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# **Mineral Investigations in the Delta River Mining District, East-Central Alaska 2001-2002**

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## **Cover Photograph**

View to the north of the southern flank of the Alaska Range. Mt. Hayes is the peak farthest to the left. Mounts Moffit and Shand are on the right.

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MINERAL INVESTIGATIONS  
IN THE  
DELTA RIVER MINING DISTRICT  
EAST-CENTRAL ALASKA  
2001-2002

by

Peter E. Bittenbender, Kirby W. Bean, and Edward G. Gensler

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## TABLE OF CONTENTS

Abstract.....	1
Introduction.....	3
Acknowledgments.....	4
Field season review with highlights.....	5
Argon isotopic age date .....	7
References.....	8
Sampling and analytical procedures .....	10
Sampling methods .....	10
Analytical methods .....	10
Analytical results for samples from mines, prospects, mineral occurrences, and reconnaissance investigations .....	14
Results of placer and sluice concentrate sample evaluation .....	15
Analytical results for placer and sluice concentrate samples.....	17
Analytical results for rock chip samples – Partial digestion.....	21
Analytical results for rock chip samples – Total digestion.....	39
Analytical results for stream sediment and pan concentrate samples – Partial digestion.....	45
Analytical results for stream sediment and pan concentrate samples – Total digestion.....	53
Sampling and analytical procedures for USGS stream sediment samples .....	59
Analytical results for USGS stream sediment samples.....	61

## LIST OF FIGURES AND PLATES

Figure 1. Location of the Delta River Mining District in East-Central Alaska .....	3
Figure 2. Location of five mafic-ultramafic complexes in the southwestern Delta River Mining District.....	7
Plate 1. Rock chip sample location map of the Delta River Mining District, 2001-2002 .....	in pocket
Plate 2. Stream sediment, pan concentrate, and placer sample location map of the Delta River Mining District, 2001-2002.....	in pocket
Plate 3. USGS stream sediment sample locations in the southern Mt. Hayes quadrangle .....	in pocket

## LIST OF TABLES

Table 1. Results of placer and sluice concentrate sample evaluation .....	16
Table 2. Analytical results for placer and sluice concentrate samples .....	18
Table 3. Analytical results for rock chip samples – Partial digestion.....	22
Table 4. Analytical results for rock chip samples – Total digestion.....	40
Table 5. Analytical results for stream sediment and pan concentrate samples – Partial digestion.....	46
Table 6. Analytical results for stream sediment and pan concentrate samples – Total digestion.....	54
Table 7. Analytical results from the analysis of USGS stream sediment samples .....	62
Table 8. Coordinates for sample locations.....	75



## ABSTRACT

In 2001 and 2002 Bureau of Land Management (BLM) investigators surveyed, mapped, or sampled 108 mineral occurrences in the 2.9-million-acre Delta River Mining District, which extends across the Alaska Range from Paxson to Delta Junction, in east-central Alaska. The BLM collected and analyzed 487 rock chip, placer, pan concentrate, and stream sediment samples during the investigation. In addition, the BLM had 264 U.S. Geological Survey (USGS) stream sediment samples analyzed by the inductively coupled argon plasma – atomic emission spectroscopy (ICP-AES) technique for 40 elements and by fire assay, atomic absorption finish, for gold, platinum, and palladium. A subset of 17 of these samples, all with high nickel values, was analyzed for the full suite of platinum group elements (PGE). The BLM is scheduled to complete fieldwork for the mineral assessment program in the district in 2004 and will produce a final report in 2005.

Noteworthy results from the BLM's investigations include the discovery of PGE-bearing disseminated and net-textured sulfides hosted in gabbro and peridotite in the Cony Mountain area, in the eastern part of the district. Also, a pan concentrate sample from the Chisna River area returned 792 ppm gold and 2.29 ppm platinum. Investigators have not positively identified platinum lode sources in the Chisna River area to date.

The BLM coordinated the collection of gravity, magnetic, and magnetotelluric data by the USGS in the district in 2001 and 2002. Modeling of these data indicates the potential for a dense, moderately magnetic, strongly conductive body oriented approximately along the axis of a synform in the Amphitheater Mountains, in the southern part of the district.

The University of Alaska, Fairbanks, determined an early Late Triassic Ar/Ar age date of  $228.3 \pm 1.1$  million years, on a sample of phlogopite in gabbro from the PGE-bearing Rainy Creek mafic-ultramafic complex in the district. This age correlates a tectonically dismembered mafic-ultramafic complex north of the Rainy Creek thrust fault, that may have been intruded at a deeper stratigraphic level, with possibly shallower, generally undeformed complexes to the south, dated at  $230.4 \pm 1.3$  million years.

In 2002, the BLM contracted an airborne geophysical survey in the southwestern part of the district. The survey, administered by the State of Alaska, Division of Geological and Geophysical Surveys, collected aeromagnetic and three frequencies of resistivity data across approximately 350 square miles. The primary target of the survey was copper-nickel-PGE-bearing mafic and ultramafic rocks. The survey products released to the public in March, 2003 include approximately 250 square miles of aeromagnetic and resistivity data previously purchased by the BLM.





## INTRODUCTION

In 2001 and 2002, personnel from the Division of Energy and Solid Minerals of the Bureau of Land Management (BLM) - Alaska conducted mineral investigations in the 2.9-million-acre Delta River Mining District. The investigations are part of the BLM's ongoing mineral assessment program of mining districts in Alaska. The BLM's mineral assessment aims to compile, analyze, and publicize mineral information to facilitate multiple-use management of the area. Mineral information includes mineral occurrence surveying, mapping, and sampling; airborne and ground-based geophysics; stream sediment geochemistry; and economic, engineering, and environmental analysis. The BLM is scheduled to complete fieldwork for the mineral assessment of the district in 2004 and produce a final report in 2005.

The Delta River Mining District extends across the eastern Alaska Range from about Delta Junction on the north to Paxson on the south. It is accessible via the Richardson, Denali, and Alaska highways (fig. 1). BLM geologists collected 487 rock chip, stream sediment, pan concentrate, and placer samples while evaluating 108 prospects and mineral occurrences in the district in 2001 and 2002.

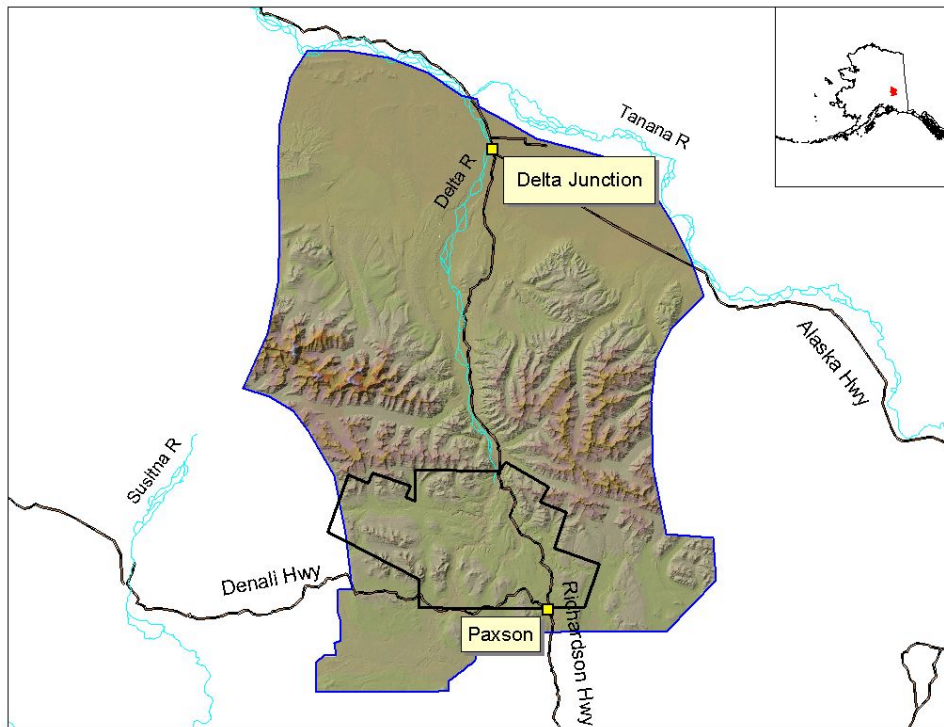


Figure 1. Location of the Delta River Mining District in east-central Alaska. The black polygon in the southern part of the district shows the extent of the BLM's airborne geophysical survey (*map scale approximately 1 inch = 30 miles (1:1,900,800)*).

In this report the authors present geochemical data that have resulted from the analyses of samples collected in the Delta River Mining District, along with brief descriptions of

airborne and ground-based geophysical data collection and the results of an Ar/Ar age determination. A full description of the BLM's mineral assessment of the district, with descriptions of individual properties, will be included in a final report on the district.

Table 1 presents data from the evaluation of placer samples the BLM collected during 2002. Don Keill, from the BLM's Northern Field Office in Fairbanks, processed the samples. Part of his processing included separating each sample into magnetic and non-magnetic fractions. Both of the fractions were sent to a commercial laboratory for trace element analysis; the results are presented in table 2.

Tables 3 through 6 present analytical results from a commercial laboratory according to the type of sample and the method of sample preparation. Results from the analysis of rock chip samples are presented in tables 3 and 4 and for placer, pan concentrate, and stream sediment samples in tables 5 and 6. Sample handling differed with regard to sample decomposition for inductively coupled argon plasma (ICP) analysis. The 'partial digestion' refers to the use of aqua regia to dissolve crushed material for ICP analysis. This process generally liberates metals in sulfides, but not in silicate phases. Alternatively, the 'total digestion' process uses a four-acid leach that breaks down the silicate lattice, so the analytical result includes metals bound in the silicate as well as the sulfide phases.

This report also includes analytical results derived from the reanalysis of 264 stream sediment samples that U.S. Geological Survey (USGS) investigators collected on the south side of the Alaska Range, in the Mt. Hayes quadrangle, in 1978 and 1979 (O'Leary and others, 1982; table 7). The aim of the reanalysis was to generate a broad baseline of geochemical data for the area using modern analytical techniques. The original, semi-quantitative USGS analysis (O'Leary and others, 1982) has been replaced by inductively coupled plasma-atomic emission spectroscopy (ICP-AES) for 40 elements. In addition, the BLM analyzed for platinum and palladium, which were missing from the original USGS data set. Table 7 includes analyses for a full suite of platinum group metals for 17 stream sediment samples from the data set. The BLM selected the 17 samples to be analyzed from those having the highest nickel values in the original USGS data set (O'Leary and others, 1982).

This report also presents data resulting from an Ar/Ar age determination from one of the PGE-bearing mafic-ultramafic complexes in the district. The age correlates tectonically dismembered complexes in the north with relatively undeformed complexes to the south.

## **ACKNOWLEDGMENTS**

The authors of this report would like to thank those that participated in field investigations in the Delta River Mining District in 2001 and 2002. Jan Still, now retired from the BLM, aided in property and reconnaissance evaluations in 2001. During that year, field assistance was ably provided by Karinne Knutsen. Several geologists from the BLM's Anchorage State Office helped with the field work in 2002. Joe Kurtak led the

investigation of placer deposits in the district. Robert Klieforth and John Wandke insured the success of the field season with their significant contributions to the field effort. Field assistance was ably provided by Amy Rodman.

The authors thank Don Keill from the BLM's Northern Field Office in Fairbanks for his analysis of the placer samples.

Bill Ellis, Alaska Earth Sciences, provided invaluable insights into the geology in the area, particularly on the mafic-ultramafic complexes and their PGE potential. The BLM appreciates the expertise shared by other investigators, including Larry Hulbert of the Geological Survey of Canada.

The authors are grateful to USGS investigators, Jeanine Schmidt, Jonathan Glen, Louise Pellerin, Jay Sampson, and Steve Nelson for sharing their expertise as well as their collaboration in the mineral assessment by collecting valuable gravity, magnetic, and magnetotelluric (MT) data across the southern part of the district.

Jeff Foley, Calista Corporation, formerly with the U.S. Bureau of Mines, provided the BLM with a sample well suited for Ar/Ar age dating. Paul Layer of the University of Alaska, Fairbanks dated the sample. We thank both of these contributors.

The authors would like to thank the staff of the Tangle River Inn for their gracious hospitality, particularly Nadine and Jack Johnson. Prism Helicopters provided excellent helicopter service, both in 2001 and 2002. Tundra Helicopters also provided able service during the field investigations.

## **FIELD SEASON REVIEW WITH HIGHLIGHTS**

The BLM made a brief reconnaissance of the Delta River Mining District in 2001. During 2002, up to seven BLM employees spent seven weeks investigating mineral occurrences in the district. The effort concentrated on the southern part of the district, which hosts Triassic, PGE-bearing, mafic-ultramafic complexes within the Wrangellia terrane. The BLM also investigated other deposit types, including skarn, basaltic copper, vein gold, and placer gold.

BLM personnel discovered PGE-bearing mafic to ultramafic lenses at the head of the Gulkana Glacier near Cony Mountain. The lenses are composed of variably serpentinitized, melagabbro to peridotite with disseminated to net-textured sulfides of pyrrhotite, chalcopyrite, and pentlandite. A 7-foot sample across one of the lenses returned 340 ppb gold, 385 ppb platinum, 827 ppb palladium, 0.47% copper and 0.37% nickel (sample number 10156). The host rock is banded or bedded, with inch-scale to foot-scale laminations or beds. In places, the host appears to be silicified volcanoclastics, and in others a more coarsely crystalline, banded intrusive. The lenses are exposed across an area of approximately 70 by 40 feet, in precipitous terrane, northwest of the head of the Gulkana Glacier.

A pan concentrate sample from the Chisna River, on the southeast side of the district, contained the highest concentration of platinum collected so far by the BLM during the current study (sample 10408). It returned 2.29 ppm platinum along with 792 ppm gold. This sample is significant because it was collected from a drainage with no known lode occurrences of PGE. Although PGE have been recovered from placer workings in the area as early as 1902 (Mendenhall and Schrader, 1903), no lode source has been determined for them. Foley and Summers (1990) identified potential sources in the Miller Gulch area as mafic and ultramafic plugs, sills, and dikes. There has been no systematic exploration of these potential lode sources to date.

The BLM collaborated with the USGS in collecting gravity, magnetic, and MT data in the Delta River Mining District in 2001 and 2002. Modeling of these data indicates the potential for a dense, moderately magnetic, strongly conductive body oriented approximately along the axis of a synform in the Amphitheater Mountains, in the southern part of the district (fig. 2). Results of the USGS gravity work in the district have been released by Morin and Glen (2002; 2003). Results of the MT work have been presented by Schmidt and others (2002) and Pellerin and others (2003).

In 2002, the BLM contracted for an airborne geophysical survey to be flown in the southwestern part of the Delta River Mining District (fig. 1). The survey, administered by the State of Alaska, Division of Geological and Geophysical Surveys (DGGs), included the collection of aeromagnetic and three frequencies of resistivity data across approximately 350 square miles. The primary target of the survey was copper-nickel-PGE-bearing mafic and ultramafic rocks. The survey, released to the public in March, 2003, also incorporates approximately 250 square miles of aeromagnetic and resistivity data previously purchased by the BLM. So the final product covers about 600 square miles of the southern part of the district. The survey data are available from the DGGs (Burns and Clautice, 2003; Burns and others, 2003).

## ARGON ISOTOPIC AGE DATE

The BLM contracted the University of Alaska, Fairbanks, to date a sample of phlogopite in gabbro collected from the Rainy mafic-ultramafic complex (fig. 2). The Ar/Ar date of  $228.3 \pm 1.1$  Ma, early Late Triassic, suggests that the tectonically disrupted Rainy, Eureka, and Canwell complexes north of the Rainy Creek thrust fault (see Nokleberg and others, 1992) are contemporaneous with the relatively undisturbed Fish Lake and Tangle complexes to the south, dated at  $230.4 \pm 2.3$  Ma (Larry Hulbert, personal comm., 2002). Although this similarity in age has been suggested previously, it had also been suggested that the northern Rainy, Eureka, and Canwell complexes could be older, intruded at deeper stratigraphic levels, and subsequently exhumed by southward directed thrusting (Bill Ellis, Larry Hulbert, personal comm., 2001, 2002; Nokleberg and others, 1992). Still other authors have suggested that the northern complexes may represent younger intrusions (Stout, 1976; Nokleberg and others, 1992). More work on defining an accurate stratigraphic sequence for the area is needed to fully answer the question of depths of emplacement and timing of fault movement. (Ar/Ar age data for the Rainy Creek sample analysis are available upon request from the BLM, Juneau, Alaska.)

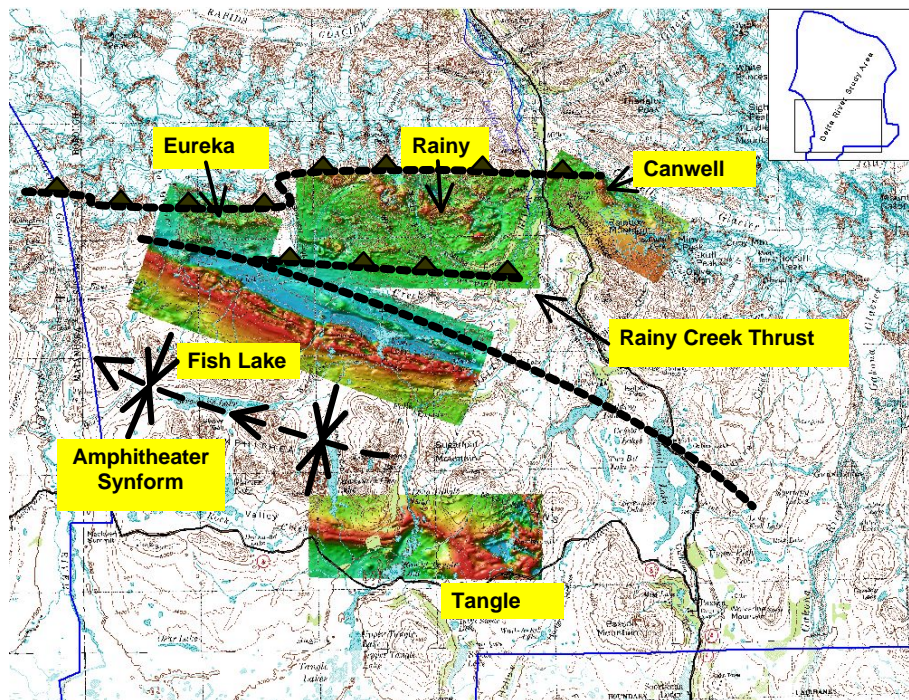


Figure 2. Location of five mafic-ultramafic complexes in the southwestern Delta River Mining District. The figure shows airborne magnetic data that mark the mafic-ultramafic complexes (*map scale approximately 1 inch = 12.5 miles (1:792,000)*).

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## SAMPLING AND ANALYTICAL PROCEDURES

### SAMPLING METHODS

BLM personnel collected several types of rock samples during 2001 and 2002. **Channel** samples are rock fragments, chips, or dust from a continuous channel of uniform width and depth across an exposure. **Chip channel** samples are chips of rock taken in a continuous line across a relatively uniform width and depth of an exposure. **Continuous chip** samples are chips of rock taken in a continuous line across an exposure. **Representative chip** samples are discontinuous chips of rock taken across an exposure. **Spaced chip** samples are chips of rock taken at a specified interval across an exposure. **Random chip** samples are chips of rock taken randomly across an exposure. **Grab** samples are rock chips or fragments taken more or less at random from an outcrop, float, or mine dump. **Select** samples are rock chips collected from the highest-grade parts of a mineralized zone.

Stream sediment, soil, and pan concentrate samples are collected in reconnaissance fashion to detect any anomalous metal values that may indicate the presence of mineralized rock in an area. **Stream sediment** samples are collections of silt- and clay-sized particles taken from a stream bed. **Pan concentrate** samples consist of one pan full of gravel, sand, and/or fines reduced by standard panning methods. The resultant concentrate of fines, approximately 0.75 ounces, is then analyzed.

BLM personnel collected **placer** concentrate samples using a portable, hydraulic concentrator, with grizzly, spray bar, and 10- by 48-inch sluice box. Sample sizes generally range from 0.05 to 0.1 bank cubic yard. The volumes of sampled material are calculated using the criterion of a heaping, 16-inch, gold pan equaling 1/160 of a cubic yard (16 heaping pans equals 0.1 cubic yard). The sample from the sluice box is then panned to produce approximately 2.5 ounces of concentrate.

**Sluice concentrate** samples are collected mostly from active or recently active placer mines. They consist of one to two pounds of black sands and other heavy minerals remaining after the placer gold has been removed. The amount of gravel washed to produce the concentrate is often unknown. BLM personnel collect these samples to find potentially anomalous accessory elements such as arsenic, antimony, bismuth, or tungsten. Following collection, they are processed like placer samples.

### ANALYTICAL METHODS

Two commercial laboratories provided analyses of BLM samples in 2001 and 2002. Sample numbers less than 10,000 were analyzed by Bondar Clegg<sup>1</sup>; sample numbers greater than 10,000 were analyzed by ALS Chemex<sup>2</sup>. Rock samples were dried, crushed

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<sup>1</sup> Mention of Bondar Clegg does not signify BLM endorsement.

<sup>2</sup> Mention of ALS Chemex does not signify BLM endorsement.



to a minus 10 mesh, split, and pulverized to minus a 150 mesh. Stream sediment samples were dried and sieved to a minus 80 mesh. Pan concentrate samples were pulverized to a minus 150 mesh. For samples analyzed by X-ray fluorescence spectroscopy (XRF), a 10-gram pressed pellet was prepared for measurement.

The laboratories analyzed samples for gold by fire assay pre-concentration of a 30-gram sample followed by an atomic absorption spectroscopy (AA) finish and reported results in parts per billion.

The laboratories analyzed platinum and palladium by fire assay pre-concentration of a 30-gram sample and an inductively coupled argon plasma –atomic emission spectroscopy (ICP-AES) or inductively coupled argon plasma –mass spectroscopy (ICP-MS) finish and reported the results in parts per million. They analyzed samples with more than trace levels of platinum and/or palladium using ICP-MS following fire assay.

The laboratories analyzed silver, copper, lead, zinc, and molybdenum by ICP-AES and reported results in parts per million. This followed a digestion of approximately 0.5 grams of sample in either aqua regia (“partial digestion”) or a multi acid (“total digestion”) solution. Tables 3 and 5 present the results of analyses using partial digestion; tables 4 and 6 present the results from total digestion. The laboratories analyzed those samples of copper, lead, zinc, and molybdenum that exceeded the upper detection limits with low-level assays consisting of an aqua regia digestion and AA finish and reported the results in percent.

Barium was analyzed by ICP-AES and XRF with results reported in ppm. For selected samples, tin and tungsten were also analyzed by XRF to improve the accuracy of data in areas where the BLM presumed a higher potential for these elements exists.

Mercury was analyzed by cold vapor AA methods with results reported in parts per million.

The laboratories analyzed the remaining elements by ICP-AES and reported the results as either parts per million or percent following either partial or total digestion of approximately 0.5 grams of sample. In most instances, when the results of samples analyzed by this method exceeded the upper detection limits, the samples were not reanalyzed, but results were reported as being greater than the corresponding upper detection limit. However, values above ICP-AES detection limits were obtained for some samples using low-level assay methods consisting of a multi acid digestion and AA finish, with results reported in percent.

## DETECTION LIMITS BY ANALYTICAL TECHNIQUE

### FIRE ASSAY METHODS

<u>Element</u>	<u>Range, ppm</u>	<u>Finish method</u>
Au	0.002-10 (0.001-20)	ICP-AES
Au	0.001-1	ICP-MS
Au	0.05-100	Ore grade ICP-MS
Pd	0.001-10 (0.001-100)	ICP-AES
Pd	0.001-1	ICP-MS
Pd	0.05-100	Ore grade ICP-MS
Pt	0.002-10 (0.005-100)	ICP-AES
Pt	0.0005-1	ICP-MS
Pt	0.05-100	Ore grade ICP-MS

(limits in parentheses refer to Bondar Clegg analyses; all others are from ALS Chemex)

### X-RAY FLUORESCENCE SPECTROSCOPY (XRF)

<u>Element</u>	<u>Range, ppm</u>
Ba	10-10,000
Sn	10-10,000
W	10-10,000

### ATOMIC ABSORPTION SPECTROSCOPY (AA)

<u>Element</u>	<u>Range, ppm</u>
Cu	0.01-30%
Pb	0.01-30%
Zn	0.01-30%

## INDUCTIVELY COUPLED ARGON PLASMA (ICP) SPECTROSCOPY

<u>Element</u>	<u>Range, ppm</u> <u>partial digestion</u>	<u>Range, ppm</u> <u>total</u> <u>digestion</u>	<u>Element</u>	<u>Range, ppm</u> <u>partial digestion</u>	<u>Range, ppm</u> <u>total</u> <u>digestion</u>
Ag	0.2-100 (0.2-200)	0.5-200	Na	0.01-15% (0.01-10%)	0.01-10%
Al	0.01-15% (0.01-10%)	0.01-10%	Nb	(1-10,000)	5-2000
As	2-10,000 (5-10,000)	5-10,000	Ni	1-10,000 (1-20,000)	1-20,000
B	10-10,000		P	10-10,000	
Ba	10-10,000 (1-2000)	5-2000	Pb	2-10,000	2-10,000
Be	0.5-100		S	0.01-10%	0.002-10%
Bi	2-10,000 (5-2000)	5-2000	Sb	2-10,000 (5-2000)	5-2000
Ca	0.01-15% (0.01-10%)	0.01-10%	Sc	1-10,000 (5-2000)	5-20,000
Cd	0.5-500 (0.2-2000)	1.0-2000	Sr	1-10,000 (1-2000)	1-10,000
Co	1-10,000 (1-20,000)	1-20,000	Sn	(20-2000)	20-2000
Cr	1-10,000 (1-20,000)	2-20,000	Ta	(10-1000)	5-2000
Cu	1-10,000	1-20,000	Te	(10-2000)	25-2000
Fe	0.01-15% (0.01-10%)	0.01-10%	Ti	0.01-10%	0.01-10%
Ga	10-10,000 (2-10,000)	10-2000	Tl	10-10,000	
Hg*	0.01-100 (0.010-20)		U	10-10,000	
K	0.01-10%	0.01-10%	V	1-10,000 (1-20,000)	2-2000
La	10-10,000 (1-2000)	5-2000	W	10-10,000 (20-2000)	20-2000
Li	(1-20,000)	2-2000	Y	(1-2000)	5-2000
Mg	0.01-15% (0.01-10%)	0.01-10%	Zn	2-10,000 (1-10,000)	2-10,000
Mn	5-10,000 (1-20,000)	5-20,000	Zr	(1-5000)	5-2000
Mo	1-10,000	1-20,000			

Partial digestion analyses for ICP reflect detection limits of ALS Chemex. Bondar Clegg detection limits for partial digestion analyses are shown in parentheses where they differ from ALS Chemex. All total digestion detection limits are those reported by Bondar Clegg.

\* analyzed by cold vapor AA

## ANALYTICAL RESULTS FOR SAMPLES FROM MINES, PROSPECTS, MINERAL OCCURRENCES, AND RECONNAISSANCE INVESTIGATIONS

Analytical and sample data are presented in tables 1 to 7. In addition to the analytical results, the following information may be listed in some of the tables: map number, sample number, sample site, sample type, sampling method, and sample size. The results are organized in the tables by map number, as presented on plates 1 to 3.

Sample locations are plotted by map number as follows:

Tables 1 and 2: Placer and sluice concentrate sample locations on plate 2

Tables 3 and 4: Rock chip sample locations on plate 1

Tables 5 and 6: Stream sediment and pan concentrate sample locations on plate 2

Table 7: USGS stream sediment sample locations on plate 3.

### ABBREVIATIONS

#### *Sample types:*

PC	pan concentrate	SC	sluice concentrate
PL	placer	SS	stream sediment
R	rock chip		

#### *Sampling method (Rock Chip):*

CH	channel	RC	random chip
CC	chip channel	Rep	representative chip
C	continuous chip	S	select
G	grab	SC	spaced chip

**Sample size:** Sample sizes are given in feet. The sizes of spaced chip samples (SC) are given by the overall size of the sample followed by the sample spacing (“Int”), e.g., 10 feet @ 0.5-foot spacing.

#### *Sample sites:*

FL	float	OC	outcrop
MD	mine dump	RC	rubblecrop
MT	mine tailings	TP	trench, pit, or cut

## RESULTS OF PLACER AND SLUICE CONCENTRATE SAMPLE EVALUATION

The following table presents the results of placer and sluice concentrate sample processing by Don Keill, of the BLM's Northern Field Office in Fairbanks. He dried and sieved the samples and removed the coarse gold. He weighed, measured, and described the gold in each sample and examined each with a microscope, noting other conspicuous metals and minerals. He separated each sample into magnetic and non-magnetic fractions. The results of geochemical analysis of the fractions are presented in table 2.

The "Au wt (g)" column presents the weight of gold after separation from each placer concentrate. As much gold as possible was removed manually from the samples. Any gold that was too fine to be removed manually is included in the analytical results from the geochemical analysis of material sent to a commercial laboratory and presented in table 2. No attempt was made to determine the fineness of the gold.

The map numbers in table 1 correspond to the numbered locations on **plate 2**.

