

GeoPT41A — AN INTERNATIONAL PROFICIENCY TEST FOR ANALYTICAL GEOCHEMISTRY LABORATORIES — REPORT ON ROUND 41A (Mineralised stream sediment, SSCO-1) / July 2017

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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 GeoPT 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, GeoPT, 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

GeoPT41A: 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 GeoPT41A (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 GeoPT41A (SSCO-1). Bar charts for the 59 measurands of GeoPT41A 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: SiO₂, TiO₂, Al₂O₃, Fe₂O₃T, MnO, MgO, CaO, Na₂O, K₂O, P₂O₅, 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, H₂O⁺, CO₂, 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 GeoPT41A, 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 GeoPT41A, 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:

$$H_a = k \cdot X_a^{0.8495}$$

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 GeoPT41A 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.

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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/>).

GeoPT1

Thompson M., Potts P.J., Kane J.S. and Webb P.C. (1996) GeoPT1. International proficiency test for analytical geochemistry laboratories - Report on round 1. *Geostandards Newsletter: The Journal of Geostandards and Geoanalysis*, 20, 295-325.

GeoPT2

Thompson M., Potts P.J., Kane J.S., Webb P.C. and Watson, J.S. (1998) GeoPT2. International proficiency test for analytical geochemistry laboratories - Report on round 2. *Geostandards Newsletter: The Journal of Geostandards and Geoanalysis*, 22 127-156.

GeoPT3

Thompson M., Potts P.J., Kane J.S. and Chappell B.W. (1999a) GeoPT3. International proficiency test for analytical geochemistry laboratories - Report on round 3. *Geostandards Newsletter: The Journal of Geostandards and Geoanalysis*, 23, 87-121.

GeoPT4

Thompson M., Potts P.J., Kane J.S., Webb P.C. and Watson J.S. (1999b) GeoPT4. 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).

GeoPT5

Thompson M., Potts P.J., Kane J.S., and Wilson S. (1999c) GeoPT5. 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).

GeoPT6

Potts P.J., Thompson M., Kane J.S., Webb P.C. and Carignan J. (2000) GeoPT6 - an international proficiency test for analytical geochemistry laboratories - report on round 6 (OU-3: Nanharon microgranite) and 6A (CAL-S: CRPG limestone). International Association of Geoanalysts: Unpublished report.

GeoPT7

Potts P.J., Thompson M., Kane J.S., and Petrov L.L. (2000) GeoPT7 - an international proficiency test for analytical geochemistry laboratories - report on round 7 (GBPG-1 Garnet-biotite plagiogneiss). International Association of Geoanalysts: Unpublished report.

GeoPT8

Potts P.J., Thompson M., Kane J.S., Webb, P.C. and Watson J.S. (2000) GeoPT8 - an international proficiency test for analytical geochemistry laboratories - report on round 8 / February 2001 (OU-4 Penmaenmawr microdiorite). International Association of Geoanalysts: Unpublished report.

GeoPT9

Potts P.J., Thompson M., Webb, P.C. and Watson J.S. (2001) GeoPT9 - an international proficiency test for analytical geochemistry laboratories - report on round 9 / July 2001 (OU-6 Penrhyn slate). International Association of Geoanalysts: Unpublished report.

GeoPT10

Potts P.J., Thompson M., Webb, P.C., Watson J.S. and Wang Yimin (2001) GeoPT10 - an international proficiency test for analytical geochemistry laboratories - report on round 10 / December 2001 (CH-1 Marine sediment). International Association of Geoanalysts: Unpublished report.

GeoPT11

Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Watson J.S. (2002) GeoPT11 - an international proficiency test for analytical geochemistry laboratories - report on round 11 / July 2002 (OU-5 Leaton dolerite). International Association of Geoanalysts: Unpublished report.

GeoPT12

Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Batjargal B. (2003) GeoPT12 - an international proficiency test for analytical geochemistry laboratories - report on round 12 / January 2003 (GAS Serpentine). International Association of Geoanalysts: Unpublished report.

GeoPT13

Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Kaspar H.U. (2003) GeoPT13 - an international proficiency test for analytical geochemistry laboratories - report on round 13 / July 2003 (Köln Loess). International Association of Geoanalysts: Unpublished report.

GeoPT14

Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and B. Batjargal (2004) GeoPT14 - an international proficiency test for analytical geochemistry laboratories - report on round 14 / January 2004 (ÖShBO - alkaline granite). International Association of Geoanalysts: Unpublished report.

GeoPT15

Potts P.J., Thompson M., Chenery S.R., Webb, P.C. and Wang Yimin (2004) GeoPT15 - an international proficiency test for analytical geochemistry laboratories - report on round 15 / June 2004 (Ocean floor sediment MSAN). International Association of Geoanalysts: Unpublished report.

GeoPT16

Potts P.J., Thompson M., Webb, P.C. and S.Wilson (2005)
GeoPT16 - an international proficiency test for analytical geochemistry laboratories - report on round 16 / February 2005 (Nevada basalt, BNV-1). International Association of Geoanalysts: Unpublished report.

GeoPT17

Potts P.J., Thompson M., Webb, P.C. and J. Nicholas Walsh (2005)
GeoPT17 - an international proficiency test for analytical geochemistry laboratories - report on round 17 / July 2005 (Calcareous sandstone, OU-8). International Association of Geoanalysts: Unpublished report.

GeoPT18

Webb, P.C., Thompson M., Potts P.J. and L. Paul Bedard (2006)
GeoPT18 - an international proficiency test for analytical geochemistry laboratories - report on round 18 / Jan 2006 (Quartz Diorite, KPT-1). International Association of Geoanalysts: Unpublished report.

GeoPT19

Webb, P.C., Thompson M., Potts P.J. and B. Batjargal (2006)
GeoPT19 - an international proficiency test for analytical geochemistry laboratories - report on round 19 / July 2006 (Gabbro, MGR-N). International Association of Geoanalysts: Unpublished report.

GeoPT20

Webb, P.C., Thompson M., Potts P.J. and M. Burnham (2007)
GeoPT20 - an international proficiency test for analytical geochemistry laboratories - report on round 20 / Jan 2007 (Ultramafic rock, OPY-1). International Association of Geoanalysts: Unpublished report.

GeoPT21

Webb, P.C., Thompson M., Potts P.J. and B. Batjargal (2007)
GeoPT21 - an international proficiency test for analytical geochemistry laboratories - report on round 21 / July 2007 (Granite, MGT-1). International Association of Geoanalysts: Unpublished report.

GeoPT22

Webb, P.C., Thompson, M., Potts, P.J. and Batjargal, B. (2008)
GeoPT22 - an international proficiency test for analytical geochemistry laboratories - report on round 22 / January 2008 (Basalt, MBL-1). International Association of Geoanalysts: Unpublished report.

GeoPT23

Webb, P.C., Thompson, M., Potts, P.J., Watson, J.S. and Kriete, C. (2008)
GeoPT23 - 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.

GeoPT24

Webb, P.C., Thompson, M., Potts, P.J. and Watson, J.S. (2009)
GeoPT24 - an international proficiency test for analytical geochemistry laboratories - report on round 24 / January 2009 (Longmyndian greywacke, OU-10). International Association of Geoanalysts: Unpublished report.

GeoPT25

Webb, P.C., Thompson, M., Potts, P.J. and Enzweiler, J. (2009)
GeoPT25 - an international proficiency test for analytical geochemistry laboratories - report on round 25 / July 2009 (Basalt, HTP-1). International Association of Geoanalysts: Unpublished report.

GeoPT26

Webb, P.C., Thompson, M., Potts, P.J. and Loubser, M. (2010)
GeoPT26 - 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.

GeoPT27

Webb, P.C., Thompson, M., Potts, P.J. and Batjargal, B. (2010)
GeoPT27 - an international proficiency test for analytical geochemistry laboratories - report on round 27 / July 2010 (Andesite, MGL-AND). International Association of Geoanalysts: Unpublished report.

GeoPT28

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2011)
GeoPT28 - an international proficiency test for analytical geochemistry laboratories - report on round 28 / January 2011 (Shale, SBC-1). International Association of Geoanalysts: Unpublished report.

GeoPT29

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2011)
GeoPT29 - an international proficiency test for analytical geochemistry laboratories - report on round 29 / July 2011 (Nephelinite, NKT-1). International Association of Geoanalysts: Unpublished report.

GeoPT30

Webb, P.C., Thompson, M., Potts, P.J., Long, D. and Batjargal, B. (2012)
GeoPT30 - 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.

GeoPT31

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2012)
GeoPT31 - 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.

GeoPT32

Webb, P.C., Thompson, M., Potts, P.J. and Webber, E. (2013)
GeoPT32 - an international proficiency test for analytical geochemistry laboratories - report on round 32 / January 2013 (Woodstock Basalt, WG-1). International Association of Geoanalysts: Unpublished report.

GeoPT33

Webb, P.C., Thompson, M., Potts, P.J., Prusisz, B., and Young, K. (2013)
GeoPT33 - 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.

GeoPT34

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2014)
GeoPT34 - an international proficiency test for analytical geochemistry laboratories - report on round 34 (Granite, GRI-1) / January 2014. International Association of Geoanalysts: Unpublished report.

GeoPT35

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2014)
GeoPT35 - an international proficiency test for analytical geochemistry laboratories - report on round 35 (Tonalite, TLM-1) / August 2014. International Association of Geoanalysts: Unpublished report.

GeoPT35A

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2014)
GeoPT35A - an international proficiency test for analytical geochemistry laboratories - report on round 35A (Metalliferous sediment, SdAR-H1) / August 2014. International Association of Geoanalysts: Unpublished report.

GeoPT36

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2015)
GeoPT36 - an international proficiency test for analytical geochemistry laboratories - report on round 36 (Gabbro, GSM-1) / January 2015. International Association of Geoanalysts: Unpublished report.

GeoPT36A

Webb, P.C., Thompson, M., Potts, P.J. and Wilson, S. (2015)
GeoPT36A - 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.

GeoPT37

Webb, P.C., Thompson, M., Potts, P.J., Gowing, C.J.B. and Burnham, M. (2015)
GeoPT37 - an international proficiency test for analytical geochemistry laboratories - report on round 37 (Rhyolite, ORPT-1) / July 2015. International Association of Geoanalysts: Unpublished report.

GeoPT37A

Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S. (2015)

GeoPT37A - an international proficiency test for analytical geochemistry laboratories - report on round 37A (Blended sediment, SdAR-L2) / July 2015. International Association of Geoanalysts: Unpublished report.

GeoPT38

Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2016)

GeoPT38 - an international proficiency test for analytical geochemistry laboratories - report on round 38 (Gabbro, OU-7) / January 2016. International Association of Geoanalysts: Unpublished report.

GeoPT38A

Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Meisel, T. (2016)

GeoPT38A - an international proficiency test for analytical geochemistry laboratories – special report on round 38A (Modified harzburgite, HARZ01) / June 2016. International Association of Geoanalysts: Unpublished report.

GeoPT39

Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2016)

GeoPT39 - an international proficiency test for analytical geochemistry laboratories - report on round 39 (Syenite, SyMP-1) / July 2016. International Association of Geoanalysts: Unpublished report.

GeoPT39A

Webb, P.C., Thompson, M., Potts, P.J, and Gowing, C.J.B. (2016)

GeoPT39A - an international proficiency test for analytical geochemistry laboratories - report on round 39A (Nepheline syenite, MNS-1) / July 2016. International Association of Geoanalysts: Unpublished report.

GeoPT40

Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2017)

GeoPT40 - 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.

GeoPT40A

Webb, P.C., Thompson, M., Potts, P.J, Gowing, C.J.B. and Wilson, S.A. (2017)

GeoPT40A - 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, SSC0-1. 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	<u>65.96</u>	<u>70.02</u>	<u>69.39</u>	<u>70.31</u>	69.64	69.47	<u>68.947</u>		
TiO2	g 100g ⁻¹	0.403		0.4	0.392	<u>0.37</u>	<u>0.42</u>	<u>0.399</u>	<u>0.4</u>	0.37	0.4	<u>0.383</u>		
Al2O3	g 100g ⁻¹	11.03	12	11.08	11.04	<u>12.25</u>	<u>10.8</u>	<u>11.11</u>	<u>10.96</u>	10.84	11.03	<u>10.916</u>		
Fe2O3T	g 100g ⁻¹	6.904	6.3	6.68	6.629	<u>7.1</u>	<u>6.69</u>	<u>6.56</u>	<u>6.47</u>	6.54	6.54	<u>6.631</u>	6.56	
Fe(II)O	g 100g ⁻¹			0.44					<u>0.9</u>		0.51			
MnO	g 100g ⁻¹	0.430		0.42	0.415	<u>0.49</u>	<u>0.45</u>	<u>0.437</u>	<u>0.42</u>	0.45	0.418	<u>0.401</u>	0.427	
MgO	g 100g ⁻¹	0.788	0.7	0.69	0.728	<u>1.3</u>	<u>0.76</u>	<u>0.74</u>	<u>0.71</u>	0.73	0.7	<u>0.718</u>	0.729	
CaO	g 100g ⁻¹	1.749	1.6	1.54	1.536	<u>1.71</u>	<u>1.59</u>	<u>1.548</u>	<u>1.56</u>	1.49	1.54	<u>1.529</u>	1.482	
Na2O	g 100g ⁻¹	1.779	1.9	1.78	1.808	<u>1.74</u>	<u>1.87</u>	<u>1.76</u>	<u>1.81</u>	1.75	1.79	<u>1.785</u>		
K2O	g 100g ⁻¹	3.514	3.7	3.53	3.336	<u>3.6</u>	<u>3.62</u>	<u>3.429</u>	<u>3.57</u>	3.55	3.56	<u>3.447</u>		
P2O5	g 100g ⁻¹	0.209		0.188	0.185	<u>0.22</u>	<u>0.19</u>	<u>0.185</u>	<u>0.19</u>	0.18	0.18	<u>0.195</u>		
H2O+	g 100g ⁻¹				2.727				<u>2.4</u>					
CO2	g 100g ⁻¹				1.89				<u>0.54</u>					
LOI	g 100g ⁻¹	3.81	<u>3.8</u>	4.03		<u>4.02</u>	<u>3.58</u>	<u>3.8</u>	<u>3.9</u>	3.47	3.77	<u>3.855</u>		
Ag	mg kg ⁻¹						<u>2.8</u>		<u>2.21</u>					
As	mg kg ⁻¹	2		13	20.6		<u>15</u>	<u>21.3</u>	<u>19.88</u>	13	17		18.25	
Au	mg kg ⁻¹													
B	mg kg ⁻¹													
Ba	mg kg ⁻¹	775		758	774.3	<u>992</u>	<u>767.1</u>	<u>776</u>	<u>775</u>	772	745	<u>753</u>	816.8	782.2
Be	mg kg ⁻¹			2.15										
Bi	mg kg ⁻¹			2.26			<u>2.8</u>		<u>2.4</u>					
Br	mg kg ⁻¹						<u>2.5</u>							
C(org)	mg kg ⁻¹								<u>0.39</u>					
C(tot)	mg kg ⁻¹						<u>5040</u>		<u>5080</u>					
Cd	mg kg ⁻¹			3.24			<u>5.2</u>	<u>2.6</u>	<u>3.5</u>					
Ce	mg kg ⁻¹	109		98		<u>81.64</u>	<u>106.3</u>	<u>90.3</u>	<u>98.8</u>	97	74	<u>91</u>	107.4	103
Cl	mg kg ⁻¹	112							<u>202</u>	31				
Co	mg kg ⁻¹	11		8.77		<u>1</u>	<u>10.4</u>		<u>8.1</u>	7		<u>11</u>	8.1	
Cr	mg kg ⁻¹	25		18.7	10.4	<u>35</u>	<u>16</u>		<u>17</u>	24	19	<u>17</u>	17.85	
Cs	mg kg ⁻¹			4.48		<u>3.08</u>	<u>9</u>	<u>3.9</u>	<u>3.7</u>				3.92	3.92
Cu	mg kg ⁻¹	373		362	363.2	<u>363</u>	<u>326.4</u>	<u>373</u>	<u>371</u>	433	365	<u>295</u>	359.8	
Dy	mg kg ⁻¹			4.52		<u>2.91</u>			<u>4.65</u>			<u>6</u>	4.71	4.75
Er	mg kg ⁻¹			2.77		<u>1.53</u>			<u>2.73</u>				2.77	2.88
Eu	mg kg ⁻¹			1.15		<u>0.99</u>			<u>0.75</u>				1.236	1.3
F	mg kg ⁻¹	1246							<u>780</u>	2979		<u>708</u>		
Ga	mg kg ⁻¹	18		16.4		<u>23.16</u>	<u>13.9</u>	<u>15</u>	<u>16.6</u>	15	16	<u>22</u>	16.94	15.78
Gd	mg kg ⁻¹			5.31		<u>4.12</u>			<u>4.84</u>	5			5.64	6.27
Ge	mg kg ⁻¹			2.66		<u>2.63</u>			<u>1.16</u>	3				
Hf	mg kg ⁻¹			7.51		<u>9.58</u>	<u>4</u>		<u>6.71</u>	6			4.09	6.53
Hg	mg kg ⁻¹						<u>2.85</u>		<u>2.48</u>					
Ho	mg kg ⁻¹			0.92		<u>0.56</u>			<u>0.95</u>				0.949	0.99
I	mg kg ⁻¹							<u>0.6</u>						
In	mg kg ⁻¹			6.24				<u>5.7</u>	<u>6.7</u>					
La	mg kg ⁻¹	35		36.1	36.6	<u>23.38</u>	<u>39.1</u>	<u>34.5</u>	<u>36.1</u>	45	44	<u>34</u>	39.51	38.62
Li	mg kg ⁻¹			23.1					<u>23</u>			<u>26</u>		
Lu	mg kg ⁻¹			0.4		<u>0.23</u>			<u>0.47</u>				0.412	0.446
Mo	mg kg ⁻¹	13		7.49			<u>11.6</u>	<u>13</u>	<u>13.72</u>	9				
N	mg kg ⁻¹													
Nb	mg kg ⁻¹	17		20.1		<u>15</u>	<u>17.2</u>	<u>19</u>	<u>18.74</u>	23	19		20.07	17.46
Nd	mg kg ⁻¹	33		30.5	29.2	<u>25.3</u>	<u>25.9</u>	<u>33.4</u>	<u>30</u>	27	24	<u>31</u>	32.08	32.62
Ni	mg kg ⁻¹	13		5.04	14.6	<u>8</u>	<u>7.3</u>	<u>8.5</u>	<u>8.1</u>	22		<u>11</u>	10.16	
Pb	mg kg ⁻¹	903		886	842.9	<u>814</u>	<u>858.3</u>	<u>946</u>	<u>937</u>	1019	976	<u>777</u>	898.4	
Pd	mg kg ⁻¹													
Pr	mg kg ⁻¹			8.15		<u>6.9</u>			<u>8.05</u>				8.65	8.69
Rb	mg kg ⁻¹	128		130		<u>128</u>	<u>119.2</u>	<u>124</u>	<u>139</u>	129	124		128.1	126.170
Re	mg kg ⁻¹													
Rh	mg kg ⁻¹													
Ru	mg kg ⁻¹													
S	mg kg ⁻¹	5979					<u>2739</u>		<u>2540</u>	2277				
Sb	mg kg ⁻¹	5		6.12			<u>8.2</u>	<u>5.5</u>	<u>6.2</u>					
Sc	mg kg ⁻¹	8		6.57	6.049	<u>5.3</u>	<u>5.8</u>		<u>6</u>	6			7.36	6
Se	mg kg ⁻¹			1.04			<u>2.8</u>							
Sm	mg kg ⁻¹			5.62		<u>4.45</u>	<u>1.6</u>	<u>5.3</u>	<u>5.47</u>			<u>8</u>	5.83	6.08
Sn	mg kg ⁻¹	7		6.63		<u>7.1</u>	<u>6.2</u>	<u>6.38</u>					6.74	
Sr	mg kg ⁻¹	186		181	191.4	<u>193</u>	<u>177.1</u>	<u>185</u>	<u>189</u>	189	194	<u>197</u>	182.9	187
Ta	mg kg ⁻¹			1.53		<u>2.1</u>			<u>1</u>				1.141	1.14
Tb	mg kg ⁻¹			0.84		<u>0.52</u>			<u>0.77</u>				0.831	0.91
Te	mg kg ⁻¹			0.75			<u>4.5</u>	<u>1.1</u>						
Th	mg kg ⁻¹	31		10.6		<u>7.89</u>	<u>9</u>	<u>16.5</u>	<u>11.1</u>		15		10.36	11.07
Tl	mg kg ⁻¹	21		1.56			<u>1.1</u>		<u>1.5</u>					
Tm	mg kg ⁻¹			0.4		<u>0.22</u>			<u>0.46</u>				0.435	0.438
U	mg kg ⁻¹	3		3.19		<u>2.14</u>	<u>3.4</u>		<u>3.31</u>				2.86	3.188
V	mg kg ⁻¹	61		54.8	52.29	<u>55</u>	<u>47.9</u>	<u>55.5</u>	<u>54.8</u>	57	45	<u>60</u>	59.69	
W	mg kg ⁻¹			4.37		<u>3.8</u>	<u>4.2</u>		<u>4.83</u>					4.469
Y	mg kg ⁻¹	29		25.7	25.95	<u>43</u>	<u>26.9</u>	<u>28.5</u>	<u>26.2</u>	29		<u>18</u>	26.44	26.125
Yb	mg kg ⁻¹			2.73		<u>1.44</u>	<u>2.3</u>		<u>2.87</u>				2.71	2.773
Zn	mg kg ⁻¹	627		497	622.9	<u>1265</u>	<u>599.5</u>	<u>631</u>	<u>583</u>	624	622	<u>586</u>	534.3	
Zr	mg kg ⁻¹	225		211	216.9	<u>224</u>	<u>221.1</u>	<u>240</u>	<u>230</u>	173	232	<u>206</u>	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	<u>68.2</u>	<u>69.48</u>	<u>71.4</u>	<u>70.529</u>	<u>68.77</u>	<u>69.1</u>		<u>69.7</u>	<u>69.1</u>	<u>69.38</u>	<u>68.9</u>	<u>69.9</u>	<u>69.78</u>
TiO2	g 100g ⁻¹	<u>0.39</u>	<u>0.37</u>	<u>0.45</u>	<u>0.42</u>	<u>0.4</u>	<u>0.39</u>		<u>0.39</u>	<u>0.38</u>	<u>0.389</u>	<u>0.383</u>	<u>0.2</u>	<u>0.365</u>
Al2O3	g 100g ⁻¹	<u>11.39</u>	<u>10.6</u>	<u>11</u>	<u>11.264</u>	<u>11</u>	<u>10.8</u>		<u>11.1</u>	<u>11.09</u>	<u>11.077</u>	<u>10.56</u>	<u>10.9</u>	<u>11.15</u>
Fe2O3T	g 100g ⁻¹	<u>6.77</u>	<u>6.19</u>	<u>6.69</u>	<u>6.692</u>	<u>6.46</u>	<u>6.43</u>		<u>6.48</u>	<u>6.51</u>	<u>6.516</u>	<u>6.32</u>	<u>6.9</u>	<u>6.904</u>
Fe(II)O	g 100g ⁻¹													<u>0.738</u>
MnO	g 100g ⁻¹	<u>0.28</u>	<u>0.38</u>	<u>0.42</u>	<u>0.438</u>	<u>0.43</u>	<u>0.4</u>	<u>0.438</u>	<u>0.41</u>	<u>0.43</u>	<u>0.422</u>	<u>0.428</u>	<u>0.43</u>	<u>0.515</u>
MgO	g 100g ⁻¹	<u>0.87</u>	<u>0.8</u>	<u>0.78</u>	<u>0.721</u>	<u>0.71</u>	<u>0.7</u>		<u>0.67</u>	<u>0.7</u>	<u>0.591</u>	<u>0.67</u>	<u>0.9</u>	<u>0.678</u>
CaO	g 100g ⁻¹	<u>1.67</u>	<u>1.5</u>	<u>1.5</u>	<u>1.645</u>	<u>1.55</u>	<u>1.5</u>		<u>1.52</u>	<u>1.52</u>	<u>1.535</u>	<u>1.5</u>	<u>0.9</u>	<u>1.45</u>
Na2O	g 100g ⁻¹	<u>1.69</u>	<u>1.55</u>	<u>1.67</u>	<u>1.86</u>	<u>1.72</u>	<u>1.68</u>		<u>1.77</u>	<u>1.83</u>	<u>1.877</u>	<u>1.84</u>	<u>1.55</u>	<u>1.987</u>
K2O	g 100g ⁻¹	<u>3.6</u>	<u>3.43</u>	<u>3.6</u>	<u>3.613</u>	<u>3.53</u>	<u>3.52</u>		<u>3.48</u>	<u>3.59</u>	<u>3.58</u>	<u>3.45</u>	<u>3.65</u>	<u>3.515</u>
P2O5	g 100g ⁻¹	<u>0.22</u>	<u>0.16</u>	<u>0.17</u>	<u>0.194</u>	<u>0.19</u>	<u>0.18</u>			<u>0.19</u>	<u>0.187</u>	<u>0.18</u>	<u>0.5</u>	<u>0.186</u>
H2O+	g 100g ⁻¹													
CO2	g 100g ⁻¹													
LOI	g 100g ⁻¹	<u>3.77</u>	<u>2.26</u>	<u>3.41</u>	<u>3.64</u>	<u>3.66</u>	<u>3.87</u>		<u>2.95</u>	<u>3.97</u>			<u>3.83</u>	<u>3.22</u>
Ag	mg kg ⁻¹						<u>3.77</u>							<u>3.734</u>
As	mg kg ⁻¹		<u>27</u>				<u>19.6</u>	<u>20.3</u>					<u>22.7</u>	
Au	mg kg ⁻¹													
B	mg kg ⁻¹													
Ba	mg kg ⁻¹	<u>0.084</u>	<u>678</u>	<u>830</u>	<u>786.7</u>	<u>759</u>	<u>713</u>	<u>775.7</u>		<u>780</u>	<u>794.650</u>	<u>778</u>		<u>794</u>
Be	mg kg ⁻¹				<u>2.1</u>		<u>2.17</u>							<u>1.767</u>
Bi	mg kg ⁻¹						<u>1.48</u>							<u>2.074</u>
Br	mg kg ⁻¹		<u>2</u>				<u>2.1</u>	<u>2.55</u>						
C(org)	mg kg ⁻¹				<u>0.33</u>									
C(tot)	mg kg ⁻¹				<u>0.57</u>		<u>6490</u>					<u>5400</u>		<u>4940</u>
Cd	mg kg ⁻¹						<u>2.98</u>						<u>3.93</u>	<u>3.096</u>
Ce	mg kg ⁻¹		<u>66</u>				<u>96.1</u>	<u>98.4</u>				<u>101</u>		<u>105.6</u>
Cl	mg kg ⁻¹	<u>322</u>	<u>10</u>										<u>0.01</u>	
Co	mg kg ⁻¹	<u>7.58</u>	<u>12</u>		<u>8.16</u>		<u>7.32</u>	<u>7.91</u>					<u>9.18</u>	<u>7.97</u>
Cr	mg kg ⁻¹	<u>28.77</u>	<u>17</u>		<u>15.7</u>		<u>13.4</u>	<u>14.6</u>			<u>19.55</u>		<u>15.4</u>	<u>17.26</u>
Cs	mg kg ⁻¹		<u>6</u>		<u>3.86</u>		<u>7.05</u>							<u>3.96</u>
Cu	mg kg ⁻¹	<u>0.032</u>	<u>713</u>	<u>360</u>	<u>386.8</u>	<u>370</u>	<u>340</u>	<u>375.6</u>			<u>383.5</u>	<u>402</u>	<u>438.4</u>	<u>371.7</u>
Dy	mg kg ⁻¹				<u>4.8</u>		<u>4.87</u>							<u>5.067</u>
Er	mg kg ⁻¹				<u>2.93</u>		<u>2.99</u>							<u>2.957</u>
Eu	mg kg ⁻¹				<u>1.14</u>		<u>1.09</u>							<u>1.318</u>
F	mg kg ⁻¹													
Ga	mg kg ⁻¹		<u>18</u>		<u>16.67</u>		<u>15</u>	<u>15.26</u>			<u>10.65</u>			<u>16.38</u>
Gd	mg kg ⁻¹				<u>5.02</u>		<u>5.49</u>							<u>5.871</u>
Ge	mg kg ⁻¹													<u>1.59</u>
Hf	mg kg ⁻¹		<u>3</u>		<u>6.1</u>									<u>6.736</u>
Hg	mg kg ⁻¹													<u>2.352</u>
Ho	mg kg ⁻¹				<u>0.98</u>		<u>0.99</u>							<u>1.018</u>
I	mg kg ⁻¹						<u>3.57</u>							
In	mg kg ⁻¹													<u>5.842</u>
La	mg kg ⁻¹		<u>27</u>		<u>37.08</u>	<u>41</u>	<u>35.7</u>	<u>41.1</u>				<u>35</u>		<u>38.59</u>
Li	mg kg ⁻¹	<u>20.05</u>												<u>22.84</u>
Lu	mg kg ⁻¹				<u>0.42</u>		<u>0.45</u>							<u>0.472</u>
Mo	mg kg ⁻¹		<u>13</u>		<u>12.68</u>		<u>11.8</u>	<u>11.85</u>						<u>9.46</u>
N	mg kg ⁻¹				<u>0.41</u>									
Nb	mg kg ⁻¹	<u>28.3</u>	<u>19</u>		<u>16.54</u>	<u>19</u>	<u>18.4</u>	<u>18.48</u>			<u>18.25</u>			<u>17.78</u>
Nd	mg kg ⁻¹		<u>41</u>		<u>31.66</u>		<u>30</u>							<u>35.02</u>
Ni	mg kg ⁻¹	<u>29.52</u>	<u>11</u>		<u>10.9</u>		<u>7.85</u>	<u>9.42</u>			<u>6.55</u>		<u>10.1</u>	<u>8.71</u>
Pb	mg kg ⁻¹		<u>809</u>		<u>934.070</u>	<u>1031</u>	<u>757</u>	<u>980.2</u>			<u>955.250</u>		<u>1124.400</u>	<u>939.2</u>
Pd	mg kg ⁻¹												<u>32.5</u>	
Pr	mg kg ⁻¹				<u>8.53</u>		<u>8.05</u>							<u>9.03</u>
Rb	mg kg ⁻¹	<u>136</u>	<u>135</u>	<u>130</u>	<u>126.550</u>	<u>129</u>	<u>119</u>	<u>125.880</u>			<u>130.7</u>			<u>133.8</u>
Re	mg kg ⁻¹													
Rh	mg kg ⁻¹													
Ru	mg kg ⁻¹													
S	mg kg ⁻¹	<u>0.43</u>	<u>1780</u>		<u>0.282</u>	<u>1700</u>	<u>2840</u>			<u>2750</u>	<u>1368</u>	<u>2800</u>		<u>2823</u>
Sb	mg kg ⁻¹						<u>5.31</u>						<u>3.86</u>	<u>6.036</u>
Sc	mg kg ⁻¹		<u>8</u>		<u>6.4</u>	<u>8</u>	<u>7.24</u>	<u>4.8</u>						<u>6.12</u>
Se	mg kg ⁻¹						<u>4.3</u>						<u>2.75</u>	<u>2.99</u>
Sm	mg kg ⁻¹				<u>5.97</u>		<u>5.66</u>							<u>6.324</u>
Sn	mg kg ⁻¹		<u>4</u>		<u>6.49</u>		<u>5.88</u>							<u>5.84</u>
Sr	mg kg ⁻¹	<u>219</u>	<u>175</u>	<u>200</u>	<u>187.730</u>	<u>189</u>	<u>179</u>	<u>185.710</u>		<u>185</u>	<u>1378</u>			<u>194.7</u>
Ta	mg kg ⁻¹				<u>1.05</u>									<u>0.996</u>
Tb	mg kg ⁻¹				<u>0.74</u>		<u>0.79</u>							<u>0.833</u>
Te	mg kg ⁻¹												<u>1.45</u>	<u>1.156</u>
Th	mg kg ⁻¹		<u>32</u>		<u>11.32</u>		<u>11.6</u>	<u>8.84</u>			<u>16.05</u>			<u>11.09</u>
Tl	mg kg ⁻¹				<u>1.36</u>		<u>1.05</u>						<u>1.85</u>	<u>1.382</u>
Tm	mg kg ⁻¹				<u>0.44</u>		<u>0.44</u>							<u>0.494</u>
U	mg kg ⁻¹		<u>5</u>		<u>3.4</u>		<u>3.53</u>	<u>3.09</u>						<u>3.505</u>
V	mg kg ⁻¹		<u>59</u>		<u>55.4</u>	<u>60</u>	<u>50.4</u>	<u>56.9</u>			<u>62.25</u>	<u>56</u>	<u>29.5</u>	<u>52.66</u>
W	mg kg ⁻¹						<u>3.01</u>							<u>5.634</u>
Y	mg kg ⁻¹	<u>13.7</u>	<u>20</u>		<u>25.21</u>	<u>28</u>	<u>25.3</u>	<u>26.86</u>			<u>25.6</u>	<u>24</u>		<u>27.83</u>
Yb	mg kg ⁻¹				<u>2.85</u>		<u>2.95</u>							<u>3.044</u>
Zn	mg kg ⁻¹	<u>467.730</u>	<u>562</u>	<u>600</u>	<u>662.2</u>	<u>700</u>	<u>596</u>	<u>646.250</u>			<u>616.450</u>	<u>622</u>	<u>588.680</u>	<u>608.5</u>
Zr	mg kg ⁻¹	<u>143</u>	<u>216</u>	<u>240</u>	<u>226.220</u>	<u>222</u>	<u>219</u>	<u>226.520</u>			<u>231</u>	<u>208</u>		<u>235.1</u>

