	<1	<0.5	19.8	31 <5	26	630 <5	<0.5	35	41	0.1	40 <1	7 <1	146 <1	25					
759387	<1	<0.5	12	41 <5	46	1900	14 <0.5	54	239	0.1	40 <1	11 <1	40 <1	52					
759388	<1	<0.5	16.8	18 <5	37	6170 <5	<0.5	23	89	0.4	100 <1	5 <1	18 <1	25					
759389	<1	<0.5	15.4	5 <5	25	2580 <5	<0.5	8	81	0.8	60 <1	1 <1	8 <1	35					
759390	<1	<0.5	17.8	14 <5	36	4780	13 <0.5	21	91	0.2	10 <1	4 <1	103 <1	19					
759391	1 <0.5	10.2	10 <5	30	9520	46 <0.5	16	356	0.1	10 <1	3 <1	40	1	8					
759392	<1	<0.5	20.7	15 <5	32	9350	19 <0.5	18	246	0.2	70 <1	3 <1	17 <1	8					
759393	10 <0.5	17.3	6 <5	58	6830	22 <0.5	10	208	0.1	40	2	2 <1	58 <1	49					
759394	<1	<0.5	15.9	142 <5	27	2620 <5	<0.5	143	523	0.3	100 <1	29 <1	88 <1	186					
759395	3 <0.5	11.4	154 <5	63	2800 <5	<0.5	154	398	0.1	30 <1	31 <1	41 <1	124						
DUP-759292	<1	<0.5	7.2	29 <5	98	1190 <5	<0.5	51	192	0.2	20 <1	10 <1	65 <1	89					
DUP-759305	6 <0.5	9.8	19 <5	250	13400	13 <0.5	45	272 <0.1	10	2	8 <1	39	1	44					
DUP-759319	<1	<0.5	17.2	31 <5	27	870 <5	<0.5	39	267	0.3	10 <1	8 <1	107 <1	39					
DUP-759329	24 <0.5	11.1 <1	7	153	4860	21 <0.5	1	342 <0.1	10	1 <1	<1	23 <1	27						
DUP-759341	<1	0.5	12.7	1 <5	48	1810 <5	<0.5	2	79	0.3 <10	<1	<1	171 <1	67					
DUP-759356	<1	<0.5	74.7	8 <5	37	1040	7 <0.5	14	99	2.4 <10	<1	3 <1	193	1	11				
DUP-759365	25 <0.5	31.5 <1	<5	60	2110	31 <0.5	<1	61 <0.1	<10	1 <1	<1	27 <1	41						
DUP-759382	<1	<0.5	15.1	85 <5	14	4270 <5	0.5	91	58	0.8	70 <1	19 <1	120 <1	79					
DUP-759389	<1	<0.5	16.7	5 <5	27	2840 <5	<0.5	8	87	0.9	60 <1	1 <1	8 <1	38					
MMISRM16	16 <0.5	53.6	8 <5	44	160	66	0.5	18	335	0.4	100	30	4 <1	465 <1	13				
AMISO169	<1	<0.5	55.2	498 <5	36	4350 <5	4.5	350	562	3.2	110 <1	98 <1	320 <1	68					
MMISRM18	5 <0.5	40	13 <5	116	930	47 <0.5	23	830	1	360	18	5	7	225 <1	6				
BLANK	<1	<0.5	0.1 <1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5		
BLANK	<1	<0.5	0.1 <1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5		
BLANK	<1	<0.5	0.2 <1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5		
759145	1 <0.5	19.7	81 <5	58	4080	6	0.5	234	173	1.7	30 <1	38 <1	15 <1	41					
759146	<1	<0.5	19.7	10 <5	8	890 <5	<0.5	17	21	3.9	50 <1	4 <1	108 <1	14					
759147	<1	<0.5	22.4	23 <5	24	810 <5	<0.5	42	13	0.5	30 <1	9 <1	117 <1	19					
759148	<1	<0.5	19.6	39 <5	7	1490	7	1.7	47	2.7	130 <1	12 <1	182 <1	35					
759149	7 <0.5	10.3 <1	7	18	4690 <5	<0.5	3	99 <0.1	10 <1	<1	<1	12	1 <5						
759150	<1	<0.5	22.4	100 <5	42	1290 <5	1.2	130	98	1.8	180 <1	28 <1	146	1	89				

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759372	4 <1		440 <1		2 <10		2	198 <0.5		3 <1		122	9	1360	10
759373	187 <1		1750 <1		52 <10		6.4	11 <0.5		29	1	2590	149	19400	56
759374	25 <1		3030 <1		8 <10		1.7	4 <0.5		16 <1		390	15	900	7
759375	1 <1		3380 <1		3 <10		<0.5	3 <0.5		21 <1		126	8	320 <5	
759376	6 <1		3380 <1		2 <10		4	3 <0.5		13 <1		94	5	640	11
759377	20 <1		290 <1		8 <10		3.2	316 <0.5		6 <1		366	20	490	19
759378	30 <1		1460 <1		11 <10		4.2	41 <0.5		8 <1		652	28	890	13
759379	32 <1		2520 <1		12 <10		11.3	313 <0.5		13 <1		563	32	890	41
759380	17 <1		170 <1		7 <10		4.9	627 <0.5		8 <1		301	17	500	28
759381	21 <1		980 <1		4 <10		7.2	121 <0.5		9 <1		150	9	130	36
759382	26 <1		880 <1		6 <10		8.2	735 <0.5		9 <1		224	13	120	48
759383 <1	<1		2970 <1		<1	<10	<0.5	3 <0.5		6 <1		43	3	260 <5	
759384	15 <1		2060 <1		4 <10		7.5	72 <0.5		11 <1		151	9	40	33
759385	5 <1		4480 <1		3 <10		1.6	4 <0.5		11 <1		149	12	420	5
759386	10 <1		1440 <1		2 <10		4.1	35 <0.5		9 <1		92	5	30	20
759387	17 <1		2370 <1		5 <10		3.2	19 <0.5		15 <1		194	11	390	12
759388	8 <1		1580 <1		3 <10		1.6	22 <0.5		33 <1		168	10	5130 <5	
759389	3 <1		790 <1		2 <10		2.6	305 <0.5		5 <1		108	10	2220	12
759390	7 <1		1650 <1		2 <10		2.6	9 <0.5		64 <1		72	3	20	9
759391	6 <1		1250 <1		2 <10		<0.5	8 <0.5		203 <1		88	4 <20		6
759392	6 <1		1570 <1		2 <10		0.9	12 <0.5		234 <1		92	5	680 <5	
759393	4 <1		3280 <1		2 <10		2.3	9 <0.5		66 <1		119	10	410	10
759394	42 <1		1650 <1		16 <10		8.6	45 <0.5		82 <1		1170	58	730	27
759395	45 <1		3210 <1		13 <10		3.8	8 <0.5		70 <1		636	36	890	19
DUP-759292	16 <1		4570 <1		4 <10		2.1	10 <0.5		32 <1		203	11	140	21
DUP-759305	15 <1		3200 <1		5 <10		4.3	13 <0.5		25 <1		179	17	50	12
DUP-759319	12 <1		1280 <1		3 <10		1.7	12 <0.5		8 <1		177	7	610	12
DUP-759329	2 <1		3170 <1		2 <10		0.8	4 <0.5		7 <1		108	10	270 <5	
DUP-759341 <1	<1		1530 <1		<1	<10	1.7	22 <0.5		3 <1		33	18	230	10
DUP-759356	4 <1		1040 <1		<1	<10	1.6	26 <0.5		5 <1		33	2	120	6
DUP-759365	1 <1		3340 <1		2 <10		0.6	3 <0.5		16 <1		108	8	370	5
DUP-759382	25 <1		920 <1		6 <10		7.4	652 <0.5		9 <1		240	14	140	40
DUP-759389	3 <1		840 <1		2 <10		2.6	353 <0.5		5 <1		119	10	2420	14
MMISRM16	5 <1		700 <1		<1	<10	25	7 <0.5		51 <1		17 <1		390	26
AMIS0169	58	1	120 <1		8 <10		84.9	544 <0.5		29 <1		157	11	280	68
MMISRM18	6 <1		1420 <1		1 <10		29.5	12 <0.5		33 <1		36 <1		1070	48
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
759145	71 <1		2430 <1		13 <10		20.3	7 <0.5		25 <1		574	39	130	21
759146	5 <1		740 <1		<1	<10	9.2	112 <0.5		4 <1		19	2	70	21
759147	11 <1		1630 <1		2 <10		16.3	156 <0.5		4 <1		43	3	30	28
759148	13 <1		660 <1		2 <10		23.8	1080 <0.5		6 <1		52	4	170	74
759149	2 <1		2350 <1		<1	<10	0.8	3 <0.5		4 <1		23	2	50 <5	
759150	32 <1		1040 <1		6 <10		25.9	736 <0.5		10 <1		153	11	200	47

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
759151	31	77 <10		0.5	1510 <1		340	8	160	18 <100	<0.5		540	64	31.1	16.7	31	3	73
759152	19	16 <10		0.1	1210 <1		510	23	29	453 <100	<0.5		880	10	5.3	1.8	5 <1		10
759153	18	34 <10		0.6	1340 <1		520	8	179	12 <100	<0.5		970	78	39.1	19.5	9	2	99
759154	31	17 <10		0.4	1090 <1		680	12	33	56 <100	<0.5		1140	36	19.3	6.7	5 <1		40
759155	43	126	10	0.2	1760 <1		200	14	371	59	100	3.8	660	72	33.2	20.3	67	8	87
759156	20	16 <10		0.1	800 <1		490	16	7	106 <100	<0.5		560	7	4.1	1.1	4 <1		6
759157	101	33 <10		0.5	1610 <1		730	14	69	217 <100	<0.5		1870	72	44.6	13.3	7	1	75
759158	51	59 <10		0.3	1280 <1		570	21	143	154 <100	<0.5		1340	81	46.7	16.3	9	2	84
759159	34	12 <10		0.3	840 <1		650	18 <5		25 <100	<0.5		1030	16	8.7	2.4	3 <1		15
759160	35	19 <10		0.4	960 <1		690	18	13	17 <100	<0.5		980	20	9.9	4.4	4 <1		25
759161	48	19 <10		0.4	810 <1		620	24	18	102 <100	<0.5		1090	20	10.7	4	5 <1		22
759162	100	20 <10		0.4	1040 <1		670	24	19	321 <100	<0.5		1760	24	15.3	3.7	4 <1		22
759163	32	32 <10		0.4	790 <1		600	25	44	92 <100	<0.5		1500	41	23.6	9	7 <1		48
759164	29	13 <10		0.5	510 <1		580	47	27	44 <100	<0.5		1030	18	10.4	2.9	5 <1		18
759165	94	54 <10		0.3	850 <1		630	47	123	41 <100		0.7	3110	85	43	21.5	11	2	103
759166	70	12 <10		0.5	1070 <1		540	15 <5		71 <100	<0.5		810	10	5.5	1.6	4 <1		9
759167	87	29 <10		0.2	1290 <1		530	14	44	60 <100		7.8	1220	66	28.5	21.6	7	1	99
759168	79	14 <10		0.4	1120 <1		660	11	12	46 <100		1.9	280	5	2.3	1.1	5 <1		5
759169	111	12 <10		0.1	300 <1		1500	12	8	23 <100	<0.5		1090	77	40.7	13.3	3 <1		83
759170	44	112 <10		0.1	380 <1		540	63	50	21 <100		5.9	680	46	26.3	7.1	16	2	41
759171	11	33 <10	<0.1		110 <1		610	12	14	63 <100		11.7	840	12	6.9	2.8	12 <1		13
759172	66	13 <10		0.2	200 <1		780	507	10	87 <100		0.5	1780	9	6	1.4	9	1	9
759173	181	33 <10		0.5	580 <1		930	55	206	183 <100		1.2	5540	104	56.4	20.5	13	2	113
759174	47	90 <10		0.2	910 <1		810	38	709	59 <100		1.2	2120	409	246	73.2	23	6	389
759175	77	37 <10		0.2	1800 <1		720	98	134	72 <100		0.7	1480	48	24	8.3	13	2	45
759176	77	117 <10		0.3	1480 <1		500	16	128	34 <100		4.1	640	49	27.2	9.8	17	2	42
759177	65	12 <10		0.5	420 <1		810	13 <5		53 <100	<0.5		1430	8	4.5	1.3	3 <1		9
759178 <1		161 <10	<0.1		690 <1		340	84 <5		55 <100		3.1	210	9	9.7	0.6	111	6	4
759179	3	177 <10	<0.1		1020 <1		340	58	23	138 <100		7.5	460	15	11.2	1.9	111	4	9
DUP-759153	18	34 <10		0.5	1340 <1		530	8	178	12 <100	<0.5		990	77	39.5	19.3	9	2	96
DUP-759158	52	61 <10		0.3	1280 <1		570	20	144	159 <100	<0.5		1340	81	46.7	16.3	9	2	84
DUP-759179	3	178 <10	<0.1		1030 <1		350	57	23	120 <100		7.4	470	16	11.1	1.9	111	4	9
MMISRM16	22	43	10	24.6	70 <1		240	4	17	57 <100		12	650	2	0.8	1	1 <1		4
BLANK	<1	<1	<10	0.1 <10	<1		<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
974368	18	165 <10		0.1	600 <1		<10	7	211	34 <100		5	390	78	48.4	14.8	28	9	67
974369	25	71 <10		0.9	3460 <1		450	21	396	186	200	0.7	1260	75	62	15.1	31	3	73
974370	23	53 <10		0.2	120 <1		<10	9	41	6 <100		9	390	15	9.3	2.8	9	13	13
974371	39	139 <10		0.6	1060 <1		10	12	116	14 <100		11.3	470	24	11.5	5.3	18	8	19
974372	30	146 <10		0.2	660 <1		<10	15	26	10 <100		14.2	280	15	10.2	1.8	23	7	8
974373	13	234 <10		0.1	2350 <1		90	22	25	94 <100		9.4	640	20	15.3	2.2	85	12	10
974374	17	157 <10		0.1	1650 <1		150	14	37	31 <100		1.7	260	29	21	5.9	89	9	26
974375	19	191 <10		0.1	820 <1		150	7	40	49 <100	<0.5		180	15	9.7	3.4	56	10	14
974376	7	214 <10	<0.1		1110 <1		40	17	30	132 <100		4.5	330	22	17.4	2.4	80	10	11
974377	19	209 <10	<0.1		1150 <1		30	14	99	50 <100		8	470	24	13	5.1	42	16	22
974378	8	255 <10	<0.1		1100 <1		50	17	26	67 <100		7.2	440	12	9.8	1.7	72	19	6



## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759151	<1	<0.5	32.3	140 <5		64	520 <5	<0.5		240	200	0.6	70 <1		49 <1		69 <1		122
759152		11 <0.5	22.1	2	35	29	13400 <5	<0.5		11	471 <0.1		130 <1		2 <1		38	2	6
759153		3 <0.5	24.1	93	7	101	550	5 <0.5		212	180	0.2	40 <1		36 <1		47 <1		36
759154		8 <0.5	16.9	22	17	110	2980	8 <0.5		56	235	0.1	30 <1		9 <1		40 <1		18
759155	<1	<0.5	26.4	214 <5		25	2440	7	1.4	321	87	2.7	140 <1		71 <1		169 <1		73
759156		8 <0.5	23 <1		20	32	5120 <5	<0.5		4	120 <0.1		70 <1		<1	<1	16 <1		5
759157		9 <0.5	29.6	46	21	102	4190 <5	<0.5		116	380	0.1	80 <1		19 <1		22 <1		45
759158		7 <0.5	39.3	80	8	97	3920 <5	<0.5		163	327	0.1	80 <1		29 <1		31 <1		56
759159		6 <0.5	21.7 <1		32	71	1390	6 <0.5		4	112 <0.1		20 <1		<1	<1	16 <1		10
759160		4 <0.5	30.6	3	8	87	780	5 <0.5		24	119 <0.1		40 <1		3 <1		18 <1		8
759161		6 <0.5	28.5	4	16	84	3530	23 <0.5		23	208 <0.1		40 <1		3 <1		17 <1		15
759162		4 <0.5	25.5	3	15	75	7380	38 <0.5		17	367 <0.1		80		1	2 <1	14 <1		26
759163		13 <0.5	30.2	34	7	106	2550	23 <0.5		83	198 <0.1		60 <1		14 <1		28 <1		31
759164		11 <0.5	36.3	2	15	51	18800	10 <0.5		12	533 <0.1		30 <1		1 <1		16 <1		9
759165		1 <0.5	17.2	113 <5		86	2820	9 <0.5		229	350	0.1	50 <1		43 <1		67 <1		36
759166		1 <0.5	19.3 <1		21	65	2270	35 <0.5		5	145 <0.1		30 <1		<1	<1	18 <1		9
759167		2 <0.5	30	76	10	35	1950	20 <0.5		203	184 <0.1		20 <1		34 <1		63 <1		28
759168		14 <0.5	10.4 <1		6	13	1940	9 <0.5		3	105 <0.1		10		1 <1	<1	17 <1	<5	
759169		8 <0.5	5.5 <1		16	125	1400	29 <0.5		25	155 <0.1	<10			2	2 <1	8 <1		23
759170	<1	<0.5	67.1	21 <5		28	2620	7 <0.5		65	73	0.4	20 <1		11 <1		69 <1		22
759171	<1	<0.5	21	7 <5		19	2120 <5	<0.5		24	46 <0.1	<10	<1		4 <1		41 <1		26
759172		18 <0.5	6.4 <1		10	22	4790	20 <0.5		6	184 <0.1	<10	<1		<1	<1	9	4	6
759173		5 <0.5	11.2	54 <5		57	3810 <5	<0.5		182	55	0.2	20 <1		28 <1		15 <1		29
759174		4 <0.5	17.9	236 <5		142	2370 <5	<0.5		688	118 <0.1		70 <1		115 <1		17 <1		139
759175		2 <0.5	49	24 <5		79	680	10 <0.5		77	42	0.1	10 <1		13 <1		36	1	15
759176	<1	<0.5	27.3	39 <5		59	870 <5	<0.5		77	24	0.1	150 <1		14 <1		92 <1		72
759177		8 <0.5	14.4 <1		9	36	1810	7 <0.5		2	88 <0.1		20 <1		<1	<1	30	1	9
759178	<1	<0.5	18.5	2 <5		24	5920 <5	<0.5		5	107	0.8	60 <1		<1	<1	55 <1		24
759179	<1	<0.5	32.9	7 <5		38	8290 <5	<0.5		16	174	1.5	120 <1		3 <1		115 <1		33
DUP-759153		3 <0.5	24.7	96	8	103	480 <5	<0.5		218	184	0.2	40 <1		36 <1		45 <1		37
DUP-759158		8 <0.5	38.6	86	6	98	4010 <5	<0.5		170	316	0.1	80 <1		32 <1		32 <1		58
DUP-759179	<1	<0.5	32.9	7 <5		38	7010 <5	<0.5		17	181	1.4	130 <1		3 <1		116 <1		33
MMISRM16		15 <0.5	39.7	4 <5		38	120	47 <0.5		15	227	0.2	90		26	3 <1	334 <1		8
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
974368	<1	<0.5	2.4	89 <5	<1		30 <5		0.9	247	42	0.3	80 <1		47 <1		33 <1		52
974369	<1	<0.5	11.2	77	12	86	6290	14	0.7	172	373	0.2	90 <1		31 <1		24	1	60
974370	<1	<0.5	4.8	22 <5	<1		100	13 <0.5		42	21	0.1	110 <1		8 <1		86 <1		13
974371	<1	<0.5	10.1	46 <5		1	200 <5	<0.5		77	14	0.3	100 <1		17 <1		133 <1		30
974372	<1	<0.5	6.2	11 <5	<1		140 <5	<0.5		23	21	0.3	110 <1		5 <1		110 <1		17
974373	<1	<0.5	44.7	11 <5		21	2130 <5		1.1	21	82	1.8	220 <1		4 <1		124 <1		23
974374	<1	<0.5	6.8	20 <5		22	610 <5		0.5	58	74	0.7	100 <1		10 <1		58 <1		22
974375	<1	<0.5	7.5	21 <5		26	650	6	1.1	44	49	2.1	110 <1		8 <1		31 <1		19
974376	<1	<0.5	16.7	13 <5		7	2450 <5		0.9	24	95	1.3	170 <1		5 <1		60 <1		28
974377	<1	<0.5	9.8	50 <5		3	1950 <5		1	76	69	1.7	180 <1		16 <1		94 <1		36
974378	<1	<0.5	17.3	12 <5		8	2610 <5		1.4	19	91	3.7	230 <1		4 <1		142 <1		28

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
759151	64 <1		1820 <1		11 <10		10.7	91 <0.5		13 <1		324	23	190	21
759152	5 <1		4050 <1		2 <10		5.9 <3	<0.5		2 <1		51	4	170 <5	
759153	66 <1		3630 <1		14 <10		11.5	14 <0.5		15 <1		445	26	160	7
759154	21 <1		4830 <1		6 <10		5.4 <3	<0.5		14 <1		210	13	190 <5	
759155	81 <1		860 <1		13 <10		38	890 <0.5		15 <1		352	24	460	56
759156	3 <1		3690 <1		<1	<10		2.5 <3	<0.5	3 <1		35	3	110 <5	
759157	40 <1		5110 <1		11 <10		9.2	19 <0.5		19 <1		381	35	200	6
759158	54 <1		4090 <1		13 <10		18	14 <0.5		21 <1		421	37	260	13
759159	5 <1		4900 <1		2 <10		2 <3	<0.5		11 <1		95	6	120 <5	
759160	12 <1		4600 <1		3 <10		4.4 <3	<0.5		12 <1		115	6	170 <5	
759161	11 <1		4450 <1		3 <10		6.1	7 <0.5		16 <1		98	8	160 <5	
759162	10 <1		4320 <1		3 <10		4.9	14 <0.5		18 <1		136	13	80 <5	
759163	28 <1		4680 <1		7 <10		10.3	19 <0.5		21 <1		225	18	200	7
759164	7 <1		3170 <1		3 <10		2.9	4 <0.5		5 <1		112	8	120 <5	
759165	74 <1		4440 <1		15 <10		11.9 <3	<0.5		87 <1		521	29	210	8
759166	4 <1		2550 <1		2 <10		1.9	4 <0.5		8 <1		53	5	40 <5	
759167	72 <1		2020 <1		13 <10		9.2	3	1.1	17 <1		420	18	90	9
759168	3 <1		1190 <1		<1	<10	<0.5	7 <0.5		4 <1		32	2	60 <5	
759169	29 <1		4160 <1		13 <10		2.2 <3	<0.5		12 <1		465	25	60 <5	
759170	25 <1		1370 <1		7 <10		2	9 <0.5		5 <1		293	17	1010	11
759171	8 <1		1030 <1		2 <10		1	4 <0.5		3 <1		87	6	110 <5	
759172	3 <1		1360 <1		1 <10		<0.5	7	0.9	8 <1		75	5	3480 <5	
759173	67 <1		4250 <1		17 <10		6 <3	<0.5		10 <1		688	37	2680	11
759174	247 <1		4410 <1		64 <10		10.4 <3	<0.5		15 <1		2770	159	2350	26
759175	29 <1		5190 <1		8 <10		5.2 <3		0.6	6 <1		253	15	4880	9
759176	28 <1		4290 <1		8 <10		5.1	7 <0.5		8 <1		303	19	340	32
759177	3 <1		3620 <1		1 <10		0.9 <3	<0.5		3 <1		56	3	60 <5	
759178	2 <1		1830 <1		<1	<10		1.9	53 <0.5	2 <1		69	9	4410	10
759179	6 <1		2060 <1		2 <10		4.7	94 <0.5		3 <1		99	9	2380	18
DUP-759153	69 <1		3610 <1		14 <10		10.8	10 <0.5		14 <1		449	26	170	6
DUP-759158	54 <1		4000 <1		13 <10		19	23 <0.5		21 <1		417	38	260	14
DUP-759179	6 <1		2070 <1		2 <10		4.9	94 <0.5		3 <1		100	9	2370	17
MMISRM16	4 <1		530 <1		<1	<10		20.6 <3	<0.5	45 <1		9 <1		280	18
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
974368	54 <1		40 <1		12 <10		8.7	533 <0.5		10 <1		513	36	30	31
974369	47 <1		4300 <1		11 <10		13.3	63 <0.5		99 <1		440	59	430	48
974370	10 <1		30 <1		2 <10		1.4	5 <0.5		8 <1		93	7 <20		15
974371	18 <1		120 <1		4 <10		10.3	169	0.8	16 <1		108	9	70	41
974372	6 <1		70 <1		2 <10		4.7	72 <0.5		6 <1		88	8	70	19
974373	6 <1		1130 <1		2 <10		11.2	474 <0.5		13 <1		112	12	830	31
974374	17 <1		1790 <1		4 <10		9.1	217 <0.5		14 <1		195	16	110	18
974375	11 <1		1230 <1		2 <10		9.1	609 <0.5		12 <1		91	7	80	23
974376	7 <1		630 <1		3 <10		8.9	367 <0.5		8 <1		126	15	530	29
974377	19 <1		220 <1		4 <10		13.3	459 <0.5		11 <1		124	10	130	58
974378	5 <1		520 <1		1 <10		11.2	704 <0.5		7 <1		66	9	950	47

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974379	11	242 <10	<0.1		1520 <1			70	6	56	38 <100		7.2	210	13	7.7	3	149	31	11
974380	25	201 <10		0.2	890 <1			20	14	93	35 <100		12	610	23	12.8	4.9	48	20	20
974381	11	244 <10		0.1	2350 <1			40	3	49	42 <100		9.4	200	14	8.7	3.4	122	21	11
974382	5	264 <10	<0.1		1290 <1			40	15	18	109 <100		7.2	310	8	9	1.2	65	18	5
974383	3	273 <10	<0.1		1080 <1			20	6	10	66 <100		2.7	150	3	4.2	0.6	119	30	2
974384	13	193	10 <0.1		2080 <1			140	9	72	58 <100		3.9	240	18	11.1	4.7	149	14	18
974385	18	173 <10	<0.1		380 <1			20	12	34	28 <100		7.9	480	13	8.2	1.8	61	17	8
974386	7	261 <10	<0.1		810 <1			20	13	26	81 <100		4.8	360	9	10.1	1.5	64	16	5
974387	28	220 <10	<0.1		1280 <1			110	8	56	65 <100		3.2	270	20	12.2	4.3	79	16	17
974388	18	90 <10		0.4	1810 <1			50	5	211	16 <100		6	1000	25	11.6	8.3	14	11	35
974389	14	140 <10		0.1	290 <1			10	10	71	41 <100		10.4	270	18	9.8	5.1	33	26	19
974390	3	117 <10	<0.1		530 <1			40	11	30	96 <100		1.3	1150	26	18.7	3.5	153	6	17
974391	25	181 <10		0.2	460 <1			30	14	103	62 <100		7.9	670	21	12.1	5.3	30	11	22
974392	46	186 <10		0.3	400 <1			10	9	53	12 <100		8	680	13	8.4	3.1	51	11	13
974393	12	224 <10		0.1	1490 <1			80	9	49	29 <100		14.8	410	17	10.2	3.7	121	21	15
974394	14	167 <10		0.3	1450 <1			60	5	78	18 <100		14.7	340	16	8.4	4.3	28	10	16
974395	7	88 <10		1.1	16400 <1			470	2	531	13 <100		6.2	1030	47	25.8	14	6	4	56
974396	14	178 <10		0.2	880 <1			30	9	207	51 <100		11.8	380	40	23.2	11.4	52	15	48
974397	4	158 <10	<0.1		210 <1			30	7	11	23 <100	<0.5		330	21	27.3	1.4	83	6	6
974428	5	6	10	2.5	2990 <1			360	5	8	11 <100	<0.5		1070	7	4.5	1.9	4 <1		9
974429	16	159	40	0.3	2950 <1			100	7	162	105 <100		7.2	1210	35	19.6	8.6	301	12	33
974430	21	226 <10		0.1	1770 <1			60	25	88	108 <100		6.2	750	33	19.7	6.2	76	12	28
974431	33	212 <10		0.1	1790 <1			50	13	66	71 <100		6.5	530	24	15.6	4.8	68	15	20
974432	18	195	30	0.4	4830 <1			100	5	310	54 <100		7.5	1110	45	22.9	13.2	69	20	54
974433	15	139 <10		0.2	2410 <1			160	13	191	48 <100		6.5	820	33	17.8	10.3	27	8	42
974434	31	73 <10		0.7	1370 <1			40	3	160	23 <100		7.9	610	44	25.7	11.8	11	12	53
974435	23	215 <10		0.3	2490 <1			70	9	183	60 <100		7.7	890	34	19.2	8.4	48	18	35
974436	23	174	20	0.2	2130 <1			60	8	234	66 <100		6.5	1410	41	23.8	9.9	99	18	43
974437	17	265 <10		0.2	2130 <1			20	7	107	51 <100		7.7	1200	35	20.5	7.3	115	15	30
974438	52	219 <10		0.1	1840 <1			30	12	100	40 <100		8.6	890	29	16.3	6.1	62	14	25
974439	78	76 <10		0.5	890 <1			70	5	82	29 <100		7.7	1290	28	15.6	6.8	11	6	33
974440	45	80 <10		0.4	700 <1			30	6	143	16 <100		6.4	750	34	19.4	9.6	15	10	45
974441	64	85 <10		0.2	170 <1		<10		5	20	14 <100		7.2	320	11	8	1.9	21	13	7
974442	14	198	20	0.2	3870 <1			100	1	97	35	100	7.7	880	22	13.1	6.1	254	30	23
974443	21	243 <10	<0.1		1960 <1			40	19	83	84 <100		5	670	29	17.9	4.9	55	15	22
974444	29	144 <10		0.2	1520 <1			50	6	105	31 <100		6.8	750	26	14.8	5.8	50	17	25
974445	23	198 <10	<0.1		1180 <1			30	12	43	64 <100		7.1	510	23	14.8	3.4	65	18	15
974446	15	44 <10		0.8	9750 <1			290	4	35	30 <100		2	4290	24	14.5	7.4	6	2	31
974447	35	200 <10		0.1	1500 <1			20	10	87	51 <100		7.5	680	31	19.5	5.8	47	16	27
974448	36	207 <10		0.2	560 <1			10	5	64	26 <100		9.2	380	17	11.5	3.4	73	17	13
974449	10	142	10	0.2	1060 <1			40	3	76	34 <100		9.1	390	11	5.9	3.4	58	22	13
974450	38	97 <10		0.5	1220 <1			40	5	292	38 <100		7.1	650	56	28.8	16.7	9	15	79
974451	17	127 <10		0.2	1470 <1			50	5	142	21 <100		5	440	31	17.7	8.8	22	9	36
974452	16	130	30	0.3	2990 <1			190	10	349	103 <100		3.3	2000	47	27	13.4	99	9	56
974453	6	35 <10		0.6	14600 <1			400	3	30	9 <100		0.9	2520	43	18.6	16.9	6	2	65

