

**Australasian
Soil and Plant
Analysis Council Inc.**



**ASPAC
Soil Proficiency Testing
Program Report**

2013-14

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May 2019

ISSN # 1445-5234

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An appropriate citation for this report is:

Lyons, D.J., Sparrow, L.A. and Hill, R.J. (2019). *ASPAC Soil Proficiency Testing Program Report 2013-14*, 91+ v pp. ASPAC, Melbourne, Victoria.

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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.

Acknowledgements

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 2013-14[†] ^{††}

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[†] Mr B.K. Daly of Palmerston North, NZ, retired from the ASPAC-LPC on 10 June 2013, and was not a member of the ASPAC-LPC when this soil program occurred.

^{††} 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
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^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 2013-14 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 2013-14. 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 this will change around the time of the 2014-15 program.

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 52 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 40 laboratories involved from Australia (NSW=13; QLD=9; VIC=6; SA=6; WA=4, TAS=1; ACT=1), 7 from New Zealand, 2 from Fiji, and 1 one each from Vietnam, Papua New Guinea and Thailand.

Most reported results (see Table 2.1) across the three “rounds” combined (average of 42), were submitted for method 4A1 (pH, 1:5 soil-water), method 3A1 (Electrical conductivity, 1:5 soil-water) and total N pooled (7A1 + 7A2 + 7A5). The median was 17 laboratories for each method.

Table 2.1. Test methods, corresponding method codes and the arithmetic average number of results per round submitted by participating laboratories in the ASPAC 2013-14 soil ILPP

Soil Tests	Method Codes ⁱ	Number of participants		
		Dec 13	Mar 14	Jun 14
Air Dry Moisture	2A1	31	31	32
Electrical conductivity 1:5 soil-water	3A1	41	43	41
Soil pH, 1:5 soil-water	4A1	41	43	43
Soil pH, 1:5 0.01 M CaCl ₂ — direct	4B1+4B3	14	13	13
Soil pH, 1:5 0.01 M CaCl ₂ — indirect	4B2+4B4	21	24	20
Water soluble Cl — potentiometric	5A1	22	23	24
Water soluble Cl — autocolour	5A2	7	6	8
Organic Carbon —W&B	6A1	25	25	23
Total Organic C — Heanes	6B1	3	3	3
Total C — Dumas	6B2	26	25	23
Total Organic C — HF Induction, IR	6B3	16	17	18
Total N — Kjeldahl, steam distillation	7A1	19	23	20
Total N – Dumas	7A5	17	15	17
Total N – Pooled	7A1 + 7A2 + 7A5	41	43	42
Water Soluble Nitrate N — autocolour	7B1	17	20	20
KCl Extractable Nitrate N — autocolour	7C2	22	23	23
KCl Ext. Ammonium N — autocolour	7C2	26	28	28
Total P – all methods	9A1 and others	18	17	16
Colwell Extractable P	9B1+9B2	31	31	31
Olsen Extractable P	9C1+9C2	21	20	19
Bray-1 Extractable P	9E1+9E2	8	9	7
Acid Extractable P	9G1+9G2	10	9	10
Phosphorus buffer index (with Colwell P)	9I2a + 9I2b + 9I2c ⁱⁱ	23	22	21
Phosphorus buffer index (unadj)	9I4a + 9I4b + 9I4c ⁱⁱ	13	13	12
Phosphate Extractable S	10B Pooled	9	10	9
KCl 40 Extractable S	10D1	18	17	17
DTPA Extractable Fe	12A1	26	28	28
DTPA Extractable Cu	12A1	26	28	28
DTPA Extractable Mn	12A1	25	27	27
DTPA Extractable Zn	12A1	26	28	28
Hot CaCl ₂ Extractable B — manual colour	12C1+12C2	20	20	21
Exchangeable Ca — 1M NH ₄ Cl extract	15A1	18	17	17
Exchangeable Mg — 1M NH ₄ Cl extract	15A1	18	17	17
Exchangeable Na — 1M NH ₄ Cl extract	15A1	18	17	17
Exchangeable K — 1M NH ₄ Cl extract	15A1	18	17	17

Soil Tests	Method Codes ⁱ	Number of participants		
		Dec 13	Mar 14	Jun 14
Exchangeable Ca — 1M NH ₄ OAc extract	15D3	21	22	24
Exchangeable Mg — 1M NH ₄ OAc extract	15D3	21	22	24
Exchangeable Na — 1M NH ₄ OAc extract	15D3	20	22	24
Exchangeable K — 1M NH ₄ OAc extract	15D3	21	23	25
Exchangeable Al — 1M KCl extract	15G1	16	15	18
Bicarbonate Extractable K	18A1	5	5	5
Aluminium	18F1	14	15	14
Boron	18F1	14	15	12
Calcium	18F1	15	16	15
Copper	18F1	15	16	15
Iron	18F1	14	16	15
Magnesium	18F1	15	16	15
Manganese	18F1	15	16	15
Phosphorus - ICP	18F1	13	14	13
Potassium	18F1	15	16	15
Sodium	18F1	15	16	15
Sulphur	18F1	13	15	14
Zinc	18F1	15	16	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 2013, March 2014 and June 2014. 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 2013-14 soil ILPP

Soil Tests	Method Codes	Average participants
Soil pH, 1:5 0.01 M CaCl ₂ - direct, pooled air dry	4B1 + 4B3	13
Soil pH, 1:5 0.01 M CaCl ₂ - indirect, pooled air dry	4B2 + 4B4	22
Total P – pooled % oven dry	9A1 + Others	17
Colwell Extractable P – pooled mg/kg air dry	9B1 + 9B2	31
Olsen Extractable P – pooled mg/kg air dry	9C1 + 9C2	20
Bray-1 Extractable P – pooled mg/kg air dry	9E1 + 9E2	8
Acid Extractable P – pooled mg/kg air dry	9G1 + 9G2	10
Phosphorous Buffer Index (Colwell) L/kg air dry	9I2a + 9I2b + 9I2c	22
Phosphorous Buffer Index (Unadj) L/kg air dry	9I4a + 9I4b + 9I4c	13
Phosphate Extractable S, pooled mg/kg air dry	10B	10
Hot CaCl ₂ Extractable B – pooled mg/kg air dry	12C1 + 12C2	20
Total Nitrogen – Pooled % oven dry	7A1 + 7A2 + 7A5	42

2.4 Sample preparation and identification

In common with practices documented for the 2004-05 soils program and since, 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. This Appendix was dedicated to examples of the homogeneity “raw” data and statistical assessments on those data. 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 2013-14 program were distributed and coded as follows: December 2013 (Round 213) — ASS 121-124; March 2014 (Round 413) — ASS 31-34; and June 2014 (Round 613) — ASS 61-64. The association between sample code and origin of the various soils is provided in Table 2.3.

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.

Table 2.3. Sample identification and the origin of the samples included in the ASPAC 2013-14 soil ILPP

Sample ID	Round ID	Sample Origin	Previous Rounds
ASS 121	213	New Zealand	N/A
ASS 122		Victoria	N/A
ASS 123		Queensland	N/A
ASS 124		NSW	Round 412, ASS31
ASS 31	413	NSW	N/A
ASS 32		Queensland	N/A
ASS 33		Tasmania	Round 612, ASS52
ASS 34		New Zealand	Round 212, ASS122
ASS 61	613	NSW	Round 611, ASS51 Round 412, ASS34
ASS 62		New Zealand	Round 612, ASS54
ASS 63		Queensland	N/A
ASS 64		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 WEPAL interlaboratory 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 2013-14 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 2013-14. 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.

2013-14: Air-Dry Moisture Content (2A1) % oven dry

Statistical parameters	Soil sample identification and values											
	<i>December 2013 (Round 213)</i>				<i>March 2014 (Round 413)</i>				<i>June 2014 (Round 613)</i>			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	31	31	31	31	31	31	31	31	32	32	32	32
Minimum	2.16	1.14	3.63	3.18	1.9	2.3	1.1	2.4	0.5	0.6	0.7	1
Maximum	4.01	2.7	6.14	4.9	3.0	3.8	2.0	3.5	1.7	3.2	4.23	3.37
Median i	3.38	2.11	5.38	4.4	2.5	3.0	1.6	3.1	1.27	2.63	3.01	2.98
Mean i	3.33	2.08	5.25	4.32	2.5	3.0	1.6	3	1.24	2.51	3.02	2.81
MAD i	0.14	0.11	0.48	0.19	0.18	0.23	0.16	0.19	0.16	0.255	0.355	0.22
IQR i	0.282	0.17	0.66	0.289	0.267	0.326	0.245	0.348	0.239	0.335	0.521	0.369
Robust CV % i	8.3	8.1	12	6.6	11	11	15	11	19	13	17	12
Median f	3.39	2.11	5.4	4.41	2.5	3.0	1.6	3.2	1.28	2.65	3.01	3.01
Mean f	3.41	2.11	5.36	4.43	2.5	3.0	1.6	3.1	1.26	2.58	3.06	2.96
MAD f	0.11	0.11	0.46	0.1	0.18	0.205	0.16	0.135	0.15	0.27	0.345	0.19
IQR f	0.167	0.156	0.671	0.2	0.267	0.328	0.245	0.267	0.237	0.341	0.51	0.341
Robust CV % f	4.9	7.4	12	4.5	11	11	15	8.4	19	13	17	11
Outliers	5	4	2	3	0	1	0	4	1	1	2	2
Stragglers	1	0	0	2	0	0	0	1	0	0	0	3

2013-14: Electrical conductivity 1:5 soil-water (3A1) dS/m air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	41	41	41	41	43	43	43	43	41	41	41	41
Minimum	0.173	0.127	0.107	0.145	0.05	0.06	0.225	0.135	0.001	0.002	0.008	0.001
Maximum	1.39	0.231	0.49	0.29	0.1	0.152	0.478	0.182	0.88	0.182	8.9	4.8
Median i	0.203	0.175	0.18	0.222	0.06	0.105	0.415	0.15	0.1	0.16	7.96	0.098
Mean i	0.237	0.176	0.19	0.223	0.063	0.106	0.409	0.154	0.127	0.152	7.01	0.212
MAD i	0.007	0.006	0.014	0.005	0.004	0.006	0.014	0.009	0.003	0.004	0.56	0.004
IQR i	0.013	0.011	0.021	0.009	0.005	0.009	0.02	0.012	0.006	0.006	0.755	0.006
Robust CV % i	6.6	6.1	12	4	8.9	8.5	4.8	7.9	5.5	3.9	9.5	5.7
Median f	0.202	0.175	0.18	0.221	0.06	0.104	0.415	0.15	0.1	0.161	8.1	0.097
Mean f	0.203	0.175	0.184	0.221	0.061	0.105	0.416	0.153	0.1	0.162	8.13	0.097
MAD f	0.005	0.005	0.012	0.003	0.003	0.005	0.011	0.009	0.001	0.001	0.42	0.003
IQR f	0.006	0.006	0.019	0.004	0.005	0.008	0.017	0.011	0.002	0.002	0.623	0.004
Robust CV % f	2.9	3.4	11	2	8.6	7.8	4	7.4	2.4	1.4	7.7	3.8
Outliers	6	7	4	9	3	5	3	1	10	7	6	8
Stragglers	4	3	1	4	2	1	3	0	5	7	0	5

2013-14: Soil pH, 1:5 soil-water (4A1) air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	41	41	41	41	43	43	43	43	43	43	43	43
Minimum	4.87	5.25	7.38	5.62	5.5	6.41	4.79	4.76	3.88	5.35	3.03	5.6
Maximum	5.45	5.72	8.75	6.37	6.86	8.06	5.87	5.86	4.84	6.1	3.52	6.55
Median i	5.2	5.57	8.46	5.87	6.68	7.8	5.53	5.64	4.42	5.86	3.24	6.27
Mean i	5.19	5.55	8.4	5.87	6.58	7.73	5.51	5.6	4.39	5.81	3.25	6.25
MAD i	0.04	0.06	0.1	0.06	0.09	0.12	0.055	0.05	0.08	0.06	0.05	0.13
IQR i	0.063	0.093	0.152	0.089	0.133	0.222	0.089	0.089	0.133	0.111	0.0741	0.215
Robust CV % i	1.2	1.7	1.8	1.5	2	2.9	1.6	1.6	3	1.9	2.3	3.4
Median f	5.2	5.58	8.49	5.87	6.71	7.8	5.53	5.64	4.43	5.87	3.25	6.28
Mean f	5.2	5.57	8.48	5.87	6.71	7.8	5.52	5.63	4	6	3	6
MAD f	0.04	0.06	0.09	0.05	0.06	0.12	0.05	0.045	0.06	0.035	0.05	0.11
IQR f	0.058	0.089	0.13	0.072	0.091	0.163	0.065	0.067	0.104	0.061	0.072	0.148
Robust CV % f	1.1	1.6	1.5	1.2	1.4	2.1	1.2	1.2	2.3	1	2.2	2.4
Outliers	5	4	3	5	5	4	5	5	3	6	3	2
Stragglers	0	0	1	0	4	0	0	1	3	3	0	0

2013-14: Soil pH, 1:5 0.01 M CaCl₂ — direct, pooled (4B1 + 4B3) air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	14	14	14	14	13	13	13	13	13	13	13	13
Minimum	4.66	4.77	6.31	5.27	5.76	6.27	4.95	4.91	3.6	4.4	3.01	5.34
Maximum	4.9	5.03	7.96	5.94	6.07	6.89	5.64	5.54	5.3	5.44	4.51	7.88
Median i	4.7	4.82	7.73	5.34	5.96	6.7	5.08	4.99	3.81	5.3	3.25	5.67
Mean i	4.73	4.85	7.55	5.4	5.93	6.62	5.12	5.05	3.95	5.25	3.32	5.81
MAD i	0.035	0.04	0.175	0.03	0.06	0.08	0.04	0.03	0.03	0.04	0.05	0.06
IQR i	0.049	0.085	0.311	0.091	0.089	0.263	0.07	0.078	0.111	0.085	0.1	0.093
Robust CV % i	1	1.8	4	1.7	1.5	3.9	1.4	1.6	2.9	1.6	3.1	1.6
Median f	4.69	4.8	7.8	5.33	5.96	6.73	5.06	4.98	3.81	5.31	3.25	5.68
Mean f	4.7	4.81	7.77	5.33	5.93	6.71	5.07	4.98	4	5	3	6
MAD f	0.025	0.02	0.1	0.01	0.06	0.045	0.02	0.015	0.02	0.04	0.05	0.055
IQR f	0.043	0.037	0.185	0.013	0.089	0.076	0.03	0.039	0.033	0.089	0.096	0.056
Robust CV % f	0.91	0.77	2.4	0.24	1.5	1.1	0.59	0.78	0.876	1.7	3	0.98
Outliers	2	3	2	3	0	2	1	2	4	1	2	3
Stragglers	0	0	1	3	0	1	3	1	1	0	0	0

