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**ASPAC
Soil Proficiency Testing
Program Report**

2017

P. Kennelly, G. Lancaster, L.A. Sparrow and R.J. Hill

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Foreword

This is the latest of ASPAC's many inter-laboratory proficiency program (ILPP) reports for soils since 1993. This reporting format for soils has applied since ASPAC's 2004-05 annual program (see Rayment *et al.* 2007)¹. Nowadays, ILPPs for common soil chemical tests have three "rounds" each of four carefully prepared and milled air-dry soils. Similar annual programs for milled plant tissue samples operate concurrently (e.g., Lyons *et al.* 2013)².

This ILPP continued ASPAC's Australasian focus and targeted laboratories in the private, government and university sectors that provide soil testing services for a range of purposes. These mostly locate in Australia, New Zealand, Oceania, and in parts of South-east Asia.

The Service Provider for ASPAC is Global Proficiency Ltd. This company operates mainly out of New Zealand, with key personnel and contact details provided on page iv.

Technical aspects of this ILPP were specified and over-sighted by ASPAC's Laboratory Proficiency Committee (LPC), recent membership of which is listed on page iv. In addition, LPC members and two key personnel from the Service Provider participate annually in a Technical Advisory Group (TAG), chaired by a senior representative of the Service Provider.

The ASPAC-LPC and the ASPAC Executive Committee also appreciate the efforts made by laboratories who utilized this method-specific proficiency program. By participating, they share a commitment to and responsibility for perceived measurement quality across Australasia, noting that proficiency in measurement is only a component of laboratory accreditation to Australian Standard AS ISO/IEC 17025-2005, which should be an achievement goal for laboratory managers.

An electronic copy of this report, and other similar completed annual program reports, can be downloaded from ASPAC's public web site at www.aspac-australasia.com.

Dr Roger Hill
Convenor, ASPAC-LPC

¹ Rayment, G.E., Peverill, K.I., Hill, R.J., Daly, B.K., Ingram, C. and Marsh, J. (2007). ASPAC Soil Proficiency Testing Program Report 2004-05. (73 + vi pp.) ASPAC, Melbourne, Victoria.

² Lyons, D.J., Rayment, G.E., Daly, B.K., Hill, R.J., Ingram, C. and Marsh, J. (2013). 'ASPAC Plant Proficiency Testing Program Report 2008-09'. (47 + vi pp.) ASPAC, Melbourne, Victoria.

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Those commissioned by GPL to prepare soil samples and confirm homogeneity prior to circulation for proficiency testing purposes [Department of Environment and Science (DES) Queensland, Australia] are acknowledged, as are operational staff of GPL.

Memberships

Membership of ASPAC's LPC 2017

<i>Name*</i>	<i>Location</i>	<i>Email</i>
R.J. Hill (Convenor)	Hamilton, New Zealand	roger.hill@hill-labs.co.nz
L.A. Sparrow	Tasmania, Australia	leigh@birdbrainsdownunder.com.au
D.J. Lyons	Queensland, Australia	daveandtrish8@bigpond.com

Service Provider Details

<i>Name, Street and Postal Address</i>	<i>Key Personnel & Current Emails.</i>
Global Proficiency Ltd (GPL) ^A .	<u><i>Business Manager:</i></u> Gordana.Aleksic@global-proficiency.com
Ruakura Research Campus, Hamilton 3214, NZ. PO Box 20474, Hamilton 3241, NZ. P. +64 7 850 4483	<u><i>Technical / Operational:</i></u> Lana Pears, Programme Leader – Ag. Programmes. Lana.Pears@global-proficiency.com Dr Julie Marsh Jules.Marsh@global-proficiency.com

^A **Note:** GPL, under its “SoilChek” logo, is accredited by IANZ (the New Zealand accreditation authority) to ISO/IEC 17043:2010 standard, noting that IANZ is a full member of both the International Laboratory Accreditation Cooperation (ILAC), and Asia Pacific Laboratory Accreditation Cooperation (APLAC). GPL is also recognized by NATA (National Association of Testing Authorities of Australia) as a proficiency provider.

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1. Introduction

This not-for-profit, annual ASPAC Soil Proficiency Testing Program Report for 2017 documents program methodology, summary statistics, and a full listing of results by test for three “rounds” of soil chemical testing. For historical details on earlier annual soil ILPP’s undertaken by ASPAC, refer to Rayment *et al.* (2007) referenced earlier in this report. These reports are also available for downloading from ASPAC’s public web site at www.aspac-australasia.com.

The report includes an outline of how ASPAC now confers performance-based, method-specific certification to laboratories that regularly participate. To respect confidentiality, the cross-reference between laboratory name and laboratory identification number is not included. However, laboratories certified as proficient for specific tests in this annual program were documented at the time on ASPAC’s public web site.

2. Program Details

2.1 Responsibilities

GPL- see page iv -under its “Soil Chek” arrangements, was contracted by ASPAC as the soil ILPP provider for 2017. Accordingly, GPL had responsibility on a “round-by-round” basis for sourcing and preparation of samples, for ensuring the samples met international and/or within-country quarantine requirements, and for the timely supply of samples to participating laboratories. GPL also undertook data analysis and “round-by-round” reporting for ASPAC and assembled the summary and “raw” data provided in Section 3 and Appendix 4, respectively, of this report.

ASPAC’s LPC- see page iv- had responsibility to implement and resolve matters of policy and to provide guidance on technical matters specific to soil chemical testing both to GPL and to laboratory participants. The LPC also undertook occasional checks and audits for quality control purposes, participated in the earlier mentioned TAG, contributed to training workshops, and assisted (on request) laboratory managers with technical aspects on measurement improvement. As always, laboratory managers were encouraged to seek help from ASPAC when shown to be operating at levels of measurement performance below their peers.

Participants receive or have a unique, confidential laboratory number, subsequently used to identify the origin of each result presented in program reports and lists of results. This identification number has typically carried forward from one annual program to the next, but code numbers changed in 2014-15 and beyond.

ASPAC’s web-site manager and others updated the public web site with details on method-specific certifications and lists of laboratories that undertook those soil tests. The proficiency data used was supplied by GPL and oversighted by the Convener of the ASPAC-LPC.

2.2 Soil program participation

Some 64 laboratories submitted results for at least one soil test in 2017, 7 more than in 2016. Names and other summary contact details for the participants are provided in Appendix 1. There were 46 laboratories involved from Australia, an increase of 5 from 2016 (NSW=10; QLD=8; VIC=13; SA=5; WA=8, TAS=1; ACT=1), 7 from New Zealand (no change), and an increase of 1 from Asia and the south Pacific, including 2 each from Fiji, Papua New Guinea and Thailand, and 1 each from Indonesia, Laos, Philippines, UAE and Vietnam.

The most reported results (see Table 2.1) across the three “rounds” combined were submitted for method 4A1 (54 average for pH, 1:5 soil-water) followed by method 3A1 (53 average for electrical conductivity, 1:5 soil-water). The median was 16 laboratories for each method. While not assessable for certification, the number of laboratories reporting Aqua Regia digestible elements, including trace elements, increased from the previous year.

Table 2.1. Test methods, corresponding method codes and the arithmetic average number of results per round submitted by participating laboratories in the ASPAC 2017 soil ILPP.

Soil Tests	Method Codes ⁱ	Number of participants		
		Mar 17	Jun 17	Sep 17
Air Dry Moisture	2A1	41	39	43
Electrical conductivity 1:5 soil-water	3A1	53	50	55
Soil pH, 1:5 soil-water	4A1	54	51	56
Soil pH, 1:5 0.01 M CaCl ₂	4B1 + 4B3 + 4B2 + 4B4	35	33	37
Water soluble Cl — pooled	5A1 + 5A2 + 5A3	33	32	34
Organic Carbon — W&B	6A1	28	28	28
Total Organic C — Pooled	6B1 + 6B3 + 6B5	17	21	20
Total C — Dumas	6B2	30	29	28
Total N — Dumas	7A5	33	35	31
Total N — Pooled	7A1 + 7A2	14	14	14
Water Soluble Nitrate N — autocolour	7B1 + 7B2	17	17	19
KCl Extractable Nitrate N — autocolour	7C2	28	27	27
KCl Ext. Ammonium N — autocolour	7C2	32	31	32
Total P — all methods %	Pooled	28	25	27
Colwell Extractable P	9B1 + 9B2	32	32	32
Olsen Extractable P	9C1 + 9C2	29	28	31
Bray-1 Extractable P	9E1 + 9E2	15	16	16
Acid Extractable P	9G1 + 9G2	11	11	11
Phosphorus buffer index (with Colwell P)	9I2a + 9I2b + 9I2c	22	21	21
Phosphorus buffer index (unadj)	9I4a + 9I4b + 9I4c	11	12	12
Phosphate Extractable S	10B1 + 10B2 + 10B3	10	10	10
KCl 40 Extractable S	10D1	20	18	18
DTPA Extractable Fe	12A1	30	30	27
DTPA Extractable Cu	12A1	31	29	27
DTPA Extractable Mn	12A1	31	29	27
DTPA Extractable Zn	12A1	31	29	27
CaCl ₂ Extractable B — manual colour	12C1 + 12C2	22	23	21
Exchangeable Ca — 1M NH ₄ Cl extract	15A1	21	19	23
Exchangeable Mg — 1M NH ₄ Cl extract	15A1	21	19	24
Exchangeable Na — 1M NH ₄ Cl extract	15A1	20	19	23
Exchangeable K — 1M NH ₄ Cl extract	15A1	21	19	23
Exchangeable Ca — 1M NH ₄ OAc extract	15D3	23	25	25

Soil Tests	Method Codes ⁱ	Number of participants		
		Mar 17	Jun 17	Sep 17
Exchangeable Mg — 1M NH ₄ OAc extract	15D3	23	25	25
Exchangeable Na — 1M NH ₄ OAc extract	15D3	22	24	23
Exchangeable K — 1M NH ₄ OAc extract	15D3	27	27	27
Exchangeable Al — 1M KCl extract	15G1	17	18	19
Bicarbonate Extractable K	18A1	12	13	12
Aluminium	18F1	17	15	16
Boron	18F1	16	13	15
Calcium	18F1	16	14	16
Copper	18F1	17	15	16
Iron	18F1	17	15	16
Magnesium	18F1	16	14	16
Manganese	18F1	17	15	16
Phosphorus – ICP	18F1	16	15	15
Potassium	18F1	16	14	16
Sodium	18F1	16	14	16
Sulphur	18F1	14	14	14
Zinc	18F1	17	15	16

Soil Tests – NOT CERTIFIED ⁱⁱ	Method Codes ⁱ	Number of participants		
		Mar 17	Jun 17	Sep 17
Aqua Regia Aluminium (mg/kg)	17B1 + 17B2	11	8	10
Aqua Regia Calcium (mg/kg)	17B1 + 17B2	12	9	11
Aqua Regia Chromium (mg/kg)	17B1 + 17B2	11	8	11
Aqua Regia Copper (mg/kg)	17B1 + 17B2	12	10	12
Aqua Regia Iron (mg/kg)	17B1 + 17B2	11	8	10
Aqua Regia Lead (mg/kg)	17B1 + 17B2	10	8	9
Aqua Regia Magnesium (mg/kg)	17B1 + 17B2	12	9	11
Aqua Regia Manganese (mg/kg)	17B1 + 17B2	12	9	11
Aqua Regia Potassium (mg/kg)	17B1 + 17B2	12	9	11
Aqua Regia Sodium (mg/kg)	17B1 + 17B2	10	7	10
Aqua Regia Sulphur (mg/kg)	17B1 + 17B2	7	7	7
Aqua Regia Zinc (mg/kg)	17B1 + 17B2	13	9	12

Soil Tests – NOT ASSESSABLE ⁱⁱⁱ	Method Codes ⁱ	Number of participants		
		Mar 17	Jun 17	Sep 17
Phosphorus buffer index (Olsen)	9I3a + 9I3b + 9I3c	6	6	7
Total Organic Matter (%)	6G1	7	6	6

ⁱ Unless otherwise indicated, soil method codes are as defined by Rayment, G.E. and Lyons, D.J. (2011). *Soil Chemical Methods - Australasia*. CSIRO Publishing, Collingwood, Victoria, Australia.

- ii NOT CERTIFIED table lists tests for which there were sufficient results reported for statistical analysis (>7) but are not yet part of the certification program.
- iii NOT ASSESSABLE table lists tests for which there were insufficient results reported for statistical analysis (<7) and are not yet part of the certification program.

2.3 Tests and methods

The three proficiency “rounds” for soils – each comprised of four samples – were offered in March, June and September, 2017. Participants were invited to analyse each sample by the methods listed and/or coded in Table 2.1. Participants were not required to submit results for all of the methods listed, noting that selected methods, including phosphate buffer index (Colwell) and phosphate buffer index (Olsen), were “scored” as one method each, irrespective of which analytical finish was used. This “pooling” also occurred for extractable P tests and some others, with details provided in Table 2.2. ‘Pooling’ test results is done for tests which the LPC deem to be equivalent and should therefore yield the same results. The most common instance is where a common extraction may have different analytical finishes, e.g. atomic absorption spectroscopy (AAS) or inductively coupled plasma optical emission spectroscopy (ICP-OES). Grouping these tests together reduces the total number of tests and also provides larger datasets for statistical analysis. Data summaries in Section 3 also indicate where there was method “pooling”.

Participating laboratories were required by ASPAC to report all tests on either an air dry (40°C) or oven dry (105 °C) soil-weight basis (not a soil-volume basis), as per the reporting guidelines published by Rayment and Lyons (2011). Indeed, routine soil fertility tests in Australia are mostly reported on an air-dry (40°C) soil-weight basis. Those results reported on an oven-dry result in this report therefore required a final calculation using the air-dry moisture percentage included in the program as method-code 2A1.

Table 2.2. Method “pooling” summary for the ASPAC 2017 soil ILPP

Soil Tests	Method Codes	Average participants
Soil pH, 1:5 0.01 M CaCl ₂ - direct, pooled air dry	4B1 + 4B2 + 4B3 + 4B4	35
Water Soluble Cl – Pooled	5A1 + 5A2 + 5A3	33
Total Carbon – Pooled %	6B1 + 6B3 +6B5	19
Total Nitrogen – Pooled %	7A1 + 7A2	14
Total P – pooled % oven dry	Pooled	27
Colwell Extractable P – pooled mg/kg air dry	9B1 + 9B2	32
Olsen Extractable P – pooled mg/kg air dry	9C1 + 9C2	29
Bray-1 Extractable P – pooled mg/kg air dry	9E1 + 9E2	16
Acid Extractable P – pooled mg/kg air dry	9G1 + 9G2	11
Phosphorous Buffer Index (Colwell) L/kg dry wt	9I2a + 9I2b + 9I2c	22
Phosphorous Buffer Index (Unadj) L/kg dry wt	9I4a + 9I4b + 9I4c	12
Phosphate Extractable S, pooled mg/kg air dry	10B1 + 10B2 + 10B3	10

Soil Tests	Method Codes	Average participants
Hot CaCl ₂ Extractable B – pooled mg/kg air dry	12C1 + 12C2	22

2.4 Sample preparation and identification

In common with practices since the 2004-05 soils program, potential samples were assessed for homogeneity by laboratories accredited to ISO/IEC 17025 standard. Specifically, 10 containers of each sample were selected at random and batched according to the principles described by Thompson and Wood (1993)³. These sub-samples were then tested in duplicate for Total N by Dumas Combustion.

Results from the homogeneity testing were subsequently statistically assessed according to ISO REMCO Protocol N231 "*Harmonised Proficiency Testing Protocol*" of January 1992. All prepared soils were rated as homogenous, as demonstrated in Appendix 2. In addition to testing for homogeneity, the soil samples were irradiated or otherwise rendered biologically benign to comply with international and/or national biosecurity regulations or requirements⁴.

Ultimately, the samples used in the three "rounds" of the 2017 program were distributed and coded as follows: March 2017 (Round 3) ASS 1703-1 to 1703-4; June 2017 (Round 6) ASS 1706-1 to 1706-4; and September 2017 (Round 9) ASS 1709-1 to 1709-4. The association between sample code and origin of the various soils is provided in Table 2.3.

Table 2.3. Sample identification and the origin of the samples included in the ASPAC 2017 soil ILPP

<i>Sample ID</i>	<i>Round ID</i>	<i>Sample Origin</i>	<i>Previous Rounds</i>
ASS 1703-1	3	Western AUS	ASP1511-4
ASS 1703-2		QLD	ASP1506-4
ASS 1703-3		SA	ASP1511-3
ASS 1703-4		NSW	N/A
ASS 1706-1	6	Tasmania	N/A
ASS 1706-2		QLD	ASP1511-1
ASS 1706-3		NSW	N/A
ASS 1706-4		NSW	ASP1603-1
ASS 1709-1	9	NSW	ASP1606-3
ASS 1709-2		QLD	ASP1606-2, ASP1506-3, ASP1406-3
ASS 1709-3		TAS	N/A
ASS 1709-4		NSW	ASP1606-4

³ Thompson, M and Wood, R. (1993). International harmonized protocol for proficiency testing of (chemical) analytical laboratories. *Journal of AOAC International* **76** (4), 926 – 940.

⁴ Rayment, G.E. (2006). Australian efforts to prevent the accidental movement of pests and diseases in soil and plant samples. *Commun. Soil Sci. Plant Anal.* **37**, 2107-2117.

2.5 Data analysis and periodic reporting

Laboratory results, after submission to the Service Provider, were entered into a database and double-checked for data transfer accuracy and required soil-moisture status prior to data processing.

The non-parametric assessment of laboratory performance for each sample and method (and/or “pooled” methods) was performed by an iterative statistical procedure similar to that used in the WEPAL inter-laboratory proficiency programs of Wageningen University. This procedure^{5,6,7,8} is suited to datasets of as few as six to seven laboratories, although larger laboratory populations are preferred. An outline of the median / MAD statistical procedure is provided in Appendix 3, with terms described in Table 2.4. In addition to medians and MADs, other statistical parameters (also described in Table 2.4) were calculated before and following the omission of non-conforming results. The “raw” data submitted by participating laboratories on a test-by-test basis are documented in Appendix 4, sometimes after rounding only for table formatting purposes.

Results submitted by each laboratory were expected to reflect the procedural and reporting guidelines in the chapter on that topic in Rayment and Lyons (2011). Like other programs nationally and internationally, the program did not accept as a numeric value a result reported as less than (<) or greater than (>) a specified number. In cases where the expected value was below the laboratory’s lower limit of reporting, the expectation was that the laboratory would report a value half way between that value and zero. For high values, dilution was the option.

Interim “round” reports, summarizing measurement performance relative to the performance of all laboratories in the program that undertook the same test/s, were routinely and promptly e-mailed to laboratory participants. The main purpose of the interim reports was to provide feedback and to enable laboratories to take prompt action where appropriate. Interim reports also provided an opportunity to correct for data-transfer and data-processing misinterpretations. In addition, regular Newsletters from the Service Provider went to participating laboratories, adding to the information provided in ASPAC’s own Newsletter to its members (the *ASPAC Digest*).

Laboratories that participated in the 2017 soil ILPP each received from the Service Provider (on behalf of ASPAC) a laboratory specific, confidential, annual summary report. Each laboratory’s data for the 12 soil samples, the aggregate data from all participants, other relevant statistical data, and whether or not the test/s received ASPAC Certification (if applicable) were provided. The laboratory code number was included.

2.6 ASPAC certification of laboratories for soil tests

Subject to satisfactory measurement performance for twelve samples across three sequential “rounds”, typically over the twelve-month period, ASPAC awarded participating laboratories with a printed, signed and dated *Certificate of Proficiency*. The *Certificate of Proficiency* identified performance for each test that met criteria set in advance by ASPAC. Method specific certification applied when a laboratory incurred no more than four demerit points for the twelve samples in the program year.

⁵ Houba, V.J.G., Uittenbogaard, J. and Pellen, P. (1996). Wageningen evaluating programmes for analytical laboratories (WEPAL), organization and purpose. *Commun. Soil Sci. Plant Anal.* **27**, 421-429.

⁶ Montford, M.A.J. van. (1996). Statistical remarks on laboratory–evaluating programs for comparing laboratories and methods. *Commun. Soil Sci. Plant Anal.* **27**, 463-478.

⁷ Rayment, G.E., Miller, R.O. and Sulaeman, E. (2000). Proficiency testing and other interactive measures to enhance analytical quality in soil and plant laboratories. *Commun. Soil Sci. Plant Anal.* **31**, 1513-1530.

⁸ Whitehouse, M.W. (1987). Medians and MADs - Statistical methodology used at Wageningen, The Netherlands, for interlaboratory comparisons in the plant exchange program. Ag. Chem. Br. Report, ACU87/36. 10 pp. (Qld Dept. Primary Ind., Brisbane.)

Demerit points (if any) were allocated through the identification of “outliers” and “stragglers” (see Appendix 3) by the “median / MAD” statistical procedure mentioned earlier in this report. Two demerit points were allocated to each statistical “outlier”, while a statistical “straggler” was allocated one demerit point. As no sample result could be both an “outlier” and a “straggler”, a maximum of two demerit points is all that could accrue per sample for a specific test.

Three (3) was set as the maximum number of demerit points for a specific test, that could be accrued in any one round of four samples. This was done so that unsatisfactory measurement for a test in one “round” did not in itself result in failure to be certified for that test across the three “rounds” in the designated 12-month period.

If a “round” was missed, the maximum number of three demerit points for every test in that “round” was allocated, unless very special circumstances applied and was known or advised expeditiously to ASPAC’s LPC through its Convenor. When the explanation was accepted, performance from the three most recently completed “rounds” was used to assess eligibility for certification. No exceptions applied to this annual program.

Finally, when six (6) laboratories or less submitted results for a particular test and/or sample (including for “pooled” tests), proficiency assessments could not be made statistically with an acceptable level of confidence and hence certification for the affected test/s could not be granted. Importantly, ASPAC’s *Certificates of Proficiency* are only issued on completion of each annual program of three “rounds”. Moreover, ASPAC provide details of certified laboratories by test on its public web site. Those certifications remain valid until superseded by corresponding findings from the next annual soil program.

Table 2.4. Statistical terms and their meanings in the context of this ASPAC annual report

<i>Statistical term</i>	<i>Meaning and/or derivation</i>
Count or number	Original population size.
Maximum i	The highest of a range of values, based on the initial data set.
Minimum i	The lowest of a range of values, based on the initial data set.
Median	The median is the score (value) at the 50 th percentile, also called the 2 nd quartile or 5 th decile. It is the score or potential score in a distribution of scores, above which and below which one-half of the frequencies fall. It is the middle observation of a sequentially sorted array of numbers, except in the case of an even sample size. Here it is the arithmetic mean of the two observations in the middle of the sorted array of observations. The median of a reasonably sized array of numbers is insensitive to extreme scores.
Mean ^A	The arithmetic mean (or average) is the sum of the values of a variable divided by their number. It represents the point in a distribution of measurements about which the summed deviations equals zero. The arithmetic mean is sensitive to extreme measurements.
MAD	The <u>M</u> edian of the <u>A</u> bsolute <u>D</u> eviations, calculated as the median of the absolute values of the observations minus their median.
Interquartile range (IQR)	This is calculated by subtracting the score at the 25 th percentile (referred to as the first quartile; Q ₁) from the score at the 75 th percentile (the third quartile; Q ₃). This value is affected by the assumptions made in the calculation of the first and third quartiles, particularly for low population sizes. Moreover, these differences exist within and across statistical software packages. Prior to the 2004-05 rounds, ASPAC used the algorithm employed by EXCEL and some others. For this program, the algorithm employed was that of SAS Method 4 ⁹ . In summary, IQR = Q ₃ -Q ₁ .
Normalized IQR	This equates to IQR x 0.7413, where the latter is a normalizing factor.
Robust % CV ¹⁰	The robust coefficient of variation (Robust % CV) = (100 x normalized IQR / median). For simplicity, the Robust %CVs shown are for the initial results, and for the “final” population of results for a test after the removal of any “outliers” or “stragglers”, following one or two iterations.
Integer “i” and the letter “f” associated with medians, means, MADs, IQR and Robust %CVs in data summaries.	The integer “i” relates to the initial data set. The letter “f” relates to the “final” data set, generated after one or two iterations, typically after removal of laboratories with statistical “outliers” (if any), and statistical “stragglers” (if any).

^A When the mean is greater than the median, the distribution is positively skewed. When the mean is lower than the median, the distribution is negatively skewed.

⁹ SAS Procedure Guide.

¹⁰ “Guide to NATA Proficiency Testing”. 27 pp. (National Association of Testing Authorities, Australia, December 1997).

3. Summary Statistics

This section provides summary data and associated statistics (values sometimes rounded for table formatting purposes) on all tests (plus key “pooled” combinations) for each of the 12 samples used across three soil “rounds” in 2017. The tabulations include initial and subsequent values for the iterative “median / MAD” procedure plus other parametric and robust statistics. Table 2.4 and Appendix 3 have the meaning or derivation of the terms and statistics used in the tabulated summaries.

2017: Air-Dry Moisture Content 2A1 (%)

Statistical parameters	Soil sample identification and values											
	<i>March 2017 (Round 3)</i>				<i>June 2017 (Round 6)</i>				<i>September 2017 (Round 9)</i>			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	40	41	41	41	40	38	39	39	43	43	43	42
Minimum	0.1	1.52	0.78	1.15	1.55	0.01	0.23	0.16	1.88	1.57	0.78	0.82
Maximum	3.94	4.25	2.06	3.71	14	0.5	1.1	1.45	5	3.8	3.65	2.05
Median i	0.332	3.21	1.6	3.02	12	0.0763	0.8	1.01	4.25	2.94	2.89	1.59
Mean i	0.411	3.18	1.53	2.95	11.5	0.0943	0.758	1	4.1	2.94	2.74	1.54
MAD i	0.0695	0.39	0.2	0.32	1.05	0.0246	0.1	0.16	0.35	0.26	0.24	0.145
IQR i	0.168	0.79	0.37	0.61	1.88	0.0483	0.183	0.285	0.69	0.525	0.615	0.33
Robust CV % i	38	18	17	15	12	47	17	21	12	13	16	15
Median f	0.332	3.23	1.61	3.12	12	0.07	0.813	1.01	4.35	2.97	3.01	1.6
Mean f	0.321	3.22	1.6	3.04	12.2	0.0707	0.805	1.04	4.3	2.98	3	1.58
MAD f	0.0665	0.395	0.18	0.235	0.95	0.0292	0.087	0.14	0.29	0.245	0.14	0.11
IQR f	0.145	0.758	0.36	0.565	1.83	0.0498	0.174	0.28	0.553	0.475	0.34	0.22
Robust CV % f	32	17	17	13	11	53	16	21	9	12	8	10
Outliers	4	1	3	1	4	4	4	2	4	3	5	3
Stragglers	0	0	1	2	0	0	0	0	1	0	5	2

2017: Electrical conductivity 1:5 soil-water (3A1) dS/m

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	53	53	53	53	50	50	50	50	55	55	55	55
Minimum	0.1	0.004	0.08	0.12	0.079	0.004	0.040	0.071	0.059	0.008	0.011	0.016
Maximum	0.187	4.14	13	0.208	0.19	0.15	0.08	0.13	0.15	9.05	0.213	0.61
Median i	0.15	3.76	0.125	0.161	0.114	0.015	0.052	0.1	0.072	8.16	0.113	0.16
Mean i	0.148	3.54	0.435	0.163	0.115	0.022	0.053	0.100	0.0773	7.69	0.115	0.166
MAD i	0.007	0.16	0.006	0.005	0.006	0.003	0.002	0.003	0.0034	0.2	0.005	0.004
IQR i	0.015	0.31	0.012	0.012	0.012	0.004	0.005	0.007	0.009	0.425	0.011	0.008
Robust CV % i	7	6	7	6	8	20	7	5	9	4	7	3
Median f	0.15	3.78	0.123	0.161	0.113	0.014	0.052	0.1	0.071	8.2	0.112	0.16
Mean f	0.15	3.77	0.124	0.162	0.112	0.015	0.052	0.100	0.072	8.22	0.113	0.16
MAD f	0.006	0.14	0.007	0.004	0.005	0.002	0.002	0.003	0.002	0.1	0.003	0.003
IQR f	0.012	0.28	0.011	0.007	0.010	0.003	0.004	0.005	0.004	0.193	0.006	0.006
Robust CV % f	6	5	7	3	6	16	6	4	4	2	4	3
Outliers	5	4	7	10	7	9	8	5	12	12	12	13
Stragglers	2	0	0	3	1	0	2	0	4	7	5	3

2017: Soil pH, 1:5 soil-water (4A1)

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	54	54	54	54	51	51	51	51	56	56	56	56
Minimum	6.48	5.7	5.62	5.16	5.82	4.8	5.02	5.15	6.5	2.94	5.1	4.9
Maximum	8.88	8.76	7.47	6.1	6.95	6.9	6.3	6.61	7.66	3.72	6.32	5.85
Median i	7.35	7.57	6.03	5.5	6.39	5.61	5.78	5.87	7.35	3.17	5.8	5.51
Mean i	7.34	7.51	6.06	5.5	6.36	5.66	5.76	5.86	7.29	3.17	5.76	5.5
MAD i	0.075	0.125	0.075	0.095	0.07	0.16	0.06	0.08	0.1	0.045	0.06	0.05
IQR i	0.155	0.24	0.158	0.17	0.16	0.33	0.145	0.15	0.193	0.1	0.155	0.095
Robust CV % i	2	2	2	2	2	4	2	2	2	2	2	1
Median f	7.37	7.59	6.03	5.5	6.41	5.6	5.8	5.87	7.37	3.16	5.8	5.52
Mean f	7.35	7.58	6.02	5.49	6.4	5.58	5.79	5.87	7.35	3.16	5.79	5.52
MAD f	0.065	0.1	0.06	0.085	0.05	0.13	0.03	0.05	0.09	0.04	0.05	0.04
IQR f	0.115	0.2	0.12	0.17	0.1	0.23	0.0575	0.1	0.145	0.08	0.09	0.08
Robust CV % f	1	2	1	2	1	3	1	1	1	2	1	1
Outliers	9	6	12	3	9	8	12	4	6	8	9	5
Stragglers	1	0	0	1	5	0	5	5	0	1	2	4

2017: pH CaCl₂ - Pooled (4B1 + 4B2 + 4B3 +4B4) pH Units

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	35	35	35	35	33	33	33	33	37	37	37	37
Minimum	6.44	7.07	4.93	4.57	5.34	4.63	4.7	4.82	5.75	2.99	4.75	4.68
Maximum	7.18	7.78	5.86	5.56	6.02	5.69	5.41	5.43	6.8	3.67	5.2	5.45
Median i	6.95	7.47	5.27	4.91	5.75	4.94	4.97	5.06	6.6	3.16	5.01	4.9
Mean i	6.94	7.44	5.28	4.93	5.73	4.95	4.97	5.07	6.55	3.17	5.01	4.9
MAD i	0.08	0.12	0.06	0.05	0.06	0.11	0.05	0.04	0.08	0.04	0.04	0.06
IQR i	0.17	0.24	0.115	0.08	0.12	0.2	0.1	0.08	0.2	0.08	0.07	0.09
Robust CV % i	2	2	2	1	2	3	1	1	2	2	1	1
Median f	6.99	7.49	5.27	4.91	5.76	4.93	4.96	5.06	6.61	3.16	5.01	4.9
Mean f	6.97	7.49	5.27	4.92	5.76	4.91	4.95	5.06	6.62	3.16	5.01	4.89
MAD f	0.08	0.085	0.05	0.05	0.045	0.1	0.05	0.04	0.045	0.04	0.03	0.03
IQR f	0.165	0.168	0.095	0.07	0.1	0.17	0.09	0.08	0.0875	0.075	0.05	0.05
Robust CV % f	2	2	1	1	1	3	1	1	1	2	1	1
Outliers	3	1	5	4	4	1	3	4	5	4	7	6
Stragglers	0	4	1	0	1	1	0	0	4	0	5	2

2017: Water Ext Cl - Pooled (5A1 + 5A2 + 5A3) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	33	33	33	33	32	32	32	32	32	35	34	34
Minimum	12.6	4630	34.9	9.1	6.47	2.38	1	37.5	3.61	86.5	22.4	21.9
Maximum	143	9400	210	266	205	179	126	155	122	27500	153	67
Median i	19	5910	49.9	15.5	11.8	5.6	5.94	49.2	8.47	6120	55.6	28
Mean i	27.4	6050	62.4	29.9	22.3	12.8	10.7	54.5	15.8	6500	62	32.1
MAD i	4.6	340	4.8	4.5	2.89	2.41	3.45	2.65	2.47	150	4.4	2.7
IQR i	7.6	690	12.1	16.6	5.5	4.5	6.23	4.55	8.13	260	7.6	5.38
Robust CV % i	30	9	18	79	35	60	78	7	71	3	10	14
Median f	15.7	5910	48.5	13.8	10.4	3.8	5.35	49.1	7	6120	55	26
Mean f	16.6	5910	49.4	13.8	10.7	4.48	5.71	49	7.21	6140	55.3	26.7
MAD f	2.4	320	3.1	1.55	1.71	1.17	2.85	1.45	1.5	100	1.9	2
IQR f	5.6	630	8.4	3.28	3.33	2.8	5.52	2.8	3.08	223	3.58	3.45
Robust CV % f	26	8	13	18	24	55	76	4	33	3	5	10
Outliers	5	3	6	8	5	5	2	5	7	6	6	6
Stragglers	3	0	2	5	1	2	1	1	2	3	2	1

2017: Organic Carbon — W&B (6A1) %

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	28	28	28	28	28	28	28	27	28	28	28	28
Minimum	0.761	0.08	1.82	5.34	1.74	0.0483	0.888	0.24	0.903	0.989	1.43	1.24
Maximum	1.99	0.54	4.91	15	4.92	2.22	2.16	3.42	1.89	2.23	3.52	3.38
Median i	0.885	0.216	2.12	6.86	2.29	0.107	1	0.931	1.02	1.32	2.75	2.01
Mean i	0.969	0.237	2.31	7.28	2.35	0.187	1.07	1.02	1.09	1.36	2.77	2.12
MAD i	0.072	0.065	0.185	0.515	0.145	0.018	0.0725	0.093	0.045	0.085	0.19	0.11
IQR i	0.166	0.12	0.373	0.988	0.258	0.033	0.164	0.216	0.11	0.165	0.383	0.283
Robust CV % i	14	41	13	11	8	23	12	17	8	9	10	10
Median f	0.851	0.21	2.1	6.7	2.29	0.104	0.999	0.931	1.01	1.31	2.74	1.98
Mean f	0.884	0.207	2.14	6.79	2.28	0.105	1.02	0.96	1	1.32	2.75	1.99
MAD f	0.0445	0.05	0.16	0.47	0.125	0.016	0.07	0.081	0.04	0.06	0.165	0.06
IQR f	0.135	0.108	0.325	0.85	0.23	0.0245	0.126	0.181	0.081	0.12	0.293	0.113
Robust CV % f	12	38	11	9	7	17	9	14	6	7	8	4
Outliers	3	2	2	2	2	3	2	2	6	4	6	5
Stragglers	1	1	0	0	0	2	0	0	0	1	0	3

2017: Total Carbon — Dumas (6B2) %

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	30	30	30	30	29	27	29	29	28	28	28	28
Minimum	0.686	0.017	1.88	5.22	2.42	0.054	0.994	0.925	0.95	0.971	2.52	2.12
Maximum	1	0.212	2.6	8.72	3.1	0.322	1.27	1.25	1.27	1.45	3.54	3.03
Median i	0.807	0.171	2.15	7.9	2.88	0.127	1.13	1.05	1.12	1.34	3.03	2.24
Mean i	0.809	0.168	2.17	7.78	2.83	0.133	1.13	1.06	1.13	1.33	3.05	2.26
MAD i	0.0235	0.0115	0.11	0.275	0.14	0.011	0.03	0.02	0.02	0.02	0.08	0.045
IQR i	0.051	0.027	0.155	0.523	0.3	0.021	0.05	0.04	0.0325	0.0425	0.175	0.085
Robust CV % i	5	12	5	5	8	12	3	3	2	2	4	3
Median f	0.807	0.171	2.15	7.92	2.88	0.125	1.12	1.05	1.12	1.34	3.02	2.24
Mean f	0.804	0.174	2.15	7.91	2.83	0.126	1.12	1.05	1.12	1.34	3.02	2.23
MAD f	0.0225	0.01	0.11	0.26	0.14	0.0085	0.02	0.01	0.01	0.015	0.05	0.04
IQR f	0.0425	0.018	0.15	0.438	0.3	0.018	0.04	0.01	0.02	0.0275	0.09	0.0825
Robust CV % f	4	8	5	4	8	11	3	1	1	2	2	3
Outliers	4	4	1	2	0	3	3	7	7	6	5	2
Stragglers	0	1	0	0	0	0	1	4	3	0	2	0

2017: Total Organic Carbon - Pooled (6B1 + 6B3 + 6B5) %

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	17	17	17	21	21	21	21	20	20	20	20
Minimum	0.67	0.143	2	6.42	2.2	0.0606	0.87	0.86	0.86	1.12	2.46	1.7
Maximum	0.88	0.21	2.5	8.46	4.21	0.29	2.19	1.92	1.3	1.45	3.39	2.86
Median i	0.799	0.178	2.18	7.82	2.8	0.12	1.1	1.05	1.1	1.33	3	2.2
Mean i	0.795	0.178	2.19	7.67	2.82	0.122	1.14	1.07	1.08	1.33	2.99	2.18
MAD i	0.031	0.011	0.06	0.33	0.2	0.013	0.05	0.03	0.04	0.035	0.065	0.055
IQR i	0.059	0.021	0.13	0.58	0.4	0.024	0.11	0.05	0.08	0.06	0.133	0.108
Robust CV % i	5	9	4	5	11	15	7	4	5	3	3	4
Median f	0.8	0.178	2.16	7.9	2.73	0.12	1.1	1.05	1.1	1.33	3	2.21
Mean f	0.803	0.178	2.16	7.77	2.75	0.119	1.09	1.05	1.09	1.35	3	2.22
MAD f	0.0295	0.011	0.04	0.33	0.215	0.01	0.05	0.01	0.04	0.02	0.045	0.04
IQR f	0.0583	0.021	0.085	0.65	0.365	0.0193	0.095	0.02	0.065	0.05	0.085	0.0675
Robust CV % f	5	9	3	6	10	12	6	1	4	3	2	2
Outliers	2	1	2	1	1	5	3	4	4	3	8	4
Stragglers	0	0	1	0	0	0	0	2	0	2	0	0

2017: Total N — Pooled (7A1 + 7A2) %

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	14	14	14	14	14	12	14	14	14	14	14	14
Minimum	0.0476	0.01	0.127	0.171	0.144	0.0009	0.06	0.04	0.069	0.031	0.143	0.152
Maximum	0.0891	0.212	0.211	0.525	0.25	0.042	0.11	0.09	0.545	0.938	1.05	1.05
Median i	0.0586	0.0299	0.15	0.462	0.218	0.00774	0.0915	0.0721	0.086	0.0746	0.182	0.19
Mean i	0.0606	0.0437	0.151	0.433	0.206	0.0138	0.0909	0.0721	0.12	0.168	0.246	0.247
MAD i	0.0075	0.0089	0.009	0.0275	0.0205	0.00474	0.01	0.0108	0.00685	0.007	0.0175	0.011
IQR i	0.0128	0.019	0.0163	0.0623	0.0368	0.017	0.0167	0.0158	0.0173	0.0244	0.0283	0.0188
Robust CV % i	16	47	8	10	12	163	14	16	15	24	12	7
Median f	0.0582	0.0298	0.15	0.475	0.218	0.005	0.0915	0.0721	0.0845	0.074	0.18	0.19
Mean f	0.0584	0.0307	0.151	0.467	0.206	0.00555	0.0909	0.0721	0.0856	0.0729	0.184	0.185
MAD f	0.0072	0.0088	0.001	0.028	0.0205	0.002	0.01	0.0108	0.00585	0.004	0.019	0.01
IQR f	0.011	0.017	0.0015	0.0528	0.0368	0.0036	0.0167	0.0158	0.0107	0.0052	0.021	0.01
Robust CV % f	14	42	1	8	12	53	14	16	9	5	9	4
Outliers	1	1	1	2	0	2	0	0	1	3	1	1
Stragglers	0	0	5	0	0	2	0	0	1	2	0	0

