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Soil and Plant
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**ASPAC
Soil Proficiency Testing
Program Report**

2014-15

D.J. Lyons, 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

¹Rayment, 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 2014-15[†]

<i>Name[†]</i>	<i>Location</i>	<i>Email</i>
R.J. Hill (Convenor)	Hamilton, New Zealand	roger.hill@hill-labs.co.nz
G.E. Rayment	Queensland, Australia	raymeng@optusnet.com.au
D.J. Lyons	Queensland, Australia	daveandtrish8@bigpond.com

[†] Dr L.A. Sparrow joined the ASPAC-LPC on 10/08/2015. He attended his first in-person ASPAC-LPC meeting on 30/06/2016 and an associated Technical Advisory Group meeting on 1/07/2016.

Service Provider Details

<i>Name, Street and Postal Address</i>	<i>Key Personnel & Current Emails.</i>
Global Proficiency Ltd (GPL) ^A .	<u>Business Manager:</u> Gordana.Aleksic@global-proficiency.com
Ruakura Research Campus, Hamilton 3214, NZ;	<u>Technical / Operational:</u> Lana Pears, Programme Leader – Ag. Programmes. <Lana.Pears@global-proficiency.com>
PO Box 20474, Hamilton 3241, NZ P. +64 7 850 4483	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 2014-15 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 2014-15. 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 over-sighted by the Convener of the ASPAC-LPC.

2.2 Soil program participation

Some 59 laboratories submitted results for at least one soil test. Names and other summary contact details for the participants are provided in Appendix 1. There were 45 laboratories involved from Australia (NSW=13; QLD=12; VIC=7; SA=6; WA=5, TAS=1; ACT=1), 8 from New Zealand, 2 from Fiji and Papua New Guinea, and 1 (one) each from Vietnam and Thailand.

Most reported results (see Table 2.1) across the three “rounds” combined were submitted for method 4A1 (44 average for pH, 1:5 soil-water) followed by method 3A1 (42 average for electrical conductivity, 1:5 soil-water). The median was 19 laboratories for each method, which was an increase of 2 on 2013-14. .

Table 2.1. Test methods, corresponding method codes and the arithmetic average number of results per round submitted by participating laboratories in the ASPAC 2014-15 soil ILPP.

Soil Tests	Method Codes ⁱ	Number of participants		
		Dec 14	Mar 15	Jun 15
Air Dry Moisture	2A1	33	33	32
Electrical conductivity 1:5 soil-water	3A1	43	42	42
Soil pH, 1:5 soil-water	4A1	44	44	44
Soil pH, 1:5 0.01 M CaCl ₂ — direct	4B1+4B3	14	10	10
Soil pH, 1:5 0.01 M CaCl ₂ — indirect	4B2+4B4	21	16	18
Water soluble Cl — pooled	5A1, 5A2, 5A3	33	31	32
Organic Carbon —W&B	6A1	22	22	24
Total Organic C — Pooled	6B1, 6B3	19	19	19
Total C — Dumas	6B2	27	29	27
Total N – Dumas	7A5	32	31	28
Total N – Pooled	7A1 + 7A2	12	12	16
Water Soluble Nitrate N — autocolour	7B1	17	15	13
KCl Extractable Nitrate N — autocolour	7C2	29	28	25
KCl Ext. Ammonium N — autocolour	7C2	32	32	32
Total P – all methods %	Pooled	20	15	18
Total P – all methods mg/kg	Pooled	0	6	9
Colwell Extractable P	9B1+9B2	30	30	30
Olsen Extractable P	9C1+9C2	20	21	19
Bray-1 Extractable P	9E1+9E2	9	8	9
Acid Extractable P	9G1+9G2	8	8	9
Phosphorus buffer index (with Colwell P)	9I2a + 9I2b + 9I2c ⁱⁱ	23	22	23
Phosphorus buffer index (unadj.)	9I4a + 9I4b + 9I4c ⁱⁱ	12	8	9
Phosphate Extractable S	10B Pooled	10	10	10
KCl 40 Extractable S	10D1	21	22	20
DTPA Extractable Fe	12A1	28	28	27
DTPA Extractable Cu	12A1	28	28	28
DTPA Extractable Mn	12A1	27	27	27
DTPA Extractable Zn	12A1	28	28	28
Hot CaCl ₂ Extractable B — manual colour	12C1+12C2	21	20	20
Exchangeable Ca — 1M NH ₄ Cl extract	15A1	19	19	18
Exchangeable Mg — 1M NH ₄ Cl extract	15A1	19	19	18
Exchangeable Na — 1M NH ₄ Cl extract	15A1	19	19	18
Exchangeable K — 1M NH ₄ Cl extract	15A1	19	19	18
Exchangeable Ca — 1M NH ₄ OAc extract	15D3	26	23	20
Exchangeable Mg — 1M NH ₄ OAc extract	15D3	26	23	20

Soil Tests	Method Codes ⁱ	Number of participants		
		Dec 14	Mar 15	Jun 15
Exchangeable Na — 1M NH ₄ OAc extract	15D3	26	23	20
Exchangeable K — 1M NH ₄ OAc extract	15D3	27	24	21
Exchangeable Al — 1M KCl extract	15G1	18	15	18
Bicarbonate Extractable K	18A1	4	7	8
Aluminium	18F1	15	15	15
Boron	18F1	14	14	14
Calcium	18F1	16	15	15
Copper	18F1	16	15	15
Iron	18F1	16	15	15
Magnesium	18F1	16	15	15
Manganese	18F1	16	15	15
Phosphorus – ICP	18F1	14	14	15
Potassium	18F1	16	15	15
Sodium	18F1	16	15	15
Sulphur	18F1	15	14	14
Zinc	18F1	16	15	15

¹ 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.

¹ These are ASPAC endorsed tests, where “O” in the code refers to Olsen extractable P, and “C” refers to Colwell extractable P. See the table Notes for more details.

2.3 Tests and methods

The three proficiency “rounds” for soils – each comprised of four samples – were offered in December 2014, March 2015 and June 2015. 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 either 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 2014-15 soil ILPP

Soil Tests	Method Codes	Average participants
Soil pH, 1:5 0.01 M CaCl ₂ - direct, pooled air dry	4B1 + 4B3	11
Soil pH, 1:5 0.01 M CaCl ₂ - indirect, pooled air dry	4B2 + 4B4	18
Water Soluble Cl – Pooled	5A1 + 5A2 + 5A3	32
Total Organic Carbon – Pooled %	6B1 + 6B3	19
Total Nitrogen – Pooled %	7A1 + 7A2	13
Total P – pooled % oven dry	All methods	18
Colwell Extractable P – pooled mg/kg air dry	9B1 + 9B2	30
Olsen Extractable P – pooled mg/kg air dry	9C1 + 9C2	20
Bray-1 Extractable P – pooled mg/kg air dry	9E1 + 9E2	9
Acid Extractable P – pooled mg/kg air dry	9G1 + 9G2	8
Phosphorous Buffer Index (Colwell) L/kg dry wt	9I2a + 9I2b + 9I2c	23
Phosphorous Buffer Index (Unadj) L/kg dry wt	9I4a + 9I4b + 9I4c	10
Phosphate Extractable S, pooled mg/kg air dry	10B	10
Hot CaCl ₂ Extractable B – pooled mg/kg air dry	12C1 + 12C2	20

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 2014-15 program were distributed and coded as follows: December 2014 (Round 214) — ASS 1412-1 to 1412-4; March 2015 (Round 414) — ASS 1503-1 to

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.

1503-4; and June 2015 (Round 614) — ASS 1506-1 to 1506-4. 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 2013-14 soil ILPP

<i>Sample ID</i>	<i>Round ID</i>	<i>Sample Origin</i>	<i>Previous Rounds</i>
ASS 1412-1	214	New Zealand	N/A
ASS 1412-2		Queensland	N/A
ASS 1412-3		South Australia	N/A
ASS 1412-4		NSW	N/A
ASS 1503-1	414	New Zealand	Round 213, ASS1312-1
ASS 1503-2		NSW	N/A
ASS 1503-3		Queensland	Round 613, ASS1406-4
ASS 1504-4		Queensland	Round 213, ASS1312-3
ASS 1506-1	614	Tasmania	N/A
ASS 1506-2		Vietnam	N/A
ASS 1506-3		Queensland	Round 613, ASS1406-3
ASS 1506-4		Queensland	N/A

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

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.)

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 2014-15 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.

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 2014-15. 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.

2014-15: Air-Dry Moisture Content (2A1) %

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	33	33	33	33	33	33	33	33	32	31	31	32
Minimum i	1.7	1.31	0.68	1.03	0.623	0.886	0.818	1.14	1.27	0.25	1.27	1.23
Maximum i	5.43	3.53	2.7	4.5	4.49	2.95	3.87	7	4.85	1.86	3.87	4.5
Median i	4.58	3.18	2.32	3.96	3.3	2.4	2.76	5.32	4.08	1.39	2.99	3.96
Mean i	4.39	3.03	2.18	3.63	3.06	2.24	2.56	5.15	3.96	1.33	3.01	3.75
MAD i	0.21	0.23	0.18	0.24	0.3	0.27	0.33	0.71	0.265	0.12	0.28	0.305
IQR i	0.59	0.52	0.49	0.75	0.65	0.65	0.63	1.4	0.465	0.23	0.52	0.633
Robust CV% i	10	12	16	14	15	20	17	20	8	12	13	12
Median f	4.65	3.22	2.36	4.1	3.31	2.53	2.82	5.45	4.24	1.42	3.02	4.01
Mean f	4.63	3.24	2.39	4.07	3.25	2.42	2.75	5.35	4.21	1.42	3.06	3.98
MAD f	0.095	0.145	0.12	0.11	0.24	0.25	0.18	0.51	0.21	0.1	0.255	0.26
IQR f	0.21	0.265	0.2	0.208	0.495	0.39	0.393	0.98	0.4	0.19	0.523	0.505
Robust CV% f	3	6	6	4	11	11	10	13	7	10	13	9
Outliers	8	3	6	8	6	5	4	1	4	5	1	4
Stragglers	5	4	2	3	0	0	3	1	1	1	0	1

2014-15: Electrical conductivity 1:5 soil-water (3A1) dS/m air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	43	43	43	43	42	42	42	42	42	42	42	42
Minimum i	0.163	0.1	0.277	0.179	0.163	0.106	0.064	0.124	0.123	0.061	0.008	0.004
Maximum i	0.221	0.163	1.22	0.57	0.276	0.202	0.122	0.233	0.274	0.104	9.87	4.2
Median i	0.192	0.121	0.417	0.223	0.21	0.163	0.1	0.187	0.155	0.091	8.1	3.77
Mean i	0.19	0.124	0.435	0.234	0.209	0.162	0.1	0.189	0.157	0.09	7.76	3.57
MAD i	0.009	0.005	0.013	0.01	0.01	0.011	0.004	0.0115	0.006	0.005	0.335	0.11
IQR i	0.017	0.011	0.027	0.026	0.02	0.02	0.007	0.0258	0.012	0.009	0.673	0.213
Robust CV% i	7	7	5	8	7	9	5	10	6	7	6	4
Median f	0.192	0.12	0.416	0.223	0.21	0.165	0.1	0.187	0.155	0.091	8.16	3.78
Mean f	0.19	0.121	0.417	0.223	0.212	0.165	0.1	0.187	0.154	0.092	8.23	3.78
MAD f	0.009	0.004	0.014	0.009	0.009	0.01	0.003	0.009	0.005	0.005	0.31	0.08
IQR f	0.017	0.008	0.027	0.017	0.017	0.019	0.006	0.018	0.01	0.008	0.593	0.15
Robust CV% f	7	5	5	5	6	8	4	7	5	7	5	3
Outliers	0	5	4	7	7	4	7	6	6	2	6	8
Stragglers	0	3	0	0	0	0	3	1	0	0	0	5

2014-15: Soil pH, 1:5 soil-water (4A1) air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	44	44	44	44	44	43	44	44	44	44	44	44
Minimum i	5.39	6.34	7.59	7.87	4.92	6.87	3.22	7.6	5.85	4.52	3.01	6.06
Maximum i	6.48	7.5	8.53	8.58	6.07	8.08	6.66	8.76	7.04	8.39	3.38	8.02
Median i	5.91	7.26	8.21	8.23	5.2	7.84	6.36	8.48	6.13	8.03	3.2	7.46
Mean i	5.9	7.21	8.2	8.21	5.19	7.79	6.3	8.43	6.13	7.92	3.2	7.29
MAD i	0.065	0.135	0.08	0.095	0.045	0.14	0.085	0.115	0.08	0.115	0.035	0.285
IQR i	0.153	0.273	0.148	0.19	0.093	0.26	0.17	0.205	0.153	0.29	0.07	0.723
Robust CV% i	2	3	1	2	1	2	2	2	2	3	2	7
Median f	5.91	7.27	8.21	8.23	5.2	7.86	6.36	8.48	6.13	8.04	3.2	7.51
Mean f	5.9	7.24	8.21	8.22	5.2	7.85	6.37	8.47	6.12	8.05	3.2	7.43
MAD f	0.03	0.125	0.07	0.09	0.025	0.12	0.08	0.105	0.07	0.09	0.02	0.2
IQR f	0.08	0.228	0.135	0.18	0.05	0.23	0.16	0.198	0.14	0.15	0.04	0.51
Robust CV% f	1	2	1	2	1	2	2	2	2	1	1	5
Outliers	7	2	2	3	6	2	3	2	2	4	4	4
Stragglers	4	0	0	0	8	2	0	0	1	3	2	2

2014-15: Soil pH, 1:5 0.01 M CaCl₂ — direct, pooled (4B1 + 4B3) air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	14	14	14	14	10	10	10	10	10	10	10	10
Minimum i	5.21	5.92	6.93	6.97	4.48	6.45	5.68	6.93	5.18	6.06	3.04	5.81
Maximum i	5.65	6.61	7.82	7.62	4.76	7.48	6.05	7.98	6.35	7.72	3.25	7.76
Median i	5.4	6.47	7.73	7.5	4.67	7.06	5.75	7.59	5.49	7.18	3.16	7.35
Mean i	5.4	6.38	7.61	7.42	4.65	7	5.78	7.56	5.54	6.99	3.15	7.01
MAD i	0.045	0.08	0.095	0.1	0.02	0.275	0.045	0.195	0.04	0.345	0.05	0.33
IQR i	0.09	0.22	0.275	0.208	0.05	0.608	0.08	0.365	0.073	0.668	0.083	0.988
Robust CV% i	1	3	3	2	1	6	1	4	1	7	2	10
Median f	5.4	6.49	7.78	7.53	4.67	7.06	5.73	7.59	5.49	7.18	3.16	7.45
Mean f	5.4	6.49	7.76	7.49	4.67	7	5.75	7.56	5.49	6.99	3.15	7.49
MAD f	0.04	0.035	0.04	0.055	0.01	0.275	0.04	0.195	0.03	0.345	0.05	0.095
IQR f	0.07	0.06	0.05	0.188	0.02	0.608	0.07	0.365	0.058	0.668	0.083	0.143
Robust CV% f	1	1	0	2	0	6	1	4	1	7	2	1
Outliers	2	2	2	2	3	0	1	0	2	0	0	1
Stragglers	0	2	3	0	0	0	0	0	0	0	0	3

2014-15: Soil pH, 1:5 0.01 M CaCl₂ — indirect, pooled (4B2 + 4B4) air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	21	21	21	21	16	15	16	16	18	18	18	18
Minimum i	5.24	6.15	7.3	7.1	4.5	6.46	5.5	7.15	5.23	6.3	3.02	6.21
Maximum i	5.65	6.66	7.88	7.74	4.92	7.61	6.05	7.99	5.81	7.61	3.32	7.67
Median i	5.43	6.49	7.72	7.59	4.71	7.3	5.74	7.83	5.5	7.33	3.19	7.16
Mean i	5.42	6.46	7.67	7.55	4.71	7.22	5.76	7.76	5.49	7.19	3.18	7.07
MAD i	0.05	0.04	0.08	0.09	0.025	0.12	0.05	0.095	0.08	0.25	0.025	0.38
IQR i	0.08	0.11	0.16	0.16	0.045	0.205	0.103	0.218	0.115	0.508	0.038	0.855
Robust CV% i	1	1	2	2	1	2	1	2	2	5	1	9
Median f	5.43	6.5	7.75	7.6	4.71	7.31	5.71	7.84	5.5	7.34	3.19	7.16
Mean f	5.41	6.49	7.74	7.57	4.7	7.32	5.72	7.8	5.47	7.24	3.2	7.07
MAD f	0.04	0.03	0.05	0.09	0.015	0.06	0.045	0.09	0.08	0.22	0.015	0.38
IQR f	0.075	0.05	0.13	0.163	0.033	0.115	0.09	0.165	0.12	0.4	0.03	0.855
Robust CV% f	1	1	1	2	1	1	1	2	2	4	1	9
Outliers	2	5	3	1	4	2	4	1	1	1	3	0
Stragglers	0	3	1	0	0	2	0	0	0	0	1	0

2014-15: Soluble Cl — pooled (5A1, 5A2, 5A3) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	33	33	33	33	31	31	31	31	31	31	32	32
Minimum i	10	11	99	15	17	2	14	2	5.7	0.01	4130	3940
Maximum i	40	48	191	50	157	182	221	242	302	236	7930	12400
Median i	19	20	156	29	27	11	22	8	21	6.3	6140	5950
Mean i	20	23	153	31	33	19	31	19	37	21	6210	6140
MAD i	2.9	3	10	3.4	3.1	3	2.6	2.7	5.7	2.9	200	325
IQR i	4.9	6.7	24	6.5	5.3	6.2	7.1	7.8	9.9	7.4	395	635
Robust CV% i	19	25	11	17	15	42	24	72	35	88	5	8
Median f	19	20	159	29	26	10	21	7.4	19	5.7	6130	5920
Mean f	18	20	157	30	26	10	22	7.4	20	6.6	6150	5880
MAD f	2	2.3	6	2.8	2.6	1.7	2.1	1.7	3.6	1.9	160	300
IQR f	4.4	4.3	14	5.2	3.9	2.7	4	3.2	7.1	4.8	320	590
Robust CV% f	17	16	6	13	11	20	14	32	28	63	4	7
Outliers	4	4	4	6	3	6	4	7	5	4	6	4
Stragglers	2	2	1	1	0	2	1	1	1	1	1	0

2014-15: Organic Carbon — W&B (6A1) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	22	22	22	22	22	22	22	22	24	24	24	23
Minimum i	3.03	0.791	1.5	0.532	3.16	0.06	0.873	0.356	2.5	0.06	0.9	0.1
Maximum i	4.54	6.38	9.99	0.98	5.45	0.982	1.47	0.89	3.76	0.75	1.61	0.48
Median i	3.53	1.05	5.05	0.679	4.42	0.725	1	0.442	3.22	0.411	1.28	0.172
Mean i	3.58	1.32	5.1	0.709	4.42	0.721	1.04	0.488	3.22	0.426	1.29	0.212
MAD i	0.165	0.11	0.24	0.091	0.205	0.084	0.06	0.042	0.105	0.055	0.065	0.027
IQR i	0.315	0.253	0.508	0.205	0.383	0.149	0.111	0.072	0.198	0.111	0.125	0.073
Robust CV% i	7	18	7	22	6	15	8	12	5	20	7	31
Median f	3.5	1.05	5.01	0.679	4.42	0.73	0.989	0.43	3.2	0.408	1.28	0.17
Mean f	3.49	1.07	4.99	0.709	4.44	0.753	0.998	0.44	3.21	0.41	1.27	0.162
MAD f	0.145	0.105	0.19	0.091	0.175	0.08	0.066	0.04	0.06	0.038	0.035	0.021
IQR f	0.283	0.218	0.42	0.205	0.328	0.112	0.114	0.07	0.1	0.077	0.068	0.031
Robust CV% f	6	15	6	22	5	11	9	12	2	14	4	14
Outliers	2	2	2	0	2	1	2	3	5	4	3	5
Stragglers	0	0	1	0	0	0	0	0	2	1	1	1

2014-15: Total Organic Carbon — Pooled (6B1 + 6B3) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	19	19	19	19	19	19	19	19	19	19	19	19
Minimum i	2.99	0.986	4.3	0.65	3.42	0.712	0.96	0.44	3.33	0.344	1.28	0.133
Maximum i	4.7	1.3	10.4	0.805	5.4	0.996	1.61	20	4.18	0.69	1.51	0.504
Median i	4.04	1.22	5.75	0.715	4.89	0.817	1.13	0.542	3.82	0.445	1.34	0.18
Mean i	4	1.23	6.3	0.718	4.78	0.828	1.14	1.59	3.8	0.457	1.37	0.203
MAD i	0.13	0.03	0.31	0.025	0.11	0.047	0.03	0.062	0.09	0.025	0.03	0.029
IQR i	0.285	0.075	0.64	0.048	0.25	0.078	0.05	0.147	0.17	0.054	0.095	0.063
Robust CV% i	5	5	8	5	4	7	3	20	3	9	5	26
Median f	4.04	1.23	5.65	0.715	4.89	0.817	1.13	0.526	3.83	0.446	1.33	0.176
Mean f	4.06	1.24	5.65	0.714	4.89	0.823	1.13	0.533	3.84	0.446	1.33	0.178
MAD f	0.095	0.025	0.205	0.024	0.07	0.047	0.02	0.046	0.075	0.024	0.02	0.033
IQR f	0.188	0.085	0.393	0.041	0.133	0.078	0.04	0.09	0.15	0.046	0.04	0.058
Robust CV% f	3	5	5	4	2	7	3	13	3	8	2	24
Outliers	4	1	5	2	4	1	6	3	3	3	6	2
Stragglers	1	0	0	0	0	0	1	0	0	0	0	0

2014-15: Total Carbon — Dumas (6B2) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	27	27	27	27	29	29	29	29	27	27	27	27
Minimum i	3.5	1.02	1.09	0.668	4.35	0.692	0.919	0.064	2.97	0.372	1.19	0.138
Maximum i	4.41	1.62	11.1	0.877	5.71	1.13	1.3	20.4	4.36	0.528	1.42	0.256
Median i	4.04	1.26	10.5	0.77	4.96	0.875	1.16	0.9	3.86	0.461	1.34	0.172
Mean i	4.02	1.26	9.66	0.765	4.94	0.875	1.17	1.56	3.83	0.467	1.34	0.18
MAD i	0.21	0.06	0.3	0.03	0.09	0.032	0.03	0.05	0.09	0.02	0.03	0.017
IQR i	0.41	0.105	1.16	0.05	0.16	0.047	0.05	0.085	0.17	0.04	0.055	0.035
Robust CV% i	8	6	8	5	2	4	3	7	3	6	3	15
Median f	4.04	1.27	10.6	0.77	4.97	0.875	1.16	0.9	3.88	0.461	1.35	0.169
Mean f	4.02	1.26	10.6	0.764	4.95	0.868	1.16	0.906	3.86	0.468	1.35	0.167
MAD f	0.21	0.05	0.2	0.02	0.07	0.014	0.02	0.015	0.1	0.019	0.02	0.01
IQR f	0.41	0.088	0.3	0.042	0.138	0.036	0.04	0.028	0.163	0.035	0.045	0.019
Robust CV% f	8	5	2	4	2	3	3	2	3	6	2	8
Outliers	0	2	7	1	4	2	4	6	3	1	2	2
Stragglers	0	1	1	3	1	5	3	4	0	1	2	3

2014-15: Total N — Pooled (7A1 + 7A2) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	12	12	12	12	12	12	12	12	16	16	16	16
Minimum i	0.346	0.067	0.43	0.048	0.29	0.06	0.07	0.02	0.248	0.058	0.065	0.02
Maximum i	0.412	0.132	0.56	0.085	0.369	0.099	0.12	0.924	0.34	0.089	0.11	0.063
Median i	0.373	0.090	0.506	0.07	0.337	0.084	0.096	0.039	0.287	0.065	0.08	0.033
Mean i	0.372	0.092	0.505	0.071	0.332	0.083	0.094	0.117	0.285	0.068	0.08	0.034
MAD i	0.011	0.004	0.019	0.005	0.015	0.006	0.01	0.004	0.016	0.006	0.009	0.005
IQR i	0.018	0.007	0.035	0.012	0.029	0.012	0.017	0.019	0.03	0.014	0.013	0.01
Robust CV% i	4	5	5	13	6	10	13	36	8	16	12	24
Median f	0.373	0.09	0.506	0.070	0.337	0.084	0.096	0.037	0.287	0.065	0.08	0.032
Mean f	0.372	0.089	0.511	0.072	0.332	0.083	0.094	0.038	0.285	0.066	0.08	0.03
MAD f	0.011	0.003	0.015	0.002	0.015	0.006	0.01	0.002	0.016	0.005	0.009	0.003
IQR f	0.018	0.005	0.042	0.009	0.029	0.012	0.017	0.003	0.03	0.012	0.013	0.01
Robust CV% f	4	4	6	10	6	10	13	6	8	13	12	23
Outliers	0	3	1	1	0	0	0	4	0	1	0	2
Stragglers	0	0	0	1	0	0	0	1	0	0	0	0

2014-15: Total N – Dumas (7A5) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	32	32	32	32	31	31	31	31	28	28	28	28
Minimum i	0.285	0.066	0.29	0.046	0.238	0.043	0.049	0.005	0.244	0.027	0.043	0.011
Maximum i	0.586	0.114	0.608	0.114	0.4	0.11	0.14	0.107	0.35	0.167	0.158	0.067
Median i	0.383	0.091	0.54	0.071	0.35	0.082	0.096	0.04	0.297	0.06	0.078	0.032
Mean i	0.386	0.09	0.53	0.071	0.342	0.081	0.095	0.043	0.299	0.064	0.08	0.035
MAD i	0.015	0.009	0.018	0.006	0.011	0.008	0.006	0.005	0.01	0.008	0.009	0.007
IQR i	0.026	0.018	0.031	0.011	0.023	0.016	0.018	0.014	0.021	0.016	0.017	0.013
Robust CV% i	5	15	4	12	5	14	14	25	5	19	16	30
Median f	0.383	0.091	0.54	0.071	0.352	0.082	0.095	0.040	0.296	0.06	0.078	0.031
Mean f	0.382	0.090	0.539	0.071	0.35	0.08	0.094	0.039	0.297	0.062	0.0791	0.033
MAD f	0.007	0.009	0.015	0.005	0.011	0.008	0.006	0.004	0.009	0.006	0.008	0.007
IQR f	0.014	0.018	0.029	0.008	0.019	0.013	0.015	0.008	0.017	0.012	0.014	0.012
Robust CV% f	3	15	4	8	4	12	11	15	4	15	13	30
Outliers	6	0	3	6	5	3	5	7	4	4	2	2
Stragglers	4	0	2	1	0	0	0	0	1	0	1	0

2014-15: Water Soluble Nitrate N— auto-colour (7B1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	17	17	17	17	15	15	15	15	13	13	13	13
Minimum i	43	0.008	15	0.215	33	8.8	19	2.3	0.013	0.507	0.001	69
Maximum i	66	17	41	4.7	66	51	52	59	120	174	1140	2030
Median i	57	0.31	32	2.6	43	12	23	3.3	0.55	0.8	0.473	89
Mean i	56	2.0	31	2.7	43	14	25	6.95	10	14	92	236
MAD i	3	0.19	1	0.3	1.5	0.8	1.5	0.42	0.525	0.2	0.423	2.8
IQR i	6	0.616	3	0.49	3.3	1.4	3.1	0.78	1.8	0.507	1.3	5.2
Robust CV% i	8	147	7	14	6	8	10	18	245	47	210	4
Median f	57	0.185	32	2.5	43	12	22	3.3	0.393	0.724	0.359	89
Mean f	57	0.214	32	2.5	43	12	23	3.23	0.42	0.753	0.493	90
MAD f	2.75	0.03	0.9	0.26	1.5	0.7	0.8	0.34	0.343	0.152	0.322	1.2
IQR f	5.13	0.102	1.8	0.47	3	1.1	1.5	0.878	0.5	0.272	0.614	2.3
Robust CV% f	7	41	4	14	5	7	5	20	94	28	127	2
Outliers	1	4	3	4	2	2	1	1	2	3	3	4
Stragglers	0	3	0	0	0	0	1	0	2	0	0	1

2014-15: KCl Extractable Nitrate N — auto-colour (7C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	29	29	29	29	28	28	28	28	25	25	24	26
Minimum i	49	0.01	2.5	1.7	38	9.5	20	1.8	0.001	0.42	0.001	0.26
Maximum i	71	2.17	39	33	54	18	29	6.3	3	4.5	2.1	104
Median i	57	0.31	32	2.5	42	11	23	3.6	0.326	0.898	0.466	89
Mean i	57	0.687	31	3.6	44	12	23	3.6	0.568	1.2	0.64	84
MAD i	1.9	0.138	1.1	0.38	1.8	0.6	0.9	0.21	0.271	0.298	0.286	3.4
IQR i	4.6	0.76	3	0.75	3.4	0.95	1.35	0.42	0.62	0.804	0.546	6.5
Robust CV% i	6	182	7	22	6	6	4	9	141	66	87	5
Median f	57	0.271	32	2.5	42	11	23	3.6	0.242	0.79	0.39	91
Mean f	57	0.273	32	2.5	42	11	23	3.62	0.323	0.822	0.394	90
MAD f	2	0.071	1	0.345	1.7	0.6	0.8	0.19	0.178	0.17	0.245	2.5
IQR f	3.5	0.108	2.1	0.685	3.2	0.85	1	0.32	0.32	0.3	0.48	4.9
Robust CV% f	4	29	5	21	6	6	3	7	98	28	91	4
Outliers	3	9	4	1	3	2	1	5	3	3	4	4
Stragglers	0	2	1	0	1	0	3	0	1	3	0	1