2013-14: Soil pH, 1:5 0.01 M CaCl₂ — indirect, pooled (4B2 + 4B4) air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	21	21	21	21	24	24	24	24	20	20	20	20
Minimum	4.49	4.71	7.48	5.24	5.39	6.3	4.76	4.77	3.75	5.22	3.15	5.31
Maximum	4.9	5	8.09	5.54	6.2	7.15	5.64	5.54	4.11	5.5	3.5	5.81
Median i	4.7	4.85	7.81	5.32	5.93	6.73	5.08	5.02	3.84	5.36	3.22	5.68
Mean i	4.7	4.85	7.82	5.34	5.91	6.68	5.09	5.02	3.86	5.35	3.24	5.67
MAD i	0.04	0.05	0.09	0.03	0.045	0.075	0.035	0.035	0.04	0.055	0.035	0.04
IQR i	0.056	0.07	0.104	0.048	0.063	0.154	0.056	0.065	0.07	0.072	0.058	0.085
Robust CV % i	1.2	1.5	1.3	0.91	1.1	2.3	1.1	1.3	1.8	1.4	1.8	1.5
Median f	4.7	4.85	7.82	5.3	5.94	6.75	5.07	5.02	3.83	5.36	3.2	5.68
Mean f	4.7	4.85	7.85	5.31	5.94	6.75	5.07	5	4	5	3	6
MAD f	0.04	0.05	0.08	0.02	0.03	0.035	0.03	0.025	0.03	0.055	0.02	0.04
IQR f	0.052	0.07	0.104	0.033	0.052	0.058	0.043	0.058	0.052	0.072	0.052	0.089
Robust CV % f	1.1	1.5	1.3	0.63	0.87	0.85	0.84	1.1	1.4	1.3	1.6	1.6
Outliers	2	0	1	2	4	5	4	3	3	0	2	1
Stragglers	0	0	1	2	2	3	0	1	0	0	1	0

2013-14: Water soluble Cl — potentiometric (5A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	22	22	22	22	23	23	22	23	24	24	24	24
Minimum	8	12	3.3	8	6	8	17	15	8.3	1.6	15	10
Maximum	44	64	25	299	25	30.9	53	59.2	160	28	8530	6200
Median i	26	38	9.0	25	12	15	27.5	38.8	15	18	6070	23
Mean i	27	40	11	51	13.6	15.9	29.9	40.6	21	18	5640	288
MAD i	4	4.5	2.7	5.7	3	5.5	4.5	3.1	2.5	2	437	4.0
IQR i	7.4	12	7.1	12	5.93	8.52	7.97	5.93	3.7	3.0	758	7.6
Robust CV % i	29	32	79	46	49	57	29	15	26	16	13	33
Median f	26	38	7	24	11.7	15	25.8	37	14	18	6150	21
Mean f	27	38	7.6	24	12.6	15.9	25.6	37.4	14	18	6130	22
MAD f	3.1	2	1.6	4.9	2.8	5.5	2.8	1.3	2.2	2.0	390	2
IQR f	6.8	3.5	2.2	7.7	4.32	8.52	4.63	2.26	3.5	2.8	586	3.7
Robust CV % f	27	9.1	31	32	37	57	18	6.1	25	16	9.5	17
Outliers	2	7	4	4	2	0	2	5	2	4	4	5
Stragglers	0	2	2	0	0	0	3	3	1	0	0	3

2013-14: Water soluble Cl — autocolour (5A2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	7	7	7	7	6	6	6	6	8	8	8	8
Minimum	20	35	5	18	3	7.6	24.3	29.3	10	16	4390	19
Maximum	32	59	18	49	50	50	44	53	40	45	6660	118
Median i	26	41	6.1	23	13.5	12.7	34.9	41.5	16	23	6360	25
Mean i	27	42	9.0	26	20.9	21.2	35.2	41.5	19	25	6030	49
MAD i	5.3	2.5	1.1	1.7	7.35	4.31	5.28	2.81	2.6	2	273	4.0
IQR i	7.6	4.9	6.9	2.5	23.6	22.2	9.52	7.52	3.7	3.1	741	50
Robust CV % i	29	12	110	11	180	170	27	18	23	13	12	202
Median f	26	40	5.3	23	13.5	10.9	34.9	41.5	15	22	6440	23
Mean f	27	40	5.4	23	20.9	10.6	35.2	41.5	16	22	6410	23
MAD f	5.3	1.9	0.2	1.6	7.35	1.81	5.28	2.81	2	1.6	149	0.8
IQR f	7.6	3.8	0.663	3.1	23.6	3.54	9.52	7.52	3.8	2.6	284	2.9
Robust CV % f	29	9.5	13	14	180	32	27	18	25	12	4.4	13
Outliers	0	1	2	1	0	1	0	0	1	1	1	3
Stragglers	0	0	1	0	0	1	0	0	0	0	1	0

2013-14: Organic Carbon — W&B (6A1) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	25	25	25	25	25	25	25	25	23	23	23	23
Minimum	2.86	2.32	0.35	2.9	0.84	0.24	2.04	2.66	1.21	1.4	0.98	0.75
Maximum	5.77	5.15	5.22	5.02	3.34	4.08	7.63	5.63	11.5	11.3	12.9	10.6
Median i	4.43	3.86	0.455	3.84	1.06	0.639	2.44	3.1	2.2	1.94	1.28	1.01
Mean i	4.47	3.89	0.694	3.89	1.21	0.794	2.7	3.25	2.52	2.37	1.82	1.45
MAD i	0.188	0.12	0.06	0.16	0.06	0.051	0.15	0.21	0.1	0.15	0.128	0.07
IQR i	0.274	0.241	0.105	0.271	0.151	0.079	0.248	0.326	0.163	0.222	0.193	0.154
Robust CV % i	6.2	6.2	23	7	14	12	10	11	7.4	12	15	15
Median f	4.4	3.85	0.443	3.8	1.05	0.619	2.4	3.08	2.2	1.94	1.28	1
Mean f	4.4	3.83	0.457	3.81	1.07	0.624	2.41	3.11	2	2	1	1
MAD f	0.13	0.06	0.042	0.14	0.05	0.041	0.11	0.19	0.06	0.125	0.085	0.04
IQR f	0.208	0.096	0.081	0.226	0.080	0.063	0.174	0.319	0.096	0.209	0.148	0.069
Robust CV % f	4.7	2.5	18	5.9	7.6	10	7.3	10	4.4	11	12	6.9
Outliers	6	6	4	4	6	5	4	2	4	3	2	4
Stragglers	0	4	1	0	0	0	0	0	3	0	1	2

2013-14: Total Organic Carbon — Heanes (6B1) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	3	3	3	3	3	3	3	3	3	3	3	3
Minimum	4.82	4.17	0.55	4.2	1.15	0.71	2.66	3.21	2.24	2.05	1.44	1.07
Maximum	5.03	4.43	0.608	4.29	1.3	0.826	2.99	3.54	2.6	2.21	1.51	1.12
Median i	4.87	4.35	0.591	4.29	1.24	0.783	2.82	3.49	2.26	2.1	1.46	1.12
Mean i	4.91	4.32	0.583	4.26	1.23	0.773	2.82	3.41	2.37	2.12	1.47	1.1
MAD i	0.05	0.08	0.017	0	0.06	0.043	0.16	0.05	0.02	0.05	0.02	0
IQR i	0.156	0.193	0.043	0.067	0.111	0.086	0.245	0.245	0.267	0.119	0.052	0.037
Robust CV % i	3.2	4.4	7.3	1.6	9	11	8.7	7	11.8	5.65	3.55	3.31
Median f	4.87	4.35	0.591	4.29	1.24	0.783	2.82	3.49	2.25	2.1	1.46	1.12
Mean f	4.91	4.32	0.583	4.26	1.23	0.773	2.82	3.41	2.25	2.12	1.47	1.1
MAD f	0.05	0.08	0.017	0	0.06	0.043	0.16	0.05	0.01	0.05	0.02	0
IQR f	0.156	0.193	0.043	0.067	0.111	0.086	0.245	0.245	-	0.119	0.052	0.037
Robust CV % f	3.2	4.4	7.3	1.6	9	11	8.7	7	-	5.65	3.55	3.31
Outliers	0	0	0	0	0	0	0	0	1	0	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2013-14: Total Carbon — Dumas (6B2) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	26	26	26	26	25	25	25	25	23	23	23	23
Minimum	4.45	4.11	0.473	3.69	1.18	0.696	2.69	3.33	2.21	2.05	1.24	1.06
Maximum	6.5	6.1	1.07	6.1	1.47	0.939	3.33	3.87	2.64	2.36	2.28	1.24
Median i	4.94	4.41	0.887	4.51	1.22	0.76	2.84	3.48	2.42	2.2	1.33	1.16
Mean i	4.95	4.46	0.878	4.52	1.23	0.769	2.86	3.49	2.42	2.19	1.38	1.15
MAD i	0.095	0.085	0.051	0.105	0.02	0.027	0.06	0.08	0.07	0.07	0.03	0.02
IQR i	0.156	0.139	0.067	0.17	0.037	0.039	0.089	0.122	0.119	0.074	0.045	0.03
Robust CV % i	3.2	3.2	7.5	3.8	3	5.2	3.1	3.5	4.9	3.4	3.3	2.6
Median f	4.95	4.41	0.887	4.52	1.22	0.76	2.83	3.48	2.42	2.2	1.32	1.16
Mean f	4.93	4.41	0.892	4.51	1.22	0.758	2.85	3.47	2.42	2.19	1.33	1.15
MAD f	0.075	0.085	0.043	0.09	0.02	0.026	0.055	0.08	0.07	0.07	0.03	0.02
IQR f	0.128	0.126	0.052	0.141	0.026	0.039	0.091	0.115	0.119	0.074	0.041	0.030
Robust CV % f	2.6	2.9	5.8	3.1	2.1	5.2	3.2	3.3	4.9	3.4	3.1	2.6
Outliers	3	2	3	2	3	1	1	1	0	0	2	2
Stragglers	1	0	1	1	0	1	0	0	0	0	0	0

2013-14: Total Organic Carbon — HF Induction, IR (6B3) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	16	16	16	16	17	17	17	17	18	18	18	18
Minimum	3.9	3.9	0.355	3.88	1.03	0.608	2.47	2.95	1.6	0.11	0.992	0.645
Maximum	5.6	5.4	0.92	5.8	1.36	0.876	3	3.78	3.5	2.3	2.8	1.2
Median i	4.85	4.38	0.535	4.42	1.2	0.73	2.85	3.48	2.41	2.15	1.33	1.13
Mean i	4.84	4.38	0.558	4.48	1.19	0.727	2.79	3.43	2.35	1.97	1.44	1.07
MAD i	0.09	0.1	0.063	0.115	0.03	0.04	0.06	0.09	0.055	0.06	0.045	0.015
IQR i	0.139	0.199	0.093	0.124	0.063	0.069	0.102	0.17	0.109	0.096	0.078	0.037
Robust CV % i	2.9	4.5	17	2.8	5.3	9.5	3.6	4.9	4.5	4.5	5.9	3.3
Median f	4.86	4.38	0.52	4.42	1.2	0.73	2.86	3.49	2.42	2.16	1.33	1.13
Mean f	4.87	4.35	0.514	4.46	1.2	0.727	2.86	3.49	2.42	2.17	1.33	1.13
MAD f	0.05	0.091	0.055	0.04	0.01	0.04	0.05	0.08	0.03	0.04	0.03	0.01
IQR f	0.111	0.166	0.085	0.111	0.022	0.069	0.076	0.126	0.052	0.052	0.045	0.015
Robust CV % f	2.3	3.8	16	2.5	1.9	9.5	2.7	3.6	2.1	2.4	3.3	1.3
Outliers	2	2	2	2	4	0	3	2	4	3	6	5
Stragglers	1	0	0	1	2	0	0	0	1	0	0	1

2013-14: Total N — Kjeldahl, steam distillation (7A1) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	19	19	19	19	23	23	23	23	20	20	20	20
Minimum	0.075	0.085	0.017	0.122	0.1	0.04	0.093	0.115	0.15	0.003	0.058	0.036
Maximum	0.37	0.3	0.119	0.44	0.27	0.634	0.276	0.312	0.74	0.772	0.923	0.929
Median i	0.339	0.264	0.04	0.39	0.12	0.067	0.246	0.275	0.189	0.18	0.08	0.091
Mean i	0.32	0.256	0.045	0.381	0.126	0.091	0.238	0.268	0.217	0.195	0.12	0.132
MAD i	0.012	0.011	0.007	0.012	0.006	0.006	0.01	0.01	0.012	0.009	0.008	0.006
IQR i	0.025	0.017	0.011	0.023	0.011	0.01	0.018	0.013	0.02	0.012	0.013	0.009
Robust CV % i	7.2	6.5	28	5.9	9.3	14	7.4	4.6	11	6.9	16	10
Median f	0.34	0.267	0.039	0.39	0.12	0.067	0.248	0.275	0.183	0.184	0.08	0.09
Mean f	0.341	0.269	0.039	0.392	0.12	0.067	0.248	0.274	0.184	0.185	0.078	0.092
MAD f	0.011	0.009	0.008	0.011	0.005	0.004	0.008	0.005	0.006	0.006	0.008	0.006
IQR f	0.017	0.016	0.011	0.022	0.009	0.006	0.012	0.009	0.01	0.008	0.013	0.007
Robust CV % f	4.9	5.8	28	5.6	7.4	8.9	5	3.4	5.3	4.5	16	7.8
Outliers	3	2	2	2	1	2	3	2	2	4	1	3
Stragglers	0	0	0	0	1	2	0	4	3	0	0	0

2013-14: Total N — Pooled (7A1 + 7A2 + 7A5) %

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	41	41	41	41	43	43	43	43	42	42	42	42
Minimum	0.075	0.085	0.011	0.122	0.087	0.035	0.093	0.115	0.15	0.003	0.04	0.036
Maximum	0.427	0.3	0.119	0.44	0.27	0.634	0.276	0.312	0.74	0.772	0.923	0.929
Median i	0.339	0.269	0.039	0.394	0.12	0.066	0.24	0.272	0.188	0.18	0.08	0.0944
Mean i	0.333	0.263	0.042	0.389	0.121	0.079	0.236	0.267	0.201	0.188	0.0977	0.113
MAD i	0.012	0.011	0.008	0.014	0.009	0.006	0.01	0.009	0.011	0.0075	0.0064	0.00705
IQR i	0.018	0.016	0.013	0.022	0.010	0.009	0.015	0.015	0.016	0.0113	0.0104	0.0108
Robust CV % i	5.2	5.8	33	5.6	8.6	14	6.2	5.5	8.5	6.3	13	12
Median f	0.34	0.269	0.039	0.394	0.12	0.066	0.242	0.273	0.188	0.18	0.08	0.0955
Mean f	0.341	0.268	0.040	0.395	0.118	0.066	0.243	0.273	0.186	0.182	0.080	0.095
MAD f	0.011	0.009	0.008	0.014	0.006	0.006	0.007	0.007	0.01	0.005	0.004	0.006
IQR f	0.017	0.014	0.011	0.021	0.009	0.008	0.010	0.012	0.012	0.007	0.007	0.009
Robust CV % f	4.9	5.2	29	5.4	7.7	12	4	4.5	6.1	3.7	8.1	9
Outliers	4	2	3	4	4	6	6	6	4	6	8	7
Stragglers	0	1	0	0	1	0	2	1	1	5	2	1