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974379	<1	<0.5	7.5	28 <5	11	710	5	4.3	40	68	4.7	90 <1			9 <1		106 <1		20
974380	<1	<0.5	10	43 <5	2	1810	6	1.1	70	43	2	210 <1			14 <1		130 <1		37
974381	<1	<0.5	11.6	28 <5	7	360 <5		2.3	43	51	2.5	90 <1			9 <1		94 <1		19
974382	<1	<0.5	17.2	9 <5	8	780 <5		1	14	69	2.4	200 <1			3 <1		91 <1		22
974383	<1	<0.5	9	5 <5	5	800 <5		2.3	6	44	3.7	70 <1			1 <1		62 <1		24
974384	<1	<0.5	6.6	39 <5	19	2650 <5		2.3	66	90	5.2	70 <1			13 <1		77 <1		26
974385	<1	<0.5	10.1	15 <5	2	2700 <5		1.2	23	62	1.5	120 <1			5 <1		119 <1		35
974386	<1	<0.5	8.9	13 <5	5	190 <5		1.2	18	57	2.3	60 <1			4 <1		71 <1		23
974387	<1	<0.5	7.4	28 <5	15	520 <5		2.2	53	77	4.6	110 <1			10 <1		66 <1		23
974388	<1	<0.5	19.1	110 <5	2	920	6	0.6	156	7	1.1	60 <1			35 <1		156	2	32
974389	<1	<0.5	7.4	27 <5	<1	2840	13	0.6	63	13	1.6	140 <1			12 <1		119 <1		50
974390	<1	<0.5	8	16 <5	7	2980 <5		0.7	35	36	2.7	230 <1			7 <1		27	3	30
974391	<1	<0.5	12.1	44 <5	2	1420	6	<0.5	76	37	1.5	150 <1			16 <1		141 <1		41
974392	<1	<0.5	8.7	27 <5	<1	140	7	<0.5	43	27	0.8	180 <1			9 <1		80	1	25
974393	<1	<0.5	9.3	27 <5	10	560	5	1.4	45	53	3.6	140 <1			9 <1		85 <1		16
974394	<1	<0.5	10.5	37 <5	1	1040	5	0.6	56	15	0.9	200 <1			12 <1		163 <1		31
974395	<1	<0.5	7.4	211 <5	60	480 <5		<0.5	205	34	0.2	80 <1			45 <1		111 <1		55
974396	<1	<0.5	18.6	110 <5	2	630 <5		0.9	187	56	0.8	130 <1			39 <1		106 <1		73
974397	<1	<0.5	2.1	6 <5	5	90 <5		<0.5	13	26	1.3	70 <1			2 <1	<5	<1		30
974428	2 <0.5		8.3	5	23	62	850 <5	<0.5	17	49	0.2	10 <1			2 <1		18 <1		9
974429	<1	<0.5	11.2	66 <5	15	4370	6	2.1	109	185	3.7	90 <1			23 <1		109	3	46
974430	<1	<0.5	32.9	43 <5	12	3400 <5		1.2	79	146	2.2	310 <1			16 <1		187	1	41
974431	<1	<0.5	13.2	33 <5	7	1200 <5		1.4	60	93	1.5	170 <1			12 <1		100 <1		41
974432	<1	<0.5	16.3	188 <5	6	3320 <5		2.4	238	42	3.4	160 <1			54 <1		129	2	76
974433	<1	<0.5	16.2	114 <5	18	5050 <5		0.5	166	87	2	180 <1			36 <1		159	1	63
974434	<1	<0.5	5.7	75 <5	2	740	12	<0.5	183	15	0.5	160 <1			34 <1		98 <1		55
974435	<1	<0.5	14.2	88 <5	4	2940 <5		1.5	129	55	2.2	190 <1			28 <1		139 <1		53
974436	<1	<0.5	30.7	82 <5	3	4870	7	1.8	142	66	2.4	220 <1			29 <1		142	4	72
974437	<1	<0.5	15.6	56 <5	3	600 <5		1.4	96	85	2.6	100 <1			19 <1		96 <1		42
974438	<1	<0.5	13.6	47 <5	3	1470 <5		1	78	82	1.6	180 <1			16 <1		116 <1		46
974439	<1	<0.5	13.8	51 <5	10	430	12	<0.5	105	19	0.2	110 <1			19 <1		177 <1		36
974440	<1	<0.5	10.7	64 <5	2	300	10	<0.5	146	19	0.3	160 <1			27 <1		122 <1		41
974441	<1	<0.5	8	9 <5	<1	460	9	<0.5	19	26	0.2	140 <1			3 <1		105 <1		25
974442	<1	<0.5	9.7	61 <5	14	300	11	4.5	80	61	4.2	100 <1			17 <1		70	1	37
974443	<1	<0.5	20.9	37 <5	9	3730 <5		0.9	62	116	3.1	270 <1			13 <1		119 <1		40
974444	<1	<0.5	16.6	46 <5	4	2430 <5		0.9	81	23	1.3	190 <1			16 <1		157 <1		44
974445	<1	<0.5	16.6	18 <5	4	5330 <5		1.1	37	110	1.5	320 <1			7 <1		136 <1		42
974446	1 <0.5		13.6	31 <5	31	1260 <5		<0.5	72	23	0.6	40 <1			12 <1		80 <1		25
974447	<1	<0.5	40.3	43 <5	4	980 <5		1	82	74	1.1	180 <1			16 <1		126 <1		48
974448	<1	<0.5	10.1	27 <5	2	620 <5		1.3	44	50	2	230 <1			9 <1		112 <1		40
974449	<1	<0.5	6.6	32 <5	2	3630	9	1.2	50	11	2.5	110 <1			11 <1		115 <1		32
974450	<1	<0.5	6.6	185 <5	2	1270	8	<0.5	333	38	0.6	120 <1			69 <1		118 <1		59
974451	<1	<0.5	11.4	78 <5	3	1010	5	<0.5	128	28	0.5	150 <1			26 <1		128 <1		50
974452	<1	<0.5	27.9	136 <5	22	7990	6	2.1	206	147	3	180 <1			44 <1		94	3	98
974453	<1	<0.5	12.6	80 <5	53	490 <5		<0.5	247	25	0.3	20 <1			44 <1		43 <1		24

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5	
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
974379	9 <1		720 <1			2 <10	12.8	2600 <0.5			10 <1		73	6	110	47
974380	17 <1		180 <1			4 <10	15.3	561 <0.5			15 <1		121	10	160	60
974381	9 <1		490 <1			2 <10	15.9	1390 <0.5			11 <1		77	7	60	61
974382	4 <1		580 <1			1 <10	9.8	485 <0.5			6 <1		52	9	400	32
974383	2 <1		270 <1		<1	<10	9.3	1470 <0.5			4 <1		17	5	440	35
974384	16 <1		1080 <1			3 <10	13.8	1400 <0.5			13 <1		107	9	220	46
974385	6 <1		140 <1			2 <10	9.6	747 <0.5			8 <1		70	7	180	48
974386	4 <1		320 <1			1 <10	6.6	840 <0.5			9 <1		46	11	200	24
974387	13 <1		860 <1			3 <10	11.7	1220 <0.5			14 <1		112	9	140	41
974388	34 <1		200 <1			5 <10	13.5	279 <0.5			25	1	114	9 <20		47
974389	18 <1		50 <1			3 <10	14.2	296 <0.5			15 <1		79	9	40	80
974390	11 <1		510 <1			3 <10	13	279 <0.5			28 <1		143	14	430	21
974391	19 <1		140 <1			4 <10	17	270 <0.5			15 <1		103	9	70	44
974392	10 <1		100 <1			2 <10	15.9	237 <0.5			15 <1		76	7	20	57
974393	12 <1		840 <1			3 <10	17.6	770 <0.5			17 <1		96	8	60	35
974394	15 <1		220 <1			3 <10	13	244 <0.5			15 <1		72	7	20	39
974395	42 <1		6910 <1			9 <10	10.2	4	1.2		31 <1		273	17	20	32
974396	44 <1		150 <1			7 <10	15.7	491 <0.5			18 <1		237	20	40	80
974397	4 <1		370 <1			2 <10	8.7	59 <0.5			27 <1		117	29	40	8
974428	5 <1		2870 <1			1 <10	2.6 <3	<0.5			20 <1		45	3	70 <5	
974429	28 <1		670 <1			6 <10	43.3	1120 <0.5			21	1	176	16	570	79
974430	21 <1		630 <1			5 <10	19.8	719 <0.5			16 <1		192	15	1150	44
974431	16 <1		380 <1			4 <10	15	899 <0.5			13 <1		141	12	90	48
974432	54 <1		710 <1			8 <10	43.7	1510	0.5		30	2	220	19	70	97
974433	38 <1		790 <1			6 <10	23.3	282 <0.5			28 <1		164	14	460	62
974434	45 <1		180 <1			8 <10	4.9	33 <0.5			15 <1		246	22	20	22
974435	32 <1		390 <1			6 <10	23.8	882 <0.5			19 <1		176	15	80	69
974436	37 <1		270 <1			7 <10	29.5	1100 <0.5			26 <1		204	20	120	79
974437	24 <1		300 <1			6 <10	23.6	694 <0.5			20 <1		197	16	50	61
974438	20 <1		260 <1			4 <10	18.6	601 <0.5			18 <1		149	14	70	60
974439	30 <1		340 <1			5 <10	7.8	25 <0.5			20 <1		150	13	20	25
974440	39 <1		70 <1			7 <10	6.6	65 <0.5			21 <1		185	15 <20		20
974441	5 <1		40 <1			1 <10	2.5	69 <0.5			6 <1		70	7	20	11
974442	19 <1		770 <1			4 <10	31.4	2400 <0.5			26	2	113	11	30	105
974443	16 <1		490 <1			4 <10	15.8	540 <0.5			11 <1		157	14	190	50
974444	22 <1		240 <1			4 <10	15.4	509 <0.5			15 <1		127	12	70	49
974445	10 <1		270 <1			3 <10	10.8	615 <0.5			10 <1		120	12	100	40
974446	21 <1		4300 <1			4 <10	9.1	6 <0.5			24 <1		139	10	190	16
974447	21 <1		250 <1			5 <10	11.3	603 <0.5			14 <1		182	15	50	44
974448	11 <1		140 <1			3 <10	13.7	548 <0.5			10 <1		87	10	50	47
974449	13 <1		160 <1			2 <10	15.8	632 <0.5			10	1	47	5	70	64
974450	74 <1		150 <1			11 <10	11.3	44 <0.5			23 <1		283	20	30	32
974451	31 <1		280 <1			6 <10	11.8	177 <0.5			13 <1		171	14	20	44
974452	49 <1		1010 <1			9 <10	52.2	873 <0.5			43	2	235	23	290	105
974453	54 <1		9120 <1			9 <10	8.3 <3	<0.5			22 <1		219	12	150	20