2014-15: KCI Ext. Ammonium N — auto-colour (7C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	32	32	32	32	32	32	32	32	32	32	32	32
Minimum i	15	2.3	2.3	0.65	17	1.5	1.9	1.5	6.55	1.73	4	0.99
Maximum i	55	28	31	33	86	13	31	7.9	76	33	48	101
Median i	45	18	11	4.8	69	4.9	16	3.8	50	5.1	36	2.14
Mean i	41	17	12	5.85	68	5.38	17	4.01	48	6.42	36	6.86
MAD i	3.35	1.1	1.25	0.7	3.25	0.45	0.85	0.75	4.7	0.475	2.85	0.44
IQR i	6.25	2.25	2.58	1.14	6.63	1.03	1.73	1.61	8.63	0.913	4.93	1.87
Robust CV% i	10	9	17	18	7	16	8	31	13	13	10	65
Median f	45	17.9	11	4.7	70	4.78	16	3.6	51	5	36	1.98
Mean f	45	17.5	11	4.77	70	4.74	16	3.66	50	4.98	37	1.97
MAD f	2.1	0.75	0.95	0.5	3.35	0.305	0.55	0.4	4.2	0.36	2.5	0.215
IQR f	3.2	1	1.85	0.8	6.08	0.595	1.03	0.785	8	0.705	4.2	0.35
Robust CV% f	5	4	12	13	6	9	5	16	12	10	9	13
Outliers	5	9	5	5	4	6	7	2	3	9	4	9
Stragglers	2	1	3	2	0	2	1	3	0	0	0	3

2014-15: Total P – Pooled % oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	20	20	20	20	15	15	15	15	18	18	18	18
Minimum i	0.092	0.009	0.088	0.01	0.056	0.021	0.07	0.091	0.11	0.03	0.03	0.033
Maximum i	0.192	0.02	0.13	0.025	0.654	0.241	0.817	1.18	0.167	0.058	0.333	0.055
Median i	0.117	0.012	0.105	0.017	0.065	0.026	0.08	0.098	0.131	0.036	0.034	0.038
Mean i	0.119	0.013	0.107	0.017	0.105	0.041	0.131	0.174	0.134	0.037	0.052	0.039
MAD i	0.0125	0.001	0.007	0.002	0.005	0.003	0.005	0.004	0.014	0.001	0.002	0.002
IQR i	0.027	0.003	0.012	0.004	0.01	0.005	0.01	0.017	0.022	0.002	0.005	0.004
Robust CV% i	17	17	8	16	11	14	9	13	12	5	10	9
Median f	0.116	0.012	0.104	0.017	0.062	0.025	0.077	0.098	0.131	0.036	0.034	0.037
Mean f	0.115	0.012	0.106	0.017	0.064	0.025	0.078	0.097	0.134	0.036	0.034	0.038
MAD f	0.012	0.001	0.006	0.002	0.004	0.003	0.003	0.001	0.014	0.001	0.002	0.002
IQR f	0.026	0.002	0.011	0.003	0.006	0.005	0.007	0.004	0.022	0.002	0.003	0.004
Robust CV% f	16	15	8	13	8	15	7	3	12	3	5	9
Outliers	1	2	1	2	2	2	2	4	0	4	2	1
Stragglers	0	1	0	0	0	0	1	2	0	0	0	0

2014-15: Colwell Extractable P — pooled (9B1 + 9B2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	30	30	30	30	30	30	30	30	30	30	30	30
Minimum i	33	7	30	13	19	21	19	16	93	1.1	32	6.7
Maximum i	95	26	178	59	83	32	41	30	302	12	65	26
Median i	58	20	45	19	63	26	28	24	149	5.6	54	18
Mean i	59	19	53	20	62	26	29	24	157	6.2	53	18
MAD i	4.9	2.5	7.9	1.6	4.9	2	2.6	1.7	12	1.3	3.7	3.0
IQR i	9.2	5.8	14	4	9.2	4.1	5.7	3.1	25	2.9	7.1	5.7
Robust CV% i	12	22	23	16	11	12	15	9	12	37	10	24
Median f	58	20	45	19	63	26	28	24	148	5.6	54	18
Mean f	58	20	45	19	63	26	29	25	150	5.6	54	18
MAD f	4.8	2.4	7	1	3.5	2	2.3	1.5	8	1.1	3.3	2.9
IQR f	8.1	5	13	2.5	6.7	4.1	5.1	2.8	16	2.1	6.1	5.6
Robust CV% f	10	19	22	10	8	12	13	8	8	28	8	23
Outliers	2	1	3	4	4	0	2	4	4	5	2	1
Stragglers	0	0	0	3	1	0	0	0	1	1	0	0

2014-15: Olsen Extractable P — Pooled (9C1 + 9C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	20	20	20	20	21	21	21	21	19	19	19	19
Minimum i	9.9	6.3	15	5.8	13	0.57	5.6	6.1	30	0.458	5.3	4.7
Maximum i	17	15	24	100	73	18	24	11	73	2.9	24	9.0
Median i	13	8.9	19	7.7	20	11	7.3	9	45	1.9	17	6.9
Mean i	14	9.2	19	12	23	10	8.1	8.6	45	1.8	17	6.7
MAD i	2	0.53	2.1	0.73	2	1	1.3	1	3.5	0.54	1	0.73
IQR i	3.5	1.01	4.2	1.6	4.5	2.4	2	1.9	6.5	1.2	2.5	1.1
Robust CV% i	19	8	16	15	17	16	20	15	11	48	11	12
Median f	13	8.8	19	7.6	20	11	7.3	9	45	1.9	17	6.9
Mean f	14	8.8	19	7.5	20	10	7.3	8.6	45	1.8	17	6.7
MAD f	2	0.3	2.1	0.6	1.4	1	1.1	1	3.1	0.54	0.7	0.73
IQR f	3.5	0.6	4.2	1	2.8	2.1	1.7	1.9	6.1	1.2	1.4	1.1
Robust CV% f	19	5	16	10	10	14	18	15	10	48	6	12
Outliers	0	5	0	3	2	2	1	0	2	0	3	0
Stragglers	0	0	0	0	2	0	0	0	0	0	1	0

2014-15: Bray-1 Extractable P — pooled (9E1 + 9E2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	9	9	9	9	8	8	8	8	9	9	9	9
Minimum i	1.5	8.8	0.902	2.3	9.5	6.3	2.4	1.7	51	1.1	21	6.4
Maximum i	5.6	17	8.8	11	26	13	5.8	6.9	109	3.9	62	66
Median i	4.5	14	1.5	5.2	20	11	3.02	5.4	89	1.5	42	14
Mean i	4	13	3.1	5.4	19	11	3.35	5.0	85	1.84	43	20
MAD i	1	2.6	0.618	1.6	4.6	1.3	0.395	0.96	15	0.33	6.4	4.9
IQR i	1.9	3.5	2.5	3.1	11	2.7	0.768	1.7	27	1.1	12	7.5
Robust CV% i	32	19	122	44	38	18	19	23	23	54	20	39
Median f	4.5	14	1.4	5.2	20	11	2.94	5.4	89	1.4	42	9.7
Mean f	4	13	1.4	5.4	19	11	3	5.0	85	1.6	43	12
MAD f	1	2.6	0.21	1.6	4.6	1.3	0.28	0.96	15	0.255	6.4	3.3
IQR f	1.9	3.5	0.368	3.1	11	2.7	0.535	1.7	27	0.59	12	6
Robust CV% f	32	19	20	44	38	18	13	23	23	30	20	46
Outliers	0	0	2	0	0	0	1	0	0	1	0	1
Stragglers	0	0	1	0	0	0	0	0	0	0	0	1

2014-15: Acid Extractable P — pooled (9G1 + 9G2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	8	8	8	8	8	8	8	8	9	9	9	9
Minimum i	42	23	21	24	73	18	9.7	386	225	94	43	176
Maximum i	139	31	101	44	151	45	29	762	353	154	87	313
Median i	105	28	73	28	138	39	21	614	296	134	66	222
Mean i	98	27	67	29	128	37	21	589	293	129	64	228
MAD i	12	2.1	20	2.1	13	5.2	4.8	53	9	6	5.8	13
IQR i	22	2.7	31	3.2	31	10	7.9	97	15	8	12	24
Robust CV% i	16	7	32	9	16	19	27	12	4	4	13	8
Median f	108	28	73	27	140	39	21	614	296	135	66	222
Mean f	106	27	67	27	136	37	21	589	294	133	64	218
MAD f	12	2.1	20	2	10	5.2	4.8	53	7	5	5.8	12
IQR f	16	2.7	31	2.6	21	10	7.9	97	13	8	12	22
Robust CV% f	11	7	32	7	11	19	27	12	3	4	13	7
Outliers	1	0	0	1	1	0	0	0	2	1	0	1
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2014-15: Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	23	23	23	23	22	22	22	22	23	23	23	23
Minimum i	10	29	198	77	141	54	252	110	196	34	198	26
Maximum i	1210	109	404	172	623	113	344	156	418	75	506	139
Median i	937	55	284	135	492	74	296	130	268	51	234	41
Mean i	856	58	293	136	476	77	299	130	269	52	245	47
MAD i	97	3.9	15	2	27	7.6	14	5.5	20	4.3	21	5.5
IQR i	180	7	43	4	63	14	26	10	39	7.5	33	14
Robust CV% i	14	9	11	2	9	14	6	6	11	11	10	25
Median f	957	55	282	135	492	74	296	130	268	50	234	40
Mean f	951	55	285	134	486	76	299	129	265	51	234	41
MAD f	83	2	10	1.5	26	7.2	14	5	18	1.6	21	4.2
IQR f	140	4.2	21	3	50	13	26	8.8	33	5.3	32	9.8
Robust CV% f	11	6	5	2	7	13	6	5	9	8	10	18
Outliers	2	4	4	9	2	1	0	2	2	3	1	3
Stragglers	2	2	1	0	0	0	0	0	0	2	0	0

2014-15: Phosphorus buffer index – Unadj. (9I4a + 9I4b + 9I4c) L/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	12	12	12	12	8	8	8	8	9	9	9	9
Minimum i	299	24	186	72	393	58	245	105	24	45	83	32
Maximum i	1010	104	319	154	531	81	299	140	260	67	244	81
Median i	876	51	267	129	428	64	275	121	207	52	218	38
Mean i	807	55	270	126	442	65	278	121	199	52	207	46
MAD i	86	3.5	15	2	33	3.5	14	7.5	15	4	20	6
IQR i	200	5.5	30	4	56	6	25	13	21	8.4	27	15
Robust CV% i	17	8	8	2	10	7	7	8	8	12	9	30
Median f	911	51	270	129	428	63	275	121	214	52	222	37
Mean f	853	51	277	129	442	63	278	121	221	52	223	39
MAD f	88	0.7	16	2	33	2.8	14	7.5	11	4	14	1.3
IQR f	141	1.1	26	3.5	56	5.8	25	13	28	8.4	26	6.1
Robust CV% f	11	2	7	2	10	7	7	8	10	12	9	12
Outliers	1	3	1	2	0	1	0	0	1	0	1	1
Stragglers	0	3	0	0	0	0	0	0	0	0	0	1

2014-15: Phosphate Extractable S – Pooled (10B1 + 10B2 + 10B3) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	10	10	10	10	10	10	10	10	10	10	10	10
Minimum i	31	8.3	3.1	6.8	41	2.8	9.9	5.3	12	0.402	4160	19
Maximum i	110	32	53	26	68	12	27	9.4	52	39	8560	87
Median i	95	12	45	10	57	11	25	7.9	43	8.4	6700	28
Mean i	88	14	41	12	56	10	23	7.87	39	12	6680	38
MAD i	6.7	1	2	1.3	7	0.6	1.9	0.4	3.1	1.8	650	4.6
IQR i	15	2.3	2.8	2.2	13	1.8	3.4	0.745	6.3	2.8	1140	20
Robust CV% i	12	14	5	16	16	11	10	7	11	24	13	52
Median f	96	12	45	10	57	12	25	8	45	8.1	6700	28
Mean f	97	12	46	10	56	12	25	8.2	44	8.4	6680	26
MAD f	4	1	1.1	1	7	0	1.7	0.4	2.5	0.35	650	1
IQR f	7.6	1	2.5	1.5	13	0.6	2.8	0.78	4.7	0.5	1140	2.2
Robust CV% f	6	6	4	11	16	4	8	7	8	5	13	6
Outliers	1	1	3	1	0	2	2	1	2	3	0	3
Stragglers	1	0	0	0	0	1	0	0	0	2	0	1

2014-15: KCl₄₀ Extractable S (10D1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	21	21	21	21	21	22	22	22	20	20	20	20
Minimum i	40	8.5	15	6.1	30	8	9.6	5.7	3	3	328	13
Maximum i	86	29	81	27	51	17	11100	47	43	11	27000	106
Median i	45	10	46	8.4	39	9.3	12	6.5	29	6.8	6740	34
Mean i	49	12	46	9.5	39	9.9	516	8.9	28	6.9	7440	37
MAD i	4	0.9	4.1	0.93	2.8	0.695	0.5	0.45	1.7	0.61	470	3.8
IQR i	9.9	1.7	7	1.7	5.2	2	0.975	1.4	3.1	1.2	940	8
Robust CV% i	16	12	11	15	10	16	6	16	8	13	10	17
Median f	44	10	46	8.2	39	9.1	12	6.3	29	6.8	6740	34
Mean f	44	10	45	8.1	38	9.2	12	6.2	29	6.8	6670	36
MAD f	3	0.7	3.6	0.79	2.6	0.4	0.45	0.2	1.3	0.48	205	3.4
IQR f	4	1.5	5.8	1.5	5.3	0.77	0.85	0.45	2.6	1.05	418	7.4
Robust CV% f	7	11	9	14	10	6	5	5	7	11	5	16
Outliers	2	3	3	3	1	1	6	4	3	4	5	3
Stragglers	2	0	0	0	0	3	0	3	0	0	3	0

2014-15: DTPA Extractable Cu (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	28	28	28	28	28	28	28	28	28	28	28	28
Minimum i	0.65	0.992	0.391	1.3	0.79	1.3	0.93	0.774	0.571	1	0.046	0.184
Maximum i	31	22	46	41	2.3	2.1	2.5	1.4	2.3	2.1	2.5	1.2
Median i	0.851	1.25	0.525	1.6	0.979	1.5	1.4	0.98	1.4	1.8	0.806	0.909
Mean i	2.01	2.02	2.18	3.1	1.1	1.5	1.4	0.993	1.4	1.8	0.858	0.892
MAD i	0.071	0.07	0.049	0.1	0.046	0.075	0.075	0.065	0.125	0.115	0.068	0.09
IQR i	0.247	0.13	0.144	0.235	0.083	0.135	0.203	0.127	0.23	0.21	0.177	0.168
Robust CV% i	22	8	20	11	6	7	11	10	12	9	16	14
Median f	0.812	1.2	0.506	1.6	0.967	1.5	1.4	0.97	1.4	1.8	0.785	0.918
Mean f	0.81	1.2	0.507	1.6	0.97	1.5	1.4	0.977	1.3	1.8	0.792	0.918
MAD f	0.036	0.07	0.037	0.04	0.033	0.07	0.05	0.07	0.1	0.11	0.027	0.082
IQR f	0.07	0.11	0.067	0.075	0.066	0.13	0.085	0.125	0.173	0.19	0.068	0.167
Robust CV% f	6	7	10	3	5	6	5	10	9	8	6	13
Outliers	6	5	5	4	5	1	4	1	3	1	5	1
Stragglers	3	0	1	5	1	0	5	0	1	0	4	0

2014-15: DTPA Extractable Fe (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	28	28	28	28	28	28	28	28	27	27	27	27
Minimum i	26	2.3	19	3.3	75	5.7	7.2	1.4	23	3.6	115	0.5
Maximum i	136	214	80	64	419	30	258	21	179	19	340	21
Median i	36	22	48	38	263	25	14	15	41	10	202	3.1
Mean i	43	29	48	38	274	25	23	15	50	11	197	4.0
MAD i	2.8	2.6	3.7	5	17	1.9	1.5	1.6	12	1.8	35	0.75
IQR i	8.3	5	6.6	8.6	36	3.7	2.7	3.8	25	4.0	68	1.7
Robust CV% i	17	17	10	17	10	11	14	19	45	29	25	40
Median f	35	22	49	38	260	25	14	14	40	10	198	3.1
Mean f	35	22	48	39	260	25	14	15	44	11	191	3.4
MAD f	1.1	2.1	3.2	3.6	12	1.8	1.1	0.7	13	1.7	33	0.67
IQR f	2.5	5	5.5	8	21	3.6	2.2	1.3	21	3.6	68	1.4
Robust CV% f	5	17	8	16	6	11	11	7	39	27	26	32
Outliers	6	3	5	4	7	1	3	4	2	2	1	2
Stragglers	6	0	0	0	1	1	2	3	0	0	0	1

2014-15: DTPA Extractable Mn (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	27	27	27	27	27	27	27	27	27	27	27	27
Minimum i	0.88	1.4	0.68	1.7	80	23	62	17	274	23	42	18
Maximum i	125	258	44	30	670	34	318	29	670	44	70	99
Median i	88	182	18	16	124	29	260	20	433	28	53	23
Mean i	86	175	19	17	146	29	250	20	427	29	55	26
MAD i	4.4	12	2	2.1	12	1.9	18	1.4	45	1.6	4.1	1.8
IQR i	8.6	24	4.5	4.4	27	4	36	2.8	95	3.5	10	4.1
Robust CV% i	7	10	18	20	16	10	10	11	16	9	14	14
Median f	89	183	18	16	124	29	263	19	433	27	53	22
Mean f	89	182	18	17	126	29	260	19	421	27	54	22
MAD f	3.8	10	1.9	1.2	10	1.9	19	1	33	1.1	4	1.8
IQR f	7.3	19	3.4	2	24	4	35	1.9	89	2.5	9.8	3.2
Robust CV% f	6	8	14	9	14	10	10	7	15	7	14	11
Outliers	5	3	5	4	2	0	2	3	2	3	1	3
Stragglers	0	0	0	2	1	0	0	3	2	1	0	0

2014-15: DTPA Extractable Zn (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	28	28	28	28	28	28	28	28	28	28	28	28
Minimum i	2.4	0.305	1.3	0.35	2.1	0.3	2.6	0.298	1.9	0.117	7.5	0.249
Maximum i	4	0.673	1.9	0.697	5.3	2.7	22	1.1	5.6	1.8	22	1.1
Median i	2.8	0.449	1.7	0.477	3.7	2.3	3.8	0.409	2.8	1	16	0.348
Mean i	2.9	0.448	1.7	0.465	3.8	2.2	4.4	0.447	2.9	0.986	16	0.435
MAD i	0.205	0.039	0.15	0.048	0.21	0.15	0.305	0.043	0.215	0.045	1.1	0.039
IQR i	0.398	0.073	0.255	0.086	0.428	0.273	0.598	0.082	0.393	0.089	2.2	0.116
Robust CV% i	11	12	11	13	9	9	12	15	10	7	10	25
Median f	2.8	0.449	1.7	0.474	3.7	2.3	3.8	0.406	2.8	1	15	0.338
Mean f	2.8	0.445	1.7	0.456	3.7	2.3	3.8	0.399	2.8	0.999	15	0.334
MAD f	0.19	0.038	0.15	0.044	0.2	0.13	0.285	0.035	0.11	0.04	0.95	0.027
IQR f	0.35	0.07	0.255	0.088	0.35	0.26	0.503	0.08	0.21	0.075	1.7	0.04
Robust CV% f	9	12	11	14	7	8	10	15	6	6	8	9
Outliers	2	2	0	1	5	2	2	2	6	4	6	7
Stragglers	0	0	0	0	0	1	0	1	3	1	0	0

2014-15: Hot CaCl₂ Extractable B — pooled (12C1 + 12C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	21	21	21	21	20	20	20	20	20	20	20	20
Minimum i	0.311	0.425	2.1	1.2	0.266	1	0.2	0.556	0.791	0.061	0.037	0.526
Maximum i	1.2	1.3	3.8	2.6	0.846	2	0.715	0.994	2.5	1	6.7	1.3
Median i	0.609	0.606	2.9	2	0.368	1.4	0.461	0.805	1.5	0.14	2.8	0.735
Mean i	0.638	0.651	2.9	2	0.407	1.5	0.454	0.783	1.6	0.194	3.2	0.767
MAD i	0.109	0.086	0.37	0.12	0.06	0.28	0.065	0.086	0.155	0.04	0.855	0.124
IQR i	0.176	0.189	0.57	0.22	0.103	0.525	0.125	0.159	0.325	0.091	1.5	0.2
Robust CV% i	21	23	15	8	21	28	20	15	16	48	40	20
Median f	0.605	0.603	2.9	1.9	0.363	1.4	0.455	0.805	1.5	0.128	2.5	0.73
Mean f	0.609	0.619	2.88	2	0.372	1.5	0.436	0.783	1.5	0.131	2.8	0.738
MAD f	0.104	0.065	0.37	0.12	0.052	0.28	0.046	0.086	0.13	0.028	0.51	0.123
IQR f	0.178	0.121	0.57	0.18	0.1	0.525	0.079	0.159	0.225	0.05	1.1	0.202
Robust CV% f	22	15	15	7	20	28	13	15	11	29	32	20
Outliers	1	1	0	4	2	0	3	0	5	3	2	1
Stragglers	0	0	0	0	0	0	2	0	0	0	2	0

2014-15: Exchangeable Ca — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	19	19	19	19	19	19	19	19	18	18	18	18
Minimum i	5.87	11.8	12	19.3	3.81	9.6	3.98	27.7	5.83	6.79	3.78	9.32
Maximum i	8.2	23	176	36	16.3	23.4	47.5	90.3	16.3	23.4	27	49.8
Median i	7	12.8	38	21.5	5.68	12.7	4.4	37.1	7.12	8.64	9.28	15.5
Mean i	7.02	13.5	43.8	22.3	6.17	13	6.71	39.2	7.54	9.43	9.93	17
MAD i	0.2	0.5	1.9	1.1	0.24	0.6	0.14	1.7	0.18	0.225	0.355	0.35
IQR i	0.425	0.9	3.25	2	0.445	1.15	0.295	3.25	0.348	0.465	0.66	0.675
Robust CV% i	5	5	6	7	6	7	5	6	4	4	5	3
Median f	7	12.7	37.7	21.2	5.68	12.8	4.4	37.4	7.09	8.64	9.29	15.5
Mean f	6.96	12.7	37.8	21.4	5.65	12.8	4.36	37	7.06	8.72	9.34	15.6
MAD f	0.16	0.35	1.2	0.8	0.185	0.5	0.095	1	0.1	0.155	0.3	0.3
IQR f	0.24	0.7	2.48	1.3	0.37	0.95	0.115	1.93	0.19	0.415	0.555	0.4
Robust CV% f	3	4	5	5	5	6	2	4	2	4	4	2
Outliers	5	3	4	1	3	3	4	3	2	2	3	5
Stragglers	0	0	1	1	0	0	1	2	3	0	0	0

2014-15: Exchangeable Mg — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	19	19	19	19	19	19	19	19	18	18	18	18
Minimum i	0.491	7.59	2.01	9.2	0.037	0.248	0.102	0.655	2.01	1.06	1.53	5.97
Maximum i	0.816	11	5.21	12	1	12.9	20.7	22	4.04	2.36	43.8	23.8
Median i	0.6	8.79	2.62	10.6	0.8	5.8	2.2	19.4	2.26	1.2	18.8	9.88
Mean i	0.619	8.8	2.73	10.5	0.752	5.73	3.04	17	2.34	1.25	19.2	10.4
MAD i	0.02	0.21	0.15	0.5	0.047	0.2	0.1	0.8	0.08	0.06	0.95	0.47
IQR i	0.041	0.465	0.28	0.9	0.077	0.495	0.15	1.4	0.153	0.108	2.08	0.778
Robust CV% i	5	4	8	6	7	6	5	5	5	7	8	6
Median f	0.6	8.8	2.61	10.6	0.803	5.8	2.2	19.5	2.25	1.2	18.8	9.88
Mean f	0.606	8.79	2.59	10.5	0.803	5.84	2.21	19.6	2.24	1.19	19	9.89
MAD f	0.015	0.195	0.115	0.5	0.018	0.16	0.04	0.5	0.08	0.06	0.9	0.275
IQR f	0.029	0.35	0.218	0.9	0.036	0.315	0.06	0.9	0.16	0.1	1.75	0.62
Robust CV% f	4	3	6	6	3	4	2	3	5	6	7	5
Outliers	5	5	3	0	4	4	4	3	1	1	3	2
Stragglers	0	0	0	0	3	1	1	1	0	0	0	2

2014-15: Exchangeable Na — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	19	19	19	19	19	19	19	19	18	18	18	18
Minimum i	0.1	0.65	0.76	0.61	0.009	0.009	0.004	0.049	0.165	0.026	1.12	1.21
Maximum i	0.29	1.1	1.1	1.6	0.909	4.73	2.52	17.4	1.34	0.85	58.4	32.4
Median i	0.153	0.8	0.983	1.3	0.241	0.23	0.12	1.09	0.202	0.053	21.4	11.2
Mean i	0.17	0.82	0.973	1.29	0.298	0.518	0.339	1.95	0.289	0.134	22.1	11.8
MAD i	0.027	0.067	0.047	0.08	0.041	0.03	0.026	0.09	0.026	0.015	0.8	0.55
IQR i	0.052	0.106	0.081	0.17	0.087	0.055	0.046	0.19	0.083	0.093	1.83	1
Robust CV% i	25	10	6	10	27	18	28	13	31	131	6	7
Median f	0.152	0.796	0.985	1.3	0.23	0.229	0.118	1.08	0.2	0.044	21.4	11.2
Mean f	0.157	0.777	0.995	1.31	0.254	0.239	0.117	1.09	0.196	0.045	21.2	11.2
MAD f	0.022	0.038	0.045	0.07	0.019	0.026	0.015	0.08	0.017	0.007	0.55	0.5
IQR f	0.049	0.087	0.088	0.15	0.068	0.039	0.027	0.155	0.025	0.014	1.08	0.8
Robust CV% f	24	8	7	9	22	13	17	11	9	24	4	5
Outliers	2	2	2	2	3	3	4	3	4	5	5	2
Stragglers	0	1	0	0	1	0	1	0	1	1	1	0

2014-15: Exchangeable K — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	19	19	19	19	19	19	19	19	18	18	18	18
Minimum i	0.203	0.333	1	1.46	0.236	0.111	0.104	0.555	1.32	0.085	0.056	0.488
Maximum i	0.37	0.52	1.4	1.91	1.07	1.25	1.76	5.28	6.75	0.234	0.45	1.95
Median i	0.232	0.379	1.23	1.73	0.493	1.07	1.03	0.655	1.52	0.105	0.087	0.557
Mean i	0.245	0.388	1.22	1.7	0.506	1.02	0.966	0.92	1.81	0.118	0.111	0.638
MAD i	0.016	0.026	0.03	0.07	0.033	0.04	0.03	0.029	0.07	0.005	0.012	0.033
IQR i	0.034	0.055	0.065	0.115	0.052	0.08	0.047	0.069	0.128	0.01	0.021	0.06
Robust CV% i	11	11	4	5	8	6	3	8	6	7	18	8
Median f	0.229	0.377	1.24	1.75	0.493	1.07	1.03	0.654	1.51	0.102	0.084	0.546
Mean f	0.23	0.38	1.23	1.74	0.489	1.06	1.03	0.657	1.5	0.104	0.085	0.553
MAD f	0.012	0.024	0.025	0.05	0.025	0.04	0.02	0.022	0.055	0.003	0.011	0.035
IQR f	0.022	0.044	0.048	0.1	0.037	0.07	0.04	0.038	0.11	0.007	0.021	0.056
Robust CV% f	7	9	3	4	6	5	3	4	5	5	19	8
Outliers	3	1	5	1	2	2	4	2	2	5	2	2
Stragglers	0	0	0	2	0	0	0	1	0	1	0	0

