REPORT ON THE 2003 GEOCHEMICAL AND GEOLOGICAL WORK ON THE LJS PROPERTY

Claim Name:	Grant No's.
LJS 1-38	YC21952-YC21989

DAWSON MINING DISTRICT, YUKON TERRITORY
NTS: 115O/11 & 115O/12

Latitude 63° 33'
Longitude 139° 27'

Work conducted:
June 28 – August 4, 2003

Owner and Operator:
Kennecott Canada Exploration Inc.
354-200 Granville Street
Vancouver, B.C.
V6C 1S4

Prepared by:
Roger Hulstein, B.Sc., P.Geo.

November 30, 2003

094441

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 5700

M. B.

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

Costs associated with this report have been applied in the amount of $ 5,700 for [illegible] credit under Certificate of Work No. 2000471

for Mining Recorder
Dawson City Mining District

SUMMARY

The LJS property is located in west-central Yukon, covers an area of approximately 790 hectares, comprised of 78 Yukon two-post Quartz claims that are held under option by Kennecott Canada Exploration Inc. Only the LJS 1-38 claims constitute the subject of this report the purpose of which is to fulfill assessment requirements. These claims are one of several noncontiguous claim blocks that together make up a larger land package, the Lucky Joe project. The ground is held under option from Copper Ridge Explorations Inc. who in turn optioned the ground from Yukon prospector Shawn Ryan.

The Lucky Joe mineral occurrence located approximately 10 km to the north hosts copper-gold mineralization spatially associated with amphibolite and an aeromagnetic high. The LJS property became a focus of exploration activity in 2002 when prospector Shawn Ryan following up on a recently released low level airborne geophysical survey recognized the potential other copper-gold occurrences on strike with the Lucky Joe occurrence. The LJS property was staked to cover an amphibolite unit and an associated aeromagnetic high.

Paleozoic metamorphic rocks of the Yukon Tanana Terrane underlie the LJS property. An amphibolite unit exposed on a northerly trending ridge is surrounded by gray orthogneiss. A small granitoid plug or dyke intrudes the amphibolite.

Work in 2003 on the LJS property consisted of reconnaissance soil sampling totaling 97 samples on or adjacent to the property. Results indicate that there are scattered, non-coincident; gold, copper, molybdenum, lead and arsenic anomalies adjacent to the amphibolite unit and its positive aeromagnetic signature. As these anomalies are not coincident and collectively do not outline a prospective target no further work is recommended on the LJS property.

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1.0 INTRODUCTION

This assessment report summarizes the geochemical work carried out on the LJS property located in the Dawson Mining District, Yukon Territory. The purpose of this report is to fulfill claim assessment requirements. A total of 78 contiguous two post Yukon Quartz claims comprise the property of which 38 claims (LJS 1-38) make up the subject of this report. These claims together with other noncontiguous claim groups together make up the Lucky Joe Project. All the claims comprising the Lucky Joe Project were optioned by Kennecott Canada Exploration Inc. in 2003 from Copper Ridge Explorations Inc. who in turn had optioned them from Yukon prospector Shawn Ryan. The Lucky Joe Project is a bulk tonnage copper – gold target hosted by metamorphic rocks of the Yukon Tanana Terrrane.

Kennecott in 2002 carried out a soil sample survey over and adjacent to an aeromagnetic high identified by the Geological Survey of Canada in 2001. An additional 40 claims (LJS 39-78) were staked along the east side of the LJS 1-38 claim block in August, 2003. This was in response to the discovery of a sulfidic kill zone located 900 m east of the central edge of the initial claim block (LJS 1-38).

The information contained in the report is based on research and fieldwork conducted in 2003 by Kennecott personnel and contractors and on referenced sources.

1.1 Location and Access

The LJS property is located approximately 65 kilometres south of Dawson City in west central Yukon Territory, within the Dawson Mining District (Figure 1). The property covers a ridge located east of the Yukon River, south of Rosebute Creek, north of Henderson Creek and west of North Henderson Creek. The property is located on map sheet NTS 115O/6.

Access to the claims is by helicopter. Helicopters are based year round in Dawson City. The 2003 helicopter supported work was carried out from a road accessible camp on Quartz Creek, approximately 35 kilometres northeast of the property.

Daily plane and bus service can be gained in Dawson City to Whitehorse, where there is daily jet airplane service to Vancouver, British Columbia. Dawson City also has scheduled flights to Fairbanks, Alaska where jet service is available to the 'lower 48'.

KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

LJS PROPERTY

LOCATION

YUKON TERRITORY, CANADA

Date: Nov. 15, 2003	Author: RH	Drawn By: P.L.
File: Lucky Joe	Scale: 1:7,000,000	Figure: 1

1.2 Topography, Vegetation and Climate

Topography in the region is typical of an incised peneplain with steep hillsides and rounded crests. The area was beyond the limits of the last two continental glacial events and evidence of glaciation in the region is a result of localized alpine glaciers. Alluvium in the valleys is locally derived. Hill slopes are covered with a veneer of colluvium also locally derived. Elevation ranges from 670 m in a valley on the east side to 1130 m atop the north trending ridge on the LJS 1-38 claims. Patches and large areas of permafrost can be found throughout the property, especially on north and west facing slopes.

Rock outcrop is restricted to ridges, small cliffs and creek bottoms. Outcrop exposure represents approximately 5 percent of the property. Soils consist of talus fines and colluvium. Colluvium veneer is the most common cover on the property, averages 1-2 m thick while colluvium blanket material averages >3 m thick. Colluvium conforms to bedrock topography and is composed of diamicton, rubble, and organic-rich silt and sand derived from bedrock sources by a variety of slope processes.

Vegetation in the valley bottoms consists of alder, dwarf birch, balsam fir, white and black spruce. Ground cover in areas of thin tree cover consists of alpine plants, 'buckbrush' (alder), dwarf willow and moss. Most of the vegetation was burnt in a forest fire within the last few years. The property is mostly below treeline at approximately 1200 m in the area although the ridge tops are covered with brush. Vegetation is generally more abundant on east and south facing slopes.

Low precipitation and a wide temperature range characterize climate. Winters are cold and temperatures of –30°C to –45°C are common. Summers are moderately cool with daily highs of 10°C to 25°C. Thunders showers are a common occurrence. Smoke from forest fires can be thick during the summer. The seasonal window for prospecting is from June to mid-late September.

1.3 History

There is no record of claims having been staked previously on what is now the LJS property. It is likely the area was explored as part of regional exploration programs in the 1970's when the Lucky Joe property 10 km to the north was being actively explored.

In 2001 Yukon prospector Shawn Ryan, guided by a recent low level airborne aeromagnetic survey, conducted jointly by the Geological Survey of Canada and the Yukon Geology Program, staked the LJS 1-38 claims that represented possible extensions of the showings discovered and drilled on the Lucky Joe property 10 km to the north. The contiguous LJS 39-78 claims were staked in August 2003 by Kennecott to cover a gossanous area.

In 2001 Copper Ridge Explorations Inc. optioned the LJS 1-38 claims staked by Shawn Ryan. In January 2003 Kennecott Canada Exploration Inc. optioned the LJS 1-38 as part of a larger land package, the Lucky Joe Project, from Copper Ridge Explorations Inc.

1.4 2003 Kennecott Work Program

The 2003 work targeted possible strike extensions of magnetite bearing amphibolete, that show up as aeromagnetic highs on the aeromagnetic survey. Both the amphibolite and aeromagnetic highs are associated with copper mineralization in drill holes at the Lucky Joe mineral occurrence (Yukon Milfile, 2003) located approximately 13 kilometres north of the LJS property. To determine if copper-gold mineralization is present, ridge and spur soil traverses with nominal 200 m sample spacing was carried out as a first pass. A total of 97 soil samples were collected on or adjacent to the property.

Personnel in 2003 who worked on the LJS 1-38 claims included Kennecott contract geologists Russ Franklin, Ricardo Presnel, Randy Boyer and Roger Hulstein. Russ Franklin, project geologist, managed the Lucky Joe project in 2003.

Data for all the samples were noted on standardized sample cards. Hand-held GPS receivers (Garmin 12XL's) were used to plot locations of samples and outcrops (approximate +/- 5m accuracy). Samples were shipped to ALS Chemex Labs Ltd. for analysis in Vancouver, B.C The sample location, description and analytical results were entered and linked in an MS Access database and displayed in MAPINFO, a GIS program.

1.5 Claim Status

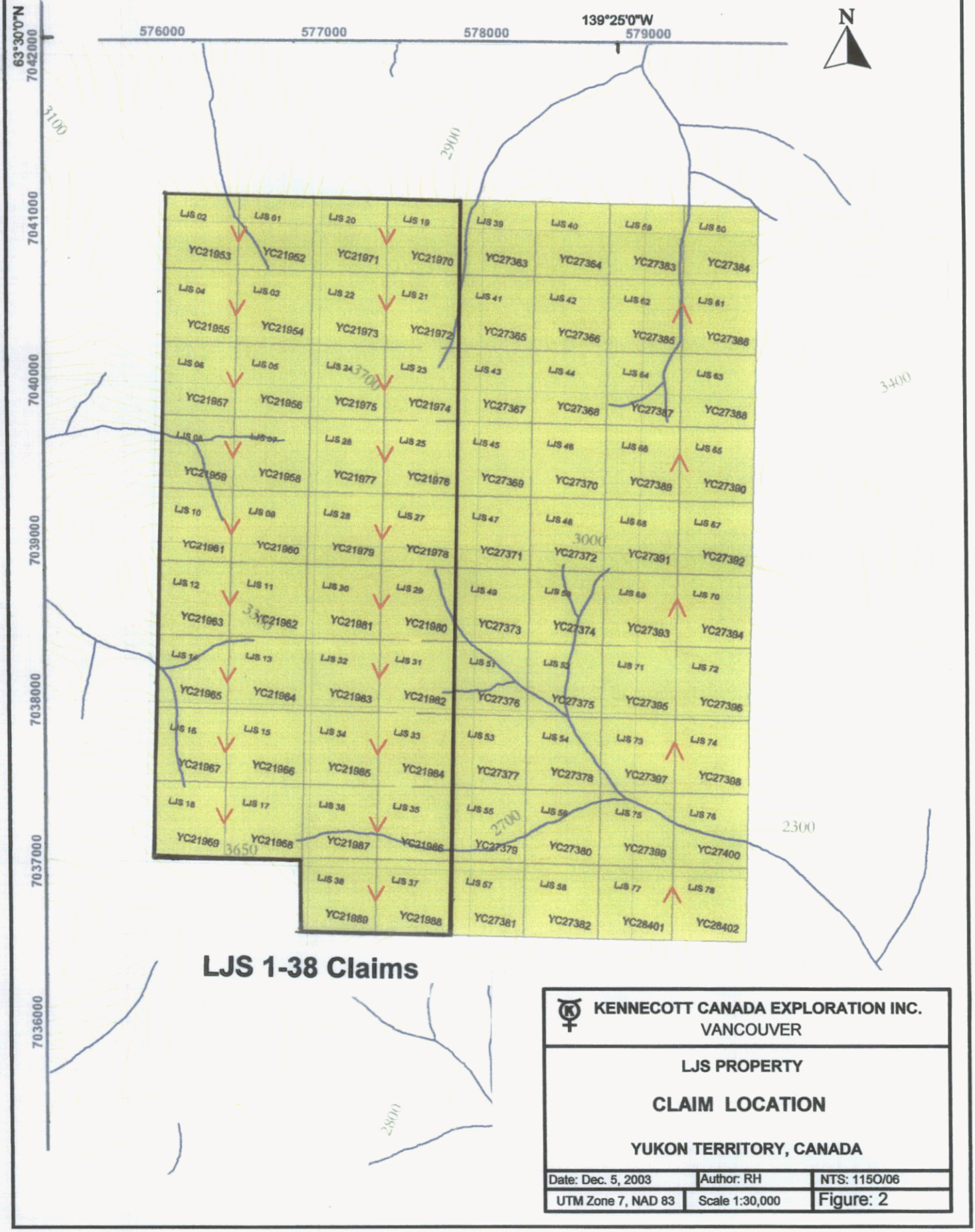
The LJS 1-38 claims covers an area of approximately 790 hectares and consists of 38 unsurveyed, contiguous, two-post Yukon 'Quartz' claims which are held under option by Kennecott (Figure 2) from Copper Ridge Explorations Inc. The claims were staked according to the Yukon Quartz Mining Act and are located in the Dawson Mining District. They are shown on claim sheets 115O-6 available for viewing at the Dawson Mining Recorders Office. The claims listed below (Table 1) are registered in the name of Kennecott Canada Exploration Inc.

Table 1. List of Claims

Claim Name	Grant Number	Expiry Date*
LJS 1-38	YC21971-YC21989	March 31, 2006

*Subject to this report being accepted as fulfilling assessment requirements.

An additional 40 claims LJS 39-78), staked along the east side of the LJS 1-38 claim block in late August 2003, are not included in this report.



LJS 1-38 Claims

KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

LJS PROPERTY

CLAIM LOCATION

YUKON TERRITORY, CANADA

Date: Dec. 5, 2003	Author: RH	NTS: 115O/06
UTM Zone 7, NAD 83	Scale 1:30,000	Figure: 2

2.0 REGIONAL GEOLOGY

The first geological investigation in the area of the Lucky Joe Property area was by H.S. Bostock starting in 1935 (Bostock, 1942). More recently most of the property was mapped at 1:100,000 scale as part of a Geological Survey of Canada NATMAP project (Ryan et al, 2002). This is an ongoing project and a final GSC regional geology map is expected to be published in 2004.

Regionally the property lies between the Tintina and Denali Faults within the Ominica Belt (Wheeler and McFeely, 1991). They are found to the northeast and southwest of the property respectfully trend northwest and are major crustal-scale transcurrent dextral faults of Tertiary (?) age.

The area is underlain by the lithotectonic (pre-accretion) Yukon-Tanana Terrane (YTT) assemblage: a medium to high grade, polydeformed metasedimentary and meta-igneous rocks. The YTT is mainly Paleozoic in age and was juxtaposed by regional scale thrust faults in early Mesozoic time, a period of terrane accretion that affected much of the northern Cordillera.

More locally, the YTT consists of two main assemblages of supracrustal rocks, the Devonian-Mississippian Pelly Gneiss, orthogneiss, including granitic augen gneiss and lower YTT terrane rocks composed of Devonian and older quartz-rich rocks, amphibolite, mica schists and minor marble.

Jurassic and Cretaceous granitoid, predominantly quartz monzonite, bodies intrude the YTT and Mortenson (1996) noted that field relationships indicate that some were intruded prior to both Early (?) Jurassic regional thrust imbrication and Early Cretaceous normal faulting.

3.0 PROPERTY GEOLOGY

The north-south ridge on the LJS property is underlain by foliated mid(?) - Late Paleozoic amphibolite surrounded grey orthogneiss. The amphibolite is described by Gordy and Ryan (2002) as an amphibolite schist and gneiss consisting of metabasite that is probably derived from mafic to intermediate volcanic or volcaniclasitc rock. The amphibolite is is locally associated with psammite or interlayered with orthogneiss. The grey orthogneiss, of intermediate to mafic composition, is generally grey, banded to layered, commonly veined and is believed to be derived from intermediate granitoid (tonalite to diorite) sheets that are commonly interlayered with amphibolite schist and gneiss (Gordy and Ryan, 2002.

A small plug or dyke of Jurassic (?) or Cretaceous (?) granite (Gordy and Ryan, 2002) intrudes the amphibolite unit in the central area of the ridge at soil sample site NA13858.

Approximate contacts noted during soil sampling traverses are shown on Figure 3. The approximate extent of the amphibolite is indicated by the corresponding aeromagnetic high over the unit. Outcrop on the ridge top in the central portion of the property was observed to be almost horizontal to gently dipping.

3.1 Alteration and Mineraization

No significant alteration or mineralization was noted on the LJS property (LJS 1-38 claims). Evidence of a possible mineralizing event was observed in a felsic schist (granite?) outcrop, a dyke or small plug, intruding amphibolite at soil sample site NA13858. Quartz – epidote veinlets (mm scale) filling joints, containing magnetite crystals, cut the schist and amphibolite. The veining was observed to increase in intensity towards the felsic schist, granite (?) – amphibolite contact.

576000 mE

579000 mE

580000 mE

N

7042000 mN

7040000 mN

7038000 mN

7036000 mN

NA13827
NA13826
NA13825
NA13824
NA13823
NA13793
NA13794
NA13795
NA13797
NA13798
NA13796
QMS
NA13850
NA13799
AMP
NA13851
NA13852
NA16240
NA16242
NA16244
NA13853
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AMP
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NA14477
NA13646
NA14463
NA13647
NA14472
NA14474
NA14466
NA14464
NA14473
NA13648
NA14478
NA14465
NA13649
NA14479

Scale: 1:25,000

0 500 1000 2000

metres

Percentiles - Soil Samples
Au (ppb)

0.5	=< 1	[<30%]	(28)
1	=< 2	[30<60%]	(15)
2	=< 3	[60<80%]	(22)
3	=< 6	[80<90%]	(22)
6	=< 9	[90<95%]	(5)
9	=< 16	[95<98%]	(3)
16	=< 26	[98<99%]	(1)
26	=< 26	[99% +]	(1)

Lithology
QMS Quartz Muscovite Schist
AMP Amphibolite
Approximate Geological Contact

KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

YUKON TERRITORY, CANADA

SOIL GEOCHEMISTRY
Gold (ppb) and Sample Numbers

LJS PROPERTY

Date: Nov. 15, 2003	Author: RH	Drawn By: RH
File: Lucky Joe	Scale: 1:25,000	Figure: 3

5.0 GEOCHEMISTRY

Geochemical sample analysis was executed by ALS Chemex Labs Ltd. of North Vancouver, B.C. All soil samples were analyzed for gold using fire assay and atomic absorption techniques on a 30-gram sub-sample plus inductively coupled argon plasma (ICP) techniques for 32 additional elements. A more complete description of the analytical procedures is attached as Appendix B. Sample descriptions and analytical results are presented in Appendix C. Sample numbers and locations are shown on Figures 3.

5.1 Soil Geochemistry

A total of 97 soil samples were collected in 2003 on or near the LJS property. Geochemical results for gold are presented on Figure 3, for copper on Figure 4, molybdenum on Figure 5, lead on Figure 6 and arsenic on Figure 7.

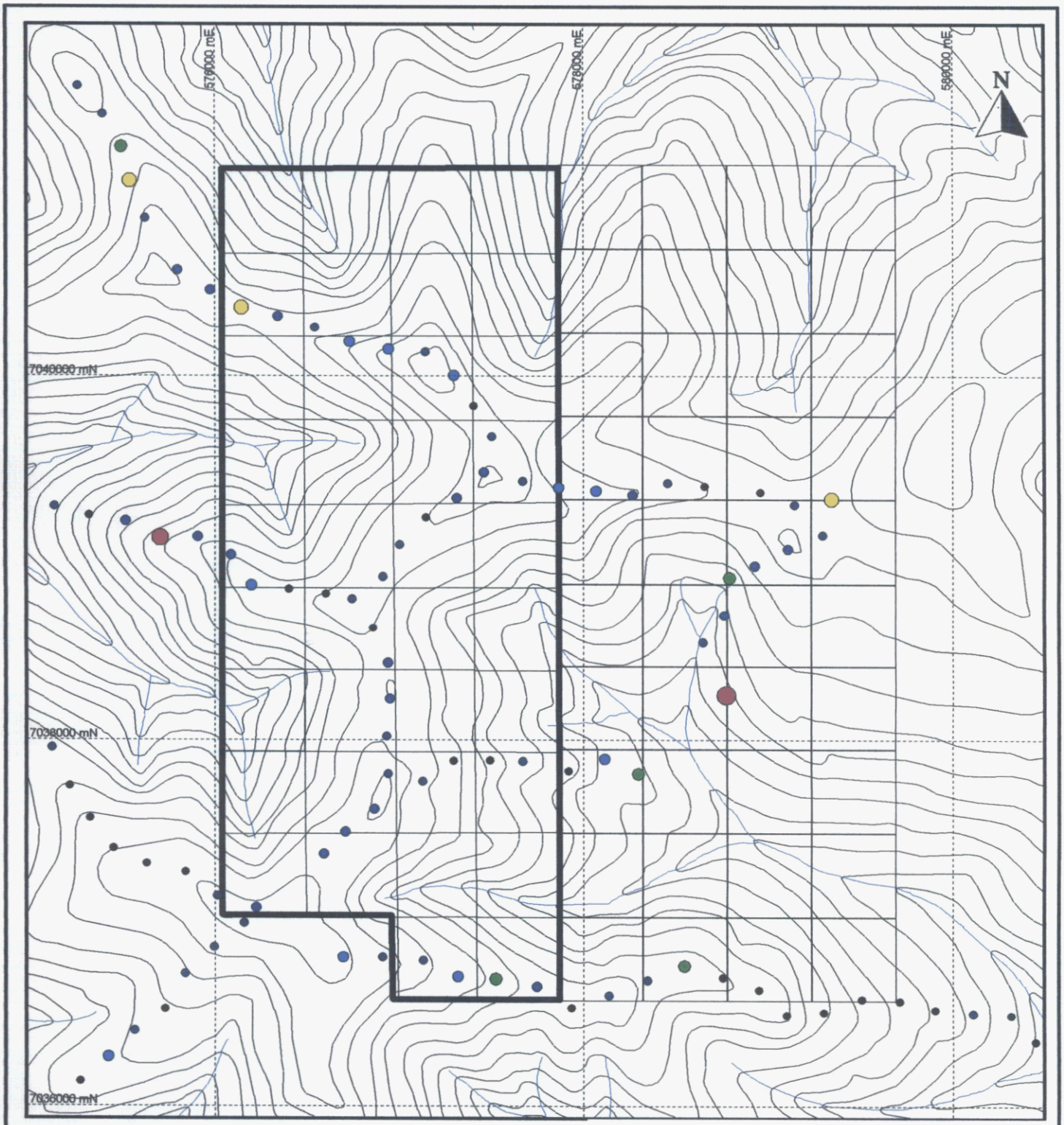
Soil samples were collected on reconnaissance ridge and spur traverses with a nominal spacing of 200m. The widespread lines were designed to locate large, km scale, coherent anomalies (Au-Cu plus other elements) in an effort to delineate a hydrothermal system(s) capable of hosting a copper-gold deposit(s).

The positive aeromagnetic anomaly was targeted and covered by crosscutting lines. All sample sights were marked with blue surveyors tape, metal tags and the location captured by GPS (average accuracy +/- 5m). The sampling medium consisted predominantly of soliflucted and reworked colluvium, talus fines and poorly developed 'B' horizon material. Permafrost was a hindrance, especially on north and west facing slopes. All samples were collected by soil augers and sample depth averaged approximately 40cm.

Due to the limited number of samples geochemical descriptive statistics were not calculated. Percentiles were calculated for the entire Lucky Joe soil sample data set (included in Appendix D) and the percentiles used on the LJS property are comparable. Duplicates samples were collected approximately every 20 samples and results from the entire Lucky Joe Project data set show that the values (for Au, Ag, Cu, Fe, Mo, Na, Pb, Zn) are repeatable although variation becomes more significant as detection limits are approached.

Scattered anomalous samples with anomalous gold values (>90th percentile) were collected on and adjacent to the LJS 1-38 claims. Most of the anomalous samples were returned just to the east side of the property. Unfortunately these samples are not coincident with Mo, Cu, Pb and As anomalous values (Figures 4 to 7). It appears that the scattered anomalous sample values are found on the margin of and distal to, the margin of the amphibolite.

Geochemical results from soils collected at the kill zone to the east of the LJS 1-38 claims returned highly anomalous values for both Fe and Mo (>99th Percentile) but nothing else.



