Bahnhofstraße 14 // D-37181 Hardegsen // T +49 (0)5505 94098-0
Geschäftsführer: Ralf Klaus Blecher // Amtsgericht Göttingen HRB 130263
www.crb-gmbh.de // labor@crb-gmbh.de

CRB Analyse Service GmbH

RFA Ringversuch GeoPT 41A, England - SSCO-1, Mineralised Stream Sediment

Veranstalter des Ringversuchs: International Association of Geoanalysts and Geostandards Newsletter - GeoPT41A

Ringversuchsmaterial: SSCO-1, Mineralised Stream Sediment

RV geschlossen: 2017 – 7

Literatur: Report - GeoPT41 Proficiency Testing Round 41A (Laborcode CRB = Z124)

Hauptelemente [MA%]

	CRB	RV	1sRV	Z-Score
Na_2O	1,780	1,800	0,033	-0,300
MgO	0,730	0,720	0,015	0,330
Al_2O_3	11,010	11,070	0,154	-0,190
SiO_2	69,420	69,420	0,734	0,000
P_2O5	0,186	0,186	0,005	0,010
S *	0,233	0,253	0,061	-0,160
K_2O	3,540	3,551	0,059	-0,090
CaO	1,540	1,539	0,029	0,020
TiO_2	0,404	0,396	0,009	0,460
Fe_2O_3tot	6,590	6,545	0,154	0,150
MnO	0,427	0,424	0,010	0,160
L.O.I. *	3,490	3,660	0,520	-0,160
TC	5412	5302	116,700	0,470
TOC*	3903	3254	984,000	0,330

Spurenelemente [µg/g]

	CRB	RV	1sRV	Z-Score
Ag	3,80	3,80	0,20	0,00
Ba	775,00	779,40	22,90	-0,10
Ce	96,00	99,90	4,00	-0,48
Cl *	150,00	158,00	106,00	-0,04
Co	8,00	8,10	0,50	-0,08
Cr	16,00	16,50	0,90	-0,30
Cu	375,00	365,00	12,00	0,42
Ga	17,00	16,10	0,80	0,56
Hf	6,50	6,50	0,40	0,00
La	42,00	37,60	1,70	1,26
Mo	15,00	13,00	0,70	1,41
Nb	18,00	18,70	1,00	-0,38
Nd	33,00	31,60	1,50	0,47
Ni	11,00	9,00	0,50	1,93
Pb	921,00	917,00	26,30	0,08
Pr	9,00	8,50	0,50	0,53
Rb	128,00	126,70	4,90	0,13
Sc	5,00	6,30	0,40	-1,70

Sm	7,00	5,80	0,40	1,74
Sr	190,00	189,00	6,90	0,07
Th	12,00	11,10	0,60	0,75
U	2,00	3,30	0,20	-2,92
V	53,00	55,50	2,40	-0,51
Y	28,00	26,10	1,30	0,73
Zn	602,00	605,00	18,50	-0,08
Zr	227,00	230,00	8,10	-0,18

Legende

CRB: Ergebnisse CRB – **RV:** Ergebnisse Ringversuch -- **1s-RV:** Standardabweichung Ringversuch
Z-Score: Differenz des Messwertes vom Mittelwert des Ringversuchs -- * Wert nicht zertifiziert

Geo*PT*41A — AN INTERNATIONAL PROFICIENCY TEST FOR ANALYTICAL GEOCHEMISTRY LABORATORIES — REPORT ON ROUND 41A (Mineralised stream sediment, SSCO-1) / July 2017

Peter C. Webb[1]*, Michael Thompson[2], Philip J. Potts[1], Charles J. B. Gowing[3] and Stephen A. Wilson[4]

[1]Department of Environment, Earth and Ecosystems, The Open University, Walton Hall, Milton Keynes, MK7 6AA, UK.

[2]School of Biological and Chemical Sciences, Birkbeck University of London, Malet Street, London WC1E 7HX, UK.

[3]British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, NG12 5GG, UK.

[4]U.S. Geological Survey, Box 25046, MS 964D, Denver Federal Centre, Denver, CO 80225, USA.

*Corresponding author, Peter Webb: e-mail geopt@macace.net

*Keywords: proficiency testing, quality assurance, Geo*PT*, Geo*PT*41A, Round 41A, SSCO-1, mineralised stream sediment*

Abstract

Results are presented for Round 41A of the International Association of Geoanalysts' Proficiency Testing programme for analytical geochemistry laboratories. The test material distributed in this supplementary round of Geo*PT* was a mineralised stream sediment, SSCO-1, supplied by Dr Stephen Wilson of the U.S. Geological Survey. In this report, the data contributed by 88 laboratories are listed, together with an assessment of consensus values, consequent *z*-scores and charts to show the distribution of contributed results and the overall performance of participating laboratories.

Introduction

This forty-first round of the international proficiency testing programme, Geo*PT*, was conducted in a similar manner to earlier rounds. The programme is designed to be part of the routine quality assurance procedures employed by analytical geochemistry laboratories. The programme is organised by the International Association of Geoanalysts and is conducted in accordance with a published protocol available at (http://www.geoanalyst.org/documents/GeoPT-protocol.pdf). The overall aim of the programme is to provide participating laboratories with *z*-score information for reported elemental determinations from which the laboratory can decide whether the quality of their data is satisfactory in relation both to their chosen fitness-for-purpose criteria and to the results submitted by other laboratories contributing to the round. In circumstances where *z*-scores are unsatisfactory, a participating laboratory is encouraged to investigate for unsuspected analytical bias and to take corrective action if this appears justified.

Steering Committee for Round 41A: P.C. Webb (results coordinator), M. Thompson (statistical advisor), P.J. Potts and C.J.B. Gowing (analytical advisors), S.A. Wilson (provision of SSCO-1).

Timetable for Round 41A:
Distribution of sample: March 2017
Results submission deadline: 14th June 2017
Release of report: July 2017

Test Material details

Geo*PT*41A: The mineralised stream sediment test material, SSCO-1, was supplied by Dr Stephen Wilson. The test material was evaluated for homogeneity by the originator, and as a result, the sample was considered suitable for use in this proficiency test.

Submission of results

A total of 3176 results were submitted for Geo*PT*41A (SSCO-1) by 88 laboratories as listed in Table 1. Results that were designated by a participating laboratory as data quality 1 (see ***Z*-score analysis** section below for explanation) are shown in bold and results of data designated as quality 2 are shown underlined. Results from all laboratories submitting data were used to assess respective assigned values. Regrettably there were two laboratories reporting in total 5 values of ‘0’ (i.e. zero), for this round. We should emphasise that as stated in the ***Instructions to Analysts*,** values of zero for measurands other than LOI should not be reported. These 5 values were excluded from consideration in the data assessment process. Note also (see details later) that at least 9 results were reported using the wrong units. Reporting is part of the proficiency test, and mistakes of this kind will adversely affect a laboratory's *z*-scores.

Assigned values

Following procedures described in earlier rounds, robust statistical procedures were used to derive assigned mass fraction values [X_a] for measurands in this test sample, these values being judged to be the best available estimates of the true composition. Values were assigned on the basis that: i) sufficient laboratories had contributed data for a measurand, and ii) visual assessment gave confidence that a substantial proportion of the results distribution was symmetrically disposed. Part of this assessment involved examining the distribution of results from bar charts of contributed data for each measurand (presented in Figures 1 and 2). For this round it has also been possible to view data distributions according to analytical procedure and assess the comparative quality of data obtained using different procedures.

Many datasets were normally disposed and showed remarkable symmetry with relatively little dispersion of data. Consequently, in 13 cases the robust mean was used to define an appropriate consensus value. However, many other datasets were slightly skewed and some cases, more severely skewed. In the majority of such instances medians provided a satisfactory estimator for defining consensus values: 26 cases in all. Where the median did not provide a symmetrical distribution of data about the consensus, the mode was preferred, and was used in 20 cases for defining a consensus.

Often, a mode was used as a consequence of an asymmetric distribution of results involving either a high tail or a low tail within which there are highly variable data. Sometimes, but not always, the reason for the high tail is because XRF data are reported for mass fractions close to the detection limit for the technique and measured values consequently have poor precision and accuracy. High tails are noted for Cd, Cs, Hg, Ni, Sc, Se and Ta. The reason for low tails is often due to incomplete dissolution of refractory accessory minerals during acid digestion. Low tails are noted for Er, Hf, Ho, Lu, Sb, Yb and Zr. In 13 cases, modes were sufficiently well defined by appropriate techniques to justify their designation as assigned values. In the other seven cases provisional status was judged most appropriate (see Table 2). Procedures used to determine the mode included the estimation of the mass fraction corresponding to the maximum value of the kernel density distribution for the dataset and the Lientz mode (Lientz, 1969) as provided by the "modeest" package which runs in "R" (https://cran.r-project.org/web/packages/modeest/modeest.pdf). Modes are suitably robust location estimators that can provide consensus values to represent the most coherent part of a data distribution where data are often symmetrically disposed, whereas the dataset as a whole is asymmetric.

Table 2 lists assigned and provisional values for 10 major components and 49 trace elements in Geo*PT*41A (SSCO-1). Bar charts for the 59 measurands of Geo*PT*41A that were judged to have satisfactory distributions for consensus values to be designated as assigned or provisional values are shown in Figure 1. These are: SiO_2, TiO_2, Al_2O_3, Fe_2O_3T, MnO, MgO, CaO, Na_2O, K_2O, P_2O_5, Ag*, Ba, Be, Bi, C(tot)*, Cd*, Ce, Co, Cr*, Cs, Cu, Dy, Er, Eu, Ga, Gd, Hf*, Hg, Ho, In*, La, Li, Lu, Mo, Nb, Nd, Ni*, Pb, Pr, Rb, Sb*, Sc, Se*, Sm, Sn, Sr, Ta, Tb, Te*, Th, Tl, Tm, U, V, W*, Y, Yb, Zn and Zr. Of these, provisional values were given to the 11 measurands marked ‘*’. Instances of provisional status were recorded because either i) a relatively small number of results contributed to the consensus, or ii) the results were unduly dispersed in relation to the target value, or iii) the distribution of values was notably skewed.

Bar charts for the 11 measurands: Fe(II)O, H_2O^+, CO_2, LOI, As, Br, C(org), Cl, F, Ge and S are plotted in Figure 2 for information only, as the data were insufficient in number, the distribution too highly skewed or too variable for the reliable determination of a consensus for the estimation of *z*-scores. The S data included six values reported as g/100g and not mg/kg as required. Three values of C(org) and C(tot) were similarly incorrectly reported. Such values inevitably degrade the dataset and would result in exceedingly poor *z*-scores for the laboratories in question had a value been assigned. We recommend that analysts should make every effort to report data in the units requested.

Z-score analysis

As in previous rounds, laboratories were invited to choose one of two performance standards against which their analytical results would be judged:

Data quality 1 for laboratories working to a 'pure geochemistry' standard of performance, where analytical results are designed for geochemical research and where care is taken to provide data of high precision and accuracy, sometimes at the expense of a reduced sample throughput rate. For Geo*PT*41A, 1434 results of data quality 1 were submitted.

Data quality 2 for laboratories working to an 'applied geochemistry' standard of performance, where, although precision and accuracy are still important, the main objective is to provide results on large numbers of samples collected, for example, as part of geochemical mapping projects or geochemical exploration programmes. For Geo*PT*41A, 1742 results of data quality 2 were submitted.

The target standard deviation (H_a) for each measurand assessed was calculated from a modified form of the Horwitz function as follows:

$$H_a = k.X_a^{0.8495}$$

Where X_a is the mass fraction of the element; the factor k = 0.01 for pure geochemistry laboratories and k = 0.02 for applied geochemistry laboratories.

Z-scores were calculated for each elemental measurement submitted by each laboratory from:

$$z = [X - X_a] / H_a$$

Where X is the contributed measurement, X_a is the assigned value and H_a is the target standard deviation (all as mass fractions). *Z*-score values for results contributed to Geo*PT*41A are listed in Table 3. Results designated as data quality 1 are shown in bold: results of data quality 2 are shown underlined. *Z*-scores derived from provisional values are shown in italics.

Participating laboratories are invited to assess their performance using the following criteria:–

Z-score results in the range $-2<z<2$ are considered to be 'satisfactory' (in the sense that no action is called for by the participant). If the *z*-score for any element falls outside this range, especially if it is outside the range $-3<z<3$, contributing laboratories are advised to examine their procedures, and if necessary, take action to ensure that determinations are not subject to unsuspected analytical bias.

Overall performance

A summary of the overall performance of individual laboratories for this round is plotted in multiple *z*-score charts in Figure 3. In these charts, the *z*-score performance for each element is distinguished by symbols that make it simple to identify whether the results were satisfactory or gave *z*-scores that exceeded the action limits. This chart is designed to help individual laboratories to judge their overall performance in this proficiency testing round. Participants should always review their *z*-scores in accord with their own fitness-for-purpose criteria.

Participation in future rounds

The benefit from proficiency testing arises from regular participation and laboratories are invited to contribute to

Round 42, the test sample for which will be distributed during September 2017.

Acknowledgements

The authors thank Cynthia Turner for much-valued assistance in distributing this sample and Thomas Meisel for development of software which has greatly assisted the investigation of data according to analytical procedure and facilitated analysis of datasets involving alternative modes as provided in the package "Modeest", which is available as an "R" package (https://cran.r-project.org/web/packages/modeest/modeest.pdf).

Reference

Lientz (1969) On estimating points of local maxima and minima of density functions. Nonparametric Techniques in Statistical Inference (ed. M.L. Puri, Cambridge University Press , p.275-282.

Appendix 1

Publication status of proficiency testing reports. Previous reports are available for download from the IAG website (http://www.geoanalyst.org/).

Geo*PT*1
Thompson M., Potts P.J., Kane J.S. and Webb P.C. (1996)
Geo*PT*1. International proficiency test for analytical geochemistry laboratories - Report on round 1. Geostandards Newsletter: The Journal of Geostandards and Geoanalysis, 20, 295-325.

Geo*PT*2
Thompson M., Potts P.J., Kane J.S., Webb P.C. and Watson, J.S. (1998)
Geo*PT*2. International proficiency test for analytical geochemistry laboratories - Report on round 2. Geostandards Newsletter: The Journal of Geostandards and Geoanalysis, 22 127-156.

Geo*PT*3
Thompson M., Potts P.J., Kane J.S. and Chappell B.W. (1999a)
Geo*PT*3. International proficiency test for analytical geochemistry laboratories - Report on round 3. Geostandards Newsletter: The Journal of Geostandards and Geoanalysis, 23, 87-121.

Geo*PT*4
Thompson M., Potts P.J., Kane J.S., Webb P.C. and Watson J.S. (1999b)
Geo*PT*4. International proficiency test for analytical geochemistry laboratories - Report on round 4. Published in the electronic version of Geostandards Newsletter: The Journal of Geostandards and Geoanalysis (Summer 2000).

Geo*PT*5
Thompson M., Potts P.J., Kane J.S., and Wilson S. (1999c)
Geo*PT*5. International proficiency test for analytical geochemistry laboratories - Report on round 5. Published in the electronic version of Geostandards Newsletter: The Journal of Geostandards and Geoanalysis (Summer 2000).

Geo*PT*6
Potts P.J., Thompson M., Kane J.S., Webb P.C. and Carignan J. (2000)
GEO*PT*6 - an international proficiency test for analytical geochemistry laboratories - report on round 6 (OU-3: Nanhoron microgranite) and 6A (CAL-S: CRPG limestone). International Association of Geoanalysts: Unpublished report.

Geo*PT*7
Potts P.J., Thompson M., Kane J.S., and Petrov L.L. (2000)
GEO*PT*7 - an international proficiency test for analytical geochemistry laboratories - report on round 7 (GBPG-1 Garnet-biotite plagiogneiss). International Association of Geoanalysts: Unpublished report.

Geo*PT*8
Potts P.J., Thompson M., Kane J.S., Webb, P.C. and Watson J.S. (2000)
GEO*PT*8 - an international proficiency test for analytical geochemistry laboratories - report on round 8 / February 2001 (OU-4 Penmaenmawr microdiorite). International Association of Geoanalysts: Unpublished report.

Geo*PT*9
Potts P.J., Thompson M., Webb, P.C. and Watson J.S. (2001)
GEO*PT*9 - an international proficiency test for analytical geochemistry laboratories - report on round 9 / July 2001 (OU-6 Penrhyn slate). International Association of Geoanalysts: Unpublished report.

Geo*PT*10
Potts P.J., Thompson M., Webb, P.C., Watson J.S. and Wang Yimin (2001)
GEO*PT*10 - an international proficiency test for analytical geochemistry laboratories - report on round 10 / December 2001 (CH-1 Marine sediment). International Association of Geoanalysts: Unpublished report.

Geo*PT*11
Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Watson J.S. (2002)
GEO*PT*11 - an international proficiency test for analytical geochemistry laboratories - report on round 11 / July 2002 (OU-5 Leaton dolerite). International Association of Geoanalysts: Unpublished report.

Geo*PT*12
Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Batjargal B. (2003)
GEO*PT*12 - an international proficiency test for analytical geochemistry laboratories - report on round 12 / January 2003 (GAS Serpentinite). International Association of Geoanalysts: Unpublished report.

Geo*PT*13
Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Kaspar H.U. (2003)
GEO*PT*13 - an international proficiency test for analytical geochemistry laboratories - report on round 13 / July 2003 (Köln Loess). International Association of Geoanalysts: Unpublished report.

Geo*PT*14
Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and B. Batjargal (2004)
Geo*PT*14 - an international proficiency test for analytical geochemistry laboratories - report on round 14 / January 2004 (OShBO - alkaline granite). International Association of Geoanalysts: Unpublished report.

Geo*PT*15
Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Wang Yimin (2004)
Geo*PT*15 - an international proficiency test for analytical geochemistry laboratories - report on round 15 / June 2004 (Ocean floor sediment MSAN). International Association of Geoanalysts: Unpublished report.

Geo*PT*16
Potts P.J., Thompson M., Webb, P.C. and S.Wilson (2005)
Geo*PT*16 - an international proficiency test for analytical geochemistry laboratories - report on round 16 / February 2005 (Nevada basalt, BNV-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*17
Potts P.J., Thompson M., Webb, P.C. and J. Nicholas Walsh (2005)
Geo*PT*17 - an international proficiency test for analytical geochemistry laboratories - report on round 17 / July 2005 (Calcareous sandstone, OU-8). International Association of Geoanalysts: Unpublished report.

Geo*PT*18
Webb, P.C., Thompson M., Potts P.J. and L. Paul Bedard (2006)
Geo*PT*18 - an international proficiency test for analytical geochemistry laboratories - report on round 18 / Jan 2006 (Quartz Diorite, KPT-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*19
Webb, P.C., Thompson M., Potts P.J. and B. Batjargal (2006)
Geo*PT*19 - an international proficiency test for analytical geochemistry laboratories - report on round 19 / July 2006 (Gabbro, MGR-N). International Association of Geoanalysts: Unpublished report.

Geo*PT*20
Webb, P.C., Thompson M., Potts P.J. and M. Burnham (2007)
Geo*PT*20 - an international proficiency test for analytical geochemistry laboratories - report on round 20 / Jan 2007 (Ultramafic rock, OPY-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*21
Webb, P.C., Thompson M., Potts P.J. and B. Batjargal (2007)
Geo*PT*21 - an international proficiency test for analytical geochemistry laboratories - report on round 21 / July 2007 (Granite, MGT-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*22
Webb, P.C., Thompson, M., Potts, P.J. and Batjargal, B. (2008)
Geo*PT*22 - an international proficiency test for analytical geochemistry laboratories - report on round 22 / January 2008 (Basalt, MBL-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*23
Webb, P.C., Thompson, M., Potts, P.J., Watson, J.S. and Kriete, C. (2008)
Geo*PT*23 - an international proficiency test for analytical geochemistry laboratories - report on round 23 / September 2008 (Separation Lake pegmatite, OU-9) and 23A (Manganese nodule, FeMn-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*24
Webb, P.C., Thompson, M., Potts, P.J. and Watson, J.S. (2009)
Geo*PT*24 - an international proficiency test for analytical geochemistry laboratories - report on round 24 / January 2009 (Longmyndian greywacke, OU-10). International Association of Geoanalysts: Unpublished report.

Geo*PT*25
Webb, P.C., Thompson, M., Potts, P.J. and Enzweiler, J. (2009)
Geo*PT*25 - an international proficiency test for analytical geochemistry laboratories - report on round 25 / July 2009 (Basalt, HTP-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*26
Webb, P.C., Thompson, M., Potts, P.J. and Loubser, M. (2010)
Geo*PT*26 - an international proficiency test for analytical geochemistry laboratories - report on round 26 / January 2010 (Ordinary Portland cement, OPC-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*27
Webb, P.C., Thompson, M., Potts, P.J. and Batjargal, B. (2010)
Geo*PT*27 - an international proficiency test for analytical geochemistry laboratories - report on round 27 / July 2010 (Andesite, MGL-AND). International Association of Geoanalysts: Unpublished report.

Geo*PT*28
Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2011)
Geo*PT*28 - an international proficiency test for analytical geochemistry laboratories - report on round 28 / January 2011 (Shale, SBC-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*29
Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2011)
Geo*PT*29 - an international proficiency test for analytical geochemistry laboratories - report on round 29 / July 2011 (Nephelinite, NKT-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*30
Webb, P.C., Thompson, M., Potts, P.J., Long, D. and Batjargal, B. (2012)
Geo*PT*30 - an international proficiency test for analytical geochemistry laboratories - report on round 30 / January 2012 (Calcareous organic-rich shale, CG-2) and 30A (Limestone, ML-2). International Association of Geoanalysts: Unpublished report.

Geo*PT*31
Webb, P.C., Thompson, M., Potts, P.J and Wilson, S. (2012)
Geo*PT*31 - an international proficiency test for analytical geochemistry laboratories - report on round 31 / July 2012 (Modified river sediment, SdAR-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*32
Webb, P.C., Thompson, M., Potts, P.J and Webber, E. (2013)
Geo*PT*32 - an international proficiency test for analytical geochemistry laboratories - report on round 32 / January 2013 (Woodstock Basalt, WG-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*33
Webb, P.C., Thompson, M., Potts, P.J., Prusisz, B., and Young, K. (2013)
Geo*PT*33 - an international proficiency test for analytical geochemistry laboratories - report on round 33 / July-August 2013 (Ball Clay, DBC-1). International Association of Geoanalysts: Unpublished report.

Geo*PT*34
Webb, P.C., Thompson, M., Potts, P.J and Wilson, S. (2014)
Geo*PT*34 - an international proficiency test for analytical geochemistry laboratories - report on round 34 (Granite, GRI-1) / January 2014. International Association of Geoanalysts: Unpublished report.

Geo*PT*35
Webb, P.C., Thompson, M., Potts, P.J and Wilson, S. (2014)
Geo*PT*35 - an international proficiency test for analytical geochemistry laboratories - report on round 35 (Tonalite, TLM-1) / August 2014. International Association of Geoanalysts: Unpublished report.

Geo*PT*35A
Webb, P.C., Thompson, M., Potts, P.J and Wilson, S. (2014)
Geo*PT*35A - an international proficiency test for analytical geochemistry laboratories - report on round 35A (Metalliferous sediment, SdAR-H1) / August 2014. International Association of Geoanalysts: Unpublished report.

Geo*PT*36
Webb, P.C., Thompson, M., Potts, P.J and Wilson, S. (2015)
Geo*PT*36 - an international proficiency test for analytical geochemistry laboratories - report on round 36 (Gabbro, GSM-1) / January 2015. International Association of Geoanalysts: Unpublished report.

Geo*PT*36A
Webb, P.C., Thompson, M., Potts, P.J and Wilson, S. (2015)
Geo*PT*36A - an international proficiency test for analytical geochemistry laboratories - report on round 36A (Metal-rich sediment, SdAR-M2) / January 2015. International Association of Geoanalysts: Unpublished report.

Geo*PT*37
Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Burnham, M. (2015)
Geo*PT*37 - an international proficiency test for analytical geochemistry laboratories - report on round 37 (Rhyolite, ORPT-1) / July 2015. International Association of Geoanalysts: Unpublished report.

Geo*PT*37A
Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S. (2015)
Geo*PT*37A - an international proficiency test for analytical geochemistry laboratories - report on round 37A (Blended sediment, SdAR-L2) / July 2015. International Association of Geoanalysts: Unpublished report.

Geo*PT*38
Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2016)
Geo*PT*38 - an international proficiency test for analytical geochemistry laboratories - report on round 38 (Gabbro, OU-7) / January 2016. International Association of Geoanalysts: Unpublished report.

Geo*PT*38A
Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Meisel, T. (2016)
Geo*PT*38A - an international proficiency test for analytical geochemistry laboratories – special report on round 38A (Modified harzburgite, HARZ01) / June 2016. International Association of Geoanalysts: Unpublished report.

Geo*PT*39
Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2016)
Geo*PT*39 - an international proficiency test for analytical geochemistry laboratories - report on round 39 (Syenite, SyMP-1) / July 2016. International Association of Geoanalysts: Unpublished report.

Geo*PT*39A
Webb, P.C., Thompson, M., Potts, P.J, and Gowing, C.J.B. (2016)
Geo*PT*39A - an international proficiency test for analytical geochemistry laboratories - report on round 39A (Nepheline syenite, MNS-1) / July 2016. International Association of Geoanalysts: Unpublished report.

Geo*PT*40
Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2017)
Geo*PT*40 - an international proficiency test for analytical geochemistry laboratories - report on round 40 (Silty marine shale, ShWYO-1) / January 2017. International Association of Geoanalysts: Unpublished report.

Geo*PT*40A
Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2017)
Geo*PT*40A - an international proficiency test for analytical geochemistry laboratories - report on round 40A (Calcareous organic-rich shale, ShTX-1) / January 2017. International Association of Geoanalysts: Unpublished report.

Table 1 - GeoPT41A Contributed data for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code		Z1	Z2	Z3	Z4	Z5	Z6	Z8	Z10	Z12	Z13	Z14	Z15	Z16
SiO2	g 100g^{-1}	**68.84**	**67.7**	**69.25**	**70.01**	65.96	70.02	69.39	70.31	**69.64**	**69.47**	68.947		
TiO2	g 100g^{-1}	**0.403**		**0.4**	**0.392**	0.37	0.42	0.399	0.4	**0.37**	**0.4**	0.383		
Al2O3	g 100g^{-1}	**11.03**	**12**	**11.08**	**11.04**	12.25	10.8	11.11	10.96	**10.84**	**11.03**	10.916		
Fe2O3T	g 100g^{-1}	**6.904**	**6.3**	**6.68**	**6.629**	7.1	6.69	6.56	6.47	**6.54**	**6.54**	6.631	**6.56**	
Fe(II)O	g 100g^{-1}			**0.44**					0.9		**0.51**			
MnO	g 100g^{-1}	**0.430**		**0.42**	**0.415**	0.49	0.45	0.437	0.42	**0.45**	**0.418**	0.401	**0.427**	
MgO	g 100g^{-1}	**0.788**	**0.7**	**0.69**	**0.728**	1.3	0.76	0.74	0.71	**0.73**	**0.7**	0.718	**0.729**	
CaO	g 100g^{-1}	**1.749**	**1.6**	**1.54**	**1.536**	1.71	1.59	1.548	1.56	**1.49**	**1.54**	1.529	**1.482**	
Na2O	g 100g^{-1}	**1.779**	**1.9**	**1.78**	**1.808**	1.74	1.87	1.76	1.81	**1.75**	**1.79**	1.785		
K2O	g 100g^{-1}	**3.514**	**3.7**	**3.53**	**3.336**	3.6	3.62	3.429	3.57	**3.55**	**3.56**	3.447		
P2O5	g 100g^{-1}	**0.209**		**0.188**	**0.185**	0.22	0.19	0.185	0.19	**0.18**	**0.18**	0.195		
H2O+	g 100g^{-1}				**2.727**				2.4					
CO2	g 100g^{-1}				**1.89**				0.54					
LOI	g 100g^{-1}	**3.81**	3.8	**4.03**		4.02	3.58	3.8	3.9	**3.47**	**3.77**	3.855		
Ag	mg kg^{-1}						2.8		2.21					
As	mg kg^{-1}	**2**		**13**	**20.6**		15	21.3	19.88	**13**	**17**		**18.25**	
Au	mg kg^{-1}													
B	mg kg^{-1}													
Ba	mg kg^{-1}	**775**		**758**	**774.3**	992	767.1	776	775	**772**	**745**	753	**816.8**	**782.2**
Be	mg kg^{-1}			**2.15**										
Bi	mg kg^{-1}			**2.26**			2.8		2.4					
Br	mg kg^{-1}						2.5							
C(org)	mg kg^{-1}								0.39					
C(tot)	mg kg^{-1}						5040		5080					
Cd	mg kg^{-1}			**3.24**			5.2	2.6	3.5					
Ce	mg kg^{-1}	**109**		**98**		81.64	106.3	90.3	98.8	**97**	**74**	91	**107.4**	**103**
Cl	mg kg^{-1}	**112**							202	**31**				
Co	mg kg^{-1}	**11**		**8.77**		1	10.4		8.1	**7**		11	**8.1**	
Cr	mg kg^{-1}	**25**		**18.7**	**10.4**	35	16		17	**24**	**19**	17	**17.85**	
Cs	mg kg^{-1}			**4.48**		3.08	9	3.9	3.7				**3.92**	**3.92**
Cu	mg kg^{-1}	**373**		**362**	**363.2**	363	326.4	373	371	**433**	**365**	295	**359.8**	
Dy	mg kg^{-1}			**4.52**		2.91			4.65			6	**4.71**	**4.75**
Er	mg kg^{-1}			**2.77**		1.53			2.73				**2.77**	**2.88**
Eu	mg kg^{-1}			**1.15**		0.99			0.75				**1.236**	**1.3**
F	mg kg^{-1}	**1246**							780	**2979**		708		
Ga	mg kg^{-1}	**18**		**16.4**		23.16	13.9	15	16.6	**15**	**16**	22	**16.94**	**15.78**
Gd	mg kg^{-1}			**5.31**		4.12			4.84	**5**			**5.64**	**6.27**
Ge	mg kg^{-1}			**2.66**		2.63			1.16	**3**				
Hf	mg kg^{-1}			**7.51**		9.58	4		6.71	**6**			**4.09**	**6.53**
Hg	mg kg^{-1}						2.85		2.48					
Ho	mg kg^{-1}			**0.92**		0.56			0.95				**0.949**	**0.99**
I	mg kg^{-1}							0.6						
In	mg kg^{-1}			**6.24**				5.7	6.7					
La	mg kg^{-1}	**35**		**36.1**	**36.6**	23.38	39.1	34.5	36.1	**45**	**44**	34	**39.51**	**38.62**
Li	mg kg^{-1}			**23.1**					23			26		
Lu	mg kg^{-1}			**0.4**		0.23			0.47				**0.412**	**0.446**
Mo	mg kg^{-1}	**13**		**7.49**			11.6	13	13.72	**9**				
N	mg kg^{-1}													
Nb	mg kg^{-1}	**17**		**20.1**		15	17.2	19	18.74	**23**	**19**		**20.07**	**17.46**
Nd	mg kg^{-1}	**33**		**30.5**	**29.2**	25.3	25.9	33.4	30	**27**	**24**	31	**32.08**	**32.62**
Ni	mg kg^{-1}	**13**		**5.04**	**14.6**	8	7.3	8.5	8.1	**22**		11	**10.16**	
Pb	mg kg^{-1}	**903**		**886**	**842.9**	814	858.3	946	937	**1019**	**976**	777	**898.4**	
Pd	mg kg^{-1}													
Pr	mg kg^{-1}			**8.15**		6.9			8.05				**8.65**	**8.69**
Rb	mg kg^{-1}	**128**		**130**		128	119.2	124	139	**129**	**124**		**128.1**	**126.170**
Re	mg kg^{-1}													
Rh	mg kg^{-1}													
Ru	mg kg^{-1}													
S	mg kg^{-1}	**5979**					2739		2540	**2277**				
Sb	mg kg^{-1}	**5**		**6.12**			8.2	5.5	6.2					
Sc	mg kg^{-1}	**8**		**6.57**	**6.049**	5.3	5.8		6	**6**			**7.36**	**6**
Se	mg kg^{-1}			**1.04**			2.8							
Sm	mg kg^{-1}			**5.62**		4.45	1.6	5.3	5.47			8	**5.83**	**6.08**
Sn	mg kg^{-1}	**7**		**6.63**			7.1	6.2	6.38					**6.74**
Sr	mg kg^{-1}	**186**		**181**	**191.4**	193	177.1	185	189	**189**	**194**	197	**182.9**	**187**
Ta	mg kg^{-1}			**1.53**		2.1			1				**1.141**	**1.14**
Tb	mg kg^{-1}			**0.84**		0.52			0.77				**0.831**	**0.91**
Te	mg kg^{-1}			**0.75**			4.5	1.1						
Th	mg kg^{-1}	**31**		**10.6**		7.89	9	16.5	11.1		**15**		**10.36**	**11.07**
Tl	mg kg^{-1}	**21**		**1.56**			1.1		1.5					
Tm	mg kg^{-1}			**0.4**		0.22			0.46				**0.435**	**0.438**
U	mg kg^{-1}	**3**		**3.19**		2.14	3.4		3.31				**2.86**	**3.188**
V	mg kg^{-1}	**61**		**54.8**	**52.29**	55	47.9	55.5	54.8	**57**	**45**	60	**59.69**	
W	mg kg^{-1}			**4.37**		3.8	4.2		4.83					**4.469**
Y	mg kg^{-1}	**29**		**25.7**	**25.95**	43	26.9	28.5	26.2	**29**		18	**26.44**	**26.125**
Yb	mg kg^{-1}			**2.73**		1.44	2.3		2.87				**2.71**	**2.773**
Zn	mg kg^{-1}	**627**		**497**	**622.9**	1265	599.5	631	583	**624**	**622**	586	**534.3**	
Zr	mg kg^{-1}	**225**		**211**	**216.9**	224	221.1	240	230	**173**	**232**	206	**132.1**	**239**