2014-15: Exchangeable Ca — 1M NH₄OAc extract (15D3) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	26	26	26	26	23	23	23	23	20	20	20	20
Minimum i	5.9	9	21	16.4	4.52	10.1	3.78	18	5.96	7.09	6.53	12.1
Maximum i	9.3	14.8	225	53	7.95	17.5	5.96	51.8	8.1	9.22	9.9	17.8
Median i	6.8	13	37.6	20.6	5.27	12.5	4.32	35	6.9	8.58	8.76	15.1
Mean i	6.96	12.8	52.5	22	5.42	12.6	4.42	35.3	6.99	8.43	8.49	15.2
MAD i	0.285	0.4	3.95	1.4	0.22	0.6	0.16	2.2	0.225	0.295	0.43	0.45
IQR i	0.455	0.825	7.45	2.95	0.37	1.3	0.28	4.25	0.483	0.563	0.79	0.95
Robust CV% i	5	5	15	11	5	8	5	9	5	5	7	5
Median f	6.8	13	36.2	20.6	5.26	12.5	4.31	35	6.87	8.59	8.84	15
Mean f	6.87	13	36.3	20.5	5.23	12.5	4.27	34.8	6.92	8.57	8.84	15
MAD f	0.27	0.35	2.25	1.2	0.14	0.6	0.095	1.6	0.23	0.235	0.185	0.25
IQR f	0.46	0.65	4.13	2.35	0.255	0.9	0.2	2.5	0.4	0.475	0.4	0.475
Robust CV% f	5	4	8	8	4	5	3	5	4	4	3	2
Outliers	1	3	6	2	3	2	3	6	3	2	2	3
Stragglers	0	1	2	0	1	0	2	1	0	0	2	3

2014-15: Exchangeable Mg — 1M NH₄OAc extract (15D3) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	26	26	26	26	23	23	23	23	20	20	20	20
Minimum i	0.5	4.77	1.91	2.5	0.633	5.07	1.89	9.9	1.81	1.02	9.05	7.58
Maximum i	1.02	9.69	10.1	11.2	0.899	6.4	2.53	21	2.64	1.5	21.5	11.8
Median i	0.583	8.31	2.41	9.99	0.755	5.67	2.14	18.5	2.17	1.15	17.9	9.46
Mean i	0.601	8.12	3.04	9.19	0.76	5.69	2.15	17.5	2.21	1.18	17.5	9.53
MAD i	0.041	0.38	0.195	0.56	0.023	0.13	0.06	0.7	0.115	0.065	0.65	0.295
IQR i	0.075	0.623	0.443	1.29	0.047	0.255	0.105	1.8	0.25	0.145	1.23	0.545
Robust CV% i	10	6	14	10	5	3	4	7	9	9	5	4
Median f	0.581	8.48	2.4	10.2	0.754	5.63	2.14	18.7	2.16	1.14	18	9.46
Mean f	0.578	8.53	2.39	10.2	0.754	5.61	2.13	18.5	2.19	1.15	18	9.46
MAD f	0.036	0.26	0.09	0.425	0.022	0.125	0.045	0.6	0.08	0.06	0.6	0.195
IQR f	0.063	0.52	0.18	0.778	0.041	0.218	0.08	1	0.17	0.108	1.05	0.378
Robust CV% f	8	5	6	6	4	3	3	4	6	7	4	3
Outliers	2	4	6	4	3	3	3	5	2	2	5	4
Stragglers	0	2	1	2	0	2	0	1	1	0	0	2

2014-15: Exchangeable Na — 1M NH₄OAc extract (15D3) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	26	26	26	26	23	23	23	23	20	20	19	19
Minimum i	0.11	0.56	0.82	0.99	0.155	0.083	0.07	0.492	0.15	0.018	15.2	8.95
Maximum i	0.735	1.38	1.62	1.45	0.38	0.79	0.917	1.32	0.486	0.12	23.2	12
Median i	0.149	0.799	0.959	1.29	0.23	0.23	0.126	1.05	0.19	0.045	19.5	10.1
Mean i	0.174	0.82	1.02	1.27	0.237	0.25	0.161	1.02	0.207	0.055	19.2	10.2
MAD i	0.018	0.046	0.06	0.08	0.02	0.033	0.02	0.066	0.011	0.01	1.3	0.8
IQR i	0.044	0.081	0.141	0.155	0.049	0.051	0.044	0.123	0.027	0.025	2.1	1.34
Robust CV% i	22	8	11	9	16	16	26	9	10	40	8	10
Median f	0.145	0.794	0.95	1.29	0.23	0.225	0.117	1.05	0.186	0.043	19.5	10.1
Mean f	0.149	0.795	0.942	1.28	0.231	0.223	0.121	1.05	0.184	0.043	19.2	10.2
MAD f	0.015	0.038	0.05	0.08	0.017	0.015	0.013	0.055	0.006	0.004	1.3	0.8
IQR f	0.029	0.078	0.078	0.15	0.033	0.036	0.025	0.092	0.011	0.008	2.1	1.34
Robust CV% f	15	7	6	9	10	12	16	6	4	14	8	10
Outliers	1	3	3	1	4	2	1	3	5	5	0	0
Stragglers	1	1	1	0	1	2	2	0	1	2	0	0

2014-15: Exchangeable K — 1M NH₄OAc extract (15D3) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	27	27	27	27	24	24	24	24	21	21	21	21
Minimum i	0.159	0.27	0.948	0.693	0.404	0.92	0.898	0.33	1.27	0.078	0.04	0.465
Maximum i	0.433	0.666	1.82	2.59	0.571	1.4	1.25	0.835	1.69	0.12	0.13	0.693
Median i	0.22	0.37	1.2	1.63	0.463	1.02	0.973	0.595	1.46	0.1	0.068	0.532
Mean i	0.233	0.391	1.24	1.62	0.465	1.04	0.99	0.611	1.45	0.102	0.074	0.561
MAD i	0.01	0.017	0.08	0.07	0.012	0.048	0.022	0.045	0.04	0.008	0.012	0.027
IQR i	0.019	0.037	0.14	0.14	0.023	0.085	0.041	0.099	0.08	0.016	0.025	0.1
Robust CV% i	6	7	9	6	4	6	3	12	4	12	27	14
Median f	0.22	0.368	1.19	1.63	0.462	1.02	0.972	0.592	1.46	0.1	0.063	0.515
Mean f	0.22	0.368	1.19	1.63	0.461	1.02	0.972	0.604	1.46	0.102	0.066	0.519
MAD f	0.006	0.007	0.05	0.05	0.011	0.04	0.018	0.039	0.03	0.008	0.005	0.015
IQR f	0.011	0.013	0.11	0.088	0.021	0.085	0.034	0.072	0.05	0.016	0.009	0.025
Robust CV% f	4	3	7	4	3	6	3	9	3	12	11	4
Outliers	5	5	3	3	3	1	2	3	5	0	3	5
Stragglers	1	4	3	2	0	0	1	0	1	0	4	2

2014-15: Exchangeable Al — 1M KCl (15G1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	18	17	18	17	16	15	15	15	18	18	19	18
Minimum i	0.005	0.002	0.002	0.001	0.094	0.001	0.001	0.001	0.008	0.001	2.07	0.002
Maximum i	0.305	0.09	0.198	0.11	73	0.05	0.24	0.05	0.17	0.14	28.9	0.14
Median i	0.035	0.009	0.017	0.007	0.781	0.009	0.01	0.008	0.017	0.005	23.2	0.009
Mean i	0.057	0.014	0.041	0.017	5.22	0.014	0.033	0.014	0.028	0.017	20	0.028
MAD i	0.014	0.005	0.009	0.006	0.075	0.005	0.004	0.003	0.007	0.003	2	0.005
IQR i	0.042	0.011	0.017	0.019	0.152	0.01	0.007	0.006	0.018	0.006	7.85	0.014
Robust CV% i	88	87	74	205	14	82	50	57	78	91	25	112
Median f	0.031	0.008	0.015	0.005	0.799	0.008	0.01	0.008	0.016	0.005	24.3	0.007
Mean f	0.035	0.01	0.013	0.008	0.808	0.008	0.009	0.008	0.015	0.005	23.8	0.007
MAD f	0.011	0.005	0.006	0.004	0.037	0.003	0.005	0.001	0.005	0.002	0.95	0.003
IQR f	0.021	0.01	0.012	0.011	0.067	0.005	0.008	0.001	0.007	0.003	1.8	0.005
Robust CV% f	51	92	61	153	6	48	62	8	33	54	5	52
Outliers	2	1	4	2	4	3	3	3	2	2	4	4
Stragglers	1	0	0	1	2	0	0	2	2	2	3	1

2014-15: Extractable K — Bicarbonate (18A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	4	4	4	4	7	7	7	7	8	8	8	8
Minimum i	75	119	359	454	164	338	335	152	506	5	5	3.15
Maximum i	143	177	511	598	408	2140	709	942	962	118	364	642
Median i	90	143	399	504	209	432	411	228	573	59	48	343
Mean i	100	145	417	515	232	658	437	410	608	60	83	342
MAD i	9.6	15	36	38	11	38	33	6	21	26	22	14
IQR i	23	23	85	74	19	55	66	325	39	35	28	31
Robust CV% i	19	12	16	11	7	9	12	106	5	44	43	7
Median f	90	143	399	504	207	422	395	227	573	59	48	338
Mean f	100	145	417	515	203	411	392	228	566	60	43	339
MAD f	9.6	15	36	38	8.5	26	37	2	8.5	26	11	10
IQR f	23	23	85	74	14	43	63	4	29	35	24	16
Robust CV% f	19	12	16	11	5	8	12	1	4	44	37	4
Outliers	0	0	0	0	1	1	1	3	1	0	1	2
Stragglers	0	0	0	0	0	0	0	0	1	0	0	1

2014-15: Aluminium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	15	15	15	15	15	15	15	15	15	15	15	15
Minimum i	1340	456	219	703	1440	384	873	378	744	20	1040	104
Maximum i	2940	756	368	1110	1990	627	1110	774	1460	502	2950	418
Median i	1590	557	271	841	1720	524	948	686	1280	384	2560	355
Mean i	1690	578	281	854	1710	518	969	672	1230	371	2480	341
MAD i	50	37	43	27	70	24	36	31	20	32	60	34
IQR i	120	76	83	53	135	44	65	55	60	59	115	59
Robust CV% i	6	10	23	5	6	6	5	6	3	11	3	12
Median f	1590	550	271	841	1720	524	938	689	1290	384	2560	357
Mean f	1570	545	281	840	1730	520	948	693	1290	388	2560	357
MAD f	45	27	43	23	55	19	26	29	10	27	35	35
IQR f	95	50	83	44	113	38	64	45	20	51	75	56
Robust CV% f	4	7	23	4	5	5	5	5	1	10	2	12
Outliers	3	2	0	4	3	2	2	1	4	1	5	1
Stragglers	0	1	0	0	0	0	0	0	2	1	0	0

2014-15: Boron — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	14	14	14	14	14	14	14	14	14	14	14	14
Minimum i	0.2	0.2	0.362	0.278	0.04	0.76	0.17	0.38	0.39	0.068	0.04	0.204
Maximum i	0.91	0.97	5.7	3	1.3	2.5	1.1	1.7	1.4	0.667	0.978	0.979
Median i	0.366	0.434	3.4	2	0.18	1.3	0.301	0.848	0.847	0.146	0.24	0.62
Mean i	0.433	0.457	3.2	1.8	0.308	1.3	0.384	0.857	0.861	0.218	0.33	0.593
MAD i	0.053	0.175	0.99	0.44	0.091	0.17	0.057	0.091	0.105	0.043	0.153	0.088
IQR i	0.152	0.301	1.8	0.743	0.286	0.295	0.093	0.237	0.177	0.125	0.247	0.149
Robust CV% i	31	51	41	27	118	17	23	21	16	63	76	18
Median f	0.359	0.434	3.4	2	0.121	1.3	0.301	0.848	0.846	0.139	0.22	0.621
Mean f	0.365	0.457	3.2	1.9	0.154	1.2	0.285	0.827	0.824	0.128	0.28	0.625
MAD f	0.043	0.175	0.99	0.38	0.032	0.17	0.017	0.083	0.064	0.01	0.142	0.029
IQR f	0.063	0.301	1.8	0.7	0.104	0.31	0.056	0.18	0.133	0.022	0.191	0.042
Robust CV% f	13	51	41	26	64	18	14	16	12	12	64	5
Outliers	2	0	0	1	2	1	3	2	2	3	1	3
Stragglers	0	0	0	0	2	0	1	0	1	2	0	2

2014-15: Calcium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	1260	1690	9890	2760	907	1850	506	5130	1250	1330	1410	1570
Maximum i	1580	2930	31600	4700	1120	2640	968	11800	1540	1840	2010	3210
Median i	1400	2510	20700	4070	1010	2410	838	7480	1440	1700	1710	2940
Mean i	1400	2510	20800	4040	1000	2350	824	7800	1420	1670	1690	2860
MAD i	70	105	850	195	48	90	29	380	60	60	130	190
IQR i	135	205	2130	383	65	140	51	815	115	160	230	390
Robust CV% i	7	6	8	7	5	4	5	8	6	7	10	10
Median f	1400	2510	20600	4070	1010	2430	838	7460	1440	1750	1710	2980
Mean f	1400	2540	20700	4130	1000	2410	839	7500	1420	1730	1690	2950
MAD f	70	85	400	190	48	70	22	200	60	85	130	185
IQR f	135	178	500	355	65	90	36	320	115	120	230	353
Robust CV% f	7	5	2	6	5	3	3	3	6	5	10	9
Outliers	0	2	7	1	0	1	3	3	0	3	0	1
Stragglers	0	0	0	0	0	1	1	1	0	0	0	0

2014-15: Copper — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	1.2	1.4	0.637	2.5	0.529	1.4	1.3	1	2.1	3.3	0.59	0.98
Maximum i	1.9	2.5	1.4	3.9	1	2.8	2.7	2.2	2.7	4.6	1.9	2.3
Median i	1.5	1.7	0.89	3	0.965	2.3	2	1.7	2.5	4.3	1.5	2.1
Mean i	1.5	1.7	0.938	3	0.9	2.3	2.1	1.7	2.4	4.1	1.5	2
MAD i	0.14	0.18	0.132	0.315	0.075	0.15	0.09	0.12	0.14	0.16	0.19	0.07
IQR i	0.263	0.353	0.358	0.503	0.227	0.245	0.155	0.225	0.245	0.59	0.365	0.125
Robust CV% i	13	16	30	13	17	8	6	10	7	10	18	4
Median f	1.5	1.6	0.89	2.97	0.982	2.3	2	1.6	2.5	4.4	1.6	2.2
Mean f	1.5	1.7	0.938	3.04	0.966	2.3	2	1.7	2.4	4.3	1.5	2.2
MAD f	0.14	0.18	0.132	0.315	0.059	0.12	0.015	0.06	0.14	0.06	0.175	0.055
IQR f	0.263	0.325	0.358	0.503	0.096	0.218	0.035	0.125	0.245	0.133	0.34	0.083
Robust CV% f	13	15	30	13	7	7	1	6	7	2	16	3
Outliers	0	1	0	0	1	1	3	2	0	3	1	3
Stragglers	0	0	0	0	2	0	4	1	0	2	0	0

2014-15: Iron — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	46	143	69	193	288	1.32	53	99	73	143	238	74
Maximum i	107	297	138	382	445	209	92	134	208	309	516	111
Median i	60	180	90	234	377	161	66	121	124	194	381	96
Mean i	66	201	92	244	369	153	69	118	130	196	382	94
MAD i	6.5	15	11	17	20	6	3.4	10	13	14	38	6.8
IQR i	19	41	22	29	49	13	7.5	19	29	28	68	13
Robust CV% i	23	17	18	9	10	6	8	12	17	11	13	10
Median f	58	178	88	233	385	162	65	121	120	192	381	96
Mean f	59	177	89	234	381	162	66	118	121	188	382	94
MAD f	5.9	2.5	9	17	20	4	2.4	10	8	14	38	6.8
IQR f	8.9	4.5	19	29	37	6.8	4.3	19	15	27	68	13
Robust CV% f	11	2	16	9	7	3	5	12	9	10	13	10
Outliers	3	4	1	1	2	3	3	0	3	1	0	0
Stragglers	0	4	0	0	0	2	1	0	1	0	0	0

2014-15: Magnesium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	62	575	203	703	66	481	179	1300	198	142	943	522
Maximum i	80	1160	602	1460	108	841	994	3120	280	184	2490	1380
Median i	70	1030	496	1270	92	734	258	2330	260	172	2150	1190
Mean i	70	1000	474	1250	91	710	306	2280	258	165	2040	1110
MAD i	2.9	49	54	80	4.8	18	10	50	15	11	120	90
IQR i	5.3	97	81	135	7.7	31	23	100	27.5	29	325	205
Robust CV% i	6	7	12	8	6	3	6	3	8	12	11	13
Median f	70	1030	502	1280	92	734	258	2330	265	172	2220	1220
Mean f	70	1030	493	1290	92	730	259	2320	262	165	2190	1180
MAD f	2.9	50	50	60	3.7	8	8	40	14	11	95	60
IQR f	5.3	94	73	115	5.6	20	16	70	25	29	153	180
Robust CV% f	6	7	11	7	5	2	4	2	7	12	5	11
Outliers	0	1	1	1	1	4	3	4	1	0	1	2
Stragglers	0	0	0	0	1	2	0	0	0	0	2	0

2014-15: Manganese — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	83	161	31	28	115	96	342	98	478	140	33	127
Maximum i	144	423	81	161	180	151	511	170	766	332	71	285
Median i	100	283	47	94	145	122	432	130	665	293	62	245
Mean i	103	284	48	94	145	123	429	132	651	276	60	230
MAD i	4.9	12	7.5	11	8	6	29	11	47	29	3	35
IQR i	9.6	25	13	17	15	13	44	20	83	66	5.55	74
Robust CV% i	7	6	21	14	7	8	7	11	9	17	7	22
Median f	100	282	46	94	143	122	432	130	669	294	63	245
Mean f	99	279	46	94	142	123	429	132	664	285	63	230
MAD f	3.2	9	7	9.7	6	5	29	11	33	28	2.8	35
IQR f	6.2	21	12	15	11	10	44	20	72	50	5.8	74
Robust CV% f	5	6	19	12	6	6	7	11	8	13	7	22
Outliers	2	3	1	2	1	2	0	0	1	1	2	0
Stragglers	1	0	0	0	2	0	0	0	0	0	0	0

2014-15: Phosphorus - ICP — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	14	14	14	14	14	14	14	14	15	15	15	15
Minimum i	6.5	7.3	15	4.5	22	5.4	1	4	36	0.4	11	6.8
Maximum i	12	24	56	17	71	39	5.8	24	103	7.5	60	73
Median i	9.1	21	42	14	36	20	4.5	12	98	4.3	54	36
Mean i	9.4	20	42	13	37	21	4.4	13	92	4.2	51	39
MAD i	0.95	1.8	3.5	0.85	1.1	0.8	0.27	0.35	3.1	0.8	4	2.7
IQR i	1.5	3.6	6.6	1.5	2.5	2	0.468	0.875	7.8	1.6	7.2	9.1
Robust CV% i	12	13	12	8	5	7	8	5	6	28	10	19
Median f	9.1	21	42	14	36	20	4.5	12	100	4.28	55	35
Mean f	9.4	21	42	14	36	20	4.5	12	99	4.2	54	35
MAD f	0.95	1.2	2.3	0.5	1	0.15	0.205	0.1	2	0.67	3.5	0.65
IQR f	1.5	2.2	4.1	0.7	1.8	0.3	0.363	0.1	2.8	1.2	6.9	1.4
Robust CV% f	12	8	7	4	4	1	6	1	2	21	9	3
Outliers	0	1	2	4	3	2	2	4	3	2	1	4
Stragglers	0	0	1	1	0	4	0	3	1	0	0	3

2014-15: Potassium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	44	68	217	268	45	109	97	67	200	19	19	83
Maximum i	122	175	704	679	189	492	462	238	804	266	61	259
Median i	84	137	450	611	175	398	376	211	564	42	27	197
Mean i	86	136	449	584	163	383	350	198	550	55	30	199
MAD i	6.45	6	51	35	8	7	8	11	17	2.7	3.4	14
IQR i	14	11	80	67	24	12	15	21	30	5.9	7.4	30
Robust CV% i	12	6	13	8	10	2	3	7	4	10	21	11
Median f	83	137	450	620	182	398	377	213	565	42	27	197
Mean f	86	140	450	617	179	398	376	216	568	42	27	200
MAD f	3	5	17	32	5	5.5	7	8.5	10	2.6	3.2	13
IQR f	12	9	23	57	11	9.3	11	15	19	5.4	6.5	23
Robust CV% f	11	5	4	7	4	2	2	5	2	10	18	8
Outliers	2	3	3	2	3	5	3	3	4	2	1	3
Stragglers	1	0	3	0	1	0	0	0	0	0	0	0

2014-15: Sodium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	28	130	89	201	44	42	15	181	40	6.3	24	184
Maximum i	68	226	458	415	92	120	64	288	67	56	5100	4030
Median i	32	176	219	293	55	55	29	232	44	14	4710	2450
Mean i	36	174	227	292	58	59	31	231	48	18	4150	2310
MAD i	3.2	15	16	15	5.6	5.9	3.3	19	4	6	200	130
IQR i	6.1	26	30	32	11	12	7.6	35	8.8	14	780	405
Robust CV% i	14	11	10	8	14	15	20	11	15	71	12	12
Median f	32	176	219	293	54	54	28	232	43	9.7	4730	2460
Mean f	33	174	218	290	53	54	28	231	44	14	4800	2470
MAD f	3	15	7	14	4.6	4.6	3.1	19	3	3.4	40	80
IQR f	5.4	26	8	24	9.1	8.1	6	35	6.4	12	120	100
Robust CV% f	13	11	3	6	13	11	16	11	11	88	2	3
Outliers	2	0	5	2	2	1	3	0	3	1	3	5
Stragglers	0	0	2	0	0	0	0	0	0	1	3	1

2014-15: Sulphur — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	14	15	15	15	14	14	14	14	14	14	14	14
Minimum i	32	1.2	21	5.6	54	8.1	7.1	4.2	25	2	1800	11
Maximum i	88	21	188	95	72	52	28	35	48	20	9130	54
Median i	50	13	80	13	62	15	16	8.8	40	9.0	7300	31
Mean i	55	14	85	18	62	16	16	11	38	9.4	6610	28
MAD i	2.7	2.4	9.9	2	3.6	1.3	1.5	1.51	2.9	0.975	545	2.4
IQR i	14	4	19	4.3	6.1	2.3	3	2.5	9.0	1.9	1560	12
Robust CV% i	20	22	17	25	7	12	14	21	17	16	16	29
Median f	49	14	78	13	62	15	16	8.7	42	8.8	7360	32
Mean f	49	15	76	13	62	15	16	8.9	42	8.7	7390	32
MAD f	1.5	1.9	8.3	2	3.6	0.55	1.2	0.74	1.1	0.75	290	0.45
IQR f	2.9	4.5	12	3.1	6.1	1.1	2.1	1.4	3.4	1.5	543	0.975
Robust CV% f	4	24	12	18	7	5	10	12	6	13	5	2
Outliers	5	1	3	1	0	3	2	2	2	3	3	5
Stragglers	0	0	1	1	0	1	0	1	2	0	1	1

2014-15: Zinc — Mehlich3 (18F1) mg/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
	ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
No of results	16	16	16	16	15	15	15	15	15	15	15	15
Minimum i	2.6	0.56	2	0.56	3	2.8	2.8	0.629	3.09	2.1	17	0.459
Maximum i	6.5	2.5	3.8	2.6	5.9	4.9	5.9	2.5	4.9	3.5	26	0.994
Median i	4.2	0.87	3	0.871	4.2	3.9	4.8	1	4.2	2.9	22	0.674
Mean i	4.3	0.958	2.9	0.956	4.4	3.9	4.6	1.1	4.1	2.9	22	0.674
MAD i	0.22	0.041	0.345	0.081	0.48	0.3	0.26	0.081	0.35	0.35	1.5	0.086
IQR i	0.405	0.085	0.695	0.162	0.71	0.48	0.415	0.19	0.59	0.57	3.1	0.182
Robust CV% i	7	7	17	14	12	9	6	14	10	15	10	20
Median f	4.2	0.87	3	0.871	4.2	3.9	4.8	1	4.2	2.9	22	0.674
Mean f	4.2	0.857	2.9	0.866	4.4	3.9	4.8	1	4.1	2.9	22	0.674
MAD f	0.17	0.036	0.345	0.078	0.48	0.3	0.185	0.015	0.35	0.35	1.5	0.086
IQR f	0.3	0.046	0.695	0.146	0.71	0.48	0.398	0.025	0.59	0.57	3.1	0.182
Robust CV% f	5	4	17	12	12	9	6	2	10	15	10	20
Outliers	2	5	0	2	0	0	3	2	0	0	0	0
Stragglers	1	0	0	0	0	0	0	5	0	0	0	0

4. Comments on Measurement Performance

Based on final median concentrations across laboratories, three of 12 test soils were saline (>0.3 dS/m), with two of these strongly saline, namely ASS 1506-3 (8.16 dS/m) and ASS 1506-4 (3.78 dS/m). Robust %CV's were similarly low for these two soils to those for other samples as were the number of outliers and stragglers, which suggest that participants were able to cope with very high concentrations of dissolved salts. Chloride concentrations for these two soils were also very high (6130 mg/kg Cl and 5920 mg/kg Cl respectively) and again participants appeared to cope well with very high concentrations of analyte. It was clear that other soluble salts were contributing to the high EC for sample ASS 1506-3. Sulfate-S was extremely high for this soil (6700 mg/kg SO₄-S) compared to the other 11 soils which were all lower than 50 mg/kg SO₄-S. There was excellent agreement between median S concentrations by method 10 B1-3 pooled (phosphate extractable S; 6700 mg/kg SO₄-S) and method 10D1 (KCl₄₀ extractable S; 6740 mg/kg SO₄-S). Method 10D1 had the better precision of the two at this concentration level (5%CV cf 13%CV). The pH of sample ASS 1506-3 was also very strongly acidic (pHw of 3.2). It is very likely this soil was an actual acid sulfate soil; actual inferring that most if not all of reduced inorganic S [eg iron disulfide (pyrite)] has been oxidized to sulfate along with the release of acidity (sulfuric acid).

Eight of the 12 soils had pHw greater than 7.0, with four strongly alkaline (pHw>8.0). However only two of these four soils appeared to contain significant levels of inorganic C, namely ASS 1412-3 (5.5 %C) and ASS 1503-4 (0.4 %C). Precision estimates for total organic carbon (TOC) and total C for the first sample were both low (5%CV and 2%CV respectively), but not so for the second sample (13% and 2% respectively). These differences are likely due to the extra steps in the method for TOC and lower concentration of C in the second sample.

Table 4.1. The six best performed and worst performed soil chemical tests, based on percent robust coefficients of variation (%CV as grand medians) after the removal of “outliers” and “stragglers”, excluding pH soil tests which 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 Carbon (6B2)	3.0	Olsen P (9C1 + 9C2)	13
Exch. Ca (15A1)	4.0	DTPA Extr. Fe	13.0
Exch. Ca (15D3)	4.0	Water soluble. Cl - potentiometric (5A1 + 5A2)	16.5
Exch K (15D3)	4.0	Meh 3 Extr. B (18F1))	17
Total Organic Carbon (6B1 + 6B3)	4.5	Hot CaCl ₂ Extr. B (12C2)	17.5
Exch. Mg (15A1)	4.5	Bray P (pooled) (9E1 + 9E2)	21.5

Only two soils had pH_w < 5.5. As such, only these two soils could be quantified for exchangeable Al, and the mean robust CV was 5.5%.