2013-14: Total N – Dumas (7A5) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	17	17	17	17	15	15	15	15	17	17	17	17
Minimum	0.325	0.25	0.011	0.364	0.087	0.035	0.183	0.194	0.16	0.157	0.04	0.069
Maximum	0.427	0.294	0.062	0.44	0.153	0.113	0.274	0.297	0.242	0.216	0.128	0.139
Median i	0.34	0.27	0.039	0.4	0.12	0.065	0.24	0.27	0.19	0.183	0.08	0.097
Mean i	0.349	0.273	0.039	0.403	0.117	0.066	0.237	0.268	0.19	0.183	0.079	0.097
MAD i	0.007	0.007	0.009	0.008	0.009	0.005	0.01	0.01	0.01	0.005	0.004	0.01
IQR i	0.015	0.013	0.016	0.016	0.01	0.009	0.016	0.015	0.016	0.008	0.012	0.02
Robust CV % i	4.5	4.9	41	3.9	8	14	6.5	5.5	8.5	4.3	14	21
Median f	0.34	0.27	0.039	0.399	0.12	0.065	0.242	0.272	0.189	0.184	0.08	0.0965
Mean f	0.341	0.273	0.039	0.4	0.117	0.065	0.243	0.273	0.186	0.184	0.081	0.094
MAD f	0.006	0.007	0.009	0.007	0.009	0.005	0.005	0.009	0.01	0.004	0.003	0.009
IQR f	0.01	0.013	0.016	0.011	0.01	0.007	0.008	0.015	0.015	0.006	0.003	0.022
Robust CV % f	2.9	4.9	41	2.8	8	11	3.4	5.5	7.7	3.3	3.2	22
Outliers	3	0	0	3	0	4	2	1	1	3	6	1
Stragglers	0	0	0	0	0	0	2	0	0	0	0	0

2013-14: Water Soluble Nitrate N— autocolour (7B1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	17	17	17	17	19	20	20	20	20	20	20	20
Minimum	27	0.015	2	3.2	0.009	2.4	105	0.448	8.1	19	0.016	16
Maximum	58	10	17	11	12	21	201	18	24	31	132	25
Median i	41	0.4	3.6	6.8	0.4	9.6	176	8.3	20	23	0.515	22
Mean i	41	1.7	4.4	7.3	1.2	9.8	169	8.7	19	24	8.5	22
MAD i	3.6	0.3	0.44	0.92	0.356	0.9	15	0.525	0.9	0.95	0.372	1.4
IQR i	5.5	1.1	0.671	2.22	0.667	1.4	24	0.804	1.8	1.6	0.807	2.3
Robust CV % i	13	280	19	33	170	14	13	9.7	8.8	6.8	157	11
Median f	41	0.213	3.5	6.5	0.157	9.6	177	8.3	20	23	0.305	22
Mean f	41	0.218	3.4	6.6	0.249	9.6	176	8.2	20	24	0.384	22
MAD f	3	0.108	0.4	0.55	0.128	0.805	12	0.5	0.4	0.75	0.176	1.3
IQR f	4.5	0.167	0.667	0.852	0.279	1.2	22	0.719	0.89	1.3	0.267	2.2
Robust CV % f	11	78	19	13	180	13	12	8.7	4.5	5.7	88	10
Outliers	2	4	2	4	2	2	2	3	3	2	4	1
Stragglers	0	3	0	1	3	0	0	0	2	0	2	0

2013-14: KCl Extractable Nitrate N — autocolour (7C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	23	20	23	23	23	23	23	23	23	23	21	23
Minimum	36	0	2.1	4.5	0.01	0.085	0.095	0.126	17	22	0.01	20
Maximum	45	0.886	4.8	12.3	1.4	20	392	17	24	29	1.4	26
Median i	42	0.193	3.5	6.3	0.23	8.9	181	7.8	20	24	0.47	22
Mean i	42	0.283	3.5	6.5	0.388	9.1	173	7.9	20	24	0.56	23
MAD i	1	0.128	0.38	0.58	0.16	0.8	9	0.69	1	0.8	0.347	0.6
IQR i	2	0.279	0.593	0.964	0.292	1.5	22	1.1	1.5	1.4	0.614	0.904
Robust CV % i	4.8	140	17	15	130	17	12	14	7.4	5.9	131	4
Median f	42	0.14	3.5	6.3	0.13	9.0	182	7.8	20	23	0.47	23
Mean f	42	0.202	3.6	6.2	0.173	9.1	182	7.9	20	24	0.56	23
MAD f	0.65	0.075	0.36	0.56	0.08	0.505	3	0.65	1	0.575	0.347	0.65
IQR f	1.5	0.192	0.545	0.903	0.172	0.96	4.5	1.0	1.5	0.741	0.614	0.741
Robust CV % f	3.4	140	15	14	130	11	2.4	13	7.7	3.2	131	3.3
Outliers	3	2	2	1	4	3	6	2	1	3	0	5
Stragglers	2	1	0	0	2	2	4	0	0	0	0	0

2013-14: KCl Ext. Ammonium N — autocolour (7C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	26	26	26	26	28	28	28	28	28	28	28	28
Minimum	24	55	0.378	42	1.8	0.53	3.9	6	14	2.3	19	3.6
Maximum	82	218	25	242	38	19	74	110	84	54	43	26
Median i	65	156	3.6	181	18	4.5	35	55	29	43	35	14
Mean i	62	151	4.5	172	19	5.4	36	56	31	41	34	15
MAD i	2.4	7.5	0.8	11	1.4	0.75	2.09	2.4	1.8	1.7	2	1.6
IQR i	4	11	1.6	15	2.4	1.2	3.3	3.7	3	3.4	2.8	2.4
Robust CV % i	6.2	7	45	8.5	13	25	9.4	6.7	10	8.1	8.1	17
Median f	65	156	3.5	181	18	4.4	34	55	29	42	35	14
Mean f	66	157	3.6	182	18	4.4	35	55	29	42	35	14
MAD f	2	4	0.67	9	0.8	0.602	1.4	2	1	1	1	0.575
IQR f	2.6	8.2	0.945	12	0.964	0.947	2.1	3	1.5	1.7	1.5	0.797
Robust CV % f	4	5.2	27	6.5	5.4	22	6.1	5.4	5.2	4.2	4.1	5.6
Outliers	5	6	4	4	7	5	5	4	5	9	7	7
Stragglers	0	1	2	0	1	1	2	1	3	2	4	3

2013-14: Total P – Pooled % oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	18	18	18	18	17	17	17	17	16	16	16	16
Minimum	0.05	0.027	0.038	0.037	0.022	0.008	0.036	0.054	0.001	0.004	0.012	0.018
Maximum	0.1	0.36	0.164	0.112	0.259	0.174	0.426	0.682	161	596	372	801
Median i	0.065	0.035	0.097	0.092	0.025	0.014	0.041	0.064	0.017	0.059	0.033	0.077
Mean i	0.066	0.054	0.097	0.089	0.039	0.03	0.075	0.104	10.1	37.3	23.3	50.1
MAD i	0.002	0.002	0.008	0.007	0.001	0.003	0.001	0.003	0.001	0.003	0.003	0.007
IQR i	0.005	0.003	0.012	0.011	0.002	0.005	0.003	0.006	0.001	0.004	0.007	0.012
Robust CV % i	7.3	8.8	13	12	9	32	6.2	9.9	7.5	7.5	21	16
Median f	0.066	0.035	0.098	0.094	0.025	0.014	0.041	0.064	0.017	0.059	0.034	0.077
Mean f	0.066	0.035	0.098	0.094	0.025	0.014	0.04	0.063	0.017	0.059	0.034	0.077
MAD f	0.002	0.002	0.006	0.006	0.001	0.002	0.001	0.001	0.0002	0.002	0.001	0.006
IQR f	0.003	0.003	0.01	0.009	0.002	0.003	0.003	0.002	0.001	0.003	0.001	0.009
Robust CV % f	4.8	7.8	11	9.9	6.3	24	6.4	3.5	3.3	5.1	2.4	12
Outliers	5	4	2	2	3	2	2	4	4	4	4	2
Stragglers	0	0	1	0	0	0	0	2	2	0	4	0

2013-14: Colwell Extractable P — pooled (9B1 + 9B2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	31	31	31	31	31	31	31	31	31	31	31	31
Minimum	40	19	19	55	8.5	9.3	81	51	9.1	13	17	14
Maximum	188	150	60	122	24	27	140	92	23	64	77	39
Median i	63	30	25	72	14	16	104	70	16	47	54	27
Mean i	67	35	26	73	14	16	106	70	16	45	52	27
MAD i	8.1	4	1.5	5.2	2	1.8	6	5.3	0.5	3.4	3.7	3
IQR i	13	5.9	2.2	8.1	2.9	2.2	8.9	8.38	1.5	4.5	6.5	5.0
Robust CV % i	20	20	9.1	11	21	14	8.6	12	9.6	9.5	12	19
Median f	63	30	24	71	14	16	103	70	16	47	55	27
Mean f	63	30	24	70	14	16	103	70	16	47	54	27
MAD f	5.3	3.5	1.1	4.3	2	1.1	4	4.2	0.5	2.3	2.5	2.2
IQR f	7.6	5.5	1.5	7.3	2.4	2.1	5.7	6.5	0.741	3.6	5.2	3.6
Robust CV % f	12	18	6.2	10	17	13	5.5	9.4	4.8	7.7	9.6	13
Outliers	2	2	6	3	2	4	3	2	10	3	4	4
Stragglers	1	0	3	1	0	1	3	1	0	2	1	2

2013-14: Olsen Extractable P — Pooled (9C1 + 9C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	21	21	21	21	20	20	20	20	19	19	19	19
Minimum	13	7.5	7.5	16	2.4	5	36	21	6.5	12	13	4.6
Maximum	30	19	14	27	5.8	22	52	31	16	16	21	13
Median i	20	11	9.2	23	4	6.5	41	24	8.8	13	17	7.4
Mean i	21	12	9.7	23	4.0	7.3	42	24	9.2	13	17	7.7
MAD i	2	1	0.8	1.7	0.5	0.7	2.6	1.5	0.81	1	1.3	0.56
IQR i	3.9	1.9	1.3	2.6	0.802	1.1	4.4	2.4	1.2	1.1	1.7	0.815
Robust CV % i	20	17	15	12	20	17	11	9.9	14	8.6	10	11
Median f	20	11	9.1	23	4	6.5	41	24	8.8	13	17	7.4
Mean f	21	11	9.3	23	4.0	6.5	41	23	8.7	13	17	7.6
MAD f	1.5	1	0.7	1.7	0.5	0.6	2.2	1	0.5	1	1.3	0.56
IQR f	3.5	1.6	1.0	3.1	0.802	0.908	3.9	2.2	0.843	1.1	1.7	0.767
Robust CV % f	18	14	11	13	20	14	9.4	9.3	9.6	8.6	10	10
Outliers	2	2	1	1	0	1	1	2	2	0	0	2
Stragglers	2	0	1	0	0	0	0	0	1	0	0	0

2013-14: Bray-1 Extractable P — pooled (9E1 + 9E2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	8	8	8	8	9	9	9	9	7	7	7	7
Minimum	8.6	3	2.1	13	3.7	4.6	32	29	7.2	1.4	13	0.596
Maximum	23	6.2	7.4	24	13	19	72	36	13	23	54	4.5
Median i	18	5	5.1	18	5.3	9	44	30	8.1	16	38	3.3
Mean i	18	4.7	5.1	18	6.4	9.8	48	31	9	15	38	3
MAD i	2.2	0.815	1.6	2.8	1.3	2	11	1	0.92	1.5	6.9	0.64
IQR i	4.1	1.2	2.5	4.3	1.5	3.9	19	1.6	1.6	4.4	11	1.2
Robust CV % i	22	24	49	23	28	44	43	5.4	20	28	29	37
Median f	18	5	5.1	18	5.3	8.4	44	30	8	16	38	3.3
Mean f	18	4.7	5.1	18	5.6	8.6	48	30	8.3	16	38	3.0
MAD f	2.2	0.815	1.6	2.8	0.85	1.5	11	0.8	0.65	0.8	6.9	0.64
IQR f	4.1	1.2	2.5	4.3	1.5	2.7	19	1.2	1.3	2.6	11	1.2
Robust CV % f	22	24	49	23	28	32	43	4.1	16	17	29	37
Outliers	0	0	0	0	1	1	0	1	1	2	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2013-14: Acid Extractable P — pooled (9G1 + 9G2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	10	10	10	10	9	9	9	9	10	10	10	10
Minimum	110	39	517	100	10	10	122	102	12	90	50	4.5
Maximum	222	68	772	136	24	29	181	221	23	218	105	61
Median i	146	54	655	124	18	23	157	158	20	102	63	24
Mean i	151	55	650	121	18	23	158	160	19	117	65	26
MAD i	18	3.7	41	7.8	1.3	4.5	8	13	2.4	12	9.7	3
IQR i	25	6.8	69	17	2.9	5.1	16	24	3.5	24	14	7
Robust CV % i	17	13	11	13	16	22	10	15	18	24	22	29
Median f	145	54	655	124	18	23	157	158	20	99	61	23
Mean f	143	55	650	121	18	23	158	160	19	101	61	23
MAD f	17	3.7	41	7.8	1	4.5	8	11	2.4	7.2	8.3	2
IQR f	25	6.8	69	17	1.6	5.1	16	18	3.5	18	11	3.5
Robust CV % f	17	13	11	13	8.6	22	10	11	18	18	18	15
Outliers	1	0	0	0	2	0	0	2	0	1	1	3
Stragglers	0	0	0	0	0	0	0	0	0	1	0	0

2013-14: Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	23	23	23	23	22	22	22	22	21	21	21	21
Minimum	389	255	112	127	27.7	26	48.6	303	84	214	198	241
Maximum	630	341	149	154	123	131	99.2	456	115	302	305	352
Median i	505	305	132	142	46.8	67.7	70.6	350	100	269	262	299
Mean i	511	304	133	141	52	69.2	70.6	356	99.7	263	258	295
MAD i	22	10	4	4	3.75	5.2	6	26	3	9	19	12
IQR i	33.4	19.3	6.67	6.67	9.95	9.1	8.6	40.8	5.19	15.2	28.5	21.9
Robust CV % i	6.6	6.3	5.1	4.7	21	13	12	12	5.2	5.7	11	7.3
Median f	505	305	132	142	46	67.5	71.2	340	100	270	262	299
Mean f	511	306	131	142	46.7	67.4	71.2	342	100	269	258	295
MAD f	20	8.5	4	3.5	3	3.5	2.8	23	3	7	19	11
IQR f	30.8	13.3	5.93	6.12	4.76	5.37	5.78	34.8	5.19	9.27	28.5	17.8
Robust CV % f	6.1	4.4	4.5	4.3	10	8	8.1	10	5.2	3.4	11	6
Outliers	2	2	4	2	4	5	4	1	2	4	0	2
Stragglers	0	1	0	0	2	0	3	2	0	1	0	0