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2

Table 1 - GeoPT41A Contributed data for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code		Z18	Z19	Z21	Z23	Z25	Z26	Z27	Z28	Z29	Z32	Z38	Z40	Z41
SiO2	g 100g^{-1}	68.2	69.48	71.4	70.529	**68.77**	**69.1**		69.7	69.1	69.38	68.9	**69.9**	69.78
TiO2	g 100g^{-1}	0.39	0.37	0.45	0.42	**0.4**	**0.39**		0.39	0.38	0.389	0.383	**0.2**	0.365
Al2O3	g 100g^{-1}	11.39	10.6	11	11.264	**11**	**10.8**		11.1	11.09	11.077	10.56	**10.9**	11.15
Fe2O3T	g 100g^{-1}	6.77	6.19	6.69	6.692	**6.46**	**6.43**		6.48	6.51	6.516	6.32	**6.9**	6.904
Fe(II)O	g 100g^{-1}													0.738
MnO	g 100g^{-1}	0.28	0.38	0.42	0.438	**0.43**	**0.4**	0.438	0.41	0.43	0.422	0.428	**0.43**	0.515
MgO	g 100g^{-1}	0.87	0.8	0.78	0.721	**0.71**	**0.7**		0.67	0.7	0.591	0.67	**0.9**	0.678
CaO	g 100g^{-1}	1.67	1.5	1.5	1.645	**1.55**	**1.5**		1.52	1.52	1.535	1.5	**0.9**	1.45
Na2O	g 100g^{-1}	1.69	1.55	1.67	1.86	**1.72**	**1.68**		1.77	1.83	1.877	1.84	**1.55**	1.987
K2O	g 100g^{-1}	3.6	3.43	3.6	3.613	**3.53**	**3.52**		3.48	3.59	3.58	3.45	**3.65**	3.515
P2O5	g 100g^{-1}	0.22	0.16	0.17	0.194	**0.19**	**0.18**			0.19	0.187	0.18	**0.5**	0.186
H2O+	g 100g^{-1}													
CO2	g 100g^{-1}													
LOI	g 100g^{-1}	3.77	2.26	3.41	3.64	**3.66**	**3.87**		2.95	3.97			**3.83**	3.22
Ag	mg kg^{-1}						**3.77**							3.734
As	mg kg^{-1}		27				**19.6**	20.3					**22.7**	
Au	mg kg^{-1}													
B	mg kg^{-1}													
Ba	mg kg^{-1}	0.084	678	830	786.7	**759**	**713**	775.7		780	794.650	778		794
Be	mg kg^{-1}				2.1		**2.17**							1.767
Bi	mg kg^{-1}						1.48							2.074
Br	mg kg^{-1}		2				2.1	2.55						
C(org)	mg kg^{-1}				0.33									
C(tot)	mg kg^{-1}				0.57		**6490**					5400		4940
Cd	mg kg^{-1}						**2.98**						**3.93**	3.096
Ce	mg kg^{-1}		66				**96.1**	98.4				101		105.6
Cl	mg kg^{-1}	322	10										**0.01**	
Co	mg kg^{-1}	7.58	12		8.16		**7.32**	7.91					**9.18**	7.97
Cr	mg kg^{-1}	28.77	17		15.7		**13.4**	14.6			19.55		**15.4**	17.26
Cs	mg kg^{-1}		6		3.86		7.05							3.96
Cu	mg kg^{-1}	0.032	713	360	386.8	**370**	**340**	375.6			383.5	402	**438.4**	371.7
Dy	mg kg^{-1}				4.8		**4.87**							5.067
Er	mg kg^{-1}				2.93		**2.99**							2.957
Eu	mg kg^{-1}				1.14		**1.09**							1.318
F	mg kg^{-1}													
Ga	mg kg^{-1}		18		16.67		15	15.26			10.65			16.38
Gd	mg kg^{-1}				5.02		**5.49**							5.871
Ge	mg kg^{-1}													1.59
Hf	mg kg^{-1}		3		6.1									6.736
Hg	mg kg^{-1}													2.352
Ho	mg kg^{-1}				0.98		**0.99**							1.018
I	mg kg^{-1}						3.57							
In	mg kg^{-1}													5.842
La	mg kg^{-1}		27		37.08	41	**35.7**	41.1				35		38.59
Li	mg kg^{-1}	20.05												22.84
Lu	mg kg^{-1}				0.42		**0.45**							0.472
Mo	mg kg^{-1}		13		12.68		**11.8**	11.85						9.46
N	mg kg^{-1}				0.41									
Nb	mg kg^{-1}	28.3	19		16.54	**19**	18.4	18.48			18.25			17.78
Nd	mg kg^{-1}		41		31.66		**30**							35.02
Ni	mg kg^{-1}	29.52	11		10.9		**7.85**	9.42			6.55		**10.1**	8.71
Pb	mg kg^{-1}		809		934.070	**1031**	**757**	980.2			955.250		**1124.400**	939.2
Pd	mg kg^{-1}												**32.5**	
Pr	mg kg^{-1}				8.53		**8.05**							9.03
Rb	mg kg^{-1}	136	135	130	126.550	**129**	119	125.880			130.7			133.8
Re	mg kg^{-1}													
Rh	mg kg^{-1}													
Ru	mg kg^{-1}													
S	mg kg^{-1}	0.43	1780		0.282	1700	**2840**			2750	1368	2800		2823
Sb	mg kg^{-1}						**5.31**						**3.86**	6.036
Sc	mg kg^{-1}		8		6.4	8	7.24	4.8						6.12
Se	mg kg^{-1}						**4.3**						**2.75**	2.99
Sm	mg kg^{-1}				5.97		**5.66**							6.324
Sn	mg kg^{-1}		4		6.49		5.88							5.84
Sr	mg kg^{-1}	219	175	200	187.730	**189**	179	185.710		185	1378			194.7
Ta	mg kg^{-1}				1.05									0.996
Tb	mg kg^{-1}				0.74		**0.79**							0.833
Te	mg kg^{-1}												**1.45**	1.156
Th	mg kg^{-1}		32		11.32		**11.6**	8.84			16.05			11.09
Tl	mg kg^{-1}				1.36		**1.05**						**1.85**	1.382
Tm	mg kg^{-1}				0.44		**0.44**							0.494
U	mg kg^{-1}		5		3.4		**3.53**	3.09						3.505
V	mg kg^{-1}		59		55.4	**60**	**50.4**	56.9			62.25	56	**29.5**	52.66
W	mg kg^{-1}						3.01							5.634
Y	mg kg^{-1}	13.7	20		25.21	**28**	**25.3**	26.86			25.6	24		27.83
Yb	mg kg^{-1}				2.85		**2.95**							3.044
Zn	mg kg^{-1}	467.730	562	600	662.2	**700**	**596**	646.250			616.450	622	**588.680**	608.5
Zr	mg kg^{-1}	143	216	240	226.220	**222**	219	226.520			231	208		235.1

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2

Table 1 - GeoPT41A Contributed data for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code		Z42	Z44	Z45	Z46	Z47	Z48	Z50	Z51	Z52	Z53	Z54	Z56	Z58
SiO2	g 100g⁻¹	70.08	**70.32**		74.12	69.42	66.3	69.94	**68.85**	69.68	**68.84**	**69.04**	**69.24**	
TiO2	g 100g⁻¹	0.42	**0.4**	**0.381**	0.42	0.393	**0.4**	0.404	**0.38**	0.399	**0.4**	**0.407**	**0.41**	
Al2O3	g 100g⁻¹	11.06	**11.1**		11.04	11.09	**11.39**	11.08	**10.55**	11.09	**11.71**	**10.72**	**11.19**	
Fe2O3T	g 100g⁻¹	6.61	**6.52**	**6.316**	6.59	6.45	**6.56**	6.46	**6.51**	6.56	**5.5**	**6.717**	**6.73**	
Fe(II)O	g 100g⁻¹											**0.33**		
MnO	g 100g⁻¹	0.45	**0.43**	**0.384**	0.436	0.413	**0.45**	0.437	**0.426**	0.413	**0.34**	**0.442**	**0.47**	
MgO	g 100g⁻¹	0.67	**0.69**		0.694	0.78	**0.91**	0.701	**0.704**	0.806	**0.77**	**0.81**	**0.58**	
CaO	g 100g⁻¹	1.51	**1.54**		1.47	1.66	**1.65**	1.54	**1.53**	1.51	**1.45**	**1.723**	**1.4**	
Na2O	g 100g⁻¹	1.62	**1.77**		1.787	1.83	**1.83**	1.75	**1.74**	1.8	**1.98**	**1.85**	**1.82**	
K2O	g 100g⁻¹	3.57	**3.56**		3.33	3.52	**3.72**	3.54	**3.44**	3.56	**3.45**	**3.4**	**3.43**	
P2O5	g 100g⁻¹	0.18	**0.18**			0.199		0.189	**0.184**	0.182	**0.2**	**0.176**		
H2O+	g 100g⁻¹	0.75										**3.01**		
CO2	g 100g⁻¹				1.95							**0.47**		
LOI	g 100g⁻¹	3.17	**3.51**		4.19	3.47			**4.321**	3.998	**4**	**3.95**	**4.06**	
Ag	mg kg⁻¹				0.7		**4.9**							
As	mg kg⁻¹			**12.1**	11.3		**18.2**							
Au	mg kg⁻¹						**0.16**							
B	mg kg⁻¹													
Ba	mg kg⁻¹		**768**	**636**	780.280	817	**800**		**814**		**810**	798		**772**
Be	mg kg⁻¹					2.28			**2.27**					**2.25**
Bi	mg kg⁻¹			**2.01**	1.72									
Br	mg kg⁻¹						**2.4**							
C(org)	mg kg⁻¹					2300						**4189**		
C(tot)	mg kg⁻¹				5317.650	4500		5165		5212		**5477**		
Cd	mg kg⁻¹			**3.5**	1.6									
Ce	mg kg⁻¹		**101.810**	**91.9**	103.290	101	**103**		**98.47**		**95**			**105.2**
Cl	mg kg⁻¹													
Co	mg kg⁻¹			**3.5**	8.07		**8.28**		**8.18**					**7.82**
Cr	mg kg⁻¹		**16**	**8**	23.27	17	**16.7**		**16.7**		**31**			**14.9**
Cs	mg kg⁻¹		**3.78**	**3.82**	3.41		**4.07**		**3.74**					**3.83**
Cu	mg kg⁻¹		**353**	**353**	332.5	370	**540**		**287.2**		**381**			**387**
Dy	mg kg⁻¹		**5.24**	**4.49**	4.85	3.15	**5**		**3.88**		**4**			**5.03**
Er	mg kg⁻¹		**3.02**	**2.74**	2.85	1.65			**2.2**		**2.2**			**2.99**
Eu	mg kg⁻¹		**1.2**	**1.05**	1.04	1.1	**1.21**		**1.04**		**1.3**			**1.13**
F	mg kg⁻¹											**874**		
Ga	mg kg⁻¹		**16**	**13**	16.51		18		**56.91**					**16**
Gd	mg kg⁻¹		**5.38**	**4.66**	5.47	4.99			**4.5**		**5.6**			**5.35**
Ge	mg kg⁻¹				1.5									
Hf	mg kg⁻¹		**6.41**	**4.63**	6.42	8.5	**6.12**		**3.84**					**6.35**
Hg	mg kg⁻¹					2.35	**2.8**					**2.413**		
Ho	mg kg⁻¹		**1.09**	**0.932**	0.97	0.6			**0.78**		**0.8**			**1.02**
I	mg kg⁻¹													
In	mg kg⁻¹				5.59		**6.11**							
La	mg kg⁻¹		**38.1**	**31.8**	37.92	42.2	**37.8**		**35.69**		**38**			**38.6**
Li	mg kg⁻¹			**23.6**		23.8			**25.35**		**21**			**24.1**
Lu	mg kg⁻¹		**0.45**	**0.422**	0.46	0.23	**0.45**		**0.31**		**0.3**			**0.44**
Mo	mg kg⁻¹			**12.8**	13.85	13	10		**14.09**		**11**			**13.25**
N	mg kg⁻¹													
Nb	mg kg⁻¹		**18.51**	**18.1**	18.84	20			**18.45**		**21**			**20.2**
Nd	mg kg⁻¹		**31.83**	**30**	31.64	29.7	**26.9**		**30.31**		**29**			**32.2**
Ni	mg kg⁻¹		**9**	**13.7**					**8.47**		**8**			**9.34**
Pb	mg kg⁻¹		**924.310**	**885**	782.660	943			**482.7**		**875**			**929**
Pd	mg kg⁻¹													
Pr	mg kg⁻¹		**8.6**	**8.06**	8.48	7.8			**8.18**		**7**			**8.61**
Rb	mg kg⁻¹		**126.1**	**124**	115.430	128	**135**		**125.1**		**97**			**127.9**
Re	mg kg⁻¹													
Rh	mg kg⁻¹													
Ru	mg kg⁻¹													
S	mg kg⁻¹	1882			2698.460			2265		3786		**2311**		
Sb	mg kg⁻¹			**6.4**	6.57	6	**6.2**							
Sc	mg kg⁻¹		**6.6**	**4.7**	9.21		**6.71**		**6.55**		**6**			**6.81**
Se	mg kg⁻¹						1.1							
Sm	mg kg⁻¹		**6.17**	**5.34**	5.82	5.21	**5.79**		**5.44**		**6**			**6.09**
Sn	mg kg⁻¹			**1.6**	6.08	6.4								**6.61**
Sr	mg kg⁻¹		**193**	**188**	189.940	192	**190**		**542**		**193**	**178**		**192**
Ta	mg kg⁻¹		**1.16**	**1.1**	1.05		**1.01**		**1.06**					**1.17**
Tb	mg kg⁻¹		**0.87**	**0.725**	0.77	0.63	**0.77**		**0.68**		**0.8**			**0.84**
Te	mg kg⁻¹													
Th	mg kg⁻¹		**11.39**	**10.9**	11.63		**12**		**12.36**		**10.7**			**11.55**
Tl	mg kg⁻¹			**1.38**	0.012									**1.58**
Tm	mg kg⁻¹		**0.45**	**0.422**	0.41	0.24					**0.3**			**0.46**
U	mg kg⁻¹		**3.36**	**3.15**	3.66		**3.2**		**2.89**		**2**			**3.51**
V	mg kg⁻¹		**55**	**47**	58.28	60	**56**		**111.8**		**53**			**52.5**
W	mg kg⁻¹				5.65		**5.3**							
Y	mg kg⁻¹		**28.22**	**25**	26.68	25.8			**22.84**		**15**			**28.3**
Yb	mg kg⁻¹		**2.87**	**2.84**	2.72	1.58	**2.92**		**2.11**		**1.9**			**2.98**
Zn	mg kg⁻¹		**627**	**546.6**	520	629	**638**		**490.4**		**653**			**606**
Zr	mg kg⁻¹		**241**	**214.8**	243.030	233	**240**		**91.6**		**170**			**235**

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2

Table 1 - GeoPT41A Contributed data for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code		Z60	Z61	Z63	Z64	Z65	Z66	Z67	Z70	Z71	Z72	Z73	Z74	Z76
SiO2	$g\ 100g^{-1}$	69.43	70.38	69.63	68		69.42	69.283	70.55		69.13	70.14		
TiO2	$g\ 100g^{-1}$	0.401	0.39	0.39	0.382		0.4	0.386	0.4	0.39	0.39	0.39		
Al2O3	$g\ 100g^{-1}$	11	11.19	11.04	10.783		11.06	11.088	11.18		11.19	11		
Fe2O3T	$g\ 100g^{-1}$	6.389	6.9	6.55	6.618		6.43	7.063	6.88	6.49	6.43	6.49		
Fe(II)O	$g\ 100g^{-1}$				1.07									
MnO	$g\ 100g^{-1}$	0.439	0.25	0.43	0.424		0.43	0.428	0.44	0.43	0.42	0.42		
MgO	$g\ 100g^{-1}$	0.708	0.6	0.72	0.711		0.74	0.702	0.74		0.75	0.71		
CaO	$g\ 100g^{-1}$	1.542	1.51	1.56	1.537		1.52	1.485	1.6		1.55	1.52		
Na2O	$g\ 100g^{-1}$	1.718	1.53	1.86	1.793		1.83	1.854	1.66		1.83	1.74		
K2O	$g\ 100g^{-1}$	3.526	3.63	3.56	3.491		3.58	3.678	3.49		3.56	3.52		
P2O5	$g\ 100g^{-1}$	0.179	0.17	0.188	0.19		0.18	0.185	0.19	0.19	0.179	0.178		
H2O+	$g\ 100g^{-1}$				2.36									
CO2	$g\ 100g^{-1}$													
LOI	$g\ 100g^{-1}$	3.603	3.56	3.25	4.05		3.61	3.48	4.01		3.58	3.66		
Ag	$mg\ kg^{-1}$			3.84	3.45					4.69			3.8	
As	$mg\ kg^{-1}$	20.16		18.4	19.296					15.6				
Au	$mg\ kg^{-1}$													
B	$mg\ kg^{-1}$				9.4								11.8	
Ba	$mg\ kg^{-1}$	792		802	751.712			793	784	786			828	673.6
Be	$mg\ kg^{-1}$			2.31	1.998					2.06			2.22	
Bi	$mg\ kg^{-1}$			2.09	2.108								2.24	
Br	$mg\ kg^{-1}$													
C(org)	$mg\ kg^{-1}$				1853		3300							
C(tot)	$mg\ kg^{-1}$			5400	5156		5400				6786	4390		
Cd	$mg\ kg^{-1}$	3.127		3.17	3.110					3.23			2.94	
Ce	$mg\ kg^{-1}$	100.8		104	96.039	106				98.3			101	84.03
Cl	$mg\ kg^{-1}$				75									
Co	$mg\ kg^{-1}$			7.7	7.758			17	8	8.04			8.55	
Cr	$mg\ kg^{-1}$			14	15.646			13	22	14			16.8	
Cs	$mg\ kg^{-1}$			3.99	3.866					3.93			4.14	3.168
Cu	$mg\ kg^{-1}$	371.7		369	430.004			400	310	361		423	375	
Dy	$mg\ kg^{-1}$			4.7	4.593	4.89				4.64			4.7	3.834
Er	$mg\ kg^{-1}$			2.8	2.759	3				2.84			2.82	2.222
Eu	$mg\ kg^{-1}$	0.912		1.2	1.107	1.42				1.13			1.35	0.950
F	$mg\ kg^{-1}$				750									
Ga	$mg\ kg^{-1}$		21	15.15	16.127				21	16.1			16.3	
Gd	$mg\ kg^{-1}$			5.3	4.866	6.52				5.19			5.79	4.137
Ge	$mg\ kg^{-1}$			2	1.500								2.28	
Hf	$mg\ kg^{-1}$			6.6	6.323					6.53			6.83	
Hg	$mg\ kg^{-1}$	2.39		3.2	2.64									
Ho	$mg\ kg^{-1}$			1	0.985	1.01				0.96			0.99	0.743
I	$mg\ kg^{-1}$													
In	$mg\ kg^{-1}$			5.65	5.703									
La	$mg\ kg^{-1}$	34.8		39	36.609	42.8				36.5			41.8	31.93
Li	$mg\ kg^{-1}$	23.9		24.5	24.6					23.8			23.5	
Lu	$mg\ kg^{-1}$			0.5	0.42					0.42			0.45	0.336
Mo	$mg\ kg^{-1}$		14	13.1	12.118					12.5			12.1	
N	$mg\ kg^{-1}$													
Nb	$mg\ kg^{-1}$		19	18	16.536			20	17	18.3			25.2	18.73
Nd	$mg\ kg^{-1}$	25.67		32.5	30.091	31				30.4			33.8	25.54
Ni	$mg\ kg^{-1}$	8.483	8	7	8.674			14	17	8.11			9.15	
Pb	$mg\ kg^{-1}$	878.7		948	896.011			1037	796	891			883	746.7
Pd	$mg\ kg^{-1}$													
Pr	$mg\ kg^{-1}$			8.7	8.024	9.71				8.32			8.98	6.615
Rb	$mg\ kg^{-1}$		126	123	126.905			128	122	127			128	119.6
Re	$mg\ kg^{-1}$			0.003										
Rh	$mg\ kg^{-1}$													
Ru	$mg\ kg^{-1}$													
S	$mg\ kg^{-1}$			2500	2646						2712	2200		
Sb	$mg\ kg^{-1}$			5.36	5.565									
Sc	$mg\ kg^{-1}$	6.497		6.1	7				7	6.02			6.95	
Se	$mg\ kg^{-1}$	2.752		2.4	2.51									
Sm	$mg\ kg^{-1}$			6.4	5.640	5.74				5.54			6.01	4.322
Sn	$mg\ kg^{-1}$			7	7.778					6.62				
Sr	$mg\ kg^{-1}$	193.7	182	193	187.879			194	195	204			192	139.6
Ta	$mg\ kg^{-1}$			1.1	1.238					0.92			1.28	1.103
Tb	$mg\ kg^{-1}$			0.8	0.742					0.81			0.85	0.643
Te	$mg\ kg^{-1}$			1										
Th	$mg\ kg^{-1}$		24	10.5	11.401	2.8				10.6			10.9	
Tl	$mg\ kg^{-1}$			1.46						1.48			1.24	
Tm	$mg\ kg^{-1}$			0.5	0.402					0.43			0.47	0.327
U	$mg\ kg^{-1}$			3.3	3.429	0.92			6	3.28			3.09	3.024
V	$mg\ kg^{-1}$	50		51	50.066			54	61	56.3			56.9	
W	$mg\ kg^{-1}$		1	5.1	5.399								5.77	
Y	$mg\ kg^{-1}$		31	26.2	25.460	27.7		30	19	26.4			25.6	21.04
Yb	$mg\ kg^{-1}$	2.047		2.4	2.817	3.05				2.78			2.93	2.24
Zn	$mg\ kg^{-1}$	577	588	629	614.983			711	625	633		643	568	
Zr	$mg\ kg^{-1}$		222	240	229.876			202	247	252			240	

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2

Table 1 - GeoPT41A Contributed data for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code		Z77	Z78	Z79	Z80	Z81	Z82	Z83	Z86	Z87	Z88	Z89	Z92	Z94
SiO2	g 100g^{-1}	**69.03**	**69.86**	**69.591**	**69.23**	**69.59**	69.76	**70.1**	64.7	69.26	67.772	69.83	**69.456**	68.76
TiO2	g 100g^{-1}	**0.400**	**0.35**	**0.418**	**0.405**	**0.4**	0.39	**0.4**	0.392	0.39	0.378	0.39	**0.398**	0.401
Al2O3	g 100g^{-1}	**11.039**	**10.98**	**11.036**	**10.98**	**11.18**	10.93	**11.2**	12.9	11.04	11.225	10.87	**11.44**	10.9
Fe2O3T	g 100g^{-1}	**6.715**	**6.72**	**6.529**	**6.59**	**6.41**	6.36	**6.58**	6.12	6.56	6.672	6.42	**6.861**	6.41
Fe(II)O	g 100g^{-1}						0.58	**0.58**						
MnO	g 100g^{-1}	**0.431**	**0.43**	**0.428**	**0.429**	**0.41**	0.41	**0.42**	0.389	0.42		0.41	**0.446**	0.479
MgO	g 100g^{-1}	**0.759**	**0.66**	**0.734**	**0.72**	**0.7**	0.72	**0.75**		0.76	0.684	0.72	**0.704**	0.717
CaO	g 100g^{-1}	**1.545**	**1.5**	**1.542**	**1.6**	**1.49**	1.55	**1.55**	1.71	1.51	1.446	1.53	**1.539**	1.52
Na2O	g 100g^{-1}	**1.835**	**1.81**	**1.814**	**2.06**	**1.89**	1.84	**1.87**		1.9	1.758	1.8	**1.484**	1.76
K2O	g 100g^{-1}	**3.574**	**3.6**	**3.529**	**3.73**	**3.51**	3.53	**3.61**	3.91	3.6	3.556	3.5	**3.637**	3.53
P2O5	g 100g^{-1}	**0.190**	**0.18**	**0.189**	**0.194**	**0.17**	0.18	**0.19**		0.186	0.205	0.18	**0.189**	0.195
H2O+	g 100g^{-1}		**2.35**				2.55						**0.66**	
CO2	g 100g^{-1}		**1.99**										**0.355**	
LOI	g 100g^{-1}	**3.325**		**3.84**	**3.72**	**3.61**	4.15	**3.71**		3.49	4.262	3.9	**3.39**	4.09
Ag	mg kg^{-1}						4.42	**3.56**		4.06	2.73		**4.1**	
As	mg kg^{-1}	**17.4**				**3.1**	17.9	**18.4**		20.1	16.96		**17**	
Au	mg kg^{-1}								75					
B	mg kg^{-1}													
Ba	mg kg^{-1}	**778.7**	**777**	**770.010**	**799**	**766**	820	**818**	1030	808	154.290	778	**743**	
Be	mg kg^{-1}							**2.28**		2.34		2.32		
Bi	mg kg^{-1}	**2.2**		**2.1**			1.98	**2.29**		1.97				
Br	mg kg^{-1}								4					
C(org)	mg kg^{-1}												**4530**	
C(tot)	mg kg^{-1}												**5499**	
Cd	mg kg^{-1}							**2.96**		3.43			**0.59**	
Ce	mg kg^{-1}	**98.2**	**104**	**100.490**	**96.3**	**109**	90.7	**101**		105.5	98.078	98.3	**118**	
Cl	mg kg^{-1}		141					**78**	409					
Co	mg kg^{-1}		**9**	**5.67**	**12**	**9**	7.88	**7.97**		8.1	6.47	7.76	**8.8**	
Cr	mg kg^{-1}	**18.5**	**23**	**15.08**	**21**	**18**	16.2	**18.3**	186		8.41	16.5	**15**	
Cs	mg kg^{-1}	**6.7**	**14**	**3.91**	**4.43**	**3**	3.72	**3.81**		3.98		3.95	**3.6**	
Cu	mg kg^{-1}	**361.8**	**351**	**319.6**	**365**	**328**	338	**374**	371	369	322.450	355	**369**	
Dy	mg kg^{-1}	**4.66**		**4.9**	**4.2**		4.52	**4.95**		4.61	5.286	4.71	**4.48**	
Er	mg kg^{-1}			**3.04**	**2.65**		2.7	**3.02**		2.73	3.29	2.81	**3**	
Eu	mg kg^{-1}			**1.38**	**1.1**		1.16	**1.13**		1.1	1.281	1.14	**1.42**	
F	mg kg^{-1}		1371		**1046**			**736**						
Ga	mg kg^{-1}	**16**	**15**	**12.63**	**17**	**14**	16.7	**16.4**	34	15.3	18.808	15.8	**15.4**	
Gd	mg kg^{-1}			**6.16**	**4.74**		5	**5.24**		4.82	5.634	5.36	**5.68**	
Ge	mg kg^{-1}							**1.77**				1.48		
Hf	mg kg^{-1}	**6.56**	**8**	**6.75**	**5.69**	**2**	5.86	**6.65**		6		5.16	**8.08**	
Hg	mg kg^{-1}						2.4				2.578			
Ho	mg kg^{-1}			**0.94**	**0.87**		0.92	**1**		0.96	1.106	0.945	**0.938**	
I	mg kg^{-1}													
In	mg kg^{-1}									6.32			**5.6**	
La	mg kg^{-1}	**37.8**	**52**	**37.56**	**35.4**	**43**	35.4	**31.9**		38.9	36.052	37.4	**34.1**	
Li	mg kg^{-1}			**26.04**			24			26.3		26.2	**18.4**	
Lu	mg kg^{-1}			**0.45**	**0.38**		0.4	**0.43**		0.42	0.335	0.418	**0.187**	
Mo	mg kg^{-1}	**13.3**	**13**	**11.88**		**11**		**13.3**	23	13.15	8.22		**11.3**	
N	mg kg^{-1}													
Nb	mg kg^{-1}	**19.37**		**19.45**	**19**	**17**	20.6	**18.6**	12	19.2		19		
Nd	mg kg^{-1}	**33**	**34**	**31.53**	**29.1**	**26**	29.9	**32.7**		32.8	30.839	31.6	**29.7**	
Ni	mg kg^{-1}	**11**	**17**	**6.11**	9	**9**	9.81	**12.7**	64	9.2	6.23	9.47	**17.3**	
Pb	mg kg^{-1}	**945.5**	**929**	**916.150**	**882**	**863**	898	**973**	895	925	913.190	965	832	
Pd	mg kg^{-1}													
Pr	mg kg^{-1}			**8.15**	**9.22**		8.18	**8.71**		8.68	7.935	8.48	**8.15**	
Rb	mg kg^{-1}	**129.2**	**110**	**121.750**	**129**	**124**	144	**123**	123	128	120.555	153	**133.1**	
Re	mg kg^{-1}												**0.004**	
Rh	mg kg^{-1}												**0.081**	
Ru	mg kg^{-1}												**0.25**	
S	mg kg^{-1}		2047		**2116**			**2543**	3420	2800			**2312**	
Sb	mg kg^{-1}			**5.88**			3.69	**5.79**		5.61	2.6		**5.33**	
Sc	mg kg^{-1}	**7.02**	**9**	**6.2**		**10**	8.07	**6.28**		6.5		6.88		
Se	mg kg^{-1}							**5**			2.58		**3.69**	
Sm	mg kg^{-1}	**6.41**		**5.7**	**5.33**	**6**	5.39	**5.94**		6.07	5.545	5.79	**5.52**	
Sn	mg kg^{-1}		**41**	**6.65**				**6.24**		6	4.52		**5.54**	
Sr	mg kg^{-1}	**194.2**	**184**	**182.4**	**187**	**181**	166	**189**	184	192.5	46.02	195	**215**	
Ta	mg kg^{-1}		**6**	**1.19**			1.37	**1.08**		1.04		1.17	**0.565**	
Tb	mg kg^{-1}			**0.92**	**0.74**		0.8	**0.78**		0.76	0.9	0.78	**0.214**	
Te	mg kg^{-1}									1.04			**1.15**	
Th	mg kg^{-1}	**11.2**	**11**	**11.5**	**12.2**	**9**	10.8	**11.13**	17	11.05	9.444	10.9	**11.8**	
Tl	mg kg^{-1}	**2.2**		**1.49**						1.49			**1.215**	
Tm	mg kg^{-1}			**0.45**	**0.38**		0.4			0.43	0.484	0.424	**0.44**	
U	mg kg^{-1}	**2.6**	**3**	**4.35**	**3.44**	**3.2**	3.09	**3.46**		3.29	3.417	3.45	**2.1**	
V	mg kg^{-1}	**57.2**	**60**	**49.55**	**58**	**57**	51.4	**54.9**	164	56	28.12	52.5	**78**	
W	mg kg^{-1}			**4.41**		**19**		**5.72**		4.8			6.35	
Y	mg kg^{-1}	**28.1**	**41**	**24.76**	**23.5**	**28**	23.3	**25.4**	24	26	31.21	26.6	**25.1**	
Yb	mg kg^{-1}			**2.87**	**2.54**		2.59	**2.84**		2.74	3.075	2.79	**2.73**	
Zn	mg kg^{-1}	**645.3**	**642**	**583.830**	**632**	**581**	555	**644**	601	646	541.440	607	**601**	
Zr	mg kg^{-1}	**236.7**	**208**	**253.790**	**227**	**220**	219	**237**	170	245		182		