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974454	30	131 <10		0.6	2270 <1			90	9	92	32 <100		5	1430	71	44.6	14.6	35	8	68
974455	18	160 <10		1	3810 <1		110	6	353	34 <100		5.4	900	32	16.4	9.4	47	11	38	
974456	15	238 <10		0.2	2280 <1		60	3	93	19 <100		4.5	490	20	12.2	5.1	123	16	20	
974457	16	121 <10		0.3	2500 <1		60	5	173	19 <100		6.5	570	43	22.8	11.1	25	9	47	
974458	24	197 <10		<0.1	610 <1		10	9	43	42 <100		6.9	590	13	7.1	2.1	59	14	9	
974459	14	87 <10		0.4	2470 <1		50	2	208	18 <100		4.9	950	37	16.5	11	14	11	44	
974460	22	68 <10		0.6	1310 <1		60	2	93	32 <100		5.5	990	26	12.9	8	10	8	35	
974461	23	65 <10		0.7	1960 <1		20	2	214	17 <100		5.2	820	44	21.4	12.5	12	14	53	
974462	18	146 <10		0.2	1140 <1		40	5	171	35 <100		4.9	1000	35	19.4	8.9	77	16	36	
974463	8	231 <10		<0.1	1390 <1		30	11	59	105 <100		5	510	33	23.4	4.1	81	19	21	
974464	10	89 <10		0.4	710 <1		30	3	137	25 <100		8.2	470	29	16.4	8.4	19	11	34	
974465	19	106 <10		0.4	780 <1		40	6	65	33 <100		8.4	680	18	9.6	5.1	21	11	21	
974466	15	216 <10		<0.1	1170 <1		30	10	70	72 <100		5.2	750	26	17.1	3.4	117	13	16	
974467	4	262 <10		<0.1	910 <1		30	5	30	86 <100		2.6	370	7	5.4	1.5	134	19	5	
974468	14	137 <10		0.5	1030 <1		50	4	174	27 <100		5.4	700	34	18.6	9.4	34	12	40	
974469	4	236 <10		<0.1	1340 <1		30	10	29	163 <100		4.1	480	17	14.8	1.6	80	13	8	
974470	3	240 <10		<0.1	880 <1		20	8	21	85 <100		2.5	400	11	9.2	1.4	75	15	6	
974471	17	153 <10		0.2	920 <1		20	5	108	31 <100		7.5	560	37	20.9	8.4	28	12	35	
974472	7	262 <10		<0.1	1370 <1		30	10	73	141 <100		5.4	770	26	18.4	4	71	12	17	
974473	12	164 <10		0.3	530 <1		10	7	26	55 <100		6	520	24	19.1	2.4	64	15	12	
974474	5	239 <10		<0.1	990 <1		20	10	45	93 <100		3.6	490	19	13.1	2.8	79	15	12	
974475	11	76 <10		0.4	2970 <1		70	1	125	23 <100		4.6	1050	30	14.1	9.1	11	6	39	
974476	11	95 <10		0.4	12700 <1		130	2	557	36 <100		4.3	2070	42	19	13.3	29	9	54	
974477	11	184 <10		0.1	1270 <1		50	3	100	47 <100		4.7	430	18	9.1	5.2	52	13	19	
974478	18	124 <10		0.3	2870 <1		70	3	364	38 <100		5.9	930	52	26.8	15.4	34	13	65	
974479	22	96 <10		0.4	4350 <1		40	2	291	17 <100		5.8	660	54	28.6	17.3	19	14	68	
DUP-974378	8	260 <10		<0.1	1180 <1		50	17	28	69 <100		7.6	450	13	9.8	1.7	75	19	7	
DUP-974388	26	94	10	0.3	1820 <1		50	5	216	16 <100		7.1	990	27	13.5	9	14	12	38	
DUP-974395	6	88 <10		0.9	16100 <1		460	2	506	13 <100		5.9	1060	45	23.5	13.1	5	4	54	
DUP-974448	38	204 <10		0.1	610 <1		10	5	63	25 <100		9.2	380	17	11.3	3.5	76	18	13	
DUP-974457	16	120 <10		0.3	2550 <1		60	6	186	18 <100		6.4	570	45	22.7	11.4	25	9	48	
DUP-974463	8	229 <10		<0.1	1340 <1		20	11	56	107 <100		4.9	500	32	24.2	3.9	80	19	19	
DUP-974478	20	129 <10		0.3	2810 <1		70	3	377	40 <100		6	970	55	28.9	16.2	35	14	70	
MMISRM16	20	41	10	25.4	60 <1		210	4	17	61 <100		12.1	670	3	1.1	1.2	1 <1		5	
AMIS0169	7	51	10	1.4	920 <1		30	1	708	89 <100		7	3300	26	11.4	10.6	36	13	39	
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	
974480	10	253 <10		<0.1	1290 <1		30	10	67	58 <100		8.1	560	27	17.1	4.7	78	19	20	
974481	4	89 <10		0.8	19600 <1		260	3	250	22 <100		3.4	3250	68	32.7	22.6	12	6	88	
974482	6	254	20	0.1	3680 <1		110	7	317	79 <100		6.4	830	35	18.2	10	83	19	40	
974483	12	256	10	0.2	1040 <1		40	6	74	61 <100		6.6	760	13	6.7	3.5	84	20	13	
974484	20	66 <10		0.3	640 <1		40	4	112	46 <100		5.9	550	37	22.1	11	11	15	45	
974485	9	199 <10		0.3	930 <1		40	5	148	99 <100		6.3	940	50	26.8	11.3	50	12	47	
974486	15	168 <10		0.2	560 <1		20	4	65	32 <100		7	710	20	12.3	4.5	62	17	18	
974487	23	230 <10		0.2	1060 <1		30	5	127	69 <100		7.2	1250	23	12.7	6.4	80	22	24	

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974454	<1	<0.5	11.9	84	<5	10	840	<5	0.5	191	83	0.5	140	<1	36	<1	66	<1	58
974455	<1	<0.5	15.7	144	<5	10	3020	<5	1.3	169	55	2.3	150	<1	40	<1	117	<1	48
974456	<1	<0.5	5.8	42	<5	4	300	<5	1.4	69	73	3	50	<1	15	<1	69	<1	33
974457	<1	<0.5	14.5	136	<5	5	1950	7	<0.5	185	24	0.5	120	<1	41	<1	144	<1	75
974458	<1	<0.5	8.6	20	<5	1	1350	<5	0.8	27	89	1.7	180	<1	6	<1	110	<1	29
974459	<1	<0.5	4.6	108	<5	<1	1130	11	<0.5	162	14	0.7	110	<1	35	<1	108	<1	68
974460	<1	<0.5	9.3	66	<5	2	1440	16	<0.5	114	20	0.5	110	<1	23	<1	151	<1	47
974461	<1	<0.5	7.1	93	<5	2	580	7	<0.5	190	16	0.5	80	<1	39	<1	130	<1	64
974462	<1	<0.5	14.9	79	<5	1	2710	6	1.5	130	69	1.7	130	<1	27	<1	108	2	70
974463	<1	<0.5	15.5	31	<5	5	2710	<5	1.7	58	138	2.1	300	<1	12	<1	108	<1	54
974464	<1	<0.5	8.2	75	<5	2	1200	8	<0.5	133	26	0.4	90	<1	27	<1	153	<1	66
974465	<1	<0.5	7.3	41	<5	2	2210	8	<0.5	71	20	0.7	100	<1	15	<1	136	<1	51
974466	<1	<0.5	12.4	29	<5	8	3260	<5	1.7	45	205	3.5	150	<1	10	<1	121	<1	42
974467	<1	<0.5	10.2	13	<5	10	1320	<5	3.3	19	130	4.8	110	<1	4	<1	74	<1	25
974468	<1	<0.5	20.4	87	<5	3	1730	7	0.6	149	34	1	110	<1	30	<1	154	2	59
974469	<1	<0.5	30.6	14	<5	12	2210	<5	1.1	19	136	3.4	230	<1	4	<1	119	<1	47
974470	<1	<0.5	15.6	9	<5	6	1190	<5	1	16	125	2.1	130	<1	3	<1	67	<1	30
974471	<1	<0.5	6.8	59	<5	1	1720	<5	<0.5	112	56	0.6	120	<1	22	<1	128	<1	70
974472	<1	<0.5	19.6	37	<5	10	3030	<5	1.5	55	216	3.8	200	<1	12	<1	141	<1	59
974473	<1	<0.5	18.1	12	<5	2	2040	<5	0.8	27	143	0.7	140	<1	5	<1	146	<1	52
974474	<1	<0.5	11.1	23	<5	6	1430	<5	1.7	36	165	3.8	220	<1	8	<1	82	<1	39
974475	<1	<0.5	8.5	114	<5	4	450	6	0.5	163	13	0.5	70	<1	35	<1	166	<1	51
974476	<1	<0.5	20.5	257	<5	13	1330	<5	2	258	20	1.9	130	<1	61	<1	135	<1	50
974477	<1	<0.5	15.7	44	<5	3	3880	7	1.6	65	39	2.5	110	<1	14	<1	118	<1	45
974478	<1	<0.5	12.1	193	<5	4	2130	7	1	293	23	1.3	120	<1	64	<1	142	<1	70
974479	<1	<0.5	10.8	222	<5	5	330	9	<0.5	332	18	0.8	140	<1	74	<1	118	<1	67
DUP-974378	<1	<0.5	17.9	13	<5	8	2630	<5	1.4	20	96	4.2	230	<1	4	<1	144	<1	29
DUP-974388	<1	<0.5	20.2	110	<5	2	940	6	<0.5	164	7	0.9	60	<1	36	<1	153	1	34
DUP-974395	<1	<0.5	7.3	207	<5	59	450	<5	<0.5	202	33	0.2	80	<1	44	<1	108	<1	56
DUP-974448	<1	<0.5	9.7	27	<5	2	630	5	1.5	43	51	2.1	230	<1	9	<1	111	<1	42
DUP-974457	<1	<0.5	14.5	145	<5	5	1970	6	<0.5	200	23	0.5	120	<1	43	<1	147	<1	73
DUP-974463	<1	<0.5	15.8	28	<5	5	2600	<5	1.7	54	141	2	300	<1	11	<1	107	<1	53
DUP-974478	<1	<0.5	12.3	200	<5	4	2290	7	1.1	310	25	1.3	130	<1	66	<1	146	<1	73
MMISRM16	17	<0.5	34.9	4	<5	33	110	46	<0.5	16	262	0.2	120	28	3	<1	310	<1	8
AMISO169	<1	<0.5	35.5	393	<5	28	3390	<5	2.7	353	367	2.1	110	<1	92	<1	218	<1	47
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<1	<5	<1	<5
974480	<1	<0.5	14.5	25	<5	5	5510	<5	1.5	52	135	1.8	330	<1	10	<1	149	<1	58
974481	<1	<0.5	8.5	243	<5	37	1450	<5	<0.5	354	20	0.8	110	<1	73	<1	90	<1	84
974482	<1	<0.5	15.9	136	<5	8	5560	5	3.2	168	178	5.1	240	<1	39	<1	142	<1	67
974483	<1	<0.5	14.9	31	<5	3	6150	8	2.4	43	54	5	150	<1	10	<1	135	1	47
974484	<1	<0.5	17	60	<5	4	2750	15	<0.5	141	17	0.5	110	<1	25	<1	195	<1	73
974485	<1	<0.5	21	93	<5	3	4220	7	1	135	88	1.5	110	<1	29	<1	207	<1	105
974486	<1	<0.5	20.2	31	<5	2	4820	9	1.3	53	36	1.8	140	<1	11	<1	218	<1	52
974487	<1	<0.5	15.9	56	<5	3	2980	9	2.2	81	44	3.4	200	<1	18	<1	152	1	65

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974454	52 <1		770 <1		11 <10		10.2	230 <0.5		20 <1		450	34	80	29
974455	35 <1		680 <1		6 <10		25.8	425 <0.5		20 <1		147	12	60	91
974456	17 <1		530 <1		3 <10		23	579 <0.5		13 <1		100	10	50	97
974457	44 <1		400 <1		8 <10		15.4	165 <0.5		19 <1		219	17	40	71
974458	7 <1		110 <1		2 <10		11.5	305 <0.5		9 <1		60	6	50	44
974459	42 <1		240 <1		7 <10		15.8	49 <0.5		33 <1		143	12 <20		58
974460	30 <1		260 <1		5 <10		6.6	17 <0.5		19 <1		120	10	20	39
974461	48 <1		150 <1		8 <10		9.3	17 <0.5		30 <1		194	17 <20		43
974462	32 <1		120 <1		6 <10		18.6	704 <0.5		22 <1		178	17	60	94
974463	16 <1		350 <1		4 <10		13.6	848 <0.5		12 <1		193	20	110	62
974464	31 <1		100 <1		5 <10		10.4	41 <0.5		16 <1		147	13	20	50
974465	19 <1		170 <1		3 <10		16.1	122 <0.5		20 <1		81	8	40	60
974466	12 <1		290 <1		4 <10		16.7	615 <0.5		11 <1		138	14	200	59
974467	5 <1		280 <1		1 <10		10.9	1030 <0.5		5 <1		35	5	290	46
974468	36 <1		160 <1		6 <10		18	231 <0.5		19 <1		174	15	40	62
974469	6 <1		380 <1		2 <10		11.2	609 <0.5		8 <1		86	14	620	51
974470	4 <1		230 <1		1 <10		6.3	427 <0.5		4 <1		62	9	320	30
974471	31 <1		90 <1		6 <10		14.1	204 <0.5		20 <1		189	18	40	58
974472	14 <1		260 <1		4 <10		16.1	476 <0.5		11 <1		142	17	310	78
974473	8 <1		130 <1		3 <10		8.1	356 <0.5		10 <1		142	16	90	34
974474	9 <1		210 <1		3 <10		14.1	581 <0.5		8 <1		100	11	210	63
974475	37 <1		330 <1		6 <10		12.3	170 <0.5		21 <1		142	11 <20		58
974476	54 <1		1780 <1		8 <10		28.5	458 <0.5		24	1	186	14	70	90
974477	17 <1		160 <1		3 <10		18.8	593 <0.5		14 <1		76	8	50	99
974478	63 <1		360 <1		10 <10		20.4	357 <0.5		25 <1		264	22	50	87
974479	70 <1		370 <1		10 <10		12.1	245 <0.5		17 <1		274	22	30	64
DUP-974378	5 <1		540 <1		1 <10		11.3	778 <0.5		7 <1		69	9	960	50
DUP-974388	35 <1		200 <1		6 <10		13.7	249 <0.5		29	1	125	10 <20		46
DUP-974395	42 <1		6650 <1		8 <10		10 <3		1.1	31 <1		258	17	20	33
DUP-974448	11 <1		150 <1		2 <10		14.6	625 <0.5		10 <1		85	10	40	50
DUP-974457	44 <1		400 <1		8 <10		15.3	145 <0.5		19 <1		221	17	40	71
DUP-974463	14 <1		340 <1		4 <10		13.1	870 <0.5		11 <1		183	21	110	60
DUP-974478	68 <1		360 <1		10 <10		20.4	360 <0.5		25 <1		281	23	50	84
MMISRM16	5 <1		480 <1		<1	<10	23.3	5 <0.5		51 <1		10 <1		330	17
AMIS0169	59 <1		80 <1		6 <10		74.8	362	1.4	24	1	110	9	180	45
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
974480	15 <1		350 <1		4 <10		15.8	574 <0.5		13 <1		147	14	160	74
974481	77 <1		4980 <1		13 <10		8.2	26 <0.5		30 <1		340	23	60	32
974482	37 <1		660 <1		6 <10		30	985 <0.5		20	1	170	14	220	124
974483	11 <1		160 <1		2 <10		24.7	699 <0.5		19 <1		48	5	160	114
974484	37 <1		120 <1		7 <10		3.9	18 <0.5		12 <1		232	18	40	46
974485	37 <1		160 <1		8 <10		23	345 <0.5		25 <1		232	21	90	102
974486	14 <1		80 <1		3 <10		14.9	470 <0.5		16 <1		102	10	70	84
974487	20 <1		150 <1		4 <10		24.8	802 <0.5		21 <1		103	11	80	129



## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1	
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	
974488	11	273 <10	<0.1		910 <1		20	7	69	122 <100		5.3	890	19	11.7	3.6	75	19	14	
974489	15	185 <10	<0.1		860 <1		50	8	107	58 <100		6.5	540	28	17.1	6.7	62	14	27	
974490	4	102 <10		0.7	11900 <1		80	2	513	22 <100		4.7	670	88	39.3	24.9	17	9	104	
974491	19	110 <10		0.2	1110 <1		100	3	109	21 <100		4	470	19	9.5	6.3	15	6	24	
974492	5	97 <10		0.4	14700 <1		170	2	117	30 <100		4.1	1580	54	26.7	19.2	18	6	73	
974493	7	93 <10		0.2	1130 <1		160	2	35	19 <100		3.4	460	7	3.1	2.2	7	3	8	
974494	23	255 <10	<0.1		1530 <1		40	7	157	67 <100		6.2	480	21	11.3	6.6	70	21	24	
974495	13	201 <10		0.1	1630 <1		60	11	172	105 <100		4.1	600	20	9.9	6.9	75	22	24	
974496	8	127 <10		0.2	2040 <1		80	3	98	27 <100		4.4	620	16	7.5	5.1	30	10	18	
974497	6	84 <10		0.3	4180 <1		80	2	153	17 <100		4.3	530	23	10.5	8.3	10	6	30	
974498	7	118 <10		0.3	7750 <1		70	2	439	18 <100		4.3	470	41	19.2	13.1	22	10	50	
974499	14	109 <10		0.4	4370 <1		190	5	118	25 <100		2.6	1070	47	24.9	13.9	12	3	56	
974500	4	23 <10		0.9	10300 <1		370	8	62	15 <100	<0.5		1760	65	35.9	21.3	16	1	84	
974501	10	198 <10		0.2	1050 <1		50	9	112	60 <100		5.3	560	27	15.6	6.9	49	11	27	
974502	10	207 <10		0.2	1090 <1		50	4	215	57 <100		7.1	470	43	21.9	14.3	50	19	52	
974503	9	126 <10	<0.1		3170 <1		90	2	139	19 <100		6	390	15	7	5.7	28	10	18	
974504	8	85 <10		0.6	12500 <1		230	3	102	26 <100		1.9	1010	43	19.3	13.7	13	3	54	
974505	11	142 <10		0.2	2200 <1		140	8	87	22 <100		5.7	390	20	10.8	5.7	28	7	21	
974506	14	157 <10		0.4	3360 <1		110	5	151	31 <100		6.7	810	43	22.7	11.6	35	9	45	
974507	16	110 <10		0.4	2680 <1		80	4	155	27 <100		6.5	840	38	19.5	12.1	20	10	47	
974508	15	131 <10		0.4	6510 <1		80	5	353	26 <100		5.4	720	67	32.6	19.8	22	10	84	
974509	8	74 <10		0.4	8870 <1		100	2	213	15 <100		5.5	980	24	10.6	9.5	9	5	33	
974510	9	232 <10	<0.1		810 <1		30	5	48	21	100	8.7	330	12	8.3	2.9	135	52	11	
974511	23	96 <10		0.3	1130 <1		80	4	185	15 <100		5	490	29	14.6	9.8	12	8	42	
974512	7	94 <10		0.2	2070 <1		60	2	211	15 <100		5.5	480	34	17.5	10.4	14	9	43	
974513	25	115 <10		0.5	2510 <1		40	2	180	11 <100		6.1	1220	31	14.4	12.1	25	16	42	
974514	20	230	10	0.1	2240 <1		120	4	89	68	100	4.4	350	16	9.1	4.7	127	27	17	
974515	14	166 <10		0.1	1280 <1		60	8	121	45 <100		5.3	570	37	22.1	8.9	41	12	37	
974516	14	156 <10		0.6	2060 <1		50	4	325	34 <100		6.2	720	45	22.7	14.5	63	18	55	
974517	10	92 <10		0.6	3500 <1		100	2	302	18 <100		4	650	33	15.3	10.5	18	8	43	
974518	12	168	10	0.3	3670 <1		110	5	330	45 <100		5.1	960	38	17.9	12.4	63	15	48	
974519	10	118 <10		0.3	5620 <1		70	4	463	40 <100		4.7	1180	103	51.3	30.9	37	9	126	
974520	5	13	10	1.5	5010 <1		360	7	27	19 <100	<0.5		870	11	6.5	4	7 <1		15	
974521	7	87 <10		0.6	7570 <1		250	5	116	28 <100		2.5	1630	59	30.8	19	20	4	76	
974522	2	236 <10	<0.1		1820 <1		90	38	33	99 <100		2.6	590	36	22	3.9	99	6	18	
974523	11	144 <10		0.2	2300 <1		170	18	265	75 <100		2.9	1450	76	44.7	20.8	73	6	89	
974524	11	206 <10		0.3	2820 <1		90	9	197	46 <100		4.6	710	51	26.7	15.2	66	14	60	
974525	7	18 <10		0.8	5270 <1		290	4	29	14 <100	<0.5		2020	14	7.9	5.3	9 <1		20	
974526	9	101	30	0.4	4100 <1		220	7	332	57	200	0.8	2110	51	27.7	16.6	107	7	62	
974527	24	207	10	0.4	2710 <1		110	13	170	61	100	3.3	770	51	30.2	9.4	168	12	39	
974528	14	211 <10		0.1	2420 <1		100	35	68	97 <100		2.1	600	64	39.5	8.6	148	7	40	
974529	17	206 <10		0.3	2560 <1		80	16	141	72 <100		4.2	450	50	27.2	10.3	67	9	44	
974530	15	102 <10		0.3	2390 <1		200	14	274	110	100	1.1	1790	77	44.1	18.7	123	4	80	
974531	3	58 <10		1	13100 <1		200	2	54	23 <100		1.3	1690	30	12.8	13	8	2	47	
974532	5	53 <10		0.8	9580 <1		230	4	58	30 <100		2.5	1850	48	26.3	16.2	11	2	64	

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc	
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5	
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
974488	<1	<0.5	35.7	32 <5		6	4090 <5		1.6	44	192	3.8	240 <1		10 <1		129 <1		46	
974489	<1	<0.5	20.1	48 <5		4	2700		1	82	67	1.1	140 <1		17 <1		178 <1		67	
974490	<1	<0.5	11.1	329 <5		9	1140		5 <0.5	415	11	1.1	130 <1		93 <1		106 <1		109	
974491	<1	<0.5	24.5	57 <5		9	1160		12 <0.5	90	13	0.7	80 <1		19 <1		226 <1		46	
974492	<1	<0.5	17.2	192 <5		29	1440 <5		0.8	282	13	1	110 <1		59 <1		113 <1		75	
974493	<1	<0.5	12.2	14 <5		2	750 <5		<0.5	28	18	0.6	50 <1		6 <1		213 <1		18	
974494	<1	<0.5	13.3	68 <5		2	4580		5	1.7	99	62	5.1	130 <1		22 <1		127 <1		56
974495	<1	<0.5	10.5	73 <5		4	4230		5	1.9	106	84	3.6	80 <1		24 <1		132 <1		50
974496	<1	<0.5	21.1	37 <5		5	2260		8	0.7	62	43	1.4	100 <1		13 <1		158 <1		38
974497	<1	<0.5	10	68 <5		4	1680		11 <0.5	115	16	0.8	70 <1		24 <1		132 <1		42	
974498	<1	<0.5	11.3	177 <5		6	850		6	1.3	211	16	2	100 <1		49 <1		121	1	55
974499	<1	<0.5	18.5	100 <5		32	960 <5		<0.5	176	43	0.4	80 <1		35 <1		125 <1		96	
974500	<1	<0.5	25.2	83 <5		72	920 <5		0.6	236	155	0.4	20 <1		39 <1		40 <1		49	
974501	<1	<0.5	16.7	52 <5		5	2170		6	0.8	87	43	1.5	130 <1		18 <1		129 <1		59
974502	<1	<0.5	16.2	109 <5		3	2890		7	1.1	197	23	1.5	110 <1		41 <1		126	1	69
974503	<1	<0.5	38.4	58 <5		11	2500		8	1	81	34	1.9	70 <1		18 <1		220 <1		33
974504	<1	<0.5	19.5	156 <5		32	270 <5		1.2	199	21	0.7	70 <1		42 <1		108 <1		60	
974505	<1	<0.5	18.3	43 <5		9	940 <5		<0.5	70	27	0.9	120 <1		15 <1		179 <1		56	
974506	<1	<0.5	9.3	80 <5		6	1500 <5		1	135	20	1.3	130 <1		28 <1		129 <1		101	
974507	<1	<0.5	13.3	101 <5		7	1390		7 <0.5	170	19	0.8	130 <1		36 <1		138 <1		82	
974508	<1	<0.5	14.1	206 <5		7	1400 <5		0.5	326	28	1	170 <1		69 <1		118 <1		93	
974509	<1	<0.5	12.2	101 <5		10	1260 <5		<0.5	145	13	1	70 <1		32 <1		120 <1		31	
974510	<1	<0.5	11.5	26 <5		6	190		8	4.3	37	174	4.7	70 <1		8 <1		92 <1		39
974511	<1	<0.5	13.9	91 <5		6	890		19 <0.5	160	20	1.2	110 <1		32 <1		161 <1		53	
974512	<1	<0.5	11.9	86 <5		5	840		7 <0.5	159	23	1.8	80 <1		33 <1		119 <1		58	
974513	<1	<0.5	7.6	74 <5		1	680		11 <0.5	150	8	0.4	90 <1		30 <1		104	2	45	
974514	<1	<0.5	27.9	42 <5		20	1760 <5		7	58	85	5.6	150 <1		13 <1		131	1	31	
974515	<1	<0.5	16.9	60 <5		5	2880 <5		0.6	109	88	1	170 <1		22 <1		110 <1		77	
974516	<1	<0.5	13.4	123 <5		4	2900		6	1.4	211	30	2.9	140 <1		45 <1		118	1	84
974517	<1	<0.5	12.6	129 <5		10	1130		6	0.8	183	19	2.6	80 <1		41 <1		101 <1		46
974518	<1	<0.5	18.3	163 <5		8	3180		6	2.6	211	59	3	190 <1		48 <1		157 <1		57
974519	<1	<0.5	9.1	276 <5		6	1270		8	1.4	452	23	1.2	130 <1		95 <1		109	1	150
974520	<1	<0.5	14.2	17 <5		61	1220 <5		0.7	40	93	1.1	20 <1		7 <1		33 <1		12	
974521	<1	<0.5	12.2	134 <5		42	1150 <5		0.9	253	50	1	80 <1		49 <1		79	1	81	
974522	<1	<0.5	38.9	13 <5		25	3700 <5		0.9	33	250	2.1	150 <1		6 <1		138 <1		49	
974523	<1	<0.5	8.2	123 <5		25	2570		8	1.7	261	292	1.5	60 <1		51 <1		75	1	96
974524	<1	<0.5	20	128 <5		7	2380 <5		2.6	215	84	3.6	100 <1		45 <1		114 <1		110	
974525	<1	<0.5	17.7	20 <5		60	620		6 <0.5	49	82	0.7	10 <1		8 <1		11 <1		15	
974526	<1	<0.5	45.9	165 <5		41	2670		18	4.8	250	323	2.1	60 <1		54 <1		45	3	93
974527	<1	<0.5	27.4	69 <5		24	3250 <5		4.5	114	245	3.7	110 <1		24 <1		119	1	107	
974528	<1	<0.5	23.8	25 <5		23	2850 <5		1.1	83	344	2.3	110 <1		14 <1		42 <1		74	
974529	<1	<0.5	19.7	68 <5		15	2280 <5		1.7	128	150	1.9	100 <1		26 <1		98 <1		94	
974530	<1	<0.5	10.2	85 <5		51	2950 <5		2.7	209	509	1.3	40 <1		39 <1		57	2	131	
974531	<1	<0.5	14.9	116 <5		32	890 <5		<0.5	181	15	1.1	40 <1		37 <1		115 <1		38	
974532	<1	<0.5	7.4	74 <5		30	1940 <5		0.5	171	25	1.3	50 <1		30 <1		96 <1		55	