Appendix 1: List of laboratories (including contact details) that participated in ASPAC's Soil ILPP in 2014-15, arranged by country

<i>Name (position)</i>	<i>Facility</i>	<i>Street and/or Postal Address</i>	<i>Country</i>	<i>Email</i>
Mr Alexander Bibin (Quality Coordinator)	SGS Australia – Alexandria	Unit 16, 33 Maddox Street, Alexandria, NSW 2015	Australia	Alexander.bibin@sgs.com
Mrs Stephanie Cameron (Laboratory Operations Manager)	East West EnviroAg	82 Plain St, Tamworth, NSW 2340	Australia	admin@ewenviroag.com.au
Mr George Croatto (Sample Reception)	Department of Primary Industries	Ernest Jones Dr, Macleod, VIC 3085	Australia	george.croatto@depi.vic.gov.au
Leanne Orsmond (Quality Manager)	SGS Australia - Cairns	2/58 Comport Street, Portsmith Cairns, QLD 4870	Australia	Leanne.Orsmond@sgs.com
Mr Graham Lancaster (Laboratory Manager)	Environmental Analysis Laboratory (EAL) Southern Cross University	University Store, Rifle range Rd, East Lismore, NSW 2480 PO Box 5125, East Lismore, NSW 2480	Australia	glancast@scu.edu.au
Mrs Fiona Milnes (Quality Manager)	SGS Pinkenba	59 Bancroft Rd, Pinkenba, Brisbane 4008	Australia	Fiona.milnes@sgs.com
Miss Tania Collins (Instrument Analyst)	Tweed Laboratory Centre, Tweed Shire Council	46 Enterprise Ave, Tweed Head South, NSW 2486	Australia	tcollins@tweed.nsw.gov.au
Ms Jenny McGuire (Manager – Inorganics)	ChemCentre Bentley	Cnr Manning Rd & South Entrance of Curtin University BENTLEY, WA 6102 PO Box 1250 Bentley Delivery Centre, WA 6983	Australia	JMcGuire@chemcentre.wa.gov.au
Ms Alba Charlson (Business Manager)	EML (Chem) Pty. Ltd.	417 Canterbury Rd, Surrey Hills, Victoria 3217 POBox 466, Canterbury, Victoria 3217	Australia	alba.charlson@emlchem.com.au
Ms Pina Caminiti (Quality Co-ordinator)	SGS Australia - Newburn	10 Reid Road, Newburn, WA 6105	Australia	pina.caminiti@sgs.com
Kellie Taylor (Lab Manager)	EP Analysis	26 Railway Tce, Cummins, SA 5631 PO Box 400, Cummins SA 5631	Australia	ep_analysis@yahoo.com.au
Mr Robert Lascelles (Chief Chemist)	SGS Food and Agriculture Laboratory	59 Bancroft Rd, Pinkenba, QLD 4008 PO Box 549, Pinkenba, QLD 4350	Australia	Robert.Lascelles@sgs.com
Ms Fiona Milnes (Reporting and Quality Manager)	SGS Australia - Pinkenba	59 Bancroft Rd, Pinkenba, QLD 4008	Australia	Fiona.milnes@sgs.com
Mr Paul Kennelly (Laboratory Manager)	Nutrient Advantage Laboratory Services	8 South Rd, Werribee, VIC 3030	Australia	Paul.Kennelly@incitecpivot.com.au
Mr 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 Craig Newman (Quality Manager)	AgVita Analytical	4 Thompson's Road, Latrobe, TAS 7307 PO Box 188, Devonport, TAS 7310	Australia	cnewman@agvita.com.au
Mr David Farrugia (Quality Assurance Manager)	Sydney Water Corporation Analytical Services - Monitoring Services Division	51 Hermitage Rd, West Ryde, NSW 2114	Australia	david.farrugia@sydneywater.com.au

Name (position)	Facility	Street and/or Postal Address	Country	Email
Ms Rabeya Akter (Senior Technical Officer)	Mark Wainwright Analytical Centre UNSW - The University of New South Wales	Room B36 Chemical Science Building (F10), Or Chemistry Store, LG25, F10 Via Gate #2, High Street, Kensington, NSW 2052	Australia	r.akter@unsw.edu.au
Mr Ted Mikhail (Managing Director)	SWEP Pty Ltd Analytical Laboratories	45-47 / 174 Bridge Rd, Keysborough, VIC 3173 PO Box 583, Noble Park, VIC 3174	Australia	services@swep.com.au
Mr Chris Gendle (Chemist)	CSBP	2 Altona St, Bibra Lake, WA 6163	Australia	chris.gendle@csbp.com.au
Ms Sue Foster (QA Officer)	NSW Dept of Primary Industries	1243 Brunxner Hwy, Wollongbar, NSW 2477	Australia	Sue.foster@dpi.nsw.gov.au
Kerri Taylor (QC Coordinator)	Australian Laboratory Services Brisbane Laboratory	32 Shand St, Stafford, QLD 4053	Australia	Kerri.Taylor@alsglobal.com
Mr Rob DeHayr (Manager)	Chemistry Centre - Dept of Science, IT, Innovation & The Arts	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@dsitia.qld.gov.au
Ms Nell Peisley (Laboratory Manager)	CSIRO Division of Plant Industry	Clunies Ross St, Acton, ACT 2601 GPO Box 1600, Canberra, ACT 2601	Australia	nell.peisley@csiro.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
Mr Matthew Dore (Laboratory Manager)	SESL Australia	16 Chilvers Rd, Thornleigh, NSW 2120 PO Box 357, Pennant Hills, NSW 1715	Australia	matthew@sesl.com.au
Mr Najib Ahmady (Lab Technical Officer)	Melbourne School of Land and Environment University of Melbourne	Water Street, Creswick, VIC 3363	Australia	nahmady@unimelb.edu.au
Mr Stephen Young (Laboratory Manager)	Soil Conservation Service, Land and Property Management Authority	709 Gundy Rd, Scone, NSW 2337 PO Box 283, Scone, NSW 2337	Australia	Stephen.Young@lpma.nsw.gov.au
Ms 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
Mr 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
Ms Sarah Houston (Laboratory Manager)	Nutri-Lab Pty Ltd	Lot 14 Troy Drive, Goondiwindi, QLD 4390 PO Box 782, Goondiwindi, QLD 4390	Australia	nutrilab@bigpond.net.au
Mr 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
Mr 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
Mr Mark Conyers (Soil Chemist)	Dept of Primary Industries, NSW Wagga Wagga	Pine Gully Rd, Wagga Wagga, NSW 2650	Australia	mark.conyers@dpi.nsw.gov.au
Ian Grant (Director)	Agricultural Chemistry P/Ltd	72 Cothill Rd, Silkstone, QLD 4304	Australia	ian@agriculturalchemistry.com.au

Name (position)	Facility	Street and/or Postal Address	Country	Email
Jack Milbank (General Manager)	Hortus Technical Services Pty Ltd	336 Goodwood Road, Bundaberg, QLD 4670 Locked Bag 3901, Bundaberg, QLD 4670	Australia	jack@hortus.net.au
Mr Peter Edmiston	Biotrack Pty Ltd	781 Mount Glorious Rd, Highvale, Queensland	Australia	pe@biotrack.com.au
Mr Stephen Ludvig (Advisor)	AgriLab	35 Wattlepark Avenue Moolap Victoria 3220	Australia	stephen.ludvig@agmin.com.au aglab@agmin.com.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 Orsmond SA 5064	Australia	Bruce.hawke@csiro.au
Dr Mohammad Rahman (Senior Research Fellow)	CERAR	University of South Australia, Mawson Lakes Campus, Building X, Mawson Lakes, SA 5095	Australia	mohammad.rahman@unisa.edu.au
Kristina Moulding (National Quality Manager)	ALS Scoresby	22 Dalmore Drive, Scoresby, Victoria 3179	Australia	kristina.moulding@alsglobal.com
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
Mr Ken Bates (Director)	Denilab	166 Napier St, Deniliquin, NSW 2710 PO Box 208, Deniliquin, NSW 2710	Australia	office@advancedsoilmapping.com.au
Ms Jennifer Waanders (Scientific Manager)	University of Queensland	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
Joel Andrew (Manager)	Precision SoilTech	Unit 1/110 Robinson Ave, Belmont, Western Australia 6104 PO Box 212, Belmont, Western Australia 6984	Australia	joel@precisionsoiltech.com.au
Mr Tawake Ducivaki (Senior Research Officer)	Fiji Agricultural Chemistry Laboratory, MASLR	Koronivia Research Station, Nausori PO Box 77, Nausori	FIJI	tducivaki@ymail.com
Prema Naidu (Laboratory Technician)	Sugar Research Institute of Fiji, Analytical Lab	Drasa, Lautoka PO Box 3560, Lautoka	FIJI	premn@srif.org.fj
Wendy Homewood (QA Officer Ag Division)	Hill Laboratories	1 Clyde St, Hamilton Private Bag 3205, Hamilton 3240	New Zealand	Roger.Hill@hill-labs.co.nz
Mr Brent Miller (TL Soil & Industrial Chemistry)	Eurofins NZ Laboratory Services, Auckland	35 O'Rorke Rd, Penrose, Auckland PO Box 12545, Penrose, Auckland 1642	New Zealand	Brent.miller@eurofins.co.nz
Mr Peter Boniface	Watercare Auckland	52 Aintree Oaks, Airport Oaks, Mangere, Auckland 2022 Box 107028	New Zealand	PBoniface@water.co.nz
Kendra Newick (Laboratory Analyst)	Veritec	49 Sala Street, Rotorua Private Bag 3020, Rotorua	New Zealand	kendra.newick@scionresearch.com
Mr Peter Lester (Managing Director)	Quantum Labs Ltd	4 Victoria St, Waipawa, Hawkes Bay 4210	New Zealand	dr.dirt@ihug.co.nz
Mr Gary Glenn (Quality Manager)	Analytical Research Laboratory (Ravensdown)	890 Waitangi Rd, Awatoto, Napier PO Box 989, Napier	New Zealand	Gary.Glenn@ravensdown.co.nz
Ms Ngaire 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

Name (position)	Facility	Street and/or Postal Address	Country	Email
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
Ms Hilda Sim	NARI Chemistry Laboratory	Boroko 111, National Capital District	Papua New Guinea	hilda.sim@nari.org.pg
Tata Telawika	Unitech Analytical Services Laboratory	Dept of Agriculture, Papua New Guinea University of Technology, Morobe Province, LAE 411	Papua New Guinea	ttelawika@ag.unitech.ac.pg
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
Le Thi Huong (Chief of ASS Laboratory)	Institute for Agricultural Environment (IAE/VAAS)	Chem Tu Liem, Hanoi	VIETNAM	pqha-nisf@hn.vnn.vn

Appendix 2: Summary examples of homogeneity data and statistical assessments for soil samples used in the ASPAC Soil ILPP in the 2014-15

Sample name		ASS 1412-1	ASS 1412-2	ASS 1412-3	ASS 1412-4	ASS 1503-1	ASS 1503-2	ASS 1503-3	ASS 1503-4	ASS 1506-1	ASS 1506-2	ASS 1506-3	ASS 1506-4
Test Method		Dumas N	Dumas N	Dumas N	Dumas N	Dumas N	Dumas N	Dumas N	Dumas N	Dumas N	Dumas N	Dumas N	Dumas N
Sample 1	replicate 1	0.347	0.1	0.529	0.075	0.355	0.081	0.103	0.039	0.301	0.074	0.084	0.045
	replicate 2	0.341	0.099	0.548	0.075	0.339	0.083	0.099	0.038	0.3	0.073	0.083	0.044
Sample 2	replicate 1	0.341	0.099	0.518	0.074	0.347	0.081	0.101	0.039	0.293	0.074	0.084	0.045
	replicate 2	0.353	0.101	0.521	0.075	0.338	0.08	0.098	0.04	0.3	0.073	0.082	0.044
Sample 3	replicate 1	0.357	0.099	0.528	0.074	0.346	0.085	0.101	0.037	0.299	0.073	0.083	0.046
	replicate 2	0.346	0.103	0.517	0.074	0.337	0.078	0.1	0.036	0.3	0.073	0.082	0.045
Sample 4	replicate 1	0.354	0.1	0.518	0.074	0.345	0.085	0.098	0.036	0.3	0.075	0.083	0.044
	replicate 2	0.394	0.098	0.537	0.074	0.341	0.084	0.096	0.036	0.307	0.073	0.082	0.044
Sample 5	replicate 1	0.385	0.1	0.525	0.075	0.342	0.086	0.097	0.036	0.297	0.073	0.082	0.045
	replicate 2	0.356	0.099	0.518	0.075	0.337	0.086	0.096	0.038	0.299	0.073	0.083	0.045
Sample 6	replicate 1	0.348	0.1	0.526	0.075	0.339	0.085	0.099	0.038	0.295	0.077	0.083	0.045
	replicate 2	0.35	0.102	0.527	0.074	0.339	0.085	0.097	0.038	0.308	0.072	0.083	0.045
Sample 7	replicate 1	0.347	0.1	0.531	0.076	0.341	0.08	0.095	0.037	0.302	0.073	0.083	0.045
	replicate 2	0.38	0.1	0.529	0.076	0.336	0.08	0.1	0.037	0.303	0.073	0.083	0.045
Sample 8	replicate 1	0.376	0.1	0.542	0.076	0.342	0.08	0.099	0.037	0.298	0.079	0.082	0.045
	replicate 2	0.381	0.102	0.53	0.075	0.337	0.083	0.098	0.037	0.303	0.073	0.083	0.045
Sample 9	replicate 1	0.391	0.1	0.535	0.074	0.34	0.081	0.097	0.038	0.3	0.075	0.083	0.045
	replicate 2	0.411	0.101	0.533	0.076	0.335	0.082	0.097	0.036	0.303	0.073	0.083	0.045
Sample 10	replicate 1	0.387	0.1	0.519	0.073	0.338	0.087	0.097	0.037	0.303	0.073	0.083	0.045
	replicate 2	0.384	0.103	0.524	0.072	0.335	0.081	0.098	0.036	0.299	0.073	0.083	0.044
Mean		0.366	0.1	0.528	0.075	0.34	0.083	0.098	0.037	0.3	0.074	0.083	0.045
Analytical Variance		0.0002	0.000002	0.0001	0.0000003	0.00003	0.000005	0.000003	0.000001	0.00002	0.000003	0.0000004	0.0000003
Sampling Variance		0.0003	0	0.00002	0.000001	0	0.000002	0.000001	0.000001	0	0	0	3E-08
SD of proficiency data		0.017	0.009	0.018	0.006	0.022	0.011	0.014	0.003	0.019	0.008	0.008	0.004
Status (H = Homogeneous)		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 6 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” 2014-15 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 Air-Dry Moisture Content (2A1) %											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
8888	2A1	3.31 ††	2.04 ††	1.3 ††	2.5 ††	2.29 ††	1.68	1.7 †	4.54	3.92	1.15	3.22	3.24
10156	2A1					0.623 ††	0.886 ††	0.818 ††	1.14 ††	3.98	1.34	3.15	3.52
10173	2A1	4.27	3.09	1.99	1.8 ††	2.2 ††	1.3 ††	1.8 †	3.8	4.1	1.6	3.3	4.3
10181	2A1	5.15	3.5	2.68	4.23	3.62	2.81	2.88	6.49	4.85	1.56	3.58	4.3
20136	2A1	5.43 ††	3.09	2.2	3.85	2.87	2.65	2.79	5.18	4.7	1.7	3.4	4.1
21043	2A1	4.73	3.37	2.53	4.21	1.73 ††	1.32 ††	1.61 ††	3.03 †	4.31	1.4	3.2	4.34
21088	2A1	4.48	3.18	2.36	3.6 †	3.66	1.86	1.83 †	3.59	1.27 ††	0.25 ††	1.27 ††	1.23 ††
21100	2A1	4.7	3.46	2.58	4.05	3.14	2.27	2.56	5.46	2.77 ††	0.911 ††	2.64	2.84 ††
21124	2A1	3.69 ††	2.62	1.87 †	2.95 ††	1.76 ††	1.21 ††	1.45 ††	3.64	4.26	1.42	2.94	3.98
21130	2A1	4.13 †	2.41 ††	1.52 ††	2.7 ††								
21138	2A1	4.37	3.03	2.05	3.72	2.99	1.91	2.2	5.07	4.04	1.23	2.78	3.73
21148	2A1	3.68 ††	2.44 †	1.63 ††	3.08 ††	2.78	1.95	2.11	4.56	3.91	0.98 ††	3.1	3.62
21182	2A1	4.54	3.42	2.48	4.07	3.4	2.5	2.9	5.6	4.09	1.57	2.77	3.77
21190	2A1	4.61	3.16	2.45	4.08								
21193	2A1	3.68 ††	2.51 †	1.64 ††	3 ††	3.44	2.57	2.82	5.86	4.45	1.33	2.68	3.79
21196	2A1	4.46	3.41	2.5	4.18	3.51	2.95	3.35	5.45	3.98	1.45	2.91	4.04
21230	2A1	5.2 †	3.5	2.7	4.5	3.35	2.55	2.76	6.22	4.32	1.43	3.71	4.27
50004	2A1	4.58	3.18	2.31	3.96	3.01	2.25	2.54	5.1	3.75	1.27	2.77	4.13
50005	2A1	4.68	3.15	2.26	4.16	3.19	2.61	3.11	5.32	4.05	1.39	2.99	4.01
50011	2A1	4.81	3.27	2.36	3.8	3.31	2.56	2.9	5	4.06	1.45	3.05	3.95
50012	2A1	4.7	3.22	2.35	3.99	3.07	2.27	2.63	5.32	4.39	1.37	2.82	3.69

50014	2A1	4.65	2.87	2.32	4.09	3.69	2.72	2.95	6.3	4.37	1.7	3.3	4.25
50017	2A1	5.22 †	3.43	2.49	4.14	3.39	2.6	2.85	5.96	4.36	1.54	2.95	4.22
50020	2A1	4.72	3.53	2.64	4.14	3.3	2.4	2.7	6.1	2.7 ††	1 †	2.8	2.7 ††
50023	2A1	4.04 †	3.21	2.34	3.42 †	3.49	2.59	2.9	6.26	4.32	1.46	3.28	4.36
50024	2A1	5.24 †	3.44	2.58	4.36	3.53	2.77	2.99	6.03	4.65	1.86 ††	3.72	4.32
50029	2A1	3.36 ††	2.48 †	1.68 ††	2.78 ††	2.6	2.23	2.27	3.89	3.54	1.24	2.31	3.35
50030	2A1	4.77	3.39	2.47	4.22	3.62	2.72	3.09	6.39	4.73	1.51	3.72	4.05
50031	2A1	4.7	3.2	2.3	4.1	3.6	2.8	3.3	7				
50032	2A1	4.47	3.08	2.16	3.83	2.81	2.12	2.33	5.23	3.86	1.32	2.61	3.95
50033	2A1	4.5	3.3	2.4	3.8	3.3	2.5	2.82	5.72	4.24	1.44	2.71	3.96
50037	2A1	3.63 ††	2.45 †	1.87 †	3.39 †	3.31	2.57	2.96	5.45	3.92	1.29	3.05	3.74
50038	2A1					4.49 ††	1.31 ††	3.87 ††	4.5	4.49	1.31	3.87	4.5
50039	2A1	4.64	3.18	2.26	4.12	2.84	2.13	2.31	5.03	3.32 †	0.86 ††	2.61	2.76 ††
50044	2A1									3 ††			3 †
52283	2A1	1.7 ††	1.31 ††	0.68 ††	1.03 ††	3	2.23	2.4	5.64				

Lab. Code #	Method Codes	Soil sample identification and values for Electrical conductivity 1:5 soil-water (3A1) dS/m air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10156	3A1	0.2	0.117	0.429	0.199	0.207	0.149	0.103	0.187	0.144	0.08	0.008 ††	0.004 ††
10173	3A1	0.203	0.156 ††	0.431	0.26 ††	0.192	0.137	0.094	0.165	0.13 ††	0.081	8.1	3.7
10181	3A1	0.183	0.119	0.418	0.223	0.206	0.16	0.097	0.187	0.155	0.096	9.06	4.2 ††
20136	3A1	0.207	0.125	0.475 ††	0.248	0.276 ††	0.189	0.106	0.21	0.166	0.096	8.85	4.19 ††
20204	3A1	0.201	0.132	0.428	0.237	0.21	0.16	0.098	0.18	0.157	0.097	8.2	3.88
21043	3A1	0.181	0.134	0.4	0.25	0.196	0.178	0.109	0.226 ††	0.151	0.093	7.74	3.6
21088	3A1	0.188	0.144 ††	0.409	0.279 ††	0.2	0.19	0.11 †	0.23 ††	0.157	0.096	7.99	3.65
21100	3A1	0.186	0.115	0.413	0.213	0.232	0.167	0.104	0.18	0.165	0.096	8.3	3.77
21124	3A1	0.196	0.126	0.444	0.293 ††	0.219	0.19	0.102	0.233 ††	0.155	0.091	8.73	3.95
21130	3A1	0.183	0.116	0.411	0.214								
21138	3A1	0.183	0.112	0.41	0.2	0.208	0.153	0.093	0.179	0.142	0.092	8.48	3.85
21148	3A1	0.182	0.163 ††	0.277 ††	0.57 ††	0.211	0.165	0.104	0.203	0.149	0.088	8.45	3.87
21182	3A1	0.201	0.117	0.441	0.231	0.22	0.17	0.1	0.19	0.183 ††	0.093	8.81	4
21190	3A1	0.174	0.122	1.22 ††	0.224	0.227	0.165	0.114 ††	0.213	0.16	0.09	8.48	3.82
21193	3A1	0.176	0.114	0.405	0.217	0.211	0.156	0.097	0.178	0.143	0.08	7.78	3.57
21196	3A1	0.21	0.13	0.39	0.25	0.25 ††	0.17	0.11 †	0.19	0.16	0.1	6.76 ††	3.34 ††
21229	3A1	0.181	0.126	0.417	0.22	0.203	0.167	0.108	0.204	0.156	0.09	8.03	3.76
21230	3A1	0.193	0.121	0.427	0.222	0.219	0.154	0.101	0.179	0.15	0.089	8.15	3.7
21232	3A1	0.17	0.12	0.43	0.23	0.21	0.17	0.1	0.19	0.22 ††	0.1	8.64	3.9
23187	3A1	0.198	0.125	0.422	0.241	0.224	0.171	0.103	0.232 ††	0.159	0.097	8.92	4.07 †
50004	3A1	0.176	0.108	0.394	0.203	0.195	0.143	0.088 ††	0.161	0.155	0.091	7.83	3.71
50005	3A1	0.19	0.121	0.416	0.216	0.172 ††	0.161	0.097	0.178	0.159	0.097	7.92	3.71
50011	3A1	0.179	0.125	0.398	0.225	0.199	0.15	0.098	0.19	0.152	0.08	7.8	3.7
50012	3A1	0.177	0.119	0.409	0.225	0.205	0.151	0.095	0.173	0.16	0.096	8.09	3.77
50013	3A1	0.221	0.136 †	0.457	0.242	0.22	0.202 ††	0.107	0.224 †	0.16	0.103	7.88	3.78

50014	3A1	0.17	0.11	0.4	0.22	0.21	0.16	0.1	0.2	0.15	0.09	8.79	4.1 †
50017	3A1	0.199	0.119	0.43	0.217	0.212	0.153	0.099	0.177	0.148	0.085	7.26	3.07 ††
50019	3A1	0.192	0.14 ††	0.43	0.22	0.216	0.177	0.1	0.207	0.153	0.093	8.59	3.95
50020	3A1	0.19	0.117	0.4	0.21	0.197	0.19	0.1	0.193	0.153	0.09	7.9	3.66
50021	3A1	0.195	0.123	0.451	0.229	0.211	0.156	0.101	0.176	0.143	0.087	8.16	3.8
50023	3A1	0.195	0.12	0.43	0.223	0.202	0.143	0.094	0.165	0.168	0.091	8.25	3.8
50024	3A1	0.195	0.117	0.43	0.226	0.227	0.167	0.1	0.185	0.145	0.087	0.008 ††	0.004 ††
50025	3A1	0.212	0.136 †	0.471 ††	0.256 ††	0.228	0.175	0.111 †	0.199	0.163	0.097	8.92	4.06 †
50027	3A1	0.163	0.122	0.398	0.212	0.163 ††	0.15	0.088 ††	0.19	0.139	0.084	7.78	3.78
50029	3A1	0.169	0.12	0.393	0.186 ††	0.172 ††	0.11 ††	0.086 ††	0.141 ††	0.134 ††	0.066 ††	9.87 ††	3.47 †
50030	3A1	0.198	0.116	0.413	0.211	0.218	0.156	0.1	0.182	0.152	0.089	8.07	3.85
50031	3A1	0.197	0.127	0.435	0.241	0.222	0.189	0.107	0.216				
50032	3A1	0.192	0.121	0.404	0.224	0.209	0.159	0.098	0.176	0.151	0.091	7.95	3.7
50033	3A1	0.163	0.1 ††	0.379	0.179 ††	0.176 ††	0.118 ††	0.088 ††	0.157	0.142	0.087	7.7	3.49 †
50037	3A1	0.196	0.116	0.412	0.213	0.201	0.174	0.097	0.178	0.158	0.087	8.08	3.8
50042	3A1	0.194	0.135 †	0.42	0.206	0.163 ††	0.106 ††	0.064 ††	0.124 ††	0.123 ††	0.061 ††	6.37 ††	3.13 ††
50044	3A1									0.16	0.1	8.2	3.7
50081	3A1	0.192	0.129	0.422	0.218	0.237	0.19	0.122 ††	0.209	0.154	0.104	8.22	3.85
52283	3A1	0.22	0.123	0.402	0.232	0.203	0.164	0.101	0.187	0.274 ††	0.095	6.64 ††	3.07 ††

Lab. Code #	Method Codes	Soil sample identification and values for Soil pH, 1:5 soil-water (4A1) air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10156	4A1	5.91	7.07	8.04	7.87 ††	5.31 †	7.68	6.44	8.37	6.12	7.94	3.22	7.53
10166	4A1	5.83	7.12	8.13	8.22	5.21	7.86	6.28	8.29	6.2	7.75	3.22	7.48
10173	4A1	5.91	6.88	8.31	8.11	5.23	7.52	6.32	8.29	6.13	7.63 ††	3.2	7.13
10181	4A1	5.95	7.43	8.26	8.35	5.28	7.98	6.59	8.61	6.24	8.22	3.18	7.14
20136	4A1	5.78	7.23	8.08	8.15	5.2	7.5	6.4	8.4	6	8	3.2	7.5
20204	4A1	5.75	7.05	8.15	8.03	5.16	7.82	6.27	8.43	5.91	7.76	3.21	7.26
21043	4A1	5.89	7.42	8.32	8.33	5.18	8.03	6.4	8.63	6.13	8.31	3.24	7.86
21088	4A1	5.91	7.27	8.19	8.14	5.2	7.9	6.4	8.5	6.1	8.01	3.19	7.54
21100	4A1	6.19 ††	7.06	8.22	8.27	5.2	7.98	6.39	8.6	6.09	7.99	3.14	6.44 ††
21124	4A1	5.88	7.33	8.16	8.17	5.1 †	7.8	6.2	8.3	6.02	8.1	3.16	7.68
21130	4A1	5.89	7.43	8.35	8.32								
21138	4A1	5.98	7.42	8.34	8.38	5.22	8	6.44	8.66	6.29	8.26	3.25	7.76
21148	4A1	5.97	7.34	8.24	8.29	5.22	7.89	6.31	8.67	6.22	8.05	3.22	6.38 ††
21182	4A1	5.79	7.27	8.23	8.24	5.2	8	6.5	8.5	5.96	7.94	3.19	6.92
21190	4A1	5.59 ††	7	8.08	8.15	5.19	7.68	6.5	8.6	6.03	8.03	3.1 †	7.37
21193	4A1	5.8	7.07	8.12	8.11	5.21		6.36	8.4	6.09	7.72 †	3.18	6.84
21196	4A1	5.71 †	7.04	8.07	8.01	5.15	7.74	6.28	8.43	5.95	7.98	3.17	7.68
21229	4A1	5.94	7.45	8.35	8.35	5.25	7.94	6.44	8.68	6.18	8.29	3.15	7.78
21230	4A1	5.9	7.3	8.3	8.3	5.14	7.9	6.36	8.51	6.17	8.29	3.19	7.7
21232	4A1	5.91	7.41	8.31	8.36	5.21	7.95	6.4	8.58	6.15	8.04	3.28	6.66 †
23187	4A1	5.86	7.25	8.29	8.36	5.23	8.03	6.48	8.31	6.12	8.09	3.28	7.47
50004	4A1	5.39 ††	6.9	8.2	8.04	5 ††	7.84	6.15	8.53	5.96	8.08	3.06 ††	8.02
50005	4A1	5.97	7.23	8.2	8.23	5.05 ††	7.62	6.25	8.48	6.15	7.84	3.27	6.96
50011	4A1	5.92	7.27	8.12	8.07	5.17	7.74	6.26	8.48	6.04	8.1	3.25	7.72
50012	4A1	5.94	7.28	8.22	8.23	5.12	7.69	6.41	8.33	6.19	8.13	3.17	7.42

50013	4A1	6.4 ††	7.5	8.1	8	5.09 †	7.93	6.33	8.54	6.15	8.2	3.2	7.67
50014	4A1	5.74	7.14	8.23	8.09	4.92 ††	7.44 †	6.23	8.31	5.97	8.02	3.15	7.52
50017	4A1	5.77	7.07	8.06	8.02	4.98 ††	7.76	6.06 ††	8.44	5.87 †	7.84	3.19	7.66
50019	4A1	6.26 ††	7.32	8.21	8.16	5.4 ††	7.7	6.6	8.2	5.98	8.13	3.33 ††	6.06 ††
50020	4A1	5.94	7.06	8.06	8.44	5.34 †	7.36 ††	6.66 ††	8.18	6.31	7.76	3.31 †	6.53 †
50021	4A1	5.72 †	7.37	8.27	8.27	5.28	8.08	6.5	8.76	6.23	8.39 †	3.19	7.82
50023	4A1	5.95	7.27	8.2	8.23	5.1 †	7.92	6.32	8.49	6.16	7.97	3.12	6.82
50024	4A1	5.91	7.22	8.19	8.17	5.21	7.87	6.27	8.38	6.14	8.16	3.13	7.44
50025	4A1	5.9	7.15	8.19	8.14	5.17	7.56	6.36	8.35	6.11	7.51 ††	3.24	6.86
50027	4A1	6.05	7.24	8.23	8.28	5.15	7.76	6.3	8.45	6.06	8	3.15	7.56
50029	4A1	5.9	7.28	8.35	8.28	5.13	7.73	6.24	8.44	5.85 ††	7.52 ††	3.01 ††	7.13
50030	4A1	6.04	7.42	8.36	8.38	5.2	8.07	6.46	8.64	6.21	8.28	3.21	7.66
50031	4A1	5.9	7.3	8.2	8.2	5.2	7.8	6.4	8.6				
50032	4A1	5.85	7.24	8.21	8.16	5.17	7.84	6.34	8.47	6.13	8.04	3.21	7.58
50033	4A1	5.7 †	6.8 ††	8.2	8.3	5.1 †	8.08	6.24	8.48	6.03	4.52 ††	3.22	6.97
50037	4A1	5.93	7.35	8.3	8.35	5.22	7.96	6.32	8.51	6.17	8.15	3.26	7.68
50038	4A1					6.07 ††	8.04	3.22 ††	7.76 ††	6.07	8.04	3.22	7.76
50042	4A1	6.48 ††	7.39	8.53 ††	8.58 ††	5.24	7.8	6.45	8.51	6.22	8.08	3.38 ††	7.32
50044	4A1									6.3	8	3.2	6.8
50081	4A1	6.07 †	7.12	8.15	8.42	5.1 †	6.87 ††	6.6	7.6 ††	7.04 ††	7.7 †	3.24	6.49 ††
52283	4A1	5.48 ††	6.34 ††	7.59 ††	7.88 ††	5.06 †	7.4 †	6.27	8.23	6.11	7.83	3.18	7.26