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2

Table 1 - GeoPT41A Contributed data for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code		Z95	Z97	Z99	Z100	Z101	Z103	Z104	Z105	Z106	Z107	Z108	Z111	Z112
SiO2	g 100g^{-1}	65.63	**65.38**	68.84		67.95	68.44	69.53	69.25	66.21	71.02	**70.185**	69.36	75
TiO2	g 100g^{-1}	0.33	**0.61**	0.38		0.399	0.411	0.4	0.4	0.55	0.387	**0.4**	0.391	0.45
Al2O3	g 100g^{-1}	11.26	**9.48**	10.92		11.87	11.35	11.03	11.15	10.36	11.101	**11.295**	10.83	11.5
Fe2O3T	g 100g^{-1}	4.56	**11.79**	6.42		6.47	6.66	6.64	6.48	6.12	6.536	**6.495**	6.28	6.7
Fe(II)O	g 100g^{-1}													
MnO	g 100g^{-1}	0.3	**0.8**	0.409		0.418	0.42	0.38	0.4	0.41	0.396	**0.434**	0.422	0.4
MgO	g 100g^{-1}	0.77	**0.31**	0.65		0.8	0.68	0.74	0.87	0.46	0.703	**0.655**	0.61	0.78
CaO	g 100g^{-1}	1.48	**1.97**	1.56		1.64	1.53	1.55	1.5	1.63	1.48	**1.59**	1.47	2.3
Na2O	g 100g^{-1}	1.26	**0.15**	1.81		1.87	1.92	1.79	1.98	2.1	1.767	**1.845**	1.726	1.9
K2O	g 100g^{-1}	3.72	**3.98**	3.6		3.61	3.54	3.6	3.46	3.53	3.384	**3.515**	3.5	3.9
P2O5	g 100g^{-1}	0.21	**1.62**	0.16		0.227	0.192	0.19	0.18	0.17	0.186	**0.201**	0.164	0.21
H2O+	g 100g^{-1}													
CO2	g 100g^{-1}													
LOI	g 100g^{-1}	3.58	**3.47**	3.8		3.61		3.63	3.3	7.58		**3.41**	4.08	
Ag	mg kg^{-1}		**6.6**			4.14						3.997		3.7
As	mg kg^{-1}		**5.9**	14.9		21.4	31	42		51	23.029	**15.9**	1	21.2
Au	mg kg^{-1}													
B	mg kg^{-1}									53				
Ba	mg kg^{-1}	752	**749.8**	777.1	**794**	771	755	805		703	752.640	**781.9**	836	892
Be	mg kg^{-1}				**2.3**	2.24				0.2				2.9
Bi	mg kg^{-1}		**2.7**	3.2		1.76					2.387	2.4		
Br	mg kg^{-1}		**1.9**	2.7			2					3.8		
C(org)	mg kg^{-1}					2015								
C(tot)	mg kg^{-1}					5208					5119.700			
Cd	mg kg^{-1}		**9**	2.47		4.07					3.305			8
Ce	mg kg^{-1}		**103**	98.2	**103.1**	104	99.5	111		27.62	108.6	**98.4**	127	
Cl	mg kg^{-1}					145							174	
Co	mg kg^{-1}	16	**4.6**	9.2	**8.17**	8.01	8			7	8.078	**7.6**	12	5.5
Cr	mg kg^{-1}	26	**12.5**	14.4	**14.9**	12.8	25	13		21	16.339	**11.7**	9	13.7
Cs	mg kg^{-1}			3.6	**3.72**								17	
Cu	mg kg^{-1}	348	**308.8**	350.6	**359**	387	295	379		409	361.667	**355.6**	371	322.2
Dy	mg kg^{-1}				**4.9**	4.56	3.49			2.35	5.14			6.1
Er	mg kg^{-1}				**2.93**	2.88	1.95			1.31	2.86			3.7
Eu	mg kg^{-1}				**1.11**	1.19	1.14			0.98	1.14			1.3
F	mg kg^{-1}					666								
Ga	mg kg^{-1}		**15.2**	15	**16.6**		13	15			20.22	**15.3**	20	17.9
Gd	mg kg^{-1}				**5.33**	5.51	5.1			2.92	5.72			7.1
Ge	mg kg^{-1}		**1.1**	1.2										2.4
Hf	mg kg^{-1}		**4**	4.8	**6.72**	5.93					8	**13.1**		8
Hg	mg kg^{-1}			4.6			2.461							
Ho	mg kg^{-1}				**1**	0.932	0.67			0.53	1.14			1.1
I	mg kg^{-1}			0.71										
In	mg kg^{-1}			7.66										
La	mg kg^{-1}	38	**35.4**	37.2	**38.1**	37.6	37.7	48		15.25	40.01	**39.1**	37	41.2
Li	mg kg^{-1}				**24.5**	27.2				53				
Lu	mg kg^{-1}				**0.45**	0.413	0.25			0.16				0.6
Mo	mg kg^{-1}	7	**11.6**	12.3		11.9	13				13.22	**13.3**	14	13
N	mg kg^{-1}													
Nb	mg kg^{-1}	13	**18.4**	16.4	**19.9**	18.9	20	19		23	24.01	**16.7**	20	20.2
Nd	mg kg^{-1}		**28.5**	31.6	**31.9**	32.3	31.4			14.4	33.72	**30.6**		36.2
Ni	mg kg^{-1}	21	**11.6**	8	**9.05**	11.97	9	8		41	10.46	**8.7**	12	10.8
Pb	mg kg^{-1}	360	**880.4**	901.1	**947**	939	891	923		488	917.940	**966**	952	1057
Pd	mg kg^{-1}													
Pr	mg kg^{-1}				**8.52**	8.63	8.6			3.48	8.57			9.8
Rb	mg kg^{-1}	108	**122.3**	122	**128.9**	127	123	131			137.170	**122.6**	136	
Re	mg kg^{-1}													
Rh	mg kg^{-1}													
Ru	mg kg^{-1}													
S	mg kg^{-1}	0.27		1200		2728					2561.700		1085	
Sb	mg kg^{-1}		**5.2**	5.23		6.34					6.61	3.37	2	7.1
Sc	mg kg^{-1}		**6.1**	7	**7.74**	6.4	6.2	6		12.59	10.86	4.81	10	16.1
Se	mg kg^{-1}		**2.6**	2.5										
Sm	mg kg^{-1}			6.8	**5.76**	5.83	5.54			2.96	6.29			6.4
Sn	mg kg^{-1}		**5.1**	5.89	**7.26**	6.23				96		**7.89**	8	6.6
Sr	mg kg^{-1}	171	**183.8**	180	**194**	189	181	188		216	183.590	**180.7**	200	
Ta	mg kg^{-1}		**3.9**	0.3	**1.13**	0.79					1.72			
Tb	mg kg^{-1}				**0.8**	0.799	0.66			0.49	0.57			1
Te	mg kg^{-1}			0.75										
Th	mg kg^{-1}	11	**11**	9.6	**11.42**	11	9.58	12			10.29	**13.1**	8	13.5
Tl	mg kg^{-1}			1.7	**1.71**	1.45					1.47	**7.6**		1.2
Tm	mg kg^{-1}				**0.43**	0.426	0.27			0.21				0.5
U	mg kg^{-1}	11	**3.3**	1.5	**3.61**	3.15		4			2.86	3.897	2	4.2
V	mg kg^{-1}	75	**50.9**	51.3	**54.9**	53.6	46	56			56.9	**51.4**	61	57.9
W	mg kg^{-1}		**5.8**	4.6								4.18	1	
Y	mg kg^{-1}	33	**26.9**	27	**28.6**	24.99	16.7	23		14.94	30.293	**25.4**	29	26.9
Yb	mg kg^{-1}			2.9	**2.98**	2.73	1.73			1.15	2.86	3.73		3.3
Zn	mg kg^{-1}	573	**484**	604.7	**550**	663	570	597		434	624.2	**595.6**	639	560
Zr	mg kg^{-1}	201	**220.9**	220.2	**252**	234	204	231				**219.5**	243	253

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2

Table 1 - GeoPT41A Contributed data for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code		Z113	Z114	Z115	Z116	Z119	Z120	Z121	Z122	Z123	Z124	-	-	-
SiO2	g 100g^{-1}	**68.89**		69.55	**70.25**	69.43	70	70.075	**69.26**	65.16	69.42			
TiO2	g 100g^{-1}	**0.395**		0.41	**0.39**	0.41	0.4	0.398	**0.39**	0.395	0.404			
Al2O3	g 100g^{-1}	**10.94**		10.89	**11.25**	11.09	10.8	11.153	**11.05**	13.02	11.01			
Fe2O3T	g 100g^{-1}	**6.517**		6.7	**6.41**	6.67	6.39	6.493	**6.64**	7.07	6.59			
Fe(II)O	g 100g^{-1}						2.54	0.494		0.57				
MnO	g 100g^{-1}	**0.42**		0.253	**0.368**	0.43	0.43	0.420	**0.42**	0.482	0.427			
MgO	g 100g^{-1}	**0.744**		0.78	**0.77**	0.68	0.67	0.729	**0.77**	1.11	0.73			
CaO	g 100g^{-1}	**1.541**		1.53	**1.54**	1.52	1.56	1.530	**1.57**	1.72	1.54			
Na2O	g 100g^{-1}	**1.783**		1.78	**1.835**	1.73	1.85	1.888	**1.87**	1.7	1.78			
K2O	g 100g^{-1}	**3.514**		3.55	**3.56**	3.46	3.54	3.572	**3.6**	3.65	3.54			
P2O5	g 100g^{-1}	**0.184**		0.179	**0.19**	0.18	0.188	0.186	**0.2**	0.266	0.186			
H2O+	g 100g^{-1}						6.56	2.289						
CO2	g 100g^{-1}		2.07											
LOI	g 100g^{-1}	**3.71**		3.76		4.26	3.32	3.25	**4.31**	4.429	3.49			
Ag	mg kg^{-1}				**5**		3.2				3.8			
As	mg kg^{-1}				**15.6**	15	22				14			
Au	mg kg^{-1}													
B	mg kg^{-1}													
Ba	mg kg^{-1}	800.8		850	**788**	785	853	763.110		812	775			
Be	mg kg^{-1}						2.5	2.094						
Bi	mg kg^{-1}						2.26	1.99						
Br	mg kg^{-1}													
C(org)	mg kg^{-1}						0.08				3903			
C(tot)	mg kg^{-1}	0.474	5650	5520			0.52	5612	**5220**		5412			
Cd	mg kg^{-1}						3.69	2.79		102	4.5			
Ce	mg kg^{-1}	98.24		104.7	**101**		97.7	100.750		69	96			
Cl	mg kg^{-1}									135	150			
Co	mg kg^{-1}	8.522			**8.3**		8.6	7.92			8			
Cr	mg kg^{-1}	16.54			**18.6**	16	13	16.1		38	16			
Cs	mg kg^{-1}						3.47	3.81						
Cu	mg kg^{-1}	354.7		325.3	**365**	352	208	384.1		454	375			
Dy	mg kg^{-1}	4.066					3.9	4.633						
Er	mg kg^{-1}	2.251					2.87	2.761						
Eu	mg kg^{-1}	1.051					0.95	1.102						
F	mg kg^{-1}													
Ga	mg kg^{-1}	15.25		15.4	**15.2**	14	16.6	15.451		18	17			
Gd	mg kg^{-1}	4.672					5.01	5.073						
Ge	mg kg^{-1}									21	1.6			
Hf	mg kg^{-1}						1.85	5.38			6.5			
Hg	mg kg^{-1}		2.83	2.55						45	6			
Ho	mg kg^{-1}	0.747					1.01	0.950						
I	mg kg^{-1}													
In	mg kg^{-1}						6.14	6.123						
La	mg kg^{-1}	32.88		38.9	**36.5**		36.8	36.597		47	42			
Li	mg kg^{-1}	26.52					13	20.14						
Lu	mg kg^{-1}	0.338					0.52	0.409						
Mo	mg kg^{-1}			12.2	**14.5**		17.3	13.99			15			
N	mg kg^{-1}													
Nb	mg kg^{-1}	16.85		16.9	**19.8**	18	16.4	18.383		15	18			
Nd	mg kg^{-1}	27.43		40.5	**27.9**		31.9	31.341		72	33			
Ni	mg kg^{-1}			10.5	**10.9**	9	10.5	8.96		14	11			
Pb	mg kg^{-1}	918		903.9	**987**	920	1010	906.180		958	921			
Pd	mg kg^{-1}													
Pr	mg kg^{-1}	7.033					8.27	8.327			9			
Rb	mg kg^{-1}	131.1		121.6	**129**	122	130	105.5		129	128			
Re	mg kg^{-1}													
Rh	mg kg^{-1}													
Ru	mg kg^{-1}													
S	mg kg^{-1}	0.198	2050	2760	**0.269**		0.25	2592		8810	2331			
Sb	mg kg^{-1}						4.3	5.699						
Sc	mg kg^{-1}	10.58			**6.49**		6.5	6.3			5			
Se	mg kg^{-1}				**2.6**		4							
Sm	mg kg^{-1}	5.165		5.7			5.7	5.729			7			
Sn	mg kg^{-1}				**7.7**	9	7	7.18						
Sr	mg kg^{-1}	182.3		175.9	**189**	183	80.2	183.220		194	190			
Ta	mg kg^{-1}						1.64	1.114						
Tb	mg kg^{-1}	0.649					0.93	0.771						
Te	mg kg^{-1}						1.06							
Th	mg kg^{-1}	8.922			**11**	8	8	10.503			12			
Tl	mg kg^{-1}						1.4	1.357						
Tm	mg kg^{-1}	0.308					0.58	0.420						
U	mg kg^{-1}	3.013			**4**		2.52	3.319			2			
V	mg kg^{-1}	60.1		67	**61.4**	54	53	52.8		92	53			
W	mg kg^{-1}				**4.4**		5.1	4.983						
Y	mg kg^{-1}	21.7		27.4	**26.6**	29	27.8	26.324		15	28			
Yb	mg kg^{-1}	2.403		3.8			2.9	2.744						
Zn	mg kg^{-1}	616.5		593.3	**641**	605	379	602.9		643	602			
Zr	mg kg^{-1}			217.6	**220**	230	71.9	202.9		233	227			

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2

Table 2 - GeoPT41A Assigned values and statistical summary for Mineralised stream sediment, SSCO-1.

	Assigned Value	Uncertainty of assigned value	Horwitz Target Value	Uncertainty/ Target	Number of reported results	Robust Mean of results	Robust SD of results	Median of results	Status of consensus value	Type of consensus value
	X_a	sdm	H_a	sdm/H_a	n					
	g 100g⁻¹	g 100g⁻¹	g 100g⁻¹			g 100g⁻¹	g 100g⁻¹	g 100g⁻¹		
SiO2	69.42	0.08786	0.7335	0.1198	77	69.36	0.8214	69.42	Assigned	Median
TiO2	0.3957	0.001466	0.0091	0.1611	78	0.3957	0.01294	0.3985	Assigned	Robust Mean
Al2O3	11.07	0.02388	0.1542	0.1549	77	11.07	0.2095	11.06	Assigned	Robust Mean
Fe2O3T	6.545	0.01989	0.09866	0.2016	80	6.558	0.1798	6.545	Assigned	Median
MnO	0.424	0.002002	0.009649	0.2075	79	0.4229	0.02035	0.424	Assigned	Median
MgO	0.72	0.006082	0.01513	0.402	77	0.7247	0.05521	0.72	Assigned	Median
CaO	1.539	0.004952	0.02885	0.1716	78	1.542	0.05718	1.539	Assigned	Median
Na2O	1.8	0.008843	0.03295	0.2684	76	1.798	0.08557	1.8	Assigned	Median
K2O	3.551	0.009039	0.05869	0.154	77	3.551	0.07932	3.55	Assigned	Robust Mean
P2O5	0.1859	0.001355	0.004789	0.283	72	0.1875	0.01093	0.1875	Assigned	Mode
	mg kg⁻¹	mg kg⁻¹	mg kg⁻¹			mg kg⁻¹	mg kg⁻¹	mg kg⁻¹		
Ag	3.8	0.1091	0.2486	0.4386	22	3.815	0.8103	3.8	Provisional	Median
Ba	779.4	3.582	22.88	0.1565	72	782.4	31.75	779.4	Assigned	Median
Be	2.263	0.0263	0.16	0.1643	20	2.211	0.156	2.245	Assigned	Mode
Bi	2.174	0.06348	0.1547	0.4102	22	2.174	0.2977	2.154	Assigned	Robust Mean
C(tot)	5302	84	116.7	0.72	26	5198	460.2	5216	Provisional	Mode
Cd	3.148	0.122	0.2119	0.5758	26	3.41	0.8558	3.235	Provisional	Mode
Ce	99.87	0.8325	3.995	0.2084	59	99.87	6.394	100.5	Assigned	Robust Mean
Co	8.074	0.09766	0.4716	0.2071	52	8.2	1.064	8.074	Assigned	Median
Cr	16.52	0.4048	0.8664	0.4673	62	17.13	4.351	16.52	Provisional	Median
Cs	3.866	0.06001	0.2523	0.2379	37	3.938	0.4353	3.9	Assigned	Mode
Cu	365	2.481	12.01	0.2065	70	362.9	30.84	365	Assigned	Median
Dy	4.66	0.05557	0.2957	0.188	41	4.606	0.5101	4.66	Assigned	Median
Er	2.862	0.07881	0.1954	0.4032	38	2.769	0.2854	2.815	Assigned	Mode
Eu	1.135	0.01864	0.08907	0.2092	40	1.146	0.1356	1.135	Assigned	Median
Ga	16.05	0.1801	0.8454	0.213	58	16.27	1.811	16.05	Assigned	Median
Gd	5.3	0.07929	0.3298	0.2404	39	5.248	0.5299	5.3	Assigned	Median
Hf	6.5	0.12	0.3923	0.3059	41	6.166	1.543	6.41	Provisional	Mode
Hg	2.489	0.08101	0.1735	0.4668	17	2.72	0.398	2.578	Assigned	Mode
Ho	0.97	0.01131	0.07794	0.1451	38	0.9409	0.1114	0.955	Assigned	Mode
In	5.895	0.268	0.361	0.7424	13	6.02	0.4017	6.11	Provisional	Mode
La	37.6	0.4204	1.742	0.2413	64	37.6	3.364	37.58	Assigned	Robust Mean
Li	23.96	0.4681	1.188	0.394	26	23.96	2.387	23.95	Assigned	Robust Mean
Lu	0.4318	0.007497	0.03919	0.1913	37	0.4044	0.07498	0.42	Assigned	Mode
Mo	13	0.2066	0.7068	0.2923	46	12.6	1.397	13	Assigned	Median
Nb	18.73	0.2288	0.9641	0.2373	62	18.63	1.633	18.73	Assigned	Median
Nd	31.6	0.625	1.503	0.4158	58	30.83	2.828	31.17	Assigned	Mode
Ni	9.001	0.251	0.5172	0.4853	62	10.26	2.817	9.445	Provisional	Mode
Pb	917	6.296	26.28	0.2396	66	909.8	65.25	917	Assigned	Median
Pr	8.48	0.07834	0.4917	0.1593	39	8.373	0.5099	8.48	Assigned	Median
Rb	126.7	0.6961	4.889	0.1424	65	126.7	5.612	127	Assigned	Robust Mean
Sb	5.755	0.214	0.3537	0.605	29	5.519	1.068	5.61	Provisional	Mode
Sc	6.3	0.15	0.382	0.3927	52	6.795	1.177	6.525	Assigned	Mode
Se	2.6	0.0301	0.1801	0.1671	16	2.848	0.8704	2.675	Provisional	Mode
Sm	5.764	0.067	0.3542	0.1892	47	5.764	0.4593	5.74	Assigned	Robust Mean
Sn	6.622	0.1696	0.3985	0.4256	35	6.622	1.003	6.61	Assigned	Robust Mean
Sr	189	0.915	6.868	0.1332	71	188	8.213	189	Assigned	Median
Ta	1.1	0.02989	0.08673	0.3447	32	1.161	0.2407	1.122	Assigned	Mode
Tb	0.785	0.01501	0.06512	0.2304	38	0.7716	0.104	0.78	Assigned	Mode
Te	1.08	0.03657	0.08539	0.4283	10	1.095	0.2635	1.08	Provisional	Median
Th	11.08	0.2142	0.6172	0.347	57	11.08	1.617	11.05	Assigned	Robust Mean
Tl	1.465	0.03242	0.1106	0.293	26	1.466	0.2685	1.465	Assigned	Median
Tm	0.43	0.007628	0.03905	0.1953	34	0.4175	0.06538	0.43	Assigned	Median
U	3.285	0.05202	0.2197	0.2368	52	3.233	0.551	3.285	Assigned	Median
V	55.45	0.6123	2.424	0.2526	66	55.58	5.064	55.45	Assigned	Median
W	4.855	0.1875	0.3062	0.6126	25	4.855	0.9377	4.83	Provisional	Robust Mean
Y	26.12	0.3597	1.279	0.2813	68	26.12	2.966	26.26	Assigned	Robust Mean
Yb	2.84	0.03479	0.1941	0.1792	44	2.715	0.3591	2.785	Assigned	Mode
Zn	605	4.751	18.45	0.2574	71	603.6	42.45	605	Assigned	Median
Zr	230	4.68	8.115	0.5767	64	223.9	18.62	225.6	Assigned	Mode

Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code	Z1	Z2	Z3	Z4	Z5	Z6	Z8	Z10	Z12	Z13	Z14	Z15	Z16
SiO2	-0.79	-2.35	-0.23	0.80	-2.36	0.41	-0.02	0.61	0.30	0.07	-0.32	*	*
TiO2	0.80	*	0.47	-0.38	-1.41	1.33	0.18	0.23	-2.83	0.47	-0.70	*	*
Al2O3	-0.24	6.05	0.08	-0.18	3.84	-0.87	0.14	-0.35	-1.48	-0.24	-0.49	*	*
Fe2O3T	3.64	-2.48	1.37	0.85	2.81	0.73	0.08	-0.38	-0.05	-0.05	0.44	0.15	*
MnO	0.63	*	-0.41	-0.95	3.42	1.35	0.67	-0.21	2.69	-0.62	-1.19	0.31	*
MgO	4.49	-1.32	-1.98	0.55	19.17	1.32	0.66	-0.33	0.66	-1.32	-0.07	0.59	*
CaO	7.26	2.10	0.02	-0.12	2.95	0.88	0.15	0.36	-1.72	0.02	-0.18	-1.99	*
Na2O	-0.64	3.03	-0.61	0.24	-0.91	1.06	-0.61	0.15	-1.52	-0.30	-0.23	*	*
K2O	-0.63	2.54	-0.36	-3.66	0.42	0.59	-1.04	0.16	-0.01	0.16	-0.88	*	*
P2O5	4.82	*	0.44	-0.23	3.56	0.43	-0.09	0.43	-1.23	-1.23	0.95	*	*
Ag	*	*	*	*	*	-2.01	*	-3.20	*	*	*	*	*
Ba	-0.19	*	-0.93	-0.22	4.65	-0.27	-0.07	-0.10	-0.32	-1.50	-0.58	1.64	0.12
Be	*	*	-0.70	*	*	*	*	*	*	*	*	*	*
Bi	*	*	0.55	*	*	2.02	*	0.73	*	*	*	*	*
C(tot)	*	*	*	*	*	-1.12	*	-0.95	*	*	*	*	*
Cd	*	*	0.43	*	*	4.84	-1.29	0.83	*	*	*	*	*
Ce	2.28	*	-0.47	*	-2.28	0.80	-1.20	-0.13	-0.72	-6.48	-1.11	1.88	0.78
Co	6.20	*	1.48	*	-7.50	2.47	*	0.03	-2.28	*	3.10	0.06	*
Cr	9.79	*	2.52	-7.06	10.67	-0.30	*	0.28	8.63	2.86	0.28	1.54	*
Cs	*	*	2.44	*	-1.56	10.18	0.07	-0.33	*	*	*	0.22	0.22
Cu	0.67	*	-0.25	-0.15	-0.08	-1.61	0.33	0.25	5.66	0.00	-2.91	-0.43	*
Dy	*	*	-0.47	*	-2.96	*	*	-0.02	*	*	2.27	0.17	0.30
Er	*	*	-0.47	*	-3.41	*	*	-0.34	*	*	*	-0.47	0.09
Eu	*	*	0.17	*	-0.81	*	*	-2.16	*	*	*	1.13	1.85
Ga	2.31	*	0.41	*	4.21	-1.27	-0.62	0.33	-1.24	-0.06	3.52	1.05	-0.32
Gd	*	*	0.03	*	-1.79	*	*	-0.70	-0.91	*	*	1.03	2.94
Hf	*	*	2.58	*	3.93	-3.19	*	0.27	-1.27	*	*	-6.14	0.08
Hg	*	*	*	*	*	1.04	*	-0.03	*	*	*	*	*
Ho	*	*	-0.64	*	-2.63	*	*	-0.13	*	*	*	-0.27	0.26
In	*	*	0.96	*	*	*	-0.27	1.11	*	*	*	*	*
La	-1.49	*	-0.86	-0.57	-4.08	0.43	-0.89	-0.43	4.25	3.67	-1.03	1.10	0.58
Li	*	*	-0.72	*	*	*	*	-0.40	*	*	0.86	*	*
Lu	*	*	-0.81	*	-2.57	*	*	0.49	*	*	*	-0.51	0.36
Mo	0.00	*	-7.80	*	*	-0.99	0.00	0.51	-5.66	*	*	*	*
Nb	-1.80	*	1.42	*	-1.94	-0.80	0.14	0.00	4.42	0.27	*	1.38	-1.32
Nd	0.93	*	-0.73	-1.60	-2.10	-1.90	0.60	-0.53	-3.06	-5.06	-0.20	0.32	0.68
Ni	7.73	*	-7.66	10.83	-0.97	-1.64	-0.48	-0.87	25.13	*	1.93	2.24	*
Pb	-0.53	*	-1.18	-2.82	-1.96	-1.12	0.55	0.38	3.88	2.24	-2.66	-0.71	*
Pr	*	*	-0.67	*	-1.61	*	*	-0.44	*	*	*	0.35	0.43
Rb	0.27	*	0.68	*	0.14	-0.76	-0.27	1.26	0.48	-0.55	*	0.29	-0.10
Sb	-2.13	*	1.03	*	*	3.46	-0.36	0.63	*	*	*	*	*
Sc	4.45	*	0.71	-0.66	-1.31	-0.65	*	-0.39	-0.78	*	*	2.78	-0.78
Se	*	*	-8.66	*	*	0.56	*	*	*	*	*	*	*
Sm	*	*	-0.41	*	-1.86	-5.88	-0.66	-0.42	*	*	3.16	0.19	0.89
Sn	0.95	*	0.02	*	*	0.60	-0.53	-0.30	*	*	*	*	0.30
Sr	-0.44	*	-1.16	0.35	0.29	-0.87	-0.29	0.00	0.00	0.73	0.58	-0.89	-0.29
Ta	*	*	4.96	*	5.77	*	*	-0.58	*	*	*	0.47	0.46
Tb	*	*	0.84	*	-2.03	*	*	-0.12	*	*	*	0.71	1.92
Te	*	*	-3.86	*	*	20.03	0.12	*	*	*	*	*	*
Th	32.27	*	-0.78	*	-2.59	-1.69	4.39	0.01	*	6.35	*	-1.17	-0.02
Tl	176.58	*	0.86	*	*	-1.65	*	0.16	*	*	*	*	*
Tm	*	*	-0.77	*	-2.69	*	*	0.38	*	*	*	0.13	0.20
U	-1.30	*	-0.43	*	-2.61	0.26	*	0.06	*	*	*	-1.93	-0.44
V	2.29	*	-0.27	-1.30	-0.09	-1.56	0.01	-0.13	0.64	-4.31	0.94	1.75	*
W	*	*	-1.59	*	-1.72	-1.07	*	-0.04	*	*	*	*	-1.26
Y	2.25	*	-0.33	-0.14	6.60	0.30	0.93	0.03	2.25	*	-3.18	0.25	0.00
Yb	*	*	-0.57	*	-3.61	-1.39	*	0.08	*	*	*	-0.67	-0.35
Zn	1.19	*	-5.85	0.97	17.88	-0.15	0.70	-0.60	1.03	0.92	-0.51	-3.83	*
Zr	-0.62	*	-2.34	-1.61	-0.37	-0.55	0.62	0.00	-7.02	0.25	-1.48	-12.06	1.11

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - *Entries in italics* are derived from Provisional Values.

Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code	Z18	Z19	Z21	Z23	Z25	Z26	Z27	Z28	Z29	Z32	Z38	Z40	Z41
SiO2	-0.83	0.04	1.35	0.76	**-0.89**	**-0.44**	*	0.19	-0.22	-0.03	-0.35	**0.65**	0.25
TiO2	-0.32	-1.41	2.98	1.33	**0.47**	**-0.63**	*	-0.32	-0.86	-0.37	-0.70	**-21.51**	-1.69
Al2O3	1.05	-1.52	-0.22	0.64	**-0.44**	**-1.74**	*	0.11	0.07	0.03	-1.65	**-1.09**	0.27
Fe2O3T	1.14	-1.80	0.73	0.74	**-0.86**	**-1.17**	*	-0.33	-0.18	-0.15	-1.14	**3.60**	1.82
MnO	-7.46	-2.28	-0.21	0.73	**0.62**	**-2.49**	0.72	-0.73	0.31	-0.09	0.21	**0.62**	4.72
MgO	4.96	2.64	1.98	0.03	**-0.66**	**-1.32**	*	-1.65	-0.66	-4.26	-1.65	**11.90**	-1.39
CaO	2.26	-0.68	-0.68	1.83	**0.36**	**-1.37**	*	-0.34	-0.34	-0.08	-0.68	**-22.16**	-1.55
Na2O	-1.67	-3.79	-1.97	0.91	**-2.43**	**-3.64**	*	-0.46	0.46	1.17	0.61	**-7.59**	2.84
K2O	0.42	-1.03	0.42	0.53	**-0.36**	**-0.53**	*	-0.60	0.33	0.25	-0.86	**1.69**	-0.31
P2O5	3.56	-2.70	-1.66	0.85	**0.86**	**-1.23**	*	*	0.43	0.11	-0.62	**65.58**	0.01
Ag	*	*	*	*	*	***-0.12***	*	*	*	*	*	*	*-0.13*
Ba	-17.03	-2.21	1.11	0.16	**-0.89**	**-2.90**	-0.08	*	0.01	0.33	-0.03	*	0.32
Be	*	*	*	-0.51	*	**-0.58**	*	*	*	*	*	*	-1.55
Bi	*	*	*	*	*	-2.24	*	*	*	*	*	*	-0.32
C(tot)	*	*	*	*-22.72*	*	***10.18***	*	*	*	*	*0.42*	*	*-1.55*
Cd	*	*	*	*	*	***-0.79***	*	*	*	*	*	***3.69***	*-0.12*
Ce	*	-4.24	*	*	*	**-0.94**	-0.18	*	*	*	0.14	*	0.72
Co	-0.52	4.16	*	0.09	*	**-1.60**	-0.17	*	*	*	*	**2.35**	-0.11
Cr	*7.07*	*0.28*	*	*-0.47*	*	***-3.60***	*-1.11*	*	*	*1.75*	*	***-1.29***	*0.43*
Cs	*	4.23	*	-0.01	*	6.31	*	*	*	*	*	*	0.19
Cu	-15.19	14.48	-0.21	0.91	**0.42**	**-2.08**	0.44	*	*	0.77	1.54	**6.11**	0.28
Dy	*	*	*	0.24	*	**0.71**	*	*	*	*	*	*	0.69
Er	*	*	*	0.17	*	**0.65**	*	*	*	*	*	*	0.24
Eu	*	*	*	0.03	*	**-0.51**	*	*	*	*	*	*	1.03
Ga	*	1.15	*	0.37	*	-0.62	-0.47	*	*	-3.19	*	*	0.20
Gd	*	*	*	-0.42	*	**0.58**	*	*	*	*	*	*	0.87
Hf	*	*-4.46*	*	*-0.51*	*	*	*	*	*	*	*	*	*0.30*
Hg	*	*	*	*	*	*	*	*	*	*	*	*	-0.39
Ho	*	*	*	0.06	*	**0.26**	*	*	*	*	*	*	0.31
In	*	*	*	*	*	*	*	*	*	*	*	*	*-0.07*
La	*	-3.04	*	-0.15	0.98	**-1.09**	1.00	*	*	*	-0.75	*	0.28
Li	-1.64	*	*	*	*	*	*	*	*	*	*	*	-0.47
Lu	*	*	*	-0.15	*	**0.46**	*	*	*	*	*	*	0.51
Mo	*	0.00	*	-0.23	*	**-1.70**	-0.81	*	*	*	*	*	-2.50
Nb	4.96	0.14	*	-1.14	**0.27**	-0.17	-0.13	*	*	-0.25	*	*	-0.50
Nd	*	3.13	*	0.02	*	**-1.07**	*	*	*	*	*	*	1.14
Ni	*19.84*	*1.93*	*	*1.84*	*	***-2.22***	*0.41*	*	*	*-2.37*	*	***2.13***	*-0.28*
Pb	*	-2.06	*	0.32	**4.34**	**-6.09**	1.20	*	*	0.73	*	**7.89**	0.42
Pr	*	*	*	0.05	*	**-0.87**	*	*	*	*	*	*	0.56
Rb	0.95	0.85	0.34	-0.01	**0.48**	-0.79	-0.08	*	*	0.41	*	*	0.73
Sb	*	*	*	*	*	***-1.26***	*	*	*	*	*	***-5.36***	*0.40*
Sc	*	2.23	*	0.13	2.23	1.23	-1.96	*	*	*	*	*	-0.24
Se	*	*	*	*	*	***9.44***	*	*	*	*	*	***0.83***	*1.08*
Sm	*	*	*	0.29	*	**-0.29**	*	*	*	*	*	*	0.79
Sn	*	-3.29	*	-0.17	*	-0.93	*	*	*	*	*	*	-0.98
Sr	2.18	-1.02	0.80	-0.09	**0.00**	-0.73	-0.24	*	-0.29	86.56	*	*	0.41
Ta	*	*	*	-0.29	*	*	*	*	*	*	*	*	-0.60
Tb	*	*	*	-0.35	*	**0.08**	*	*	*	*	*	*	0.37
Te	*	*	*	*	*	*	*	*	*	*	*	***4.33***	*0.45*
Th	*	16.95	*	0.19	*	**0.84**	-1.82	*	*	4.02	*	*	0.01
Tl	*	*	*	-0.47	*	**-3.75**	*	*	*	*	*	**3.48**	-0.38
Tm	*	*	*	0.13	*	**0.26**	*	*	*	*	*	*	0.82
U	*	3.90	*	0.26	*	**1.12**	-0.44	*	*	*	*	*	0.50
V	*	0.73	*	-0.01	**1.88**	**-2.08**	0.30	*	*	1.40	0.11	**-10.71**	-0.58
W	*	*	*	*	*	*-3.01*	*	*	*	*	*	*	*1.27*
Y	-4.86	-2.39	*	-0.36	**1.47**	**-0.64**	0.29	*	*	-0.20	-0.83	*	0.67
Yb	*	*	*	0.03	*	**0.57**	*	*	*	*	*	*	0.53
Zn	-3.72	-1.17	-0.14	1.55	**5.15**	**-0.49**	1.12	*	*	0.31	0.46	**-0.88**	0.09
Zr	-5.36	-0.86	0.62	-0.23	**-0.99**	-0.68	-0.21	*	*	0.06	-1.36	*	0.31

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - *Entries in italics* are derived from Provisional Values.

Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code	Z42	Z44	Z45	Z46	Z47	Z48	Z50	Z51	Z52	Z53	Z54	Z56	Z58
SiO2	0.45	**1.23**	*	3.20	0.00	-2.13	0.35	**-0.78**	0.18	-0.79	**-0.52**	**-0.25**	*
TiO2	1.33	**0.47**	**-1.62**	1.33	-0.15	**0.47**	0.45	**-1.73**	0.18	0.47	**1.24**	**1.57**	*
Al2O3	-0.02	**0.21**	*	-0.09	0.07	**2.09**	0.04	**-3.36**	0.07	4.17	**-2.25**	**0.79**	*
Fe2O3T	0.33	**-0.25**	**-2.32**	0.23	-0.48	**0.15**	-0.43	**-0.35**	0.08	-10.59	**1.74**	**1.88**	*
MnO	1.35	**0.62**	**-4.15**	0.62	-0.57	**2.69**	0.67	**0.21**	-0.57	-8.71	**1.87**	**4.77**	*
MgO	-1.65	**-1.98**	*	-0.86	1.98	**12.56**	-0.63	**-1.06**	2.84	3.30	**5.95**	**-9.25**	*
CaO	-0.51	**0.02**	*	-1.20	2.09	**3.83**	0.01	**-0.33**	-0.51	-3.10	**6.36**	**-4.83**	*
Na2O	-2.73	**-0.91**	*	-0.20	0.46	**0.91**	-0.76	**-1.82**	0.00	5.46	**1.52**	**0.61**	*
K2O	0.16	**0.16**	*	-1.88	-0.26	**2.88**	-0.09	**-1.89**	0.08	-1.72	**-2.57**	**-2.06**	*
P2O5	-0.62	**-1.23**	*	*	1.37	*	0.32	**-0.40**	-0.41	2.94	**-2.07**	*	*
Ag	*	*	*	_-6.23_	*	**_4.42_**	*	*	*	*	*	*	*
Ba	*	**-0.50**	**-6.26**	0.02	0.82	**0.90**	*	**1.51**	*	1.34	0.41	*	**-0.32**
Be	*	*	*	*	0.05	*	*	**0.05**	*	*	*	*	**-0.08**
Bi	*	*	**-1.06**	-1.47	*	*	*	*	*	*	*	*	*
C(tot)	*	*	*	_0.07_	_-3.44_	*	_-0.59_	*	_-0.39_	*	**_1.50_**	*	*
Cd	*	*	**_1.66_**	_-3.65_	*	*	*	*	*	*	*	*	*
Ce	*	**0.48**	**-2.00**	0.43	0.14	**0.78**	*	**-0.35**	*	-1.22	*	*	**1.33**
Co	*	*	**-9.70**	-0.00	*	**0.44**	*	**0.22**	*	*	*	*	**-0.54**
Cr	*	**_-0.60_**	**_-9.83_**	_3.90_	_0.28_	**_0.21_**	*	**_0.21_**	*	_16.71_	*	*	**_-1.87_**
Cs	*	**-0.34**	**-0.18**	-0.90	*	**0.81**	*	**-0.50**	*	*	*	*	**-0.14**
Cu	*	**-1.00**	**-1.00**	-1.35	0.21	**14.57**	*	**-6.48**	*	1.33	*	*	**1.83**
Dy	*	**1.96**	**-0.57**	0.32	-2.55	**1.15**	*	**-2.64**	*	-2.23	*	*	**1.25**
Er	*	**0.81**	**-0.63**	-0.03	-3.10	*	*	**-3.39**	*	-3.39	*	*	**0.65**
Eu	*	**0.73**	**-0.95**	-0.53	-0.20	**0.84**	*	**-1.07**	*	1.85	*	*	**-0.06**
Ga	*	**-0.06**	**-3.61**	0.27	*	1.15	*	**48.33**	*	*	*	*	**-0.06**
Gd	*	**0.24**	**-1.94**	0.26	-0.47	*	*	**-2.43**	*	0.91	*	*	**0.15**
Hf	*	**_-0.23_**	**_-4.77_**	_-0.10_	_2.55_	**_-0.97_**	*	**_-6.78_**	*	*	*	*	**_-0.38_**
Hg	*	*	*	*	-0.40	**1.79**	*	*	*	*	**-0.44**	*	*
Ho	*	**1.54**	**-0.49**	0.00	-2.37	*	*	**-2.44**	*	-2.18	*	*	**0.64**
In	*	*	*	_-0.42_	*	**_0.60_**	*	*	*	*	*	*	*
La	*	**0.29**	**-3.33**	0.09	1.32	**0.11**	*	**-1.10**	*	0.23	*	*	**0.57**
Li	*	*	**-0.30**	*	-0.07	*	*	**1.17**	*	-2.49	*	*	**0.12**
Lu	*	**0.46**	**-0.25**	0.36	-2.57	**0.46**	*	**-3.11**	*	-3.36	*	*	**0.21**
Mo	*	*	**-0.28**	0.60	0.00	-2.12	*	**1.54**	*	-2.83	*	*	**0.35**
Nb	*	**-0.23**	**-0.66**	0.05	0.66	*	*	**-0.30**	*	2.35	*	*	**1.52**
Nd	*	**0.15**	**-1.07**	0.01	-0.63	**-3.13**	*	**-0.86**	*	-1.73	*	*	**0.40**
Ni	*	**_-0.00_**	**_9.09_**	*	*	*	*	**_-1.03_**	*	_-1.93_	*	*	**_0.66_**
Pb	*	**0.28**	**-1.22**	-2.56	0.49	*	*	**-16.53**	*	-1.60	*	*	**0.45**
Pr	*	**0.24**	**-0.85**	0.00	-0.69	*	*	**-0.61**	*	-3.01	*	*	**0.26**
Rb	*	**-0.12**	**-0.55**	-1.15	0.14	**1.70**	*	**-0.32**	*	-6.07	*	*	**0.25**
Sb	*	*	**_1.82_**	_1.15_	_0.35_	**_1.26_**	*	*	*	*	*	*	*
Sc	*	**0.79**	**-4.19**	3.81	*	**1.07**	*	**0.66**	*	-0.78	*	*	**1.34**
Se	*	*	*	*	*	_-4.16_	*	*	*	*	*	*	*
Sm	*	**1.15**	**-1.20**	0.08	-0.78	**0.07**	*	**-0.92**	*	0.67	*	*	**0.92**
Sn	*	*	**-12.60**	-0.68	-0.28	*	*	*	*	*	*	*	**-0.03**
Sr	*	**0.58**	**-0.15**	0.07	0.22	**0.15**	*	**51.39**	*	0.58	**-1.60**	*	**0.44**
Ta	*	**0.69**	**0.00**	-0.29	*	**-1.04**	*	**-0.46**	*	*	*	*	**0.81**
Tb	*	**1.31**	**-0.92**	-0.12	-1.19	**-0.23**	*	**-1.61**	*	0.23	*	*	**0.84**
Te	*	*	*	*	*	*	*	*	*	*	*	*	*
Th	*	**0.50**	**-0.30**	0.44	*	**1.49**	*	**2.07**	*	-0.62	*	*	**0.76**
Tl	*	*	**-0.77**	-6.57	*	*	*	*	*	*	*	*	**1.04**
Tm	*	**0.51**	**-0.20**	-0.26	-2.43	*	*	*	*	-3.33	*	*	**0.77**
U	*	**0.34**	**-0.61**	0.85	*	**-0.39**	*	**-1.80**	*	-5.85	*	*	**1.02**
V	*	**-0.19**	**-3.49**	0.58	0.94	**0.23**	*	**23.25**	*	-1.01	*	*	**-1.22**
W	*	*	*	_1.30_	*	**_1.45_**	*	*	*	*	*	*	*
Y	*	**1.64**	**-0.88**	0.22	-0.13	*	*	**-2.57**	*	-8.70	*	*	**1.70**
Yb	*	**0.15**	**0.00**	-0.31	-3.25	**0.41**	*	**-3.76**	*	-4.84	*	*	**0.72**
Zn	*	**1.19**	**-3.16**	-2.30	0.65	**1.79**	*	**-6.21**	*	2.60	*	*	**0.05**
Zr	*	**1.36**	**-1.87**	0.80	0.18	**1.23**	*	**-17.05**	*	-7.39	*	*	**0.62**

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - _Entries in italics_ are derived from Provisional Values.

Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code	Z60	Z61	Z63	Z64	Z65	Z66	Z67	Z70	Z71	Z72	Z73	Z74	Z76
SiO2	0.01	1.31	0.14	-1.94	*	0.00	-0.09	1.54	*	-0.20	0.98	*	*
TiO2	0.61	-0.63	-0.32	-1.51	*	0.23	-0.53	0.47	-0.63	-0.32	-0.63	*	*
Al2O3	-0.44	0.79	-0.09	-1.85	*	-0.02	0.07	0.73	*	0.40	-0.44	*	*
Fe2O3T	-1.58	3.60	0.03	0.74	*	-0.58	2.63	3.40	-0.56	-0.58	-0.56	*	*
MnO	1.59	-18.03	0.31	0.00	*	0.31	0.21	1.66	0.62	-0.21	-0.41	*	*
MgO	-0.79	-7.93	0.00	-0.59	*	0.66	-0.59	1.32	*	0.99	-0.66	*	*
CaO	0.09	-1.02	0.36	-0.09	*	-0.34	-0.94	2.10	*	0.18	-0.68	*	*
Na2O	-2.49	-8.19	0.91	-0.21	*	0.46	0.82	-4.25	*	0.46	-1.82	*	*
K2O	-0.42	1.35	0.08	-1.02	*	0.25	1.08	-1.04	*	0.08	-0.53	*	*
P2O5	-1.38	-3.32	0.22	0.86	*	-0.62	-0.09	0.86	0.86	-0.72	-1.65	*	*
Ag	*	*	0.08	-1.41	*	*	*	*	3.58	*	*	0.00	*
Ba	0.55	*	0.49	-1.21	*	*	0.30	0.20	0.29	*	*	2.13	-4.62
Be	*	*	0.15	-1.65	*	*	*	*	-1.27	*	*	-0.27	*
Bi	*	*	-0.27	-0.43	*	*	*	*	*	*	*	0.42	*
C(tot)	*	*	0.42	-1.25	*	0.42	*	*	*	6.36	-7.82	*	*
Cd	-0.10	*	0.05	-0.18	*	*	*	*	0.39	*	*	-0.98	*
Ce	0.23	*	0.52	-0.96	1.53	*	*	*	-0.39	*	*	0.28	-3.97
Co	*	*	-0.40	-0.67	*	*	9.46	-0.16	-0.07	*	*	1.01	*
Cr	*	*	-1.45	-1.01	*	*	-2.03	6.33	-2.91	*	*	0.32	*
Cs	*	*	0.25	0.00	*	*	*	*	0.26	*	*	1.09	-2.77
Cu	0.56	*	0.17	5.41	*	*	1.46	-4.58	-0.33	*	4.83	0.83	*
Dy	*	*	0.07	-0.23	0.78	*	*	*	-0.07	*	*	0.14	-2.79
Er	*	*	-0.16	-0.53	0.70	*	*	*	-0.12	*	*	-0.22	-3.28
Eu	-2.50	*	0.36	-0.31	3.20	*	*	*	-0.06	*	*	2.41	-2.07
Ga	*	5.86	-0.53	0.09	*	*	*	5.86	0.06	*	*	0.30	*
Gd	*	*	0.00	-1.32	3.70	*	*	*	-0.33	*	*	1.49	-3.53
Hf	*	*	0.13	-0.45	*	*	*	*	0.08	*	*	0.84	*
Hg	-0.57	*	2.05	0.87	*	*	*	*	*	*	*	*	*
Ho	*	*	0.19	0.19	0.51	*	*	*	-0.13	*	*	0.26	-2.92
In	*	*	-0.34	-0.53	*	*	*	*	*	*	*	*	*
La	-1.61	*	0.40	-0.57	2.98	*	*	*	-0.63	*	*	2.41	-3.25
Li	-0.05	*	0.23	0.54	*	*	*	*	-0.13	*	*	-0.39	*
Lu	*	*	0.87	-0.30	*	*	*	*	-0.30	*	*	0.46	-2.45
Mo	*	1.41	0.07	-1.25	*	*	*	*	-0.71	*	*	-1.27	*
Nb	*	0.27	-0.38	-2.28	*	*	0.66	-1.80	-0.45	*	*	6.71	-0.01
Nd	-3.95	*	0.30	-1.00	-0.40	*	*	*	-0.80	*	*	1.46	-4.03
Ni	-1.00	-1.93	-1.93	-0.63	*	*	4.83	15.47	-1.72	*	*	0.29	*
Pb	-1.46	*	0.59	-0.80	*	*	2.28	-4.61	-0.99	*	*	-1.30	-6.48
Pr	*	*	0.22	-0.93	2.50	*	*	*	-0.33	*	*	1.02	-3.79
Rb	*	-0.14	-0.38	0.05	*	*	0.14	-0.96	0.07	*	*	0.27	-1.45
Sb	*	*	-0.56	-0.54	*	*	*	*	*	*	*	*	*
Sc	0.52	*	-0.26	1.83	*	*	*	1.83	-0.73	*	*	1.70	*
Se	0.84	*	-0.56	-0.50	*	*	*	*	*	*	*	*	*
Sm	*	*	0.90	-0.35	-0.07	*	*	*	-0.63	*	*	0.69	-4.07
Sn	*	*	0.47	2.90	*	*	*	*	-0.01	*	*	*	*
Sr	0.68	-1.02	0.29	-0.16	*	*	0.36	0.87	2.18	*	*	0.44	-7.19
Ta	*	*	0.00	1.59	*	*	*	*	-2.08	*	*	2.08	0.03
Tb	*	*	0.12	-0.66	*	*	*	*	0.38	*	*	1.00	-2.18
Te	*	*	-0.47	*	*	*	*	*	*	*	*	*	*
Th	*	20.93	-0.47	0.52	-13.42	*	*	*	-0.78	*	*	-0.30	*
Tl	*	*	-0.02	*	*	*	*	*	0.14	*	*	-2.03	*
Tm	*	*	0.90	-0.71	*	*	*	*	0.00	*	*	1.02	-2.63
U	*	*	0.03	0.65	-10.77	*	*	12.36	-0.02	*	*	-0.89	-1.19
V	-2.25	*	-0.92	-2.22	*	*	-0.30	2.29	0.35	*	*	0.60	*
W	*	-12.59	0.40	1.78	*	*	*	*	*	*	*	2.99	*
Y	*	3.81	0.03	-0.52	1.23	*	1.52	-5.57	0.22	*	*	-0.41	-3.98
Yb	-4.08	*	-1.13	-0.12	1.08	*	*	*	-0.31	*	*	0.46	-3.09
Zn	-1.52	-0.92	0.65	0.54	*	*	2.87	1.08	1.52	*	2.06	-2.00	*
Zr	*	-0.99	0.62	-0.02	*	*	-1.73	2.09	2.71	*	*	1.23	*

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - *Entries in italics* are derived from Provisional Values.

Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

Lab Code	Z77	Z78	Z79	Z80	Z81	Z82	Z83	Z86	Z87	Z88	Z89	Z92	Z94
SiO2	-0.53	0.60	0.23	-0.26	0.23	0.23	0.93	-3.22	-0.11	-1.12	0.28	0.05	-0.45
TiO2	0.50	-5.03	2.41	1.02	0.47	-0.32	0.47	-0.21	-0.32	-0.97	-0.32	0.25	0.29
Al2O3	-0.19	-0.57	-0.20	-0.57	0.73	-0.45	0.86	5.94	-0.09	0.51	-0.64	2.42	-0.54
Fe2O3T	1.72	1.77	-0.16	0.46	-1.37	-0.94	0.35	-2.15	0.08	0.64	-0.63	3.20	-0.68
MnO	0.76	0.62	0.37	0.52	-1.45	-0.73	-0.41	-1.81	-0.21	*	-0.73	2.28	2.85
MgO	2.58	-3.97	0.93	0.00	-1.32	0.00	1.98	*	1.32	-1.19	0.00	-1.06	-0.10
CaO	0.19	-1.37	0.09	2.10	-1.72	0.18	0.36	2.95	-0.51	-1.62	-0.16	-0.02	-0.34
Na2O	1.06	0.30	0.42	7.89	2.73	0.61	2.12	*	1.52	-0.64	0.00	-9.59	-0.61
K2O	0.39	0.84	-0.37	3.05	-0.70	-0.18	1.01	3.06	0.42	0.04	-0.43	1.47	-0.18
P2O5	0.81	-1.23	0.67	1.69	-3.32	-0.62	0.86	*	0.01	1.99	-0.62	0.65	0.95
Ag	*	*	*	*	*	1.25	-0.97	*	0.52	-2.15	*	1.21	*
Ba	-0.03	-0.10	-0.41	0.86	-0.58	0.89	1.69	5.48	0.63	-13.66	-0.03	-1.59	*
Be	*	*	*	*	*	*	0.11	*	0.24	*	0.18	*	*
Bi	0.17	*	-0.48	*	*	-0.63	0.75	*	-0.66	*	*	*	*
C(tot)	*	*	*	*	*	*	*	*	*	*	*	1.69	*
Cd	*	*	*	*	*	*	-0.89	*	0.66	*	*	-12.07	*
Ce	-0.42	1.03	0.15	-0.89	2.28	-1.15	0.28	*	0.70	-0.22	-0.20	4.54	*
Co	*	1.96	-5.10	8.32	1.96	-0.21	-0.22	*	0.03	-1.70	-0.33	1.54	*
Cr	2.29	7.48	-1.66	5.17	1.71	-0.18	2.05	97.81	*	-4.68	-0.01	-1.75	*
Cs	11.24	40.18	0.18	2.24	-3.43	-0.29	-0.22	*	0.23	*	0.17	-1.05	*
Cu	-0.27	-1.17	-3.78	0.00	-3.08	-1.12	0.75	0.25	0.17	-1.77	-0.42	0.33	*
Dy	0.00	*	0.81	-1.56	*	-0.24	0.98	*	-0.08	1.06	0.08	-0.61	*
Er	*	*	0.91	-1.09	*	-0.42	0.81	*	-0.34	1.09	-0.13	0.70	*
Eu	*	*	2.75	-0.39	*	0.14	-0.06	*	-0.20	0.82	0.03	3.20	*
Ga	-0.06	-1.24	-4.05	1.12	-2.42	0.38	0.41	10.62	-0.44	1.63	-0.15	-0.77	*
Gd	*	*	2.61	-1.70	*	-0.45	-0.18	*	-0.73	0.51	0.09	1.15	*
Hf	0.15	3.82	0.64	-2.06	-11.47	-0.82	0.38	*	-0.64	*	-1.71	4.03	*
Hg	*	*	*	*	*	-0.26	*	*	*	0.26	*	*	*
Ho	*	*	-0.38	-1.28	*	-0.32	0.38	*	-0.06	0.87	-0.16	-0.41	*
In	*	*	*	*	*	*	*	*	0.59	*	*	-0.82	*
La	0.11	8.26	-0.02	-1.26	3.10	-0.63	-3.27	*	0.37	-0.44	-0.06	-2.01	*
Li	*	*	1.75	*	*	0.02	*	*	0.99	*	0.94	-4.68	*
Lu	*	*	0.46	-1.32	*	-0.41	-0.05	*	-0.15	-1.24	-0.18	-6.25	*
Mo	0.42	0.00	-1.58	*	-2.83	*	0.42	7.07	0.11	-3.38	*	-2.41	*
Nb	0.66	*	0.74	0.27	-1.80	0.97	-0.14	-3.49	0.24	*	0.14	*	*
Nd	0.93	1.60	-0.05	-1.66	-3.73	-0.57	0.73	*	0.40	-0.25	-0.00	-1.26	*
Ni	3.87	15.47	-5.59	-0.00	-0.00	0.78	7.15	53.17	0.19	-2.68	0.45	16.05	*
Pb	1.08	0.45	-0.03	-1.33	-2.06	-0.36	2.13	-0.42	0.15	-0.07	0.91	-1.62	*
Pr	*	*	-0.67	1.51	*	-0.31	0.47	*	0.20	-0.55	0.00	-0.67	*
Rb	0.52	-3.41	-1.01	0.48	-0.55	1.77	-0.75	-0.38	0.14	-0.63	2.69	1.31	*
Sb	*	*	0.35	*	*	-2.92	0.10	*	-0.20	-4.46	*	-1.20	*
Sc	1.89	7.07	-0.26	*	9.69	2.32	-0.05	*	0.26	*	0.76	*	*
Se	*	*	*	*	*	*	13.33	*	*	-0.06	*	6.05	*
Sm	1.82	*	-0.18	-1.23	0.67	-0.53	0.50	*	0.43	-0.31	0.04	-0.69	*
Sn	*	86.26	0.07	*	*	*	-0.96	*	-0.78	-2.64	*	-2.72	*
Sr	0.76	-0.73	-0.96	-0.29	-1.16	-1.67	0.00	-0.36	0.25	-10.41	0.44	3.79	*
Ta	*	56.50	1.04	*	*	1.56	-0.23	*	-0.35	*	0.40	-6.17	*
Tb	*	*	2.07	-0.69	*	0.12	-0.08	*	-0.19	0.88	-0.04	-8.77	*
Te	*	*	*	*	*	*	*	*	-0.23	*	*	0.82	*
Th	0.19	-0.13	0.68	1.81	-3.37	-0.23	0.08	4.79	-0.03	-1.33	-0.15	1.16	*
Tl	6.64	*	0.23	*	*	*	*	*	0.11	*	*	-2.26	*
Tm	*	*	0.51	-1.28	*	-0.38	*	*	0.00	0.69	-0.08	0.26	*
U	-3.12	-1.30	4.85	0.71	-0.39	-0.44	0.80	*	0.01	0.30	0.38	-5.39	*
V	0.72	1.88	-2.43	1.05	0.64	-0.84	-0.23	22.40	0.11	-5.64	-0.61	9.30	*
W	*	*	-1.45	*	46.20	*	2.82	*	-0.09	*	*	2.44	*
Y	1.55	11.63	-1.07	-2.05	1.47	-1.10	-0.57	-0.83	-0.05	1.99	0.19	-0.80	*
Yb	*	*	0.15	-1.55	*	-0.64	0.00	*	-0.26	0.61	-0.13	-0.57	*
Zn	2.18	2.00	-1.15	1.46	-1.30	-1.35	2.11	-0.11	1.11	-1.72	0.05	-0.22	*
Zr	0.83	-2.71	2.93	-0.37	-1.23	-0.68	0.86	-3.70	0.92	*	-2.96	*	*

Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - *Entries in italics* are derived from Provisional Values.

Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

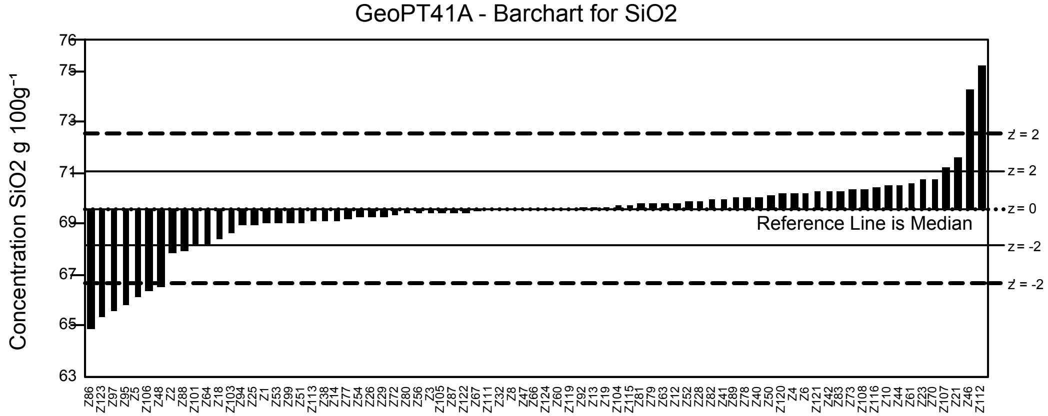
Lab Code	Z95	Z97	Z99	Z100	Z101	Z103	Z104	Z105	Z106	Z107	Z108	Z111	Z112
SiO2	-2.58	-5.51	-0.40	*	-1.00	-0.67	0.07	-0.12	-2.19	1.09	1.04	-0.04	3.80
TiO2	-3.61	23.55	-0.86	*	0.18	0.84	0.23	0.23	8.48	-0.49	0.47	-0.26	2.98
Al2O3	0.62	-10.30	-0.48	*	2.60	0.92	-0.12	0.27	-2.30	0.11	1.48	-0.77	1.40
Fe2O3T	-10.06	53.16	-0.63	*	-0.38	0.58	0.48	-0.33	-2.15	-0.05	-0.51	-1.34	0.79
MnO	-6.43	38.97	-0.78	*	-0.31	-0.21	-2.28	-1.24	-0.73	-1.46	1.04	-0.10	-1.24
MgO	1.65	-27.10	-2.31	*	2.64	-1.32	0.66	4.96	-8.59	-0.56	-4.30	-3.64	1.98
CaO	-1.03	14.92	0.36	*	1.74	-0.16	0.18	-0.68	1.57	-1.03	1.75	-1.20	13.18
Na2O	-8.19	-50.07	0.15	*	1.06	1.82	-0.15	2.73	4.55	-0.50	1.37	-1.12	1.52
K2O	1.44	7.31	0.42	*	0.50	-0.09	0.42	-0.77	-0.18	-1.42	-0.61	-0.43	2.97
P2O5	2.52	299.43	-2.70	*	4.29	0.64	0.43	-0.62	-1.66	0.00	3.15	-2.29	2.52
Ag	*	11.26	*	*	0.68	*	*	*	*	*	0.40	*	-0.20
Ba	-0.60	-1.29	-0.05	0.64	-0.18	-0.53	0.56	*	-1.67	-0.58	0.11	1.24	2.46
Be	*	*	*	0.23	-0.07	*	*	*	-6.44	*	*	*	1.99
Bi	*	3.40	3.31	*	-1.34	*	*	*	*	0.69	0.73	*	*
C(tot)	*	*	*	*	-0.40	*	*	*	*	-0.78	*	*	*
Cd	*	27.62	-1.60	*	2.17	*	*	*	*	0.37	*	*	11.45
Ce	*	0.78	-0.21	0.81	0.52	-0.05	1.39	*	-9.04	1.09	-0.37	3.39	*
Co	8.40	-7.37	1.19	0.20	-0.07	-0.08	*	*	-1.14	0.00	-1.01	4.16	-2.73
Cr	5.47	-4.64	-1.22	-1.87	-2.15	4.89	-2.03	*	2.59	-0.10	-5.56	-4.34	-1.63
Cs	*	*	-0.53	-0.58	*	*	*	*	*	*	*	26.03	*
Cu	-0.71	-4.68	-0.60	-0.50	0.92	-2.91	0.58	*	1.83	-0.14	-0.78	0.25	-1.78
Dy	*	*	*	0.81	-0.17	-1.98	*	*	-3.91	0.81	*	*	2.44
Er	*	*	*	0.35	0.04	-2.33	*	*	-3.97	-0.01	*	*	2.14
Eu	*	*	*	-0.28	0.31	0.03	*	*	-0.87	0.03	*	*	0.93
Ga	*	-1.01	-0.62	0.65	*	-1.80	-0.62	*	*	2.47	-0.89	2.34	1.09
Gd	*	*	*	0.09	0.32	-0.30	*	*	-3.61	0.64	*	*	2.73
Hf	*	-6.37	-2.17	0.56	-0.73	*	*	*	*	1.91	16.83	*	1.91
Hg	*	*	6.08	*	*	-0.08	*	*	*	*	*	*	*
Ho	*	*	*	0.38	-0.24	-1.92	*	*	-2.82	1.09	*	*	0.83
In	*	*	2.44	*	*	*	*	*	*	*	*	*	*
La	0.11	-1.26	-0.12	0.29	-0.00	0.03	2.98	*	-6.41	0.69	0.86	-0.17	1.03
Li	*	*	*	0.46	1.36	*	*	*	12.22	*	*	*	*
Lu	*	*	*	0.46	-0.24	-2.32	*	*	-3.47	*	*	*	2.15
Mo	-4.24	-1.98	-0.50	*	-0.78	0.00	*	*	*	0.16	0.42	0.71	0.00
Nb	-2.97	-0.35	-1.21	1.21	0.09	0.66	0.14	*	2.21	2.74	-2.11	0.66	0.76
Nd	*	-2.06	-0.00	0.20	0.23	-0.07	*	*	-5.72	0.70	-0.67	*	1.53
Ni	11.60	5.03	-0.97	0.10	2.87	-0.00	-0.97	*	30.94	1.41	-0.58	2.90	1.74
Pb	-10.60	-1.39	-0.30	1.14	0.42	-0.50	0.11	*	-8.16	0.02	1.86	0.67	2.66
Pr	*	*	*	0.08	0.15	0.12	*	*	-5.08	0.09	*	*	1.34
Rb	-1.91	-0.90	-0.48	0.45	0.03	-0.38	0.44	*	*	1.07	-0.83	0.95	*
Sb	*	-1.57	-0.74	*	0.83	*	*	*	*	1.21	-3.37	-5.31	1.90
Sc	*	-0.52	0.92	3.77	0.13	-0.13	-0.39	*	8.23	5.97	-1.95	4.84	12.83
Se	*	0.00	-0.28	*	*	*	*	*	*	*	*	*	*
Sm	*	*	1.46	-0.01	0.09	-0.32	*	*	-3.96	0.74	*	*	0.90
Sn	*	-3.82	-0.92	1.60	-0.49	*	*	*	112.14	*	3.18	1.73	-0.03
Sr	-1.31	-0.76	-0.66	0.73	0.00	-0.58	-0.07	*	1.97	-0.39	-1.21	0.80	*
Ta	*	32.28	-4.61	0.35	-1.79	*	*	*	*	3.57	*	*	*
Tb	*	*	*	0.23	0.11	-0.96	*	*	-2.27	-1.65	*	*	1.65
Te	*	*	-1.93	*	*	*	*	*	*	*	*	*	*
Th	-0.07	-0.13	-1.20	0.55	-0.07	-1.22	0.74	*	*	-0.64	3.27	-2.50	1.96
Tl	*	*	1.06	2.21	-0.07	*	*	*	*	0.02	55.45	*	-1.20
Tm	*	*	*	0.00	-0.05	-2.05	*	*	-2.82	*	*	*	0.90
U	17.56	0.07	-4.06	1.48	-0.31	*	1.63	*	*	-0.97	1.39	-2.92	2.08
V	4.03	-1.88	-0.86	-0.23	-0.38	-1.95	0.11	*	*	0.30	-1.67	1.15	0.51
W	*	3.09	-0.42	*	*	*	*	*	*	*	-1.10	-6.30	*
Y	2.69	0.61	0.34	1.94	-0.44	-3.68	-1.22	*	-4.37	1.63	-0.57	1.12	0.30
Yb	*	*	0.15	0.72	-0.28	-2.86	*	*	-4.35	0.05	2.29	*	1.18
Zn	-0.87	-6.56	-0.01	-2.98	1.57	-0.95	-0.22	*	-4.63	0.52	-0.51	0.92	-1.22
Zr	-1.79	-1.12	-0.60	2.71	0.25	-1.60	0.06	*	*	*	-1.29	0.80	1.42

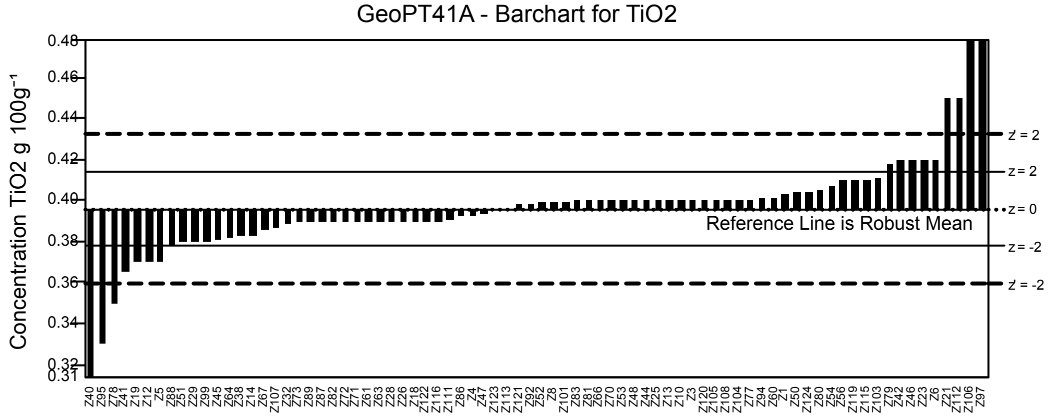
Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - *Entries in italics* are derived from Provisional Values.

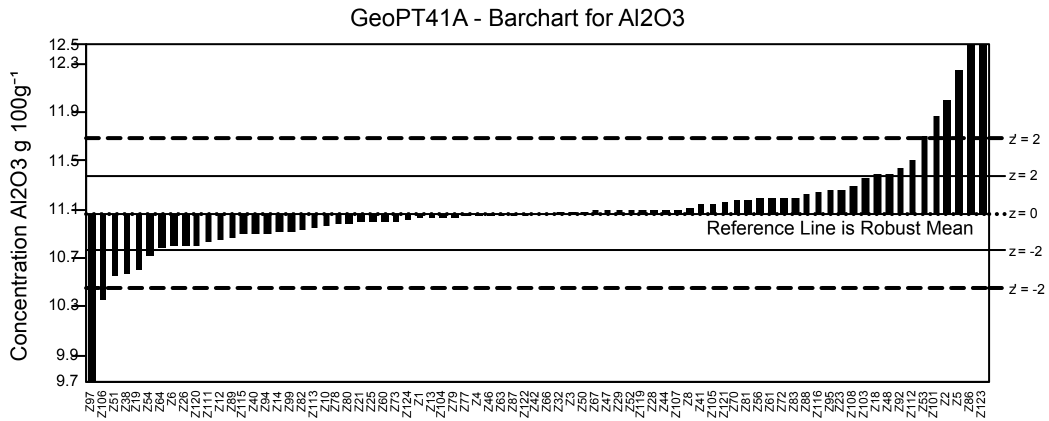
Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

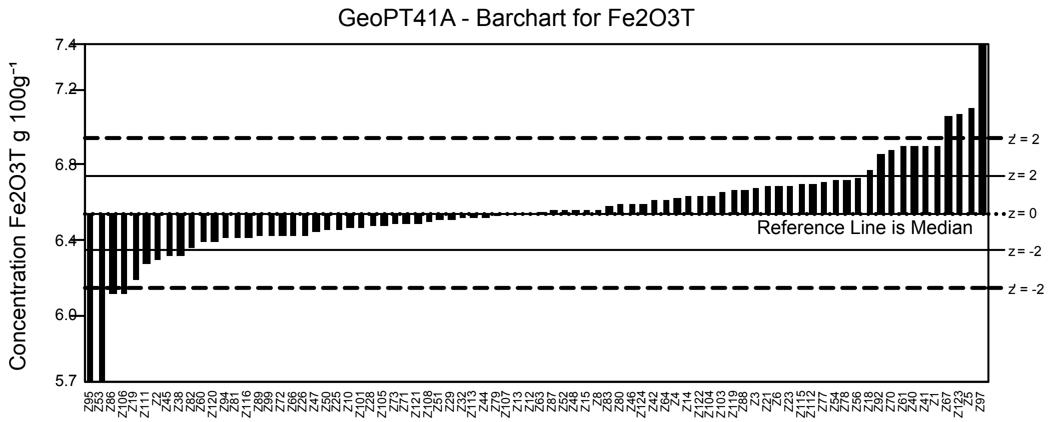
Lab Code	Z113	Z114	Z115	Z116	Z119	Z120	Z121	Z122	Z123	Z124
SiO2	**-0.72**	*	0.09	**1.13**	0.01	0.40	0.45	**-0.22**	-2.90	0.00
TiO2	**-0.08**	*	0.78	**-0.63**	0.78	0.23	0.12	**-0.63**	-0.04	0.45
Al2O3	**-0.83**	*	-0.58	**1.18**	0.07	-0.87	0.28	**-0.11**	6.33	-0.19
Fe2O3T	**-0.28**	*	0.79	**-1.37**	0.63	-0.79	-0.27	**0.96**	2.66	0.23
MnO	**-0.41**	*	-8.86	**-5.80**	0.31	0.31	-0.19	**-0.41**	3.01	0.16
MgO	**1.59**	*	1.98	**3.30**	-1.32	-1.65	0.31	**3.30**	12.89	0.33
CaO	**0.05**	*	-0.16	**0.02**	-0.34	0.36	-0.17	**1.06**	3.13	0.01
Na2O	**-0.52**	*	-0.30	**1.06**	-1.06	0.76	1.34	**2.12**	-1.52	-0.30
K2O	**-0.63**	*	-0.01	**0.16**	-0.77	-0.09	0.18	**0.84**	0.84	-0.09
P2O5	**-0.40**	*	-0.72	**0.86**	-0.62	0.22	0.05	**2.94**	8.36	0.01
Ag	*	*	*	**_4.83_**	*	_-1.21_	*	*	*	_0.00_
Ba	0.47	*	1.54	**0.38**	0.12	1.61	-0.35	*	0.71	-0.10
Be	*	*	*	*	*	0.74	-0.53	*	*	*
Bi	*	*	*	*	*	0.28	-0.60	*	*	*
C(tot)	_-22.72_	_1.49_	_0.93_	*	*	_-22.72_	_1.33_	**_-0.70_**	*	_0.47_
Cd	*	*	*	*	*	_1.28_	_-0.85_	*	_233.25_	_3.19_
Ce	-0.20	*	0.60	**0.28**	*	-0.27	0.11	*	-3.86	-0.48
Co	0.47	*	*	**0.48**	*	0.56	-0.16	*	*	-0.08
Cr	_0.01_	*	*	**_2.40_**	_-0.30_	_-2.03_	_-0.24_	*	_12.40_	_-0.30_
Cs	*	*	*	*	*	-0.78	-0.11	*	*	*
Cu	-0.43	*	-1.65	**0.00**	-0.54	-6.53	0.79	*	3.70	0.42
Dy	-1.00	*	*	*	*	-1.29	-0.05	*	*	*
Er	-1.56	*	*	*	*	0.02	-0.26	*	*	*
Eu	-0.47	*	*	*	*	-1.04	-0.18	*	*	*
Ga	-0.47	*	-0.38	**-1.01**	-1.21	0.33	-0.35	*	1.15	0.56
Gd	-0.95	*	*	*	*	-0.44	-0.34	*	*	*
Hf	*	*	*	*	*	_-5.93_	_-1.43_	*	*	_0.00_
Hg	*	0.98	0.18	*	*	*	*	*	122.48	10.12
Ho	-1.43	*	*	*	*	0.26	-0.13	*	*	*
In	*	*	*	*	*	_0.34_	_0.32_	*	*	*
La	-1.35	*	0.37	**-0.63**	*	-0.23	-0.29	*	2.70	1.26
Li	1.08	*	*	*	*	-4.61	-1.61	*	*	*
Lu	-1.20	*	*	*	*	1.13	-0.29	*	*	*
Mo	*	*	-0.57	**2.12**	*	3.04	0.70	*	*	1.41
Nb	-0.98	*	-0.95	**1.10**	-0.38	-1.21	-0.18	*	-1.94	-0.38
Nd	-1.39	*	2.96	**-2.46**	*	0.10	-0.09	*	13.44	0.47
Ni	*	*	_1.45_	**_3.67_**	_-0.00_	_1.45_	_-0.04_	*	_4.83_	_1.93_
Pb	0.02	*	-0.25	**2.66**	0.06	1.77	-0.21	*	0.78	0.08
Pr	-1.47	*	*	*	*	-0.21	-0.16	*	*	0.53
Rb	0.45	*	-0.52	**0.48**	-0.48	0.34	-2.17	*	0.24	0.14
Sb	*	*	*	*	*	_-2.06_	_-0.08_	*	*	*
Sc	5.60	*	*	**0.50**	*	0.26	0.00	*	*	-1.70
Se	*	*	*	**_0.00_**	*	_3.89_	*	*	*	*
Sm	-0.85	*	-0.09	*	*	-0.09	-0.05	*	*	1.74
Sn	*	*	*	**2.70**	2.98	0.47	0.70	*	*	*
Sr	-0.49	*	-0.95	**0.00**	-0.44	-7.92	-0.42	*	0.36	0.07
Ta	*	*	*	*	*	3.11	0.08	*	*	*
Tb	-1.04	*	*	*	*	1.11	-0.11	*	*	*
Te	*	*	*	*	*	_-0.12_	*	*	*	*
Th	-1.75	*	*	**-0.13**	-2.50	-2.50	-0.47	*	*	0.74
Tl	*	*	*	*	*	-0.29	-0.49	*	*	*
Tm	-1.56	*	*	*	*	1.92	-0.13	*	*	*
U	-0.62	*	*	**3.25**	*	-1.74	0.08	*	*	-2.92
V	0.96	*	2.38	**2.46**	-0.30	-0.51	-0.55	*	7.54	-0.51
W	*	*	*	**_-1.49_**	*	_0.40_	_0.21_	*	*	*
Y	-1.73	*	0.50	**0.37**	1.12	0.66	0.08	*	-4.35	0.73
Yb	-1.13	*	2.47	*	*	0.15	-0.25	*	*	*
Zn	0.31	*	-0.32	**1.95**	0.00	-6.12	-0.06	*	1.03	-0.08
Zr	*	*	-0.76	**-1.23**	0.00	-9.74	-1.67	*	0.18	-0.18

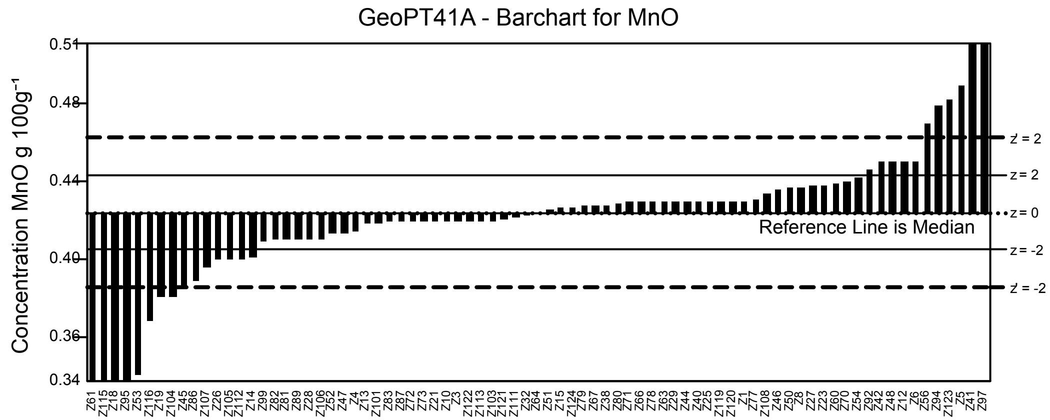
Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - _Entries in italics_ are derived from Provisional Values.

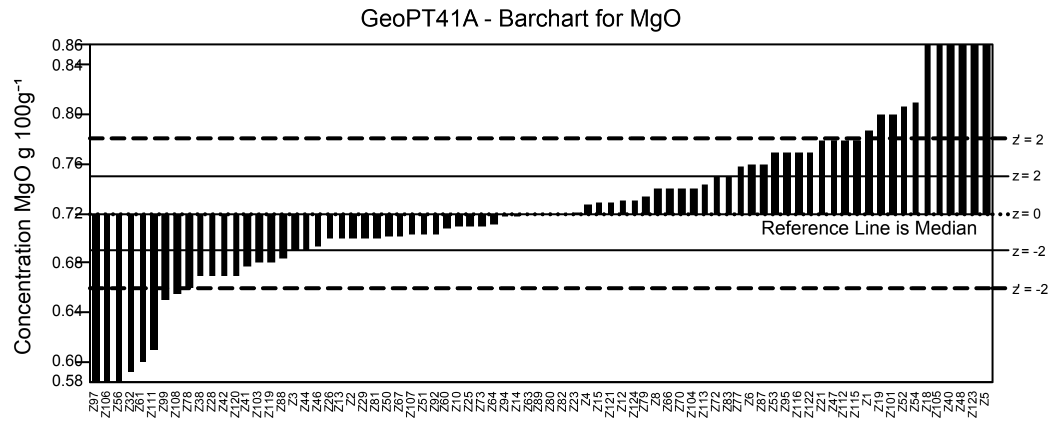

GeoPT41A - Barchart for SiO2
Concentration SiO2 g 100g⁻¹
Reference Line is Median
z' = 2
z = 2
z = 0
z = -2
z' = -2


GeoPT41A - Barchart for TiO2
Concentration TiO2 g 100g⁻¹
Reference Line is Robust Mean
z' = 2
z = 2
z = 0
z = -2
z' = -2

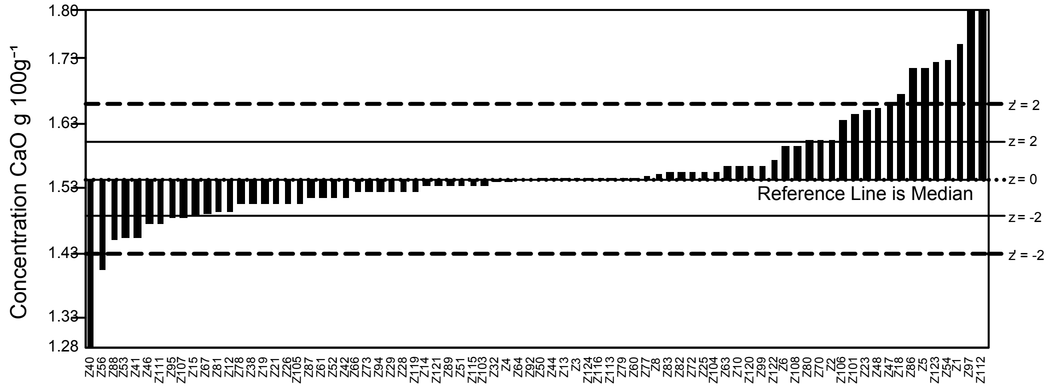

GeoPT41A - Barchart for Al2O3
Concentration Al2O3 g 100g⁻¹
Reference Line is Robust Mean
z' = 2
z = 2
z = 0
z = -2
z' = -2


GeoPT41A - Barchart for Fe2O3T
Concentration Fe2O3T g 100g⁻¹
Reference Line is Median
z' = 2
z = 2
z = 0
z = -2
z' = -2

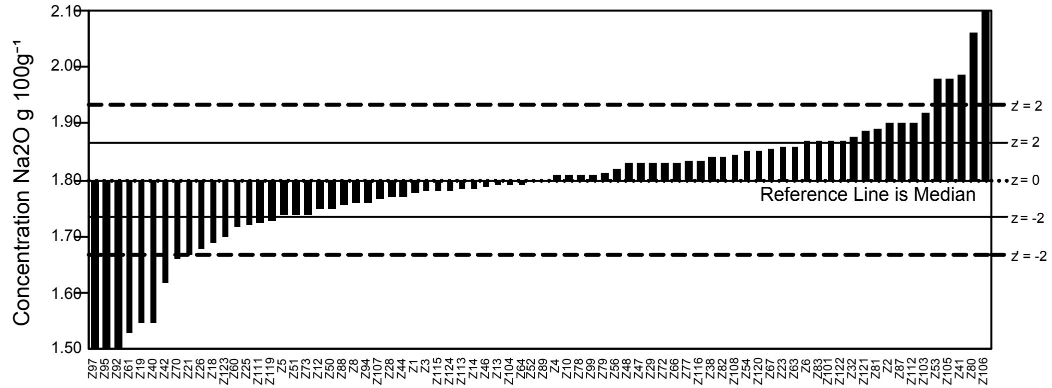

GeoPT41A - Barchart for MnO
Concentration MnO g 100g⁻¹
Reference Line is Median
z' = 2
z = 2
z = 0
z = -2
z' = -2


GeoPT41A - Barchart for MgO
Concentration MgO g 100g⁻¹
Reference Line is Median
z' = 2
z = 2
z = 0
z = -2
z' = -2