Percentiles - Soil Samples
Cu (ppm)

6 =< 27	[<30%]	(28)
27 =< 40	[30<60%]	(30)
40 =< 60	[60<80%]	(19)
60 =< 87	[80<90%]	(10)
87 =< 117	[90<95%]	(5)
117 =< 166	[95<98%]	(3)
166 =< 235	[98<99%]	(1)
235 =< 235	[99% +]	(1)

KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

YUKON TERRITORY, CANADA

SOIL GEOCHEMISTRY
Copper (ppm)

LJS PROPERTY

Date: Nov. 15, 2003	Author: RH	Drawn By: RH
File: Lucky Joe	Scale: 1:30,000	Figure: 4

Percentiles - Soil Samples
Mo (ppm)

1 =< 1	[<30%]	(0)
1 =< 1	[30<60%]	(75)
1 =< 2	[60<80%]	(0)
2 =< 2	[80<90%]	(14)
2 =< 3	[90<95%]	(0)
3 =< 6	[95<98%]	(5)
6 =< 10	[98<99%]	(2)
10 =< 10	[99% +]	(1)

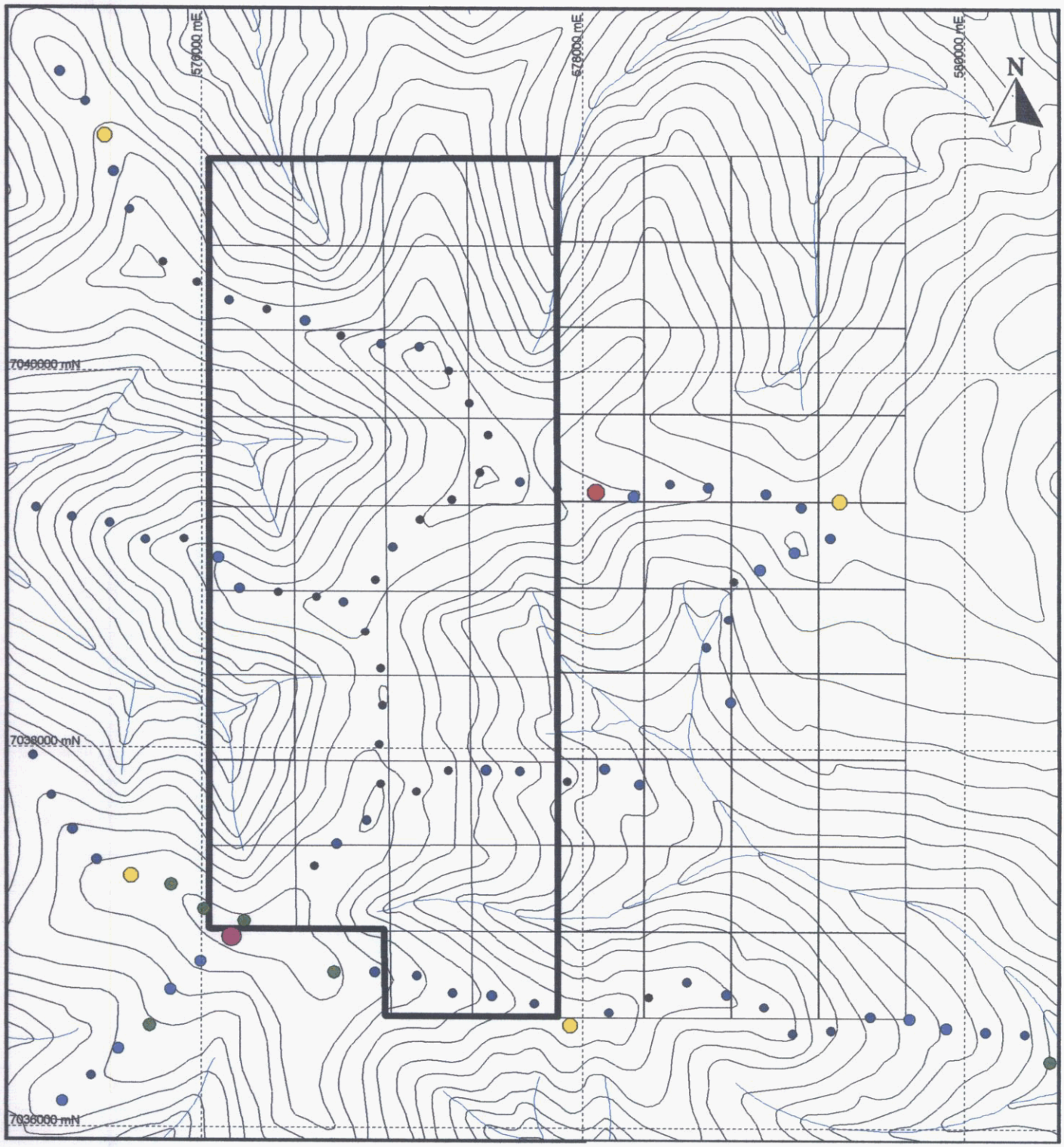
KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

YUKON TERRITORY, CANADA

SOIL GEOCHEMISTRY
Molybdenum (ppm)

LJS PROPERTY

Date: Nov. 15, 2003	Author: RH	Drawn By: RH
File: Lucky Joe	Scale: 1:30,000	Figure: 5



Percentiles - Soil Samples
Pb (ppm)

●	1 =< 4 [<30%]	(26)
●	4 =< 7 [30<60%]	(29)
●	7 =< 10 [60<80%]	(20)
●	10 =< 12 [80<90%]	(10)
●	12 =< 16 [90<95%]	(6)
●	16 =< 24 [95<98%]	(4)
●	24 =< 26 [98<99%]	(1)
●	26 =< 26 [99% +]	(1)

KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

YUKON TERRITORY, CANADA

SOIL GEOCHEMISTRY
Lead (ppm)

LJS PROPERTY

Date: Nov. 15, 2003	Author: RH	Drawn By: RH
File: Lucky Joe	Scale: 1:30,000	Figure: 6

Percentiles - Soil Samples
As (ppm)

1 =< 4	[<30%]	(24)
4 =< 8	[30<60%]	(32)
8 =< 10	[60<80%]	(20)
10 =< 11	[80<90%]	(11)
11 =< 12	[90<95%]	(5)
12 =< 13	[95<98%]	(2)
13 =< 14	[98<99%]	(2)
14 =< 14	[99% +]	(1)

KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

YUKON TERRITORY, CANADA

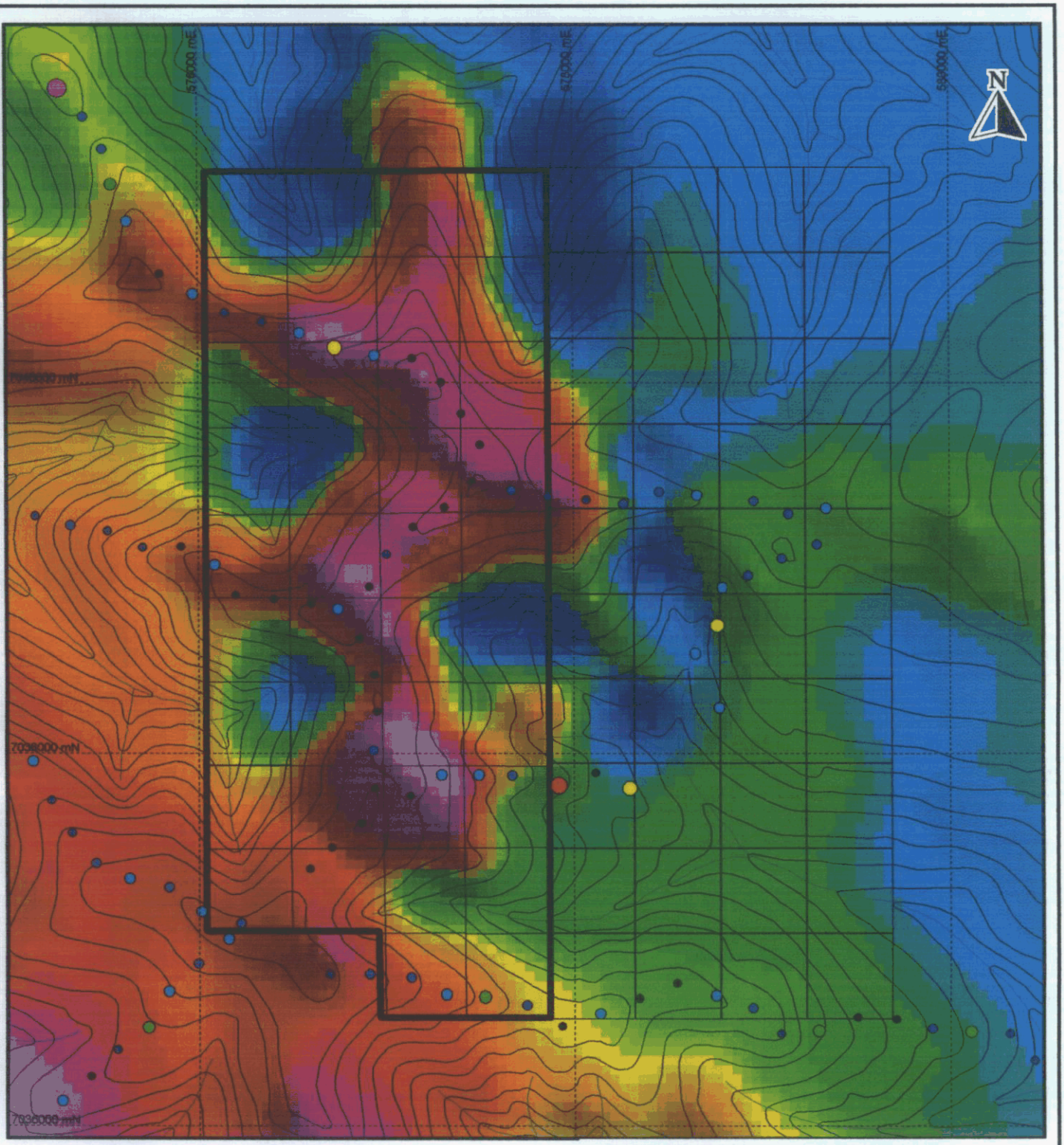
SOIL GEOCHEMISTRY
Arsenic (ppm)

LJS PROPERTY

Date: Nov. 15, 2003	Author: RH	Drawn By: RH
File: Lucky Joe	Scale: 1:30,000	Figure: 7

6.0 GEOPHYSICS

A low-level airborne magnetic survey, with a 500 m flight line spacing was conducted jointly by the Geological Survey of Canada and the Yukon Geology Survey in 2000 over the area (Shives et al., 2001). The aeromagnetics show the LJS property to be underlain by a northerly trending aeromagnetic high (Figure 8). This is a reflection of the amphibolite unit. The aeromagnetics are a targeting tool which was first recognized and used at the Lucky Joe occurrence by prospector Shawn Ryan.



Percentiles - Soil Samples
Au (ppb)

0.5	=< 1	[<30%]	(28)
1	=< 2	[30<60%]	(15)
2	=< 3	[60<80%]	(22)
3	=< 6	[80<90%]	(22)
6	=< 9	[90<95%]	(5)
9	=< 16	[95<98%]	(3)
16	=< 26	[98<99%]	(1)
26	=< 26	[99% +]	(1)

Source of Aeromagnetic Data: Geological Survey of Canada

KENNECOTT CANADA EXPLORATION INC.
VANCOUVER

YUKON TERRITORY, CANADA

Airborne Aeromagnetic Survey
TOTAL FIELD

LJS PROPERTY

Date: Nov. 15, 2003	Datum: NAD83, Zone	Drawn By: RH
File: LJS	Scale: 1:30,000	Figure: 8

8.0 CONCLUSION AND RECOMMENDATIONS

The LJS property covers an aeromagnetic high, reflecting an amphibolite unit exposed on a north trending ridge in the central portion of the property. Surrounding lithologies consist of grey orthogneiss. Reconnaissance soil sample lines on ridges and ridge spurs with a nominal sample spacing of 200 m were designed to cross cut the aeromagnetic anomaly, the amphibolite unit, to test for copper-gold mineralization on strike with the Lucky Joe property to the north.

Results from the soil sample survey returned scattered anomalies (>90th percentile) for Au, Mo, Cu, Pb and As. Unfortunately these anomalies are not coincident and collectively do not outline a prospective target.

No further work is recommended on this property.

9.0 STATEMENT OF COSTS

The LJS property (LJS1-38 claims) are part were part of a larger exploration project, the Lucky Joe Project, carried out by Kennecott in 2003. To determine the costs incurred on the LJS property in 2003 the total applicable costs were summed up and divided by the number of samples collected. The expenses incurred are tabled below and when divided by the number of samples each sample was deemed to have cost a total of $144.

Assessment Work Valuation; LJS 1-38 Claims
2003 Lucky Joe Project
Geological and Geochemical Work Program

	Applicable Costs	
Geochemical Costs	$74557.76	
helicopter	126105.00	
contract labour	121555.02	
KEX wages	186527.57	
OPPS support wages (post May)	36770.76	
Geology Expenses	6690.97	
Field Meals	17613.42	
Field Accom	1717.72	
Field supplies	40876.10	
Field Communications	23635.04	
Freight	8308.65	
Vehicle Expenses	6469.72	
Bulk Fuel	13036.22	
Health and Safety	2457.48	
Field Travel	286.04	
Travel Meals	1805.00	
Work meals	2268.09	
postage	81.60	
computer	112.11	
insurance	3738.00	
Rental	10473.92	
	$685086.19	
Subtract		
-staking costs	11821.00	
-digger pit costs	44076.55	
-Lucky Joe 1-48 filing	3955.98	
-Lucky 1-12 and other LJ claims	11773.11	
	$71626.64	
Total Applicable Costs		$613459.55
4232 samples used in filing		$144.96/ sample

*Derived from Detailed Expenses V015J for month ending Sept. 30, 2003.

10.0 STATEMENT OF QUALIFICATIONS

I, Roger W. Hulstein, with business address:

Kennecott Canada Exploration Inc.
354-200 Granville Street
Vancouver, B.C.
V6C 1S4

and residential address in Whitehorse, Yukon Territory, do hereby certify that:

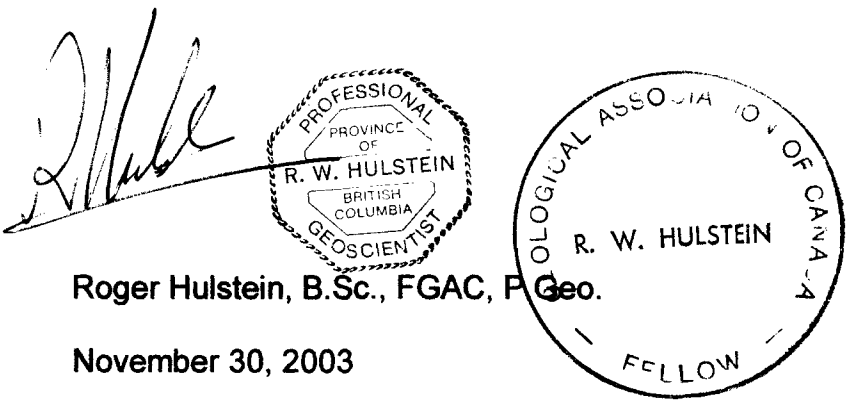
1. I am a geologist working under contract to Kennecott Canada Exploration Inc.

2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since 1978.

3. I am a fellow of the Geological Association of Canada (F3572).

4. I am registered as a professional geoscientist (No. 19127) with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

5. I am the author of this report on the LJS Property located in the Dawson Mining District, Yukon. The report is based on personal examination of the ground on various dates in June, 2003, fieldwork carried out by personnel of Kennecott Canada Exploration Inc. and on referenced sources.



Roger Hulstein, B.Sc., FGAC, P.Geo.

November 30, 2003

11.0 REFERENCES

Bostock, H.S., 1942. Ogilvie, Yukon Territory; Geological Survey of Canada, Map 711A, scale 1:250,000.

Gordy, S.P. and Ryan, J.J. 2003 Geology, Stewart River Area (Parts of 115N/1,2,7,8 and 115O/2-7,12), Yukon Territory; Geological Survey of Canada, Open File 1772, scale 1:100,000.

Mortenson, J.K., 1996.Geological Compilation Maps of the Northern Stewart River Map Area, Klondike and Sixtymile Districts, 1:50,000 scale. Indian and Northern Affairs Canada, Northern Affairs: Yukon Region, Open File 1996-1G

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Appendix A

Sample Code Abbreviations

SAMPLETYPE

Bleg	BG
Concentrate	PC
Drill - Core	DR
Drill - Cuttings	DT
Dmp - Bulk	DB
Dmp - Channel	DP
Dmp - Grab	DG
Dmp - Hi grade	DH
Float	FL
Gas	GS
Lake Sediment	LS
Other	OT
Rock	RK
Rk - Channel	CH
Rk - Chip	RC
Rk - Grab	RG
Rk - High Grade	RH
Soil	SL
Stream Sed	SS
Vegetation	VG
Water	WT

COUNTRIES

Australia	AUS
Canada	CAN
Costa Rica	COS
Honduras	HON
Jamaica	JAM
Mexico	MEX
Panama	PAN
United States	USA
Other	OTH

STATES-USA

Use postal code

STATES-MEX.

Aguascalientes	AG
Baja California	BC
Campeche	CA
Chiapas	CP
Chihuahua	CH
Coahuila	CO
Colima	CL
Distrito Federal	DF
Durango	DG
Guanajuato	GT
Guerrero	GR
Hidalgo	HG
Jalisco	JA
Mexico	MX
Michoacan	MI
Morelos	MO
Nayarit	NY
Nuevo Leon	NL
Oaxaca	OX
Puebla	PU
Queretaro	QO
Quintana Roo	QR
San Luis Pot	SL
Sinaloa	SI
Sonora	SO
Tabasco	TB
Tamaulipas	TA
Tlaxcala	TL
Veracruz	VR
Yucatan	YU
Zacatecas	ZA

COLOR

Black	BK
Blue	BL
Brown	BN
Buff	BF
Clear	CL
Gray	GY
Green	GN
Olive	OL
Orange	OR
Pink	PN
Purple	PP
Red	RD
Tan	TA
White	WT
Yellow	YW

PROVINCES

Alberta	AB
Brit. Columb.	BC
Manitoba	MB
New Bruns.	NB
Newfoundland	NF
N.W. Terr.	NT
Nova Scotia	NS
Ontario	ON
Prince Ed. Isl.	PE
Quebec	PQ
Saskatchewan	SK
Yukon	YK

SIEVE

MESH	1
MESH	2
MESH	3
MESH	4
MESH	70
MESH (1000um	18
MESH (106um)	140
MESH (1180um	16
MESH (125um)	120
MESH (1400um	14
MESH (150um)	100
MESH (1700um	12
MESH (180um)	80
MESH (2000um	10
MESH (2380um	8
MESH (250um)	60
MESH (250um)	60
MESH (2830um	7
MESH (3360um	6
MESH (355um)	45
MESH (4000um	5
MESH (425um)	40
MESH (44um)	325
MESH (500um)	35
MESH (53um)	270
MESH (600um)	30
MESH (63um)	230
MESH (710um)	25
MESH (75um)	200
MESH (850um)	20
MESH (90um)	170

COLOR MOD.

Same as color includes Q. quality.

Q - Bright	QB
Q - Clear	QC
Q - Dark	QD
Q - Dull	QU
Q - Light	QL
Q - Medium	QE

Age

Archean	ARC
Cambrian	CAM
Carboniferous	CAR
Cenozoic	CEN
Cretaceous	CRE
Devonian	DEV
Eocene	EOC
Jurassic	JUR
Mesozoic	MES
Miocene	MIO
Mississippian	MIS
Oligocene	OLI
Ordovician	ORD
Paleocene	PAE
Paleozoic	PAL
Pennsylvanian	PEN
Permian	PER
Pleistocene	PLE
Pliocene	PLI
Precambrian	PRC
Proterozoic	PRO
Quarternary	QUA
Recent	REC
Silurian	SIL
Tertiary	TER
Triassic	TRI

INTENSITY

Trace	T
Weak	W
Moderate	M
Strong	S

CLAY

MOISTURE

STR. GRAD.

High	H
Medium	M
Low	L

SS SAMPLE

Wet	W
Dry	D

DEPTH/DIST

Meters	M
Feet	F
Inches	I

MINERALS

Acanthite	ACA	Dickite	DIC	Neotaxite	NEO	Topaz	TOP
Actinolite	ACT	Diopside	DIO	Nepheline	NPH	Torbernite	TOR
Adularia	ADU	Dolomite	DOL	Niccolite	NIC	Tourmaline	TOU
Albite	ALB	Electrum	ELE	Nickel bloom	NIB	Tremolite	TRE
Almandine	ALM	Enargite	ENA	Nickeline	NKL	Turoquoise	TUR
Alunite	ALU	Enstatite	ENS	Nontronite	NON	Uraninite	URA
Amphibole	AMP	Epidote	EPI	Olivine	OLI	Vanadinite	VAN
Anatase	ATS	Epsonite	EPS	Opal	OPL	Wavelite	WAV
Andalusite	AND	Erythrite	ERY	Orpiment	OPR	Witherite	WIT
Anglesite	AGL	Exot. Geoth.	EXG	Orthoclase	ORT	Wolframite	WOL
Anhydrite	ANH	Exot. Hemat.	XHM	Orthopyrox.	OPX	Wollastonite	WLL
Ankerite	ANK	Exot. Jaros.	EXJ	Other	OTH	Wulfenite	WUL
Anorthoclase	ANT	Famatinite	FAM	Oxides	OXD	Xenotime	XEN
Ant. ochre	ANO	Fayalite	FAY	Paragonite	PAR	Zeolite	ZEO
Antlerite	ATL	Feldspar	FEL	Pentlandite	PEN	Zinc oxide	ZNX
Apatite	APA	Fluorite	FLU	Phengite	PHE	Zircon	ZIR
Aragonite	ARA	Franklinite	FRN	Phlogopite	PHL	Zoisite	ZOI
Argentite	ARG	Fuchsite	FUC	Plagioclase	PLA	Zunyite	ZUN
Arsenic ochre	ARO	Galena	GAL	Polybasite	PBS		
Arsenopyrite	ARS	Garnet	GAR	Powellite	POW		
Atacamite	ATC	Gersdorffite	GER	Proustite	PRU		
Augite	AUG	Gibbsite	GIB	Psilomelane	PSI		
Aut.-carnotite	AUC	Glaucophane	GAU	Pyrite	PYY		
Azurite	AZU	Goethite	GOE	Pyrochlore	PYC		
Barite	BAR	Gold	AUU	Pyrogyrite	PGY		
Beryl	BER	Graphite	GRA	Pyrolusite	PLU		
Biotite	BIO	Greenorite	GEE	Pyromorphite	PMO		
Bismuthinite	BIS	Gypsum	GYP	Pyrope	PYR		
Boehmite	BOE	Haematite	HEM	Pyrophyllite	PYP		
Bornite	BOR	Halite	HAL	Pyroxene	PYX		
Boulangerite	BOU	Hedenbergite	HED	Pyrrhotite	PYT		
Bournonite	BOU	Hornblende	HOR	Quartz	QTZ		
Brookite	BRO	Hubnerite	HUB	Realgar	REA		
Brucite	BRU	Hypersthene	HTH	Rhodochros.	RHO		
Bytownite	BYT	Idocrase	IDO	Rhodonite	RHO		
Calaverite	CAL	Illite	ILL	Ruby silver	RSI		
Calcite	CAL	Ilmenite	ILM	Rutile	RUT		
Carbon	CBN	Ilvaite	ILV	Samarskite	SAM		
Carnalite	CRN	Iron oxide	FEX	Sanidine	SAN		
Carnotite	CNT	Jamesonite	JAM	Scapolite	SCA		
Cassiterite	CAS	Jarosite	JAR	Scheelite	SCH		
Celestite	CEL	Johannsenite	JOH	Sericite	SEC		
Cerargyrite	CAR	K-feldspar	KFE	Serpentine	SER		
Cerussite	CER	Kaolinite	KAO	Siderite	SID		
Chalcanthite	CHT	Kyanite	KYA	Silica	SIL		
Chalcedony	CDY	Labradorite	LAB	Sillimanite	SLL		
Chalcocite	CHA	Lazurite	LAZ	Silver	AGG		
Chalcopyrite	CPY	Lead oxide	PBX	Silver halide	AGH		
Chlorite	CHL	Leucite	LEU	Ag sulfosalt	SSS		
Chondrodite	CHN	Limonite	LIM	Smaltite	SMA		
Chromite	CHR	Magnesite	MGT	Smithsonite	SMS		
Chrysocolla	CCA	Magnetite	MAG	Sodalite	SDA		
Cinnabar	CIN	Malachite	MAL	Specularite	SPU		
Clay	CLA	Mang. oxide	MNX	Sphalerite	SPH		
Clinopyrox	CPX	Manganite	MAN	Sphene	SPH	MIN. OCCUR.	
Clinozoisite	CLZ	Marble	MBL	Spinel	SPN	Bedded	BED
Cobaltite	COB	Marcasite	MAR	Staurolite	STA	Crystalline	XLN
Columbite	CLM	Marmorite	MRP	Stibiconite	SBC	Disseminated	DIS
Copper	CUU	Melanterite	MLT	Stibnite	STI	Groundmass	GRM
Copper oxide	COX	Mercury	HGG	Stilbite	STB	Massive	MAS
Cordierite	CRD	Miargyrite	MIA	Strontianite	STT	Phenocryst	PHN
Corundum	COR	Microcline	MIC	Sulfide	SFD	Porphyroblast	PRB
Covellite	COV	Millerite	MIL	Sulfur	SUL	Porphyroclast	PRC
Cryolite	CRO	Molybdenite	MDL	Sylvanite	SYV	Pseudomorph	PSU
Crysoberyl	CRB	Moly oxide	MDX	Sylvite	SVT	Replacement	REP
Crystoballite	CRY	Monazite	MNZ	Talc	TAL	Stockwork	STK
Cummingtonite	CMM	Montmorillonite	MON	Tellurides	TEL	Str Ctl - Fault	STT
Cuprite	CPR	Muscovite	MUS	Tennantite	TEN	Str Ctl - Frac.	STF
Diamond	DIA	Natrolite	NAT	Tenorite	TRT	Str Ctl - Other	STO
Diaspore	DSP	Naumannite	NAU	Tetrahedrite	TET	Vein	VEN