Abbreviations:

wt	weight	oz	troy ounces
g	grams	\$	U.S. dollars
Vol	volume	@	at
cy	bank cubic yards		

Table 1. Results of placer and sluice concentrate sample evaluation

Map no.	Sample no.	Sample type	Location	Au wt (g)	Vol (cy)	oz/cy	\$/cy @ \$350/oz
27	10435	SC	Broxson Gulch	0.2833			\$ -
30	10415	SC	Broxson Gulch	0.0769			\$ -
33	10437	PL	Specimen Creek	0.0486	0.1	<b>0.0156</b>	<b>\$ 5.47</b>
37	10436	PL	Specimen Creek	0.182	0.1	<b>0.0585</b>	<b>\$ 20.48</b>
41	10515	PL	Rainy Creek	0.0212	0.1	<b>0.0068</b>	<b>\$ 2.39</b>
42	10414	SC	Rainy Creek	0.0327			\$ -
42	10514	PL	Rainy Creek	0.0496	0.1	<b>0.0159</b>	<b>\$ 5.58</b>
59	10511	SC	W. Fork Chistochina	0			\$ -
67	10409	PL	Chistochina River	0.1342	0.125	<b>0.0345</b>	<b>\$ 12.08</b>
69	10403	SC	Big 4 Creek	0.4528			\$ -
70	10410	PL	Big 4 Creek	0.0169	0.1	<b>0.0054</b>	<b>\$ 1.90</b>
71	10427	PL	Big 4--Miller	0.0162	0.05	<b>0.0104</b>	<b>\$ 3.65</b>
72	10400	PL	Miller Creek	0.2596	0.1	<b>0.0835</b>	<b>\$ 29.21</b>
73	10411	PL	Miller Creek	0.0159	0.05	<b>0.0102</b>	<b>\$ 3.58</b>
73	10428	PL	Miller Creek	0.0053	0.05	<b>0.0034</b>	<b>\$ 1.19</b>
76	10412	PL	Chisna River	0.0361	0.1	<b>0.0116</b>	<b>\$ 4.06</b>
77	10454	SC	Lower Chisna River	0			\$ -

## **ANALYTICAL RESULTS FOR PLACER AND SLUICE CONCENTRATE SAMPLES**

Placer and sluice concentrate samples were geochemically analyzed by a commercial laboratory after manual removal of coarse gold (weights of coarse gold from each sample are presented in table 1). The concentrates were processed by the laboratory like pan concentrate samples, so were dried and pulverized prior to analysis.

The magnetic versus nonmagnetic fractions of each sample are identified in table 2. New sample numbers have been given to the magnetic fraction of each sample to facilitate incorporation into the BLM's analytical database.

The map numbers in table 2 correspond to the numbered locations on **plate 2**.

Table 2. Analytical results for placer and sluice concentrate samples.

Note: In cases where analytical results are preceded by a ">" there was insufficient sample to analyze the over detection limits result.

Map no.	Sample no.	Mag/ non mag	Type	Au ppm	Pt ppm	Pd ppm	Ag ppm	Al pct	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm
27	10435	non mag	SC	97.2	0.007	0.007	5.9	1.59	30	<10	70	<0.5	<2	0.5	0.5	18	129	47	3.23	<10
27	10471	mag	SC	244	0.585	0.195	23.6	0.55	<2	<10	40	<0.5	6	0.21	17.1	193	836	194	15	10
30	10415	non mag	PL	22.8	0.115	1.191	0.7	1.28	17	10	300	<0.5	<2	0.4	0.5	40	126	97	3.12	<10
30	10468	mag	PL	3.342	37	94.2	<0.2	0.41	<2	<10	30	<0.5	4	0.09	5.6	865	275	1155	15	70
33	10437	non mag	PL	8.95	0.005	0.006	2.4	1.93	25	<10	40	<0.5	<2	0.73	0.5	26	200	91	3.67	<10
33	10473	mag	PL	0.066	1.445	0.049	1	0.23	<2	<10	10	<0.5	45	0.11	21.8	247	232	161	15	<10
37	10436	non mag	PL	16.7	0.005	0.006	0.3	1.71	27	<10	30	<0.5	<2	0.82	<0.5	21	219	48	2.79	<10
37	10472	mag	PL	9.698	0.069	0.026	1.1	0.48	9	<10	20	<0.5	37	0.21	19.8	128	378	115	15	10
41	10515	non mag	PL	1.375	<0.005	0.006	0.2	1.47	<2	<10	40	<0.5	<2	0.74	0.6	34	175	46	4.05	<10
41	10477	mag	PL	0.092	0.444	0.029	1.1	0.53	<2	<10	30	<0.5	9	0.32	15.8	74	677	75	15	10
42	10414	non mag	SC	9.979	0.008	0.018	<0.2	1.43	8	<10	60	<0.5	<2	0.5	<0.5	23	141	46	3.75	<10
42	10467	mag	SC	9.41	0.985	0.209	0.9	0.34	<2	<10	30	<0.5	<2	0.18	13.6	89	266	202	15	10
42	10514	non mag	PL	0.028	0.008	0.008	0.3	1.76	16	<10	180	<0.5	<2	0.89	<0.5	26	192	52	3.64	<10
42	10476	mag	PL	4.167	0.075	0.022	1.5	0.43	<2	<10	30	<0.5	6	0.27	16.6	76	434	97	15	10
59	10511	non mag	SC	0.618	0.005	0.006	0.6	1.38	24	10	200	<0.5	2	1.8	1.6	22	102	72	6.1	<10
59	10475	mag	SC	0.01	0.047	0.049	0.9	0.53	<2	<10	40	<0.5	<2	0.64	28.2	102	326	76	15	20
67	10409	non mag	PL	10.5	0.013	0.009	0.6	1.29	76	<10	40	<0.5	<2	1.06	1	38	74	199	5.91	<10
67	10463	mag	PL	>10	0.418	0.06	1.3	0.96	29	<10	120	0.6	<2	1.15	14.8	66	2230	142	15	10
69	10403	non mag	SC	>1000	0.076	0.001	80.3	0.59	28	10	310	<0.5	<2	0.38	3.1	43	271	6670	15	10
69	10462	mag	SC	77.7	0.039	0.014	60.9	0.26	7	10	40	<0.5	<2	0.14	3.3	38	2250	74	15	10
70	10410	non mag	PL	61.3	0.008	0.006	<0.2	1.39	29	10	60	<0.5	9	0.56	<0.5	32	233	51	8.01	<10
70	10464	mag	PL	32.8	0.042	0.011	1	0.79	5	10	60	0.5	<2	0.35	10.5	72	2770	41	15	20
71	10427	non mag	PL	113.5	0.005	0.009	0.2	1.47	26	10	50	<0.5	<2	0.4	0.9	34	157	58	6.27	<10
71	10469	mag	PL	13.2	0.065	0.128	<0.2	0.9	13	<10	50	<0.5	<2	0.29	11.5	89	1675	40	15	20
72	10400	non mag	PL	63.8	0.016	0.006	2.3	2.34	32	10	210	<0.5	<2	1.08	1.1	30	115	764	8.21	<10
72	10461	mag	PL	12.5	0.029	0.016	<0.2	0.7	<2	<10	70	<0.5	<2	0.35	5.1	50	1130	35	15	10
73	10411	non mag	PL	0.545	<0.005	0.005	<0.2	1.88	11	<10	20	<0.5	<2	0.21	0.5	16	89	36	4.03	<10
73	10465	mag	PL	0.935	0.06	0.023	<0.2	1.01	5	<10	30	<0.5	4	0.35	13.4	49	1110	24	15	20
73	10428	non mag	PL	0.102	<0.005	0.005	<0.2	1.82	23	<10	40	<0.5	<2	0.24	0.5	23	120	41	4.73	<10
73	10470	mag	PL				0.2	1.23	12	10	50	0.5	8	0.22	12.2	95	4480	36	15	20
76	10412	non mag	PL	0.238	<0.005	0.009	<0.2	1.35	17	<10	60	<0.5	7	0.51	<0.5	12	34	29	2.46	<10
76	10466	mag	PL	69.3	2.17	0.033	4.9	0.9	5	<10	40	0.5	21	0.53	13	79	520	33	15	20
77	10454	non mag	SC	>10	0.071	0.019	25	1.9	7	<10	80	<0.5	<2	1.5	6.2	44	604	58	15	10
77	10474	mag	SC	0.052	0.03	0.016	0.9	0.51	<2	<10	30	<0.5	<2	0.39	19.3	87	759	33	15	30



Table 2. Analytical results for placer and sluice concentrate samples.

Note: In cases where analytical results are preceded by a ">" there was insufficient sample to analyze the over detection limits result.

Map no.	Sample no.	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Hg	
		pct	ppm	pct	ppm	ppm	pct	ppm	ppm	ppm	pct	ppm	ppm	ppm	pct	ppm	ppm	ppm	ppm	ppm	ppm	ppm
27	10435	0.08	<10	1.77	481	1	0.03	133	700	773	0.09	6	3	19	0.09	<10	10	51	30	115	7.94	
27	10471	0.03	<10	2.52	1055	<1	0.02	3580	<10	91	<0.01	<2	2	<1	0.11	<10	10	303	70	469	13.85	
30	10415	0.11	10	1.34	462	<1	0.02	242	370	4	<0.01	<2	4	17	0.07	<10	<10	62	<10	225	4.68	
30	10468	0.02	<10	2.18	582	10	<0.01	>10000	<10	63	<0.01	25	1	<1	0.02	<10	10	43	60	153	0.04	
33	10437	0.07	<10	2.07	469	<1	0.06	168	480	<2	0.02	<2	4	27	0.13	<10	10	72	10	55	0.43	
33	10473	0.01	<10	2.47	663	<1	<0.01	4480	<10	65	<0.01	<2	<1	<1	0.04	<10	10	34	60	52	0.11	
37	10436	0.04	<10	1.9	360	<1	0.07	178	440	<2	<0.01	3	4	28	0.14	10	10	56	10	49	1.18	
37	10472	0.02	<10	1.91	751	<1	0.02	1110	<10	46	<0.01	7	1	<1	0.13	<10	20	237	60	70	1.42	
41	10515	0.05	10	4.13	486	<1	0.04	371	350	<2	<0.01	<2	3	19	0.13	<10	10	110	30	51	0.24	
41	10477	0.02	<10	2.07	826	<1	0.02	549	<10	28	<0.01	8	2	<1	0.26	<10	10	1540	70	72	0.11	
42	10414	0.05	<10	2.27	380	<1	0.02	201	370	<2	<0.01	<2	3	18	0.07	<10	<10	110	10	53	0.93	
42	10467	0.02	<10	1.37	596	<1	<0.01	882	<10	101	<0.01	<2	1	<1	0.12	<10	10	1000	60	58	0.52	
42	10514	0.07	<10	2.73	447	<1	0.05	235	390	<2	0.02	<2	4	28	0.14	<10	10	93	20	57	0.09	
42	10476	0.02	<10	1.38	761	<1	0.01	431	<10	35	<0.01	6	1	<1	0.24	<10	10	1825	70	63	0.09	
59	10511	0.15	<10	1.09	511	1	0.07	48	660	<2	0.29	<2	6	63	0.11	<10	10	211	30	105	0.29	
59	10475	0.04	<10	0.84	949	<1	0.03	183	<10	52	<0.01	<2	5	<1	0.33	<10	20	1670	70	62	0.29	
67	10409	0.08	<10	1	438	1	0.02	74	930	49	3.36	6	3	32	0.11	10	10	72	30	129	7.37	
67	10463	0.09	<10	0.94	1105	<1	0.05	465	<10	116	0.52	<2	7	<1	0.48	<10	20	1565	50	218	38	
69	10403	0.04	<10	0.33	1355	5	0.02	88	<10	1495	0.13	21	5	<1	0.24	<10	10	831	70	72	>100	
69	10462	0.01	<10	0.28	881	16	<0.01	652	<10	77	<0.01	<2	3	<1	0.13	<10	<10	640	60	36	>100	
70	10410	0.07	10	0.89	978	1	0.02	135	920	6	<0.01	7	7	27	0.15	<10	<10	276	30	72	2.15	
70	10464	0.03	<10	0.67	1530	<1	0.02	853	<10	72	<0.01	<2	8	<1	0.25	<10	10	1015	60	69	1.22	
71	10427	0.06	<10	1.1	754	<1	0.01	180	350	<2	<0.01	4	8	18	0.12	<10	<10	194	30	69	0.4	
71	10469	0.02	<10	0.88	1595	<1	<0.01	633	<10	48	<0.01	<2	11	<1	0.33	<10	10	1240	70	61	0.32	
72	10400	0.21	<10	1.59	771	<1	0.03	67	770	210	0.01	<2	7	27	0.15	<10	10	285	40	143	>100	
72	10461	0.05	<10	0.51	852	<1	0.01	325	<10	64	<0.01	<2	5	<1	0.2	<10	<10	1030	50	58	23	
73	10411	0.05	<10	0.88	398	<1	<0.01	65	560	2	<0.01	<2	6	7	0.05	<10	<10	88	10	82	1.63	
73	10465	0.04	<10	0.5	715	2	0.02	296	140	40	<0.01	11	9	46	0.23	<10	20	1485	<10	60	0.87	
73	10428	0.06	<10	1.03	620	1	<0.01	108	590	<2	<0.01	<2	6	12	0.07	<10	<10	109	20	84	0.33	
73	10470	0.03	<10	0.9	1660	<1	0.01	1375	<10	48	<0.01	<2	9	<1	0.21	<10	10	869	70	92	0.44	
76	10412	0.05	<10	0.85	370	<1	0.02	28	680	4	<0.01	<2	3	14	0.1	<10	10	62	<10	62	0.68	
76	10466	0.04	<10	0.59	689	<1	0.04	148	<10	83	<0.01	<2	5	<1	0.5	<10	10	1965	60	95	0.66	
77	10454	0.13	<10	1.38	974	<1	0.17	120	430	94	<0.01	3	11	55	0.63	<10	10	819	60	87	1.3	
77	10474	0.02	<10	0.48	749	<1	0.02	268	<10	48	<0.01	2	3	<1	0.46	<10	10	2100	70	80	0.17	



**ANALYTICAL RESULTS FOR ROCK CHIP SAMPLES – PARTIAL  
DIGESTION**

The map numbers in table 3 correspond to the numbered locations on **plate 1**.

Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Site	Method	Size (ft)	Int	Au ppm	Ag ppm	Al pct	As ppm	B ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	Hg ppm	K pct	La ppm	Li ppm	Mg pct	Mn ppm	Mo ppm
1	6988	OC	G		1,498	9.5	0.28	4033	57	14	0.62	12.7	9	147	11	4.24	2	0.094	0.15	9	1	0.31	1216	23	
2	1024	RC	S		0.013	<0.2	0.23	14	93	<5	0.18	0.8	1	191	14	1.27	<2	0.572	0.11	4	3	0.17	256	2833	
2	6987	RC	S		0.015	0.5	0.63	136	30	<5	0.14	1.9	7	124	143	2.74	3	20	0.27	7	4	0.14	56	35	
3	6972	OC	G		0.018	<0.2	0.49	<5	19	12	0.47	<0.2	35	1332	>10	12	0.027	0.18	2	<1	2	0.23	1710	<1	
3	9758	RC	Rep	4	0.001	<0.2	0.81	<5	16	9	1.2	<0.2	100	16	699	>10	16	0.022	<0.01	4	2	0.38	832	<1	
4	10172	FL	C	3	0.002	<0.2	0.71	<2	<10	1280	<2	0.25	12	192	53	4.02	20	<0.01	1.82	10		1.92	531	1	
4	10173	FL	S		0.004	0.2	1.27	<2	<10	1230	<2	0.1	<0.5	7	86	61	3.52	<10	<0.01	0.29	10		0.73	136	1
5	6973	OC	G		0.016	<0.2	0.47	<5	56	<5	2.27	<0.2	29	78	73	>10	5	0.072	0.1	2	1	0.16	1531	<1	
6	6967	RC	S		0.075	30.1	0.67	<5	14	151	0.12	43.6	88	3909	>10	12	0.48	0.02	<1	2	0.42	697	<1		
6	6968	RC	S		0.013	1.5	0.71	<5	20	<5	0.05	14.7	24	193	3956	5.58	4	0.124	0.06	3	2	0.46	566	1	
6	6969	RC	S		0.097	1.3	0.93	19	15	22	0.46	2.3	87	42	2224	>10	14	0.068	0.02	<1	2	0.55	1701	<1	
6	6970	RC	S		0.064	25	0.24	<5	24	107	5.71	80.4	7	131	636	5.84	2	0.666	0.11	<1	<1	0.26	4134	2	
6	6971	RC	S		0.059	<0.2	0.37	<5	52	19	5.33	23.2	3	18	275	6.91	3	0.118	0.19	3	<1	0.21	8772	<1	
6	9755	RC	Rep	1.5	0.083	6.9	0.1	<5	14	16	4.38	141.9	64	14	<b>1.39%</b>	>10	7	0.548	0.07	<1	<1	0.8	7646	<1	
6	9756	RC	Rep		0.003	1	0.62	<5	16	<5	0.06	3	245	19	2911	>10	14	0.143	<0.01	<1	2	0.44	486	<1	
6	9757	RC	Rep	1	0.032	26.6	0.85	<5	10	76	0.19	151.3	15	38	<b>1.63%</b>	>10	11	0.43	<0.01	<1	2	0.55	1474	<1	
7	10171	FL	S		0.004	0.4	1.52	2	<10	2470	<2	0.01	0.7	12	88	83	2.25	10	0.01	0.18	10		0.34	70	3
8	10048	OC	G		0.001	<0.2	0.59	31	<10	1670	<2	0.06	<0.5	10	63	86	1.88	<10	0.17	0.07	<10		0.03	232	1
9	10165	OC	Rep		0.001	<0.2	0.31	4	<10	160	13	0.25	17.3	46	8	9	15	100	0.03	0.03	40		0.19	5930	4
10	6985	RC	S		<0.001	<0.2	0.41	11	61	<5	0.11	<0.2	8	139	49	5.52	3	<0.01	0.05	7	<1	0.05	2936	<1	
10	10175	OC	S		<0.001	<0.2	1.71	8	<10	2700	<2	0.1	<0.5	18	62	5	3.45	10	0.01	0.84	10		0.51	411	<1
11	10174	OC	S		0.01	<0.2	1.65	6	<10	5140	<2	0.07	<0.5	23	57	110	4.43	10	<0.01	0.14	20		1.33	333	<1
12	6986	RC	S		<0.001	0.2	0.32	10	62	<5	0.05	<0.2	<1	103	5	0.71	2	<0.01	0.22	9	3	0.06	28	4	
13	10100	OC	C	5	0.019	0.6	0.13	515	<10	150	<2	0.03	<0.5	1	128	17	0.73	<10	0.19	0.04	<10		0.08	52	<1
13	10101	OC	C	4.5	0.015	0.4	0.63	1080	<10	1910	<2	0.06	<0.5	9	23	45	4.55	<10	0.36	0.19	<10		0.25	309	<1
13	10102	OC	C	12	0.009	<0.2	0.05	81	<10	30	<2	0.01	<0.5	<1	173	6	0.42	<10	0.05	0.01	<10		0.01	19	1
13	10103	OC	C	5.5	0.052	0.4	0.45	1665	<10	1610	6	0.42	<0.5	18	27	52	5.34	<10	0.41	0.18	<10		0.53	716	<1
13	10104	OC	S	1	0.107	5	0.4	1625	<10	1030	7	0.05	<0.5	11	63	32	3.04	<10	1.53	0.12	<10		0.06	123	<1
13	10105	OC	G	1	0.108	0.2	0.11	1110	<10	320	<2	0.01	<0.5	1	84	8	1.72	<10	0.11	0.07	<10		0.02	95	<1
13	10304	FL	G		2.49	303	0.05	683	<10	<10	580	0.08	3.4	13	115	162	1.08	<10	0.1	<0.01	<10		0.04	44	2
14	10111	FL	S		0.057	0.4	0.52	7410	<10	200	5	6.05	0.9	6	18	49	3.93	<10	0.39	0.03	<10		2.06	1870	<1
15	10301	OC	C	1.5	0.027	3.4	0.13	240	<10	1270	8	0.13	1	1	80	63	2.02	<10	1.24	0.15	<10		0.04	118	1
16	10300	OC	Rep	1	0.008	<0.2	0.18	1145	<10	430	<2	0.34	<0.5	7	134	50	1.25	<10	0.07	0.1	<10		0.03	241	1
17	1043	OC	SC	5	1	0.094	2	0.74	53	19	<5	5.1	0.6	34	44	1235	6.41	<2	0.125	0.04	3	3	0.89	503	6
17	2680	OC	Rep		0.004	<0.2	1.72	57	15	<5	10	0.3	21	114	32	4.34	<2	0.03	<0.01	14	19	2.66	4653	<1	
18	10021	TP	SC	23	1	0.094	9.3	3.61	<2	<10	130	<2	0.73	<0.5	49	141	<b>2.44%</b>	5.87	20	0.75	<0.01	10	3.84	958	<1
18	10022	TP	SC	8.5	0.5	0.068	8.6	1.7	<2	<10	130	<2	0.72	<0.5	22	97	<b>2.45%</b>	3.2	10	0.65	<0.01	<10	1.68	454	<1
18	10023	OC	SC	6	1	0.008	0.6	2.64	<2	<10	170	<2	0.95	<0.5	35	143	1500	5.1	20	0.04	<0.01	10	2.68	674	<1
18	10024	MD	S		0.323	49.3	2.03	<2	<10	100	<2	0.37	<0.5	24	96	<b>16%</b>	3.31	10	4.86	<0.01	<10		1.97	556	<1
19	10164	FL	S		0.005	0.8	1.52	5	<10	110	<2	2.19	1.3	16	65	4950	2.13	10	0.12	<0.01	<10		1.08	391	<1
19	10504	OC	C	1	0.004	1.5	1.25	2	<10	70	5	2.37	<0.5	6	93	3570	1.43	<10	0.02	<0.01	<10		0.24	201	1
20	10317	RC	G		0.007	1.8	0.35	55	<10	150	3	0.84	<0.5	2	37	<b>1.22%</b>	0.56	<10	0.19	<0.01	<10		0.11	135	<1
21	10318	OC	C	5	0.004	0.6	3.71	17	<10	290	6	0.43	5.5	52	150	<b>1.22%</b>	8.8	10	0.15	0.02	<10		3.43	942	14
21	10319	OC	C		0.011	0.8	2.05	26	<10	210	<2	0.44	5	21	96	<b>4.87%</b>	9.62	<10	0.08	0.02	<10		1.95	652	17
21	10320	OC	G		0.002	0.8	1.29	10	<10	40	7	0.92	1.4	17	94	<b>2%</b>	4.21	<10	0.05	<0.01	<10		1.27	357	10
22	10531	OC	Rep		0.005	0.2	4.67	<2	<10	140	6	1.92	0.6	32	77	171	5.08	10	0.01	0.05	<10		2.55	591	<1

Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	6988	0.02	1	11	<0.005	0.43	6	<0.001	<0.005	0.43	7	<20	10	<10	<10	<0.01	<10	38	<20	13	115	4	
2	1024	0.02	1	6	<0.005	0.24	<5	<0.001	<0.005	0.24	<5	<20	11	<10	<10	0.021	<10	28	66	3	30	<1	
3	6987	<0.01	6	63	<0.005	2.13	<5	<0.005	2.13	<5	<20	14	<10	<10	<0.01	<10	96	<20	5	150	3		
3	6972	<0.01	<1	11	<0.005	0.10	<5	<0.005	0.10	<5	<20	18	<10	<10	0.021	0.021	8	<20	2	72	<1		
3	9758	<0.01	<1	6	<0.005	0.006	<5	<0.005	0.006	<5	<20	21	<10	<10	0.012	0.012	10	<20	3	100	<1		
4	10172	0.09	65	880	0.003	0.015	0.33	<2	13	<5	12	<5	<1	<10	0.26	<10	40	163	<10	140	91		
4	10173	0.02	19	370	0.003	0.015	0.43	2	2	<5	<1	<5	<1	<10	0.06	<10	<10	45	10	6	<20	2	
5	6973	<0.01	<1	8	<0.005	0.005	5.6	<5	<5	<20	22	<10	<10	<10	0.038	0.038	6	<20	2	72	<1		
6	6967	<0.01	<1	27	0.005	<0.005	10	<5	<5	<20	6	<10	<10	<10	0.01	0.01	9	<20	1	9398	<1		
6	6968	<0.01	<1	14	<0.001	<0.005	3.46	<5	<5	<20	2	<10	<10	<10	0.031	0.031	9	<20	1	3237	<1		
6	6969	<0.01	<1	7	<0.002	<0.005	10	<5	<5	<20	9	<10	<10	<10	0.01	0.01	9	<20	1	592	<1		
6	6970	<0.01	<1	6	<0.001	<0.005	3.67	<5	<5	<20	103	<10	<10	<10	0.01	0.01	3	<20	<1	2.65%	<1		
6	6971	0.04	<1	2	<0.001	<0.005	1.78	<5	<5	<20	54	<10	<10	<10	0.01	0.01	2	21	2	5039	<1		
6	9755	<0.01	<1	5	<0.001	<0.005	9.1	<5	<5	<20	219	<10	<10	<10	0.01	0.01	4	22	1	4.91%	<1		
6	9756	<0.01	<1	10	0.003	0.011	10	<5	<5	<20	2	<10	<10	<10	0.01	0.01	14	<20	<1	839	<1		
6	9757	<0.01	<1	6	>1000	0.001	<0.005	10	<5	<5	<20	10	<10	<10	0.01	0.01	7	32	1	7.49%	<1		
7	10171	0.02	48	60	<2	0.003	0.0014	1.09	<2	1	<5	7	<5	7	0.01	<10	<10	73	<10	28	28		
8	10048	0.01	17	20	5	0.001	0.0009	0.03	<2	6	<5	6	<5	6	0.01	<10	<10	23	<10	63	63		
9	10165	0.01	16	430	26	<0.001	<0.000	0.01	<2	2	8	<1	<1	<1	0.01	<10	<10	32	10	92	92		
10	6985	<0.01	<1	18	9	<0.001	<0.005	<0.01	<5	<5	<20	23	<10	<10	<0.01	<0.01	22	<20	5	72	<1		
10	10175	0.02	32	130	18	0.001	<0.000	0.01	3	13	<5	15	<5	15	0.13	<10	<10	53	10	143	143		
11	10174	0.02	26	240	2	0.001	0.0007	1.27	<2	2	<5	<1	<1	<1	0.03	<10	<10	23	<10	49	49		
12	6986	0.08	3	9	40	<0.001	<0.005	0.25	<5	<5	<20	8	<10	<10	<0.01	<0.01	2	<20	17	32	29		
13	10100	0.01	8	30	93	<0.001	<0.005	0.12	52	<1	<5	5	<5	5	<0.01	<10	<10	4	10	20	20		
13	10101	0.01	28	240	53	0.001	<0.005	0.69	42	4	<5	9	<5	9	<0.01	<10	<10	13	20	133	133		
13	10102	0.01	5	10	8	0.001	<0.005	0.04	4	<1	<5	2	<5	2	<0.01	<10	<10	1	<10	4	4		
13	10103	0.01	50	180	21	0.001	<0.005	1.24	36	5	<5	32	<5	32	<0.01	<10	<10	8	30	238	238		
13	10104	0.01	20	100	607	<0.001	<0.005	2.07	333	2	<5	7	<5	7	<0.01	<10	<10	5	30	64	64		
13	10105	0.01	6	30	7	<0.001	<0.005	1.18	11	<1	<5	15	<5	15	<0.01	<10	<10	2	10	5	5		
13	10304	0.01	577	460	<b>7.69%</b>	0.007	<0.005	2.35	<b>2.79%</b>	1	67	25	<5	25	<0.01	<10	<10	4	<10	12	12		
14	10111	0.01	14	1320	19	<0.001	<0.005	1.28	39	11	<5	701	<5	701	<0.01	<10	<10	6	40	96	96		
15	10301	0.01	5	80	1740	0.002	<0.005	0.69	735	1	<5	11	<5	11	<0.01	<10	<10	3	20	337	337		
16	10300	0.01	5	140	9	0.001	<0.005	0.17	9	1	<5	5	<5	5	<0.01	<10	<10	3	<10	27	27		
17	1043	0.04	<1	108	2	0.003	<0.005	0.26	<5	<5	<20	42	<10	<10	0.102	0.102	28	<20	4	89	2		
17	2680	<0.01	<1	127	<2	0.01	0.024	0.09	<5	8	<20	227	<10	<10	0.061	0.061	32	<20	19	175	4		
18	10021	0.01	88	750	<2	0.037	0.0033	0.21	3	4	<5	<1	<5	<1	0.4	<10	20	145	<10	129	129		
18	10022	0.01	49	660	<2	0.069	0.003	0.27	<2	3	<5	16	<5	16	0.31	<10	<10	83	<10	60	60		
18	10023	0.01	87	780	<2	0.019	0.0027	0.01	2	3	<5	16	<5	16	0.43	<10	10	122	<10	87	87		
18	10024	0.01	46	490	<2	0.064	0.0011	0.89	2	5	6	<1	<1	<1	0.21	<10	<10	91	<10	167	167		
19	10164	0.01	62	460	207	0.012	0.0052	0.02	5	7	<5	47	<5	47	0.52	<10	40	99	<10	263	263		
19	10504	0.01	22	470	<2	0.017	0.0043	0.09	<2	6	<5	80	<5	80	0.43	<10	<10	97	10	9	9		
20	10317	0.01	9	600	4	0.012	<0.005	<0.01	<2	4	<5	22	<5	22	0.19	<10	<10	39	<10	16	16		
21	10318	0.03	118	540	6	0.024	<0.005	0.89	<2	13	<5	7	<5	7	0.34	<10	<10	204	<10	86	86		
21	10319	0.03	67	400	4	0.021	<0.005	2.79	<2	6	<5	9	<5	9	0.19	<10	<10	95	<10	82	82		
21	10320	0.01	51	310	3	0.013	<0.005	1.35	4	4	<5	9	<5	9	0.18	<10	<10	53	<10	50	50		
22	10531	0.32	95	410	3	0.021	0.0191	0.52	<2	3	<5	64	<5	64	0.19	<10	<10	101	<10	66	66		



Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
23	10315	0.01	80	810	4	0.014	<0.005	0.01	4	2	<5	25	<5	25	0.21	<10	<10	48	<10	<10	<10	26	<10
23	10316	0.01	47	790	8	0.015	<0.005	0.08	<2	2	<5	27	<5	27	0.22	<10	<10	51	<10	<10	<10	36	<10
24	10361	0.63	35	100	<2	0.003	0.0044	0.1	5	2	<5	116	<5	116	0.07	<10	<10	47	<10	<10	<10	16	<10
25	10028	0.01	1055	30	<2	0.004	0.0078	0.01	<2	4	<5	<1	<5	<1	0.01	<10	<10	5	<10	<10	<10	41	<10
26	10066	0.01	1455	40	<2	0.046	0.0295	0.1	<2	4	<5	4	<5	4	0.01	<10	<10	8	<10	<10	<10	45	<10
26	10213	0.01	1745	60	2	0.076	0.0346	0.12	<2	3	<5	4	<5	4	0.01	<10	<10	8	<10	<10	<10	50	<10
27	10064	0.01	2850	30	<2	0.069	0.0688	0.34	<2	7	<5	<1	<5	<1	0.03	<10	<10	26	<10	<10	<10	61	<10
27	10065	0.01	1805	80	<2	0.003	0.0042	0.12	<2	7	<5	<1	<5	<1	0.03	<10	<10	28	<10	<10	<10	31	<10
27	10212	0.01	600	110	2	0.035	0.0618	0.36	<2	3	<5	7	<5	7	0.04	<10	<10	25	<10	<10	<10	31	<10
28	10120	0.03	74	610	<2	0.017	<0.005	0.14	<2	11	<5	22	<5	22	0.25	<10	<10	150	<10	<10	<10	109	<10
28	10121	0.03	76	600	4	0.018	<0.005	0.25	<2	12	9	23	<5	23	0.27	<10	<10	174	<10	<10	<10	137	<10
29	10204	0.01	22	250	2	0.008	<0.005	<0.01	<2	6	<5	31	<5	31	0.21	<10	<10	77	<10	<10	<10	15	<10
30	10366	0.09	49	570	2	0.015	0.0038	0.04	2	5	<5	33	<5	33	0.37	<10	<10	156	<10	<10	<10	62	<10
31	10002	0.01	71	530	2	0.016	<0.005	0.24	<2	5	<5	14	<5	14	0.19	<10	<10	97	<10	<10	<10	45	<10
31	10003	0.02	47	490	3	0.021	<0.005	0.56	<2	4	<5	13	<5	13	0.2	<10	<10	78	<10	<10	<10	43	<10
32	10000	0.05	73	590	4	0.022	0.005	0.54	<2	3	<5	17	<5	17	0.2	<10	<10	79	<10	<10	<10	54	<10
32	10001	0.03	72	610	2	0.011	<0.005	0.08	<2	6	<5	11	<5	11	0.22	<10	<10	112	<10	<10	<10	55	<10
32	10042	0.03	90	570	<2	0.01	0.0041	<0.01	<2	9	<5	42	<5	42	0.38	<10	<10	100	<10	<10	<10	100	<10
32	10043	0.04	72	510	<2	0.008	0.003	<0.01	<2	9	<5	28	<5	28	0.37	<10	<10	157	<10	<10	<10	92	<10
32	10044	0.02	84	600	<2	0.013	0.0047	0.03	<2	4	<5	42	<5	42	0.35	<10	<10	77	<10	<10	<10	50	<10
32	10045	0.04	82	620	<2	0.011	0.0042	0.02	<2	8	<5	23	<5	23	0.43	<10	<10	118	<10	<10	<10	107	<10
32	10046	0.04	84	590	<2	0.01	0.004	0.05	<2	8	<5	14	<5	14	0.46	<10	<10	151	<10	<10	<10	87	<10
32	10047	0.02	43	500	<2	0.012	0.0026	0.03	<2	5	<5	40	<5	40	0.38	<10	<10	111	<10	<10	<10	68	<10
32	10200	0.03	61	380	2	0.016	<0.005	0.06	<2	3	<5	10	<5	10	0.13	<10	<10	74	<10	<10	<10	13	<10
32	10201	0.02	46	440	2	0.014	<0.005	0.03	2	3	<5	11	<5	11	0.2	<10	<10	78	10	10	10	36	<10
32	10202	0.05	76	570	<2	0.012	<0.005	0.04	<2	5	<5	14	<5	14	0.23	<10	<10	84	10	10	10	70	<10
32	10203	0.04	42	490	2	0.012	<0.005	0.09	<2	4	<5	28	<5	28	0.2	<10	<10	78	<10	<10	<10	42	<10
33	10191	0.01	1180	80	4	0.014	0.0099	0.03	<2	5	<5	6	<5	6	0.02	<10	<10	14	<10	<10	<10	66	<10
34	10365	0.13	861	210	2	0.008	0.0162	0.06	<2	3	<5	20	<5	20	0.06	<10	<10	31	<10	<10	<10	49	<10
35	10362	0.03	431	60	<2	0.018	0.0112	0.6	<2	3	<5	8	<5	8	0.04	<10	<10	43	<10	<10	<10	26	<10
35	10363	0.01	2110	60	4	0.056	0.0268	0.97	<2	7	<5	<1	<5	<1	0.02	<10	<10	30	<10	<10	<10	34	<10
35	10364	0.01	1070	110	3	0.008	0.0167	0.19	<2	3	<5	1	<5	1	0.02	<10	<10	12	<10	<10	<10	62	<10
36	10009	0.03	55	90	2	0.025	<0.005	0.19	4	4	8	5	<5	5	0.13	<10	<10	1025	<10	<10	<10	31	<10
37	10067	0.01	1085	90	<2	0.101	0.0461	0.23	<2	5	<5	<1	<5	<1	0.02	<10	<10	26	<10	<10	<10	45	<10
37	10214	0.04	1240	60	<2	0.091	0.0362	0.12	<2	3	<5	17	<5	17	0.01	<10	<10	36	<10	<10	<10	45	<10
37	10215	0.06	695	70	2	0.052	0.0262	0.28	<2	3	<5	24	<5	24	0.02	<10	<10	40	<10	<10	<10	34	<10
37	10216	0.06	814	90	5	0.025	0.0136	0.87	<2	2	<5	52	<5	52	0.03	<10	<10	32	<10	<10	<10	23	<10
38	2877	0.13	4	301	3	0.019	0.015	0.08	<5	<5	<20	48	<10	<10	0.103	<10	<10	86	<20	7	26	<1	<1
38	6989	<0.01	<1	1033	4	0.034	0.037	0.18	<5	<5	<20	1	<10	<10	<0.01	<10	<10	9	<20	<1	32	<1	<1
38	6990	<0.01	2	56	<2	0.004	<0.005	0.04	<5	<5	<20	7	<10	<10	0.073	<10	<10	63	<20	7	30	5	5
38	6991	<0.01	<1	1125	3	0.013	0.029	0.06	<5	<5	<20	<1	<10	<10	<0.01	<10	<10	5	<20	<1	28	<1	<1
38	6992	<0.01	<1	501	<2	0.027	0.038	0.07	<5	<5	<20	4	<10	<10	<0.01	<10	<10	4	<20	<1	14	<1	<1
39	10182	0.01	1400	40	2	0.002	0.0007	0.04	<2	4	<5	9	<5	9	0.02	<10	<10	14	<10	<10	<10	32	<10
39	10354	0.02	1335	50	2	0.048	0.0195	0.12	<2	4	<5	11	<5	11	0.01	<10	<10	15	<10	<10	<10	37	<10
39	10355	0.02	2010	60	6	0.06	0.0266	0.05	<2	18	<5	32	<5	32	0.02	<10	<10	51	<10	<10	<10	127	<10
40	2647	<0.01	<1	1255	4	0.016	0.032	0.07	<5	<5	<20	<1	<10	<10	<0.01	<10	<10	3	<20	<1	27	<1	<1





Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
40 2648	<0.01	<1	1316		3	0.067	0.054	0.04	0.04	<5	<5	<20	1	<10	<10	<0.01	<10	<10	5	<20	<1	30	<1
40 2649	0.02	<1	576		3	0.048	0.031	0.05	0.05	<5	<5	<20	9	<10	<10	<0.01	<10	<10	5	<20	<1	28	<1
40 9754	<0.01	<1	891		3	0.014	0.022	0.02	0.02	<5	<5	<20	<1	<10	<10	<0.01	<10	<10	4	<20	<1	37	<1
41 10350	0.01		1425		20	0.062	0.0577	0.09	<2	2	<5	1				0.01	<10	<10	3	<10	<1	46	
42 10352	0.01		966		70	0.011	0.0113	0.05	<2	3	<5	<1				0.01	<10	<10	6	<10	<1	83	
42 10353	0.01		1340		50	0.025	0.0504	0.24	<2	3	<5	<1				<0.01	<10	<10	5	<10	<1	55	
43 10181	0.02		1555		50	<0.001	<0.000	0.18	<2	2	<5	8				0.02	<10	<10	15	<10	<1	21	
43 10351	0.01		1240		50	0.114	0.0553	0.16	<2	9	<5	5				0.03	<10	<10	41	<10	<1	37	
44 6993	<0.01	<1	1923		<2	0.091	0.112	<0.01	<5	<5	<20	2	<10	<10	<10	<0.01	<10	<10	3	<20	<1	48	<1
44 6994	0.02	<1	1073		6	0.022	0.059	0.26	<5	8	<20	26	<10	<10	<10	<0.01	<10	<10	38	<20	7	76	2
45 10343	0.01		1.14%		30	1.47	0.19	4.01	<2	4	<5	1				0.02	<10	<10	19	<10	<1	35	
46 10342	0.02		1045		50	0.288	0.1495	1.1	<2	3	<5	4				0.04	<10	<10	55	<10	<1	24	
47 10341	0.01		1515		60	0.027	0.0166	0.07	<2	3	<5	3				0.01	<10	<10	5	<10	<1	45	
48 10211	0.01		1240		80	<2	0.006	0.0119	0.16	<2	4	<5	9			0.02	<10	<10	14	<10	<1	52	
49 10340	0.01		1220		70	0.021	0.0197	0.04	<2	2	<5	3				0.01	<10	<10	5	<10	<1	78	
50 1044	<0.01	<1	4964		8	0.325	0.259	4.85	<5	<5	<20	<1	<10	<10	<10	0.019	<10	<10	17	<20	<1	67	<1
50 2681	0.05	<1	932		3	0.01	0.019	0.02	<5	7	<20	80	<10	<10	<10	0.038	<10	<10	32	<20	2	22	<1
50 10008	0.02		15		60	<2	0.001	<0.005	<0.01	<2	<1	<5	9			0.03	<10	<10	3	<10	<1	6	
51 10025	0.11		18		1200	<2	0.001	<0.000	0.54	<2	1	<5	22			0.19	<10	<10	39	<10	<1	8	
51 10026	0.01		760		100	<2	0.004	0.0063	0.14	<2	10	<5	<1			0.08	<10	<10	55	<10	<1	32	
51 10027	0.03		1295		60	<2	0.04	0.0204	0.3	<2	4	<5	<1			0.03	<10	<10	29	<10	<1	36	
52 10075	0.03		47		540	<2	0.013	0.0045	0.14	2	3	<5	<1			0.37	<10	40	114	<10	<1	66	
53 10013	0.01		1340		220	2	0.01	0.012	0.06	<2	4	<5	18			0.03	<10	<10	27	<10	<1	24	
53 10014	0.03		34		100	3	0.087	0.033	0.39	2	3	<5	5			0.01	<10	<10	65	40	<1	12	
54 10029	0.04		3820		180	<2	0.468	0.489	1.03	<2	3	<5	<1			0.06	<10	<10	36	<10	<1	32	
54 10030	0.03		22		500	<2	0.003	0.0008	1.8	<2	3	<5	14			0.07	<10	<10	39	<10	<1	39	
54 10031	0.03		1980		170	<2	0.097	0.1825	0.4	<2	4	<5	<1			0.05	<10	<10	35	<10	<1	28	
54 10429	0.05		3		960	2	<0.001	<0.000	0.66	<2	5	<5	26			0.11	<10	<10	86	10	<1	71	
54 10430	0.02		3550		90	<2	0.383	0.406	0.68	<2	3	<5	7			0.02	<10	<10	22	<10	<1	29	
55 10011	0.04		28		840	<2	0.002	<0.005	0.79	<2	1	<5	19			0.08	<10	<10	51	<10	<1	50	
56 10010	0.03		2330		90	<2	0.176	0.201	0.43	<2	3	<5	12			0.01	<10	<10	35	<10	<1	26	
57 10012	0.01		3500		60	2	0.366	0.483	0.61	<2	3	<5	1			0.01	<10	<10	19	<10	<1	31	
58 10015	0.01		1450		100	<2	0.015	0.018	0.08	<2	5	<5	17			0.01	<10	<10	18	<10	<1	28	
58 10016	0.01		5		190	8	0.003	<0.005	0.06	21	1	5	3			<0.01	<10	<10	11	10	<1	43	
59 10007	0.01		2150		50	<2	0.04	0.068	<0.01	2	5	<5	2			0.01	<10	<10	20	<10	<1	38	
60 10072	0.01		1730		20	5	0.037	0.0233	<0.01	<2	9	<5	<1			0.03	<10	<10	19	<10	<1	67	
60 10073	0.01		1810		60	<2	0.052	0.0699	0.01	<2	6	<5	<1			0.02	<10	<10	22	<10	<1	39	
61 10074	0.01		2030		60	<2	0.043	0.0596	0.01	<2	6	<5	<1			0.02	<10	<10	23	<10	<1	42	
62 2659	0.04		<1		1372	<2	0.024	0.024	0.02	<5	<5	<20	27	<10	<10	0.014	<10	<10	8	<20	<1	27	<1
62 9759	0.02	<1	1048		58	0.011	0.015	0.27	<5	<5	<20	17	<10	<10	<10	0.035	<10	<10	28	<20	1	149	<1
63 10006	0.02		34		610	3	0.003	<0.005	<0.01	<2	2	<5	13			0.05	<10	<10	35	<10	<1	70	
64 9760	0.06	<1	9		36	<0.001	<0.005	0.99	<5	<5	<20	40	<10	<10	<10	0.065	<10	<10	13	<20	2	137	7
65 10356	0.01		557		10	0.006	0.0028	7.5	<2	1	8	63				<0.01	<10	<10	11	<10	<1	691	
65 10528	0.01		146		430	<2	0.006	0.0073	0.38	2	2	<5	23			0.09	<10	<10	18	<10	<1	183	
65 10529	0.01		490		210	13	0.004	0.0014	10	<2	<1	7	<1			<0.01	<10	<10	6	<10	<1	49	
65 10530	0.01		2360		440	9	0.006	0.0021	10	<2	1	15	26			0.04	<10	<10	12	<10	<1	159	



Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
66 10142	0.01	18	60	<2	0.001	<0.005	0.33	<2	1	<5	11	<10	<10	<10	<10	<10	<10	<10	5	<10	10		
66 10312	0.01	6610	590	9	0.149	0.115	0.49	6	2	<5	20	<10	<10	<10	<10	<10	<10	<10	13	<10	1130		
66 10313	0.01	9980	470	4	0.157	0.098	0.7	2	2	<5	13	<10	<10	<10	<10	<10	<10	<10	12	<10	145		
66 10512	0.01	535	360	3	0.027	0.023	0.04	<2	1	<5	24	<10	<10	<10	<10	<10	<10	<10	12	<10	161		
67 10141	0.03	155	210	2	0.012	<0.005	4.99	<2	2	<5	2	<10	<10	<10	<10	<10	<10	<10	62	<10	26		
68 10151	0.05	283	410	<2	0.011	0.008	0.06	<2	3	<5	37	<10	<10	<10	<10	<10	<10	<10	40	<10	29		
69 10149	0.01	2110	20	2	0.006	0.005	0.02	2	2	<5	1	<10	<10	<10	<10	<10	<10	<10	3	<10	40		
69 10150	0.01	331	150	61	0.006	<0.005	0.09	3	1	<5	2	<10	<10	<10	<10	<10	<10	<10	11	<10	180		
70 10147	0.03	120	440	8	0.039	<0.005	1.68	<2	1	6	20	<10	<10	<10	<10	<10	<10	<10	13	<10	45		
70 10148	0.01	207	270	<2	0.01	0.006	0.16	<2	2	<5	24	<10	<10	<10	<10	<10	<10	<10	23	10	31		
71 6983	0.01	1	33	23	0.138	0.068	0.54	<5	<5	<20	55	<10	<10	<10	<10	0.102			34	<20	4	48	5
71 6984	0.19	1	190	<2	0.007	0.012	0.01	<5	<5	<20	25	<10	<10	<10	0.108				48	<20	3	16	6
72 2660	0.06	4	69	<2	0.002	<0.005	0.11	<5	<5	<20	32	<10	<10	<10	0.318				65	<20	8	23	1
72 2661	0.02	8	85	3	0.003	<0.005	0.12	<5	<5	<20	37	<10	<10	<10	0.368				137	<20	8	47	3
72 2662	0.06	7	47	3	0.002	<0.005	0.02	<5	<5	<20	44	<10	<10	<10	0.294				104	<20	7	31	2
72 9761	0.04	4	110	9	0.005	0.006	0.15	<5	<5	<20	36	<10	<10	<10	0.254				76	<20	8	116	<1
72 9762	0.04	3	149	12	0.002	<0.005	0.04	<5	<5	<20	33	<10	<10	<10	0.251				72	<20	7	81	1
72 9763	0.06	5	69	3	0.005	<0.005	0.11	<5	<5	<20	32	<10	<10	<10	0.324				88	<20	8	32	4
72 9764	0.05	7	29	5	0.002	<0.005	0.04	<5	<5	<20	29	<10	<10	<10	0.325				108	<20	8	27	2
72 10019	0.03	43	790	2	0.012	0.0108	0.18	<2	2	<5	18	<10	<10	<10	0.2				68	<10	20		
72 10020	0.02	102	1180	<2	0.003	0.0014	0.05	<2	4	<5	14	<10	<10	<10	0.22				92	<10	30		
72 10032	0.04	59	280	<2	0.01	0.0103	<0.01	<2	2	<5	21	<10	<10	<10	0.1				70	<10	29		
72 10069	0.06	35	1350	2	0.002	<0.000	0.04	3	2	<5	20	<10	<10	<10	0.37				90	<10	10		
72 10070	0.03	60	740	2	0.001	0.0014	0.03	2	2	<5	17	<10	<10	<10	0.15				51	<10	17		
72 10071	0.01	178	650	<2	0.003	0.0008	0.01	<2	3	<5	12	<10	<10	<10	0.22				76	<10	66		
72 10217	0.06	144	800	2	0.008	0.0053	0.12	<2	3	<5	36	<10	<10	<10	0.16				91	<10	25		
72 10218	0.05	93	280	3	0.005	0.0067	0.01	<2	6	<5	31	<10	<10	<10	0.11				78	<10	89		
72 10219	0.06	66	1000	5	0.001	0.0005	0.03	<2	5	<5	31	<10	<10	<10	0.24				186	<10	32		
72 10220	0.07	64	1050	2	0.001	0.0006	0.06	<2	3	<5	22	<10	<10	<10	0.4				135	<10	22		
72 10221	0.07	40	960	3	0.001	0.0038	0.05	<2	3	<5	35	<10	<10	<10	0.33				134	<10	19		
72 10222	0.07	56	800	3	0.003	0.0026	0.02	<2	3	<5	23	<10	<10	<10	0.25				76	10	17		
72 10431	0.07	124	480	2	0.025	0.0236	0.22	<2	3	<5	23	<10	<10	<10	0.17				55	<10	18		
73 10440	0.13	542	360	<2	0.01	0.0103	0.12	<2	4	<5	27	<10	<10	<10	0.09				53	<10	24		
74 10143	0.15	34	440	<2	0.003	<0.005	0.01	<2	1	<5	35	<10	<10	<10	0.07				13	<10	11		
75 10144	0.02	405	330	<2	0.01	0.009	0.24	<2	2	<5	3	<10	<10	<10	0.09				28	10	3		
75 10145	0.01	50	450	22	0.001	<0.005	10	8	1	23	<1	<10	<10	<10	0.01				10	<10	28		
75 10146	0.03	574	340	<2	0.009	0.009	0.3	<2	1	<5	7	<10	<10	<10	0.04				29	<10	9		
75 10513	0.04	529	590	2	0.002	<0.005	2.57	<2	1	<5	24	<10	<10	<10	0.03				13	<10	20		
76 10183	0.21	203	460	<2	0.001	0.0007	0.49	<2	2	<5	120	<10	<10	<10	0.1				23	<10	5		
76 10184	0.28	413	470	<2	0.004	0.0042	1.09	<2	2	<5	105	<10	<10	<10	0.1				26	<10	12		
76 10185	0.01	13	160	2	<0.001	0.0011	4.02	3	4	8	12	<10	<10	<10	0.05				29	<10	35		
76 10186	0.01	49	470	3	0.004	0.0035	1.53	2	4	5	68	<10	<10	<10	0.16				18	<10	14		
76 10459	0.02	81	480	<2	0.001	0.001	0.92	<2	2	<5	31	<10	<10	<10	0.08				25	<10	23		
77 10187	0.01	23	640	6	0.001	0.0009	1.23	<2	2	<5	24	<10	<10	<10	0.11				55	<10	<2		
78 10357	0.01	1720	90	25	0.064	0.0075	10	7	3	16	<1	<10	<10	<10	0.03				163	<10	36		
78 10358	0.15	96	300	11	0.037	0.0063	2.56	<2	3	<5	145	<10	<10	<10	0.07				70	<10	40		



Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
78	10442	0.2	75	590	7	0.02	0.0137	0.78	<2	5	<5	97				0.13	<10	<10	115	<10		51	
79	10224	0.01	15	500	146	0.001	0.0006	0.11	5	1	<5	13				0.04	<10	<10	10	<10		258	
79	10225	0.07	35	610	5	0.002	0.0011	0.69	<2	5	<5	26				0.16	<10	<10	66	<10		59	
79	10359	0.04	25	720	4	0.002	0.0019	1.05	<2	3	<5	22				0.15	<10	<10	53	10		12	
79	10360	0.02	116	560	4	0.001	0.0017	4.53	<2	2	<5	12				0.06	<10	<10	25	<10		54	
80	10152	0.26	97	430	9	0.005	<0.005	<0.01	<2	2	<5	113				0.19	<10	<10	47	<10		59	
81	10153	0.19	909	190	5	0.251	0.05	1.05	3	2	<5	54				0.04	<10	<10	55	<10		25	
82	10068	0.01	834	370	<2	0.013	0.0166	0.76	<2	1	<5	<1				0.14	<10	<10	49	<10		26	
82	10078	0.05	424	350	<2	0.001	0.0013	0.04	<2	2	<5	4				0.24	<10	<10	62	<10		44	
83	1023	0.08	6	22	5	0.017	0.015	0.04	<5	<5	<20	57	<10	<10	<10	0.113		109	<20	8	36	3	
83	6981	<0.01	<1	165	11	0.002	<0.005	6.8	<5	<5	<20	135	<10	<10	0.064			16	<20	3	26	4	
83	6982	0.28	<1	28	5	0.002	<0.005	1.31	<5	<5	<20	149	<10	<10	0.152			22	<20	6	23	11	
84	6979	0.01	<1	26	<2	<0.001	<0.005	0.19	<5	<5	<20	36	<10	<10	0.072			27	<20	3	27	5	
84	6980	0.12	7	27	4	0.012	0.012	0.02	<5	<5	<20	82	<10	<10	0.087			133	<20	8	51	5	
85	10063	0.01	164	10	4	0.013	0.0094	0.15	<2	3	<5	176				0.05	<10	<10	6	<10		640	
86	10033	0.01	70	170	2	0.002	0.0013	0.11	<2	4	<5	<1				0.08	<10	<10	47	<10		568	
86	10034	0.01	1910	20	<2	0.019	0.0205	0.23	<2	4	<5	<1				<0.01	<10	<10	5	<10		20	
87	10060	0.85	57	250	<2	0.002	0.003	0.03	2	1	<5	216				0.05	<10	10	69	<10		47	
87	10180	0.76	98	120	3	<0.001	<0.000	0.04	4	2	<5	114				0.02	<10	<10	35	<10		25	
88	10332	0.01	1270	90	2	0.348	0.227	0.12	<2	6	<5	4				0.02	<10	<10	48	<10		90	
89	10039	0.18	66	660	<2	0.023	0.0073	<0.01	<2	4	<5	9				0.18	<10	<10	102	<10		72	
89	10040	0.51	46	730	<2	0.023	0.0056	<0.01	<2	2	<5	57				0.19	<10	10	117	<10		45	
89	10041	0.01	2030	<10	<2	0.045	0.0051	<0.01	2	2	<5	48				<0.01	<10	<10	3	<10		38	
89	10330	0.45	47	740	<2	0.023	0.0051	<0.01	2	2	<5	48				0.24	<10	<10	141	<10		43	
89	10331	0.01	2030	20	2	0.054	0.0745	0.07	<2	2	<5	3				<0.01	<10	<10	2	<10		26	
90	10038	0.01	2400	20	<2	0.104	0.142	0.05	<2	4	<5	<1				<0.01	<10	<10	2	<10		39	
91	6999	0.29	<1	292	2	0.007	0.005	0.01	<5	<5	<20	184	<10	<10	<10	<0.01		7	<20	<1	22	<1	
92	10076	0.05	318	340	<2	0.01	0.0099	0.12	<2	2	<5	5				0.12	<10	<10	35	<10		21	
92	10077	0.11	82	410	<2	0.001	0.0011	0.13	<2	3	<5	7				0.32	<10	<10	159	<10		99	
93	10061	0.01	4	230	25	0.001	0.0005	0.52	<2	1	18	<1				0.02	<10	10	16	<10		30	
93	10062	0.02	18	150	48	<0.001	<0.000	<0.01	<2	<1	22	<1				0.01	<10	10	9	<10		43	
93	10525	0.01	107	120	9	0.001	0.0019	5.48	3	2	23	<1				0.02	<10	20	20	10		10	
93	10526	0.01	77	260	6	0.003	0.0046	5.32	<2	2	13	5				0.07	<10	10	31	<10		16	
93	10527	0.01	13	520	5	0.001	0.0017	7.55	<2	2	12	<1				0.03	<10	10	13	10		28	
94	10059	0.03	67	490	<2	0.002	0.0019	0.78	2	2	<5	12				0.15	<10	<10	30	<10		79	
94	10179	0.02	217	590	4	0.003	0.001	3.13	2	2	<5	33				0.09	<10	<10	23	<10		171	
95	10054	0.01	4	110	<2	<0.001	0.0006	5.97	<2	1	<5	<1				<0.01	<10	<10	4	<10		41	
95	10055	0.05	156	650	5	0.025	0.0167	4.68	<2	4	<5	32				0.1	<10	<10	119	<10		109	
95	10056	0.01	761	120	<2	0.06	0.0187	0.61	<2	3	<5	<1				0.06	<10	<10	47	10		38	
95	10057	0.03	1820	150	73	0.375	0.0716	10	<2	1	9	52				0.03	<10	<10	51	<10		160	
95	10058	0.03	27	180	6	0.017	0.019	8.34	3	4	<5	<1				<0.01	<10	<10	46	<10		21	
95	10176	0.02	7	940	4	<0.001	<0.000	2.01	<2	9	<5	12				0.15	<10	<10	106	<10		65	
95	10177	0.03	207	400	5	0.003	0.0008	2.51	<2	4	<5	66				0.1	<10	<10	104	<10		115	
95	10178	0.01	2110	90	13	0.004	0.0031	9.39	<2	4	11	13				0.03	<10	20	36	<10		63	
96	10321	0.05	3220	190	17	0.643	0.515	1.52	<2	3	<5	13				0.05	<10	<10	24	<10		34	
96	10322	0.04	1230	420	21	0.772	0.676	0.27	12	2	<5	50				0.09	<10	<10	30	<10		20	



Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
96	10323	0.05	4220	200	17	0.631	0.575	2.02	<2	2	<5	12	<10	<10	0.04	<10	<10	19	<10	<10	33	<1
96	10324	0.04	6150	190	9	0.875	0.731	4.16	<2	3	<5	11	<10	<10	0.04	<10	<10	25	<10	<10	40	<1
96	10325	0.04	7760	180	22	0.95	0.898	4.58	<2	3	<5	11	<10	<10	0.04	<10	<10	23	<10	<10	40	<1
97	10037	0.01	1790	10	<2	0.069	0.0897	0.15	<2	3	<5	3	<10	<10	<0.01	<10	<10	2	<10	<10	19	<1
98	10035	0.03	10	510	<2	0.002	0.0016	<0.01	<2	5	<5	28	<10	<10	0.14	<10	<10	27	<10	<10	41	<1
98	10036	0.04	351	360	<2	0.008	0.0089	<0.01	<2	2	<5	5	<10	<10	0.14	<10	<10	38	<10	<10	22	<1
98	10326	0.02	1120	220	5	0.016	0.0139	0.04	<2	4	<5	8	<10	<10	0.05	<10	<10	40	<10	<10	27	<1
98	10327	0.02	1285	160	2	0.007	0.0094	0.04	<2	3	<5	7	<10	<10	0.03	<10	<10	27	10	<10	24	<1
98	10328	0.04	205	420	<2	0.003	0.0066	<0.01	<2	3	<5	15	<10	<10	0.14	<10	<10	44	<10	<10	16	<1
98	10329	0.01	217	490	4	0.003	0.004	<0.01	36	21	<5	407	<10	<10	0.01	<10	10	172	<10	<10	65	<1
99	2886	0.02	8	8	5	0.004	<0.005	1.31	<5	<5	<20	7	<10	<10	<0.01	<10	<10	50	<20	3	58	<1
100	10349	0.05	1180	230	<2	0.039	0.0202	0.33	<2	4	<5	11	<10	<10	0.04	<10	<10	39	<10	<10	48	<1
100	10520	<0.01	69	80	2	0.004	0.0043	0.65	<2	5	9	<1	<10	<10	0.1	<10	<10	49	10	<10	183	<1
100	10521	<0.01	329	110	3	0.008	0.0055	5.57	<2	6	26	<1	<10	<10	0.1	<10	10	42	<10	<10	1470	<1
100	10522	0.01	542	30	7	0.013	0.0037	9.42	5	1	7	<1	<10	<10	0.02	<10	10	18	<10	<10	171	<1
100	10523	0.01	453	30	8	0.008	0.0023	9.02	<2	<1	<5	<1	<10	<10	0.01	<10	<10	8	<10	<10	53	<1
100	10524	0.05	1240	230	<2	0.021	0.0154	0.49	<2	4	<5	16	<10	<10	0.04	<10	<10	38	<10	<10	28	<1
101	6995	0.04	<1	1628	5	0.253	0.168	0.43	<5	<5	<20	19	<10	<10	0.04	<10	<10	22	<20	<1	48	<1
101	6996	0.04	<1	1520	7	0.293	0.182	0.5	<5	<5	<20	15	<10	<10	0.034	<10	<10	26	<20	<1	51	<1
102	6997	0.28	10	41	<2	0.022	0.008	0.02	<5	<5	<20	49	<10	<10	0.148	<10	<10	184	<20	8	31	2
102	6998	<0.01	<1	59	38	0.008	<0.005	0.14	<5	<5	<20	71	<10	<10	0.037	<10	<10	22	<20	4	383	2
103	10347	0.01	2620	60	5	0.075	0.0701	0.46	<2	5	<5	5	<10	<10	0.03	<10	<10	16	<10	<10	53	<1
103	10507	0.02	1585	50	4	0.056	0.0649	0.67	<2	3	<5	9	<10	<10	0.01	<10	<10	8	<10	<10	42	<1
104	10168	0.02	6	220	40	0.001	0.0005	0.13	<2	3	<5	2	<10	<10	<0.01	<10	<10	24	<10	<10	162	<1
105	10109	0.05	3	130	9	<0.001	<0.005	0.04	2	2	<5	3	<10	<10	<0.01	<10	<10	8	<10	<10	36	<1
105	10110	0.06	4	170	<2	<0.001	<0.005	0.02	2	1	<5	6	<10	<10	<0.01	<10	<10	6	<10	<10	20	<1
106	9753	0.02	<1	24	22	0.004	<0.005	0.8	<5	<5	<20	4	<10	<10	0.041	<10	<10	15	<20	3	88	<1
106	10004	0.03	10	340	16	0.004	<0.005	0.04	<2	2	<5	17	<10	<10	0.05	<10	<10	59	<10	<10	527	<1
106	10005	0.02	10	350	5	0.004	<0.005	0.09	<2	2	<5	15	<10	<10	0.04	<10	<10	47	<10	<10	220	<1
106	10208	0.04	12	400	11	0.003	0.0013	0.02	4	5	<5	24	<10	<10	0.12	<10	<10	84	<10	<10	549	<1
106	10209	0.01	5	90	6	0.005	0.001	1.35	10	2	<5	39	<10	<10	0.02	<10	<10	30	<10	<10	115	<1
106	10210	0.01	4	140	203	0.001	0.0007	0.05	<2	2	<5	27	<10	<10	0.04	<10	<10	20	10	<10	299	<1
107	1022	<0.01	<1	4	1287	0.002	0.006	0.98	<5	<5	<20	30	<10	<10	0.021	<10	<10	8	<20	3	5978	<1
107	6965	<0.01	3	61	26	0.004	<0.005	2.05	<5	<5	<20	35	<10	<10	0.045	<10	<10	99	<20	4	477	<1
107	6966	0.03	<1	14	11	0.002	<0.005	0.52	6	<5	<20	4	<10	<10	0.015	<10	<10	9	<20	4	84	<1
108	1021	0.02	<1	15	760	0.001	<0.005	1.36	6	<5	<20	21	<10	<10	0.025	<10	<10	32	<20	2	368	1
108	9752	<0.01	3	11	57	0.002	<0.005	3.94	<5	<5	<20	1	<10	<10	<0.01	<10	<10	108	<20	<1	285	<1
108	10302	0.01	8	200	69	0.004	<0.005	8.97	<2	7	<5	3	<10	<10	0.03	<10	<10	159	<10	<10	265	<1
109	6964	<0.01	<1	>2000	14	1.038	0.459	10	<5	<5	<20	2	<10	22	0.011	<10	<10	21	<20	<1	240	<1
109	10136	0.4	186	350	3	0.003	<0.005	0.01	2	5	<5	28	<10	<10	0.1	<10	<10	113	<10	<10	51	<1
109	10137	2.3	103	680	2	0.002	<0.005	0.01	<2	4	<5	56	<10	<10	0.12	<10	<10	105	<10	<10	64	<1
109	10138	0.01	2130	110	<2	0.071	0.063	0.37	3	5	<5	74	<10	<10	0.02	<10	<10	30	<10	<10	10	<1
109	10139	0.01	<b>4.67%</b>	70	3	2.09	0.827	6.2	<2	1	19	<1	<10	<10	0.01	<10	<10	91	<10	<10	98	<1
109	10140	0.01	<b>1.31%</b>	110	3	0.674	0.294	0.79	5	7	<5	48	<10	<10	0.03	<10	<10	49	<10	<10	19	<1
109	10303	0.01	<b>6.31%</b>	90	17	2.28	0.462	8.19	<2	1	27	1	<10	<10	0.01	<10	10	37	<10	<1	17	<1
110	6963	<0.01	<1	4047	2	0.298	0.443	0.4	<5	<5	<20	3	<10	<10	0.025	<10	<10	18	<20	<1	40	<1





Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
110	10130	0.11	277	340	<2	0.01	<0.005	0.01	2	4	<5	54			0.09	<10	<10	85	<10		41	
110	10131	0.02	697	790	<2	0.008	0.005	0.06	<2	3	<5	22			0.04	<10	<10	77	<10		36	
110	10132	0.3	<b>1.38%</b>	190	13	1.33	1.175	2.81	<2	3	<5	75			0.05	<10	<10	37	<10		37	
110	10133	0.85	1705	360	<2	0.188	0.145	0.27	<2	3	<5	28			0.06	<10	<10	60	<10		32	
110	10134	0.01	1995	40	<2	0.026	0.03	0.11	3	4	<5	90			0.01	<10	<10	16	<10		9	
110	10135	0.41	180	370	<2	0.009	0.01	<0.01	<2	3	<5	28			0.06	<10	<10	67	<10		23	
111	10207	0.01	6	130	530	0.004	<0.005	1.2	9	3	29	98			0.01	<10	<10	31	<10		1600	
111	10307	0.03	49	380	306	0.004	<0.005	1.25	13	3	<5	6			0.09	<10	<10	51	10		458	
112	10308	0.01	11	40	<b>1.27%</b>	0.002	<0.005	2.25	17	1	72	96			<0.01	<10	<10	8	<10		<b>5.15%</b>	
113	10169	0.01	2	170	49	0.001	<0.000	0.72	3	1	<5	2			0.03	<10	<10	5	<10		72	
113	10170	0.03	4	290	5	0.002	0.0013	0.43	<2	3	<5	1			0.07	<10	<10	60	<10		137	
113	10345	0.01	18	730	9	0.003	0.0011	3.48	9	2	<5	17			0.02	<10	<10	36	<10		199	
114	10337	0.01	6	110	664	0.001	0.0014	6.11	<2	3	5	3			0.02	<10	<10	21	<10		1355	
114	10338	0.02	53	150	37	0.002	0.0028	0.09	4	11	<5	31			0.08	<10	<10	101	<10		253	
114	10339	0.02	7	100	29	0.001	0.0011	2.23	3	3	<5	4			0.02	<10	<10	25	<10		98	
115	1045	0.01	<1	>2000	11	0.839	0.46	6.22	<5	<5	<20	67	<10	12	0.033	<10	<10	31	<20	1	168	<1
115	1046	0.02	<1	2056	6	0.08	0.071	0.62	<5	<5	<20	11	<10	<10	0.026	<10	<10	19	<20	<1	50	<1
115	7000	<0.01	<1	18775	16	1.381	0.671	9.98	<5	<5	<20	23	<10	20	0.014	<10	<10	26	<20	<1	130	<1
116	10106	0.02	5	70	24	0.003	<0.005	2.26	<2	4	14	4			0.01	<10	<10	10	<10		264	
117	10167	0.01	34	690	5	0.017	0.0028	<0.01	3	4	<5	101			0.35	<10	30	88	<10		56	
117	10344	0.02	102	420	7	0.023	0.0043	0.12	<2	10	<5	89			0.23	<10	10	135	<10		59	
118	10161	0.02	5	190	97	0.002	<0.000	1.45	<2	3	<5	3			0.03	<10	<10	31	<10		139	
118	10162	0.01	3	230	4030	<0.001	<0.000	2.36	2	2	<5	43			0.04	<10	<10	17	<10		<b>1.35%</b>	
118	10163	0.01	4	150	<b>5.63%</b>	0.002	0.0011	4.57	21	2	10	4			0.04	<10	<10	23	<10		<b>6.04%</b>	
118	10333	0.02	31	230	29	0.003	0.0015	0.63	2	2	<5	3			0.08	<10	<10	23	<10		90	
118	10334	0.01	18	110	8190	0.003	0.002	1.56	7	1	<5	13			0.01	<10	<10	17	<10		<b>1.17%</b>	
118	10335	0.01	6	20	<b>5.06%</b>	0.002	0.0026	10	11	1	15	19			<0.01	<10	<10	23	<10		<b>21.80%</b>	
118	10336	0.01	5	40	<b>4.63%</b>	0.001	0.0016	7.37	25	2	19	42			<0.01	<10	<10	61	<10		<b>10.65%</b>	
119	9274	0.05	<1	1016	<2	0.042	0.112	0.17	<5	<5	<20	13	<10	<10	0.028	<10	<10	12	<20	<1	40	<1
120	10306	0.02	1310	310	162	0.018	0.015	0.13	59	3	<5	7			0.03	<10	<10	47	<10		38	
121	10305	0.01	3140	90	701	0.169	0.131	0.4	247	3	<5	4			0.01	<10	<10	8	<10		50	
121	10460	0.04	448	200	2	0.014	0.0168	0.06	<2	3	<5	7			0.11	<10	<10	78	<10		39	
122	6974	0.04	<1	5377	11	1.368	1.131	0.51	<5	<5	<20	5	<10	<10	0.039	<10	<10	61	<20	2	95	2
123	6975	0.43	2	64	4	0.016	0.014	0.1	<5	5	<20	26	<10	<10	0.114	<10	<10	64	<20	6	37	3
124	10159	0.19	61	760	<2	0.002	0.0007	0.17	3	3	<5	19			0.39	<10	<10	145	10		90	
125	10017	0.02	15	550	4	0.006	0.005	3.29	2	6	<5	6			0.12	<10	<10	120	<10		172	
126	1047	0.02	6	99	2	0.009	0.007	0.09	9	9	<20	195	<10	<10	<0.01	<10	<10	110	<20	6	38	<1
126	9275	0.04	3	19	2	0.043	<0.005	0.26	<5	<5	<20	53	<10	<10	0.128	<10	<10	78	<20	3	63	<1
127	1048	0.06	<1	2029	3	0.686	0.33	1.34	<5	<5	<20	12	<10	<10	0.065	<10	<10	47	<20	1	39	<1
127	1049	0.02	<1	1346	4	0.057	0.033	0.11	<5	<5	<20	11	<10	<10	0.031	<10	<10	32	<20	1	20	<1
127	9276	0.07	<1	4190	5	0.945	0.244	1.25	<5	<5	<20	17	<10	<10	0.046	<10	<10	28	<20	1	46	1
127	10154	0.04	44	200	<2	0.002	0.0022	0.66	<2	8	<5	15			0.04	<10	10	60	<10		89	
127	10155	0.07	51	590	<2	0.006	0.0043	1.09	<2	6	<5	43			0.2	<10	<10	125	<10		39	
127	10156	0.08	3710	280	3	0.827	0.385	1.3	<2	3	<5	21			0.06	<10	<10	35	<10		30	
127	10157	0.05	1975	350	2	0.222	0.1325	0.49	<2	4	<5	18			0.07	<10	<10	48	<10		15	
127	10158	0.03	31	260	3	0.009	0.0058	0.69	<2	4	<5	21			0.16	<10	<10	95	10		33	

Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Site	Method	Size (ft)	Int	Au ppm	Ag ppm	Al pct	As ppm	B ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	Hg ppm	K pct	La ppm	Li ppm	Mg pct	Mn ppm	Mo ppm
128	10189	FL	S		0.001	9.5	0.35	5	<10	50	9	0.42	12.8	4	125	4560	2.31	<10	0.91	0.01	<10	0.11	218	1	
129	10190	OC	Rep	2	0.002	0.3	0.46	10	<10	190	6	1.35	<0.5	8	86	26	1.78	<10	0.02	0.03	<10	0.32	227	1	
129	10192	OC	Rep		0.007	0.4	0.44	27	<10	310	<2	0.23	<0.5	22	117	378	3.46	<10	0.01	0.01	<10	1.78	375	16	
130	10188	RC	S		0.042	1.3	2.68	130	<10	250	<2	3.01	4	8	38	32	15	20	0.03	0.01	<10	0.71	1505	1	
133	10122	OC	G		<0.001	0.6	1.56	7	40	200	<2	0.19	<0.5	60	581	298	3.43	<10	0.03	1.06	<10	8.67	474	1	
133	10123	MT	G		0.01	0.2	1.36	2	<10	480	9	2.85	<0.5	15	22	540	3.74	<10	0.12	0.08	<10	1.24	678	<1	
134	2931	RC	G		0.007	<0.2	1.6	<5		145	<5	1.23	0.7	16	75	188	3.3	2	0.335	0.2	6	4	0.72	409	4
135	10311	OC	G		0.003	0.4	1.33	8	<10	1770	8	1.51	<0.5	14	27	127	4.52	<10	0.08	0.41	<10	1.28	750	<1	
136	10309	OC	Rep	5.5	0.005	1.1	1.81	32	<10	1100	13	0.4	3.6	58	52	247	15	10	0.11	0.04	<10	0.83	2770	20	
136	10310	OC	S		0.013	4.5	0.45	55	<10	120	12	0.57	2.5	31	67	91	15	<10	0.14	0.01	<10	0.09	388	13	
137	10107	RC	S		0.204	5.1	2.35	67	<10	1050	11	0.09	<0.5	36	24	<b>3.57%</b>	9.44	<10	0.03	0.13	<10	2.04	425	1	
137	10108	RC	S		0.033	0.8	2.25	18	<10	990	21	0.08	<0.5	56	35	425	9.43	<10	0.01	0.17	<10	1.79	521	4	
137	10508	TP	S		0.003	<0.2	1.83	17	<10	3010	3	0.35	<0.5	6	11	296	3.48	<10	0.01	0.19	<10	1.94	498	<1	
137	10509	OC	Rep	150	0.047	11.6	2.16	83	<10	1300	7	0.11	<0.5	44	25	<b>2.12%</b>	8.24	10	0.05	0.12	<10	2.19	623	6	
138	6976	OC	G		<0.001	<0.2	1.57	<5		27	<5	1.68	<0.2	46	62	479	5.92	<2	0.165	0.21	2	15	1.24	405	<1
138	6977	OC	G		<0.001	<0.2	2.1	<5		36	<5	2.48	<0.2	14	24	194	3.87	3	0.153	0.2	3	17	1.28	643	<1
138	6978	RC	G		0.007	<0.2	2.2	<5		25	<5	2.65	0.4	22	101	190	5.04	6	0.685	0.18	11	19	1.85	953	<1
138	10401	OC	C	7	0.003	0.2	3.12	7	<10	650	8	1.98	0.5	27	63	444	6.59	10	0.05	0.25	<10	2.44	1055	1	
139	10125	RC	G		<0.001	2	1.59	9	<10	10	12	1.93	1.2	4	38	1385	7.43	10	0.02	0.01	<10	1.27	2780	1	
139	10126	RC	S		0.003	13.7	1.04	3	<10	<10	<2	0.02	<0.5	2	42	<b>1.76%</b>	6.7	<10	0.04	<0.01	<10	0.77	626	1	
139	10127	OC	C		<0.001	2.8	1.69	10	<10	90	4	5.93	2.1	19	28	<b>2.89%</b>	2.85	10	0.05	<0.01	<10	2	6650	<1	
139	10128	OC	S	5	0.022	3.8	3.01	15	<10	<10	9	0.02	4.4	37	18	<b>2.46%</b>	15	20	0.26	<0.01	<10	2.35	639	2	

Table 3. Analytical results for rock chip samples - partial digestion

Map Sample no.	Na pct	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Ti ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
128	10189	0.01	4	180	3320	<0.001	<0.000	1.17	<2	2	<5	5	5	<10	<10	0.14	<10	<10	54	<10	<10	1735	
129	10190	0.02	5	120	30	0.001	<0.000	0.71	5	2	<5	15	15	<10	<10	0.02	<10	<10	24	<10	<10	20	
129	10192	0.03	117	290	837	0.007	0.0051	1.32	<2	5	<5	5	5	<10	<10	0.01	<10	<10	41	10	10	48	
130	10188	0.02	6	1890	33	0.004	0.0035	7.37	3	12	6	32	32	<10	<10	0.75	<10	<10	484	10	10	273	
133	10122	0.24	919	220	<2	0.002	0.005	0.03	<2	2	<5	56	56	<10	<10	0.03	<10	<10	24	<10	<10	31	
133	10123	0.03	12	2420	3	0.016	<0.005	0.02	<2	4	<5	108	108	<10	<10	0.06	<10	<10	138	<10	<10	50	
134	2931	0.03	2	28	3	0.006	<0.005	0.98	<5	<5	<20	22	<10	<10	<10	0.089	<10	<10	60	<20	10	67	<1
135	10311	0.12	17	2410	41	0.007	<0.005	0.1	<2	6	<5	82	82	<10	<10	0.16	<10	<10	187	10	10	101	
136	10309	0.04	28	390	145	0.002	<0.005	0.91	<2	3	9	34	34	<10	<10	0.05	<10	<10	43	<10	<10	474	
136	10310	0.02	21	410	156	0.001	<0.005	2.2	<2	1	5	91	91	<10	<10	0.06	<10	<10	26	<10	<10	162	
137	10107	0.01	3	340	9	<0.001	<0.005	6.66	<2	2	10	1	1	<10	<10	<0.01	<10	<10	12	<10	<10	54	
137	10108	0.02	2	350	5	<0.001	<0.005	7.17	<2	1	<5	1	1	<10	<10	<0.01	<10	<10	12	10	10	24	
137	10508	0.01	6	490	7	0.002	<0.005	1.49	<2	1	<5	5	5	<10	<10	0.01	<10	<10	15	10	10	45	
137	10509	0.01	6	220	193	<0.001	<0.005	5.3	<2	2	9	3	3	<10	<10	<0.01	<10	<10	20	<10	<10	97	
138	6976	0.1	5	91	4	0.017	0.019	2.7	<5	<5	<20	38	<10	<10	<10	0.204	<10	<10	122	<20	5	41	2
138	6977	0.12	6	3	4	0.003	<0.005	0.7	<5	6	<20	151	<10	<10	<10	0.112	<10	<10	123	<20	6	38	6
138	6978	0.03	8	35	6	0.005	<0.005	0.06	<5	10	<20	111	<10	<10	<10	0.126	<10	<10	148	<20	9	65	5
138	10401	0.02	36	1020	6	0.006	<0.005	0.04	<2	18	<5	42	42	<10	<10	0.07	<10	<10	224	<10	<10	81	
139	10125	0.01	6	190	4	<0.001	<0.005	0.03	<2	3	<5	12	12	<10	<10	0.02	<10	<10	20	60	60	228	
139	10126	0.01	3	140	12	<0.001	<0.005	1.41	<2	2	<5	1	1	<10	<10	0.01	<10	<10	11	40	40	90	
139	10127	0.01	15	290	2	0.002	<0.005	0.06	2	5	<5	40	40	<10	<10	0.04	<10	<10	24	<10	<10	776	
139	10128	0.01	3	270	15	<0.001	<0.005	8.44	7	6	<5	<1	<1	<10	<10	0.01	<10	<10	64	10	10	65	



## **ANALYTICAL RESULTS FOR ROCK CHIP SAMPLES – TOTAL DIGESTION**

The map numbers in table 4 correspond to the numbered locations on **plate 1**.

Table 4. Analytical results for rock samples prepared with total digestion

Map no.	Sample no.	Type	Method	Site	Size (ft)	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	K pct	La ppm	Li ppm	Mg pct
1	6988	R	G	OC		11.4	4.39	4686	904	15	0.68	32.4	9	193	16	4.49	<10	1.97	11	7	0.34
2	1024	R	S	RC		<0.5	1	13	204	<5	0.31	<1	3	227	17	1.24	<10	0.27	<5	10	0.16
2	6987	R	S	RC		1.3	3.65	161	1324	<5	0.15	3.4	8	193	149	2.74	<10	1.61	22	18	0.23
3	6972	R	G	OC		0.6	1.16	<5	159	24	2.12	<1	49	<2	1730	10	<10	0.24	8	<2	0.48
3	9758	R	Rep	RC	4	<0.5	1.48	<5	26	18	1.83	1.2	153	<2	921	10	<10	0.05	8	4	0.57
5	6973	R	G	OC		0.7	1.23	<5	355	8	3.44	<1	34	125	84	10	<10	0.11	6	2	0.23
6	6967	R	S	RC		49.7	1.12	<5	50	268	0.17	70.6	117	49	5079	10	<10	0.05	<5	4	0.57
6	6968	R	S	RC		1.8	1.11	<5	71	<5	0.08	17.6	25	289	4463	5.87	<10	0.21	7	4	0.47
6	6969	R	S	RC		3.1	1.45	27	64	41	0.63	5.1	126	71	2981	10	<10	0.03	<5	3	0.78
6	6970	R	S	RC		34.4	0.34	<5	248	160	6.69	114.5	7	199	780	7.11	<10	0.11	<5	<2	0.28
6	6971	R	S	RC		<0.5	0.64	<5	213	24	10	32.5	5	19	343	10	<10	0.19	5	<2	1.18
6	9755	R	Rep	RC	1.5	11	0.25	<5	115	29	6.46	243.5	91	6	14601	10	<10	0.08	<5	<2	1.13
6	9756	R	Rep	RC		2.4	1.1	<5	<5	<5	0.1	6	359	10	3901	10	<10	0.01	<5	3	0.66
6	9757	R	Rep	RC	1	40.2	1.31	<5	8	117	0.24	233.1	19	64	17346	10	<10	0.01	<5	3	0.68
10	6985	R	S	RC		<0.5	2.12	9	236	<5	0.13	<1	9	176	61	5.8	<10	0.23	11	9	0.06
12	6986	R	S	RC		<0.5	5.56	7	223	<5	0.07	<1	2	114	13	0.74	30	1.78	8	10	0.08
17	1043	R	SC	OC	5	3.5	2.92	59	70	<5	10	1.1	56	100	1524	10	<10	0.09	16	5	5.84
17	2680	R	Rep	OC		<0.5	2.55	93	25	<5	10	1.3	34	121	52	5.71	<10	0.01	18	19	3.49
38	2877	R	G	OC		0.8	6.13	<5	136	<5	5.04	<1	92	1129	457	10	<10	0.35	7	21	7.6
38	6989	R	G	OC		1.1	0.57	19	49	<5	3.38	<1	125	2925	227	10	<10	0.01	<5	8	10
38	6990	R	G	OC		1	7.65	<5	6	<5	10	<1	22	204	46	6.35	<10	0.01	6	9	4.88
38	6991	R	G	OC		<0.5	0.39	<5	<5	<5	0.09	<1	139	3716	39	10	<10	<0.01	<5	<2	10
38	6992	R	G	OC		0.8	0.59	32	11	<5	5.36	<1	70	2402	34	7.32	<10	0.02	<5	9	10
40	2647	R	S	OC	3	<0.5	0.37	<5	7	<5	1.84	<1	131	2788	139	10	<10	<0.01	<5	5	10
40	2648	R	S	OC		<0.5	0.29	<5	<5	<5	0.39	<1	134	3439	65	10	<10	<0.01	<5	4	10
40	2649	R	S	OC		0.7	2.02	<5	15	<5	3.07	<1	129	2129	238	10	<10	0.02	<5	8	10
40	9754	R	G	OC		<0.5	0.24	<5	5	<5	0.16	<1	144	2656	186	10	<10	<0.01	<5	3	10
44	6993	R	G	FL		0.6	0.24	<5	11	<5	0.05	<1	139	3043	136	10	<10	<0.01	<5	5	10
44	6994	R	G	OC		<0.5	0.72	198	59	<5	0.87	1.6	151	2924	289	10	<10	0.13	<5	15	3.55
50	1044	R	Rep	OC		1.1	0.49	<5	8	<5	0.03	<1	492	1782	2618	10	<10	<0.01	<5	2	10
50	2681	R	C	OC		<0.5	7.35	<5	68	7	8.7	1.1	72	574	125	4.69	<10	0.35	<5	22	7.79
62	2659	R		FL		<0.5	0.73	240	40	<5	0.38	1.6	76	2079	52	3.8	<10	0.09	<5	16	9.91
62	9759	R	Rep	RC	1	0.8	1.28	48	52	<5	1.32	1.2	91	2022	135	7.36	<10	0.15	<5	21	10
64	9760	R	C	RC	2	0.9	8.64	57	716	<5	2.2	1.2	7	97	38	4.82	<10	1.32	18	9	0.58
71	6983	R	S	RC		26.7	5.42	<5	14	10	10	<1	45	235	17546	8.37	<10	0.01	6	4	4.31
71	6984	R	G	RC		0.7	6.11	<5	69	<5	6.87	<1	73	1032	22	8.83	<10	0.21	5	5	9.84
72	2660	R	Rep	TP		1.9	8.26	<5	234	<5	9.36	<1	46	45	5050	3.38	<10	0.43	18	5	3.27
72	2661	R	Rep	TP		2.6	8.71	6	100	<5	10	1.1	87	40	9422	4.63	<10	0.15	25	4	2.9
72	2662	R	Rep	TP		2.3	7.94	<5	154	<5	8.48	<1	62	93	5670	5.26	<10	0.27	21	4	3.26
72	9761	R	Rep	TP		4.8	8.77	<5	225	<5	7.63	<1	56	33	>20000	5.22	<10	0.44	16	3	2.98
72	9762	R	Rep	TP	2	3.6	8.43	7	187	<5	8.88	1.1	57	27	18541	3.83	<10	0.28	17	4	2.92
72	9763	R	Rep	TP	2	3.6	9.07	6	113	<5	9.96	<1	54	36	7862	4.33	<10	0.19	21	4	3.23
72	9764	R	Rep	TP	3	2.3	8.65	9	182	<5	9.77	<1	53	34	5015	4.47	<10	0.33	25	4	2.91
83	1023	R	G	RC		<0.5	8.99	<5	692	<5	7.12	<1	45	107	80	8.38	<10	1.12	14	5	3.19
83	6981	R	S	OC		1.2	5.27	45	9	<5	10	<1	81	92	389	10	<10	0.01	<5	3	2.01
83	6982	R	G	RC		0.6	7.61	<5	78	<5	8.64	<1	37	227	301	6.53	<10	0.2	11	13	1.69
84	6979	R	G	OC		0.8	4.51	7	26	<5	10	<1	44	96	110	10	<10	0.03	10	5	1.44