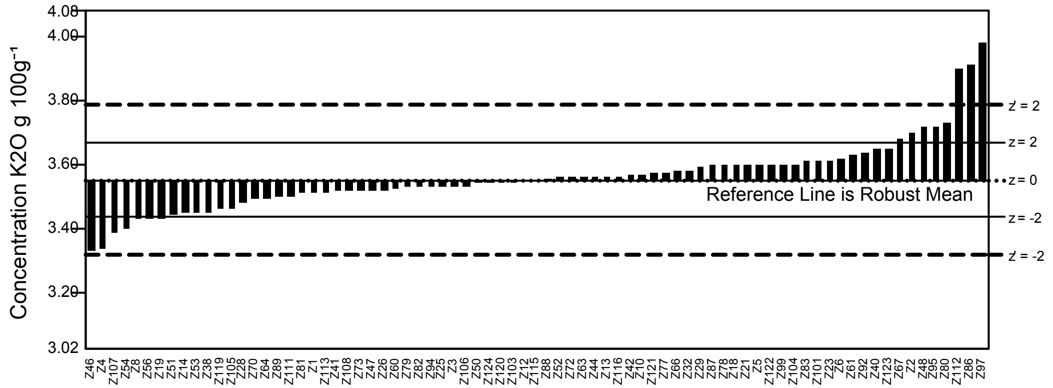
GeoPT41A - Barchart for CaO



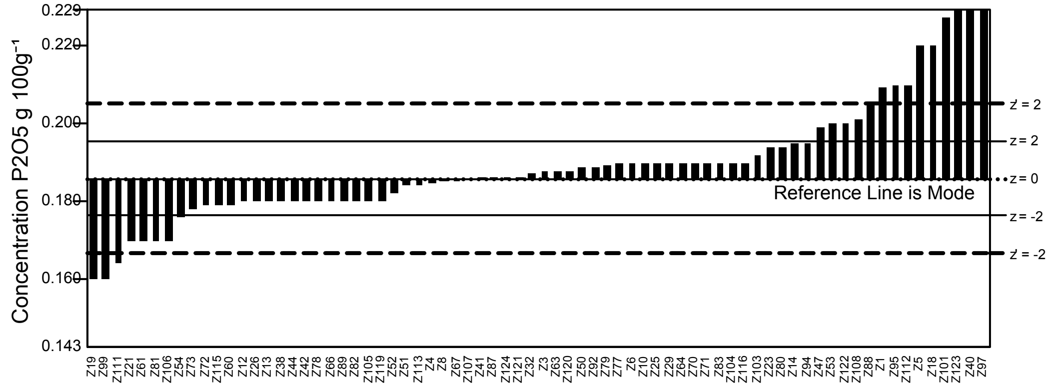
GeoPT41A - Barchart for Na2O



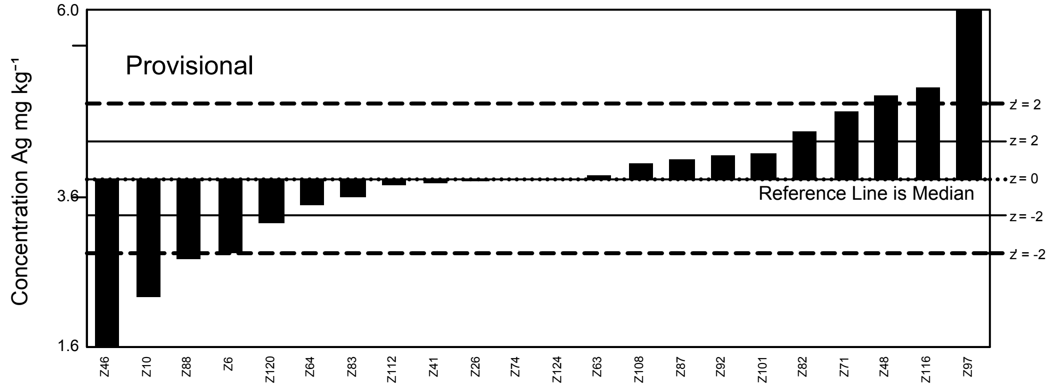
GeoPT41A - Barchart for K2O



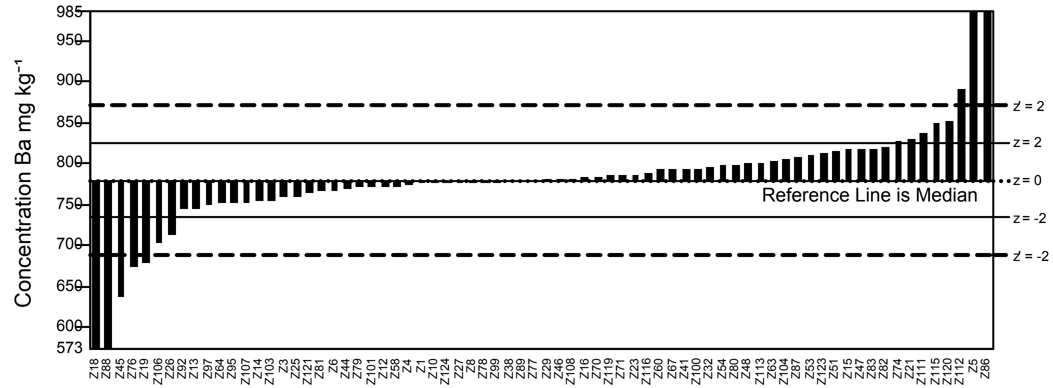
GeoPT41A - Barchart for P2O5



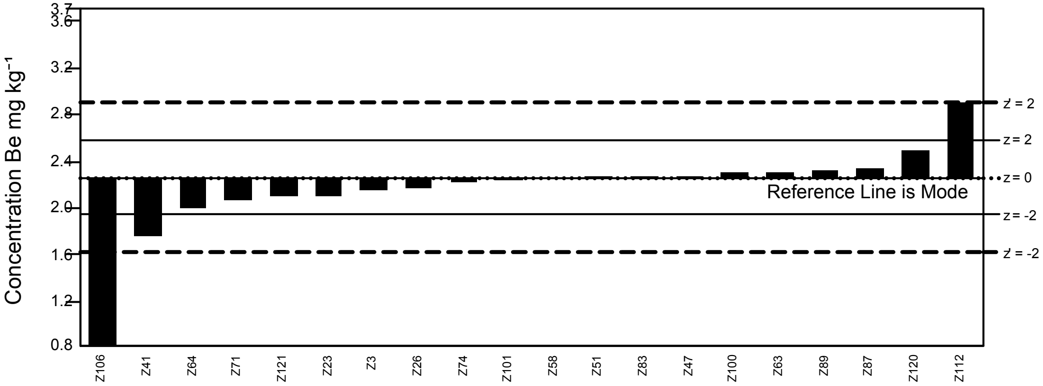
GeoPT41A - Barchart for Ag



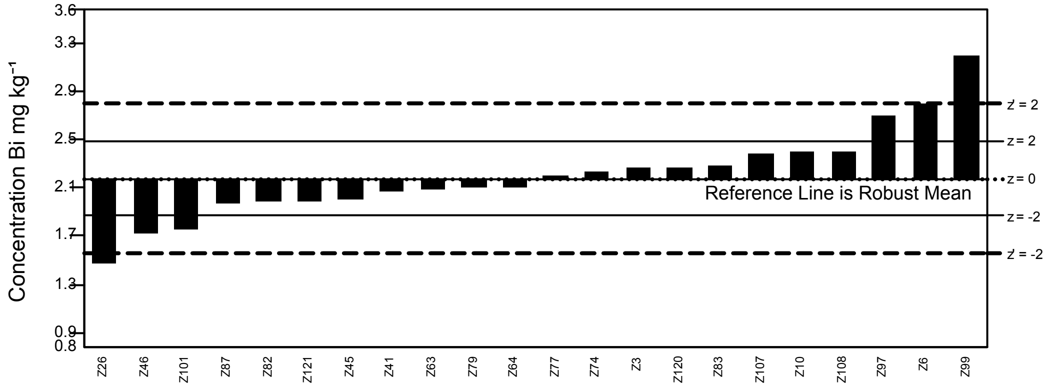
GeoPT41A - Barchart for Ba



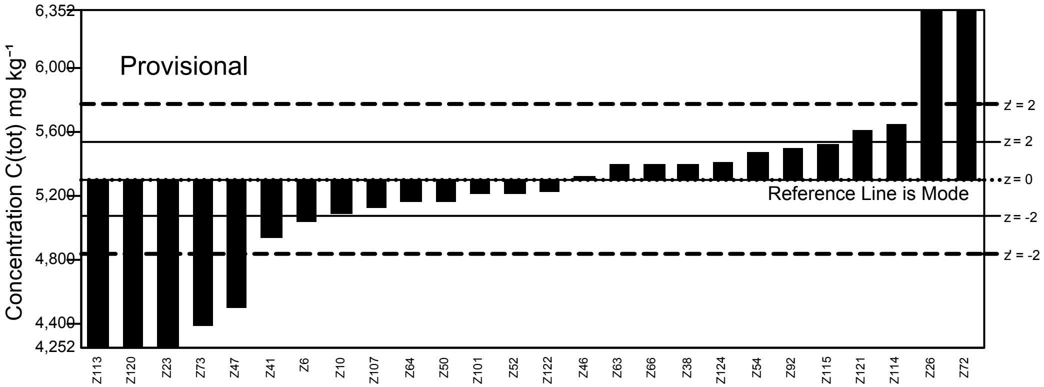
GeoPT41A - Barchart for Be



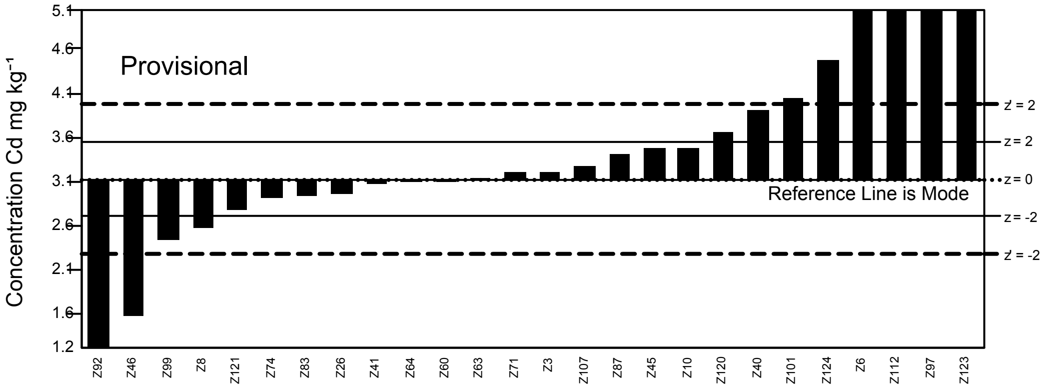
GeoPT41A - Barchart for Bi



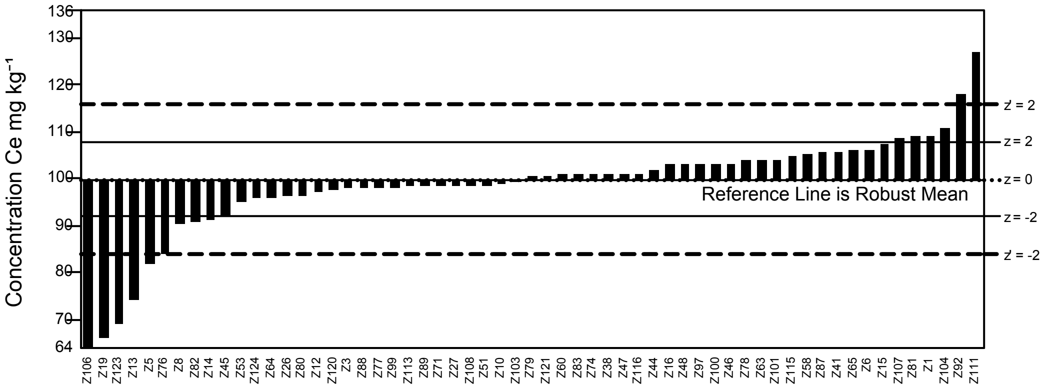
GeoPT41A - Barchart for C(tot)