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	<u>70.08</u>	70.32		<u>74.12</u>	<u>69.42</u>	<u>66.3</u>	<u>69.94</u>	68.85	<u>69.68</u>	68.84	69.04	69.24	
TiO2	g 100g ⁻¹	<u>0.42</u>	0.4	0.381	<u>0.42</u>	<u>0.393</u>	0.4	<u>0.404</u>	0.38	<u>0.399</u>	0.4	0.407	0.41	
Al2O3	g 100g ⁻¹	<u>11.06</u>	11.1		<u>11.04</u>	<u>11.09</u>	11.39	<u>11.08</u>	10.55	<u>11.09</u>	11.71	10.72	11.19	
Fe2O3T	g 100g ⁻¹	<u>6.61</u>	6.52	6.316	<u>6.59</u>	<u>6.45</u>	6.56	<u>6.46</u>	6.51	<u>6.56</u>	5.5	6.717	6.73	
Fe(II)O	g 100g ⁻¹											0.33		
MnO	g 100g ⁻¹	<u>0.45</u>	0.43	0.384	<u>0.436</u>	<u>0.413</u>	0.45	<u>0.437</u>	0.426	<u>0.413</u>	0.34	0.442	0.47	
MgO	g 100g ⁻¹	<u>0.67</u>	0.69		<u>0.694</u>	<u>0.78</u>	0.91	<u>0.701</u>	0.704	<u>0.806</u>	0.77	0.81	0.58	
CaO	g 100g ⁻¹	<u>1.51</u>	1.54		<u>1.47</u>	<u>1.66</u>	1.65	<u>1.54</u>	1.53	<u>1.51</u>	1.45	1.723	1.4	
Na2O	g 100g ⁻¹	<u>1.62</u>	1.77		<u>1.787</u>	<u>1.83</u>	1.83	<u>1.75</u>	1.74	<u>1.8</u>	1.98	1.85	1.82	
K2O	g 100g ⁻¹	<u>3.57</u>	3.56		<u>3.33</u>	<u>3.52</u>	3.72	<u>3.54</u>	3.44	<u>3.56</u>	3.45	3.4	3.43	
P2O5	g 100g ⁻¹	<u>0.18</u>	0.18			<u>0.199</u>		<u>0.189</u>	0.184	<u>0.182</u>	0.2	0.176		
H2O+	g 100g ⁻¹	<u>0.75</u>										3.01		
CO2	g 100g ⁻¹				<u>1.95</u>							0.47		
LOI	g 100g ⁻¹	<u>3.17</u>	3.51		<u>4.19</u>	<u>3.47</u>			4.321	<u>3.998</u>	4	3.95	4.06	
Ag	mg kg ⁻¹				<u>0.7</u>		4.9							
As	mg kg ⁻¹			12.1	<u>11.3</u>		18.2							
Au	mg kg ⁻¹						0.16							
B	mg kg ⁻¹													
Ba	mg kg ⁻¹		768	636	<u>780.280</u>	<u>817</u>	800		814		810	<u>798</u>		772
Be	mg kg ⁻¹					<u>2.28</u>			2.27					2.25
Bi	mg kg ⁻¹			2.01	<u>1.72</u>									
Br	mg kg ⁻¹						2.4							
C(org)	mg kg ⁻¹					<u>2300</u>						4189		
C(tot)	mg kg ⁻¹				<u>5317.650</u>	<u>4500</u>		<u>5165</u>		<u>5212</u>		<u>5477</u>		
Cd	mg kg ⁻¹			3.5	<u>1.6</u>									
Ce	mg kg ⁻¹		101.810	91.9	<u>103.290</u>	<u>101</u>	103		98.47		95			105.2
Cl	mg kg ⁻¹													
Co	mg kg ⁻¹			3.5	<u>8.07</u>		8.28		8.18					7.82
Cr	mg kg ⁻¹		16	8	<u>23.27</u>	<u>17</u>	16.7		16.7		31			14.9
Cs	mg kg ⁻¹		3.78	3.82	<u>3.41</u>		4.07		3.74					3.83
Cu	mg kg ⁻¹		353	353	<u>332.5</u>	<u>370</u>	540		287.2		381			387
Dy	mg kg ⁻¹		5.24	4.49	<u>4.85</u>	<u>3.15</u>	5		3.88		4			5.03
Er	mg kg ⁻¹		3.02	2.74	<u>2.85</u>	<u>1.65</u>			2.2		2.2			2.99
Eu	mg kg ⁻¹		1.2	1.05	<u>1.04</u>	<u>1.1</u>	1.21		1.04		1.3			1.13
F	mg kg ⁻¹											874		
Ga	mg kg ⁻¹		16	13	<u>16.51</u>		<u>18</u>		56.91					16
Gd	mg kg ⁻¹		5.38	4.66	<u>5.47</u>	<u>4.99</u>			4.5		5.6			5.35
Ge	mg kg ⁻¹				<u>1.5</u>									
Hf	mg kg ⁻¹		6.41	4.63	<u>6.42</u>	<u>8.5</u>	6.12		3.84					6.35
Hg	mg kg ⁻¹				<u>2.35</u>	<u>2.8</u>						2.413		
Ho	mg kg ⁻¹		1.09	0.932	<u>0.97</u>	<u>0.6</u>			0.78		0.8			1.02
I	mg kg ⁻¹													
In	mg kg ⁻¹				<u>5.59</u>		6.11							
La	mg kg ⁻¹		38.1	31.8	<u>37.92</u>	<u>42.2</u>	37.8		35.69		38			38.6
Li	mg kg ⁻¹			23.6		<u>23.8</u>			25.35		21			24.1
Lu	mg kg ⁻¹		0.45	0.422	<u>0.46</u>	<u>0.23</u>	0.45		0.31		0.3			0.44
Mo	mg kg ⁻¹			12.8	<u>13.85</u>	<u>13</u>	<u>10</u>		14.09		11			13.25
N	mg kg ⁻¹													
Nb	mg kg ⁻¹		18.51	18.1	<u>18.84</u>	<u>20</u>			18.45		21			20.2
Nd	mg kg ⁻¹		31.83	30	<u>31.64</u>	<u>29.7</u>	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	<u>782.660</u>	<u>943</u>			482.7		875			929
Pd	mg kg ⁻¹													
Pr	mg kg ⁻¹		8.6	8.06	<u>8.48</u>	<u>7.8</u>			8.18		7			8.61
Rb	mg kg ⁻¹		126.1	124	<u>115.430</u>	<u>128</u>	135		125.1		97			127.9
Re	mg kg ⁻¹													
Rh	mg kg ⁻¹													
Ru	mg kg ⁻¹													
S	mg kg ⁻¹	<u>1882</u>			<u>2698.460</u>			<u>2265</u>		<u>3786</u>		2311		
Sb	mg kg ⁻¹			6.4	<u>6.57</u>	<u>6</u>	6.2							
Sc	mg kg ⁻¹		6.6	4.7	<u>9.21</u>		6.71		6.55		6			6.81
Se	mg kg ⁻¹						<u>1.1</u>							
Sm	mg kg ⁻¹		6.17	5.34	<u>5.82</u>	<u>5.21</u>	5.79		5.44		6			6.09
Sn	mg kg ⁻¹			1.6	<u>6.08</u>	<u>6.4</u>								6.61
Sr	mg kg ⁻¹		193	188	<u>189.940</u>	<u>192</u>	190		542		193	178		192
Ta	mg kg ⁻¹		1.16	1.1	<u>1.05</u>		1.01		1.06					1.17
Tb	mg kg ⁻¹		0.87	0.725	<u>0.77</u>	<u>0.63</u>	0.77		0.68		0.8			0.84
Te	mg kg ⁻¹													
Th	mg kg ⁻¹		11.39	10.9	<u>11.63</u>		12		12.36		10.7			11.55
Tl	mg kg ⁻¹			1.38	<u>0.012</u>									1.58
Tm	mg kg ⁻¹		0.45	0.422	<u>0.41</u>	<u>0.24</u>					0.3			0.46
U	mg kg ⁻¹		3.36	3.15	<u>3.66</u>		3.2		2.89		2			3.51
V	mg kg ⁻¹		55	47	<u>58.28</u>	<u>60</u>	56		111.8		53			52.5
W	mg kg ⁻¹				<u>5.65</u>		5.3							
Y	mg kg ⁻¹		28.22	25	<u>26.68</u>	<u>25.8</u>			22.84		15			28.3
Yb	mg kg ⁻¹		2.87	2.84	<u>2.72</u>	<u>1.58</u>	2.92		2.11		1.9			2.98
Zn	mg kg ⁻¹		627	546.6	<u>520</u>	<u>629</u>	638		490.4		653			606
Zr	mg kg ⁻¹		241	214.8	<u>243.030</u>	<u>233</u>	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	<u>69.63</u>	68		<u>69.42</u>	<u>69.283</u>	70.55		<u>69.13</u>	70.14		
TiO2	g 100g ⁻¹	0.401	0.39	<u>0.39</u>	0.382		<u>0.4</u>	<u>0.386</u>	0.4	0.39	<u>0.39</u>	0.39		
Al2O3	g 100g ⁻¹	11	11.19	<u>11.04</u>	10.783		<u>11.06</u>	<u>11.088</u>	11.18		<u>11.19</u>	11		
Fe2O3T	g 100g ⁻¹	6.389	6.9	<u>6.55</u>	6.618		<u>6.43</u>	<u>7.063</u>	6.88	6.49	<u>6.43</u>	6.49		
Fe(II)O	g 100g ⁻¹				1.07									
MnO	g 100g ⁻¹	0.439	0.25	<u>0.43</u>	0.424		<u>0.43</u>	<u>0.428</u>	0.44	0.43	<u>0.42</u>	0.42		
MgO	g 100g ⁻¹	0.708	0.6	<u>0.72</u>	0.711		<u>0.74</u>	<u>0.702</u>	0.74		<u>0.75</u>	0.71		
CaO	g 100g ⁻¹	1.542	1.51	<u>1.56</u>	1.537		<u>1.52</u>	<u>1.485</u>	1.6		<u>1.55</u>	1.52		
Na2O	g 100g ⁻¹	1.718	1.53	<u>1.86</u>	1.793		<u>1.83</u>	<u>1.854</u>	1.66		<u>1.83</u>	1.74		
K2O	g 100g ⁻¹	3.526	3.63	<u>3.56</u>	3.491		<u>3.58</u>	<u>3.678</u>	3.49		<u>3.56</u>	3.52		
P2O5	g 100g ⁻¹	0.179	0.17	<u>0.188</u>	0.19		<u>0.18</u>	<u>0.185</u>	0.19	0.19	<u>0.179</u>	0.178		
H2O+	g 100g ⁻¹				2.36									
CO2	g 100g ⁻¹													
LOI	g 100g ⁻¹	3.603	3.56	<u>3.25</u>	4.05		<u>3.61</u>	<u>3.48</u>	4.01		<u>3.58</u>	3.66		
Ag	mg kg ⁻¹			<u>3.84</u>	3.45					4.69			3.8	
As	mg kg ⁻¹	20.16		<u>18.4</u>	19.296					15.6				
Au	mg kg ⁻¹													
B	mg kg ⁻¹				9.4								11.8	
Ba	mg kg ⁻¹	792		<u>802</u>	751.712			<u>793</u>	784	786			828	673.6
Be	mg kg ⁻¹			<u>2.31</u>	1.998					2.06			2.22	
Bi	mg kg ⁻¹			<u>2.09</u>	2.108								2.24	
Br	mg kg ⁻¹													
C(org)	mg kg ⁻¹				1853		<u>3300</u>							
C(tot)	mg kg ⁻¹			<u>5400</u>	5156		<u>5400</u>				<u>6786</u>	4390		
Cd	mg kg ⁻¹	3.127		<u>3.17</u>	3.110					3.23			2.94	
Ce	mg kg ⁻¹	100.8		<u>104</u>	96.039	106				98.3			101	84.03
Cl	mg kg ⁻¹				75									
Co	mg kg ⁻¹			<u>7.7</u>	7.758			<u>17</u>	8	8.04			8.55	
Cr	mg kg ⁻¹			<u>14</u>	15.646			<u>13</u>	22	14			16.8	
Cs	mg kg ⁻¹			<u>3.99</u>	3.866					3.93			4.14	3.168
Cu	mg kg ⁻¹	371.7		<u>369</u>	430.004			<u>400</u>	310	361		423	375	
Dy	mg kg ⁻¹			<u>4.7</u>	4.593	4.89				4.64			4.7	3.834
Er	mg kg ⁻¹			<u>2.8</u>	2.759	3				2.84			2.82	2.222
Eu	mg kg ⁻¹	0.912		<u>1.2</u>	1.107	1.42				1.13			1.35	0.950
F	mg kg ⁻¹				750									
Ga	mg kg ⁻¹		21	<u>15.15</u>	16.127				21	16.1			16.3	
Gd	mg kg ⁻¹			<u>5.3</u>	4.866	6.52				5.19			5.79	4.137
Ge	mg kg ⁻¹			<u>2</u>	1.500								2.28	
Hf	mg kg ⁻¹			<u>6.6</u>	6.323					6.53			6.83	
Hg	mg kg ⁻¹	2.39		<u>3.2</u>	2.64									
Ho	mg kg ⁻¹			<u>1</u>	0.985	1.01				0.96			0.99	0.743
I	mg kg ⁻¹													
In	mg kg ⁻¹			<u>5.65</u>	5.703									
La	mg kg ⁻¹	34.8		<u>39</u>	36.609	42.8				36.5			41.8	31.93
Li	mg kg ⁻¹	23.9		<u>24.5</u>	24.6					23.8			23.5	
Lu	mg kg ⁻¹			<u>0.5</u>	0.42					0.42			0.45	0.336
Mo	mg kg ⁻¹		14	<u>13.1</u>	12.118					12.5			12.1	
N	mg kg ⁻¹													
Nb	mg kg ⁻¹		19	<u>18</u>	16.536			<u>20</u>	17	18.3			25.2	18.73
Nd	mg kg ⁻¹	25.67		<u>32.5</u>	30.091	31				30.4			33.8	25.54
Ni	mg kg ⁻¹	8.483	8	<u>7</u>	8.674			<u>14</u>	17	8.11			9.15	
Pb	mg kg ⁻¹	878.7		<u>948</u>	896.011			<u>1037</u>	796	891			883	746.7
Pd	mg kg ⁻¹													
Pr	mg kg ⁻¹			<u>8.7</u>	8.024	9.71				8.32			8.98	6.615
Rb	mg kg ⁻¹		126	<u>123</u>	126.905			<u>128</u>	122	127			128	119.6
Re	mg kg ⁻¹			<u>0.003</u>										
Rh	mg kg ⁻¹													
Ru	mg kg ⁻¹													
S	mg kg ⁻¹			<u>2500</u>	2646						<u>2712</u>	2200		
Sb	mg kg ⁻¹			<u>5.36</u>	5.565									
Sc	mg kg ⁻¹	6.497		<u>6.1</u>	7				7	6.02			6.95	
Se	mg kg ⁻¹	2.752		<u>2.4</u>	2.51									
Sm	mg kg ⁻¹			<u>6.4</u>	5.640	5.74				5.54			6.01	4.322
Sn	mg kg ⁻¹			<u>7</u>	7.778					6.62				
Sr	mg kg ⁻¹	193.7	182	<u>193</u>	187.879			<u>194</u>	195	204			192	139.6
Ta	mg kg ⁻¹			<u>1.1</u>	1.238					0.92			1.28	1.103
Tb	mg kg ⁻¹			<u>0.8</u>	0.742					0.81			0.85	0.643
Te	mg kg ⁻¹			<u>1</u>										
Th	mg kg ⁻¹		24	<u>10.5</u>	11.401	2.8				10.6			10.9	
Tl	mg kg ⁻¹			<u>1.46</u>						1.48			1.24	
Tm	mg kg ⁻¹			<u>0.5</u>	0.402					0.43			0.47	0.327
U	mg kg ⁻¹			<u>3.3</u>	3.429	0.92			6	3.28			3.09	3.024
V	mg kg ⁻¹	50		<u>51</u>	50.066			<u>54</u>	61	56.3			56.9	
W	mg kg ⁻¹		1	<u>5.1</u>	5.399								5.77	
Y	mg kg ⁻¹		31	<u>26.2</u>	25.460	27.7		<u>30</u>	19	26.4			25.6	21.04
Yb	mg kg ⁻¹	2.047		<u>2.4</u>	2.817	3.05				2.78			2.93	2.24
Zn	mg kg ⁻¹	577	588	<u>629</u>	614.983			<u>711</u>	625	633		643	568	
Zr	mg kg ⁻¹		222	<u>240</u>	229.876			<u>202</u>	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	<u>69.76</u>	70.1	<u>64.7</u>	<u>69.26</u>	<u>67.772</u>	<u>69.83</u>	69.456	<u>68.76</u>
TiO2	g 100g ⁻¹	0.400	0.35	0.418	0.405	0.4	<u>0.39</u>	0.4	<u>0.392</u>	<u>0.39</u>	<u>0.378</u>	<u>0.39</u>	0.398	<u>0.401</u>
Al2O3	g 100g ⁻¹	11.039	10.98	11.036	10.98	11.18	<u>10.93</u>	11.2	<u>12.9</u>	<u>11.04</u>	<u>11.225</u>	<u>10.87</u>	11.44	<u>10.9</u>
Fe2O3T	g 100g ⁻¹	6.715	6.72	6.529	6.59	6.41	<u>6.36</u>	6.58	<u>6.12</u>	<u>6.56</u>	<u>6.672</u>	<u>6.42</u>	6.861	<u>6.41</u>
Fe(II)O	g 100g ⁻¹						<u>0.58</u>	0.58						
MnO	g 100g ⁻¹	0.431	0.43	0.428	0.429	0.41	<u>0.41</u>	0.42	<u>0.389</u>	<u>0.42</u>		<u>0.41</u>	0.446	<u>0.479</u>
MgO	g 100g ⁻¹	0.759	0.66	0.734	0.72	0.7	<u>0.72</u>	0.75		<u>0.76</u>	<u>0.684</u>	<u>0.72</u>	0.704	<u>0.717</u>
CaO	g 100g ⁻¹	1.545	1.5	1.542	1.6	1.49	<u>1.55</u>	1.55	<u>1.71</u>	<u>1.51</u>	<u>1.446</u>	<u>1.53</u>	1.539	<u>1.52</u>
Na2O	g 100g ⁻¹	1.835	1.81	1.814	2.06	1.89	<u>1.84</u>	1.87		<u>1.9</u>	<u>1.758</u>	<u>1.8</u>	1.484	<u>1.76</u>
K2O	g 100g ⁻¹	3.574	3.6	3.529	3.73	3.51	<u>3.53</u>	3.61	<u>3.91</u>	<u>3.6</u>	<u>3.556</u>	<u>3.5</u>	3.637	<u>3.53</u>
P2O5	g 100g ⁻¹	0.190	0.18	0.189	0.194	0.17	<u>0.18</u>	0.19		<u>0.186</u>	<u>0.205</u>	<u>0.18</u>	0.189	<u>0.195</u>
H2O+	g 100g ⁻¹		2.35				<u>2.55</u>						0.66	
CO2	g 100g ⁻¹		1.99										0.355	
LOI	g 100g ⁻¹	3.325		3.84	3.72	3.61	<u>4.15</u>	3.71		<u>3.49</u>	<u>4.262</u>	<u>3.9</u>	3.39	<u>4.09</u>
Ag	mg kg ⁻¹						<u>4.42</u>	3.56		<u>4.06</u>	<u>2.73</u>		4.1	
As	mg kg ⁻¹	17.4				3.1	<u>17.9</u>	18.4		<u>20.1</u>	<u>16.96</u>		17	
Au	mg kg ⁻¹								<u>75</u>					
B	mg kg ⁻¹													
Ba	mg kg ⁻¹	778.7	777	770.010	799	766	<u>820</u>	818	<u>1030</u>	<u>808</u>	<u>154.290</u>	<u>778</u>	743	
Be	mg kg ⁻¹							2.28		<u>2.34</u>		<u>2.32</u>		
Bi	mg kg ⁻¹	2.2		2.1			<u>1.98</u>	2.29		<u>1.97</u>				
Br	mg kg ⁻¹								<u>4</u>					
C(org)	mg kg ⁻¹												4530	
C(tot)	mg kg ⁻¹												5499	
Cd	mg kg ⁻¹							2.96		<u>3.43</u>			0.59	
Ce	mg kg ⁻¹	98.2	104	100.490	96.3	109	<u>90.7</u>	101		<u>105.5</u>	<u>98.078</u>	<u>98.3</u>	118	
Cl	mg kg ⁻¹		<u>141</u>					78	<u>409</u>					
Co	mg kg ⁻¹		9	5.67	12	9	<u>7.88</u>	7.97		<u>8.1</u>	<u>6.47</u>	<u>7.76</u>	8.8	
Cr	mg kg ⁻¹	18.5	23	15.08	21	18	<u>16.2</u>	18.3	<u>186</u>		<u>8.41</u>	<u>16.5</u>	15	
Cs	mg kg ⁻¹	6.7	14	3.91	4.43	3	<u>3.72</u>	3.81		<u>3.98</u>		<u>3.95</u>	3.6	
Cu	mg kg ⁻¹	361.8	351	319.6	365	328	<u>338</u>	374	<u>371</u>	<u>369</u>	<u>322.450</u>	<u>355</u>	369	
Dy	mg kg ⁻¹	4.66		4.9	4.2		<u>4.52</u>	4.95		<u>4.61</u>	<u>5.286</u>	<u>4.71</u>	4.48	
Er	mg kg ⁻¹			3.04	2.65		<u>2.7</u>	3.02		<u>2.73</u>	<u>3.29</u>	<u>2.81</u>	3	
Eu	mg kg ⁻¹			1.38	1.1		<u>1.16</u>	1.13		<u>1.1</u>	<u>1.281</u>	<u>1.14</u>	1.42	
F	mg kg ⁻¹		<u>1371</u>		1046			736						
Ga	mg kg ⁻¹	16	15	12.63	17	14	<u>16.7</u>	16.4	<u>34</u>	<u>15.3</u>	<u>18.808</u>	<u>15.8</u>	15.4	
Gd	mg kg ⁻¹			6.16	4.74		<u>5</u>	5.24		<u>4.82</u>	<u>5.634</u>	<u>5.36</u>	5.68	
Ge	mg kg ⁻¹							1.77				<u>1.48</u>		
Hf	mg kg ⁻¹	6.56	8	6.75	5.69	2	<u>5.86</u>	6.65		<u>6</u>		<u>5.16</u>	8.08	
Hg	mg kg ⁻¹						<u>2.4</u>				<u>2.578</u>			
Ho	mg kg ⁻¹			0.94	0.87		<u>0.92</u>	1		<u>0.96</u>	<u>1.106</u>	<u>0.945</u>	0.938	
I	mg kg ⁻¹													
In	mg kg ⁻¹									<u>6.32</u>			5.6	
La	mg kg ⁻¹	37.8	52	37.56	35.4	43	<u>35.4</u>	31.9		<u>38.9</u>	<u>36.052</u>	<u>37.4</u>	34.1	
Li	mg kg ⁻¹			26.04			<u>24</u>			<u>26.3</u>		<u>26.2</u>	18.4	
Lu	mg kg ⁻¹			0.45	0.38		<u>0.4</u>	0.43		<u>0.42</u>	<u>0.335</u>	<u>0.418</u>	0.187	
Mo	mg kg ⁻¹	13.3	13	11.88		11		13.3	<u>23</u>	<u>13.15</u>	<u>8.22</u>		11.3	
N	mg kg ⁻¹													
Nb	mg kg ⁻¹	19.37		19.45	19	17	<u>20.6</u>	18.6	<u>12</u>	<u>19.2</u>		<u>19</u>		
Nd	mg kg ⁻¹	33	34	31.53	29.1	26	<u>29.9</u>	32.7		<u>32.8</u>	<u>30.839</u>	<u>31.6</u>	29.7	
Ni	mg kg ⁻¹	11	17	6.11	9	9	<u>9.81</u>	12.7	<u>64</u>	<u>9.2</u>	<u>6.23</u>	<u>9.47</u>	17.3	
Pb	mg kg ⁻¹	945.5	929	916.150	882	863	<u>898</u>	973	<u>895</u>	<u>925</u>	<u>913.190</u>	<u>965</u>	832	
Pd	mg kg ⁻¹													
Pr	mg kg ⁻¹			8.15	9.22		<u>8.18</u>	8.71		<u>8.68</u>	<u>7.935</u>	<u>8.48</u>	8.15	
Rb	mg kg ⁻¹	129.2	110	121.750	129	124	<u>144</u>	123	<u>123</u>	<u>128</u>	<u>120.555</u>	<u>153</u>	133.1	
Re	mg kg ⁻¹												0.004	
Rh	mg kg ⁻¹												0.081	
Ru	mg kg ⁻¹												0.25	
S	mg kg ⁻¹		<u>2047</u>		2116			2543	<u>3420</u>	<u>2800</u>			2312	
Sb	mg kg ⁻¹			5.88			<u>3.69</u>	5.79		<u>5.61</u>	<u>2.6</u>		5.33	
Sc	mg kg ⁻¹	7.02	9	6.2		10	<u>8.07</u>	6.28		<u>6.5</u>		<u>6.88</u>		
Se	mg kg ⁻¹							5			<u>2.58</u>		3.69	
Sm	mg kg ⁻¹	6.41		5.7	5.33	6	<u>5.39</u>	5.94		<u>6.07</u>	<u>5.545</u>	<u>5.79</u>	5.52	
Sn	mg kg ⁻¹		41	6.65				6.24		<u>6</u>	<u>4.52</u>		5.54	
Sr	mg kg ⁻¹	194.2	184	182.4	187	181	<u>166</u>	189	<u>184</u>	<u>192.5</u>	<u>46.02</u>	<u>195</u>	215	
Ta	mg kg ⁻¹		6	1.19			<u>1.37</u>	1.08		<u>1.04</u>		<u>1.17</u>	0.565	
Tb	mg kg ⁻¹			0.92	0.74		<u>0.8</u>	0.78		<u>0.76</u>	<u>0.9</u>	<u>0.78</u>	0.214	
Te	mg kg ⁻¹									<u>1.04</u>			1.15	
Th	mg kg ⁻¹	11.2	11	11.5	12.2	9	<u>10.8</u>	11.13	<u>17</u>	<u>11.05</u>	<u>9.444</u>	<u>10.9</u>	11.8	
Tl	mg kg ⁻¹	2.2		1.49						<u>1.49</u>			1.215	
Tm	mg kg ⁻¹			0.45	0.38		<u>0.4</u>			<u>0.43</u>	<u>0.484</u>	<u>0.424</u>	0.44	
U	mg kg ⁻¹	2.6	3	4.35	3.44	3.2	<u>3.09</u>	3.46		<u>3.29</u>	<u>3.417</u>	<u>3.45</u>	2.1	
V	mg kg ⁻¹	57.2	60	49.55	58	57	<u>51.4</u>	54.9	<u>164</u>	<u>56</u>	<u>28.12</u>	<u>52.5</u>	78	
W	mg kg ⁻¹			4.41		19		5.72		<u>4.8</u>			6.35	
Y	mg kg ⁻¹	28.1	41	24.76	23.5	28	<u>23.3</u>	25.4	<u>24</u>	<u>26</u>	<u>31.21</u>	<u>26.6</u>	25.1	
Yb	mg kg ⁻¹			2.87	2.54		<u>2.59</u>	2.84		<u>2.74</u>	<u>3.075</u>	<u>2.79</u>	2.73	
Zn	mg kg ⁻¹	645.3	642	583.830	632	581	<u>555</u>	644	<u>601</u>	<u>646</u>	<u>541.440</u>	<u>607</u>	601	
Zr	mg kg ⁻¹	236.7	208	253.790	227	220	<u>219</u>	237	<u>170</u>	<u>245</u>		<u>182</u>		