ROCK TYPE

Agglomerate	AGG	Laterite	LTR
Alaskite	ALK	Latite	LAT
Albitite	ALB	Lignite	LIG
Alluvium	ALV	Limestone	LST
Amphibolite	AMP	Limonite	LIM
Andesite	AND	Loess	LOS
Anterite	ANK	Malic	MAF
Anorthosite	ANO	Marble	MRB
Anthracite	ANT	Marl	MRL
Aplite	APL	Mass. Sulf.	MSF
Arenite	ARE	Metachert	MTC
Argillite	ARG	Meta Sed.	MTS
Arkose	ARK	Meta Volc.	MTV
Banded Iron Fm	BIF	Micrite	MIC
Basalt	BAS	Migmatite	MIG
Bauxite	BAU	Monzonite	MNZ
Bentonite	BEN	Mud	MUD
Boundstone	BST	Mudstone	MDS
Breccia	BXX	Mylonite	MYL
Bx. - Collapse	BXC	Neph. Syen.	NSY
Bx. - Hydroth.	BXH	Norite	NOR
Bx. - Intrusive	BXV	Outwash	OTW
Bx. - Sed.	BXN	Packstone	PKS
Bx. - Sln	BXL	Pegmatite	PGM
Bx. - Tectonic	BXT	Pelite	PEL
Calcite	CLT	Peridotite	PER
Caliche	CAL	Perlite	PRL
Carbonatite	CBT	Phonolite	PHN
Cataclasite	CAT	Phyllite	PHY
Chalk	CHK	Porphyry	POR
Chert	CHT	Pumice	PUM
Clay	CLY	Pyroxenite	PXX
Claystone	CLS	Quartz	QTZ
Coal	COL	Quartz Latite	QLT
Colluvium	CLV	Qtz Monzonite	QMZ
Conglomerate	CNG	Quartzite	QZT
Coquina	COQ	Rhyodacite	RYD
Dacite	DAC	Rhyolite	RHY
Diabase	DIA	Sand	SAD
Diatomaceous	DIE	Sand&grav.	S&G
Diorite	DIO	Sandstone	SST
Dolomite	DOL	Saprolite	SAP
Dunite	DUN	Schist	SCH
Eclogite	ECL	Schist - Calc	SHC
Evaporite	EVP	Serpentinite	SRP
Exhalite	EXH	Shale	SHL
Ferricrete	FEC	Shonkite	SHK
Gabbro	GAB	Shoshonite	SHS
Gneiss	GNE	Siderite	SID
Gossan	GOS	Siltstone	SLT
Gouge	GOU	Sinter	SNT
Grainstone	GRA	Skarn	SKR
Granite	GNT	Slate	SLA
Granodiorite	GRD	Stockwork	SWK
Granophyre	GRP	Syenite	SYE
Granulite	GRL	Syenodiorite	SYD
Gravel	GRV	Terrace gravels	TRG
Greywacke	GWK	Tholeiite	THL
Greenstone	GRS	Till	TIL
Hornblendite	HBT	Tonolite	TON
Hornfels	HNF	Trachyand.	TRA
Ignimbrite	IGN	Trachybas.	TRB
Iron fm.	IFM	Trachyte	TRY
Jasperoid	JAP	Travertine	TRT
Keratophyre	KER	Tufa	TFA
Kimberlite	KIM	Tuff	TUF
Komatiite	KOM	Ultramafic	ULM
Lahar	LAH	Vein	VEN
Lamproite	LMP	Volcaniclastic	VLC
Lamprophyre	LAM	Wackestone	WAK

ALTERATION

Actinolite	ACT	Tertiary	TER
Adv. Argillic	AVA	Tourmaline	TOU
Albitic	ALB	Tremolite	TRE
Amphibole	AMP	Unaltered	UNA
Argillic	ARG	Weathered	WEA
Barite	BAR	Wollastonite	WLL
Bauxite	BAU	Zeolithic	ZEO
Biotite	BIO	Zeolitization	ZEO
Bleached	BLE		
Calc-silicate	CSI		
Carbonatization	CAR		
Chloritic	CHL		
Decalcified	DEC		
Depleted	DPL		
Dissolution	DSS		
Dolomitization	DOL		
Endoskarn	ENS		
Enriched	ENR		
Epidote	EPI		
Epithermal	EPT		
Exoskarn	EXS		
Garnet	GAR		
Greenschist fac.	GSS		
Greisen	GRE		
Hornfelsed	HFD		
Hydrothermal	HYD		
Hypogene	HYP		
Idocrase	IDO		
Iron Oxide	FOX		
K-spar	KSP		
Kaolinitization	KAO		
Leached	LEA		
Magnetite	MAG		
Mn-oxide	MNX		
Muscovite	MUS		
Opalization	OPL		
Other	OTH		
Oxidation	OXI		
Phyllic	PHY		
Potassic	POT		
Primary	PRI		
Prograde	PRO		
Propylitic	PRP		
Pyritization	PYR		
Pyroxene	PYX		
Pyrrhotite	PYT		
Quartz	QTZ		
Qtz-Kspar	QKS		
Qtz-Tourmaline	QTO		
Qtz-carbonate	QCA		
Qtz-chlor.-Ser.	QCS		
Qtz-clay	QCL		
Qtz-sericite	QSE		
Reduced	RED		
Retrograde	RTR		
Sanded	SND		
Saussuritic	SAU		
Secondary	SEC		
Sericitic	SER		
Serpentine	SER		
Serpentinized	SRZ		
Siderite	SID		
Si-carbonate	SCA		
Silicification	SLC		
Skarn	SKR		
Solution	SLN		
Spilitic	SPL		
Sulfide	SFD		
Supergene	SUP		
Talc	TAL		

STRUCTURE

Boxwork	BOX		
Bx - Collapse	BXC		
Bx - Hydroth.	BXY		
Bx - Phreatic	BXH		
Bx - Pipe	BXP		
Bx - Sed.	BXS		
Bx - Tectonic	BXT		
Cleavage	CLE		
Contact	CON		
Fault	FLT		
Flt.-Normal	FLN		
Flt.-Oblique	FLO		
Flt.-Reverse	FLR		
Flt.-Strike slip	FSS		
Flt.-Thrust	FTH		
Flamme	FIA		
Flow banded	FLB		
Fld-Antiform	FOA		
Fld-Synform	FOS		
Folded	FLD		
Foliation	FOL		
Ft.wall-Ore	FWO		
Ft.wall-Struc	FWS		
Ft.wall-Vein	FWV		
Fractured	FRA		
Hng.wall-Ore	HWO		
Hng.wall-Struc	HWS		
Hng.wall-Vein	HWV		
Joints	JOI		
Jts.-Blocky	JBL		
Jts.-Columnar	JCO		
Jts.-platy	JPL		
Lineation	LIN		
Other	OTH		
Sheared	SHD		
Soft Sed. Def.	SSD		
Sln Structures	SUS		
Stockwork	STK		
Vein	VEN		
Void Filling	VFL		

ROCK MODIFIERS

Actinolite	ACT	Clst.-Well srt	WEL	Ign.-Devitrified	IDV	Porphyritic	POR
Agglomerate	AGG	Clst.-Angular	CAN	Ign.-Flow band.	IFB	Prehn-Pump.	PPF
Air fall	TAR	Clst.-Bio.	CBI	Ign.-Intrus.	IIN	Pumiceous	PUM
Alaskite	ALK	Clst.-Mixed	CLM	Ign.-Pegmat.	IPG	Pyrite	PYY
Alb-Epi-Hornf.	AEH	Clst.-Round	ROC	Ign.-Plug	PLG	Pyroclastic	PRC
Albitite	ALB	Clay	CLA	Ign.-Pluton	IPL	Pyrophyllite	PYP
Algal Struc	ALS	Clay	CLY	Ign.-Porphy.	IPO	Pyroxene	PYX
Amphibole	AMP	Clay pebbles	CLP	Ign.-Ultrabas.	IUB	Quartz	QTZ
Amphibolite	AMT	Coal	COL	Ignimbrite	IGN	Quartzose	QTS
Amphib. facies	AMF	Cobbly	COB	Intrusive - Sill	ISL	Re-xtal	REC
Andalusite	ANU	Colluvium	CLV	Jasperoid	JAP	Repl.	REP
Andesite	AND	Columnar	CLN	Jointed	JOI	Rhyodacite	RYD
Anorthosite	ANO	Concretions	CNC	K-feldspar	KFE	Rhyolite	RHY
Anthracite	ANT	Conglomeratic	CNG	Karst	KAR	Ripple marks	RIM
Apatite	APA	Coquina	COQ	Keratophyre	KER	Rutile	RUT
Aphanitic	APH	Corundum	COR	Kimberlite	KIM	Sand&Grav.	S&G
Aplitic	APL	Crystalline	CRY	Komatiite	KOM	Sandstone	SST
Arenite	ARE	Dacite	DAC	Kyanite	KYA	Sandy	SDY
Argillaceous	ARG	Diabase	DIA	Lahar	LAH	Sanidine	SAN
Arkosic	ARK	Dike	DIK	Laminated	LAM	Schistose	SCH
Ash flow	TAF	Diopside	DIO	Lam.-Conv.	LCN	Scarlaceous	SCO
Augite	AUG	Diorite	DIR	Lam.-Parall.	LLP	Scoured	SCS
Balls & Pillows	BAP	Dolomite	DOL	Lamprolite	LMP	Sericite	SEC
Banded	BAN	Dunite	DUN	Lamprophyre	LPH	Serpentine	SER
Basalt	BAS	Eclogite	ECF	Latite	LAT	Serpentinized	SRP
Bedded	BED	Epidote	EPI	Leached	LEA	Shaly	SHA
Bd-cross	BCR	Epi-Amph.	EAF	Lignite	LIG	Sheared	SHD
Bd-Epsilon	BCB	Evaporite	EVP	Limestone	LST	Silica	SIL
Bd-Flaser	BFL	Exhalative	EXH	Lineated	LIN	Siliceous	SLS
Bd-Graded	BGR	Extr.-Flow	FLO	Lithic	TLI	Sillimanite	SLL
Bd-Lentic.	BLN	Extr.-Pillow	PIL	Lithographic	LTH	Silty	SLT
Bd-Massive	BMV	Extr.-Trachy.	TRA	Mafic	MAF	Sinsery	SNT
Bd-Med.	BME	Feldspar	FLD	Magnetite	MAG	Soft-sed def.	SSD
Bd-Parallel	BPL	Feldspathic	FEL	Marble	MRB	Sol'n Struc.	SOS
Bd-Planar	BLL	Ferruginous	FER	Meripoeite	MRP	Sorted	SOR
Bd-Thick	BTH	Flame str.	FLS	Mass. Sulf.	MSF	Sparry	SPA
Bd-Thin	BTN	Fluidized	FLU	Megacrystic	MEG	Spherulitic	SPR
Bd-Wavy	WAB	Flute casts	FLC	Metamorph.	MET	Staurolite	STA
Bentonite	BEN	Fossiliferous	FOS	Microlitic	MIA	Stilbite	STB
Bimodal	BIM	Friable	FRI	Micaceous	MIC	Stockwork	STO
Biotite	BIO	Fuchsite	FUC	Micritic	MCR	Syenite	SYE
Bioturbated	BIT	Gabbro	GAB	Migmatitic	MIG	Talc	TAL
Blocky	BLK	Garnet	GAR	Milky	MIL	Tephra	TEP
Bouldery	BDY	Glassy	GLA	Monzonite	MNZ	Tholeiitic	THL
Breccia	BXX	Glauc-schist	GSF	Mud	MUD	Till	TIL
Bx - Collapse	BXC	Gneissose	GNE	Muscovite	MUS	Topaz	TOP
Bx - Hydroth.	BXH	Gossanous	GOS	Mylonite	MYL	Tourmaline	TOU
Bx - Intrusive	BXV	Gouge	GOU	Norite	NOR	Trachyte	TRY
Bx - Sed.	BXN	Grn-Coarse	GNC	Olivine	OLI	Travertine	TRT
Bx - Soln	BXL	Grn-Equigran.	GEQ	Oolitic	OOL	Tremolite	TRE
Bx - Tectonic	BXT	Grn-Fine	GNF	Opal	OPL	Tufa	TFA
Breccia Pipe	BXP	Grn-Med.	GRM	Orthoclase	ORT	Tuff	TUF
Brecciated	BRX	Granite	GNT	Other	OTH	Tuffaceous	TFC
Burrowed	BUR	Granodiorite	GRD	Outwash	OTW	Ultramafic	ULM
Bytownite	BYT	Granophyre	GRP	Oxidized	OXI	Unwelded	TNW
Calcareous	CLC	Granulite	GRF	Packstone	PKS	Vein	VEN
Calcite	CAL	Graphite	GRA	Pebbly	PEB	Veined	VND
Calcite	CLT	Graphitic	GRA	Pegmatite	PGM	Vent	VNT
Caliche	CLH	Gravel	GRV	Pellet(oid)	PLD	Vitric	TVI
Carbon	CBN	Graywacke	GWK	Pelite	PEL	Volcanic	VOL
Carbonatite	CBT	Greenschist	GSS	Peridotite	PER	Volc.Clastic	VCL
Cataclasite	CAT	Greenstone	GRS	Perlite	PRL	Vuggy	VUG
Channels	CHA	Haematite	HEM	Phlogopite	PHL	Water laid	TWL
Cherty	CHE	Hornblende	HOR	Phonolite	PHN	Welded	WLD
Chlorite	CHL	Hornfelsed	HFD	Phreato-Mag.	PHM	Wollastonite	WLL
Cinder	CIN	Hrnblnd-hrnfls	HHF	Phyllitic	PHY	Zeolite	ZEO
Clst.-Clst sup.	CCL	Hydrothermal	HYD	Plagioclase	PLA	Zeolite facies	ZEF
Clst.-Mat. sup.	MSU	Idocrase	IDO	Platy	PTY	Zircon	ZIR
Clst.-Poor srt	CPS	Ign.-Acid	IAD	Polymictic	PLM		
Clst.-Unsrt	UNS	Ign.-Basic	IBA	Porcelain.	PCL		

Appendix B

Analytical Procedures

SOIL SAMPLES

Sample Preparation Package – SCR-41F

Dry sample and dry-sieve to –75 micron

Sample is dried and then dry-sieved using a 75 micron (200 mesh) screen. The plus fraction is retained unless disposal is requested. This method is appropriate for soil or sediment samples up to one kilogram in weight.

ALS Chemex Method Code	Description
SCR-41F	Sample is dry-sieved to -75 micron.

Fire Assay Procedure - Au-ICP21 and Au-ICP22
Fire Assay Fusion ICP-AES Finish

Sample Decomposition: Fire Assay Fusion
Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 ml dilute nitric acid in the microwave oven. 0.5 ml concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 ml with de-mineralized water, and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

ALS Chemex Method Code	Element	Symbol	Sample Weight	Detection Limit	Upper Limit	Units
Au-ICP21	Gold	Au	30g	0.001	10	ppm
Au-ICP22	Gold	Au	50g	0.001	10	ppm

Geochemical Procedure - ME-ICP41
Trace Level Methods Using Conventional ICP-AES Analysis

Sample Decomposition: Nitric Aqua Regia Digestion
Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)

A prepared sample (0.50 grams) is digested with aqua regia for at least one hour in a graphite heating block. After cooling, the resulting solution is diluted to 12.5 ml with demineralized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. The analytical results are corrected for inter-element spectral interferences.

Element	Symbol	Detection Limit	Upper Limit	Units
Aluminum*	Al	0.01	15	%
Antimony	Sb	2	10,000	ppm
Arsenic	As	2	10,000	ppm
Barium*	Ba	10	10,000	ppm
Beryllium*	Be	0.5	100	ppm
Bismuth	Bi	2	10,000	ppm
Boron*	B	10	10,000 ppm	ppm
Cadmium	Cd	0.5	500	ppm
Calcium*	Ca	0.01	15	%
Chromium*	Cr	1	10,000	ppm
Cobalt	Co	1	10,000	ppm
Copper	Cu	1	10,000	ppm
Gallium*	Ga	10	10,000	ppm
Iron	Fe	0.01	15	%
Lanthanum*	La	10	10,000	ppm
Lead	Pb	2	10,000	ppm
Magnesium*	Mg	0.01	15	%
Manganese	Mn	5	10,000	ppm
Mercury	Hg	1	10,000	ppm
Molybdenum	Mo	1	10,000	ppm

Geochemical Procedure - ME-ICP41

Trace Level Methods Using Conventional ICP-AES Analysis *(con't)*

Element	Symbol	Detection Limit	Upper Limit	Units
Nickel	Ni	1	10,000	ppm
Phosphorus	P	10	10,000	ppm
Potassium*	K	0.01	10	%
Scandium*	Sc	1	10,000	ppm
Silver	Ag	0.2	100	ppm
Sodium*	Na	0.01	10 %	%
Strontium*	Sr	1	10,000	ppm
Sulfur	S	0.01	10	%
Thallium*	Tl	10	10,000	ppm
Titanium*	Ti	0.01	10	%
Tungsten*	W	10	10,000	ppm
Uranium	U	10	10,000	ppm
Vanadium	V	1	10,000	ppm
Zinc	Zn	2	10,000	ppm

*Elements for which the digestion is possibly incomplete.

Appendix C

Soil Sample Descriptions and Analytical Results

Kennecott Canada Exploration Inc.
LJS 1-38 Claims, Lucky Joe Project, Yukon Territory
2003 Soil Sample, Locations, Descriptions and Analytical Results

Sample Number	UTM East	UTM North	Geologist Name	Sample Date YR/MN/DY	Sample Color	Color Modify	Sample Depth	Units	Sample % Organics	Sample Horizon	Sample Clay	Sample Moisture	Sample Slope	Sample Environ.	Sample Frost	Dominent Rock Type
NA13684	576222	7037086	BOYER	20030630	BN	QL	0.2	M	10	BC	L	L	F	BDR	N	SCH
NA13685	576012	7037150	BOYER	20030630	BN	QL	0.2	M	5	BC	M	M	G	BDR	N	SCH
NA13686	575840	7037280	BOYER	20030630	BN	QL	0.3	M	8	BC	M	M	F	BDR	N	SCH
NA13687	575628	7037324	BOYER	20030630	BN	QL	0.25	M	5	BC	M	L	G	BDR	N	
NA13688	575448	7037409	BOYER	20030630	BN	QL	0.4	M	5	BC	M	M	M	BDR	N	
NA13689	575321	7037572	BOYER	20030630	BN	QE	0.3	M	5	C	M	M	M	BDR	N	
NA13690	575210	7037748	BOYER	20030630	BN	QE	0.2	M	10	BC	M	M	F	BDR	N	SCH
NA13691	575112	7037958	BOYER	20030630	BN	QE	0.3	M	8	BC	M	M	G	BDR	N	
NA13823	575621	7040860	PRESNELL	20030628	BN	QE	1.5	F	2	C	L	L	G	BDR	N	SCH
NA13643	576157	7037003	BOYER	20030628	OR	QE	0.2	M	10	BC	M	M	M	BDR	N	
NA13644	575995	7036869	BOYER	20030628	BN	QE	0.3	M	5	BC	M	M	M	BDR	N	SCH
NA13645	575837	7036723	BOYER	20030628	BN	QE	0.4	M	5	C	M	M	M	BDR	N	SCH
NA13646	575727	7036531	BOYER	20030628	BN	QE	0.2	M	10	BC	M	M	G	BDR	N	
NA13647	575563	7036410	BOYER	20030628	BN	QE	0.15	M	10	B	M	M	F	BDR	N	
NA13648	575419	7036267	BOYER	20030628	BN	QE	0.25	M	10	BC	M	M	F	BDR	N	
NA13649	575267	7036134	BOYER	20030628	TA	QL	0.2	M	10	BC	L	L	M	BDR	N	
NA13824	575537	7041060	PRESNELL	20030628	TA	QD	1.5	F	2	C	L	L	G	BDR	N	SCH
NA13825	575492	7041249	PRESNELL	20030628	TA	QD	1.25	F	2	C	L	L	F	BDR	N	SCH
NA13826	575390	7041426	PRESNELL	20030628	BN	QE	1	F	3	C	L	L	F	BDR	N	SCH
NA13827	575256	7041580	PRESNELL	20030628	TA	QD	1.5	F	3	C	L	L	G	BDR	N	SCH
NA13793	575797	7040581	HULSTEIN	20030628	BN	QE	0.4	M	0	B	L	L	G	BDR	N	AMP
NA13794	575973	7040472	HULSTEIN	20030628	BN	QE	0.4	M	0	C	L	L	G	BDR	N	AMP
NA13795	576143	7040373	HULSTEIN	20030628	BN	QE	0.4	M	0	B	L	L	G	BDR	N	AMP
NA13796	576341	7040325	HULSTEIN	20030628	OL	QE	0.4	M	0	C	L	L	G	BDR	N	AMP
NA13797	576543	7040264	HULSTEIN	20030628	TA	QE	0.3	M	5	B	M	L	G	BDR	N	SCH
NA13798	576731	7040186	HULSTEIN	20030628	OL	QE	0.4	M	0	B	L	L	G	BDR	N	SCH
NA13799	576941	7040146	HULSTEIN	20030628	OL	QE	0.35	M	0	C	L	L	M	BDR	N	SCH
NA13850	577141	7040130	HULSTEIN	20030628	BN	QE	0.2	M		B	L	L	G	BDR	N	SCH
NA13851	577296	7040003	HULSTEIN	20030628	BN	QE	0.35	M		B	L	L	G	BDR	N	AMP
NA13852	577404	7039834	HULSTEIN	20030628	GN	QD	0.45	M		C	L	L	F	BDR	N	AMP
NA13853	577501	7039665	HULSTEIN	20030628	OL	QD	0.25	M		B	L	L	G	BDR	N	AMP
NA13854	577460	7039471	HULSTEIN	20030628	BN	QE	0.25	M		B	L	L	G	BDR	N	AMP
NA13855	577312	7039329	HULSTEIN	20030628	BN	QE	0.5	M		B	L	L	G	BDR	N	AMP

Sample Number	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	C %	Sb ppm	Sc ppm	Sr ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
NA14465	40	3.37	10	-1	0.25	10	0.98	237	-1	0.01	20	360	4	0.02	3	8	21	0.16	-10	-10	80	-10	56
NA14466	26	2.77	10	-1	0.04	10	0.51	408	-1	0.01	23	220	17	0.01	3	4	18	0.13	-10	-10	59	-10	316
NA14467	35	3.97	10	-1	0.2	10	0.97	265	1	0.02	16	540	4	0.01	2	6	28	0.17	-10	-10	116	-10	54
NA14468	29	4.69	10	-1	0.5	10	1.42	500	1	0.02	19	290	2	0.01	3	7	81	0.21	-10	-10	110	-10	130
NA14469	115	4.2	10	-1	0.23	10	0.9	470	-1	0.03	26	530	4	-0.01	-2	9	26	0.2	-10	-10	114	-10	90
NA14470	17	2.15	-10	1	0.04	10	0.35	162	-1	0.01	19	150	7	-0.01	2	3	13	0.08	-10	-10	49	-10	37
NA14471	15	3.04	10	-1	0.09	10	0.64	297	-1	0.01	18	170	6	-0.01	3	3	17	0.13	-10	-10	70	-10	49
NA14472	24	3.83	10	-1	0.64	10	1.02	461	-1	0.01	17	210	6	0.01	3	3	19	0.19	-10	-10	81	-10	68
NA14473	23	2.69	-10	-1	0.16	20	0.62	370	1	0.03	18	710	5	0.01	2	4	37	0.12	-10	-10	62	-10	53
NA14474	12	2.72	10	-1	0.07	30	0.4	257	-1	0.01	14	270	8	0.01	2	3	10	0.09	-10	-10	54	-10	57
NA14475	14	2.43	-10	-1	0.06	10	0.37	275	-1	0.01	15	160	10	0.01	4	3	17	0.08	-10	-10	54	-10	39
NA14476	13	3.25	10	-1	0.11	10	0.4	790	1	0.01	17	830	10	0.01	2	3	22	0.08	-10	-10	66	-10	63
NA14477	34	2.88	-10	-1	0.06	40	0.49	392	-1	0.01	25	180	8	-0.01	3	8	25	0.08	-10	-10	53	-10	55
NA14478	16	1.92	-10	-1	0.06	10	0.39	209	-1	0.02	14	370	6	-0.01	2	4	26	0.08	-10	-10	41	-10	36
NA14479	20	3.4	10	-1	0.23	30	0.58	335	1	0.01	14	670	13	0.01	2	6	28	0.09	-10	-10	69	-10	70
NA14029	87	10.25	10	1	0.66	40	1.29	480	10	0.07	23	1110	3	1.28	3	5	58	0.14	-10	-10	91	-10	94
NA14031	52	5.75	10	1	0.13	10	0.8	757	2	0.05	31	1250	5	0.03	3	12	40	0.12	-10	-10	154	-10	102
NA14032	27	2.83	10	-1	0.08	10	0.55	333	2	0.03	21	840	6	0.03	-2	5	29	0.12	-10	-10	73	-10	77
NA14033	235	5.99	10	-1	0.67	50	0.81	628	-1	0.02	33	1160	8	0.09	3	8	35	0.25	-10	-10	51	-10	2010
NA16238	30	2.81	10	-1	0.08	10	0.94	388	1	0.04	30	320	4	-0.01	-2	6	39	0.19	-10	-10	74	-10	34
NA16239	60	6.85	20	-1	0.47	20	1.82	462	2	0.03	13	2310	2	-0.01	-2	15	31	0.13	-10	-10	110	-10	42
NA16240	72	4.73	10	-1	0.78	50	1.11	381	6	0.04	37	960	24	0.51	-2	4	59	0.12	-10	-10	69	-10	115
NA16241	41	4.71	10	-1	0.09	10	0.61	534	2	0.01	40	450	10	0.01	-2	6	13	0.16	-10	-10	89	-10	218
NA16242	38	3.31	10	-1	0.3	20	0.8	552	2	0.01	11	320	6	-0.01	-2	5	17	0.09	-10	-10	65	-10	62
NA16243	18	3.59	10	-1	0.37	10	0.79	459	2	0.01	18	420	8	0.01	-2	4	17	0.15	-10	-10	73	-10	57
NA16244	18	1.58	-10	-1	0.06	20	0.14	331	1	0.01	12	180	8	-0.01	-2	3	10	0.03	-10	-10	18	-10	25
NA16245	28	3.63	10	-1	0.62	30	1.02	781	2	0.02	14	1130	7	0.01	-2	9	30	0.12	-10	-10	84	-10	69
NA16246	164	5.06	10	-1	0.09	50	0.41	1765	1	0.01	270	3180	16	0.01	-2	13	142	0.05	-10	10	125	-10	78
NA16247	33	4.01	10	-1	0.62	10	1.29	684	3	0.01	20	440	8	0.01	-2	4	21	0.19	-10	-10	82	-10	76
NA16248	48	4.54	10	-1	0.36	20	0.83	444	2	0.01	29	810	11	0.02	-2	4	13	0.11	-10	-10	66	-10	73
NA16249	52	8.82	10	-1	0.56	10	0.84	453	2	0.14	11	1300	11	0.65	-2	22	78	0.35	-10	-10	313	-10	95