2017: Total N – Dumas (7A5) %

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	33	33	33	33	35	33	35	35	31	31	31	31
Minimum	0.005	0.005	0.102	0.445	0.198	0.001	0.0625	0.0392	0.065	0.048	0.161	0.174
Maximum	0.67	0.0571	0.165	0.59	0.347	0.144	0.217	0.231	0.104	0.097	0.231	0.22
Median i	0.0561	0.031	0.149	0.491	0.23	0.006	0.095	0.0772	0.09	0.0784	0.187	0.198
Mean i	0.0782	0.0308	0.147	0.493	0.231	0.0114	0.0981	0.0799	0.0885	0.0778	0.189	0.198
MAD i	0.0041	0.005	0.007	0.01	0.017	0.00318	0.005	0.0049	0.003	0.0026	0.007	0.005
IQR i	0.008	0.011	0.014	0.022	0.033	0.0062	0.0115	0.0095	0.006	0.00555	0.013	0.009
Robust CV % i	11	26	7	3	11	77	9	9	5	5	5	3
Median f	0.056	0.031	0.15	0.49	0.228	0.005	0.0949	0.0787	0.09	0.0775	0.186	0.197
Mean f	0.0563	0.0307	0.15	0.487	0.228	0.00604	0.095	0.0777	0.0891	0.077	0.187	0.197
MAD f	0.002	0.005	0.006	0.008	0.0165	0.00218	0.0049	0.0036	0.002	0.00235	0.006	0.005
IQR f	0.004	0.011	0.0108	0.019	0.0318	0.00574	0.0086	0.00755	0.0049	0.00448	0.012	0.0085
Robust CV % f	5	26	5	3	10	85	7	7	4	4	5	3
Outliers	7	2	3	5	1	3	3	4	4	6	3	4
Stragglers	3	0	0	3	0	1	0	0	2	0	0	1

2017: Water Soluble Nitrate N— Pooled (7B1 +7B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	17	15	17	17	16	17	17	20	17	20	20
Minimum	1.82	71	0.01	0.02	0.03	0.128	8.4	10.6	0.03	0.001	2.55	17.5
Maximum	13	277	14	19.5	112	8.8	14	18	336	321	239	159
Median i	10	90	0.192	14	0.5	0.39	10.7	14	1.98	0.301	9.46	32.6
Mean i	9.67	101	1.62	13.7	7.91	1.18	10.7	14	18.6	21.3	20.9	38.7
MAD i	0.8	3.7	0.172	2	0.36	0.115	0.8	0.6	0.25	0.196	0.64	1.85
IQR i	1.6	9.3	0.486	3.5	0.755	0.253	1.5	1.1	0.558	0.396	1.1	3.15
Robust CV % i	12	8	187	19	112	48	10	6	21	98	9	7
Median f	10	89.2	0.13	14.1	0.182	0.37	10.7	14	1.93	0.22	9.42	32.6
Mean f	9.94	88.8	0.217	14.6	0.281	0.361	10.5	13.9	1.91	0.24	9.52	32.3
MAD f	0.57	2.3	0.094	1.75	0.112	0.03	0.75	0.6	0.13	0.134	0.42	0.4
IQR f	0.97	3.6	0.232	3.63	0.385	0.0575	1.23	0.95	0.218	0.314	0.83	0.675
Robust CV % f	7	3	132	19	157	12	9	5	8	106	7	2
Outliers	2	4	2	1	2	3	1	2	7	3	5	7
Stragglers	2	1	1	0	3	3	0	0	1	0	2	3

2017: KCI Extractable Nitrate N — autocolour (7C2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	28	28	26	28	27	27	27	27	27	27	27	27
Minimum	0.99	9.4	0.001	1.6	0.001	0.001	9.73	12.2	0.01	0.007	6.78	28.9
Maximum	24.2	128	14.9	20	2.07	3.47	14	16	2.89	1.73	12.1	38.5
Median i	9.99	88.1	0.213	15	0.28	0.435	10.8	13.6	2	0.39	9.84	31.5
Mean i	10.1	86.9	1.04	14.2	0.466	0.649	11.1	13.8	1.92	0.5	9.89	32
MAD i	0.505	3.65	0.176	0.6	0.178	0.086	0.3	0.6	0.18	0.273	0.41	0.8
IQR i	1.06	6.48	0.453	1.33	0.35	0.188	0.55	1.3	0.38	0.557	0.765	1.65
Robust CV % i	8	5	158	7	93	32	4	7	14	106	6	4
Median f	10	88.1	0.16	15	0.226	0.4	10.8	13.6	2	0.276	9.75	31.2
Mean f	10.1	88.6	0.209	14.9	0.247	0.4	10.7	13.6	2.03	0.314	9.73	31.2
MAD f	0.3	2.5	0.0825	0.5	0.101	0.06	0.2	0.6	0.13	0.195	0.35	0.5
IQR f	0.718	5.93	0.22	0.95	0.192	0.131	0.4	1.1	0.24	0.389	0.693	0.9
Robust CV % f	5	5	102	5	63	24	3	6	9	104	5	2
Outliers	5	3	4	4	4	5	7	2	5	3	4	4
Stragglers	1	1	2	2	1	1	1	0	1	2	3	4

2017: KCI Ext. Ammonium N — autocolour (7C2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	32	32	32	32	31	31	31	31	32	32	32	32
Minimum	2.18	0.01	2.07	4.41	3.27	0.7	1.47	1.52	1.2	5.65	8.46	7.55
Maximum	10	10.2	17.6	35.7	47.3	5.05	9.22	15.1	35	60.1	68	48.1
Median i	5.77	2.12	11.8	25	38.5	1.86	5.22	9.81	6.43	38.5	44.5	28.9
Mean i	6.15	2.58	11.8	24.6	37	2.14	5.35	9.73	7.15	35.8	42.2	28.3
MAD i	0.515	0.51	0.95	1.55	3.5	0.25	0.61	0.79	0.71	2.85	3.1	1.75
IQR i	1.06	1	2.1	3.05	6.2	0.52	1.2	1.57	1.37	6.13	7.2	3.75
Robust CV % i	14	35	13	9	12	21	17	12	16	12	12	10
Median f	5.7	2.1	11.7	24.9	38.5	1.76	5.15	9.81	6.4	39	44.8	29.2
Mean f	5.72	2.08	11.7	24.8	38.2	1.78	5.16	9.72	6.28	38.8	44.1	29
MAD f	0.3	0.29	0.9	1.2	3.15	0.29	0.6	0.7	0.61	2.05	2.55	1.5
IQR f	0.575	0.635	1.8	2.6	5.9	0.51	1.15	1.34	1.23	4.03	5.63	2.7
Robust CV % f	7	22	11	8	11	21	17	10	14	8	9	7
Outliers	7	5	3	5	1	6	4	5	3	8	5	6
Stragglers	2	1	0	2	0	0	0	0	0	0	1	1

2017: Total P - Pooled %

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	28	28	28	28	25	23	25	25	27	27	27	27
Minimum	0.0057	0.027	0.0186	0.141	0.0962	0.00001	0.0226	0.0141	0.0546	0.025	0.0015	0.04
Maximum	0.0397	0.174	0.0802	0.822	0.38	0.07	0.14	0.12	0.22	0.1	0.05	0.15
Median i	0.008	0.0395	0.0249	0.185	0.16	0.0005	0.0337	0.0208	0.0937	0.035	0.01	0.0485
Mean i	0.0111	0.0482	0.0274	0.209	0.162	0.0044	0.0374	0.0257	0.0956	0.0368	0.0121	0.0514
MAD i	0.000995	0.00235	0.00165	0.012	0.012	0.0003	0.0033	0.0024	0.0053	0.0021	0.00184	0.0028
IQR i	0.00192	0.00585	0.00278	0.0195	0.028	0.00095	0.0061	0.0051	0.0105	0.00355	0.00386	0.0048
Robust CV % i	18	11	8	8	13	140	13	18	8	8	29	7
Median f	0.00774	0.039	0.024	0.185	0.16	0.00044	0.0334	0.0207	0.0937	0.0348	0.00941	0.0474
Mean f	0.00784	0.0395	0.0243	0.185	0.158	4.9E-04	0.0332	0.0214	0.0925	0.0345	0.00984	0.047
MAD f	0.00054	0.0018	0.0011	0.0065	0.0115	0.00014	0.00345	0.0023	0.0025	0.0009	0.00109	0.0024
IQR f	0.00123	0.00395	0.0021	0.0123	0.025	0.00025	0.00625	0.0044	0.00565	0.00223	0.0017	0.0043
Robust CV % f	12	8	6	5	12	42	14	16	4	5	13	7
Outliers	4	3	3	3	3	5	1	2	5	5	3	2
Stragglers	1	2	2	3	0	2	0	0	3	2	3	0

2017: Colwell Extractable P — Pooled (9B1 + 9B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	32	32	32	32	32	32	32	32	32	32	32	32
Minimum	14.8	5.2	33.3	169	106	0.01	36.3	9.6	33.8	30.6	0.954	24.3
Maximum	51.2	24.6	65.9	471	293	9	75.3	23.9	94	64	44	397
Median i	21.5	18.1	45.6	355	156	1.86	46.8	17.5	45	52.4	7.8	34.9
Mean i	22.6	17.5	46.5	348	161	2.13	47.4	17.3	46.6	51.2	8.79	47.9
MAD i	2.25	1.9	3.35	26.5	16	1.14	1.8	1.45	2.2	2.15	2.25	1.85
IQR i	3.83	3.78	6.48	49.8	28.5	2.27	5.75	2.63	4.55	4.8	4.45	3.95
Robust CV % i	13	16	11	10	14	91	9	11	7	7	42	8
Median f	21.3	18.1	45.5	359	155	1.77	46.8	17.5	44.9	52.9	7.8	34.5
Mean f	21.6	17.9	45.5	356	154	1.77	46.5	17.3	44.5	52.5	7.8	34.7
MAD f	2.4	1.8	2.75	23	15	1.05	1.6	1.05	2	1.6	1.95	1.1
IQR f	3.8	3.2	4.83	46.5	29.3	1.97	3.1	1.95	3.1	3	3.65	2.08
Robust CV % f	13	13	8	10	14	83	5	8	5	4	35	4
Outliers	1	3	4	3	2	2	7	4	7	5	2	9
Stragglers	0	0	0	1	0	0	0	4	0	2	2	3

2017: Olsen Extractable P — Pooled (9C1 + 9C2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	29	28	29	29	29	26	29	28	32	32	30	31
Minimum	1.72	5.3	16.7	42.8	30.5	0.01	15.5	4.4	14.4	12.9	0.25	8.42
Maximum	18.1	43.1	38.8	162	444	6.39	85.2	28.3	49	46.4	25	51
Median i	12.6	7.17	21	121	43.3	0.64	21.3	6.95	18.8	17.9	2.95	12
Mean i	12.5	8.64	21.5	122	66	1.17	25.5	7.73	19.6	19.6	3.73	13.8
MAD i	1	0.53	1.9	9	3.6	0.277	1.6	0.81	1.75	1.6	0.8	1.5
IQR i	1.6	1.3	3.3	20	5.9	0.919	5.1	1.57	2.98	3.08	1.57	3.2
Robust CV % i	9	13	12	12	10	107	18	17	12	13	40	20
Median f	12.1	6.95	20.8	121	43	0.538	21.3	6.74	18.7	17.1	2.73	11.4
Mean f	12.1	7.07	20.6	124	44	0.481	21.9	6.85	18.6	17.2	2.73	12
MAD f	0.8	0.475	1.6	9	3.3	0.212	1.4	0.715	1.7	1.3	0.54	0.8
IQR f	1.4	0.898	3.4	17.5	5.15	0.416	3.9	1.42	2.95	2.58	1.17	2.3
Robust CV % f	9	10	12	11	9	57	14	16	12	11	32	15
Outliers	5	6	2	2	5	4	4	2	1	4	4	2
Stragglers	1	0	0	0	1	3	0	0	0	0	3	2

2017: Bray-1 Extractable P — Pooled (9E1 + 9E2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	15	14	15	15	16	15	16	16	16	16	16	16
Minimum	0.4	7.35	29.4	95.5	18.4	0.02	33.8	10.1	13.3	31.6	2	17.4
Maximum	39.3	39.1	58.7	489	164	6.75	106	34.7	87	67	7.82	62
Median i	9.12	11.7	35	250	37.7	1.09	47.7	12.9	18.6	42.6	3.75	22.9
Mean i	9.9	14	37.9	264	49.8	1.44	51.3	14.9	23.3	44.7	3.81	26.4
MAD i	5.34	1.3	3.2	40	8.8	0.44	6.8	0.85	2.2	4.45	0.405	2.1
IQR i	10.5	3.73	9.25	75.5	17.3	0.904	12.8	1.83	4.45	8.3	0.843	4.08
Robust CV % i	85	24	20	22	34	61	20	11	18	14	17	13
Median f	9.06	11.1	33.5	250	34	1.06	45.6	12.7	18	42.1	3.8	22.7
Mean f	7.8	11.2	35	259	34.7	1.06	45.9	12.5	18.2	41.7	3.73	22.4
MAD f	4.81	0.7	1.6	38	6.7	0.414	6.4	0.7	1.5	3.9	0.2	1.7
IQR f	10.2	1.2	5.2	52	12	0.771	11.7	1	3.33	6.95	0.52	3.1
Robust CV % f	84	8	12	15	26	54	19	6	14	12	10	10
Outliers	1	2	1	2	2	1	1	3	2	2	2	3
Stragglers	0	3	2	0	1	0	1	0	0	0	1	0

2017: Acid Extractable P — Pooled (9G1 + 9G2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	11	11	11	11	11	11	11	11	11	11	11	11
Minimum	17.8	165	55.4	792	169	1	49.2	14.3	344	57.1	4.44	31.8
Maximum	45.1	250	107	1190	305	20	162	39.4	469	79	19.4	54.8
Median i	33	224	84	980	207	2.67	128	25.2	394	69.6	7.8	48.7
Mean i	32	219	81.5	963	212	4.08	121	25.2	405	68.8	9.47	47.4
MAD i	4.8	6	5	87	21	0.44	12	3.4	20	4.1	1.8	3.3
IQR i	7.15	13	8.3	156	39.5	0.755	25.5	6.2	45.5	7.05	3.22	5.35
Robust CV % i	16	4	7	12	14	21	15	18	9	8	31	8
Median f	33	225	84.5	980	203	2.67	130	25.1	394	69.6	7.79	48.9
Mean f	32	228	84.6	963	203	2.6	128	23.7	405	68.8	7.39	48.9
MAD f	4.8	4	4.15	87	22.5	0.27	11.5	3.3	20	4.1	1.21	2.95
IQR f	7.15	9	5.88	156	40.5	0.405	20.8	5.25	45.5	7.05	2.31	5.15
Robust CV % f	16	3	5	12	15	11	12	16	9	8	22	8
Outliers	0	3	3	0	1	1	1	1	0	0	2	1
Stragglers	0	0	0	0	0	3	0	0	0	0	0	0

2017: Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	22	22	22	22	21	21	21	21	21	21	21	21
Minimum	64	32	24	164	466	7.68	18.9	37.7	9	6	5	7
Maximum	124	374	378	715	671	22	36.9	54.8	107	272	108	149
Median i	87	40.2	33.1	209	529	15.8	29.7	49.7	92.6	213	92.5	95.1
Mean i	88.1	55.8	48	231	546	15.6	29.1	49	87	207	88.8	95.1
MAD i	7.5	1.35	2.65	12.5	43	2.4	2.6	2.9	5.3	10	4.5	4.1
IQR i	15.3	3.88	4.55	24.3	79	3.6	5.4	5.9	12.4	22	8	7.2
Robust CV % i	13	7	10	9	11	17	13	9	10	8	6	6
Median f	86.7	40	33.1	209	529	15.8	30	51	92.7	215	94.8	93.5
Mean f	86.4	39.8	32.7	208	546	15.6	29.7	50	92.9	218	95.1	94.2
MAD f	6.7	0.6	2.35	12	43	2.4	2.3	2	5.2	9	5.1	3
IQR f	15	1.3	4.45	20	79	3.6	4.53	4.45	10.2	18	9.3	6.63
Robust CV % f	13	2	10	7	11	17	11	6	8	6	7	5
Outliers	1	5	1	3	0	0	1	1	3	2	3	6
Stragglers	0	3	1	0	0	0	0	1	0	2	0	1

2017: Phosphorus buffer index - Unadj (9I4a + 9I4b + 9I4c) L/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	11	11	11	11	12	12	12	12	12	12	12	12
Minimum	59.9	27.8	16.3	107	413	13.8	20	42.6	66	177	65	69
Maximum	120	48	31.3	147	543	21.7	27.8	53.6	96	259	99	104
Median i	84.1	37	26.4	130	453	16.7	22.6	48.5	82.1	199	89.4	89.6
Mean i	85.7	38.6	25	130	460	17.3	23.5	48.5	82.7	204	89.2	89.2
MAD i	14.5	1.3	3.2	3	27.5	1.8	2.45	0.85	5.55	4.5	3	4.8
IQR i	21.8	6.6	4.85	5.5	53	4.18	5	1.4	9.98	11.3	6.28	8.1
Robust CV % i	19	13	14	3	9	19	16	2	9	4	5	7
Median f	84.1	36.2	26.4	129	453	16.7	22.6	48.5	82.1	197	90.2	90
Mean f	85.7	36.5	25	129	460	17.3	23.5	48.5	82.7	197	91.3	91
MAD f	14.5	0.35	3.2	2	27.5	1.8	2.45	0.5	5.55	2	2.2	3.6
IQR f	21.8	0.9	4.85	4.5	53	4.18	5	1	9.98	4.75	6.85	7.1
Robust CV % f	19	2	14	3	9	19	16	2	9	2	6	6
Outliers	0	4	0	3	0	0	0	4	0	3	1	1
Stragglers	0	1	0	0	0	0	0	0	0	1	0	0

2017: Phosphate Extractable S – Pooled (10B1 + 10B2 + 10B3) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	10	10	10	10	10	10	10	10	10	10	10	10
Minimum	3.89	21	3.75	13.9	55.3	4.67	3.67	7.67	3.17	6690	13.8	7.03
Maximum	13	27.5	16	38.6	111	12	20.3	31.8	11.1	10400	73	42.9
Median i	10.9	25.4	10.3	33.6	80.6	8.77	6.56	14.3	9.45	7030	30	32.4
Mean i	10.3	24.6	10.2	31.2	82.9	9.05	8.06	16	9.09	7400	34.7	30
MAD i	1.27	1.2	1.6	4.15	5.65	1.05	0.63	2.45	0.83	325	3.6	4.9
IQR i	2.18	2.73	2.92	7.73	15.8	1.95	1.82	3.13	1.38	580	6.4	9.98
Robust CV % i	15	8	21	17	15	16	21	16	11	6	16	23
Median f	11	25.4	10.3	35.2	80.6	8.77	6.55	14	9.49	7010	29.2	35.2
Mean f	11	24.6	10.2	33.1	82.8	9.05	6.47	14.3	9.75	7060	28.7	34.3
MAD f	1	1.2	1.6	3.3	4.3	1.05	0.085	2.1	0.71	300	2.1	3.5
IQR f	1.7	2.73	2.92	6.7	9.48	1.95	0.13	3	1.02	440	4.25	6.63
Robust CV % f	11	8	21	14	9	16	1	16	8	5	11	14
Outliers	1	0	0	1	2	0	2	1	1	1	3	1
Stragglers	0	0	0	0	0	0	2	0	0	0	0	1

2017: KCl₄₀ Extractable S (10D1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	20	20	20	20	18	18	18	18	18	18	18	18
Minimum	7.78	19.8	5.75	24.6	27.8	2.33	4.33	6.64	4.67	17.9	11.4	18.8
Maximum	15.2	52.9	18.3	60.3	60	10.2	12.5	19.6	33	9300	35.7	33
Median i	9.95	34	9.3	31.4	40.4	6.08	6.43	12.2	7.52	6620	21	25.2
Mean i	10.5	33.4	10.3	32.8	40.6	6.14	7.07	12.1	8.99	6310	21.3	25.9
MAD i	0.72	1.3	0.74	2.45	3.4	0.465	0.73	0.8	0.855	305	2.65	2.1
IQR i	1.31	3.1	1.58	5.08	6.35	0.888	1.16	1.6	1.16	663	4.8	4.4
Robust CV % i	10	7	13	12	12	11	13	10	11	7	17	13
Median f	9.9	34.1	9.1	31.1	40.4	6.08	6.4	12.3	7.52	6670	20.7	24.9
Mean f	9.97	34.1	9.26	30.5	40.2	6.12	6.29	12.3	7.37	6640	20.3	25.4
MAD f	0.65	0.35	0.2	2.4	3.25	0.38	0.6	0.7	0.61	175	1.7	1.9
IQR f	1.25	0.65	0.43	4.18	5.65	0.685	0.775	1.4	1.02	333	3.4	4.4
Robust CV % f	9	1	4	10	10	8	9	8	10	4	12	13
Outliers	2	5	4	2	2	4	3	3	2	5	2	1
Stragglers	0	3	3	0	0	0	0	0	2	1	1	0

2017: DTPA Extractable Fe (12A1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	30	30	30	30	30	30	30	30	27	27	27	27
Minimum	51	1.56	45.9	48	1.07	3.27	54.1	25.7	9.2	117	73.7	53.3
Maximum	538	33.9	169	347	17.6	12.9	218	69.6	34.7	224	676	447
Median i	197	3.3	84.8	186	9.13	6.35	79.1	51.2	26.5	170	102	71.2
Mean i	194	4.29	91.5	196	9.1	6.73	89.5	48.9	25.7	172	123	88.4
MAD i	49	0.25	12.1	21	2.09	1.4	13.9	6.9	3.2	17	14	9.5
IQR i	104	0.465	27.5	45.5	3.96	2.82	32.7	12.5	5.65	31.5	24.3	16.6
Robust CV % i	39	10	24	18	32	33	31	18	16	14	18	17
Median f	193	3.26	84.4	184	9.13	6.3	72.4	51.3	26.8	170	95.3	70.1
Mean f	183	3.29	85.3	185	9.09	6.52	74.7	49.7	26.4	172	97.8	70
MAD f	48	0.14	10.3	18	1.94	1.31	9.8	6.8	3.2	17	11.6	7.7
IQR f	96	0.2	16.3	29	3.77	2.83	19.1	11.7	5.55	31.5	21.9	15.4
Robust CV % f	37	5	14	12	31	33	20	17	15	14	17	16
Outliers	1	5	4	5	2	1	5	1	1	0	2	3
Stragglers	0	4	1	0	0	0	1	0	0	0	1	0

2017: DTPA Extractable Cu (12A1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	31	31	31	31	29	28	29	29	27	27	27	27
Minimum	0.419	0.73	0.283	1.3	1.05	0.008	0.0405	0.51	1.02	0.722	1.07	1.66
Maximum	0.905	1.42	0.703	9.84	2.48	0.18	0.55	0.892	1.76	1.34	3.01	3.28
Median i	0.554	0.941	0.438	6.65	1.39	0.025	0.38	0.75	1.2	0.95	1.26	1.88
Mean i	0.569	0.999	0.453	6.78	1.45	0.0482	0.384	0.739	1.21	0.968	1.32	1.92
MAD i	0.043	0.062	0.032	0.47	0.24	0.014	0.042	0.039	0.07	0.138	0.06	0.13
IQR i	0.086	0.131	0.0675	0.905	0.45	0.0455	0.094	0.072	0.125	0.264	0.11	0.235
Robust CV % i	12	10	11	10	24	135	18	7	8	21	6	9
Median f	0.551	0.929	0.433	6.58	1.38	0.013	0.38	0.751	1.19	0.95	1.25	1.86
Mean f	0.553	0.933	0.436	6.54	1.38	0.0151	0.391	0.747	1.19	0.968	1.25	1.87
MAD f	0.04	0.0405	0.021	0.21	0.21	0.0026	0.029	0.0355	0.065	0.138	0.07	0.11
IQR f	0.075	0.0708	0.0398	0.495	0.36	0.006	0.063	0.0695	0.115	0.264	0.115	0.223
Robust CV % f	10	6	7	6	19	34	12	7	7	21	7	9
Outliers	2	8	7	6	2	6	4	3	1	0	1	1
Stragglers	0	1	2	2	0	6	0	0	0	0	0	0

2017: DTPA Extractable Mn (12A1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	31	31	31	31	29	29	29	29	27	27	27	27
Minimum	2.04	15.9	5.31	5.2	186	0.028	48.9	96.7	52.7	43.3	10.9	241
Maximum	7.8	39.7	19.4	44.2	2660	1.42	123	191	80	70.9	22	549
Median i	4.7	25.4	8.2	31.4	276	0.135	60.8	126	57	55.4	17.5	300
Mean i	4.55	26.1	8.32	29.8	362	0.286	66.7	129	58.7	56.3	17.5	305
MAD i	0.76	3	0.4	5.4	25	0.0669	4.8	6	3	2.6	0.8	14
IQR i	1.62	6	0.955	9.3	45	0.254	12.8	12	7	5.5	1.4	32.5
Robust CV % i	25	18	9	22	12	139	16	7	9	7	6	8
Median f	4.7	25.3	8.31	31.6	276	0.083	59.6	125	55.9	54.8	17.5	300
Mean f	4.52	25.3	8.2	31.2	272	0.0979	59.8	126	57.6	54.3	17.6	297
MAD f	0.71	2.9	0.21	5	9	0.03	2.85	6	2.4	1.7	0.6	10
IQR f	1.36	5.6	0.483	9.1	19.3	0.0709	5.4	10	6.2	3.15	1.3	23.5
Robust CV % f	21	16	4	21	5	63	7	6	8	4	6	6
Outliers	3	2	7	2	5	6	4	6	1	5	5	4
Stragglers	1	0	4	0	4	3	3	0	1	3	1	0

2017: DTPA Extractable Zn (12A1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	31	30	31	30	29	27	29	29	27	27	27	27
Minimum	0.529	0.21	0.597	35	0.474	0.002	11.7	0.37	0.367	11.3	0.526	0.63
Maximum	2.12	1.24	2.72	275	2.91	1.18	18.6	2.29	0.893	20.2	1.69	1.72
Median i	0.83	0.345	0.941	180	0.618	0.035	14	0.531	0.578	15.1	0.647	0.84
Mean i	0.864	0.405	1.01	171	0.719	0.0816	14.3	0.601	0.589	15.2	0.676	0.862
MAD i	0.085	0.0415	0.089	12	0.084	0.01	1	0.029	0.062	0.9	0.064	0.083
IQR i	0.171	0.0993	0.159	21.5	0.21	0.022	2.6	0.058	0.123	1.9	0.124	0.156
Robust CV % i	15	21	13	9	25	46	14	8	16	9	14	14
Median f	0.83	0.334	0.94	184	0.613	0.032	13.7	0.529	0.57	15	0.64	0.84
Mean f	0.833	0.332	0.939	181	0.63	0.0323	13.9	0.525	0.565	14.9	0.637	0.829
MAD f	0.084	0.024	0.07	11	0.074	0.007	0.95	0.017	0.061	0.8	0.064	0.079
IQR f	0.16	0.043	0.134	17	0.164	0.013	1.8	0.033	0.093	1.6	0.112	0.15
Robust CV % f	14	10	11	7	20	30	10	5	12	8	13	13
Outliers	2	5	3	8	2	4	3	5	2	4	1	1
Stragglers	0	4	1	1	0	2	0	3	0	0	0	0

2017: CaCl2 Extractable B (12C1 + 12C2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	22	22	22	22	23	21	23	23	21	21	21	21
Minimum	0.311	0.238	0.69	0.907	1.03	0.008	0.097	0.22	0.228	0.364	0.476	0.263
Maximum	0.6	0.973	1.33	1.65	2.99	0.24	0.4	0.67	0.633	5.6	0.91	0.733
Median i	0.464	0.72	0.942	1.32	2.07	0.06	0.2	0.518	0.408	3.11	0.648	0.53
Mean i	0.461	0.689	0.956	1.32	2.04	0.0825	0.214	0.505	0.418	3.13	0.659	0.531
MAD i	0.087	0.0505	0.09	0.135	0.37	0.04	0.049	0.073	0.057	0.64	0.112	0.063
IQR i	0.161	0.0875	0.168	0.24	0.71	0.116	0.088	0.133	0.105	1.28	0.217	0.123
Robust CV % i	26	9	13	13	25	143	33	19	19	31	25	17
Median f	0.464	0.728	0.913	1.32	2.07	0.05	0.198	0.526	0.399	3	0.648	0.546
Mean f	0.461	0.718	0.938	1.32	2.04	0.0532	0.206	0.531	0.407	3.01	0.659	0.545
MAD f	0.087	0.035	0.087	0.135	0.37	0.026	0.048	0.064	0.048	0.365	0.112	0.0685
IQR f	0.161	0.04	0.163	0.24	0.71	0.048	0.092	0.101	0.107	0.6	0.217	0.121
Robust CV % f	26	4	13	13	25	71	34	14	20	15	25	16
Outliers	0	3	1	0	0	3	1	2	1	2	0	1
Stragglers	0	2	0	0	0	1	0	0	0	3	0	0

2017: Exchangeable Ca — 1M NH₄Cl extract (15A1) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	21	21	21	21	19	19	19	19	23	23	23	23
Minimum	1.83	6.82	3.01	11.3	7.83	0.086	2.54	2.95	22.3	0.001	4.75	2.94
Maximum	4.62	16.3	7.95	125	9.4	0.57	3.47	4.14	29.9	10.6	6.16	4.48
Median i	3.88	15.1	6.7	15.6	8.56	0.123	3	3.46	25.8	9.46	5.07	3.5
Mean i	3.74	14	6.44	20.3	8.58	0.16	2.99	3.45	25.9	8.65	5.17	3.53
MAD i	0.28	0.8	0.34	1.4	0.5	0.023	0.17	0.18	1	0.47	0.1	0.12
IQR i	0.52	1.7	0.77	2.3	0.815	0.04	0.265	0.31	1.9	0.8	0.29	0.235
Robust CV % i	10	8	9	11	7	24	7	7	5	6	4	5
Median f	3.93	15.6	6.86	15.6	8.56	0.116	3	3.44	25.8	9.49	5.02	3.5
Mean f	3.93	15.4	6.69	15.2	8.58	0.118	2.99	3.42	25.9	9.56	5.03	3.51
MAD f	0.12	0.5	0.26	0.9	0.5	0.0155	0.17	0.155	1	0.285	0.05	0.12
IQR f	0.205	1	0.61	2.2	0.815	0.0305	0.265	0.298	1.6	0.633	0.07	0.22
Robust CV % f	4	5	7	10	7	20	7	6	5	5	1	5
Outliers	2	5	3	1	0	2	0	1	2	3	5	2
Stragglers	3	0	1	1	0	1	0	0	0	2	3	0

2017: Exchangeable K — 1M NH₄Cl extract (15A1) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	21	21	21	20	19	17	19	19	23	21	23	23
Minimum	0.0529	0.337	0.763	0.44	0.14	0.005	0.092	0.374	0.163	0.01	0.0585	0.705
Maximum	0.376	0.79	1.29	0.772	2.02	0.1	0.483	0.747	0.6	0.17	0.23	1.6
Median i	0.106	0.539	1.14	0.675	1.56	0.014	0.398	0.627	0.382	0.0728	0.13	1.39
Mean i	0.118	0.536	1.12	0.659	1.53	0.0268	0.378	0.603	0.399	0.0767	0.139	1.38
MAD i	0.015	0.039	0.04	0.056	0.14	0.004	0.025	0.02	0.029	0.0238	0.02	0.09
IQR i	0.026	0.075	0.08	0.1	0.28	0.0092	0.054	0.032	0.0715	0.041	0.0405	0.14
Robust CV % i	18	10	5	11	13	49	10	4	14	42	23	7
Median f	0.105	0.542	1.15	0.678	1.59	0.01	0.399	0.63	0.38	0.0724	0.13	1.4
Mean f	0.0977	0.552	1.15	0.67	1.61	0.0123	0.395	0.631	0.386	0.0721	0.132	1.41
MAD f	0.011	0.033	0.045	0.056	0.15	0.003	0.0165	0.0045	0.02	0.0205	0.015	0.075
IQR f	0.018	0.064	0.0775	0.094	0.273	0.005	0.03	0.009	0.032	0.0395	0.0285	0.135
Robust CV % f	13	9	5	10	13	37	6	1	6	40	16	7
Outliers	2	4	3	1	1	4	2	5	4	1	3	1
Stragglers	2	0	0	0	0	0	1	2	2	0	1	0

2017: Exchangeable Mg — 1M NH₄Cl extract (15A1) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	21	21	21	21	19	17	19	19	24	24	24	24
Minimum	0.332	0.87	1.4	2.28	1.43	0.01	0.455	0.973	0.312	0.002	0.118	0.49
Maximum	0.674	11.5	8.37	4.04	2.33	0.1	0.81	1.54	13.7	22.9	2.68	1.4
Median i	0.452	9.77	1.55	3.01	1.79	0.021	0.605	1.1	10.6	18.8	2.09	0.7
Mean i	0.465	9	1.94	3.03	1.81	0.0264	0.632	1.12	10.2	16.1	2.04	0.728
MAD i	0.029	0.53	0.09	0.21	0.11	0.003	0.018	0.05	0.3	1.3	0.085	0.022
IQR i	0.048	1.17	0.29	0.31	0.205	0.005	0.081	0.095	0.775	2.35	0.17	0.0435
Robust CV % i	8	9	14	8	8	18	10	6	5	9	6	5
Median f	0.451	9.84	1.51	3.01	1.78	0.021	0.6	1.09	10.5	19.1	2.09	0.695
Mean f	0.452	9.77	1.54	3.01	1.78	0.0206	0.601	1.09	10.6	19.4	2.11	0.693
MAD f	0.0215	0.46	0.045	0.21	0.12	0.00175	0.01	0.04	0.2	0.75	0.07	0.005
IQR f	0.0458	0.87	0.138	0.305	0.193	0.00313	0.015	0.07	0.4	1.75	0.115	0.0125
Robust CV % f	8	7	7	8	8	11	2	5	3	7	4	1
Outliers	3	3	3	1	1	2	6	2	9	5	3	5
Stragglers	0	1	2	1	0	1	2	0	1	1	1	3

2017: Exchangeable Na — 1M NH₄Cl extract (15A1) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	18	21	21	21	19	18	19	19	23	23	23	21
Minimum	0.033	0.084	0.086	0.07	0.0865	0.001	0.0191	0.218	0.08	0.001	0.231	0.005
Maximum	0.574	12	1.08	0.539	1.34	0.492	0.953	1.25	9.11	25.6	18.1	0.3
Median i	0.0831	11	0.26	0.175	0.14	0.022	0.07	0.348	0.165	20.1	0.31	0.032
Mean i	0.119	9.16	0.302	0.197	0.259	0.0575	0.134	0.402	0.584	17.4	1.1	0.0659
MAD i	0.0156	0.4	0.024	0.045	0.032	0.0134	0.03	0.009	0.025	1.2	0.05	0.012
IQR i	0.0425	0.8	0.044	0.07	0.0545	0.0265	0.048	0.021	0.0525	2.15	0.0765	0.07
Robust CV % i	38	5	13	30	29	89	51	4	24	8	18	162
Median f	0.0796	11	0.26	0.173	0.125	0.019	0.0676	0.346	0.161	20.3	0.31	0.0296
Mean f	0.0805	11.1	0.259	0.171	0.129	0.0206	0.0666	0.347	0.163	20.3	0.316	0.026
MAD f	0.0074	0.4	0.02	0.034	0.021	0.01	0.0215	0.006	0.015	0.55	0.033	0.0096
IQR f	0.0131	0.7	0.044	0.0635	0.0383	0.019	0.0338	0.011	0.0278	1.1	0.05	0.0139
Robust CV % f	12	5	13	27	23	74	37	2	13	4	12	35
Outliers	3	4	4	2	3	3	3	6	3	5	2	6
Stragglers	4	0	0	0	0	0	0	0	2	2	0	0

2017: Exchangeable Ca — 1M NH₄OAc extract (15D3) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	23	23	23	23	26	23	26	25	25	25	25	25
Minimum	2.89	12.4	5.14	10.9	4.29	0.061	1.81	2.3	18.6	5.6	4.38	2.48
Maximum	4.4	18.5	7.67	17.5	10.1	0.58	4.04	4.43	35	9.88	5.85	4.1
Median i	3.96	14.8	6.73	13.7	8.4	0.116	2.99	3.43	25.4	8.81	5.14	3.46
Mean i	3.91	14.9	6.58	13.7	8.31	0.159	3.01	3.45	26	8.64	5.15	3.47
MAD i	0.15	0.4	0.33	0.5	0.36	0.026	0.18	0.16	1.2	0.21	0.2	0.11
IQR i	0.34	0.75	0.575	1.15	0.73	0.07	0.328	0.27	2.8	0.41	0.39	0.23
Robust CV % i	6	4	6	6	6	45	8	6	8	3	6	5
Median f	4	14.8	6.78	13.7	8.38	0.109	2.96	3.43	25.4	8.81	5.14	3.44
Mean f	3.99	14.8	6.7	13.7	8.43	0.112	2.98	3.42	25.6	8.81	5.15	3.43
MAD f	0.11	0.4	0.31	0.5	0.22	0.0165	0.13	0.09	0.75	0.09	0.19	0.065
IQR f	0.21	0.7	0.51	0.9	0.5	0.0298	0.218	0.148	1.35	0.145	0.35	0.123
Robust CV % f	4	4	6	5	4	20	5	3	4	1	5	3
Outliers	2	4	2	4	3	3	5	3	4	6	2	5
Stragglers	2	0	0	0	4	2	1	2	1	4	0	2

2017: Exchangeable K — 1M NH₄OAc extract (15D3) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	27	27	27	27	28	26	28	27	27	27	27	27
Minimum	0.07	0.48	0.55	0.32	0.74	0.00515	0.15	0.4	0.25	0.0585	0.07	1.06
Maximum	0.18	0.85	1.9	1.07	1.79	0.11	0.48	0.78	0.79	0.2	0.22	2.12
Median i	0.1	0.527	1.09	0.639	1.48	0.0135	0.38	0.618	0.368	0.0776	0.138	1.37
Mean i	0.103	0.554	1.05	0.654	1.44	0.0238	0.37	0.602	0.392	0.0884	0.143	1.38
MAD i	0.0088	0.019	0.05	0.031	0.06	0.00455	0.0195	0.026	0.011	0.0136	0.009	0.05
IQR i	0.0154	0.032	0.1	0.064	0.118	0.0157	0.038	0.0605	0.0345	0.0313	0.015	0.095
Robust CV % i	11	5	7	7	6	86	7	7	7	30	8	5
Median f	0.1	0.521	1.09	0.636	1.48	0.011	0.384	0.62	0.365	0.0707	0.136	1.39
Mean f	0.1	0.519	1.08	0.631	1.47	0.0118	0.385	0.614	0.365	0.0735	0.134	1.38
MAD f	0.006	0.013	0.045	0.027	0.04	0.002	0.016	0.018	0.0045	0.0069	0.006	0.03
IQR f	0.0112	0.024	0.085	0.054	0.0675	0.00375	0.034	0.04	0.008	0.015	0.011	0.055
Robust CV % f	8	3	6	6	3	25	7	5	2	16	6	3
Outliers	1	5	5	6	5	5	5	5	6	4	5	6
Stragglers	2	1	0	0	3	3	0	1	7	2	1	2