2013-14: Phosphorus buffer index - Unadj (9I4a + 9I4b + 9I4c) L/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	13	13	13	13	13	13	13	13	12	12	12	12
Minimum	362	244	106	110	25.5	23	30.5	8.29	52.2	17.1	15.2	14.7
Maximum	908	823	570	568	68	84.5	79.5	424	112	263	316	315
Median i	476	297	129	130	44	62.2	53	314	94	248	236	280
Mean i	501	332	162	162	45.3	59.6	55	304	92.7	223	225	261
MAD i	22	18	13	7	3	3.8	6.5	25	3.95	10	14.5	16
IQR i	35.6	22.2	16.7	13	4.37	5.49	13.1	48.9	6.63	18.3	22.2	25
Robust CV % i	7.5	7.5	13	10	9.9	8.8	25	16	7.1	7.4	9.4	9
Median f	476	297	129	128	43.8	62.6	53	314	94	249	236	282
Mean f	477	295	128	126	43.5	62.4	55	321	95	246	237	283
MAD f	21	10	9.5	5	2	1.9	5	22	3.15	6	12	16
IQR f	34.1	14.8	16.9	11.9	3.17	3.6	10.9	34.8	6.12	13.3	19.3	23.7
Robust CV % f	7.2	5	13	9.3	7.2	5.7	21	11	6.5	5.4	8.2	8.4
Outliers	2	1	1	1	3	3	1	2	2	2	2	1
Stragglers	0	1	0	1	0	0	1	0	0	0	0	0

2013-14: Phosphate Extractable S – Pooled (10B1 + 10B2 + 10B3 +10B4) mg/kg air dry

Statistical parameters	Soil sample identification and value											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	9	9	9	9	10	10	10	10	9	9	9	9
Minimum	43	12	6.0	5.1	6.9	5.5	25	35	1.2	31	4670	11
Maximum	502	312	91	363	28	24	49	65	22	64	7850	123
Median i	55	33	8	37	11	7.6	33	54	18	51	6650	28
Mean i	108	61	19	70	12	9.3	34	53	16	50	6440	38
MAD i	9	5.4	1.1	6	1.5	1.1	2.3	6.8	3	4	704	4
IQR i	17	9.6	9.0	9.6	2.6	2.1	3.5	11	5.2	8.2	1320	13
Robust CV % i	32	30	110	26	24	27	11	20	29	16	20	45
Median f	55	33	7.1	37	11	7.2	32	54	18	52	6650	25
Mean f	56	32	7.3	37	10	7.7	32	53	18	52	6440	24
MAD f	2.8	2.6	0.9	0.5	1.1	0.8	2.6	6.8	2.5	4.1	704	3
IQR f	8.9	5.9	1.5	0.908	2.6	1.7	3.9	11	4.3	7	1320	4.5
Robust CV % f	16	18	21	2.5	24	24	12	20	24	14	20	18
Outliers	1	1	2	2	1	1	1	0	1	1	0	2
Stragglers	1	1	0	3	0	0	0	0	0	0	0	0

2013-14: KCl₄₀ Extractable S (10D1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	18	18	18	18	17	17	17	17	17	17	17	17
Minimum	31	18	3.9	28	6.6	4.5	28	31	1.3	4.7	233	1.3
Maximum	80	33	8	39	45	66	92	42	15	50	12200	29
Median i	36	22	6.4	31	7.7	6.4	32	35	10	33	6930	12
Mean i	40	23	6.2	32	10	11	36	35	10	34	6620	14
MAD i	3.5	3.2	0.715	2.7	0.6	0.51	2.1	2.7	0.7	1.3	490	1.7
IQR i	6.4	4.7	1.3	3.8	1.6	0.964	3.7	4.4	1.3	3.7	1360	4.1
Robust CV % i	18	21	19	12	21	15	11	13	13	11	20	33
Median f	36	22	6.4	31	7.3	6.4	32	35	10	33	6930	12
Mean f	36	23	6.2	32	7.5	6.2	33	35	10	33	6880	12
MAD f	2.5	3.2	0.715	2.65	0.29	0.35	1.9	2.7	0.5	1.1	393	1
IQR f	4.8	4.7	1.3	3.8	0.593	0.556	2.9	4.4	0.808	2.1	569	0.964
Robust CV % f	13	21	19	12	8.1	8.8	8.9	13	8.1	6.4	8.2	8
Outliers	2	0	0	0	3	3	1	0	3	4	6	4
Stragglers	1	0	0	0	2	1	0	0	1	0	0	2

2013-14: DTPA Extractable Cu (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	26	26	26	26	28	28	28	28	28	28	28	28
Minimum	0.81	0.51	0.759	1.4	0.07	0.07	0.04	0.05	0.14	0.74	0.358	0.982
Maximum	1.6	2.2	1.5	2.9	1.6	1.3	0.92	1.6	1.3	1.4	2.5	2.0
Median i	0.99	0.662	0.939	2.18	1.3	0.924	0.545	1.3	0.307	1.2	0.765	1.4
Mean i	1.0	0.814	0.966	2.2	1.3	0.91	0.558	1.3	0.343	1.1	0.83	1.4
MAD i	0.105	0.114	0.061	0.105	0.1	0.070	0.060	0.105	0.04	0.08	0.143	0.108
IQR i	0.145	0.213	0.083	0.167	0.145	0.091	0.098	0.206	0.068	0.102	0.229	0.146
Robust CV % i	15	32	8.8	7.7	11	9.8	18	16	22	8.71	30	10.9
Median f	0.951	0.631	0.928	2.2	1.3	0.92	0.54	1.3	0.305	1.2	0.755	1.4
Mean f	0.989	0.637	0.928	2.2	1.3	0.921	0.554	1.3	0.309	1.2	0.728	1.3
MAD f	0.098	0.061	0.064	0.07	0.1	0.043	0.049	0.11	0.025	0.08	0.125	0.085
IQR f	0.147	0.094	0.087	0.093	0.149	0.082	0.071	0.2	0.038	0.1	0.184	0.115
Robust CV % f	15	15	9.4	4.3	11	8.9	13	15	13	8.5	24	8.5
Outliers	2	5	2	5	1	4	5	1	4	2	2	2
Stragglers	0	1	0	4	0	1	0	0	3	0	1	1

2013-14: DTPA Extractable Fe (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	26	26	26	26	28	28	28	28	28	28	28	28
Minimum	15	459	13	132	1.5	0.89	21	6.4	20	8.1	13	1.82
Maximum	358	768	29	263	171	172	454	371	579	356	399	270
Median i	256	545	19	195	26	13	310	160	398	136	229	14
Mean i	256	566	20	196	30	19	300	179	379	137	221	30
MAD i	15	58	1.2	17	2.5	1.6	33	16	36	12	47	2.1
IQR i	27	100	2.5	29	4	2.7	50	40	55	17	69	4.4
Robust CV % i	11	18	13	15	15	20	16	25	14	13	30	32
Median f	252	541	19	195	26	13	311	155	398	136	229	14
Mean f	254	550	20	196	26	13	316	154	391	134	222	14
MAD f	10	53	1.1	16	2.2	1	27	11	27	11	40	1.5
IQR f	16	86	1.7	27	3.5	1.7	37	16	41	17	66	2.5
Robust CV % f	6.2	16	8.6	14	13	13	12	10	10	12	29	18
Outliers	4	2	7	2	4	5	4	7	4	2	2	5
Stragglers	3	0	1	0	0	2	0	1	2	0	0	1

2013-14: DTPA Extractable Mn (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	25	25	25	25	27	27	27	27	27	27	27	27
Minimum	79	4	13	110	38	34	4.9	16	2.6	97	36	2.9
Maximum	157	49	23	251	414	216	33	151	11	194	64	696
Median i	119	7.5	20	184	271	75	17	109	7.4	158	52.9	258
Mean i	118	10	19	184	255	81	18	108	7.3	157	52	269
MAD i	8	1.7	1.5	14	29	7.4	1.1	8	0.43	12	3.2	23
IQR i	12	2.8	1.6	23	57	11	1.4	10	0.615	19	5.4	31
Robust CV % i	10	38	8	13	21	15	8.2	9.5	8.4	12	10	12
Median f	119	7.4	20	187	275	75	17	109	7.4	158	53	257
Mean f	119	7.5	20	189	269	78	17	110	7.4	159	54	260
MAD f	7.5	1.5	1.5	11	15	6.8	0.96	6	0.37	12	2.2	21
IQR f	12	2	1.9	18	27	9.4	0.982	9.3	0.589	18	3.6	29
Robust CV % f	9.9	26	9.8	9.7	9.9	13	5.8	8.5	8	12	6.8	11
Outliers	3	3	4	3	3	4	5	4	5	1	4	4
Stragglers	0	0	0	1	2	0	0	1	1	0	2	1

2013-14: DTPA Extractable Zn (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	26	26	26	26	28	28	28	28	28	28	28	28
Minimum	2.1	0.93	0.36	2	0.09	0.02	0.12	0.15	0.36	1.4	11	3
Maximum	5.2	2.6	0.65	4.1	1.7	2.3	5.7	5.7	1.3	3.6	22	407
Median i	3.8	1.3	0.435	2.8	1.2	0.408	3.5	4.2	0.928	2	16	3.7
Mean i	3.8	1.4	0.449	2.85	1.2	0.476	3.5	4.2	0.944	2.1	16	18
MAD i	0.27	0.145	0.048	0.13	0.11	0.046	0.355	0.25	0.088	0.095	1.8	0.2
IQR i	0.434	0.328	0.078	0.232	0.169	0.073	0.547	0.484	0.137	0.174	2.8	0.313
Robust CV % i	11	25	18	8.3	14	18	16	11	15	8.7	17	8.4
Median f	3.7	1.3	0.43	2.8	1.2	0.41	3.4	4.2	0.898	2	16	3.7
Mean f	3.8	1.2	0.434	2.83	1.2	0.417	3.4	4.2	0.899	2.03	16	3.7
MAD f	0.225	0.095	0.04	0.1	0.1	0.04	0.23	0.2	0.062	0.088	1.8	0.195
IQR f	0.343	0.143	0.062	0.167	0.133	0.06	0.393	0.297	0.103	0.085	2.8	0.265
Robust CV % f	9.2	11	14	6	11	15	11	7.1	11	4.3	17	7.2
Outliers	4	4	2	4	3	4	3	3	3	6	0	4
Stragglers	0	2	0	1	0	1	0	2	5	0	0	0

2013-14: Hot CaCl₂ Extractable B — pooled (12C1 + 12C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	20	20	20	20	20	20	20	20	21	21	21	21
Minimum	0.222	0.33	0.36	0.54	0.25	0.32	0.227	0.19	0.06	0.264	0.146	0.287
Maximum	0.84	1.7	1.1	1.3	0.98	1.4	0.844	0.835	1.5	7.2	6.4	0.9
Median i	0.349	0.827	0.829	0.795	0.322	0.894	0.578	0.539	0.36	0.41	2.5	0.466
Mean i	0.399	0.833	0.791	0.851	0.366	0.879	0.569	0.55	0.384	0.756	2.7	0.489
MAD i	0.068	0.158	0.077	0.067	0.04	0.135	0.078	0.084	0.074	0.028	0.9	0.079
IQR i	0.122	0.24	0.164	0.164	0.072	0.208	0.119	0.133	0.117	0.046	1.5	0.125
Robust CV % i	35	29	20	21	22	23	21	25	33	11	61	27
Median f	0.348	0.818	0.846	0.756	0.32	0.914	0.578	0.544	0.36	0.398	2.5	0.459
Mean f	0.356	0.787	0.832	0.759	0.321	0.906	0.573	0.572	0.358	0.401	2.6	0.469
MAD f	0.053	0.148	0.05	0.035	0.038	0.134	0.073	0.072	0.065	0.019	0.95	0.077
IQR f	0.089	0.228	0.089	0.055	0.055	0.175	0.111	0.118	0.094	0.033	1.4	0.118
Robust CV % f	26	28	11	7.2	17	19	19	22	26	8.4	57	26
Outliers	2	1	3	4	2	2	1	1	3	5	1	1
Stragglers	0	0	1	3	0	1	1	2	0	0	0	0

2013-14: Exchangeable Ca — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	18	18	18	18	17	17	17	17	17	17	17	17
Minimum	1.81	0.518	1.28	2.25	8.04	10.8	7.49	5.67	0.5	4.66	7.54	3.56
Maximum	25.2	23.8	364	103	11	18	10	8	1.41	7.08	10	5.06
Median i	5.68	4.45	35.6	18	8.75	12.8	8.28	5.98	1.1	5.94	9.23	4.4
Mean i	6.41	5.17	51.4	21.3	8.85	13	8.27	6.11	1.08	5.93	9.06	4.34
MAD i	0.375	0.19	1.9	0.82	0.21	0.43	0.25	0.14	0.08	0.19	0.47	0.17
IQR i	0.53	0.532	2.96	1	0.352	0.678	0.397	0.271	0.115	0.289	0.741	0.252
Robust CV % i	9.3	12	8.3	5.6	4	5.3	4.8	4.5	10	4.9	8	5.7
Median f	5.7	4.54	36	18	8.73	12.9	8.28	5.98	1.1	5.94	9.23	4.4
Mean f	5.65	4.53	35.8	17.9	8.72	12.9	8.16	6	1.09	5.94	9.06	4.37
MAD f	0.23	0.11	2	0.4	0.205	0.3	0.225	0.14	0.06	0.17	0.47	0.085
IQR f	0.467	0.159	2.59	0.89	0.319	0.443	0.41	0.232	0.104	0.267	0.741	0.215
Robust CV % f	8.2	3.5	7.2	4.9	3.7	3.4	4.9	3.9	9.4	4.5	8	4.9
Outliers	3	4	3	3	1	2	1	1	2	2	0	2
Stragglers	0	2	0	0	0	1	0	0	0	0	0	1

2013-14: Exchangeable Mg — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	18	18	18	18	17	17	17	17	17	17	17	17
Minimum	0.484	0.922	1.19	0.986	1.4	1.9	0.876	1	0.23	0.73	0.288	1.96
Maximum	4.31	20.2	100	24	3.1	6.1	5.1	1.68	0.719	1.19	20.3	2.38
Median i	0.811	4.02	19	4.49	2.56	5.29	4.3	1.06	0.37	0.865	18.7	2.25
Mean i	0.974	4.64	22.1	5.18	2.52	5.08	4.17	1.12	0.389	0.865	17.6	2.22
MAD i	0.034	0.175	0.93	0.295	0.11	0.2	0.09	0.04	0.023	0.035	0.7	0.07
IQR i	0.064	0.387	1.44	0.524	0.17	0.382	0.156	0.056	0.038	0.057	1.02	0.141
Robust CV % i	7.9	9.6	7.6	12	6.7	7.2	3.6	5.2	10	6.6	5.4	6.3
Median f	0.812	4.05	19	4.52	2.56	5.29	4.3	1.06	0.37	0.865	18.8	2.28
Mean f	0.812	4.04	19.2	4.51	2.56	5.22	4.29	1.07	0.37	0.852	18.9	2.26
MAD f	0.029	0.13	0.55	0.11	0.09	0.19	0.075	0.04	0.018	0.032	0.6	0.06
IQR f	0.043	0.215	1.13	0.222	0.148	0.304	0.117	0.059	0.031	0.055	0.964	0.111
Robust CV % f	5.3	5.3	5.9	4.9	5.8	5.7	2.7	5.6	8.3	6.3	5.1	4.9
Outliers	4	3	3	4	2	2	3	2	3	2	2	2
Stragglers	1	1	1	2	0	0	0	0	0	0	0	0