Sample Number	Sample Quality	Sample Description Notes	Au ppb	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm
NA14465	H		2	-0.2	2.9	11	-10	330	-0.5	-2	0.17	-0.5	11	60
NA14466	H		-1	0.2	1.94	11	-10	150	0.5	-2	0.26	0.7	8	30
NA14467	H		3	0.3	2.77	10	-10	260	-0.5	-2	0.28	-0.5	14	26
NA14468	H		-1	-0.2	3.83	10	-10	410	0.5	-2	0.21	-0.5	17	39
NA14469	H		-1	-0.2	2.52	5	-10	350	0.5	-2	0.37	-0.5	18	17
NA14470	H		3	-0.2	1.75	5	-10	150	-0.5	-2	0.12	-0.5	7	26
NA14471	M		2	-0.2	2.24	13	-10	140	-0.5	-2	0.15	-0.5	10	27
NA14472	M		1	-0.2	2.58	10	-10	190	-0.5	-2	0.19	-0.5	12	25
NA14473	H		7	-0.2	1.61	4	-10	220	-0.5	-2	0.53	-0.5	8	24
NA14474	H		-1	-0.2	2.17	10	-10	110	-0.5	-2	0.09	-0.5	7	22
NA14475	M		-1	-0.2	1.82	13	-10	160	-0.5	-2	0.14	-0.5	6	28
NA14476	M		2	-0.2	2.33	12	-10	240	-0.5	-2	0.22	-0.5	9	27
NA14477	H		6	0.2	1.89	8	-10	220	0.9	-2	0.26	-0.5	11	30
NA14478	H		1	-0.2	1.27	8	-10	170	-0.5	-2	0.34	-0.5	6	19
NA14479	H		1	-0.2	2.25	11	-10	170	0.5	-2	0.35	-0.5	9	21
NA14029	H	KILL ZONE - NOTHING GROWING IN A 10X5 AREA REEKS OF SULFIDE	5	1.2	2.52	9	-10	70	-0.5	3	0.1	-0.5	7	49
NA14031	H		9	-0.2	2.46	7	-10	300	-0.5	2	0.99	0.7	31	23
NA14032	M	BIO-SCH	4	-0.2	1.64	2	-10	260	-0.5	2	0.49	0.6	15	26
NA14033	H		4	-0.2	2.66	2	-10	400	1	3	0.6	7.9	18	49
NA16238	H		2	-0.2	2.33	-2	-10	180	-0.5	-2	0.57	-0.5	17	36
NA16239	H	V. PUNKY SOIL, NO SOLID RX CHIPS LOTS OF ORG COLORS	1	-0.2	3.48	3	-10	280	0.6	-2	0.9	-0.5	25	14
NA16240	H	BIO-MUSC-FEL-QTZ SCH	1	1.2	3.41	-2	-10	500	1.2	-2	0.1	0.7	9	39
NA16241	H	QTZ-FEL GNE EPIDOTE ALTERATION RED CLY PROBABLY DUE TO FIRE SUBCROP NEARBY	2	-0.2	2.34	10	-10	130	0.8	-2	0.21	1	17	63
NA16242	H	BIO-QTZ-FEL GNE	2	-0.2	2.33	2	-10	140	0.5	-2	0.21	-0.5	12	16
NA16243	H	BIO-QTZ-FEL SCH	3	-0.2	2.42	7	-10	180	0.5	-2	0.21	0.6	14	28
NA16244	H	MORE CLAY@BTTM OF HOLE~80CM POSSIBLY GOUGE EXTREMELY WTHRD QTZ-FEL GNE LOC HEM	2	-0.2	0.7	5	-10	120	0.6	-2	0.13	-0.5	3	12
NA16245	H	NO SOLID CHUNCKS OF ROCK,V. WTHRD,FAIR AMOUNT OF BIO	2	-0.2	2.2	-2	-10	280	-0.5	-2	0.69	-0.5	13	18
NA16246	H	V. OR CLAY-PROBABLE GOUGE,A COUPLE OF CHUNKS OF EQUIGRANULARQTZ-FEL RX- TOO SMALL TO TELLIF THERE IS A FABRIC	5	-0.2	1.46	6	-10	760	3.9	-2	1.02	-0.5	27	286
NA16247	H	BIO-QTZ-FEL-SCH	2	-0.2	2.84	-2	-10	220	0.6	-2	0.28	-0.5	21	32
NA16248	H	BIO SCH - MYLONITIC	2	-0.2	2.61	5	-10	160	0.9	-2	0.21	-0.5	14	39
NA16249	H	HOR-BIO SCH SOIL BECOMES V. OR @70CM	2	-0.2	2.73	-2	-10	300	-0.5	-2	0.72	-0.5	14	9

Sample Number	UTM East	UTM North	Geologist Name	Sample Date YR/MN/DY	Sample Color	Color Modify	Sample Depth	Units	Sample % Organics	Sample Horizon	Sample Clay	Sample Moisture	Sample Slope	Sample Environ.	Sample Frost	Dominent Rock Type
NA14465	577746	7036653	BOYER	20030723	OR	QE	0.3	M	5	B	M	M	G	BDR	N	SCH
NA14466	577934	7036538	BOYER	20030723	BN	QE	0.2	M	8	BC	M	L	G	BDR	N	
NA14467	578136	7036605	BOYER	20030723	OR	QE	0.3	M	5	BC	M	L	F	BDR	N	
NA14468	578344	7036687	BOYER	20030723	OR	QE	0.3	M	8	BC	M	L	M	BDR	N	SCH
NA14469	578546	7036765	BOYER	20030723	BN	QL	0.3	M	8	BC	M	L	F	BDR	N	
NA14470	578753	7036702	BOYER	20030723	BN	QE	0.3	M	10	C	M	L	F	BDR	N	
NA14471	578950	7036636	BOYER	20030723	BN	QL	0.2	M	10	BC	M	L	G	BDR	N	
NA14472	579100	7036496	BOYER	20030723	BN	QL	0.3	M	8	BC	M	L	M	BDR	N	
NA14473	579300	7036513	BOYER	20030723	BN	QE	0.7	M	3	BC	M	L	M	BDR	N	SCH
NA14474	579504	7036585	BOYER	20030723	OR	QE	0.2	M	8	BC	M	L	G	BDR	N	
NA14475	579710	7036575	BOYER	20030723	BN	QE	0.3	M	3	BC	M	M	M	BDR	N	
NA14476	579903	7036526	BOYER	20030723	OR	QE	0.2	M	10	B	M	L	M	BDR	N	
NA14477	580109	7036506	BOYER	20030723	BN	QL	0.3	M	5	BC	M	L	M	BDR	N	
NA14478	580314	7036497	BOYER	20030723	BN	QE	0.3	M	8	BC	M	L	M	BDR	N	
NA14479	580448	7036353	BOYER	20030723	BN	QL	0.4	M	4	BC	M	L	M	BDR	N	
NA14029	578792	7038898	FRANKLIN	20030804	OR	QB	0.3	M		C	L	L	G	BDR	N	SCH
NA14031	578764	7038692	FRANKLIN	20030804	GN	QD	0.55	M		C	L	L	M	BDR	N	AMP
NA14032	578648	7038537	FRANKLIN	20030804	GY	QD	0.55	M	7	C	M	H	M	COL	N	SCH
NA14033	578773	7038246	FRANKLIN	20030804	BN	QL	0.25	M	2	C	L	L	G	BDR	N	
NA16238	577669	7039422	FRANKLIN	20030804	GN	QE	0.45	M		C	L	L	G	BDR	N	AMP
NA16239	577866	7039386	FRANKLIN	20030804	GY	QL	0.45	M		C	L	L	F	BDR	N	SCH
NA16240	578067	7039369	FRANKLIN	20030804	TA	QE	0.2	M		C	L	L	G	BDR	N	SCH
NA16241	578267	7039345	FRANKLIN	20030804	RD	QD	0.2	M		C	L	L	G	BDR	N	GNE
NA16242	578457	7039412	FRANKLIN	20030804	TA	QL	0.25	M		C	L	L	F	BDR	N	GNE
NA16243	578658	7039395	FRANKLIN	20030804	TA	QE	0.15	M	2	C	L	L	F	BDR	N	SCH
NA16244	578959	7039362	FRANKLIN	20030804	YW	QD	0.65	M		C	M	M	F	BDR	N	GNE
NA16245	579144	7039293	FRANKLIN	20030804	GY	QE	0.5	M	1	C	L	M	G	BDR	N	SCH
NA16246	579345	7039324	FRANKLIN	20030804	OR	QB	0.55	M		C	H	M	G	BDR	N	GOU
NA16247	579298	7039131	FRANKLIN	20030804	BN	QE	0.35	M	5	C	L	L	M	BDR	N	SCH
NA16248	579108	7039055	FRANKLIN	20030804	GY	QL	0.25	M	2	C	L	L	M	BDR	N	SCH
NA16249	578930	7038963	FRANKLIN	20030804	GN	QD	0.5	M	1	C	L	M	M	BDR	N	SCH

Sample Number	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	C %	Sb ppm	Sc ppm	Sr ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
NA13856	26	4.9	10	2	0.66	-10	1.75	516	-1	0.03	14	830	-2	0.01	3	5	31	0.29	-10	-10	122	-10	67
NA13857	39	3.05	10	1	0.1	10	0.66	373	-1	0.02	23	490	6	0.01	-2	4	21	0.13	-10	-10	63	-10	59
NA13858	38	3.95	10	1	0.13	20	1.22	443	-1	0.02	38	140	-2	-0.01	-2	6	17	0.23	-10	-10	95	-10	68
NA13859	30	3.29	10	1	0.06	10	0.63	398	-1	0.01	33	280	6	0.01	-2	7	25	0.12	-10	-10	72	-10	70
NA13860	22	3.2	10	-1	0.07	10	0.54	358	-1	0.01	21	240	3	0.01	-2	4	19	0.11	-10	-10	58	-10	61
NA13861	41	9.9	20	1	0.05	10	2.18	1515	-1	0.07	8	530	-2	0.02	-2	24	105	0.36	-10	-10	273	-10	160
NA13862	45	7.02	20	1	0.89	10	3.33	1355	-1	0.02	5	1510	-2	0.01	-2	22	66	0.3	-10	-10	278	-10	500
NA13863	30	6.46	10	1	0.12	10	1.72	952	-1	0.03	9	1490	-2	0.01	-2	18	179	0.1	10	-10	173	-10	152
NA13864	38	5.34	10	1	0.26	10	0.7	465	-1	0.03	12	470	-2	0.01	-2	12	84	0.15	-10	-10	47	-10	78
NA13865	41	4.14	10	1	0.1	10	1.09	454	-1	0.01	15	510	4	0.06	-2	10	16	0.11	-10	-10	50	-10	152
NA13866	45	5.11	10	1	0.86	10	1.4	548	-1	0.05	9	450	8	0.12	2	11	120	0.3	-10	-10	184	-10	121
NA13868	57	6.12	10	2	0.99	-10	1.16	556	3	0.03	6	690	2	0.5	2	5	41	0.37	-10	-10	145	-10	232
NA13896	23	4.21	10	2	0.31	30	0.79	501	-1	0.02	16	370	2	0.04	-2	9	27	0.16	-10	-10	64	-10	96
NA13897	18	5.03	10	1	0.32	10	1.05	607	-1	0.09	4	3540	-2	-0.01	-2	12	59	0.18	-10	-10	105	-10	77
NA13898	85	3.93	10	2	0.65	50	0.95	218	2	0.03	21	580	9	0.53	-2	5	100	0.11	-10	-10	66	-10	104
NA13899	46	3.72	10	1	0.08	20	0.66	367	1	0.02	32	480	11	0.04	3	6	38	0.13	-10	-10	78	-10	75
NA14750	50	4.73	10	1	0.49	10	1.2	440	-1	0.07	19	1380	-2	0.04	2	8	39	0.32	-10	-10	156	-10	88
NA14751	166	4.81	10	-1	0.7	30	1.12	450	-1	0.03	24	990	5	0.08	-2	7	40	0.26	-10	-10	107	-10	78
NA14752	51	3.95	10	2	0.56	20	1.18	483	1	0.03	38	590	6	0.02	-2	5	76	0.27	-10	-10	103	-10	135
NA14753	23	2.93	10	-1	0.25	20	0.79	331	-1	0.02	23	340	4	0.01	2	4	27	0.2	-10	-10	61	-10	64
NA14754	27	2.72	10	1	0.24	20	0.7	358	-1	0.02	19	320	5	0.01	-2	4	33	0.17	-10	-10	60	-10	65
NA14758	34	4.34	10	1	0.08	10	1.23	656	-1	0.03	28	350	2	0.01	3	6	108	0.18	-10	-10	96	-10	77
NA14759	25	3.6	10	1	0.08	10	0.83	475	-1	0.02	19	520	-2	0.01	2	5	27	0.14	-10	-10	75	-10	78
NA14760	25	2.6	10	-1	0.11	10	0.74	341	-1	0.02	20	440	7	-0.01	2	5	35	0.14	-10	-10	58	-10	56
NA14761	30	3.09	10	1	0.06	10	0.7	375	-1	0.03	22	580	4	0.01	3	6	35	0.13	-10	-10	67	-10	64
NA14762	23	2.35	10	-1	0.05	10	0.52	246	-1	0.02	18	570	3	0.01	2	4	31	0.1	-10	-10	53	-10	51
NA14763	76	3.12	10	1	0.09	10	0.45	365	5	0.01	28	550	7	0.03	2	4	22	0.11	-10	-10	107	-10	90
NA14764	94	4.05	10	1	0.29	10	0.79	1100	-1	0.03	29	860	9	0.01	3	9	38	0.17	-10	-10	109	-10	94
NA14460	66	4.5	10	1	0.64	40	0.79	263	-1	0.02	21	470	13	0.34	-2	4	21	0.17	-10	-10	45	-10	112
NA14461	35	4.21	10	-1	0.28	20	0.7	284	1	0.01	22	370	7	0.11	3	5	21	0.16	-10	-10	82	-10	77
NA14462	38	3.77	10	1	0.15	20	0.73	442	-1	0.02	22	300	6	0.01	2	10	22	0.17	-10	-10	95	-10	76
NA14463	72	2.94	10	-1	0.09	10	0.57	248	6	0.01	16	330	5	0.04	-2	5	25	0.12	-10	-10	66	-10	49
NA14464	116	2.79	10	-1	0.14	20	0.46	206	3	0.01	16	270	7	0.04	2	4	32	0.13	-10	-10	63	-10	45

Sample Number	Sample Quality	Sample Description Notes	Au ppb	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm
NA13856	M	OLIVE BRN SL, AMPHIBOLITE PEBBLES. AMPHIBOLITE HAS EPIDOTE (LESS THAN 5 PERCENT) ON FOL AND QTZ INLETS ON JOINT SETS	-1	-0.2	4.01	5	-10	340	-0.5	-2	0.53	-0.5	23	18
NA13857	L	AMPHIBOLITE PEBBLES AND OUTCROP LESS THAN 10M AWAY. AMPHIBOLITE WITH EPIDOTE AND QTZ INLETS	1	-0.2	2.27	8	-10	200	-0.5	-2	0.27	-0.5	14	30
NA13858	L	SOME LOESS. NEXT TO FELSIC SCHIST UNIT WITHIN LARGE AMPHIBOLITE UNIT, STEEPLY DIPPING. MAG XLS ON QTZ-EPIDOTE VEINED JOINT FOCS. SEE RH3-035 STN	-1	-0.2	3.08	6	-10	210	0.5	-2	0.18	-0.5	15	89
NA13859	L	QTZ-FELD GRANULES OF ORTHOGNEISS WITH LOESS	3	-0.2	2.73	10	-10	300	0.5	-2	0.2	-0.5	14	40
NA13860	L	LOTS OF LOESS, GRANULES OF FELSIC SCH-ORTHOGNEISS	-1	-0.2	2.55	8	-10	210	-0.5	-2	0.16	-0.5	11	33
NA13861	M	AMPHIBOLITE FLOAT	-1	-0.2	5.95	3	-10	160	0.7	-2	1.32	-0.5	37	16
NA13862	M	'C' HORIZON OF BIO RICH DECOMPOSED SCHIST	-1	-0.2	5.01	-2	-10	530	-0.5	-2	0.43	-0.5	34	9
NA13863	M	DECOMPOSED BIO RICH SCHIST	2	-0.2	3.52	3	-10	300	-0.5	-2	0.67	-0.5	24	14
NA13864	M	SANDY TEXTURED SL, FROM DECOMPOSED QTZ-FELD-BIO-MUSC SCHIST FOUND NEARBY AS OUTCROP	-1	0.3	3.23	7	-10	280	-0.5	-2	0.5	-0.5	13	20
NA13865	L	LOTS OF LOESS, PEBBLES OF QTZ-FELD BIO SCHIST	-1	-0.2	2.99	9	-10	180	-0.5	-2	0.14	-0.5	12	24
NA13866	M	MINOR LOESS, PEBBLES OF QTZ-BIO-FELD SCHIST	-1	0.4	3.39	-2	-10	1430	-0.5	-2	0.42	-0.5	15	20
NA13868	M	DECOMPOSED SCHIST AMPHIBOLITE? LIMONITE/RUST ON SCHIST FLOAT FRAGMENTS, ALSO QTZ ON THE FLOAT	-1	0.2	3.29	2	-10	380	-0.5	-2	0.23	-0.5	12	12
NA13896	M		-1	-0.2	2.62	9	-10	250	-0.5	-2	0.16	-0.5	12	25
NA13897	M	AMP'C'	-1	-0.2	3.08	-2	-10	380	-0.5	-2	1.6	-0.5	21	9
NA13898	M	BIOT RICH SCH	-1	-0.2	2.36	3	-10	510	0.6	-2	0.26	-0.5	7	38
NA13899	L	LOTS OF LOESS, SCHIST & ORTHOGN? PEBBLES	5	-0.2	2.77	9	-10	300	0.6	-2	0.23	-0.5	14	44
NA14750	M	AMPHIBOLITE 'C'	-1	-0.2	3.17	-2	-10	440	-0.5	-2	0.85	-0.5	24	11
NA14751	M	QTZ-MICA SCHIST AND MINOR AMPHIBOLITE PEBBLES	1	-0.2	3.28	-2	-10	460	0.8	-2	0.44	-0.5	17	44
NA14752	L	MINOR LOESS AND ORGANICS, OUTCROP OF AMPHIBOLITE BUT SOIL OF BIO RICH SCHIST	1	-0.2	3.1	4	-10	270	0.5	-2	0.48	-0.5	21	40
NA14753	M	SOME LOESS? BIO RICH SCHIST-SL	2	-0.2	2.11	4	-10	250	-0.5	-2	0.31	-0.5	13	36
NA14754	M	SOME LOESS, MIXED WITH BIO RICH SOIL	1	-0.2	1.97	6	-10	220	-0.5	-2	0.32	-0.5	12	28
NA14758	M	OLIVE-BRN, LOTS OF LOESS MIXED WITH AMPHIBOLITE PEBBLES	-1	-0.2	3.56	5	-10	230	-0.5	-2	0.42	-0.5	20	42
NA14759	M	'SANDY' TEXTURE, QTZ-BIO-MUSC SCHIST AND AMPHIBOLITE FLOAT	3	-0.2	2.5	6	-10	160	-0.5	-2	0.33	-0.5	14	28
NA14760	M	SOME LOESS, VARIOUS SCHIST TYPES AS FLOAT	5	-0.2	1.78	6	-10	260	-0.5	-2	0.42	-0.5	11	34
NA14761	L	LOTS OF LOESS, SCHIST PEBBLES, VERY POOR SAMPLE	2	0.2	2.11	6	-10	290	-0.5	-2	0.5	-0.5	15	32
NA14762	L	LOTS OF LOESS WITH MIXED SCHIST PEBBLES	16	-0.2	1.69	4	-10	240	-0.5	-2	0.46	-0.5	10	29
NA14763	M	VERY GRANULAR- SCHIST PEBBLES	-1	-0.2	2.57	10	-10	170	-0.5	-2	0.17	-0.5	19	38
NA14764	M	VERY GRANULAR WITH QTZ-MICA SCHIST PEBBLES, STILL RAINING	11	-0.2	2.24	7	-10	290	0.6	-2	0.48	-0.5	18	26
NA14460	H		1	0.3	2.91	10	-10	220	0.7	-2	0.08	-0.5	8	35
NA14461	H		2	0.3	2.99	14	-10	250	-0.5	-2	0.12	-0.5	12	45
NA14462	H		2	-0.2	2.34	8	-10	250	0.5	-2	0.29	-0.5	14	32
NA14463	H		3	0.3	2.01	10	-10	210	-0.5	-2	0.18	-0.5	8	27
NA14464	H		8	0.2	2.04	9	-10	140	-0.5	-2	0.14	-0.5	6	28