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

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

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	s_{dm}	H_a	s_{dm}/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	<u>-2.36</u>	<u>0.41</u>	<u>-0.02</u>	<u>0.61</u>	0.30	0.07	<u>-0.32</u>	*	*
TiO2	0.80	*	0.47	-0.38	<u>-1.41</u>	<u>1.33</u>	<u>0.18</u>	<u>0.23</u>	-2.83	0.47	<u>-0.70</u>	*	*
Al2O3	-0.24	6.05	0.08	-0.18	<u>3.84</u>	<u>-0.87</u>	<u>0.14</u>	<u>-0.35</u>	-1.48	-0.24	<u>-0.49</u>	*	*
Fe2O3T	3.64	-2.48	1.37	0.85	<u>2.81</u>	<u>0.73</u>	<u>0.08</u>	<u>-0.38</u>	-0.05	-0.05	<u>0.44</u>	0.15	*
MnO	0.63	*	-0.41	-0.95	<u>3.42</u>	<u>1.35</u>	<u>0.67</u>	<u>-0.21</u>	2.69	-0.62	<u>-1.19</u>	0.31	*
MgO	4.49	-1.32	-1.98	0.55	<u>19.17</u>	<u>1.32</u>	<u>0.66</u>	<u>-0.33</u>	0.66	-1.32	<u>-0.07</u>	0.59	*
CaO	7.26	2.10	0.02	-0.12	<u>2.95</u>	<u>0.88</u>	<u>0.15</u>	<u>0.36</u>	-1.72	0.02	<u>-0.18</u>	-1.99	*
Na2O	-0.64	3.03	-0.61	0.24	<u>-0.91</u>	<u>1.06</u>	<u>-0.61</u>	<u>0.15</u>	-1.52	-0.30	<u>-0.23</u>	*	*
K2O	-0.63	2.54	-0.36	-3.66	<u>0.42</u>	<u>0.59</u>	<u>-1.04</u>	<u>0.16</u>	-0.01	0.16	<u>-0.88</u>	*	*
P2O5	4.82	*	0.44	-0.23	<u>3.56</u>	<u>0.43</u>	<u>-0.09</u>	<u>0.43</u>	-1.23	-1.23	<u>0.95</u>	*	*
Ag	*	*	*	*	*	<u>-2.01</u>	*	<u>-3.20</u>	*	*	*	*	*
Ba	-0.19	*	-0.93	-0.22	<u>4.65</u>	<u>-0.27</u>	<u>-0.07</u>	<u>-0.10</u>	-0.32	-1.50	<u>-0.58</u>	1.64	0.12
Be	*	*	-0.70	*	*	*	*	*	*	*	*	*	*
Bi	*	*	0.55	*	*	<u>2.02</u>	*	<u>0.73</u>	*	*	*	*	*
C(tot)	*	*	*	*	*	<u>-1.12</u>	*	<u>-0.95</u>	*	*	*	*	*
Cd	*	*	<u>0.43</u>	*	*	<u>4.84</u>	<u>-1.29</u>	<u>0.83</u>	*	*	*	*	*
Ce	2.28	*	-0.47	*	<u>-2.28</u>	<u>0.80</u>	<u>-1.20</u>	<u>-0.13</u>	-0.72	-6.48	<u>-1.11</u>	1.88	0.78
Co	6.20	*	1.48	*	<u>-7.50</u>	<u>2.47</u>	*	<u>0.03</u>	-2.28	*	<u>3.10</u>	0.06	*
Cr	9.79	*	2.52	-7.06	<u>10.67</u>	<u>-0.30</u>	*	<u>0.28</u>	8.63	2.86	<u>0.28</u>	1.54	*
Cs	*	*	2.44	*	<u>-1.56</u>	<u>10.18</u>	<u>0.07</u>	<u>-0.33</u>	*	*	*	0.22	0.22
Cu	0.67	*	-0.25	-0.15	<u>-0.08</u>	<u>-1.61</u>	<u>0.33</u>	<u>0.25</u>	5.66	0.00	<u>-2.91</u>	-0.43	*
Dy	*	*	-0.47	*	<u>-2.96</u>	*	*	<u>-0.02</u>	*	*	<u>2.27</u>	0.17	0.30
Er	*	*	-0.47	*	<u>-3.41</u>	*	*	<u>-0.34</u>	*	*	*	-0.47	0.09
Eu	*	*	0.17	*	<u>-0.81</u>	*	*	<u>-2.16</u>	*	*	*	1.13	1.85
Ga	2.31	*	0.41	*	<u>4.21</u>	<u>-1.27</u>	<u>-0.62</u>	<u>0.33</u>	-1.24	-0.06	<u>3.52</u>	1.05	-0.32
Gd	*	*	0.03	*	<u>-1.79</u>	*	*	<u>-0.70</u>	-0.91	*	*	1.03	2.94
Hf	*	*	2.58	*	<u>3.93</u>	<u>-3.19</u>	*	<u>0.27</u>	-1.27	*	*	-6.14	0.08
Hg	*	*	*	*	*	<u>1.04</u>	*	<u>-0.03</u>	*	*	*	*	*
Ho	*	*	-0.64	*	<u>-2.63</u>	*	*	<u>-0.13</u>	*	*	*	-0.27	0.26
In	*	*	0.96	*	*	*	<u>-0.27</u>	<u>1.11</u>	*	*	*	*	*
La	-1.49	*	-0.86	-0.57	<u>-4.08</u>	<u>0.43</u>	<u>-0.89</u>	<u>-0.43</u>	4.25	3.67	<u>-1.03</u>	1.10	0.58
Li	*	*	-0.72	*	*	*	*	<u>-0.40</u>	*	*	<u>0.86</u>	*	*
Lu	*	*	-0.81	*	<u>-2.57</u>	*	*	<u>0.49</u>	*	*	*	-0.51	0.36
Mo	0.00	*	-7.80	*	*	<u>-0.99</u>	<u>0.00</u>	<u>0.51</u>	-5.66	*	*	*	*
Nb	-1.80	*	1.42	*	<u>-1.94</u>	<u>-0.80</u>	<u>0.14</u>	<u>0.00</u>	4.42	0.27	*	1.38	-1.32
Nd	0.93	*	-0.73	-1.60	<u>-2.10</u>	<u>-1.90</u>	<u>0.60</u>	<u>-0.53</u>	-3.06	-5.06	<u>-0.20</u>	0.32	0.68
Ni	7.73	*	-7.66	10.83	<u>-0.97</u>	<u>-1.64</u>	<u>-0.48</u>	<u>-0.87</u>	25.13	*	<u>1.93</u>	2.24	*
Pb	-0.53	*	-1.18	-2.82	<u>-1.96</u>	<u>-1.12</u>	<u>0.55</u>	<u>0.38</u>	3.88	2.24	<u>-2.66</u>	-0.71	*
Pr	*	*	-0.67	*	<u>-1.61</u>	*	*	<u>-0.44</u>	*	*	*	0.35	0.43
Rb	0.27	*	0.68	*	<u>0.14</u>	<u>-0.76</u>	<u>-0.27</u>	<u>1.26</u>	0.48	-0.55	*	0.29	-0.10
Sb	-2.13	*	1.03	*	*	<u>3.46</u>	<u>-0.36</u>	<u>0.63</u>	*	*	*	*	*
Sc	4.45	*	0.71	-0.66	<u>-1.31</u>	<u>-0.65</u>	*	<u>-0.39</u>	-0.78	*	*	2.78	-0.78
Se	*	*	-8.66	*	*	<u>0.56</u>	*	*	*	*	*	*	*
Sm	*	*	-0.41	*	<u>-1.86</u>	<u>-5.88</u>	<u>-0.66</u>	<u>-0.42</u>	*	*	<u>3.16</u>	0.19	0.89
Sn	0.95	*	0.02	*	*	<u>0.60</u>	<u>-0.53</u>	<u>-0.30</u>	*	*	*	*	0.30
Sr	-0.44	*	-1.16	0.35	<u>0.29</u>	<u>-0.87</u>	<u>-0.29</u>	<u>0.00</u>	0.00	0.73	<u>0.58</u>	-0.89	-0.29
Ta	*	*	4.96	*	<u>5.77</u>	*	*	<u>-0.58</u>	*	*	*	0.47	0.46
Tb	*	*	0.84	*	<u>-2.03</u>	*	*	<u>-0.12</u>	*	*	*	0.71	1.92
Te	*	*	-3.86	*	*	<u>20.03</u>	<u>0.12</u>	*	*	*	*	*	*
Th	32.27	*	-0.78	*	<u>-2.59</u>	<u>-1.69</u>	<u>4.39</u>	<u>0.01</u>	*	6.35	*	-1.17	-0.02
Tl	176.58	*	0.86	*	*	<u>-1.65</u>	*	<u>0.16</u>	*	*	*	*	*
Tm	*	*	-0.77	*	<u>-2.69</u>	*	*	<u>0.38</u>	*	*	*	0.13	0.20
U	-1.30	*	-0.43	*	<u>-2.61</u>	<u>0.26</u>	*	<u>0.06</u>	*	*	*	-1.93	-0.44
V	2.29	*	-0.27	-1.30	<u>-0.09</u>	<u>-1.56</u>	<u>0.01</u>	<u>-0.13</u>	0.64	-4.31	<u>0.94</u>	1.75	*
W	*	*	-1.59	*	<u>-1.72</u>	<u>-1.07</u>	*	<u>-0.04</u>	*	*	*	*	-1.26
Y	2.25	*	-0.33	-0.14	<u>6.60</u>	<u>0.30</u>	<u>0.93</u>	<u>0.03</u>	2.25	*	<u>-3.18</u>	0.25	0.00
Yb	*	*	-0.57	*	<u>-3.61</u>	<u>-1.39</u>	*	<u>0.08</u>	*	*	*	-0.67	-0.35
Zn	1.19	*	-5.85	0.97	<u>17.88</u>	<u>-0.15</u>	<u>0.70</u>	<u>-0.60</u>	1.03	0.92	<u>-0.51</u>	-3.83	*
Zr	-0.62	*	-2.34	-1.61	<u>-0.37</u>	<u>-0.55</u>	<u>0.62</u>	<u>0.00</u>	-7.02	0.25	<u>-1.48</u>	-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	<u>-0.83</u>	<u>0.04</u>	<u>1.35</u>	<u>0.76</u>	-0.89	-0.44	*	<u>0.19</u>	<u>-0.22</u>	<u>-0.03</u>	<u>-0.35</u>	0.65	<u>0.25</u>
TiO2	<u>-0.32</u>	<u>-1.41</u>	<u>2.98</u>	<u>1.33</u>	0.47	-0.63	*	<u>-0.32</u>	<u>-0.86</u>	<u>-0.37</u>	<u>-0.70</u>	-21.51	<u>-1.69</u>
Al2O3	<u>1.05</u>	<u>-1.52</u>	<u>-0.22</u>	<u>0.64</u>	-0.44	-1.74	*	<u>0.11</u>	<u>0.07</u>	<u>0.03</u>	<u>-1.65</u>	-1.09	<u>0.27</u>
Fe2O3T	<u>1.14</u>	<u>-1.80</u>	<u>0.73</u>	<u>0.74</u>	-0.86	-1.17	*	<u>-0.33</u>	<u>-0.18</u>	<u>-0.15</u>	<u>-1.14</u>	3.60	<u>1.82</u>
MnO	<u>-7.46</u>	<u>-2.28</u>	<u>-0.21</u>	<u>0.73</u>	0.62	-2.49	<u>0.72</u>	<u>-0.73</u>	<u>0.31</u>	<u>-0.09</u>	<u>0.21</u>	0.62	<u>4.72</u>
MgO	<u>4.96</u>	<u>2.64</u>	<u>1.98</u>	<u>0.03</u>	-0.66	-1.32	*	<u>-1.65</u>	<u>-0.66</u>	<u>-4.26</u>	<u>-1.65</u>	11.90	<u>-1.39</u>
CaO	<u>2.26</u>	<u>-0.68</u>	<u>-0.68</u>	<u>1.83</u>	0.36	-1.37	*	<u>-0.34</u>	<u>-0.34</u>	<u>-0.08</u>	<u>-0.68</u>	-22.16	<u>-1.55</u>
Na2O	<u>-1.67</u>	<u>-3.79</u>	<u>-1.97</u>	<u>0.91</u>	-2.43	-3.64	*	<u>-0.46</u>	<u>0.46</u>	<u>1.17</u>	<u>0.61</u>	-7.59	<u>2.84</u>
K2O	<u>0.42</u>	<u>-1.03</u>	<u>0.42</u>	<u>0.53</u>	-0.36	-0.53	*	<u>-0.60</u>	<u>0.33</u>	<u>0.25</u>	<u>-0.86</u>	1.69	<u>-0.31</u>
P2O5	<u>3.56</u>	<u>-2.70</u>	<u>-1.66</u>	<u>0.85</u>	0.86	-1.23	*	*	<u>0.43</u>	<u>0.11</u>	<u>-0.62</u>	65.58	<u>0.01</u>
Ag	*	*	*	*	*	-0.12	*	*	*	*	*	*	<u>-0.13</u>
Ba	<u>-17.03</u>	<u>-2.21</u>	<u>1.11</u>	<u>0.16</u>	-0.89	-2.90	<u>-0.08</u>	*	<u>0.01</u>	<u>0.33</u>	<u>-0.03</u>	*	<u>0.32</u>
Be	*	*	*	<u>-0.51</u>	*	-0.58	*	*	*	*	*	*	<u>-1.55</u>
Bi	*	*	*	*	*	<u>-2.24</u>	*	*	*	*	*	*	<u>-0.32</u>
C(tot)	*	*	*	<u>-22.72</u>	*	10.18	*	*	*	*	<u>0.42</u>	*	<u>-1.55</u>
Cd	*	*	*	*	*	-0.79	*	*	*	*	*	3.69	<u>-0.12</u>
Ce	*	<u>-4.24</u>	*	*	*	-0.94	<u>-0.18</u>	*	*	*	<u>0.14</u>	*	<u>0.72</u>
Co	<u>-0.52</u>	<u>4.16</u>	*	<u>0.09</u>	*	-1.60	<u>-0.17</u>	*	*	*	*	2.35	<u>-0.11</u>
Cr	<u>7.07</u>	<u>0.28</u>	*	<u>-0.47</u>	*	-3.60	<u>-1.11</u>	*	*	<u>1.75</u>	*	-1.29	<u>0.43</u>
Cs	*	<u>4.23</u>	*	<u>-0.01</u>	*	<u>6.31</u>	*	*	*	*	*	*	<u>0.19</u>
Cu	<u>-15.19</u>	<u>14.48</u>	<u>-0.21</u>	<u>0.91</u>	0.42	-2.08	<u>0.44</u>	*	*	<u>0.77</u>	<u>1.54</u>	6.11	<u>0.28</u>
Dy	*	*	*	<u>0.24</u>	*	0.71	*	*	*	*	*	*	<u>0.69</u>
Er	*	*	*	<u>0.17</u>	*	0.65	*	*	*	*	*	*	<u>0.24</u>
Eu	*	*	*	<u>0.03</u>	*	-0.51	*	*	*	*	*	*	<u>1.03</u>
Ga	*	<u>1.15</u>	*	<u>0.37</u>	*	<u>-0.62</u>	<u>-0.47</u>	*	*	<u>-3.19</u>	*	*	<u>0.20</u>
Gd	*	*	*	<u>-0.42</u>	*	0.58	*	*	*	*	*	*	<u>0.87</u>
Hf	*	<u>-4.46</u>	*	<u>-0.51</u>	*	*	*	*	*	*	*	*	<u>0.30</u>
Hg	*	*	*	*	*	*	*	*	*	*	*	*	<u>-0.39</u>
Ho	*	*	*	<u>0.06</u>	*	0.26	*	*	*	*	*	*	<u>0.31</u>
In	*	*	*	*	*	*	*	*	*	*	*	*	<u>-0.07</u>
La	*	<u>-3.04</u>	*	<u>-0.15</u>	<u>0.98</u>	-1.09	<u>1.00</u>	*	*	*	<u>-0.75</u>	*	<u>0.28</u>
Li	<u>-1.64</u>	*	*	*	*	*	*	*	*	*	*	*	<u>-0.47</u>
Lu	*	*	*	<u>-0.15</u>	*	0.46	*	*	*	*	*	*	<u>0.51</u>
Mo	*	<u>0.00</u>	*	<u>-0.23</u>	*	-1.70	<u>-0.81</u>	*	*	*	*	*	<u>-2.50</u>
Nb	<u>4.96</u>	<u>0.14</u>	*	<u>-1.14</u>	0.27	<u>-0.17</u>	<u>-0.13</u>	*	*	<u>-0.25</u>	*	*	<u>-0.50</u>
Nd	*	<u>3.13</u>	*	<u>0.02</u>	*	-1.07	*	*	*	*	*	*	<u>1.14</u>
Ni	<u>19.84</u>	<u>1.93</u>	*	<u>1.84</u>	*	-2.22	<u>0.41</u>	*	*	<u>-2.37</u>	*	2.13	<u>-0.28</u>
Pb	*	<u>-2.06</u>	*	<u>0.32</u>	4.34	-6.09	<u>1.20</u>	*	*	<u>0.73</u>	*	7.89	<u>0.42</u>
Pr	*	*	*	<u>0.05</u>	*	-0.87	*	*	*	*	*	*	<u>0.56</u>
Rb	<u>0.95</u>	<u>0.85</u>	<u>0.34</u>	<u>-0.01</u>	0.48	<u>-0.79</u>	<u>-0.08</u>	*	*	<u>0.41</u>	*	*	<u>0.73</u>
Sb	*	*	*	*	*	-1.26	*	*	*	*	*	-5.36	<u>0.40</u>
Sc	*	<u>2.23</u>	*	<u>0.13</u>	<u>2.23</u>	<u>1.23</u>	<u>-1.96</u>	*	*	*	*	*	<u>-0.24</u>
Se	*	*	*	*	*	9.44	*	*	*	*	*	0.83	<u>1.08</u>
Sm	*	*	*	<u>0.29</u>	*	-0.29	*	*	*	*	*	*	<u>0.79</u>
Sn	*	<u>-3.29</u>	*	<u>-0.17</u>	*	<u>-0.93</u>	*	*	*	*	*	*	<u>-0.98</u>
Sr	<u>2.18</u>	<u>-1.02</u>	<u>0.80</u>	<u>-0.09</u>	0.00	<u>-0.73</u>	<u>-0.24</u>	*	<u>-0.29</u>	<u>86.56</u>	*	*	<u>0.41</u>
Ta	*	*	*	<u>-0.29</u>	*	*	*	*	*	*	*	*	<u>-0.60</u>
Tb	*	*	*	<u>-0.35</u>	*	0.08	*	*	*	*	*	*	<u>0.37</u>
Te	*	*	*	*	*	*	*	*	*	*	*	4.33	<u>0.45</u>
Th	*	<u>16.95</u>	*	<u>0.19</u>	*	0.84	<u>-1.82</u>	*	*	<u>4.02</u>	*	*	<u>0.01</u>
Tl	*	*	*	<u>-0.47</u>	*	-3.75	*	*	*	*	*	3.48	<u>-0.38</u>
Tm	*	*	*	<u>0.13</u>	*	0.26	*	*	*	*	*	*	<u>0.82</u>
U	*	<u>3.90</u>	*	<u>0.26</u>	*	1.12	<u>-0.44</u>	*	*	*	*	*	<u>0.50</u>
V	*	<u>0.73</u>	*	<u>-0.01</u>	1.88	-2.08	<u>0.30</u>	*	*	<u>1.40</u>	<u>0.11</u>	-10.71	<u>-0.58</u>
W	*	*	*	*	*	<u>-3.01</u>	*	*	*	*	*	*	<u>1.27</u>
Y	<u>-4.86</u>	<u>-2.39</u>	*	<u>-0.36</u>	1.47	-0.64	<u>0.29</u>	*	*	<u>-0.20</u>	<u>-0.83</u>	*	<u>0.67</u>
Yb	*	*	*	<u>0.03</u>	*	0.57	*	*	*	*	*	*	<u>0.53</u>
Zn	<u>-3.72</u>	<u>-1.17</u>	<u>-0.14</u>	<u>1.55</u>	5.15	-0.49	<u>1.12</u>	*	*	<u>0.31</u>	<u>0.46</u>	-0.88	<u>0.09</u>
Zr	<u>-5.36</u>	<u>-0.86</u>	<u>0.62</u>	<u>-0.23</u>	-0.99	<u>-0.68</u>	<u>-0.21</u>	*	*	<u>0.06</u>	<u>-1.36</u>	*	<u>0.31</u>