2013-14: Exchangeable Na — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	18	18	18	18	17	17	17	17	17	17	17	17
Minimum	0.16	0.191	0.606	0.076	0.042	1.15	0.457	0.146	0.03	0.14	10.4	0.06
Maximum	1.58	1.73	4.52	0.838	1.4	2.85	2.35	0.604	0.193	0.465	24.9	1.17
Median i	0.227	0.331	1.04	0.12	0.067	1.7	0.563	0.27	0.086	0.242	21.1	0.125
Mean i	0.327	0.427	1.27	0.173	0.188	1.7	0.669	0.299	0.092	0.266	20.1	0.19
MAD i	0.014	0.024	0.134	0.020	0.013	0.08	0.03	0.02	0.012	0.017	1.74	0.02
IQR i	0.041	0.044	0.2	0.043	0.042	0.152	0.064	0.034	0.015	0.045	2.91	0.034
Robust CV % i	18	13	19	36	62	8.9	11	13	17	18	14	27
Median f	0.222	0.331	1.03	0.11	0.06	1.7	0.562	0.27	0.085	0.234	21.3	0.123
Mean f	0.223	0.33	1.02	0.121	0.0633	1.72	0.561	0.263	0.086	0.239	21.2	0.124
MAD f	0.007	0.02	0.119	0.01	0.007	0.08	0.023	0.014	0.01	0.007	1.4	0.014
IQR f	0.009	0.024	0.186	0.036	0.015	0.119	0.036	0.022	0.014	0.015	2.18	0.023
Robust CV % f	4	7.3	18	33	25	7	6.5	8.1	16	6.6	10	19
Outliers	5	3	2	2	4	4	2	3	2	5	2	2
Stragglers	2	1	0	1	0	0	3	1	1	2	0	1

2013-14: Exchangeable K — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	18	18	18	18	17	17	17	17	17	17	17	17
Minimum	0.37	0.319	0.11	1.14	0.089	0.74	0.347	0.309	0.14	0.375	0.053	0.287
Maximum	2.87	2.18	3.23	11.3	0.796	8.6	0.607	0.821	0.302	0.528	24	1.1
Median i	0.495	0.417	0.654	2	0.69	0.88	0.401	0.737	0.259	0.5	0.089	1
Mean i	0.61	0.505	0.766	2.4	0.661	1.36	0.419	0.716	0.251	0.474	1.5	0.95
MAD i	0.034	0.026	0.035	0.1	0.03	0.037	0.021	0.031	0.012	0.017	0.023	0.05
IQR i	0.056	0.044	0.06	0.151	0.045	0.071	0.028	0.046	0.02	0.051	0.037	0.105
Robust CV % i	11	11	9.2	7.6	6.5	8.1	6.9	6.3	7.9	10	41	11
Median f	0.495	0.417	0.654	2.02	0.69	0.879	0.4	0.738	0.26	0.505	0.0865	1.02
Mean f	0.484	0.411	0.653	2.01	0.69	0.854	0.401	0.741	0.263	0.504	0.091	1
MAD f	0.031	0.024	0.022	0.085	0.029	0.029	0.015	0.03	0.008	0.005	0.020	0.04
IQR f	0.051	0.04	0.037	0.126	0.039	0.063	0.026	0.045	0.01	0.007	0.034	0.065
Robust CV % f	10	9.7	5.6	6.3	5.6	7.1	6.5	6.2	3.9	1.5	39	6.3
Outliers	2	2	4	4	1	3	2	1	3	4	1	1
Stragglers	0	0	0	0	1	0	0	0	1	2	0	1

2013-14: Exchangeable Ca — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	21	21	21	21	22	22	22	22	24	24	24	24
Minimum	1.13	0.86	14	9.51	7.16	9.84	6.61	3.97	0.87	4.38	6.66	3.32
Maximum	7.72	7	83	37	10.7	15.5	10.4	7.2	1.57	7.05	10	5.91
Median i	5.24	4.05	35.2	17.1	8.75	12.9	8.08	5.65	1.04	5.87	8.71	4.31
Mean i	5.17	4.07	36.1	17.8	8.83	12.9	8.09	5.68	1.09	5.85	8.62	4.36
MAD i	0.25	0.21	2.8	0.7	0.34	0.9	0.243	0.185	0.05	0.145	0.566	0.16
IQR i	0.4	0.297	5.08	1.26	0.519	1.36	0.43	0.293	0.107	0.246	0.901	0.269
Robust CV % i	7.6	7.3	14	7.4	5.9	11	5.3	5.2	10	4.2	10	6.2
Median f	5.24	4.05	35.3	17.1	8.7	12.9	8.1	5.63	1.03	5.9	8.87	4.3
Mean f	5.26	4.07	35.2	17.2	8.68	12.9	8.07	5.66	1.03	5.89	8.79	4.31
MAD f	0.16	0.045	2.43	0.642	0.3	0.9	0.16	0.173	0.035	0.12	0.49	0.16
IQR f	0.304	0.085	4	0.989	0.458	1.36	0.267	0.269	0.056	0.189	0.752	0.23
Robust CV % f	5.8	2.1	11	5.8	5.3	11	3.3	4.8	5.4	3.2	8.5	5.3
Outliers	4	4	2	5	3	0	3	3	4	3	1	3
Stragglers	2	5	1	0	1	0	2	0	2	0	1	0

2013-14: Exchangeable Mg — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	21	21	21	21	22	22	22	22	24	24	24	24
Minimum	0.01	0.08	0.002	0.16	1.31	2.59	2.08	0.5	0.286	0.614	8.9	1.47
Maximum	1.02	5.87	32	8.68	3.37	5.87	5.16	1.29	0.661	1.3	23.6	3.57
Median i	0.741	3.84	19	4.26	2.45	4.94	4.12	1	0.368	0.82	17.7	2.14
Mean i	0.732	3.76	18.2	4.28	2.43	4.85	4.03	0.993	0.385	0.851	17.3	2.27
MAD i	0.049	0.2	1.07	0.23	0.135	0.26	0.18	0.054	0.022	0.03	1.73	0.125
IQR i	0.082	0.369	1.3	0.399	0.22	0.37	0.289	0.09	0.038	0.048	2.78	0.204
Robust CV % i	11	9.6	6.8	9.4	9	7.5	7	9	10	5.8	16	9.5
Median f	0.736	3.78	19.1	4.23	2.45	4.94	4.13	1	0.367	0.82	17.7	2.13
Mean f	0.744	3.75	19	4.21	2.44	4.93	4.1	0.988	0.364	0.817	17.7	2.13
MAD f	0.022	0.14	0.34	0.13	0.13	0.182	0.109	0.016	0.017	0.02	1.7	0.115
IQR f	0.036	0.246	0.741	0.215	0.202	0.321	0.222	0.050	0.022	0.032	2.45	0.167
Robust CV % f	4.8	6.5	3.9	5.1	8.2	6.5	5.4	5	5.9	3.8	14	7.9
Outliers	5	4	3	5	2	3	2	4	5	6	1	4
Stragglers	2	0	3	1	0	1	1	3	0	1	0	0

2013-14: Exchangeable Na — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	20	20	20	20	22	22	22	22	24	24	24	24
Minimum	0.155	0.26	0.72	0.09	0.025	0.793	0.28	0.1	0.06	0.2	6.94	0.09
Maximum	0.3	0.41	1.86	0.347	0.65	2.04	0.76	0.698	18.8	48.6	4340	842
Median i	0.227	0.33	0.993	0.12	0.067	1.61	0.565	0.261	0.088	0.247	20.2	0.132
Mean i	0.222	0.325	1.07	0.147	0.108	1.58	0.549	0.287	0.884	2.27	205	35.2
MAD i	0.018	0.027	0.085	0.013	0.017	0.135	0.033	0.02	0.014	0.027	1.95	0.0215
IQR i	0.031	0.045	0.145	0.049	0.029	0.215	0.053	0.030	0.028	0.042	3.11	0.036
Robust CV % i	14	14	15	41	44	13	9.4	11	32	17	15	27
Median f	0.227	0.33	0.971	0.111	0.06	1.65	0.57	0.26	0.087	0.245	20	0.13
Mean f	0.221	0.325	0.99	0.114	0.0619	1.66	0.571	0.26	0.087	0.245	19.7	0.123
MAD f	0.017	0.027	0.063	0.01	0.01	0.08	0.02	0.015	0.008	0.025	1.9	0.019
IQR f	0.026	0.045	0.099	0.016	0.017	0.145	0.029	0.024	0.013	0.038	2.88	0.02
Robust CV % f	11	14	10	14	27	8.8	5.1	9.1	15	15	14	15
Outliers	2	0	3	5	4	2	3	4	3	3	3	5
Stragglers	0	0	1	0	1	2	2	0	1	0	0	0

2013-14: Exchangeable K — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	21	21	21	21	23	23	23	23	25	25	25	25
Minimum	0.292	0.224	0.38	1.59	0.065	0.49	0.23	0.196	0.205	0.381	0.047	0.779
Maximum	0.623	0.606	0.939	3.46	0.75	1.56	0.518	0.82	0.433	0.517	0.773	1.1
Median i	0.458	0.391	0.573	1.92	0.655	0.825	0.38	0.695	0.248	0.454	0.074	0.969
Mean i	0.451	0.389	0.612	1.98	0.607	0.824	0.376	0.631	0.256	0.455	0.106	0.957
MAD i	0.02	0.019	0.048	0.07	0.045	0.05	0.028	0.045	0.008	0.016	0.016	0.036
IQR i	0.035	0.03	0.082	0.131	0.071	0.113	0.032	0.076	0.017	0.021	0.032	0.063
Robust CV % i	7.7	7.7	14	6.8	11	14	8.4	11	6.9	4.7	43	6.5
Median f	0.46	0.394	0.571	1.93	0.659	0.842	0.38	0.703	0.246	0.457	0.0639	0.97
Mean f	0.46	0.391	0.58	1.94	0.65	0.84	0.378	0.703	0.247	0.459	0.067	0.971
MAD f	0.013	0.014	0.031	0.063	0.038	0.032	0.01	0.009	0.006	0.013	0.008	0.03
IQR f	0.02	0.017	0.045	0.107	0.051	0.052	0.015	0.017	0.012	0.018	0.012	0.047
Robust CV % f	4.4	4.4	7.8	5.6	7.7	6.1	3.9	2.4	4.8	3.9	19	4.8
Outliers	6	4	5	3	2	4	2	5	5	3	3	4
Stragglers	0	1	1	0	1	2	6	5	1	0	4	0

2013-14: Exchangeable Al — 1M KCl (15G1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	16	16	16	16	14	15	15	15	17	18	17	18
Minimum	0.187	0.04	0.000001	0.007	0.0001	0.001	0.015	0.045	0.326	0.007	4.7	0.003
Maximum	0.93	0.34	0.028	0.074	0.041	0.054	0.33	0.214	5.46	0.624	94.3	0.33
Median i	0.758	0.154	0.009	0.013	0.007	0.006	0.031	0.155	1.73	0.039	24.7	0.02
Mean i	0.668	0.155	0.009	0.02	0.009	0.011	0.064	0.150	1.78	0.083	23.7	0.049
MAD i	0.092	0.053	0.005	0.004	0.003	0.003	0.011	0.013	0.09	0.016	2.5	0.013
IQR i	0.25	0.086	0.009	0.008	0.006	0.005	0.037	0.019	0.191	0.027	9.36	0.028
Robust CV % i	33	56	100	63	80	91	120	12	11	71	38	140
Median f	0.775	0.154	0.008	0.011	0.007	0.004	0.0305	0.157	1.76	0.035	25.2	0.013
Mean f	0.792	0.155	0.008	0.013	0.006	0.005	0.028	0.158	1.77	0.036	25.7	0.014
MAD f	0.046	0.053	0.005	0.004	0.003	0.0024	0.0055	0.011	0.04	0.01	1.08	0.007
IQR f	0.077	0.086	0.007	0.006	0.005	0.004	0.009	0.017	0.067	0.017	1.48	0.01
Robust CV % f	9.9	56	93	51	76	94	28	11	3.8	47	5.9	80
Outliers	3	0	1	3	1	2	3	3	4	3	8	4
Stragglers	1	0	0	0	0	1	1	0	2	1	0	1

2013-14: Extractable K — Bicarbonate (18A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	5	5	5	5	5	5	5	5	5	5	5	5
Minimum	164	143	210	661	285	277	108	228	97	175	56	367
Maximum	203	189	226	765	483	479	184	472	254	491	347	415
Median i	187	163	222	708	327	325	174	273	106	191	62	384
Mean i	185	167	220	717	349	351	159	298	136	251	119	387
MAD i	2	13	4.5	47	29	30	10	34	8.9	16	6.2	3
IQR i	16	22	8.9	67	93	88	37.4	106	63	125	111	20
Robust CV % i	8.3	14	4	9.4	28	27	21	39	59	66	179	5.2
Median f	187	163	222	708	327	325	175	273	106	190	61	383
Mean f	187	167	220	717	349	351	171	298	107	192	62	380
MAD f	1	13	4.5	47	29	30	5	34	4.5	8	3.1	3
IQR f	2.2	22	8.9	67	93	88	19	106	12	20	7.7	12
Robust CV % f	1.2	14	4	9.4	28	27	11	39	11	11	13	3.1
Outliers	2	0	0	0	0	0	1	0	1	1	1	1
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2013-14: Aluminium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	14	14	14	14	15	15	15	15	14	14	14	14
Minimum	1600	925	591	587	448	402	375	1420	696	1330	2080	764
Maximum	2580	1510	912	1110	1860	1610	1210	4360	13000	37300	44800	25700
Median i	1720	1020	687	729	573	610	467	1620	756	1500	2640	961
Mean i	1840	1090	705	778	684	674	517	1880	1670	4150	5690	2790
MAD i	83	60	68	47	59	46	24	152	47	40	242	59
IQR i	232	153	106	69	78	77	47	215	105	205	392	201
Robust CV % i	13	15	15	9.5	14	13	10	13	14	14	15	21
Median f	1680	994	687	721	566	603	462	1610	748	1500	2560	953
Mean f	1690	1000	705	725	579	596	453	1600	751	1500	2600	951
MAD f	42	34	68	39	52	32	23	108	30	11	215	30
IQR f	70	47	106	61	70	70	42	173	50	24	338	48
Robust CV % f	4.2	4.7	15	8.5	12	12	9	11	6.6	1.6	13	5.1
Outliers	3	2	0	2	2	3	3	2	3	4	2	3
Stragglers	1	1	0	0	0	0	0	1	0	2	0	1