Sample Number	UTM East	UTM North	Geologist Name	Sample Date YR/MN/DY	Sample Color	Color Modify	Sample Depth	Units	Sample % Organics	Sample Horizon	Sample Clay	Sample Moisture	Sample Slope	Sample Environ.	Sample Frost	Dominent Rock Type
NA13856	577145	7039223	HULSTEIN	20030628	OL	QE	0.4	M		B	L	L	G	BDR	N	AMP
NA13857	577002	7039076	HULSTEIN	20030628	BN	QE	0.2	M		B	L	L	G	BDR	N	AMP
NA13858	576910	7038903	HULSTEIN	20030628	BN	QE	0.35	M		B	L	L	G	BDR	N	AMP
NA13859	576744	7038785	HULSTEIN	20030628	TA	QE	0.2	M		B	L	L	G	BDR	N	GNE
NA13860	576856	7038616	HULSTEIN	20030628	TA	QE	0.4	M		B	M	L	G	BDR	N	GNE
NA13861	576939	7038427	HULSTEIN	20030628	BN	QE	0.25	M		B	L	L	G	BDR	N	AMP
NA13862	576949	7038225	HULSTEIN	20030628	OL	QE	0.4	M		C	L	L	G	BDR	N	SCH
NA13863	576930	7038019	HULSTEIN	20030628	OL	QE	0.5	M		B	L	L	G	BDR	N	SCH
NA13864	576939	7037814	HULSTEIN	20030628	BN	QE	0.25	M		B	L	L	G	BDR	N	SCH
NA13865	576864	7037621	HULSTEIN	20030628	BN	QE	0.15	M	5	B	L	L				SCH
NA13866	576707	7037496	HULSTEIN	20030628	BN	QE	0.3	M		B	L	L	G	BDR	N	SCH
NA13868	576591	7037379	HULSTEIN	20030628	BN	QE	0.2	M		B	L	L	M	BDR	N	AMP
NA13896	576601	7038813	HULSTEIN	20030629	BN	QE	0.4	M		B	L	L	G	BDR	N	
NA13897	576400	7038838	HULSTEIN	20030629	GN	QD	0.4	M		B	L	L	F	BDR	N	AMP
NA13898	576198	7038858	HULSTEIN	20030629	TA	QE	0.4	M		C	L	L	G	BDR	N	SCH
NA13899	576086	7039022	HULSTEIN	20030629	TA	QE	0.3	M		B	M	L	F	BDR	N	SCH
NA14750	575904	7039119	HULSTEIN	20030630	OL	QD	0.35	M		C	L	L	M	BDR	N	AMP
NA14751	575701	7039115	HULSTEIN	20030630	BN	QE	0.3	M		B	L	L	M	BDR	N	SCH
NA14752	575514	7039203	HULSTEIN	20030630	BN	QE	0.2	M	5	B	L	M	S	BDR	N	SCH
NA14753	575315	7039235	HULSTEIN	20030630	BN	QE	0.35	M		B	M	L	S	BDR	S	SCH
NA14754	575128	7039282	HULSTEIN	20030630	BN	QE	0.35	M		B	M	L	S	BDR	N	SCH
NA14758	577125	7037775	HULSTEIN	20030630	OL	QL	0.25	M		B	L	L	M	BDR	N	AMP
NA14759	577293	7037885	HULSTEIN	20030630	BN	QE	0.3	M		B	L	L	M	COL	N	SCH
NA14760	577493	7037887	HULSTEIN	20030630	BN	QE	0.35	M		B	L	L	M	COL	N	SCH
NA14761	577670	7037882	HULSTEIN	20030630	GY	QE	0.25	M	4	B	M	M	G	COL	P	SCH
NA14762	577918	7037829	HULSTEIN	20030630	BN	QE	0.3	M		B	M	M	M	COL	P	SCH
NA14763	578115	7037896	HULSTEIN	20030630	TA	QE	0.25	M		B	L	L	G	BDR	N	SCH
NA14764	578297	7037814	HULSTEIN	20030630	TA	QE	0.35	M		B	L	L	G	BDR	N	SCH
NA14460	576694	7036813	BOYER	20030723	OR	QE	0.2	M	7	BC	M	M	G	BDR	N	
NA14461	576908	7036813	BOYER	20030723	OR	QE	0.25	M	7	BC	M	M	M	BDR	N	SCH
NA14462	577129	7036797	BOYER	20030723	BN	QE	0.5	M	6	BC	M	M	M	BDR	N	SCH
NA14463	577316	7036708	BOYER	20030723	BN	QE	0.5	M	4	BC	M	M	M	BDR	N	SCH
NA14464	577522	7036694	BOYER	20030723	BN	QE	0.4	M	7	BC	M	M	G	BDR	N	SCH

Sample Number	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	C %	Sb ppm	Sc ppm	Sr ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
NA13684	48	4.24	10	-1	0.51	40	0.9	278	2	0.01	19	730	14	0.19	-2	4	55	0.11	-10	-10	68	-10	53
NA13685	28	3.43	10	-1	0.11	20	0.61	391	1	0.01	25	290	12	0.01	-2	5	26	0.11	-10	-10	64	-10	54
NA13686	26	3.36	10	-1	0.21	10	0.77	316	-1	0.01	24	300	12	0.01	-2	4	104	0.11	-10	-10	62	-10	60
NA13687	23	3.49	10	-1	0.09	10	0.51	276	1	0.01	21	320	16	0.02	-2	3	29	0.09	-10	-10	69	-10	64
NA13688	22	3.82	10	-1	0.2	20	0.46	225	2	0.02	11	590	9	0.21	-2	3	41	0.08	-10	-10	56	-10	44
NA13689	24	3.13	10	-1	0.12	20	0.65	317	-1	0.01	18	380	7	0.01	-2	4	29	0.12	-10	-10	60	-10	59
NA13690	13	3.25	10	-1	0.23	10	0.59	278	-1	0.01	12	290	6	0.01	-2	3	33	0.13	-10	-10	55	-10	46
NA13691	35	3.48	10	-1	0.22	50	0.79	468	-1	0.02	19	230	6	0.01	-2	8	37	0.13	-10	-10	64	-10	69
NA13823	36	5.25	10	-1	0.89	10	1.4	553	-1	0.03	20	1100	5	0.21	-2	11	36	0.25	-10	-10	139	-10	132
NA13643	29	3.93	10	-1	0.11	10	0.62	258	2	0.01	24	450	26	0.06	-2	4	19	0.1	-10	-10	70	-10	65
NA13644	34	3.4	10	-1	0.31	30	0.79	355	1	0.01	32	290	11	0.01	-2	4	20	0.15	-10	-10	56	-10	77
NA13645	35	3.17	10	-1	0.1	20	0.61	296	1	0.01	22	180	11	0.01	-2	5	25	0.1	-10	-10	61	-10	67
NA13646	22	2.86	10	-1	0.07	10	0.55	308	1	0.01	18	200	12	0.01	-2	3	21	0.08	-10	-10	58	-10	45
NA13647	30	3.83	10	-1	0.24	10	0.8	361	2	0.01	19	280	11	0.01	-2	4	42	0.15	-10	-10	71	-10	62
NA13648	71	5	10	-1	1.03	10	1.88	724	1	0.01	27	360	5	0.01	-2	9	29	0.28	-10	-10	113	-10	76
NA13649	17	1.47	30	-1	0.39	10	0.35	150	-1	0.03	9	170	10	0.01	-2	2	438	0.06	-10	-10	24	-10	25
NA13824	143	4.74	10	-1	0.86	110	0.87	220	-1	0.04	20	1290	8	0.57	-2	5	99	0.14	-10	-10	65	-10	69
NA13825	92	6.69	20	1	1.35	10	1.71	452	3	0.1	23	720	19	0.67	3	20	71	0.23	-10	-10	251	-10	110
NA13826	38	3.85	10	-1	0.32	30	0.77	278	-1	0.02	28	260	5	0.12	-2	4	38	0.15	-10	-10	60	-10	46
NA13827	31	3.84	10	-1	0.12	10	0.75	224	-1	0.01	35	290	8	0.01	-2	5	19	0.16	-10	-10	88	-10	53
NA13793	47	5.72	10	1	0.5	10	1.64	576	-1	0.05	11	1520	-2	0.11	-2	10	42	0.32	-10	-10	153	-10	105
NA13794	40	4.07	10	-1	0.32	10	0.87	375	-1	0.06	11	420	-2	0.02	2	9	104	0.16	-10	-10	91	-10	67
NA13795	117	5.83	10	1	0.09	-10	0.8	354	-1	0.06	13	250	6	0.03	-2	11	41	0.19	-10	-10	177	-10	80
NA13796	56	4.71	10	1	0.07	10	1.3	626	-1	0.03	13	670	-2	0.01	-2	8	40	0.12	-10	-10	111	-10	89
NA13797	30	2.59	10	-1	0.06	10	0.5	229	-1	0.02	22	710	7	0.01	-2	3	26	0.09	-10	-10	58	-10	51
NA13798	63	5.03	10	1	0.59	-10	1.33	576	-1	0.05	15	850	-2	0.01	2	6	16	0.29	-10	-10	149	-10	59
NA13799	67	3.69	-10	-1	0.19	10	1.31	427	-1	0.03	30	510	5	0.01	-2	6	28	0.18	-10	-10	86	-10	48
NA13850	34	3.09	10	-1	0.05	10	0.59	228	-1	0.02	23	410	6	0.01	-2	4	14	0.11	-10	-10	66	-10	41
NA13851	61	3.43	10	-1	0.05	10	0.78	320	-1	0.03	23	410	2	0.01	-2	5	22	0.19	-10	-10	88	-10	42
NA13852	6	3.23	10	-1	0.26	-10	1.76	379	-1	0.03	27	450	-2	-0.01	-2	7	27	0.16	-10	-10	84	-10	26
NA13853	31	3.31	10	2	0.07	10	0.78	369	-1	0.04	23	520	2	0.01	-2	5	16	0.15	-10	-10	88	-10	41
NA13854	43	4.27	10	1	0.06	-10	1.02	587	-1	0.04	23	480	-2	0.01	2	7	17	0.17	-10	-10	110	-10	43
NA13855	42	3.52	10	1	0.07	10	1.02	514	-1	0.09	26	1050	-2	-0.01	2	9	51	0.09	-10	-10	104	-10	60

Sample Number	Sample Quality	Sample Description Notes	Au ppb	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm
NA13684	H		2	-0.2	2.66	5	-10	270	0.5	-2	0.14	-0.5	12	39
NA13685	H		4	-0.2	2.47	9	-10	180	0.5	-2	0.13	-0.5	15	37
NA13686	H		2	-0.2	2.83	10	-10	300	0.5	-2	0.21	-0.5	14	39
NA13687	H		3	-0.2	2.66	11	-10	180	-0.5	-2	0.12	-0.5	12	34
NA13688	H		2	-0.2	1.91	5	-10	210	-0.5	-2	0.18	-0.5	9	22
NA13689	H		1	-0.2	1.98	9	-10	180	-0.5	-2	0.28	-0.5	11	26
NA13690	H		1	-0.2	2.01	7	-10	130	-0.5	-2	0.16	-0.5	10	17
NA13691	H		4	-0.2	2.66	10	-10	220	0.6	-2	0.23	-0.5	13	30
NA13823	H	QTZ. MICA SCHIST	3	-0.2	2.94	7	-10	480	-0.5	-2	0.35	0.9	18	33
NA13643	M		3	0.3	2.85	12	-10	260	-0.5	-2	0.13	-0.5	12	39
NA13644	H		2	-0.2	2.41	8	-10	140	0.6	-2	0.14	-0.5	15	38
NA13645	H		5	-0.2	2.41	9	-10	170	0.6	-2	0.18	-0.5	11	35
NA13646	H		7	-0.2	2.04	8	-10	150	-0.5	-2	0.16	-0.5	10	31
NA13647	M		1	-0.2	3.15	11	-10	190	0.5	-2	0.15	-0.5	15	33
NA13648	H		-1	-0.2	4.02	8	-10	180	0.6	-2	0.23	0.7	23	49
NA13649	H		3	-0.2	9.87	4	-10	200	1.5	-2	5.24	0.5	8	10
NA13824	H	QTZ. MUSC SCHIST	7	-0.2	2.62	5	-10	320	0.6	-2	0.32	-0.5	12	39
NA13825	H	QTZ. MUSC SCHIST, SOIL IS ORANGE TAN IN COLOR	2	0.2	5.12	-2	-10	520	1.4	-2	0.2	0.6	17	18
NA13826	H	QTZ. MUSC. SCHIST	2	-0.2	2.78	8	-10	220	0.8	-2	0.21	-0.5	16	33
NA13827	H	QTZ. MUSC. SCHIST	26	-0.2	2.75	5	-10	190	-0.5	-2	0.18	-0.5	20	24
NA13793	M	SANDY TEXTURED SOIL, BIO-RICH SCH PEBBLES - AMPH?	-1	-0.2	3.33	2	-10	370	-0.5	-2	0.75	-0.5	26	18
NA13794	M	SANDY TEXTURED SOIL, AMPHIBOLITE?	3	0.3	2.64	3	-10	450	-0.5	-2	0.55	-0.5	13	17
NA13795	M	MINOR LOESS, AMPHIBOLITE PEBBLES?	1	-0.2	3.46	5	-10	260	-0.5	-2	0.64	-0.5	29	16
NA13796	M	SANDY TEXTURED, AMPHIBOLITE PEBBLES?	1	0.5	3.12	7	-10	180	-0.5	-2	0.31	-0.5	24	25
NA13797	L	LOTS OF LOESS, MINOR ORGANICS, SOME ASH, SHITTY SAMPLE!, FLOAT OF BLOCKY ANGULAR QTZ-FEL-BIO-MUS SCH, MAG SUSC 0.96 - 5.44, ANISOTROPIC	3	-0.2	1.97	8	-10	250	-0.5	-2	0.27	-0.5	9	34
NA13798	M	SANDY TEXTURED, BIO-RICH SOIL, DECOMPOSED SCH (AMPHIBOLITE?)	9	-0.2	3.4	3	-10	280	-0.5	-2	0.62	-0.5	26	20
NA13799	M	SANDY TEXTURED, DECOMPOSED SCHIST	3	-0.2	2.47	4	-10	210	-0.5	2	0.5	-0.5	23	45
NA13850	L	SOME LOESS, PEBBLES OF QTZ RICH AND BIO RICH SCHIST	-1	-0.2	2.34	9	-10	160	-0.5	-2	0.26	-0.5	13	31
NA13851	M	AMP PEBBLES, OLIVE-BRN COLOUR SL	-1	-0.2	2.69	5	-10	190	-0.5	-2	0.39	-0.5	20	34
NA13852	H	AMP PEBBLES	-1	-0.2	2.58	-2	-10	110	-0.5	-2	0.74	-0.5	20	19
NA13853	M	AMPHIBOLITE PEBBLES, SCREE AND NEARBY OUTCROP	-1	-0.2	2.65	4	-10	170	-0.5	-2	0.45	-0.5	16	29
NA13854	M	OLIVE-BRN SL, AMP PEBBLES	-1	0.2	3.01	8	-10	180	-0.5	-2	0.36	-0.5	21	38
NA13855	M	GREEN-OLIVE BRN COLOUR, AMPHIBOLITE PEBBLES	-1	-0.2	2.92	2	-10	300	-0.5	-2	1.16	-0.5	17	63

Appendix D

Soil Geochemistry Statistics and Quality Control

Kennecott Canada Exploration Inc.
Lucky Joe Project, Yukon Territory
2003 Soil Geochemistry Descriptive Statistics

	Au (ppb)	Ag (ppm)	Al (%)	As (ppm)	B (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Ce (ppm)	Co (ppm)	Cr (ppm)	Cs (ppm)	Cu (ppm)
Mean	5.51	-0.04	2.36	6.13	-9.84	304.83	0.10	-1.31	0.51	-0.25	#DIV/0!	12.90	34.84	#DIV/0!	85.90
Standard Error	0.58	0.01	0.02	0.33	0.04	5.76	0.01	0.09	0.02	0.04	65535.00	0.19	0.77	65535.00	4.86
Median	2	-0.2	2.24	5	-10	240	0.5	-2	0.36	-0.5	#NUM!	11	28	#NUM!	36
Mode	1	-0.2	1.78	5	-10	230	-0.5	-2	0.21	-0.5	#N/A	11	26	#N/A	23
Standard Deviation	26.65	0.68	0.77	15.18	1.78	265.69	0.61	4.11	0.76	1.89	#DIV/0!	8.69	35.41	#DIV/0!	224.03
Sample Variance	710.17	0.46	0.59	230.45	3.17	70589.59	0.37	16.92	0.58	3.58	#DIV/0!	75.45	1253.77	#DIV/0!	50188.30
Kurtosis	305.03	484.89	1.43	774.88	120.35	95.20	-0.58	665.02	182.53	1478.07	#DIV/0!	237.36	100.95	#DIV/0!	111.71
Skewness	16.21	18.64	0.93	24.83	11.06	7.13	0.33	23.15	11.52	35.82	#DIV/0!	11.21	7.82	#DIV/0!	8.92
Range	612	21	5.75	539	20	5540	4.4	134	14.99	79.8	0	237	722	0	4396
Minimum	-1	-0.2	0.2	-2	-10	30	-0.5	-2	0.01	-0.5	0	-1	3	0	4
Maximum	611	20.8	5.95	537	10	5570	3.9	132	15	79.3	0	236	725	0	4400
Sum	11721	-82.7	5022.93	13037	-20920	648060	214.9	-2781	1085.42	-529.8	0	27432	74076	0	182615
Count	2126	2126	2126	2126	2126	2126	2126	2126	2126	2126	0	2126	2126	0	2126
Largest(1)	611	20.8	5.95	537	10	5570	3.9	132	15	79.3	#NUM!	236	725	#NUM!	4400
Smallest(1)	-1	-0.2	0.2	-2	-10	30	-0.5	-2	0.01	-0.5	#NUM!	-1	3	#NUM!	4
Confidence Level(95.0%)	1.13	0.03	0.03	0.65	0.08	11.30	0.03	0.17	0.03	0.08	#NUM!	0.37	1.51	#NUM!	9.53

Fe (%)	Ga (ppm)	Ge (ppm)	Hf (ppm)	Hg (ppm)	In (ppm)	K (%)	La (ppm)	Li (ppm)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Nb (ppm)	Ni (ppm)	P (ppm)	Pb (ppm)	Rb (ppm)
3.89	7.75	#DIV/0!	#DIV/0!	-0.58	#DIV/0!	0.36	20.75	#DIV/0!	0.90	489.48	1.56	0.03	#DIV/0!	23.17	723.20	13.20	#DIV/0!
0.03	0.15	65535.00	65535.00	0.02	65535.00	0.01	0.37	65535.00	0.01	7.15	0.21	0.00	65535.00	0.53	15.66	0.65	65535.00
3.58	10	#NUM!	#NUM!	-1	#NUM!	0.24	20	#NUM!	0.79	421	1	0.02	#NUM!	17	540	8	#NUM!
3.12	10	#N/A	#N/A	-1	#N/A	0.07	10	#N/A	0.61	362	-1	0.01	#N/A	12	500	7	#N/A
1.39	6.73	#DIV/0!	#DIV/0!	0.85	#DIV/0!	0.34	17.28	#DIV/0!	0.46	329.59	9.68	0.05	#DIV/0!	24.56	722.17	29.77	#DIV/0!
1.94	45.23	#DIV/0!	#DIV/0!	0.73	#DIV/0!	0.11	298.63	#DIV/0!	0.22	108626.37	93.63	0.00	#DIV/0!	603.37	521532.26	886.08	#DIV/0!
5.95	3.10	#DIV/0!	#DIV/0!	0.99	#DIV/0!	3.60	27.47	#DIV/0!	11.56	84.46	664.21	135.44	#DIV/0!	68.25	56.40	265.71	#DIV/0!
1.82	-2.10	#DIV/0!	#DIV/0!	1.63	#DIV/0!	1.71	3.38	#DIV/0!	2.12	6.01	22.43	9.48	#DIV/0!	6.62	5.86	13.58	#DIV/0!
13.35	30	0	0	4	0	2.61	280	0	6.08	6855	325	1.04	0	422	9950	769	0
0.65	-10	0	0	-1	0	0.01	-10	0	0.02	-5	-1	-0.01	0	-1	50	-2	0
14	20	0	0	3	0	2.62	270	0	6.1	6850	324	1.03	0	421	10000	767	0
8267.26	16470	0	0	-1229	0	762.43	44120	0	1919.61	1040626	3310	57.11	0	49254	1537520	28057	0
2126	2126	0	0	2126	0	2126	2126	0	2126	2126	2126	2126	0	2126	2126	2126	0
14	20	#NUM!	#NUM!	3	#NUM!	2.62	270	#NUM!	6.1	6850	324	1.03	#NUM!	421	10000	767	#NUM!
0.65	-10	#NUM!	#NUM!	-1	#NUM!	0.01	-10	#NUM!	0.02	-5	-1	-0.01	#NUM!	-1	50	-2	#NUM!
0.06	0.29	#NUM!	#NUM!	0.04	#NUM!	0.01	0.73	#NUM!	0.02	14.02	0.41	0.00	#NUM!	1.04	30.72	1.27	#NUM!

Re (ppm)	S (%)	Sb (ppm)	Sc (ppm)	Se (ppm)	Sn (ppm)	Sr (ppm)	Ta (ppm)	Te (ppm)	Th (ppm)	Tl (%)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Y (ppm)	Zn (ppm)
#DIV/0!	0.11	-1.10	6.78	#DIV/0!	#DIV/0!	44.80	#DIV/0!	#DIV/0!	#DIV/0!	0.14	-9.65	-9.75	78.36	-9.69	#DIV/0!	98.37
65535.00	0.01	0.04	0.09	65535.00	65535.00	1.26	65535.00	65535.00	65535.00	0.00	0.06	0.05	0.83	0.05	65535.00	2.37
#NUM!	0.01	-2	6	#NUM!	#NUM!	31	#NUM!	#NUM!	#NUM!	0.13	-10	-10	68	-10	#NUM!	73
#N/A	0.01	-2	4	#N/A	#N/A	18	#N/A	#N/A	#N/A	0.11	-10	-10	64	-10	#N/A	62
#DIV/0!	0.38	1.87	4.09	#DIV/0!	#DIV/0!	58.12	#DIV/0!	#DIV/0!	#DIV/0!	0.07	2.86	2.24	38.29	2.48	#DIV/0!	109.34
#DIV/0!	0.14	3.49	16.76	#DIV/0!	#DIV/0!	3377.93	#DIV/0!	#DIV/0!	#DIV/0!	0.01	8.20	5.02	1466.11	6.17	#DIV/0!	11955.30
#DIV/0!	54.65	3.20	6.37	#DIV/0!	#DIV/0!	175.24	#DIV/0!	#DIV/0!	#DIV/0!	3.13	91.54	73.93	24.84	64.55	#DIV/0!	120.31
#DIV/0!	6.45	1.88	2.08	#DIV/0!	#DIV/0!	10.47	#DIV/0!	#DIV/0!	#DIV/0!	1.03	8.95	8.71	3.22	8.09	#DIV/0!	9.21
0	5.44	16	39	0	0	1284	0	0	0	0.68	50	20	602	30	0	2007
0	-0.01	-2	-1	0	0	6	0	0	0	-0.01	-10	-10	7	-10	0	3
0	5.43	14	38	0	0	1290	0	0	0	0.67	40	10	609	20	0	2010
0	229.19	-2328	14416	0	0	95244	0	0	0	297.84	-20510	-20720	166594	-20610	0	209145
0	2126	2126	2126	0	0	2126	0	0	0	2126	2126	2126	2126	2126	0	2126
#NUM!	5.43	14	38	#NUM!	#NUM!	1290	#NUM!	#NUM!	#NUM!	0.67	40	10	609	20	#NUM!	2010
#NUM!	-0.01	-2	-1	#NUM!	#NUM!	6	#NUM!	#NUM!	#NUM!	-0.01	-10	-10	7	-10	#NUM!	3
#NUM!	0.02	0.08	0.17	#NUM!	#NUM!	2.47	#NUM!	#NUM!	#NUM!	0.00	0.12	0.10	1.63	0.11	#NUM!	4.65

Kennecott Canada Exploration Inc.
Lucky Joe Project, Yukon Territory
2003 Soil Geochemistry, Percentiles