Lab. Code #	Method Codes	Soil sample identification and values for Soil pH, 1:5 0.01 M CaCl ₂ – direct (4B1, 4B3) air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10166	4B1	5.3	6.33	7.51 †	7.34	4.67	7.05	5.73	7.53	5.51	7.15	3.18	7.45
21043	4B1	5.38	6.52	7.79	7.59	4.66	7.4	5.71	7.89				
21138	4B3	5.44	6.57	7.82	7.62								
23187	4B1	5.4	6.51	7.77	7.57	4.67	7.26	5.78	7.45	5.46	7.32	3.23	7.4
50005	4B1	5.27	6.16 †	7.4 †	7.36	4.69	7.07	5.68	7.8	5.41	6.29	3.25	6.43 †
50014	4B1	5.4	6.49	7.79	7.51	4.69	6.55	5.85	7.42	5.54	6.67	3.04	6.46 †
50019	4B1	5.65 ††	6.45	7.52 †	7.36								
50021	4B1	5.44	6.48	7.78	7.56	4.76 ††	7.48	5.8	7.98	5.55	7.72	3.15	7.76
50024	4B1	5.38	6.42	7.71	7.39					5.46	7.21	3.1	7.29
50027	4B1	5.45	6.48	7.74	7.48	4.68	6.99	5.73	7.65	5.5	7.36	3.15	7.45
50030	4B1	5.42	6.61	7.82	7.54	4.63	7.27	5.69	7.77	5.48	7.41	3.17	7.59
50081	4B1	5.52	6.27 †	7.59	7.57	4.57 ††	6.47	6.05 ††	6.93	6.35 ††	6.72	3.2	6.47 †
52283	4B1	5.34	5.92 ††	6.93 ††	6.98 ††								
52317	4B3	5.21 ††	6.13 ††	7.31 ††	6.97 ††	4.48 ††	6.45	5.77	7.18	5.18 ††	6.06	3.04	5.81 ††

Lab. Code #	Method Codes	Soil sample identification and values for Soil pH, 1:5 0.01 M CaCl ₂ – indirect (4B2, 4B4) air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10181	4B2	5.43	6.51	7.75	7.64	4.72	7.25	5.93 ††	7.75	5.54	7.41	3.2	7.16
20204	4B2	5.31	6.44	7.67	7.49	4.7	7.27	5.75	7.84	5.39	7.2	3.18	7.15
21043	4B4									5.42	7.6	3.21	7.67
21088	4B2	5.38	6.49	7.76	7.57					5.42	7.4	3.19	7.37
21100	4B4	5.5	6.26 ††	7.3 ††	7.47	4.68	7.31	5.69	7.89	5.34	6.79	3.09 ††	6.4
21130	4B2	5.43	6.52	7.84	7.67								
21193	4B2	5.45	6.49	7.65	7.61	4.73		5.8	7.82	5.7	6.9	3.18	6.21
21196	4B2	5.31	6.39 †	7.65	7.49	4.69	7.16	5.72	7.73				
21229	4B2	5.47	6.61 †	7.87	7.66	4.75	7.38	5.79	7.94	5.51	7.61	3.14	7.66
21230	4B2	5.4	6.6 †	7.8	7.7					5.52	7.61	3.19	7.52
21232	4B2	5.49	6.66 ††	7.88	7.74	4.92 ††	7.61 †	5.95 ††	7.99	5.81 ††	7.56	3.26	6.73
23187	4B2	5.4	6.5	7.78	7.6	4.72	7.37	5.78	7.53	5.5	7.31	3.24	7.44
50005	4B2	5.24 ††	6.15 ††	7.42 ††	7.41	4.67	7.18	5.69	7.81	5.52	6.3 ††	3.21	6.59
50011	4B2	5.35	6.47	7.75	7.5	4.7	7.3	5.7	7.86	5.4	7.34	3.18	7.53
50012	4B4	5.37	6.42	7.7	7.59								
50013	4B2	5.3	6.3 ††	7.3 ††	7.1 ††	4.5 ††	6.46 ††	5.5 ††	7.15 ††	5.38	6.63	3.17	6.84
50017	4B2	5.43	6.53	7.72	7.65	4.66	7.42	5.66	7.98	5.47	7.37	3.18	7.48
50019	4B2	5.65 ††	6.45	7.52	7.36								
50020	4B4	5.56	6.19 ††	7.47 †	7.5	4.89 ††	6.81 ††	6.05 ††	7.52	5.68	7.06	3.32 ††	6.52
50023	4B2	5.45	6.53	7.8	7.63	4.72	7.53	5.78	7.92	5.51	7.25	3.11 †	6.82
50029	4B2	5.42	6.52	7.76	7.42	4.58 ††	6.88 †	5.61	7.53	5.23	6.61	3.02 ††	6.63
50037	4B2	5.43	6.53	7.62	7.68	4.71	7.36	5.7	7.84	5.5	7.46	3.21	7.54

Lab. Code #	Method Codes	Soil sample identification and values for Soluble Cl – pooled (5A1, 5A2, 5A3) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10173	5A1	16	14	168	18 ††	32	10	31 ††	6		0.01	5870	5940
20136	5A1	20	21	163	32	22	7.39	18	5	12	3.3	6020	6270
20204	5A1	24	25	173	37	26	16	22	13	20	9.8	6010	5660
21043	5A1	13	17	140	26	26	7.47	19	7.8	15	4.4	5860	5450
21088	5A1	20	22	173	32	30	12	21	6.5	186 ††	168 ††	6180	5900
21100	5A1	28 †	35 ††	165	48 ††	34	11	27	11	60 ††	6.3	6120	5820
21124	5A2									21	5	6680	6480
21130	5A1	19	20	166	27								
21148	5A1	13	11	140	34	17 ††	2	14	2	23	2.0	6270	5720
21182	5A1	20	29	178	33	29	15	23	7.4	22	5.6	6350	6330
21193	5A1	36 ††	19	175	26					28	12	5830	5540
21196	5A1	17	17	156	25	28	9	21	6	18	5.3	5940	5730
21229	5A2	20	18	164	28	25	8	19	8.7	16	5.3	6820 ††	6490
21230	5A1	15	15	141	24	25	11	19	7.6	19	11	5890	5620
21232	5A1	16	23	137	31	28	14	23	15 †	22	13	5150 ††	5300
23187	5A1	19	20	158	30								
50004	5A1	17	18	153	29	27	7.9	21	4.4	15	4.11	6260	5970
50005	5A1	32 ††	21	102 ††	16 ††	27	25 ††	22	6.9	29	7.8	6160	6490
50011	5A1	16	16	153	29	25	7	20	8	17	7	6100	5200
50012	5A2	16	17	163	28	21	9.6	18	5.3	15	4.6	6130	6000
50013	5A1	22	24	125	30	33	13	25	12	23	5.8	6490	6270
50014	5A1	19	19	155	29	31	25 ††	27	17 ††	23	16	6340	5950
50017	5A1	13	23	165	38	22	9.6	29	5.4	19	12	5530 †	4990
50019	5A1	40 ††	40 ††	135	50 ††								
50020	5A2	10 †	33 ††	99 ††	36	47 ††	39 ††	55 ††	32 ††	57 ††	30 ††	6310	6150
50023	5A1	21	20	155	29	21	10	19	8	16	6	5950	5650

50025	5A1	17	17.7	119 †	23	21	14	15	9.1	14	8.1	7930 ††	7610 ††
50027	5A1	23	25	147	15 ††	23	11	22	11	5.7 †	1.2	5970	5720
50029	5A2	18	30 †	141	43 ††	34	27 ††	60 ††	39 ††	44 ††	42 ††	4130 ††	3940 ††
50031	5A1	20	20	160	30	25	10	21	6				
50032	5A1	19	20	154	26	28	8.1	23	10	31	12	6150	5480
50037	5A2	21	19	165	28	26	9.4	23	5.31	15	4.6	6450	6220
50042	5A1					157 ††	182 ††	221 ††	242 ††	302 ††	236 ††	7750 ††	12400 ††
50044	5A1									22		6100	6300
50081	5A1	21	28	191 †	43 ††	28	21 †	28	18 ††	21.3	10.6	7780 ††	7870 ††
52283	5A1	33 ††	48 ††	165	32	80 ††	15	27	24 ††				

Lab Code #	Method Codes	Soil sample identification and values for Organic Carbon - W&B (6A1) % oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	6A1	3.55	1.19	9.99 ††	0.661	4.43	0.7	1.05	0.465	3.26	0.442	1.24	0.165
21043	6A1					4.48	0.72	0.99	0.423	3.6 ††	0.73 ††	1.25	0.301 ††
21100	6A1	3.03	1.05	4.58	0.77	4.41	0.853	1.13	0.633 ††	2.87 †	0.492	1.35	0.172
21138	6A1	3.4	0.976	4.82	0.608	4.19	0.643	0.904	0.378	3.08	0.389	1.22	0.164
21148	6A1	3.36	1.25	5.55	0.532	4.49	0.751	0.988	0.444	3.06	0.453	1.14	0.14
21182	6A1	4	1.26	5.15	0.72	4.7	0.81	1.1	0.89 ††	3.56 †	0.48	1.58 ††	0.26 †
21190	6A1	4.54 ††	6.38 ††	1.5 ††	0.98	5.45 ††	0.982	1.44 ††	0.846 ††	3.33	0.25 †	1.19	0.17
21193	6A1	3.22	1.04	5.13	0.63					3.2	0.5	1.3	0.3 ††
21196	6A1	3.6	1	5.1	0.667	4.64	0.748	1.06	0.474	3.12	0.381	1.14	0.158
21229	6A1	3.69	0.972	4.87	0.589	4.23	0.64	0.881	0.379	3.17	0.344	1.24	0.149
21232	6A1	3.67	1.24	5.3	0.81					3.3	0.42	1.29	0.1
50005	6A1	4.3 ††	1.15	5.87 †	0.653	4.99	0.825	1.01	0.439	3.61 ††	0.408	1.27	0.199
50011	6A1	3.12	1.03	4.52	0.6	4.3	0.65	0.98	0.43	3.2	0.39	1.31	0.17
50012	6A1	3.5	0.791	5.24	0.809	4.78	0.812	1.06	0.531	3.2	0.371	1.24	0.172

50014	6A1	3.5	0.941	5.39	0.746	4.19	0.73	1.05	0.46	3.4	0.482	1.28	0.193
50020	6A1	3.75	1.44 ††	5.09	0.84	4.27	0.712	1.05	0.487	3.76 ††	0.413	1.41	0.194
50025	6A1	3.49	0.981	4.88	0.84	3.96	0.62	0.901	0.426	3.3	0.439	1.21	0.114
50027	6A1	3.63	1.28	4.99	0.82	4.51	0.86	1.13	0.57	2.78 ††	0.75 ††	1.42	0.48 ††
50029	6A1	3.25	1.05	4.69	0.69	4.26	0.97	0.97	0.39	3.24	0.66 ††	1.39	0.29 ††
50030	6A1	3.45	0.91	4.64	0.56	4.18	0.7	0.96	0.41	3.25	0.37	1.3	0.18
50031	6A1	3.56	1.06	5.01	0.604	4.56	0.73	0.919	0.43				
50032	6A1	3.35	0.94	4.64	0.55	4.33	0.72	0.945	0.386	3.26	0.34	1.28	0.11
50038	6A1					3.16 ††	0.06 ††	1.47 ††	0.48	3.16	0.06 ††	1.47 †	0.48 ††
50044	6A1									2.5 ††	0.3	0.9 ††	
50081	6A1	3.7	1.2	5.2	0.928	4.83	0.636	0.873	0.356	3.08	0.37	1.61 ††	0.207

Lab. Code #	Method Codes	Soil sample identification and values for Total Organic C - Pooled (6B1, 6B3) %											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10060	6B3									4.06	0.54 †	1.5 ††	0.31 ††
10156	6B3	4.1	1.22	9.66 ††	0.746								
20136	6B3	4.7	1.2	6	0.7	5.4 ††	0.81	1.1	0.51	4.18 ††	0.39	1.48 ††	0.18
20204	6B3	3.7	1.2	10.4 ††	0.691	4.85	0.869	1.14	0.561	3.33 ††	0.447	1.28	0.166
21043	6B3	2.99 ††	0.986 ††	5.48	0.675								
21088	6B3	4.42	1.2	5.63	0.72	4.89	0.848	1.11	0.441	3.42 ††	0.46	1.51 ††	0.23
21100	6B3	4.34	1.3	7.69 ††	0.722	5.06	0.866	1.16	0.654	3.83	0.428	1.3	0.157
21182	6B3	3.4 ††	1.3	4.3 ††	0.65	4.1 ††	0.75	1 ††	0.48	3.9	0.344 †	1.28	0.133
21230	6B3	4.1	1.2	5.4	0.7	4.89	0.817	1.15	20 ††	3.88	0.424	1.34	0.143
21232	6B3					4.37 ††	0.72	0.96 ††	0.44				
50005	6B3	4.27	1.27	5.9	0.759	4.95	0.86	1.13	0.502	3.75	0.489	1.31	0.224
50011	6B3	3.95	1.17	6.2	0.7	4.82	0.84	1.1	0.55	3.75	0.47	1.34	0.19
50012	6B1	3.93	1.3	5.55	0.82 ††								
50013	6B3	3.54	1.3	5.1	0.715	3.42 ††	0.996 ††	1.61 ††	1.06 ††	3.72	0.69 ††	1.45 ††	0.504 ††
50014	6B1	4.04	1.17	5.51	0.733	4.83	0.89	1.24 ††	0.63	3.79	0.465	1.61 ††	0.219
50020	6B3					4.97	0.833	1.14	0.542	3.72	0.444	1.32	0.209
50023	6B3	4.15	1.23	5.75	0.72	5.08	0.8	1.11	0.663	3.96	0.407	1.36	0.143
50030	6B1	3.99	1.21	5.44	0.69	4.65	0.76	1.01 ††	0.48	3.64	0.47	1.48 ††	0.25
50032	6B3	4.32	1.25	5.98	0.73	5	0.81	1.11	0.45	3.88	0.4	1.3	0.136
50037	6B3	4.13	1.25	8.3 ††	0.757	4.85	0.712	1.13	0.526	3.81	0.42	1.33	0.171
50039	6B3	3.91	1.28	5.85	0.8	5	0.96	1.26 ††	0.6	3.78	0.48	1.33	0.18
50043	6B3	4.04	1.3	5.71	0.805	4.87	0.908	1.2	0.77 †	3.82	0.508	1.37	0.201

Lab. Code #	Method Codes	Soil sample identification and values for Total C - Dumas (6B2) % oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	6B2	3.57	1.02 ††	10	0.686	4.74	0.887	1.16	0.892	3.72	0.433	1.27 †	0.155
8888	6B2	3.72	1.32	10.5	0.841	4.96	0.931	1.26 †	0.96	3.9	0.499	1.38	0.176
10156	6B2					4.73	0.772 †	1.05 ††	1.2 ††	3.79	0.434	1.31	0.138
10173	6B2	3.96	1.17	6.18 ††	0.67 †	5.01	0.82	1.13	0.62 ††	4.08	0.46	1.31	0.16
10181	6B2	4.08	1.36	7.46 ††	0.83	4.95	0.917	1.23 †	0.965	3.96	0.522	1.4	0.249 ††
20204	6B2	3.74	1.21	10.7	0.72	4.9	0.874	1.16	0.893	3.76	0.47	1.35	0.173
21043	6B2	3.84	1.32	7.64 ††	0.77	4.91	0.88	1.18	0.91	3.82	0.471	1.37	0.186
21100	6B2	4.41	1.36	11.1	0.773	5.07	0.884	1.18	0.968	3.92	0.492	1.37	0.172
21138	6B2	3.95	1.18	9.98	0.734	4.74	0.864	1.13	0.901	2.97 ††	0.528 †	1.35	0.256 ††
21182	6B2	4.3	1.3	9.3 ††	0.75	5.1	0.88	1.18	0.87	4.36 ††	0.422	1.42 †	0.145
21230	6B2	4.1	1.3	11	0.77	4.89	0.857	1.15	20.4 ††	3.89	0.454	1.35	0.161
21232	6B2	3.92	1.08 †	10.8	0.74	4.42 ††	0.89	1.19	0.84	3.64	0.44	1.32	0.18
50004	6B2	3.81	1.2	10.6	0.714	4.65 ††	0.826	1.16	0.064 ††	3.67	0.461	1.37	0.206
50005	6B2	4.28	1.33	8.82 ††	0.789	4.97	0.883	1.16	0.885	3.77	0.494	1.31	0.226 †
50011	6B2	4.08	1.27	10.2	0.76	4.93	0.86	1.15	0.88	4.1	0.49	1.35	0.19
50012	6B2	4.13	1.22	10.6	0.726	4.98	0.834	1.13	0.92	3.9	0.457	1.33	0.173
50014	6B2	3.97	1.26	10.9	0.753	5.07	0.88	1.14	0.9	4.06	0.444	1.34	0.161
50017	6B2	4.27	1.24	10.6	0.785	5.03	0.878	1.14	0.897	3.93	0.489	1.33	0.169
50019	6B2	4.22	1.62 ††	1.09 ††	0.877 ††	5.09	1.13 ††	1.3 ††	1.2 ††				
50020	6B2					5.26 †	0.98 †	1.29 ††	1 †	3.65	0.481	1.36	0.224 †
50021	6B2	3.83	1.15	10.6	0.668 †	4.94	0.8 †	1.1	0.822 †	3.77	0.461	1.23 ††	0.143
50024	6B2	4.27	1.23	10.7	0.741	4.79	0.84	1.17	0.89	3.77	0.465	1.3	0.168
50029	6B2	4.13	1.23	10.8	0.77	5.71 ††	0.692 ††	0.92 ††	0.708 ††	3.35 ††	0.372 ††	1.19 ††	0.145
50030	6B2	4.34	1.26	8.73 ††	0.78	5.05	0.87	1.2	0.9	3.94	0.46	1.39	0.17
50032	6B2	4.36	1.36	10.8	0.87 †	5.08	0.833	1.14	0.907	4.07	0.445	1.33	0.139

50033	6B2	3.95	1.27	10.5	0.77	4.98	0.843	1.19	0.95	3.89	0.46	1.32	0.16
50039	6B2	3.82	1.3	10.8	0.81	5	0.96 †	1.26 †	0.99 †	3.78	0.48	1.33	0.2
50043	6B2	4.04	1.29	10.5	0.801	4.89	0.946 †	1.21	0.99 †	3.86	0.513	1.37	0.224 †
52283	6B2	3.5	1.18	9.88 †	0.756	4.35 ††	0.875	1.17	0.878				

Lab. Code #	Method Codes	Soil sample identification and values for Total N – Pooled (7A1, 7A2) %											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
21088	7A2									0.289	0.066	0.083	0.031
21138	7A2	0.373	0.083	0.515	0.062	0.345	0.079	0.084	0.035	0.249	0.058	0.065	0.024
21148	7A1	0.346	0.087	0.452	0.067	0.323	0.083	0.089	0.037	0.268	0.060	0.072	0.032
21190	7A1	0.382	0.132 ††	0.508	0.085 †	0.32	0.091	0.097	0.04	0.27	0.08	0.08	0.03
21193	7A1	0.35	0.11 ††	0.43 ††	0.08					0.297	0.068	0.082	0.033
21196	7A1	0.367	0.067 ††	0.492	0.048 ††					0.299	0.061	0.080	0.035
21229	7A2	0.359	0.084	0.491	0.069	0.311	0.084	0.097	0.037	0.272	0.073	0.08	0.034
21232	7A1	0.39	0.09	0.56	0.08	0.34	0.09	0.11	0.05 †	0.28	0.07	0.09	0.04
23187	7A2	0.374	0.086	0.506	0.069	0.305	0.08	0.081	0.069 ††	0.267	0.059	0.071	0.02
50003	7A1					0.369	0.09	0.12	0.075 ††	0.307	0.081	0.093	0.033
50004	7A1	0.412	0.094	0.56	0.081	0.341	0.072	0.081	0.924 ††	0.284	0.077	0.086	0.063 ††
50012	7A2	0.373	0.091	0.551	0.069					0.303	0.060	0.079	0.022
50014	7A2	0.376	0.092	0.506	0.07	0.333	0.078	0.094	0.035	0.301	0.058	0.071	0.025
50031	7A2					0.35	0.093	0.103	0.043				
50032	7A1	0.36	0.091	0.484	0.072	0.352	0.099	0.099	0.036	0.248	0.065	0.07	0.035
50038	7A1					0.29	0.06	0.07	0.02 ††	0.29	0.06	0.07	0.02
50044	7A1									0.34	0.089 ††	0.11	0.06 ††

Lab. Code #	Method Codes	Soil sample identification and values for Total N – Dumas (7A5) % oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	7A5	0.365	0.073	0.557	0.065	0.329	0.09	0.101	0.048	0.303	0.07	0.09	0.037
8888	7A5	0.373	0.104	0.555	0.1 ††	0.341	0.089	0.102	0.045	0.314	0.066	0.087	0.04
10060	7A5									0.282	0.167 ††	0.158 ††	0.067 ††
10156	7A5	0.392	0.09	0.521	0.069	0.322	0.074	0.084	0.107 ††	0.287	0.058	0.076	0.032
10173	7A5	0.381	0.086	0.546	0.066	0.38	0.11 ††	0.14 ††	0.07 ††	0.29	0.03 ††	0.05 †	0.02
10181	7A5	0.411	0.099	0.546	0.075	0.361	0.096	0.109	0.052	0.314	0.0724	0.092	0.047
20136	7A5	0.32 ††	0.069	0.29 ††	0.082	0.248 ††	0.056	0.08	0.035				
20204	7A5	0.358	0.085	0.521	0.064	0.346	0.076	0.093	0.037	0.295	0.065	0.083	0.036
21043	7A5	0.362	0.096	0.535	0.071	0.339	0.08	0.09	0.034	0.284	0.051	0.078	0.031
21088	7A5	0.586 ††	0.098	0.608 ††	0.074	0.333	0.084	0.096	0.036				
21100	7A5	0.376	0.102	0.482 †	0.081	0.353	0.085	0.096	0.045	0.289	0.069	0.089	0.043
21182	7A5	0.48 ††	0.08	0.52	0.07	0.4 ††	0.09	0.1	0.04	0.342 ††	0.076	0.088	0.037
21196	7A5					0.279 ††	0.073	0.083	0.035				
21230	7A5	0.38	0.08	0.52	0.06	0.238 ††	0.071	0.084	0.028	0.294	0.058	0.074	0.031
50005	7A5	0.424 †	0.094	0.596 †	0.067	0.353	0.082	0.096	0.039	0.286	0.064	0.074	0.043
50011	7A5	0.38	0.1	0.51	0.076	0.35	0.079	0.095	0.04	0.3	0.06	0.08	0.03
50012	7A5	0.413	0.098	0.553	0.076	0.353	0.082	0.097	0.042	0.296	0.054	0.07	0.028
50013	7A5	0.323 ††	0.082	0.456 ††	0.060					0.264 †	0.055	0.071	0.029
50014	7A5	0.375	0.096	0.54	0.072	0.34	0.08	0.102	0.051	0.3	0.058	0.074	0.029
50017	7A5	0.384	0.087	0.569	0.073	0.355	0.081	0.093	0.039	0.306	0.06	0.078	0.025
50019	7A5	0.333 †	0.075	0.515	0.046 ††	0.322	0.058	0.079	0.035				
50020	7A5	0.388	0.084	0.535	0.072	0.374	0.109 ††	0.123 ††	0.057 ††	0.272	0.054	0.06	0.027
50021	7A5	0.387	0.09	0.544	0.064	0.358	0.084	0.093	0.041	0.283	0.058	0.07	0.021
50023	7A5	0.385	0.08	0.54	0.053 †	0.34	0.063	0.077	0.02 ††	0.29	0.05	0.06	0.02
50024	7A5	0.435 ††	0.1	0.564	0.084	0.36	0.086	0.113	0.049	0.306	0.077	0.093	0.045

50027	7A5	0.285 ††	0.114	0.525	0.114 ††	0.367	0.093	0.104	0.059 ††	0.318	0.077	0.084	0.049
50029	7A5	0.384	0.066	0.579	0.051 ††	0.379	0.043 ††	0.049 ††	0.005 ††	0.244 ††	0.027 ††	0.043 ††	0.011
50030	7A5	0.421 †	0.091	0.546	0.069	0.367	0.067	0.082	0.03	0.347 ††	0.042	0.058	0.024
50031	7A5	0.387	0.103	0.522	0.078								
50033	7A5	0.37	0.09	0.54	0.07	0.341	0.077	0.092	0.037	0.3	0.059	0.075	0.031
50037	7A5	0.402	0.092	0.551	0.071	0.341	0.085	0.097	0.04	0.297	0.061	0.081	0.039
50039	7A5	0.37	0.1	0.55	0.07	0.35	0.09	0.1	0.04	0.35 ††	0.09 ††	0.1	0.04
50043	7A5	0.384	0.113	0.546	0.091 ††	0.358	0.107	0.12 ††	0.062 ††	0.321	0.074	0.093	0.064 ††
52283	7A5	0.346 †	0.075	0.493	0.052 ††	0.311 ††	0.072	0.064 ††	0.029				

Lab. Code #	Method Codes	Soil sample identification and values for Water Soluble Nitrate N - autocolour (7B1) mg/kg dry wt											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	7B1	51	3.2 ††	32	4.6 ††	40	13	22	3.3	2.5 †	0.667	0.473	89
21138	7B1	43 ††	17 ††	15 ††	4.7 ††								
21148	7B1	57	7.1 ††	23 ††	2.3	43	10	24	3.2	0.025	0.623	0.025	90
21182	7B1	52	0.15	32	2.5								
21196	7B1	53	0.5	33	2	44	11	22	2.5	0.013	0.507	0.001	83 †
21232	7B1	55	0.16	30	2.3	42	12	23	4				
23187	7B1	58	0.2	32	2.5	40	10	22	2.3	0.2	0.8	0.4	92
50004	7B1	61	0.31	34	2.8								
50005	7B1	60	0.184	31	2.6	44	12	22	3.5	2 †	0.99	0.318	88
50013	7B1	57	0.008	41 ††	2.1	44	12	27 †	3.3	0.05	0.6	0.05	94
50020	7B1	56	0.16	32	2.6	46	12	25	3.7	1.4	1.7 ††	3.89 ††	86
50025	7B1	66	0.539 †	33	2.8	43	13	25	4.3	0.393	0.533	47 ††	90
50029	7B1	50	0.186	30	2.2	33 ††	8.8 ††	19	2.4	0.785	0.903	0.814	73 ††
50031	7B1	60	0.8 †	35	2.9	43	12	24	3.3				
50032	7B1	55	0.56 †	32	2.8	40	11	21	3.6	0.55	1.1	0.89	88
50037	7B1	59	0.283	29	0.215 ††	41	13	22	3.6	0.393	0.78	0.31	68.8 ††
50042	7B1					66 ††	51 ††	52 ††	59 ††	120 ††	174 ††	1140 ††	2030 ††
50081	7B1	59	2.3 ††	31	3.9 ††	41	11	26	2.3	4.3 ††	2.1 ††	1.7	102 ††