2013-14: Boron — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	14	14	14	14	15	15	15	15	12	12	13	12
Minimum	0.097	0.125	0.67	0.298	0.14	0.55	0.21	0.175	0.024	0.11	0.274	0.221
Maximum	1.6	2.5	2.3	2.1	12	9.2	5.6	2.6	36	38	39	38
Median i	0.173	0.465	0.96	0.513	0.3	0.872	0.4	0.38	0.152	0.319	0.431	0.348
Mean i	0.372	0.689	1.1	0.642	1.1	1.5	0.826	0.559	3.3	3.5	3.8	3.6
MAD i	0.049	0.137	0.156	0.12	0.097	0.187	0.12	0.06	0.124	0.077	0.109	0.077
IQR i	0.334	0.405	0.314	0.264	0.131	0.263	0.225	0.212	0.183	0.248	0.48	0.234
Robust CV % i	190	87	33	52	44	30	56	56	121	78	111	67
Median f	0.128	0.38	0.92	0.498	0.292	0.805	0.362	0.326	0.151	0.3	0.398	0.306
Mean f	0.13	0.376	0.991	0.5	0.293	0.777	0.39	0.325	0.182	0.272	0.421	0.305
MAD f	0.003	0.047	0.18	0.069	0.062	0.118	0.088	0.056	0.066	0.075	0.086	0.036
IQR f	0.007	0.102	0.268	0.105	0.103	0.16	0.152	0.084	0.144	0.128	0.153	0.059
Robust CV % f	5.5	27	29	21	35	20	42	26	96	43	39	19
Outliers	5	3	1	1	2	3	2	3	2	3	3	2
Stragglers	3	2	0	1	1	0	1	1	0	0	0	2

2013-14: Calcium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	15	15	15	15	16	16	16	16	15	15	15	15
Minimum	912	714	5290	2560	1420	1680	1360	913	121	1000	1320	647
Maximum	1370	1070	12400	5640	2580	3860	2700	1760	2850	16600	20500	10700
Median i	994	805	7490	3310	1700	2400	1680	1130	218	1160	1700	842
Mean i	1020	823	7920	3380	1780	2490	1750	1170	391	2200	2930	1510
MAD i	36	40	1100	82	113	85	75	81	8	50	132	51
IQR i	61	62	1680	173	174	139	113	122	14	96	231	73
Robust CV % i	6.1	7.7	22	5.2	10	5.8	6.7	11	6.5	8.2	14	8.7
Median f	965	802	7400	3330	1690	2390	1670	1110	218	1160	1640	842
Mean f	976	794	7240	3340	1680	2420	1660	1100	219	1150	1630	852
MAD f	29	34	726	65	112	53	48	61	2	49	141	30
IQR f	34	54	1240	107	174	79	80	108	6.67	79	216	51
Robust CV % f	3.5	6.7	17	3.2	10	3.3	4.8	9.7	3.1	6.8	13	6.1
Outliers	2	2	2	4	2	5	3	2	4	2	2	3
Stragglers	0	0	0	0	0	0	0	0	2	0	0	0

2013-14: Copper — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	15	15	15	15	16	16	16	16	14	15	15	15
Minimum	0.555	0.17	1.4	1.6	1.7	0.679	0.01	1.1	0.05	1.1	0.97	1.4
Maximum	1.4	0.473	2.5	2.9	4.1	2.5	0.368	2.4	1.7	12	25	43
Median i	1	0.287	1.6	2	2.3	1.3	0.124	1.5	0.226	1.4	1.4	2
Mean i	0.987	0.291	1.7	2.1	2.4	1.4	0.137	1.5	0.314	2.1	3	4.8
MAD i	0.06	0.047	0.13	0.1	0.16	0.075	0.077	0.125	0.02	0.11	0.19	0.08
IQR i	0.089	0.07	0.222	0.222	0.191	0.128	0.119	0.202	0.072	0.163	0.289	0.178
Robust CV % i	8.9	25	14	11	8.4	9.6	96	14	32	12	21	8.8
Median f	1	0.279	1.6	2	2.3	1.3	0.124	1.4	0.231	1.38	1.4	2
Mean f	1	0.278	1.7	2.0	2.2	1.36	0.137	1.4	0.23	1.3	1.4	2
MAD f	0.04	0.045	0.115	0.1	0.12	0.05	0.077	0.1	0.008	0.09	0.145	0.02
IQR f	0.073	0.074	0.206	0.178	0.159	0.085	0.119	0.165	0.014	0.1	0.235	0.067
Robust CV % f	7.3	26	13	8.9	7.1	6.4	96	11	6	7.3	17	3.3
Outliers	3	1	1	2	2	4	0	2	6	2	1	5
Stragglers	1	0	0	0	1	0	0	0	0	0	0	1

2013-14: Iron — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	14	14	14	14	16	16	16	16	15	15	15	15
Minimum	329	654	96	259	97	77	468	172	414	249	315	51
Maximum	612	1260	184	522	280	468	935	340	6080	2700	6580	1400
Median i	392	806	123	322	126	110	616	201	504	272	499	65
Mean i	415	861	129	345	138	141	630	212	866	443	890	156
MAD i	22	56	16	29	19	16	52	14	35	14	63	9.7
IQR i	49	130	29	62	26	38	83	21	42	42	99	15
Robust CV % i	12	16	23	19	21	35	13	11	8.2	16	20	24
Median f	384	802	121	312	122	106	609	199	474	263	490	64
Mean f	379	798	120	306	129	105	594	196	485	265	483	64
MAD f	14	34	8	24	18	8.5	47	9.7	30	9	58	6.4
IQR f	27	59	18	35	22	15	67	18	37	11	89	12
Robust CV % f	7.1	7.3	15	11	18	14	11	9.2	7.8	4.2	18	19
Outliers	3	3	1	3	1	2	2	2	1	3	1	2
Stragglers	0	1	1	0	0	2	0	0	1	1	0	0

2013-14: Magnesium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	15	15	15	15	16	16	16	16	15	15	15	15
Minimum	66	397	1190	391	253	428	23	105	41	91	1090	218
Maximum	107	662	3400	765	490	1050	875	200	655	1500	30000	3920
Median i	92	462	2310	511	300	617	504	122	46	101	2200	257
Mean i	91	469	2300	517	318	639	504	126	87	196	4030	503
MAD i	2.1	19	69	23	26	29	27	9.5	2.8	4	116	21
IQR i	3.6	35	102	38	51	61	45	17	4.3	6.7	198	33
Robust CV % i	3.9	7.5	4.4	7.4	17	10	8.9	14	9.4	6.6	9	13
Median f	92	463	2310	511	289	615	503	121	46	99	2190	250
Mean f	92	460	2310	507	293	620	503	119	45	99.6	2180	248
MAD f	0.6	8	59	20	20	23	9	5.5	2	4.8	79	12
IQR f	0.741	15	89	34	34	36	19	14	3.7	7.3	119	18.2
Robust CV % f	0.81	3.3	3.8	6.6	12	5.9	3.7	11	8	7.4	5.5	7.3
Outliers	5	2	4	2	2	5	3	1	2	2	5	2
Stragglers	1	3	0	0	1	0	2	1	0	0	0	1

2013-14: Manganese — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	15	15	15	15	16	16	16	16	15	15	15	15
Minimum	113	40	91	171	265	103	18	102	0.16	169	40	330
Maximum	213	69	212	333	549	761	423	169	117	3800	983	8420
Median i	148	50	137	205	345	452	20	117	7.7	199	59	438
Mean i	152	51	139	221	357	467	47	119	15	442	122	966
MAD i	13	3.3	28	13	36	47	1.1	6	0.7	9	3	50
IQR i	21	5.2	50	42	56	80	3.5	9.6	1.1	21	5.0	78
Robust CV % i	14	10	36	20	16	18	18	8.3	15	10	8.4	18
Median f	145	49	137	202	340	444	19	115	7.6	198	59	436
Mean f	148	49	139	204	331	441	19.4	116	7.6	198	59	434
MAD f	14	2.9	28	9.5	36	42	0.9	6	0.38	4	2.7	42
IQR f	20	5	50	17	51	59	0.741	9.64	0.534	5.9	3.7	71
Robust CV % f	14	10	36	8.5	15	13	3.9	8.4	7	3	6.3	16
Outliers	1	1	0	2	2	4	4	1	3	2	4	1
Stragglers	0	0	0	1	0	0	1	0	1	2	0	0

2013-14: Phosphorus - ICP — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	13	13	13	13	14	14	14	14	13	13	13	12
Minimum	29	7.4	6.8	29	1.4	1.8	11	5.0	17	25	40	2.2
Maximum	49	16	19	63	30	82	217	95	203	573	793	71
Median i	35	12	13	37	14	14	102	43	19	28	50	4.4
Mean i	37	12	12	39	15	20	107	46	34	73	108	10
MAD i	2	1.1	1.6	2.5	1.3	2.6	7	3	0.7	1	7.3	0.89
IQR i	6.9	2.1	2.1	4.7	2.6	6.1	11	6.1	3.1	5.5	14	2.2
Robust CV % i	20	17	17	13	18	43	11	14	17	20	28	49
Median f	34	12	13	36	14	14	101	43	18	28	50	4.3
Mean f	35	12	12	36	14	13	100	42	18	27	51	4.35
MAD f	1.2	0.3	1.5	2	1	0.98	6	2.2	0.3	0.5	6.65	0.38
IQR f	1.9	0.89	1.7	3.1	1.3	2.1	6.7	3.1	0.463	0.686	10	0.549
Robust CV % f	5.4	7.4	14	8.6	9.5	15	6.6	7.2	2.6	2.5	21	13
Outliers	3	1	1	2	3	4	3	3	4	3	1	2
Stragglers	2	3	1	0	0	1	0	1	1	2	0	2

2013-14: Potassium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	15	15	15	15	16	16	16	16	15	15	15	15
Minimum	83	77	111	318	118	180	69	124	87	124	21	291
Maximum	249	210	313	1040	298	572	206	334	571	1240	331	4950
Median i	173	157	207	716	255	313	154	269	95	172	36	377
Mean i	177	157	219	695	247	317	151	266	132	249	55	680
MAD i	12	9	23	35	22	24	11	20	6	8	8	46
IQR i	22	17	42	53	32	34	16	30	10	18	11	76
Robust CV % i	13	11	20	7.4	12	11	10	11	11	10	29	20
Median f	173	157	205	720	257	313	154	269	95	172	33	376
Mean f	178	159	209	718	256	318	153	271	96	173	35	375
MAD f	10	7	2	16	22	11	9	17	5	4	5	39
IQR f	18	14	11	30	33	26	15	27	8.2	8.9	9.3	68
Robust CV % f	10	9	5.2	4.1	13	8.3	9.9	10	8.6	5.2	28	18
Outliers	2	2	3	4	1	3	2	1	2	3	1	1
Stragglers	0	0	3	1	0	2	0	1	0	1	0	0

2013-14: Sodium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	15	15	15	15	16	16	16	16	15	15	15	15
Minimum	32	62	177	20	8.8	187	82	41	15	38	2670	23
Maximum	64	115	282	34	72	522	202	114	125	535	63600	235
Median i	50	91	231	26	15	375	129	60	20	54	4670	32
Mean i	49	91	231	26	20	366	132	62	29	91	8380	47
MAD i	4.5	6	23	2.5	3	38	10	5.2	1.4	6.8	311	7.4
IQR i	7.0	10	39	3.7	5.9	56	17	9.3	6.9	18	545	14
Robust CV % i	14	11	17	14	40	15	13	15	35	33	12	44
Median f	50	91	231	26	14	375	128	61	19	52	4700	31
Mean f	50	92	231	26	15	377	126	61	19	53	4700	33
MAD f	4.3	5.5	23	2.5	2.5	25	8	2.4	1	2	56	6.7
IQR f	6.8	8.3	39	3.7	4.4	43	13	4.9	1.5	2.7	109	12
Robust CV % f	14	9.1	17	14	31	11	10	8	7.8	5.1	2.3	38
Outliers	1	2	0	0	2	2	3	2	4	2	4	1
Stragglers	0	0	0	0	0	1	0	3	0	4	2	0

2013-14: Sulphur — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	13	13	13	13	15	15	15	15	14	14	14	14
Minimum	33	21	4.5	26	5.8	1.5	32	44	11	18	1700	9.0
Maximum	85	48	17	53	314	581	1140	1050	169	505	95800	108
Median i	58	31	8.8	38	14	11	41	53	23	48	7210	19
Mean i	63	33	9.3	40	36	53	117	124	34	80	12600	27
MAD i	4	3	1.5	1.2	2	3.7	5.1	7.4	3.1	3.1	644	2.9
IQR i	14	6.8	2.9	4.1	6	13	9.6	15	7.5	6.7	1730	8.2
Robust CV % i	24	22	33	11	44	110	24	28	32	14	24	44
Median f	57	30	8.3	38	13	9.5	38	51	23	47	7240	18
Mean f	58	30	8.7	38	14	11	38	52	23	47	7200	18
MAD f	1.1	1.2	1.5	1.1	0.3	1.5	1.4	1.6	2.7	2	329	2.2
IQR f	2.0	1.7	2.2	1.3	1.4	3.3	2.6	3.7	3.2	3.4	604	4.0
Robust CV % f	3.6	5.5	26	3.5	11	34	6.8	7.3	14	7.3	8.3	22
Outliers	4	2	1	4	4	4	3	2	2	4	3	3
Stragglers	1	3	0	0	3	2	3	2	1	0	1	1

2013-14: Zinc — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
No of results	15	15	15	15	16	16	16	16	15	15	15	15
Minimum	3.9	2	0.639	2.68	1.6	0.596	3.1	3.6	0.77	2.2	16	4.2
Maximum	7.1	3.3	2.1	6.2	3.3	3.3	6.3	6.9	12	46	307	85
Median i	4.5	2.5	1	3.6	2.1	0.927	3.5	4.2	1	2.55	21	4.6
Mean i	4.9	2.6	1.1	3.8	2.2	1.1	3.8	4.4	1.8	5.6	41	10
MAD i	0.38	0.26	0.119	0.25	0.2	0.139	0.1	0.3	0.11	0.21	1.5	0.27
IQR i	0.578	0.445	0.17	0.393	0.334	0.271	0.196	0.463	0.289	0.667	3	0.393
Robust CV % i	13	18	17	11	16	29	5.6	11	29	26	14	8.5
Median f	4.4	2.5	0.99	3.4	2.0	0.91	3.5	4.2	0.925	2.5	21	4.6
Mean f	4.4	2.6	0.979	3.5	2.0	0.927	3.5	4.2	0.93	2.4	22	4.6
MAD f	0.295	0.26	0.11	0.2	0.07	0.124	0.1	0.25	0.061	0.075	1.2	0.205
IQR f	0.465	0.445	0.178	0.367	0.185	0.188	0.141	0.389	0.093	0.159	2	0.373
Robust CV % f	11	18	18	11	9.1	21	4	9.3	10	6.5	9.4	8.2
Outliers	3	0	1	2	2	1	4	2	3	2	2	3
Stragglers	0	0	0	0	1	0	0	0	2	3	1	0

4. Comments on Measurement Performance

Two of 12 test soils were alkaline and another two could be considered saline (>0.3 dS/m). One of these soils ASS 63 had an EC of 8.1 dS/m, due to extremely high levels of chloride (6150 mg/kg), sulfate-S (6650 mg/kg), exchangeable sodium (20 cmol+/kg) and exchangeable Al (25.2 cmol+/kg); these values were grand median concentrations (final) taken from summary tables (Section 3). The pHw of this soil was 3.25. It is likely ASS 63 is an actual acid sulfate soil (as distinct from a potential acid sulfate soil), as it appears that most if not all of the acidity is due to oxidation of reduced inorganic S. Three soils were very strongly acidic with pHw <5.5, allowing quantifiable concentrations of exchangeable Al to be determined on these three soils. All but one (ASS 63) of the twelve soils were <50 mg/kg Cl, which again is too many test soils in the extremely low agronomic category. More than half of the Australian laboratories that participate in the Soil Chek Program do not handle many farmer samples if at all (farmer samples usually sampled from the surface 10-15 cm), and as such they would not be geared up for such low chloride concentrations. This is the likely reason why soil chloride is regularly one of the worst performing tests.