## Appendix 2

## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974488	11 <1		220 <1		3 <10		16.4	557 <0.5		10 <1		97	10	170	92
974489	21 <1		240 <1		5 <10		14	279 <0.5		15 <1		154	14	100	99
974490	94 <1		1040 <1		17 <10		25.3	156 <0.5		39 <1		373	29	20	86
974491	22 <1		340 <1		4 <10		14.6	74 <0.5		19 <1		85	7	30	127
974492	64 <1		2830 <1		10 <10		11.3	277	0.5	21 <1		273	19	40	67
974493	8 <1		830 <1		1 <10		5.6	18 <0.5		9 <1		25	3	20	37
974494	23 <1		260 <1		4 <10		21.4	581 <0.5		13 <1		93	10	150	136
974495	23 <1		360 <1		4 <10		18.2	550 <0.5		11	1	90	9	200	107
974496	16 <1		290 <1		3 <10		18	180 <0.5		15 <1		60	6	40	77
974497	28 <1		610 <1		4 <10		7.7	25 <0.5		13 <1		97	8	20	45
974498	46 <1		690 <1		8 <10		28	324 <0.5		26	1	170	15	20	134
974499	44 <1		1790 <1		8 <10		8	69 <0.5		19 <1		237	19	40	53
974500	62 <1		7130 <1		11 <10		12.1	10 <0.5		45 <1		351	26	110	94
974501	22 <1		290 <1		5 <10		17.1	274 <0.5		16 <1		141	12	90	99
974502	48 <1		290 <1		8 <10		31.2	333 <0.5		30 <1		185	18 <20		160
974503	17 <1		620 <1		3 <10		18.5	214 <0.5		12	1	63	5	30	97
974504	44 <1		3100 <1		8 <10		9.1	100 <0.5		12 <1		186	12	40	37
974505	18 <1		650 <1		3 <10		9.2	106 <0.5		11 <1		96	9	120	66
974506	36 <1		410 <1		7 <10		21.4	376 <0.5		29 <1		186	19	60	119
974507	41 <1		390 <1		7 <10		25.1	121 <0.5		27 <1		179	16	50	113
974508	73 <1		680 <1		13 <10		15.9	242 <0.5		21 <1		323	25	130	57
974509	31 <1		1280 <1		5 <10		10.5	54	0.6	15 <1		104	8	30	45
974510	9 <1		360 <1		2 <10		16.5	1430 <0.5		13 <1		64	7	180	102
974511	36 <1		250 <1		6 <10		9.9	36 <0.5		17 <1		153	11	40	78
974512	38 <1		290 <1		7 <10		13.7	74 <0.5		21	1	156	14	30	70
974513	37 <1		360 <1		6 <10		21.4	193 <0.5		21 <1		128	11 <20		83
974514	14 <1		900 <1		3 <10		18.3	3250 <0.5		15	1	79	7	190	80
974515	28 <1		300 <1		6 <10		13.3	248 <0.5		14 <1		198	17	230	58
974516	49 <1		290 <1		9 <10		24.3	562 <0.5		22 <1		203	19	140	105
974517	39 <1		900 <1		7 <10		16.4	106 <0.5		23	1	148	11	30	90
974518	44 <1		710 <1		7 <10		24.7	808 <0.5		18	1	174	14	70	111
974519	107 <1		550 <1		19 <10		24.7	533 <0.5		36 <1		479	38	40	132
974520	10 <1		4920 <1		2 <10		3.5	8 <0.5		24 <1		68	5	100	38
974521	60 <1		3210 <1		11 <10		17.5	181 <0.5		26 <1		289	23	190	87
974522	10 <1		980 <1		5 <10		9	197 <0.5		8 <1		181	17	1670	39
974523	69 <1		980 <1		13 <10		22.7	441 <0.5		32	1	428	35	500	101
974524	50 <1		590 <1		9 <10		22.8	788 <0.5		18 <1		241	20	330	128
974525	13 <1		3530 <1		3 <10		5.3	17 <0.5		20 <1		86	6	220	17
974526	55 <1		1770 <1		9 <10		34.2	1100 <0.5		34	2	261	23	280	149
974527	29 <1		1170 <1		7 <10		23.1	1260 <0.5		20	1	265	24	240	135
974528	25 <1		1270 <1		9 <10		10.9	263 <0.5		19 <1		357	30	880	47
974529	32 <1		810 <1		8 <10		14.1	560 <0.5		15 <1		257	20	470	73
974530	59 <1		1360 <1		13 <10		17.4	393 <0.5		38	1	383	34	370	125
974531	39 <1		4530 <1		6 <10		7.7	30 <0.5		15 <1		137	8	40	38
974532	46 <1		4950 <1		9 <10		11.4	16 <0.5		34	1	252	19	150	64

## Appendix 2

## Analytical Data

ANALYTE	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	0.1	10	1	10	1	5	5	100	0.5	10	1	0.5	0.5	1	1	1
UNITS	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb
974533	3	53 <10		0.7	8110 <1		230	2	56	20 <100		0.9	1560	32	14.7	12.5	11	2	48
974534	10	101 <10		0.4	1510 <1		70	2	126	27 <100		5.6	610	60	29.4	20.5	34	10	86
974535	10	204 <10	<0.1		1980 <1		40	12	97	58 <100		4.1	420	51	29.7	8.5	71	10	37
974536	13	115 <10		0.2	1630 <1		60	8	68	64 <100		4.3	410	45	27.7	9.3	22	5	41
974537	10	131 <10		0.4	3610 <1		180	7	160	37 <100		2.7	1000	46	22.7	15.3	24	6	60
974538	3	13 <10		0.9	8020 <1		260	2	6	8 <100		1.4	2000	12	6.8	4.8	5 <1		17
974539	5	112 <10		0.6	6820 <1		110	3	208	45 <100		2.9	720	76	35.9	21.1	27	8	90
974540	10	75 <10		0.6	4690 <1		90	4	113	16 <100		2.7	470	48	24.8	14.2	4	3	56
974541	15	196 <10	<0.1		440 <1		20	14	17	37 <100		5.6	250	11	7.3	1.5	53	17	6
974542	2	75 <10		0.4	4670 <1		50	2	289	15 <100		4.3	1030	34	14.8	12.7	30	13	47
974543	9	193 <10		0.3	1640 <1		40	6	237	52 <100		4.9	550	32	15.9	10.5	55	26	39
974544	9	75 <10		0.5	1980 <1		20	2	339	12 <100		4.9	320	63	31.3	21.7	7	22	89
974545	9	169 <10	<0.1		490 <1		20	9	51	29 <100		2.1	210	22	13.2	3.7	46	8	16
974546	8	166 <10	<0.1		1480 <1		190	33	34	58 <100		1.5	390	31	21.3	3.8	170	3	18
974547	4	66	30	0.5	7090 <1		150	2	298	43	100	2.6	2900	20	9.4	8.7	131	12	26
974548	8	107	20	1	3430 <1		130	5	185	57 <100		3.5	1230	30	13.8	11.8	47	12	43
974549	2	182 <10	<0.1		1900 <1		160	27	72	43 <100		1.7	760	52	36.4	7.9	169	6	37
974550	4	147	50	1	13700 <1		110	3	1110	59	200	5.8	1620	46	21.2	16.9	133	30	54
974551	4	186 <10	<0.1		2150 <1		150	59	23	421 <100		1	310	34	30.9	2.3	184	4	10
974552	11	219 <10	<0.1		910 <1		20	20	54	47 <100		2.2	260	21	12	3.6	73	13	15
974553	4	30 <10		1.5	9000 <1		250	2	29	11 <100		0.9	1910	44	20.9	17.9	10	2	66
974554	3	46 <10		1	14600 <1		170	2	28	13 <100		3.1	2250	16	7.4	8.2	8	3	25
974555	10	201 <10	<0.1		1110 <1		60	11	116	99 <100		1.6	700	46	25	9.2	122	6	39
974556	2	65 <10		0.6	20900 <1		160	3	145	23 <100		2.6	1080	30	12.8	14.2	8	4	42
974557	5	136	10	0.2	4510 <1		130	3	262	25 <100		3.5	1030	57	34.1	18.5	79	9	74
974558	8	103 <10		0.4	5520 <1		160	4	289	42 <100		2.6	1790	50	23.6	18.3	49	6	66
974559	3	22 <10		0.6	5530 <1		260 <1		169	23 <100	<0.5		1190	71	38.6	21.9	55	3	91
974560	6	99 <10		0.5	6690 <1		260	5	74	19 <100		1.5	1330	34	18	11.5	10	2	45
974561	3	103 <10		0.5	11100 <1		190	2	354	49 <100		2.4	1880	44	21	16.3	9	4	61
974562	11	172 <10		0.6	910 <1		30	10	111	27 <100		5.2	790	37	23	7	73	9	28
DUP-974485	8	194 <10		0.2	950 <1		50	5	163	87 <100		5.9	850	50	25.3	11.9	46	11	49
DUP-974494	22	251 <10	<0.1		1560 <1		40	8	157	67 <100		5.8	470	22	12	6.9	70	21	24
DUP-974517	9	88 <10		0.3	3990 <1		110	2	295	15 <100		3.9	540	34	15.2	10.7	11	6	44
DUP-974522	2	235 <10	<0.1		2050 <1		100	42	31	110 <100		2.7	610	36	23.5	3.5	102	7	17
DUP-974539	6	117 <10		0.7	5860 <1		100	3	210	46 <100		3	680	77	37.7	21.8	30	8	92
DUP-974554	1	46 <10		1.1	15300 <1		170	2	30	13 <100		3.2	2270	15	7.2	8.2	9	3	25
DUP-974558	8	105 <10		0.5	5460 <1		160	4	286	44 <100		2.6	1820	50	24.1	18	51	6	66
MMISRM16	16	49	10	22.6	70 <1		200	4	20	55 <100		11.9	590	3	1.2	1.4	2 <1		5
AMIS0169	8	73 <10		0.6	820 <1		40	2	869	112 <100		8	4070	34	14.9	13.4	47	16	56
BLANK	<1	<1	<10	<0.1		20 <1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1
BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1

## Appendix 2

## Analytical Data

ANALYTE	Hg	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	0.5	0.1	1	5	1	10	5	0.5	1	5	0.1	10	1	1	1	5	1	5
UNITS	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974533	<1	<0.5	10.6	102 <5		38	360 <5		0.5	162	21	0.5	20 <1		32 <1		54 <1		32
974534	<1	<0.5	5.8	125 <5		7	740	8	1.7	274	16	1.3	50 <1		52 <1		100	1	76
974535	<1	<0.5	9.1	47 <5		6	2050 <5		1.4	96	108	1.8	130 <1		18 <1		104 <1		93
974536	<1	<0.5	11.1	42 <5		9	1240 <5	<0.5		92	57	0.4	70 <1		17 <1		91 <1		109
974537	<1	<0.5	23.7	141 <5		28	1920	5	1.6	222	95	1.2	210 <1		47 <1		146 <1		93
974538	<1	<0.5	8.5	15	9	44	310 <5	<0.5		40	27	0.4	20 <1		6 <1		48 <1		13
974539	<1	<0.5	5.7	171 <5		15	1860 <5		1.7	319	25	1.7	100 <1		66 <1		121 <1		118
974540	<1	<0.5	3.9	90 <5		7	440 <5	<0.5		162	9	0.3	80 <1		32 <1		74 <1		87
974541	<1	<0.5	14	7 <5		2	750 <5		0.7	14	78	1.3	160 <1		3 <1		97 <1		32
974542	<1	<0.5	4.1	139 <5		2	460	7	1.2	222	9	1.8	40 <1		49 <1		90	1	39
974543	<1	<0.5	16.5	96 <5		2	3570	6	2	151	30	3.4	90 <1		33 <1		113	1	67
974544	<1	<0.5	6.1	186 <5	<1		520	8 <0.5		388	12	1	70 <1		79 <1		112 <1		82
974545	<1	<0.5	11.1	20 <5		4	300 <5	<0.5		43	84	0.5	70 <1		8 <1		39 <1		41
974546	<1	<0.5	11.7	12 <5		49	4040 <5	<0.5		34	274	0.7	40 <1		6 <1		42 <1		47
974547	<1	<0.5	17.8	103 <5		37	2260 <5		6.5	132	20	1.8	40 <1		31 <1		118	3	31
974548	<1	<0.5	10.1	120 <5		17	2480 <5		2.2	191	26	2.4	70 <1		42 <1		75	2	37
974549	<1	<0.5	35.4	29 <5		49	5270 <5		1.3	78	253	1.4	80 <1		14 <1		71 <1		48
974550	<1	<0.5	6.7	233 <5		15	4120 <5		9.8	270	26	3.6	140 <1		65 <1		99	2	77
974551	<1	<0.5	30.4	7 <5		27	10600 <5		0.6	16	169	1.9	20 <1		3 <1		67 <1		32
974552	<1	<0.5	35.4	20 <5		4	1420 <5		1.2	41	117	1.5	100 <1		8 <1		82 <1		37
974553	<1	<0.5	6.8	131 <5		39	660 <5		0.6	269	30	0.3	10 <1		52 <1		60 <1		44
974554	<1	<0.5	9.7	51 <5		26	390 <5		0.7	98	15	1.1	40 <1		19 <1		97 <1		21
974555	<1	<0.5	4.4	41 <5		12	2700 <5		1.3	100	232	3	40 <1		19 <1		24 <1		73
974556	<1	<0.5	15.2	162 <5		18	2720 <5		0.7	202	20	1.2	50 <1		45 <1		131 <1		48
974557	<1	<0.5	7.5	124 <5		15	670 <5		2.2	248	43	1.2	70 <1		49 <1		67	1	90
974558	<1	<0.5	9.3	145 <5		28	1660 <5		1.7	250	75	1	50 <1		52 <1		97	1	90
974559	<1	<0.5	2.4	112 <5		60	900 <5		0.8	252	135	0.4 <10	<1		45 <1		10 <1		47
974560	<1	<0.5	11.4	72 <5		44	570 <5	<0.5		132	67	0.3	50 <1		25 <1		73	1	51
974561	<1	<0.5	9.8	196 <5		17	2120 <5	<0.5		255	20	1.1	80 <1		55 <1		129	2	61
974562	<1	<0.5	13	45 <5		5	1220 <5		0.6	85	141	0.6	80 <1		17 <1		87 <1		48
DUP-974485	<1	<0.5	20.8	104 <5		3	3800	7	0.8	151	88	1.4	100 <1		33 <1		201 <1		97
DUP-974494	<1	<0.5	13.4	69 <5		3	4640	5	1.7	103	74	4.8	140 <1		23 <1		124 <1		56
DUP-974517	<1	<0.5	11.9	127 <5		12	910	5 <0.5		188	19	2.1	60 <1		41 <1		104 <1		45
DUP-974522	<1	<0.5	42	12 <5		27	3680 <5		0.9	29	247	2.3	160 <1		5 <1		151 <1		50
DUP-974539	<1	<0.5	5.8	160 <5		13	2040 <5		1.8	314	23	1.7	100 <1		64 <1		117 <1		119
DUP-974554	<1	<0.5	10	54 <5		27	420 <5		0.8	102	15	1.1	30 <1		20 <1		99 <1		22
DUP-974558	<1	<0.5	9.2	144 <5		28	1710 <5		1.7	245	73	1	60 <1		51 <1		97	2	91
MMISRM16		15 <0.5	33.7	5 <5		32	110	42 <0.5		18	228	0.2	120	25	3 <1		298 <1		10
AMIS0169	<1	<0.5	45.8	468 <5		34	4090 <5		3	424	456	2.5	140 <1		112 <1		253 <1		65
BLANK	<1	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	<5
BLANK	<1	<0.5	<0.1	<1	<5	<1		10 <5	<0.5	<1	<5	<0.1	<10	<1	<1	<5	<1	<5	<5