Lab. Code #	Method Codes	Soil sample identification and values for KCL Extractable Nitrate N - autocolour (7C2) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	7C2	58	0.284	32	2.7	42	11	22	3.3	0.001	0.646	0.001	91
8888	7C2	59	0.773 †	33	3.1	40	9.7	21	3.3	0.697	1.6 †	1.6 ††	85
10173	7C2	59	0.363	34	2.71	53 ††	18 ††	29 ††	1.8 ††	0.42	0.91	0.48	89
10181	7C2	58	0.172	29	2	38	9.5	20 †	2.5 ††	0.242	0.698	0.01	86
20136	7C2	59	0.3	32	2.9	40	12	23	3.8	0.1	0.62		93
21043	7C2	60	1.8 ††	2.5 ††	33 ††	42	12	23	4.2	0.055	0.578	0.043	91
21088	7C2	66 ††	0.163	25 ††	2.2	54 ††	11	21	3.6	0.04	0.55	0.28	85
21100	7C2	52	0.782 ††	29	2.6	52 ††	13	26 †	4	0.87	1.4	0.559	94
21138	7C2	53	0.35	31	2.5	41	11	23	3.6				88
21182	7C2	53	0.16	33	2.4	45	11	23	3.6	0.372	0.898	0.617	94
21193	7C2					40	12	22	3.7	0.4	0.8	0.8	86
21196	7C2	56	1 ††	33	2	47	11	23	3				
21229	7C2	54	0.24	29	2	41	11	23	3.9	0.24	1.6 †	0.34	74 ††
21230	7C2	58	1.9 ††	36 ††	3.1	40	11	22	3.8	1.1 †	1.6 †	0.715	80 †
21232	7C2	57	0.01 †	35	2.0	44	12	23	4	1.5 ††	4.5 ††	1.73 ††	92
23187	7C2	57	0.3	31	2.4	40	10	21	2.3 ††	0.2	0.7	0.2	93
50004	7C2	57	0.258	32	2.5	42	12	23	3.5	0.326	0.809	0.05	90
50005	7C2	54	0.198	31	2.3	41	11	23	3.5	2.96 ††	1.1	0.451	93
50011	7C2	57	0.25	32	2.2	41	12	22	3.5	0.1	0.6	0.4	92
50012	7C2	62	0.288	32	2.1	42	11	22	3.5	0.045	0.59	0.1	91
50014	7C2	56	1.5 ††	30	2.8	47	13 ††	25	6.3 ††	1.9 ††	3.1 ††	2.1 ††	104 ††
50017	7C2	58	1.6 ††	33	3.2	44	12	24	4.3 ††	0.72	1.2	0.68	33 ††
50019	7C2	63	2.2 ††	33	1.7	43	11	24	3.2	0.87	2.9 ††	0.97	87
50020	7C2					48 †	13	26 †	3.8	0.545	1.5	2 ††	93
50021	7C2	49 ††	0.41	28 †	2.3	43	11	22	3.4	0.24	0.79	0.65	88

50023	7C2	54	1.9 ††	29	3.2	44	10	23	3.8				
50027	7C2	55	0.47	31	2.5	43	12	23	3.6	0.29	0.91	0.16	88
50030	7C2	58	0.2	32	2.4								
50031	7C2	56	0.2	31	2	44	12	24	3.8				
50033	7C2	53	0.31	31	2.9					0.02	0.42	0.38	0.26 ††
52283	7C2	71 ††	1.6 ††	39 ††	3.6								

Lab. Code #	Method Codes	Soil sample identification and values for KCL Extractable Ammonium N - autocolour (7C2) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	7C2	41	15	9.5	3.8	62	4.1	15	1.8	42	4.7	35	1.9
8888	7C2	44	18	11	5.5	86 ††	4.77	31 ††	6.2 †	76 ††	4.7	45	3.7 ††
10156	7C2	20 ††	28 ††	31 ††	33 ††								
10173	7C2	44	18	10	4.8	71	8.8 ††	17	5.6	45	4.7	33	1.8
10181	7C2	48	18	10	5.6	69	4.3	16	2.6	51	5.6	39	2
20136	7C2	47	22 ††	13	4.8	67	4.6	17	3.6	52	4.6	37	2
20204	7C2	51	27 ††	19 ††	6.2	66	4.8	15	3.9	50	1.7 ††	36	2.4
21043	7C2	50	20	5.2 ††	12 ††	72	4.7	16	3.2	52	4.6	37	1.7
21088	7C2	24 ††	3.1 ††	3.2 ††	0.65 ††	63	3.9	14	3.3	44	4.3	31	1.7
21100	7C2	45	18	13	5.2	76	5.5	17	4.8	58	8 ††	44	5.2 ††
21138	7C2	45	17	15 †	4.8	68	5.1	16	3.6	51	5.4	37	2
21148	7C2									10 ††	11 ††	47 ††	6.4 ††
21182	7C2	47	24 ††	12	4.7	74	7.3 ††	18 †	6.1 †	52	5.4	38	2.1
21193	7C2					68	5.1	16	4.4	49	5.4	36	2.6
21196	7C2	39	15	9	4.1	56 ††	4.5	12 ††	3.8	40	4.8	32	1.9
21229	7C2	46	18	11	4.4	71	5.1	16	2.8	43	4.8	33	2
21230	7C2	47	19	13	5.5	75	8.8 ††	21 ††	7.9 ††	53	9 ††	41	5.5 ††
21232	7C2	55 †	18	13	5.2	75	4.5	16	2.5	59	8.6 ††	48 ††	3.8 ††
23187	7C2	48	19	12	5.2	71	5.3	17	5.1	53	5.5	40	2.2

50004	7C2	48	22 ††	12	6.3 †	60	7 ††	22 ††	5.7	45	5	31	2.9 †
50005	7C2	37 †	21 †	10	8.8 ††	54 ††	4.8	14	3.4	44	33 ††	35	35 ††
50011	7C2	42	16	10	4.4	66	4.3	14	3	46	5	36	1.5
50012	7C2	49	18	11	4.5	68	4.9	15	3.8	48	5	36	2
50014	7C2	44	17	11	4	72	5	16	3.8	53	5.4	39	2.3
50017	7C2	45	18	12	4.5	70	4.9	16	4	55	5	40	1.9
50019	7C2	19 ††	12 ††	9.0	5.4	71	3.8	29 ††	1.5 †				
50020	7C2					78	13 ††	20 ††	7.8 ††	60	7.6 ††	39	4.8 ††
50021	7C2	41	18	12	6.3 †	66	4.7	14	3.1	41	5.6	35	2.9 †
50023	7C2					69	4.4	15	3.6	56	5.4	40	1.7
50027	7C2	43	17	15 †	4.7	63	5.6	16	3.9	47	5.2	35	2.2
50029	7C2	15 ††	2.3 ††	2.3 ††	1.1 ††	17 ††	1.5 ††	1.9 ††	1.6	7 ††	1.8 ††	14 ††	1.7
50030	7C2	45	17	11	4.7								
50031	7C2	47	19	12	5.7	74	6.2 †	16	4.9				
50032	7C2	44	18	7.2 †	4.6	68	5.9 †	15	3.9	50	4.4	40	0.99 †
50033	7C2	41	16	9.9	3.4	74	5.3	16	3.4	54	4.3	36	101 ††
50044	7C2									61	10 ††	4 ††	8 ††
52283	7C2	16 ††	8.2 ††	11	3.7								

Lab. Code #	Method Codes	Soil sample identification and values for Total P - Pooled % oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20136	Not Specified	0.092	0.009	0.103	0.012								
20204	Not Specified	0.092	0.02 ††	0.098	0.025 ††	0.061	0.025	0.08	0.094	0.142	0.035	0.031	0.042
21043	Not Specified	0.108	0.013	0.088	0.018					0.128	0.035	0.034	0.04
21088	Not Specified	0.192 ††	0.017 †	0.121	0.022	0.062	0.029	0.084	0.094	0.117	0.036	0.035	0.036
21100	Not Specified	0.142	0.012	0.125	0.018	0.654 ††	0.241 ††	0.817 ††	1.18 ††	0.11	0.033	0.033	0.035
21138	Not Specified	0.128	0.013	0.11	0.017	0.066	0.025	0.071	0.091 †				
21148	Not Specified	0.113	0.011	0.112	0.016	0.062	0.024	0.085	0.12 ††	0.147	0.042 ††	0.038	0.04
21182	Not Specified	0.097	0.01	0.1	0.013					0.148	0.037	0.036	0.034
21196	Not Specified	0.105	0.011	0.103	0.016	0.056	0.021	0.08	0.099	0.124	0.034	0.032	0.036
21229	Not Specified	0.123	0.014	0.111	0.012	0.059	0.022	0.077	0.098	0.144	0.037	0.033	0.036
21230	Not Specified	0.13	0.02 ††	0.12	0.02	0.07	0.031	0.097 †	0.119 ††	0.129	0.035	0.034	0.04
21232	Not Specified	0.15	0.01	0.13 ††	0.02								
50003	Not Specified					0.094 ††	0.044 ††	0.117 ††	0.132 ††	0.133	0.036	0.033	0.035
50005	Not Specified	0.127	0.011	0.101	0.015	0.058	0.022	0.07	0.098	0.167	0.039	0.333 ††	0.038
50011	Not Specified	0.117	0.012	0.109	0.014	0.06	0.023	0.074	0.094	0.114	0.036	0.034	0.036
50012	Not Specified	0.125	0.013	0.114	0.019	0.066	0.026	0.078	0.098	0.15	0.04 ††	0.039	0.045
50013	Not Specified	0.1	0.012	0.095	0.015					0.11	0.03 ††	0.03	0.033
50019	Not Specified	0.098	0.009	0.104	0.01 ††								
50021	Not Specified	0.123	0.015	0.106	0.019	0.075	0.028	0.085	0.105 †	0.127	0.037	0.031	0.039
50024	Not Specified	0.101	0.011	0.097	0.017					0.155	0.058 ††	0.055 ††	0.055 ††
50027	Not Specified									0.129	0.037	0.038	0.037
50031	Not Specified					0.071	0.028	0.074	0.096				
50037	Not Specified	0.116	0.014	0.102	0.018	0.065	0.027	0.076	0.098	0.132	0.035	0.034	0.038

Lab. Code #	Method Codes	Soil sample identification and values for Total P - Pooled mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10173	17B1					566	221	561	890	1400	387	384	448
20136	Not Specified					720	280	760	1200				
21088	17C1									1200	350	340	360
21138	9A3									1370	366	344	370
21182	Not Specified					575	211	651	978				
21196	Not Specified									1240	341	316	362
21232	9A1					631	287	927	1080	1490	415	396	467
50012	17C1									1270	337	327	394
50020	17B1					681	268	810	1110	1390	388	358	402
50027	Not Specified					654	295	979	1110	1290	372	381	371
50044	17B1									1300	340	330	410

Lab. Code #	Method Codes	Soil sample identification and values for Colwell Extractable P – pooled (9B1, 9B2) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	9B1	67	22	53	20	61	24	28	25	170	10 ††	54	22
21043	9B2	55	15	35	17	74	26	31	24	133	3.11	50	14
21088	9B1	64	20	45	59 ††	82 ††	28	35	27	149	4	61	18
21100	9B1	56	16	56	15	76 †	30	32	29	176	7.38	52	21
21138	9B1	58	19	36	19	56	24	26	23	151	4.48	56	17
21182	9B1	61	21	44	20	64	26	26	26	192 ††	6.87	59	24
21193	9B1	59	22	45	20	61	26	34	26	147	4.35	48	16

21196	9B1	61	15	34	16	61	27	33	26	200 ††	5.04	56	17
21229	9B2	54	14	30	15 †	55	21	25	18 ††	148	4.78	49	12
21230	9B1	95 ††	22	178 ††	19	68	25	27	29	148	5.66	51	21
21232	9B1	53	23	50	20	66	23	25	23	129	9.9 ††	59	26
50005	9B1	60	25	45	26 ††	41 ††	32	28	24	140	1.1 ††	56	6.71 ††
50011	9B1	54	21	42	19	63	25	27	24	156	6.5	54	20
50012	9B2	63	20	50	19	64	28	29	27	153	4.4	62	19
50013	9B1	53	18	53	19	58	26	29	24	146	5.1	35 ††	14
50014	9B2	61	19	39	16	61	28	30	24	176	5.6	55	21
50017	9B1	51	22	46	21	58	27	27	25				
50019	9B1	61	24	53	22	57	30	33	30 ††	143	6.25	50	18
50020	9B1	50	16	47	13 ††	69	22	21	20	132	5.5	57	14
50023	9B1	63	23	54	20	66	29	32	27	184 †	8.1	62	23
50024	9B1									160	3.8	51	16
50025	9B1	33 ††	18	36	15	19 ††	22	19 ††	19	93 ††	3.5	32 ††	14
50027	9B2	59	16	31	16	65	28	34	23	167	5.6	55	19
50029	9B2	69	26	103 ††	24 †	53	21	26	17 ††	129	8.59	43	13
50030	9B1	52	18	38	18	65	23	27	22	147	5.9	53	17
50031	9B1	64	20	45	19	75	30	41 ††	28				
50032	9B1	54	22	40	20	59	27	30	24	156	9.8 †	51	19
50037	9B2	53	21	45	19	63	26	27	24	162	7.41	55	15
50045	9B1	70	17	98 ††	18	60	22	25	25	137	6.8	49	19
50081	9B1	52	7.04 ††	55	14 †	68	24	32	23	137	12 ††	65	24
52283	9B1	49	16	54	13 ††	83 ††	23	29	16 ††	302 ††	10 ††	57	15

Lab. Code #	Method Codes	Soil sample identification and values for Olsen Extractable P – pooled (9C1, 9C2) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
8888	9C2	13	8.8	17	7.4	21	9.4	7.3	7.9	48	2.7	17	7.1
10173	9C2	14	8.6	17	7.8	21	10	8	9	48	2	21 ††	7
10181	9C2	16	11 ††	20	8.8	23	12	9.3	9.6	50	1.4	16	7.3
21043	9C2	16	9.1	17	7.6	32 ††	12	11	10	37	1.6	18	6.1
21100	9C1	11	7.9	22	5.9	21	11	7.5	10	52	2.7	19	8.6
21148	9C1	9.9	6.3 ††	16	100 ††	18	18 ††	5.8	7.5	40	1.9	16	6.1
21190	9C1	14	9.3	22	7.7	27 †	12	9.3	9				
21196	9C1	16	9.1	24	7.7	25	12	10	11				
21229	9C2	13	8.2	17	6.9	17	8.5	6.3	7	41	1.7	15	5.2
21232	9C1	11	8.4	22	7	20	12	7	8.3	43	2.3	18	6.8
50005	9C1	13	12 ††	21	11 ††	13 †	9.8	7.2	9.2	37	0.458	17	5.1
50011	9C1	14	9.5	17	7	20	11	7.5	8	54	2.6	17	7
50013	9C1	12	15 ††	15	11 ††	14	11	5.9	9.3	30 ††	0.882	5.3 ††	7.6
50017	9C2	11	8.3	17	6.7	19	11	6.8	9.4	42	1.4	16	6.9
50020	9C1	11	6.8 ††	21	5.8	23	9	5.9	6.1	43	0.903	20 †	4.7
50023	9C1	15	9	20	8	18	11	7.6	9.1	46	2.4	16	8.4
50027	9C2	15	8.6	18	8.1	20	7.7	5.9	7.2	47	1	17	6.9
50029	9C2	17	8.9	24	8.5	21	7.6	5.6	6.5	45	2.5	19	5.1
50031	9C1	16	9.9	20	8.8								
50033	9C2					18	9.1	6	7.3	42	2	14	6.6
50037	9C2	13	8.62	16	7.1	20	9.5	7.5	9.1	45	2.9	17	6.4
50038	9C1					73 ††	0.57 ††	24 ††	9.0	73 ††	0.57	24 ††	9

Lab. Code #	Method Codes	Soil sample identification and values for Bray-1 Extractable P - pooled (9E1, 9E2) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10166	9E1	5.4	14	1.3	4.5	14	11	2.4	5	74	1.5	46	9.5
20204	9E1	2.5	14	1.5	5.7	19	12	2.9	5.6	109	1.1	37	33 †
21100	9E1	5	9.1	1.5	3.4	22	11	4.1	6.4	51	1.4	35	6.4
21229	9E2	3.1	9	1.1	2.3	24	8.6	2.7	3.4	101	2.4	62	9.7
50005	9E1	3.3	17	6.3 ††	11	10	6.3	3.2	5.2	108	3.9 ††	37	66 ††
50012	9E2	4.5	14	2.3	6.5					80	1.2	42	17
50013	9E1	4.8	15	0.902	5.2	26	13	5.8 ††	6.2	89	2.3	61	14
50019	9E1	5.6	11	3.8 †	6.8								
50020	9E1	1.5	11	8.8 ††	2.4	9.5	9.6	2.6	1.7	60	1.2	21	9.3
50021	9E1					24	12	3.1	6.9				

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Lab. Code #	Method Codes	Soil sample identification and values for Acid Extractable P — pooled (9G1 + 9G2) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	9G1	42 ††	24	38	24	136	37	23	625	296	135	71	313 ††
21100	9G2	101	27	101	32	140	41	18	762	289	116	60	211
21229	9G2	71	23	21	25	117	30	15	416	300	128	58	243
50014	9G2	108	31	56	44 ††	151	45	27	698	302	135	66	221
50020	9G1					73 ††	18	9.7	386	272	127	54	205
50025	9G1	96	27	78	27					311	138	67	230
50027	9G2									287	134	70	235
50029	9G2	120	28	67	27	112	34	20	593	225 ††	94 ††	43	176
50031	9G2	109	28	79	28	145	43	24	628				
50032	9G1	139	31	95	29	150	44	29	602	353 ††	154	87	222

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg dry wt											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	9I2a	996	68 †	404 ††	172 ††	518	78	303	137	324	64 †	263	62 ††
21088	9I2a	995	54	276	142 ††	552	81	340	137	247	49	235	35
21100	9I2a	1050	51	283	125 ††	623 ††	85	344	156 ††	288	59 †	253	47
21138	9I2a	840	51	264	127 ††	473	74	295	126	251	50	234	36
21148	9I2a									418 ††	51	506 ††	139 ††
21193	9I2a	655 †	53	301	135	141 ††	113 ††	331	134	273	55	224	40
21196	9I2a	995	53	331 †	134	512	86	311	145	286	49	222	37
21229	9I2a	824	57	287	136	466	69	284	128	268	52	233	44
50005	9I2a	873	54	272	133	436	71	280	130	221	52	224	61 ††
50011	9I2a	1030	61	342 ††	165 ††	500	78	297	130	280	50	255	38
50012	9I2a	992	55	280	133	487	72	293	126	251	49	239	36
50014	9I2b	937	55	288	137	486	74	295	129	276	51	223	40
50017	9I2a	1050	55	295	133	465	66	280	116	268	46	255	39
50019	9I2a	618 †	109 ††	337 ††	159 ††	500	54	290	118	266	57	212	53
50020	9I2a	903	66 †	274	142 ††	505	87	316	138	220	34 ††	198	27
50025	9I2a	956	75 ††	284	136	443	95	287	126	236	75 ††	263	47
50027	9I2b	808	57	260	133	564	73	305	135	250	57	205	50
50029	9I2a	957	61	315	131	420	69	275	119	242	57	225	54
50030	9I2a	874	58	269	136	429	90	258	121	242	45	204	37
50031	9I2a	10 ††	55	276	126 ††								
50032	9I2a	325 ††	29 ††	198 ††	77 ††	496	66	309	132	311	56	261	41
50037	9I2a	1210	59	316	135	508	74	301	134	272	49	258	52
50045	9I2a	1090	49	324	137	418	62	252	110 ††	294	49	247	41
50081	9I2a	690	38 ††	271	133	533	82	322	124	196 ††	34 ††	206	26

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus buffer index - Unadj (9I4a + 9I4b + 9I4c) L/kg dry wt											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
21088	9I4b	933	51	264	129					205	48	218	32
21138	9I4a	841	52	264	127								
21196	9I4a	937	50	319	131	481	81 ††	299	140				
21232	9I4a	637	47 †	254	125	417	63	279	117	205	45	226	36
50005	9I4a	823	50	258	127	417	66	271	125	192	52	211	60 †
50017	9I4a	1000	51	280	128	438	61	271	110	226	45	241	37
50019	9I4a	598	104 ††	318	154 ††								
50025	9I4a	924	72 ††	270	132					24 ††	67	83 ††	81 ††
50027	9I4b	766	54	250	130	531	68	294	130	220	53	190	46
50029	9I4a	911	57 †	286	129	397	66	266	115	207	56	213	51
50032	9I4a	299 ††	24 ††	186 ††	72 ††	464	59	297	124	260	54	244	38
50045	9I4a	1010	45 †	288	131	393	58	245	105	253	46	238	36

Lab. Code #	Method Codes	Soil sample identification and values for Phosphate Extractable S – Pooled (10B1, 10B2, 10B3) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10173	10B3	94	14	53 ††	12	48	11	23	9.4	41	39 ††	6980	87 ††
21229	10B1	100	11	44	9.7	62	12	25	7.8	44	7.8	7530	28
21232	10B1	103	14	45	12								
50014	10B3	110	12	49	10	65	12	27	8	52	9.2	8320	29
50020	10B3					45	10 †	16 ††	7.0	40	11 †	8560	51 ††
50025	10B3	96	11	44	9.5	55	11	24	7.6	46	8.6	6310	28
50027	10B3	92	12	44	11	58	11	27	8.2	46	8.1	6230	21
50029	10B3	31 ††	8.3	47	6.8	41	8.1 ††	9.9 ††	5.3 ††	22 ††	5.3 †	4160	19 †
50032	10B1	81	32 ††	3.1 ††	26 ††	62	2.8 ††	26	7.6	12 ††	18 ††	6900	60 ††
50045	10B3	73 †	11	34 ††	8.5	54	12	23	9.4	39	0.402 ††	5330	27
50081	10B3	96	12	46	10	68	12	27	8.4	46	8.1	6500	25

Lab. Code #	Method Codes	Soil sample identification and values for KCl ₄₀ Extractable S (10D1) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	10D1	41	11	15 ††	10	36	9.3	12	6.5	26	10 ††	6730	39
21043	10D1	40	8.5	48	6.1	38	8.3	11	7.5 †	28	6.1	328 ††	31
21088	10D1	54	15 ††	51	9.1	47	12 †	15 ††	7.9 †	32	7	6630	35
21100	10D1	42	9.4	42	7.8	36	12 †	13	7.6 †	30	6.8	4540 ††	40
21130	10D1	59 †	29 ††	64 ††	27 ††								
21138	10D1	40	9.9	42	7.4	30	8.7	9.6 ††	5.7	29	6.9	6530	31
21148	10D1									3 ††	3 ††	27000 ††	106 ††

21193	10D1	42	10	34	7.8	36	8.7	11	6.1				
21196	10D1	45	9.2	39	7.5	39	9.5	11	6.6	30	7.1	5770 †	34
21229	10D1	45	9	41	7	34	9.1	11	6.4	28	6.1	6970	31
21232	10D1	40	9.9	47	8.1	39	9.7	12	6.5	33	7.2	7670 †	41
50005	10D1	45	11	46	9.2	41	9	12	6.6	28	6	6930	32
50011	10D1	41	9.5	39	6.5	35	8.5	12	6	27	6	7000	31
50012	10D1	44	11	50	8.8	41	9.4	12	6.2	28	7.3	6740	36
50013	10D1						17 ††	21 ††	15 ††				
50017	10D1	57 †	10	46	8.4	35	8.9	11	6.5	22 ††	4.6 ††	4500 ††	21 ††
50019	10D1	70 ††	16 ††	81 ††	13 ††	39	8	10	6				
50020	10D1	45	11	44	9	41	8.2	9.6 ††	6.1	29	6.4	6980	39
50027	10D1	43	9.6	45	6.8	41	11	12	8.8 ††	29	7.4	6530	34
50037	10D1	52	11	47	12 ††	36	11	12	6.4	27	7.3	6940	32
50038	10D1					43	11	11100 ††	47 ††	43 ††	11 ††	11100 ††	47
50045	10D1	47	9.4	57	8.8	41	8.9	11	5.8	31	7.6	7840 †	39
50081	10D1	48	10	47	8.3	39	9.3	12	6.3	31	6.7	6060	34
52283	10D1	86 ††	11	38	9.4	51 ††	11 †	22 ††	8.1 ††	31	6.2	6000	13 ††

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Cu (12A1) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10166	12A1	31 ††	22 ††	46 ††	41 ††	0.89	1.4	1.1 †	0.99	1.1	1.8	1 †	0.9
20204	12A1	1.5 ††	1.5 ††	1.1 ††	1.9 †	1.1	1.6	1.5	1.4 ††	1.4	1.9	0.76	0.76
21088	12A1	0.79	1.1	0.462	1.6	0.993	1.5	1.4	1.1	1.4	1.8	0.74	0.82
21100	12A1	0.797	1.3	0.529	1.6	0.929	1.5	1.3	1.1	1.3	1.9	0.845	1
21130	12A1	0.83	1.3	0.51	1.6								
21148	12A1									1	1.7	0.2 ††	1.2
21190	12A1	0.786	1.2	0.412	1.6	0.928	1.4	1.3	0.893	1.5	1.8	0.988 †	0.896
21193	12A1	1 †	1.2	0.71 ††	1.9 †	0.92	1.3	1.4	0.9	1.3	1.8	1 †	0.89
21196	12A1	1.2 ††	1.3	0.55	1.7	1.1 †	1.5	1.5	1	1.5	1.9	0.875	0.918
21229	12A1	0.859	1.2	0.498	1.6	0.928	1.4	1.3	0.924	1.3	1.8	0.748	0.809
21232	12A1	0.76	1.2	0.52	1.6	0.79 ††	1.3	0.93 ††	0.82	1.3	1.7	0.88	0.81
50003	12A1					0.95	1.4	1.3	0.89	1.8 †	2	0.66	0.98
50005	12A1	0.914	1.2	0.391	1.5	0.964	1.4	1.4	0.916	1.1	1.9	0.801	0.949
50011	12A1	0.9	1.3	0.55	1.7	1	1.4	1.4	0.97	1.4	1.7	0.76	0.8
50012	12A1	0.742	1.2	0.516	1.6	0.951	1.4	1.2	0.915	1.2	1.7	0.785	0.866
50013	12A1	1.6 ††	1.6 ††	0.8 ††	2.2 ††	1.3 ††	1.6	1.6 †	1.1	1.6	1.9	0.77	0.97
50014	12A1	1.1 ††	1.6 ††	0.627	2.1 ††	1	1.6	1.4	1.1	1.4	1.8	1.1 ††	0.926
50017	12A1	0.832	1.3	0.485	1.6	0.91	1.4	1.3	0.932	1.5	2	0.796	0.97
50019	12A1	0.843	1.4	0.643 †	1.8								
50020	12A1	0.65	1.1	0.48	1.3 †	0.981	1.5	1.3	1	1.5	2	0.923	0.989
50024	12A1	0.917	1.3	0.472	1.6	1.1	1.5	1.6 †	1	1.3	1.7	0.843	0.813
50025	12A1	0.812	1.3	0.545	1.6	0.961	1.4	1.3	0.948	1.4	1.9	0.812	1
50027	12A1	0.799	1.2	0.529	1.5	1	1.5	1.4	0.99	1.4	2	0.98 †	0.92
50029	12A1	0.776	1.1	0.5	1.3 †	1	1.3	1.1 †	0.846	1.1	1.5	0.728	0.672
50030	12A1	1.1 ††	1.3	0.57	1.7	1.4 ††	1.6	2.1 ††	1	2 ††	1.8	0.76	1

50020	12A1	26 ††	17	35 ††	29	263	25	15	15	41	12	251	4.1
50024	12A1	37	16	40	27	314 †	24	16	13	23	7.4	146	2.5
50025	12A1	42 †	24	59	48	331 ††	27	17	14	81	13	340 ††	4.7
50027	12A1	34	20	45	33	272	27	14	15	27	9.2	150	3.3
50029	12A1	33	19	44	35	249	23	11	13	26	8.8	139	2.5
50030	12A1	34	20	49	35	352 ††	5.7 ††	7.2 ††	1.4 ††	179 ††	3.6 ††	115	0.5 ††
50031	12A1	38	24	50	43	253	26	15	14				
50032	12A1	35	23	47	41	261	26	16	17	32	11	193	3.1
50037	12A1	36	21	43	38	256	29	14	19 †	40	15	226	5.1
50038	12A1					75 ††	19 †	258 ††	21 ††	75	19 ††	258	21 ††
50081	12A1	34	18	47	35	238	26	19 †	14	53	10	185	3.8
52283	12A1	46 ††	2.3 ††	23 ††	3.3 ††	416 ††	24	22 ††	9.6 †	53	8.8	129	2.3

Lab. Code#	Method Codes	Soil sample identification and values for DTPA Extractable Mn (12A1) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10166	12A1	0.88 ††	1.4 ††	0.68 ††	1.7 ††	112	34	280	23 †	449	29	60	24.6
20204	12A1	125 ††	258 ††	29 ††	25 ††	113	32	244	26 ††	436	23	54	26
21088	12A1	88	153	16	16	143	32	278	21	466	30	62	24
21100	12A1	62 ††	156	15	14	103	26	243	19	371	24	50	22
21130	12A1	95	192	17	16								
21148	12A1									338	41 ††	70 ††	99 ††
21190	12A1	84	178	24	21 †	80 ††	34	188 ††	27 ††	364	34 ††	43	26
21193	12A1	95	196	29 ††	19	117	26	243	20	501	25	57	20
21196	12A1	92	182	23	20	124	29	277	20	399	27	53	22
21229	12A1	89	178	17	15	130	30	263	19	431	28	50	22
21232	12A1	91	190	19	17	142	26	285	18	460	27	54	21
50003	12A1					163 †	34	318	23 †	444	44 ††	63	33 ††