It needs to be re-iterated that more alkaline and saline soils should be included into the Soil Chek program in future. Soils from inland Australia are predominantly termed alkaline and/or saline, often underlying an acid to neutral, non-saline A horizon. Moreover, a very important test for carbon accounting is total organic carbon (6B3) and an important step in this procedure, the prior removal of inorganic carbon, can only be tested if the soils are alkaline ie. they show a positive fizz test due to inorganic carbon, usually carbonates or bicarbonates (see Rayment and Lyons (2011), method 6B3).

All 12 samples for 2012-13 were deemed to be homogenous (Appendix 2).

Table 4.1: Median robust %CV's over the 12 test soils in 2013/14 by test, in this case 24 tests from 2A1 to 10D1

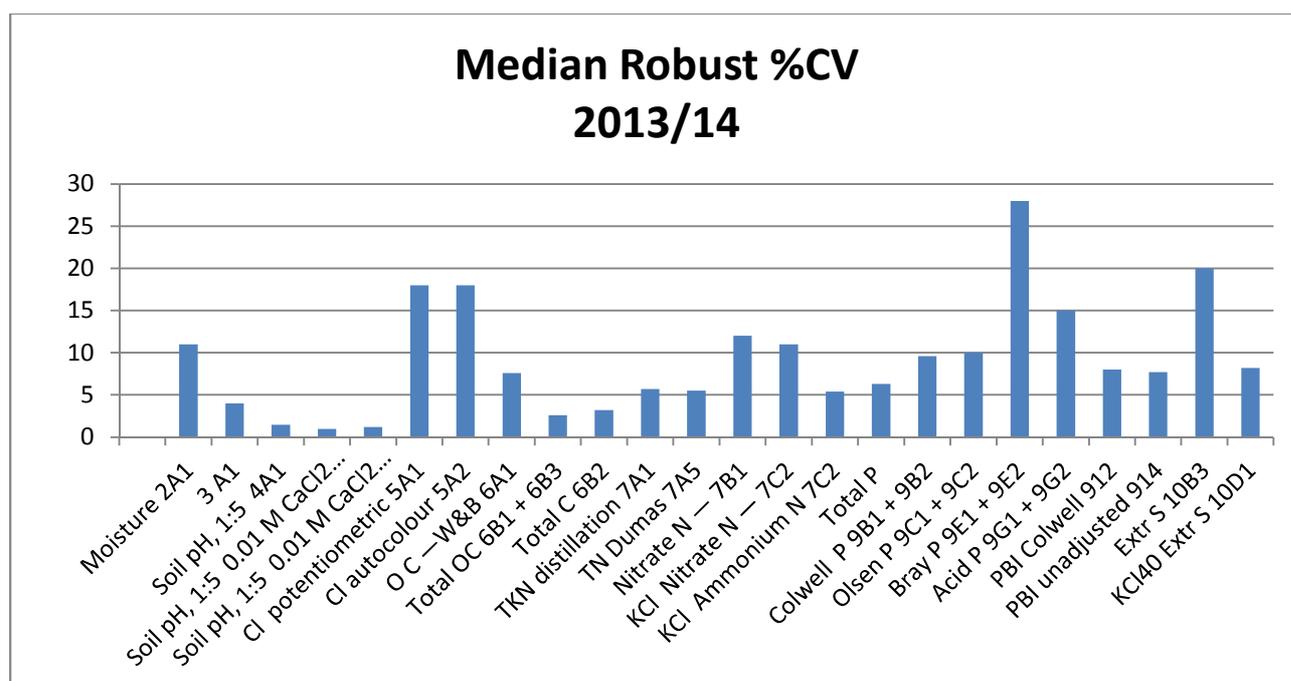
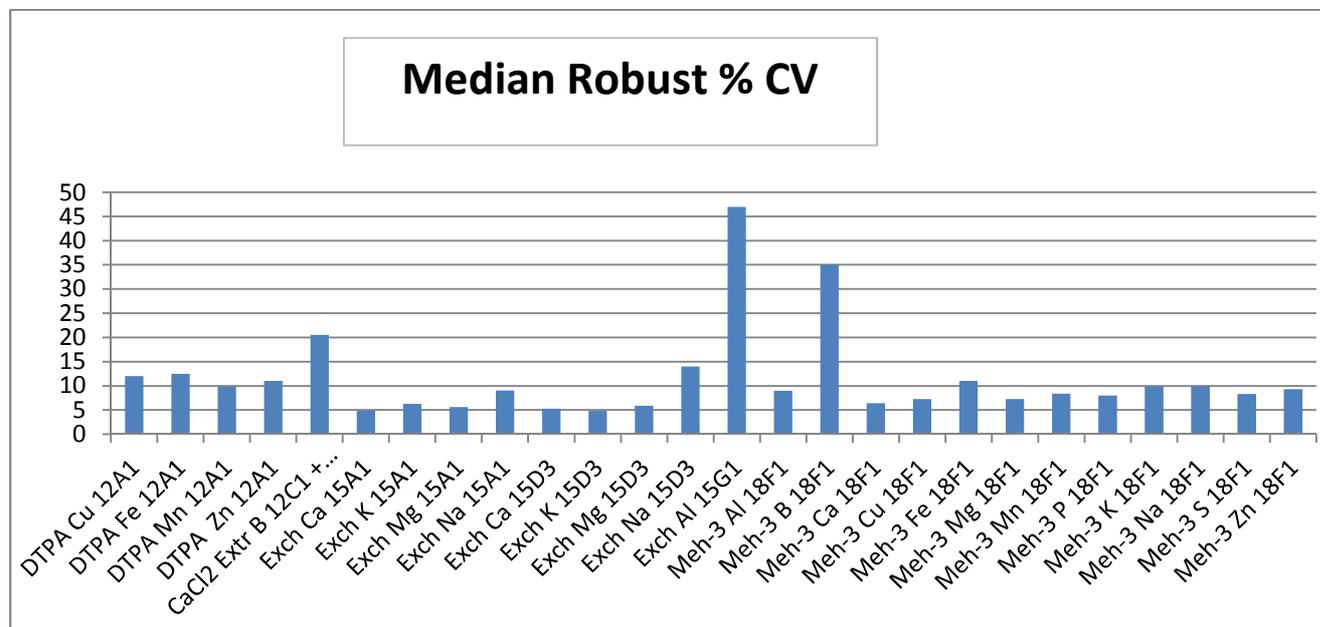


Table 4.2: Median robust %CV's over the 12 test soils in 2013/14 by test, in this case 26 tests from 12A1 to 18F1



Excluding exchangeable Al, the six worst performing tests as indicated by median robust %CV were Mehlich 3 extractable B (35%), Bray P (28%), calcium chloride extractable B (20.5%), calcium phosphate extractable sulfate-S (20%), water soluble chloride (18%) and acid extractable P (15%). Of the three soils that could be quantified for exchangeable Al, the mean precision was 5.1%.

Appendix 1: List of laboratories (including contact details) who participated in ASPAC's Soil ILPP in 2013-14, arranged by country

<i>Name (position)</i>	<i>Facility</i>	<i>Street and/or Postal Address</i>	<i>Country</i>	<i>Email</i>
Mr Ken Bates (Director)	Denilab	166 Napier St, Deniliquin, NSW 2710 PO Box 208, Deniliquin, NSW 2710	Australia	office@advancedsoilmapping.com.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 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 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
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
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
Mr Paul Kennelly (Laboratory Manager)	Nutrient Advantage Laboratory Services	8 South Rd, Werribee, VIC 3030	Australia	Paul.Kennelly@incitecpivot.com.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
Mr George Croatto (Sample Reception)	Department of Primary Industries	Ernest Jones Dr, Macleod, VIC 3085	Australia	george.croatto@depi.vic.gov.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
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
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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

Name (position)	Facility	Street and/or Postal Address	Country	Email
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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
Mrs Stephanie Cameron (Laboratory Operations Manager)	East West EnviroAg	82 Plain St, Tamworth, NSW 2340	Australia	admin@ewenviroag.com.au
Mr Michael Smirk (Analytical Chemist)	School of Earth and Environment	University of Western Australia, 35 Stirling Highway, Crawley, WA 6009	Australia	Michael.Smirk@uwa.edu.au
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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
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
Kellie Taylor (Lab Manager)	EP Analysis	26 Railway Tce, Cummins, SA 5631 PO Box 400, Cummins SA 5631	Australia	ep.analysis@yahoo.com.au
Ms Pina Caminiti (Quality Co-ordinator)	SGS Australia - Newburn	10 Reid Road, Newburn, WA 6105	Australia	pina.caminiti@sgs.com
Mr Jon Dicker	SGS Australia - Cairns	2/58 Comport Street, Portsmith Cairns, QLD 4870	Australia	jon.dicker@sgs.com
Mr Alexander Bibin (Quality Coordinator)	SGS Australia – Alexandria	Unit 16, 33 Maddox Street, Alexandria, NSW 2015	Australia	Alexander.bibin@sgs.com
Ms Fiona Milnes (Reporting and Quality Manager)	SGS Australia - Pinkenba	59 Bancroft Rd, Pinkenba, QLD 4008	Australia	Fiona.milnes@sgs.com

Name (position)	Facility	Street and/or Postal Address	Country	Email
Mr Stephen Ludvig (Advisor)	Agrilab	35 Wattlepark Avenue Moolap Victoria 3220	Australia	stephen.ludvig@agmin.com.au aglab@agmin.com.au
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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
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Appendix 2: Summary examples of homogeneity data and statistical assessments for soil samples used in the ASPAC Soil ILPP in the 2013-14

Sample name		ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
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	0.355	0.261	0.039	0.405	0.119	0.06	0.258	0.255	0.189	0.191	0.084	0.103
	replicate 2	0.339	0.265	0.038	0.393	0.121	0.061	0.264	0.245	0.189	0.185	0.083	0.099
Sample 2	replicate 1	0.347	0.265	0.039	0.402	0.118	0.06	0.258	0.232	0.185	0.187	0.084	0.101
	replicate 2	0.338	0.267	0.04	0.401	0.119	0.061	0.259	0.244	0.18	0.185	0.082	0.098
Sample 3	replicate 1	0.346	0.26	0.037	0.39	0.122	0.061	0.257	0.232	0.181	0.19	0.083	0.101
	replicate 2	0.337	0.266	0.036	0.391	0.121	0.06	0.26	0.239	0.182	0.188	0.082	0.1
Sample 4	replicate 1	0.345	0.267	0.036	0.393	0.122	0.061	0.257	0.235	0.176	0.193	0.083	0.098
	replicate 2	0.341	0.265	0.036	0.388	0.122	0.059	0.26	0.241	0.173	0.189	0.082	0.096
Sample 5	replicate 1	0.342	0.26	0.036	0.396	0.12	0.061	0.262	0.252	0.195	0.188	0.082	0.097
	replicate 2	0.337	0.261	0.038	0.393	0.121	0.059	0.258	0.238	0.168	0.193	0.083	0.096
Sample 6	replicate 1	0.339	0.263	0.038	0.399	0.121	0.06	0.26	0.245	0.183	0.189	0.083	0.099
	replicate 2	0.339	0.256	0.038	0.388	0.121	0.06	0.261	0.252	0.178	0.191	0.083	0.097
Sample 7	replicate 1	0.341	0.263	0.037	0.398	0.12	0.06	0.261	0.247	0.177	0.189	0.083	0.095
	replicate 2	0.336	0.265	0.037	0.392	0.12	0.061	0.261	0.241	0.181	0.188	0.083	0.1
Sample 8	replicate 1	0.342	0.266	0.037	0.4	0.123	0.063	0.258	0.251	0.18	0.187	0.082	0.099
	replicate 2	0.337	0.272	0.037	0.405	0.121	0.062	0.261	0.242	0.171	0.189	0.083	0.098
Sample 9	replicate 1	0.34	0.262	0.038	0.411	0.122	0.061	0.259	0.255	0.18	0.189	0.083	0.097
	replicate 2	0.335	0.264	0.036	0.414	0.121	0.06	0.262	0.247	0.184	0.188	0.083	0.097
Sample 10	replicate 1	0.338	0.261	0.037	0.41	0.121	0.061	0.265	0.258	0.196	0.186	0.083	0.097
	replicate 2	0.335	0.258	0.036	0.4	0.12	0.059	0.265	0.253	0.184	0.185	0.083	0.098
Mean		0.34	0.263	0.037	0.398	0.121	0.06	0.26	0.245	0.182	0.189	0.083	0.098
Analytical Variance		0.00003	0.00001	0.000001	0.00002	0.000001	0.000001	0.000004	0.00004	0.0001	0.000004	0.0000004	0.000003
Sampling Variance		0	0.000005	0.000001	0.00004	0.000001	0.0000003	0.000001	0.00002	0	0.000001	0	0.000001
SD of proficiency data		0.009	0.01	0.013	0.01	0.003	0.007	0.007	0.015	0.015	0.005	0.004	0.013
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” 2013-14 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 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	2A1	2.16 ††	1.19 ††	3.67 ††	3.22 ††	2.66	2.75	1.39	2.75	0.81	2.02	2.19	2.11 ††
10156	2A1	3.27	2.11	5.38	4.4					1.28	2.72	3.66	3.14
10173	2A1	3.9 ††	2.7 ††	5.4	4.9 †	2.3	3.7	1.8	3.3	1.3	2.7	3.5	2.96
10181	2A1	3.73	2.4	5.9	4.83	2.92	3.69	1.89	3.42	1.4	2.9	3.38	3.12
21043	2A1	3.39	2.24	5.49	4.4	2.63	3.3	1.7	3.33	1.68	2.85	3.35	3.14
21088	2A1	2.35 ††	1.14 ††	3.63 ††	3.18 ††	1.89	2.64	1.42	2.41 ††	1.34	2.67	3.25	3.21
21100	2A1	3.37	2.15	5.03	4.3	2.57	2.88	1.55	2.95	1.1	2.34	2.78	2.71
21124	2A1					2.4	3.4	1.2	2.4 ††	0.5 ††	0.6 ††	0.7 ††	1 ††
21130	2A1	3.42	2.06	5.64	4.44	2.1	3.2	1.6	3.2	1.19	2.29	3.35	2.7
21138	2A1	3.35	2.11	5.95	4.41	2.48	3.46	1.83	2.99	1.15	2.3	3.29	2.4
21182	2A1	3.1	2	4.6	4	2.7	3	1.6	2.9	0.8	2	2.2	2.3 †
21193	2A1	3.64	2.32	5.86	4.69	2.38	3.2	1.84	3.25	1.42	2.94	3.73	3.2
21196	2A1	3.46	2.22	4.9	4.33	2.54	3.2	1.75	3.31	1.43	2.69	2.67	3.05
21230	2A1	3.73	2.36	6.14	4.64	2.48	3.13	1.75	3.14	1.46	3	3.37	3.2
50004	2A1	3.38	2.08	5.92	4.62	2.7	3.07	1.59	3.16	1.09	3.2	3.01	2.3 †
50005	2A1	3.11	2.01	4.91	4.39	2.34	2.96	1.5	3.18	1.28	2.61	3.66	3.37
50006	2A1					2.89	2.41	1.14	2.83	1.67	2.99	4.23 ††	3.04
50011	2A1	3.48	2.15	5.26	4.4	2.5	2.79	1.59	2.84	1.11	2.45	2.56	2.88
50012	2A1	3.44	2.12	5.24	4.43	2.38	2.84	1.56	3.09	1.18	2.47	2.72	2.88
50014	2A1	3.52	1.83	4.82	4.82	2.94	3.02	1.81	3.54	1.3	2.68	3.32	3.05
50017	2A1	3.68	2.23	5.9	4.59	2.71	3.11	1.64	3.2	1.44	2.74	3.82	3.17