2017: Exchangeable Mg — 1M NH₄OAc extract (15D3) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	23	23	23	23	26	24	26	25	25	25	25	25
Minimum	0.08	8.06	1.31	2.23	0.99	0.0037	0.34	0.67	4.59	4.69	1.6	0.555
Maximum	2	20.7	2.49	3.7	12.8	0.0598	8.99	5.38	14.5	23.2	4.35	1.25
Median i	0.454	9.45	1.56	2.81	1.67	0.02	0.619	1.09	10	18.3	2.08	0.68
Mean i	0.502	10	1.59	2.76	2.03	0.0239	0.941	1.24	10	17.8	2.17	0.72
MAD i	0.03	0.27	0.09	0.13	0.09	0.005	0.041	0.06	0.4	0.8	0.08	0.036
IQR i	0.047	0.455	0.165	0.41	0.178	0.0128	0.0735	0.12	0.58	1.5	0.16	0.087
Robust CV % i	8	4	8	11	8	47	9	8	4	6	6	9
Median f	0.452	9.42	1.56	2.85	1.68	0.02	0.62	1.1	10	18.3	2.06	0.68
Mean f	0.446	9.34	1.55	2.83	1.68	0.019	0.622	1.1	10	18.4	2.05	0.684
MAD f	0.019	0.18	0.04	0.025	0.08	0.004	0.028	0.045	0.3	0.4	0.07	0.028
IQR f	0.0393	0.33	0.06	0.0575	0.153	0.005	0.044	0.0825	0.56	0.9	0.13	0.038
Robust CV % f	6	3	3	1	7	19	5	6	4	4	5	4
Outliers	2	5	2	7	4	5	5	3	4	3	6	4
Stragglers	1	1	4	4	0	2	0	0	0	3	0	0

2017: Exchangeable Na — 1M NH₄OAc extract (15D3) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	22	21	22	22	24	22	24	24	23	23	23	22
Minimum	0.04	2.42	0.225	0.11	0.0787	0.004	0.005	0.24	0.112	2.32	0.214	0.0079
Maximum	0.4	12.7	1.01	0.53	1.36	0.08	0.54	5.5	1.18	25.5	1.32	0.33
Median i	0.0793	11	0.272	0.173	0.103	0.0152	0.0438	0.32	0.153	19.4	0.319	0.0314
Mean i	0.0998	10.4	0.309	0.187	0.176	0.0207	0.0796	0.552	0.2	17.8	0.363	0.0586
MAD i	0.013	0.8	0.0235	0.0175	0.00865	0.0052	0.015	0.021	0.018	1.1	0.024	0.0124
IQR i	0.0285	1.4	0.045	0.0305	0.0248	0.0113	0.0369	0.036	0.0375	1.9	0.0465	0.0301
Robust CV % i	27	9	12	13	18	55	62	8	18	7	11	71
Median f	0.0765	11.1	0.27	0.17	0.0978	0.0126	0.041	0.317	0.151	19.4	0.318	0.0279
Mean f	0.0773	10.8	0.271	0.171	0.0987	0.014	0.0428	0.315	0.151	19.3	0.317	0.0274
MAD f	0.0065	0.8	0.0195	0.01	0.0075	0.0035	0.0103	0.0145	0.016	0.4	0.022	0.0089
IQR f	0.0123	1.4	0.0305	0.0195	0.0136	0.0088	0.0212	0.0295	0.031	0.95	0.0425	0.016
Robust CV % f	12	9	8	9	10	52	38	7	15	4	10	43
Outliers	3	1	1	2	6	3	4	4	2	6	3	4
Stragglers	3	0	1	1	0	1	1	2	0	2	0	1

2017: Exchangeable Al — 1M KCl (15G1) cmol+/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	17	17	17	18	18	18	18	16	20	19	20
Minimum	0.001	0.001	0.001	0.016	0.001	0.0426	0.005	0.005	0.001	9.31	0.005	0.035
Maximum	0.0706	0.069	0.095	0.18	0.3	0.407	0.136	0.1	0.1	28.7	0.3	0.8
Median i	0.0083	0.007	0.0142	0.0918	0.0153	0.135	0.02	0.018	0.00701	22.2	0.031	0.0855
Mean i	0.0174	0.0148	0.0215	0.0964	0.034	0.143	0.0289	0.0226	0.0184	20.5	0.0694	0.129
MAD i	0.0033	0.003	0.00501	0.0418	0.00714	0.012	0.0079	0.00575	0.003	2.2	0.0252	0.0203
IQR i	0.01	0.0109	0.0145	0.074	0.0148	0.0213	0.0143	0.0108	0.0133	3.9	0.0685	0.0639
Robust CV % i	89	115	76	60	72	12	53	45	140	13	164	55
Median f	0.0065	0.0066	0.0105	0.0918	0.01	0.135	0.0162	0.0156	0.00525	22.5	0.0273	0.0693
Mean f	0.00628	0.00577	0.0103	0.0964	0.013	0.135	0.016	0.0161	0.00655	22.2	0.0312	0.0728
MAD f	0.00186	0.00155	0.00267	0.0418	0.0085	0.005	0.0041	0.0044	0.003	2.1	0.008	0.0073
IQR f	0.00358	0.003	0.00512	0.074	0.0112	0.00975	0.00838	0.0078	0.00218	3.6	0.014	0.0216
Robust CV % f	41	34	36	60	83	5	38	37	31	12	38	23
Outliers	4	4	3	0	3	4	3	2	4	3	2	3
Stragglers	1	1	2	0	0	4	1	0	0	0	3	3

2017: Extractable Al – Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	17	17	17	15	15	15	15	16	16	16	16
Minimum	1010	297	371	1150	1040	310	346	590	787	1030	0.00573	635
Maximum	1460	431	551	1680	1720	415	777	806	2670	2800	1160	1390
Median i	1270	359	458	1280	1260	362	418	669	1000	2470	831	981
Mean i	1240	354	453	1310	1290	355	432	677	1140	2360	789	1010
MAD i	90	23	24	60	60	14	12	12	24	100	53	47.5
IQR i	180	42	61	120	110	29	29.5	19.5	38.5	183	86.8	80
Robust CV % i	11	9	10	7	6	6	5	2	3	5	8	6
Median f	1270	359	457	1270	1260	362	420	669	1000	2480	831	968
Mean f	1240	354	447	1270	1250	354	420	672	998	2520	828	979
MAD f	90	23	24	60	50	10	8	5	10	85	25.5	28
IQR f	180	42	61.5	125	87.5	19	12.5	15	25	153	48.8	35
Robust CV % f	11	9	10	7	5	4	2	2	2	5	4	3
Outliers	0	0	1	2	2	1	4	3	4	2	3	3
Stragglers	0	0	0	0	1	1	0	3	2	0	1	0

2017: Extractable B – Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	15	16	16	16	14	12	13	14	15	15	15	15
Minimum	0.01	0.1	0.14	0.11	0.684	0.001	0.001	0.037	0.02	0.01	0.02	0.02
Maximum	4.61	0.82	0.638	0.921	1.8	0.44	0.742	0.574	1.8	1.1	2	1.8
Median i	0.503	0.632	0.472	0.64	1.25	0.0405	0.19	0.264	0.363	0.287	0.381	0.23
Mean i	0.96	0.613	0.469	0.633	1.28	0.102	0.21	0.281	0.441	0.336	0.422	0.382
MAD i	0.097	0.0265	0.0565	0.05	0.313	0.0395	0.077	0.055	0.097	0.105	0.109	0.09
IQR i	0.371	0.0448	0.112	0.0923	0.54	0.107	0.105	0.0995	0.182	0.169	0.17	0.166
Robust CV % i	55	5	18	11	32	196	41	28	37	44	33	53
Median f	0.501	0.63	0.475	0.637	1.25	0.0228	0.185	0.258	0.363	0.287	0.381	0.227
Mean f	0.498	0.635	0.491	0.637	1.28	0.0366	0.166	0.255	0.369	0.282	0.332	0.227
MAD f	0.036	0.011	0.055	0.026	0.313	0.0218	0.0715	0.032	0.076	0.0995	0.09	0.056
IQR f	0.065	0.0275	0.114	0.039	0.54	0.046	0.102	0.053	0.171	0.157	0.14	0.087
Robust CV % f	10	3	18	5	32	150	41	15	35	41	27	28
Outliers	5	4	1	2	0	2	1	3	1	1	1	2
Stragglers	1	1	0	1	0	1	0	2	1	0	1	0

2017: Extractable Ca – Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	16	16	16	16	14	13	14	14	16	16	16	16
Minimum	0.762	1500	502	1630	1580	16.4	564	561	601	183	122	103
Maximum	925	3300	1500	3210	2030	51	1210	780	5470	5360	1210	775
Median i	835	2970	1340	2890	1780	24	645	713	4890	1770	1040	662
Mean i	727	2840	1270	2760	1790	26.9	678	701	4260	1830	966	622
MAD i	52.5	110	70	110	30	6.7	20.5	27.5	225	95	65	32.5
IQR i	118	208	113	238	60	14.7	34	57.3	718	188	85	65
Robust CV % i	10	5	6	6	2	45	4	6	11	8	6	7
Median f	857	2970	1350	2930	1780	23.9	642	724	5030	1780	1060	669
Mean f	835	2940	1360	2920	1780	24.9	637	712	5000	1800	1080	688
MAD f	33	25	30	70	30	5.45	15	23	70	90	40	29
IQR f	85	72.5	65	130	55	8.83	26	43	90	165	80	51
Robust CV % f	7	2	4	3	2	27	3	4	1	7	6	6
Outliers	2	3	3	2	4	1	2	1	4	4	2	2
Stragglers	1	3	1	1	0	0	1	0	3	0	1	1

2017: Extractable Cu - Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	17	17	17	15	14	15	15	16	16	16	16
Minimum	0.05	1.27	0.11	3.03	2.16	0.025	0.242	0.32	1.01	0.73	1.05	1.24
Maximum	0.575	2.93	0.567	9.08	4.35	0.358	0.833	1.65	2.7	2.8	3.28	3.8
Median i	0.335	2.11	0.447	6.37	2.71	0.0626	0.471	0.867	2.21	1.61	2.33	2.74
Mean i	0.321	2.08	0.428	6.19	2.75	0.0978	0.483	0.874	2.17	1.7	2.18	2.72
MAD i	0.07	0.17	0.037	0.83	0.22	0.0231	0.063	0.096	0.195	0.215	0.25	0.075
IQR i	0.15	0.34	0.07	1.71	0.395	0.053	0.111	0.163	0.4	0.415	0.463	0.108
Robust CV % i	33	12	12	20	11	63	17	14	13	19	15	3
Median f	0.338	2.11	0.449	6.44	2.68	0.0526	0.469	0.867	2.26	1.59	2.38	2.74
Mean f	0.338	2.08	0.448	6.38	2.64	0.0546	0.433	0.857	2.24	1.62	2.38	2.75
MAD f	0.0645	0.12	0.036	0.76	0.215	0.0136	0.059	0.094	0.21	0.09	0.03	0.03
IQR f	0.127	0.305	0.0685	1.72	0.348	0.0291	0.11	0.138	0.4	0.19	0.0575	0.06
Robust CV % f	28	11	11	20	10	41	17	12	13	9	2	2
Outliers	1	2	1	1	1	3	2	2	1	3	3	5
Stragglers	0	0	0	0	0	0	0	0	0	2	5	1

2017: Extractable Fe – Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	17	17	17	15	15	15	15	16	16	16	16
Minimum	2550	69	165	130	1.4	20	209	153	221	221	218	144
Maximum	6300	134	281	2980	77.7	75.3	366	232	370	479	375	226
Median i	4500	99.7	215	261	66.8	53.4	312	214	262	374	273	179
Mean i	4670	102	215	406	60.5	49.3	304	209	273	363	275	179
MAD i	630	4.3	17	27	5.9	4.8	30	10	24.5	25	16	8
IQR i	1030	11.1	34	49	13.3	12.7	59	16.5	49	48.5	30.3	13.8
Robust CV % i	17	8	12	14	15	18	14	6	14	10	8	6
Median f	4500	99.3	215	265	67	54.1	312	215	261	384	273	178
Mean f	4670	99.3	211	261	64.8	52.9	304	215	266	374	272	176
MAD f	630	3.7	17	23	5.35	3.8	30	5	22	25	13	5
IQR f	1030	8.1	30.3	36	9.38	7.6	59	14	43	36	25	11
Robust CV % f	17	6	10	10	10	10	14	5	12	7	7	5
Outliers	0	4	1	3	1	4	0	1	1	3	1	2
Stragglers	0	0	0	0	0	0	0	1	0	0	1	1

2017: Extractable K – Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	16	16	16	16	14	13	14	14	16	16	16	16
Minimum	34	0.205	244	141	310	3.94	8.67	63.9	25.2	12.7	21	167
Maximum	90	282	455	247	618	16.2	172	265	188	145	53.7	580
Median i	46.6	200	400	231	557	6.2	156	232	131	27	48.4	530
Mean i	49.4	184	377	221	547	7.15	139	210	123	33.3	45.4	486
MAD i	3.05	6	46.5	11	28	1.27	7.5	11.5	8.5	3.45	2.3	27
IQR i	6.08	29.3	96.3	29.5	43.5	2.18	18.5	46.3	14.8	5.55	4.68	68
Robust CV % i	10	11	18	9	6	26	9	15	8	15	7	10
Median f	45.9	201	400	236	559	6.18	157	234	131	26.7	49.5	532
Mean f	46	201	377	230	565	5.92	154	236	131	25.9	48.7	527
MAD f	2.4	2.5	46.5	6	21	0.93	5	4	4.5	2.3	2.05	14
IQR f	4.7	4.5	96.3	15	42	2.03	10.5	8	7.75	4.9	4.38	17
Robust CV % f	8	2	18	5	6	24	5	3	4	14	7	2
Outliers	3	5	0	1	1	2	2	4	4	2	2	2
Stragglers	0	1	0	2	0	0	0	1	2	1	0	1

2017: Extractable Mg – Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	16	16	16	16	14	13	14	14	16	16	16	16
Minimum	39	756	101	175	170	2.04	59	87	1010	1440	169	64.8
Maximum	92	1250	268	387	239	5.33	146	223	2460	2620	306	101
Median i	63.5	1190	186	335	204	3.05	82.9	136	1300	2210	256	83.2
Mean i	64.8	1160	185	329	206	3.32	85.5	138	1340	2150	251	82.9
MAD i	4.5	30	10.5	15	8	0.65	6.2	3	55	105	10.5	3.35
IQR i	6.53	42.5	16	27.3	15.5	1.45	10.7	6	125	193	18.5	6.63
Robust CV % i	8	3	6	6	6	35	10	3	7	6	5	6
Median f	63.5	1200	186	336	204	3.05	82.9	136	1300	2220	256	83.3
Mean f	63.3	1200	188	340	206	3.32	82.7	136	1280	2210	256	84.2
MAD f	3.6	20	9	15	7.5	0.65	5.15	2	20	50	9	2.3
IQR f	4.9	40	14	27.5	14.5	1.45	10.2	3	50	80	16	5.3
Robust CV % f	6	2	6	6	5	35	9	2	3	3	5	5
Outliers	3	2	2	1	2	0	2	4	2	3	3	3
Stragglers	0	0	1	0	0	0	0	1	2	1	0	0

2017: Extractable Mn – Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	17	17	17	15	14	15	15	16	16	16	16
Minimum	34	178	1.15	21	383	0.108	79.5	125	60.1	46.3	11	327
Maximum	100	1180	186	339	724	9.1	167	184	165	130	39.7	504
Median i	53.8	253	8.65	39.1	531	0.418	132	161	114	63.5	18.7	405
Mean i	54.3	302	19	58.2	550	1.41	128	160	115	65.9	19.4	408
MAD i	3.9	12	0.67	3.2	35	0.238	9	5	8	3.25	0.8	9
IQR i	8.4	24	1.23	5.9	85	1.43	15	9.5	13.5	5.55	1.43	13.5
Robust CV % i	12	7	11	11	12	254	8	4	9	6	6	2
Median f	54	255	8.57	39.1	517	0.278	133	161	113	64	18.7	404
Mean f	53.7	256	8.44	39.6	515	0.293	134	160	113	64.3	18.6	403
MAD f	3.35	9.5	0.545	2.6	20	0.118	4	4	7	1.7	0.4	3
IQR f	6.23	18.3	0.973	4.95	35.3	0.206	7.25	6.5	10	3.48	0.8	9
Robust CV % f	9	5	8	9	5	55	4	3	7	4	3	2
Outliers	3	3	3	3	4	4	4	3	3	3	4	3
Stragglers	0	0	0	0	1	1	1	1	0	1	2	2

2017: Extractable Na - Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	16	16	16	16	14	14	14	14	16	16	16	16
Minimum	20.1	2000	53.1	33.3	18.4	1.3	10.2	24.6	26	37.3	39	1.3
Maximum	59	2640	91	76.2	73	38.9	74	94	5150	5180	345	310
Median i	25.9	2440	60.3	42.8	27.6	2.93	13.6	71.3	39.1	4680	71.3	6.58
Mean i	28.9	2390	63.5	44.6	34.9	11.3	25.4	70.6	359	4100	85.8	27.3
MAD i	2.05	55	2.9	3.1	4.95	1.45	2.95	4.35	4.25	180	5.55	2.45
IQR i	4	113	5.8	7.78	11.2	18.5	26.1	8.45	7.5	425	9.73	4.91
Robust CV % i	11	3	7	13	30	468	142	9	14	7	10	55
Median f	25.7	2450	60.1	42.7	26.5	2.53	13	71.2	38.8	4740	71.3	6.2
Mean f	26.1	2440	59.7	41	25.7	2.31	12.5	71	37.8	4710	70.6	5.69
MAD f	0.8	20	2.65	1.8	2.4	0.395	0.9	3.9	3.85	70	5.5	1.67
IQR f	1.55	37.5	3.85	6.7	5.05	0.738	2.3	7.65	6.95	155	8.85	2.69
Robust CV % f	4	1	5	12	14	22	13	8	13	2	9	32
Outliers	3	4	2	2	3	4	5	3	2	3	2	3
Stragglers	2	2	0	1	1	2	0	0	0	2	0	0

2017: Extractable P - ICP — Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	16	16	16	16	15	14	15	15	15	15	15	15
Minimum	7.84	10	39	359	4.1	0.87	4.1	4.1	22	41	0.5	22.6
Maximum	103	104	113	700	44	7.07	300	139	225	110	10.2	44
Median i	33.5	35.6	53.4	412	35.4	2.27	80.9	26.8	38.7	53.4	6.32	39.9
Mean i	35.5	39.6	55.5	427	33.1	2.67	92.1	33.2	50.7	57.6	5.54	38.7
MAD i	3.7	3.25	2.6	28	4.2	0.725	6.6	1.5	2.5	5.7	0.62	2.5
IQR i	7.6	6.33	3.4	55.5	6.05	1.4	11.9	2.95	5.05	11.1	2.41	5.25
Robust CV % i	17	13	5	10	13	46	11	8	10	15	28	10
Median f	33.5	35.2	53.4	408	35.5	2.17	80.6	26.8	38.7	53.2	6.48	41.5
Mean f	32.6	35.3	53.2	409	35.2	2.34	80.7	27.5	39.2	52.1	6.43	40.4
MAD f	3.25	1.45	0.25	28	4.2	0.67	5.95	0.6	2.5	5.4	0.44	1.6
IQR f	5.98	2.53	0.65	50.5	6.25	1.28	10.1	2.3	3.1	7.9	1.01	3.8
Robust CV % f	13	5	1	9	13	44	9	6	6	11	12	7
Outliers	2	3	3	1	1	1	3	2	4	2	5	1
Stragglers	0	3	5	0	0	0	0	2	0	0	0	1

2017: Extractable S - Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	14	14	14	14	14	14	14	14	14	14	14	14
Minimum	4.97	12.9	7.87	42.8	5.7	5	5.7	5	1	9.17	12	11.5
Maximum	183	295	166	294	107	23.3	31	36.1	7920	7450	33.8	43.1
Median i	14.4	31.8	14.5	46.8	46.9	18.4	10.9	16.2	11	7050	25.3	36.3
Mean i	27.6	50.2	25.7	65.9	47.9	17.4	12.5	16.4	579	6330	25.6	34.5
MAD i	1.35	1.3	1.75	2.8	3.05	1.8	1.19	1.45	2.15	265	3.3	2.25
IQR i	3.4	3.45	4.38	5	4.48	3.4	2.16	2.98	3.93	493	7.3	5
Robust CV % i	18	8	22	8	7	14	15	14	26	5	21	10
Median f	14.4	32	14.3	46	46.9	18.4	10.5	16.2	10.6	7170	25.6	36.7
Mean f	13.9	31.8	13	46.2	46.5	18.4	10.8	15.7	11	7090	26.7	37.5
MAD f	0.9	0.4	1.7	2.35	2.8	1.7	1	1.1	1.8	220	3.6	2.55
IQR f	2	0.85	3.75	4.63	4.23	3	1.54	2.93	3	435	6.2	4.95
Robust CV % f	10	2	20	7	7	12	11	13	21	5	18	10
Outliers	4	4	2	2	2	1	3	2	3	2	1	2
Stragglers	0	2	0	0	0	0	0	0	0	0	0	0

2017: Extractable Zn — Mehlich3 (18F1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	17	16	17	17	15	13	15	15	16	16	16	16
Minimum	1.4	0.54	0.94	1.27	0.47	0.009	13	0.58	0.56	0.996	0.16	0.32
Maximum	17.3	6.98	6.85	211	18.7	0.44	27.1	1.24	21.2	27	1.2	1.5
Median i	1.67	0.72	1.34	186	1.04	0.0596	19.5	0.851	1.14	22	0.916	1.12
Mean i	2.65	1.14	1.71	175	2.19	0.108	19.7	0.885	2.38	20.8	0.89	1.1
MAD i	0.2	0.066	0.16	11	0.13	0.0396	1.1	0.051	0.065	2.85	0.057	0.055
IQR i	0.39	0.233	0.28	26	0.236	0.087	2.45	0.112	0.165	4.73	0.117	0.123
Robust CV % i	17	24	15	10	17	108	9	10	11	16	9	8
Median f	1.66	0.677	1.33	189	1.04	0.037	19.5	0.851	1.12	22.4	0.922	1.12
Mean f	1.73	0.687	1.31	188	1.05	0.0455	19.6	0.863	1.12	23	0.937	1.15
MAD f	0.195	0.022	0.11	8	0.102	0.0248	0.4	0.041	0.03	2.2	0.05	0.04
IQR f	0.38	0.051	0.203	16	0.132	0.0459	0.5	0.0818	0.055	4.2	0.094	0.09
Robust CV % f	17	6	11	6	9	92	2	7	4	14	8	6
Outliers	1	1	2	1	2	2	4	3	6	2	3	2
Stragglers	0	4	1	1	0	1	2	0	0	0	0	1

2017: Extractable K — Bicarbonate (18A1) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	12	12	12	12	13	12	13	12	12	12	12	12
Minimum	33	317	376	259	314	0.05	58.3	216	150	34.3	32.8	232
Maximum	133	508	638	524	622	19	291	321	308	120	107	817
Median i	52	374	468	325	555	6.4	235	286	205	56.7	54.9	572
Mean i	64.2	381	466	335	531	7.85	228	276	210	61.2	61.8	561
MAD i	11.5	41.5	40.5	19.5	12	3.9	18	27.5	27	6.85	11.5	25
IQR i	25.3	75.8	72.5	28.8	65	7.98	42	48.8	47	14.8	23.9	39.3
Robust CV % i	36	15	11	7	9	92	13	13	17	19	32	5
Median f	50.7	374	467	325	562	6.4	240	286	205	56.3	51.3	573
Mean f	51.1	381	450	324	560	7.85	242	276	210	55.9	54.9	576
MAD f	8.85	41.5	40	9.5	6	3.9	21	27.5	27	6.3	6.05	16
IQR f	15.8	75.8	69	16.5	12.3	7.98	43.5	48.8	47	12.3	18.9	25
Robust CV % f	23	15	11	4	2	92	13	13	17	16	27	3
Outliers	2	0	1	1	5	0	1	0	0	1	1	2
Stragglers	0	0	0	1	0	0	0	0	0	0	1	1

2017: Total Organic Matter (6G1) %

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	7	7	7	7	6	6	6	6	6	6	6	6
Minimum	0.406	0.0865	1.02	3.75	4.92	0.25	2.01	1.66	2.24	2.63	5.91	4.06
Maximum	2	4.32	5.37	17	14.7	0.7	3.15	3.45	7.47	9.96	8.64	6.9
Median i	1.73	4.06	4.9	15.9	11.4	0.279	2.43	2.63	4.24	5.08	6.89	4.94
Mean i	1.53	2.79	4.24	13.6	10.9	0.346	2.52	2.55	4.54	5.93	7.02	5.29
MAD i	0.27	0.26	0.47	1.1	2.47	0.0235	0.405	0.55	1.69	1.67	0.77	0.7
IQR i	0.405	2.74	1.16	3.35	4.54	0.0463	0.913	0.993	2.96	3.54	1.19	1.58
Robust CV % i	17	50	17	16	29	12	28	28	52	52	13	24
Median f	1.75	4.14	4.96	16.2	11.4	0.261	2.43	2.63	4.24	5.08	6.89	4.94
Mean f	1.72	4.17	4.78	15.8	10.9	0.275	2.52	2.55	4.54	5.93	7.02	5.29
MAD f	0.215	0.07	0.405	0.3	2.47	0.011	0.405	0.55	1.69	1.67	0.77	0.7
IQR f	0.363	0.155	0.988	0.5	4.54	0.036	0.913	0.993	2.96	3.54	1.19	1.58
Robust CV % f	15	3	15	2	29	10	28	28	52	52	13	24
Outliers	1	3	1	1	0	1	0	0	0	0	0	0
Stragglers	0	0	0	1	0	0	0	0	0	0	0	0

2017: Aqua Regia Aluminium (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	11	11	11	11	8	8	8	8	10	10	10	10
Minimum	3230	7570	4650	10700	41100	751	4500	5650	26000	10800	8800	10300
Maximum	10200	47300	19200	33500	103000	2910	9610	16500	53200	33200	29100	37700
Median i	6060	21000	11700	17600	79900	1500	8230	12900	36400	15300	13600	16700
Mean i	6460	21300	11900	18000	75000	1530	7510	11600	35900	17600	16000	19600
MAD i	1480	4400	3070	4300	11200	255	960	3300	6750	3950	4650	6000
IQR i	2720	9050	5440	6450	26100	543	2700	8190	12200	8130	11200	11500
Robust CV % i	33	32	34	27	24	27	24	47	25	39	61	51
Median f	6060	20300	11700	17600	79900	1460	8230	12900	36400	14500	13600	16700
Mean f	6460	18700	11900	18000	75000	1330	7510	11600	35900	15800	16000	19600
MAD f	1480	4600	3070	4300	11200	230	960	3300	6750	2900	4650	6000
IQR f	2720	8100	5440	6450	26100	505	2700	8190	12200	5500	11200	11500
Robust CV % f	33	30	34	27	24	26	24	47	25	28	61	51
Outliers	0	1	0	0	0	1	0	0	0	1	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2017: Aqua Regia Calcium (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	12	12	12	12	9	9	9	9	11	11	11	11
Minimum	275	2270	232	2660	865	2.94	1080	770	1600	431	232	178
Maximum	1430	6850	2020	5880	5340	129	3470	973	14300	2810	1430	877
Median i	948	4210	1690	5380	2280	31.8	1420	879	10500	2120	1270	828
Mean i	930	4250	1590	5140	2430	39.4	1860	874	10300	2070	1190	760
MAD i	60	395	105	300	190	13.3	260	58	1560	140	60	32
IQR i	101	600	205	573	340	22.5	1250	115	2610	265	85	75.5
Robust CV % i	8	11	9	8	11	52	65	10	18	9	5	7
Median f	948	4210	1740	5450	2280	29.4	1380	879	10800	2090	1270	831
Mean f	945	4180	1710	5370	2240	28.2	1340	874	11200	2100	1280	818
MAD f	46.5	250	140	320	160	11.3	130	58	1200	120	45	30
IQR f	79.8	420	200	530	270	19.9	198	115	2110	203	70	65.5
Robust CV % f	6	7	9	7	9	50	11	10	14	7	4	6
Outliers	2	2	1	1	2	1	3	0	1	3	1	1
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2017: Aqua Regia Chromium (17B1 + 17B2) mg/k

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	11	11	11	11	8	8	8	8	11	11	11	11
Minimum	11.1	6.65	34.6	34.4	83.7	2.14	11.8	10.9	77.5	23	48.3	16
Maximum	23	53.6	83.3	117	314	24	43.9	40.8	144	40.7	78.1	28
Median i	17.3	43.3	68.6	41	239	8.02	35.3	31.1	100	31	57	19.6
Mean i	17	40.1	66.9	48.1	225	9.39	34	29.6	103	31.1	62.8	20.2
MAD i	2	6.3	10.4	5.2	26.5	0.79	7.7	5.1	13	6	8.7	3
IQR i	3.25	12.3	15.4	11.7	50.3	1.73	11.9	7.85	28	9.55	19.8	4.6
Robust CV % i	14	21	17	21	16	16	25	19	21	23	26	17
Median f	17.3	44.1	68.6	39	246	8.02	35.3	31.1	100	31	57	19.6
Mean f	17	43.4	66.9	41.2	246	8.17	34	29.6	103	31.1	62.8	20.2
MAD f	2	6.45	10.4	3.7	24	0.71	7.7	5.1	13	6	8.7	3
IQR f	3.25	11	15.4	9.03	39	1.21	11.9	7.85	28	9.55	19.8	4.6
Robust CV % f	14	18	17	17	12	11	25	19	21	23	26	17
Outliers	0	1	0	1	1	2	0	0	0	0	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2017: Aqua Regia Copper (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	12	13	11	13	10	9	10	10	12	12	12	12
Minimum	0.59	18.2	2.38	46.6	52	0.00001	3.82	6.04	35	5.13	10	12
Maximum	11.6	33.9	20.5	75.8	216	23.8	22.4	22.8	51.3	13.3	19	24.7
Median i	4.14	22.6	3.5	50.4	63.9	0.64	4.65	9.04	40.6	8.05	12.8	17.2
Mean i	4.78	24.7	5.14	53.2	77.1	3.1	6.57	9.85	41.5	8.35	13.8	17.6
MAD i	1.14	1.8	0.47	2.3	5.75	0.565	0.7	0.655	1.65	0.78	1.5	2.75
IQR i	2.61	5.4	0.905	5	14	0.891	1.5	1.41	2.63	1.28	3.4	4.55
Robust CV % i	47	18	19	7	16	103	24	12	5	12	20	20
Median f	3.84	22.5	3.26	49.8	62.6	0.52	4.45	9.04	40	8.05	12.2	17.2
Mean f	3.82	22.3	3.32	50.4	61.7	0.518	4.81	8.71	39.9	8.18	12.3	17.6
MAD f	0.755	1.4	0.34	2.1	6.9	0.446	0.45	0.51	1.9	0.405	0.2	2.75
IQR f	1.38	1.8	0.5	4	15.1	0.718	1.2	1.12	3.15	0.635	0.475	4.55
Robust CV % f	27	6	11	6	18	102	20	9	6	6	3	20
Outliers	1	3	2	2	1	1	1	2	2	1	1	0
Stragglers	1	0	0	0	0	0	0	0	0	1	5	0

2017: Aqua Regia Iron (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	11	11	11	11	8	8	8	8	10	10	10	10
Minimum	5250	18800	13200	15700	11200	110	8830	9490	37600	14500	27000	14800
Maximum	7890	35600	22100	27200	116000	371	14400	15200	75800	48300	42800	37700
Median i	6520	32500	19700	22300	94600	167	10800	13800	49500	33000	30600	17500
Mean i	6770	29500	18200	22200	85300	183	11100	12900	51900	33000	31800	19400
MAD i	640	2100	1500	1700	14900	52	1650	1300	4800	1100	1450	1450
IQR i	1060	9450	4950	3150	25400	85.5	3060	3150	11500	2200	2530	2480
Robust CV % i	12	22	19	10	20	38	21	17	17	5	6	10
Median f	6520	34000	19900	22300	97000	167	10800	13800	47000	33000	30100	17300
Mean f	6770	33500	19800	22200	95900	183	11100	12900	49200	33400	29900	17300
MAD f	640	1000	500	1700	13800	52	1650	1300	4900	1000	1200	1300
IQR f	1060	1700	925	3150	19800	85.5	3060	3150	8200	1800	2180	2300
Robust CV % f	12	4	3	10	15	38	21	17	13	4	5	10
Outliers	0	2	1	0	1	0	0	0	1	2	1	1
Stragglers	0	2	2	0	0	0	0	0	0	0	1	0

2017: Aqua Regia Potassium (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	12	12	12	12	9	8	9	9	11	11	11	11
Minimum	66.9	2260	1380	804	963	3.06	1710	721	600	1830	10.4	1090
Maximum	173	6940	3230	4370	2450	24.5	2830	1970	1860	4100	280	3910
Median i	96.8	3820	2120	1720	1860	7.8	2320	1590	1000	2600	140	1900
Mean i	102	4190	2140	2140	1790	9.58	2310	1420	1060	2740	155	2110
MAD i	16.5	1060	420	877	280	2.77	90	180	280	540	61	650
IQR i	27.9	1740	643	2050	530	4.13	200	738	488	1060	106	1330
Robust CV % i	21	34	22	88	21	39	6	34	36	30	56	52
Median f	95.7	3820	2120	1720	1860	7.1	2320	1640	1000	2600	140	1900
Mean f	95.4	4190	2140	2140	1790	7.45	2320	1500	1060	2740	155	2110
MAD f	14.7	1060	420	877	280	2.63	90	175	280	540	61	650
IQR f	26.8	1740	643	2050	530	3.52	150	417	488	1060	106	1330
Robust CV % f	21	34	22	88	21	37	5	19	36	30	56	52
Outliers	1	0	0	0	0	1	2	1	0	0	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2017: Aqua Regia Magnesium (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	12	12	12	12	9	8	9	9	11	11	11	11
Minimum	77.5	4100	598	974	628	2.29	1750	436	15400	2800	372	310
Maximum	155	8060	1460	2020	1400	14	2480	936	22000	3960	806	1030
Median i	103	5310	1170	1320	964	5.35	2030	770	19700	3370	540	560
Mean i	105	5470	1090	1380	1020	6.52	2070	680	19400	3320	555	584
MAD i	16	300	150	220	270	2.01	240	126	1100	200	136	217
IQR i	31.5	610	265	453	424	4.41	430	318	1950	415	276	409
Robust CV % i	23	9	17	26	33	61	16	31	7	9	38	54
Median f	103	5310	1170	1320	964	5.35	2030	770	19700	3370	540	560
Mean f	105	5350	1090	1380	1020	6.52	2070	680	19400	3320	555	584
MAD f	16	275	150	220	270	2.01	240	126	1100	200	136	217
IQR f	31.5	443	265	453	424	4.41	430	318	1950	415	276	409
Robust CV % f	23	6	17	26	33	61	16	31	7	9	38	54
Outliers	0	2	0	0	0	0	0	0	0	0	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2017: Aqua Regia Manganese (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	12	12	12	12	9	9	9	9	11	11	11	11
Minimum	61.2	462	25	210	2070	0.366	293	335	762	88	53	1210
Maximum	121	1070	61.7	455	4720	7	368	401	1520	128	147	2100
Median i	75	536	39	246	4050	1.66	346	380	950	100	73	1300
Mean i	79.7	605	39.5	272	3860	2.22	346	375	980	103	84.2	1380
MAD i	11.6	50.5	5	21.5	330	0.44	9	4	40	9	17	50
IQR i	22.2	153	9.95	51.3	410	0.68	23	12	97	17.9	42.6	70
Robust CV % i	22	21	19	15	8	30	5	2	8	13	43	4
Median f	75	532	39	238	4080	1.4	351	380	950	100	71.1	1290
Mean f	79.7	529	37.5	238	4090	1.34	353	377	945	103	78	1280
MAD f	11.6	9	5	11	240	0.28	9.5	4	38	9	14.6	30
IQR f	22.2	41	7.5	22	320	0.5	21	8	68	17.9	37.4	50
Robust CV % f	22	6	14	7	6	26	4	2	5	13	39	3
Outliers	0	1	1	2	1	2	1	2	2	0	1	2
Stragglers	0	2	0	1	0	0	0	0	0	0	0	0

2017: Aqua Regia Sodium (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	10	11	10	10	7	7	7	7	10	10	10	8
Minimum	16	2270	73.1	131	131	0.149	37.4	86	236	6320	9.09	3.44
Maximum	5020	3600	149	287	201	15	102	136	1590	7390	133	82
Median i	52.7	2710	99.8	177	162	5.7	83	104	440	6760	97.3	35.6
Mean i	544	2720	104	192	165	6.67	76.9	109	536	6820	83.3	38.4
MAD i	10.7	240	13.9	25.5	24	3.36	17.8	14.7	109	290	7.7	18.3
IQR i	17.7	405	21.8	50.8	42.5	5.55	34.3	31.4	192	470	27.8	30.9
Robust CV % i	25	11	16	21	19	72	31	22	32	5	21	64
Median f	47.1	2710	99.8	175	162	5.7	83	104	430	6760	99.4	35.6
Mean f	46.6	2720	104	182	165	6.67	76.9	109	419	6820	99.3	38.4
MAD f	11.8	240	13.9	21	24	3.36	17.8	14.7	102	290	4.1	18.3
IQR f	17.7	405	21.8	26	42.5	5.55	34.3	31.4	185	470	6.45	30.9
Robust CV % f	28	11	16	11	19	72	31	22	32	5	5	64
Outliers	1	0	0	1	0	0	0	0	1	0	3	0
Stragglers	0	0	0	0	0	0	0	0	0	0	1	0

2017: Aqua Regia Lead (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	8	11	10	11	8	7	8	7	7	9	9	9
Minimum	1.6	8.34	1.49	448	0.328	0.144	4.02	5.6	0.1	0.714	6.9	12
Maximum	159	42.9	22.7	1270	23.2	12.5	21.1	55	3.6	7.1	15.5	15.1
Median i	2.88	15.1	7.1	1010	12.3	0.65	16.1	6.95	1.23	6.68	14	14
Mean i	23	16.5	7.43	994	12.6	2.3	14.2	13.6	1.67	5.74	12.9	13.7
MAD i	0.745	1.5	0.605	89	3.9	0.443	2.95	0.67	1.13	0.42	0.9	1
IQR i	2.72	4.25	2.43	205	8.14	0.659	5.84	1.34	1.68	1.16	1.2	2.3
Robust CV % i	70	21	25	15	49	75	27	14	101	13	6	12
Median f	2.58	15.3	7.23	1010	12.3	0.599	16.1	6.67	1.23	7	14	14
Mean f	2.59	15.9	7.27	1040	12.6	0.604	14.2	6.72	1.67	6.95	13.7	13.7
MAD f	0.385	0.7	0.23	80	3.9	0.273	2.95	0.725	1.13	0.05	0.45	1
IQR f	0.69	1.25	0.358	189	8.14	0.434	5.84	1.23	1.68	0.05	0.975	2.3
Robust CV % f	20	6	4	14	49	54	27	14	101	1	5	12
Outliers	3	3	5	1	0	1	0	1	0	2	1	0
Stragglers	0	2	0	0	0	0	0	0	0	2	0	0

2017: Aqua Regia Sulphur (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	7	7	7	7	7	7	7	7	7	7	7	7
Minimum	59	43.4	169	597	138	29.5	69.7	50.5	74	5170	265	207
Maximum	284	259	600	2740	445	58	97.8	85.7	150	21000	345	267
Median i	91	79	190	660	341	38	84	67	106	17600	299	223
Mean i	140	128	273	995	335	43.3	84.1	68	110	16600	300	230
MAD i	32	35.6	21	63	59	8.5	10.5	12.1	2	2300	11	11
IQR i	143	155	136	262	96	20.5	16.8	20.4	9.5	3950	21	19
Robust CV % i	117	146	53	29	21	40	15	23	7	17	5	6
Median f	65.2	52.4	170	612	341	38	84	67	106	18800	299	223
Mean f	70.1	78.2	170	620	335	43.3	84.1	68	106	18500	300	230
MAD f	4.75	9	1	8.5	59	8.5	10.5	12.1	1	1650	11	11
IQR f	13	29.6	1	19.5	96	20.5	16.8	20.4	1.75	3050	21	19
Robust CV % f	15	42	0	2	21	40	15	23	1	12	5	6
Outliers	2	1	2	1	0	0	0	0	3	1	0	0
Stragglers	1	1	2	2	0	0	0	0	0	0	0	0

2017: Aqua Regia Zinc (17B1 + 17B2) mg/kg

Statistical parameters	Soil sample identification and values											
	<i>March 2017 (Round 3)</i>				<i>June 2017 (Round 6)</i>				<i>September 2017 (Round 9)</i>			
	ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
No of results	12	13	13	13	9	8	9	9	12	12	12	12
Minimum	1.16	45.8	1.15	383	41.7	0.1	35	7.36	49.7	35	6	10
Maximum	467	73	15.7	580	86.6	14.4	52	18	89.7	56.9	23	34
Median i	3.59	58.6	12	467	66.1	0.511	45.1	15.6	58.1	41.6	11.6	25.2
Mean i	42.8	59.3	11	470	64.3	2.31	44.6	14.3	59.8	43.1	12.6	22.4
MAD i	0.89	7.4	1.1	35	13.3	0.306	3.3	1.5	3.55	4.1	3.53	4.05
IQR i	1.9	13.7	3.05	63	26.2	0.655	4.6	4.7	5.18	6.5	5.99	11.7
Robust CV % i	39	17	19	10	29	95	8	22	7	12	38	34
Median f	3.17	58.6	12.1	467	66.1	0.401	45.1	15.8	58	41.6	11.6	25.2
Mean f	3.26	59.3	11.8	470	64.3	0.409	44.6	15.2	57.1	43.1	12.6	22.4
MAD f	0.76	7.4	1.05	35	13.3	0.229	3.3	1.25	3.5	4.1	3.53	4.05
IQR f	1.26	13.7	1.99	63	26.2	0.345	4.6	3	4.1	6.5	5.99	11.7
Robust CV % f	29	17	12	10	29	64	8	14	5	12	38	34
Outliers	2	0	1	0	0	1	0	1	1	0	0	0
Stragglers	0	0	0	0	0	1	0	0	0	0	0	0

4. Comments on Measurement Performance

Of the 12 soils tested in 2017, 3 were new to the program, with the remainder repeated from past rounds in 2015 and 2016 (see Table 2.3). Based on final median concentrations across laboratories, two of the retested soils were saline, with one of these containing a very low pHw, and very high Exchangeable Al, and Extractable S and Cl, indicative of an acid sulfate soil.