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	<u>0.45</u>	1.23	*	<u>3.20</u>	<u>0.00</u>	<u>-2.13</u>	<u>0.35</u>	-0.78	<u>0.18</u>	-0.79	-0.52	-0.25	*
TiO2	<u>1.33</u>	0.47	-1.62	<u>1.33</u>	<u>-0.15</u>	0.47	<u>0.45</u>	-1.73	<u>0.18</u>	0.47	1.24	1.57	*
Al2O3	<u>-0.02</u>	0.21	*	<u>-0.09</u>	<u>0.07</u>	2.09	<u>0.04</u>	-3.36	<u>0.07</u>	4.17	-2.25	0.79	*
Fe2O3T	<u>0.33</u>	-0.25	-2.32	<u>0.23</u>	<u>-0.48</u>	0.15	<u>-0.43</u>	-0.35	<u>0.08</u>	-10.59	1.74	1.88	*
MnO	<u>1.35</u>	0.62	-4.15	<u>0.62</u>	<u>-0.57</u>	2.69	<u>0.67</u>	0.21	<u>-0.57</u>	-8.71	1.87	4.77	*
MgO	<u>-1.65</u>	-1.98	*	<u>-0.86</u>	<u>1.98</u>	12.56	<u>-0.63</u>	-1.06	<u>2.84</u>	3.30	5.95	-9.25	*
CaO	<u>-0.51</u>	0.02	*	<u>-1.20</u>	<u>2.09</u>	3.83	<u>0.01</u>	-0.33	<u>-0.51</u>	-3.10	6.36	-4.83	*
Na2O	<u>-2.73</u>	-0.91	*	<u>-0.20</u>	<u>0.46</u>	0.91	<u>-0.76</u>	-1.82	<u>0.00</u>	5.46	1.52	0.61	*
K2O	<u>0.16</u>	0.16	*	<u>-1.88</u>	<u>-0.26</u>	2.88	<u>-0.09</u>	-1.89	<u>0.08</u>	-1.72	-2.57	-2.06	*
P2O5	<u>-0.62</u>	-1.23	*	*	<u>1.37</u>	*	<u>0.32</u>	-0.40	<u>-0.41</u>	2.94	-2.07	*	*
Ag	*	*	*	<u>-6.23</u>	*	4.42	*	*	*	*	*	*	*
Ba	*	-0.50	-6.26	<u>0.02</u>	<u>0.82</u>	0.90	*	1.51	*	1.34	<u>0.41</u>	*	-0.32
Be	*	*	*	*	<u>0.05</u>	*	*	0.05	*	*	*	*	-0.08
Bi	*	*	-1.06	<u>-1.47</u>	*	*	*	*	*	*	*	*	*
C(tot)	*	*	*	<u>0.07</u>	<u>-3.44</u>	*	<u>-0.59</u>	*	<u>-0.39</u>	*	1.50	*	*
Cd	*	*	1.66	<u>-3.65</u>	*	*	*	*	*	*	*	*	*
Ce	*	0.48	-2.00	<u>0.43</u>	<u>0.14</u>	0.78	*	-0.35	*	-1.22	*	*	1.33
Co	*	*	-9.70	<u>-0.00</u>	*	0.44	*	0.22	*	*	*	*	-0.54
Cr	*	-0.60	-9.83	<u>3.90</u>	<u>0.28</u>	0.21	*	0.21	*	16.71	*	*	-1.87
Cs	*	-0.34	-0.18	<u>-0.90</u>	*	0.81	*	-0.50	*	*	*	*	-0.14
Cu	*	-1.00	-1.00	<u>-1.35</u>	<u>0.21</u>	14.57	*	-6.48	*	1.33	*	*	1.83
Dy	*	1.96	-0.57	<u>0.32</u>	<u>-2.55</u>	1.15	*	-2.64	*	-2.23	*	*	1.25
Er	*	0.81	-0.63	<u>-0.03</u>	<u>-3.10</u>	*	*	-3.39	*	-3.39	*	*	0.65
Eu	*	0.73	-0.95	<u>-0.53</u>	<u>-0.20</u>	0.84	*	-1.07	*	1.85	*	*	-0.06
Ga	*	-0.06	-3.61	<u>0.27</u>	*	1.15	*	48.33	*	*	*	*	-0.06
Gd	*	0.24	-1.94	<u>0.26</u>	<u>-0.47</u>	*	*	-2.43	*	0.91	*	*	0.15
Hf	*	-0.23	-4.77	<u>-0.10</u>	<u>2.55</u>	-0.97	*	-6.78	*	*	*	*	-0.38
Hg	*	*	*	*	<u>-0.40</u>	1.79	*	*	*	*	-0.44	*	*
Ho	*	1.54	-0.49	<u>0.00</u>	<u>-2.37</u>	*	*	-2.44	*	-2.18	*	*	0.64
In	*	*	*	<u>-0.42</u>	*	0.60	*	*	*	*	*	*	*
La	*	0.29	-3.33	<u>0.09</u>	<u>1.32</u>	0.11	*	-1.10	*	0.23	*	*	0.57
Li	*	*	-0.30	*	<u>-0.07</u>	*	*	1.17	*	-2.49	*	*	0.12
Lu	*	0.46	-0.25	<u>0.36</u>	<u>-2.57</u>	0.46	*	-3.11	*	-3.36	*	*	0.21
Mo	*	*	-0.28	<u>0.60</u>	<u>0.00</u>	<u>-2.12</u>	*	1.54	*	-2.83	*	*	0.35
Nb	*	-0.23	-0.66	<u>0.05</u>	<u>0.66</u>	*	*	-0.30	*	2.35	*	*	1.52
Nd	*	0.15	-1.07	<u>0.01</u>	<u>-0.63</u>	-3.13	*	-0.86	*	-1.73	*	*	0.40
Ni	*	-0.00	9.09	*	*	*	*	-1.03	*	-1.93	*	*	0.66
Pb	*	0.28	-1.22	<u>-2.56</u>	<u>0.49</u>	*	*	-16.53	*	-1.60	*	*	0.45
Pr	*	0.24	-0.85	<u>0.00</u>	<u>-0.69</u>	*	*	-0.61	*	-3.01	*	*	0.26
Rb	*	-0.12	-0.55	<u>-1.15</u>	<u>0.14</u>	1.70	*	-0.32	*	-6.07	*	*	0.25
Sb	*	*	1.82	<u>1.15</u>	<u>0.35</u>	1.26	*	*	*	*	*	*	*
Sc	*	0.79	-4.19	<u>3.81</u>	*	1.07	*	0.66	*	-0.78	*	*	1.34
Se	*	*	*	*	*	<u>-4.16</u>	*	*	*	*	*	*	*
Sm	*	1.15	-1.20	<u>0.08</u>	<u>-0.78</u>	0.07	*	-0.92	*	0.67	*	*	0.92
Sn	*	*	-12.60	<u>-0.68</u>	<u>-0.28</u>	*	*	*	*	*	*	*	-0.03
Sr	*	0.58	-0.15	<u>0.07</u>	<u>0.22</u>	0.15	*	51.39	*	0.58	-1.60	*	0.44
Ta	*	0.69	0.00	<u>-0.29</u>	*	-1.04	*	-0.46	*	*	*	*	0.81
Tb	*	1.31	-0.92	<u>-0.12</u>	<u>-1.19</u>	-0.23	*	-1.61	*	0.23	*	*	0.84
Te	*	*	*	*	*	*	*	*	*	*	*	*	*
Th	*	0.50	-0.30	<u>0.44</u>	*	1.49	*	2.07	*	-0.62	*	*	0.76
Tl	*	*	-0.77	<u>-6.57</u>	*	*	*	*	*	*	*	*	1.04
Tm	*	0.51	-0.20	<u>-0.26</u>	<u>-2.43</u>	*	*	*	*	-3.33	*	*	0.77
U	*	0.34	-0.61	<u>0.85</u>	*	-0.39	*	-1.80	*	-5.85	*	*	1.02
V	*	-0.19	-3.49	<u>0.58</u>	<u>0.94</u>	0.23	*	23.25	*	-1.01	*	*	-1.22
W	*	*	*	<u>1.30</u>	*	1.45	*	*	*	*	*	*	*
Y	*	1.64	-0.88	<u>0.22</u>	<u>-0.13</u>	*	*	-2.57	*	-8.70	*	*	1.70
Yb	*	0.15	0.00	<u>-0.31</u>	<u>-3.25</u>	0.41	*	-3.76	*	-4.84	*	*	0.72
Zn	*	1.19	-3.16	<u>-2.30</u>	<u>0.65</u>	1.79	*	-6.21	*	2.60	*	*	0.05
Zr	*	1.36	-1.87	<u>0.80</u>	<u>0.18</u>	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	<u>0.14</u>	-1.94	*	<u>0.00</u>	<u>-0.09</u>	1.54	*	<u>-0.20</u>	0.98	*	*
TiO2	0.61	-0.63	<u>-0.32</u>	-1.51	*	<u>0.23</u>	<u>-0.53</u>	0.47	-0.63	<u>-0.32</u>	-0.63	*	*
Al2O3	-0.44	0.79	<u>-0.09</u>	-1.85	*	<u>-0.02</u>	<u>0.07</u>	0.73	*	<u>0.40</u>	-0.44	*	*
Fe2O3T	-1.58	3.60	<u>0.03</u>	0.74	*	<u>-0.58</u>	<u>2.63</u>	3.40	-0.56	<u>-0.58</u>	-0.56	*	*
MnO	1.59	-18.03	<u>0.31</u>	0.00	*	<u>0.31</u>	<u>0.21</u>	1.66	0.62	<u>-0.21</u>	-0.41	*	*
MgO	-0.79	-7.93	<u>0.00</u>	-0.59	*	<u>0.66</u>	<u>-0.59</u>	1.32	*	<u>0.99</u>	-0.66	*	*
CaO	0.09	-1.02	<u>0.36</u>	-0.09	*	<u>-0.34</u>	<u>-0.94</u>	2.10	*	<u>0.18</u>	-0.68	*	*
Na2O	-2.49	-8.19	<u>0.91</u>	-0.21	*	<u>0.46</u>	<u>0.82</u>	-4.25	*	<u>0.46</u>	-1.82	*	*
K2O	-0.42	1.35	<u>0.08</u>	-1.02	*	<u>0.25</u>	<u>1.08</u>	-1.04	*	<u>0.08</u>	-0.53	*	*
P2O5	-1.38	-3.32	<u>0.22</u>	0.86	*	<u>-0.62</u>	<u>-0.09</u>	0.86	0.86	<u>-0.72</u>	-1.65	*	*
Ag	*	*	<u>0.08</u>	-1.41	*	*	*	*	3.58	*	*	0.00	*
Ba	0.55	*	<u>0.49</u>	-1.21	*	*	<u>0.30</u>	0.20	0.29	*	*	2.13	-4.62
Be	*	*	<u>0.15</u>	-1.65	*	*	*	*	-1.27	*	*	-0.27	*
Bi	*	*	<u>-0.27</u>	-0.43	*	*	*	*	*	*	*	0.42	*
C(tot)	*	*	<u>0.42</u>	-1.25	*	<u>0.42</u>	*	*	*	<u>6.36</u>	-7.82	*	*
Cd	-0.10	*	<u>0.05</u>	-0.18	*	*	*	*	0.39	*	*	-0.98	*
Ce	0.23	*	<u>0.52</u>	-0.96	1.53	*	*	*	-0.39	*	*	0.28	-3.97
Co	*	*	<u>-0.40</u>	-0.67	*	*	<u>9.46</u>	-0.16	-0.07	*	*	1.01	*
Cr	*	*	<u>-1.45</u>	-1.01	*	*	<u>-2.03</u>	6.33	-2.91	*	*	0.32	*
Cs	*	*	<u>0.25</u>	0.00	*	*	*	*	0.26	*	*	1.09	-2.77
Cu	0.56	*	<u>0.17</u>	5.41	*	*	<u>1.46</u>	-4.58	-0.33	*	4.83	0.83	*
Dy	*	*	<u>0.07</u>	-0.23	0.78	*	*	*	-0.07	*	*	0.14	-2.79
Er	*	*	<u>-0.16</u>	-0.53	0.70	*	*	*	-0.12	*	*	-0.22	-3.28
Eu	-2.50	*	<u>0.36</u>	-0.31	3.20	*	*	*	-0.06	*	*	2.41	-2.07
Ga	*	5.86	<u>-0.53</u>	0.09	*	*	*	5.86	0.06	*	*	0.30	*
Gd	*	*	<u>0.00</u>	-1.32	3.70	*	*	*	-0.33	*	*	1.49	-3.53
Hf	*	*	<u>0.13</u>	-0.45	*	*	*	*	0.08	*	*	0.84	*
Hg	-0.57	*	<u>2.05</u>	0.87	*	*	*	*	*	*	*	*	*
Ho	*	*	<u>0.19</u>	0.19	0.51	*	*	*	-0.13	*	*	0.26	-2.92
In	*	*	<u>-0.34</u>	-0.53	*	*	*	*	*	*	*	*	*
La	-1.61	*	<u>0.40</u>	-0.57	2.98	*	*	*	-0.63	*	*	2.41	-3.25
Li	-0.05	*	<u>0.23</u>	0.54	*	*	*	*	-0.13	*	*	-0.39	*
Lu	*	*	<u>0.87</u>	-0.30	*	*	*	*	-0.30	*	*	0.46	-2.45
Mo	*	1.41	<u>0.07</u>	-1.25	*	*	*	*	-0.71	*	*	-1.27	*
Nb	*	0.27	<u>-0.38</u>	-2.28	*	*	<u>0.66</u>	-1.80	-0.45	*	*	6.71	-0.01
Nd	-3.95	*	<u>0.30</u>	-1.00	-0.40	*	*	*	-0.80	*	*	1.46	-4.03
Ni	-1.00	-1.93	<u>-1.93</u>	-0.63	*	*	<u>4.83</u>	15.47	-1.72	*	*	0.29	*
Pb	-1.46	*	<u>0.59</u>	-0.80	*	*	<u>2.28</u>	-4.61	-0.99	*	*	-1.30	-6.48
Pr	*	*	<u>0.22</u>	-0.93	2.50	*	*	*	-0.33	*	*	1.02	-3.79
Rb	*	-0.14	<u>-0.38</u>	0.05	*	*	<u>0.14</u>	-0.96	0.07	*	*	0.27	-1.45
Sb	*	*	<u>-0.56</u>	-0.54	*	*	*	*	*	*	*	*	*
Sc	0.52	*	<u>-0.26</u>	1.83	*	*	*	1.83	-0.73	*	*	1.70	*
Se	0.84	*	<u>-0.56</u>	-0.50	*	*	*	*	*	*	*	*	*
Sm	*	*	<u>0.90</u>	-0.35	-0.07	*	*	*	-0.63	*	*	0.69	-4.07
Sn	*	*	<u>0.47</u>	2.90	*	*	*	*	-0.01	*	*	*	*
Sr	0.68	-1.02	<u>0.29</u>	-0.16	*	*	<u>0.36</u>	0.87	2.18	*	*	0.44	-7.19
Ta	*	*	<u>0.00</u>	1.59	*	*	*	*	-2.08	*	*	2.08	0.03
Tb	*	*	<u>0.12</u>	-0.66	*	*	*	*	0.38	*	*	1.00	-2.18
Te	*	*	<u>-0.47</u>	*	*	*	*	*	*	*	*	*	*
Th	*	20.93	<u>-0.47</u>	0.52	-13.42	*	*	*	-0.78	*	*	-0.30	*
Tl	*	*	<u>-0.02</u>	*	*	*	*	*	0.14	*	*	-2.03	*
Tm	*	*	<u>0.90</u>	-0.71	*	*	*	*	0.00	*	*	1.02	-2.63
U	*	*	<u>0.03</u>	0.65	-10.77	*	*	12.36	-0.02	*	*	-0.89	-1.19
V	-2.25	*	<u>-0.92</u>	-2.22	*	*	<u>-0.30</u>	2.29	0.35	*	*	0.60	*
W	*	-12.59	<u>0.40</u>	1.78	*	*	*	*	*	*	*	2.99	*
Y	*	3.81	<u>0.03</u>	-0.52	1.23	*	<u>1.52</u>	-5.57	0.22	*	*	-0.41	-3.98
Yb	-4.08	*	<u>-1.13</u>	-0.12	1.08	*	*	*	-0.31	*	*	0.46	-3.09
Zn	-1.52	-0.92	<u>0.65</u>	0.54	*	*	<u>2.87</u>	1.08	1.52	*	2.06	-2.00	*
Zr	*	-0.99	<u>0.62</u>	-0.02	*	*	<u>-1.73</u>	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	<u>0.23</u>	0.93	<u>-3.22</u>	<u>-0.11</u>	<u>-1.12</u>	<u>0.28</u>	0.05	<u>-0.45</u>
TiO2	0.50	-5.03	2.41	1.02	0.47	<u>-0.32</u>	0.47	<u>-0.21</u>	<u>-0.32</u>	<u>-0.97</u>	<u>-0.32</u>	0.25	<u>0.29</u>
Al2O3	-0.19	-0.57	-0.20	-0.57	0.73	<u>-0.45</u>	0.86	<u>5.94</u>	<u>-0.09</u>	<u>0.51</u>	<u>-0.64</u>	2.42	<u>-0.54</u>
Fe2O3T	1.72	1.77	-0.16	0.46	-1.37	<u>-0.94</u>	0.35	<u>-2.15</u>	<u>0.08</u>	<u>0.64</u>	<u>-0.63</u>	3.20	<u>-0.68</u>
MnO	0.76	0.62	0.37	0.52	-1.45	<u>-0.73</u>	-0.41	<u>-1.81</u>	<u>-0.21</u>	*	<u>-0.73</u>	2.28	<u>2.85</u>
MgO	2.58	-3.97	0.93	0.00	-1.32	<u>0.00</u>	1.98	*	<u>1.32</u>	<u>-1.19</u>	<u>0.00</u>	-1.06	<u>-0.10</u>
CaO	0.19	-1.37	0.09	2.10	-1.72	<u>0.18</u>	0.36	<u>2.95</u>	<u>-0.51</u>	<u>-1.62</u>	<u>-0.16</u>	-0.02	<u>-0.34</u>
Na2O	1.06	0.30	0.42	7.89	2.73	<u>0.61</u>	2.12	*	<u>1.52</u>	<u>-0.64</u>	<u>0.00</u>	-9.59	<u>-0.61</u>
K2O	0.39	0.84	-0.37	3.05	-0.70	<u>-0.18</u>	1.01	<u>3.06</u>	<u>0.42</u>	<u>0.04</u>	<u>-0.43</u>	1.47	<u>-0.18</u>
P2O5	0.81	-1.23	0.67	1.69	-3.32	<u>-0.62</u>	0.86	*	<u>0.01</u>	<u>1.99</u>	<u>-0.62</u>	0.65	<u>0.95</u>
Ag	*	*	*	*	*	<u>1.25</u>	<u>-0.97</u>	*	<u>0.52</u>	<u>-2.15</u>	*	1.21	*
Ba	-0.03	-0.10	-0.41	0.86	-0.58	<u>0.89</u>	1.69	<u>5.48</u>	<u>0.63</u>	<u>-13.66</u>	<u>-0.03</u>	-1.59	*
Be	*	*	*	*	*	*	0.11	*	<u>0.24</u>	*	<u>0.18</u>	*	*
Bi	0.17	*	-0.48	*	*	<u>-0.63</u>	0.75	*	<u>-0.66</u>	*	*	*	*
C(tot)	*	*	*	*	*	*	*	*	*	*	*	1.69	*
Cd	*	*	*	*	*	*	<u>-0.89</u>	*	<u>0.66</u>	*	*	<u>-12.07</u>	*
Ce	-0.42	1.03	0.15	-0.89	2.28	<u>-1.15</u>	0.28	*	<u>0.70</u>	<u>-0.22</u>	<u>-0.20</u>	4.54	*
Co	*	1.96	-5.10	8.32	1.96	<u>-0.21</u>	-0.22	*	<u>0.03</u>	<u>-1.70</u>	<u>-0.33</u>	1.54	*
Cr	2.29	7.48	-1.66	5.17	1.71	<u>-0.18</u>	2.05	<u>97.81</u>	*	<u>-4.68</u>	<u>-0.01</u>	-1.75	*
Cs	11.24	40.18	0.18	2.24	-3.43	<u>-0.29</u>	-0.22	*	<u>0.23</u>	*	<u>0.17</u>	-1.05	*
Cu	-0.27	-1.17	-3.78	0.00	-3.08	<u>-1.12</u>	0.75	<u>0.25</u>	<u>0.17</u>	<u>-1.77</u>	<u>-0.42</u>	0.33	*
Dy	0.00	*	0.81	-1.56	*	<u>-0.24</u>	0.98	*	<u>-0.08</u>	<u>1.06</u>	<u>0.08</u>	-0.61	*
Er	*	*	0.91	-1.09	*	<u>-0.42</u>	0.81	*	<u>-0.34</u>	<u>1.09</u>	<u>-0.13</u>	0.70	*
Eu	*	*	2.75	-0.39	*	<u>0.14</u>	-0.06	*	<u>-0.20</u>	<u>0.82</u>	<u>0.03</u>	3.20	*
Ga	-0.06	-1.24	-4.05	1.12	-2.42	<u>0.38</u>	0.41	<u>10.62</u>	<u>-0.44</u>	<u>1.63</u>	<u>-0.15</u>	-0.77	*
Gd	*	*	2.61	-1.70	*	<u>-0.45</u>	-0.18	*	<u>-0.73</u>	<u>0.51</u>	<u>0.09</u>	1.15	*
Hf	0.15	3.82	0.64	-2.06	<u>-11.47</u>	<u>-0.82</u>	0.38	*	<u>-0.64</u>	*	<u>-1.71</u>	4.03	*
Hg	*	*	*	*	*	<u>-0.26</u>	*	*	*	<u>0.26</u>	*	*	*
Ho	*	*	-0.38	-1.28	*	<u>-0.32</u>	0.38	*	<u>-0.06</u>	<u>0.87</u>	<u>-0.16</u>	-0.41	*
In	*	*	*	*	*	*	*	*	<u>0.59</u>	*	*	-0.82	*
La	0.11	8.26	-0.02	-1.26	3.10	<u>-0.63</u>	-3.27	*	<u>0.37</u>	<u>-0.44</u>	<u>-0.06</u>	-2.01	*
Li	*	*	1.75	*	*	<u>0.02</u>	*	*	<u>0.99</u>	*	<u>0.94</u>	-4.68	*
Lu	*	*	0.46	-1.32	*	<u>-0.41</u>	-0.05	*	<u>-0.15</u>	<u>-1.24</u>	<u>-0.18</u>	-6.25	*
Mo	0.42	0.00	-1.58	*	-2.83	*	0.42	<u>7.07</u>	<u>0.11</u>	<u>-3.38</u>	*	-2.41	*
Nb	0.66	*	0.74	0.27	-1.80	<u>0.97</u>	-0.14	<u>-3.49</u>	<u>0.24</u>	*	<u>0.14</u>	*	*
Nd	0.93	1.60	-0.05	-1.66	-3.73	<u>-0.57</u>	0.73	*	<u>0.40</u>	<u>-0.25</u>	<u>-0.00</u>	-1.26	*
Ni	3.87	15.47	-5.59	<u>-0.00</u>	<u>-0.00</u>	<u>0.78</u>	7.15	<u>53.17</u>	<u>0.19</u>	<u>-2.68</u>	<u>0.45</u>	16.05	*
Pb	1.08	0.45	-0.03	-1.33	-2.06	<u>-0.36</u>	2.13	<u>-0.42</u>	<u>0.15</u>	<u>-0.07</u>	<u>0.91</u>	<u>-1.62</u>	*
Pr	*	*	-0.67	1.51	*	<u>-0.31</u>	0.47	*	<u>0.20</u>	<u>-0.55</u>	<u>0.00</u>	-0.67	*
Rb	0.52	-3.41	-1.01	0.48	-0.55	<u>1.77</u>	-0.75	<u>-0.38</u>	<u>0.14</u>	<u>-0.63</u>	<u>2.69</u>	1.31	*
Sb	*	*	0.35	*	*	<u>-2.92</u>	0.10	*	<u>-0.20</u>	<u>-4.46</u>	*	-1.20	*
Sc	1.89	7.07	-0.26	*	9.69	<u>2.32</u>	-0.05	*	<u>0.26</u>	*	<u>0.76</u>	*	*
Se	*	*	*	*	*	*	13.33	*	*	<u>-0.06</u>	*	6.05	*
Sm	1.82	*	-0.18	-1.23	0.67	<u>-0.53</u>	0.50	*	<u>0.43</u>	<u>-0.31</u>	<u>0.04</u>	-0.69	*
Sn	*	86.26	0.07	*	*	*	-0.96	*	<u>-0.78</u>	<u>-2.64</u>	*	-2.72	*
Sr	0.76	-0.73	-0.96	-0.29	-1.16	<u>-1.67</u>	0.00	<u>-0.36</u>	<u>0.25</u>	<u>-10.41</u>	<u>0.44</u>	3.79	*
Ta	*	56.50	1.04	*	*	<u>1.56</u>	-0.23	*	<u>-0.35</u>	*	<u>0.40</u>	-6.17	*
Tb	*	*	2.07	-0.69	*	<u>0.12</u>	-0.08	*	<u>-0.19</u>	<u>0.88</u>	<u>-0.04</u>	-8.77	*
Te	*	*	*	*	*	*	*	*	<u>-0.23</u>	*	*	0.82	*
Th	0.19	-0.13	0.68	1.81	-3.37	<u>-0.23</u>	0.08	<u>4.79</u>	<u>-0.03</u>	<u>-1.33</u>	<u>-0.15</u>	1.16	*
Tl	6.64	*	0.23	*	*	*	*	*	<u>0.11</u>	*	*	-2.26	*
Tm	*	*	0.51	-1.28	*	<u>-0.38</u>	*	*	<u>0.00</u>	<u>0.69</u>	<u>-0.08</u>	0.26	*
U	-3.12	-1.30	4.85	0.71	-0.39	<u>-0.44</u>	0.80	*	<u>0.01</u>	<u>0.30</u>	<u>0.38</u>	-5.39	*
V	0.72	1.88	-2.43	1.05	0.64	<u>-0.84</u>	-0.23	<u>22.40</u>	<u>0.11</u>	<u>-5.64</u>	<u>-0.61</u>	9.30	*
W	*	*	-1.45	*	46.20	*	2.82	*	<u>-0.09</u>	*	*	2.44	*
Y	1.55	11.63	-1.07	-2.05	1.47	<u>-1.10</u>	-0.57	<u>-0.83</u>	<u>-0.05</u>	<u>1.99</u>	<u>0.19</u>	-0.80	*
Yb	*	*	0.15	-1.55	*	<u>-0.64</u>	0.00	*	<u>-0.26</u>	<u>0.61</u>	<u>-0.13</u>	-0.57	*
Zn	2.18	2.00	-1.15	1.46	-1.30	<u>-1.35</u>	2.11	<u>-0.11</u>	<u>1.11</u>	<u>-1.72</u>	<u>0.05</u>	-0.22	*
Zr	0.83	-2.71	2.93	-0.37	-1.23	<u>-0.68</u>	0.86	<u>-3.70</u>	<u>0.92</u>	*	<u>-2.96</u>	*	*

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

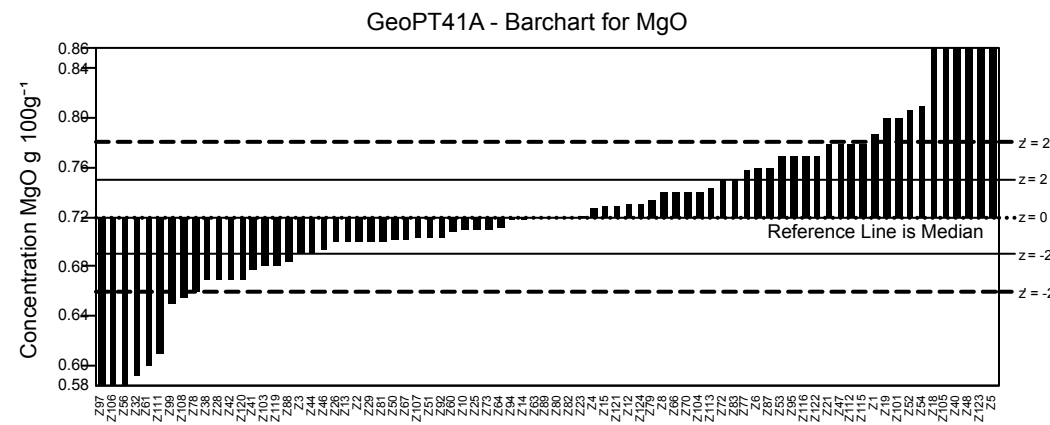
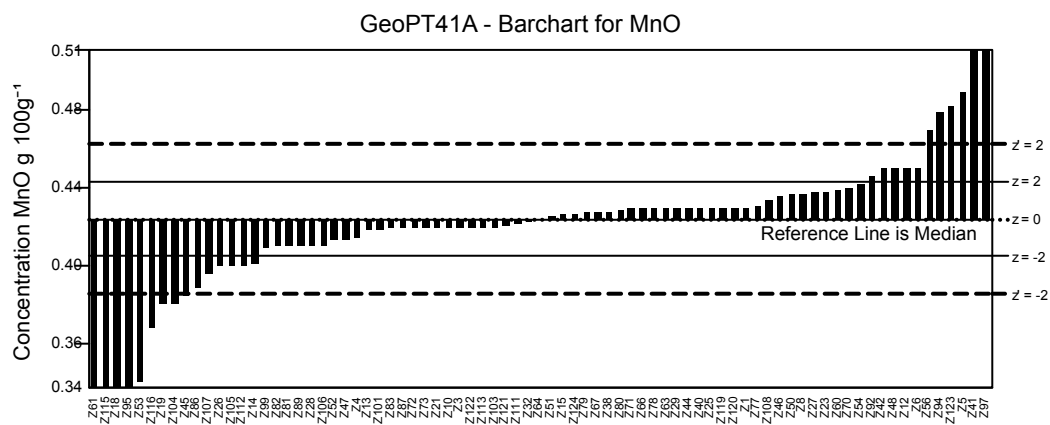
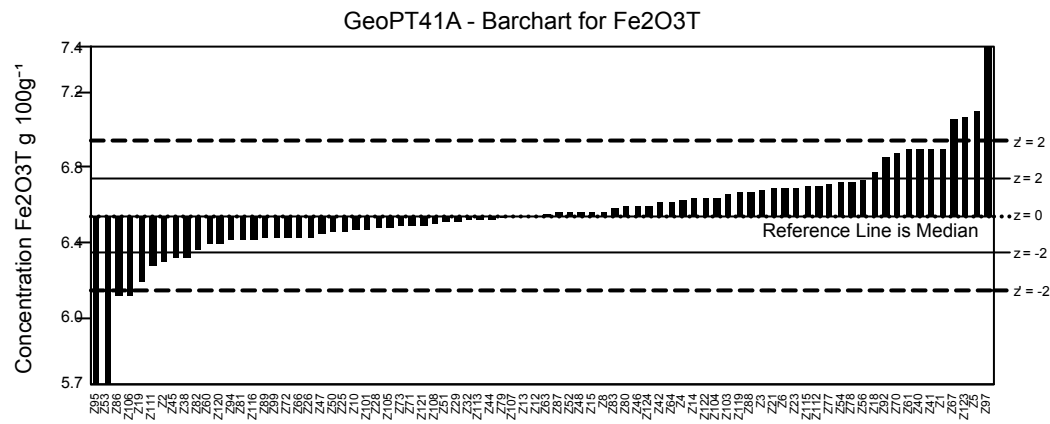
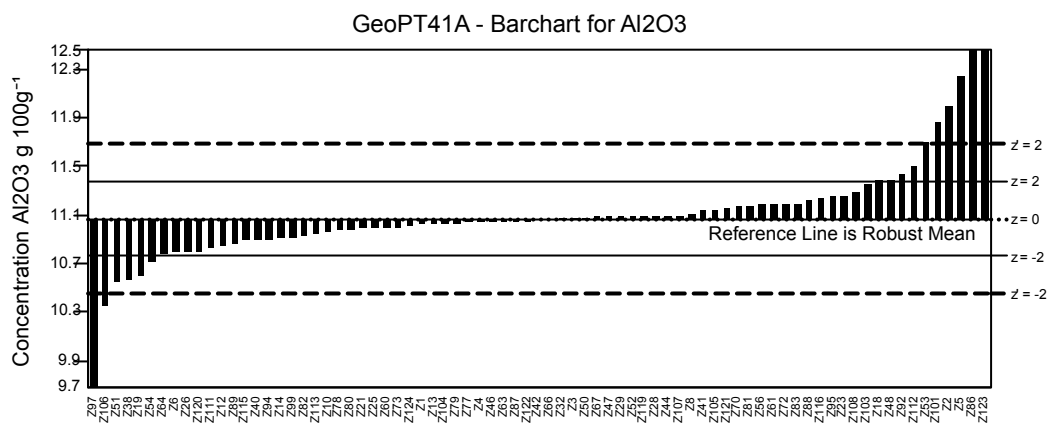
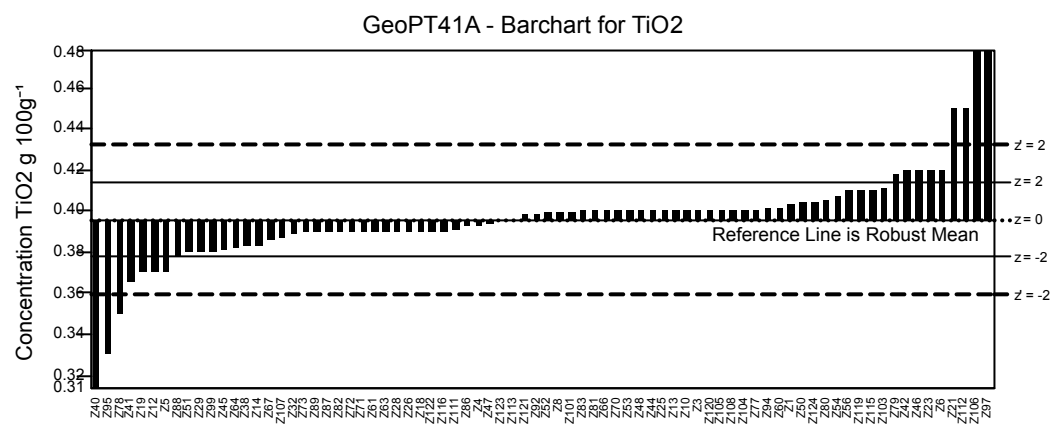
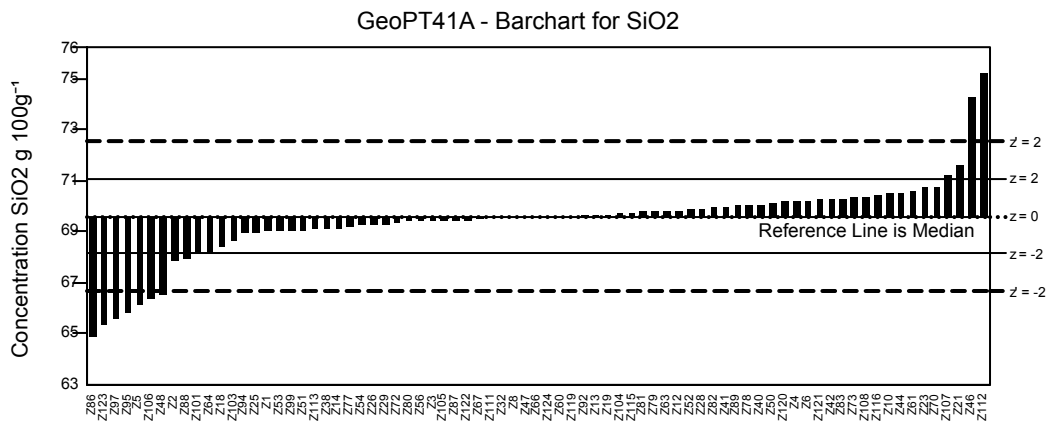
Lab Code	Z95	Z97	Z99	Z100	Z101	Z103	Z104	Z105	Z106	Z107	Z108	Z111	Z112
SiO2	<u>-2.58</u>	-5.51	<u>-0.40</u>	*	<u>-1.00</u>	<u>-0.67</u>	<u>0.07</u>	<u>-0.12</u>	<u>-2.19</u>	<u>1.09</u>	1.04	<u>-0.04</u>	3.80
TiO2	<u>-3.61</u>	23.55	<u>-0.86</u>	*	<u>0.18</u>	<u>0.84</u>	<u>0.23</u>	<u>0.23</u>	8.48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