## Appendix 2

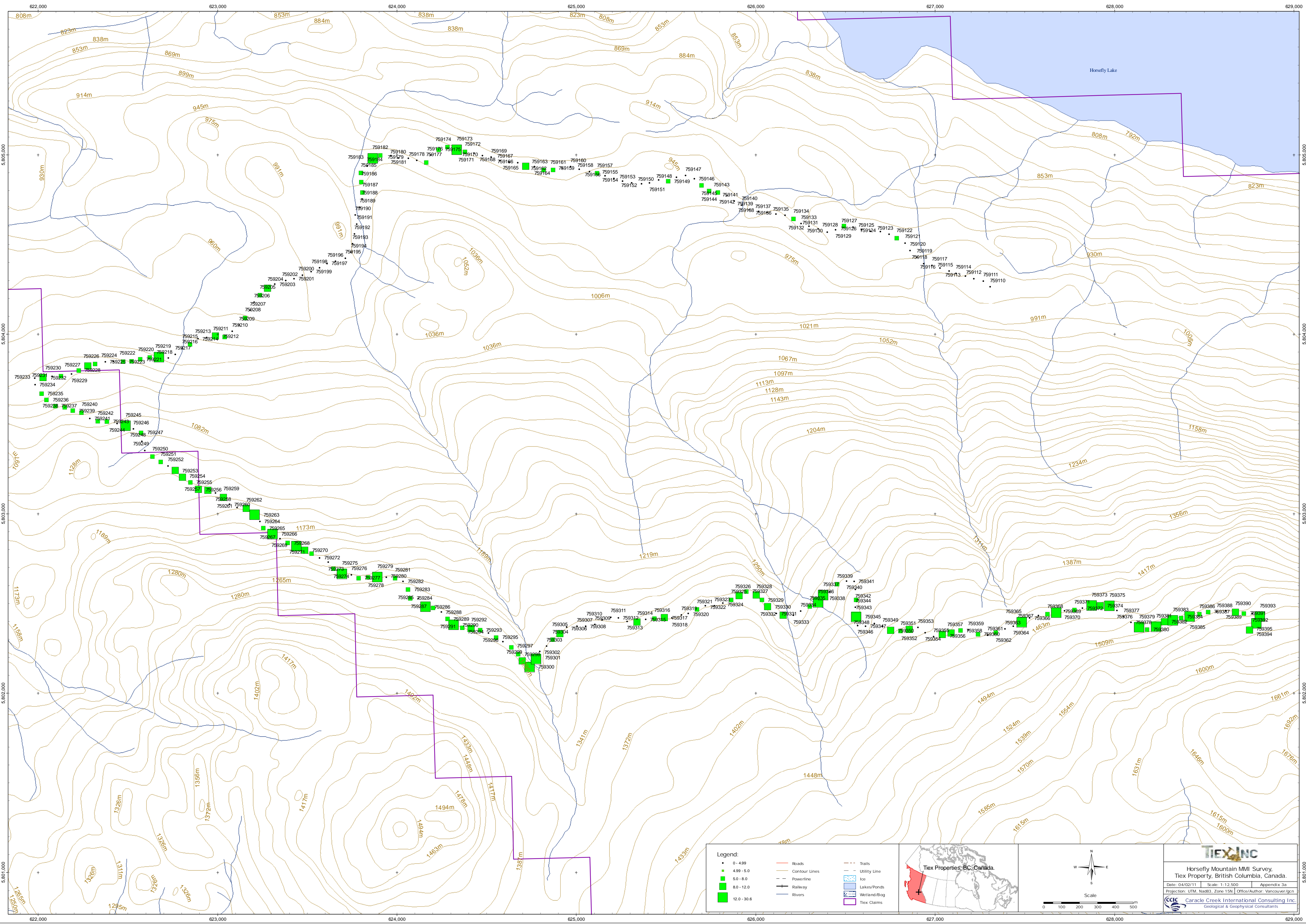
## Analytical Data

ANALYTE	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y	Yb	Zn	Zr
METHOD	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
DETECTION	1	1	10	1	1	10	0.5	3	0.5	1	1	5	1	20	5
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
974533	39 <1		4190 <1		6 <10		14.1	71 <0.5		15 <1		149	10	30	52
974534	71 <1		480 <1		12 <10		9.7	603 <0.5		19 <1		288	22	20	72
974535	26 <1		510 <1		7 <10		12.9	479 <0.5		13 <1		266	23	130	71
974536	28 <1		250 <1		7 <10		8.1	128 <0.5		17 <1		238	23	50	62
974537	50 <1		1410 <1		9 <10		18	413 <0.5		20 <1		222	17	170	113
974538	11 <1		4650 <1		2 <10		2.9	16 <0.5		10 <1		82	5	250	18
974539	78 <1		770 <1		14 <10		11.2	633 <0.5		23 <1		328	27	70	81
974540	43 <1		640 <1		9 <10		2.5	10 <0.5		12 <1		243	19	180	23
974541	4 <1		200 <1		1 <10		5.5	348 <0.5		5 <1		55	6	100	36
974542	46 <1		550 <1		7 <10		14.3	349 <0.5		17 <1		140	11 <20		63
974543	35 <1		180 <1		6 <10		24.7	691 <0.5		19 <1		135	13	90	117
974544	83 <1		120 <1		13 <10		5.6	21 <0.5		15 <1		321	24	100	32
974545	12 <1		150 <1		3 <10		6.3	129 <0.5		7 <1		116	10	40	39
974546	11 <1		1970 <1		4 <10		6.8	81 <0.5		43 <1		190	16	130	27
974547	27 <1		4150 <1		4 <10		36	1370 <0.5		12	3	77	7	100	122
974548	41 <1		1510 <1		6 <10		18.5	636 <0.5		16	2	128	11	40	96
974549	23 <1		1770 <1		7 <10		11.5	262 <0.5		23 <1		348	28	360	45
974550	57 <1		1650 <1		9 <10		69.7	2760	0.6	21	4	178	18	70	261
974551	5 <1		2110 <1		3 <10		5.5	140	0.7	10 <1		205	24	1510	21
974552	11 <1		260 <1		3 <10		8.5	431 <0.5		7 <1		107	9	120	49
974553	57 <1		5910 <1		9 <10		10.5	114 <0.5		22 <1		217	14	100	55
974554	21 <1		5130 <1		3 <10		7.5	108 <0.5		9 <1		75	5	100	39
974555	28 <1		590 <1		7 <10		16.8	288 <0.5		17 <1		236	19	1240	72
974556	40 <1		3830 <1		6 <10		14.4	133 <0.5		20 <1		129	9	140	75
974557	60 <1		1310 <1		10 <10		20.9	917 <0.5		19 <1		319	27	70	115
974558	57 <1		2000 <1		10 <10		18.8	533	0.5	19 <1		221	17	200	93
974559	68 <1		3560 <1		13 <10		9.5	216 <0.5		19 <1		382	29	50	27
974560	34 <1		3270 <1		6 <10		9.4	54 <0.5		12 <1		181	13	120	46
974561	52 <1		3340 <1		9 <10		11.4	52	0.6	23 <1		202	14	20	59
974562	21 <1		290 <1		5 <10		13.1	198 <0.5		14 <1		201	18	90	62
DUP-974485	40 <1		170 <1		9 <10		22.2	304 <0.5		23 <1		231	20	90	91
DUP-974494	23 <1		290 <1		4 <10		21.3	613 <0.5		12 <1		99	10	160	130
DUP-974517	40 <1		970 <1		7 <10		13.7	39 <0.5		24	1	152	11 <20		83
DUP-974522	9 <1		1060 <1		4 <10		8.8	233 <0.5		8 <1		187	18	1820	39
DUP-974539	78 <1		650 <1		14 <10		11.8	666 <0.5		24 <1		334	28	80	79
DUP-974554	21 <1		5230 <1		3 <10		7.7	125 <0.5		10 <1		75	5	100	40
DUP-974558	57 <1		1940 <1		10 <10		19.3	567	0.6	19 <1		217	18	200	95
MMISRM16	5 <1		450 <1	<1	<10		24.9 <3	<0.5		50 <1		12 <1		250	20
AMIS0169	71 <1		80 <1		8 <10		90.4	398	1.5	31	1	138	13	220	61
BLANK	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5	<1	<20	<5
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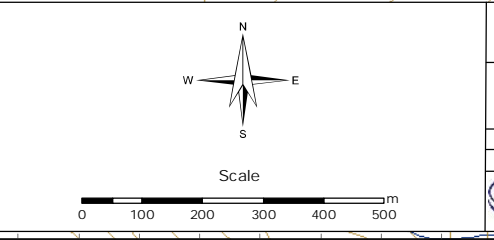
APPENDIX 3  
Geochemical Sampling Plan Maps  
With Copper Response Ratios





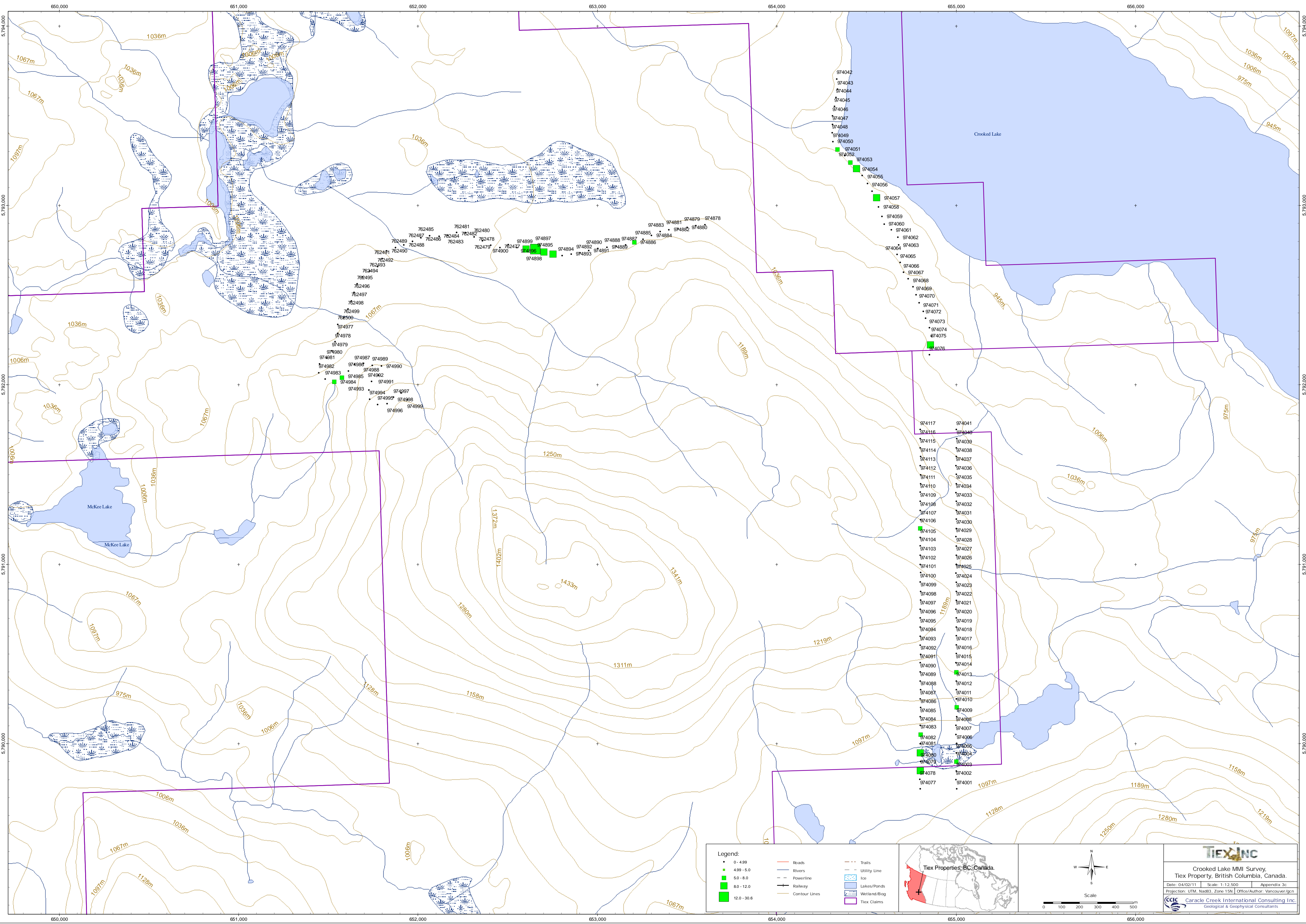
**Legend:**

• 0 - 499	— Roads	— Trails
■ 499 - 5.0	— Contour Lines	— Utility Line
■ 5.0 - 8.0	— Powerline	— Ice
■ 8.0 - 12.0	— Railway	— Lakes/Ponds
■ 12.0 - 30.6	— Rivers	— Wetland/Bog
		— Teix Claims



**TIEX INC**  
 Horseshy Mountain MMI Survey,  
 Teix Property, British Columbia, Canada.  
 Date: 04/02/11 Scale: 1:12,500 Appendix 3a  
 Projection: UTM, NAD83, Zone 18N Office/Author: Vancouver/gcn  
**CCIC** Caracle Creek International Consulting Inc.  
 Geological & Geophysical Consultants

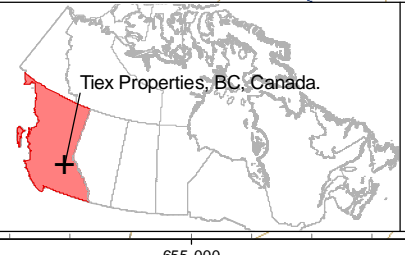




**Legend:**

- 0 - 4.99
- 4.99 - 5.0
- 5.0 - 8.0
- 8.0 - 12.0
- 12.0 - 30.6

- Roads
- Rivers
- Powerline
- Railway
- Contour Lines
- Trails
- Utility Line
- Ice
- Lakes/Ponds
- Wetland/Bog
- Tiex Claims