Table 4. Analytical results for rock samples prepared with total digestion

Map no.	Sample no.	Mn ppm	Mo ppm	Na pct	Nb ppm	Ni ppm	Pb ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	V ppm	Y ppm	Zn ppm	Zr ppm
1	6988	1324	20	0.57	7	17	1058	0.435	12	10	<20	60	<5	<25	0.04	51	15	149	32
2	1024	261	3400	0.23	<5	13	30	0.236	6	<5	<20	48	<5	<25	0.05	26	<5	46	6
2	6987	66	41	0.08	29	70	10	2.003	<5	6	<20	53	<5	<25	0.17	235	12	178	52
3	6972	3352	3	0.06	<5	21	14	10	<5	<5	<20	74	<5	<25	0.07	69	6	150	<5
3	9758	1280	2	0.06	<5	13	60	10	<5	<5	23	40	<5	<25	0.08	66	6	265	5
5	6973	2130	4	0.02	<5	14	5	7.055	<5	<5	<20	76	<5	<25	0.09	34	<5	133	5
6	6967	935	2	0.04	<5	54	6358	10	<5	<5	<20	8	<5	32	0.01	55	<5	17694	<5
6	6968	608	3	0.01	<5	23	54	3.608	5	<5	39	3	<5	<25	0.07	23	<5	3943	10
6	6969	2529	6	<0.01	<5	15	136	10	9	<5	<20	11	<5	<25	0.01	60	<5	1084	<5
6	6970	5624	2	0.01	<5	13	>10000	4.038	<5	<5	<20	102	<5	<25	<0.01	13	<5	>20000	<5
6	6971	>20000	<1	0.08	<5	10	94	2.012	<5	<5	58	57	<5	<25	0.03	29	<5	7975	<5
6	9755	11804	<1	0.02	<5	11	367	10	<5	<5	<20	267	<5	38	<0.01	38	<5	>20000	<5
6	9756	708	3	0.02	<5	16	201	10	<5	<5	<20	2	<5	<25	0.01	77	<5	1643	<5
6	9757	1956	<1	0.1	<5	13	>10000	10	14	<5	23	13	<5	30	0.01	39	<5	>20000	<5
10	6985	3162	2	0.02	<5	24	9	0.019	5	<5	<20	66	<5	<25	0.11	33	6	94	15
12	6986	49	3	2.59	102	12	48	0.205	<5	<5	24	19	<5	<25	0.06	6	39	43	225
17	1043	2204	17	0.21	9	174	<2	0.372	<5	12	<20	105	<5	<25	0.26	106	14	219	10
17	2680	7785	5	0.01	<5	219	<2	0.169	<5	12	<20	224	<5	<25	0.24	51	26	339	143
38	2877	1644	5	1.45	26	421	<2	0.12	<5	28	<20	165	<5	<25	0.71	298	20	100	<5
38	6989	2091	<1	0.03	<5	1582	<2	0.272	21	6	<20	3	<5	<25	0.02	66	<5	116	<5
38	6990	3711	5	0.01	9	83	<2	0.129	<5	9	<20	8	<5	<25	0.21	112	13	88	39
38	6991	1526	2	<0.01	<5	1784	<2	0.098	19	<5	<20	<1	<5	<25	0.02	67	<5	117	<5
38	6992	1440	3	0.13	<5	905	<2	0.087	15	<5	<20	11	<5	<25	0.02	55	<5	90	<5
40	2647	1657	4	0.04	<5	2068	<2	0.138	7	10	<20	6	<5	<25	0.03	68	<5	91	<5
40	2648	1566	<1	0.01	<5	2112	<2	0.069	23	6	<20	2	<5	<25	0.02	63	<5	117	<5
40	2649	1615	2	0.15	<5	934	<2	0.108	17	12	20	45	<5	<25	0.04	75	<5	132	<5
40	9754	1507	3	<0.01	<5	1436	<2	0.05	14	<5	<20	1	<5	<25	0.01	48	<5	123	<5
44	6993	1536	1	<0.01	<5	3087	<2	0.014	15	<5	<20	3	<5	<25	0.03	63	<5	164	<5
44	6994	3256	1	0.03	<5	1503	<2	0.322	20	16	<20	34	<5	<25	0.13	96	8	200	11
50	1044	1210	9	0.01	<5	7826	4	7.41	12	6	<20	<1	<5	<25	0.06	70	<5	153	<5
50	2681	1095	2	0.46	6	1218	3	0.067	<5	31	<20	153	<5	<25	0.09	100	<5	74	7
62	2659	697	3	0.24	<5	1939	<2	0.04	18	<5	<20	38	<5	<25	0.02	28	<5	59	<5
62	9759	1109	3	0.07	<5	1738	103	0.426	10	9	<20	33	<5	<25	0.08	71	<5	287	6
64	9760	837	5	1.09	6	16	46	1.026	7	8	<20	252	<5	<25	0.28	55	14	194	101
71	6983	1428	5	0.1	6	238	21	0.579	<5	10	<20	405	<5	<25	0.26	125	12	101	20
71	6984	1182	2	1.09	17	744	<2	0.058	<5	23	<20	74	<5	<25	0.43	219	13	85	29
72	2660	441	3	2.65	35	158	<2	0.157	<5	29	<20	288	<5	<25	1.22	335	30	45	14
72	2661	583	4	1.49	54	159	<2	0.185	<5	31	<20	258	<5	<25	1.64	538	32	72	17
72	2662	684	4	2.38	49	121	<2	0.074	<5	30	<20	285	<5	<25	1.27	479	28	60	14
72	9761	346	6	2.36	39	220	11	0.2	<5	28	<20	321	<5	<25	1.1	328	29	106	12
72	9762	397	4	2.63	31	245	14	0.094	<5	28	<20	229	<5	<25	1.18	331	29	95	17
72	9763	527	4	2.99	46	161	<2	0.162	<5	31	<20	273	<5	<25	1.37	413	32	64	26
72	9764	460	3	2.76	58	91	<2	0.095	<5	31	<20	267	<5	<25	1.71	523	35	56	22
83	1023	1257	5	1.85	26	60	3	0.092	<5	31	<20	413	<5	<25	0.5	289	19	103	55
83	6981	1308	3	0.04	8	217	3	7.769	<5	10	<20	925	<5	<25	0.18	111	8	122	19
83	6982	568	5	1.45	15	57	<2	1.355	<5	14	<20	485	<5	<25	0.36	121	14	87	92
84	6979	3997	4	0.45	<5	44	<2	0.283	<5	9	<20	121	<5	<25	0.2	92	11	136	27

Table 4. Analytical results for rock samples prepared with total digestion

Map no.	Sample no.	Type	Method	Site	Size (ft)	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	K pct	La ppm	Li ppm	Mg pct
84	6980	R	G	OC		<0.5	8.86	<5	511	<5	6.69	<1	51	98	143	10	<10	0.83	14	6	3.21
91	6999	R	Rep	RC		0.8	7.19	<5	42	<5	8.55	<1	63	995	18	6.35	<10	0.09	<5	11	10
99	2886	R	G	OC		0.8	6.77	17	1251	<5	0.26	<1	15	120	92	4.46	<10	1.78	<5	27	1.63
101	6995	R	S	RC		1.8	3.79	<5	53	<5	5.27	<1	119	1385	1434	10	<10	0.09	<5	7	10
101	6996	R	S	RC		2.3	4.41	<5	71	<5	4.86	<1	112	1320	1616	10	<10	0.15	<5	6	10
102	6997	R	Rep	RC		0.8	8.53	6	85	<5	7.87	1	64	127	218	10	<10	0.24	6	5	4.01
102	6998	R	S	FL		6.4	4.89	9	13	6	10	4.9	40	55	3454	10	<10	0.03	<5	8	2.99
106	9753	R	S	RC		4.1	5.8	7	541	<5	0.18	<1	14	92	3014	3.79	<10	1.41	7	8	0.99
107	1022	R	C	OC	0.4	4.3	2.47	14	>2000	10	2.45	136.9	9	144	412	1.15	<10	1.16	<5	3	0.2
107	6965	R	S	RC		7.6	7.08	8	372	5	3.23	1.3	25	496	>20000	10	<10	0.4	<5	9	3.81
107	6966	R	S	RC		0.8	5.38	5	699	<5	0.5	1.1	10	147	2125	2.7	<10	1.17	6	5	0.8
108	1021	R	Rep	OC	3	9.8	1.25	68	751	6	0.37	3.8	7	289	179	4.14	<10	0.48	<5	4	0.33
108	9752	R	S	RC	2	5	4.32	26	588	<5	0.08	1.3	60	100	78	10	<10	0.35	<5	9	2.59
109	6964	R	S	RC		4.2	0.4	<5	14	10	0.48	1.6	2078	670	>20000	10	<10	0.02	<5	2	2.02
110	6962	R	G	OC		5	7.42	-5	270	-5	8.25	1.3	175	536	6310	10	-10	0.27	-5	7	5.93
110	6963	R	G	RC		3.7	7.38	<5	6	105	0.22	1.3	195	>20000	2547	10	79	<0.01	<5	<2	8.57
115	1045	R	S	OC	0.5	6.5	6.4	<5	35	<5	7.98	1.9	898	120	19816	10	<10	0.02	<5	15	1.95
115	1046	R	S	RC		1.3	2.21	<5	32	<5	3.12	<1	144	1969	1157	10	<10	0.04	<5	10	10
115	7000	R	S	OC		4.9	2.56	<5	10	<5	3.61	<1	798	<2	8145	10	<10	0.02	<5	5	0.54
119	9274	R	G	RC		0.6	2.04	<5	40	<5	2.25	<1	130	1961	287	10	<10	0.08	<5	5	10
122	6974	R	G	TP		5.3	3.08	<5	51	<5	3.8	<1	140	1543	10345	10	<10	0.1	<5	2	10
123	6975	R	G	RC		0.9	7.51	<5	86	7	7.32	<1	51	169	515	9.14	<10	0.19	<5	7	5.25
126	1047	R	CH	OC	0.7	<0.5	6.39	<5	1126	<5	8.44	<1	22	61	59	5.89	<10	0.21	5	31	2.65
126	9275	R	S	RC		2.3	8.82	<5	454	<5	4.55	1.1	23	101	2493	5.69	<10	0.36	5	7	1.71
127	1048	R	S	RC		2.1	4.57	<5	91	<5	4.64	<1	129	1385	2892	10	<10	0.14	<5	3	10
127	1049	R		RC		0.7	2.27	<5	31	<5	1.98	<1	111	2439	227	8.91	<10	0.08	<5	3	10
127	9276	R	G	OC		3.1	3.22	<5	77	<5	3.54	<1	169	2091	3988	10	<10	0.13	<5	3	10
134	2931	R	G	RC	20	0.6	7.8	<5	1492	<5	4.58	1.1	22	147	215	4.56	<10	1.36	16	6	2.09
138	6976	R	G	OC		0.9	6	<5	333	<5	7.59	<1	64	173	548	10	<10	0.9	<5	17	5.5
138	6977	R	G	OC		0.8	10	<5	1061	<5	5.01	1	20	42	215	5.34	<10	1.56	9	17	1.75
138	6978	R	G	RC		0.5	8.67	<5	937	<5	3.74	<1	30	107	219	6.34	<10	1.84	14	21	2.13



Table 4. Analytical results for rock samples prepared with total digestion

Map no.	Sample no.	Mn ppm	Mo ppm	Na pct	Nb ppm	Ni ppm	Pb ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	V ppm	Y ppm	Zn ppm	Zr ppm
84	6980	1599	3	1.76	27	63	<2	0.069	<5	31	<20	459	<5	<25	0.51	288	18	129	54
91	6999	1077	3	0.6	8	488	<2	0.061	<5	27	<20	227	<5	<25	0.05	160	<5	65	<5
99	2886	830	11	0.24	15	12	3	1.38	<5	15	<20	40	<5	<25	0.27	167	9	84	19
101	6995	1504	3	0.3	7	2469	2	0.553	<5	19	<20	74	<5	<25	0.12	137	6	123	6
101	6996	1496	3	0.41	7	2287	<2	0.611	<5	18	<20	91	<5	<25	0.14	147	5	123	6
102	6997	1736	3	1.43	30	106	<2	0.068	<5	34	<20	160	<5	<25	0.84	332	21	132	50
102	6998	1403	3	0.05	5	182	47	0.2	<5	7	<20	339	<5	<25	0.11	101	12	578	13
106	9753	687	3	1.08	<5	30	18	0.783	6	6	<20	18	50	<25	0.12	51	11	113	64
107	1022	702	44	0.02	<5	12	1619	1.016	13	7	<20	70	<5	<25	0.08	65	6	7800	9
107	6965	5092	2	0.26	<5	94	24	2.586	17	13	<20	161	<5	<25	0.15	167	10	669	17
107	6966	865	2	1.17	<5	22	13	0.499	20	<5	<20	27	<5	<25	0.06	31	11	110	61
108	1021	233	15	0.05	5	23	920	1.315	36	<5	<20	33	<5	<25	0.08	55	<5	426	8
108	9752	2513	55	0.02	11	18	72	4.679	<5	9	<20	4	<5	<25	0.09	156	5	403	7
109	6964	413	5	0.05	<5	>20000	<2	10	<5	<5	<20	3	<5	<25	0.03	93	<5	401	<5
110	6962	1333	1	1.22	16	10291	4	2.56	-5	27	-20	402	-5	-25	0.33	224	10	147	11
110	6963	1743	4	0.01	23	5530	<2	0.399	1003	6	<20	4	53	<25	0.3	1154	<5	500	<5
115	1045	653	4	0.07	<5	>20000	<2	10	<5	6	<20	156	<5	<25	0.14	91	<5	280	<5
115	1046	1474	4	0.11	5	3231	<2	0.877	12	16	<20	36	<5	<25	0.11	113	<5	120	<5
115	7000	286	3	0.03	<5	>20000	<2	10	<5	<5	<20	29	<5	<25	0.04	92	<5	236	<5
119	9274	1549	1	0.23	<5	1685	<2	0.239	12	11	<20	62	<5	<25	0.1	88	<5	115	<5
122	6974	1451	3	0.24	5	7917	8	0.687	<5	17	<20	26	<5	<25	0.15	129	6	167	16
123	6975	1634	4	1.74	20	119	<2	0.159	<5	35	<20	96	<5	<25	0.39	268	18	125	18
126	1047	1669	4	0.1	12	148	<2	0.138	40	13	<20	227	<5	<25	0.21	149	9	73	8
126	9275	1117	953	1.91	12	27	5	0.291	<5	16	<20	356	<5	<25	0.31	154	10	96	<5
127	1048	1315	3	0.6	11	3074	<2	1.451	<5	18	<20	83	<5	<25	0.32	172	9	121	8
127	1049	1195	4	0.25	7	2092	<2	0.161	6	11	<20	39	<5	<25	0.15	110	<5	108	6
127	9276	1382	5	0.42	7	6214	4	1.553	<5	15	<20	87	<5	<25	0.21	130	6	132	10
134	2931	1274	5	1.3	19	39	<2	1.031	<5	15	<20	177	<5	<25	0.31	192	23	122	28
138	6976	1652	2	0.97	33	128	<2	2.9	<5	46	<20	209	<5	<25	0.46	441	12	162	10
138	6977	1036	1	2.66	17	6	<2	0.756	<5	16	<20	854	<5	<25	0.34	219	15	81	29
138	6978	1326	1	2.08	18	50	7	0.078	<5	19	<20	433	<5	<25	0.42	212	16	109	59



**ANALYTICAL RESULTS FOR STREAM SEDIMENT AND PAN CONCENTRATE  
SAMPLES – PARTIAL DIGESTION**

The map numbers in table 5 correspond to the numbered locations on **plate 2**.

Table 5. Analytical results for stream sediment and pan concentrate samples prepared by partial digestion

Map Sample no.	Type	Au ppm	Ag ppm	Al pct	As ppm	B ppm	Ba ppm	Bi ppm	Cd pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	Hg ppm	K pct	La ppm	Li ppm	Mg pct	Mn ppm	Mo ppm	
1	10346	PC	0.008	<0.2	1.28	13	<10	<2	0.19	<0.5	10	64	20	2.91	<10	0.01	0.41	30	<10	0.55	353	<1	
2	10051	PC	56.6	0.3	0.58	15	<10	100	2	0.31	<0.5	7	59	12	1.88	<10	0.11	<10	<10	0.28	389	<1	
2	10052	PC	0.31	<0.2	0.53	23	<10	190	<2	0.24	<0.5	16	63	24	2.73	30	0.03	0.08	20	0.23	2000	<1	
2	10053	PC	0.267	<0.2	0.41	12	<10	140	<2	0.15	<0.5	20	62	12	2.69	20	0.02	0.08	20	0.14	1330	<1	
4	10049	SS	0.003	<0.2	0.58	16	<10	1480	<2	0.41	0.7	14	43	46	2.26	<10	0.07	0.12	20	0.33	428	<1	
5	10166	PC	0.14	1.6	0.14	3	<10	30	<2	0.01	<0.5	2	88	7	1.27	<10	0.09	<10	0.02	0.56	<1	<1	
6	10050	PC	0.28	<0.2	0.33	2180	<10	50	<2	0.29	<0.5	13	48	37	3.16	<10	0.13	0.11	20	0.23	411	<1	
7	10112	PC	0.047	1.1	0.17	2660	<10	80	2	0.04	<0.5	1	51	12	2.35	<10	0.17	<10	0.03	63	<1		
8	2658	SS	0.004	0.2	1.19	24		57	<5	1.78	<0.2	21	33	60	3.54	<2	0.184	0.06	5	1.17	588	2	
9	2678	SS	0.141	<0.2	2.06	65		24	<5	0.72	<0.2	19	48	51	4.66	2	<0.01	0.06	9	40	1.15	689	<1
10	2663	SS	0.032	0.2	1.21	67		32	<5	0.77	<0.2	18	33	57	3.99	<2	0.128	0.06	5	15	0.85	610	2
10	2664	SS	0.136	<0.2	1.39	108		49	<5	1.8	<0.2	28	66	87	4.55	<2	0.807	0.06	4	15	1.49	689	<1
11	2665	SS	0.005	<0.2	1.72	52		133	<5	2.79	<0.2	23	48	82	5.03	<2	1.268	0.06	4	8	1.26	896	<1
12	2666	SS	0.016	0.5	1.05	81		129	<5	2.11	1.4	18	24	74	5.33	<2	0.177	0.09	7	8	0.76	711	9
13	2667	SS	0.012	0.5	0.79	80		113	<5	1.57	1.2	17	107	76	4.41	<2	0.316	0.06	6	8	1.25	735	5
14	2668	SS	0.014	<0.2	2.29	88		95	<5	0.73	0.6	34	45	100	6.77	3	0.077	0.08	6	22	1.08	1128	4
15	10423	PC	5.14	<0.2	2.03	27	<10	50	<2	0.85	<0.5	19	94	81	3.72	<10	6.04	0.09	<10	1.57	557	<1	
15	10424	PC	0.145	<0.2	1.37	20	<10	80	2	0.65	<0.5	13	49	34	2.91	<10	1.29	0.06	<10	1.12	360	<1	
16	10422	PC	0.091	<0.2	1.96	20	<10	210	3	1.05	<0.5	19	66	70	4.48	<10	2.45	0.1	<10	1.74	621	<1	
16	10502	PC	0.047	<0.2	1.83	10	<10	100	<2	0.89	<0.5	18	66	71	4.34	<10	2	0.09	<10	1.71	604	<1	
17	10425	PC	0.01	<0.2	1.42	18	<10	240	<2	0.77	<0.5	14	59	42	3.32	<10	3.08	0.07	<10	1.18	399	<1	
18	2669	SS	0.008	<0.2	1.21	43		57	<5	0.56	<0.2	18	59	40	3.35	<2	0.039	0.06	36	8	1.29	695	<1
19	2670	SS	0.004	<0.2	1.54	81		78	<5	0.68	<0.2	31	112	112	4.1	<2	0.066	0.08	5	10	1.52	979	<1
20	2673	SS	0.019	<0.2	1.35	26		87	<5	0.43	<0.2	28	107	78	3.91	<2	0.383	0.06	8	7	2.28	734	<1
20	2674	SS	0.013	<0.2	1.57	44		91	<5	0.58	<0.2	28	128	98	4.01	<2	0.146	0.06	12	8	2.06	731	<1
21	2671	SS	0.028	<0.2	1.72	17		150	<5	0.71	0.2	27	63	236	5.86	<2	0.064	0.19	7	10	1.61	961	2
22	2672	SS	0.004	<0.2	2.33	9		388	<5	0.36	0.3	37	35	222	4.6	<2	0.081	0.41	6	9	1.86	880	6
23	2675	SS	0.008	<0.2	2.55	19		119	<5	0.51	0.4	25	90	109	3.97	<2	0.047	0.08	4	12	1.66	690	<1
24	2676	SS	0.01	0.3	2.09	12		260	<5	0.64	0.3	34	102	94	4.29	<2	0.092	0.07	6	10	2.42	1200	<1
25	2677	SS	0.011	0.5	0.92	49		77	<5	2.98	6.6	24	20	106	5.55	2	0.089	0.06	13	11	0.42	895	8
26	10421	PC	4.1	0.2	1.83	49	<10	310	2	0.58	0.8	21	124	52	4.6	<10	0.03	0.17	<10	1.32	576	2	
26	10519	PC	8.14	<0.2	1.63	55	<10	190	2	0.53	0.7	18	112	52	3.76	<10	0.03	0.16	<10	1.18	519	<1	
27	10443	PC	0.521	<0.2	1.73	12	<10	60	2	0.68	<0.5	22	144	44	3.78	<10	0.83	0.08	<10	1.84	523	<1	
28	2679	SS	0.002	<0.2	1.65	23		44	<5	0.7	<0.2	62	380	181	4.24	<2	0.064	0.05	<1	5	2.97	484	<1
29	10444	PC	0.674	<0.2	1.72	10	<10	50	<2	0.59	<0.5	19	96	38	3.68	<10	0.52	0.1	20	1.72	642	<1	
30	10160	PC	10.8	<0.2	1.3	8	<10	70	2	0.4	<0.5	30	175	57	4.87	<10	0.05	0.11	20	1.41	549	<1	
31	10438	PC	7.16	<0.2	1.24	18	<10	110	<2	0.99	0.7	26	150	71	6.93	20	0.06	0.11	20	1.91	596	<1	
32	10439	PC	0.3	<0.2	1.13	20	<10	260	<2	0.26	<0.5	10	83	56	3.57	<10	0.3	0.12	20	0.52	424	<1	
33	10432	PC	5.58	<0.2	1.77	12	<10	60	<2	0.86	<0.5	21	241	98	3.68	<10	10	0.04	<10	2	375	<1	
33	10433	PC	0.167	<0.2	1.78	8	<10	50	<2	0.78	<0.5	30	203	77	4.99	20	0.11	0.07	<10	2.42	419	<1	
34	1026	SS	0.003	<0.2	2.86	6		52	<5	1.67	<0.2	54	377	182	4.08	<2	0.117	0.04	2	8	2.62	553	<1
34	1027	SS	0.003	<0.2	2.14	32		53	<5	1.44	1.2	46	326	156	3.99	<2	0.59	0.06	3	8	2.43	690	<1
34	1028	SS	0.002	<0.2	2.99	<5		51	<5	1.71	<0.2	32	227	128	2.99	<2	0.08	0.07	3	6	1.72	374	<1
35	1025	SS	0.007	<0.2	2.56	12		104	<5	0.62	0.6	121	69	602	4.39	<2	0.973	0.05	5	11	1.94	2144	<1
36	10503	PC	9.05	<0.2	1.51	3	<10	50	<2	0.7	<0.5	21	198	80	3.48	<10	1.33	0.04	<10	1.84	316	<1	
37	10426	PC	0.37	<0.2	1.54	12	<10	110	<2	0.86	<0.5	31	242	147	5.82	<10	7.05	0.04	<10	2.06	408	<1	

Table 5. Analytical results for stream sediment and pan concentrate samples prepared by partial digestion

Map Sample no.	Na pct	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	10346	0.03	21	400	33	<0.001	0.0005	0.01	6	3	8	8			0.06	<10	<10	20	<10		55	
2	10051	0.02	18	350	8	0.001	0.0007	0.02	<2	2	11	11			0.08	<10	<10	35	<10		41	
2	10052	0.02	36	400	13	0.001	0.0008	<0.01	2	2	7	7			0.07	<10	<10	35	<10		48	
2	10053	0.02	20	310	9	0.001	<0.0005	<0.01	<2	3	5	5			0.04	<10	<10	22	<10		47	
4	10049	0.01	34	430	11	0.002	0.0007	0.03	<2	5	<5	21			0.04	10	<10	32	<10		107	
5	10166	0.01	6	50	6	<0.001	<0.0005	0.04	<2	1	3	3			0.01	<10	<10	5	<10		12	
6	10050	0.01	37	440	34	0.13	0.0007	0.33	16	2	11	11			<0.01	<10	<10	11	<20		54	
7	10112	0.01	7	250	160	0.001	<0.005	0.23	661	1	17	17			<0.01	10	<10	5	<10		20	
8	2658	0.03	2	49	12	0.003	<0.005	0.57	<5	<5	<20	96			0.046	<10	<10	50	<20	5	91	2
9	2678	0.01	4	51	5	0.003	<0.005	0.02	<5	<5	<20	54			0.031	<10	<10	47	<20	8	114	2
10	2663	<0.01	3	38	5	0.003	<0.005	0.28	<5	<5	<20	35			0.057	<10	<10	33	<20	6	114	2
10	2664	0.01	2	64	4	0.006	<0.005	0.64	<5	6	<20	67			0.068	<10	<10	57	<20	8	87	3
11	2665	0.01	4	26	4	0.003	<0.005	0.06	<5	13	<20	93			0.027	<10	<10	114	<20	10	93	3
12	2666	0.03	3	48	7	0.003	<0.005	1.06	7	5	<20	138			0.021	<10	<10	53	<20	12	228	5
13	2667	0.02	2	74	5	0.007	0.007	0.41	16	<5	<20	111			<0.01	<10	<10	43	<20	9	203	4
14	2668	0.03	5	53	5	0.003	<0.005	0.05	8	10	<20	44			0.103	<10	<10	114	<20	15	159	5
15	10423	0.03	50	470	6	0.008	0.0028	0.15	<2	6	27	27			0.25	<10	<10	90	10		55	
15	10424	0.03	43	400	4	0.002	0.0028	0.04	<2	5	37	37			0.1	<10	<10	56	<10		47	
16	10422	0.03	54	540	8	0.005	0.0047	0.14	<2	5	35	35			0.22	<10	<10	92	<10		66	
16	10502	0.03	52	550	7	0.006	0.0028	0.03	<2	5	24	24			0.2	<10	<10	92	<10		65	
17	10425	0.04	42	380	7	0.003	0.0036	0.22	3	5	37	37			0.09	<10	<10	64	<10		49	
18	2669	0.02	2	101	6	0.005	<0.005	0.05	<5	<5	<20	37			0.04	<10	<10	50	<20	11	53	5
19	2670	0.02	2	236	6	0.006	<0.005	0.04	<5	6	<20	57			0.073	<10	<10	63	<20	9	84	4
20	2673	0.02	2	219	7	0.005	<0.005	0.02	<5	<5	<20	31			0.058	<10	<10	45	<20	8	65	5
20	2674	0.02	2	177	6	0.005	<0.005	0.05	<5	5	<20	48			0.073	<10	<10	56	<20	9	77	4
21	2671	0.03	5	72	5	0.004	<0.005	0.09	<5	7	<20	79			0.1	<10	<10	155	<20	8	83	4
22	2672	0.03	3	77	2	0.003	<0.005	0.05	<5	6	<20	57			0.078	<10	<10	82	<20	9	64	4
23	2675	0.03	3	58	14	0.003	<0.005	0.03	<5	7	<20	40			0.059	<10	<10	71	<20	7	138	5
24	2676	0.02	2	159	9	0.005	<0.005	0.07	<5	<5	<20	44			0.077	<10	<10	56	<20	8	110	4
25	2677	0.02	3	63	8	0.005	<0.005	0.22	6	6	<20	201			0.021	<10	<10	57	<20	25	572	4
26	10421	0.05	116	1020	163	0.002	<0.005	0.42	3	3	40	40			0.07	<10	<10	62	10		108	
26	10519	0.03	90	1150	149	0.003	<0.005	0.39	2	3	35	35			0.06	<10	<10	48	10		119	
27	10443	0.05	147	1030	7	0.005	0.0051	0.03	<2	6	26	26			0.09	<10	<10	63	<10		70	
28	2679	0.04	2	457	<2	0.008	0.011	0.02	<5	<5	<20	48			0.117	<10	<10	49	<20	2	42	5
29	10444	0.04	116	350	13	0.004	0.0058	0.01	<2	5	25	25			0.13	<10	<10	79	<10		53	
30	10160	0.04	219	310	8	0.011	0.0538	<0.01	<2	4	15	15			0.1	<10	<10	56	<10		48	
31	10438	0.03	276	410	11	0.017	0.258	0.01	<2	5	16	16			0.09	<10	<10	57	<10		58	
32	10439	0.02	60	140	18	0.002	0.03	0.02	<2	5	16	16			0.06	<10	<10	49	<10		72	
33	10432	0.09	175	470	6	0.006	0.0089	0.02	<2	4	39	39			0.16	<10	<10	56	<10		60	
33	10433	0.08	385	420	7	0.005	0.0094	0.03	<2	4	28	28			0.12	<10	<10	62	<10		39	
34	1026	0.14	3	295	<2	0.007	0.012	0.12	<5	6	<20	161			0.184	<10	<10	84	<20	4	40	5
34	1027	0.08	2	267	2	0.006	0.008	0.13	<5	6	<20	77			0.104	<10	<10	69	<20	7	148	4
34	1028	0.12	2	179	<2	0.007	<0.005	0.03	<5	<5	<20	109			0.177	<10	<10	68	<20	3	39	4
35	1025	0.01	3	49	9	0.003	<0.005	0.06	<5	7	<20	44			0.129	<10	<10	90	<20	42	170	3
36	10503	0.07	186	390	5	0.005	0.0116	0.03	<2	3	23	23			0.12	<10	<10	58	<10		40	
37	10426	0.08	274	370	9	0.006	0.0194	0.13	<2	4	20	20			0.15	<10	<10	82	<10		49	