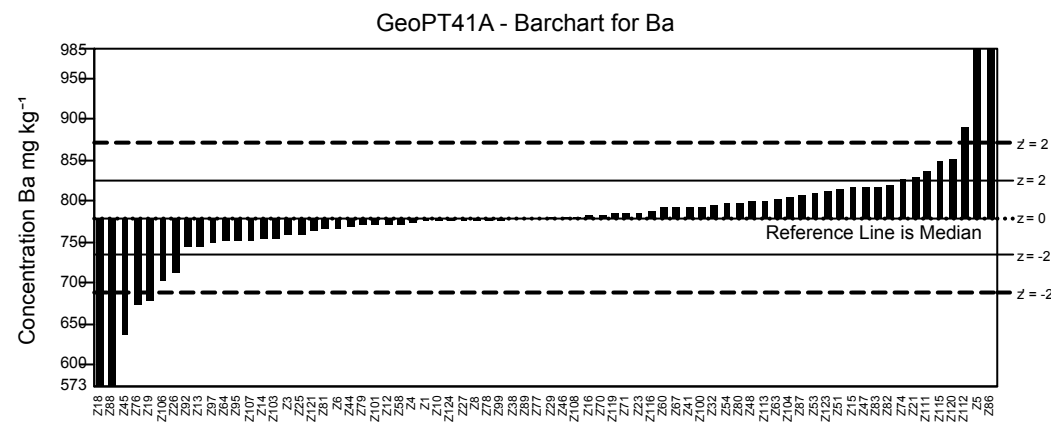
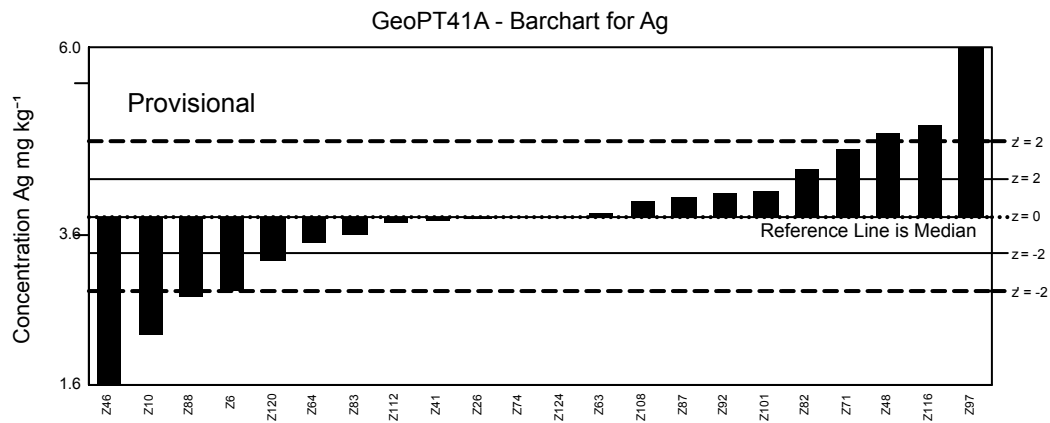
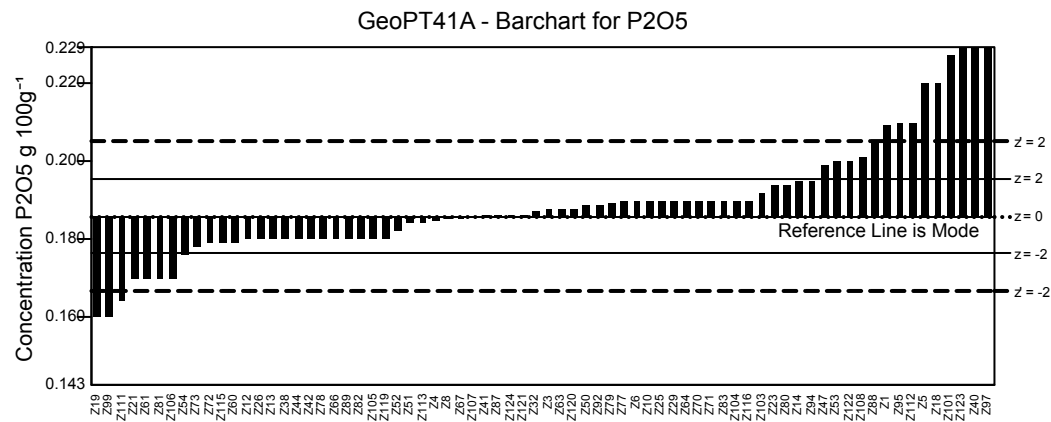
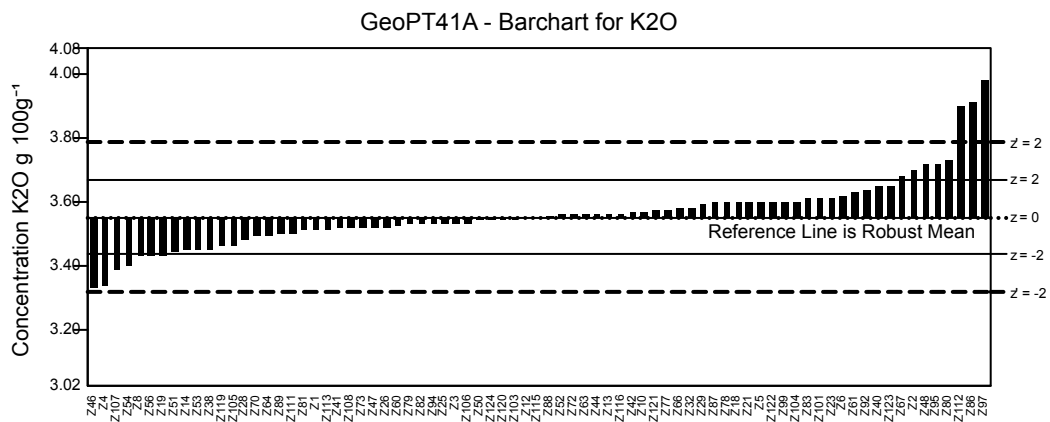
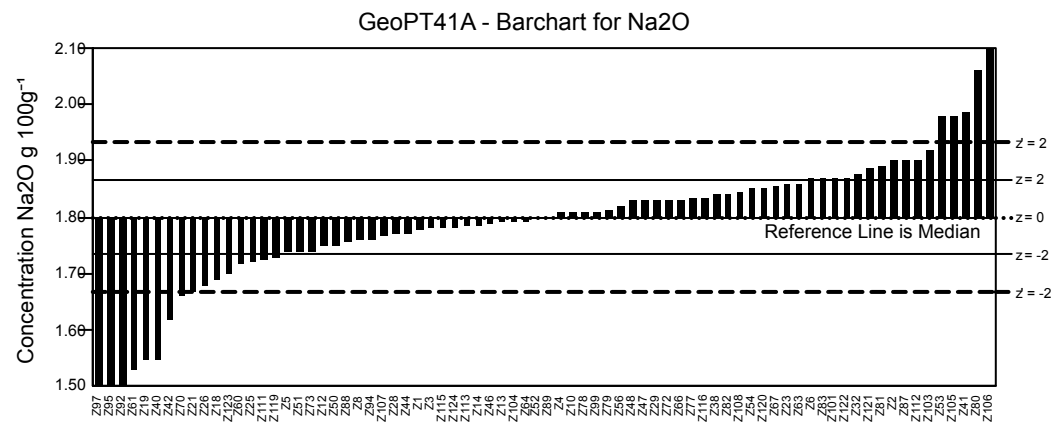
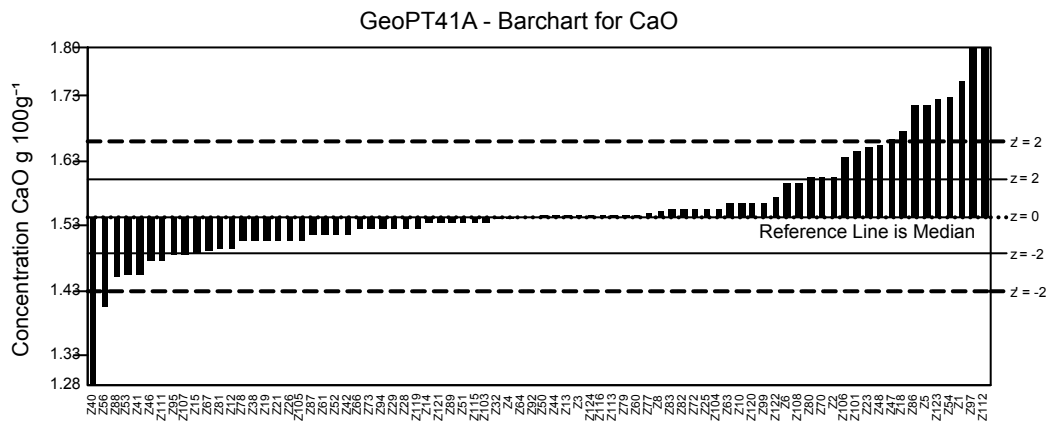
Bold entries are Data Quality 1 - Underlined entries are Data Quality 2 - Entries in italics are derived from Provisional Values.

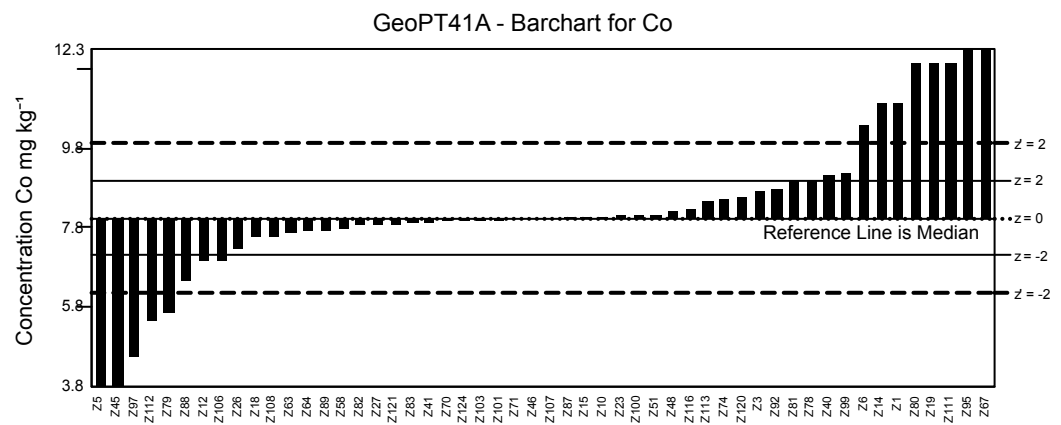
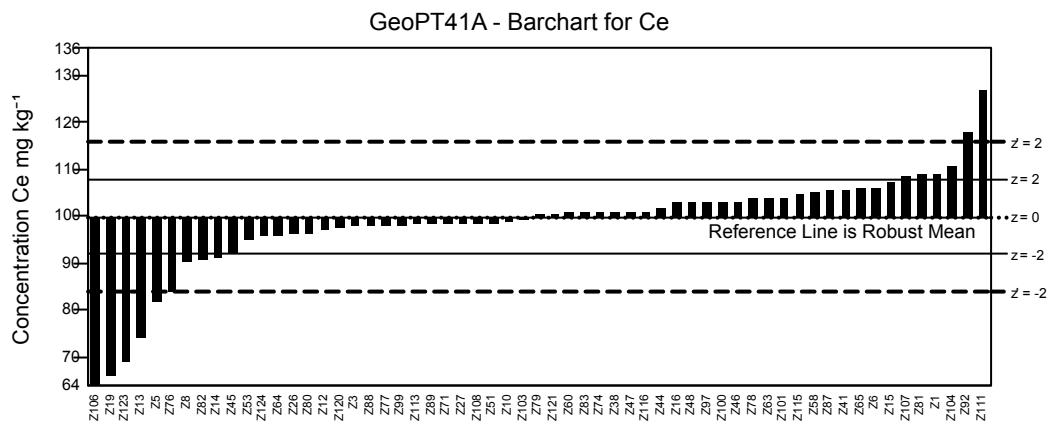
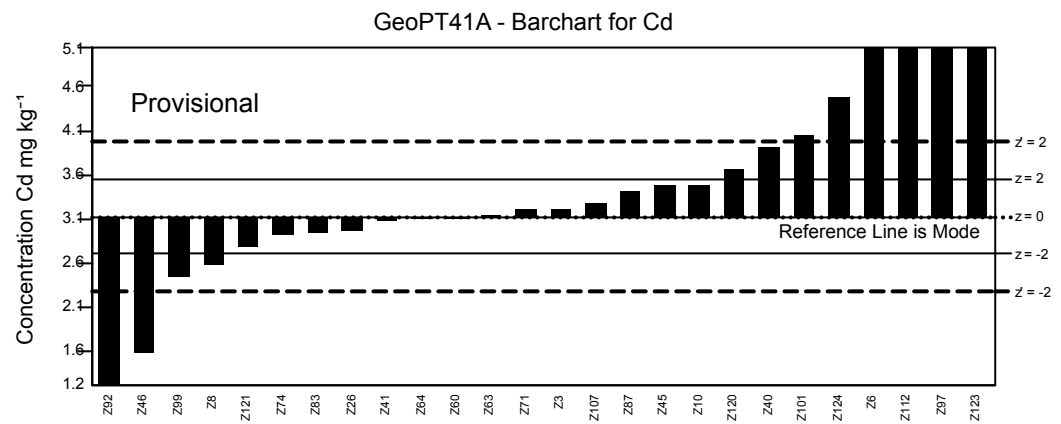
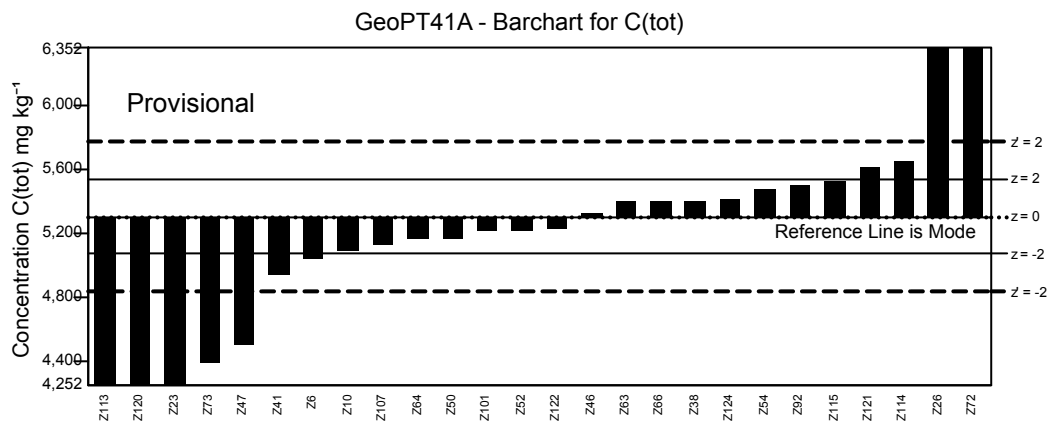
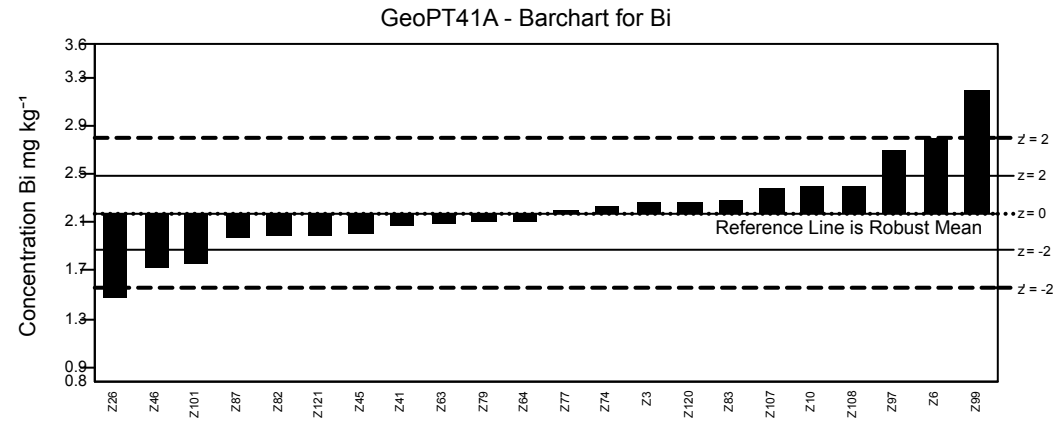
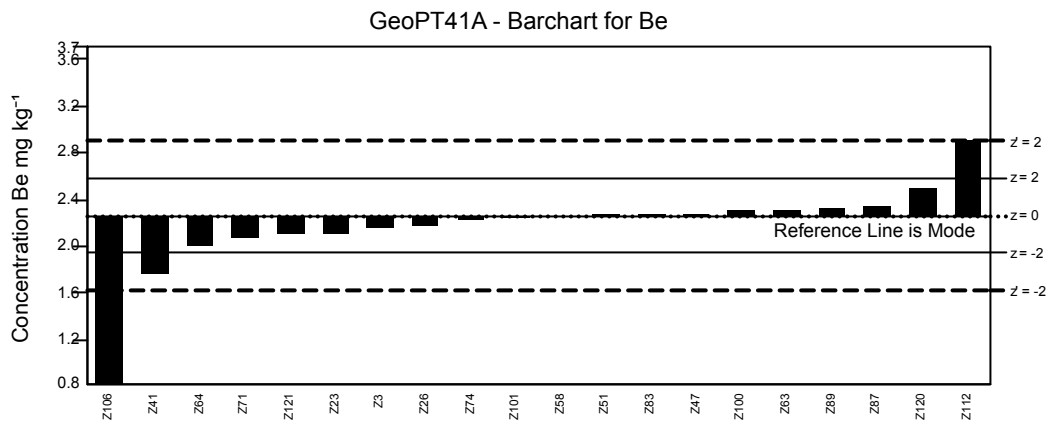
Table 3 - GeoPT41A Z-scores for Mineralised stream sediment, SSCO-1. 14/06/2017