50005	12A1	86	157	18	18	100	28	253	20	357	26	52	19
50011	12A1	80	150	19	17	124	27	260	20	320	25	53	22
50012	12A1	79	181	18	17	121	28	240	18	433	26	61	23
50013	12A1	122 ††	203	44 ††	30 ††	149	28	282	21	478	26	60	21
50014	12A1	99	212	20	20	139	27	275	18	457	28	57	23
50017	12A1	88	178	16	16	126	30	255	20	369	30	51	24
50019	12A1	96	202	24	22 †								
50020	12A1	91	191	18	16	110	23	204	17	462	33 †	65	26
50024	12A1	92	198	13	14	133	29	292	18	455	24	49	20
50025	12A1	93	193	18	16	147	27	266	19	544	30	61	26
50027	12A1	84	173	15	13	142	29	241	18	331	28	48	20
50029	12A1	84	183	18	16	130	28	214	18	307 †	26	42	18
50031	12A1	92	194	21	18	116	30	271	20				
50032	12A1	85	184	20	20	116	31	275	23 †	423	29	52	24
50037	12A1	88	175	17	16	121	34	253	20	401	27	52	23
50038	12A1					670 ††	32	62 ††	29 ††	670 ††	32	62.3	29 ††
50081	12A1	87	166	16	14	115	29	207	19	274 ††	28	51	21
52283	12A1	50 ††	95 ††	9.6 ††	6.9 ††	147	29	291	18	577 †	26.7	50	21

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Zn (12A1) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10166	12A1	2.9	0.54	1.9	0.56	3.9	2.7 †	4.2	0.55 †	3.1	1	22 ††	0.38
20204	12A1	3.6 ††	0.673 ††	1.9	0.697 ††	3.8	2.4	3.8	0.85 ††	2.7	1.1 †	17	0.5 ††
21088	12A1	2.5	0.305 ††	1.3	0.369	3.2	2.2	3.5	0.408	2.6	0.92	15	0.26
21100	12A1	3	0.473	1.7	0.485	4	2.3	4.2	0.355	3.1	1	15	0.338
21130	12A1	2.4	0.34	1.5	0.35								
21148	12A1									4.6 ††	1.8 ††	17	0.84 ††

21190	12A1	2.6	0.458	1.3	0.503	5 ††	2.4	4.3	0.406	3.9 ††	1	15	0.593 ††
21193	12A1	2.6	0.48	1.9	0.53	3.8	2.1	4.2	0.36	1.9 ††	0.99	15	0.31
21196	12A1	3.1	0.435	1.6	0.479	3.6	2.1	3.9	0.4	3	1	14	0.311
21229	12A1	2.8	0.358	1.6	0.361	3.5	2.3	3.8	0.384	2.7	1	14	0.249
21232	12A1	2.7	0.44	1.6	0.43	3	2	2.6 ††	0.32	5.6 ††	0.97	14	0.3
50003	12A1					4	2.4	3.5	0.298	2.9	1	7.5 ††	0.42
50005	12A1	3	0.481	1.7	0.49	3.5	2.1	3.8	0.446	2.3 †	0.928	16	0.329
50011	12A1	2.8	0.48	1.9	0.48	3.6	2.4	3.7	0.47	2.8	1	16	0.4
50012	12A1	2.4	0.409	1.7	0.398	3.5	2.2	3.4	0.338	2.7	0.969	17	0.322
50013	12A1	4 ††	0.44	1.9	0.5	3.9	2.2	4	0.413	2.9	1	15	0.34
50014	12A1	3.1	0.48	1.7	0.506	3.3	2.3	3.8	0.441	2.8	1	16	0.3
50017	12A1	2.7	0.395	1.5	0.388	3.6	2.1	3.5	0.36	3	1.1	17	0.349
50019	12A1	2.8	0.523	1.9	0.474								
50020	12A1	2.9	0.46	1.7	0.42	3 ††	1.9	3.1	0.331	2.9	1	18	0.346
50024	12A1	2.7	0.413	1.5	0.44	3.5	2.2	3.9	0.41	2.6	0.951	14	0.308
50025	12A1	2.8	0.43	1.7	0.494	5.2 ††	2.5	4.1	0.401	3.5 †	1.3 ††	22 ††	0.485 ††
50027	12A1	2.4	0.432	1.6	0.428	4.1	2.5	4	0.44	2.9	1.1	15	0.35
50029	12A1	2.4	0.496	1.6	0.47	3.7	2	3.1	0.432	2.4	0.971	12	0.365
50030	12A1	3.2	0.53	1.7	0.48	4.3	2.2	4.5	0.38	3.3 †	0.95	10 ††	0.37
50031	12A1	3.3	0.488	1.9	0.545	3.8	2.4	3.9	0.491				
50032	12A1	2.7	0.51	1.7	0.53	3.8	2.4	3.8	0.46	2.9	1.1	16	0.48 ††
50037	12A1	2.9	0.41	1.5	0.382	3.7	2.4	3.7	0.434	2.8	0.891	16	0.326
50038	12A1					2.1 ††	0.3 ††	22 ††	1.1 ††	2.1 ††	0.3 ††	22 ††	1.1 ††
50081	12A1	2.6	0.334	1.5	0.378	3.5	1.7 ††	3.2	0.36	1.9 ††	0.117 ††	22 ††	1.1 ††
52283	12A1	3.2	0.34	1.4	0.45	5.3 ††	2.6	4.7	0.44	2.6	0.931	15	0.338

Lab. Code #	Method Codes	Soil sample identification and values for Hot CaCl ₂ Extractable B – pooled (12C1, 12C2) mg/kg air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
10166	12C1	0.48	0.46	2.5	1.8	0.59 ††	1.1	0.23 †	0.63	1.5	0.1	6.7 ††	0.55
10173	12C2	0.6	0.6	2.5	1.6	0.3	1.1	0.2 ††	0.7	1.6	0.18	2	0.76
20204	12C2	0.592	0.5	3.1	2.1	0.365	2	0.473	0.8	1.3	0.1	2.6	0.546
21043	12C2	0.749	0.794	2.4	2	0.377	1.1	0.279	0.556	2.5 ††	1 ††	5.1 †	1.3 ††
21088	12C2	0.708	0.568	3.5	2.6 ††	0.266	1.2	0.391	0.891	1.5	0.128	3	0.73
21100	12C2	0.584	0.62	2.3	1.7	0.448	1.2	0.339	0.62	1.4	0.072	2.1	0.74
21130	12C2	0.66	0.65	3.1	2.1								
21148	12C2									1.6	0.14	3.8	0.9
21193	12C2	0.5	0.52	2.6	2.1	0.43	1.4	0.71 ††	0.86				
21196	12C2	0.479	0.82	3.6	2	0.357	1.8	0.499	0.895	2.1 ††	0.14	3.8	0.89
21229	12C2	0.545	0.626	2.7	2.2	0.442	1.6	0.409	0.857	1.5	0.087	3.3	0.685
21232	12C2	0.76	0.77	3.3	2.4	0.31	1.4	0.47	0.69	1.6	0.12	2.9	0.63
50005	12C2	0.72	0.606	2.7	1.9	0.443	1.7	0.439	0.844	1.7	0.222	2.5	0.721
50011	12C2	0.65	0.58	2.3	1.9	0.36	1.3	0.4	0.81	1.4	0.15	2.5	0.7
50012	12C2	0.66	0.65	2.9	1.9	0.413	1.4	0.466	0.711	1.6	0.223	6.7 ††	1
50014	12C2	0.818	0.8	3.1	2.5 ††	0.503	2	0.715 ††	0.994	2.2 ††	0.14	2.4	0.853
50017	12C2	0.609	0.572	2.8	1.9	0.37	1.7	0.475	0.821	1.3	0.061	3.9	0.548
50025	12C2	0.83	0.757	3.8	2.6 ††	0.355	1.8	0.59	0.89	1.8	0.156	1.7	0.785
50027	12C2	0.544	0.575	3	2	0.3	1.5	0.34	0.8	1	0.08	1.8	0.7
50029	12C2	0.311	0.425	3.3	1.8	0.319	1.1	0.517	0.696	0.791 ††	0.315 ††	0.0372 †	0.526
50037	12C2	0.375	0.478	2.1	1.2 ††	0.346	1	0.455	0.842	1.4	0.126	2.5	0.865
50081	12C2	1.2 ††	1.3 ††	3.1	1.9	0.846 ††	1.7	0.675 †	0.755	2.1 ††	0.347 ††	4.4	0.902

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Ca - 1M NH4Cl extract (15A1) cmol+/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	15A1	6.85	12.8	38	21.6	5.67	12.9	4.54	35.1	6.84	8.58	9.29	15.1
21130	15A1	7.9 ††	16 ††	40	24								
21138	15A1	7.86 ††	13.4	38.9	24.3	5.96	14.3	4.63	37.8	7.02	8.99	8.89	15.8
21148	15A1	7	23 ††	12 ††	36 ††	3.81 ††	9.81 ††	3.98 †	32 †	5.83 ††	6.79 ††	3.78 ††	9.32 ††
21182	15A1	7	12.3	37.4	21	5.7	12.7	4.3	37	7.22	8.81	7.88 ††	15.4
21193	15A1	6.67	12.3	39.6	20.1	5.87	13.3	4.39	40.2	7.68 †	9.09	10.2	17.3 ††
21196	15A1	8.2 ††	15 ††	44 †	25 †	6.8 ††	14.6	5 ††	44 ††	6.62 †	8.36	8.81	12.8 ††
21232	15A1	7.06	12.8	39.9	21.2	5.07	13.3	4.4	37.9	7.15	9.02	9.69	15.2
50005	15A1	7.36	13.7	176 ††	22	5.32	12.3	4.4	36.1	7.23	8.78	9.26	15.6
50011	15A1	7.3	13	45 ††	23	5.5	12	4.2	33	7	8.5	9	15.5
50012	15A1	6.21 ††	12.5	33.1	20	5.44	12.3	4.23	36.2	7.18	8.63	9.6	15.5
50013	15A1	6.8	12.3	41.9	20.4	5.85	12.2	4.28	37.1	7.6 †	8.6	9.3	15.8
50014	15A1	7.01	13	36.9	21.7	5.73	13.2	4.3	38.1	7.09	8.65	9.27	16.3
50017	15A1	6.83	12.4	37.2	20.3	5.31	11.8	4.1	34.7	6.73	8.5	8.64	14.7
50019	15A1	6.56	12.3	36.5	21.6	5.51	12.3	4.4	38.2	7.36	9.08	9.4	15.5
50020	15A1	7.15	12.5	37.1	20.6	5.68	11.6	4.4	27.7 ††	6.76	8.3	10.2	15.7
50023	15A1	6.8	13.1	38	21.5	5.68	12.8	4.47	37.6	7.19	8.6	9.5	16.2
50031	15A1	7	12.9	35	21	6.06	12.8	5.04 ††	38.8				
50038	15A1					16.3 ††	23.4 ††	47.5 ††	90.3 ††	16.3 ††	23.4 ††	27 ††	49.8 ††
52283	15A1	5.87 ††	11.8	25.4 ††	19.3	5.98	9.6 ††	4.94 ††	32.2 †	7	8.97	8.99	14.1 ††

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Mg - 1M NH4Cl extract (15A1) cmol+/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	15A1	0.626	8.79	2.35	10.1	0.821	6.33	2.38	19.6	2.07	1.14	18.5	9.59
21130	15A1	0.52 ††	11 ††	2.7	12								
21138	15A1	0.649	9	2.8	11.1	0.864	6.01	2.32	19.1	2.17	1.27	18.8	9.62
21148	15A1	0.62	8.8	2.4	10	0.655 †	5.64	2.08	20.3	2.21	1.06	1.53 ††	5.97 ††
21182	15A1	0.6	8.7	2.6	10.9	0.82	5.8	2.2	20	2.33	1.26	16.2	10.5
21193	15A1	0.58	7.88 ††	3.16 ††	9.22	0.8	5.61	2.07	19.4	2.24	1.13	17.8	9.66
21196	15A1	0.816 ††	10 ††	3	12	1 ††	6.8 ††	2.6 ††	22 †	2.17	1.2	18.7	9.13
21232	15A1	0.59	8.45	2.56	9.83	0.6 ††	6.43 †	2.26	21	2.3	1.29	20.8	10.3
50005	15A1	0.609	9.05	5.21 ††	10.8	0.765	5.59	2.25	18.9	2.33	1.17	18.3	9.76
50011	15A1	0.62	8.5	2.55	10	0.75	5.6	2.1	18	2.2	1.2	18	10
50012	15A1	0.591	8.61	2.43	10.4	0.806	5.8	2.2	20.4	2.26	1.2	19.7	10
50013	15A1	0.593	8.91	2.63	10.7	0.847	5.96	2.18	19.4	2.5	1.3	21.1	11.4 †
50014	15A1	0.756 ††	9	2.67	10.8	0.814	6.23	2.22	20.3	2.37	1.17	20.1	10.6
50017	15A1	0.574	7.59 ††	2.33	9.8	0.037 ††	0.248 ††	0.102 ††	1.01 ††	2.04	1.09	17.9	9.05
50019	15A1	0.592	8.57	2.47	10.9	0.776	5.64	2.23	19.4	2.25	1.24	18.9	9.68
50020	15A1	0.637	8.72	2.62	10.4	0.787	5.79	2.2	18.6	2.35	1.18	21	10.1
50023	15A1	0.6	8.93	2.63	10.9	0.79	5.8	2.2	19.5	2.33	1.2	19.7	10.4
50031	15A1	0.69 ††	9	2.76	10.6	0.948 †	5.94	2.48 †	19.9				
50038	15A1					0.933 †	12.9 ††	20.7 ††	4.68 ††	4.04 ††	2.36 ††	43.8 ††	23.8 ††
52283	15A1	0.491 ††	7.63 ††	2.01 ††	9.2	0.475 ††	0.716 ††	1.01 ††	0.655 ††	2.01	1.11	14.5 ††	8.18 †

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Na - 1M NH4Cl extract (15A1) air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	15A1	0.166	0.722	0.983	1.3	0.227	0.253	0.13	1.03	0.22	0.063	21.4	11.7
21130	15A1	0.18	1.1 ††	1.1	1.5								
21138	15A1	0.194	0.884	1	1.42	0.306	0.255	0.133	1.07	0.247	0.148 ††	21.8	11.2
21148	15A1	0.29 ††	0.71	0.76 ††	0.61 ††	0.336	0.308	0.268 ††	1.28	0.343 ††	0.178 ††	1.12 ††	1.21 ††
21182	15A1	0.14	0.82	1.07	1.46	0.23	0.22	0.12	1.2	0.201	0.045	17.9 ††	11.1
21193	15A1	0.13	0.65	1.03	1.06	0.3	0.18	0.06	0.81	0.21	0.05	22	11.6
21196	15A1	0.275 ††	1 †	1.1	1.6 ††	0.314	0.282	0.15	1.2	0.202	0.061	25.1 ††	10.3
21232	15A1	0.23	1.05 ††	0.99	1.52	0.38 †	0.3	0.21 †	1.27	0.33 ††	0.38 ††	21.3	11.1
50005	15A1	0.166	0.816	1.1	1.3	0.226	0.219	0.116	1	0.278 †	0.088 †	21	11.6
50011	15A1	0.15	0.79	0.96	1.3	0.22	0.22	0.11	1	0.17	0.04	20	12
50012	15A1	0.131	0.793	0.931	1.3	0.211	0.2	0.1	1.02	0.174	0.026	21.6	10.9
50013	15A1	0.211	0.869	0.942	1.27	0.274	0.249	0.146	0.992	0.2	0.05	23.8 †	12.3
50014	15A1	0.125	0.733	0.938	1.23	0.218	0.218	0.104	1.06	0.201	0.037	20.8	12.1
50017	15A1	0.141	0.745	0.892	1.22	0.009 ††	0.009 ††	0.004 ††	0.049 ††	0.177	0.037	18.2 ††	10
50019	15A1	0.181	0.804	0.985	1.4	0.188	0.196	0.087	1.12	0.165	0.055	20.6	10.6
50020	15A1	0.152	0.799	0.912	1.25	0.241	0.227	0.112	1.12	0.183	0.035	22.2	10.9
50023	15A1	0.1	0.8	1	1.3	0.23	0.23	0.12	1.09	0.2	0.042	21.9	11.5
50031	15A1	0.153	0.821	0.982	1.36	0.282	0.265	0.156	1.16				
50038	15A1					0.56 ††	1.28 ††	1.79 ††	2.13 ††	1.34 ††	0.85 ††	58.4 ††	32.4 ††
52283	15A1	0.114	0.672	0.803 ††	1.09	0.909 ††	4.73 ††	2.52 ††	17.4 ††	0.356 ††	0.234 ††	19.3	10.2

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable K - 1M NH4Cl extract (15A1) air dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	15A1	0.227	0.416	1.3	1.76	0.452	1.1	1.03	0.66	1.32	0.1	0.1	0.58
21130	15A1	0.24	0.44	1.3	1.8								
21138	15A1	0.232	0.372	1.26	1.82	0.493	1.09	1.07	0.621	1.52	0.106	0.083	0.533
21148	15A1	0.27	0.38	1 ††	1.5 †	0.459	0.967	1.03	0.626	1.64	0.234 ††	0.182 ††	0.585
21182	15A1	0.23	0.38	1.24	1.75	0.5	1	1	0.73	1.51	0.087 ††	0.065	0.593
21193	15A1	0.24	0.34	1.22	1.46 ††	0.53	1.05	1.04	0.63	1.5	0.1	0.09	0.54
21196	15A1	0.26	0.423	1.4 ††	1.8	0.526	1.2	1.1	0.708	1.42	0.103	0.069	0.488
21232	15A1	0.37 ††	0.52 ††	1.34 ††	1.91	0.54	1.11	1.01	0.7	1.4	0.1	0.09	0.51
50005	15A1	0.219	0.379	1.25	1.73	0.47	1.01	0.997	0.656	1.45	0.109	0.083	0.562
50011	15A1	0.24	0.39	1.2	1.7	0.47	1.03	1	0.61	1.5	0.12 †	0.08	0.5
50012	15A1	0.216	0.375	1.18	1.7	0.468	1.05	1.02	0.634	1.54	0.101	0.085	0.538
50013	15A1	0.203	0.333	1.08 ††	1.57	0.527	1.08	1.04	0.633	1.9 ††	0.1	0.1	0.7 ††
50014	15A1	0.226	0.365	1.24	1.74	0.501	1.12	1.03	0.655	1.56	0.109	0.076	0.564
50017	15A1	0.21	0.349	1.14	1.64	0.49	1.08	0.104 ††	0.652	1.47	0.106	0.099	0.604
50019	15A1	0.298 ††	0.454	1.21	1.75	0.426	0.974	0.922 ††	0.701	1.55	0.099	0.104	0.653
50020	15A1	0.248	0.353	1.25	1.72	0.46	1.02	0.981	0.555 †	1.6	0.11	0.079	0.551
50023	15A1	0.3 ††	0.4	1.23	1.8	0.5	1.09	1.06	0.64	1.59	0.085 ††	0.056	0.53
50031	15A1	0.222	0.354	1.2	1.69	0.505	1.07	1.05	0.659				
50038	15A1					1.07 ††	1.25 ††	1.76 ††	5.28 ††	6.75 ††	0.21 ††	0.45 ††	1.95 ††
52283	15A1	0.204	0.344	1.08 ††	1.52 †	0.236 ††	0.111 ††	0.106 ††	1.13 ††	1.39	0.144 ††	0.106	0.509

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Ca — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
8888	15D3	5.9	11.2 ††	25.1 †	17.4	4.81	11.2	3.95	28.5 †				
10156	15D3	6.76	13.1	69.2 ††	18.5								
10166	15D3	6.41	12.6	32.3	19.4	5.25	11.9	4.31	33.8	7.44	9.22	8.85	17.8 ††
10173	15D3	7.5	9 ††	51.2 ††	17.4	5.4	10.5	4.1	37.4	8.1 ††	8.6	9.4	15
10181	15D3	6.38	12.4	32.8	19.3	4.95	12.1	4.82 †	30.7				
20136	15D3	7.1	13.5	42.2	22.6	5.3	14	4.2	43 ††	7.1	8.8	6.9 ††	15
20204	15D3	6.77	12.8	37.3	21.3	5.33	12.7	4.39	35.5	6.85	8.57	8.75	15.2
21043	15D3	6.55	12.4	29.6	20.2	4.83	11.3	3.93	33.1	6.79	8.04	8.67	14.8
21088	15D3	7.29	13.1	38.7	19.6	5.51	12.8	4.43	37	6.45	7.26 ††	7.43 †	13.7 †
21100	15D3	6.64	13.3	35.8	21.6	5.27	12.6	4.38	34	7.05	8.63	7.48 †	15.6
21138	15D3	7.53	13	38.1	23.4								
21182	15D3	6.6	12.1	37.9	20.2								
21190	15D3	9.3 ††	14.8 ††	153 ††	28.1 ††	7.95 ††	17.5 ††	5.96 ††	51.8 ††	8.02 ††	8.99	7.92	15.8
21196	15D3	7.1	13	36	21	6.3 ††	14	5.1 ††	41				
21229	15D3	6.81	12.9	39.3	20.7	5.35	12.5	4.32	35	6.7	8.73	9.2	15.5
50005	15D3	7.18	12.9	225 ††	20.5	5.12	11.9	4.29	35.2	7.1	8.26	8.87	15.2
50020	15D3	7.39	14.3	40.9	22.5	5.04	12.1	4.16	33.3	6.35	7.89	8.68	14.9
50021	15D3					6.4 ††	14	5.1 ††	18 ††	6.67	8.21	8.33	14.2
50024	15D3	7.07	12.3	32.6	19.1	5.22	11.7	4.14	32.8	6.75	8.11	8.83	14.7
50025	15D3	6.8	13.4	36.3	22.1	5.31	12.8	4.49	35	6.59	8.45	9.04	16.3 †
50027	15D3	6.76	12.6	35.3	20.6	5.26	12.1	4.34	30.4	7.12	8.66	9.19	14.6
50029	15D3	6.56	11.6 †	116 ††	16.4	4.52 †	10.1 ††	3.78 †	26.9 ††	5.96 ††	7.09 ††	6.53 ††	12.1 ††
50030	15D3	6.8	14.1	50 †	24.1	5.05	12.6	4.25	44.6 ††	7.52	8.85	8.76	16.6 †
50032	15D3	7.12	13.9	39.3	23	5.53	13.6	4.6	36.5	7.34	9.14	9.9	17.6 ††
50037	15D3	6.72	12.7	34.5	20.6	5.26	12.2	4.34	35.4	6.87	8.49	8.84	15.2
50081	15D3	6.8	13	21 ††	53 ††	5.6	14	4.3	43 ††	6.93	8.58	8.19	14.7

52283	15D3	7.1	13.2	34.4	20.4								
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Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Mg — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
8888	15D3	0.502	4.77 ††	2.31	4.53 ††	0.691	5.55	2.06	15.1 ††				
10156	15D3	0.738 ††	9.69 ††	4.3 ††	10.3								
10166	15D3	0.56	9.2	2.55	11.2	0.773	6.11 †	2.23	19.3	2.45	1.31	20.4 ††	11.8 ††
10173	15D3	0.64	5.96 ††	3.08 ††	8.11 †	0.75	5.07 ††	2.11	18.7	2.6 ††	1.5 ††	18	9.96
10181	15D3	0.551	8.5	2.06	9.74	0.727	5.61	2.26	17.8				
20136	15D3	0.63	5.61 ††	1.91 †	6.58 ††	0.8	5.8	2.1	19	2.15	1.16	13.8 ††	8.66 †
20204	15D3	0.608	8.79	2.42	10.2	0.755	6.09 †	2.21	19.4	2.01	1.08	18.2	9.47
21043	15D3	0.56	8.23	2.4	10.5	0.73	5.4	2.01	17.6	2.1	1.07	17.4	9.16
21088	15D3	0.644	9.27	2.79	10.9	0.72	5.67	2.02	19.5	2.04	1.04	17.3	9.28
21100	15D3	0.664	8.21	2.54	10.6	0.736	5.67	2.08	18.1	2.34	1.24	16	10.4 †
21138	15D3	0.622	8.73	2.74	10.7								
21182	15D3	0.5	8.3	2.4	9.5								
21190	15D3	1.02 ††	7.26 †	4.56 ††	5.09 ††	0.899 ††	5.52	2.53 ††	9.9 ††	2.64 ††	1.43 ††	9.05 ††	7.58 ††
21196	15D3	0.6	8.7	2.4	10	0.87 ††	6.4 ††	2.4 ††	21 ††				
21229	15D3	0.57	8.88	2.4	10.5	0.786	5.77	2.19	18.5	2.16	1.2	19.7	9.81
50005	15D3	0.584	8.46	6.3 ††	10.2	0.753	5.44	2.11	19	2.27	1.14	17.5	9.67
50020	15D3	0.507	7.17 †	2.02	8.38 †	0.735	5.65	2.06	18	2.49	1.32	21.5 ††	11.6 ††
50021	15D3					0.76	6.2 ††	2.2	10 ††	2.08	1.09	17.5	9.3
50024	15D3	0.606	8.08	2.35	9.61	0.797	5.67	2.16	17.8	2.16	1.14	18.3	9.28
50025	15D3	0.637	8.68	2.6	10.4	0.777	5.77	2.16	18.5	2.2	1.16	18.4	9.45
50027	15D3	0.593	8.32	2.36	9.75	0.782	5.47	2.14	16.5 †	2.36	1.23	19.1	9.17
50029	15D3	0.503	8.08	3.29 ††	9.12	0.633 ††	5.29	1.89 ††	15.4 ††	1.81 †	1.14	15.1 ††	8.09 ††
50030	15D3	0.58	9.08	2.46	10.9	0.76	5.55	2.17	16.8	2.21	1.08	18.6	9.48

50032	15D3	0.54	8.17	2.33	10.2	0.733	5.78	2.14	18.7	1.87	1.02	18.6	9.68
50037	15D3	0.567	8.5	2.21	9.98	0.732	5.61	2.13	19.1	2.17	1.13	17.8	9.62
50081	15D3	0.523	8.3	10.1 ††	2.5 ††	0.773	5.8	2.1	19	2.11	1.15	17.4	9.07
52283	15D3	0.582	8.16	2.16	9.38								

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Na — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
8888	15D3	0.124	0.734	0.84	1.14	0.216	0.083 ††	0.089	0.492 ††				
10156	15D3	0.735 ††	1.38 ††	1.62 ††	1.37								
10166	15D3	0.14	0.75	0.94	1.24	0.247	0.234	0.128	1.05	0.18	0.04	17.2	8.95
10173	15D3	0.21 †	0.56 ††	0.87	0.99 ††	0.21	0.19	0.11	1.05	0.23 ††	0.084 ††	17	9.52
10181	15D3	0.127	0.789	0.899	1.21	0.194	0.193	0.159	1.02				
20136	15D3	0.14	0.91	0.98	1.38	0.23	0.23	0.1	1.1	0.18	0.04	15.2	9.02
20204	15D3	0.165	0.767	1.06	1.33	0.212	0.22	0.112	1.03	0.2	0.058	20	9.79
21043	15D3	0.157	0.798	0.9	1.3	0.155 ††	0.79 ††	0.917 ††	1.32 ††	0.191	0.051	19.5	10.4
21088	15D3	0.12	0.73	0.96	1.18	0.16 ††	0.17	0.08	0.87	0.2	0.083 ††	19.5	9.7
21100	15D3	0.149	0.832	0.978	1.37	0.229	0.236	0.121	1.13	0.189	0.043	16.8	10.9
21138	15D3	0.186	0.858	0.962	1.37								
21182	15D3	0.13	0.8	0.97	1.28								
21190	15D3	0.181	0.958 ††	1.15 †	1.45	0.296 †	0.189	0.148	1.11	0.25 ††	0.12 ††	20.1	11.8
21196	15D3	0.199	0.82	0.928	1.3	0.266	0.265	0.14	1.1				
21229	15D3	0.151	0.881	1.05	1.43	0.244	0.225	0.113	1.05	0.185	0.032	23.2	12
50005	15D3	0.132	0.784	0.957	1.22	0.219	0.209	0.126	0.984	0.228 ††	0.046	20	10.6
50020	15D3	0.149	0.955 †	1.07	1.4	0.241	0.232	0.109	1.12	0.166	0.025	20.7	11
50021	15D3					0.38 ††	0.34 †	0.19 †	0.71 ††	0.19	0.05		
50024	15D3	0.138	0.826	0.949	1.33	0.23	0.217	0.106	1.09	0.169	0.018 †	19	9.72
50025	15D3	0.185	0.831	1.01	1.36	0.257	0.263	0.158	1.06	0.226 †	0.092 ††	22.1	11.3