Scale  
0 100 200 300 400 500 m

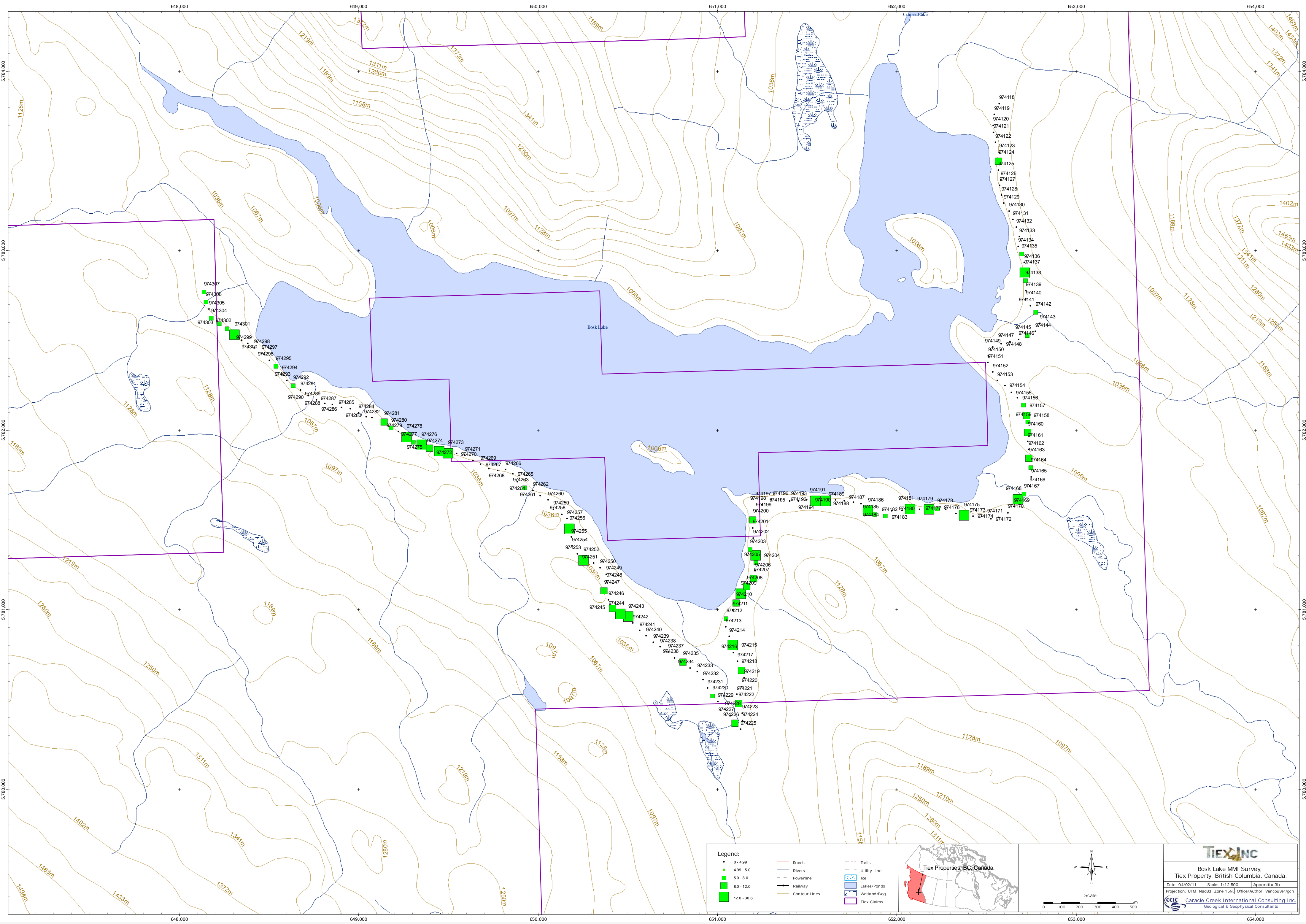
**TIEX INC**

Crooked Lake MMI Survey  
Tiex Property, British Columbia, Canada.

Date: 04/02/11 Scale: 1:12,500 Appendix 3c  
 Projection: UTM, NAD83, Zone 18N Office/Author: Vancouver/gcn

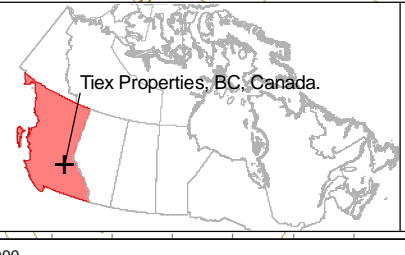
**CCIC** Caracle Creek International Consulting Inc.  
Geological & Geophysical Consultants





**Legend:**

● 0 - 4.99	— Roads	--- Trails
■ 4.99 - 5.0	— Rivers	--- Utility Line
■ 5.0 - 8.0	— Powerline	■ Lakes/Ponds
■ 8.0 - 12.0	— Railway	■ Wetland/Bog
■ 12.0 - 30.6	— Contour Lines	■ Teix Claims



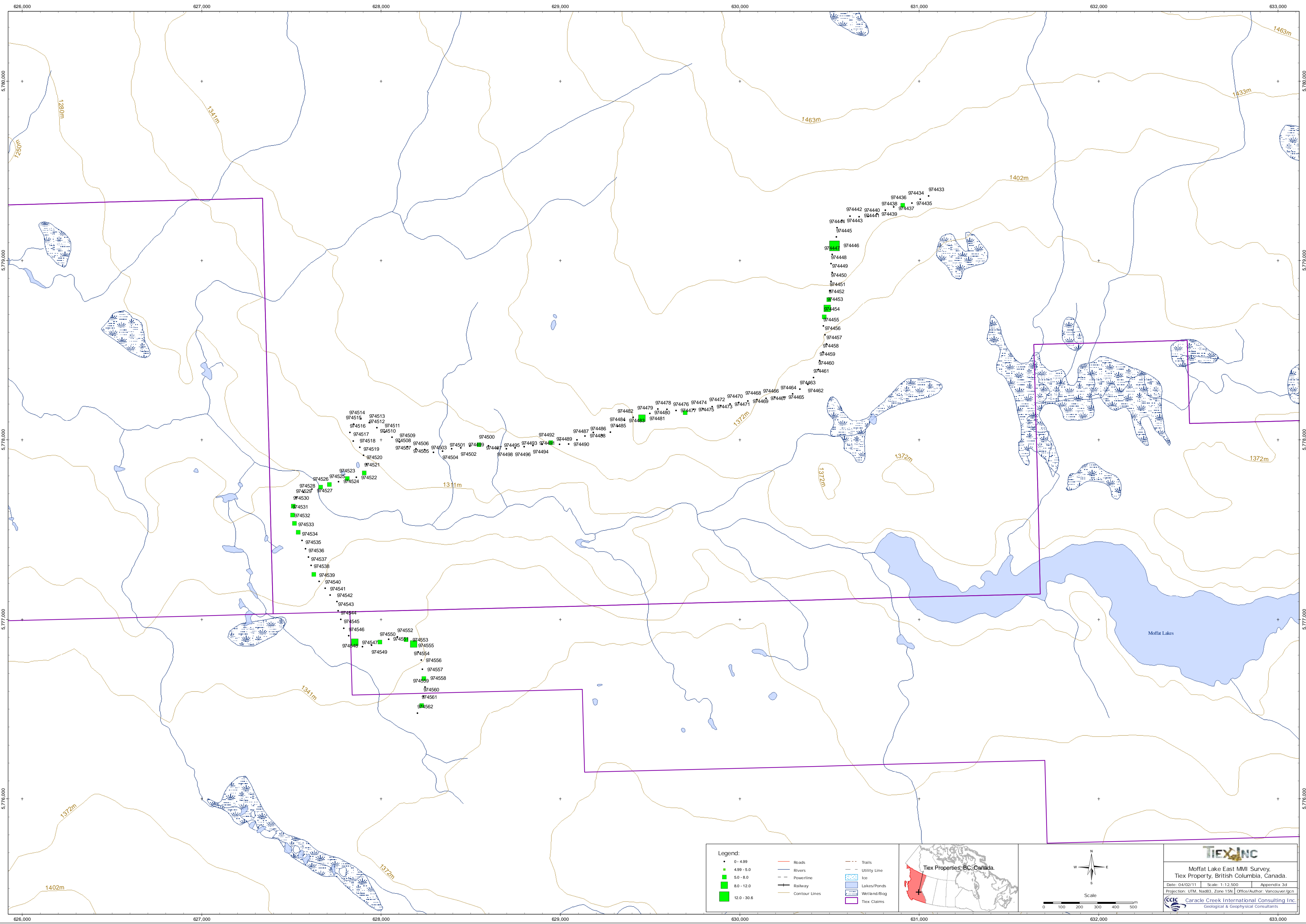
Scale: 0 100 200 300 400 500 m

**TIEX INC**

Bosk Lake MMI Survey,  
Teix Property, British Columbia, Canada.

Date: 04/02/11 | Scale: 1:12,500 | Appendix 3b  
 Projection: UTM, NAD83, Zone 18N | Office/Author: Vancouver/gcn

**CCIC** Caracle Creek International Consulting Inc.  
 Geological & Geophysical Consultants



**Legend:**

- 0 - 4.99
- 4.99 - 5.0
- 5.0 - 8.0
- 8.0 - 12.0
- 12.0 - 30.6

<ul style="list-style-type: none"> <li>— Roads</li> <li>— Rivers</li> <li>— Powerline</li> <li>— Railway</li> <li>— Contour Lines</li> </ul>	<ul style="list-style-type: none"> <li>--- Trails</li> <li>--- Utility Line</li> <li>■ Ice</li> <li>■ Lakes/Ponds</li> <li>■ Wetland/Bog</li> <li>■ Teix Claims</li> </ul>
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Scale  
0 100 200 300 400 500 m

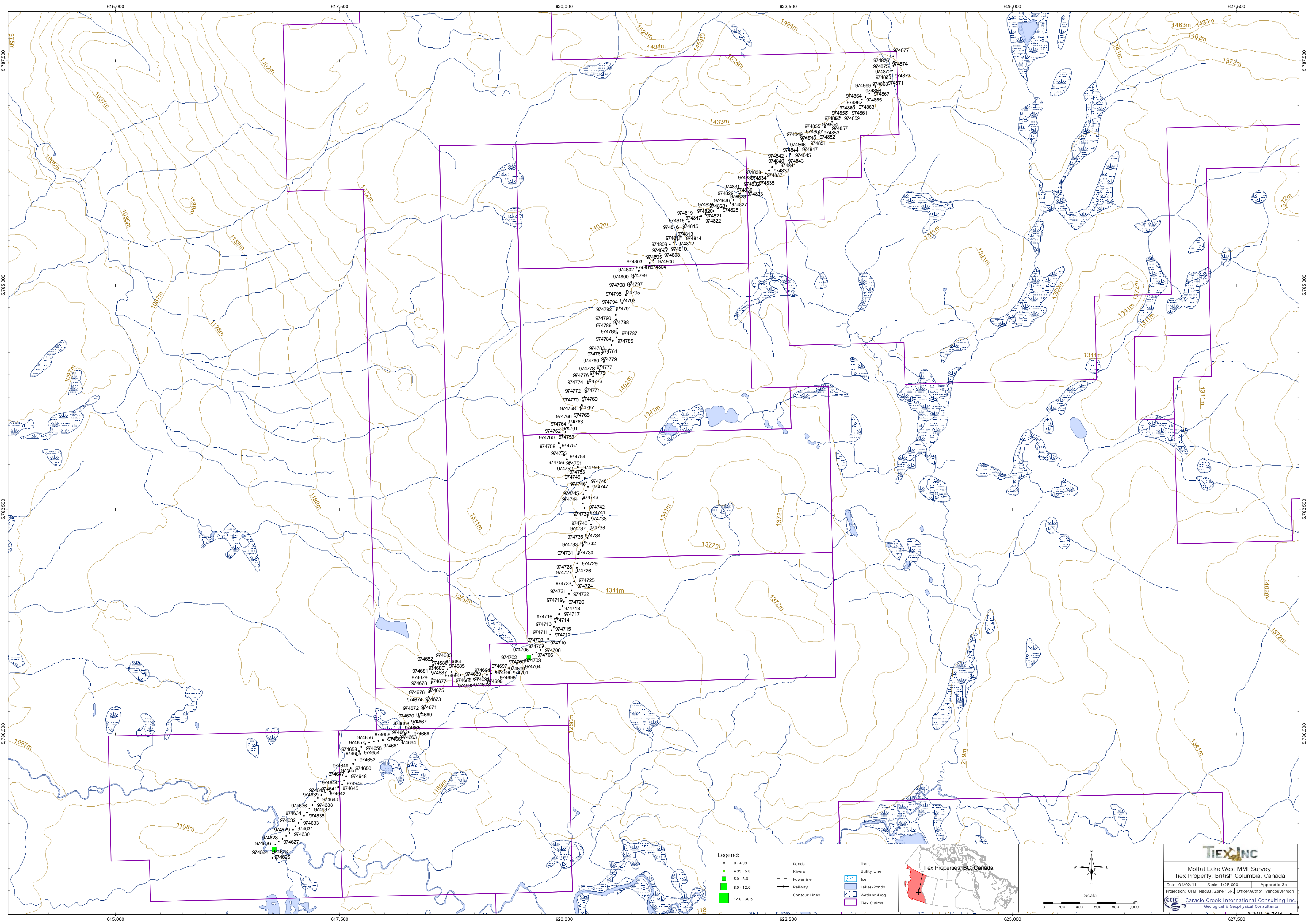
**TIEX INC**

Moffat Lake East MMI Survey,  
Teix Property, British Columbia, Canada.

Date: 04/02/11 | Scale: 1:12,500 | Appendix 3d  
 Projection: UTM, NAD83, Zone 18N | Office/Author: Vancouver/gcn

**CCIC** Caracle Creek International Consulting Inc.  
 Geological & Geophysical Consultants

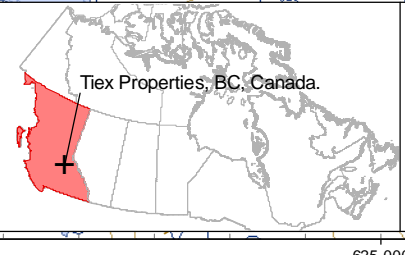




**Legend:**

- 0 - 4.99
- 4.99 - 5.0
- 5.0 - 8.0
- 8.0 - 12.0
- 12.0 - 30.6

— Roads	— Trails
— Rivers	— Utility Line
— Powerline	— Ice
— Railway	— Lakes/Ponds
— Contour Lines	— Wetland/Bog
	— Teix Claims



Scale: 0 200 400 600 800 1,000 m

North Arrow

**TIEX INC**

Moffat Lake West MMI Survey,  
Teix Property, British Columbia, Canada.

Date: 04/02/11 | Scale: 1:25,000 | Appendix 3e  
 Projection: UTM, NAD83, Zone 18N | Office/Author: Vancouver/gcn  
 CCIC Caracle Creek International Consulting Inc.  
 Geological & Geophysical Consultants