Table 5. Analytical results for stream sediment and pan concentrate samples prepared by partial digestion

Map Sample no.	Type	Au ppm	Ag ppm	Al pct	As ppm	B ppm	Ba ppm	Bi ppm	Cd pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	Hg ppm	K pct	La ppm	Li ppm	Mg pct	Mn ppm	Mo ppm
37	10434	PC	20.6	<0.2	1.55	10	<10	<10	0.83	<0.5	29	234	113	4.99	<10	2.21	0.04	<10	<10	1.93	377	<1
38	10441	PC	0.155	<0.2	2.16	11	<10	<10	1.35	0.6	26	126	47	5.99	<10	0.01	0.26	<10	<10	1.98	368	1
39	2878	SS	0.006	<0.2	2.69	31	58	<5	3.46	0.3	22	63	53	5.09	3	0.019	0.4	5	24	1.27	407	<1
39	2879	SS	0.003	<0.2	2.78	21	106	<5	1.92	0.6	32	58	79	5.63	3	0.019	0.18	8	27	1.26	699	2
40	2880	SS	0.009	<0.2	2.33	5	41	<5	0.76	<0.2	40	379	134	3.98	<2	0.029	0.05	2	6	2.86	438	<1
40	2881	SS	0.006	<0.2	2.55	16	37	<5	1.58	<0.2	40	371	80	5.19	<2	0.027	0.12	2	13	3.18	594	<1
41	10516	PC	7.14	0.7	1.28	8	<10	50	2	0.64	1.5	35	229	55	7.74	<10	0.52	<10	<10	3.01	451	<1
42	10517	PC	0.121	<0.2	1.44	14	<10	40	<2	0.58	<0.5	27	189	67	4.55	<10	0.06	<10	<10	2.64	432	2
43	10445	PC	25.1	<0.2	1.59	3	<10	30	<2	0.65	0.5	29	191	48	5.01	<10	0.02	<10	<10	3.21	449	<1
44	2883	SS	0.062	<0.2	1.13	13	67	<5	0.37	<0.2	93	314	150	7.38	<2	0.055	0.04	<1	5	10	1072	<1
45	2884	SS	0.003	<0.2	1.92	13	77	<5	1.28	0.5	40	237	193	8.34	<2	0.149	0.09	<1	8	1.69	733	<1
45	2885	SS	0.005	<0.2	1.91	16	58	<5	2.13	0.5	23	117	91	4.07	<2	0.112	0.06	2	9	1.7	705	<1
46	10348	PC	0.004	<0.2	2.14	8	20	120	2	2.07	0.8	27	58	101	6.72	<10	1.61	<10	<10	1.78	612	<1
47	10506	PC	0.007	<0.2	1.71	8	<10	310	2	1.46	<0.5	18	66	70	3.58	<10	0.14	<10	<10	2.1	524	<1
48	10446	PC	0.003	<0.2	1.68	3	<10	90	<2	1.23	0.6	14	68	63	4.71	<10	0.09	<10	<10	1.14	398	<1
49	10117	PC	0.008	<0.2	1.41	2	<10	130	<2	0.17	<0.5	5	35	17	1.76	<10	0.02	<10	<10	1.13	523	2
49	10118	PC	0.067	<0.2	1.64	6	<10	80	<2	0.82	<0.5	14	72	79	4.32	<10	0.1	<10	<10	1.14	358	<1
49	10205	PC	0.003	<0.2	1.59	4	<10	140	<2	1.06	<0.5	14	77	72	4.16	<10	0.12	<10	<10	1.09	379	2
50	2882	SS	0.002	<0.2	1.62	7	90	<5	0.6	<0.2	25	93	39	4.04	<2	0.026	0.09	6	12	2.33	560	<1
51	2887	SS	0.005	<0.2	1.68	<5	75	<5	0.82	0.3	22	19	132	3.98	<2	0.117	0.03	1	3	1.18	588	<1
52	10018	PC	0.01	0.2	7.93	12	<10	340	9	0.14	6.1	<1	1	165	15	20	0.05	0.42	<10	3.77	3350	<1
53	1038	SS	0.007	<0.2	0.99	20	42	<5	7.8	<0.2	11	21	49	1.99	<2	0.102	0.1	6	10	3.29	619	2
54	1037	SS	0.004	<0.2	1.36	13	63	<5	0.6	0.3	15	43	53	2.62	<2	0.11	0.08	8	13	0.61	464	<1
55	1039	SS	0.013	<0.2	1.25	123	39	<5	1.59	<0.2	14	40	32	3.06	<2	0.116	0.07	8	33	0.76	441	<1
56	1040	SS	0.017	<0.2	2.52	12	148	<5	1.11	<0.2	19	77	48	4.26	3	0.535	0.15	9	17	1.3	484	<1
56	1041	SS	0.005	<0.2	1.57	8	75	<5	2.21	<0.2	24	75	95	4.44	<2	1.797	0.07	<1	16	1.19	335	<1
57	1042	SS	0.041	<0.2	2.29	6	80	<5	0.86	0.4	30	120	87	5.82	<2	0.702	0.08	5	18	1.89	602	<1
58	2921	SS	0.003	<0.2	0.61	<5	52	<5	0.67	0.5	38	139	51	10	6	0.21	0.04	<1	5	0.52	274	<1
60	2925	SS	0.05	<0.2	1.43	41	171	<5	1.05	<0.2	18	48	58	3.45	<2	0.286	0.1	5	9	0.78	515	<1
61	10510	PC	0.034	<0.2	1.34	10	<10	220	<2	0.53	<0.5	17	71	261	3.93	<10	0.18	<10	<10	0.92	458	2
62	2922	SS	0.123	0.4	1.09	1126	82	12	0.92	<0.2	29	54	136	6.3	<2	0.404	0.07	2	13	0.83	379	<1
63	2923	SS	0.007	<0.2	1.78	41	43	<5	1.22	<0.2	17	29	80	2.9	<2	0.16	0.11	1	10	0.81	378	<1
64	2924	SS	0.011	0.8	2.03	20	339	<5	0.75	1.8	19	22	70	4.1	2	0.076	0.1	16	19	1.08	1258	<1
65	2927	SS	0.016	1.2	0.53	70	67	<5	0.47	6	25	16	140	6.33	<2	0.266	0.06	6	8	0.42	402	12
65	2928	SS	0.018	1.3	1.13	108	73	<5	1.42	5.1	35	35	140	6.77	<2	0.247	0.09	2	19	1.14	764	8
66	2929	SS	0.012	0.9	0.59	39	192	<5	3.6	3.3	16	19	90	3.62	<2	0.115	0.07	4	9	1.1	849	8
68	2930	PC	0.011	0.5	2.1	24	79	<5	1.61	0.8	29	283	87	6.41	<2	0.261	0.25	9	16	1.34	539	3
69	2926	SS	0.012	<0.2	2.07	19	95	<5	0.73	<0.2	27	206	50	5.28	<2	0.087	0.13	6	45	1.23	701	<1
70	10402	PC	2.52	6	1.23	18	<10	80	<2	0.56	1.2	51	1645	35	13.1	<10	0.04	<10	<10	0.92	912	<1
70	10404	PC	84	1.4	1.53	23	<10	80	<2	0.59	1.6	34	498	49	9.89	<10	0.47	<10	<10	1.08	747	<1
70	10405	PC	17.45	<0.2	1.29	8	<10	100	2	0.66	1.8	30	389	37	11.4	<10	0.07	<10	<10	0.8	740	<1
74	10406	PC	7.02	19.2	1.51	16	<10	100	<2	0.51	1.1	30	841	56	8.06	<10	0.84	0.1	<10	1.01	929	<1
76	10407	PC	792	63.8	1.75	11	<10	200	<2	0.76	1	24	186	84	7.65	<10	1.93	0.1	<10	1.04	716	<1
76	10408	PC	82.2	2	1.64	10	<10	120	2	0.74	<0.5	15	78	35	5.02	<10	0.75	0.1	<10	0.96	440	<1
77	10451	PC	43.3	5.4	1.67	6	<10	80	<2	0.75	0.5	18	93	51	6.23	<10	0.2	0.1	<10	1.13	581	<1
77	10452	PC	1.32	<0.2	1.74	10	<10	90	2	0.85	<0.5	18	102	45	5.61	<10	0.68	0.12	<10	1.17	606	<1

Table 5. Analytical results for stream sediment and pan concentrate samples prepared by partial digestion

Map Sample no.	Na pct	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
37	10434	0.08	275	370	7	0.03	0.0091	0.07	<2	4	4	23	<10	<10	0.14	<10	<10	77	<10		46	
38	10441	0.1	182	450	9	0.004	0.0155	0.09	<2	6	6	60	<10	<10	0.11	<10	<10	80	10		88	
39	2878	0.09	3	54	9	0.002	<0.005	0.29	<5	9	<20	318	<10	<10	0.081	<10	<10	83	<20	8	148	4
39	2879	0.05	4	92	11	0.004	<0.005	0.1	<5	7	<20	224	<10	<10	0.084	<10	<10	90	<20	10	294	6
40	2880	0.06	2	316	4	0.007	0.006	0.02	<5	<5	<20	54	<10	<10	0.171	<10	<10	80	<20	4	58	4
40	2881	0.06	3	267	7	0.008	<0.005	0.1	<5	6	<20	101	<10	<10	0.16	<10	<10	86	<20	6	120	9
41	10516	0.04	287	370	3	0.014	0.068	0.06	2	2	19	26	<10	<10	0.11	<10	<10	309	<10		37	
42	10517	0.04	243	900	5	0.006	0.012	0.11	4	2	26	18	<10	<10	0.09	<10	<10	100	<10		41	
43	10445	0.04	285	500	6	0.006	0.0384	<0.01	2	3	18	21	<10	<10	0.13	<10	20	143	<10		44	
44	2883	0.02	<1	1364	4	0.024	0.031	0.06	<5	<5	<20	21	<10	<10	0.038	<10	<10	44	<20	4	147	4
45	2884	0.04	7	69	6	0.011	0.014	0.22	<5	9	<20	62	<10	<10	0.106	<10	<10	288	<20	8	94	5
45	2885	0.03	4	88	3	0.004	<0.005	0.1	<5	6	<20	81	<10	<10	0.127	<10	<10	89	<20	7	75	5
46	10348	0.03	45	460	8	0.002	0.0023	0.55	<2	10	44	39	<10	<10	0.16	<10	<10	160	<10		54	
47	10506	0.06	120	420	9	0.005	0.0062	0.09	<2	5	5	48	<10	<10	0.1	<10	<10	80	<10		54	
48	10446	0.09	44	470	6	0.004	0.0106	0.03	<2	5	48	39	<10	<10	0.14	<10	40	187	<10		41	
49	10117	0.06	8	200	14	0.002	<0.005	0.01	<2	1	8	8	<10	<10	0.02	<10	<10	22	<10		68	
49	10118	0.1	44	500	<2	0.004	0.01	0.07	<2	3	36	46	<10	<10	0.1	<10	<10	166	<10		40	
49	10205	0.1	43	510	2	0.005	<0.005	0.06	2	3	46	36	<10	<10	0.1	<10	<10	167	<10		38	
50	2882	0.02	3	197	4	0.004	<0.005	0.01	<5	<5	<20	38	<10	<10	0.085	<10	<10	82	<20	5	62	3
51	2887	0.02	4	10	<2	0.004	<0.005	0.37	<5	5	<20	48	<10	<10	0.121	<10	<10	86	<20	6	55	3
52	10018	0.01	4	730	22	0.001	<0.005	5.29	<2	26	14	<1	<10	<10	0.09	<10	<10	163	<10		231	
53	1038	0.03	<1	14	<2	0.004	<0.005	0.15	<5	<5	<20	85	<10	<10	0.08	<10	<10	49	<20	6	30	3
54	1037	0.03	3	32	7	0.003	<0.005	0.01	<5	<5	<20	44	<10	<10	0.054	<10	<10	72	<20	6	50	4
55	1039	0.02	2	34	7	0.002	<0.005	0.62	<5	5	<20	38	<10	<10	0.02	<10	<10	46	<20	10	65	3
56	1040	0.09	4	41	6	0.004	<0.005	0.05	<5	10	<20	107	<10	<10	0.038	<10	<10	121	<20	10	80	7
56	1041	0.06	3	34	<2	0.007	<0.005	0.12	<5	6	<20	65	<10	<10	0.146	<10	<10	176	<20	5	36	3
57	1042	0.03	5	77	2	0.01	0.006	0.02	<5	10	<20	58	<10	<10	0.117	<10	<10	225	<20	7	82	6
58	2921	0.03	12	53	<2	0.016	0.019	0.08	<5	<5	<20	25	13	<10	0.082	<10	<10	523	<20	2	35	6
60	2925	0.05	3	27	7	0.006	<0.005	0.23	<5	<5	<20	47	<10	<10	0.103	<10	<10	96	<20	7	64	4
61	10510	0.05	29	600	6	0.004	<0.005	0.46	<2	3	23	23	<10	<10	0.09	<10	<10	114	<10		61	
62	2922	0.04	6	34	154	0.018	0.006	0.64	6	5	<20	33	<10	<10	0.07	<10	<10	200	<20	5	269	4
63	2923	0.08	3	22	5	0.005	<0.005	0.04	<5	6	<20	37	<10	<10	0.126	<10	<10	78	<20	7	59	2
64	2924	0.03	4	24	154	0.005	<0.005	0.09	<5	6	<20	62	<10	<10	0.078	<10	<10	81	<20	13	510	9
65	2927	0.01	4	102	18	0.008	<0.005	3.07	11	<5	<20	67	<10	<10	<0.01	<10	<10	25	<20	6	588	3
65	2928	0.02	4	125	17	0.01	<0.005	3.23	6	<5	<20	116	<10	<10	0.013	<10	<10	34	<20	8	519	3
66	2929	<0.01	1	65	9	0.008	0.006	0.72	6	<5	<20	196	<10	<10	<0.01	<10	<10	23	<20	9	282	2
68	2930	0.08	16	71	5	0.006	0.01	1.1	<5	7	<20	77	<10	<10	0.247	<10	<10	188	<20	8	94	<1
69	2926	0.03	5	141	5	0.009	0.01	<0.01	<5	10	<20	72	<10	<10	0.106	<10	<10	107	<20	8	77	4
70	10402	0.03	1185	720	5	0.004	<0.005	<0.01	16	4	35	35	<10	<10	0.06	<10	<10	117	<10		55	
70	10404	0.05	191	500	6	0.008	0.011	<0.01	7	10	42	42	<10	<10	0.15	<10	<10	348	<10		56	
70	10405	0.04	155	550	3	0.018	0.03	<0.01	5	14	85	85	<10	<10	0.15	<10	<10	481	<10		45	
74	10406	0.04	255	520	6	<0.001	<0.005	<0.01	8	6	38	38	<10	<10	0.1	<10	<10	187	<10		60	
76	10407	0.04	55	510	5	0.013	1.555	0.07	4	4	70	70	<10	<10	0.11	<10	<10	284	<10		73	
76	10408	0.08	34	520	5	0.011	2.29	0.01	<2	4	32	32	<10	<10	0.16	<10	<10	186	<10		53	
77	10451	0.07	41	590	9	0.006	0.09	0.02	<2	5	26	26	<10	<10	0.15	<10	<10	203	<10		66	
77	10452	0.08	46	620	10	0.006	0.0055	0.02	<2	6	33	33	<10	<10	0.17	<10	<10	204	<10		70	

Table 5. Analytical results for stream sediment and pan concentrate samples prepared by partial digestion

Map Sample no.	Sample no.	Type	Au ppm	Ag ppm	Al pct	As ppm	B ppm	Ba ppm	Bi ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	Hg ppm	K pct	La ppm	Li ppm	Mg pct	Mn ppm	Mo ppm	
77	10453	PC	0.552	<0.2	1.56	7	<10	80	3	0.66	<0.5	19	106	53	6.26	<10	0.89	0.07	<10	1.12	581	<1	
77	10455	PC	1.02	<0.2	1.66	7	<10	90	<2	0.72	<0.5	17	86	57	5.06	<10	0.35	0.09	<10	1.15	601	<1	
77	10456	PC	3.33	<0.2	1.54	5	<10	90	2	0.66	<0.5	15	65	56	4.33	<10	0.27	0.09	<10	1.09	518	<1	
78	10413	PC	10	0.2	1.5	6	<10	130	<2	0.74	<0.5	13	84	26	3.83	<10	0.34	0.11	<10	0.84	495	<1	
79	1036	SS	0.008	<0.2	1.93	25		92	<5	0.64	<0.2	15	50	37	4.26	3	0.162	0.08	7	12	0.73	464	<1
80	1034	SS	0.002	<0.2	1.37	6		135	<5	0.68	<0.2	21	70	34	3.35	<2	0.13	0.07	7	12	0.97	522	<1
80	1035	SS	0.004	<0.2	1.31	15		169	<5	1.69	0.3	16	51	27	4.16	<2	0.094	0.1	10	10	1.05	599	<1
81	1031	SS	0.001	<0.2	1.56	9		265	<5	0.99	<0.2	17	60	27	2.62	<2	0.066	0.16	7	14	1	525	<1
81	1032	SS	0.012	<0.2	1.23	6		148	<5	1.7	0.2	14	26	21	3.28	<2	0.092	0.09	10	8	0.89	611	<1
81	1033	SS	0.001	<0.2	1.4	5		131	<5	1.57	0.3	18	46	26	3.73	<2	0.07	0.07	8	11	1.11	673	<1
81	10419	PC	0.058	<0.2	1.16	6	<10	350	2	1.21	0.5	13	92	30	4.69	<10	0.38	0.1	<10	0.84	358	<1	
82	10420	PC	0.014	<0.2	1.22	6	<10	100	<2	0.7	<0.5	11	70	27	3.5	<10	0.1	0.09	<10	0.81	333	<1	
83	10500	PC	0.23	2.1	1.51	3	<10	60	<2	1.02	<0.5	13	67	36	3.51	<10	0.68	0.08	<10	1.15	358	<1	
84	10119	PC	0.019	<0.2	1.43	10	<10	70	<2	0.78	<0.5	13	76	32	3.54	<10	0.05	0.07	<10	0.94	438	<1	
84	10206	PC	0.007	<0.2	1.43	8	<10	70	<2	0.76	<0.5	12	63	28	3.1	<10	0.06	0.08	<10	0.95	364	<1	
84	10501	PC	5.01	<0.2	1.17	6	<10	40	<2	0.9	1	26	128	24	11.3	<10	0.24	0.05	<10	0.73	443	<1	
85	2654	SS	0.138	<0.2	1.22	<5		68	<5	0.83	0.2	15	58	31	4.19	<2	0.03	0.06	4	7	1.02	366	<1
86	2655	SS	0.002	<0.2	1.37	9		139	<5	0.81	<0.2	15	46	24	3.62	<2	0.085	0.09	8	9	0.92	515	<1
86	10113	PC	0.104	<0.2	1.15	5	<10	80	4	0.64	<0.5	12	113	37	6.34	<10	0.15	0.07	<10	0.89	468	<1	
87	10114	PC	0.052	0.2	1.58	8	<10	210	10	1.01	<0.5	12	91	30	3.5	<10	0.16	0.14	<10	0.93	397	<1	
88	10115	PC	0.055	<0.2	1.43	2	<10	80	7	0.62	<0.5	13	62	44	2.94	<10	0.07	0.08	<10	1.03	359	<1	
88	10116	PC	0.002	<0.2	1.58	6	<10	180	<2	0.74	<0.5	16	84	50	4.57	<10	0.2	0.09	<10	1.03	357	<1	
89	1030	SS	0.003	<0.2	1.36	<5		117	<5	0.64	0.3	32	127	66	6.57	<2	1.336	0.08	3	8	2.95	538	<1
90	10505	PC	0.774	<0.2	1.54	9	<10	100	<2	0.93	<0.5	19	92	43	4.26	<10	1.17	0.1	<10	1.25	470	<1	
91	10448	PC	0.039	<0.2	1.54	8	<10	100	<2	0.96	<0.5	20	110	37	5.36	<10	0.35	0.1	<10	1.36	409	<1	
92	10447	PC	0.34	<0.2	1.51	3	<10	100	<2	1.18	<0.5	18	77	87	5.73	<10	0.1	0.08	<10	1.17	350	<1	
93	10449	PC	0.026	<0.2	1.32	4	<10	120	4	1.66	<0.5	17	75	87	6.2	<10	0.36	0.11	<10	0.78	350	<1	
94	1029	SS	0.017	<0.2	1.97	59		131	<5	1.76	<0.2	48	47	158	5.78	<2	0.093	0.22	4	6	1.51	865	3
95	2657	SS	0.003	<0.2	1.74	6		136	<5	0.88	<0.2	25	37	126	4.09	<2	0.157	0.04	2	5	1.6	656	<1
96	2656	SS	0.006	<0.2	1.46	<5		119	<5	1.39	0.3	17	46	74	3.59	<2	0.271	0.08	2	5	1.19	381	<1
97	10518	PC	0.662	<0.2	1.41	46	<10	140	2	0.71	<0.5	16	106	50	3.16	<10	0.16	0.12	<10	1.21	555	2	
98	10417	PC	1.595	<0.2	1.42	6	<10	60	<2	0.59	<0.5	14	94	32	2.58	<10	0.02	0.06	<10	1.25	408	<1	
99	10416	PC	0.985	<0.2	1.45	6	<10	60	2	0.64	<0.5	14	116	29	2.54	<10	0.02	0.06	<10	1.17	427	<1	
100	10314	PC	0.006	0.3	1.05	5	<10	120	<2	0.73	<0.5	15	82	464	1.94	<10	0.03	<0.01	<10	1	313	<1	
101	2653	SS	0.002	<0.2	1.6	19		92	<5	0.87	<0.2	19	58	59	3.68	<2	0.063	0.07	4	11	1.15	1041	<1
102	2652	SS	0.007	<0.2	2.02	9		99	<5	0.97	<0.2	22	60	47	3.41	2	0.056	0.04	4	10	1.11	622	<1
103	2651	SS	0.003	<0.2	2.1	<5		67	<5	0.42	<0.2	19	39	34	3.26	3	0.08	0.1	5	10	0.77	623	<1
104	2650	SS	0.006	<0.2	1.36	18		131	<5	0.64	<0.2	14	44	49	3.01	<2	0.079	0.3	5	22	0.91	444	<1



Table 5. Analytical results for stream sediment and pan concentrate samples prepared by partial digestion

Map Sample no.	Na pct	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
77	10453	0.05	46	590	12	0.005	0.0266	0.02	<2	5	<2	22	<10	<10	0.15	<10	80	228	<10		68	
77	10455	0.05	43	640	12	0.004	0.0035	0.02	<2	5	<2	27	<10	<10	0.13	<10	30	165	<10		75	
77	10456	0.05	35	590	7	0.004	0.0079	0.01	<2	5	<2	24	<10	<10	0.16	<10	20	150	<10		61	
78	10413	0.09	26	560	4	0.005	0.043	0.01	<2	3	<2	33	<10	<10	0.13	<10	<10	136	<10		50	
79	1036	0.03	5	31	6	0.003	<0.005	0.01	<5	5	<20	47	<10	<10	0.077	<10	123	<20	6	55	6	
80	1034	0.04	3	85	5	0.003	<0.005	0.03	<5	5	<20	51	<10	<10	0.055	<10	67	<20	6	61	6	
80	1035	0.07	2	26	5	0.003	<0.005	0.05	<5	7	<20	62	<10	<10	0.046	<10	80	<20	9	67	8	
81	1031	0.12	2	54	5	0.002	<0.005	0.03	<5	6	<20	110	<10	<10	0.059	<10	49	<20	10	50	10	
81	1032	0.07	1	19	20	0.002	<0.005	0.06	<5	6	<20	81	<10	<10	0.02	<10	31	<20	11	79	7	
81	1033	0.08	2	31	5	0.002	<0.005	0.06	<5	7	<20	73	<10	<10	0.056	<10	46	<20	10	70	9	
81	10419	0.06	30	550	4	0.003	<0.005	0.03	3	4	34	<10	<10	<10	0.07	<10	<10	166	<10		45	
82	10420	0.08	26	540	<2	0.004	<0.005	0.01	<2	4	33	<10	<10	<10	0.07	<10	<10	113	<10		41	
83	10500	0.08	53	580	5	0.003	0.0028	0.01	<2	4	47	<10	<10	<10	0.18	<10	20	130	<10		40	
84	10119	0.08	38	620	<2	0.003	<0.005	0.01	<2	3	37	<10	<10	<10	0.11	<10	<10	129	<10		41	
84	10206	0.07	40	610	2	0.008	<0.005	<0.01	2	3	36	<10	<10	<10	0.11	<10	<10	107	<10		43	
84	10501	0.06	52	560	8	0.008	0.0076	<0.01	<2	3	23	<10	<10	<10	0.22	<10	270	563	10		36	
85	2654	0.04	4	59	6	0.003	<0.005	0.02	<5	<5	<20	45	<10	<10	0.122	<10	153	<20	5	47	5	
86	2655	0.07	3	29	4	0.003	<0.005	0.02	<5	6	<20	55	<10	<10	0.065	<10	75	<20	8	59	7	
86	10113	0.07	43	590	2	0.004	<0.005	0.01	<2	4	26	<10	<10	<10	0.08	<10	<10	263	<10		36	
87	10114	0.16	38	510	3	0.004	<0.005	0.01	5	5	50	<10	<10	<10	0.12	<10	<10	123	<10		36	
88	10115	0.07	59	510	2	0.004	<0.005	0.01	<2	4	30	<10	<10	<10	0.09	<10	<10	97	<10		36	
88	10116	0.08	54	630	5	0.005	<0.005	<0.01	2	4	34	<10	<10	<10	0.12	<10	<10	190	<10		43	
89	1030	0.04	4	257	3	0.005	0.007	0.01	<5	<5	<20	39	<10	<10	0.095	<10	238	<20	5	55	5	
90	10505	0.07	101	500	6	0.004	0.0038	0.01	<2	5	38	<10	<10	<10	0.13	<10	40	149	<10		48	
91	10448	0.07	94	460	7	0.004	0.0043	0.03	<2	5	30	<10	<10	<10	0.13	<10	60	213	<10		46	
92	10447	0.08	59	510	8	0.07	0.0046	0.11	<2	5	46	<10	<10	<10	0.14	<10	80	255	<10		33	
93	10449	0.09	23	710	9	0.004	0.0029	0.54	<2	5	58	<10	<10	<10	0.09	<10	70	244	<10		47	
94	1029	0.16	3	92	3	0.005	0.005	1.31	<5	8	<20	117	<10	<10	0.096	<10	87	<20	8	59	5	
95	2657	0.02	3	67	3	0.005	<0.005	0.27	<5	6	<20	53	<10	<10	0.127	<10	89	<20	7	64	4	
96	2656	0.06	3	51	2	0.005	<0.005	0.22	<5	<5	<20	55	<10	<10	0.094	<10	105	<20	5	48	3	
97	10518	0.05	81	890	3	0.004	<0.005	0.33	2	3	33	<10	<10	<10	0.07	<10	<10	44	<10		61	
98	10417	0.05	81	470	<2	0.003	<0.005	<0.01	<2	3	22	<10	<10	<10	0.11	<10	<10	64	<10		42	
99	10416	0.06	83	450	2	0.004	0.005	<0.01	<2	3	25	<10	<10	<10	0.11	<10	<10	62	<10		39	
100	10314	0.03	159	550	4	0.014	0.01	0.03	4	1	<5	13	<10	<10	0.12	<10	<10	51	<10		32	
101	2653	0.05	4	62	8	0.004	<0.005	0.04	<5	<5	<20	40	<10	<10	0.157	<10	114	<20	6	63	3	
102	2652	0.03	4	48	6	0.008	<0.005	0.02	<5	5	<20	39	<10	<10	0.266	<10	116	<20	6	71	6	
103	2651	0.02	4	35	7	0.003	<0.005	0.03	<5	<5	<20	27	<10	<10	0.168	<10	80	<20	5	64	3	
104	2650	0.02	2	34	<2	0.002	0.005	0.13	<5	<5	<20	26	<10	<10	0.072	<10	54	<20	7	85	2	



**ANALYTICAL RESULTS FOR STREAM SEDIMENT AND PAN CONCENTRATE  
SAMPLES – TOTAL DIGESTION**

The map numbers in table 6 correspond to the numbered locations on **plate 2**.