	Au (ppb)	Ag (ppm)	Al (%)	As (ppm)	B (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Ce (ppm)	Co (ppm)	Cr (ppm)	Cs (ppm)
Total Count	2621	2680	3157	3157	3112	3157	2171	2671	3155	3157	45	3155	3157	45
Number Missing	536	477	0	0	45	0	986	486	2	0	3112	2	0	3112
Detection Limits	-1	-0.2		(-2) (-0.1)	-10		-0.5	-2		(-0.5) (-0.01)		-1		
Count	380	1668		(311) (4)	2109		1033	1871		(2311) (13)		2		
Percent	14.50%	62.20%		(9.9%) (.1%)	67.80%		47.60%	70.00%		(73.2%) (.4%)		0.10%		
Value	0.5	0.1		0.05	5		0.25	1		0.005		0.5		
Mean	5.99	0.19	2.35	6.10	3.72	306.07	0.49	1.19	0.51	0.16	87.27	12.16	32.81	2.73
Minimum	0.10	0.01	0.08	0.10	0.50	30.00	0.50	0.01	0.01	0.00	44.90	0.30	1.00	1.49
Maximum	611.00	20.80	10.40	537.00	10.00	5570.00	4.03	132.00	15.00	79.30	190.00	236.00	725.00	6.20
Percentiles														
10.00	0.50	0.07	1.52	0.10	0.50	140.00	0.25	0.17	0.16	0.00	54.70	6.00	13.00	1.98
20.00	1.00	0.10	1.70	3.00	0.50	170.00	0.25	1.00	0.21	0.00	56.80	8.00	18.00	2.20
30.00	1.00	0.10	1.84	4.00	3.00	195.00	0.25	1.00	0.26	0.00	63.20	9.00	22.00	2.41
40.00	2.00	0.10	2.00	4.50	5.00	220.00	0.25	1.00	0.32	0.00	71.70	10.00	25.00	2.59
50.00	2.00	0.10	2.15	5.00	5.00	243.90	0.50	1.00	0.37	0.00	75.50	11.00	28.00	2.66
55.00	2.40	0.10	2.24	6.00	5.00	260.00	0.50	1.00	0.40	0.00	77.70	11.00	29.00	2.68
60.00	3.00	0.10	2.34	6.00	5.00	272.00	0.50	1.00	0.44	0.00	81.60	12.00	31.00	2.71
65.00	3.00	0.10	2.44	6.80	5.00	290.00	0.50	1.00	0.48	0.00	88.70	13.00	32.00	2.74
70.00	4.00	0.10	2.58	7.00	5.00	309.90	0.60	1.00	0.52	0.00	90.60	14.00	34.00	2.77
75.00	4.00	0.11	2.69	8.00	5.00	330.00	0.60	1.00	0.58	0.03	100.00	15.00	36.00	2.84
80.00	5.00	0.20	2.86	8.00	5.00	360.00	0.70	1.00	0.67	0.07	120.00	16.00	39.00	3.00
85.00	6.40	0.30	3.04	9.00	5.00	410.00	0.70	1.00	0.78	0.15	120.00	17.00	43.00	3.07
90.00	9.00	0.30	3.35	10.00	5.00	500.00	0.80	2.00	0.93	0.50	150.00	19.00	50.00	3.63
91.00	10.00	0.35	3.41	10.00	5.00	520.00	0.90	2.00	0.97	0.50	150.00	20.00	52.60	3.63
92.00	11.00	0.40	3.48	10.00	5.00	550.00	0.90	2.00	1.04	0.60	150.00	20.00	54.00	3.63
93.00	12.00	0.40	3.57	10.20	5.00	580.00	0.90	2.00	1.12	0.60	150.00	21.00	57.00	3.84
94.00	13.00	0.43	3.67	11.00	5.00	639.00	1.00	2.00	1.17	0.70	150.00	22.00	62.00	3.84
95.00	15.00	0.50	3.83	11.10	5.00	690.00	1.00	2.00	1.27	0.70	150.00	22.70	67.00	3.87
96.00	19.80	0.60	4.02	12.00	5.00	780.00	1.10	3.00	1.42	0.80	150.00	24.00	74.00	3.87
97.00	26.00	0.70	4.32	14.00	5.00	916.00	1.20	3.00	1.54	0.90	170.00	25.00	85.00	4.02
98.00	37.00	1.00	4.97	15.00	5.00	1040.00	1.30	3.87	1.75	1.10	170.00	27.00	112.00	4.02
99.00	65.00	1.30	6.88	22.00	5.00	1350.00	1.60	4.00	2.27	1.60	190.00	34.00	158.00	6.20

	Cu (ppm)	Fe (%)	Ga (ppm)	Ge (ppm)	Hf (ppm)	Hg (ppm)	In (ppm)	K (%)	La (ppm)	Li (ppm)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Nb (ppm)	Ni (ppm)
Total Count	3157	3157	2623	49	45	2574	45	3157	3157	45	3157	3157	3157	3157	45	3154
Number Missing	0	0	534	3108	3112	583	3112	0	0	3112	0	0	0	0	3112	3
Detection Limits			-10			-1			-10			-5	-1	-0.01		-1
Count			258			1699			51			1	989	10		1
Percent			9.80%			66.00%			1.60%			0.00%	31.30%	0.30%		0.00%
Value			5			0.5			5			2.5	0.5	0.005		0.5
Mean	85.08	3.72	9.45	1.64	1.49	3.94	0.19	0.38	20.60	18.80	0.90	498.48	2.27	0.05	8.32	20.97
Minimum	2.00	0.48	2.40	0.30	0.50	1.00	0.05	0.01	1.40	10.50	0.01	2.00	0.09	0.00	2.20	0.30
Maximum	4400.00	14.00	34.10	17.00	2.30	226.00	2.80	3.10	270.00	24.30	6.10	6850.00	324.00	1.94	28.30	488.20
Percentiles																
10.00	14.00	2.47	5.00	0.39	1.20	0.50	0.05	0.06	10.00	14.80	0.47	233.00	0.50	0.01	3.20	8.00
20.00	18.00	2.72	8.00	0.43	1.30	0.50	0.05	0.08	10.00	17.00	0.54	288.00	0.50	0.01	4.40	11.00
30.00	23.00	2.94	10.00	0.46	1.40	0.50	0.06	0.11	10.00	18.10	0.61	336.00	0.50	0.01	5.10	12.50
40.00	27.00	3.14	10.00	0.47	1.50	0.50	0.06	0.16	11.20	18.90	0.68	382.00	0.50	0.01	5.60	14.00
50.00	33.00	3.40	10.00	0.50	1.50	0.50	0.07	0.23	18.50	19.30	0.77	430.00	1.00	0.02	7.40	16.00
55.00	36.53	3.54	10.00	0.52	1.50	0.50	0.08	0.27	20.00	19.50	0.83	455.00	1.00	0.02	7.50	17.00
60.00	41.00	3.69	10.00	0.54	1.50	0.50	0.08	0.32	20.00	19.60	0.89	485.00	1.00	0.02	7.90	18.00
65.00	45.00	3.87	10.00	0.60	1.60	0.50	0.08	0.37	20.00	19.80	0.95	514.00	1.00	0.02	9.10	20.00
70.00	52.00	4.08	10.00	0.60	1.60	1.00	0.09	0.45	20.00	20.20	1.02	552.00	1.00	0.02	9.60	21.00
75.00	61.00	4.32	10.00	0.63	1.60	1.00	0.11	0.53	23.00	20.30	1.10	596.00	1.36	0.03	10.40	23.00
80.00	72.00	4.62	10.00	0.64	1.60	1.00	0.12	0.62	30.00	20.70	1.20	656.00	2.00	0.03	12.50	26.00
85.00	92.00	4.92	10.00	0.67	1.70	8.00	0.12	0.75	30.00	20.90	1.34	739.00	2.00	0.04	13.10	29.00
90.00	140.00	5.36	10.00	0.68	1.80	14.00	0.19	0.94	40.00	21.60	1.55	831.00	3.88	0.05	13.80	35.00
91.00	159.00	5.51	10.00	0.70	1.80	16.00	0.19	0.99	40.00	21.60	1.60	860.00	4.00	0.05	13.80	37.00
92.00	181.00	5.67	10.00	0.70	1.80	17.00	0.19	1.03	40.00	21.60	1.65	890.00	4.55	0.06	13.80	39.00
93.00	214.00	5.82	10.00	12.00	1.90	19.00	0.21	1.08	44.70	21.80	1.71	923.00	5.00	0.07	14.30	41.00
94.00	256.00	6.00	10.20	12.00	1.90	21.00	0.21	1.16	50.00	21.80	1.76	970.00	6.00	0.08	14.30	44.00
95.00	305.77	6.27	10.90	13.00	1.90	22.00	0.24	1.23	50.00	22.10	1.82	1010.00	8.00	0.10	14.80	48.00
96.00	398.00	6.52	12.40	13.00	1.90	25.00	0.24	1.29	52.20	22.10	1.92	1070.00	9.00	0.13	14.80	55.00
97.00	531.00	6.78	16.50	15.00	2.00	29.00	2.30	1.42	60.00	22.30	2.05	1141.00	11.19	0.17	21.20	61.00
98.00	688.70	7.52	19.65	15.00	2.00	33.00	2.30	1.56	70.00	22.30	2.15	1235.00	16.00	0.31	21.20	73.00
99.00	1105.00	8.64	20.00	17.00	2.30	41.00	2.80	1.70	80.00	24.30	2.38	1502.00	27.33	1.24	28.30	100.00

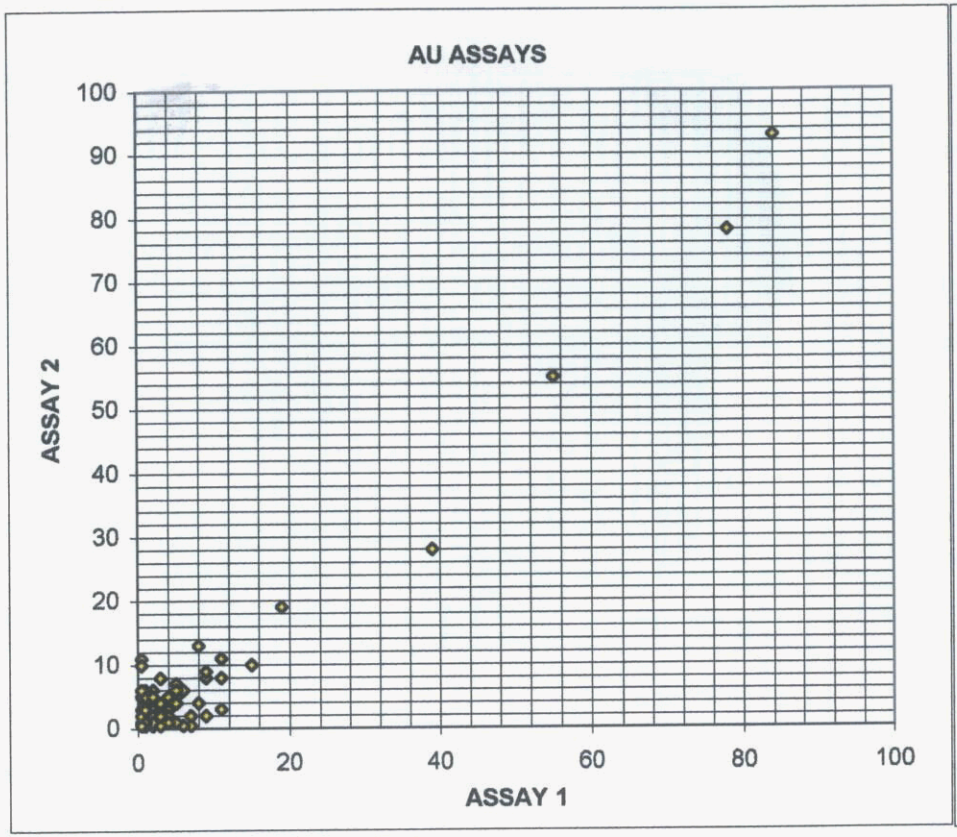
	P (ppm)	Pb (ppm)	Rb (ppm)	Re (ppm)	S (%)	Sb (ppm)	Sc (ppm)	Se (ppm)	Sn (ppm)	Sr (ppm)	Ta (ppm)	Te (ppm)	Th (ppm)	Ti (%)	Tl (ppm)
Total Count	3157	3157	45	45	2623	2643	2578	497	46	3156	45	497	1031	3107	2623
Number Missing	0	0	3112	3112	534	514	579	2660	3111	1	3112	2660	2126	50	534
Detection Limits		-2			-0.01	-2	-1							-0.01	-10
Count		63			416	1701	1							7	2092
Percent		2.00%			15.90%	64.40%	0.00%							0.20%	79.80%
Value		1			0.005	1	0.5							0.005	5
Mean	496.39	12.33	85.96	0.00	0.13	1.14	6.64	1.17	3.61	49.79	0.32	0.11	7.03	0.14	4.18
Minimum	0.01	0.74	45.20	0.00	0.00	0.03	1.00	0.05	1.40	5.00	0.03	0.01	0.20	0.00	0.02
Maximum	10000.00	767.00	150.00	0.02	5.43	14.00	38.00	16.50	45.00	1290.00	1.77	3.14	65.50	0.67	40.00
Percentiles															
10.00	0.04	4.00	53.50	0.00	0.00	0.31	3.00	0.20	1.60	17.00	0.03	0.01	2.00	0.07	0.16
20.00	0.06	5.00	61.60	0.00	0.00	1.00	4.00	0.20	1.60	21.00	0.05	0.02	3.00	0.09	5.00
30.00	0.14	6.00	69.30	0.00	0.01	1.00	4.00	0.30	1.80	24.80	0.07	0.02	4.00	0.10	5.00
40.00	260.00	7.00	72.10	0.00	0.01	1.00	5.00	0.30	1.90	28.00	0.10	0.03	4.40	0.11	5.00
50.00	380.00	8.00	79.00	0.00	0.01	1.00	5.60	0.40	2.00	32.00	0.20	0.03	5.40	0.12	5.00
55.00	430.00	8.21	82.00	0.00	0.01	1.00	6.00	0.40	2.10	35.00	0.26	0.04	6.00	0.13	5.00
60.00	490.00	9.00	85.40	0.00	0.01	1.00	6.00	0.50	2.20	38.00	0.27	0.05	6.20	0.14	5.00
65.00	530.00	10.00	86.70	0.00	0.02	1.00	7.00	0.60	2.30	42.00	0.33	0.06	7.00	0.15	5.00
70.00	600.00	10.00	90.50	0.00	0.02	1.00	7.00	0.90	2.40	46.50	0.38	0.09	8.00	0.16	5.00
75.00	680.00	11.00	100.00	0.00	0.03	1.00	8.00	1.00	2.60	53.60	0.44	0.12	9.00	0.17	5.00
80.00	780.00	12.00	110.00	0.00	0.05	1.00	9.00	1.40	3.00	62.00	0.47	0.15	10.00	0.19	5.00
85.00	900.00	14.00	120.00	0.00	0.12	2.00	10.00	2.00	3.90	75.00	0.55	0.19	12.00	0.21	5.00
90.00	1090.00	19.00	130.00	0.01	0.30	2.00	11.20	3.30	4.40	95.00	0.74	0.26	14.40	0.24	5.00
91.00	1130.00	20.31	130.00	0.01	0.35	2.00	12.00	3.80	5.40	103.10	0.74	0.28	15.00	0.25	5.00
92.00	1190.00	22.40	130.00	0.01	0.42	2.00	12.00	4.10	5.40	109.60	0.74	0.31	15.90	0.25	5.00
93.00	1240.00	25.00	140.00	0.01	0.50	2.00	13.00	4.40	7.80	117.00	1.01	0.33	17.00	0.26	5.00
94.00	1330.00	27.00	140.00	0.01	0.63	3.00	14.00	4.60	7.80	128.00	1.01	0.37	17.60	0.27	5.00
95.00	1450.00	30.00	140.00	0.01	0.77	3.00	14.50	4.90	8.60	139.00	1.06	0.38	18.20	0.28	5.00
96.00	1620.00	34.80	140.00	0.01	0.97	3.00	16.00	5.40	8.60	159.00	1.06	0.41	19.00	0.29	5.00
97.00	1890.00	43.00	150.00	0.01	1.23	3.00	17.00	6.40	10.00	186.00	1.22	0.47	20.40	0.31	5.00
98.00	2320.00	61.40	150.00	0.01	1.47	3.00	19.00	7.40	10.00	222.00	1.22	0.60	22.00	0.36	5.00
99.00	2980.00	96.00	150.00	0.02	1.99	4.00	21.40	10.10	45.00	274.00	1.77	0.92	27.30	0.43	10.00

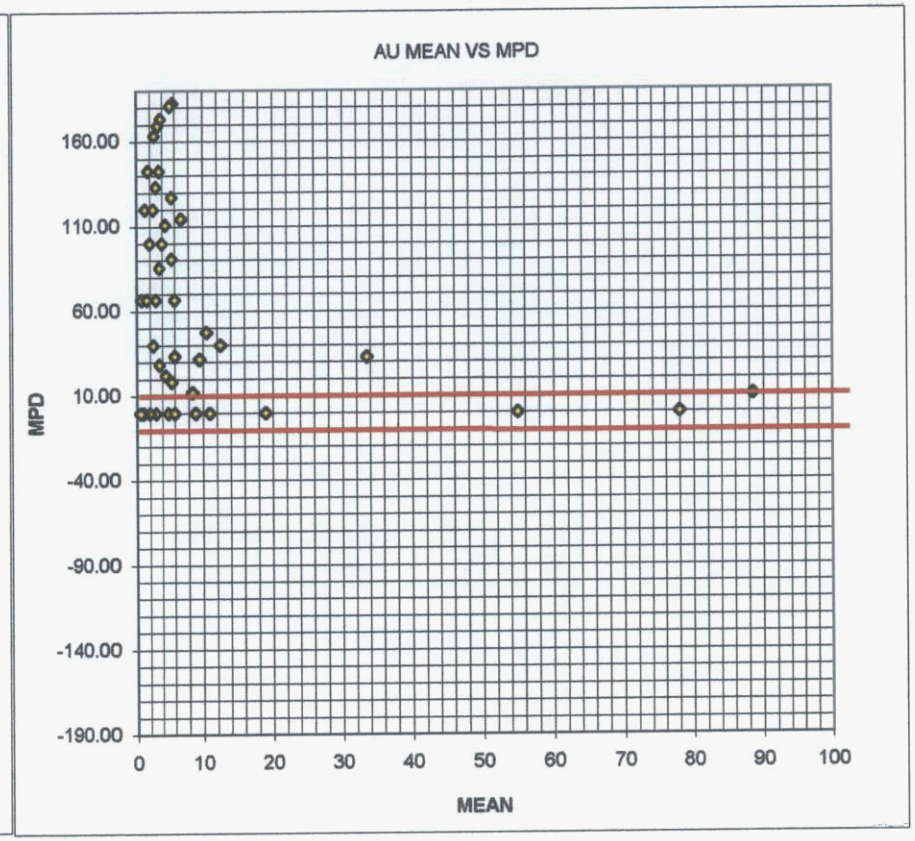
	U (ppm)	V (ppm)	W (ppm)	Y (ppm)	Zn (ppm)	Zr (ppm)
Total Count	2625	3157	3157	45	3157	45
Number Missing	532	0	0	3112	0	3112
Detection Limits	-10		-10			
Count	2099		2094			
Percent	80.00%		66.30%			
Value	5		5			
Mean	4.35	78.05	3.63	18.60	97.37	50.69
Minimum	0.20	7.00	0.05	9.90	1.00	16.20
Maximum	17.90	609.00	20.00	46.20	2010.00	80.30
Percentiles						
10.00	0.90	46.00	0.10	10.80	49.00	36.10
20.00	5.00	54.00	1.00	11.60	56.00	41.40
30.00	5.00	59.00	1.00	13.60	62.00	46.80
40.00	5.00	64.00	5.00	14.60	68.00	49.90
50.00	5.00	69.00	5.00	15.40	74.30	52.30
55.00	5.00	72.00	5.00	15.90	79.00	52.60
60.00	5.00	75.00	5.00	16.80	83.00	53.60
65.00	5.00	79.00	5.00	18.80	89.00	54.20
70.00	5.00	84.00	5.00	19.50	96.00	54.80
75.00	5.00	90.00	5.00	21.50	104.00	56.80
80.00	5.00	98.00	5.00	23.80	116.00	57.70
85.00	5.00	109.00	5.00	26.20	130.00	59.00
90.00	5.00	122.00	5.00	33.20	158.00	59.90
91.00	5.00	125.00	5.00	33.20	165.00	59.90
92.00	5.00	129.00	5.00	33.20	176.00	59.90
93.00	5.00	133.00	5.00	33.90	188.00	61.30
94.00	5.00	138.00	5.00	33.90	199.00	61.30
95.00	5.00	144.00	5.00	35.50	213.40	65.80
96.00	5.00	153.00	5.00	35.50	232.00	65.80
97.00	5.00	164.00	5.00	36.20	262.00	66.80
98.00	5.00	174.00	5.00	36.20	316.00	66.80
99.00	10.00	205.00	6.00	46.20	456.00	80.30

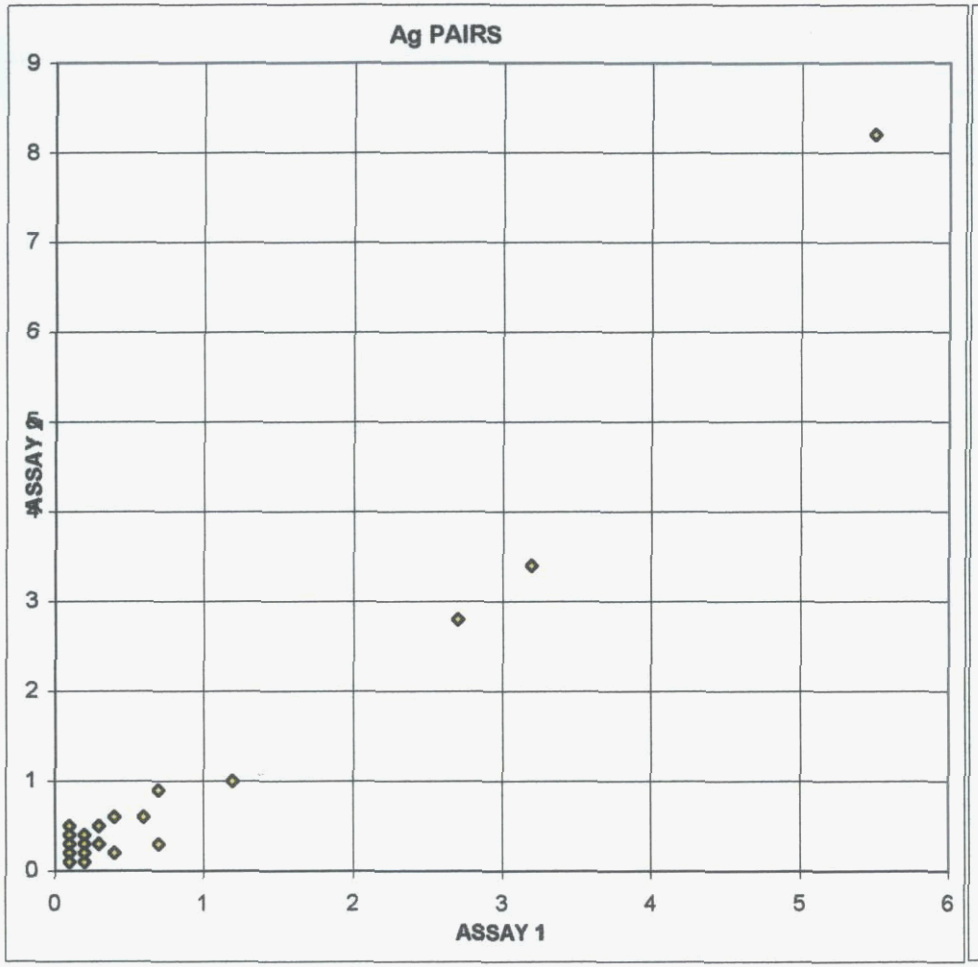
PAIR #	Au		Ag		Cu		Fe		Mo		Na		Pb		Zn	
	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2
1	0.5	1	0.1	0.1	47	44	3.41	3.35	0.5	0.5	0.02	0.02	2	1	70	69
2	2	2	0.1	0.1	17	14	3.13	3.97	0.5	0.5	0.02	0.02	8	6	65	92
3	0.5	0.5	0.1	0.1	12	11	3.96	4.18	1	0.5	0.02	0.02	6	4	69	71
4	0.5	1	0.1	0.1	32	34	2.27	2.4	2	2	0.01	0.01	9	9	47	50
5	0.5	0.5	0.1	0.1	24	24	4.5	4.42	0.5	0.5	0.01	0.01	19	20	229	226
6	2	2	0.1	0.1	97	95	5.57	5.3	4	4	0.01	0.01	5	4	132	126
7	0.5	0.5	0.1	0.1	15	14	3.82	3.56	0.5	0.5	0.01	0.01	7	6	68	65
8	1	2	0.1	0.1	64	62	4.36	4.1	2	2	0.01	0.01	6	8	52	51
9	55	55	0.1	0.1	33	36	2.75	2.96	0.5	0.5	0.01	0.01	22	20	55	61
10	2	5	0.1	0.5	27	29	2.79	2.87	1	1	0.03	0.03	7	7	64	71
11	4	1	0.1	0.1	41	40	3.93	3.87	0.5	1	0.05	0.06	12	8	51	49
12	2	1	0.1	0.1	23	21	3.85	3.81	1	2	0.02	0.02	7	5	69	70
13	7	2	0.1	0.1	12	9	2.58	2.45	0.5	0.5	0.03	0.02	8	4	44	38
14	0.5	1	0.1	0.1	97	104	4.56	4.6	0.5	1	0.04	0.04	13	8	60	61
15	2	2	0.1	0.1	16	18	2.4	2.46	0.5	1	0.01	0.01	10	8	40	40
16	2	3	0.1	0.1	20	19	3.41	2.98	1	0.5	0.01	0.02	8	9	58	55
17	3	1	0.2	0.1	48	53	6.6	7.22	0.5	0.5	0.03	0.04	1	1	97	101
18	0.5	0.5	0.2	0.1	45	63	2.95	3.18	0.5	1	0.01	0.02	4	11	60	71
19	2	6	0.1	0.1	82	65	4.86	4.39	0.5	0.5	0.01	0.01	3	6	63	59
20	1	4	0.1	0.4	44	43	4.46	4.48	0.5	2	0.02	0.02	13	16	104	98
21	0.5	3	0.1	0.1	14	14	2.88	2.95	0.5	0.5	0.01	0.01	9	9	45	49
22	1	1	0.1	0.1	28	28	4.35	4.59	1	0.5	0.01	0.01	11	14	81	83
23	7	0.5	0.2	0.4	40	38	2.84	2.77	2	1	0.02	0.02	9	8	70	68
24	3	3	0.2	0.3	48	46	2.72	2.65	2	2	0.01	0.01	20	20	89	86
25	3	2	0.1	0.1	24	18	2.77	2.78	1	1	0.01	0.01	8	9	43	42
26	2	0.5	0.1	0.1	31	31	4.1	4.17	3	3	0.01	0.01	18	19	126	124
27	1	0.5	0.1	0.1	102	108	4.46	4.56	2	2	0.01	0.01	6	8	52	50
28	2	0.5	0.2	0.2	24	13	5	2.35	0.5	0.5	0.02	0.02	4	7	498	83
29	2	0.5	0.1	0.1	91	86	3.98	3.9	0.5	0.5	0.01	0.01	29	27	532	546
30	6	6	0.4	0.6	44	47	3.34	3.41	2	2	0.02	0.02	25	25	130	133
31	1	6	0.1	0.1	25	17	3.56	3.7	2	1	0.01	0.01	14	10	68	61
32	5	5	0.1	0.1	32	34	4.37	4.56	0.5	0.5	0.02	0.03	10	8	86	89
33	15	10	0.1	0.1	17	18	2.8	3	1	1	0.01	0.01	11	11	60	65
34	8	4	0.7	0.3	77	70	4.57	4.14	0.5	0.5	0.03	0.03	4	3	96	87
35	1	3	0.1	0.1	48	49	3.08	3.22	0.5	0.5	0.01	0.01	109	116	110	115
36	1	0.5	0.1	0.1	14	14	2.86	2.89	1	1	0.01	0.01	9	8	80	80
37	3	2	0.4	0.2	25	25	3.46	3.24	0.5	0.5	0.03	0.02	9	9	125	124
38	0.5	0.5	0.1	0.1	24	17	3.98	4.97	0.5	0.5	0.02	0.02	4	4	87	47
39	1	1	0.1	0.1	19	19	3.57	3.64	0.5	0.5	0.02	0.02	12	12	71	72
40	1	3	0.1	0.1	35	34	4.13	4.14	1	1	0.02	0.02	8	9	100	101
41	0.5	0.5	0.1	0.1	20	22	3.83	3.81	1	1	0.01	0.01	14	16	43	44
42	0.5	5	0.1	0.1	28	28	2.79	2.79	1	1	0.02	0.02	10	6	67	66
43	1	5	0.1	0.1	37	35	3.65	3.52	0.5	0.5	0.02	0.02	10	10	65	63