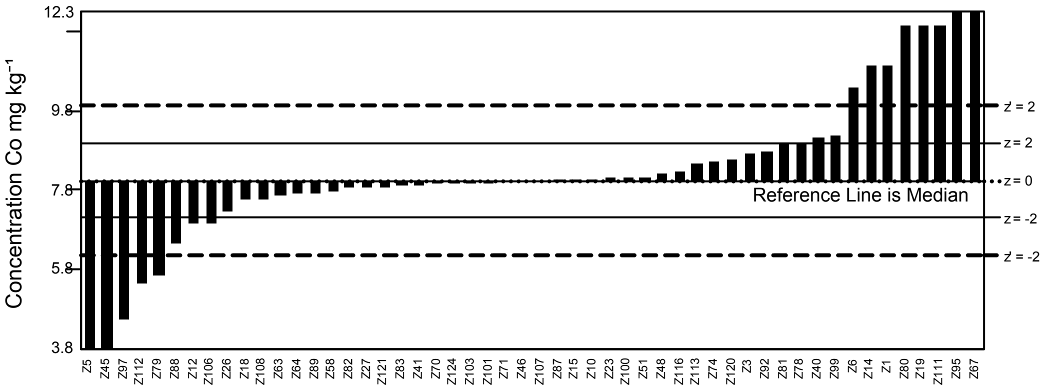
GeoPT41A - Barchart for Cd



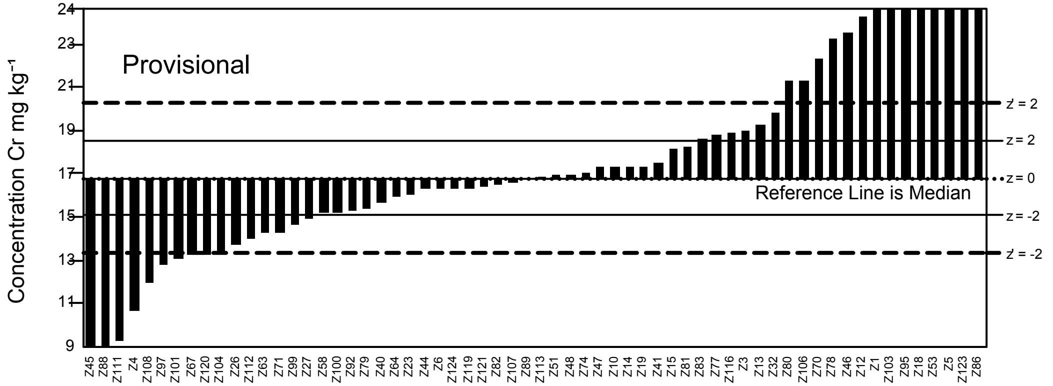
GeoPT41A - Barchart for Ce



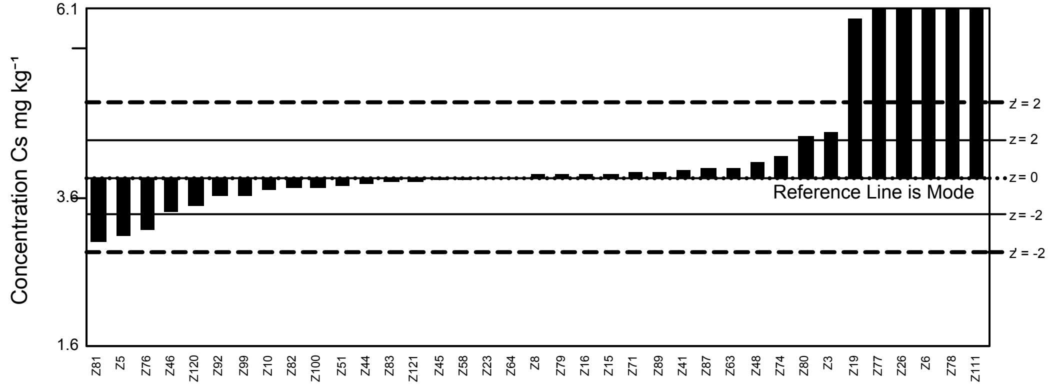
GeoPT41A - Barchart for Co



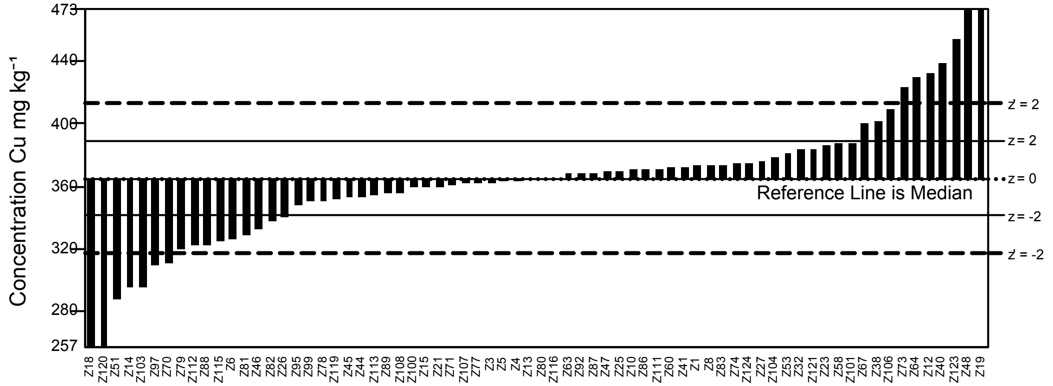
GeoPT41A - Barchart for Cr



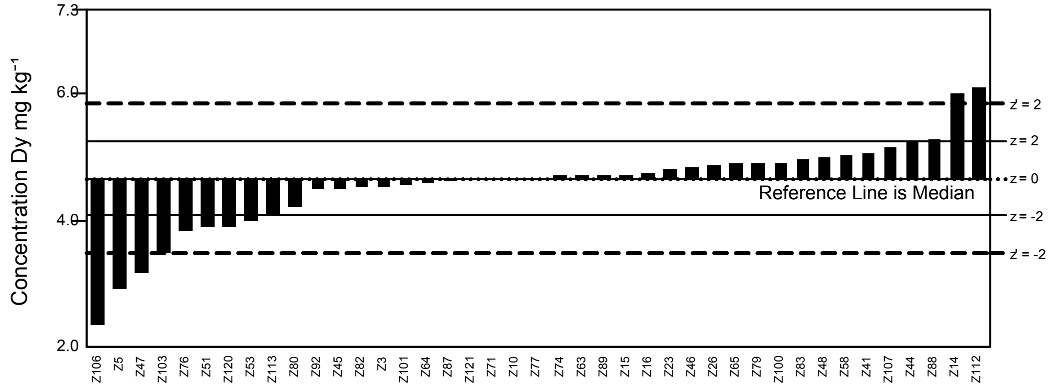
GeoPT41A - Barchart for Cs



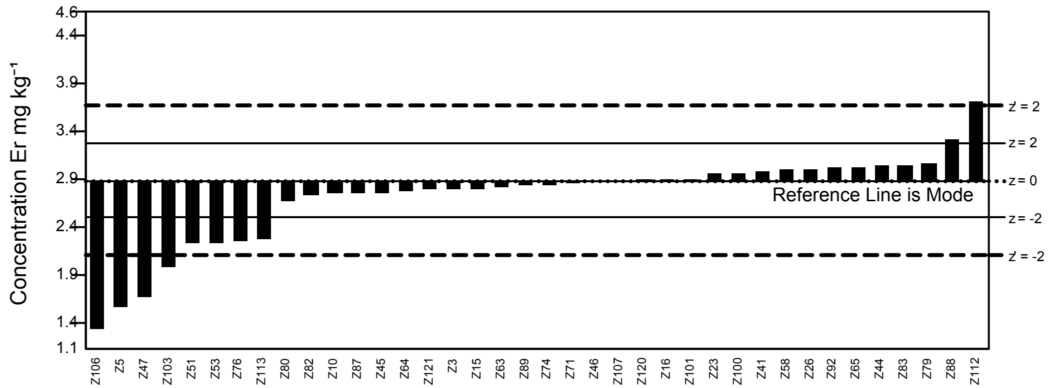
GeoPT41A - Barchart for Cu



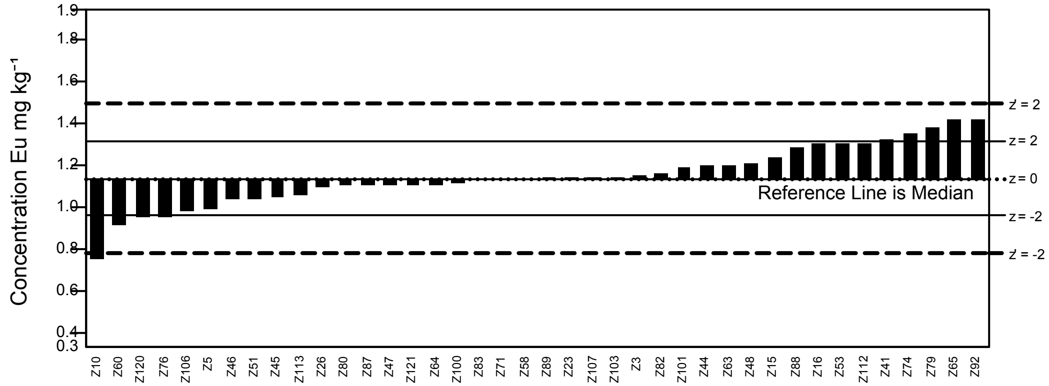
GeoPT41A - Barchart for Dy



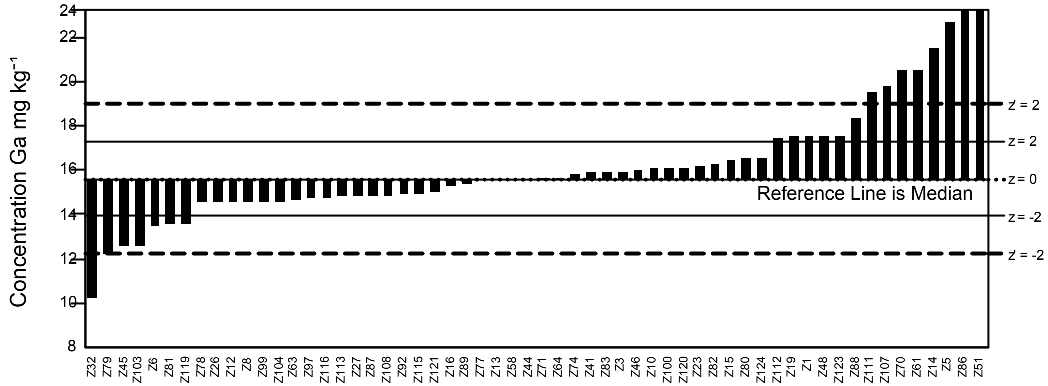
GeoPT41A - Barchart for Er



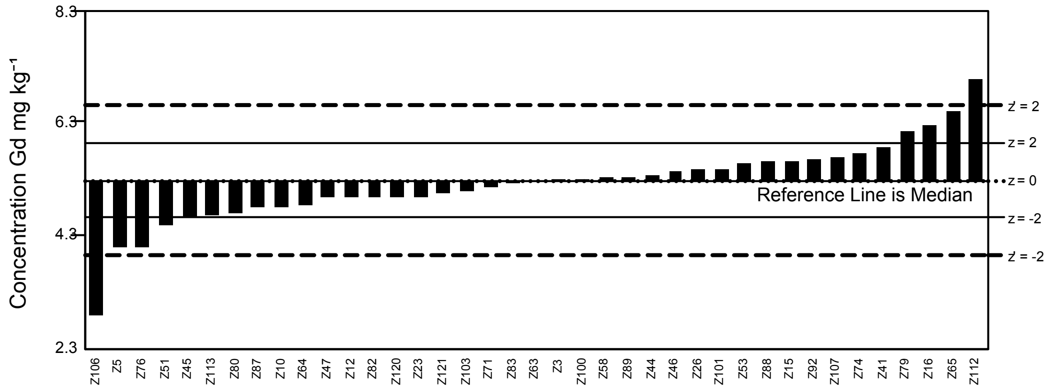
GeoPT41A - Barchart for Eu



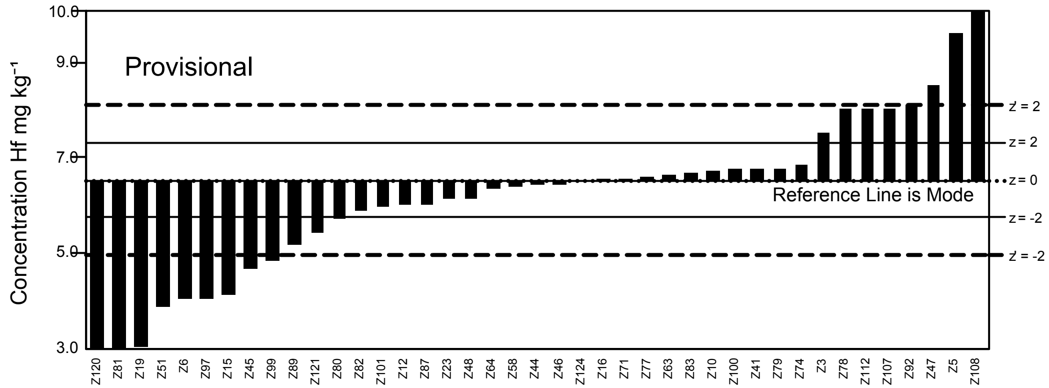
GeoPT41A - Barchart for Ga



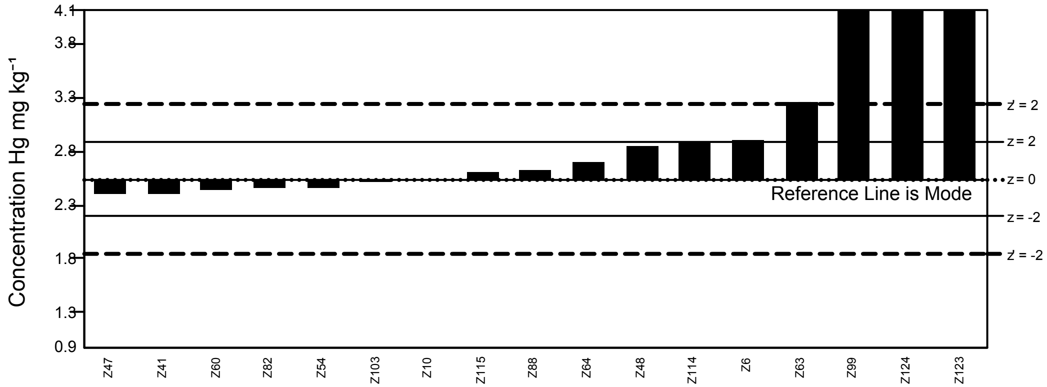
GeoPT41A - Barchart for Gd



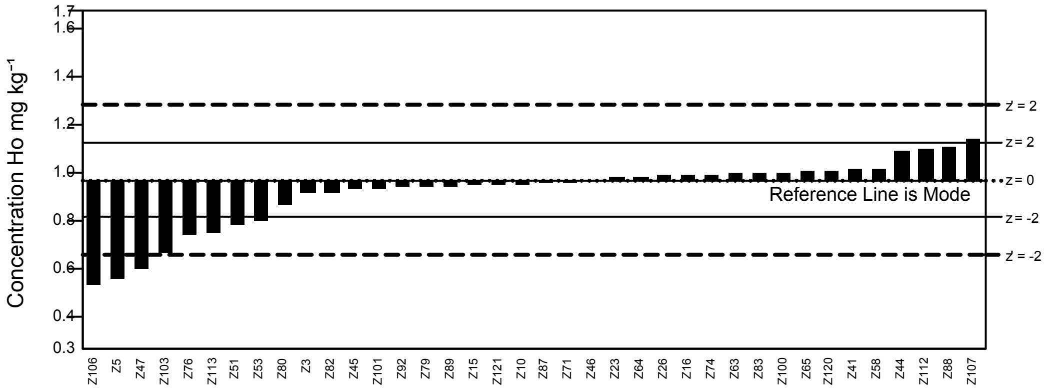
GeoPT41A - Barchart for Hf



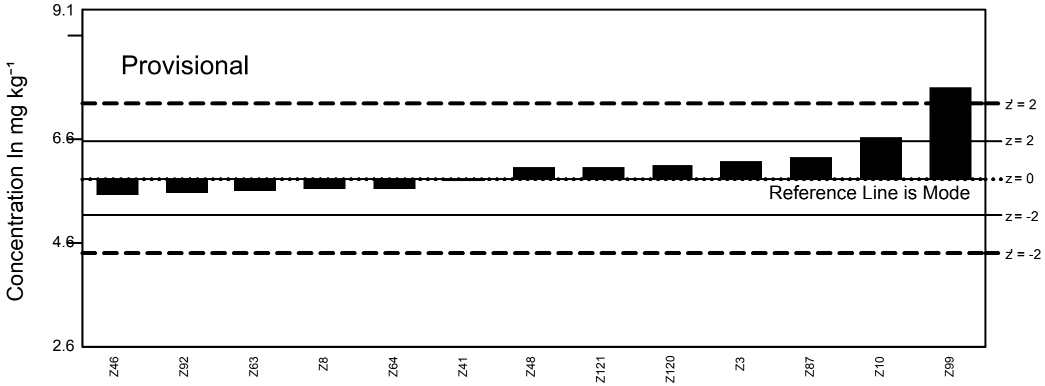
GeoPT41A - Barchart for Hg



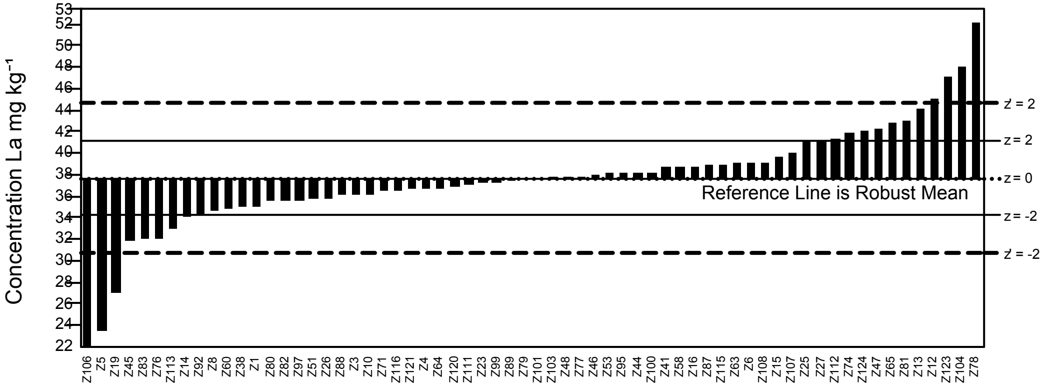
GeoPT41A - Barchart for Ho



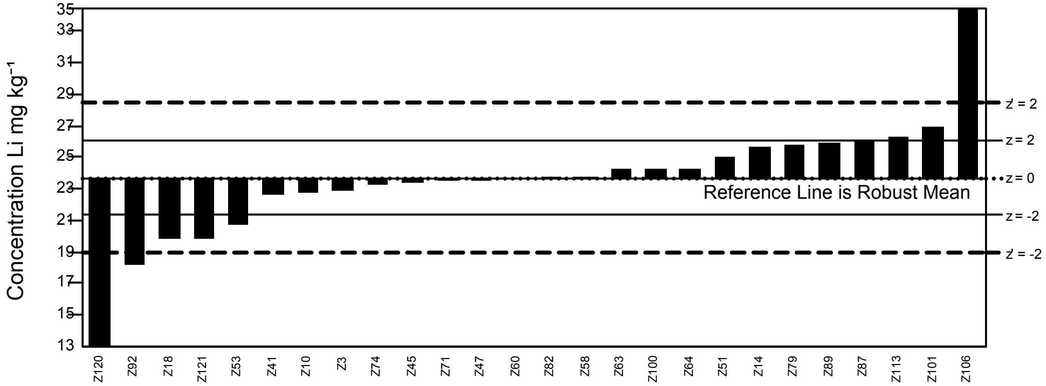
GeoPT41A - Barchart for In



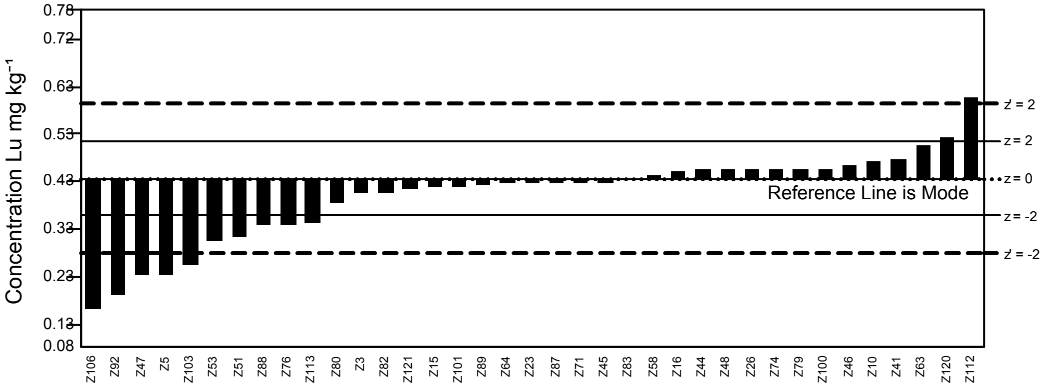
GeoPT41A - Barchart for La



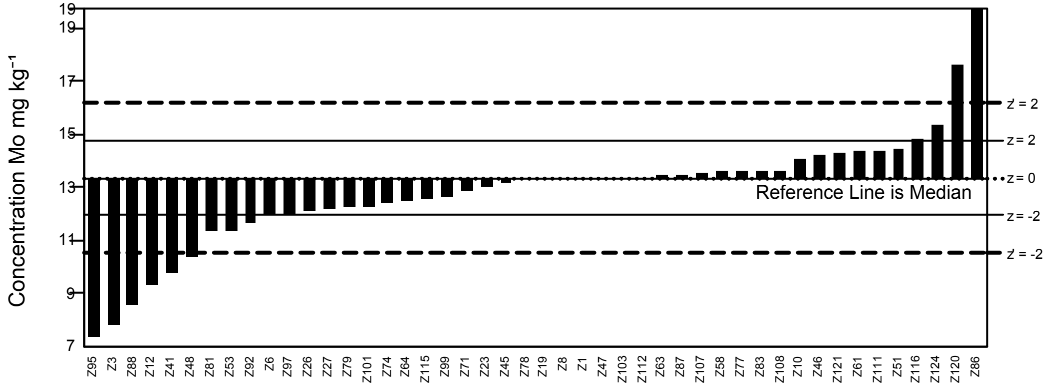
GeoPT41A - Barchart for Li



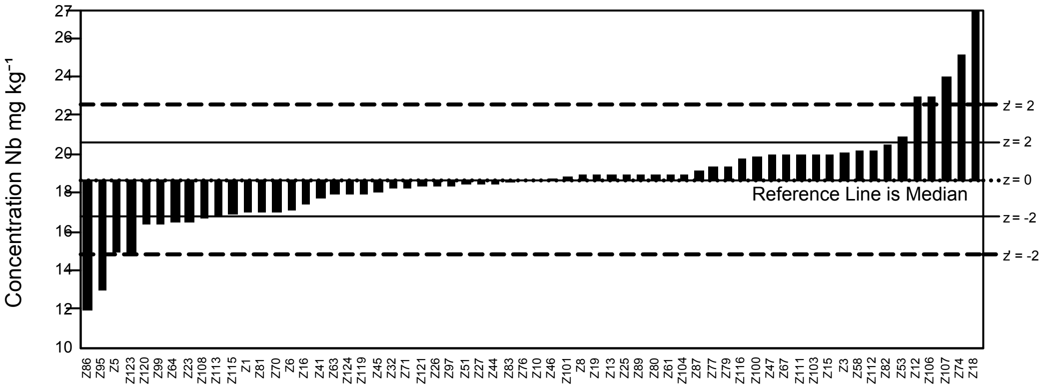
GeoPT41A - Barchart for Lu



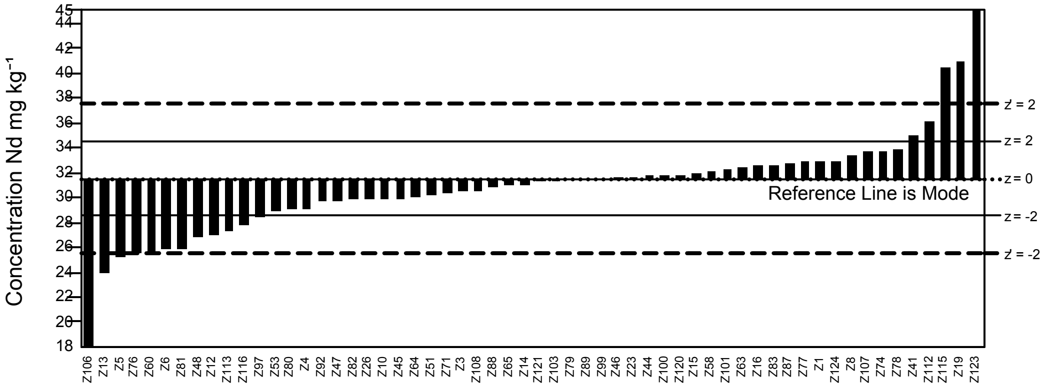
GeoPT41A - Barchart for Mo



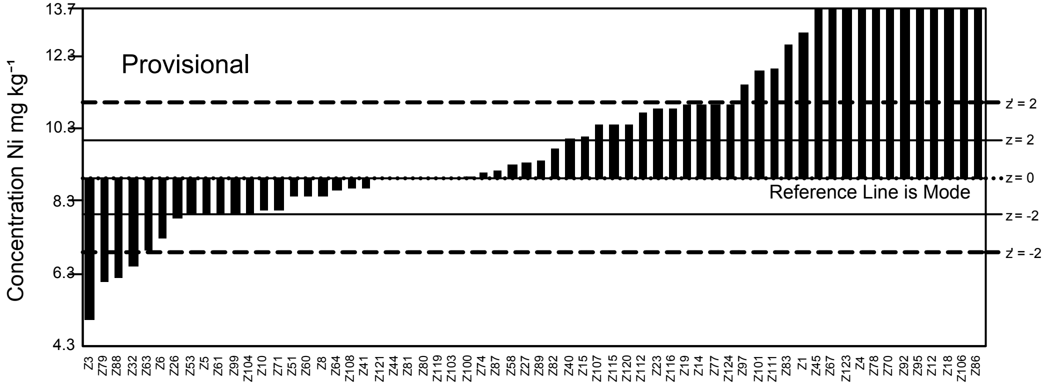
GeoPT41A - Barchart for Nb



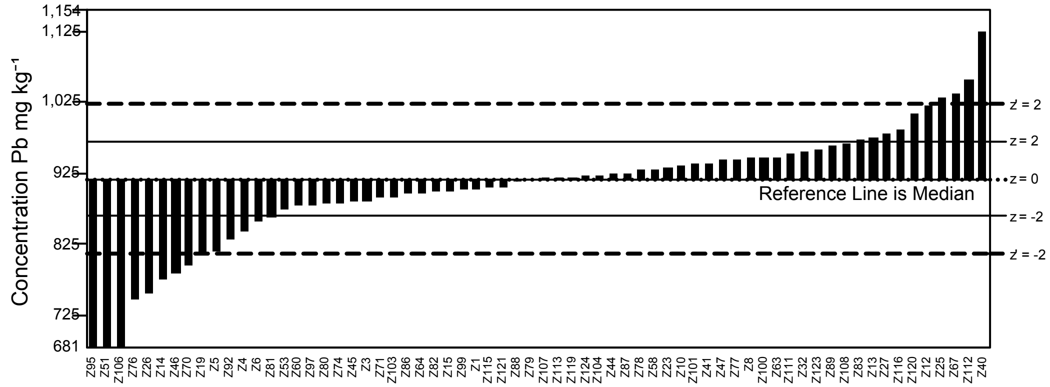
GeoPT41A - Barchart for Nd



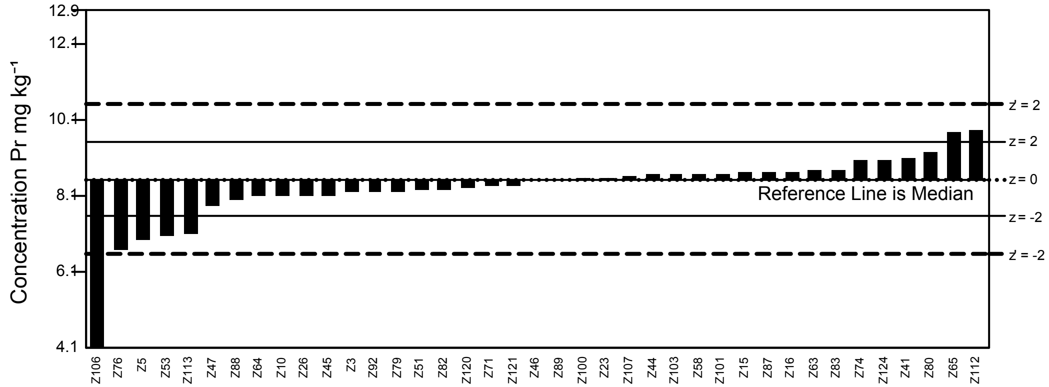
GeoPT41A - Barchart for Ni



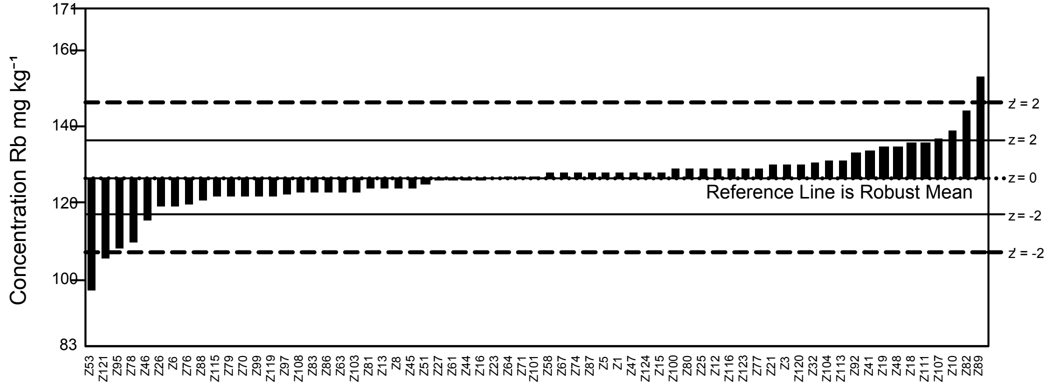
GeoPT41A - Barchart for Pb



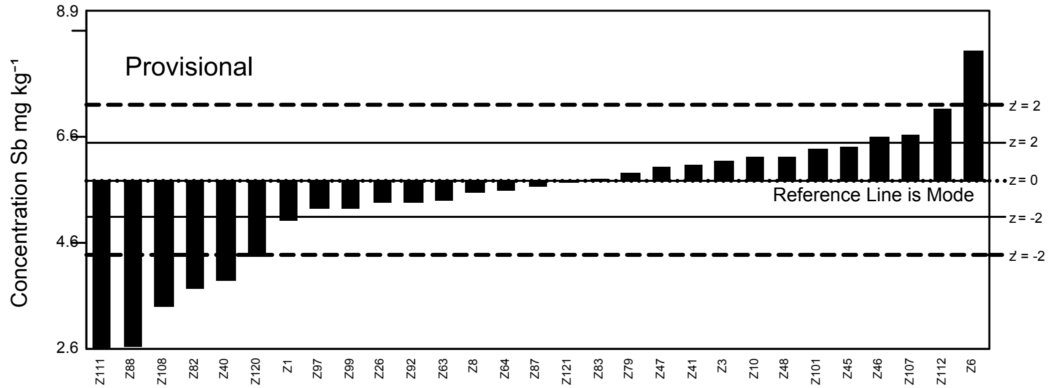
GeoPT41A - Barchart for Pr



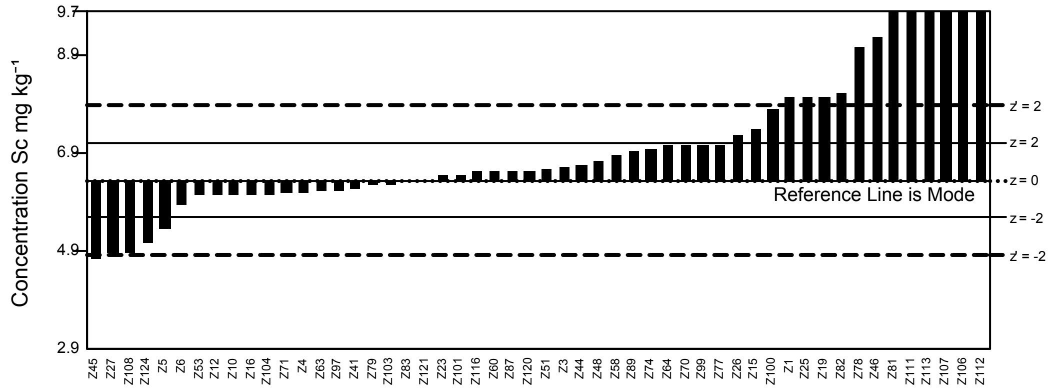
GeoPT41A - Barchart for Rb



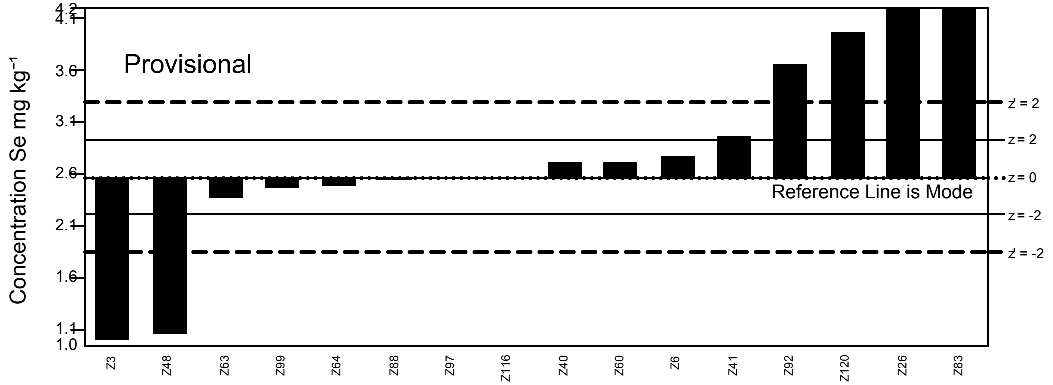
GeoPT41A - Barchart for Sb



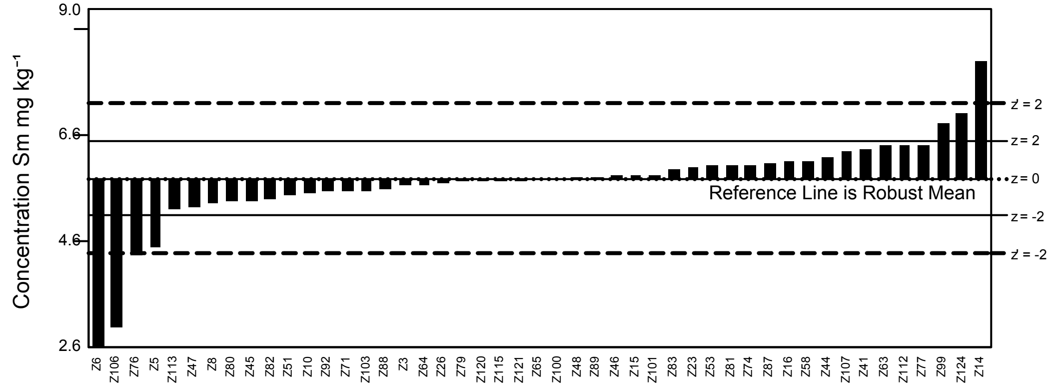
GeoPT41A - Barchart for Sc



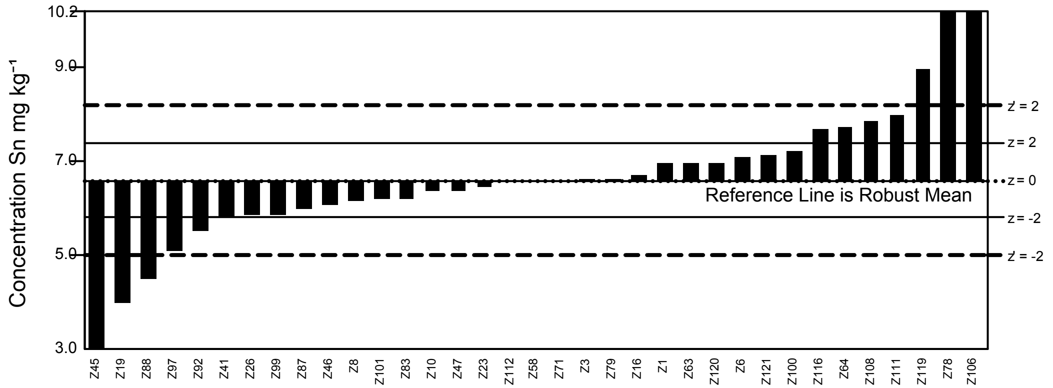
GeoPT41A - Barchart for Se



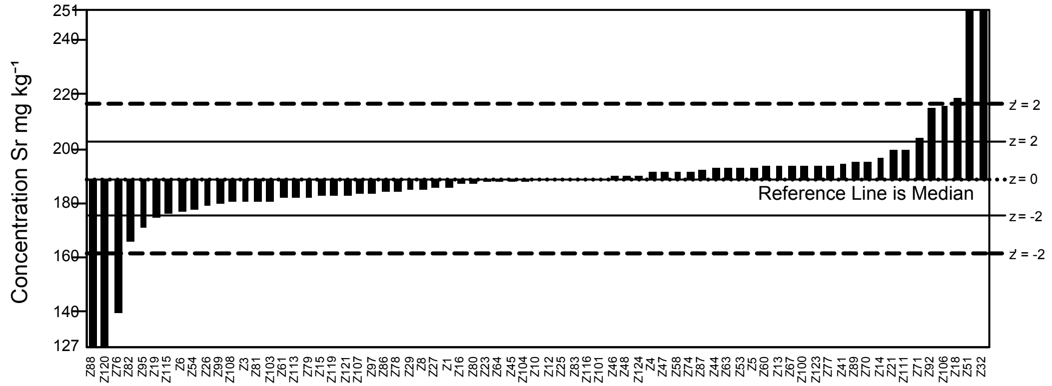
GeoPT41A - Barchart for Sm



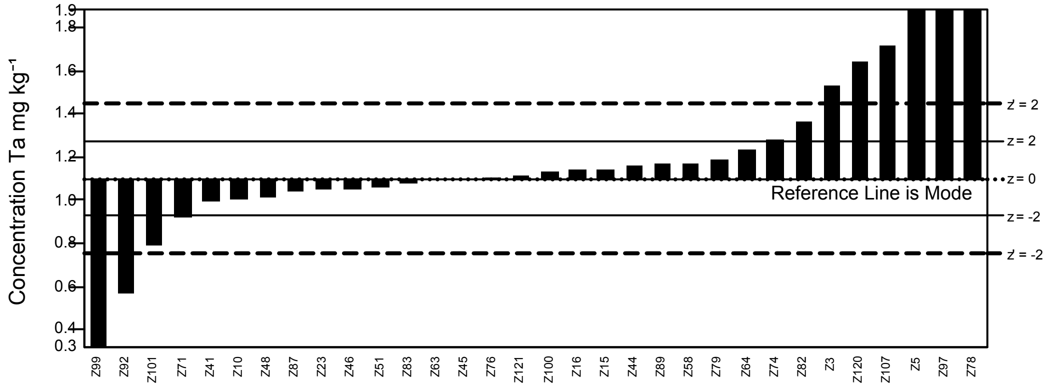
GeoPT41A - Barchart for Sn



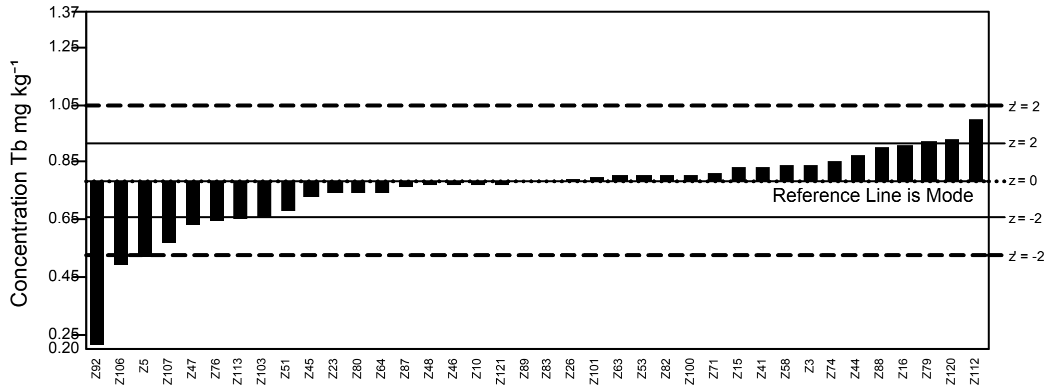
GeoPT41A - Barchart for Sr

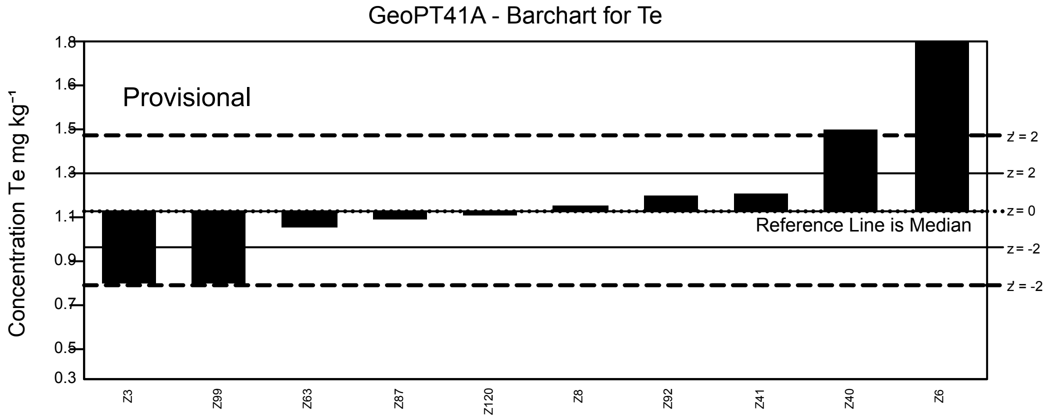


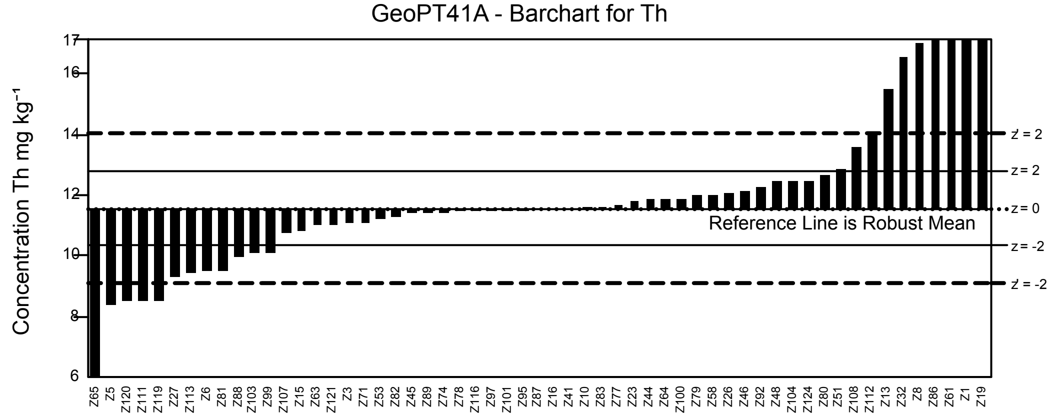
GeoPT41A - Barchart for Ta

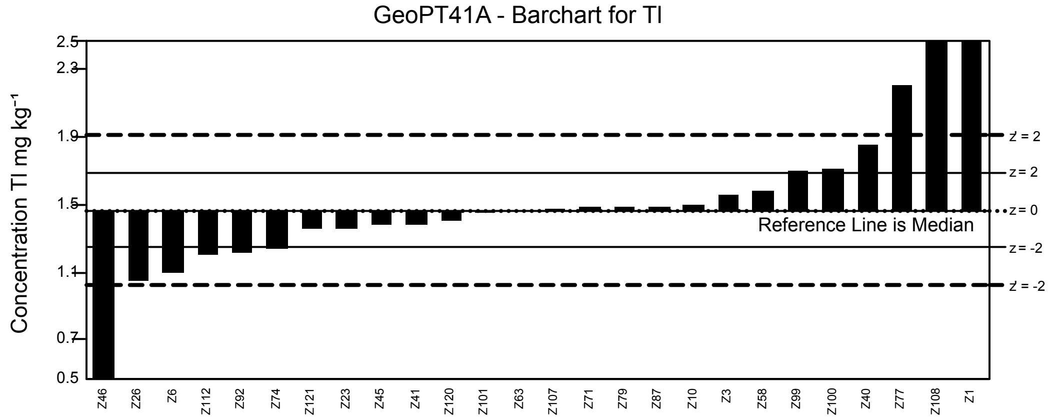


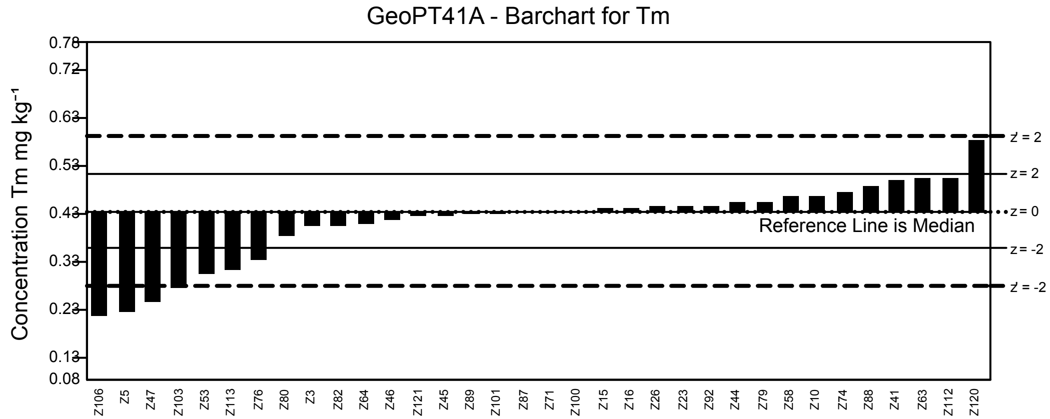
GeoPT41A - Barchart for Tb

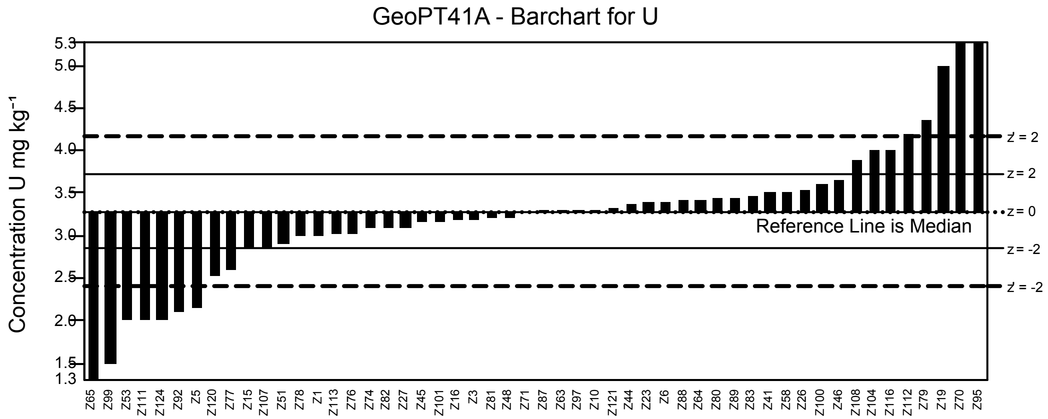


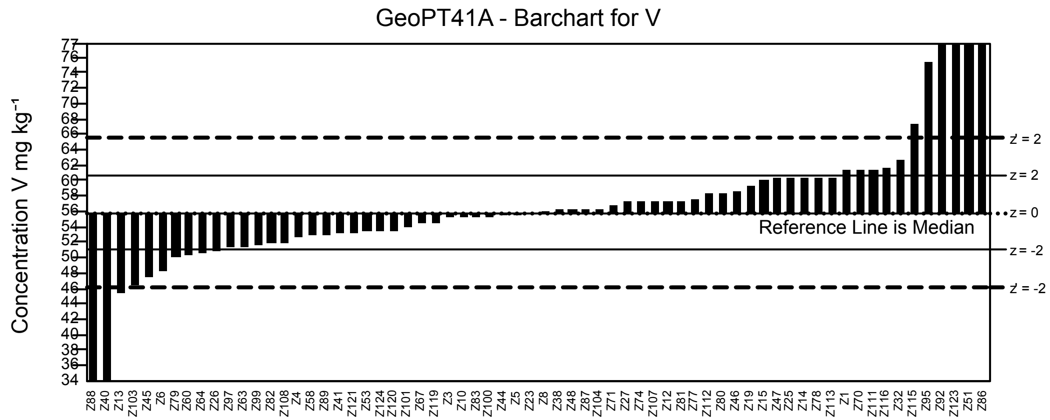

GeoPT41A - Barchart for Te
Provisional
Concentration Te mg kg⁻¹
z' = 2
z = 2
z = 0
z = -2
z' = -2
Reference Line is Median
Z3 Z99 Z63 Z87 Z120 Z8 Z92 Z41 Z40 Z6


GeoPT41A - Barchart for Th
Concentration Th mg kg⁻¹
z' = 2
z = 2
z = 0
z = -2
z' = -2
Reference Line is Robust Mean


GeoPT41A - Barchart for Tl
Concentration Tl mg kg⁻¹
z' = 2
z = 2
z = 0
z = -2
z' = -2
Reference Line is Median
Z46 Z26 Z6 Z112 Z92 Z74 Z121 Z23 Z45 Z41 Z120 Z101 Z63 Z107 Z71 Z79 Z87 Z10 Z3 Z58 Z99 Z100 Z40 Z77 Z108 Z1


GeoPT41A - Barchart for Tm
Concentration Tm mg kg⁻¹
z' = 2
z = 2
z = 0
z = -2
z' = -2
Reference Line is Median


GeoPT41A - Barchart for U
Concentration U mg kg⁻¹
z' = 2
z = 2
z = 0
z = -2
z' = -2
Reference Line is Median


GeoPT41A - Barchart for V
Concentration V mg kg⁻¹
z' = 2
z = 2
z = 0
z = -2
z' = -2
Reference Line is Median