Several tests were included for the first time in this report, including Aqua Regia Al, Cr, K, Pb, and S which included a sufficient number of laboratories to allow statistical analysis, but will not be considered for certification this year. They join tests added for the first time in 2016, including Aqua Regia Ca, Cu, Fe, Mg, Mn, Na and Zn. Table 4.1. shows that while most tests continue to have low robust CV's after the removal of outliers and stragglers, the tests with the highest variance between laboratories are dominated by these new Aqua Regia elements. The number of laboratories submitting results for these so called "total" tests is rapidly increasing, and it is hoped that performance will improve in the coming years through in-house improvements arising from proficiency testing feedback. Certification of these tests will be considered if participation continues to remain sufficient for statistical analysis after stragglers and outliers are removed.

Mehlich3 B continues to show the least precision amongst Mehlich elements, with the notable improvements observed last year in the %CV as grand medians not repeated (2016 = 13.5%, 2017 = 27.5%). This may be due to several labs reporting Mehlich3 tests for the first time in 2017, and the known challenges associated with this test including the need for short extraction time and extracting solution longevity management, and the need to optimize ICPOES equipment parameters when analysing low levels of B in a matrix containing NH₄F, especially if the lab's introduction system contains glass.

Table 4.1. The six best performed and worst performed soil chemical tests for 2017, based on percent robust coefficients of variation (%CV as grand medians) after the removal of "outliers" and "stragglers", excluding pH soil tests which are logarithmic and have been shown over the years to be in the range 1 - 3% CV.

Best (Lowest Robust %CVs)		Worst (Highest Robust %CVs)	
Soil Method	%CV	Soil Method	%CV
Total C (6B2)	3.5	Total Organic Matter (6G1)	19.5
Exchangeable Ca (15D3)	4	Aqua Regia Na (17B1/17B2)	20.5
Mehlich3 Extractable Ca (18F1)	4	Aqua Regia Mg (17B1/17B2)	24.5
Electrical Conductivity (3A1)	4.5	Mehlich3 Extractable B (18F1)	27.5
Total Organic C (pooled)	4.5	Aqua Regia Al (17B1/17B2)	29
Exchangeable Mg (15D3)	4.5	Aqua Regia K (17B1/17B2)	32

Appendix 1: List of laboratories (including contact details) that participated in ASPAC's Soil ILPP in 2017, arranged by country

<i>Name (position)</i>	<i>Facility</i>	<i>Street and/or Postal Address</i>	<i>Country</i>	<i>Email</i>
Stephanie King (Administration)	AgLab Services	32 Wattlepark Avenue Moolap, Victoria, 3220	Australia	service@agmin.com.au
Ian Grant (Director)	Agricultural Chemistry P/Ltd	72 Cothill Rd, Silkstone, QLD 4304	Australia	igrant51@optusnet.com.au
Stephanie King	Agrilab	32 Wattlepark Avenue Moolap, Victoria, 3220	Australia	service@agmin.com.au
Craig Newman (Laboratory Manager)	AgVita Analytical	4 Thompson's Road, Latrobe, TAS 7307 PO Box 188, Devonport, TAS 7310	Australia	cnewman@agvita.com.au
Kerri Taylor (QC Coordinator)	ALS Brisbane Laboratory	32 Shand St, Stafford, QLD 4053	Australia	Kerri.Taylor@alsglobal.com
Emily Yuen (QC Coordinator)	ALS – Melbourne	4 Westall Rd, Springvale, Victoria 3171	Australia	emily.yuen@alsglobal.com
Fernando Rodriguez (QC Officer)	ALS – Perth	10 Hod Way, Malaga, WA, 6090	Australia	fernando.rodriguez@alsglobal.com
Kristina Moulding (National Quality Manager)	ALS Scoresby	22 Dalmore Drive, Scoresby, Victoria 3179	Australia	kristina.moulding@alsglobal.com
Lancy Cai (National Quality Manager)	ALS - Sydney	277-289 Woodpark Rd, Smithfield, NSW 2164	Australia	lancy.cai@alsglobal.com
Tim Thompson (Operations Manager)	APAL Laboratory Pty Ltd	489 The Parade, Magill, SA 5072 PO Box 327, Magill, SA 5072	Australia	tim@apal.com.au
Shannon Lawson (Quality Manager)	Bioscience	488 Nicholson Rd, Forrestdale, WA PO Box 5466, Canning Vale South, WA	Australia	Shannon.Lawson@biosciencewa.com
Jenny McGuire (Manager – Inorganics)	ChemCentre (WA)	Resources & Chem Precinct Centre, Conlon, WA 6102 PO Box 1250 Bentley Delivery Centre, WA 6983	Australia	JMcGuire@chemcentre.wa.gov.au
Chris Gendle (Chemist)	CSBP Ltd – Soil and Plant	2 Altona St, Bibra Lake, WA 6163	Australia	chris.gendle@csbp.com.au
Nell Peisley (DNA Sequencing Coordinator)	CSIRO Analytical Chemistry Group - Agriculture	Clunies Ross St, Acton, ACT 2601 GPO Box 1600, Canberra, ACT 2601	Australia	nell.peisley@csiro.au
John Gouzos (Manager, Analytical Services)	CSIRO Land and Water, Adelaide	Entrance 4 Waite Rd, Urrbrae, SA 5064 Private Bag 2, Glen Osmond, SA 5064	Australia	John.gouzos@csiro.au
Mr Bruce Hawke (Research Scientist)	CSIRO Soil, Carbon and Nutrient Cycling Lab, CSIRO Land and Water	Gate 4, Waite Rd, Urrbrae, SA 5064 PMB 2, Glen Osmond SA 5064	Australia	Bruce.hawke@csiro.au
George Croatto (Research Scientist)	DEDJTR Macleod Chemistry Laboratory	TER 4, Ernest Jones Dr, Macleod, VIC 3085	Australia	George.Croatto@ecodev.vic.gov.au

Name (position)	Facility	Street and/or Postal Address	Country	Email
Graeme Poile (Technical Officer, Soils)	Dept of Primary Industries, NSW Wagga Wagga	Pine Gully Rd, Wagga Wagga, NSW 2650	Australia	graeme.poile@dpi.nsw.gov.au
Rob DeHayr (Manager)	Dept of Science, IT, Innovation – Chemistry Centre	Block A - Level 3, 41 Boggo Road, Joe Baker Street, Loading Dock 3, Dutton Park, QLD 4102 Business Unit (ESP), GPO Box 2454, Brisbane, QLD 4001	Australia	rob.dehayr@dsiti.qld.gov.au
Michael Smirk (Analytical Chemist)	Earth and Environment Analysis Laboratory (UWA)	University of Western Australia, 35 Stirling Highway, Crawley, WA 6009	Australia	Michael.Smirk@uwa.edu.au
Stephanie Cameron (Operations Manager)	East West EnviroAg	82 Plain St, Tamworth, NSW 2340	Australia	Stephanie.c@eastwestonline.com.au
Alba Charlson (Business Manager)	EML - Chemistry	417 Canterbury Rd, Surrey Hills, Victoria 3127	Australia	alba.charlson@emlchem.com.au
Graham Lancaster (Laboratory Manager)	Environmental Analysis Laboratory (EAL) Southern Cross University	University Store, Military Rd, East Lismore, NSW 2480 PO Box 5125, East Lismore, NSW 2480	Australia	glancast@scu.edu.au
Kellie Taylor (Lab Manager)	EP Analysis	26 Railway Tce, Cummins, SA 5631 PO Box 400, Cummins SA 5631	Australia	info@epanalysis.com.au
Paul Woodward (Managing Director)	Groundswell Laboratories	116 Moray Street, South Melbourne	Australia	paul@groundswelllabs.com.au
Jack Milbank (General Manager)	Hortus Technical Services Pty Ltd	336 Goodwood Road, Bundaberg, QLD 4670 Locked Bag 3901, Bundaberg, QLD 4670	Australia	techservices@hortus.net.au
Rabeya Akter (Senior Technical Officer)	Mark Wainwright Analytical Centre UNSW - The University of New South Wales	Room B36 Chemical Science Building (F10), High Street, Kensington, NSW 2052	Australia	r.akter@unsw.edu.au
Stacey Hawkins (Supervisor - ASS/AMD)	MPL Laboratories	16 Hayden Court, Myaree, Western Australia, 6154	Australia	shawkins@mpl.com.au
Sue Foster (Quality Assurance Officer)	NSW Department of Primary Industries	1243 Brunxner Hwy, Wollongbar, NSW 2477	Australia	Sue.foster@dpi.nsw.gov.au
Paul Kennelly (Laboratory Manager)	Nutrient Advantage Laboratory Services	8 South Rd, Werribee, VIC 3030	Australia	Paul.Kennelly@incitecpivot.com.au
Sarah Houston (Laboratory Manager)	Nutri-Lab Pty Ltd	Lot 14 Troy Drive, Goondiwindi, QLD 4390 PO Box 782, Goondiwindi, QLD 4390	Australia	sarah@nutrilab.com.au
Rob Cirocco (Manager)	Phosyn Analytical	1/60 Junction Road, Andrews, QLD 4220 P.O.Box 2594, Burleigh MDC, QLD 4220	Australia	rcirocco@phosyn.com.au
Kevin Mincherton (General Manager)	Precision SoilTech	Unit 1/110 Robinson Ave, Belmont, WA 6104	Australia	kevin@precisionsoiltech.com.au
Najib Ahmady (Lab Technical Officer)	School of Ecosystem and Forest Science	Water Street, Creswick, VIC 3363	Australia	nahmady@unimelb.edu.au
Lyndall Stevens (Quality Manager)	SGS Australia - Melbourne	Unit 10/585 Blackburn Rd, Notting Hill, Victoria 3168	Australia	lyndall.stevens@sgs.com

Name (position)	Facility	Street and/or Postal Address	Country	Email
Pina Caminiti (Quality Co-ordinator)	SGS Environmental – Perth Airport – WA	10 Reid Road, Newburn, WA 6105	Australia	pina.caminiti@sgs.com
Leanne Orsmond (Quality Manager)	SGS Environmental Services - Portsmith - Cairns	2/58 Comport Street, Portsmith Cairns, QLD 4870	Australia	Leanne.Orsmond@sgs.com
Lynette Dunn (Senior Technical Officer)	Soil Conservation Service	709 Gundy Rd, Scone, NSW 2337 PO Box 283, Scone, NSW 2337	Australia	scone.lab@scs.nsw.gov.au
Kristen Clancy (Senior Team Leader)	Soil Health and Archive Scientific Division, Office of Environment and Heritage Dept of Premier and Cabinet	c/- DPI Ag Institute, Trunk Yr Y80, Yanco, NSW 2703	Australia	Kristen.Clancy@environment.nsw.gov.au
Edward Mikail	SWEP Pty Ltd Analytical Laboratories	45-47 / 174 Bridge Rd, Keysborough, VIC 3173 PO Box 583, Noble Park, VIC 3174	Australia	tedmikhal@swep.com.au
Matthew Dore (Laboratory Manager)	Sydney Environmental and Soil Laboratory	16 Chilvers Rd, Thornleigh, NSW 2120 PO Box 357, Pennant Hills, NSW 1715	Australia	matthew@sesl.com.au
Mr David Wade	The Environmental and Analytical Laboratories, Charles Sturt University Boorooma Campus	C/o Central Store, Binya Way, Wagga Wagga, NSW 2678 Locked Bag 677, Wagga Wagga, NSW 2678	Australia	eal@csu.edu.au; DWade@csu.edu.au
John Pengelly (Environmental Chemist)	The Murray Darling Freshwater Research Centre	Building 8, University Drive, Wodonga, Victoria, 3690 PO Box 991, Wodonga	Australia	john.pengelly@csiro.au
Michael Hall (Instrument Analyst)	TrACEES – University of Melbourne	500 Yarra Blvd, Richmond, VIC 3121	Australia	michael.hall@unimelb.edu.au
Mr Sean Mason (Research Fellow)	University of Adelaide	Entrance 6, Paratoo Drive, Davies Bldg, Waite Campus, Urrbrae, SA 5064	Australia	sean.mason@adelaide.edu.au
Jennifer Waanders (Scientific Manager)	University of Queensland - Analytical Services, Agriculture & Food Sciences	S327 (Reception) – Building 83 (Hartley Teakle), School of Agriculture and Food Sciences, University of Queensland, St. Lucia, Brisbane 4072	Australia	j.waanders@uq.edu.au
Jason GuoFu Luo (Senior Research Officer)	Fiji Agricultural Chemistry Laboratory	Koronivia Research Station, Nausori PO Box 77, Nausori	Fiji	guofu_luo@yahoo.com
Doreen Pillay (Technial Officer)	Sugar Research Fiji	Visimiti Terrace, (Drasa Avenue), Lautoka	Fiji	doreenp@srif.org.fj
Dr. Diah Setyorini (Quality Manager)	Indonesian Soil Research Institute (ISRI), Agricultural Research and Development	Laboratorium Penguji Balai Penelitian Tanah Jl., Tentara Pelajar No.12 Bogor	Indonesia	diahs62@gmail.com
Mr. Xaysatith Souliyavongsa (Deputy Chief of Soil Laboratory)	Department of Agricultural Land Management (DALAM)	Agricultural Land Use Planning Centre (ALUPC), DALAM, Ministry of Agriculture and Forestry, Nongviengkham Village, Xaitany District, Vientian	Lao Peoples Democratic Republic	xaysatith1@hotmail.com
Brent Miller (Team Leader Agriculture)	Eurofins NZ Laboratory Services, Auckland	35 O'Rorke Rd, Penrose, Auckland PO Box 12545, Penrose, Auckland 1642	New Zealand	Brentmiller@eurofins.co.nz

Name (position)	Facility	Street and/or Postal Address	Country	Email
Wendy Homewood (QA Officer Ag Division)	Hill Laboratories	1 Clyde St, Hamilton Private Bag 3205, Hamilton 3240	New Zealand	wendy.homewood@hill-labs.co.nz
Ngair Foster (Laboratory Manager)	Landcare Research NZ Ltd	Cnr University Ave and Riddett Rd, Massey University Campus, Palmerston North Private Bag 11052, Palmerston North	New Zealand	fostern@landcareresearch.co.nz
Chris Dunlop (Soil Scientist)	Plant And Food Research, Canterbury Agricultural & Science Centre	Gerald Street, Lincoln 7608, Canterbury Private Bag 4704, Christchurch 8140	New Zealand	Chris.dunlop@plantandfood.co.nz
Rachel Coburn (Managing Director)	QLabs Ltd	4 Victoria St, Waipawa, Hawkes Bay 4210	New Zealand	lab@qlabs.co.nz
Adina Vlad (Analyst)	Ravensdown Ltd (ARL)	890 Waitangi Rd, Awatoto, Napier PO Box 989, Napier	New Zealand	aev@arllab.co.nz
Kendra Newick (Laboratory Analyst)	Veritec	49 Sala Street, Rotorua Private Bag 3020, Rotorua	New Zealand	kendra.newick@scionresearch.com
Hilda Sim (Quality Manager)	NARI Chemistry Laboratory	Boroko 111, National Capital District, Papua New Guinea	Papua New Guinea	hilda.sim@nari.org.pg
Sovera Guti (Laboratory Manager)	Unitech Analytical Services Laboratory	Dept of Agriculture, Papua New Guinea University of Technology, Morobe Province, LAE 411	Papua New Guinea	sguti@ag.unitech.ac.pg
Dr Gina P. Nilo (Chief, Laboratory Services Division)	Bureau of Soils and Water Management	Lab Services Division, Elliptical Road, Corner Visayas Avenue, Diliman Quezon City	Phillippines	ginapnilo@ymail.com
Ms Nopmanee Suvannang (Director of the Technical Analysis Service)	Land Development Department, Thailand	Office of Science for Land Development, 2003/61 Phaholyothin Road, Chatuchak, Bangkok	Thailand	nopmanee_su@hotmail.com
Ms Piyanart Nuchniyom	Thaus Co Ltd	305 Moo 4 Soi Khun Vivian, Chang Wattana Rd, Thung Song Hong, Laksi, Bangkok 10210	Thailand	piyanart.nny@gmail.com
Gautam Kumar Upadhyay (Laboratory Manager)	PSN Lifesciences International FZ-LLC	G0#4B, Laboratory Complex, Dubai Science Park, Al Barsha South 2, Umm Suqiem Rd, DUBAI	UAE	gautam@psnl.ae
Do Duy Phai (Head of Central Analytical Lab)	Soils and Fertilizers Research Institute (SFRI) Vietnam	Central Analytical laboratory, SFRI, Le Van Hien St, Duc Thang, Bac Tu Liem, Ha Noi	Vietnam	phaidd.sfri@mard.gov.vn

Appendix 2: Summary examples of homogeneity data and statistical assessments for soil samples used in the ASPAC Soil ILPP in the 2017

Sample name		ASS 1703- 1	ASS 1703- 2	ASS 1703- 3	ASS 1703- 4	ASS 1706- 1	ASS 1706- 2	ASS 1706- 3	ASS 1706- 4	ASS 1709- 1	ASS 1709- 2	ASS 1709- 3	ASS 1709- 4
Sub-sample													
1	Rep 1	0.045	0.160	0.050	0.491	0.205	0.012	0.089	0.082	0.092	0.084	0.192	0.198
	Rep 2	0.044	0.163	0.054	0.483	0.208	0.013	0.090	0.082	0.092	0.083	0.186	0.199
2	Rep 1	0.045	0.161	0.050	0.484	0.211	0.012	0.093	0.081	0.091	0.084	0.194	0.200
	Rep 2	0.044	0.156	0.054	0.479	0.209	0.013	0.089	0.081	0.092	0.082	0.189	0.199
3	Rep 1	0.046	0.159	0.051	0.501	0.208	0.013	0.094	0.082	0.092	0.083	0.185	0.199
	Rep 2	0.045	0.160	0.054	0.494	0.208	0.013	0.094	0.080	0.091	0.082	0.184	0.197
4	Rep 1	0.044	0.158	0.052	0.496	0.207	0.012	0.095	0.083	0.092	0.083	0.183	0.197
	Rep 2	0.044	0.161	0.053	0.502	0.209	0.012	0.091	0.086	0.091	0.082	0.180	0.197
5	Rep 1	0.045	0.160	0.051	0.496	0.208	0.012	0.092	0.085	0.092	0.082	0.194	0.201
	Rep 2	0.045	0.160	0.052	0.472	0.209	0.012	0.092	0.084	0.092	0.083	0.184	0.198
6	Rep 1	0.045	0.157	0.051	0.494	0.206	0.013	0.092	0.083	0.091	0.083	0.196	0.199
	Rep 2	0.045	0.164	0.054	0.501	0.209	0.012	0.091	0.080	0.092	0.083	0.194	0.199
7	Rep 1	0.045	0.155	0.052	0.489	0.208	0.012	0.095	0.080	0.091	0.083	0.182	0.198
	Rep 2	0.045	0.163	0.052	0.491	0.209	0.012	0.095	0.081	0.092	0.083	0.182	0.201
8	Rep 1	0.045	0.157	0.051	0.487	0.207	0.012	0.096	0.081	0.091	0.082	0.195	0.198
	Rep 2	0.045	0.163	0.052	0.486	0.207	0.012	0.093	0.081	0.091	0.083	0.185	0.205
9	Rep 1	0.045	0.159	0.051	0.491	0.207	0.013	0.096	0.081	0.091	0.083	0.203	0.197
	Rep 2	0.045	0.163	0.051	0.488	0.209	0.012	0.093	0.081	0.091	0.083	0.195	0.202
10	Rep 1	0.045	0.164	0.051	0.477	0.208	0.012	0.092	0.081	0.091	0.083	0.186	0.203
	Rep 2	0.044	0.162	0.051	0.459	0.207	0.012	0.093	0.084	0.091	0.083	0.182	0.205

Mean	0.045	0.160	0.052	0.488	0.208	0.012	0.093	0.082	0.091	0.083	0.188	0.200
Analytical SD	3E-07	1E-05	2E-06	6E-05	1E-06	7E-08	3E-06	1E-06	3E-07	4E-07	2E-05	5E-06
Sampling SD	3E-08	0	0	6E-05	2E-07	0	2E-06	1E-06	3E-08	0	2E-05	1E-06
SD proficiency data	0.003	0.007	0.006	0.014	0.018	0.0037	0.0068	0.0053	0.0033	0.0033	0.0088	0.006
Status	H	H	H	H	H	H	H	H	H	H	H	H

* Homogeneity statistics calculated according to *Thompson, M., Ellison, S.L.R. and Wood, R. (2006). "The International Harmonised Protocol For the Proficiency Testing of Analytical Chemistry Laboratories." Pure Appl. Chem. Vol. 78, No. 1, pp. 145-196. IUPAC Technical Report*

Appendix 3: Statistical procedures used by ASPAC for its contemporary soil ILPP

Refer to Table 4 for a description of most statistical terms and their meaning. Of most significance is the “median / MAD” non-parametric, iterative procedure for identifying “outliers” (++) and “stragglers” (†) within datasets for particular tests and samples from multiple (typically 7 or greater) laboratories. See references in the body of the report for more details. Also, the median (μ) is regarded as a good estimate of the true mean, while the MAD; i.e., the median of the absolute deviations from the median, (@), is regarded as a good estimate of the standard deviation.

After tabulating the data with a separate column for each sample result and a separate row for each laboratory, calculations were applied iteratively. Each iteration operated at an action level of $[(X - \mu)/f@] > 2$, where “X” is the value reported by the laboratory (one replicate assumed), “ μ ” is the median of the population of values, and “f@” is a code for the Gaussian distribution of the sample size “n”, approximated by $[0.7722 + 1.604/n * t]$, with t = the Student’s “t” of 5% (two tailed), with n-1 degrees of freedom]. Note that for program reports up to and including 2009-10, Student “t’s” of 2.5% (two-tailed) were used.

Excluding any case when a laboratory reported no result (or a non-numeric value) [these were automatically excluded], the laboratories at first iteration with an “ASPAC score” > 2 were rated as “outliers” (++) . Following their removal (if any), the remaining population of laboratory data were subject to a second iteration involving a recalculation of the “ASPAC score”. Where this was again > 2 , relevant laboratories were rated as “stragglers” (†). The revised Student “t” at 5% (two tailed) makes the test slightly stricter than previously.

The other statistics summarized in Table 4 were calculated on the same populations of data. Only the first (i) and second (final; f) values appear in the data summaries in Section 3.

Appendix 4: “Raw” 2017 soil data reported by laboratories for 12 samples across three “rounds”

These tabulations list the “raw” data provided by participating laboratories for each method, with unnecessary precision removed after completion of statistical tests to assist data presentation. Statistical “outliers” and “stragglers” are indicated by †† and †, respectively. The soil method codes are those of Rayment and Lyons (2011), referenced earlier.

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Air-Dry Moisture Content 2A1 (%)											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
8888	2A1	0.212	3.24	1.68	3.28	11.4		0.355 ††	0.599	3.59	2.4	2.65	1.35
10156	2A1	0.15	1.52 ††	0.888 ††	1.15 ††								
10173	2A1		2.6	1.4	2.7	11.6	0.1	0.8	0.9	3.8	2.9	2.68	1.36
10181	2A1	0.47	3.78	2.06	3.71	14	0.206 ††	1.1	1.45	5	3.54	3.56	1.98
20136	2A1					11.5	0.5 ††	0.8	0.9				
21043	2A1	0.74 ††	2.83	1.18	2.51	11	0.07	0.71	0.93	4.75	3.24	3.01	1.71
21100	2A1	0.413	2.23	1.5	2.57	5.89 ††	0.078	0.841	1.21	3.66	2.66	1.66 ††	1.36
21115	2A1	0.27	3.11	1.61	3.3	11.7	0.04	0.68	0.94	4.17	3.04	2.88	1.54
21138	2A1	0.382	3.09	1.37	3	12.9	0.074	0.63	0.707	4.2	2.88	2.65	1.33
21148	2A1	0.235	2.91	1.38	3	11.2	0.01	0.39 ††	0.57	4.25	3.17	2.89	1.53
21178	2A1	0.206	2.27	0.921 ††	2.09 †	8.5 ††	0.039	0.432 ††	0.468 ††				
21182	2A1					12	0.09	0.9	1.2	3.9	2.8	2.8	1.5
21193	2A1	0.33	3.73	1.6	3.01	13.4	0.067	0.88	1.18	4.55	3.15	3.09	1.72
21230	2A1	0.396	3.91	1.79	3.43	13.3	0.098	0.865	1.17	4.6	3.45	3	1.7
50004	2A1	0.16	2.89	1.21	2.19	13.3	0.056	0.82	1.37	3.81	2.9	2.89	1.4
50005	2A1	0.31	4.02	1.49	2.9	11.7	0.126	0.939	1.15	3.9	3.34	1.97 ††	1.67
50006	2A1	0.35	3.54	1.62	3.28	12.9	0.11	0.85	0.88	4.44	2.99	2.78	1.57
50007	2A1	0.456	3.21	1.62	3.12	10.9	0.054	0.636	1.04	4.14	3.33	3.24	1.67
50011	2A1	0.402	3.36	1.99	3.31	13.3	0.1	1.09	1.27	4.45	2.94	3.05	1.48
50012	2A1	0.38	3.2	1.7	3	13.4	0.059	0.763	1.04	4.66	3.52	3.14	1.64
50013	2A1	0.1 ††	3	1.2	2.6	11.9	0.05	0.78	1.2	4.4	3.4	2.8	1.7
50014	2A1	0.287	3.62	1.67	3.39	13	0.013	0.727	1.01	4.64	3.11	3.43	1.79
50017	2A1	3.94 ††	3.26	1.41	3.65	12.3	0.02	0.84	1.19	4.42	2.9	3.65	1.6
50018	2A1	0.344	2.82	1.46	2.72	9.8	0.108	0.692	1.01	4.3	2.68	2.28 †	1.5
50020	2A1	0.333	3.27	1.5	3.27	4.1 ††	0.1	0.55	0.85	3.05 ††	2.3	1.05 ††	0.95 ††
50022	2A1	0.33	4.25	1.94	3.34	13.7	0.06	0.96	1.39	4.93	3.4	3.15	1.76
50023	2A1	0.41	4.11	1.95	3.61	13.7	0.09	0.94	1.18	4.06	2.79	3.15	1.63
50024	2A1	0.192	2.99	1.43	3.02	12.9	0.05	0.69	0.91	4.02	2.71	2.69	1.33
50029	2A1	0.243	3.16	1.5	2.89	11.4	0.06	0.813	1.01	4.23	2.75	3.01	1.57

50030	2A1	0.365	3.16	1.6	3.12	13.4	0.13	1.01	1.28	4.8	3.27	3.08	1.69
50031	2A1	0.4	3.8	1.8	3.4	13.2	0.1	0.9	1.2	5	3.8 ††	3.1	1.9
50032	2A1	0.33	3.36	1.65	3.2	13.5	0.08	0.75	0.94	4.52	3.04	3.13	1.68
50033	2A1	0.4	3.67	1.83	3.35	1.55 ††	0.16 ††	0.85	0.95	4.54	3.2	3.35	1.74
50037	2A1	0.346	2.83	1.45	2.73	9.81	0.11	0.691	1.01	4.29	2.68	2.28 †	1.5
50038	2A1	0.369	3.92	1.98	3.25					4.58	2.91	2.63	1.66
50039	2A1	0.2	3.27	1.36	2.88	13.2	0.07	0.76	0.96	3.65	2.54	2.27 †	1.24
50044	2A1					12				4	3	3	
52417	2A1	0.2	2.03	0.78 ††	2.25					1.88 ††	1.57 ††	0.78 ††	0.82 ††
52434	2A1	0.1 ††	2.04	0.96 †	2.09 †	11.4	0.01	0.6	0.9	3.19 †	2.44	2.2 †	1.15 †
52435	2A1	0.309	3.61	1.69	3.12	8.88	0.03	0.23 ††	0.16 ††	2.04 ††	2.04 ††	2.06 ††	2.05 †
52436	2A1	0.36	3.58	1.75	3.38	11.7	0.1	0.87	1.08	4.02	2.78	2.82	1.74
52437	2A1	0.3	2.67	1.83	2.25					4.5	3.1	3.3	1.8
52476	2A1									2.5 ††	2.2	2.2 †	1 ††
52491	2A1	0.52	4.16	2.02	3.6	12	0.314 ††	0.855	1.12				
52508	2A1	0.196	2.47	1.04	2.35	12	0.050	0.583	0.762	3.38	2.9	2.34	1.28
52526	2A1									4.5	3.5	3	1.4
52527	2A1									4.8	3.3	3.1	1.6

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Electrical conductivity 1:5 soil-water (3A1) dS/m											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
10156	3A1	0.141	0.004 ††	0.122	0.158	0.115	0.031 ††	0.064 ††	0.108	0.08 †	0.008 ††	0.118	0.167
10173	3A1	0.155	3.99	0.116	0.157	0.103	0.012	0.048	0.093	0.069	8.52	0.12	0.163
10181	3A1	0.143	3.86	0.12	0.16	0.115	0.015	0.053	0.101	0.071	8.33	0.109	0.158
20204	3A1	0.154	3.74	0.119	0.165	0.119	0.016	0.055	0.101	0.076	8.26	0.12	0.165
21043	3A1	0.147	3.6	0.131	0.166	0.123	0.016	0.053	0.101	0.08 †	7.55 †	0.12	0.155
21100	3A1	0.147	3.92	0.119	0.161	0.121	0.005 ††	0.045 †	0.092	0.072	8.55	0.113	0.164
21115	3A1	0.153	3.96	0.121	0.148	0.109	0.011	0.05	0.094	0.083 ††	9 ††	0.124 †	0.183 ††
21138	3A1	0.144	3.67	0.113	0.152	0.109	0.013	0.052	0.099	0.07	8.54	0.011 ††	0.016 ††
21148	3A1	0.15	3.93	0.127	0.166	0.112	0.017	0.052	0.103	0.070	8.64 †	0.106	0.156
21178	3A1	0.165	4.01	0.13	0.175 †	0.115	0.013	0.054	0.101	0.071	8.52	0.114	0.164
21182	3A1	0.16	4	0.12	0.17	0.11	0.012	0.052	0.1	0.07	8.75 †	0.109	0.162
21190	3A1	0.13 †	4.14	0.134	0.159	0.17 ††	0.016	0.059 †	0.106	0.083 ††	8.91 ††	0.124 †	0.175 ††
21193	3A1	0.167	3.85	0.132	0.178 ††	0.12	0.015	0.056	0.101	0.072	7.97	0.112	0.156
21229	3A1	0.152	3.78	0.128	0.162	0.125	0.017	0.055	0.105	0.078	7.85	0.121	0.166
21230	3A1	0.153	3.72	0.115	0.161	0.104	0.013	0.048	0.094	0.059 ††	7.54 †	0.095 ††	0.136 ††
21232	3A1	0.15	3.79	13 ††	0.16	0.11	0.015	0.053	0.103	0.072	8.4	0.11	0.16
50004	3A1	0.125 ††	3.49	0.11	0.144 ††	0.101	0.012	0.05	0.093	0.07	0.008 ††	0.111	0.159
50005	3A1	0.157	3.76	0.132	0.178 ††	0.106	0.014	0.055	0.105	0.073	7.96	0.113	0.165
50006	3A1	0.16	3.95	0.15 ††	0.18 ††	0.1	0.02	0.06 ††	0.1	0.1 ††	8.1	0.13 ††	0.18 ††
50007	3A1	0.14	3.5	0.12	0.16	0.122	0.016	0.054	0.106	0.09 ††	8.02	0.12	0.17 †
50011	3A1	0.141	3.78	0.116	0.159	0.108	0.013	0.047	0.1	0.076	8.16	0.11	0.162
50012	3A1	0.133	3.58	0.122	0.155	0.12	0.013	0.048	0.096	0.074	7.33 ††	0.106	0.147 ††
50013	3A1	0.134	3.6	0.123	0.161	0.116	0.011	0.048	0.094	0.081 †	8.1	0.115	0.164
50014	3A1	0.137	3.73	0.129	0.159	0.116	0.012	0.048	0.097	0.069	8.16	0.109	0.157
50017	3A1	0.153	3.64	0.125	0.163	0.108	0.014	0.05	0.1	0.071	8.13	0.116	0.157
50018	3A1	0.154	3.79	0.131	0.171	0.107	0.013	0.05	0.096	0.07	8.2	0.111	0.157
50019	3A1	0.156	3.93	0.123	0.172								
50020	3A1	0.148	3.38	0.114	0.151	0.115	0.02	0.05	0.1	0.069	8.03	0.112	0.152
50021	3A1	0.153	3.94	0.126	0.16	0.115	0.015	0.053	0.103	0.076	8.2	0.119	0.164
50022	3A1	0.15	3.82	0.12	0.16	0.11	0.004 ††	0.04 ††	0.09 ††	0.06 ††	8.22	0.1 †	0.15 †
50023	3A1	0.159	3.76	0.131	0.17	0.114	0.013	0.054	0.101	0.072	8.14	0.11	0.159
50024	3A1	0.15	3.87	0.13	0.173	0.114	0.15 ††	0.052	0.098	0.078	0.859 ††	0.123 †	0.17 †
50025	3A1	0.154	3.71	0.119	0.156	0.113	0.015	0.053	0.101	0.074	8.2	0.114	0.162
50027	3A1	0.149	3.73	0.119	0.156	0.108	0.013	0.048	0.097	0.069	8.33	0.114	0.158
50029	3A1	0.139	3.98	0.111	0.146 †	0.079 ††	0.009	0.040 ††	0.082 ††	0.065	9.05 ††	0.084 ††	0.12 ††
50030	3A1	0.154	3.78	0.134	0.164	0.112	0.012	0.052	0.098	0.069	7.69 †	0.11	0.158

50031	3A1	0.157	3.85	0.132	0.175 †	0.111	0.012	0.051	0.096	0.073	8.2	0.115	0.161
50032	3A1	0.168	3.72	0.135	0.18 ††	0.106	0.013	0.055	0.103	0.068	8.24	0.133 ††	0.157
50033	3A1	0.157	0.004 ††	0.118	0.159	0.083 ††	0.013	0.05	0.097	0.071	8.29	0.108	0.157
50037	3A1	0.153	3.8	0.13	0.17	0.106	0.013	0.049	0.095	0.070	8.21	0.11	0.158
50038	3A1	0.132	0.137 ††	3.71 ††	0.185 ††					0.078	8.46	0.165 ††	0.167
50042	3A1	0.113 ††	3.41	0.12	0.132 ††	0.084 ††	0.014	0.051	0.092	0.071	7.47 ††	0.106	0.133 ††
50044	3A1	0.14	3.6	0.13	0.16	0.12	0.016	0.054	0.1	0.072	8.2	0.11	0.16
52283	3A1	0.173 ††	3.76	0.165 ††	0.171	0.131 †	0.04 ††	0.062 ††	0.102	0.075	8.31	0.118	0.16
52387	3A1	0.187 ††	4.05	0.159 ††	0.208 ††	0.118	0.018	0.054	0.107	0.071	8.27	0.113	0.161
52417	3A1	0.132	3.37	0.116	0.164					0.11 ††	7.09 ††	0.146 ††	0.175 ††
52434	3A1	0.14	3.54	0.14	0.16	0.12	0.02	0.05	0.1	0.08 †	7.72 †	0.11	0.16
52435	3A1	0.15	3.62	0.13	0.17	0.15 ††	0.04 ††	0.08 ††	0.13 ††	0.09 ††	8.45	0.13 ††	0.18 ††
52436	3A1	0.1 ††	3.15 ††	0.08 ††	0.12 ††	0.098	0.051 ††	0.042 ††	0.071 ††	0.15 ††	8.92 ††	0.145 ††	0.61 ††
52437	3A1	0.13 †	3.51	0.1 ††	0.13 ††	0.19 ††	0.02	0.07 ††	0.12 ††	0.1 ††	5.9 ††	0.07 ††	0.1 ††
52476	3A1									0.113 ††	7.3 ††	0.213 ††	0.258 ††
52491	3A1	0.155	3.8	0.128	0.171	0.111	0.126 ††	0.053	0.097	0.067	8.01	0.109	0.158
52494	3A1	0.148	3.96	0.12	0.158	0.118	0.017	0.055	0.101	0.068	8.13	0.109	0.154
52508	3A1	0.146	3.91	0.128	0.166	0.134 ††	0.033 ††	0.055	0.108	0.098 ††	8.13	0.146 ††	0.162
52526	3A1									0.076	7.59 †	0.121	0.159
52527	3A1									0.07	8.06	0.1 †	0.152

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Soil pH, 1:5 soil-water (4A1)											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