Table 6. Analytical results for stream sediment and pan concentrate samples prepared with total digestion

Map Sample no.	Type	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	K pct	La ppm	Li ppm	Mg pct	Mn ppm	Mo ppm		
8	2658	SS	<0.5	6.19	21	491	<5	3.29	<1	32	118	57	<10	4.7	<10	1.12	41	22	1.6	850	6
9	2678	SS	<0.5	7.66	63	597	6	1.35	<1	35	87	46	5.16	<10	1.45	37	48	1.38	1054	3	
10	2663	SS	<0.5	6.82	69	583	<5	2.21	<1	30	94	62	4.73	<10	0.98	15	28	1.23	784	5	
10	2664	SS	<0.5	6.73	118	444	<5	3.84	<1	42	261	82	5.69	<10	0.76	20	25	1.86	977	4	
11	2665	SS	<0.5	7.58	77	615	<5	4.18	<1	32	45	73	5.68	<10	0.65	7	26	1.55	987	5	
12	2666	SS	<0.5	6.8	84	1375	<5	2.93	1	29	62	72	5.69	<10	1.49	15	27	1.26	777	13	
13	2667	SS	<0.5	5.73	80	1165	<5	2.08	<1	23	341	70	4.6	<10	1.3	11	30	1.68	799	6	
14	2668	SS	<0.5	6.82	82	897	<5	1.99	<1	42	89	89	7.37	<10	1.02	8	32	1.55	1304	7	
18	2669	SS	<0.5	6.81	50	553	<5	1.38	<1	25	202	43	3.86	<10	1.62	46	16	1.49	820	3	
19	2670	SS	<0.5	6.85	79	531	<5	2.8	<1	40	1856	96	5.37	<10	1.03	10	17	2.22	1252	4	
20	2673	SS	<0.5	6.82	33	756	<5	2.52	<1	38	828	73	5.25	<10	1.15	14	14	2.88	1099	4	
20	2674	SS	<0.5	7.26	46	671	<5	3.07	<1	38	1244	84	5.65	<10	0.98	16	14	2.89	1089	4	
21	2671	SS	<0.5	7.03	26	717	<5	3.29	<1	37	246	227	7.66	<10	1.38	11	14	2.74	1600	6	
22	2672	SS	<0.5	7.55	15	863	<5	2.22	<1	45	218	224	6.05	<10	1.1	15	12	2.46	1276	11	
23	2675	SS	<0.5	7.93	20	709	<5	1.99	<1	33	192	101	5.04	<10	1.29	11	17	2.01	910	4	
24	2676	SS	<0.5	7.54	16	883	<5	2.75	<1	42	368	92	5.58	<10	1.49	11	16	3.05	1495	3	
25	2677	SS	<0.5	7.08	48	1373	<5	3.4	6.4	35	38	96	5.37	12	1.41	20	33	0.63	926	11	
28	2679	SS	<0.5	5.54	20	187	7	6.51	<1	94	1617	203	8.82	<10	0.29	8	9	7.85	1299	4	
34	1026	SS	<0.5	6.53	7	125	9	5.44	<1	78	562	157	7.99	<10	0.28	7	12	5.9	1141	5	
34	1027	SS	<0.5	6.38	35	246	11	5.2	<1	77	657	138	7.86	<10	0.42	9	13	5.94	1310	6	
34	1028	SS	<0.5	6.51	<5	186	12	5.95	<1	68	559	117	7.67	<10	0.35	6	10	5.72	1212	5	
35	1025	SS	<0.5	8.12	17	403	<5	2.69	<1	120	79	550	5.88	<10	0.61	9	18	2.18	2243	4	
39	2878	SS	<0.5	6.48	26	343	<5	4.61	<1	27	80	46	5.32	<10	1.25	17	28	1.6	474	4	
40	2880	SS	<0.5	6.03	8	163	7	4.98	<1	65	999	123	7.54	<10	0.43	<5	12	6.42	1103	6	
40	2881	SS	<0.5	6.12	15	218	<5	4.69	<1	56	710	68	7.11	<10	0.63	9	17	5.05	1018	4	
44	2883	SS	<0.5	3.65	15	249	<5	2.21	<1	116	6176	163	8.93	<10	0.3	<5	7	10	1409	3	
45	2884	SS	<0.5	6.44	8	338	<5	5.68	<1	59	274	171	10	<10	0.6	<5	12	3.66	1353	3	
45	2885	SS	<0.5	7.13	16	422	<5	7	<1	43	352	90	6.76	<10	0.6	6	13	3.24	1417	5	
50	2882	SS	<0.5	6.64	6	395	<5	3.52	<1	42	909	36	6.12	<10	0.76	19	17	3.27	1229	4	
51	2887	SS	<0.5	8.32	<5	302	<5	5.23	<1	32	45	97	6.21	<10	0.39	5	6	1.69	1166	5	
53	1038	SS	<0.5	5.24	6	496	7	10	<1	20	29	54	3.4	<10	1.35	10	23	3.63	921	6	
54	1037	SS	<0.5	7.5	14	633	<5	2.99	<1	28	269	50	4.09	10	1.65	15	29	1.33	894	4	
55	1039	SS	<0.5	6.56	118	501	<5	2.49	<1	23	66	32	3.47	<10	1.41	18	63	0.84	538	4	
56	1040	SS	<0.5	8.68	18	639	8	2.56	<1	33	127	42	5.35	10	1.51	16	32	1.53	723	3	
56	1041	SS	<0.5	6.21	6	213	13	7.7	<1	57	159	78	9.4	<10	0.46	<5	21	4.65	1409	3	
57	1042	SS	<0.5	7.52	9	406	11	3.79	<1	44	196	78	7.62	<10	0.71	11	25	2.48	1145	4	
58	2921	SS	<0.5	3.75	<5	132	11	8.33	<1	84	175	26	10	<10	0.31	<5	9	4.98	1487	<1	
60	2925	SS	<0.5	6.78	50	718	<5	4.57	<1	38	140	54	5.97	<10	1	11	16	2.31	1219	6	
62	2922	SS	2.9	6.37	1185	856	151	5.83	<1	61	131	132	10	<10	0.67	<5	24	3.4	1336	4	
63	2923	SS	<0.5	6.96	37	170	<5	5.44	<1	51	98	65	7.89	<10	0.44	<5	17	3.05	1375	5	
64	2924	SS	0.6	7.16	28	1086	<5	2.98	1.6	32	70	63	5.32	<10	1.35	23	26	1.86	1779	5	
65	2927	SS	0.5	5.06	71	793	<5	0.55	6.2	31	96	124	6.06	<10	1.4	43	45	0.64	599	13	
65	2928	SS	0.7	6.21	113	989	<5	1.59	5.1	42	124	124	6.6	<10	1.88	35	40	1.46	847	10	
66	2929	SS	<0.5	3.98	44	>2000	<5	3.55	2.6	22	85	82	3.5	<10	1.31	25	27	1.27	822	10	
68	2930	PC	1.2	6.74	30	1030	<5	4.91	1.4	54	526	89	8.92	<10	0.73	19	20	2.59	1240	3	
69	2926	SS	<0.5	6.81	18	370	<5	4.14	<1	42	397	53	6.68	<10	0.64	19	47	2.24	1317	5	

Table 6. Analytical results for stream sediment and pan concentrate samples prepared with total digestion

Map Sample no.	Na pct	Nb ppm	Ni ppm	Pb ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	V ppm	Y ppm	Zn ppm	Zr ppm
8	2658	1.34	17	54	23	0.569	6	15	225	<5	<25	0.56	134	12	100	22
9	2678	1.71	24	51	13	0.026	<5	13	257	<5	<25	0.92	160	18	125	6
10	2663	1.92	14	52	6	0.268	6	19	268	<5	<25	0.58	166	20	124	16
10	2664	1.62	17	67	8	0.654	10	21	260	<5	<25	0.74	169	20	94	28
11	2665	1.56	14	33	13	0.065	14	21	227	<5	<25	0.54	184	15	99	22
12	2666	1.39	15	54	14	1.055	15	20	227	<5	<25	0.52	197	22	219	75
13	2667	0.94	10	79	8	0.428	17	15	143	<5	<25	0.41	173	20	202	74
14	2668	1.47	14	60	11	0.055	13	22	202	<5	<25	0.5	214	24	166	50
18	2669	2.49	23	111	15	0.058	7	9	163	<5	<25	0.34	95	17	66	78
19	2670	2.04	13	256	8	0.043	9	16	267	<5	<25	0.47	146	17	107	36
20	2673	1.88	13	233	9	0.029	10	13	226	<5	<25	0.42	119	17	92	43
20	2674	1.95	16	183	10	0.06	11	16	256	<5	<25	0.38	127	17	98	40
21	2671	1.78	15	84	7	0.079	11	21	482	<5	<25	0.46	236	18	115	34
22	2672	1.76	16	89	10	0.06	9	16	267	<5	<25	0.37	139	19	74	45
23	2675	1.1	15	61	19	0.033	8	20	198	<5	<25	0.49	155	17	146	48
24	2676	1.47	12	173	12	0.089	7	17	197	<5	<25	0.41	147	17	131	41
25	2677	1.38	17	65	12	0.224	11	16	358	<5	<25	0.51	233	35	593	42
28	2679	1.07	16	637	<2	0.053	9	20	287	<5	<25	0.65	211	13	104	44
34	1026	1.41	19	390	<2	0.152	12	25	229	<5	<25	0.78	231	15	69	41
34	1027	1.25	18	402	<2	0.146	10	23	222	<5	<25	0.86	229	18	175	44
34	1028	1.23	16	321	<2	0.052	10	25	208	<5	<25	0.83	239	16	80	38
35	1025	2.29	12	58	18	0.059	13	24	222	<5	<25	0.52	191	56	169	27
39	2878	1.26	13	64	14	0.276	8	14	494	<5	<25	0.36	124	16	155	63
39	2879	1.12	15	100	11	0.11	8	17	372	<5	<25	0.41	162	19	305	64
40	2880	1.27	17	453	3	0.041	6	22	193	<5	<25	0.72	213	14	96	48
40	2881	1.18	15	333	13	0.102	7	20	268	<5	<25	0.58	188	14	146	56
44	2883	0.65	9	1440	2	0.066	15	12	112	5	<25	0.29	117	9	200	20
45	2884	1.4	17	98	6	0.225	7	39	290	6	<25	0.74	485	20	128	27
45	2885	1.44	14	137	<2	0.126	6	24	360	<5	<25	0.75	237	20	104	38
50	2882	1.53	17	226	5	0.027	9	20	312	<5	<25	0.64	203	19	96	30
51	2887	2.23	15	18	8	0.374	8	26	368	<5	<25	0.6	212	19	67	30
53	1038	1.36	9	27	3	0.201	9	10	333	<5	<25	0.38	111	12	49	36
54	1037	1.82	14	41	12	0.022	8	15	437	<5	<25	0.51	158	15	74	30
55	1039	2.09	13	38	13	0.651	6	12	194	<5	<25	0.48	99	17	58	40
56	1040	1.25	19	46	9	0.065	<5	17	356	<5	<25	0.81	205	17	103	59
56	1041	1.68	12	74	4	0.134	12	42	240	<5	<25	0.71	370	17	89	22
57	1042	1.52	16	85	7	0.033	10	25	276	<5	<25	0.68	324	18	106	35
58	2921	0.81	20	102	<2	0.105	11	53	183	19	<25	0.79	833	10	103	22
60	2925	1.7	14	44	7	0.223	8	23	286	<5	<25	0.62	223	18	96	42
62	2922	1.72	17	61	154	0.672	18	34	234	8	<25	0.78	412	18	449	30
63	2923	1.77	13	50	7	0.066	14	31	141	<5	<25	0.72	262	21	117	33
64	2924	2.02	15	32	148	0.103	10	19	232	<5	<25	0.53	159	23	551	76
65	2927	0.71	18	103	17	2.894	16	12	183	<5	<25	0.39	285	12	630	47
65	2928	0.77	23	126	22	3.015	12	13	169	<5	<25	0.6	244	13	560	43
66	2929	0.44	13	66	10	0.724	13	9	186	<5	<25	0.38	151	13	253	40
68	2930	1.11	32	99	<2	1.018	<5	24	245	<5	<25	0.92	304	17	143	30
69	2926	1.54	15	145	9	0.026	7	27	278	<5	<25	0.7	235	19	93	21

Table 6. Analytical results for stream sediment and pan concentrate samples prepared with total digestion

Map Sample no.	no.	Type	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	Ga ppm	K pct	La ppm	Li ppm	Mg pct	Mn ppm	Mo ppm
79	1036	SS	<0.5	7.97	29	583	<5	3.39	<1	30	201	37	6.43	<10	1.4	14	22	1.68	972	5
80	1034	SS	<0.5	7.03	9	616	<5	3.3	<1	39	1284	34	5.22	<10	1.22	16	27	1.53	911	3
80	1035	SS	<0.5	6.58	6	859	<5	3.44	<1	26	75	25	4.81	<10	1.71	15	27	1.39	702	3
81	1031	SS	<0.5	7.67	20	704	7	3.75	<1	28	280	28	3.92	<10	1.22	12	26	1.47	805	4
81	1032	SS	<0.5	7.75	12	773	12	3.82	<1	31	58	21	4.15	11	1.67	17	25	1.11	752	5
81	1033	SS	<0.5	7.73	10	721	13	4.1	<1	40	605	27	5.24	<10	1.21	19	24	1.51	1105	4
85	2654	SS	<0.5	7	10	434	<5	4.28	<1	33	401	27	6.49	<10	0.85	13	14	2.22	1038	4
86	2655	SS	<0.5	7.33	13	791	<5	3.2	<1	27	202	25	4.62	<10	1.56	14	25	1.43	759	4
89	1030	SS	<0.5	6.48	6	449	11	4.14	<1	54	1649	61	9.31	<10	0.68	7	14	4.01	1207	4
94	1029	SS	<0.5	8	59	685	<5	4.89	<1	57	712	166	7.75	<10	1.22	8	10	2.35	1276	6
95	2657	SS	<0.5	8.17	9	650	<5	4.98	<1	36	578	115	6.5	<10	0.46	7	8	1.98	1214	5
96	2656	SS	<0.5	7.36	5	385	<5	5.26	<1	34	243	64	6.41	<10	0.65	8	11	2.55	1117	6
101	2653	SS	<0.5	6.34	22	408	10	3.69	<1	34	299	58	5.44	<10	0.67	9	17	2.12	1739	4
102	2652	SS	<0.5	7	13	412	12	4.59	<1	44	310	48	6.06	<10	0.52	9	16	2.22	1243	4
103	2651	SS	<0.5	6.38	6	432	6	2.49	<1	31	142	33	4.72	<10	0.94	15	19	1.52	1066	4
104	2650	SS	<0.5	7.01	26	543	<5	2.51	<1	23	89	44	3.87	<10	1.04	16	31	1.32	775	3

Table 6. Analytical results for stream sediment and pan concentrate samples prepared with total digestion

Map Sample no.	Na pct	Nb ppm	Ni ppm	Pb ppm	S pct	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Ti pct	V ppm	Y ppm	Zn ppm	Zr ppm	
79	1036	1.8	15	42	7	0.027	8	17	<20	435	<5	<25	0.6	226	16	86	45
80	1034	1.54	16	110	5	0.037	11	17	<20	278	<5	<25	0.66	179	15	90	43
80	1035	1.66	14	31	9	0.057	9	12	<20	235	<5	<25	0.5	133	14	78	61
81	1031	1.65	14	68	13	0.046	5	14	<20	356	<5	<25	0.6	124	17	69	51
81	1032	1.67	15	29	11	0.071	<5	12	<20	290	<5	<25	0.87	93	16	98	79
81	1033	1.62	20	44	10	0.064	7	16	<20	313	<5	<25	1.05	139	20	95	73
85	2654	1.99	17	73	10	0.038	6	18	<20	388	<5	<25	0.69	253	17	75	37
86	2655	1.77	14	38	7	0.032	8	14	<20	286	<5	<25	0.56	143	16	73	55
89	1030	1.55	17	266	8	0.029	8	21	<20	292	<5	<25	0.75	350	16	103	38
94	1029	1.74	13	99	<2	1.295	9	23	<20	482	<5	<25	0.45	204	18	80	46
95	2657	2.06	12	73	8	0.294	9	26	<20	371	<5	<25	0.62	214	20	75	30
96	2656	1.88	11	70	<2	0.225	9	25	<20	330	<5	<25	0.53	225	18	74	23
101	2653	1.72	14	76	14	0.061	5	17	<20	297	<5	<25	0.74	202	16	92	43
102	2652	1.69	19	67	5	0.041	6	22	<20	287	<5	<25	1.12	258	18	96	62
103	2651	1.85	18	48	11	0.039	6	16	<20	270	<5	<25	0.67	163	16	87	50
104	2650	1.9	15	37	13	0.118	7	13	<20	308	<5	<25	0.5	128	14	97	8





## SAMPLING AND ANALYTICAL PROCEDURES FOR USGS STREAM SEDIMENT SAMPLES

The USGS collected stream sediment samples from the active channels of streams. Sample material ranged in size from fine sand and silt to coarse sand and gravel (O’Leary and others, 1982).

Samples were prepared as described by O’Leary and others (1982). This included drying and sieving the samples to yield a minus-80-mesh fraction. These fractions have been stored as pulps at the USGS facilities in Denver, Colorado since their original analyses in the early 1980’s (O’Leary and others, 1982). The USGS pulled the pulps from storage and shipped them to a laboratory under contract to the USGS for analysis

Gold, platinum, and palladium were determined in stream sediment samples by atomic absorption spectroscopy (AA) after collection by fire assay. An assay fusion consists of heating a mixture of the finely pulverized sample with a flux until the product is molten. One of the ingredients of the flux is a lead compound, which is reduced by other constituents of the flux or sample to metallic lead. The latter collects all the gold, together with silver, platinum metals, and small quantities of certain base metals present in the sample and falls to the bottom of the crucible to form a lead button. The gangue of the ore is converted by the flux into a slag sufficiently fluid so that all particles of lead may fall readily through the molten mass. The choice of a suitable flux depends on the character of the ore. The lead button is cupelled to oxidize the lead leaving behind a dore bead containing the precious metals. The dore bead is then transferred to a test tube, dissolved with aqua regia, diluted to a specific volume and the precious metal concentrations determined by AA.

The detection limits for elements analyzed by fire assay are 0.005 to 10 ppm.

The USGS contract laboratory analyzed 17 samples for the full suite of platinum group elements (PGE) using a nickel-sulfide (NiS) fusion fire assay preconcentration with an inductively coupled plasma-mass spectroscopy (ICP-MS) finish. A pulverized, 25-gram sample is fused with nickel, sulfur, and a borax-soda ash-silica flux to form a NiS button. The button is digested in concentrated hydrochloric acid, filtered, and digested again in nitric and hydrochloric acids. The resultant solution is then analyzed by ICP-MS.

The lower detection limits for samples analyzed by NiS fusion, ICP-MS are:

<u>Element</u>	<u>Lower Detection Limit</u>
Rhodium Rh	1 ppb
Rhenium Re	1 ppb
Ruthenium Ru	1 ppb
Iridium Ir	0.1 ppb
Osmium Os	3 ppb
Platinum Pt	1 ppb
Palladium Pd	1 ppb

Forty major, minor, and trace elements were determined in stream sediment samples by inductively coupled plasma-atomic emission spectroscopy (ICP-AES). The sample was decomposed using a mixture of hydrochloric, nitric, perchloric, and hydrofluoric acids at low temperature. The digested sample was aspirated into the ICP-AES discharge where the elemental emission signal was measured simultaneously for the forty elements. Calibration was performed by standardizing with digested rock reference materials and a series of multi-element solution standards.

Detection limits for elements analyzed by ICP-AES:

Element	Range	Element	Range
Aluminum, Al	0.005 - 50%	Holmium, Ho	4 - 5,000 ppm
Calcium, Ca	0.005 - 50%	Lanthanum, La	2 - 50,000 ppm
Iron, Fe	0.02 - 25%	Lithium, Li	2 - 50,000 ppm
Potassium, K	0.01 - 50%	Manganese, Mn	4 - 50,000 ppm
Magnesium, Mg	0.005 - 5%	Molybdenum, Mo	2 - 50,000 ppm
Sodium, Na	0.005 - 50%	Niobium, Nb	4 - 50,000 ppm
Phosphorous, P	0.005 - 50%	Neodymium, Nd	9 - 50,000 ppm
Titanium, Ti	0.005 - 25%	Nickel, Ni	3 - 50,000 ppm
Silver, Ag	2 - 10,000 ppm	Lead, Pb	4 - 50,000 ppm
Arsenic, As	10 - 50,000 ppm	Scandium, Sc	2 - 50,000 ppm
Barium, Ba	1 - 35,000 ppm	Tin, Sn	50 - 50,000 ppm
Beryllium, Be	1 - 5,000 ppm	Strontium, Sr	2 - 15,000 ppm
Bismuth, Bi	50 - 50,000 ppm	Tantalum, Ta	40 - 50,000 ppm
Cadmium, Cd	2 - 25,000 ppm	Thorium, Th	6 - 50,000 ppm
Cerium, Ce	5 - 50,000 ppm	Uranium, U	100 - 100,000 ppm
Cobalt, Co	2 - 25,000 ppm	Vanadium, V	2 - 30,000 ppm
Chromium, Cr	2 - 25,000 ppm	Yttrium, Y	2 - 25,000 ppm
Copper, Cu	2 - 15,000 ppm	Ytterbium, Yb	1 - 5,000 ppm
Europium, Eu	2 - 5,000 ppm	Zinc, Zn	2 - 15,000 ppm
Gallium, Ga	4 - 50,000 ppm		

## **ANALYTICAL RESULTS FOR USGS STREAM SEDIMENT SAMPLES**

Sample locations corresponding to the map numbers in table 7 are shown on **plate 3**.























Table 7. Analytical results for USGS stream sediment samples

Map no.	Sample no.	Au_FA ppm	Ir ppb	Os ppb	Pd ppm	Pt ppm	Re ppb	Rh ppm	Ru ppb	Ag ppm	Al pct	As ppm	Ca pct	Fe pct	K pct	Mg pct	Na pct	P pct	Ti pct	Au ppm	Ba ppm	Be ppm	Bi ppm	Cd ppm
237	MH366S	0.039			0.089	<0.05				<2	7.665	14	2.355	5.11	1.44	2.688	1.705	0.06	0.49	<8	832	1	<50	<2
238	MH152S	0.02			0.006	<0.05				<2	7.607	<10	2.258	4.99	1.31	1.78	1.72	0.07	0.325	<8	994	1	<50	<2
239	MH365S	0.033			0.062	<0.05				<2	7.5	<10	2.355	4.61	1.34	2.672	1.955	0.05	0.38	<8	728	<1	<50	<2
240	MH364S	0.033			0.053	<0.05				<2	7.84	<10	2.3	5.58	1.27	2.384	2.075	0.06	0.51	<8	800	1	<50	3
241	MH363S	0.031			<0.005	<0.05				<2	7.9	18	3.31	6.84	0.95	2.993	1.76	0.045	0.46	<8	575	<1	<50	2
242	MH362S	0.028			<0.005	<0.05				<2	6.98	16	2.31	4.26	1.4	1.743	1.575	0.105	0.42	<8	890	1	<50	2
243	MH358S	0.053			<0.005	<0.05				<2	6.12	<10	5.545	9.95	0.98	4.19	1.14	0.125	0.605	<8	498	1	<50	<2
244	MH151S	0.021			0.02	<0.05				<2	7.623	11	5.402	7.19	1.71	2.368	1.925	0.085	0.475	<8	477	1	<50	<2
245	MH147S	0.032			0.01	<0.05				<2	6.017	73	2.179	5.86	2.02	1.281	0.695	0.08	0.42	<8	568	2	<50	<2
246	MH146S	0.011			0.028	<0.05				<2	6.893	14	3.964	5.64	1.5	2.237	1.29	0.075	0.445	<8	1020	1	<50	<2
247	MH143S	0.03			0.061	<0.05				<2	7.292	<10	4.772	7.46	1.17	3.617	1.99	0.07	0.485	<8	506	<1	<50	<2
248	MH371S	0.018			0.04	0.08				<2	6.645	11	8.335	5.64	1.02	3.05	1.5	0.05	0.42	<8	452	<1	<50	<2
249	MH372S	0.029			0.069	0.07				<2	7.17	<10	5.505	5.48	0.95	2.972	1.95	0.065	0.5	<8	693	1	<50	<2
250	MH373S	0.031			0.044	<0.05				<2	6.585	13	5.095	4.57	1.66	2.273	1.225	0.06	0.42	<8	573	2	<50	<2
251	MH374S	0.034			0.054	<0.05				<2	6.875	11	3.91	4.89	1.55	2.111	1.605	0.07	0.525	<8	851	1	<50	<2
252	MH375S	0.034			0.067	<0.05				<2	6.815	15	5.205	4.68	1.71	2.074	1.635	0.075	0.515	<8	1870	1	<50	<2
253	MH376S	0.036			0.052	<0.05				<2	6.81	16	3.64	4.85	1.31	2.042	1.84	0.07	0.52	<8	705	1	<50	<2
254	MH121S	0.008			<0.005	<0.05				<2	7.565	32	3.266	4.47	1.82	1.706	1.405	0.075	0.4	<8	952	2	<50	<2
255	MH122S	0.014			<0.005	<0.05				<2	7.308	<10	7.235	8.74	0.82	4.253	2.08	0.045	0.81	<8	203	<1	<50	<2
256	MH123S	0.039			<0.005	<0.05				<2	5.817	33	12.48	5.44	1.14	2.221	1.145	0.065	0.275	<8	337	<1	<50	<2
257	MH124S	0.014			<0.005	<0.05				<2	7.481	20	2.825	6.02	1.54	3.638	1.635	0.1	0.42	<8	750	1	<50	2
258	MH140S	0.034			<0.005	0.08				<2	7.649	28	3.397	7.37	0.98	3.035	1.435	0.055	0.41	<8	717	<1	<50	<2
259	MH139S	0.008			<0.005	<0.05				<2	7.35	<10	5.707	7.64	1.05	4.148	1.785	0.08	0.62	<8	387	1	<50	3
260	MH134S	0.018			<0.005	<0.05				<2	7.66	17	4.636	5.81	1.39	2.657	1.42	0.095	0.445	<8	805	1	<50	<2
261	MH135S	0.014			0.018	<0.05				<2	7.56	18	2.284	4.89	1.76	1.685	1.635	0.09	0.465	<8	876	1	<50	<2
262	MH138S	0.019			<0.005	<0.05				<2	7.539	<10	4.352	6.25	1.39	2.882	1.75	0.09	0.55	<8	706	1	<50	<2
263	MH137S	0.005			<0.005	<0.05				<2	8.174	37	2.079	5.28	1.59	2.132	1.91	0.1	0.49	<8	675	2	<50	<2
264	MH136S	0.016			<0.005	<0.05				<2	7.403	39	1.444	4.81	2.09	1.281	1.245	0.125	0.43	<8	2300	2	<50	5

Table 7. Analytical results for USGS stream sediment samples

Map no.	Sample no.	Ce ppm	Co ppm	Cr ppm	Cu ppm	Eu ppm	Ga ppm	Ho ppm	La ppm	Li ppm	Mn ppm	Mo ppm	Nb ppm	Nd ppm	Ni ppm	Pb ppm	Sc ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	V ppm	Y ppm	Yb ppm	Zn ppm
237	MH366S	31	25	105	58	<2	13	<4	16	18	971	3	9	15	73	9	25	<50	198	<40	<6	<100	179	25	3	86
238	MH152S	28	25	73	92	<2	12	<4	15	8	1060	3	6	16	30	15	19	<50	351	<40	<6	<100	167	24	3	99
239	MH365S	24	21	86	48	<2	13	<4	12	13	935	2	6	12	57	7	21	<50	177	<40	<6	<100	148	19	3	114
240	MH364S	22	22	73	73	<2	13	<4	11	14	1110	3	8	12	41	41	26	<50	195	<40	<6	<100	220	19	3	187
241	MH363S	16	33	94	115	<2	14	<4	9	16	1220	4	6	10	57	14	31	<50	172	<40	<6	<100	274	19	3	112
242	MH362S	35	20	80	84	<2	15	<4	19	32	617	4	9	18	60	11	20	<50	266	<40	<6	<100	238	18	2	122
243	MH358S	20	42	354	93	<2	11	<4	13	21	1550	5	6	16	120	6	42	<50	422	<40	<6	<100	472	20	3	123
244	MH151S	20	25	72	60	<2	14	<4	11	26	1240	2	9	13	41	<4	24	<50	421	<40	<6	<100	309	21	3	97
245	MH147S	65	28	294	102	<2	13	<4	38	31	514	9	13	30	85	36	14	<50	202	<40	9	<100	157	13	2	210
246	MH146S	56	28	63	104	3	12	<4	30	24	985	4	10	26	63	9	24	<50	152	<40	<6	<100	191	14	2	94
247	MH143S	14	38	129	110	<2	11	<4	11	18	1210	4	7	11	90	5	32	<50	245	<40	<6	<100	302	21	3	95
248	MH371S	21	29	116	79	<2	11	<4	12	27	959	4	7	11	80	6	30	<50	269	<40	<6	<100	231	18	3	88
249	MH372S	22	35	137	77	<2	12	<4	12	15	1080	4	8	12	297	16	28	<50	319	<40	<6	<100	239	18	2	88
250	MH373S	35	22	117	40	<2	12	<4	18	26	570	5	10	16	63	11	22	<50	198	<40	<6	<100	174	18	2	112
251	MH374S	41	22	109	42	<2	12	<4	21	20	795	3	12	18	63	11	22	<50	273	<40	6	<100	207	20	2	95
252	MH375S	38	21	69	34	<2	12	<4	21	17	840	3	10	18	53	11	21	<50	304	<40	<6	<100	192	21	3	80
253	MH376S	37	21	71	37	<2	12	<4	19	21	833	3	11	17	48	8	22	<50	307	<40	<6	<100	206	20	3	80
254	MH121S	59	20	55	43	<2	13	<4	30	26	783	<2	13	25	46	17	20	<50	299	<40	10	<100	145	25	3	93
255	MH122S	9	37	138	100	<2	13	<4	6	15	1020	3	9	10	97	<4	37	<50	217	<40	<6	<100	335	23	3	72
256	MH123S	18	22	58	214	<2	9	<4	11	9	1090	14	<4	11	42	7	19	<50	508	<40	<6	<100	182	14	2	106
257	MH124S	24	39	120	161	<2	14	<4	14	29	1160	6	8	16	179	6	22	<50	310	<40	<6	<100	205	22	3	106
258	MH140S	13	40	117	189	<2	12	<4	8	19	1200	3	5	10	55	13	34	<50	162	<40	<6	<100	257	19	2	116
259	MH139S	16	35	287	99	<2	13	<4	10	23	1070	3	9	12	97	<4	34	<50	335	<40	<6	<100	288	20	2	90
260	MH134S	33	25	113	81	<2	15	<4	21	38	945	3	9	20	64	4	31	<50	460	<40	<6	<100	247	19	2	96
261	MH135S	29	20	50	86	<2	14	<4	16	70	690	2	11	17	46	8	22	<50	213	<40	<6	<100	204	15	2	146
262	MH138S	25	25	177	91	<2	13	<4	16	45	958	2	11	16	69	6	29	<50	311	<40	<6	<100	268	18	2	103
263	MH137S	28	24	54	85	<2	14	<4	16	34	827	2	11	16	50	10	21	<50	280	<40	<6	<100	204	20	3	113
264	MH136S	43	24	43	88	2	14	<4	25	65	766	6	12	23	86	15	18	<50	179	<40	<6	<100	259	11	1	322





**TABLE 8. COORDINATES FOR SAMPLE LOCATIONS**

Coordinates are expressed in decimal degrees using the North American Datum, 1927 (NAD27).