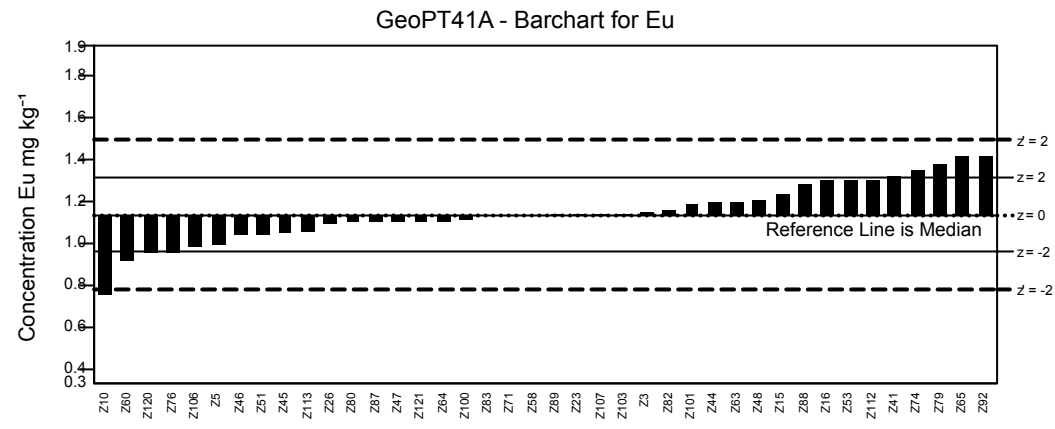
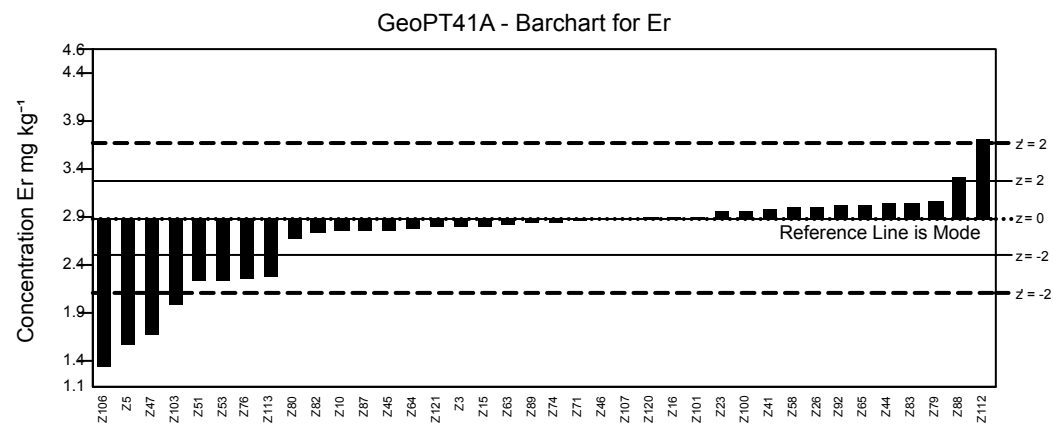
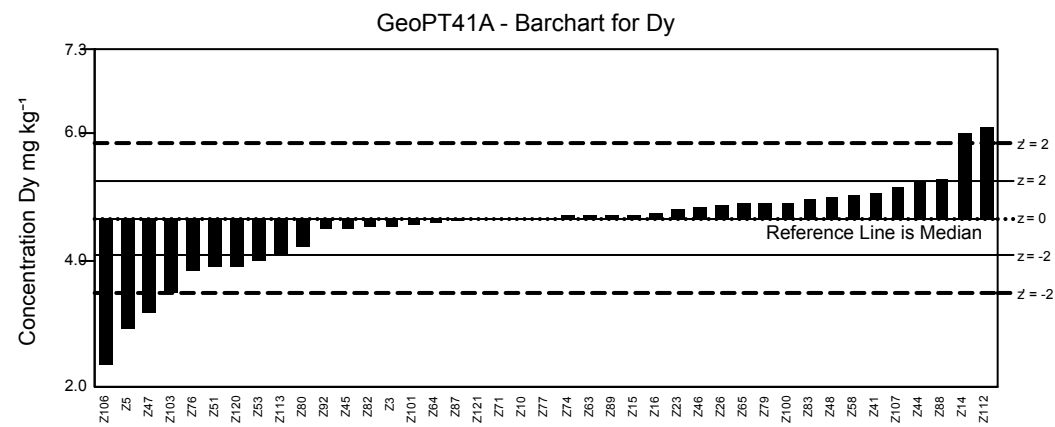
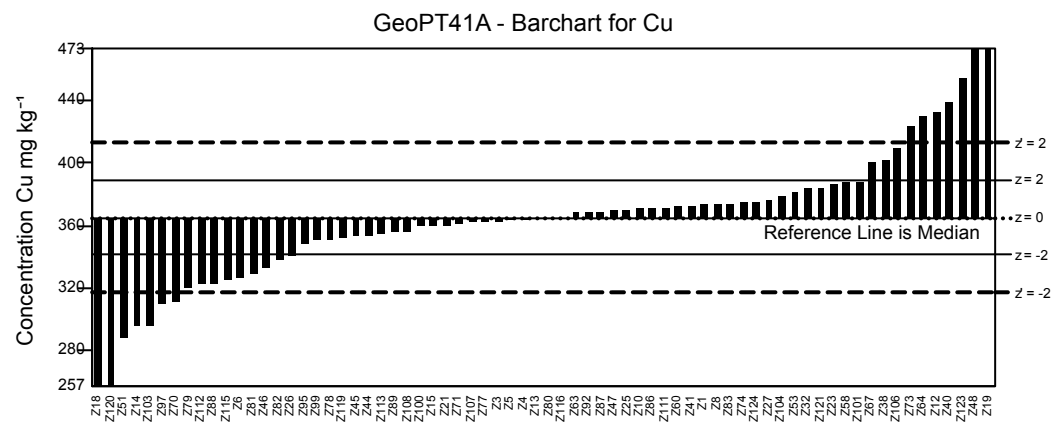
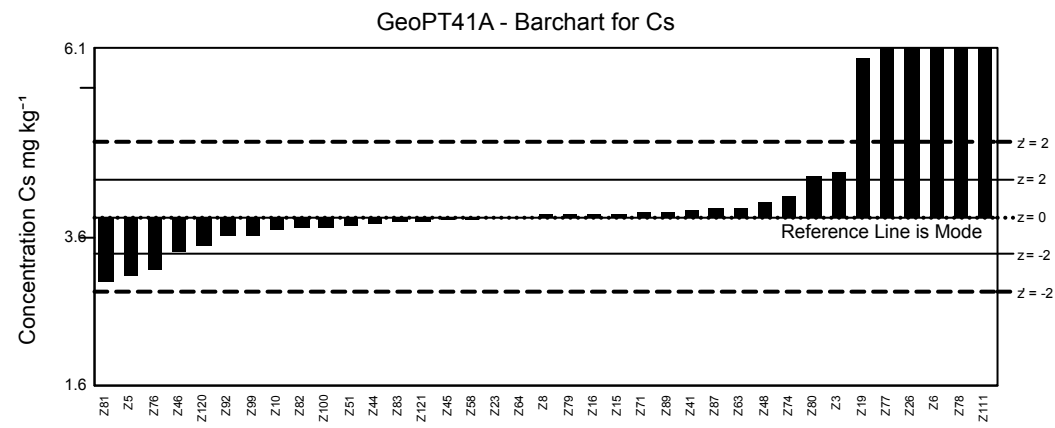
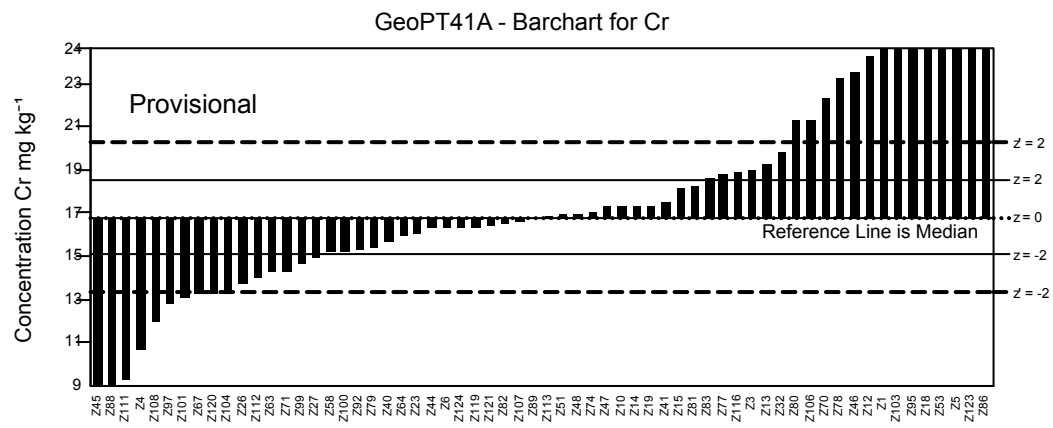
Lab Code	Z113	Z114	Z115	Z116	Z119	Z120	Z121	Z122	Z123	Z124
SiO2	-0.72	*	<u>0.09</u>	1.13	<u>0.01</u>	<u>0.40</u>	<u>0.45</u>	-0.22	-2.90	<u>0.00</u>
TiO2	-0.08	*	<u>0.78</u>	-0.63	<u>0.78</u>	<u>0.23</u>	<u>0.12</u>	-0.63	-0.04	<u>0.45</u>
Al2O3	-0.83	*	<u>-0.58</u>	1.18	<u>0.07</u>	<u>-0.87</u>	<u>0.28</u>	-0.11	<u>6.33</u>	<u>-0.19</u>
Fe2O3T	-0.28	*	<u>0.79</u>	-1.37	<u>0.63</u>	<u>-0.79</u>	<u>-0.27</u>	0.96	<u>2.66</u>	<u>0.23</u>
MnO	-0.41	*	<u>-8.86</u>	-5.80	<u>0.31</u>	<u>0.31</u>	<u>-0.19</u>	-0.41	<u>3.01</u>	<u>0.16</u>
MgO	1.59	*	<u>1.98</u>	3.30	<u>-1.32</u>	<u>-1.65</u>	<u>0.31</u>	3.30	<u>12.89</u>	<u>0.33</u>
CaO	0.05	*	<u>-0.16</u>	0.02	<u>-0.34</u>	<u>0.36</u>	<u>-0.17</u>	1.06	<u>3.13</u>	<u>0.01</u>
Na2O	-0.52	*	<u>-0.30</u>	1.06	<u>-1.06</u>	<u>0.76</u>	<u>1.34</u>	2.12	<u>-1.52</u>	<u>-0.30</u>
K2O	-0.63	*	<u>-0.01</u>	0.16	<u>-0.77</u>	<u>-0.09</u>	<u>0.18</u>	0.84	<u>0.84</u>	<u>-0.09</u>
P2O5	-0.40	*	<u>-0.72</u>	0.86	<u>-0.62</u>	<u>0.22</u>	<u>0.05</u>	2.94	<u>8.36</u>	<u>0.01</u>
Ag	*	*	*	4.83	*	<u>-1.21</u>	*	*	*	<u>0.00</u>
Ba	<u>0.47</u>	*	<u>1.54</u>	0.38	<u>0.12</u>	<u>1.61</u>	<u>-0.35</u>	*	<u>0.71</u>	<u>-0.10</u>
Be	*	*	*	*	*	<u>0.74</u>	<u>-0.53</u>	*	*	*
Bi	*	*	*	*	*	<u>0.28</u>	<u>-0.60</u>	*	*	*
C(tot)	<u>-22.72</u>	<u>1.49</u>	<u>0.93</u>	*	*	<u>-22.72</u>	<u>1.33</u>	-0.70	*	<u>0.47</u>
Cd	*	*	*	*	*	<u>1.28</u>	<u>-0.85</u>	*	<u>233.25</u>	<u>3.19</u>
Ce	<u>-0.20</u>	*	<u>0.60</u>	0.28	*	<u>-0.27</u>	<u>0.11</u>	*	<u>-3.86</u>	<u>-0.48</u>
Co	<u>0.47</u>	*	*	0.48	*	<u>0.56</u>	<u>-0.16</u>	*	*	<u>-0.08</u>
Cr	<u>0.01</u>	*	*	2.40	<u>-0.30</u>	<u>-2.03</u>	<u>-0.24</u>	*	<u>12.40</u>	<u>-0.30</u>
Cs	*	*	*	*	*	<u>-0.78</u>	<u>-0.11</u>	*	*	*
Cu	<u>-0.43</u>	*	<u>-1.65</u>	0.00	<u>-0.54</u>	<u>-6.53</u>	<u>0.79</u>	*	<u>3.70</u>	<u>0.42</u>
Dy	<u>-1.00</u>	*	*	*	*	<u>-1.29</u>	<u>-0.05</u>	*	*	*
Er	<u>-1.56</u>	*	*	*	*	<u>0.02</u>	<u>-0.26</u>	*	*	*
Eu	<u>-0.47</u>	*	*	*	*	<u>-1.04</u>	<u>-0.18</u>	*	*	*
Ga	<u>-0.47</u>	*	<u>-0.38</u>	-1.01	<u>-1.21</u>	<u>0.33</u>	<u>-0.35</u>	*	<u>1.15</u>	<u>0.56</u>
Gd	<u>-0.95</u>	*	*	*	*	<u>-0.44</u>	<u>-0.34</u>	*	*	*
Hf	*	*	*	*	*	<u>-5.93</u>	<u>-1.43</u>	*	*	<u>0.00</u>
Hg	*	<u>0.98</u>	<u>0.18</u>	*	*	*	*	*	<u>122.48</u>	<u>10.12</u>
Ho	<u>-1.43</u>	*	*	*	*	<u>0.26</u>	<u>-0.13</u>	*	*	*
In	*	*	*	*	*	<u>0.34</u>	<u>0.32</u>	*	*	*
La	<u>-1.35</u>	*	<u>0.37</u>	-0.63	*	<u>-0.23</u>	<u>-0.29</u>	*	<u>2.70</u>	<u>1.26</u>
Li	<u>1.08</u>	*	*	*	*	<u>-4.61</u>	<u>-1.61</u>	*	*	*
Lu	<u>-1.20</u>	*	*	*	*	<u>1.13</u>	<u>-0.29</u>	*	*	*
Mo	*	*	<u>-0.57</u>	2.12	*	<u>3.04</u>	<u>0.70</u>	*	*	<u>1.41</u>
Nb	<u>-0.98</u>	*	<u>-0.95</u>	1.10	<u>-0.38</u>	<u>-1.21</u>	<u>-0.18</u>	*	<u>-1.94</u>	<u>-0.38</u>
Nd	<u>-1.39</u>	*	<u>2.96</u>	-2.46	*	<u>0.10</u>	<u>-0.09</u>	*	<u>13.44</u>	<u>0.47</u>
Ni	*	*	<u>1.45</u>	3.67	<u>-0.00</u>	<u>1.45</u>	<u>-0.04</u>	*	<u>4.83</u>	<u>1.93</u>
Pb	<u>0.02</u>	*	<u>-0.25</u>	2.66	<u>0.06</u>	<u>1.77</u>	<u>-0.21</u>	*	<u>0.78</u>	<u>0.08</u>
Pr	<u>-1.47</u>	*	*	*	*	<u>-0.21</u>	<u>-0.16</u>	*	*	<u>0.53</u>
Rb	<u>0.45</u>	*	<u>-0.52</u>	0.48	<u>-0.48</u>	<u>0.34</u>	<u>-2.17</u>	*	<u>0.24</u>	<u>0.14</u>
Sb	*	*	*	*	*	<u>-2.06</u>	<u>-0.08</u>	*	*	*
Sc	<u>5.60</u>	*	*	0.50	*	<u>0.26</u>	<u>0.00</u>	*	*	<u>-1.70</u>
Se	*	*	*	0.00	*	<u>3.89</u>	*	*	*	*
Sm	<u>-0.85</u>	*	<u>-0.09</u>	*	*	<u>-0.09</u>	<u>-0.05</u>	*	*	<u>1.74</u>
Sn	*	*	*	2.70	<u>2.98</u>	<u>0.47</u>	<u>0.70</u>	*	*	*
Sr	<u>-0.49</u>	*	<u>-0.95</u>	0.00	<u>-0.44</u>	<u>-7.92</u>	<u>-0.42</u>	*	<u>0.36</u>	<u>0.07</u>
Ta	*	*	*	*	*	<u>3.11</u>	<u>0.08</u>	*	*	*
Tb	<u>-1.04</u>	*	*	*	*	<u>1.11</u>	<u>-0.11</u>	*	*	*
Te	*	*	*	*	*	<u>-0.12</u>	*	*	*	*
Th	<u>-1.75</u>	*	*	-0.13	<u>-2.50</u>	<u>-2.50</u>	<u>-0.47</u>	*	*	<u>0.74</u>
Tl	*	*	*	*	*	<u>-0.29</u>	<u>-0.49</u>	*	*	*
Tm	<u>-1.56</u>	*	*	*	*	<u>1.92</u>	<u>-0.13</u>	*	*	*
U	<u>-0.62</u>	*	*	3.25	*	<u>-1.74</u>	<u>0.08</u>	*	*	<u>-2.92</u>
V	<u>0.96</u>	*	<u>2.38</u>	2.46	<u>-0.30</u>	<u>-0.51</u>	<u>-0.55</u>	*	<u>7.54</u>	<u>-0.51</u>
W	*	*	*	-1.49	*	<u>0.40</u>	<u>0.21</u>	*	*	*
Y	<u>-1.73</u>	*	<u>0.50</u>	0.37	<u>1.12</u>	<u>0.66</u>	<u>0.08</u>	*	<u>-4.35</u>	<u>0.73</u>
Yb	<u>-1.13</u>	*	<u>2.47</u>	*	*	<u>0.15</u>	<u>-0.25</u>	*	*	*
Zn	<u>0.31</u>	*	<u>-0.32</u>	1.95	0.00	<u>-6.12</u>	<u>-0.06</u>	*	<u>1.03</u>	<u>-0.08</u>
Zr	*	*	<u>-0.76</u>	-1.23	0.00	<u>-9.74</u>	<u>-1.67</u>	*	<u>0.18</u>	<u>-0.18</u>

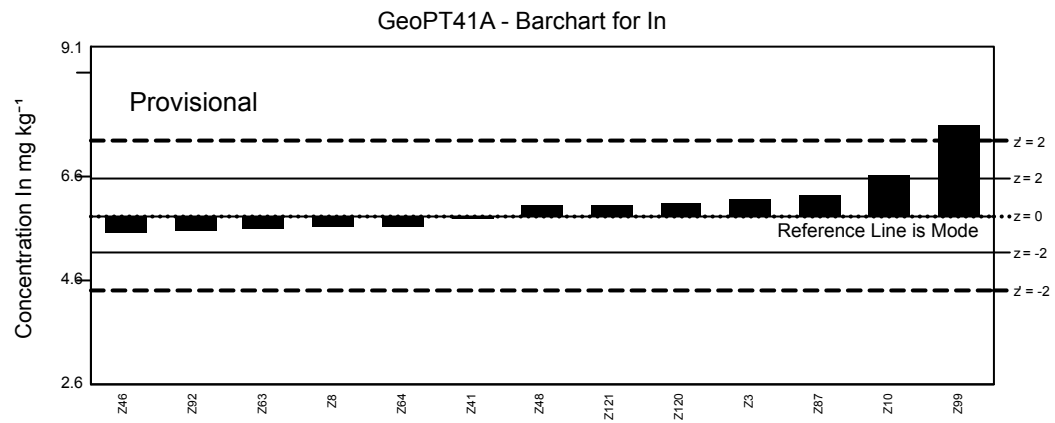
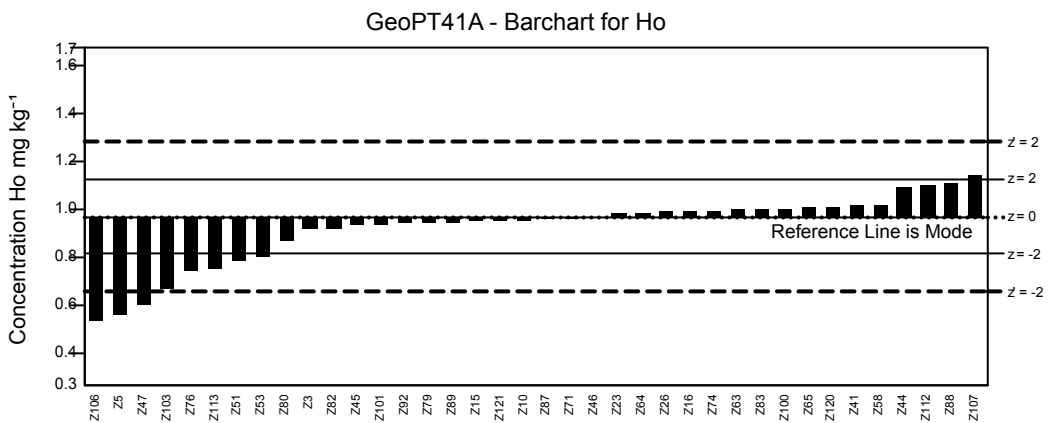
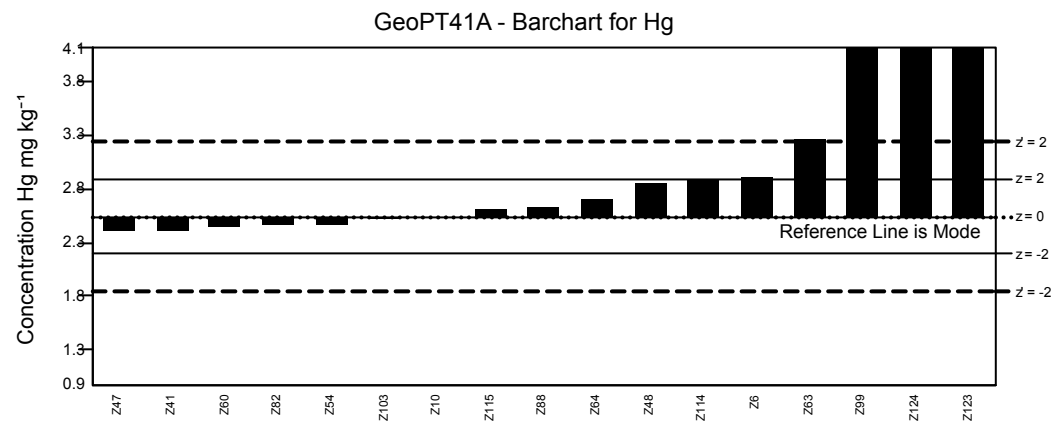
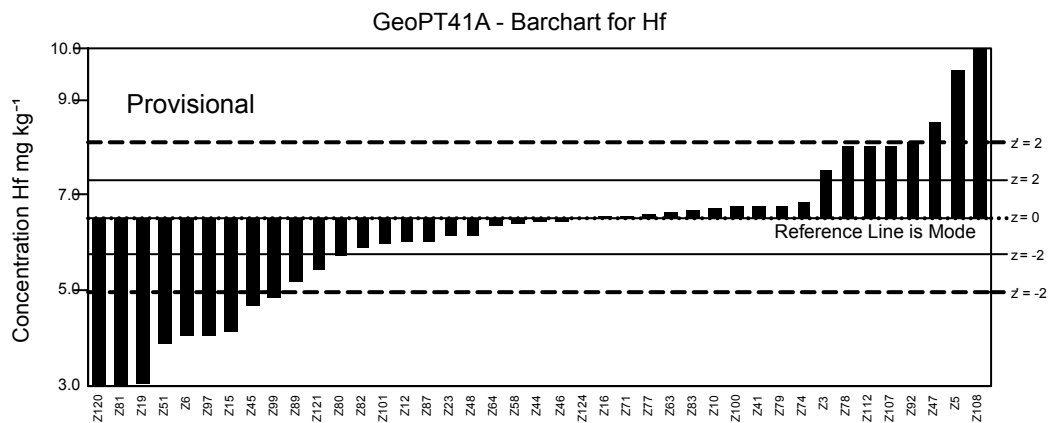
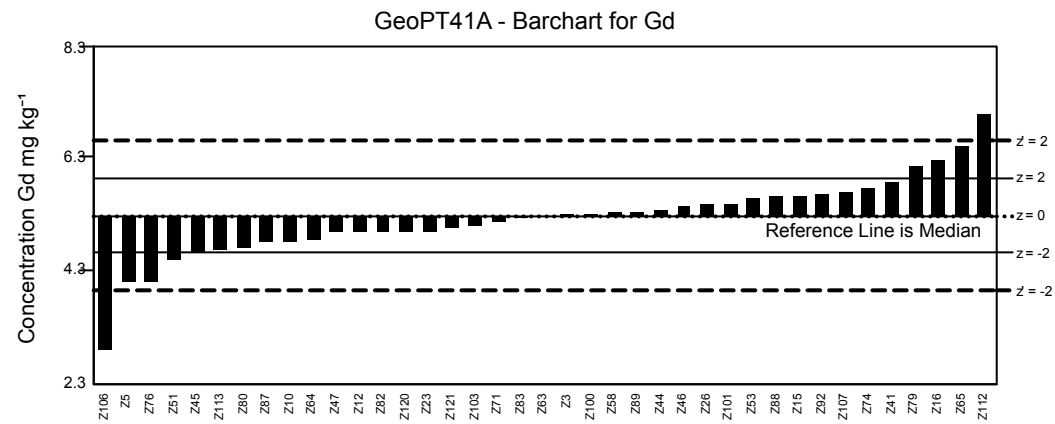
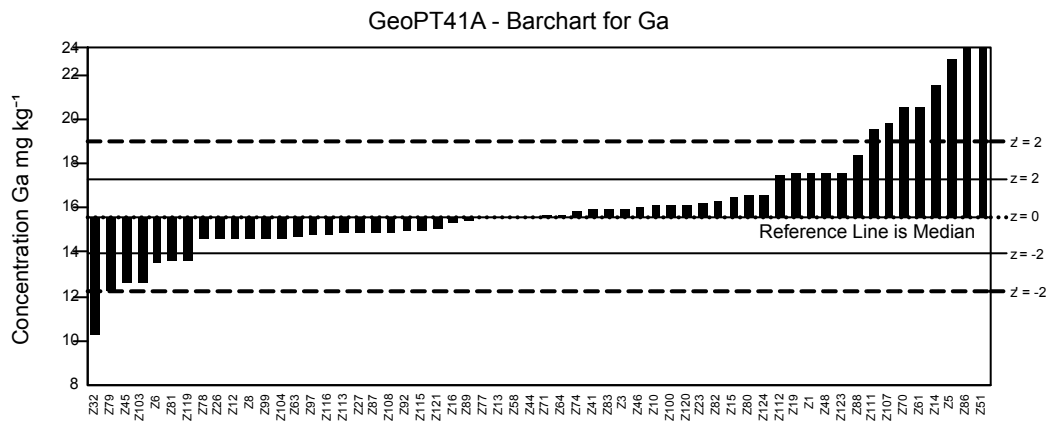
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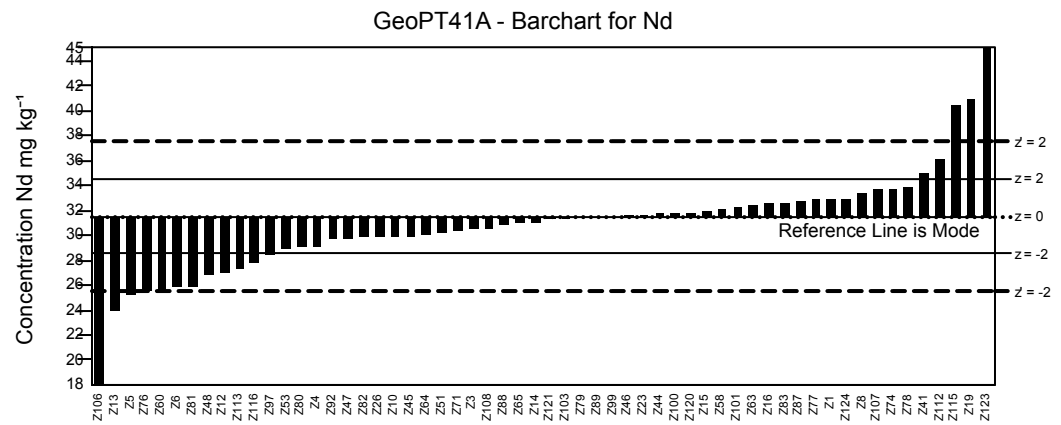
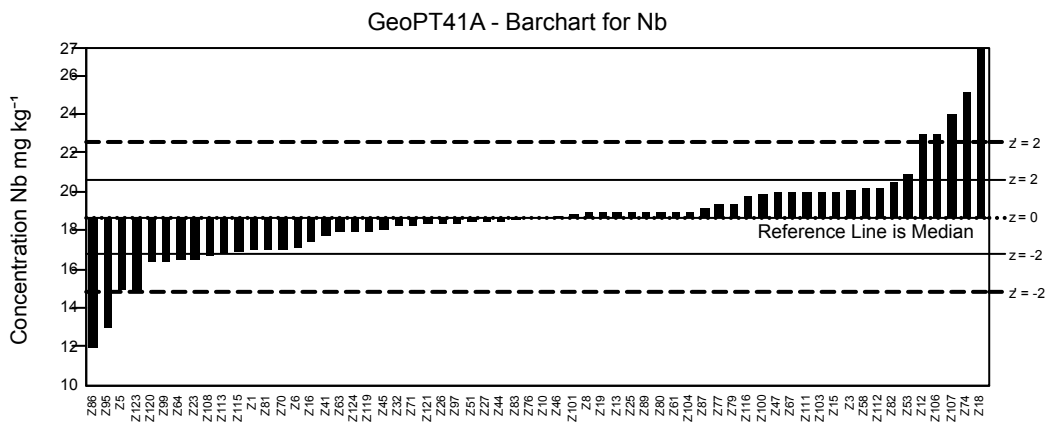
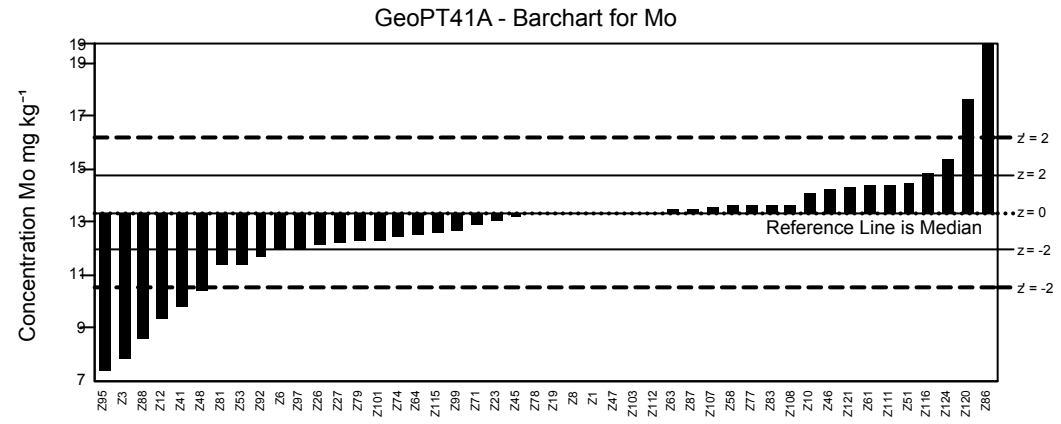
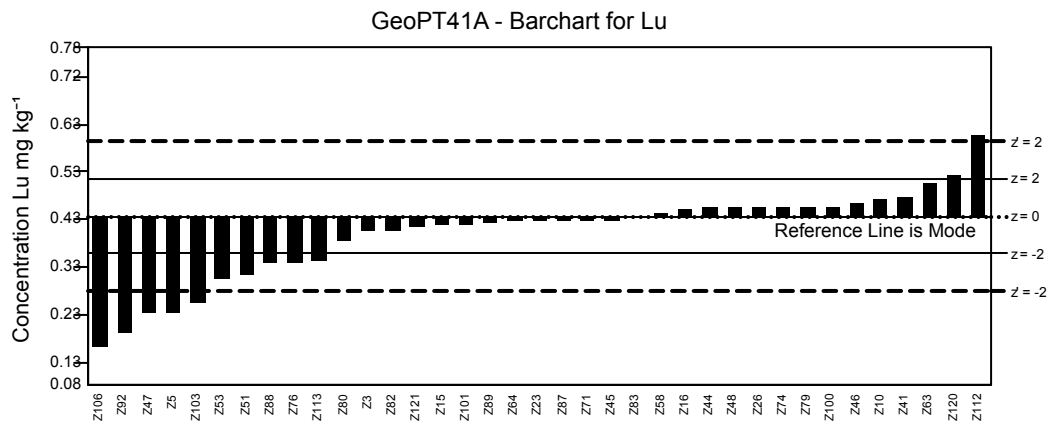
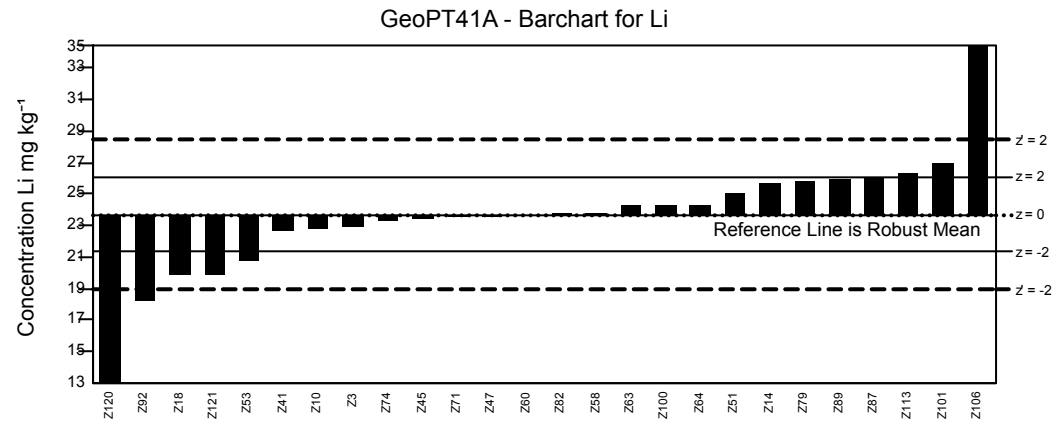
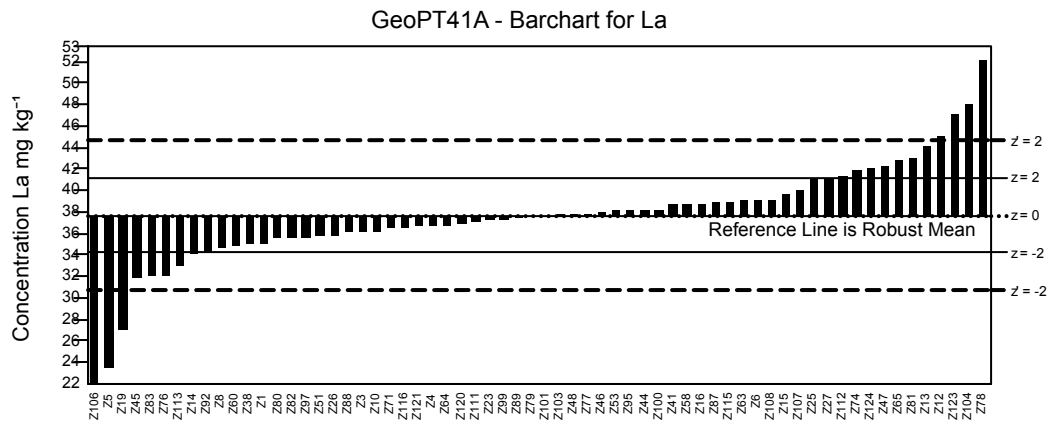