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10156	4A1	7.79 ††	7.84	6.08	5.63	6.42	5.95	6.02 ††	6.11 †	7.38	3.17	5.82	5.53
10166	4A1	7.3	7.39	5.95	5.47	6.42	5.63	5.78	5.86	7.33	3.13	5.76	5.48
10173	4A1	7.29	7.54	6.13	5.72	6.44	5.42	5.77	5.78	7.17	3.3 †	5.94	5.56
10181	4A1	7.37	7.59	6.07	5.56	6.35	5.46	5.7	5.82	7.63	3.21	5.91	5.61
20204	4A1	7.44	7.38	6.1	5.3	6.28	5.66	5.74	5.86	7.23	3.19	5.49 ††	5.45
21043	4A1	7.37	7.86	6.03	5.5	6.38	5.37	5.73	5.89	7.56	3.2	5.84	5.56
21100	4A1	7.26	7.31	6.03	5.53	6.32	5.6	5.73	5.87	7.35	3.16	5.83	5.54
21115	4A1	7.39	7.68	6.05	5.56	6.45	5.37	5.75	5.89	7.37	3.16	5.8	5.56
21138	4A1	7.5	7.81	6.14	5.62	6.44	5.77	5.81	5.92	7.5	3.21	5.91	5.59
21148	4A1	7.2	7.07 ††	6	5.39	6.73 ††	6.6 ††	6.1 ††	6.03	7.35	3.23	5.86	5.58
21178	4A1	7.36	7.55	5.94	5.46	6.36	5.47	5.74	5.86	7.34	3.13	5.76	5.48
21182	4A1	7.3	7.5	6.1	5.6	6.4	5.9	5.8	5.9	7.4	3.2	5.8	5.5
21190	4A1	6.93 ††	6.9 ††	6.42 ††	5.6	6.47	5.94	5.85	5.97	7.23	3.23	5.67	5.39
21193	4A1	7.35	7.72	5.94	5.4	6.17 †	5.19	5.5 ††	5.67 †	7.22	3.14	5.51 ††	5.36 †
21229	4A1	7.48	7.57	6.12	5.63	6.46	5.68	5.84	5.96	7.47	3.14	5.85	5.53
21230	4A1	7.25	7.61	5.91	5.39	6.35	5.56	5.77	5.87	7.41	3.16	5.83	5.51
21232	4A1	7.25	7.41	5.98	5.57	6.39	5.61	5.78	5.87	7.36	3.19	5.75	5.51
50004	4A1	6.86 ††	7.31	5.62 ††	5.27	6.2 †	5.68	5.57 ††	5.69	7.14	3.04	5.77	5.39
50005	4A1	7.46	7.57	6.75 ††	5.44	6.29	5.56	5.6 †	5.89	7.26	3.27	5.71	5.55
50006	4A1	6.48 ††	5.7 ††	5.72 ††	5.22	5.83 ††	6.5 ††	5.91	5.78	6.91 ††	2.96 ††	5.57 ††	5.35 †
50007	4A1	7.16 †	7.29	6.02	5.39	6.12 ††	5.28	5.52 ††	5.63 †	7.17	3.06	5.65	5.47
50011	4A1	7.44	7.56	6.1	5.55	6.31	5.85	5.95 †	5.96	7.28	3.18	5.83	5.53
50012	4A1	7.44	7.65	6.05	5.55	6.45	5.63	5.83	5.95	7.38	3.14	5.85	5.57
50013	4A1	7.3	7.7	6	5.5	6.2 †	5.2	5.6 †	5.7	7.21	3.06	5.74	5.43
50014	4A1	7.23	7.6	5.85	5.37	6.19 †	5.23	5.48 ††	5.65 †	7.31	3.15	5.75	5.52
50017	4A1	7.53	7.86	6.09	5.59	6.45	5.62	5.86	5.92	7.41	3.05	5.75	5.32 ††
50018	4A1	7.41	7.55	6.01	5.5	6.35	5.55	5.77	5.86	7.46	3.22	5.81	5.51
50019	4A1	7.27	7.45	6.03	5.57								
50020	4A1	7.46	7.39	6.16	5.61	6.44	6.42 ††	6 ††	6.16 ††	6.99 ††	3.34 ††	5.55 ††	5.57
50021	4A1	7.39	7.7	6.09	5.59	6.47	5.69	5.91	6.01	7.52	3.11	5.86	5.56
50022	4A1	7.3	7.7	6	5.4	6.41	5.57	5.77	5.87	7.28	3.29	5.88	5.53
50023	4A1	7.29	7.61	5.91	5.42	6.41	5.55	5.79	5.9	7.35	3.14	5.83	5.53
50024	4A1	7.3	7.48	6.18	6.1 ††	6.35	5.45	5.72	5.84	7.09	3.01 ††	5.7	5.48
50025	4A1	7.63 ††	7.5	6.5 ††	5.57	6.95 ††	6.9 ††	6.3 ††	6.1 †	7.37	3.13	5.67	5.4
50027	4A1	7.37	7.6	6.06	5.54	6.42	5.73	5.82	5.9	7.39	3.2	5.86	5.5
50029	4A1	7.21	7.5	5.88	5.7	6.12 ††	5.51	5.43 ††	5.52 ††	7.5	3.12	5.83	5.54

50030	4A1	7.42	7.71	6.05	5.57	6.46	5.66	5.85	5.93	7.4	3.2	5.84	5.55
50031	4A1	7.4	7.8	6	5.4	6.5	5.7	5.8	6	7.4	3.2	5.8	5.5
50032	4A1	7.37	7.65	5.93	5.46	6.13 ††	5.88	5.65	5.76	7.09	3.22	5.68	5.45
50033	4A1	7.29	7.73	5.95	5.39	6.47	5.48	5.81	5.97	7.56	3.08	5.82	5.51
50037	4A1	7.42	7.56	6	5.51	6.34	5.56	5.76	5.87	7.44	3.21	5.8	5.5
50038	4A1	7.38	5.94 ††	7.47 ††	5.47					7.38	3.02 ††	5.72	5.48
50042	4A1	8.88 ††	8.76 ††	6.68 ††	5.97 ††	6.58	5.25	5.66	5.78	7.66	3.37 ††	6.17 ††	5.85 ††
50044	4A1	7.3	7.8	5.9	5.5	6.4	5.6	5.8	5.9	7.5	3.2	5.8	5.6
52283	4A1	7.31	7.47	5.92	5.49	6.44	5.43	5.8	5.93	7.26	3.18	5.68	5.52
52387	4A1	7.31	7.6	6	5.5	6.47	5.64	5.81	5.91	7.13	3.31 ††	5.83	5.61
52417	4A1	6.98 ††	7.07 ††	5.63 ††	5.16 ††					6.5 ††	3.1	5.1 ††	4.9 ††
52434	4A1	7.2	7.5	6	5.4	6.2 †	5.8	5.5 ††	5.7	7.14	3.11	5.61 †	5.42
52435	4A1	7.41	7.58	6.03	5.47	6.29	5.45	5.64 †	5.75	7.29	3.12	5.66	5.6
52436	4A1	7.41	7.52	5.76 ††	5.23	6.32	5.07 ††	5.62 †	5.76	7.41	3.11	5.82	5.57
52437	4A1	7 ††	7.3	5.7 ††	5.2 †	5.82 ††	4.8 ††	5.02 ††	5.15 ††	6.71 ††	2.94 ††	5.52 ††	5.27 ††
52476	4A1									7.02 ††	3.72 ††	5.64	5.35 †
52491	4A1	7.01 ††	7.67	5.76 ††	5.21	6 ††	6.27 ††	5.8	5.81	6.65 ††	3.1	5.63 †	5.47
52494	4A1	7.34	7.77	6.03	5.51	6.34	5.84	5.81	5.82	7.3	3.04	5.47 ††	5.36 †
52508	4A1	7.47	7.62	6.42 ††	5.6	6.66 ††	6.33 ††	6.26 ††	6.61 ††	7.46	3.27	6.32 ††	5.69 ††
52526	4A1									7.4	3.2	5.8	5.5
52527	4A1									7.4	3.2	5.9	5.6

Lab. Code #	Method Codes	Soil sample identification and values for 2017: pH CaCl ₂ - Pooled (4B1 + 4B2 + 4B3 +4B4)											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
10166	4B1	6.87	7.34	5.22	4.88	5.81	4.93	4.98	5.06	6.58	3.14	5	4.83
10181	4B2	7.01	7.59	5.31	4.96	5.83	4.96	4.98	5.11	6.66	3.15	5.02	4.91
20204	4B2	7.07	7.07 ††	5.33	4.76	5.68	5.03	4.99	5.08	6.47	3.16	4.87 ††	4.9
21043	4B1	6.95	7.69	5.22	4.85					6.64	3.17	4.97	4.83
21043	4B4					5.77	5.08	4.9	5.05				
21100	4B4	6.92	7.1 †	5.45 †	5.04	5.74	5.14	5	5.14	6.6	3.17	5.13 †	5.03 †
21138	4B3	7.15	7.74	5.4	5.07	5.85	4.96	5.01	5.1	6.8 †	3.14	5.1	4.96
21178	4B3	6.88	7.62	5.22	4.9	5.67	4.83	4.91	4.96	6.55	3.12	4.99	5.45 ††
21182	4B1	7	7.6	5.4	4.9	5.7	5.3 †	5	5.1	6.6	3.2	5	4.9
21193	4B2	6.98	7.41	5.23	4.89	5.68	4.83	4.9	5.02	6.3 ††	3.13	4.95	4.81
21229	4B2	7.08	7.47	5.35	5.01	5.85	5	5.03	5.12	6.7	3.14	5.05	4.9
21230	4B2	6.85	7.47	5.14	4.8	5.76	5.14	4.91	5.04	6.71	3.14	5.03	4.87
21232	4B2	6.94	7.56	5.31	4.97	5.85	5.26	5.02	5.14	6.58	3.16	5.04	4.99
50005	4B1	6.68 ††	7.42	5.15	4.9	5.34 ††	4.74	4.95	5.02	6.29 ††	3.25	5.01	4.86
50005	4B2	6.89	7.19	5.17	4.85	5.67	4.8	4.91	5.01	6.41 †	3.22	5.14 †	4.88
50011	4B2	7.04	7.32	5.34	4.96	5.67	4.96	5.03	5.09	6.43	3.15	5.02	4.92
50012	4B4	6.95	7.57	5.24	4.91	5.73	4.89	4.9	5.02	6.63	3.11	4.98	4.83
50013	4B2	6.8	7.1 †	5.3	4.9	5.7	4.7	4.9	5	6.6	3 ††	5	4.8
50014	4B1	6.73	7.42	5.25	4.94	5.67	4.69	4.91	4.96	6.65	3.12	5.02	4.86
50017	4B2	7.07	7.78	5.32	4.96	5.8	5	4.94	5.08	6.62	3.04	4.99	4.84
50018	4B2	7.09	7.2	5.29	4.97	5.76	4.84	4.95	5.1	6.69	3.2	5.05	4.9
50019	4B1	6.94	7.45	5.41	4.99								
50020	4B4	7.18	7.3	5.54 ††	5.08 ††	6.02 ††	5.69 ††	5.41 ††	5.43 ††	6.67	3.31 ††	5.14 †	5.2 ††
50021	4B1	7.05	7.51	5.4	5.02	5.84	5.18	5.02	5.14	6.71	3.1	5	4.9
50022	4B2	6.9	7.5	5.3	4.9	5.77	5.1	5.01	5.1	6.35 †	3.24	4.95	4.91
50023	4B2	7.07	7.44	5.18	4.83	5.74	4.94	4.93	5.04	6.59	3.25	5.14 †	4.98
50024	4B1	6.93	7.09 †	5.86 ††	5.56 ††	5.66	4.63	4.88	4.93	6.43	2.99 ††	4.92	4.79 †
50027	4B1	7	7.56	5.19	4.89	5.75	4.85	5	5.04	6.6	3.18	5.04	4.87
50027	4B2	7.06	7.52	5.24	4.92	5.78	4.94	4.99	5.09	6.63	3.2	5.09	4.9
50029	4B3	6.62 ††	7.4	5.06 ††	4.79	5.51 ††	4.63	4.7 ††	4.82 ††	6.3 ††	3.08	4.98	4.81
50030	4B1	6.88	7.57	5.26	4.94	5.79	4.78	4.97	5.05	6.68	3.18	4.85 ††	4.91
50037	4B2	7.1	7.19	5.28	4.96	5.78	4.85	4.94	5.09	6.68	3.2	5.03	4.89
50044	4B2	7	7.7	5.2	4.9	5.8	4.9	5.4 ††	5.3 ††	6.7	3.2	5.2 ††	5.1 ††
52317	4B3	7	7.48	5.22	4.9	5.75	4.97	4.99	5.04	6.72	3.21	5.14 †	4.98
52387	4B3	6.87	7.53	5.27	4.97	5.8	4.86	5.02	5.1	6.59	3.23	5.06	4.9
52417	4B3	6.44 ††	7.1 †	4.93 ††	4.57 ††					6.4 †	3.1	4.8 ††	4.7 ††

52476	4B4									6.56	3.67 ††	5.15 ††	4.95
52491	4B2	6.8	7.37	5 ††	4.65 ††	5.4 ††	4.97	4.81	4.96	5.75 ††	3.1	4.77 ††	4.69 ††
52494	4B1	7.02	7.69	5.27	4.94	5.56 †	4.8	4.81	4.92 ††	6.16 ††	3.04	4.75 ††	4.68 ††
52526	4B1									6.6	3.2	5	4.9
52527	4B2									6.6	3.2	5.1	4.9

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Water Ext Cl - Pooled (5A1 + 5A2 + 5A3) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
20204	5A1	20.3	5880	48.3	16.8	8.26	5.94	9.8	46.3	9.48	5650 †	67.6 †	26.4
21043	5A1	14.5	5430	45.9	13.1	6.47	3.35	2.61	42.9 †	3.97	5800	50.8	28.2
21100	5A3	32.9 †	8240 ††	74 ††	35.7 ††	9.21	3.29	2.5	47	18.9 ††	86.5 ††	81.4 ††	50.1 ††
21115	5A2	14.3	6200	49.9	17.4	7.18	2.38	2.83	48.6	16 †	7000 ††	51	31.2
21138	5A1										6030		
21148	5A1	14.2	6540	48.5	9.1	17	14 ††	14	91 ††	8.25	6220	54.6	23.8
21178	5A3	14.2	5500	43.3	11.2	8	3	2	48	6	6200	56	26
21182	5A1	20	5600	60	27 †	11	3.8	5.5	52	6	6270	61	28
21193	5A1	19	6130	56.6	26.2 †	11.6	5.54	6.82	49.5				
21229	5A2	19.8	6250	49.5	15.3	12.7	7.6	8.1	48.4	6.6	6160	56.5	25.1
21230	5A1	15.7	6900	51.2	13.5	8.24	3.02	2.48	52.1	3.61	6260	48.5	21.9
21232	5A1	13.3	5550	41.9	11.2	14.3	9.35 †	9.4	50.5	9.4	6100	55.2	34.9 †
50004	5A1	15.6	5840	45.6	12.3	8.79	2.99	2.22	44.2	5.49	6370	62.8	28.5
50005	5A1	26.9 †	5790	34.9 †	48.6 ††	14.8	10.9 †	13.2	49.2	10.4	6290	22.4 ††	24.7
50011	5A1	20	5540	45.1	14.9	10.9	5.65	5.35	48.5	8.68	6020	52.9	24.4
50012	5A2	13	5900	54	14	8.9	2.5	2.3	46	5.3	6350	53	24
50013	5A1	20.6	6780	62.2 †	29.8 †	12.2	2.84	4.72	50		6290	53.7	29.3
50014	5A1	15.9	6240	46	14.9	8.07	2.63	2.19	44.9	5.53	6490 †	53.6	27.6
50017	5A1	14.4	4980	50	26 †	22.7 ††	2.94	3.7	49	10.1	6120	54	26
50018	5A2	12.6	5920	44.8	11	9.8	5.78	6.37	49	6.29	6120	55.6	22.9
50020	5A2	41.6 ††	6470	76.6 ††	44.4 ††	66.4 ††	52.6 ††	34.8 ††	70.8 ††	38 ††	6550 †	62	45 ††
50023	5A1	16.6	5910	46.9	15.3	9.5	3.8	3	47.6	5.5	6120	54.8	25.6
50024	5A3	17.5	5350	45.4	13.4	8.93	3.49	2.38	51.6	8	6060	57.5	25.8
50025	5A1	21	6170	152 ††	32.2 ††	28.6 ††	16.8 ††	8.5	37.5 ††	41.7 ††	27500 ††	115 ††	67 ††
50027	5A1	14	5940	58	13	14	6	1	52	7	6020	65 †	28
50029	5A2	73.8 ††	4630 ††	49.5	42.4 ††	19.7 †	7.47	13.4	45.4	20.2 ††	4520 ††	50.1	31.4
50031	5A1	19	6140	47	14	12	3.5	2	52	8	6100	56	26
50032	5A1	26 †	5050	55	20	12	4.7	7.5	50	13.8 †	4800 ††	51	29
50037	5A2	12.7	5910	44.9	10.9	9.9	5.8	6.4	49.1	6.32	6130	55.6	23.1
50042	5A1	105 ††	9400 ††	142 ††	66 ††	205 ††	14 ††	17 †	73 ††	51 ††	6000	153 ††	63 ††
50044	5A2	22	5800	54	30 †	12	6	8	52	7	6100	54	28
52417	5A1	143 ††	5350	210 ††	266 ††					18 ††	5230 ††	32 ††	43 ††
52494	5A1	15.5	6110	54.5	15.5	12.9	8.1	7.26	50.5	9.93	6270	56.8	25.5
52508	5A1	37.8 ††	6270	70.5 ††	35.2 ††	93 ††	179 ††	126 ††	155 ††	122 ††	5850	134 ††	66.3 ††
52526	5A1									9	6040	60	30
52527	5A1										6360	60	30

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Organic Carbon — W&B (6A1) %											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	6A1	0.85	0.16	2.11	7.1	1.97	0.105	0.97	0.915	1.01	1.33	2.85	2.04
21043	6A1	0.88	0.342	2.03	7	2.36	0.126	1.14		1.15	1.36	2.57	1.87
21100	6A1	0.827	0.214	1.94	5.87	2.28	0.066	1.07	1.11	1.02	1.35	2.73	2.02
21138	6A1	0.816	0.222	1.91	6.6	2.26	0.123	0.98	0.838	0.98	1.26	2.69	1.94
21148	6A1	1.21 ††	0.355	2.26	8.21	2.15	0.097	0.92	0.892	0.962	1.08 †	2.52	1.92
21178	6A1	0.761	0.14	1.97	6.19	1.74 ††	0.163 †	0.91	0.81	0.93	1.27	2.91	1.97
21190	6A1	0.838	0.2	2.56	7.8	2.45	0.048 †	1.17	1.03	1.24 ††	1.66 ††	3.52 ††	2.41 ††
21193	6A1	0.82	0.25	2.08	6.56	2.35	0.12	1.06	1	1.05	1.31	2.72	2.02
21229	6A1	0.8	0.142	1.98	6.06	2.03	0.132	0.997	0.859	1.04	1.31	2.76	1.99
21232	6A1	0.987	0.14	1.92	6.66	2.2	0.063	1.03	0.947	0.93	1.21	2.67	1.8
50005	6A1	0.9	0.193	2.35	7.2	2.46	0.13	0.965	0.968	1.02	1.29	3.06	2.21
50006	6A1	0.78	0.49 ††	2.54	7.31	4.92 ††	2.22 ††	2.16 ††	0.24 ††	1.5 ††	1.61 ††	1.91 ††	1.24 ††
50007	6A1	1.01	0.26	2.31	6.42	2.35	0.23 ††	1.13	0.87	1.3 ††	1.14	3.43 ††	2.25 †
50011	6A1	0.825	0.165	2.12	6.37	1.98	0.097	1	0.896	0.98	1.37	2.51	1.97
50012	6A1	0.851	0.21	2.02	5.93	2.45	0.08	0.907	0.798	0.921	1.15	2.72	1.92
50013	6A1					2.7	0.14	1.2	1.1	1.32 ††	1.38	3.43 ††	2.34 †
50014	6A1	0.966	0.218	2.13	7	2.39	0.104	0.995	0.931	1.06	1.27	2.75	2.03
50020	6A1	1.99 ††	0.424 †	4.91 ††	15 ††	2.35	0.065	1.14	1.18	1.05	1.49	2.9	2.14
50025	6A1	1.03 †	0.22	1.82	5.34	1.97	0.108	0.888	0.819	0.903	0.989 ††	2.37	1.7 †
50027	6A1	1.02	0.25	2.07	6.72	2.13	0.09	1	0.98	1	1.3	2.75	2.05
50029	6A1	0.96	0.54 ††	2.21	6.32	2.27	0.11	1.05	1.2	1.07	1.5	2.91	1.99
50030	6A1	0.92	0.31	2.2	7.13	2.26	0.098	0.925	0.884	1.05	1.25	2.55	1.93
50031	6A1	0.85	0.29	2	7.03	2.49	0.1	1.21	1.13				
50032	6A1	0.833	0.134	1.85	5.93	2.1	0.1	0.93	0.85	0.925	1.12	2.33	1.8
52417	6A1	1.68 ††	0.27	4.18 ††	12.5 ††					1.89 ††	2.23 ††	3.41 ††	3.35 ††
52434	6A1	1.01	0.08	2.53	7.45	2.38	0.12	1.1	1.04	1.22 ††	1.39	3.13	2.2
52435	6A1	0.83	0.117	1.89	6.67	2.18	0.1	0.97	0.85	0.99	1.42	2.83	1.92
52436	6A1	0.89	0.11	2.35	7.65	2.3	0.13	0.97	3.42 ††	1.01	1.48	3.21	3.38 ††
52437	6A1	0.99	0.19	2.49	7.92	2.44	0.17 ††	1.27 ††	1.11	1.02	1.43	1.43 ††	3.03 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Total Carbon — Dumas (6B2) %											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

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22	6B2	0.83	0.153	1.88	7.76	2.81	0.19 ††	1.18	1.08	1.25 ††	0.971 ††	3.02	2.15
8888	6B2	0.797	0.181	2.14	7.98	2.92		1.23 †	1.15 ††				
10156	6B2	0.766	0.122 ††	2.11	7.79	2.88	0.107	1.09	1.03	1.07 †	1.32	2.93	2.24
10173	6B2	0.73	0.12 ††	1.9	7.83	2.83	0.145	1.11	1.01 †	1.11	1.31	2.86	2.15
10181	6B2	0.81	0.16	2.29	7.9	3.05	0.134	1.14	1.06	1.13	1.35	3.22 †	2.31
20204	6B2	0.83	0.17	2.21	7.51	2.59	0.127	1.12	1.05	1.13	1.33	3.06	2.25
21043	6B2	0.83	0.197	2.15	7.96	3	0.141	1.13	1.05	1.14	1.38	3.02	2.3
21100	6B2	0.827	0.153	2.3	8.28	3.05	0.147	1.14	1.08	1.16 †	1.34	3.03	2.32
21138	6B2	0.792	0.189	2.03	6.9 ††	2.8	0.127	1.1	1.02	1.14	1.33	3	2.18
21182	6B2	0.75	0.2	2.6 ††	8.3	2.74	0.12	1.1	1 †	1.23 ††	1.45 ††	3.54 ††	3.03 ††
21229	6B2	0.831	0.162	2.14	5.22 ††	2.42	0.127	1.19	1.06	1.07 †	1.33	2.52 ††	2.17
21230	6B2	0.804	0.194	2.12	7.96	2.95	0.122	1.12	1.06	1.12	1.33	2.97	2.25
21232	6B2	0.967 ††	0.212 ††	2.29	7.85	2.77	0.154	1.26 ††	1.21 ††	1.22 ††	1.39	3.14	2.27
50004	6B2	0.809	0.197	2.37	8.26	2.98	0.141	1.19	1.13 ††	1.13	1.36	3.03	2.28
50005	6B2	0.811	0.173	2.04	7.51	2.5	0.138	1.04	1.05	1.1	1.31	3.4 ††	2.21
50011	6B2	0.825	0.165	2.12	8.72	2.68	0.128	1.14	1.11 †	1.12	1.38	3.01	2.23
50012	6B2	0.767	0.183	2.12	7.7	2.96	0.116	1.14	1.05	1.11	1.34	3.01	2.24
50014	6B2	0.777	0.175	2.27	8.33	3.01	0.101	1.11	1.05	1.12	1.34	3.16	2.24
50017	6B2	0.758	0.172	2.02	7.11	2.97	0.137	1.18	1.05	1.1	1.34	2.97	2.19
50019	6B2	1 ††	0.17	2.18	7.64								
50021	6B2	0.689 ††	0.017 ††	2.17	7.79	2.68		1.07	0.925 ††	0.95 ††	1.19 ††	2.89	2.12
50024	6B2	0.795	0.167	2.13	8.18	2.93	0.12	1.15	1.05	1.11	1.33	3.19	2.22
50029	6B2	0.881	0.209 †	2.28	8.17	3.1	0.322 ††	1.27 ††	1.15 ††	1.27 ††	1.43 ††	3.39 ††	2.32
50030	6B2	0.81	0.17	2.15	7.93	2.93	0.122	1.04	1 †	1.21 ††	1.45 ††	3.31 ††	2.49 ††
50032	6B2	0.848	0.17	2.36	8.46	3.02	0.1	1.11	1.04	1.1	1.32	3.07	2.23
50033	6B2	0.85	0.16	2.18	8.19	2.65	0.12	1.1	1.06	1.11	1.31	3.09	2.23
50039	6B2	0.8	0.19	2.26	7.97	3.02	0.12	1.15	1.06	1.14	1.37	3.04	2.27
52283	6B2	0.686 ††	0.171	1.97	7.08	2.55	0.054 ††	0.994 ††	0.975 ††	1.13	1.36	2.81 †	2.14
52387	6B2	0.785	0.175	2.01	7.32	2.52	0.116	1.12	1.25 ††	1 ††	1.25 ††	2.86	2.13
52491	6B2	0.8	0.157	2.2	7.9	2.63	0.117	1.13	1.05	1.11	1.34	2.97	2.25

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Total Organic Carbon - Pooled (6B1 + 6B3 + 6B5) %											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20136	6B3					2.9	0.14	1.2	1.1				
20204	6B3	0.83	0.17	2.13	7.41	2.39	0.107	0.963	0.962 †	1.03	1.33	2.46 ††	2.16
21100	6B3	0.753	0.168	2.18	7.99	2.99	0.060 ††	1.13	1.05	1.1	1.34	3.04	2.26
21138	6B3	0.792	0.189	2.03	6.71	2.8	0.127	1.1	1.02	1.15	1.33	2.97	2.19
21182	6B3	0.67 ††	0.15	2.5 ††	7.9	3.1	0.07 ††	1	0.98	1.14	1.35	3.28 ††	2.86 ††
21182	6B1					2.62	0.066 ††	1.01	0.961 †	1.04	1.48 ††	3.12	2.18
21230	6B3	0.774	0.189	2.12	7.96	2.96	0.118	1.12	1.05	1.11	1.33	2.97	2.25
21232	6B3					2.6	0.13	1.19	1.06				
50005	6B3	0.799	0.179	2	7.49	2.48	0.137	1.04	1.04	1.08	1.31	3.39 ††	2.19
50011	6B3	0.825	0.165	2.12	6.42 ††	2.58	0.127	1.13	1.1	1.02	1.37	2.76 ††	2.1
50012	6B3	0.74	0.204	2.25	7.82	2.95	0.098	1.1	1.07	1.15	1.37	3.28 ††	2.25
50013	6B3					2.2	0.11	0.87 ††	0.86 ††	0.93 ††	1.12 ††	2.89	1.72 ††
50014	6B3	0.755	0.143	2.22	8.3	2.94	0.115	1.08	1.01	1.11	1.31	3.04	2.24
50014	6B1	1.28 ††	0.432 ††	2.72 ††	8.23	2.88	0.216 ††	1.33 ††	1.38 ††	1.31 ††	1.63 ††	3.32 ††	2.3
50018	6B3	0.772	0.177	2.18	7.74	2.65	0.122	1.08	1.04	1.06	1.32	2.94	2.2
50022	6B1	0.83	0.17	2.02	6.74	2.47	0.1	0.96	0.9	0.98	1.29	2.95	1.7 ††
50023	6B3	0.803	0.183	2.16	8.39	3	0.14	1.15	1.06	1.13	1.42	3	2.26
50024	6B1	0.879	0.209	2.15	8.14	2.59	0.12	1.17	1.08	0.86 ††	1.21 †	2.49 ††	1.99 ††
50030	6B1	0.88	0.21	2.33	7.17	2.66	0.103	1.04	1	1.11	1.45 †	3.3 ††	2.3
50032	6B3	0.848	0.155	2.36 †	8.46	3.02	0.1	1.11	1.04	1.09	1.3	3.06	2.22
50037	6B3	0.771	0.178	2.19	7.74	2.66	0.123	1.09	1.05	1.06	1.33	2.93	2.2
50039	6B3	0.8	0.19	2.26	7.97	3.02	0.12	1.15	1.06	1.14	1.37	3.04	2.27
52437	6B1					4.21 ††	0.29 ††	2.19 ††	1.92 ††				
52526	6B1									1.3 ††	1.4	3	2.2
52527	6B3									1.1	1.4	3.1	2.1

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Total N — Pooled (7A1 + 7A2) %											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10181	7A2	0.062	0.212 ††	0.211 ††	0.289 ††					0.087	0.0736	0.199	0.202
21138	7A2	0.051	0.021	0.127 †	0.42	0.187		0.087	0.069	0.082	0.067	0.18	0.18
21148	7A1	0.0503	0.031	0.129 †	0.488	0.181	0.00547	0.0717	0.0471	0.0783	0.0752	0.171	0.175
21178	7A1	0.0567	0.029	0.145	0.436	0.187	0.003	0.1	0.076	0.09	0.081	0.18	0.19
21190	7A1					0.237	0.042 ††	0.099	0.071	0.112 †	0.101 †	0.212	0.19
21229	7A2	0.066	0.03	0.149	0.473	0.219	0.003	0.095	0.081	0.084	0.08	0.179	0.19
21232	7A1	0.07	0.05	0.15	0.49	0.196	0.012	0.105	0.086	0.1	0.1 †	0.21	0.21
50004	7A1	0.071	0.054	0.178 †	0.525	0.217	0.026 †	0.103	0.09	0.069	0.031 ††	0.146	0.152
50007	7A1	0.059	0.025	0.15	0.48	0.22	0.005	0.086	0.072	0.085	0.074	0.184	0.19
50012	7A2	0.0582	0.026	0.149	0.476	0.225	0.0009	0.0854	0.0721				
50014	7A2	0.061	0.021	0.163	0.506	0.235	0.005	0.088	0.069	0.091	0.074	0.211	0.204
50044	7A1	0.056	0.038	0.15	0.45	0.25		0.11	0.087				
52417	7A1	0.0476	0.020	0.132 †	0.171 ††					0.105	0.938 ††	0.2	0.181
52436	7A1					0.22	0.02 †	0.11	0.09	0.08	0.07	0.18	0.19
52437	7A1	0.05	0.01	0.13 †	0.42	0.17	0.01	0.06	0.04	0.0756	0.0616	0.143	0.157
52508	7A1	0.0891 ††	0.042	0.152	0.435	0.144	0.0332 ††	0.0718	0.0595	0.545 ††	0.52 ††	1.05 ††	1.05 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Total N – Dumas (7A5) %											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

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22	7A5	0.053	0.022	0.135	0.492	0.238	0.022 ††	0.114 ††	0.09	0.07 ††	0.075	0.182	0.19
8888	7A5	0.077 ††	0.041	0.144	0.491	0.247		0.105	0.086				
10156	7A5	0.0641	0.037	0.151	0.485	0.226	0.006	0.0933	0.077	0.088	0.077	0.182	0.196
10173	7A5	0.055	0.031	0.11 ††	0.478	0.246	0.02 ††	0.106	0.0757	0.0841	0.0761	0.198	0.204
10181	7A5	0.058	0.025	0.165	0.499	0.252	0.0075	0.0978	0.0799	0.0916	0.0784	0.202	0.209
20136	7A5					0.209	0.004	0.0948	0.0684				
20204	7A5	0.061	0.036	0.156	0.461 †	0.207	0.0094	0.096	0.0787	0.0928	0.0802	0.184	0.194
21043	7A5	0.057	0.03	0.146	0.49	0.23	0.001	0.084	0.067	0.087	0.076	0.176	0.19
21100	7A5	0.0665 †	0.057 ††	0.158	0.477	0.241	0.00967	0.0968	0.0794	0.0902	0.0873 ††	0.182	0.192
21182	7A5	0.058	0.025	0.14	0.56 ††	0.252	0.0038	0.095	0.0803				
21229	7A5	0.67 ††	0.036	0.142	0.471	0.222	0.01	0.108	0.08	0.094	0.081	0.181	0.193
21230	7A5	0.0621	0.038	0.15	0.497	0.249	0.00924	0.103	0.0838	0.091	0.0787	0.187	0.202
50005	7A5	0.106 ††	0.034	0.163	0.523 †	0.205	0.00223	0.0874	0.0772	0.0906	0.0795	0.214 ††	0.194
50011	7A5	0.051	0.03	0.146	0.497	0.2	0.01	0.09	0.08	0.088	0.078	0.195	0.198
50012	7A5	0.0575	0.028	0.146	0.483	0.243	0.00624	0.0967	0.0825	0.0865	0.0738	0.184	0.197
50012	7A5									0.0906	0.0726	0.179	0.19
50013	7A5	0.052	0.036	0.162	0.482	0.237	0.004	0.094	0.076	0.092	0.077	0.191	0.198
50014	7A5	0.054	0.035	0.155	0.496	0.236	0.0035	0.093	0.075	0.0935	0.081	0.195	0.198
50017	7A5	0.0405 ††	0.019	0.119 ††	0.468	0.237	0.00282	0.096	0.0731	0.0783 ††	0.0751	0.18	0.187
50018	7A5	0.0556	0.032	0.16	0.501	0.216	0.0131	0.095	0.0821	0.0846	0.0798	0.194	0.203
50019	7A5	0.061	0.025	0.149	0.476	0.198	0.004	0.09	0.074				
50020	7A5	0.0561	0.029	0.139	0.45 ††	0.219	0.015 †	0.107	0.0868	0.0939	0.0818	0.189	0.202
50021	7A5	0.04 ††	0.016	0.15	0.503	0.213		0.086	0.059 ††	0.065 ††	0.048 ††	0.167	0.174 ††
50023	7A5	0.043 †	0.023	0.147	0.52 †	0.23	0.001	0.09	0.067	0.1 †	0.093 ††	0.197	0.203
50024	7A5	0.069 †	0.045	0.16	0.529 ††	0.256	0.009	0.107	0.082	0.104 ††	0.097 ††	0.202	0.22 ††
50027	7A5	0.166 ††	0.042	0.15	0.59 ††	0.241	0.01	0.087	0.06 ††	0.09	0.079	0.19	0.212
50029	7A5	0.005 ††	0.005 ††	0.102 ††	0.491	0.203	0.005	0.0625 ††	0.0392 ††	0.0996 †	0.0889 ††	0.231 ††	0.216 ††
50030	7A5	0.049	0.025	0.142	0.484	0.254	0.006	0.09	0.076	0.09	0.079	0.203	0.213 †
50031	7A5	0.052	0.023	0.145	0.445 ††	0.201	0.003	0.084	0.068				
50032	7A5	0.056	0.031	0.147	0.467	0.222	0.002	0.083	0.072	0.082	0.069 ††	0.185	0.199
50033	7A5	0.06	0.032	0.15	0.499	0.21	0.003	0.092	0.076	0.087	0.071	0.189	0.195
50037	7A5	0.056	0.032	0.161	0.501	0.217	0.0132	0.0951	0.0823	0.0841	0.0795	0.192	0.202
50039	7A5	0.054	0.029	0.156	0.493	0.21	0.005	0.093	0.07	0.088	0.072	0.178	0.199
52283	7A5	0.058	0.036	0.152	0.486	0.249	0.005	0.102	0.08	0.092	0.081	0.161 ††	0.177 ††
52387	7A5					0.347 ††	0.144 ††	0.217 ††	0.231 ††				

52491	7A5	0.0556	0.026	0.141	0.474	0.219	0.00648	0.101	0.0828	0.0855	0.071	0.174	0.19
52526	7A5									0.092	0.076	0.185	0.197
52527	7A5									0.088	0.073	0.186	0.196

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Water Soluble Nitrate N - Pooled (7B1 +7B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	7B1	10	88.1	0.21	19.5	0.98 †	0.36	11.7	14.8	2.06	0.45	4.65 ††	19.4 ††
21115	7B1	10.3	90	0.01	13.9	0.14	0.34	10	14.2	2.2	0.11	9.5	33
21148	7B1	1.82 ††	86.3	0.02	0.02 ††	0.03	0.27	11	14.5	0.03 ††	0.03	2.55 ††	17.5 ††
21178	7B1	10.2	81	0.08	14.2	0.15	0.35	10.8	13.2	1.95	0.1	9	31
21182	7B1					112 ††	3.91 ††	14 ††	15.2	2	0.001	9	47 ††
21232	7B1									3.13 ††	0.445	11.1 †	33.3
50004	7B1	8.97	79.8	0.16	12								
50005	7B1	9.43	88.5	0.192	14.9	0.0391	0.194	11.7	16	1.85	0.301	10.1	36.1 †
50013	7B1	10	97.4		14	0.1	0.4	10.6	13.4	1.8		9.4	32.1
50014	7B1	9.98	92.7	0.022	16.3	0.164	0.416	10.6	13.4	2.07	0.072	10.1	32.2
50018	7B1	10.8	89.4	0.558	12.8	0.64	0.128 †	9.4	13.6	0.253 ††	0.497	9.42	32.8
50020	7B1	12.8 †	104 ††	6.99 ††	17.1	0.905 †		9.29	11.9	3.56 ††	0.139	12.7 ††	39.6 ††
50024	7B2									2	10.5 ††	10	32.5
50025	7B1	10.8	105 ††	0.1	16.8	1.29 †	1.53 ††	11	14	2.7 †	0.32	9.17	32.8
50029	7B1	8.74	71 ††	0.772 †	12.9	0.5	0.5	8.4	10.6 ††	1.79	0.3	7.45 †	25.6 ††
50031	7B1	10.4	91	0.1	15.5	0.2	0.4	11.5	14				
50032	7B1	9	102 †	0.59	11.3	0.56	0.38	10.7	14	3.7 ††	27 ††	16.3 ††	46 ††
50037	7B1	10.6	89	0.561	12.8	0.646	0.131 †	9.6	13.8	0.251 ††	0.496	9.41	32.6
50042	7B1	13 ††	277 ††	14 ††	17	16 ††	8.8 ††	12	18 ††	336 ††	321 ††	239 ††	159 ††
50044	7B1	7.5 †	92		12	0.2	0.8 †	10	13	1.6		8.8	30 †
52526	7B1									1.7	0.1	10.1	31.1
52527	7B1									1.9		9.7	30.4 †

Lab. Code #	Method Codes	Soil sample identification and values for 2017: KCl Extractable Nitrate N — autocolour (7C2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	7C2	10.1	88.3	0.001	15.6	0.315	0.306	11.1	13.9	0.098 ††	1.73 ††	9.84	30.9
8888	7C2	8.44 †	71.1 ††	1.03 ††	11.2 ††	0.24	0.518	10.2	12.6	1.86	0.252	9.91	32.3
10173	7C2	7.9 ††	85		20 ††	0.0112	0.35	13 ††	15.2	2.39	0.103	12.1 ††	38.5 ††
10181	7C2	9.7	89.1	0.1	15.5	0.13	0.39	11	13	2	0.007	9.5	29 †
20136	7C2					0.12	0.4	9.85 †	12.5				
21043	7C2	9.98	87.9	0.055	15	0.001	0.001 ††	11.2	14.9	1.97	0.046	9.56	31.1
21100	7C2	9.24	100 †	0.564	14.1	0.312	0.435	10.4	13.6	1.89	0.513	9.23	31.7
21138	7C2	6.84 ††	98.3		14.4	0.368	0.34	10.3	12.8	1.67	1.33 ††	9.43	31.2
21193	7C2	10.7	95.2	0.31	15.1	0.49	0.52	10.8	13.3	2.29	0.56	10.1	30.7
21229	7C2	10.9	86.7	0.14	15	0.46	0.44	12 ††	14.5	1.91	0.22	10.1	33.4 †
21230	7C2	11	86.1	3.16 ††	13.4	1.32 ††	3.47 ††	13.2 ††	14.8	1.02 ††	0.0201	9.18	30.4
21232	7C2	10.8	94.1	0.411	15.8	1.86 ††	1.6 ††	11.1	13.1	2.89 ††	1.12 †	11.3 ††	31
50004	7C2	9.49	128 ††	2.22 ††	8.25 ††	0.642	0.349	10.6	13	0.01 ††	1.03 †	6.78 ††	29.8
50005	7C2	9.49	89.9	0.213	15.3	0.0325	0.205	11.9 ††	16 ††	2.1	0.789	10.2	34.9 ††
50011	7C2	10.1	95.4	0.203	16.8 †	0.28	0.44	12.8 ††	15.9 ††	2.15	0.49	9.33	35 ††
50012	7C2	10	90	0.006	15	0.102	0.36	11	14	2.4	0.05	9.8	32
50014	7C2	10.5	92.9	0.519	14.9	1.23 ††	0.24	9.73 ††	14.2	2.13	0.39	10.1	31.6
50017	7C2	10.2	88.2	0.696 †	14.1	0.271	0.555	10.7	14.1	2	0.42	9.06	31.5
50019	7C2	0.99 ††	9.4 ††	0.02	1.6 ††					2.5 †	0.32	11 †	34 †
50020	7C2	24.2 ††	86.9	14.9 ††	15.4	2.07 ††	2.47 ††	14 ††	15.3	2.63 ††	0.663	11.5 ††	32.5
50021	7C2	9.81	83.4	0.18	13.2 †	0.21	0.41	10.6	13.2	2.44	1.38 ††	9.98	30.8
50023	7C2	9.9	86.1	0.35	15.1	0.08	0.21	10.7	13.6	1.82	0.16	9.68	30.6
50024	7C2	9.27	84.7	0.1	14.6	0.16	0.48	10.8	13.7	1.68	0.73	10.4	32.3
50027	7C2	10	82.4	0.5	13.8	0.3	0.6	10.8	12.9	1.8	0.3	8.7 †	28.9 †
50030	7C2	9.7	92.1	0.1	15.4					2.1	0.5	10.1	31.6
50031	7C2	10	92	0.1	14.5	0.68 †	0.9 ††	10.6	13.2				
50033	7C2	12.7 ††	77.2	0.1	16.6	0.5	0.7 †	10.2	12.2	2	0.1	9.7	31.5
52491	7C2	11	87	0.213	14	0.197	0.493	10.9	14	1.9	0.153	11 †	36 ††
52494	7C2	9.73	86.8	0.78 †	14.5	0.211	0.353	11	13.1	2.07	0.127	9.34	29.9