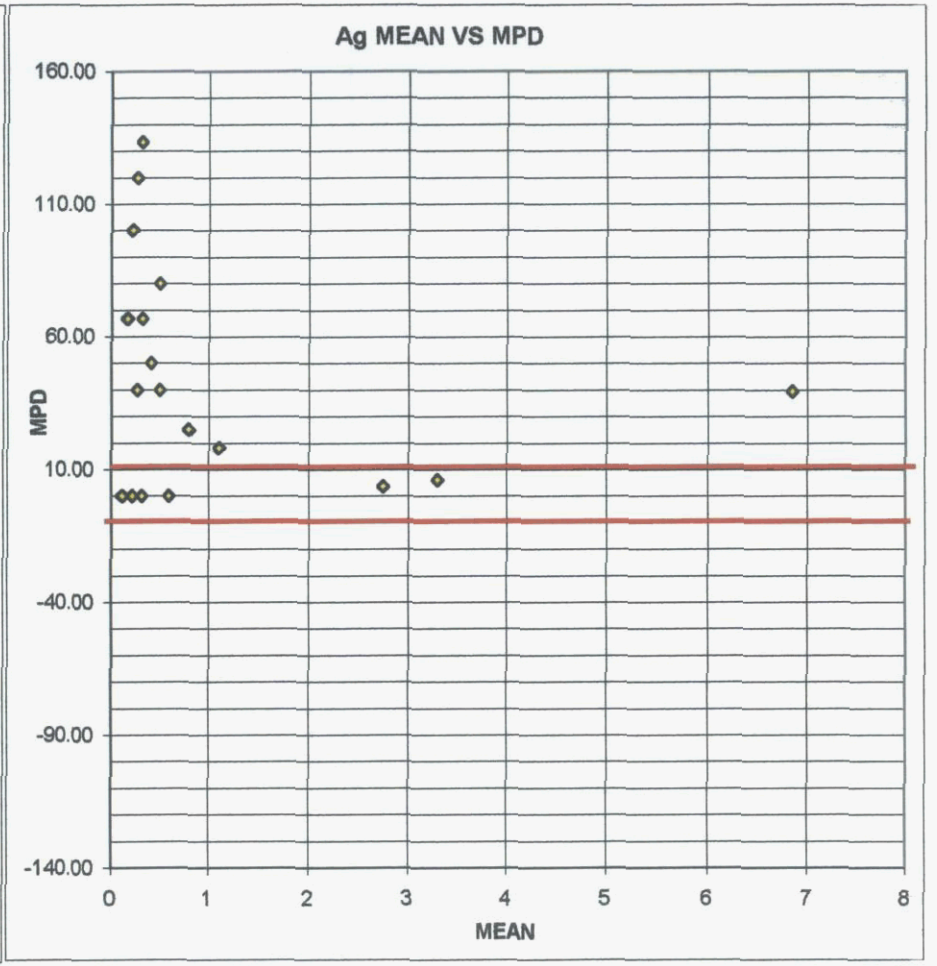
PAIR #	Au		Ag		Cu		Fe		Mo		Na		Pb		Zn	
	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2
44	1	1	0.1	0.1	14	14	5.05	5.16	1	0.5	0.01	0.01	25	9	166	166
45	2	2	0.1	0.1	23	22	2.31	2.37	0.5	0.5	0.01	0.01	4	7	44	45
46	84	93	5.5	8.2	508	820	4.65	5.56	6	11	0.03	0.02	35	69	101	162
47	1	1	0.1	0.1	27	26	4.54	4.73	0.5	0.5	0.02	0.02	8	8	164	175
48	0.5	2	0.1	0.1	13	13	4.49	4.34	0.5	0.5	0.01	0.01	7	4	73	70
49	2	2	0.1	0.3	32	38	3.4	3.41	0.5	0.5	0.01	0.01	12	13	58	60
50	3	8	0.1	0.1	79	77	3.4	3.32	0.5	0.5	0.03	0.03	6	5	60	63
51	0.5	0.5	0.1	0.1	37	40	3.79	3.86	1	1	0.01	0.01	12	14	71	77
52	6	0.5	0.1	0.1	33	37	2.74	2.86	0.5	0.5	0.01	0.02	4	5	35	37
53	1	1	0.1	0.1	28	29	3.17	3.44	0.5	0.5	0.03	0.03	5	6	49	55
54	0.5	0.5	0.1	0.1	27	27	4.29	4.67	0.5	0.5	0.01	0.01	10	12	86	96
55	1	1	0.1	0.1	39	33	6.93	5.61	1	1	0.01	0.01	10	9	138	106
56	0.5	3	0.1	0.1	78	67	4.03	3.85	0.5	1	0.02	0.01	12	10	59	55
57	0.5	11	0.1	0.1	51	50	5.82	5.66	1	1	0.02	0.02	11	11	102	98
58	0.5	6	0.1	0.1	76	76	1.04	0.94	0.5	0.5	0.01	0.01	3	3	15	13
59	2	2	0.1	0.1	28	36	3.15	3.48	0.5	0.5	0.02	0.02	5	6	62	68
60	3	0.5	0.1	0.1	19	22	2.02	1.34	0.5	1	0.03	0.03	4	2	41	33
61	1	1	0.1	0.1	77	76	4.25	4.37	0.5	0.5	0.04	0.04	8	9	132	134
62	0.5	1	0.1	0.1	178	172	6.67	6.69	0.5	1	0.03	0.03	4	6	107	109
63	9	8	2.7	2.8	569	672	4.01	4.25	13	14	0.005	0.005	15	18	78	82
64	9	9	3.2	3.4	220	219	8.36	8.38	10	8	0.005	0.03	7	3	837	835
65	1	0.5	0.1	0.1	26	25	2.11	2	0.5	0.5	0.02	0.02	5	6	38	36
66	2	0.5	0.1	0.1	18	17	3.02	2.98	0.5	0.5	0.01	0.01	7	9	55	54
67	0.5	3	0.3	0.3	66	64	5.39	5.26	1	2	0.01	0.01	10	10	155	150
68	0.5	1	0.1	0.2	16	16	2.84	2.89	0.5	0.5	0.01	0.01	9	9	44	45
69	4	3	0.1	0.1	21	18	3.24	3.22	0.5	0.5	0.01	0.01	9	10	66	75
70	0.5	0.5	0.1	0.1	104	108	5.44	5.09	1	0.5	0.13	0.11	8	12	43	35
71	3	4	0.1	0.1	58	63	2.99	3.09	1	0.5	0.005	0.005	10	11	80	84
72	2	2	0.1	0.1	122	111	6.23	5.58	0.5	0.5	0.03	0.03	3	3	88	88
73	1	1	0.1	0.1	17	17	2.6	2.32	0.5	0.5	0.02	0.02	16	12	66	49
74	0.5	2	0.1	0.1	90	89	4.46	4.56	1	1	0.03	0.03	3	2	104	102
75	4	3	0.3	0.5	33	33	3.45	3.48	0.5	0.5	0.03	0.03	9	8	66	66
76	6	6	0.1	0.1	37	39	3.06	3.03	0.5	0.5	0.01	0.01	7	5	52	51
77	4	5	0.2	0.3	24	24	3.61	3.66	1	0.5	0.02	0.02	121	118	227	231
78	0.5	2	0.4	0.2	45	46	5.11	5.04	0.5	0.5	0.05	0.06	8	6	121	122
79	0.5	0.5	0.2	0.1	54	64	5.46	6.34	0.5	0.5	0.02	0.02	1	1	81	90
80	5	7	1.2	1	87	88	10.25	10.45	10	10	0.07	0.07	3	5	94	94
81	11	8	0.1	0.1	79	82	4.64	4.55	4	4	0.02	0.02	152	156	312	305
82	4	2	0.1	0.2	459	435	7.13	6.87	6	6	0.05	0.05	1	2	83	75
83	5	6	0.1	0.1	200	214	5.37	5.56	2	3	0.01	0.01	5	10	151	163
84	2	2	0.1	0.1	44	44	4.87	5	1	1	0.06	0.06	39	41	94	101
85	1	3	0.1	0.1	14	12	3.43	3.39	1	1	0.01	0.01	96	93	77	76
86	1	0.5	0.1	0.1	20	23	3.4	3.87	1	1	0.01	0.01	13	15	70	78

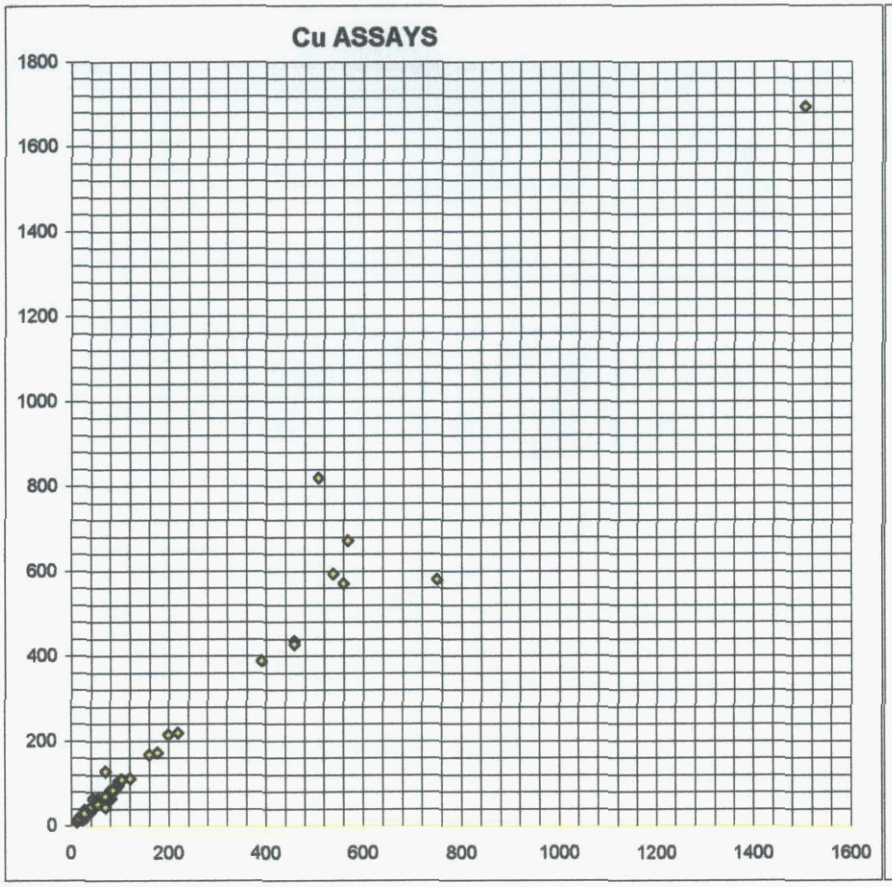
PAIR #	Au		Ag		Cu		Fe		Mo		Na		Pb		Zn	
	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2	ASSAY 1	ASSAY 2
87	4	5	0.2	0.2	70	69	3.05	3	1	1	0.02	0.02	7	11	64	62
88	0.5	2	0.1	0.2	71	44	2.91	3.39	0.5	1	0.005	0.01	5	7	45	61
89	1	1	0.1	0.4	35	35	3.38	3.67	1	0.5	0.02	0.02	33	36	208	228
90	2	1	0.1	0.1	55	58	6.67	6.84	2	2	0.04	0.03	4	6	83	87
91	5	4	0.1	0.2	39	38	4.11	4.17	2	3	0.01	0.01	7	7	158	162
92	5	1	0.1	0.1	42	45	4.62	4.86	0.5	1	0.03	0.03	1	2	33	33
93	3	4	0.1	0.1	82	80	4.8	4.67	0.5	0.5	0.03	0.03	6	5	63	62
94	0.5	10	0.1	0.1	52	50	2.75	2.69	0.5	0.5	0.02	0.02	1	2	56	55
95	11	3	0.1	0.1	55	52	2.73	2.56	0.5	1	0.02	0.02	7	7	46	44
96	2	5	0.1	0.1	26	28	3.71	3.72	0.5	0.5	0.02	0.02	8	6	98	101
97	4	1	0.1	0.1	24	24	2.54	2.44	1	0.5	0.01	0.01	11	7	106	112
98	1	1	0.1	0.1	17	18	4.36	4.44	0.5	0.5	0.01	0.01	22	31	90	108
99	1	3	0.1	0.3	24	24	2.88	2.77	1	1	0.01	0.01	36	27	142	130
100	3	0.5	0.1	0.1	71	128	2.34	3.24	1	1	0.01	0.01	15	17	116	154
101	11	11	0.1	0.1	86	85	4.64	4.54	3	3	0.01	0.01	17	14	160	158
102	9	2	0.1	0.1	458	428	4.17	3.92	8	7	0.01	0.01	1	1	66	62
103	8	13	0.1	0.1	161	167	4.53	4.67	2	3	0.04	0.04	7	6	66	69
104	5	6	0.1	0.2	540	594	5.52	5.72	8	8	0.02	0.02	9	1	69	72
105	19	19	0.3	0.3	390	388	8.66	8.52	4	4	0.59	0.59	13	16	40	39
106	78	78	0.7	0.9	1505	1695	5.03	5.49	56	55	0.05	0.05	9	10	65	72
107	5	6	0.1	0.1	560	571	6.59	6.63	6	5	0.12	0.13	10	10	43	45
108	39	28	0.6	0.6	751	580	4.89	4.79	9	8	0.03	0.03	59	44	198	196
109	3	2	0.1	0.1	31	32	3.77	3.94	4	4	0.02	0.03	12	14	201	207
110	0.5	0.5	0.1	0.1	28	28	4.27	4.29	0.5	1	0.01	0.01	5	4	76	77