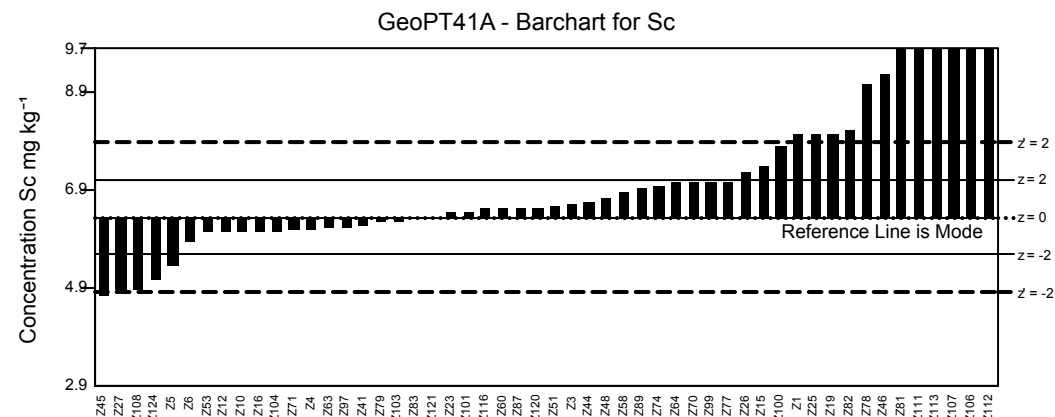
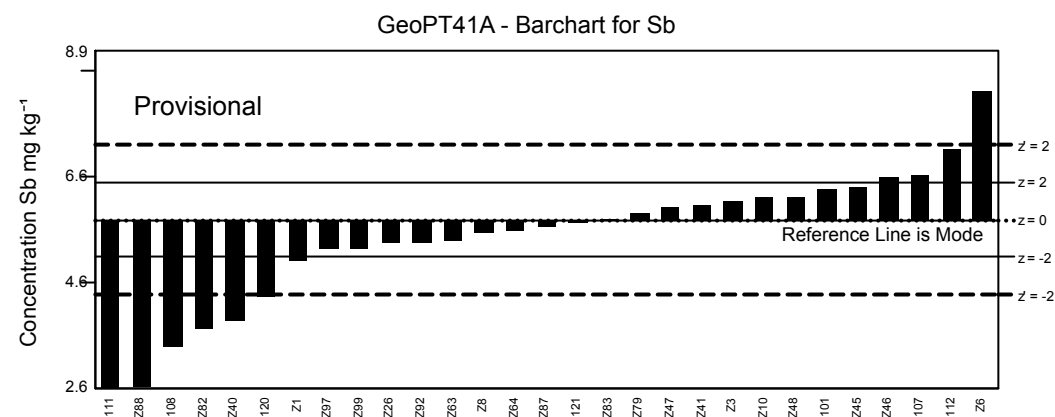
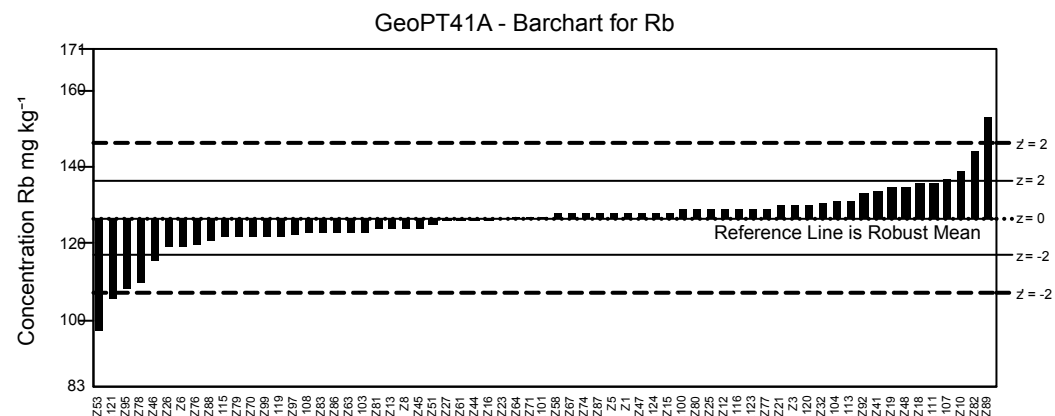
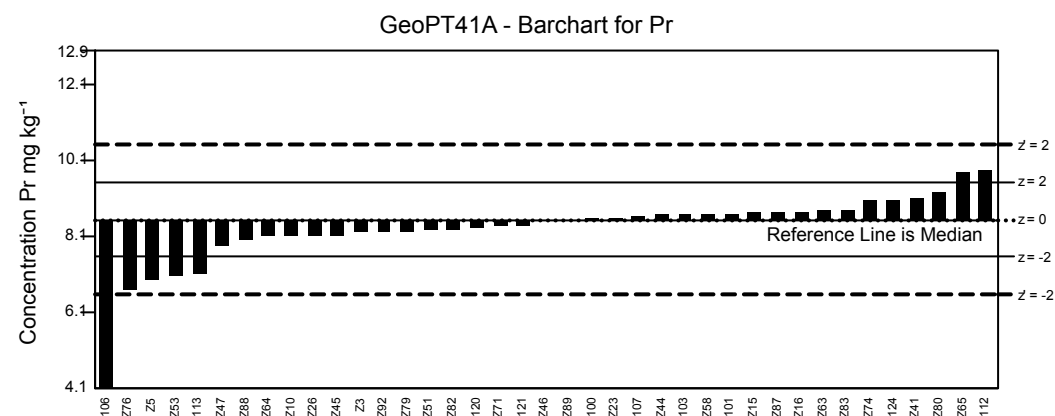
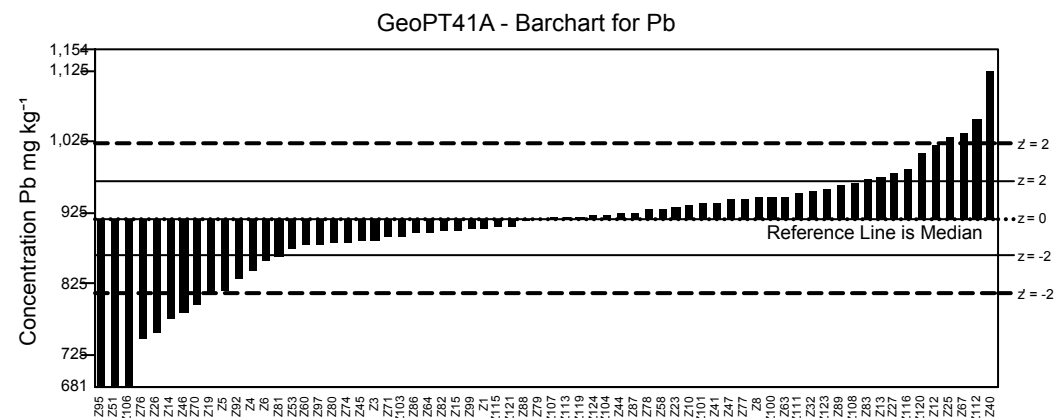
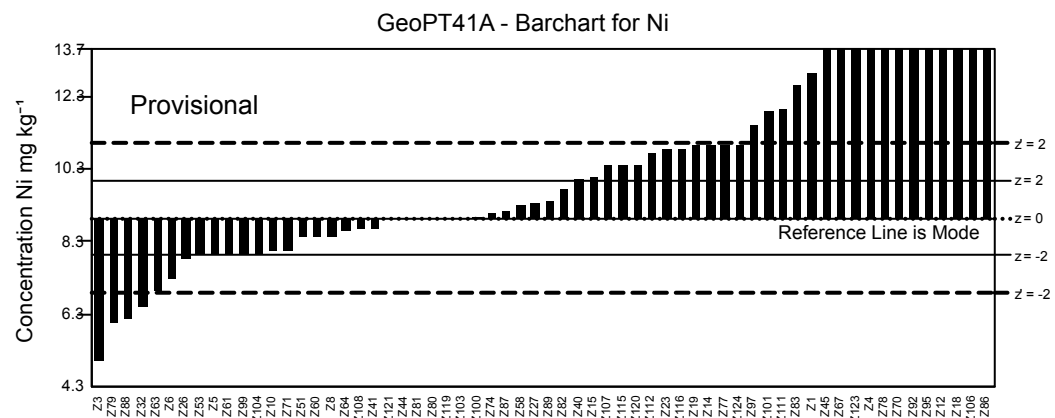


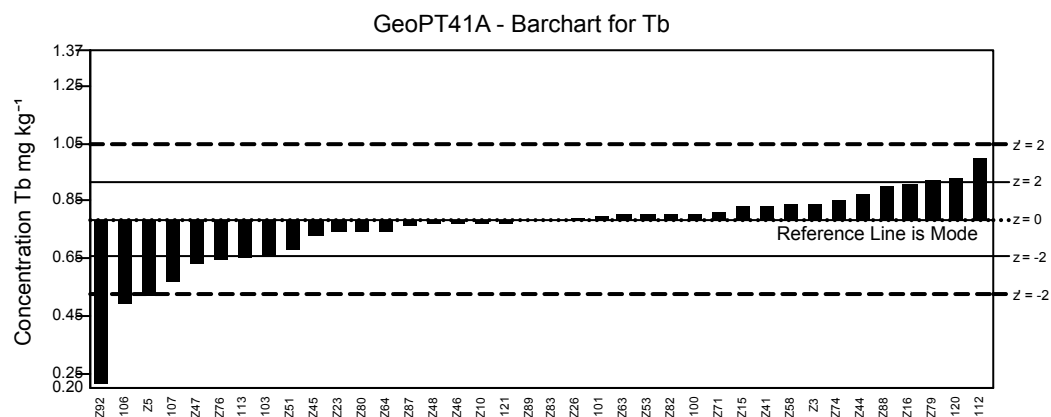
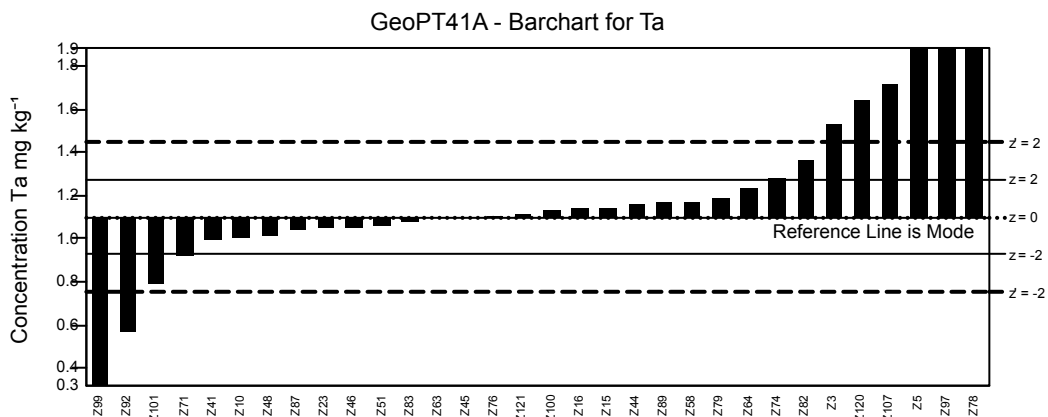
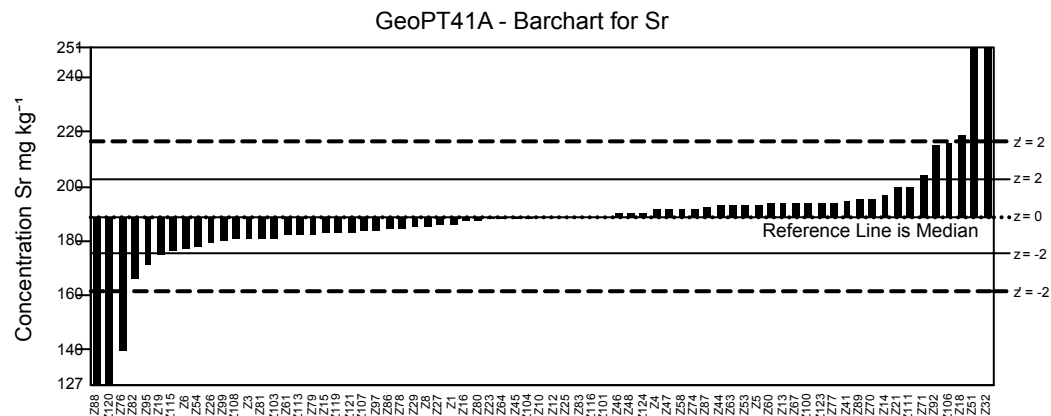
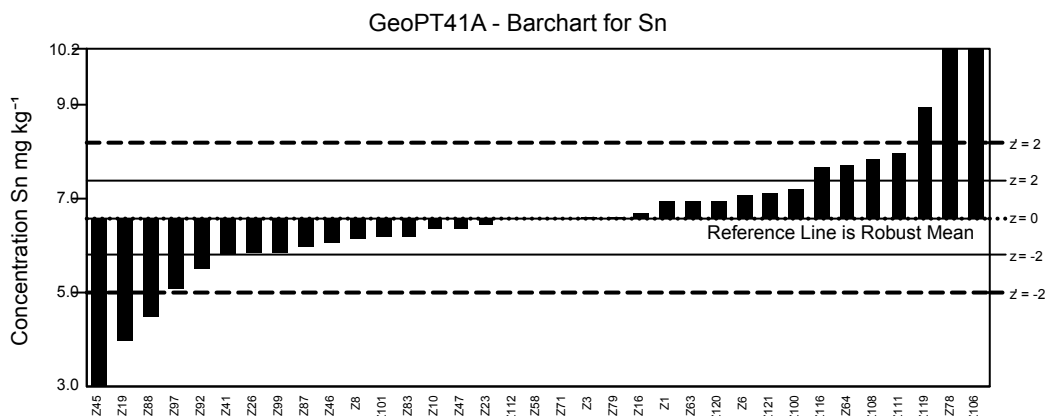
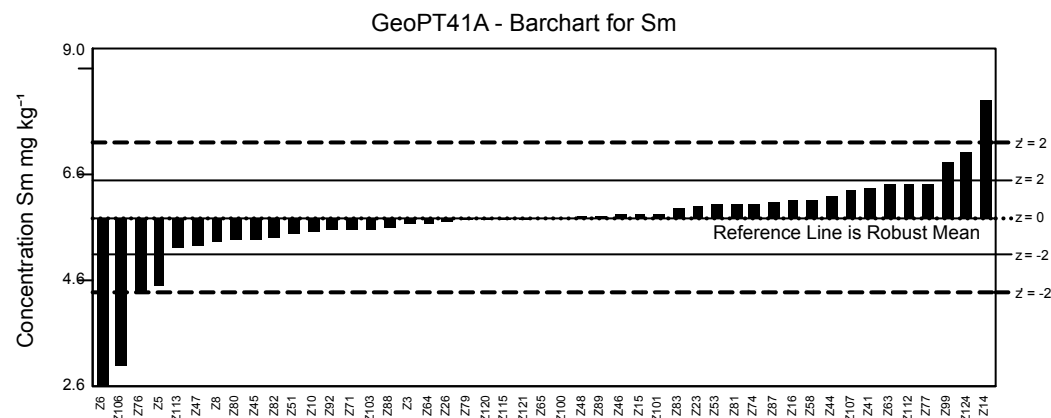
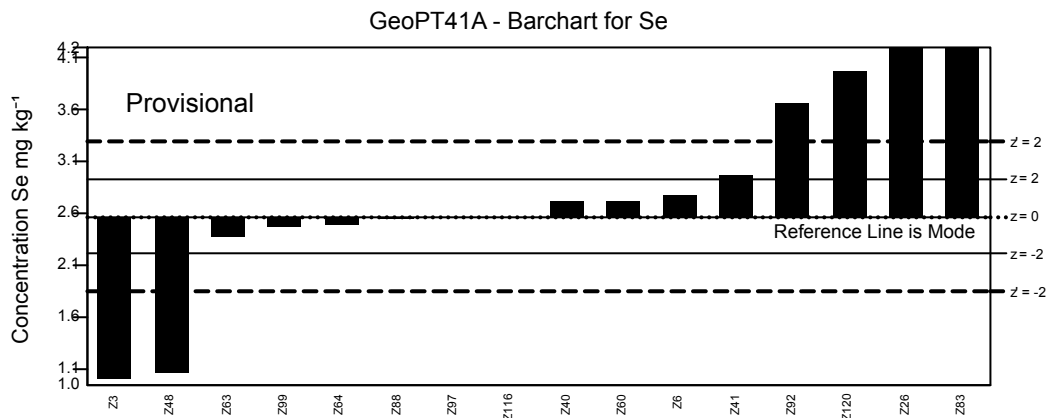


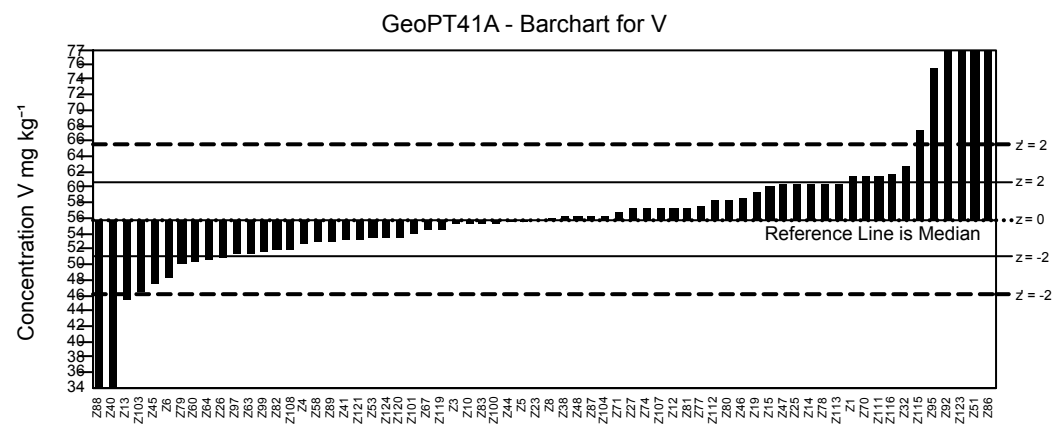
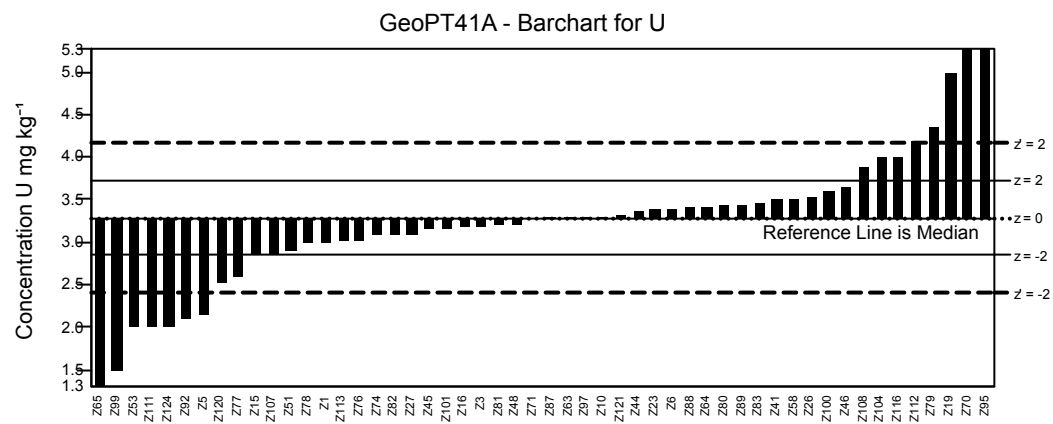
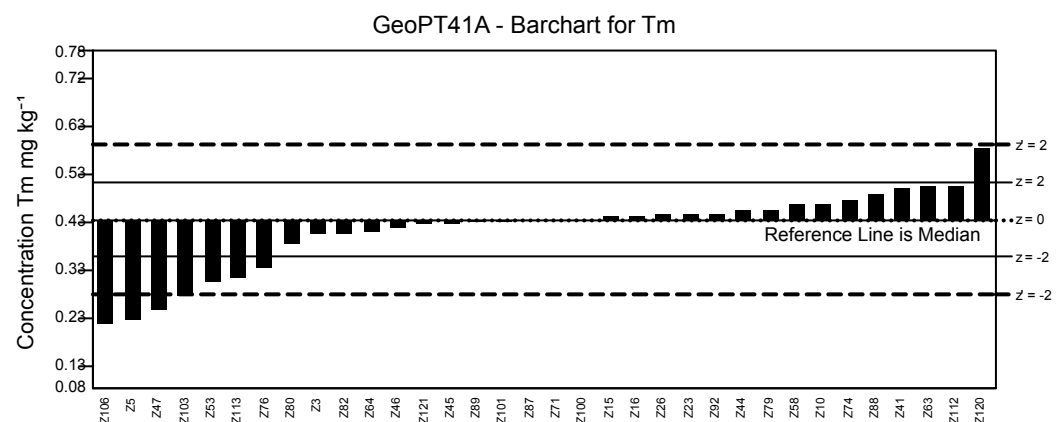
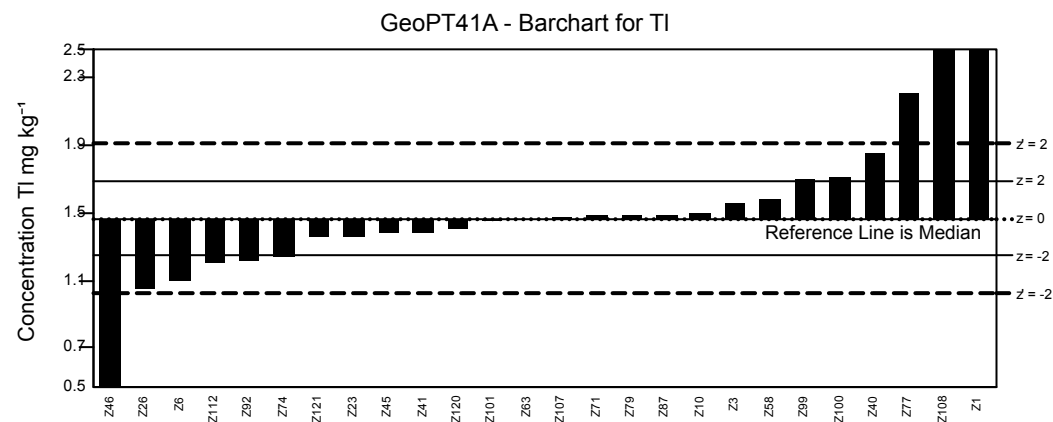
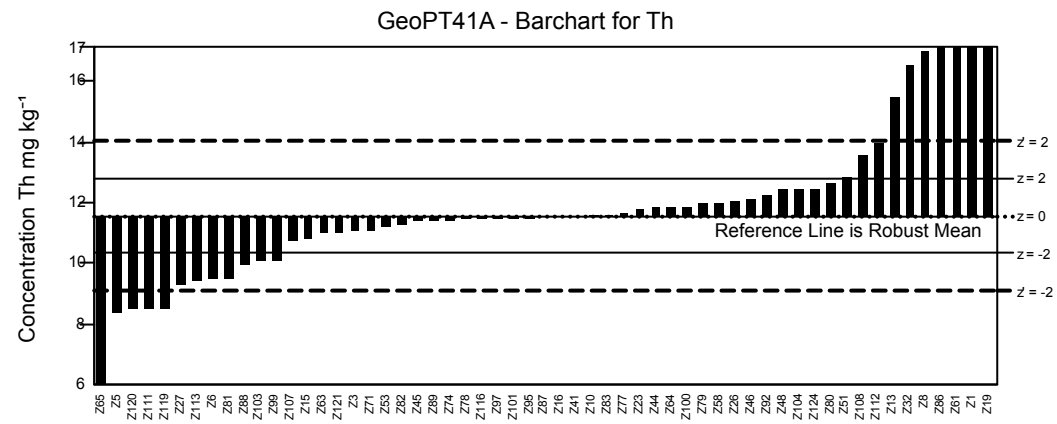
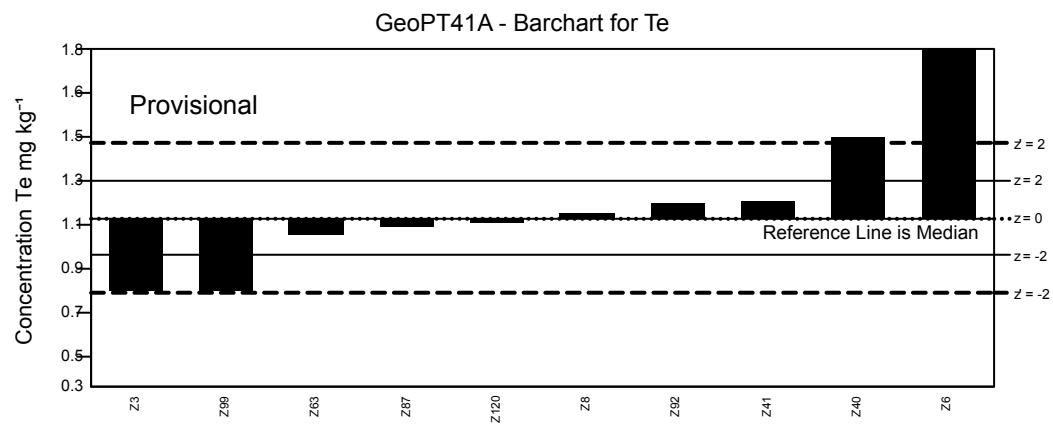