Lab. Code #	Method Codes	Soil sample identification and values for 2017: KCl Ext. Ammonium N – autocolour (7C2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	7C2	7.2 †	2.85	11.3	23.8	31.3	2.1	8 ††	10.1	35 ††	5.65 ††	39.2	23.3 †
8888	7C2	6.23	2.37	13.2	26.1	38.5	1.45	4.9	9.81	7.32	45.2	51	33
10173	7C2	5.7	2.9	13	25	38	2.4	5.75	10.5	5.92	40.4	44.6	28.8
10181	7C2	5.7	2.1	12.5	24.9	45	4.6 ††	5.7	11	6.5	39	47	30
20136	7C2					37	1.47	5.84	11				
20204	7C2	5.3	4.9 ††	10.9	35.7 ††	29.9	1.62	5.79	9.1	6.45	38.9	20.6 ††	29.4
21043	7C2	6.5	2.2	12.7	28.7	43.2	1.84	5.28	10.8	6.92	6.92 ††	46	32.2
21100	7C2	6.63	1.66	11.3	22.2	38.5	2.71 ††	4.64	9.87	6.48	35.2	36.1	26.7
21138	7C2	9.88 ††	2	12.6	26	39.2	1.74	5.22	9.43	5.32	37.1	42	28.2
21148	7C2	10 ††	10.2 ††	17.5 ††	30 †					5.44	28.2 ††	22.2 ††	27.5
21178	7C2	4.69	2.72	9.3	19 ††	32.4	2.09	4.25	7.56	5.42	20.9 ††	39.1	20.5 ††
21193	7C2	5.58	1.58	11.7	23.4	40.6	2.03	3.89	6.76 ††	10.6 ††	60.1 ††	68 ††	48.1 ††
21229	7C2	5.59	1.79	10.8	24.9	34.8	2.08	5.53	8.97	5.53	36.7	41.6	27.6
21230	7C2	6.32	1.63	11.8	25.6	45.3	4.72 ††	7.83 ††	13.1 ††	6.61	42.6	46.7	30.7
21232	7C2	9.08 ††	4.17 ††	17.6 ††	29.8 †	43.1	4.05 ††	9.22 ††	15.1 ††	7.05	49.7 ††	54.6 †	35.2 ††
50004	7C2	3.55 ††	0.01 ††	10.4	26.6	39.9	1.4	5.07	9.97	6.94	31.9	46.6	30.3
50005	7C2	7.91 ††	1.56	13.4	30.8 ††	35.7	1.86	3.83	8.31	5.93	36.1	40.7	27.2
50011	7C2	5.56	2.14	9.57	21.5	34.2	1.76	5.15	8.44	5.57	39.2	44.4	26.4
50012	7C2	5.8	2.1	13	24	41	2.1	4.8	9.8	6.8	41	47	30
50014	7C2	5.74	2.02	11.3	23.4	39.8	1.59	4.6	9.83	5.64	37.7	42.3	29.6
50017	7C2	5.29	1.85	12.4	24.5	37.7	1.42	4.44	9.65	5.79	37.4	41.2	27.6
50019	7C2									5.4	34	39	22 ††
50020	7C2	8.35 ††	6.11 ††	13.3	25	31.1	5.05 ††	6.87	12.6 ††	5.21	25.8 ††	29.4 ††	23 ††
50021	7C2	5.99	2.9	11.6	22.4	30.7	2.11	5.09	9.16	6.01	35.5	40	25.3
50023	7C2	6	2.2	13	27.5	47.3	1.69	5.49	10.6	6.8	41.2	46.4	30.6
50024	7C2	6.05	2.13	12.7	25.6	36.4	1.32	4.81	9.5	7.21	41.1	48.1	29.2
50027	7C2	5.5	2.1	10.9	23.5	34.2	1.7	4.2	8.6	5.5	38	42.4	28.1
50029	7C2	2.18 ††	1.25	2.07 ††	4.41 ††	3.27 ††	1.13	1.47 ††	1.52 ††	1.2 ††	16.9 ††	8.46 ††	7.55 ††
50030	7C2	5.4	2	11.4	24.2					5.9	39.8	47.4	29.8
50031	7C2	7.2 †	3.2 †	13.6	28.5	44	2.1	5.9	10.3				
50032	7C2	5.6	2.73	9.15	17.3 ††	40.8	1.99	6.16	8.88	7.8	42	47	25.1
50033	7C2	5.2	1.4	12.2	26.4	40	0.7 ††	5.8	10.6	6.4	39.5	46.7	31.7
52491	7C2	4.7	1.5	9	21	35	1.9	4.4	9.2	6.8	39	45	29
52494	7C2	6.5	2.37	11.6	26.1	40	1.57	5.83	11.7	7.37	42.5	48.1	30.8

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Total P - Pooled %											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

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10156	Not Specified	0.008	0.027 ††	0.025	0.157 †					0.074 ††	0.032	0.015 †	0.04
10181	Not Specified	0.040 ††	0.174 ††	0.049 ††	0.141 ††	0.171	0.001	0.038	0.026	0.101	0.037	0.013	0.053
20204	Not Specified	0.007	0.039	0.022	0.218 †	0.128	0.001	0.027	0.021	0.089	0.032	0.011	0.049
21043	Not Specified	0.008	0.045	0.025	0.182								
21100	Not Specified	0.009	0.039	0.023	0.185	0.176	0.001	0.037	0.021	0.107 †	0.04 †	0.009	0.049
21138	Not Specified	0.008	0.039	0.024	0.178	0.17		0.037	0.024	0.092	0.0346	0.023 ††	0.049
21148	Not Specified	0.007	0.041	0.020	0.188	0.169	0.011 ††	0.029	0.017	0.097	0.035	0.008	0.042
21178	Not Specified	0.007	0.039	0.023	0.185	0.136	0.0002	0.034	0.019	0.087	0.035	0.008	0.045
21182	Not Specified					0.185	0.0004	0.041	0.030 ††	0.118 ††	0.046 ††	0.014	0.063 ††
21229	Not Specified					0.128	0.0003	0.023	0.019	0.091	0.032	0.009	0.049
21229	Not Specified	0.008	0.038	0.023	0.165								
21230	Not Specified	0.008	0.046 †	0.025	0.217 †	0.171	0.00001	0.031	0.018	0.092	0.026 ††	0.009	0.047
21232	Not Specified	0.011 †	0.045	0.028	0.227 ††	0.16	0.003 ††	0.034	0.025	0.095	0.035	0.01	0.052
50005	Not Specified	0.009	0.038	0.030	0.191	0.096 ††	0.001	0.033	0.023	0.055 ††	0.033	0.010	0.050
50011	Not Specified	0.008	0.035	0.025	0.18	0.143	0.001	0.035	0.023	0.094	0.035	0.011	0.050
50012	Not Specified	0.009	0.037	0.023	0.177					0.096	0.034	0.006	0.047
50012	Not Specified					0.172	0.0003	0.036	0.024				
50013	Not Specified	0.008	0.044	0.026	0.184	0.145	0.0004	0.039	0.026	0.107 †	0.0405 †	0.0144 †	0.0513
50017	Not Specified	0.026 ††	0.146 ††	0.080 ††	0.822 ††	0.16	0.005 ††	0.03	0.019				
50018	Not Specified	0.006	0.037	0.025	0.189	0.149	0.001 †	0.032	0.021	0.084	0.034	0.009	0.049
50019	Not Specified					0.175	0.0003	0.031	0.02				
50020	Not Specified	0.039 ††	0.042	0.024	0.197	0.117 ††		0.025	0.014	0.095	0.036	0.008	0.047
50021	Not Specified	0.008	0.04	0.024	0.185	0.16	0.0002	0.037	0.026	0.099	0.025 ††	0.011	0.044
50024	Not Specified	0.008	0.042	0.025	0.197	0.148	0.001	0.037	0.021	0.096	0.035	0.008	0.050
50027	Not Specified	0.007	0.038	0.023	0.198	0.157	0.002 ††	0.032	0.024	0.076 †	0.036	0.009	0.044
50031	Not Specified	0.009	0.043	0.024	0.207								
50031	Not Specified					0.17	0.001	0.037	0.023				
50037	Not Specified	0.006	0.037	0.025	0.19	0.15	0.001 †	0.033	0.021	0.084	0.034	0.009	0.049
50044	Not Specified	0.007	0.04	0.022	0.18								
52417	Not Specified	0.010	0.047 †	0.025	0.207					0.094	0.033	0.015 †	0.046
52437	Not Specified	0.01	0.04	0.03 †	0.17	0.38 ††	0.07 ††	0.14 ††	0.12 ††	0.22 ††	0.1 ††	0.05 ††	0.15 ††
52491	Not Specified	0.014 ††	0.037	0.030 †	0.173	0.142	0.0005	0.030	0.019	0.069 ††	0.027 ††	0.002 ††	0.045
52508	Not Specified	0.007	0.034	0.019 ††	0.17					0.085	0.032	0.009	0.040
52526	Not Specified									0.092	0.035	0.012	0.046
52527	Not Specified									0.094	0.039	0.012	0.042

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Colwell Extractable P — Pooled (9B1 + 9B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

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20204	9B1	22.5	17.8	44.8	329	174	3	46.7	18.5	44.9	52.9	16.9 ††	36.7
21043	9B2	23.7	19.1	48.5	382	155	0.702	47.6	16.6	42	56.3	8.97	34.8
21100	9B1	21.9	19	46.1	370	185	4.28	46.8	23.9 ††	53.2 ††	45.7 †	8.36	43.2 ††
21115	9B2	19.8	14.3	44.2	376	127	0.08	42.3	14.3	38.6	40.7 ††	5.6	33.3
21138	9B1	21.6	17.4	46.1	359	165	0.735	47.5	17.6	47.3	52.5	8.5	40.4 †
21148	9B2	17.5	20.6	45.8	337	148	2.1	38.8 ††	13.6 †	36.4 ††	49.7	4.66	397 ††
21178	9B1	27	21.5	59.1 ††	404	148	0.56	48.5	16.1	44.4	45.9 †	6.94	31.6
21182	9B1	17	10 ††	43	350	140	0.01	42	12 ††	47	55	6	34
21193	9B1	16	5.2 ††	33.3 ††	340	250 ††	3	46.1	9.6 ††				
21229	9B2	21.1	15.8	39.1	344	141	1.83	38.7 ††	16.9	45.5	51.3	4.33	35.8
21230	9B1	25.6	24.6 ††	50.2	471 ††	155	2.06	58 ††	23.2 ††	94 ††	62.8 ††	11.4	48.3 ††
21232	9B1	51.2 ††	19.9	41	301	133	3.34	42.8	16.3	44	50.7	12.1	36.5
50005	9B1	14.8	13.7	42.5	359	293 ††	0.501	75.3 ††	17.1	41.2	46.4	0.954 †	25.1 ††
50011	9B1	20.8	18.7	45.6	361	168	2.47	47.7	18.5	44.3	53.3	6.75	33.5
50012	9B2	20	18	45	320	178	0.86	47	20	46	54	8.3	35
50013	9B1	18	17	42	351	170	9 ††	52	22 †	49	52	8	37
50014	9B2	18.7	15.6	44.5	335	153	0.1	45.3	18.5	45.3	53.4	6.9	35.8
50017	9B1	21.1	19.4	49.9	359	152	1.7	45.1	15.9	46.9	52.2	3.12	33.2
50018	9B2	23	18.1	45.4	391	156	2.6	48.2	17.5	45.3	54.4	10.1	35.2
50019	9B1	21	19	47	289	173	3.3	52	22 †	47	58	11	42 ††
50020	9B1	23.7	16.9	51.6	392	132	1.89	39.7 ††	12.9 †	38	50.1	10.9	29.9 †
50023	9B1	27	22	52	366	164	1.2	50	19.2	50	56.8	9.4	37.9
50024	9B1	21.3	20.6	57.3 ††	277 †	153	0.8	45.7	18	44.6	46.8	5.4	34
50025	9B1	17.7	14	42	169 ††	106	1.25	42	15	36.8 ††	30.6 ††	6.6	24.8 ††
50027	9B2	26.7	20	41.6	336	184	6.1 ††	45.4	17.9	42.6	51	6	34.2
50029	9B1	23.1	16.2	47.2	392	176	4	48.4	18.1	42.9	53.5	12.1	33.8
50030	9B1	20.3	17.5	47.2	347	176	0.6	45	17.4	42	54	7.6	34
50031	9B1	24	21	51	387	146	0.1	47	15.8	53 ††	48	1 †	29 †
50032	9B1	25	15	42	315	116	3.5	36.3 ††	17.3	43	54	8	33
50037	9B2	23.1	18.2	45.6	392	157	2.7	48.6	17.6	45.5	54.3	10.2	35.4
52283	9B1	27.3	18.6	65.9 ††	393	172	1.09	67.9 ††	19.7	45.1	51.2	5.42	59.2 ††
52417	9B2									72 ††	64 ††	44 ††	74 ††
52494	9B2	20.5	13.9	42	238 ††	118	2.63	41.7	15.7	33.8 ††	36.3 ††	5.7	24.3 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Olsen Extractable P — Pooled (9C1 + 9C2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
8888	9C2	10.8	5.58	17.7	118	42.9		20.9	5.86	17.4	16.4	2.4	10.9
10173	9C2	16 ††	7	18	120	43	2 ††	21	6	16.7	19.1	2.5	11.4
10181	9C2	12.9	7.6	22.4	136	53	0.21	26	8.4	20	16	4.1	13
21043	9C2	11.9	6.68	20.1	138	53.4	0.831	25.7	7.82	15.8	18.2	3.22	11.4
21100	9C1	12.6	8.56	23.4	129	47	0.838	21.3	8.07	22.6	19.2	5.03 †	16.6 †
21115	9C2	11.9	5.3 ††	19.1	126	41.2	0.1	19.7	5.6	16.8	17.8	2.2	11.3
21148	9C1	10.1	5.96	16.7	100	30.5 ††	0.77	15.5 ††	4.4	22.8	14.7	2.05	8.42
21178	9C1	13.8	9.44 ††	23	130	44.7	0.326	25.4	7.53	18.7	18.3	2.19	11.6
21229	9C2	12.6	6.73	20.6	120	38.5	0.87	19.9	5.47	15.7	16.1	2.1	10.2
21232	9C1	12.6	6.38	18.7	116	40	1.48 †	21.6	8.68	17.8	20.3	6 ††	14.4
50005	9C1	11.4	6.59	22.2	117	42.7	0.026	23.9	6.67	19.1	46.4 ††	0.537 †	11.4
50007	9C1	13.1	7.65	23.4	148	444 ††	0.01	44.8 ††	7.42	19.8	16.9	2.73	13.6
50011	9C1	12.9	7.87	20.1	112	43.3	1.53 †	25.1	7.48	18.4	18.5	2.99	10.6
50012	9C2					39	0.688	20	6.2	17	20	2.9	11
50013	9C1	10.3	6.9	17.3	105	43.1	1.5 †	21.2	6.4	16.4	12.9	1.4	9.5
50017	9C2	12.1	8.46	21.9	112	37.6	0.433	20.2	6.57	19.8	16.4	2.21	11.3
50018	9C2	11.6	6.84	20.6	130	42.9	0.534	19.1	6.04	16.9	16.5	3.65	12.2
50019	9C1									20	20	3.8	14
50020	9C1	10.1	7.33	17.3	105	42.1		21.3	6.36	14.4	15.7	0.25 †	9.44
50023	9C1	13.1	7.6	20	111	39.7	0.59	21.8	7.2	18.8	17.2	3.2	12
50027	9C2	13.2	7.3	21.7	126	55.4 †	3.9 ††	22.9	7.7	16.8	19.2	3.2	12.1
50029	9C1	15.9 †	7.03	23.3	149	46.9	4.47 ††	24.2	7.35	19.5	20.9	6.27 ††	15.6
50033	9C2	1.72 ††	43.1 ††	17	42.8 ††	46.4	0.59	22.7	6.8	16.6	13.3	2.4	10.1
50037	9C2	11.6	6.82	20.8	131	43	0.538	19	6.06	16.9	16.5	3.64	12.2
50044	9C2	12		21	120	47		20		19	17		
52387	9C1					46.7	0.68	17.6	7.1	23.3	34 ††	0.707	17 †
52417	9C2	18.1 ††	7.56	38.8 ††	162 ††					49 ††	39 ††	25 ††	51 ††
52434	9C1	17 ††	10.2 ††	28.8 ††	145	61.2 ††	0.1	25.6	8.3	20	17.9	3.5	13.5
52435	9C1	17.4 ††	9.23 ††	25.3	132	217 ††	6.39 ††	85.2 ††	28.3 ††	19.8	15	3.97	16.1
52436	9C1	12.4	6.9	21.3	137	93.7 ††	0.4	48.1 ††	9.95 ††	19.3	14.3		14.4
52437	9C1	13.3	9.13 ††	22.4	112					23.8	25 ††	5.91 ††	20.7 ††
52491	9C2	11	6.3	21	121	48	0.599	21	6.6	17	18	1.8	11

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Bray-1 Extractable P — Pooled (9E1 + 9E2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

8888	9E2					29.8	1.53	37	11.6	21	42	3	24
10166	9E1	10.8	11.4	33.9	249	26.3	0.8	44.8	12.8	13.3	36.3	2.6 †	17.4
20204	9E1	9.24	11.1	36.2	250	28.7	1.8	52	12.1	17.5	47.3	3.66	22
21100	9E1	1.59	9.2	29.4	238	26.5	1.77	35.6	10.1	20.6	43	3.21	19.1
21178	9E1	0.53	11.9	31.8	95.5 ††	32.1	0.171	42.5	11.6	18.5	42.2	3.97	21.9
21229	9E2	9.12	7.35 †	32	263	48.4	1.02	48.9	12.9	16.8	45.9	3.86	20.9
50005	9E1	12.9	12.1	40.2	345	46.3	1.09	46.4	12.2	18.6	39	3.48	22.8
50007	9E1	0.4	17.8 ††	42.9	311	164 ††	0.04	33.8	14.5	16.2	31.6	7.82 ††	25.1
50012	9E2	3.78	15 †	33	260	34	0.702	42	12	22	47	2.8	23
50013	9E1	13.4	10.4	32	212	35	0.79	39.8	12.7	17.5	51.2	3.8	19.9
50020	9E1	15.6		32.8	209	40.7		53.4	19.5 ††	14.9	43.4	2 ††	22.7
50021	9E1	15.5	10.7	35	290	40.4	1.35	56.7	13.5				
50022	9E1	9	13	45 †	316	45	2.4	52	13	31 ††	64 ††	4	38 ††
52417	9E2	39.3 ††	39.1 ††	58.7 ††	181					87 ††	67 ††	4	62 ††
52435	9E1	1.42	16.3 †	45.2 †	489 ††	116 ††	6.75 ††	106 ††	34.7 ††	16.8	38.1	4.63	27.6
52436	9E1	5.9	11	40.4	248	18.4	0.02	58	13.7	22	35.9	3.7	24.4
52437	9E1					65.6 †	1.39	72 †	21.7 ††				
52526	9E1									18.7	41.5	4.4	31.6 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Acid Extractable P — Pooled (9G1 + 9G2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	9G1	33	222	84	890	177	2.26	49.2 ††	19.1	394	63.6	18.3 ††	47
21100	9G2	26.5	225	85	1010	195	3.2	118	28.6	422	71.9	5.8	49.9
21178	9G2	45.1	230	96.7	1050	237	2.23	162	31.3	414	78.7	9	54.8
21229	9G2	28.2	223	80.4	1190	199	2.67	128	20.2	391	68.6	7.79	45.1
50014	9G2	30.9	219	78.1	1030	219	1.29 †	135	25.2	437	69.6	6.97	48.7
50020	9G1	17.8	176 ††	55.4 ††	828	173	2.67	106	14.3	386	57.1	4.44	31.8 ††
50025	9G1	35	237	88.7	878	228	1 †	131	25	469	71.3	6	49
50027	9G2	34	250 ††	107 ††	893	305 ††	20 ††	141	39.4 ††	344	65.5	19.4 ††	46.1
50029	9G1	24.3	165 ††	57 ††	792	169	4.36 †	103	22	382	61.9	8.31	44.7
50031	9G2	34	240	85	1050	223	2.4	138	25.6	438	70	7.8	52
50032	9G1	43	224	79	980	207	2.8	116	26	379	79	10.4	52

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	9I2a	102	40.6	34.8	257 ††	606	16	36.9	54.8	92.6	222	92.2	97.5
21100	9I2a	95.7	39.9	33.4	230	671	15.8	30.2	52.3	97.6	209	94.4	98.1
21138	9I2a	81.1	33.7 ††	28.8	197	515	13.1	32.2	49.3	80.9	196	85.1	90
21148	9I2a	78.9	41.3	35.7	209	478	7.68	18.9 ††	37.7 ††	73.6 ††	179 †	73.9 ††	149 ††
21178	9I2a	92.3	39.9	36.7	222	562	15.5	26.8	44.3	97.9	272 ††	100	111 ††
21193	9I2a	68	374 ††	378 ††	715 ††	593	20	33	53				
21229	9I2a	103	40.3	32.9	206	505	14.9	24.5	48	97.5	219	92.5	95.1
50005	9I2a	86.7	38.3	27	203	586	14.7	32.3	52.8	104	215	90.4	98.2
50011	9I2a	103	43.7 †	30.4	210	501	16.4	29.7	52.1	95.1	209	89.8	98.2
50012	9I2a	80	37	31	200	517	12	26	49	9 ††	6 ††	5 ††	7 ††
50014	9I2b	80	40	32	206	529	15	28	48	88	213	89	91
50017	9I2a	124 ††	40.6	37.1	225	608	17.1	30.3	49.7	92.6	227	97	93
50018	9I2a	83.4	40	27.1	222	584	18.6	28.4	46.4	87.4	235	96.4	92.3
50019	9I2a									97	235	107	114 ††
50020	9I2a	87.3	43.9 †	41.6	210	524	17.7	31.5	54.3	92.7	223	101	98.2
50025	9I2a	87.7	39	34.2	164 ††	486	14.6	30.3	52.6	86.4	206	95.1	94
50027	9I2b	95	48 ††	34.1	196	499	19	29	52	84	205	89	91
50029	9I2b	64	38.6	24 †	188	547	22	34.9	52.2	85.1	212	87	89.8
50030	9I2a	88	32 ††	32	209	584	11	25	41 †	107	205	108	108 †
50031	9I2a	97	41	35	215								
50032	9I2a	74	50 ††	33.2	197	466	20	33	51	98	239	101	110 ††
50037	9I2a	83.8	40	27.4	223	582	18.2	28	46	87.5	236	96.6	92.4
52494	9I2a	82.8	44.8 †	30.4	183	515	8.61	23	42.6	73.1 ††	179 †	73.9 ††	80.2 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Phosphorus buffer index - Unadj (9I4a + 9I4b + 9I4c) L/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

21100	9I4b	108	44.6 ††	31.3	147 ††	543	15.1	21.5	47.3	88.1	195	91	91.5
21178	9I4c	87	36.3	27	131	486	16.4	20.1	42.6 ††	89.6	259 ††	99	104
21193	9I4a					479	20	26	52 ††	66	177 ††	65 ††	69 ††
21232	9I4a	66.6	27.8 ††	21.7	124	429	21.7	27.8	53.6 ††	81	202	88	90
50005	9I4a	83.9	36	20.3	127	451	14.7	20.5	49.9	96	204	90.2	93.6
50011	9I4c	98.6	40.5 †	23.1	131	424	16	22	48.9	86.5	195	88.5	91.6
50014	9I4b	76	37	25	132	455	15	20	45 ††	79	199	88	84
50017	9I4a	120	38	29.6	144 ††	524	16.9	23.1	48	83.2	213 †	96	87
50025	9I4a	84.1	35.7	27.2	130	436	13.8	25	48.1	79.5	198	93.7	89.2
50027	9I4b	90	45 ††	27.3	125	421	18	22	49	76	191	88	84
50029	9I4b	59.9	35.9	16.3	107 ††	461	21.4	27	49	77	195	83.4	82.9
50032	9I4a	69	48 ††	26.4	128	413	19	27	48	91	224 ††	99	103

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Phosphate Extractable S – Pooled (10B1 + 10B2 + 10B3) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10173	10B3	12	25	8	36	95	10	7	17	8.84	6840	22.6	30.6
21229	10B1	11.4	26.4	10.3	37.6	73.9	7.9	6.54	13.9	10.4	7010	30.7	34.1
21232	10B1					82.9	11.4	8.67 †	16.8	9.49	8070	29.2	7.03 ††
21232	10B3	11	25.9	11.6	37.8								
50014	10B3	10.3	27.5	12.1	38.6	81.5	8.64	6.57	14.6	9.38	7150	27.3	36.3
50020	10B3					55.3 ††	4.67	3.67 ††	7.67	3.17 ††	10400 ††	13.8 ††	18.6 †
50020	10B3	3.89 ††	21.3	3.75	13.9 ††								
50025	10B3	9.46	21	8.18	29	96.6	12	9.2 †	18.7	10.4	7380	33.4	42.9
50027	10B3	10.7	26	11.4	35.2	76.6	8.9	6.4	14	9.4	6690	59.2 ††	36.9
50029	10B3	12.6	24	10	31.9	79.7	8.42	6.55	13.8	8.54	6710	26.2	30
50032	10B1	13	23	16	21	76	10.3	20.3 ††	31.8 ††	10.2	6690	73 ††	25.7
52283	10B3	8.47	25.7	10.2	30.9	111 ††	8.23	5.74	11.9	11.1	7040	31.3	37.6

Lab. Code #	Method Codes	Soil sample identification and values for 2017: KCl ₄₀ Extractable S (10D1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	10D1	9.78	34.6	8.9	26.7	40.7	8.72 ††	9.31 ††	13.4	8.6	6310	18.1	25.5
21043	10D1	9.99	32	9.33	30.7	40.1	5.57	6.44	12.1	6.4	6400	16.6	24.9
21100	10D1	10.5	33.8	8.95	28	27.8 ††	5.24	4.7	6.64 ††	7.63	5430 ††	19.7	24.6
21138	10D1	11.2	34.1	10.8 †	33.9	47	6.2	7.26	13.9				
21148	10D1	7.78	19.8 ††	17.2 ††	60.3 ††					33 ††	9300 ††	33 ††	33 ††
21178	10D1	12	38.6 ††	10.4	35.5	38.6	3.58 ††	5.56	11	16 ††	7100	20.7	29.2
21229	10D1	9.54	34.5	8.34	26.3	43.7	6.26	6.22	12.3	7.58	6860	20.1	23.5
21232	10D1	10.5	34	10.7 †	31.1	38.4	5.56	7.43	13.4	7.45	8360 ††	23.4	29.6
50005	10D1	15.2 ††	33.9	14.7 ††	34.5	38.8	10.2 ††	11.1 ††	12.8	7.71	6920	24	24.9
50011	10D1	8.3	31.2 †	7.89 †	25.5	44.2	6.11	6.26	12.6	7.76	6750	17.8	24.3
50012	10D1	9.9	29 ††	9.1	29	33	5.8	6.4	12	6.6	6140	24	23
50013	10D1	8.98	33.4	8.94	32.5	41	5.7	5.8	10	6.6	6800	19.1	25.9
50017	10D1	10.6	31.5 †	10.1	31.7	37.2	6.46	7.63	13	8.54	17.9 ††	22.4	29.4
50018	10D1	9.16	34.1	8.9	32.1	43.6	6.01	6.4	11.4	7.07	6660	21.4	28.7
50019	10D1	12	35	9.3	31								
50020	10D1	9.67	26.1 ††	5.75 ††	24.6								
50020	10D1					31.3	2.33 ††	4.33	7.67 ††	4.67 †	6510	13.7	18.8
50024	10D1	9.9	35.5	9.98	33.8	46.1	6.99	6.57	13	6.72	6580	21.2	27.2
50027	10D1	10.5	29.5 †	9.3	29.7	35.8	6.5	7	11.8	7.8	5560 †	35.7 ††	24.3
50037	10D1	9.1	34.2	8.8	32.2	43.9	6.04	6.42	11.4	6.74	6670	21.6	28.7
52494	10D1	14.4 ††	52.9 ††	18.3 ††	47.3 ††	60 ††	7.25	12.5 ††	19.6 ††	4.98 †	5270 ††	11.4 †	19.9

Lab. Code #	Method Codes	Soil sample identification and values for 2017: DTPA Extractable Fe (12A1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

8888	12A1	187	2.41 ††	71.7	163	11.8	8.95	101	61.7				
10166	12A1	241	3.4	88.4	232	9	4.13	62.9	42.2	28.8	223	128	88.1
20204	12A1	131	3.42	84.4	166	11	6.53	112 †	54.1	31.3	174	94.7	74.9
21100	12A1	98.6	4.12 †	79.5	211	8.87	6.54	149 ††	58.3	34.7	168	153 ††	120 ††
21138	12A1	294	2.71	73.9	151								
21148	12A1					5.95	5.8	56.1	37.8	23.4	175	81.8	53.3
21178	12A1	210	3.34	85.1	183	5.09	3.27	54.1	25.7 ††	24.9	190	77.3	55.6
21190	12A1	112	2.77	71.7	133	10.1	10.2	91	51.3	28.9	196	94.5	83.5
21193	12A1	193	3	87.6	203	6.95	5.78	65.7	51.1	28.7	170	90.6	60.7
21229	12A1	131	3.34	84.5	193	11.8	5.97	91.9	55.9	31.3	187	131	80.7
21232	12A1	159	3.34	74.1	179	5.79	5.73	78.6	43.3	19.7	140	82.6	70.4
50005	12A1	227	3.17	133 ††	314 ††	15.5	8.23	102	54.2	30.1	224	137 †	76.1
50006	12A1	538 ††	33.9 ††	106	259 ††	10.8	12.9 ††	128 ††	57.9	9.2 ††	152	676 ††	447 ††
50011	12A1	124	3.61	90.4	194	11.3	5.25	78	55	28.5	175	104	75.9
50012	12A1	87	3.8	72	150	7.5	6.3	60	44	24	147	76	60
50013	12A1	98.8	3.1	97.1	222	13	8.72	86.5	56	29.9	157	105	80.1
50014	12A1	148	3.45	80.5	171	7.97	4.91	67.2	44.5	27.3	207	107	66.9
50017	12A1	206	4.36 ††	116	231	6.54	4.9	79.6	40.3	28.2	145	104	71.2
50018	12A1	246	3.23	102	186	10.1	6.2	82.1	52.1	23.3	192	95.4	75.5
50019	12A1	210	3.5	73	48 ††	10	8.3	73	55				
50020	12A1	99.8	3.9 †	85.9	195	17.6 ††	6.4	68.4	50.6	24.2	158	105	68
50024	12A1	237	3.22	83.4	180	7.12	3.76	61.8	38.6	21.6	152	83.9	55.9
50025	12A1	200	3.24	107	213	9.25	8.08	218 ††	59.2	27.1	157	122	139 ††
50027	12A1	222	3.8	74.9	170	7.8	7.2	68	42	26.5	163	107	67
50029	12A1	216	2.47 †	63.7	164	5.48	9.93	64.7	40	20.8	117	73.7	55
50031	12A1	264	1.56 ††	79.8	184	4.78	4.99	145 ††	43.4				
50032	12A1	173	3.25	127 ††	194	7.43	6.62	91	48	25.3	186	95	67
50037	12A1	247	3.22	101	186	10.1	6.21	82.3	52.4	23.1	193	95.1	75.3
52283	12A1	51	3.26	169 ††	347 ††	13.2	7.26	71.8	55	31.4	182	116	95.3
52387	12A1	159	4.24 ††	137 ††	278 ††	10.2	9.54	139 ††	69.6	20.5	158	102	69.7
52494	12A1	322	2.59 †	45.9 †	166	1.07 ††	3.36	55	28.3	22	163	75.7	53.4

Lab. Code #	Method Codes	Soil sample identification and values for 2017: DTPA Extractable Cu (12A1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

8888	12A1	0.559	0.906	0.42	6.46	1.64	0.035 †	0.458	0.892 ††				
10166	12A1	0.52	0.97	0.39	8.83 ††	1.74	0.065 †	0.445	0.785	1.15	1.22	1.13	1.77
20204	12A1	0.59	0.94	0.42	8.63 ††	2.06	0.02	0.55 ††	0.77	1.23	0.84	1.24	2.09
21100	12A1	0.481	1.04	0.335 †	5.61	1.63	0.015	0.405	0.782	1.38	1.09	1.28	1.94
21138	12A1	0.419	0.782	0.29 ††	5.6								
21148	12A1	0.46	1.42 ††	0.42	5.22 †	1.06	0.18 ††	0.22 ††	0.74	1.18	1.1	1.24	1.7
21178	12A1	0.622	1.21 ††	0.486	7.54	1.15	0.012	0.324	0.652	1.3	1.22	1.2	1.88
21190	12A1	0.558	1	0.453	6.95					1.29	1.11	1.31	2.03
21193	12A1	0.5	0.73 ††	0.45	9.84 ††	1.18	0.05 †	0.37	0.65	1.02	0.9	1.09	1.66
21229	12A1	0.551	0.937	0.411	6.41	1.24	0.014	0.372	0.714	1.21	0.812	1.23	1.97
21232	12A1	0.526	0.804	0.407	6.55	1.08	0.011	0.333	0.693	1.1	0.95	1.07	1.75
50005	12A1	0.67	0.919	0.58 ††	8.3 ††	2.31 ††	0.168 ††	0.452	0.774	1.28	0.722	1.22	2.02
50006	12A1	0.631	1.23 ††	0.49	8.01 †	1.75	0.121 ††	0.48	0.586 ††	1.76 ††	0.91	3.01 ††	3.28 ††
50011	12A1	0.534	0.941	0.396	7.07	1.45	0.03	0.38	0.75	1.26	0.834	1.41	2.07
50012	12A1	0.523	0.889	0.376	6	1.2	0.016	0.335	0.711	1.1	1	1.1	1.7
50013	12A1	0.57	1.04	0.47	6.65	1.3	0.008	0.39	0.82	1.21	0.95	1.24	1.91
50014	12A1	0.567	1.24 ††	0.469	7.33	1.46	0.014	0.376	0.806	1.35	1.34	1.46	2.01
50017	12A1	0.71 ††	1.29 ††	0.608 ††	9.41 ††	1.12	0.01	0.394	0.755	1.24	0.89	1.39	1.9
50018	12A1	0.531	0.913	0.436	6.59	1.41	0.011	0.378	0.701	1.14	0.788	1.34	1.75
50019	12A1	0.605	1	0.556 ††	1.3 ††	1.3	0.105 ††	0.422	0.779				
50020	12A1	0.511	0.844	0.422	6.43	2.48 ††		0.35	0.817	1.11	1.21	1.32	1.83
50024	12A1	0.595	0.955	0.462	6.79	1.38	0.02	0.351	0.71	1.13	0.788	1.27	1.82
50025	12A1	0.544	0.879	0.43	6.79	1.32	0.055 †	0.406	0.751	1.17	0.828	1.26	1.98
50027	12A1	0.62	0.92	0.52 †	6.56	1.1	0.04 †	0.4	0.76	1.11	0.97	1.22	1.77
50029	12A1	0.629	0.761 †	0.426	6.05	1.05	0.123 ††	0.476	0.729	1.02	0.841	1.13	1.67
50031	12A1	0.905 ††	1.27 ††	0.703 ††	6.72	1.39	0.132 ††	0.545 ††	0.824				
50032	12A1	0.61	0.92	0.48	6.9	1.41	0.03	0.0405 ††	0.735	1.23	1.05	1.32	1.96
50037	12A1	0.533	0.912	0.438	6.58	1.4	0.011	0.38	0.702	1.12	0.789	1.32	1.73
52283	12A1	0.506	1.04	0.444	6.79	1.91	0.012	0.359	0.727	1.23	0.81	1.41	2.12
52387	12A1	0.554	1.28 ††	0.582 ††	6.18	1.59	0.034 †	0.456	0.796	1.2	1.2	1.26	1.77
52494	12A1	0.504	0.981	0.283 ††	5.94	1.07	0.008	0.294	0.51 ††	1.17	0.962	1.15	1.79

Lab. Code #	Method Codes	Soil sample identification and values for 2017: DTPA Extractable Mn (12A1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

8888	12A1	4.36	21.4	7.59	32.4	413 ††	0.135	100 ††	191 ††				
10166	12A1	5.1	32.7	8.45	44.2	342 †	1.16 ††	66.3	133	65.2	64 †	17	330
20204	12A1	4.8	22.7	8.33	22	2660 ††	0.095	71.2	131	55.6	56	19.3	310
21100	12A1	3.67	28.3	7.89	25.8	251	0.358 †	58.5	125	55.8	49.4	14.5 ††	251 ††
21138	12A1	6.06	27.6	8.35	25.7								
21148	12A1	3.22	39.7 ††	6.92 †	12.4 ††	228	0.16	51.1	112	58.8	63.2 †	17.2	549 ††
21178	12A1	4.93	29.4	8.5	28.3	264	0.053	58.4	123	61.3	64.7 ††	18.3	277
21190	12A1	4.45	32.1	9.82 ††	36.6	186 ††	0.329 †	76.1 †	116	62.2	56.3	17.9	307
21193	12A1	3.94	27	7.69	25.9	252	0.076	61.5	137	54.5	48.5	15.7	266
21229	12A1	4.25	23.3	8.52	31.6	279	0.075	65	131	54.3	53.1	18.9	314
21232	12A1	5.42	20.4	8.04	34.9	281	0.097	59.7	131	55.9	51.8	16.9	290
50005	12A1	5.41	22.2	8.62	42	317	0.663 ††	57.4	121	52.7	52.9	18.4	290
50006	12A1	7.14 †	36.5 ††	8.29	17.9	280	0.136	88.7 ††	150 ††	80 ††	56.5	10.9 ††	241 ††
50011	12A1	3.65	23.3	8.46	39.6	275	0.098	59.2	122	55.4	53.8	17.2	302
50012	12A1	3.9	25	8	34	273	0.304 †	52	123	57	59	17	270
50013	12A1	2.04 ††	24.6	5.31 ††	30.7	272	0.05	59.9	121	54.4	55.4	13.5 ††	282
50014	12A1	4.25	29.1	8.35	31.4	283	0.053	58.2	131	62.7	67.2 ††	18.3	320
50017	12A1	5.6	28.8	10.6 ††	35.8	207 †	0.175	68.3	122	60	57	22 ††	308
50018	12A1	4.7	22.3	8.2	34.4	276	0.19	74.8 †	120	55.4	54.2	17	300
50019	12A1	3.6	30	6.1 ††	5.2 ††	375 ††	0.075	60	157 ††				
50020	12A1	3.24	25.6	7.27 †	34.3	430 ††	0.7 ††	59.4	137	65.8 †	70.9 ††	21.7 ††	360 ††
50024	12A1	5.16	25.3	7.95	25.4	280	0.028	60.8	126	60.7	51.1	17.7	296
50025	12A1	3.59	15.9	6.68 ††	27.7	218 †	0.068	48.9	103 ††	53.4	47.7 †	16.6	266
50027	12A1	7.8 ††	26.2	9.4 †	36.8	235	1.42 ††	56	113	58.3	54.9	20.1 †	290
50029	12A1	5.13	21.2	7.52	39.1	265	0.394 ††	64.8	138	53.4	43.3 ††	17.5	326
50031	12A1	5.6	25.4	8.52	28.8	215 †	1 ††	123 ††	133				
50032	12A1	4.7	28.7	8.6	25.3	296	0.08	63.5	129	64	58	18.1	301
50037	12A1	4.74	22.4	8.18	34.5	278	0.18	75 †	121	55	54.1	17	298
52283	12A1	2.13 ††	22.8	6.95 †	34.9					53.7	54.8	18.5	309
52387	12A1	3.22	23.6	19.4 ††	19.7	316	0.086	80.7 ††	149 ††	63.2	66.7 ††	18.1	314
52494	12A1	5.39	25.6	5.38 ††	25.5	247	0.048	55.8	96.7 ††	57	55.6	16.4	269