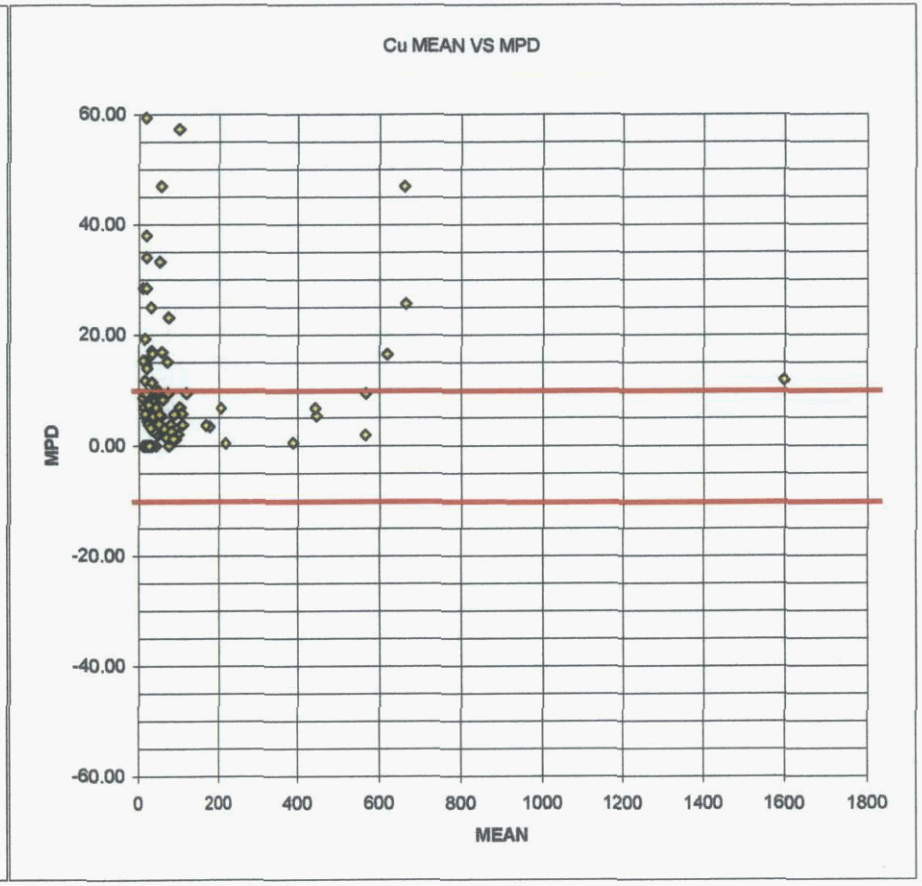

AU ASSAYS
ASSAY 2
ASSAY 1
0
10
20
30
40
50
60
70
80
90
100
0
20
40
60
80
100

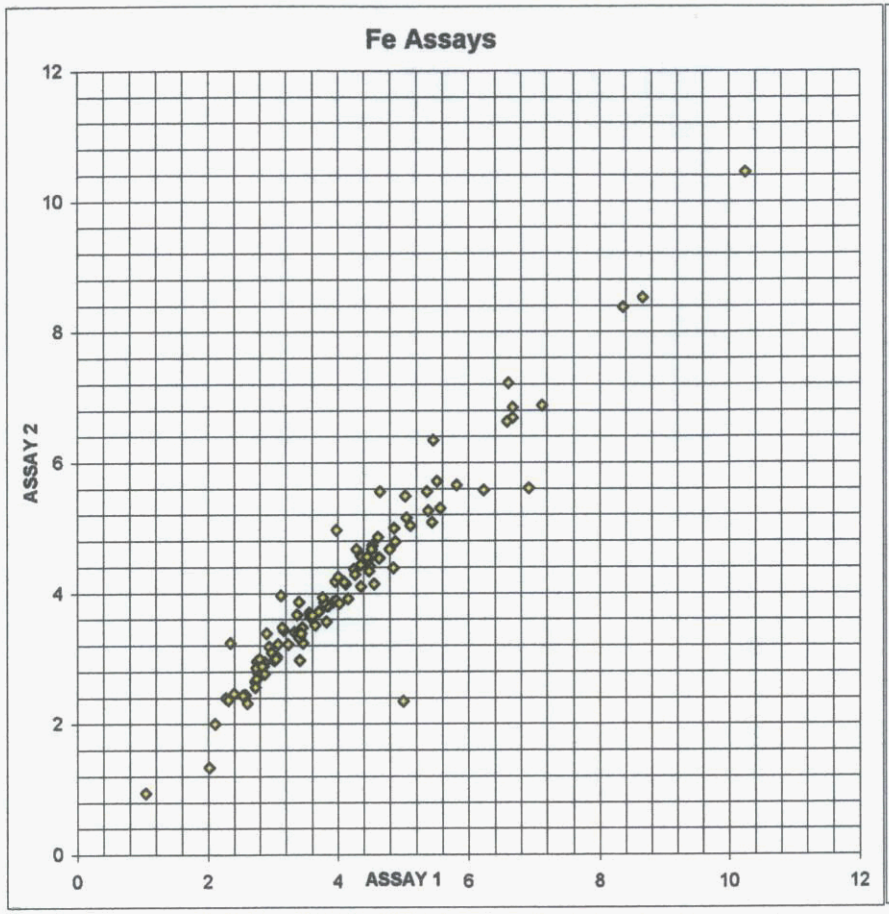

AU MEAN VS MPD
MPD
MEAN
160.00
110.00
60.00
10.00
-40.00
-90.00
-140.00
-190.00
0
10
20
30
40
50
60
70
80
90
100

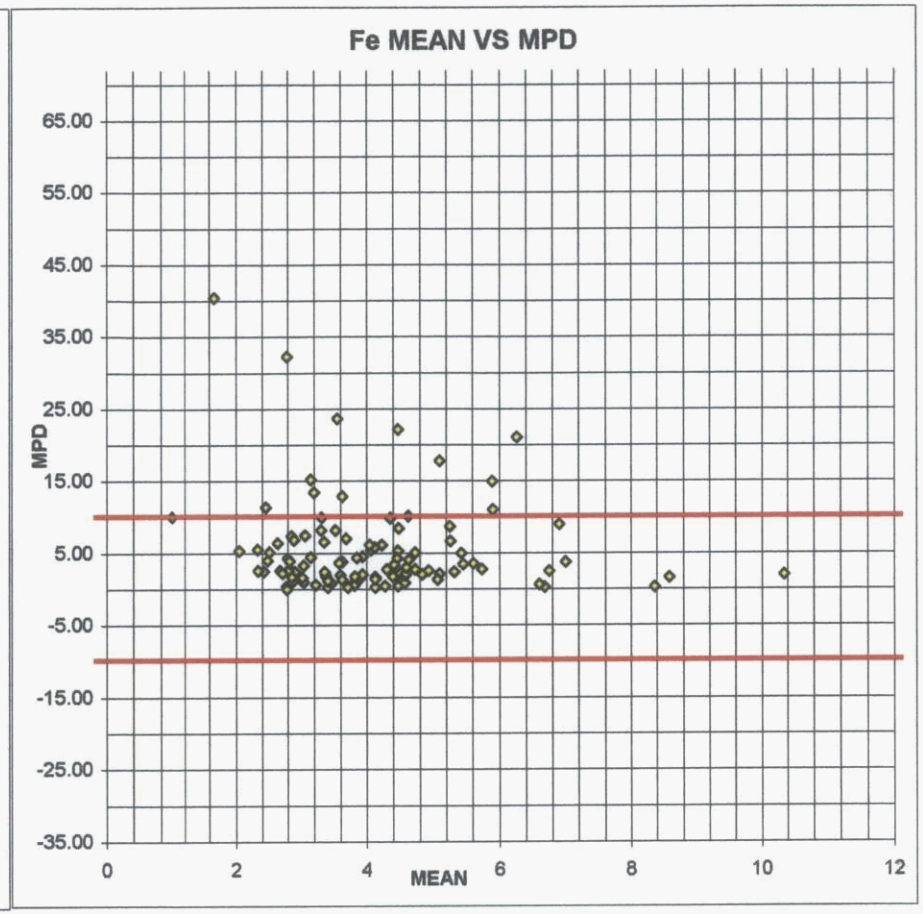

Ag PAIRS
9
8
7
6
5
4
3
2
1
0
0
1
2
3
4
5
6
ASSAY 1

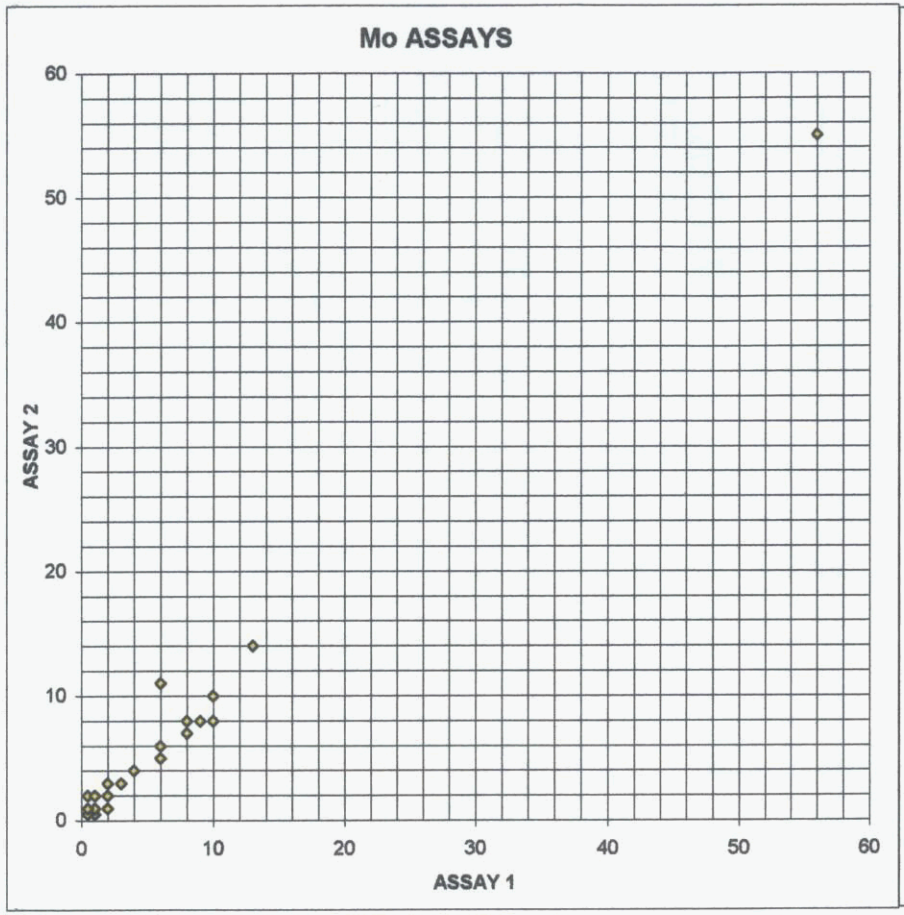

Ag MEAN VS MPD
160.00
110.00
60.00
10.00
-40.00
-90.00
-140.00
MPD
0
1
2
3
4
5
6
7
8
MEAN

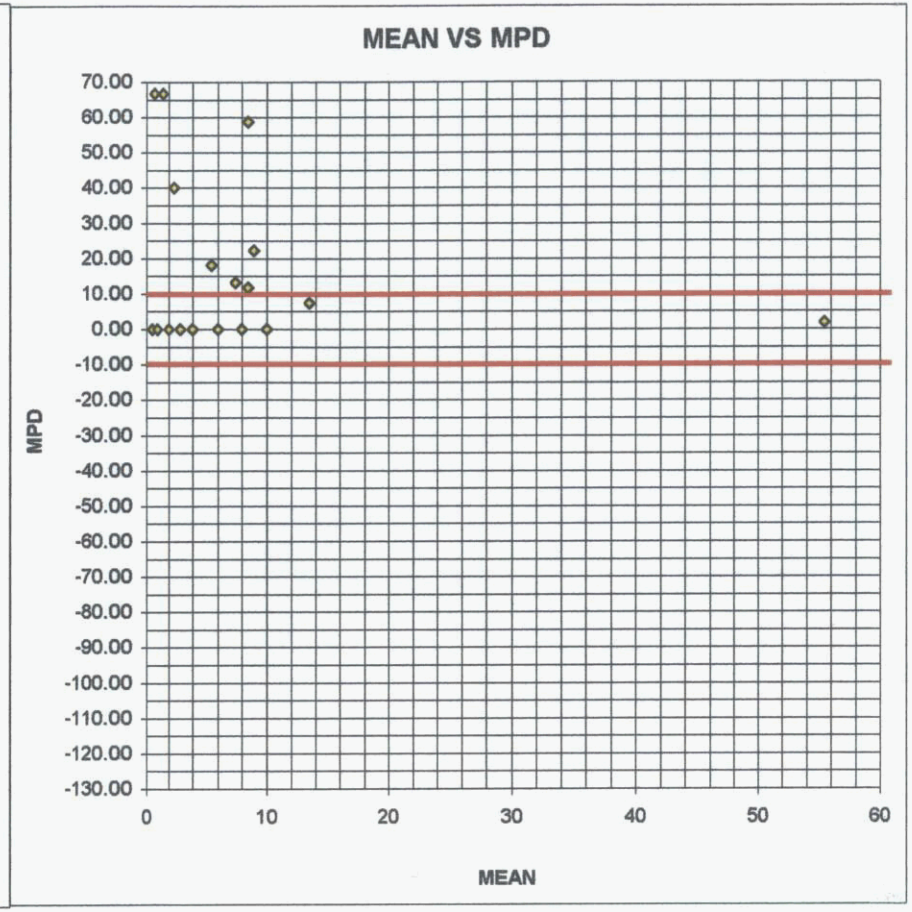

Cu ASSAYS
1800
1600
1400
1200
1000
800
600
400
200
0
0
200
400
600
800
1000
1200
1400
1600


Cu MEAN VS MPD
60.00
40.00
20.00
0.00
-20.00
-40.00
-60.00
MPD
0
200
400
600
800
1000
1200
1400
1600
1800
MEAN


Fe Assays
ASSAY 2
ASSAY 1
0
2
4
6
8
10
12


Fe MEAN VS MPD
MPD
MEAN
65.00
55.00
45.00
35.00
25.00
15.00
5.00
-5.00
-15.00
-25.00
-35.00
0
2
4
6
8
10
12


Mo ASSAYS
ASSAY 2
ASSAY 1
0
10
20
30
40
50
60


MEAN VS MPD
MPD
MEAN
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.00
-110.00
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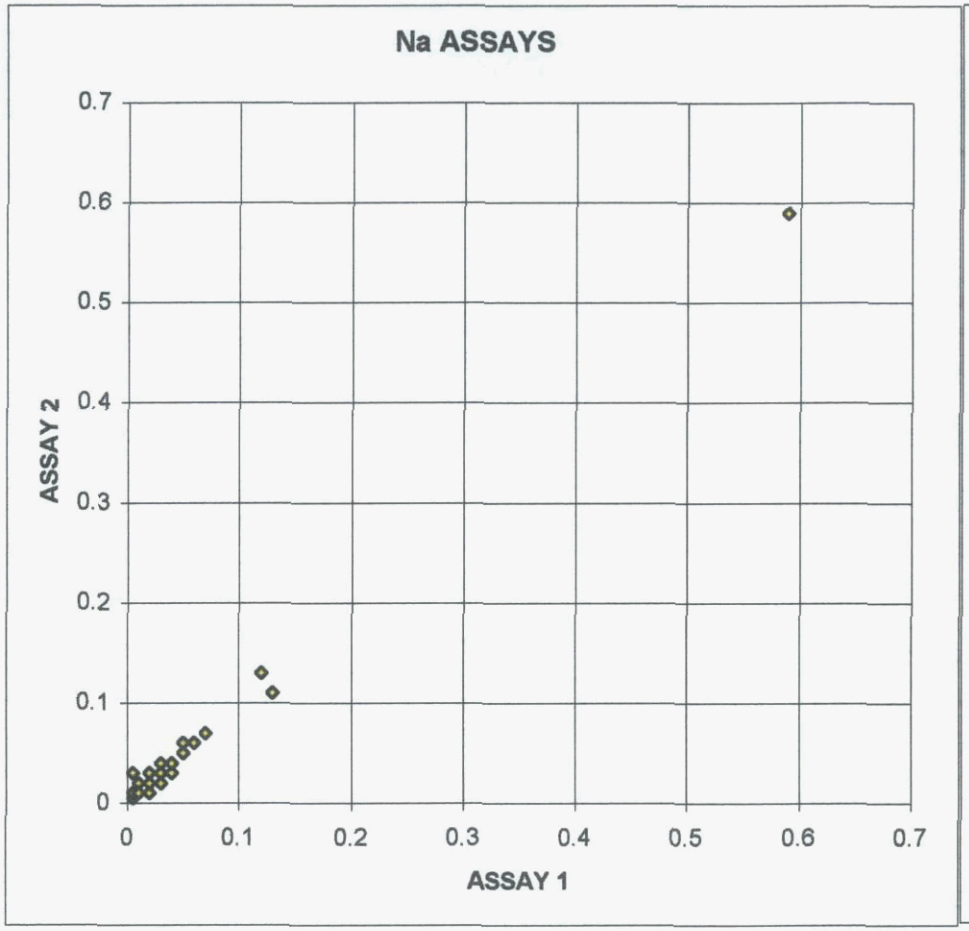
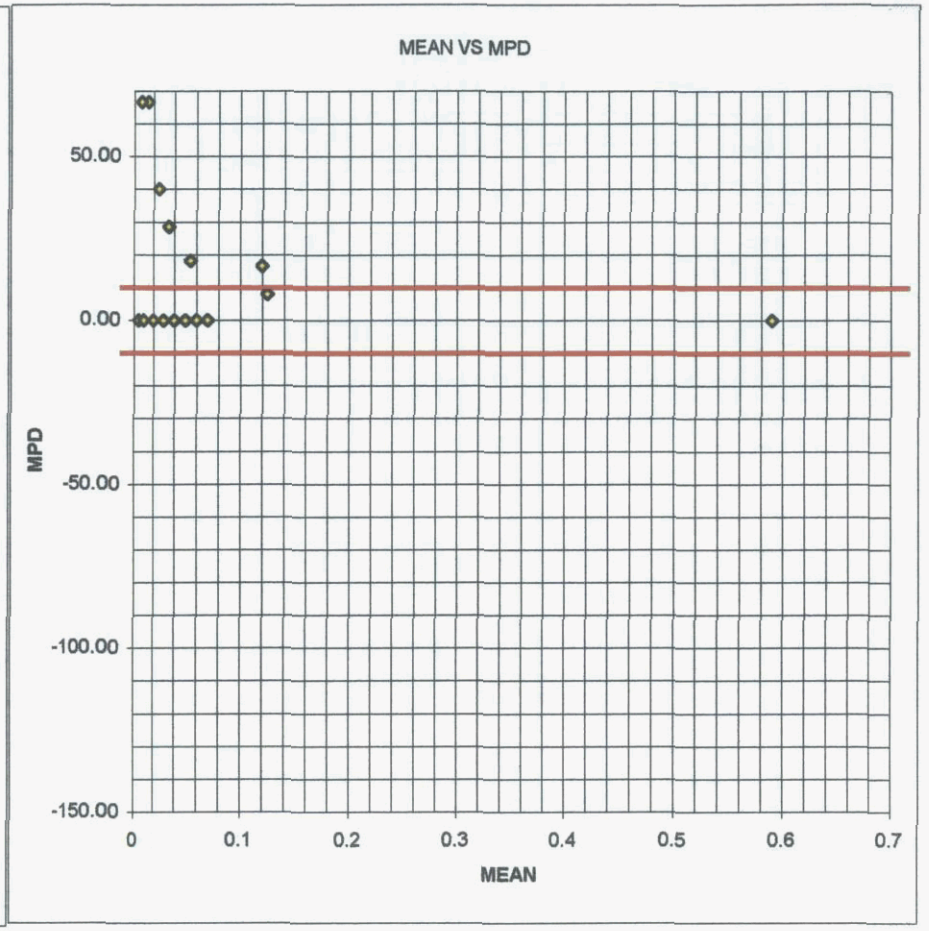
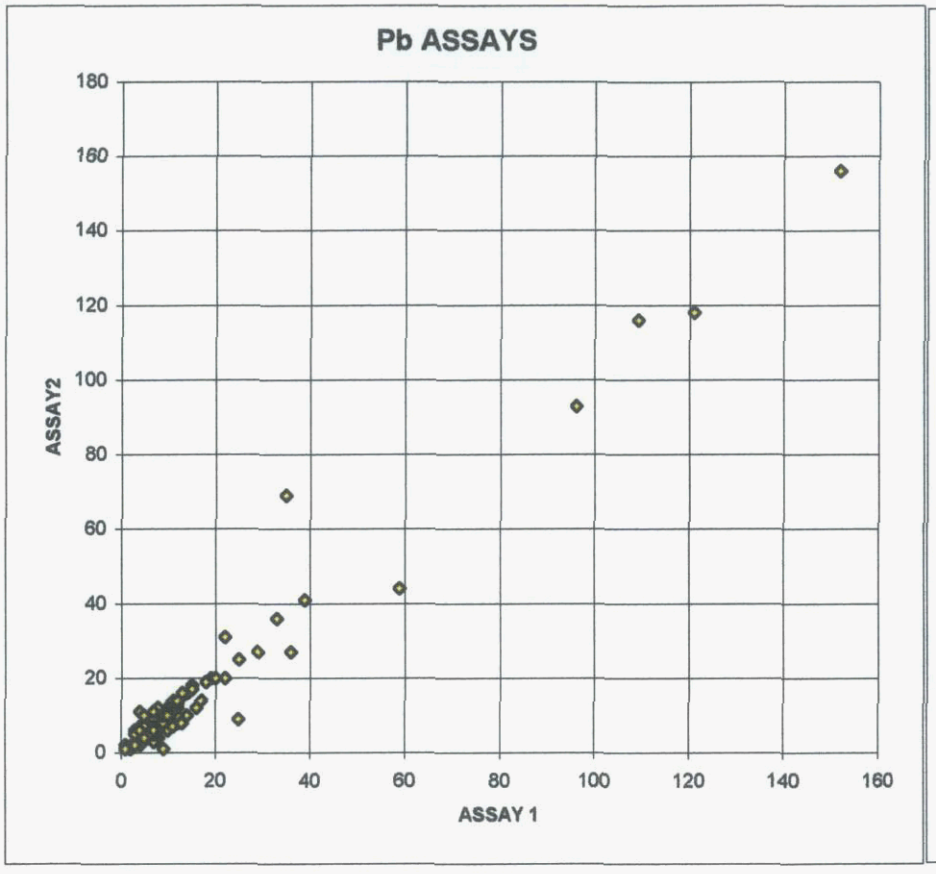
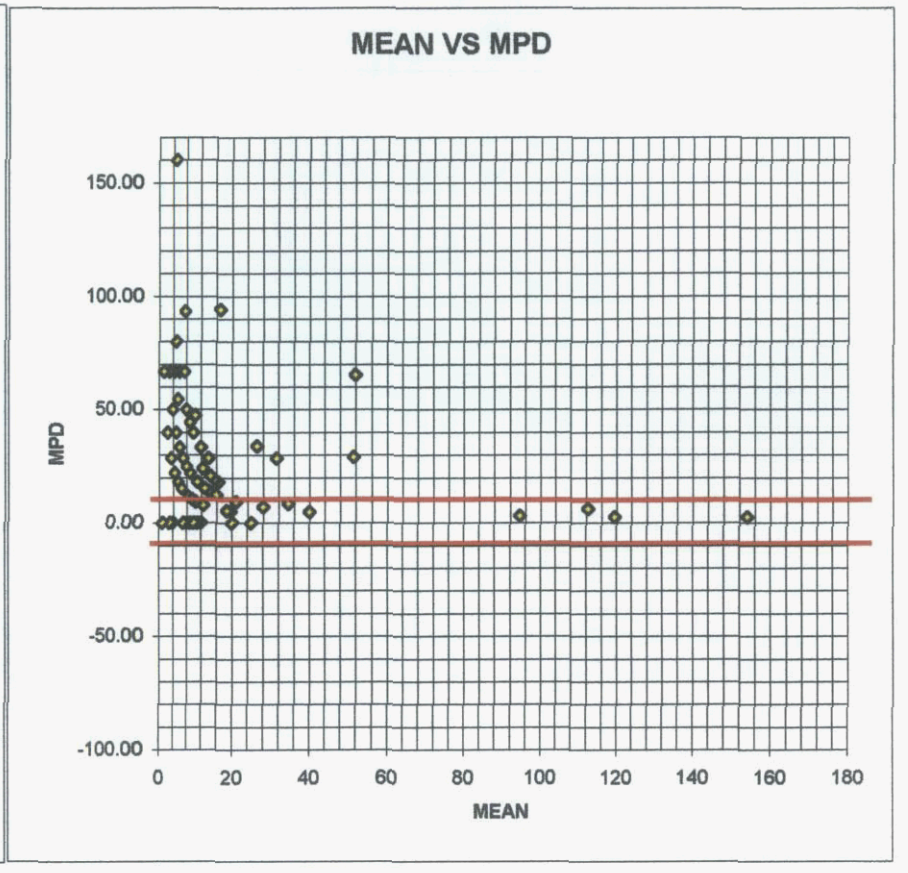
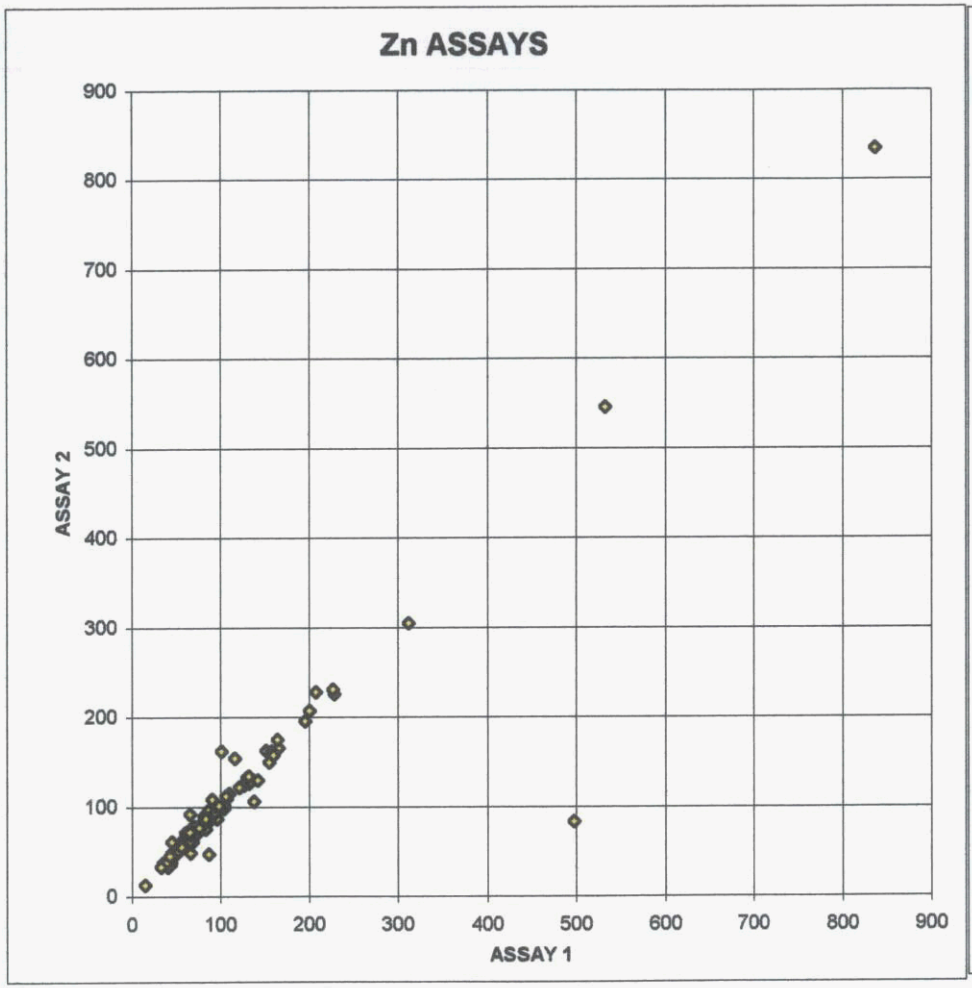
-130.00
0
10
20
30
40
50
60

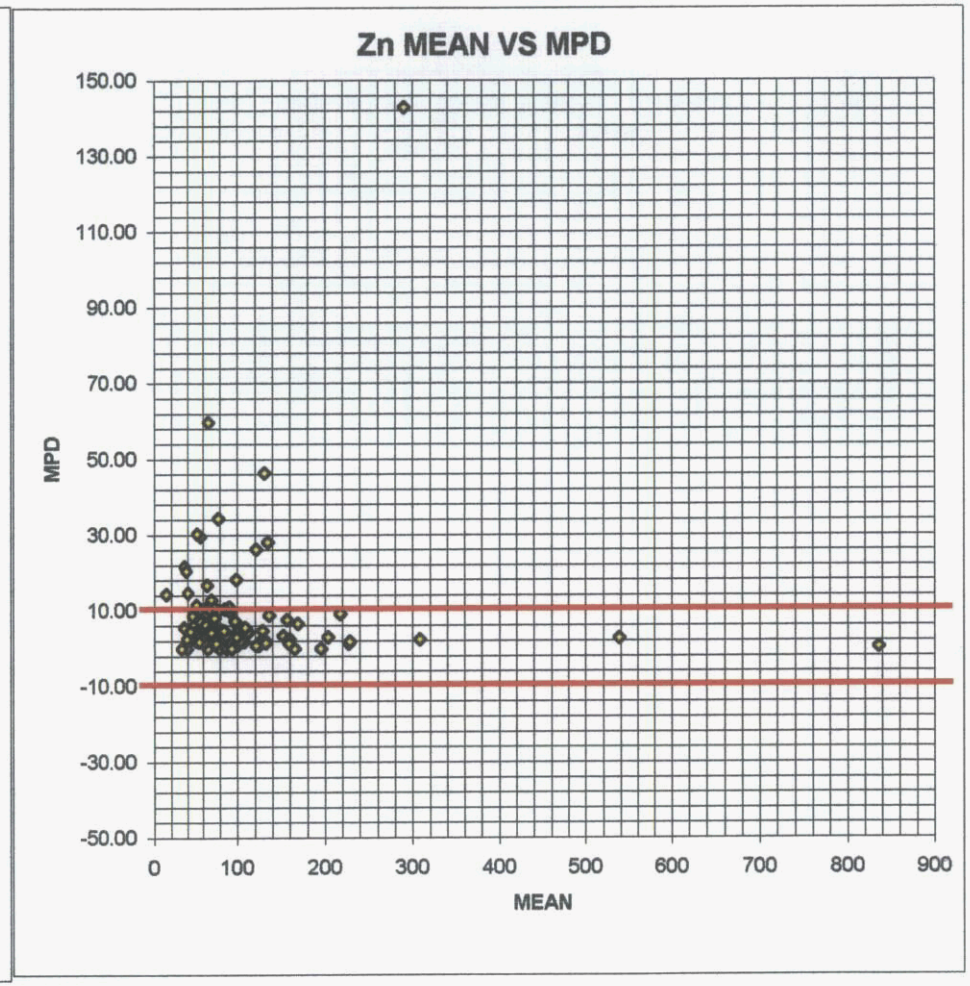

Na ASSAYS
ASSAY 2
ASSAY 1
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7


MEAN VS MPD
MPD
MEAN
50.00
0.00
-50.00
-100.00
-150.00
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7


Pb ASSAYS
ASSAY2
ASSAY 1
0
20
40
60
80
100
120
140
160
180


MEAN VS MPD
MPD
MEAN
150.00
100.00
50.00
0.00
-50.00
-100.00
0
20
40
60
80
100
120
140
160
180


Zn ASSAYS
ASSAY 2
ASSAY 1
0
100
200
300
400
500
600
700
800
900


Zn MEAN VS MPD
MPD
MEAN
150.00
130.00
110.00
90.00
70.00
50.00
30.00
10.00
-10.00
-30.00
-50.00
0
100
200
300
400
500
600
700
800
900

ELEMENT	AVG MPD	MIN CONC	MAX CONC	MEAN	COMMENTS
Au (ppb)	56.67	0.5	93	5.18	The high average MPD can be attributed to values below 12 ppb, which statistically falls at the 95th percentile for the entire 2003 dataset indicating that subtle Au anomalies are not reliable.
Ag (ppm)	14.99	0.1	8.2	0.27	Good repeatability for values above 1 ppm, however .9 ppm represents the 98th percentile for the dataset and .19 ppm is the mean. Only high levels of this element can be trusted, incomplete digestion being the cause. Only 23% of the entire population falls above the detection limit.
Cu (ppm)	8.68	9	1695	98.53	The average MPD is within acceptable limits, high MPD's tend to cluster below 100 ppm but more than half of the population within this range produces repeatable results. Unusual scatter occurs around 600 ppm but both returns are still highly anomalous.
Fe (%)	5.86	0.94	10.45	4.08	Good repeatability throughout the range of data. There is an unexplained linear trend that falls outside of the 90% confidence level that ranges from 3-6% but only 6 samples fall within it. There must be some type of systematic error. Some of these samples also have high MPD's for Pb, Zn, Cu. Three were collected by the same individual possibly suggesting improper homogenization.
Mo (ppm)	17.94	0.5	56	2.13	This is a fair average MPD considering aqua-regia digestion was used. Only a small handful of samples fall outside of the confidence level but these range from the detection limit up to about 10 ppm. 46% of the population falls below the detection limit.
Na (%)	7.22	0.005	0.59	0.03	Good repeatibility, falls off below about 0.06% (96th percentile level)
Pb (ppm)	24.96	1	156	14.42	Very poor repeatability below about 15 ppm
Zn (ppm)	8.26	13	837	100.29	Good overall repeatability, higher MPD's occur below 130 ppm