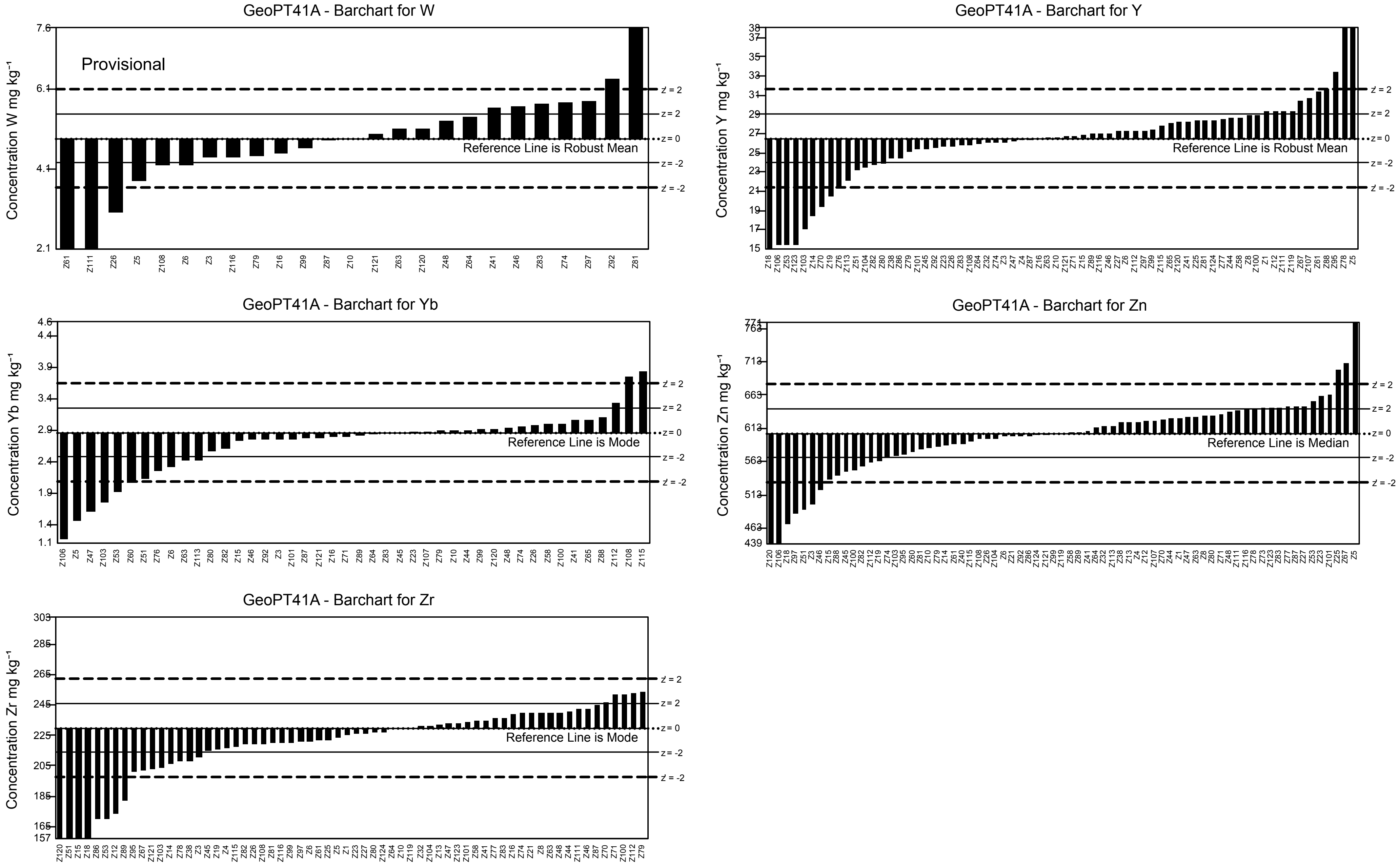
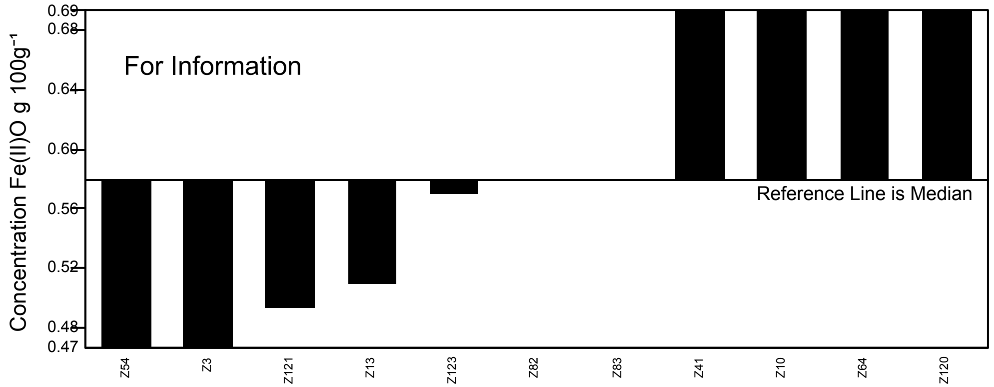
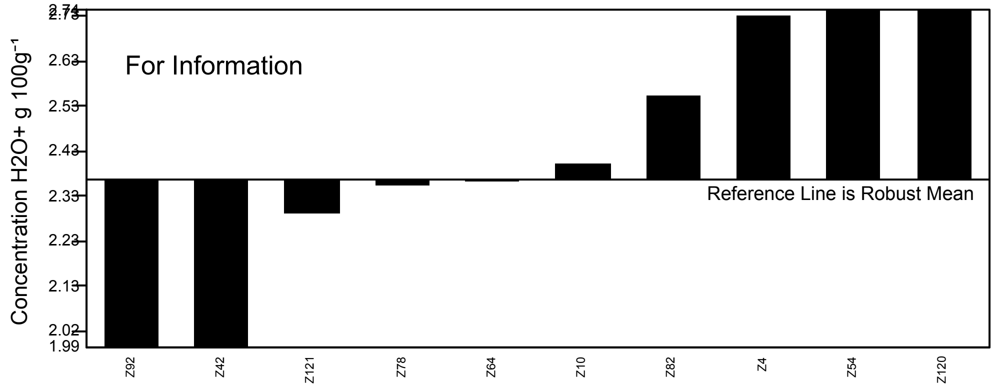


Figure 1: GeoPT41A - Mineralised stream sediment, SSCO-1. Data distribution charts for elements for which values were assigned or provisional values given for guidance. Horizontal lines show the limits for -2<z<2 for pure geochemistry labs (solid lines) and -2<z'<2 for applied geochemistry labs (pecked lines).

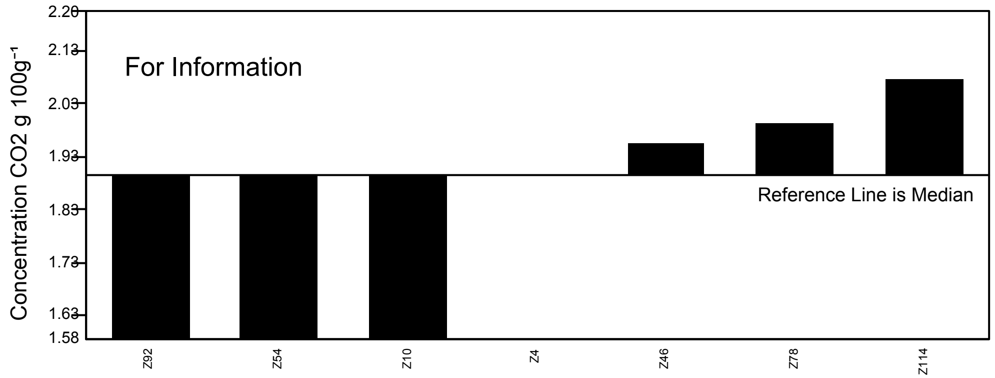
GeoPT41A - Barchart for Fe(II)O



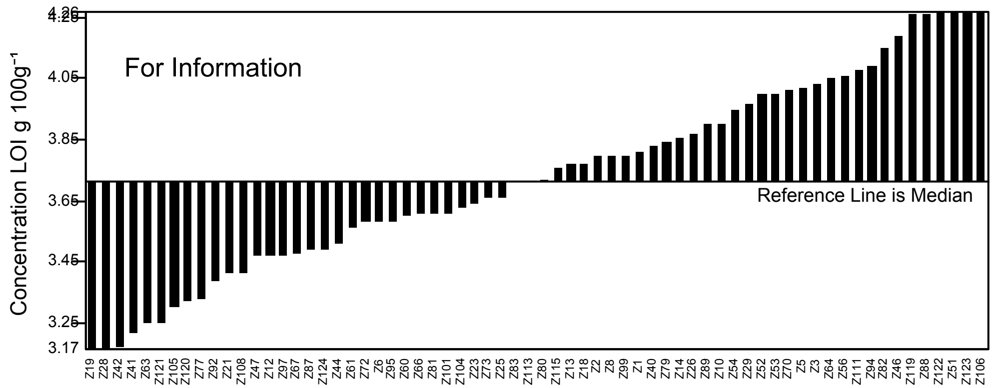
GeoPT41A - Barchart for H2O+



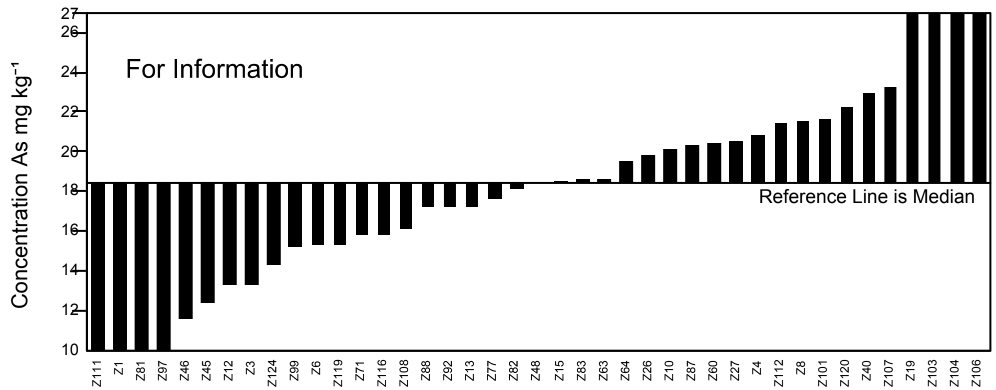
GeoPT41A - Barchart for CO2



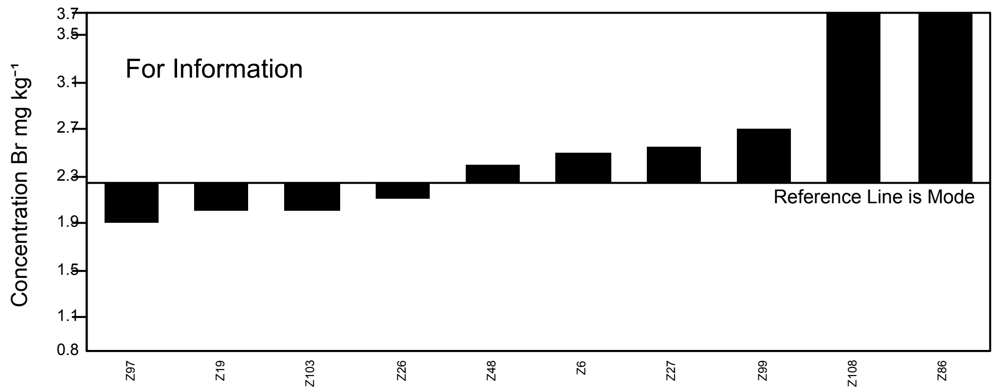
GeoPT41A - Barchart for LOI

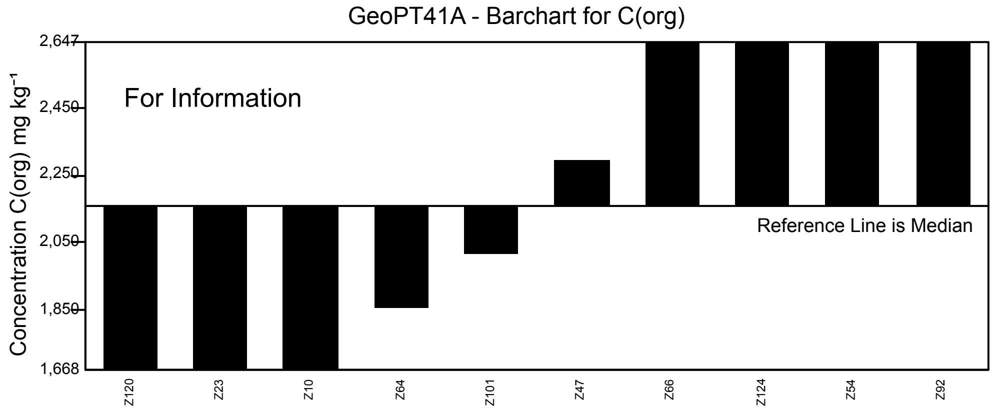


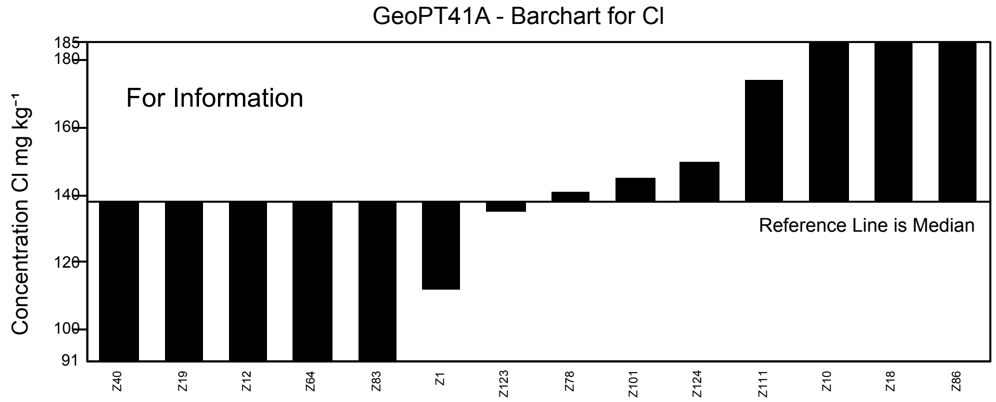
GeoPT41A - Barchart for As

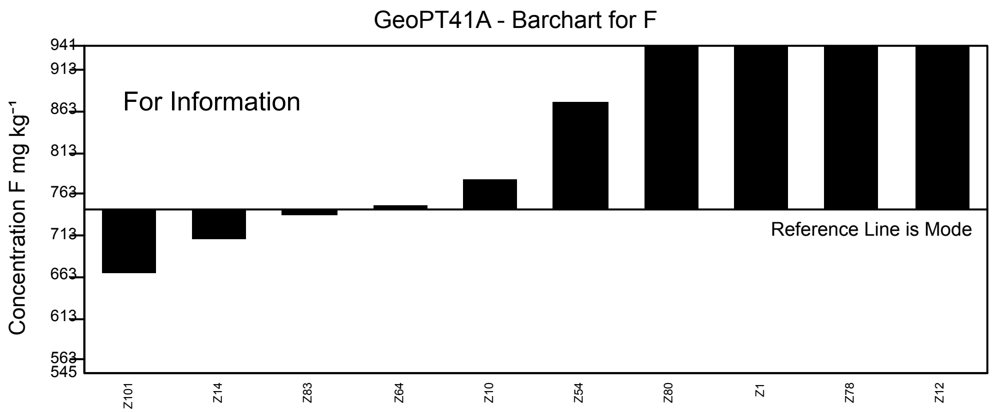


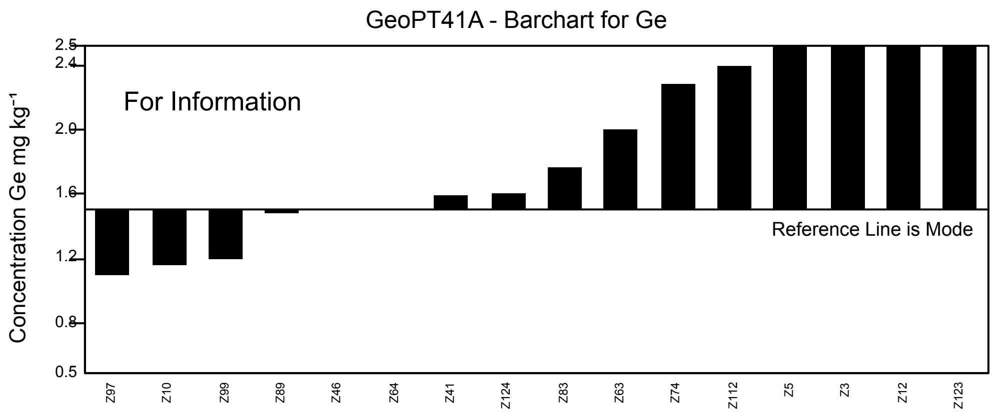
GeoPT41A - Barchart for Br











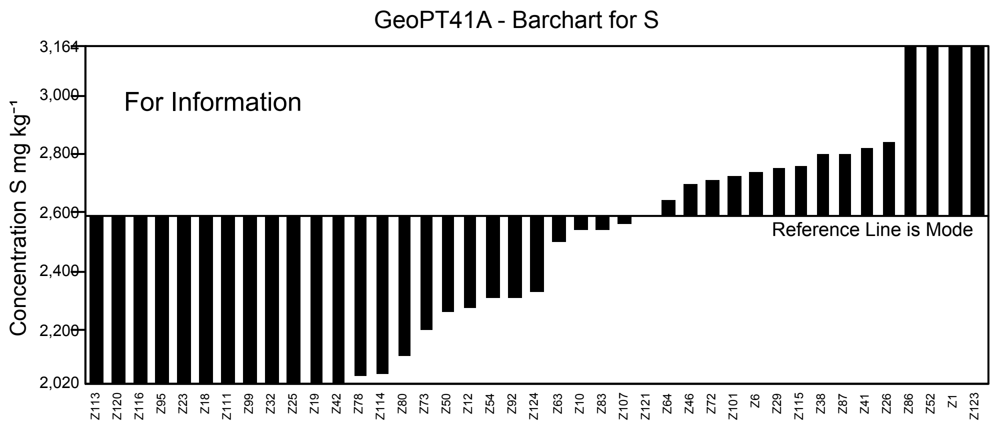


Figure 2: GeoPT41A - Mineralised stream sediment, SSCO-1. Data distribution charts provided for information only for elements for which values could not be assigned.

Multiple Z-Score Chart for GeoPT41A

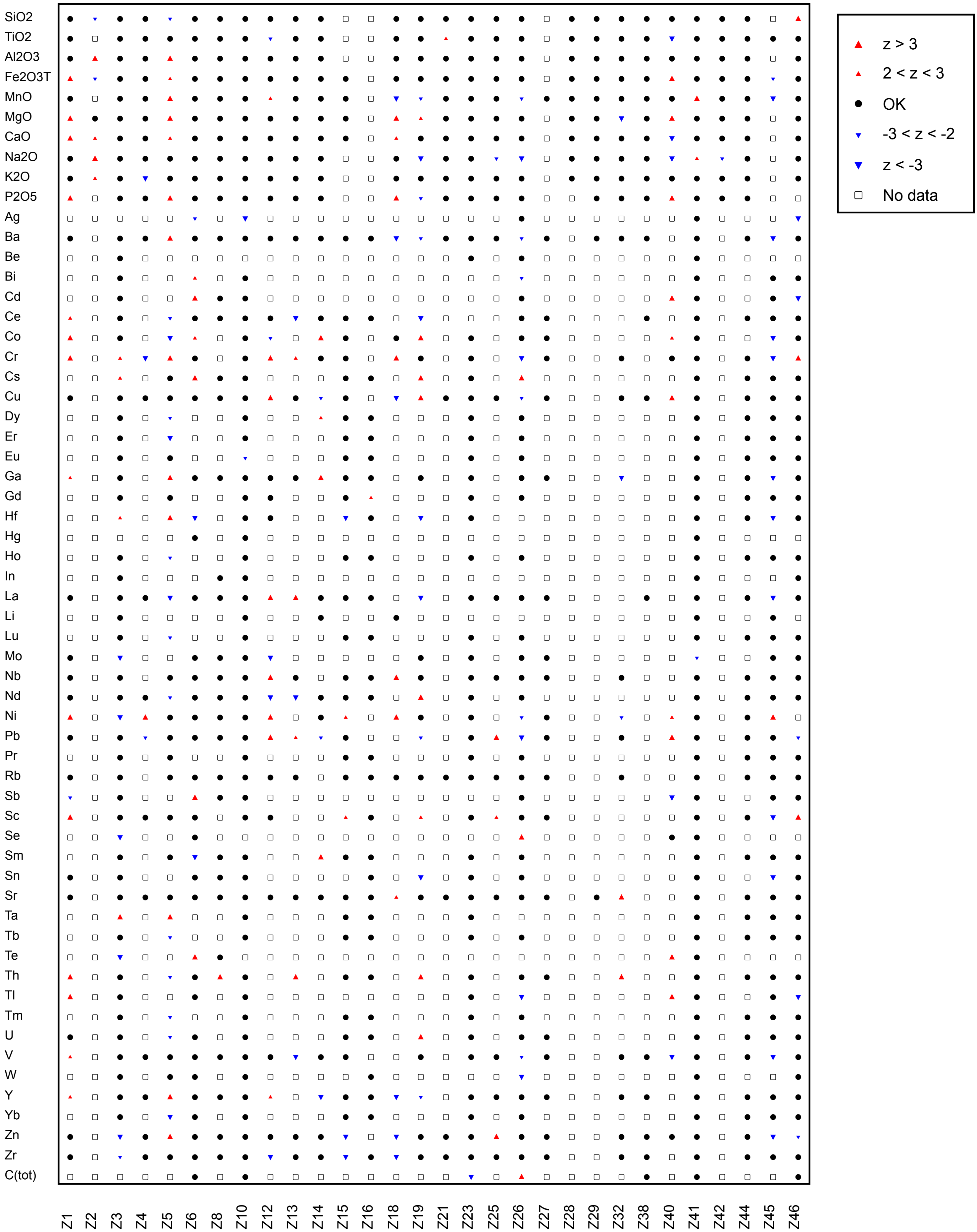


Figure 3: GeoPT41A - Mineralised stream sediment, SSCO-1. Multiple z-score charts for laboratories participating in the GeoPT41A round. Symbols indicate whether or not an elemental result complies with the -2<z<+2 criteria (see key).

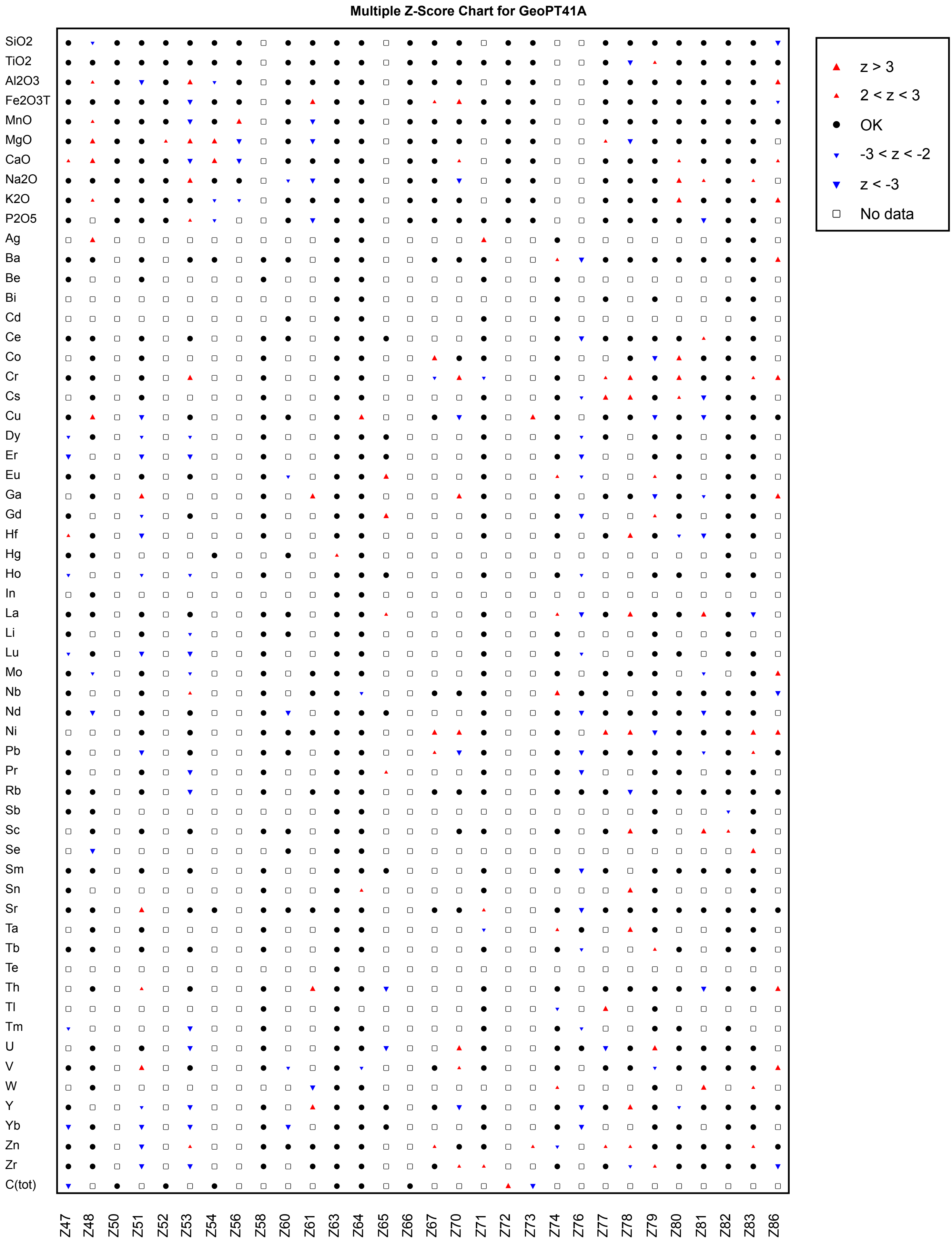


Figure 3: GeoPT41A - Mineralised stream sediment, SSCO-1. Multiple z-score charts for laboratories participating in the GeoPT41A round. Symbols indicate whether or not an elemental result complies with the -2<z<+2 criteria (see key).

Multiple Z-Score Chart for GeoPT41A

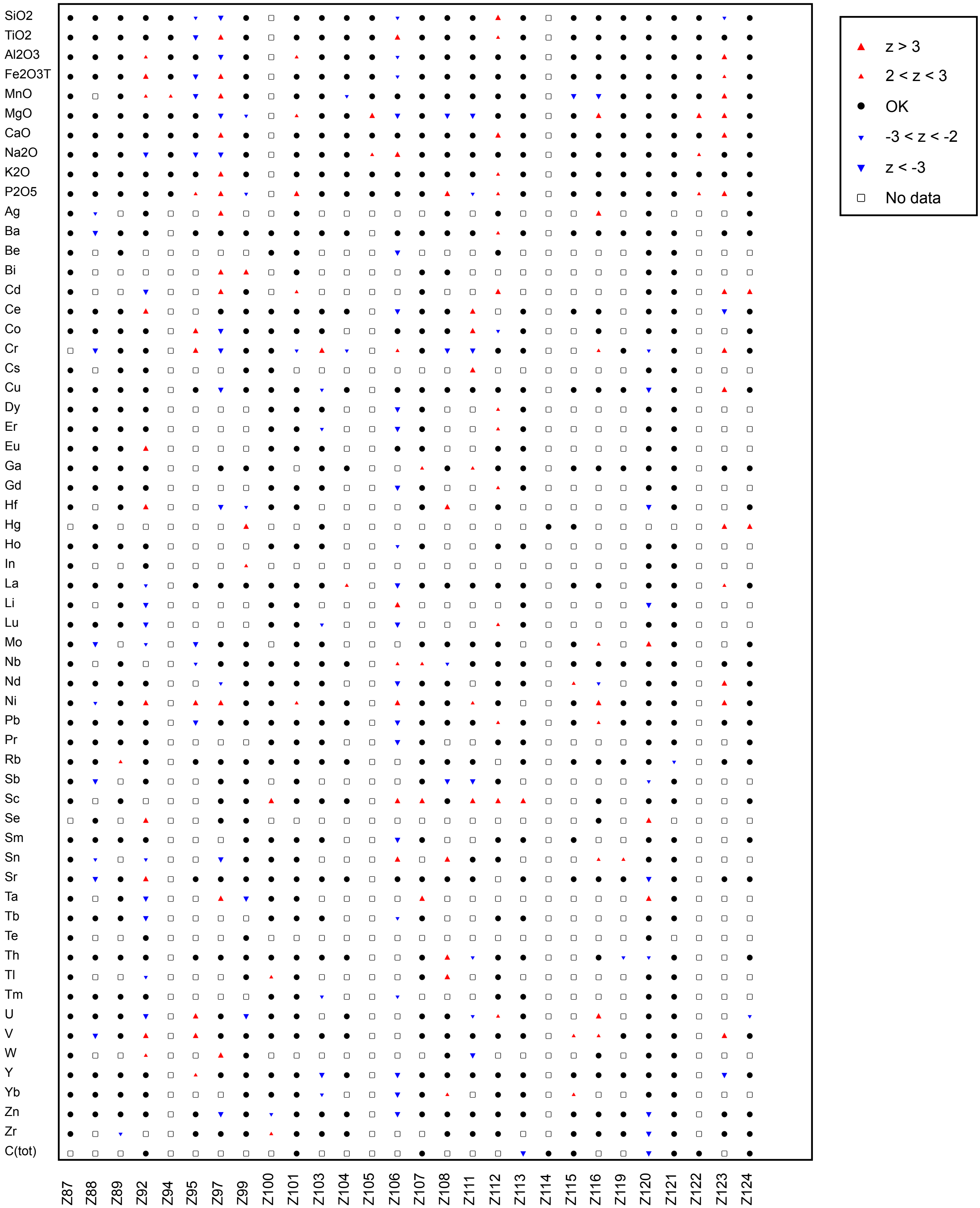


Figure 3: GeoPT41A - Mineralised stream sediment, SSCO-1. Multiple z-score charts for laboratories participating in the GeoPT41A round. Symbols indicate whether or not an elemental result complies with the -2<z<+2 criteria (see key).