Lab. Code #	Method Codes	Soil sample identification and values for 2017: DTPA Extractable Zn (12A1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
8888	12A1	1.04	0.472 †	1.06	180	0.79		16.1	0.744 ††				
10166	12A1	0.83	0.35	0.94	184	0.815	0.025	18.6 ††	0.55	0.69	18.7 ††	0.59	0.78
20204	12A1	0.96	0.34	0.98	275 ††	0.77	0.055	13.3	0.6 †	0.6	13.7	0.678	0.91
21100	12A1	0.724	0.376	0.882	171	0.801	0.032	13.7	0.618 †	0.893 ††	15.1	0.609	0.84
21138	12A1	0.88	0.31	0.811	169								
21148	12A1	2.12 ††	1.24 ††	2.72 ††	148	2.91 ††	1.18 ††	13.3	2.29 ††	0.7	16	0.8	0.9
21178	12A1	0.868	0.353	1.01	188	0.499	0.025	13	0.427 ††	0.57	16	0.57	0.98
21190	12A1	0.915	0.536 ††	1.11	53.4 ††	0.624	0.061 †	14	0.617 †	0.667	16.5	0.724	0.967
21193	12A1	0.84	0.36	1.03	185					0.48	15.3	0.54	0.73
21229	12A1	0.884	0.324	0.876	226 ††	0.613	0.043	15.6	0.535	0.595	14.6	0.651	0.857
21232	12A1	0.755	0.263	0.953	194	0.474	0.022	12.5	0.527	0.87 ††	20.2 ††	0.75	0.99
50005	12A1	0.929	0.333	1.06	168	0.82	0.072 ††	13.5	0.568	0.602	15.8	0.633	0.881
50006	12A1	1.04	0.618 ††	1.36 ††	223 ††	0.529	0.033	16.1	0.492	0.578	13.1	1.69 ††	1.72 ††
50011	12A1	0.928	0.328	0.917	184	0.73	0.035	15	0.529	0.657	14.4	0.713	0.975
50012	12A1	0.758	0.295	0.8	180	0.569	0.015	13	0.515	0.509	15	0.526	0.7
50013	12A1	0.66	0.21 †	0.82	173	0.52	0.02	13.5	0.47	0.46	14.6	0.53	0.69
50014	12A1	0.762	0.424 †	1	168	0.606	0.021	14.4	0.516	0.631	18.5 ††	0.711	0.854
50017	12A1	0.899	0.317	1.19 †	209	0.539	0.019	15.7	0.544	0.591	13.8	0.69	0.84
50018	12A1	0.762	0.334	0.94	201	0.563	0.035	14.8	0.51	0.538	15.5	0.673	0.824
50019	12A1	0.746	0.38	0.922	35 ††	0.618	0.032	16	0.573				
50020	12A1	0.85		0.767	190	0.778		12.9	0.482	0.367	14.8	0.574	0.63
50024	12A1	0.729	0.34	0.926	168	0.624	0.038	14	0.531	0.498	12.6	0.556	0.757
50025	12A1	0.716	0.297	0.866	133 ††	0.544	0.084 ††	12.4	0.51	0.546	13.1	0.647	0.975
50027	12A1	0.81	0.4	1.03	124 ††	0.56	0.03	13.7	0.56	0.56	15.2	0.71	0.85
50029	12A1	0.773	0.283	0.786	126 ††	0.633	0.05	11.7	0.543	0.507	11.3 ††	0.585	0.728
50031	12A1	0.973	0.725 ††	1.14		0.702	0.125 ††	18.1 ††	0.739 ††				
50032	12A1	0.93	0.46 †	1	184	0.65	0.04	14.1	0.53	0.64	17.2	0.67	0.85
50037	12A1	0.758	0.335	0.941	202	0.567	0.036	14.8	0.512	0.535	15.6	0.671	0.82
52283	12A1	0.529 ††	0.297	0.777	184	0.935 ††	0.03	12.1	0.541	0.59	14.8	0.617	0.765
52387	12A1	0.744	0.486 ††	1	141 †	0.602	0.002 †	18 ††	0.492	0.5	16.3	0.574	0.728
52494	12A1	0.681	0.36	0.597 ††	171	0.474	0.042	12.1	0.37 ††	0.516	13	0.578	0.742

Lab. Code #	Method Codes	Soil sample identification and values for 2017: CaCl2 Extractable B (12C1 + 12C2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10166	12C1	0.58	0.59	1.05	1.33	1.77	0.02	0.34	0.22	††	0.36	3.43	0.65	0.53			
10173	12C2	0.37	0.29	††	0.85	1.3	1.9	0.01	0.2	0.5	0.35	2.53	0.57	0.47			
20204	12C2	0.45	0.73	0.89	1.09	2.44	0.06	0.097	0.518	0.39	3.2	0.8	0.53				
21043	12C2	0.43	0.694	1.16	1.65	2.55	0.031	0.193	0.591	0.43	5.26	†	0.756	0.593			
21100	12C2	0.383	0.668	0.913	1.25	1.93	0.205	††	0.246	0.61	0.413	3.81	0.607	0.473			
21138	12C2					1.57		0.155	0.423								
21148	12C2	0.481	0.693	0.69	0.907	1.08	0.24	††	0.4	††	0.4						
21178	12C2	0.54	0.896	†	1.19	1.58	2.99	0.016	0.214	0.59	0.56	4.5	0.91	0.7			
21229	12C2	0.422	0.711	0.909	1.25	2.07	0.060	0.178	0.5	0.408	3.2	0.594	0.481				
21232	12C2	0.477	0.615	0.876	1.39	2.36	0.178	†	0.249	0.648	0.476	3.11	0.76	0.57			
50005	12C2	0.579	0.733	1	1.44	2.16	0.205	††	0.258	0.526	0.445	2.47	0.531	0.461			
50011	12C2	0.482	0.689	0.867	1.31	1.89	0.053	0.191	0.494	0.374	2.88	0.575	0.351				
50012	12C2	0.37	0.77	1	1.4	2.5	0.043	0.196	0.584	0.508	5.6	††	0.84	0.665			
50014	12C2	0.481	0.973	††	1.14	1.59	2.72	0.068	0.255	0.67	0.465	5.35	†	0.771	0.593		
50017	12C2	0.354	0.704	0.88	1.14	2.09	0.019	0.152	0.482	0.367	3.19	0.65	0.561				
50018	12C2	0.579	0.728	0.97	1.32	1.33	0.14	0.264	0.55	0.349	2.82	0.55	0.568				
50020	12C2	0.517	0.837	1.04	1.54	2.9		0.1	0.433	0.633	††	2.27	0.833	0.733			
50025	12C2	0.348	0.77	1.03	1.32	2.66	0.024	0.254	0.654	0.465	1.4	0.648	0.456				
50027	12C2	0.44	0.73	0.76	1.02	1.8	0.09	0.15	0.34	0.39	0.95	†	0.48	0.4			
50029	12C2	0.356	0.238	††	0.698	1.17	1.03	0.05	0.144	0.242	††	0.228	0.364	††	0.476	0.263	††
50032	12C1	0.6	0.81	1.33	††	1.58	2.19	0.07	0.24	0.61	0.48	3.87	0.78	0.68			
50037	12C2	0.583	0.731	0.98	1.34	1.34	0.141	0.265	0.54	0.352	2.81	0.554	0.572				
52494	12C2	0.311	0.55	†	0.813	1.15	1.75	0.008	0.188	0.49	0.332	2.7	0.51	0.506			

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable Ca — 1M NH ₄ Cl extract (15A1) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
20204	15A1	4.02	15.7	6.87	16.3	8.52	0.129	3.02	3.64	25.8	9.22	5.12	3.62
21100	15A1									27.7	10.2	5.51 ††	3.73
21138	15A1	3.8	14.9	6.34	15.6	9.26	0.097	3	3.34	26.2	8.99	5.07	3.43
21148	15A1	3.53	10.9 ††	7.03	15.6	8.48	0.154	2.54	3.01	28.5	9.98	5.01	3.2
21178	15A1	3.86	15.1	6.36	12.9	8.36	0.15	3.15	3.66	26.7	9.8	5	3.32
21182	15A1	3.6	14	6.2	14	8.8	0.11	2.7	3.1	26.8	0.001 ††	5.46 ††	3.72
21193	15A1	3.11 †	14	5.52 †	13.3	7.99	0.57 ††	3.47	4.14 ††	26.2	8.52	5.07	3.6
21232	15A1	4.37	16.3	7.61	17.5	8.24	0.125	2.82	3.28	25.7	9.46	5.3 †	3.59
50005	15A1	4.03	15.6	7.95 ††	14.2	8.79	0.107	2.93	3.46	24.8	9.19	4.92	3.52
50011	15A1	4.17	15.2	6.94	16.1	8.56	0.115	3.02	3.57	25.5	9.43	5.29 †	3.5
50013	15A1	3.9	15.5	6.6	14.7	8.7	0.1	3.3	3.6	25.3	9.6	5	3.5
50014	15A1	3.96	15.9	6.88	16.2	9.32	0.1	2.79	3.39	25.8	9.62	4.87	3.38
50017	15A1	3.88	14.9	6.37	14.1	7.85	0.137	2.64	2.95	23	9.52	5.03	3.37
50019	15A1	4.62 †	15.7	7.24	17.3	9.06	0.198 †	3.01	3.55				
50020	15A1	3.53	14.9	6.05	13.1	8.72	0.123	3.23	3.7	27.2	10.6 †	5.05	3.4
50023	15A1	4.05	16.3	6.86	16.4	9.4	0.1	3.03	3.56	25.9	9.46	5.02	3.36
50031	15A1					9.4	0.39 ††	3.43	3.64				
50038	15A1	2.64 ††	10.9 ††	4.95 ††	11.3 †					27	10.2	6.16 ††	4.48 ††
50044	15A1	4.3	9 ††	6.7	16					28	4.5 ††	5.5 ††	3.9
52283	15A1	3.88	15.9	6.97	16.3	7.83	0.086	2.93	3.34	25.2	9.31	5.02	3.58
52387	15A1	3.36 †	9.97 ††	5.7	13.9	7.83	0.135	2.83	3.28	23.8	3.69 ††	4.97	2.94 ††
52417	15A1	1.83 ††	6.82 ††	3.01 ††	125 ††					29.9 ††	10.2	5.2	3.7
52494	15A1	4.05	16.1	7.02	16	7.92	0.116	2.96	3.41	23.9	8.08 †	4.75 †	3.26
52526	15A1									22.3 ††	9.3	5.1	3.4
52527	15A1									24.8	10	5.6 ††	3.6

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable K — 1M NH ₄ Cl extract (15A1) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	15A1	0.108	0.55	1.16	0.68	1.45	0.018	0.363	0.62	0.378	0.067	0.173	1.39
21100	15A1									0.48 †	0.17 ††	0.23 ††	1.5
21138	15A1	0.107	0.511	1.15		1.7		0.411	0.625	0.36	0.049	0.11	1.38
21148	15A1	0.376 ††	0.632	1.29 ††	0.734	1.99	0.059 ††	0.483 †	0.747 ††	0.449	0.128	0.199 †	1.52
21178	15A1	0.106	0.542	1.14	0.678	1.56	0.01	0.39	0.63	0.4	0.08	0.14	1.51
21182	15A1	0.09	0.49	1.1	0.61	1.7	0.01	0.4	0.6 †	0.38	0.01	0.13	1.4
21193	15A1	0.1	0.48	1.09	0.71	1.69	0.015	0.42	0.64	0.35	0.038	0.095	1.34
21232	15A1	0.235 ††	0.66	1.18	0.626	1.34	0.014	0.353	0.539 ††	0.34	0.08	0.13	1.26
50005	15A1	0.0713	0.539	1.14	0.665	1.32	0.019	0.442	0.629	0.368	0.0728	0.127	1.36
50011	15A1	0.105	0.551	1.21	0.671	1.52	0.01	0.429	0.65	0.377	0.062	0.136	1.38
50013	15A1	0.074	0.5	1	0.6	1.5	0.1 ††	0.4	0.6 †	0.3 †	0.08	0.1	1.3
50014	15A1	0.116	0.614	1.28	0.771	1.8	0.013	0.398	0.652	0.382	0.072	0.115	1.39
50017	15A1	0.091	0.79 ††	1.19	0.69	1.62	0.01	0.334	0.55 ††	0.506 ††	0.137	0.147	1.36
50019	15A1	0.123	0.629	1.15	0.772	0.14 ††	0.055 ††	0.092 ††	0.374 ††				
50020	15A1	0.106	0.515	1.08	0.595	1.42		0.394	0.607	0.397	0.02	0.151	1.55
50023	15A1	0.097	0.557	1.17	0.71	1.81	0.005	0.4	0.63	0.39	0.09	0.13	1.46
50031	15A1					1.71	0.01	0.423	0.627				
50038	15A1	0.158 †	0.539	1.12	0.693					0.422	0.117	0.18	1.48
50044	15A1	0.12	0.37 ††	1.1	0.61					0.45		0.13	1.4
52283	15A1	0.11	0.575	1.25	0.748	2.02	0.081 ††	0.36	0.634	0.372	0.063	0.13	1.52
52387	15A1	0.0529 †	0.337 ††	0.763 ††	0.44 †	1.42	0.008	0.298 ††	0.467 ††	0.163 ††	0.0325	0.0585 ††	0.705 ††
52417	15A1	0.078	0.372 ††	0.829 ††	0.549					0.57 ††	0.11	0.16	1.6
52494	15A1	0.058	0.5	1.1	0.622	1.43	0.017	0.395	0.628	0.353	0.0461	0.115	1.29
52526	15A1									0.6 ††	0.087	0.2 ††	1.4
52527	15A1									0.4		0.1	1.3

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable Mg — 1M NH ₄ Cl extract (15A1) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	15A1	0.47	9.98	1.9 ††	3.5	1.72	0.021	0.629	1.14	10.4	18.4	2.02	0.676
21100	15A1									11.9 ††	22	2.32	0.75 †
21138	15A1	0.436	9.49	1.48	3.02	1.85		0.612	1.07	10.5	19.2	2.07	0.69
21148	15A1	0.428	5.97 ††	1.46	2.88	1.81	0.025	0.587	1.04	11.9 ††	21.5	2.22	0.706
21178	15A1	0.449	9.99	1.46	2.69	1.64	0.02	0.6	1.08	10.7	19.6	2.1	0.68
21182	15A1	0.42	9.5	1.5	2.8	1.9	0.017	0.59	1	10.8	0.002 ††	2.1	0.7
21193	15A1	0.46	10.3	1.49	2.9	1.63	0.021	0.6	1.09	12.1 ††	21.1	2.26	0.74 †
21232	15A1	0.51	0.87 ††	1.79 †	3.35	1.76	0.022	0.648 †	1.12	10.3	18.5	2.08	0.69
50005	15A1	0.469	9.84	1.62	3.01	1.76	0.022	0.605	1.05	10.4	17.8	2.08	0.695
50011	15A1	0.471	9.43	1.64	2.86	1.73	0.022	0.71 ††	1.1	10.5	18.9	2.17	0.71
50012	15A1									0.312 ††	0.0443 ††	0.118 ††	1.4 ††
50013	15A1	0.4	10.1	1.5	2.8	1.7	0.1 ††	0.6	1.1	10.8	19.6	2	0.7
50014	15A1	0.452	10.4	1.61	3.11	1.89	0.02	0.59	1.16	10.8	19.9	2.04	0.695
50017	15A1	0.42	9.27	1.42	2.66	2.01	0.025	0.605	1.05	7.51 ††	10.3 ††	2.08	0.665
50019	15A1	0.624 ††	10.3	1.78	3.44	1.56	0.024	0.455 ††	0.973				
50020	15A1	0.497	10.7	1.71	3.1	1.79		0.687 ††	1.2	11.3 †	22.9 †	2.25	0.728
50023	15A1	0.447	10.3	1.55	3.09	1.99	0.01 †	0.59	1.04	10.8	18.8	2.07	0.69
50031	15A1					2	0.05 ††	0.696 ††	1.15				
50038	15A1	0.423	8.6	1.51	2.78					10.3	17.8	1.88	0.49 ††
50044	15A1	0.47	4.5 ††	1.4	2.8					11	1.6 ††	2	0.67
52283	15A1	0.332 ††	9.77	1.52	3.01	1.43	0.015	0.665 †	1.12	10.3	18.8	2.16	0.742 †
52387	15A1	0.674 ††	9.13	2.18 ††	4.04 ††	2.33 ††	0.015	0.81 ††	1.54 ††	13.7 ††	1.58 ††	2.68 ††	0.884 ††
52417	15A1	0.398	9.01	8.37 ††	2.28 †					9.3 ††	17.3	1.7 ††	0.6 ††
52494	15A1	0.515	11.5 †	1.83 †	3.46	1.93	0.019	0.736 ††	1.33 ††	11.9 ††	21.2	2.37 †	0.779 ††
52526	15A1									7.4 ††	20.4	2.2	0.7
52527	15A1									10.5	18.6	2.1	0.7

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable Na — 1M NH ₄ Cl extract (15A1) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	15A1	0.198	††	11.9	0.29	0.22	0.151	0.024	0.091	0.356	0.177	20.1	0.255	0.039							
21100	15A1										9.11	††	8.78	††	18.1	††	0.3	††			
21138	15A1	0.087		11	0.284	0.348	††	0.141		0.076	0.362	0.16	21.3	0.33	0.04						
21148	15A1	0.574	††	1.56	††	0.666	††	0.539	††	1.26	††	0.492	††	0.953	††	1.25	††	0.147	20.1	0.301	0.03
21178	15A1	0.08		10.8	0.24	0.15	0.1	0.03	0.07	0.34	0.14	19.8	0.26	0.02							
21182	15A1	0.07		12	0.24	0.16	0.1	0.009	0.04	0.29	††	0.15	0.001	††	0.31	0.03					
21193	15A1	0.17	††	10.6	0.33	0.27	0.14	0.047	0.07	0.35	0.096	21.6	0.26	0.005							
21232	15A1	0.068		11.1	0.246	0.231	0.142	0.029	0.103	0.346	0.24	†	20.1	0.37	0.16	††					
50005	15A1	0.0862		11.4	0.28	0.175	0.116	0.035	0.0652	0.345	0.165	20.9	0.293	0.0357							
50011	15A1	0.077		11	0.269	0.19	0.108	0.015	0.118	0.339	0.162	20.7	0.319	0.023							
50013	15A1	0.033	†	11	0.2	0.2	0.1	0.1	††	0.1	0.4	††	0.2	19.5	0.4	0.09	††				
50014	15A1	0.077		11.5	0.284	0.173	0.119	0.008	0.038	0.345	0.134	21.7	0.302	0.0062							
50017	15A1	0.106		10	0.302	0.22	0.261	††	0.012	0.036	0.34	0.208	18.6	0.343	0.032						
50019	15A1	0.125	†	10.8	0.26	0.207	1.34	††	0.019	0.34	††	0.562	††								
50020	15A1			11.6	0.258	0.15	0.193	0.133	††	0.18	††	0.4	††	0.202	23.4	†	0.376	0.195	††		
50023	15A1	0.067		11.7	0.26	0.167	0.13	0.02	0.07	0.36	0.14	20.5	0.31	0.02							
50031	15A1						0.158	0.04	0.059	0.334											
50038	15A1	0.117	†	11.4	1.08	††	0.22				0.268	††	19.1	0.41	0.15	††					
50044	15A1			0.91	††	0.24	0.16				0.16	1.1	††	0.31							
52283	15A1	0.043	†	10.8	0.224	0.126	0.167	0.014	0.048	0.351	0.165	20.6	0.415	0.014							
52387	15A1	0.0796		0.442	††	0.102	††	0.073	0.0865	0.005	0.0191	0.218	††	0.16	0.895	††	0.231	0.0296			
52417	15A1			10.7	0.191	0.07					0.08	†	16.9	†	0.24	0.02					
52494	15A1	0.088		0.084	††	0.086	††	0.085	0.108	0.001	0.062	0.348	0.171	18.8	0.306	0.0452					
52526	15A1										0.8	††	25.6	††	0.5	††	0.1	††			
52527	15A1										0.2	20.8	0.3								

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable Ca — 1M NH ₄ OAc extract (15D3) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
8888	15D3	3.92	14.8	6.47	13.7	5.58 ††		2.07 ††	2.3 ††	24.4	8.81	5.12	3.43
10166	15D3	2.89 ††	14.6	5.14 ††	12.6	8.74	0.395 ††	3.55 †	4.07 ††	24.2	5.6 ††	4.9	3.32
10173	15D3	4.4 †	14.3	5.85	14.9	8.32	0.196 †	3.23	3.54	25.4	9.88 ††	5.38	3.77 †
10181	15D3	3.87	14.7	6.72	13.6	7.83	0.115	2.87	3.27	23.2	8.62	4.85	3.22
20136	15D3					7.75	0.124	2.89	3.27				
20204	15D3	4	15.2	6.83	15.9 ††	8.46	0.116	2.9	3.5	25.7	8.84	5.14	3.4
21043	15D3	3.78	14.2	6.38	13.3	8.19	0.091	2.64	3.08	25.9	8.9	5.09	3.38
21100	15D3	3.92	15.3	6.9	13.7	8.77	0.159	3	3.47	25.6	8.79	5.34	3.53
21115	15D3	3.59 †	14.1	5.99	12	8.33	0.08	2.77	3.48	28.8	8.6	4.79	3.17
21190	15D3	4.36	17.4 ††	7.33	17.5 ††	9.55 †	0.283 ††	3.72 ††	3.96 †	28.2	8.71	5.85 ††	4.1 ††
21229	15D3	4.08	14.8	6.91	14.2	8.36	0.1	3.02	3.39	25.3	8.93	5.12	3.44
50005	15D3	3.94	15	7.67	13.9	8.38	0.132	2.95	3.41	25.4	8.74	4.95	3.43
50006	15D3	4.08	14.9	6.95	13.3	9.63 †	0.58 ††	3.67 ††	4.43 ††	34.5 ††	9.13	5.75	3.84 ††
50018	15D3	4.11	15.1	7.13	14.6	8.42	0.062	3.11	3.41	25.2	8.84	5.19	3.48
50020	15D3	3.7	14.4	6.33	13.2	9.01		3.08	3.6	27.7	9.84 ††	5.59	3.6
50021	15D3	4.11	12.9 ††	6.78	11.3 ††	8.16	0.107	3.15	3.47	24.3	8.8	5.4	3.7
50024	15D3	4.01	14.4	6.61	14	8.12	0.106	2.93	3.43	23.2	8.37 †	4.94	3.35
50025	15D3	4.1	16.1	7.06	15	8.68	0.194 †	3.22	3.72	27.1	9.47 †	5.45	3.78 †
50027	15D3	3.96	18.5 ††	6.79	14.2	8.23	0.16	2.97	3.53	25	8.61	5.23	3.47
50029	15D3	3.75	12.4 ††	5.77	12.3	7.17 †	0.111	2.72	3.02 †	20 ††	7.08 ††	4.38 ††	2.98 ††
50030	15D3	3.75	15.1	6.73	13.6	8.99	0.1	2.91	3.42	25.3	9.02	5.13	3.37
50032	15D3	4.18	15.4	6.44	13.4	8.94	0.12	3.27	3.67	27.2	9.82 ††	5.27	3.46
50037	15D3	4.13	15.1	7.15	14.6	8.41	0.061	3.1	3.4	25.3	8.83	5.2	3.5
52434	15D3					9.62 †	0.09	2.79	3.24	29.2 †	8.2 †	5.22	3.53
52437	15D3					4.29 ††	0.18	1.81 ††		35 ††	6.32 ††	4.96	2.48 ††
52508	15D3	3.4 ††	14.4	5.45 ††	10.9 ††	10.1 ††		4.04 ††	3.14	18.6 ††	9.3 †	4.5	3.9 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable K — 1M NH ₄ OAc extract (15D3) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

8888	15D3	0.123	0.528	1.09	0.623	1.1	††		0.305	††	0.456	††	0.375	0.13	††	0.134	1.39								
10166	15D3	0.094	0.518	1.08	0.597	1.28	†	0.012	0.395		0.638		0.357	0.11	†	0.15	1.41								
10173	15D3	0.13	†	0.555	0.865	††	0.765	††	1.47		0.014		0.419	0.699	†	0.422	††	0.0722		0.136	1.43				
10181	15D3	0.096	0.493	1.1	0.626	1.45		0.011	0.384		0.617		0.333	†	0.0585		0.128				1.3				
20136	15D3					1.44		0.013	0.405		0.618														
20204	15D3	0.106	0.524	1.13	0.68	1.43		0.014	0.364		0.622		0.369		0.0737		0.168	†			1.37				
21043	15D3	0.091	0.49	0.991	0.596	1.5		0.006	0.355		0.576		0.392	†	0.094		0.144				1.4				
21100	15D3	0.103	0.535	1.12	0.636	1.63	†	0.027	†		0.388		0.645		0.384	†	0.0707			0.141	1.45				
21115	15D3	0.1	0.48	1.04	0.57	1.5		0.02	0.39		0.66		0.368		0.067		0.133				1.39				
21190	15D3	0.1	0.503	1.12	0.659	1.48		0.008	0.404		0.632		0.372		0.0776		0.141				1.34				
21229	15D3	0.099	0.521	1.11	0.649	1.53		0.010	0.411		0.638		0.366		0.0784		0.129				1.34				
50005	15D3	0.0912	0.519	1.01	0.621	1.52		0.005	0.391		0.62		0.365		0.064		0.118				1.32				
50006	15D3	0.18	††	0.85	††	1.9	††	1.06	††	1.72	††	0.06	††	0.48	††	0.78	††	0.5	††	0.13	††	0.22	††	2.12	††
50007	15D3	0.11		0.68	††	1.16		0.76	††	1.79	††	0.011		0.378		0.51	††	0.363		0.064		0.137		1.17	††
50018	15D3	0.101	0.519	1.02	0.67	1.45		0.018	0.366		0.571		0.369		0.0656		0.139				1.21	†			
50020	15D3	0.113	0.506	1.11	0.639	1.39		0.03	††		0.36		0.573		0.397	†	0.0913			0.175	††		1.45		
50021	15D3	0.1	0.62	††	1.09	0.56		1.37			0.307	††	0.524	††	0.5	††	0.2	††		0.2	††		1.4		
50024	15D3	0.1	0.527	1.1	0.663	1.48		0.01	0.376		0.612		0.36		0.079		0.129				1.37				
50025	15D3	0.0996	0.534	1.09	0.635	1.38		0.021	†	0.379	0.592		0.363		0.081		0.144				1.39				
50027	15D3	0.104	0.546	1.04	0.602	1.52		0.028	†	0.4	0.63		0.34	†	0.064		0.122				1.33				
50029	15D3	0.0837	0.658	††	0.956	0.605		1.41	0.012		0.368		0.602		0.415	††	0.104	†		0.119		1.06	††		
50030	15D3	0.09	0.52	1.15	0.64	1.59		0.009	0.36		0.62		0.36		0.06		0.13				1.06	††			
50032	15D3	0.11	0.53	1.03	0.64	1.48		0.01	0.41		0.62		0.345	†	0.067		0.128				1.36				
50037	15D3	0.103	0.521	1.02	0.665	1.46		0.018	0.368		0.572		0.364		0.0658		0.138				1.21	†			
52434	15D3	0.09	0.54	1.14	0.67	1.66	†	0.08	††		0.38		0.59		0.36		0.09			0.14		1.44			
52435	15D3	0.09	0.68	††	0.55	††	0.45	††	1.13	††	0.11	††	0.25	††	0.4	††	0.25	††	0.06		0.07	††	1.08	††	
52436	15D3	0.11	0.49	0.62	††	1.07	††	1.54		0.01	0.41		0.64		0.4	†	0.1			0.14		1.4			
52437	15D3	0.07	†	0.58	†	0.73	††	0.32	††	0.74	††	0.05	††	0.15	††		0.79	††	0.17	††	0.22	††	2.09	††	

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable Mg — 1M NH ₄ OAc extract (15D3) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
8888	15D3	0.424	9.15	1.41	2.5 †	1.04 ††		0.394 ††	0.683 ††	9.34	17.7	1.87	0.652
10166	15D3	0.412	8.53 †	1.46	2.23 ††	1.81	0.038 ††	0.71	1.2	10.2	17.2	2.02	0.67
10173	15D3	0.515	9.5	1.42	2.84	1.75	0.047 ††	0.699	1.18	9.84	19.4	2.14	0.777
10181	15D3	0.456	10	1.55	2.81	1.55	0.024	0.588	1.03	9.88	17.9	1.96	0.646
20136	15D3					1.58	0.017	0.568	1.03				
20204	15D3	0.45	9.58	1.9 ††	3.7 ††	1.68	0.02	0.617	1.12	10	18.3	2.23	0.685
21043	15D3	0.402	8.71	1.37 †	2.46 †	1.65	0.015	0.552	0.992	10.3	19.3	2.08	0.68
21100	15D3	0.448	9.53	1.57	2.72	1.75	0.022	0.629	1.12	10.8	18.7	2.38 ††	0.748
21115	15D3	0.41	9.18	1.39	2.43 †	0.99 ††	0.01	0.34 ††	0.67 ††	9.72	18.3	1.95	0.63
21190	15D3	0.454	9.07	1.61	2.86	1.83	0.05 ††	0.702	1.2	10.4	18.3	2.16	0.735
21229	15D3	0.431	9.45	1.57	2.78	1.62	0.013	0.608	1.06	10	18.6	2.11	0.67
50005	15D3	0.457	9.42	1.55	2.85	1.71	0.047 ††	0.621	1.08	9.92	16.8	2.01	0.675
50006	15D3	0.08 ††	9.35	2.49 ††	2.25 ††	1.76	0.02	1.27 ††	1.2	14.5 ††	23.2 ††	4.35 ††	0.68
50018	15D3	0.461	9.48	1.59	2.86	1.67	0.003 †	0.621	1.06	9.92	18.1	2.06	0.641
50020	15D3	0.538 †	11.6 ††	1.82 †	3.29 ††	1.84	0.02	0.65	1.19	11.4 ††	20.9 †	2.43 ††	0.827 ††
50021	15D3	0.5	8.84	1.65	2.31 ††	1.6	0.016	0.636	1.09	10.4	20.9 †	2.19	0.74
50024	15D3	0.469	9.24	1.54	2.84	1.58	0.015	0.592	1.07	9.49	17.8	2.02	0.68
50025	15D3	0.497	9.66	1.6	2.89	1.71	0.059 ††	0.686	1.15	10.4	18.5	2.13	0.739
50027	15D3	0.455	11.8 ††	1.56	2.75	1.65	0.027	0.6	1.12	9.82	19.4	2	0.689
50029	15D3	0.407	8.06 ††	1.31 †	2.32 ††	1.46	0.018	0.567	0.987	8.56 ††	16.1 †	1.76 ††	0.555 ††
50030	15D3	0.38	10.5 ††	1.56	2.94	1.82	0.015	0.6	1.11	10.7	19.3	2.05	0.69
50032	15D3	0.44	9.18	1.33 †	2.44 †	1.52	0.02	0.56	0.99	9.14	19.1	1.82	0.621
50037	15D3	0.46	9.51	1.6	2.85	1.66	0.004 †	0.62	1.07	9.93	18.1	2.09	0.644
52434	15D3					1.76	0.03	0.63	1.1	10.5	18.1	2.15	0.68
52437	15D3					0.99 ††	0.02	0.42 ††		4.59 ††	4.69 ††	2.7 ††	1.25 ††
52508	15D3	2 ††	20.7 ††	1.65	3.55 ††	12.8 ††		8.99 ††	5.38 ††	10.3	10.6 ††	1.6 ††	0.99 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable Na — 1M NH ₄ OAc extract (15D3) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