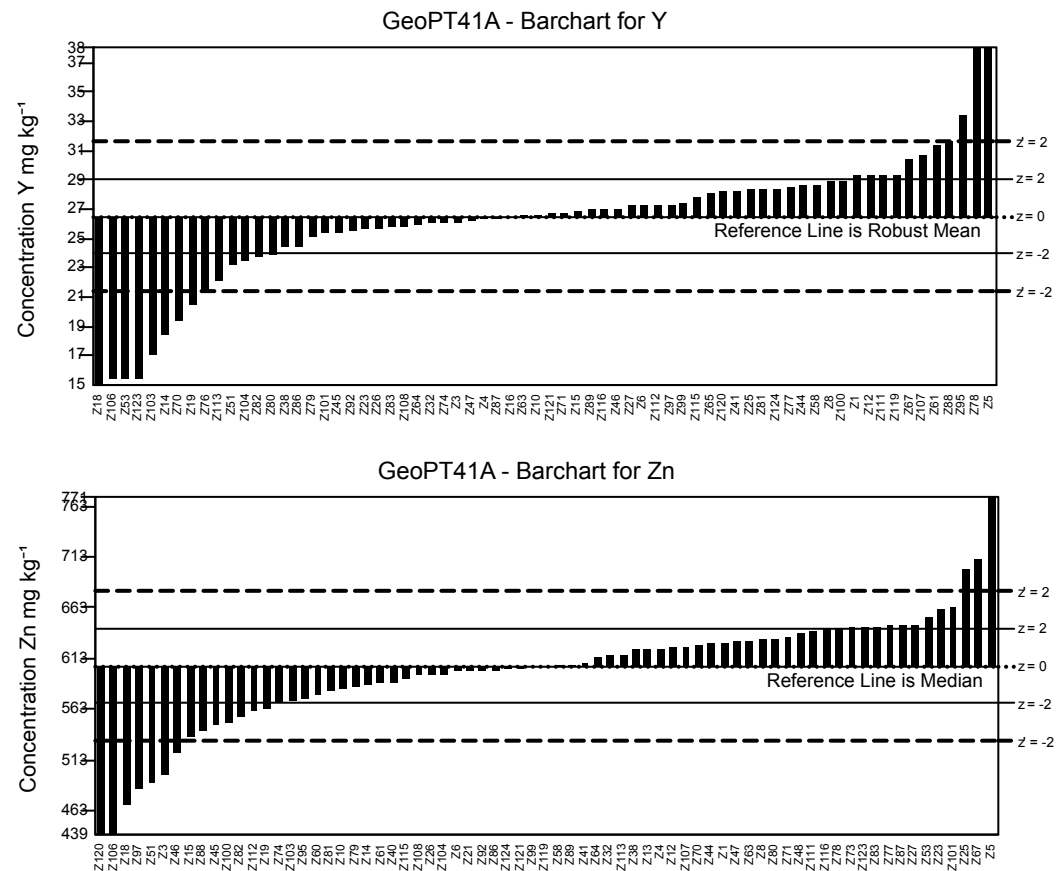
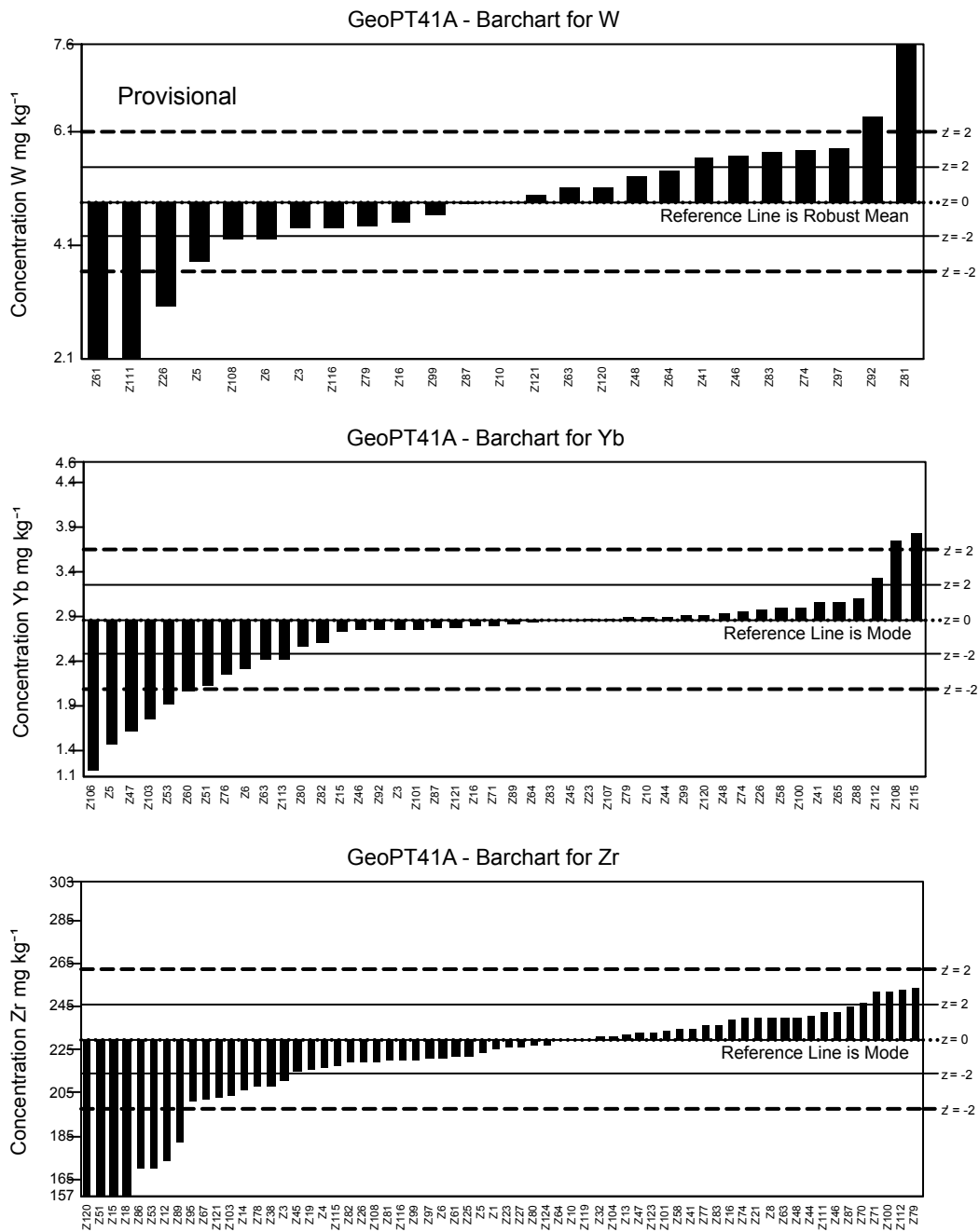
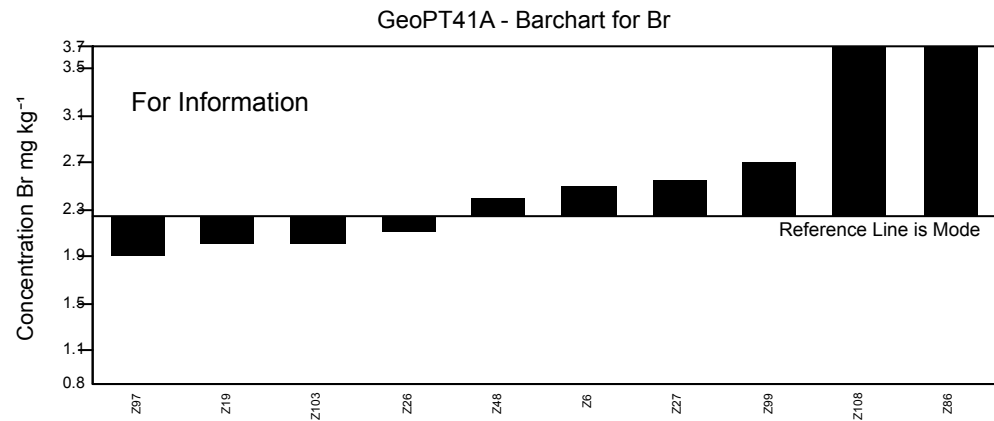
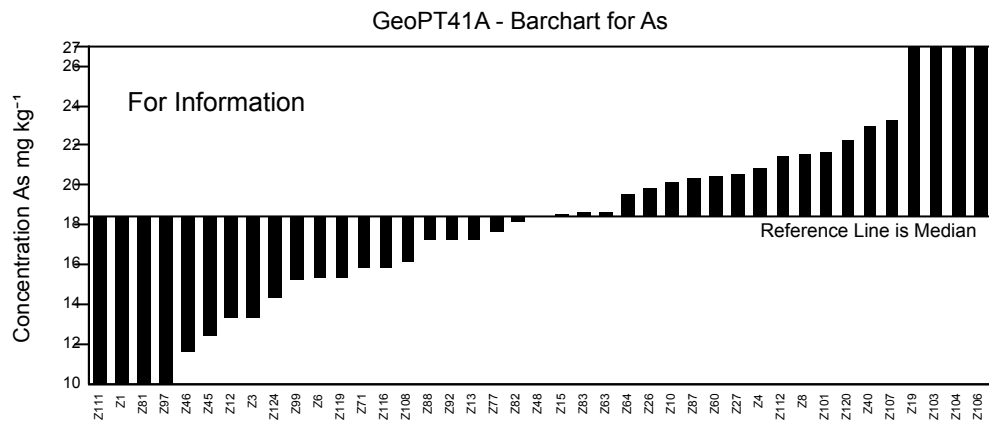
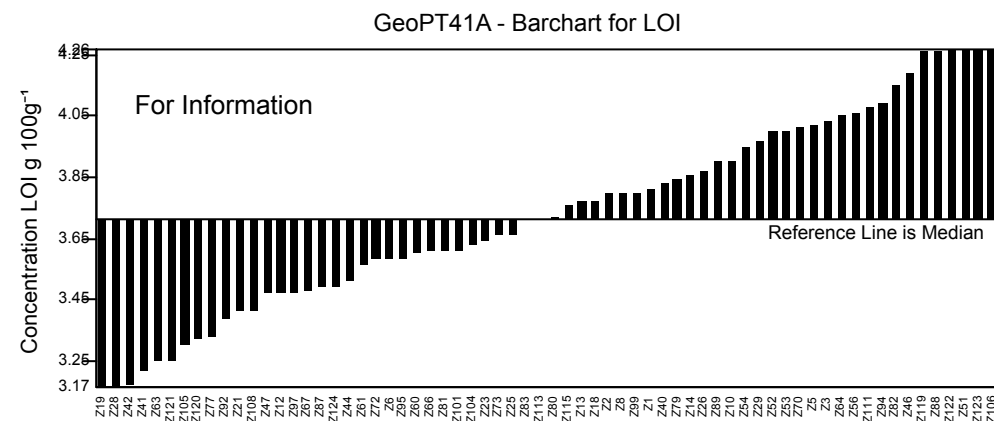
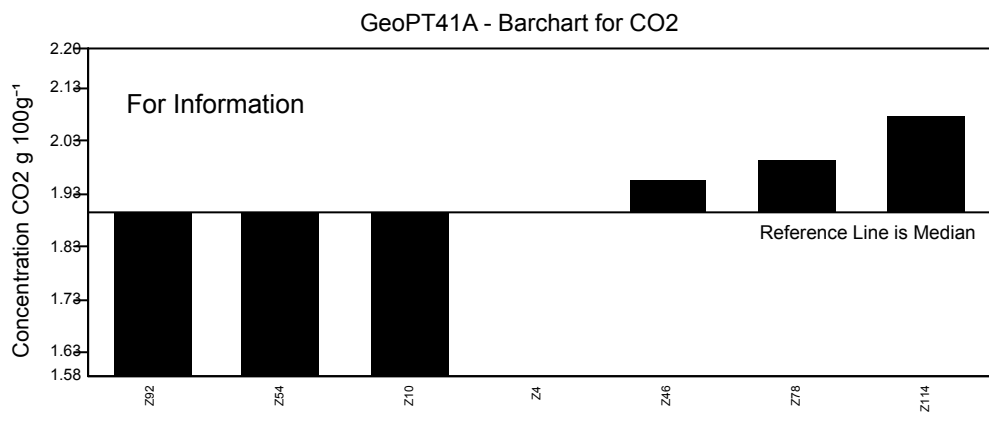
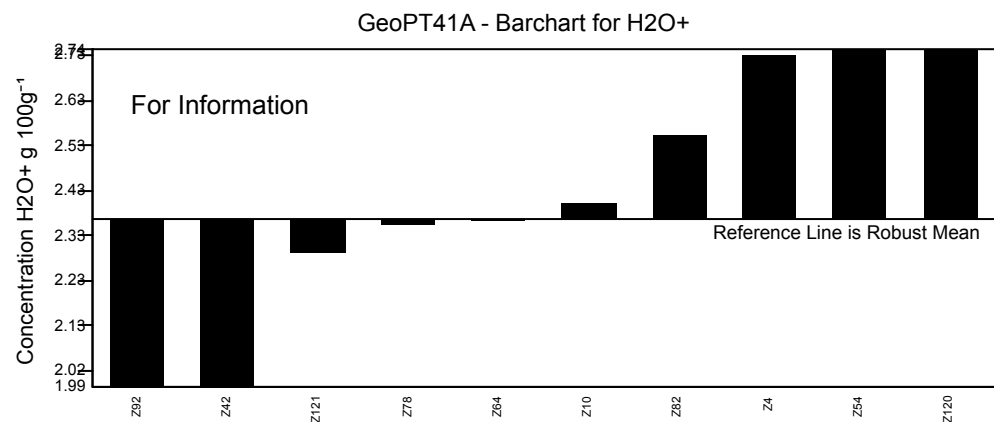
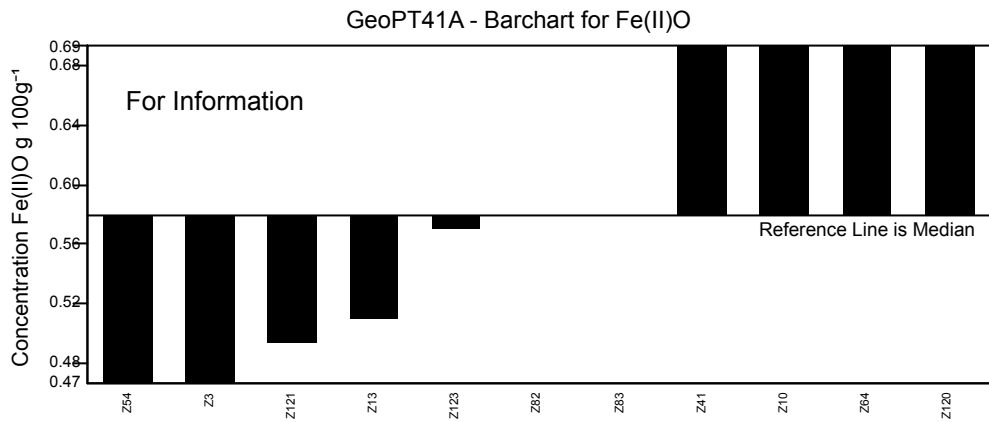


Figure 1: GeoPT41A - Mineralised stream sediment, SSCO-1. Data distribution charts for elements for which values were assigned or provisional values given for guidance. Horizontal lines show the limits for $-2 < z < 2$ for pure geochemistry labs (solid lines) and $-2 < z < 2$ for applied geochemistry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



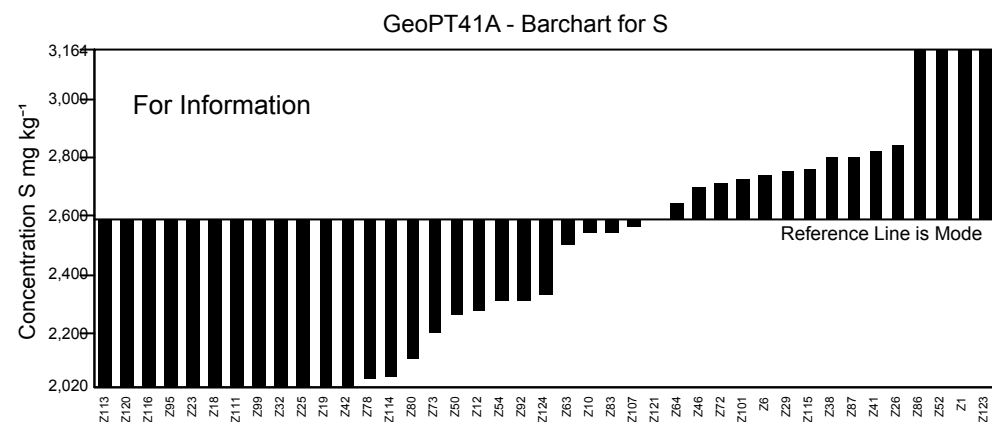
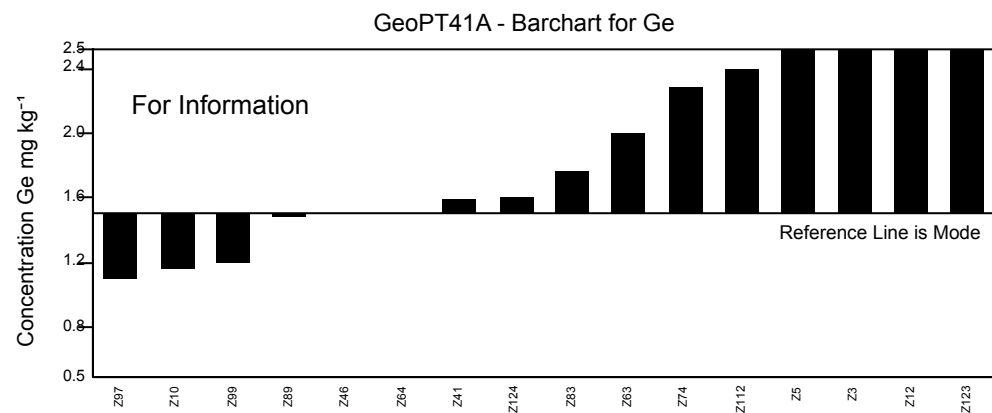
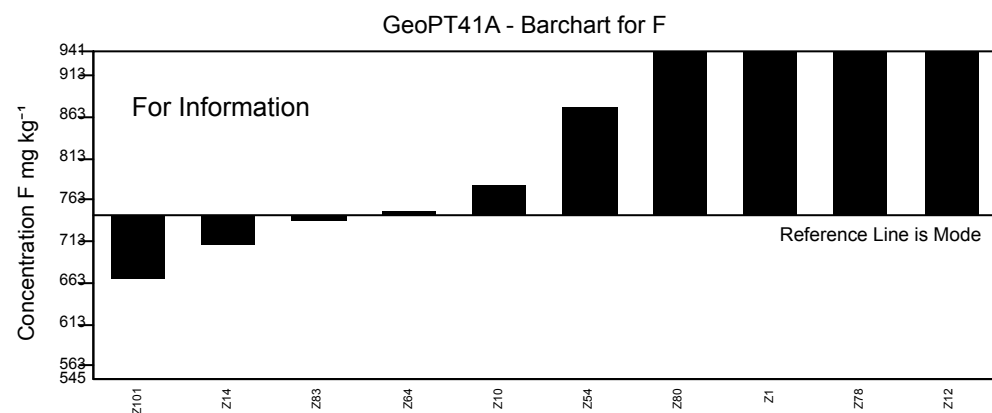
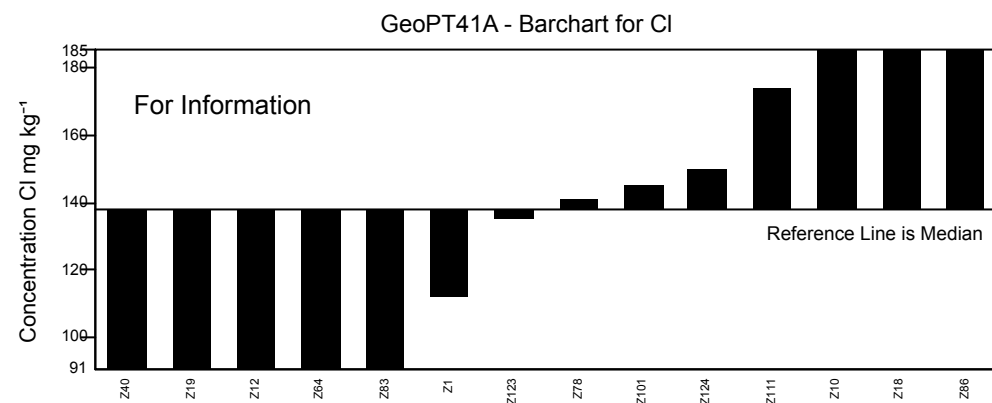
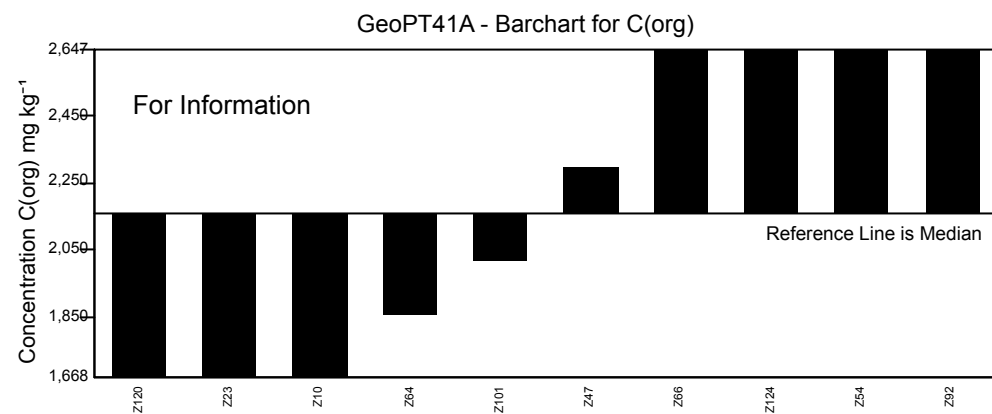


Figure 2: GeoPT41A - Mineralised stream sediment, SSCO-1. Data distribution charts provided for information only for elements for which values could not be assigned.

Multiple Z-Score Chart for GeoPT41A

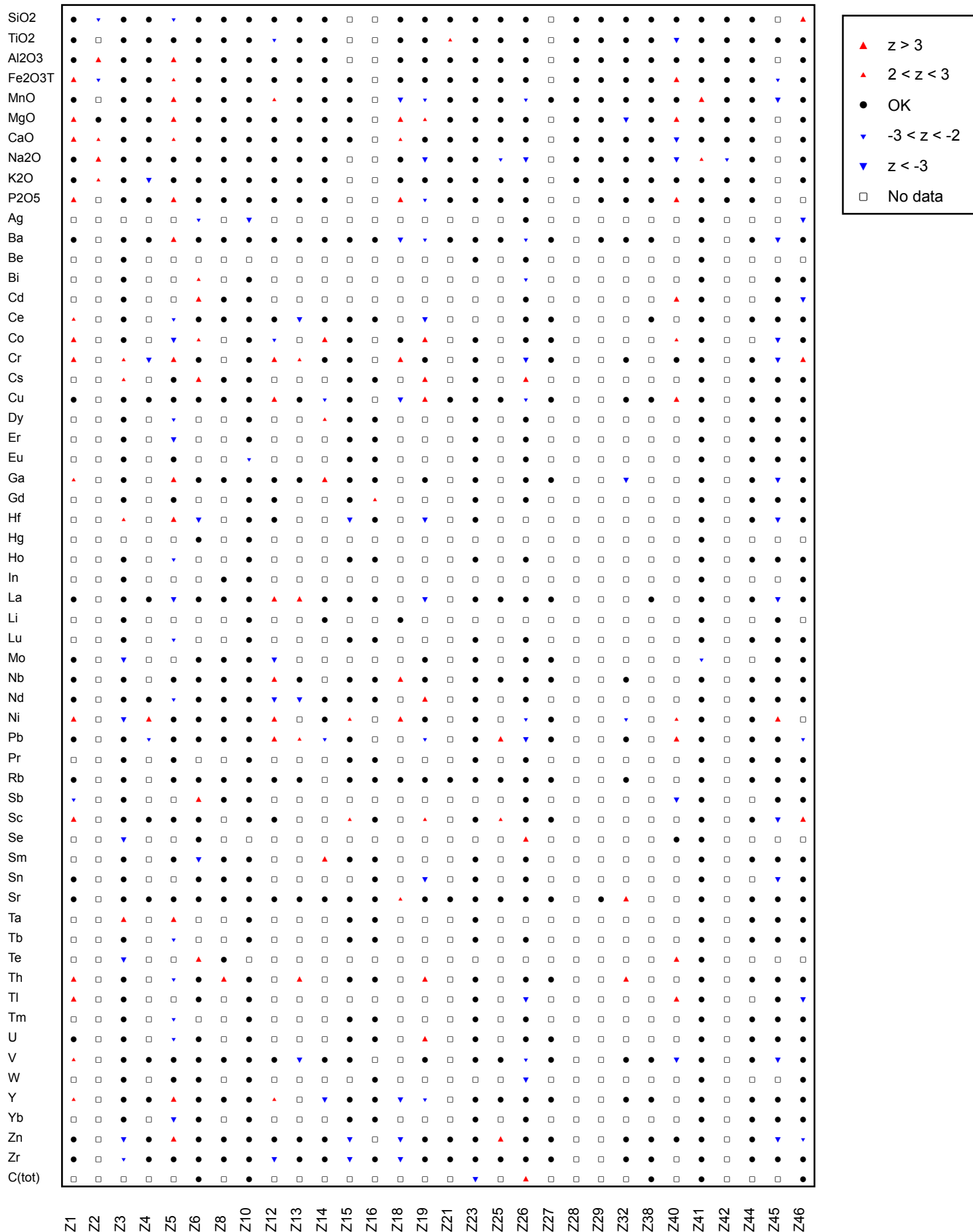


Figure 3: GeoPT41A - Mineralised stream sediment, SSCO-1. Multiple z-score charts for laboratories participating in the GeoPT41A round. Symbols indicate whether or not an elemental result complies with the $-2 < z < +2$ criteria (see key).

Multiple Z-Score Chart for GeoPT41A

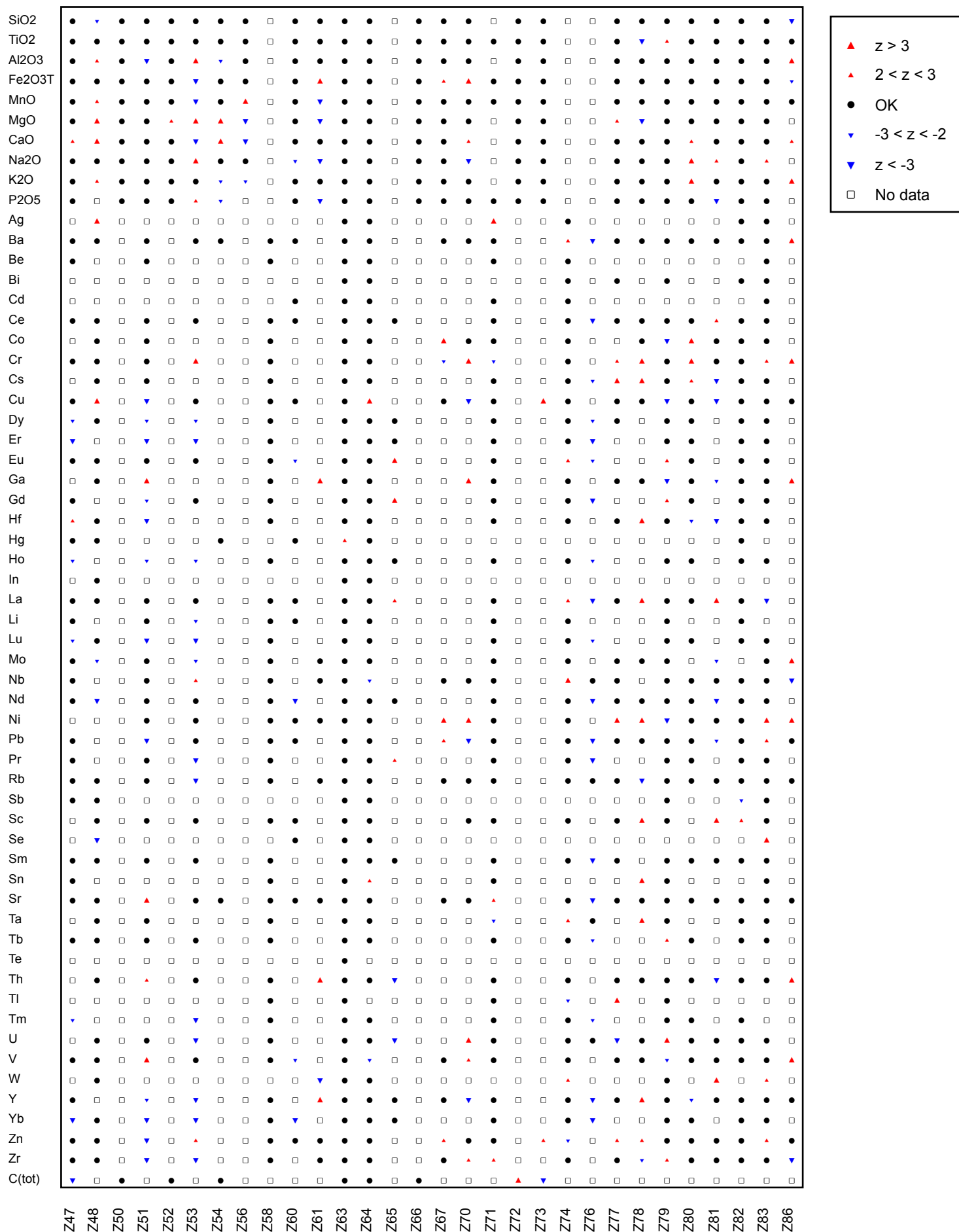


Figure 3: GeoPT41A - Mineralised stream sediment, SSCO-1. Multiple z-score charts for laboratories participating in the GeoPT41A round. Symbols indicate whether or not an elemental result complies with the $-2 < z < +2$ criteria (see key).

Multiple Z-Score Chart for GeoPT41A

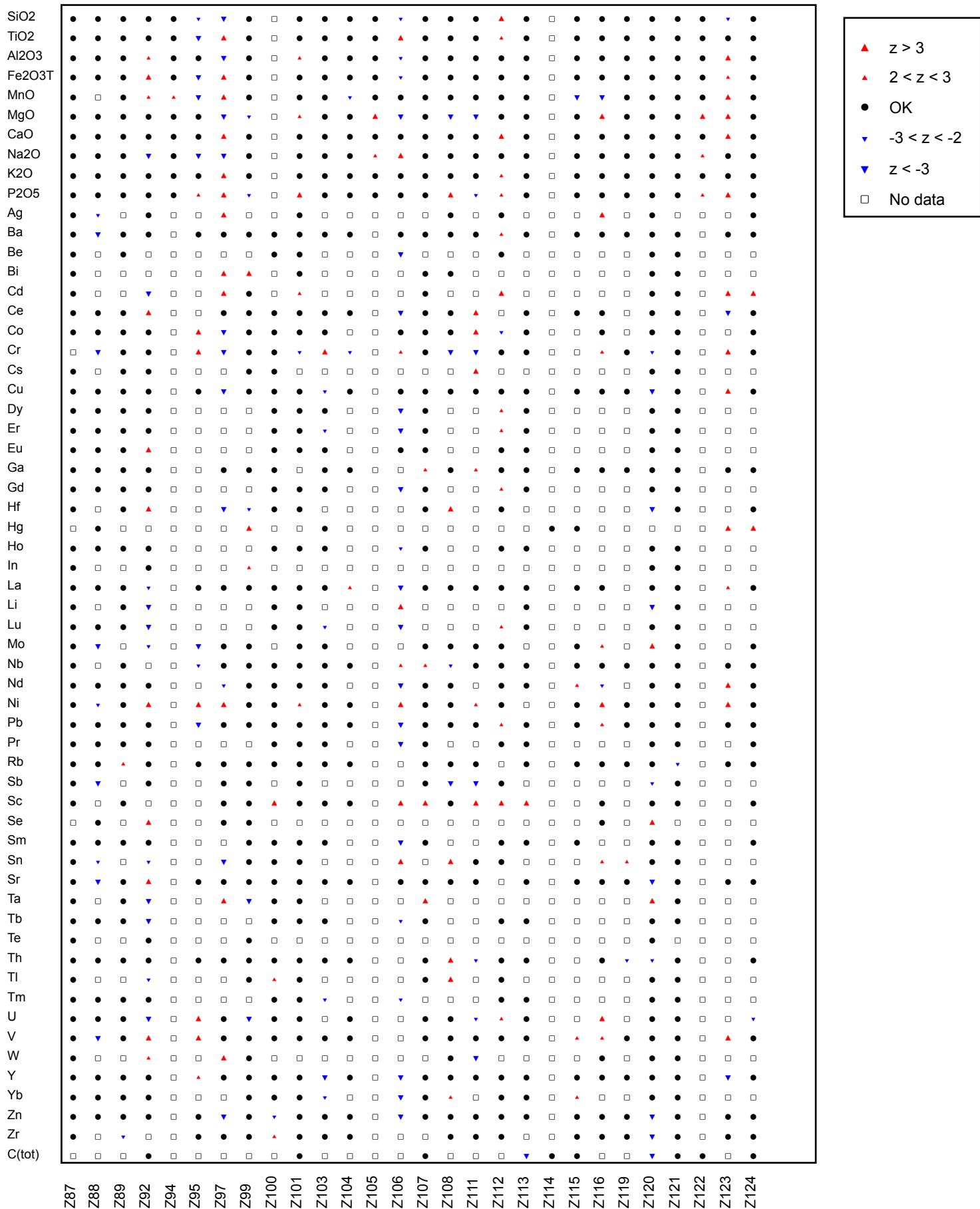


Figure 3: GeoPT41A - Mineralised stream sediment, SSCO-1. Multiple z-score charts for laboratories participating in the GeoPT41A round. Symbols indicate whether or not an elemental result complies with the -2<z<+2 criteria (see key).