50027	15D3	0.14	0.757	0.897	1.23	0.268	0.237	0.128	1.03	0.18	0.043	18.2	9.02
50029	15D3	0.159	0.833	1.55 ††	1.28	0.309 ††	0.31 †	0.172	1.17	0.486 ††	0.12 ††	18	9.17
50030	15D3	0.11	0.71	0.82	1.11	0.17	0.17	0.07	0.89	0.15 ††	0.02 †	18.8	10.1
50032	15D3	0.15	0.79	0.95	1.29	0.213	0.211	0.111	0.981	0.186	0.048	21.1	11.7
50037	15D3	0.117	0.737	0.898	1.24	0.224	0.24	0.131	0.968	0.196	0.039	20.2	9.83
50081	15D3	0.192	0.81	1.4 ††	1.03	0.288	0.299	0.187 †	1.14	0.166	0.043	18.1	10.2
52283	15D3	0.137	0.732	0.846	1.19								

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable K — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
8888	15D3	0.159 ††	0.302 ††	0.974 †	1.38 ††	0.452	1.01	0.973	0.571				
10156	15D3	0.422 ††	0.655 ††	1.43 †	1.67								
10166	15D3	0.21	0.37	1.17	1.62	0.479	1.04	1.02	0.631	1.53	0.09	0.13 ††	0.67 ††
10173	15D3	0.21	0.27 ††	1.28	1.44	0.46	0.92	0.99	0.66	1.69 ††	0.11	0.058	0.52
10181	15D3	0.188 †	0.331 †	0.948 †	1.49	0.404 ††	0.922	0.898 †	0.511				
20136	15D3	0.22	0.4	1.39	1.83 †	0.47	1.1	1	0.69	1.46	0.09	0.06	0.51
20204	15D3	0.215	0.422 †	1.29	1.75	0.437	1.09	0.962	0.599	1.3 ††	0.092	0.08	0.57
21043	15D3	0.225	0.367	1.12	1.62	0.452	0.958	0.928	0.597	1.47	0.102	0.068	0.484
21088	15D3	0.24	0.42 †	1.12	1.75	0.474	1.11	0.961	0.823 ††	1.43	0.099	0.085	0.638 ††
21100	15D3	0.23	0.378	1.18	1.71	0.462	1.06	1.02	0.642	1.56	0.112	0.04 †	0.558
21138	15D3	0.222	0.361	1.24	1.75								
21182	15D3	0.21	0.36	1.12	1.51								
21190	15D3	0.273 ††	0.445 ††	1.19	0.693 ††	0.571 ††	1.04	1.19 ††	0.694	1.3 ††	0.12	0.08	0.53
21196	15D3	0.216	0.352	1.1	1.6	0.483	1.1	0.972	0.685				
21229	15D3	0.215	0.373	1.23	1.7	0.464	0.985	0.971	0.545	1.44	0.095	0.06	0.506
50005	15D3	0.213	0.364	1.21	1.65	0.457	0.965	0.958	0.572	1.42	0.103	0.062	0.539
50020	15D3	0.433 ††	0.666 ††	1.82 ††	2.59 ††	0.464	1.04	1	0.587	1.27 ††	0.078	0.049	0.465

50021	15D3					0.52 ††	1.4 ††	1.25 ††	0.33 ††	1.47	0.11	0.07	0.61 †
50024	15D3	0.219	0.365	1.14	1.66	0.473	1.02	0.993	0.598	1.5	0.094	0.061	0.532
50025	15D3	0.214	0.368	1.2	1.69	0.446	1.02	0.976	0.592	1.47	0.108	0.09 †	0.53
50027	15D3	0.222	0.354	1.12	1.58	0.475	1.02	1	0.552	1.51	0.115	0.068	0.51
50029	15D3	0.236	0.413 †	1.66 ††	1.63	0.478	1.08	0.95	0.715	1.32 †	0.114	0.118 ††	0.665 ††
50030	15D3	0.22	0.34	1.08	1.53	0.45	1.01	0.99	0.57	1.45	0.1	0.04 †	0.51
50032	15D3	0.23	0.37	1.24	1.68	0.466	1	0.959	0.56	1.61 ††	0.095	0.062	0.505
50037	15D3	0.201	0.391	1.2	1.63	0.457	0.963	0.963	0.575	1.42	0.117	0.063	0.693 ††
50045	15D3	0.224	0.373	1.2	1.6	0.44	0.95	0.92	0.54	1.46	0.094	0.096 †	0.595 †
50081	15D3	0.184 ††	0.387	1.7 ††	1.4 †	0.435	1.06	0.913	0.835 ††	1.37	0.1	0.121 ††	0.644 ††
52283	15D3	0.231	0.357	1.15	1.63								

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Al — 1M KCl (15G1) cmol+/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	15G1	0.045	0.02	0.002	0.027 †	0.731	0.009	0.014	0.007	0.012	0.007	25.2	0.007
21043	15G1	0.03	0.009	0.008	0.001					0.05 ††	0.075 ††	2.07 ††	0.108 ††
21088	15G1	0.076	0.021	0.051 ††	0.024	0.82	0.03 ††	0.09 ††	0.05 ††	0.01	0.002	24	0.006
21100	15G1	0.034	0.011	0.02	0.014	1.05 †	0.016	0.054 ††	0.025 ††	0.022	0.008	17.8 †	0.009
21130	15G1	0.029	0.002	0.008	0.001								
21193	15G1	0.005	0.005	0.005	0.005								
21196	15G1	0.072	0.002	0.026	0.003	73 ††	0.001	0.001	0.001 †	0.01	0.001	25.5	0.002
21229	15G1	0.023	0.009	0.015	0.021	0.736	0.001	0.014	0.008	0.038 †	0.004	24.6	0.009
21232	15G1	0.08 †	0.09 ††	0.13 ††	0.11 ††	0.83	0.05 ††	0.24 ††	0.04 ††	0.17 ††	0.14 ††	28.9 †	0.14 ††
50005	15G1	0.015	0.004	0.016	0.006	0.286 ††	0.004	0.009	0.004	0.008	0.005	24.9	0.005
50011	15G1	0.04	0.007	0.006	0.007	0.88	0.007	0.009	0.008	0.016	0.006	20	0.006
50013	15G1											23.3	
50014	15G1	0.031	0.015	0.015	0.015	0.757	0.041 ††	0.015	0.016 †	0.016	0.015 †	22.4	0.016
50017	15G1	0.305 ††	0.023	0.198 ††	0.032 ††	0.789	0.006	0.003	0.008	0.017	0.003	23.2	0.012
50019	15G1									0.008	0.005	13.8 ††	0.021 †
50027	15G1	0.128 ††		0.175 ††		0.57 †				0.019	0.005	9.94 ††	0.007
50029	15G1	0.02	0.004	0.021	0.002	0.382 ††	0.01	0.001	0.011	0.011	0.001	16.2 †	0.073 ††
50030	15G1					0.96	0.01	0.01	0.01	0.04 †	0.01	23	0.01
50032	15G1	0.047	0.006	0.002	0.002	0.808	0.007	0.007	0.005	0.031	0.004	24.8	0.004
50037	15G1	0.036	0.002	0.018	0.002	0.772	0.008	0.014	0.008	0.017	0.002	25.1	0.003
50081	15G1	0.016	0.014	0.019	0.011	0.094 ††	0.016	0.01	0.008	0.017	0.014 †	5.17 ††	0.073 ††

Lab. Code #	Method Codes	Soil sample identification and values for											
		NOT ASSESSABLE				Extractable K — Bicarbonate (18A1) mg/kg air dry				NOT ASSESSABLE			
		<i>December 2014 (Round 214)</i>				<i>March 2015 (Round 414)</i>				<i>June 2015 (Round 614)</i>			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
20204	18A1					198	412	378	226				
21088	18A1									580	5	5	350
21100	18A1					408 ††	2140 ††	709 ††	865 ††	542	118	81	332
21138	18A1					205	382	359	228	542	56	59	338
21193	18A1	86	137	511	598	215	470	436	234	572	17	15	327
21232	18A1	143	177	368	454	225	432	411	942 ††	574	65	48	348
50017	18A1	75	119	359	478					506 †	49	44	3.2 ††
50020	18A1					164	338	335	152 ††	962 ††	110	364 ††	642 ††
50027	18A1	94	148	430	529	209	433	432	224	583	62	48	397 †

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Lab. Code #	Method Codes	Soil sample identification and values for											
		Aluminium – Mehlich 3 (18F1) mg/kg oven dry											
		<i>December 2014 (Round 214)</i>				<i>March 2015 (Round 414)</i>				<i>June 2015 (Round 614)</i>			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	1640	514	242	807	1720	493	987	648	1310	381	2580	358
10156	18F1	1490	517	276	733 ††	1760	543	994	717	1240 †	345	2600	315
21088	18F1	1690	679 †	263	843	1860	627 ††	1110 ††	743	1300	475	2500	401
21100	18F1	1590	542	271	822	1670	529	937	686	1290	391	2830 ††	355
21196	18F1	2160 ††	706 ††	368	1020 ††	1990 ††	579	1090 ††	774	1460 ††	429	2860 ††	392
21229	18F1	1630	575	233	841	1770	529	1000	698	1230 †	418	2630	394
21232	18F1	1470	557	320	867	1850	538	992	680	1260	384	2950 ††	323
50004	18F1	1620	577	352	878	1720	517	933	718	1300	502 †	2560	418
50005	18F1	1480	624	227	868	1440 ††	451	923	691	1050 ††	330	2500	287

50014	18F1	1540	567	348	829	1650	524	975	719	1280	400	2590	366
50020	18F1	1590	520	292	799	1660	474	938	670	1290	364	2500	354
50024	18F1	1550	557	253	822	1450 ††	500	873	626	1180 ††	352	2020 ††	321
50037	18F1	1590	530	320	864	1680	560	948	682	1260	360	2560	351
50042	18F1	2940 ††	756 ††	228	1110 ††	1810	384 ††	918	378 ††	744 ††	20 ††	1040 ††	104 ††
52283	18F1	1340 ††	456	219	703 ††	1620	524	912	656	1290	411	2550	369

Lab. Code #	Method Codes	Soil sample identification and values for Boron – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	0.356	0.438	4	2.2	0.116	1.4	0.301	0.869	0.831	0.139	0.202	0.634
10156	18F1	0.286	0.249	0.362	0.278 ††	0.655 ††	0.76	0.624 ††	0.667	0.72	0.068	0.078	0.204 ††
21088	18F1	0.505	0.575	4.3	2.2	0.4 †	1.5	0.23	0.93	0.93	0.27 †	0.53	0.63
21100	18F1	0.52	0.324	2.6	1.5	0.092	1.3	0.21	0.778	0.848	0.169	0.209	0.618
21196	18F1	0.2	0.2	1.4	0.938	1.3 ††	2.5 ††	1.1 ††	1.7 ††	1.2 †	0.667 ††	0.978 ††	0.979 ††
21229	18F1	0.357	0.811	3.1	2.1	0.217	1.1	0.343	0.946	0.981	0.233 †	0.544	0.735
21232	18F1	0.77 ††	0.97	3.9	2.4	0.26	1.3	0.64 ††	0.6	1.4 ††	0.38 ††	0.47	0.88 †
50005	18F1	0.323	0.43	2.3	1.6	0.361	1.4	0.299	1.01	0.906	0.355 ††	0.393	0.7
50014	18F1	0.416	0.495	4.9	2.6	0.086	1.5	0.33	0.93	0.846	0.085	0.22	0.592
50020	18F1	0.37	0.27	5.3	2	0.1	1.3	0.23	0.827	0.676	0.149	0.22	0.524
50024	18F1	0.31	0.229	2.6	1.4	0.04	0.88	0.17 †	0.38 ††	0.581	0.135	0.087	0.38 †
50037	18F1	0.371	0.484	3.6	2	0.126	1.3	0.301	0.932	0.91	0.121	0.392	0.621
50042	18F1	0.91 ††	0.69	5.7	3	0.42 †	1.1	0.3	0.62	0.39 ††	0.14	0.04	0.24 ††
52283	18F1	0.361	0.235	1.2	0.803	0.143	1.4	0.304	0.814	0.835	0.143	0.26	0.568

**Soil sample identification and values for
Calcium – Mehlich 3 (18F1) mg/kg oven dry**

Lab. Code #	Method Codes	Soil sample identification and values for Calcium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	1310	2570	20600	3880	998	2380	827	7180	1440	1760	1770	3110
10156	18F1	1450	2680	26100 ††	4360	1020	2320	506 ††	7550	1340	1330 ††	1600	2940
21088	18F1	1320	2460	21000	3960	1010	2160	803	8230	1430	1750	1700	2750
21100	18F1	1530	2390	20500	4110	947	2280	824	7070	1380	1640	1710	2920
21196	18F1	1380	2650	9890 ††	4310	1010	2500	889	8450 †	1450	1470 ††	1750	3200
21229	18F1	1410	2460	13300 ††	3850	1020	2430	860	7480	1340	1650	1510	3020
21232	18F1	1430	2470	21300	4060	1120	2640	968 ††	9050 ††	1520	1840	1840	3210
50004	18F1	1460	2750	20500	4600	1060	2410	867	7660	1540	1840	2010	2600
50005	18F1	1330	1690 ††	31600 ††	2760 ††	927	2110 †	838	7390	1310	1660	1550	2620
50014	18F1	1350	2550	20800	4700	984	2450	862	7460	1470	1830	1890	3130
50020	18F1	1280	2470	25000 ††	3860	1030	2360	832	7100	1490	1700	1840	3090
50024	18F1	1530	2600	20200	4070	1090	2500	929 †	7970	1460	1550	1460	2840
50032	18F1	1450	2700	24400 ††	4030								
50037	18F1	1260	2430	21500	4090	962	2430	845	7410	1380	1750	1650	3210
50042	18F1	1580	2930 ††	19800	4240	907	1850 ††	716 ††	5130 ††	1250	1470 ††	1410	1570 ††
52283	18F1	1290	2390	16600 ††	3770	958	2430	787	11800 ††	1480	1740	1710	2710

Soil sample identification and values for
Copper – Mehlich 3 (18F1) mg/kg oven dry

Lab. Code #	Method Codes	Soil sample identification and values for Copper – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	1.4	1.5	0.841	2.8	0.965	2.1	2.1	1.6	2.6	4.4	1.8	2.3
10156	18F1	1.8	2.3	1.3	3.9	0.827	2.5	2.7 ††	2.2 ††	2.4	3.8 †	1.5	2.2
21088	18F1	1.3	1.9	1.1	2.9	0.684 †	2.4	2.1	1.9	2.7	4.3	1.1	2.2
21100	18F1	1.4	1.6	1.1	2.8	1	2.1	2	1.6	2.4	4.3	1.7	2.1
21196	18F1	1.5	1.9	0.637	3.3	0.953	2.7	2.5 ††	2.1 †	2.5	3.8 †	1.5	2.1
21229	18F1	1.5	1.6	0.746	3	0.919	2.3	2	1.5	2.3	4.1	1.3	2.1
21232	18F1	1.3	1.4	1	2.9	0.98	2.8	2	1.7	2.5	4.4	1.7	2.1
50004	18F1	1.6	1.7	0.938	3.3	0.983	2.3	2	1.7	2.6	4.4	1.9	2.1
50005	18F1	1.9	2.5 ††	0.907	3.3	1	2.3	2	1.7	2.1	3.6 ††	1.4	1.8 ††
50014	18F1	1.5	1.8	1.2	3.1	1	2.4	2.3 †	1.8	2.6	4.6	1.8	2.3
50020	18F1	1.2	1.4	0.64	2.8	0.529 ††	2.2	1.8 †	1.5	2.6	4.1	1.6	2.2
50024	18F1	1.3	1.5	0.773	2.7	0.78	2.1	1.8 †	1.6	2.1	3.3 ††	1.2	1.7 ††
50032	18F1	1.6	1.9	1.4	3.3								
50037	18F1	1.3	1.6	0.873	2.6	1	2.2	2	1.6	2.4	4.3	1.4	2.1
50042	18F1	1.6	1.8	0.77	3.4	0.7 †	1.4 ††	1.3 ††	1 ††	2.2	3.3 ††	0.59 ††	0.98 ††
52283	18F1	1.2	1.5	0.798	2.5	1	2.4	2.2 †	1.8	2.6	4.4	1.7	2.2

Lab. Code #	Method Codes	Soil sample identification and values for Iron – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	55	145 †	69	198	365	140 †	67	99	124	194	381	97
10156	18F1	85 ††	273 ††	138 ††	286	294 ††	177	72	131	112	179	320	104
21088	18F1	64	247 ††	106	227	386	209 ††	92 ††	130	185 ††	207	238	98
21100	18F1	56	168	83	201	346	140 †	53 †	102	105	179	343	91
21196	18F1	72	206 †	88	254	431	188 ††	81 ††	132	163 †	218	434	103
21229	18F1	61	179	80	233	359	164	70	128	116	201	516	111
21232	18F1	46	180	79	235	344	164	69	106	129	187	366	94
50004	18F1	51	174	96	227	392	162	65	134	113	176	353	77
50005	18F1	86 ††	287 ††	84	285	288 ††	1.3 ††	65	122	73 ††	143	475	78
50014	18F1	58	176	94	224	396	161	63	111	120	200	382	96
50020	18F1	64	181	109	239	377	150	63	115	145	208	398	104
50024	18F1	58	176	79	216	334	155	64	110	101	146	286	74
50032	18F1	79	198 †	103	247								
50037	18F1	55	180	91	250	385	167	62	123	126	189	496	95
50042	18F1	107 ††	297 ††	101	382 ††	445	157	84 ††	121	208 ††	309 ††	353	86
52283	18F1	51	143 †	74	193	397	158	66	110	137	207	384	100

Lab. Code #	Method Codes	Soil sample identification and values for Magnesium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	63	1070	445	1260	87	707	246	2330	271	172	2250	1230
10156	18F1	62	867	505	1110	81	586 ††	994 ††	1770 ††	224	147	1750 †	987
21088	18F1	69	961	479	1160	96	719	258	2440	250	178	2030	1050
21100	18F1	80	1060	552	1400	91	735	247	2260	260	154	2120	1190
21196	18F1	73	1160	203 ††	1370	99	841 ††	312 ††	2540 ††	270	148	2240	1160
21229	18F1	77	1010	419	1250	97	739	264	2200	279	179	2150	1230
21232	18F1	73	1070	503	1360	108 †	791 †	285	2330	279	175	2310	1280
50004	18F1	68	1160	559	1460	93	734	255	2350	245	151	2490	1010
50005	18F1	64	575 ††	379	703 ††	86	595 ††	248	2280	244	165	2090	846 ††
50014	18F1	68	973	508	1290	90	743	258	2370	280	184	2320	1270
50020	18F1	70	1080	602	1340	92	734	257	2300	280	172	2250	1230
50024	18F1	70	1030	469	1280	93	742	265	2370	259	147	1700 †	1040
50032	18F1	70	1020	502	1260								
50037	18F1	70	973	568	1340	92	716	249	2310	260	182	2200	1380
50042	18F1	76	1060	490	1220	66 ††	481 ††	179 ††	1300 ††	198 ††	142	943 ††	522 ††
52283	18F1	67	980	408	1180	97	791 †	277	3120 ††	270	183	1820	1220

Lab. Code #	Method Codes	Soil sample identification and values for Manganese – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	90	269	39	85	136	116	428	118	653	319	63	276
10156	18F1	123 ††	338 ††	81 ††	128	123	121	381	155	606	264	63	245
21088	18F1	100	290	64	105	153	136	503	170	690	206	59	192
21100	18F1	100	261	46	91	136	117	375	111	579	282	64	253
21196	18F1	112	282	31	97	168 †	151 ††	511	163	712	281	65	266
21229	18F1	103	280	37	75	155	118	443	114	610	210	62	192
21232	18F1	96	259	50	86	149	133	449	129	665	308	65	250
50004	18F1	94	276	44	82	137	122	403	135	729	293	59	228
50005	18F1	100	161 ††	34	28 ††	180 ††	118	438	130	478 ††	140 ††	59	127
50014	18F1	97	293	51	99	145	136	464	137	692	332	66	282
50020	18F1	97	291	57	97	115 †	96 ††	342	98	673	325	71	285
50024	18F1	102	287	44	98	141	125	431	124	588	238	46 ††	193
50032	18F1	111	305	47	111								
50037	18F1	90	284	48	73	146	128	432	135	677	315	59	210
50042	18F1	144 ††	423 ††	56	161 ††	147	112	440	139	766	295	33 ††	182
52283	18F1	83 †	248	39	83.7	137	122	402	119	650	325	61	266

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus ICP – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	12	20	43	14	36	19	5.1	12	100	3.7	55	33
10156	18F1	8.5	21	44	17 ††	71 ††	39 ††	5.8 ††	24 ††	98	5.5	54	60 ††
21088	18F1	7.8	24	39	14	37	22 †	4.4	12	94	2.9	50	35
21100	18F1									90 †	4.2	53	35
21196	18F1	12	24	48	17 ††	37	22 †	5.2	14 ††	100	5.1	60	46 †
21229	18F1	9.2	22	41	13	36	20	4.5	13 †	97	7.5 ††	51	73 ††
21232	18F1	12	22	56 ††	15	34	22 †	4.8	12	100	4.5	58	38
50004	18F1	6.5	18	40	7.9 ††	35	21	4.3	17 ††	100	0.4 ††	58	27 †
50005	18F1	8	23	37	14	36	20	4.4	12	101	4.3	49	37
50014	18F1	10	21	55 †	15	37	20	4	12	103	2	56	36
50020	18F1	9	17	38	11 †	36	18 †	4.7	13 †	102	4.4	57	41 †
50024	18F1	8.9	20	47	14	31 ††	20	4.0	11 †	76 ††	3.9	42	35
50037	18F1	10	20	42	13	35	20	4.4	12	86 ††	6.1	50	35
50042	18F1	9.5	7.3 ††	15 ††	4.5 ††	22 ††	5.4 ††	1 ††	4 ††	36 ††	3.1	11 ††	6.8 ††
52283	18F1	9	17	43	13	32	20	4.5	12	98	5	57	47 ††

Lab. Code #	Method Codes	Soil sample identification and values for Potassium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	80	132	428	587	171	387	365	200	593	44	27	211
10156	18F1	95	147	448	554	148 †	267 ††	182 ††	154 ††	499 ††	38	19	175
21088	18F1	97	155	704 ††	651	187	405	391	234	542	43	26	224
21100	18F1	100 †	144	499	640	182	398	374	223	575	39	20	185
21196	18F1	82	143	217 ††	679	178	492 ††	462 ††	222	587	44	26	221
21229	18F1	83	137	451	611	185	403	384	211	564	42	33	196
21232	18F1	122 ††	175 ††	396	571	189	404	379	238	560	45	30	215
50004	18F1	82	137	561 †	638	182	392	358	221	804 ††	266 ††	61 ††	183
50005	18F1	97	113 ††	456	443 ††	139 ††	443 ††	376	202	495 ††	50	33	259 ††
50014	18F1	75	131	433	581	169	397	370	206	566	45	26	197
50020	18F1	79	135	501	638	183	405	380	214	554	38	24	196
50024	18F1	84	134	454	611	175	394	378	212	565	42	24	191
50032	18F1	85	142	433	628								
50037	18F1	83	150	614 †	670	170	396	370	208	558	40	34	250 ††
50042	18F1	44 ††	68 ††	238 ††	268 ††	45 ††	109 ††	97 ††	67 ††	200 ††	19 ††	27	83 ††
52283	18F1	94	136	356 †	572	141 ††	459 ††	388	158 ††	581	33	31	203

Lab. Code #	Method Codes	Soil sample identification and values for Sodium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	29	171	211	278	45	46	23	213	42	8.4	4710	2540
10156	18F1	29	151	212	255	59	55	22	181	60 ††	56 ††	23.9 ††	184 ††
21088	18F1	28	130	203	201 ††	44	42	15 ††	182	49	20	4090 †	1950 ††
21100	18F1	32	158	219	280	45	46	26	208	42	8.7	5100	2770 †
21196	18F1	36	197	89 ††	334	55	53	29	242	41	9.7	2990 ††	2450
21229	18F1	32	187	234	303	50	49	26	230	40	7.8	4730	2440
21232	18F1	43	182	219	287	92 ††	65	38	275	43	20	4830	2370
50004	18F1	32	163	254 †	292	52	50	22	245	44	7.2	4020 †	1740 ††
50005	18F1	33	157	143 ††	253	62	65	31	240	49	16	4690	4030 ††
50014	18F1	44 ††	195	217	299	56	56	32	232	51	26	4720	2510
50020	18F1	32	181	269 †	308	59	58	29	288	47	8.4	4910	2620
50024	18F1	32	180	226	296	54	53	28	256	60 ††	24	3890 ††	2320
50032	18F1	36	181	220	293								
50037	18F1	29	165	308 ††	327	49	55	32	232	40	14	4710	2460
50042	18F1	68 ††	226	458 ††	415 ††	62	64	44 ††	245	67 ††	34 †	3960 †	1790 ††
52283	18F1	41	157	147 ††	250	90 ††	120 ††	64 ††	201	43	6.3	4810	2540

Lab. Code #	Method Codes	Soil sample identification and values for Sulphur – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	49	13	73	11	64	13	15	7	43	8.8	7870	31
10156	18F1		1.2 ††	21 ††	5.6 †								
21088	18F1	52	20	92	17	62	9.2 ††	7.1 ††	4.5	27 ††	13 ††	1800 ††	19 ††
21100	18F1	88 ††	19	188 ††	95 ††	67	52 ††	28 ††	35 ††	33 †	20 ††	4270 ††	17 ††
21196	18F1	64 ††	18	52	13	72	15	19	9.4	43	8.3	8150	32
21229	18F1	49	13	74	11	58	13	16	8.6	36	7.5	7270	32
21232	18F1	53	16	86	14	61	17	17	9	41	9.6	9130 †	33
50004	18F1	50	7.1	80	7	62	15	15	13	48	10	5930	11 ††
50005	18F1	32 ††	13	62	11	54	14	18	8.3	43	9.8	7180	33
50014	18F1	49	13	81	13	63	15	17	10	42	9.2	7760	32
50020	18F1	47	13	88	11	65	15	16	11	38	9.4	7400	54 ††
50024	18F1	47	16	121 ††	17	56	15	14	17 ††	32 †	7	7320	24 †
50037	18F1	48	15	70	14	57	11 †	18	8.3	39	8.5	7250	30
50042	18F1	64 ††	11	78	11	63	8.1 ††	14	4.2 †	25 ††	2 ††	3350 ††	15 ††
52283	18F1	74 ††	21	112 †	17	67	16	15	8.7	42	7.7	7810	35

Lab. Code #	Method Codes	Soil sample identification and values for Zinc – Mehlich 3 (18F1) mg/kg oven dry											
		December 2014 (Round 214)				March 2015 (Round 414)				June 2015 (Round 614)			
		ASS1412-1	ASS1412-2	ASS1412-3	ASS1412-4	ASS1503-1	ASS1503-2	ASS1503-3	ASS1503-4	ASS1506-1	ASS1506-2	ASS1506-3	ASS1506-4
22	18F1	4.1	0.742	2.4	0.803	3.7	3.5	4.5	0.764 †	4.2	2.8	23	0.655
10156	18F1	2.6 ††	2.52 ††	2.9	2.6 ††	3.5	3.1	2.8 ††	2.5 ††	3.1	2.1	17	0.459
21088	18F1	4.3	0.87	3	0.76	4	3.9	4.9	1	4.4	3.3	21	0.6
21100	18F1	4	0.677 ††	2.4	0.646	4.2	3.8	4.6	0.939	4.5	3	26	0.994
21196	18F1	4.8	0.929	2	0.886	4.2	4.6	5.9 ††	1.2 †	4.2	2.7	24	0.752
21229	18F1	4.2	0.876	3.8	0.909	4.2	4	4.8	1	3.6	2.9	22	0.675
21232	18F1	5 †	0.91	3.4	0.95	4.1	4.9	4.9	1.2 †	3.3	2.2	25	0.76
50004	18F1	4.4	0.86	3	0.82	5.6	4.3	5.1	1	4.6	3.4	23	0.533
50005	18F1	4.6	1.04 ††	2.7	0.788	4.4	3.7	4.5	1	3.8	2.8	21	0.674
50014	18F1	4.3	0.828	3.2	0.859	5.9	4.2	4.9	1	4.5	3.4	25	0.761
50020	18F1	4.4	0.56 ††	3.2	0.56 ††	3	2.8	3.1 ††	0.629 ††	4.1	2.7	22	0.65
50024	18F1	4.2	0.879	3	0.947	4.7	4.2	4.5	1.3 †	4	2.5	18	0.78
50032	18F1	4.2	0.83	3.1	0.99								
50037	18F1	3.8	0.87	2.5	0.883	4.4	3.9	4.5	0.99	4.1	2.9	21	0.509
50042	18F1	6.5 ††	1.1 ††	3.4	1.1	4.9	3.7	4.9	1	4.9	3.5	17	0.55
52283	18F1	3.7	0.834	2.4	0.778	4.7	4.1	5	1.2 †	4.6	3.3	25	0.753

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 These are ASPAC endorsed tests, where “O” in the code refers to Olsen extractable P, and “C” refers to Colwell extractable P. See the table Notes for more details.