8888	15D3	0.103	11.4	0.295	0.21	0.096		0.063	0.254 †	0.135	20.9	0.326	0.041
10166	15D3	0.091	11.3	0.277	0.177	0.108	0.017	0.041	0.305	0.124	13 ††	0.365	0.041
10173	15D3	0.145 ††	9.36	0.32	0.175	0.0975	0.028	0.0715	0.359	0.181	17.9	0.362	0.0645 †
10181	15D3	0.074	11	0.276	0.17	0.101	0.022	0.036	0.319	0.139	19.1	0.311	0.0239
20136	15D3					0.105	0.01	0.06	0.323				
20204	15D3	0.117 †	12.1	0.26	0.21	0.144 ††	0.02	0.076	0.314	0.166	19.8	0.267	0.035
21043	15D3	0.083	9.56	0.267	0.17	0.1	0.009	0.037	0.3	0.138	23.3 ††	0.325	0.017
21100	15D3	0.0657	11.3	0.299	0.16	0.0957	0.016	0.0303	0.31	0.153	19.7	0.345	0.0534
21115	15D3	0.12 †	10.6	0.3	0.19	0.09	0.04 ††	0.06	0.24 ††	0.112	12.1 ††	0.214 ††	0.041
21190	15D3	0.0548	2.42 ††	0.274	0.148	0.0787	0.01	0.0196	0.278	0.151	17.1 †	0.33	0.0079
21229	15D3	0.0669	10.2	0.269	0.155	0.0886	0.010	0.0307	0.342	0.167	19.9	0.319	0.0302
50005	15D3	0.0798	10.2	0.275	0.165	0.0965	0.019	0.0439	0.331	0.16	19.5	0.296	0.0326
50006	15D3	0.4 ††	11.6	1.01 ††	0.53 ††	1.36 ††		0.54 ††	5.5 ††	0.13	25.5 ††	0.48 ††	
50018	15D3	0.072	10	0.252	0.175	0.109	0.014	0.0435	0.297	0.156	19.4	0.265	0.0274
50020	15D3	0.0948	10	0.225	0.155			0.307	0.307	0.142	22 †	0.343	0.33 ††
50021	15D3	0.0787		0.27	0.136	0.325 ††	0.032 †	0.176 ††	0.791 ††				
50024	15D3	0.076	11.4	0.353 †	0.177	0.093	0.01	0.035	0.333	0.133	18.5	0.314	0.019
50025	15D3	0.136 ††	11.2	0.341	0.234 †	0.147 ††	0.050 ††	0.0912 †	0.38 †	0.184	20	0.365	0.0773 ††
50027	15D3	0.077	12.7	0.24	0.146	0.098	0.011	0.04	0.331	0.132	19.3	0.299	0.019
50029	15D3	0.0629	9.2	0.24	0.19	0.113	0.005	0.005	0.272	0.189	18	0.275	0.0121
50030	15D3	0.04 †	11.2	0.24	0.11 ††	0.11	0.004	0.03	0.32	0.14	5.05 ††	0.31	0.01
50032	15D3	0.083	11.8	0.248	0.161	0.089	0.011	0.048	0.33	0.191	18.3	0.317	0.028
50037	15D3	0.074	9.98	0.256	0.176	0.108	0.014	0.0436	0.297	0.158	19.4	0.268	0.0279
52434	15D3					0.22 ††	0.08 ††	0.19 ††	0.41 ††	0.25 ††	19.5	0.34	0.09 ††
52437	15D3					0.26 ††	0.02	0.1 ††		1.18 ††	2.32 ††	1.32 ††	0.26 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Exchangeable Al — 1M KCl (15G1) cmol+/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
20204	15G1	0.005	0.007	0.011	0.021	0.009	0.093 †	0.02	0.025	0.0077	22.5	0.063	0.063
21043	15G1	0.003	0.001	0.01	0.082	0.007	0.147	0.015	0.015		21.9	0.023	0.068
21100	15G1	0.0305 ††	0.025 ††	0.024 †	0.105	0.0099	0.14	0.0173	0.0162	0.017	10.9 ††	0.0299	0.0631
21178	15G1	0.01	0.01	0.01	0.144	0.025	0.407 ††	0.025	0.026	0.005	20.1	0.0168	0.0673
21229	15G1	0.0076	0.005	0.008	0.144	0.0265	0.123	0.0199	0.0198	0.005	23.1	0.0562	0.0706
21232	15G1	0.057 ††	0.069 ††	0.053 ††	0.163	0.3 ††	0.139	0.136 ††	0.1 ††	0.1 ††	28.7	0.23 ††	0.15 †
50005	15G1	0.0059	0.006	0.009	0.0315	0.012	0.042 ††	0.0115	0.0203	0.00701	24.7	0.00573	0.0677
50011	15G1	0.005	0.005	0.003	0.068	0.02	0.131	0.005	0.005	0.005	23.2	0.005	0.035
50013	15G1					0.02	0.16 †	0.04 †	0.005		22.4		0.1
50014	15G1	0.015 †	0.016 †	0.015	0.016	0.001	0.13	0.02	0.02	0.001	20.4	0.031	0.092
50017	15G1	0.007	0.002	0.015	0.13	0.0072	0.143	0.011	0.013	0.00843	22.5	0.036	0.0741
50018	15G1	0.0084	0.006	0.014	0.0915	0.0185	0.13	0.0121	0.0123	0.0051	23.7	0.0271	0.0851
50027	15G1	0.001	0.001	0.001	0.08	0.001	0.16 †	0.02	0.015	0.005	24.6	0.02	0.086
50029	15G1	0.0706 ††	0.025 ††	0.039 ††	0.0988	0.0666 ††	0.076 ††	0.0268	0.0243	0.0702 ††	9.31 ††	0.114 †	0.169 ††
50030	15G1	0.01	0.01	0.03 †	0.18	0.01	0.1 †	0.07 ††	0.02		17	0.12 †	0.17 ††
50032	15G1	0.004	0.008	0.012	0.05	0.009	0.184 ††	0.008	0.008	0.007	13.2 ††	0.118 †	0.128 †
50037	15G1	0.0083	0.006	0.014	0.0918	0.0187	0.131	0.012	0.0122	0.0054	23.8	0.0274	0.0859
52494	15G1	0.047 ††	0.047 ††	0.095 ††	0.142	0.05 ††	0.14	0.05 ††	0.05 ††	0.0237 ††	19.7	0.071	0.142 †
52526	15G1									0.022 ††	18.6	0.025	0.061
52527	15G1										19.8	0.3 ††	0.8 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Al – Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	1250	334	447	1300	1280	310 †	777 ††	669	2670 ††	1030 ††	874	1040
8888	18F1	1290	362	479	1250	1040 †	346	356 ††	590 ††				
10156	18F1	1020	297	371	1210					787 ††	1440 ††	519 ††	635 ††
21100	18F1	1300	361	455	1330	1200	372	420	664	982	2360	898	968
21178	18F1	1360	431	551 ††	1470	1330	361	430	732 ††	960	2600	753	895
21229	18F1	1280	378	479	1340	1300	365	443	686	1030	2470	822	996
21232	18F1	1270	323	444	1260	1160	376	420	631 †	1000	2580	827	1040
50004	18F1	1340	362	470	1320	1310	415 ††	431	680	1010	2460	847	993
50005	18F1	1120	328	509	1170	1160	372	409	667	982	2390	0.00573 ††	1000
50014	18F1	1220	390	482	1310	1250	327	390	713 †	1000	2330	805	945
50018	18F1	1110	352	416	1160	1220	363	416	664	934 †	2560	836	965
50020	18F1	1410	359	486	1550 ††	1360	363	428	670	994	2410	745	913
50024	18F1	1270	320	458	1270	1260	347	372 ††	632 †	1010	2490	893	1040
50037	18F1	1120	353	418	1160	1220	362	418	665	936 †	2560	834	968
50042	18F1	1460	382	459	1680 ††	1720 ††	315	417	806 ††	1280 ††	2740	1000 †	1390 ††
52283	18F1	1180	370	388	1280	1600 ††	333	346 ††	681	1010	2470	805	965
52417	18F1	1010	313	386	1150					1700 ††	2800	1160 ††	1330 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable B – Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	0.493	0.605	0.393	0.65	1.37	0.001	0.269	0.18	0.253	0.372	0.272	0.171
8888	18F1	2.79 ††	0.641	0.603	0.716	1.24		0.218	0.334				
10156	18F1	0.6	0.63	0.57	0.75					0.46	0.38	0.41	0.4
21100	18F1	0.365	0.621	0.399	0.557	1.61	0.177 †	0.208	0.418 †	0.501	0.447	0.454	0.437
21178	18F1	0.53	0.625	0.459	0.643	1.04	0.053	0.18	0.27	0.34	0.17	0.26	0.23
21229	18F1	0.423	0.674	0.433	0.593	1.62	0.085	0.19	0.294	0.376	0.249	0.182	0.258
21232	18F1	1.32 ††	0.8 ††	0.56	0.693	1.8	0.44 ††	0.742 ††	0.574 ††	0.66	0.42	0.51	0.97 ††
50005	18F1	4.61 ††	0.658	0.638	0.921 ††	0.684	0.109	0.208	0.279	0.371	0.392	0.4	0.24
50014	18F1	0.465	0.69 †	0.515	0.635	1.25	0.001	0.068	0.224	0.357	0.267	0.291	0.227
50018	18F1	0.503	0.618	0.469	0.632	1.11	0.022	0.113	0.228	0.289	0.287	0.384	0.221
50020	18F1		0.633	0.411	0.611	0.916			0.0662 †	0.02 †	0.02	0.02 †	0.02
50024	18F1	0.01 ††	0.1 ††	0.14 ††	0.11 ††	0.948	0.007	0.001	0.037 ††	0.06	0.01	0.16	0.12
50037	18F1	0.501	0.623	0.475	0.637	1.1	0.022	0.114	0.226	0.287	0.286	0.381	0.218
50042	18F1	0.6	0.82 ††	0.52	0.81 †	1.6	0.28 ††	0.33	0.54 ††	0.48	0.42	0.4	0.32
52283	18F1	1.03 ††	0.662	0.493	0.65	1.58	0.028	0.095	0.258	0.363	0.226	0.211	0.093
52417	18F1	0.16 †	0.41 ††	0.42	0.52					1.8 ††	1.1 ††	2 ††	1.8 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Ca – Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	781	2890	1290	2780	1730	17.3	1210 ††	643	1660 ††	5360 ††	1030	658
10156	18F1	711	2310 ††	1060 ††	2620					2650 ††	878 ††	483 ††	365 ††
21100	18F1	860	2970	1330	2870	1810	34.3	627	689	4610 †	1680	1020	659
21178	18F1	925	3220 †	1430	3210	1830	19.6	649	744	5120	2040	1210	775
21229	18F1	846	2970	1380	2790	1770	24.9	657	732	4960	1790	1110	698
21232	18F1	872	3010	1440	3000	1800	25.7	668	732	5110	1770	1120	733
50004	18F1	824	2960	1330	2870	1790	19.8	631	670	4540 †	1870	1010	710
50005	18F1	784	2830	1350	2570 †	1650 ††	36.2	642	724	4820	1630	1030	633
50014	18F1	866	3250 †	1440	2930	1810	24	619	754	4810	1850	1020	669
50018	18F1	0.762 ††	2980	1350	2970	1750	16.4	649	701	5050	1690	1100	664
50020	18F1	869	2750	1320	3010	1930 ††		713 †	780	5030	1800	1060	637
50024	18F1	899	3040	1500 †	3000	1750	23.8	614	654	5470 †	2010	1190	769
50037	18F1	761	2980	1350	2970	1760	16.6	648	702	5040	1690	1100	660
50042	18F1	857	2510 ††	1050 ††	2070 ††	1580 ††	51 ††	564 ††	561 ††	3680 ††	1310 ††	816 †	543 †
52283	18F1	696 †	3300 †	1250	2910	2030 ††	40.7	604	725	5020	1770	1040	674
52417	18F1	81 ††	1500 ††	502 ††	1630 ††					601 ††	183 ††	122 ††	103 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Cu - Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	0.399	2.22	0.442	6.37	2.8	0.04	0.778 ††	0.908	1.81	2.32 †	2.37	2.78
8888	18F1	0.145	2.34	0.486	6.99	2.71		0.507	0.833				
10156	18F1	0.25	1.83	0.48	5.28					1.01 ††	0.73 ††	1.05 ††	1.24 ††
21100	18F1	0.575	2.08	0.468	6.34	2.71	0.052	0.539	1.65 ††	2.69	2.51 ††	3.28 ††	3.8 ††
21178	18F1	0.22	1.94	0.508	6.24	3	0.039	0.51	0.94	2.37	2.04	2.32	2.72
21229	18F1	0.342	2.21	0.454	7.19	2.65	0.066	0.519	0.867	2.05	1.59	1.96 †	2.72
21232	18F1	0.453	1.88	0.36	5.34	2.34	0.059	0.471	0.753	2.54	1.67	2.4	2.65
50004	18F1	0.283	2.93 ††	0.567	9.08	2.44	0.1	0.408	0.669	2.7	2.8 ††	2.5	3.05 ††
50005	18F1	0.341	2.17	0.414	3.03 ††	2.29	0.358 ††	0.242	0.891	2.15	1.39	1.26 ††	2.74
50014	18F1	0.335	2.42	0.54	6.5	2.92	0.036	0.51	0.961	2.36	1.84	2.39	2.84
50018	18F1	0.317	2.14	0.361	6.97	2.49	0.071	0.4	0.77	2.02	1.51	2.31	2.72
50020	18F1	0.405	2	0.422	7.52	4.35 ††	0.25 ††	0.833 ††	1.18	1.7	1.07 †	1.84 †	2.29 ††
50024	18F1	0.2	1.75	0.45	3.77	2.16	0.04	0.39	0.71	2.47	1.72	2.67 †	3.15 ††
50037	18F1	0.32	2.11	0.358	6.94	2.5	0.072	0.41	0.771	2.01	1.52	2.34	2.74
50042	18F1	0.05 ††	1.27 ††	0.11 ††	5.27	2.8	0.16 ††	0.26	0.32 ††	2.1	1.4	2 †	2.8
52283	18F1	0.419	2.23	0.447	7.2	3.13	0.025	0.469	0.89	2.26	1.63	2.39	2.78
52417	18F1	0.4	1.83	0.41	5.14					2.4	1.5	1.8 †	2.5 †

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Fe – Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	5130	90.8	214	261	66.8	31.6 ††	228	198	338	255 ††	299	178
8888	18F1	4370	99.9	232	268	50.2	53.4	282	186 †				
10156	18F1	3610	107	209	251					236	221 ††	218 †	144 ††
21100	18F1	4940	104	212	242	60	54.1	304	212	245	326	283	164
21178	18F1	4310	123 ††	281 ††	324	70	50.3	332	224	239	392	231	162
21229	18F1	4430	95.6	233	275	72.7	48.6	339	226	280	358	253	171
21232	18F1	5640	134 ††	220	226	62	55.6	312	196	259	363	259	171
50004	18F1	5340	99.7	232	269	69.5	57.9	342	214	261	397	272	183
50005	18F1	2550	93.7	173	130 ††	50.9	75.3 ††	209	210	263	479 ††	261	181
50014	18F1	5620	108	241	238	64.5	45.2	308	226	257	338	270	163
50018	18F1	6300	95.9	195	210	67.1	58	337	216	223	384	273	178
50020	18F1	4500	99.3	226	288	74.7	56.2	366	232	316	387	285	183
50024	18F1	4490	69 ††	165	136 ††	53	43.5	220	153 ††	290	356	297	188
50037	18F1	6290	96	198	214	67.4	59	339	217	221	386	276	180
50042	18F1	4190	104	191	316	1.4 ††	20 ††	361	210	300	414	298	208 †
52283	18F1	4510	96.9	215	275	77.7	30.6 ††	278	215	266	347	254	182
52417	18F1	3190	119 ††	222	2980 ††					370 ††	409	375 ††	226 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable K – Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	49.6	204	423	242	580	4.93	151	230	25.2 ††	145 ††	50.3	529
10156	18F1	40.1	162 ††	358	197 †					70.6 ††	12.7 ††	23.9 ††	302 ††
21100	18F1	48.2	194	405	241	542	6.63	155	238	127	27.3	50.4	536
21178	18F1	51.9	0.205 ††	455	247	616	4.27	158	244	136	29	51.3	546
21229	18F1	47.2	197	421	236	554	4.27	161	233	130	25.6	49.6	530
21232	18F1	45.9	178 †	404	216	552	16.2 ††	157	234	136	26.7	49.3	532
50004	18F1	90 ††	282 ††	327	234	559	3.94	157	238	124	22	44.8	529
50005	18F1	43.5	201	411	197 †	589	7.11	165	229	134	33.1	51.5	444 †
50014	18F1	49.5	206	454	236	579	5.58	156	260	130	23.9	50.5	540
50018	18F1	45	200	318	206	501	6.18	139	182 ††	161 †	28.1	46.1	472
50020	18F1	40.1	157 ††	353	227	618		172	265 †	118	17.9	46.1	475
50024	18F1	48.1	208	446	240	547	11.6 ††	8.67 ††	63.9 ††	141	28.6	53.7	562
50037	18F1	45.1	201	320	208	504	6.2	138	181 ††	162 †	28.1	46	474
50042	18F1	34 ††	155 ††	244	141 ††	310 ††	9.4	88 ††	122 ††	48 ††	23	21 ††	167 ††
52283	18F1	43.3	199	396	225	606	6.62	140	221	131	23.2	47.4	551
52417	18F1	69 ††	203	295	236					188 ††	38 †	45	580

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Mg – Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	62.2	1180	182	325	205	2.04	91.6	125 †	2460 ††	1440 ††	247	81
10156	18F1	63.3	1180	184	337					1010 ††	1790 ††	169 ††	64.8 ††
21100	18F1	63.5	1180	182	345	193	3.99	73.1	122 ††	1280	2250	270	81
21178	18F1	51.9	1240	197	356	202	2.16	77	132	1210	2210	248	84
21229	18F1	67.1	1250	186	319	208	2.91	82.7	138	1280	2290	246	83
21232	18F1	63.5	1130	188	326	213	4.32	82.8	136	1350	2230	267	90.5
50004	18F1	82 ††	1210	185	334	213	2.54	84.3	135	1160	2340	256	90.6
50005	18F1	92 ††	1220	268 ††	387	197	3.13	82.9	135	1300	2150	270	90.2
50014	18F1	69.5	1220	198	336	203	3.05	75.9	139	1180	2030	240	81.4
50018	18F1	58	1220	174	312	196	2.49	86.9	138	1310	2190	263	79.4
50020	18F1	62.7	1170	195	378	228		91	149 ††	1350	2340	256	83.3
50024	18F1	67.1	1190	196	342	212	4.88	146 ††	223 ††	1480 †	2620 ††	306 ††	101 ††
50037	18F1	58.1	1220	175	310	198	2.56	87.3	139	1320	2200	262	79.6
50042	18F1	39 ††	756 ††	101 ††	175 ††	170 ††	3.7	59 ††	87 ††	1130 †	2080	209 ††	67 ††
52283	18F1	71.6	1190	199	367	239 ††	5.33	76.3	136	1300	2240	258	86.3
52417	18F1	65	987 ††	147 †	321					1290	1930 †	244	84

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Mn – Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	52.7	253	8.07	37.1	531	0.406	79.5 ††	150	60.1 ††	130 ††	17.8	404
8888	18F1	45.8	269	9.21	41.8	679 ††		131	183 ††				
10156	18F1	64.7	1180 ††	186 ††	339 ††					97.1	46.3 ††	13.7 ††	327 ††
21100	18F1	55.2	259	7.98	34.7	541	2.44 ††	128	157	122	63.1	18.2	395
21178	18F1	48.8	282	9.49	47.8	556	0.2	143	165	115	70.4	19.4	406
21229	18F1	53.8	246	8.66	39.8	687 ††	0.278	167 ††	155	112	64	22.4 ††	406
21232	18F1	54.2	228	8.49	35.9	496	0.366	123	161	112	65.3	18.8	405
50004	18F1	54.9	265	8.65	38.9	536	0.16	136	161	119	69.9	18.5	432 †
50005	18F1	100 ††	198 ††	18.2 ††	76.1 ††	383 ††	1.02 †	126	157	110	59	39.7 ††	372 †
50014	18F1	61	284	9	42.5	510	0.241	136	170	123	64	18.6	419
50018	18F1	57.2	240	7.3	39.1	516	0.43	132	161	104	62.2	19	396
50020	18F1	49.9	262	8.9	41.3	620 †	1.9 ††	153	184 ††	122	67.1	20.8 †	406
50024	18F1	52.2	178 ††	8.21	36.6	480	2.63 ††	79.7 ††	125 ††	120	63.9	19.1	398
50037	18F1	57.5	241	7.34	39	518	0.45	133	162	103	62.3	19.1	394
50042	18F1	34 ††	256	1.15 ††	21 ††	724 ††	9.1 ††	165 †	166	147 ††	56 †	11 ††	455 ††
52283	18F1	44.1	246	7.26	34.4	466	0.108	91.8 ††	145 †	113	60.6	17.6	401
52417	18F1	36.9 ††	250	9.64	44.8					165 ††	51 ††	16 †	504 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Na - Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	28.5	2380	60.3	35.6	22.5	2.81	15.2	67.4	5150 ††	37.3 ††	70.3	4.53
10156	18F1	22.4	2000 ††	53.1	34.7					30	4150 †	51.6	4.31
21100	18F1	25.7	2430	56.6	40.9	29	5.66 †	13.4	63.9	43.4	5020	74.9	9.95
21178	18F1	24.4	2610 †	64.2	41.8	24.2	2.02	10.2	75.1	42	4620	345 ††	310 ††
21229	18F1	25.1	2440	58.4	36.5	22.3	2.62	12.1	74.5	36.5	4740	81.6	6.2
21232	18F1	20.1 †	2400	56.2	43.2	32.4	3.04	11.1	64.2	45.7	4450	70.7	17.9 ††
50004	18F1	26.5	2280 †	60.3	44.6	28.4	1.3	10.2	66.9	33.8	4470	64.5	6.75
50005	18F1	40 ††	2500	59.8	47.1	64.7 ††	38.9 ††	50.3 ††	68.9	43.3	4670	71.9	7.53
50014	18F1	26	2490	66.5	43	26.5	5.89 †	13.8	81.9	38.6	4690	73.6	9.2
50018	18F1	25.3	2450	57.2	42.9	26.5	2.51	13	71.2	39	4800	65.8	6.4
50020	18F1	20.6 †	2420	60.7	36	37.2 †	33.2 ††	42.9 ††	88.3 ††	33.4	4830	73.1	1.5
50024	18F1	30.2	2640 ††	61.3	33.3 †	18.4	1.66	74 ††	24.6 ††	38.5	1340 ††	76.8	1.3
50037	18F1	25.7	2460	57.6	42.7	26.7	2.54	13.1	71.4	39.2	4800	65.7	6.2
50042	18F1	27	2000 ††	63	44	57 ††	26 ††	38 ††	94 ††	64 ††	5180 †	83	35 ††
52283	18F1	35.4 ††	2460	89.2 ††	76.2 ††	73 ††	30.5 ††	38.6 ††	75.6	39.7	4760	65.5	3.05
52417	18F1	59 ††	2210 ††	91 ††	71 ††					26	2970 ††	39 ††	7

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable P - ICP — Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	34.3	33.9	52.3	425	30.5	2.63	300 ††	29.3	54.2 ††	41.5	6.89	42.6
8888	18F1					31.2		88.5	29.7				
10156	18F1	26.8	42.9 †	39.4 ††	361								
21100	18F1	23.2	33.5	47.8 †	390	28.2	4.42	79.8	25.9	38.9	49.6	10.2 ††	35.8
21178	18F1	39.6	49.6 ††	62.9 †	468	35.5	1.5	82	28.3	46.5	76.4 ††	7.2	43.1
21229	18F1	22.9	35.2	52.8	403	44	1.89	71.4	26.6	38.5	53.4	6.39	38.6
21232	18F1	37.1	38.4	53.6	408	39.6	2.86	80.9	26.8	41.2	62.2	5.75	41.6
50004	18F1	32.2	27.5 †	53.6	438	31	2.17	77.1	21.3 †	27.3 ††	60.8	1.8 ††	42.4
50005	18F1	38.3	35.9	58.3 †	417	33.4	3.03	71	26.8	36.2	47.7	6.56	38.2
50014	18F1	35	37	57.5 †	436	37.7	1.36	80.3	29.3	41.2	58.6	6.32	41.5
50018	18F1	32.4	35.1	53	373	36	1.58	86.4	26.4	38.7	53.2	5.7	39.9
50020	18F1	36.4	39.2	53.6	478	43.4	7.07 ††	89.6	30.7 †	36.1	55.6	0.5 ††	35.3
50024	18F1	7.84 ††	29.4	53.4	382	35.4	0.87	109 ††	139 ††	39.7	46.8	6.93	42.1
50037	18F1	32.7	35.1	53.3	378	36.1	1.6	86.7	26.3	38.5	53.2	5.68	39.8
50042	18F1	36	10 ††	39 ††	415	4.1 ††	4.1	4.1 ††	4.1 ††	22 ††	41	3 ††	33 †
52283	18F1	29.7	47.4 †	44.4 †	359	30.7	2.36	74.3	27.4	35.8	53.8	3.3 ††	22.6 ††
52417	18F1	103 ††	104 ††	113 ††	700 ††					225 ††	110 ††	6.9	44

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable S - Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	13.6	28.4 †	14.2	43.3	49.9	17.1	20.1 ††	16.5	7920 ††	9.17 ††	24.7	39.7
21100	18F1	51.1 ††	66.7 ††	38.4 ††	74.8 ††	107 ††	23.3	31 ††	36.1 ††	63.9 ††	6510	30.4	11.5 ††
21178	18F1	14	30.5	14.6	47.8	43.6	16.5	10.5	15.6	9.2	6940	22	34.2
21229	18F1	12.8	31.8	12.6	53	57.7	19.4	11.7	17.8	12.4	7450	25.6	37.1
21232	18F1	15	31.8	14.8	45.9	46.7	20.2	12.3	17.4	10.6	7160	31.2	41.1
50004	18F1	4.97 ††	12.9 ††	7.87	43	43.8	20.1	10.3	12.9	15.4	7250	32.7	36.6
50005	18F1	15.4	32.4	16.1	44.8	39.1	18.3	11.3	17.1	12.4	6910	24.9	35.9
50014	18F1	15	30.5	16	47.5	44.3	17.4	10.2	16.5	9.89	6870	25.6	36.7
50018	18F1	11.6	32.3	10.9	42.8	47	13.8	9.11	14.2	8.24	7380	21.9	34
50020	18F1	14.8	28.4 †	14.3	48	48.2	20.6	11.5	15.8	11.4	7170	24.2	35.4
50024	18F1	183 ††	295 ††	166 ††	294 ††	42.5	18.4	9.92	13.5	9.6	6790	28.2	42.1
50037	18F1	11.4	32.1	10.9	43	47.1	13.9	9.1	14.1	8.16	7380	21.7	34
50042	18F1	8 ††	18 ††	8.6	46	5.7 ††	5 †	5.7 ††	5 ††	1 ††	3540 ††	12 ††	22 ††
52283	18F1	15.5	32.6	14.6	48.9	47.9	19.9	12.7	17.1	13.5	7320	33.8	43.1

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable Zn — Mehlich3 (18F1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

22	18F1	1.48	0.934 †	1.31	189	1.06	0.317 ††	18.4	0.941	21.2 ††	0.996 ††	0.881	1.14
8888	18F1	1.89	0.744	1.9 †	203	1.07		24.8 ††	0.837				
10156	18F1	1.65	0.81	1.5	181					1.15	19.8	0.974	1.16
21100	18F1	1.64	0.899 †	1.53	197	1.3	0.44 ††	19.3	1.24 ††	1.48 ††	21.1	0.91	1.06
21178	18F1	1.5	0.675	1.4	186	0.85	0.009	19.6	0.77	1.1	26	0.88	1.1
21229	18F1	1.67	0.699	1.25	189	0.983	0.059	27.1 ††	0.909	1.11	22.5	0.942	1.08
21232	18F1	1.87	0.64	1.32	192	0.938	0.11	20.2	1.11 ††	1.2	25.5	0.95	1.18
50004	18F1	2.13	0.933 †	1.97 ††	181	1.32	0.069	15.8 †	0.816	1.65 ††	27	1.2 ††	1.25
50005	18F1	1.81	0.677	1.13	127 ††	0.997	0.189 †	15.3 ††	0.892	1.09	21.2	1.03	1.09
50014	18F1	2.31	0.93 †	1.41	197	0.47 ††	0.01	18.7	0.8	1.14	24.2	0.922	1.06
50018	18F1	1.41	0.67	1.33	211	1.04	0.023	19.5	0.85	1.06	21.6	0.84	1.11
50020	18F1	1.44		1.19	183	0.85		23.5 †	0.58 ††	0.567 ††	26	0.7 ††	0.911 †
50024	18F1	1.63	0.74	1.56	151 †	18.7 ††	0.08	19.1	0.81	1.19	25.5	1.02	1.28
50037	18F1	1.4	0.667	1.34	210	1.05	0.024	19.5	0.851	1.07	21.7	0.86	1.12
50042	18F1	1.8	0.54	0.94	171	0.91	0.05	13 ††	1	0.56 ††	9.3 ††	0.16 ††	0.32 ††
52283	18F1	2.1	0.691	1.12	167	1.25	0.02	21.8	0.876	1.13	22.3	0.872	1.27
52417	18F1	17.3 ††	6.98 ††	6.85 ††	164					1.4 ††	18	1.1	1.5 ††

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Extractable K — Bicarbonate (18A1) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

20204	18A1	60	339	507	326	567	15.9	291	309	192	56.3	79	602
21100	18A1	33	384	467	323	622 ††	17.4	283	319	231	75.1	52.7	557
21138	18A1	66.4	319	376	295								
21178	18A1	51	406	468	333	565	2	246	254	232	60	57	582
21193	18A1					576	3	234	321	150	50	68	232 ††
21229	18A1					561	5.71	278	292				
21232	18A1	126 ††	446	485	353	500 ††	8.28	222	222	170	49.6	32.8	578
50011	18A1	43	386	444	322	544	9	260	297	217	64.5	49.8	573
50017	18A1	38.7	320	384	259 †	562	7.08	235	269	205	50	70	570
50020	18A1	73.3	508	638 ††	524 ††	497 ††		175	216	255	120 ††	107 ††	639
50024	18A1	50.3	362	528	358	548	5	244	291	204	52	49.4	552
50027	18A1	53	364	426	314	555	19	217	281	189	57	45	535
50030	18A1	133 ††	422	473	331								
52437	18A1					314 ††	0.05	58.3 ††		308	65.8	85.2 †	817 ††
52494	18A1	42.3	317	394	286	492 ††	1.75	218	243	161	34.3	45.4	495 †

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Total Organic Matter (6G1) % – Not Assessable											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

50005	6G1	0.406 ††	0.086 ††	1.02 ††	3.75 ††	4.92	0.261	2.01	2.29	2.24	2.63	6.82	4.42
50020	6G1	1.73	4.2	4.9	16.2	14.7	0.7 ††	3.15	3.45	6.2	8.65	7.65	6.5
50029	6G1	1.46	1.49 ††	4.07	12.4 †	8.86	0.25	2.04	1.66	3.37	4.71	5.91	4.06
50030	6G1	1.77	4.32	5.37	16.4	13.8	0.31	2.71	3.03				
52417	6G1	2	4.06	5.01	17					7.47	9.96	8.64	6.9
52494	6G1	1.43	1.31 ††	3.98	13.5	9.78	0.26	2.15	1.93	2.83	4.18	6.11	4.91
52508	6G1	1.93	4.08	5.35	15.9	13.1	0.296	3.07	2.96	5.1	5.44	6.96	4.97

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Aluminium (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	8130	23400	14600	21100								
21148	17B1	4080	14700	8000	12700	41900	751	4500	5650	34700	17100	13300	15600
21229	17B1	7290	24400	14800	18100	83300	1180	5970	14300	38100	21400	19800	23400
21230	17B2	6060	21300	12900	17000	90000	1460	7800	15900	39700	26200	24100	29400
50005	17B2	5810	19600	11700	17600	72000	2910 ††	8720	15100	40600	14500	21700	24100
50017	17B2	8470	21000	11500	23100	103000	1530	9610	16500				
50019	17B1					92100	1680	8770	6850				
50020	17B1	4630	14500	8630	13300	76500	1020	6060	7200	27500	11000	8800	10300
50044	17B1	5600	15000	9900	13000					28000	14000	10000	15000
52417	17B1	7540	25400	14800	18000					42100	16000	13900	17700
52491	17B1	10200	47300 ††	19200	33500	41100	1690	8660	11500	53200	33200 ††	29100	37700
52508	17B1	3230	7570	4650	10700								
52526	17B1									26000	11600	9100	11000
52527	17B1									28600	10800	10300	11600

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Calcium (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	1020	4740	1780	5670								
21148	17B1	967	4320	1580	5780	2470	18.5	1080	904	10500	2030	1270	833
21229	17B1	903	4210	1740	5130	2010	2.94	1370	829	11800	2120	1380	828
21230	17B2	869	4120	1580	5070	2420	14.1	1610	879	11100	2260	1210	765
50005	17B2	900	3810	2020	4940	5340 ††	54	3470 ††	822	12200	2260	1430	853
50017	17B2	1430 ††	6850 ††	1890	4750	865 ††	129 ††	1380	817				
50019	17B1					2280	36	1420	937				
50020	17B1	929	3820	1630	5450	2120	31.8	1160	770	10400	2050	1330	843
50027	17B2	1060	4210	1760	5880	2080	27	2660 ††	973	8860	2700 ††	1110	743
50044	17B1	970	4300	1600	5300					14000	2200	1300	860
52417	17B1	275 ††	2270 ††	232 ††	2660 †					1600 ††	431 ††	232 ††	178 ††
52491	17B1	984	4710	1800	5510	2320	41	2620 ††	938	14300	2810 ††	1260	877
52508	17B1	851	3590	1440	5590								
52526	17B1									8940	1930	1250	780
52527	17B1									9850	1960	1270	800

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Chromium (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	23	53.6	83.3	52.5								
21148	17B1	17.3	34.9	57.6	34.4	246	7.28	32.3	26.8	144	40.7	68.8	20.4
21229	17B1	15.5	37	65.6	35.8	231	7.17	27.5	32.5	104	32.1	73.6	19.6
21230	17B2	17.6	48.4	80.5	45.6	270	9.82	43.9	40.8	126	37.2	77.6	24.6
50005	17B2	11.1	6.65 ††	34.6	43.2	186	24 ††	37	29.7	83.2	24.3	78.1	19.6
50019	17B1					314	8.7	43	33				
50020	17B1	16.3	38.3	65.7	36.9	217	7.73	33.6	25.2	100	27.8	56.7	16.6
50044	17B1	22	48	79	41					110	31	57	18
52417	17B1	19.3	44.9	68.6	36.5					90	23	49	16
52436	17B1	12.1	43.3	69.2	117 ††	83.7 ††	2.14 ††	11.8	10.9	77.5	33.9	48.3	22.8
52491	17B1	18	52	75	50	256	8.3	43	38	122	40	74	28
52508	17B1	15.3	33.6	57.3	35.8								
52526	17B1									87	27	53	21
52527	17B1									89	25	55	16

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Copper (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	11.6 ††	33.4 ††	2.38	61.6 ††								
21148	17B1	7	33.9 ††	20.5 ††	48.3	216 ††	1.32	22.4 ††	22.8 ††	51.3 ††	10	15 †	18.2
21229	17B1	2.64	21.1	3.26	47.7	62.6	0.074	4	8.29	41.1	8.35	15.2 †	18.4
21230	17B2	3.14	20.8	3.16	48.9	65.2	0.966	5.87	9.49	38.2	5.13 †	12.5	17
50005	17B2	3.88	22.6	3.6	46.6	53.9	0.718	6.29	9.26	39.9	9.94	13	17.3
50017	17B2	5.3	30.1 ††	3.5	75.8 ††	69.8	23.8 ††	4.84	8.97				
50019	17B1					52	0.64	4.2	7				
50020	17B1	3.03	21.1	2.78	50.4	53		3.82	6.04 ††	40	7.83	12.4	14.8
50027	17B2	4.4	22.5	4.1	53.3	69.5	0.4	5.4	9.6	47.7 ††	8.56	16.4 †	21.4
50044	17B1		25		57					42	8	12	16
52417	17B1	7.5 †	26.5	6.2 ††	49.8					35	6	10 †	12
52436	17B1	4.45	22.5	3.97	52.4	59.9	0.000	4.45	7.94	42.4	13.3 ††	19 ††	24.7
52491	17B1	3.8	23	3.1	52	69	0.023	4.4	9.1	42	8.1	16 †	23
52508	17B1	0.59	18.2		48.1								
52526	17B1									40	8	12	14
52527	17B1									38	7	12	14

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Iron (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	6510	30800	19300	22000								
21148	17B1	5250	25300 †	15800	20400	102000	114	9990	10500	60200	34000	30000	17700
21229	17B1	7160	32500	19700	22300	97000	110	9240	14100	46200	32700	30100	18300
21230	17B2	7740	35600	21200	26000	113000	174	13100	15000	51900	34400	31100	18900
50005	17B2	6400	18800 ††	13200 ††	15700	92200	371	11700	14000	44800	14500 ††	36200 †	20600
50017	17B2	7890	24100 †	13900 †	18500	11200 ††	160	9160	13600				
50019	17B1					67900	222	8830	9490				
50020	17B1	6520	34300	22100	27200	116000	116	12000	11400	57900	36400	32000	17300
50044	17B1	7100	34000	20000	24000					53000	32000	27000	16000
52417	17B1	5780	34600	19800	23400					75800 ††	48300 ††	42800 ††	14800
52491	17B1	7750	33000	20300	23900	83200	194	14400	15200	47000	33200	29100	37700 ††
52508	17B1	6380	21000 ††	14600 †	21200								
52526	17B1									37600	31800	28700	15400
52527	17B1									44500	32400	31400	17100

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Potassium (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	173 ††	5170	2730	3230								
21148	17B1	74.5	3420	1740	1070	1200	10	2210	900	694	2060	120	1250
21229	17B1	104	4210	2240	1790	1860	4.47	2290	1690	1240	3140	201	2770
21230	17B2	97.8	3430	2130	1650	1560	3.06	2180	1420	1330	3370	10.4	2890
50005	17B2	105	4820	3230	2960	2010	24.5 ††	2390	1590	1100	2430	277	2500
50017	17B2	114	4930	2110	3080	2450	12	2410	1770				
50019	17B1					2090	8.5	2830 ††	972				
50020	17B1	66.9	2440	1470	804	963		1710 ††	721 ††	874	2830	119	1570
50027	17B2	143	6410	2210	4370	2140	7	2410	1970	1370	3400	229	2630
50044	17B1	94	3400	2000	1300					1000	2600	160	1900
52417	17B1	73	2260	1660	882					874	2300	68	1450
52491	17B1	81	6940	2750	3510	1850	7.1	2320	1710	1860	4100	280	3910
52508	17B1	95.7	2820	1380	1060								
52526	17B1									600	1830	100	1090
52527	17B1									720	2100	140	1300

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Magnesium (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	117	5310	1180	1500								
21148	17B1	80.1	5420	891	1090	694	3.9	1950	458	18700	2800	372	317
21229	17B1	107	5580	1190	1330	1080	3.48	1750	770	20100	3530	668	726
21230	17B2	98.1	5310	1180	1300	964	2.29	1790	644	17400	3450	723	853
50005	17B2	107	5780	1460	1430	913	10.3	2030	787	20100	3170	597	652
50017	17B2	155	8060 ††	1250	2020	1300	7.5	2100	771				
50019	17B1					876	6.2	2480	436				
50020	17B1	77.5	4720	856	1060	628		1890	469	20800	3350	404	343
50027	17B2	136	5030	1160	1830	1400	14	2320	936	15400	3370	720	815
50044	17B1	99	5300	1000	1200					22000	3600	540	560
52417	17B1	88	4990	957	1100					21600	3370	432	439
52491	17B1	120	6090	1300	1700	1330	4.5	2320	848	19700	3960	806	1030
52508	17B1	80.9	4100 ††	598	974								
52526	17B1									18900	2980	380	310
52527	17B1									18300	2940	460	380

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Manganese (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	90	723 †	50.2	309 †								
21148	17B1	62.3	541	44	256	4460	1.66	341	370	1030	108	99.6	1320
21229	17B1	66.9	532	33.9	210	4050	1.22	293 ††	380	988	103	82.3	1360
21230	17B2	69.7	525	34.1	243	4100	0.366	364	401 ††	941	128	126	1210
50005	17B2	72.9	473	34.9	227	2070 ††	1.68	355	376	831	95.2	69.2	1290
50017	17B2	121	705 †	44	355 ††	4130	1.9	346	370				
50019	17B1					3580	3.6 ††	344	382				
50020	17B1	61.2	497	29.1	229	3720	1.12	341	335 ††	988	95.8	60.5	1300
50027	17B2	88	462	39	249	4720	7 ††	368	384	762 ††	126	147 ††	1510 ††
50044	17B1	78	660	39	270					990	100	73	1300
52417	17B1	105	1070 ††	61.7 ††	455 ††					1520 ††	91	56	2100 ††
52491	17B1	77	533	39	238	3950	1.4	365	380	920	114	103	1290
52508	17B1	64.4	538	25	220								
52526	17B1									864	88	53	1220
52527	17B1									950	89	57	1250

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Sodium (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	58.9	2470	118	196								
21148	17B1	47.1	2980	90.3	170	131	9.4	65.2	104	328	6600	95.8	29.1
21229	17B1	41.2	2440	101	175	138	3.97	37.4	86	513	7390	106	48.4
21230	17B2	41.7	2350	98.5	178	162	0.149	58.5	89.3	546	6320	9.09 ††	3.44
50005	17B2	58.2	2720	132	243	192	9.06	102	136	450	7010	98.8	65.1
50017	17B2	16	3600	102	229	181	5.7	96.2	136				
50019	17B1					150	15	83	97				
50020	17B1	5020 ††	2270							236	6680	25 ††	25
50044	17B1		2700	98	170					600	7100	91	
52417	17B1	34	2850	77	131					430	7160	104	42
52491	17B1	63	2870	149	287 ††	201	3.4	96	113	1590 ††	6840	133 ††	82
52508	17B1	59.1	2710	73.1	145								
52526	17B1									270	6630	70 †	11.8
52527	17B1									400	6430	100	

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Lead (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

10156	17B2	1.6	9.64 †	4.39 ††	448 ††								
21148	17B1	3.67	15.3	7.95	952	23.2	1.32	15.8	6.95				
21229	17B1	2.18	18.9		1070	10.6	0.207	12.1	6.39	2.51	6.68	15.5	14.8
21230	17B2	2.35	16.6	7.46	1170	8.71	0.548	16.3	7.62	0.1	4.4 ††	12	13.9
50005	17B2	9.11 ††	42.9 ††	22.7 ††	921	20.3	0.144	4.02	6.15	2.55	6.95	13.1	15.1
50005	17B1	9.11 ††	42.9 ††	22.7 ††	1000								
50019	17B1					14	0.65	18	7.6				
50020	17B1	159 ††	14.4	6.76	1230	8.1		9.36		0.5	5.84 †	12.8	12.5
50044	17B1		16	7	930						7	14	14
52417	17B1		9.7 †	2.1 ††	1090					3.6	7.1	14	14
52436	17B1	2.95	15.1	7.25	847	15.5	12.5 ††	21.1	55 ††	1.23	0.714 ††	6.9 ††	15
52491	17B1	2.8	15	7.2	1010	0.328	0.752	17	5.6				
52508	17B1		8.34 ††	1.49 ††	1270								
52526	17B1									1.21	7	14	12
52527	17B1										6 †	14	12

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Sulphur (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4

21229	17B1	59	52.4	169	609	332	32.1	72.2	80.2	104	17600	345	234
21230	17B2	268 ††	259 ††	354 ††	838 †	445	52.9	97.8	54.9	106	15300	265	207
50005	17B2	61.9	43.4	170	614	138	56.5	79.8	76.4	105	5170 ††	286	223
50017	17B2	284 ††	245 †	600 ††	2740 ††	438	36.4	94.5	85.7				
50019	17B1					368	38	91	67				
50020	17B1	68.5	49.4	171	597	282	29.5	69.7	50.5	108	20300	299	216
50044	17B1	91	79	190 †	660					120 ††	21000	290	240
52491	17B1	149 †	167	259 †	909 †	341	58	84	61	74 ††	19900	308	267
52526	17B1									150 ††	17000	310	220

Lab. Code #	Method Codes	Soil sample identification and values for 2017: Aqua Regia Zinc (17B1 + 17B2) mg/kg											
		March 2017 (Round 3)				June 2017 (Round 6)				September 2017 (Round 9)			
		ASS 1703-1	ASS 1703-2	ASS 1703-3	ASS 1703-4	ASS 1706-1	ASS 1706-2	ASS 1706-3	ASS 1706-4	ASS 1709-1	ASS 1709-2	ASS 1709-3	ASS 1709-4
10156	17B2	2.81	71.6	12.4	537								
21148	17B1	467 ††	50.2	14.2	390	41.7	1.66 †	44.9	10.6	89.7 ††	56.9	22.1	26.1
21229	17B1	2.74	52.3	9.35	462	52.8	0.404	35	12.3	58.3	42.6	11.4	24.8
21230	17B2	3.75	61.3	12.1	452	73.4	0.771	48.4	16	54.5	39	13.3	25.6
50005	17B2	3.43	56.2	11.6	432	55.8	0.618	49.1	14.6	58.1	40.6	11.7	26.3
50017	17B2	5.19	72.2	13.1	467	86.6	0.16	46	15.6				
50020	17B1	4.52	54.1	8.86	489	43		37.5	7.36 ††	54.5	39.6	8.05	14.7
50027	17B2	4.1	58.6	12.2	473	80.7	0.1	45.1	17.1	49.7	42.9	16.2	27.7
50044	17B1		73	12	580					67	43	10	21
52417	17B1	2	59.6	8.9	439					58	36	8	15
52436	17B1	1.16	50.5	1.15 ††	503	66.1	14.4 ††	43.8	18	58.9	55.8	13.2	29.1
52491	17B1	2.9	66	11	502	79	0.398	52	17	62	50	23	34
52508	17B1	13.8 ††	45.8	15.7	383								
52526	17B1									50	36	6	10
52527	17B1									57	35	8	14

i Unless otherwise indicated, soil method codes are as defined by Rayment, G.E. and Lyons, D.J. (2011). *Soil Chemical Methods - Australasia*. CSIRO Publishing, Collingwood, Victoria, Australia.