Sample no.	Latitude	Longitude	Sample no.	Latitude	Longitude
1021	63.34860	-145.70542	2665	63.30951	-146.49672
1022	63.34623	-145.70332	2666	63.30661	-146.49505
1023	63.31991	-145.96700	2667	63.30299	-146.49759
1024	63.80151	-146.53581	2668	63.29561	-146.46180
1025	63.30118	-146.05137	2669	63.30823	-146.38188
1026	63.30577	-146.04094	2670	63.31919	-146.32574
1027	63.30598	-146.04115	2671	63.29630	-146.30652
1028	63.30407	-146.04270	2672	63.29665	-146.29235
1029	63.24031	-145.58789	2673	63.31494	-146.28312
1030	63.20944	-145.44743	2674	63.31532	-146.28242
1031	63.20271	-145.37045	2675	63.29666	-146.22721
1032	63.20312	-145.37074	2676	63.30570	-146.19171
1033	63.20333	-145.36832	2677	63.33864	-146.18100
1034	63.20398	-145.36475	2678	63.35737	-146.17330
1035	63.20441	-145.36554	2679	63.30027	-146.09953
1036	63.19447	-145.33830	2680	63.30209	-146.49182
1037	63.21874	-145.31852	2681	63.27975	-146.30967
1038	63.22708	-145.32235	2877	63.21717	-145.95788
1039	63.23397	-145.17620	2878	63.31851	-146.00135
1040	63.21442	-145.14291	2879	63.31861	-146.00268
1041	63.21499	-145.14430	2880	63.31357	-145.96433
1042	63.20166	-145.12449	2881	63.31421	-145.96482
1043	63.30179	-146.49166	2882	63.30007	-145.76888
1044	63.27975	-146.30967	2883	63.33333	-145.84434
1045	63.35238	-145.65888	2884	63.34151	-145.85201
1046	63.35223	-145.65928	2885	63.34158	-145.85295
1047	63.30561	-145.42825	2886	63.34167	-145.85298
1048	63.29045	-145.42042	2887	63.27391	-145.55960
1049	63.29044	-145.42042	2921	63.19030	-145.05735
2647	63.23194	-146.05127	2922	63.20060	-145.00141
2648	63.23193	-146.05186	2923	63.21595	-144.99103
2649	63.23370	-146.05237	2924	63.18907	-144.96598
2650	63.12045	-146.52932	2925	63.16977	-145.00585
2651	63.09021	-146.32980	2926	63.18605	-144.81995
2652	63.07070	-146.10429	2927	63.21338	-144.84229
2653	63.04508	-146.02410	2928	63.21459	-144.84076
2654	63.06786	-145.51169	2929	63.21092	-144.83432
2655	63.17039	-145.52998	2930	63.16890	-144.88209
2656	63.21214	-145.63751	2931	63.21266	-145.04008
2657	63.22409	-145.64829	6962	63.35631	-145.69872
2658	63.37422	-145.72918	6963	63.35630	-145.69862
2659	63.31938	-146.26496	6964	63.35377	-145.70019
2660	63.31357	-145.98547	6965	63.34648	-145.70337
2661	63.31340	-145.98255	6966	63.34473	-145.70381
2662	63.31365	-145.98238	6967	63.59757	-146.24929
2663	63.33240	-146.49234	6968	63.59936	-146.24909
2664	63.33148	-146.49325	6969	63.59934	-146.24897

Sample no.	Latitude	Longitude
6970	63.59850	-146.24792
6971	63.59879	-146.24823
6972	63.71310	-146.74221
6973	63.68665	-146.55192
6974	63.33067	-145.59248
6975	63.32851	-145.58858
6976	63.17593	-144.82328
6977	63.17592	-144.82332
6978	63.17397	-144.82525
6979	63.32038	-145.97254
6980	63.32042	-145.97256
6981	63.32059	-145.96698
6982	63.32071	-145.96582
6983	63.31704	-145.99034
6984	63.31799	-145.99197
6985	63.72409	-145.47318
6986	63.59206	-145.23866
6987	63.80150	-146.53580
6988	63.80720	-146.51679
6989	63.21714	-145.95783
6990	63.21718	-145.95781
6991	63.21692	-145.95803
6992	63.21608	-145.95554
6993	63.24176	-146.05909
6994	63.24294	-146.05966
6995	63.34101	-145.77825
6996	63.34130	-145.77889
6997	63.33614	-145.77179
6998	63.33597	-145.77173
6999	63.32289	-145.89287
7000	63.35240	-145.65901
9274	63.33504	-145.63039
9275	63.30604	-145.42908
9276	63.29024	-145.42135
9752	63.34868	-145.70564
9753	63.34339	-145.70530
9754	63.23200	-146.05008
9755	63.59938	-146.24385
9756	63.59840	-146.24852
9757	63.59806	-146.24592
9758	63.71295	-146.73777
9759	63.31958	-146.26497
9760	63.31107	-146.18861
9761	63.31359	-145.98495
9762	63.31358	-145.98495
9763	63.31342	-145.98659
9764	63.31372	-145.98632
10000	63.09049	-145.62929
10001	63.09021	-145.62900
10002	63.08622	-145.64210
10003	63.08612	-145.64221
10004	63.34226	-145.70688

Sample no.	Latitude	Longitude
10005	63.34214	-145.70659
10006	63.31703	-146.24906
10007	63.30523	-146.28254
10008	63.27933	-146.30932
10009	63.13163	-145.47169
10010	63.31604	-146.39223
10011	63.31860	-146.39055
10012	63.31266	-146.38246
10013	63.30893	-146.43883
10014	63.30718	-146.43686
10015	63.31092	-146.31383
10016	63.31088	-146.31210
10017	63.29303	-145.55739
10018	63.29269	-145.55565
10019	63.31336	-145.98260
10020	63.31347	-145.98270
10021	63.26199	-146.40695
10022	63.26199	-146.40689
10023	63.26196	-146.40683
10024	63.26199	-146.40695
10025	63.28818	-146.37008
10026	63.28959	-146.37048
10027	63.28948	-146.37008
10028	63.06829	-145.75284
10029	63.32090	-146.39839
10030	63.32065	-146.39749
10031	63.32093	-146.39399
10032	63.31330	-145.98533
10033	63.32761	-145.93011
10034	63.32810	-145.92923
10035	63.33516	-145.89867
10036	63.33368	-145.89842
10037	63.33118	-145.89633
10038	63.32568	-145.90226
10039	63.32086	-145.91008
10040	63.32089	-145.91035
10041	63.32089	-145.91031
10042	63.09000	-145.62819
10043	63.08982	-145.62812
10044	63.08984	-145.62823
10045	63.09013	-145.62800
10046	63.09030	-145.62904
10047	63.09050	-145.62981
10048	63.63296	-145.85884
10049	63.63296	-145.85884
10050	63.52588	-145.84276
10051	63.71779	-145.77296
10052	63.71884	-145.76921
10053	63.71872	-145.76878
10054	63.32998	-145.86063
10055	63.32905	-145.86179
10056	63.32804	-145.86223

Sample no.	Latitude	Longitude
10057	63.32816	-145.86230
10058	63.32865	-145.86125
10059	63.32159	-145.84778
10060	63.31641	-145.92137
10061	63.31418	-145.87633
10062	63.31790	-145.86790
10063	63.33880	-145.97490
10064	63.05801	-145.74858
10065	63.05782	-145.74826
10066	63.06762	-145.74516
10067	63.20944	-145.90441
10068	63.30530	-145.95666
10069	63.31423	-145.98485
10070	63.31404	-145.98402
10071	63.31385	-145.98539
10072	63.30903	-146.28041
10073	63.30720	-146.27872
10074	63.30931	-146.26505
10075	63.29928	-146.41890
10076	63.31557	-145.87787
10077	63.31552	-145.87772
10078	63.30541	-145.95690
10100	63.52479	-145.82379
10101	63.52480	-145.82397
10102	63.52483	-145.82397
10103	63.52482	-145.82395
10104	63.52483	-145.82393
10105	63.52555	-145.81945
10106	63.32708	-145.68726
10107	63.17618	-144.99700
10108	63.17537	-144.99684
10109	63.33356	-145.72455
10110	63.33410	-145.72672
10111	63.52548	-145.84823
10112	63.52501	-145.82440
10113	63.17042	-145.53191
10114	63.16989	-145.53597
10115	63.18107	-145.53777
10116	63.18105	-145.53777
10117	63.32191	-145.72555
10118	63.32239	-145.72504
10119	63.01793	-145.49155
10120	63.03728	-145.56208
10121	63.03730	-145.56200
10122	63.21614	-145.11132
10123	63.21455	-145.11278
10124	63.22660	-145.41879
10125	63.14079	-144.81336
10126	63.14114	-144.81361
10127	63.14149	-144.81467
10128	63.14155	-144.81441
10129	63.14135	-144.81423

Sample no.	Latitude	Longitude
10130	63.35669	-145.69868
10131	63.35655	-145.69869
10132	63.35629	-145.69878
10133	63.35599	-145.69881
10134	63.35593	-145.69899
10135	63.35591	-145.69871
10136	63.35488	-145.70030
10137	63.35457	-145.70031
10138	63.35382	-145.70031
10139	63.35382	-145.70033
10140	63.35377	-145.70031
10141	63.30933	-146.07550
10142	63.30829	-146.08078
10143	63.30868	-145.98445
10144	63.30416	-145.98205
10145	63.30345	-145.98154
10146	63.30474	-145.98239
10147	63.32090	-146.03242
10148	63.32076	-146.03419
10149	63.32325	-146.06698
10150	63.32197	-146.06499
10151	63.31632	-146.05218
10152	63.29369	-145.94638
10153	63.29251	-145.94106
10154	63.28983	-145.41588
10155	63.29006	-145.42078
10156	63.29033	-145.42100
10157	63.29038	-145.42125
10158	63.29106	-145.42131
10159	63.30975	-145.63067
10160	63.32805	-146.08824
10161	63.32146	-145.65209
10162	63.32162	-145.65248
10163	63.32169	-145.65242
10164	63.23174	-146.43624
10165	63.62237	-145.76985
10166	63.61639	-145.72221
10167	63.29898	-145.67275
10168	63.33121	-145.73129
10169	63.34576	-145.69829
10170	63.34631	-145.69934
10171	63.61250	-146.17753
10172	63.71588	-146.56592
10173	63.71588	-146.56597
10174	63.70170	-145.43664
10175	63.72504	-145.47115
10176	63.33038	-145.86117
10177	63.32816	-145.86218
10178	63.32816	-145.86217
10179	63.32169	-145.84771
10180	63.31687	-145.92162
10181	63.23564	-146.06592

Sample no.	Latitude	Longitude
10182	63.23336	-146.03806
10183	63.30420	-145.99664
10184	63.30392	-145.99585
10185	63.30467	-145.99686
10186	63.30494	-145.99729
10187	63.29844	-145.98084
10188	63.23564	-145.55960
10189	63.27305	-145.59329
10190	63.26342	-145.56471
10191	63.10026	-145.74147
10192	63.26279	-145.56669
10200	63.09121	-145.62648
10201	63.09074	-145.62945
10202	63.09016	-145.62805
10203	63.09050	-145.62984
10204	63.05577	-145.58443
10205	63.32162	-145.72574
10206	63.01982	-145.49015
10207	63.35494	-145.69268
10208	63.34221	-145.70658
10209	63.34221	-145.70658
10210	63.34217	-145.70638
10211	63.24881	-146.20432
10212	63.05783	-145.74870
10213	63.06780	-145.74536
10214	63.20964	-145.90551
10215	63.20956	-145.90476
10216	63.20951	-145.90524
10217	63.31372	-145.98196
10218	63.31365	-145.98194
10219	63.31343	-145.98231
10220	63.31343	-145.98231
10221	63.31353	-145.98233
10222	63.31414	-145.98532
10224	63.29548	-145.96125
10225	63.29548	-145.96145
10300	63.50871	-145.85216
10301	63.51389	-145.85047
10302	63.35050	-145.70292
10303	63.35377	-145.70027
10304	63.52596	-145.81851
10305	63.33568	-145.61416
10306	63.33875	-145.61848
10307	63.35453	-145.69272
10308	63.35158	-145.69260
10309	63.18581	-144.97010
10310	63.18582	-144.97010
10311	63.20293	-145.01176
10312	63.30723	-146.07975
10313	63.30722	-146.07973
10314	63.15228	-145.90835
10315	63.14679	-145.99473

Sample no.	Latitude	Longitude
10316	63.14745	-145.99610
10317	63.14462	-146.10324
10318	63.13813	-146.09672
10319	63.13817	-146.09666
10320	63.13819	-146.09681
10321	63.33028	-145.88055
10322	63.33033	-145.88139
10323	63.33027	-145.88186
10324	63.33047	-145.88226
10325	63.33045	-145.88252
10326	63.33518	-145.89846
10327	63.33512	-145.89870
10328	63.33363	-145.89832
10329	63.33339	-145.89816
10330	63.32096	-145.91054
10331	63.32096	-145.91056
10332	63.31860	-145.91177
10333	63.32153	-145.65142
10334	63.32163	-145.65216
10335	63.32180	-145.65329
10336	63.32202	-145.65318
10337	63.34126	-145.69636
10338	63.34116	-145.69624
10339	63.34103	-145.69850
10340	63.25316	-146.21627
10341	63.24815	-146.18813
10342	63.25284	-146.18303
10343	63.25236	-146.16034
10344	63.29898	-145.67196
10345	63.34586	-145.69911
10346	63.70124	-145.44707
10347	63.33693	-145.76093
10348	63.35279	-145.77341
10349	63.34495	-145.84636
10350	63.22941	-146.05041
10351	63.23561	-146.06614
10352	63.22845	-146.06337
10353	63.22854	-146.06240
10354	63.23341	-146.03801
10355	63.23338	-146.03800
10356	63.30225	-146.08033
10357	63.29444	-145.96462
10358	63.29444	-145.96468
10359	63.29539	-145.96213
10360	63.29567	-145.96077
10361	63.09478	-145.83061
10362	63.11439	-145.75349
10363	63.11444	-145.75367
10364	63.11624	-145.75243
10365	63.10915	-145.77135
10366	63.07211	-145.63563
10400	63.16981	-144.82502

Sample no.	Latitude	Longitude
10401	63.17350	-144.82526
10402	63.18386	-144.81512
10403	63.18582	-144.82290
10404	63.18404	-144.81932
10405	63.18468	-144.81684
10406	63.17068	-144.79257
10407	63.07161	-144.82136
10408	63.07166	-144.82310
10409	63.18628	-144.85455
10410	63.18387	-144.81514
10411	63.17550	-144.81028
10412	63.07188	-144.82277
10413	63.07513	-144.88108
10414	63.29134	-145.89595
10415	63.32761	-146.08959
10416	63.20176	-145.81143
10417	63.20396	-145.81228
10419	63.20166	-145.36697
10420	63.13223	-145.45095
10421	63.32824	-146.13433
10422	63.27467	-146.41341
10423	63.26855	-146.44556
10424	63.26859	-146.44671
10425	63.29265	-146.42920
10426	63.28471	-146.04970
10427	63.17886	-144.81986
10428	63.17582	-144.80728
10429	63.32034	-146.39754
10430	63.32147	-146.39432
10431	63.31310	-145.98638
10432	63.31665	-146.05333
10433	63.31611	-146.05191
10434	63.28364	-146.04924
10435	63.28929	-146.10462
10436	63.28281	-146.04936
10437	63.31610	-146.05187
10438	63.32762	-146.08282
10439	63.32507	-146.07274
10440	63.30917	-145.99312
10441	63.30913	-145.99305
10442	63.29556	-145.96897
10443	63.28787	-146.10592
10444	63.32518	-146.10332
10445	63.28743	-145.88480
10446	63.32693	-145.73189
10447	63.21801	-145.48269
10448	63.21735	-145.47876
10449	63.23020	-145.47889
10450	63.21760	-145.48072
10451	63.05949	-144.83584
10452	63.05808	-144.83615
10453	63.05722	-144.83951

Sample no.	Latitude	Longitude
10454	63.05826	-144.83737
10455	63.05892	-144.83831
10456	63.05949	-144.83875
10457	63.65670	-145.78512
10458	63.15106	-144.71733
10459	63.30566	-145.99713
10460	63.33579	-145.61263
10500	63.01687	-145.48393
10501	63.01913	-145.48714
10502	63.27390	-146.41373
10503	63.29008	-146.04547
10504	63.22943	-146.43564
10505	63.21733	-145.45766
10506	63.33686	-145.76107
10507	63.33684	-145.76059
10508	63.17550	-144.99919
10509	63.17502	-145.00008
10510	63.17450	-145.00016
10511	63.17426	-145.01060
10512	63.30823	-146.08277
10513	63.30479	-145.98343
10514	63.29166	-145.89512
10515	63.29091	-145.90175
10516	63.29102	-145.90217
10517	63.29286	-145.89458
10518	63.25023	-145.80568
10519	63.32926	-146.13185
10520	63.34372	-145.84697
10521	63.34375	-145.84706
10522	63.34381	-145.84739
10523	63.34381	-145.84739
10524	63.34613	-145.84656
10525	63.28623	-145.86501
10526	63.31809	-145.86908
10527	63.31767	-145.86870
10528	63.30163	-146.07839
10529	63.30152	-146.08204
10530	63.30210	-146.08123
10531	63.10421	-146.10640
MH001S	63.00527	-145.48750
MH002S	63.02777	-145.50750
MH003S	63.10138	-145.48472
MH004S	63.16944	-145.53055
MH005S	63.22666	-145.48472
MH006S	63.23027	-145.62638
MH007S	63.27222	-145.65583
MH008S	63.27555	-145.66777
MH009S	63.27833	-145.65166
MH010S	63.31000	-145.70055
MH011S	63.34055	-145.73305
MH020S	63.03166	-145.71194
MH021S	63.04277	-145.70944

Sample no.	Latitude	Longitude
MH022S	63.04527	-145.54805
MH030S	63.16805	-145.71611
MH031S	63.16194	-145.73166
MH032S	63.15361	-145.73194
MH033S	63.14944	-145.78222
MH034S	63.16583	-145.80444
MH035S	63.17500	-145.76277
MH036S	63.20638	-145.79277
MH037S	63.19333	-145.82416
MH038S	63.18805	-145.84694
MH039S	63.16222	-145.88055
MH040S	63.18166	-145.91111
MH041S	63.19277	-145.94694
MH042S	63.23361	-146.01638
MH043S	63.23638	-146.09638
MH044S	63.22500	-146.12166
MH045S	63.22777	-146.20138
MH046S	63.25388	-146.23444
MH047S	63.24694	-146.24555
MH048S	63.24805	-146.26416
MH049S	63.24555	-146.32138
MH050S	63.24611	-146.38861
MH101S	63.09944	-145.22055
MH102S	63.08388	-145.13361
MH103S	63.07361	-145.16055
MH104S	63.07166	-145.16916
MH105S	63.05472	-145.15305
MH106S	63.04861	-145.15222
MH107S	63.02916	-145.23888
MH108S	63.06694	-145.24333
MH109S	63.15777	-145.12888
MH110S	63.18944	-145.13249
MH111S	63.21388	-145.14805
MH112S	63.20111	-145.22944
MH113S	63.15833	-145.25500
MH114S	63.14805	-145.25888
MH115S	63.13527	-145.34194
MH116S	63.20083	-145.36722
MH117S	63.16416	-145.38055
MH118S	63.16694	-145.38416
MH119S	63.12916	-145.38777
MH120S	63.05611	-145.39694
MH121S	63.04000	-144.33861
MH122S	63.04666	-144.30555
MH123S	63.06888	-144.32444
MH124S	63.08111	-144.29027
MH134S	63.04722	-144.17194
MH135S	63.04611	-144.16305
MH136S	63.00861	-144.00833
MH137S	63.00861	-144.10638
MH138S	63.00944	-144.11861
MH139S	63.03750	-144.18333

Sample no.	Latitude	Longitude
MH140S	63.00638	-144.24444
MH143S	63.09888	-144.38944
MH146S	63.11694	-144.42805
MH147S	63.13388	-144.50555
MH151S	63.13388	-144.53305
MH152S	63.09944	-144.60194
MH153S	63.07361	-144.79750
MH154S	63.07972	-144.76250
MH155S	63.09277	-144.78055
MH156S	63.10527	-144.80277
MH157S	63.11611	-144.78305
MH158S	63.12722	-144.80805
MH159S	63.13055	-144.79138
MH160S	63.13555	-144.79027
MH161S	63.15027	-144.74888
MH162S	63.15222	-144.75250
MH163S	63.15666	-144.77305
MH164S	63.16777	-144.79944
MH169S	63.20694	-144.81833
MH170S	63.21138	-144.83944
MH171S	63.20055	-144.85472
MH172S	63.18972	-144.87305
MH173S	63.17055	-144.85722
MH174S	63.17111	-144.89611
MH175S	63.15888	-144.92500
MH176S	63.13888	-144.92944
MH177S	63.32638	-146.08027
MH178S	63.33833	-146.05250
MH179S	63.34083	-146.00694
MH180S	63.35194	-145.99833
MH181S	63.35388	-146.00833
MH182S	63.35666	-146.08138
MH183S	63.34805	-146.12888
MH187S	63.31388	-146.16861
MH188S	63.30333	-146.16694
MH189S	63.29138	-146.16000
MH190S	63.30888	-146.25138
MH191S	63.31361	-146.26499
MH192S	63.28888	-146.24555
MH193S	63.31194	-146.33388
MH194D	63.32555	-146.35722
MH195D	63.31805	-146.37055
MH196S	63.29083	-146.42444
MH197S	63.25416	-146.30611
MH198S	63.26527	-146.23527
MH199S	63.26805	-146.17611
MH200S	63.26499	-146.06166
MH201S	63.26083	-146.04305
MH202S	63.29583	-146.04250
MH203S	63.28777	-146.01277
MH204S	63.29000	-146.43527
MH205S	63.25611	-146.54361

Sample no.	Latitude	Longitude
MH206S	63.28083	-146.54777
MH207S	63.29027	-146.55555
MH208S	63.29944	-146.55416
MH209S	63.31750	-146.56666
MH210S	63.30611	-146.49527
MH222S	63.29027	-146.74277
MH224S	63.26555	-146.75805
MH225S	63.26000	-146.75388
MH226S	63.25027	-146.79000
MH227S	63.23722	-146.79250
MH228S	63.24277	-146.74111
MH229S	63.22861	-146.78111
MH230S	63.21888	-146.73611
MH299S	63.23527	-145.48916
MH300D	63.25388	-145.43861
MH301D	63.25583	-145.44805
MH302D	63.25333	-145.41555
MH303D	63.28000	-145.40222
MH304S	63.23972	-145.47111
MH305S	63.23638	-145.44583
MH306S	63.25916	-145.49055
MH307S	63.27222	-145.57222
MH308S	63.25500	-145.56194
MH309S	63.19055	-145.49611
MH310S	63.20805	-145.48138
MH311S	63.21666	-145.47194
MH312S	63.30055	-145.97416
MH313S	63.29194	-145.89944
MH314S	63.35305	-145.93194
MH315S	63.33416	-145.95888
MH316S	63.32666	-145.93916
MH317S	63.31333	-145.94000
MH318S	63.31805	-145.82194
MH319S	63.33083	-145.83194
MH320S	63.33611	-145.76361
MH321S	63.35361	-145.75388
MH328S	63.18444	-146.16111
MH329S	63.17805	-146.16305
MH330S	63.17833	-146.19583
MH331S	63.18555	-146.22611
MH332S	63.16500	-146.26416
MH333S	63.17805	-146.31972
MH334S	63.19166	-146.31111
MH335S	63.19527	-146.38972
MH336S	63.19222	-146.39888
MH337S	63.21500	-146.40583
MH338S	63.21833	-146.48972
MH339S	63.18138	-146.44916
MH340S	63.13166	-146.40777
MH341S	63.12972	-146.39694
MH343S	63.13277	-146.25444
MH344S	63.15166	-146.24694

Sample no.	Latitude	Longitude
MH345S	63.12555	-146.18611
MH346D	63.08944	-146.16638
MH347S	63.09694	-146.08138
MH348S	63.11472	-146.06638
MH349S	63.15555	-146.08000
MH350S	63.15944	-146.11555
MH351D	63.17916	-146.07527
MH351S	63.17916	-146.07527
MH352S	63.09777	-144.91916
MH353S	63.07833	-144.82638
MH354S	63.13888	-144.83944
MH355S	63.14027	-144.82944
MH356S	63.16861	-144.82638
MH357S	63.16305	-144.81444
MH358S	63.16416	-144.68333
MH362S	63.13944	-144.63000
MH363S	63.13472	-144.66944
MH364S	63.11916	-144.67250
MH365S	63.10694	-144.66277
MH366S	63.08722	-144.68222
MH367S	63.07333	-144.66583
MH368S	63.07083	-144.68583
MH369S	63.06083	-144.64944
MH370S	63.07694	-144.60222
MH371S	63.08388	-144.50222
MH372S	63.06138	-144.49638
MH373S	63.06111	-144.47361
MH374S	63.03277	-144.46611
MH375S	63.02888	-144.42999
MH376S	63.02305	-144.42361
MH377S	63.19805	-144.95194
MH378S	63.21944	-144.92750
MH379S	63.21500	-144.95611
MH380S	63.19638	-145.00138
MH381S	63.18027	-145.03166
MH382S	63.16444	-145.04138
MH416S	63.26305	-146.63166
MH417S	63.26083	-146.63250
MH443D	63.25111	-145.18388
MH444D	63.25111	-145.20277
MH476S	63.21194	-146.92416
MH478S	63.17777	-146.95416
MH479S	63.16111	-146.99388
MH480S	63.15472	-146.94027
MH481S	63.12277	-146.95111
MH482S	63.03166	-145.55250
MH484S	63.00277	-145.64555
MH530D	63.31333	-145.46638
MH531D	63.32527	-145.56833
MH532D	63.33777	-145.60666
MH533S	63.35666	-145.66916
MH534S	63.27527	-145.68222

Sample no.	Latitude	Longitude
MH654S	63.30972	-145.72527
MH655S	63.30166	-145.77250
MH656S	63.21416	-145.52333
MH657S	63.23250	-145.61722
MH658S	63.24944	-145.57083
MH659S	63.21055	-145.66500
MH660S	63.23750	-145.69222
MH661S	63.24472	-145.78555
MH662S	63.25750	-145.81472
MH663S	63.28361	-145.88194
MH664S	63.26805	-145.99000
MH665S	63.08388	-146.86972
MH666S	63.09750	-146.82416
MH667S	63.10861	-146.79583
MH668S	63.13305	-146.80805
MH669S	63.14055	-146.79333
MH670S	63.15611	-146.80888
MH671S	63.17277	-146.83055
MH672S	63.16777	-146.83305
MH673S	63.12277	-146.72444
MH674S	63.21027	-146.77277
MH675S	63.21277	-146.71777
MH676S	63.17472	-146.62833
MH677S	63.21361	-146.58833
MH678S	63.24805	-146.61166
MH679S	63.19638	-146.58916
MH680S	63.12694	-146.59249
MH681S	63.05694	-146.28500
MH682S	63.11138	-145.99333
MH683S	63.15305	-145.96138
MH684S	63.11694	-145.94361
MH685S	63.08250	-145.88833
MH686S	63.11416	-145.75944
MH687S	63.12777	-145.67833
MH688S	63.06611	-145.59361
MH689S	63.08944	-145.60277
MH690S	63.08055	-145.69083
MH691S	63.07638	-145.71194
MH724S	63.13000	-145.05555
MH725S	63.09555	-145.46527
MH726D	63.10833	-145.48194
MH727D	63.16666	-145.41805