50020	2A1	4.01 ††	2.62 ††	5.28	4.48	2.96	2.4	2.03	3.36	1.7	3	3.6	3.2
50022	2A1	3.31	2.09	5.52	4.32	2.31	2.91	1.49	2.92				
50023	2A1	3.44	2.22	5.42	4.57	2.78	3.82 ††	1.7	3.19	1.6	2.7	3	3
50024	2A1	2.92 †	1.74	4.87	3.59 ††	2.42	2.76	1.44	2.83	1.21	2.38	2.7	2.65 †
50029	2A1	3.14	1.98	4.73	4.05	2.25	2.35	1.31	2.4 ††	0.98	2.05	2.57	2.3
50030	2A1	3.65	2.35	5.76	4.68	2.8	3.17	1.73	3.4	1.07	2.43	2.84	2.81
50031	2A1	3.5	2.2	5.6	4.5	2.6	3.4	1.8	3.3	1.4	2.8	3.4	3.3
50032	2A1	3.11	1.85	4.5	3.99	2.47	2.52	1.31	2.66 †	1.34	2.65	2.94	3.01
50033	2A1	3.3	2.11	5.04	4.2	2.14	2.34	1.12	2.37 ††	0.92	2.22	2.79	2.5
50037	2A1	3.24	2.07	5.5	4.38	2.02	3.13	1.67	3.2	1.26	2.38	2.69	3.01
50038	2A1	3.37	2.05	6.11	4.36					1.18	2.33	2.63	2.64
50039	2A1	2.89 ††	1.83	4.85	3.84 †	2.37	2.83	1.41	3.07	1.02	2.37	2.86	2.7

Lab. Code #	Method Codes	Soil sample identification and values for Electrical conductivity 1:5 soil-water (3A1) dS/m air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	3A1	0.187	0.158 †	0.156	0.203 ††	0.055	0.098	0.409	0.144	0.1	0.16	0.008 ††	0.095
10173	3A1	0.201	0.154 ††	0.129 ††	0.198 ††	0.05	0.065 ††	0.305 ††	0.135	0.081 ††	0.15 †	6.9	0.14 ††
10181	3A1	0.202	0.173	0.179	0.221	0.06	0.1	0.41	0.15	0.1	0.16	8.63	0.1
20204	3A1	0.202	0.172	0.178	0.22	0.064	0.108	0.429	0.15	0.097	0.164	8.8	0.1
21043	3A1	0.184 †	0.16	0.195	0.224	0.072 †	0.131 ††	0.405	0.159	0.101	0.162	7.9	0.108 †
21088	3A1	0.195	0.178	0.229 ††	0.249 ††	0.065	0.122	0.403	0.141	0.099	0.16	7.4	0.11 †
21091	3A1					0.074 ††	0.123 †	0.46 †	0.182 ††	0.616 ††	0.017 ††	1.28 ††	4.8 ††
21100	3A1	0.209	0.182	0.172	0.229	0.059	0.106	0.389	0.153	0.1	0.162	8.56	0.098
21124	3A1					0.06	0.118	0.431	0.165	0.1	0.167	7.7	0.102
21130	3A1	0.217	0.186	0.176	0.226	0.060	0.099	0.42	0.148	0.1	0.157	8.65	0.094
21138	3A1	0.199	0.17	0.168	0.216	0.058	0.100	0.41	0.146	0.093 †	0.16	8.59	0.107 †
21182	3A1	0.28 ††	0.16	0.49 ††	0.29 ††	0.06	0.11	0.44	0.16	0.097	0.17 †	8.9	0.097
21190	3A1					0.06	0.105	0.445	0.155	0.88 ††	0.1495 †	8.576	0.085 ††

21193	3A1	0.206	0.177	0.175	0.223	0.06	0.115	0.445	0.16	0.101	0.17 †	8.52	0.098
21196	3A1	0.23 ††	0.2 ††	0.21	0.25 ††	0.069	0.122	0.38	0.164	0.001 ††	0.002 ††	0.792 ††	0.001 ††
21229	3A1	0.203	0.177	0.176	0.225	0.065	0.109	0.418	0.153	0.103	0.162	8.1	0.105 †
21230	3A1	0.199	0.17	0.168	0.218	0.056	0.099	0.413	0.15	0.1	0.159	8.2	0.092
21232	3A1	0.19	0.17	0.18	0.21	0.1 ††	0.06 ††	0.4	0.15	0.1	0.17 †	8.76	0.1
21234	3A1	0.22 †	0.2 ††	0.2	0.22	0.07	0.1	0.37 †	0.17	0.09 ††	0.11 ††	0.01 ††	0.07 ††
23187	3A1	0.226 ††	0.188	0.206	0.244 ††	0.068	0.113	0.43	0.165	0.106	0.169	8.7	0.099
50004	3A1	0.195	0.169	0.158	0.217	0.063	0.088	0.413	0.141	0.116 ††	0.169	7.75	0.114 ††
50005	3A1	0.264 ††	0.231 ††	0.221 †	0.219	0.072 †	0.152 ††	0.478 ††	0.141	0.092 †	0.161	7.53	0.093
50006	3A1	0.21	0.19 †	0.2	0.23	0.07	0.11	0.43	0.17	0.09 ††	0.15 †	6.95	0.1
50011	3A1	0.191	0.168	0.196	0.223	0.058	0.11	0.41	0.14	0.095	0.16	7.72	0.098
50012	3A1	0.2	0.173	0.208	0.227	0.058	0.108	0.415	0.155	0.094	0.157	8.02	0.093
50013	3A1	0.206	0.175	0.165	0.218	0.075 ††	0.131 ††	0.373 †	0.162	0.107 †	0.175 ††	7.96	0.102
50014	3A1	0.2	0.17	0.18	0.22	0.06	0.1	0.41	0.15	0.1	0.16	8.72	0.1
50017	3A1	0.213	0.178	0.174	0.222	0.065	0.111	0.426	0.172	0.103	0.167	8.61	0.097
50019	3A1	0.218	0.188	0.201	0.235 †	0.06	0.099	0.444	0.16	0.099	0.165	0.878 ††	0.097
50020	3A1	0.207	0.177	0.19	0.217	0.06	0.103	0.4	0.147	0.1	0.163	7.99	0.097
50022	3A1	0.202	0.175	0.186	0.223	0.05	0.09	0.43	0.15				
50023	3A1	0.2	0.174	0.171	0.216	0.058	0.102	0.425	0.15	0.101	0.162	8.55	0.108 †
50024	3A1	0.204	0.178	0.184	0.221	0.065	0.109	0.424	0.168	0.097	0.155	0.008 ††	0.092
50025	3A1	0.207	0.181	0.18	0.224	0.059	0.108	0.39	0.148	0.094	0.163	8.41	0.099
50027	3A1	0.173 ††	0.157 †	0.199	0.197 ††	0.065	0.104	0.415	0.141	0.091 †	0.143 ††	7.75	0.1
50029	3A1	0.202	0.177	0.203	0.234 †	0.053	0.097	0.418	0.139	0.08 ††	0.131 ††	7.96	0.082 ††
50030	3A1	0.202	0.172	0.178	0.219	0.057	0.096	0.403	0.152	0.098	0.161	8.29	0.096
50031	3A1	0.217	0.188	0.191	0.236 †	0.065	0.11	0.43	0.16	0.101	0.16	7.94	0.096
50032	3A1	0.223 †	0.197 ††	0.193	0.247 ††	0.064	0.104	0.422	0.168	0.104	0.161	7.94	0.094
50033	3A1	0.197	0.167	0.166	0.213	0.058	0.099	0.378	0.147				
50037	3A1	0.197	0.166	0.169	0.218	0.059	0.097	0.41	0.142	0.093 †	0.157	7.8	0.095
50038	3A1	1.39 ††	0.127 ††	0.107 ††	0.145 ††								
50042	3A1	0.224 †	0.197 ††	0.199	0.235 †	0.062	0.101	0.225 ††	0.142	0.062 ††	0.147 †	7.57	0.098
50081	3A1	0.211	0.18	0.194	0.226	0.067	0.113	0.423	0.164	0.113 ††	0.182 ††	8.26	0.139 ††

Lab. Code #	Method Codes	Soil sample identification and values for Soil pH, 1:5 soil-water (4A1) air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	4A1	5.22	5.63	8.39	5.88	6.45 †	7.52	5.54	5.59	4.45	5.86	3.21	6.35
10173	4A1	5.17	5.57	8.39	5.66 ††	6.6	7.68	5.64	5.86 ††	3.88 ††	5.35 ††	3.24	5.6 ††
10181	4A1	5.12	5.66	8.62	5.83	6.58	7.73	5.67	5.73	4.66 †	5.95	3.38	6.05
20204	4A1	5.08	5.43	8.37	5.76	6.59	7.8	5.59	5.67	4.51	5.85	3.26	6.25
21043	4A1	5.06 ††	5.63	8.55	5.97	6.74	7.89	5.51	5.6	4.44	5.85	3.3	6.11
21088	4A1	5.15	5.5	8.43	5.79	6.54	7.71	5.39	5.5	4.35	5.86	3.32	6.43
21091	4A1					6.65	7.92	5.5	5.58	4.4	5.8	3.2	6.3
21100	4A1	5.1	5.49	8.42	5.76	6.7	7.91	5.58	5.67	4.43	5.89	3.27	6.4
21124	4A1					6.76	7.95	5.52	5.59	4.41	5.86	3.26	6.26
21130	4A1	5.22	5.58	8.72	5.86	6.72	7.97	5.5	5.64	4.39	5.87	3.18	6.44
21138	4A1	5.2	5.48	8.48	5.82	6.77	7.97	5.53	5.67	4.46	5.94	3.2	6.43
21182	4A1	5.2	5.6	8.6	5.9	6.4 †	7.7	5.4	5.5	4.5	5.7 †	3.2	6.2
21190	4A1					6.45 †	7.45	5.59	5.69	4.42	5.88	3.14	6.31
21193	4A1	5.24	5.58	8.46	5.81	5.61 ††	7.35 ††	5.55	5.64	4.17 †	5.58 ††	3.18	6.08
21196	4A1	5.16	5.51	8.44	5.79	6.26 ††	7.38 ††	5.24 ††	5.28 ††	4.24	5.74	3.22	6.27
21229	4A1	5.26	5.61	8.64	5.92	6.86	8.01	5.56	5.68	4.5	5.96	3.29	6.49
21230	4A1	5.24	5.63	8.65	5.87	6.7	7.92	5.5	5.66	4.4	5.9	3.3	6.3
21232	4A1	5.25	5.65	8.75	5.95	6.8	7.8	5.6	5.6	4.5	5.9	3.4	6.4
21234	4A1	4.87 ††	5.25 ††	8.28	5.64 ††	5.5 ††	6.83 ††	4.79 ††	4.76 ††	3.92 ††	5.35 ††	3.06 ††	5.98
23187	4A1	5.24	5.6	8.58	5.91	6.67	7.8	5.45	5.56	4.42	5.88	3.28	6.42
50004	4A1	5.17	5.55	7.38 ††	5.94	6.37 ††	7.62	5.47	5.54	4.28	5.75	3.31	6.26
50005	4A1	5.12	5.34 ††	8.34	5.82	6.68	7.49	5.44	5.65	4.46	5.9	3.35	6.43
50006	4A1	5.08	5.35 ††	7.54 ††	5.89	5.6 ††	6.41 ††	5.08 ††	5.31 ††	4.34	5.75	3.19	6.2
50011	4A1	5.27	5.67	8.5	5.9	6.58	7.7	5.52	5.6	4.43	5.9	3.27	6.36
50012	4A1	5.25	5.59	8.52	5.86	6.8	7.95	5.5	5.65	4.44	5.9	3.2	6.35
50013	4A1	5.2	5.6	8.3	5.8	6.7	7.8	5.6	5.7	4.23	5.72 †	3.21	6.1

50014	4A1	5.19	5.46	8.27	5.93	6.84	8.06	5.58	5.74	4.3	5.76	3.17	6.11
50017	4A1	5.16	5.46	8.56	5.77	6.45 †	7.6	5.43	5.48 †	4.27	5.72 †	3.16	6.21
50019	4A1	5.3	5.6	8.4	6	6.59	7.9	5.4	5.55	4.6	5.8	3.4	6.2
50020	4A1	5.24	5.59	8.53	5.94	6.67	7.88	5.59	5.67	4.47	5.85	3.28	6.22
50022	4A1	5.18	5.55	8.55	5.85	6.68	7.86	5.46	5.54				
50023	4A1	5.19	5.55	8.56	5.84	6.77	7.95	5.5	5.64	4.37	5.82	3.23	6.36
50024	4A1	5.24	5.57	8.42	5.9	6.71	7.72	5.54	5.64	4.29	5.66 ††	3.21	6.28
50025	4A1	5.19	5.52	8.31	5.91	6.82	7.59	5.6	5.59	4.34	5.76	3.19	6.06
50027	4A1	5.23	5.51	8.41	5.94	6.75	7.91	5.51	5.63	4.49	5.86	3.26	6.27
50029	4A1	5.39 ††	5.72	8.5	6.07 ††	6.76	7.97	5.57	5.69	4.48	5.98	3.21	6.39
50030	4A1	5.27	5.68	8.59	5.95	6.83	8.03	5.58	5.69	4.52	5.94	3.29	6.45
50031	4A1	5.2	5.5	8.5	5.8	6.6	7.8	5.4	5.5	4.5	5.9	3.3	6.3
50032	4A1	5.16	5.48	8.46	5.86	6.65	7.76	5.55	5.6	4.39	5.83	3.28	6.1
50033	4A1	5.19	5.56	8.18 †	5.86	6.74	7.89	5.54	5.69	4.31	5.81	3.16	6.03
50037	4A1	5.3	5.68	8.62	5.87	6.64	7.9	5.53	5.68	4.45	5.93	3.3	6.5
50038	4A1	4.9 ††	5.28 ††	8.19	5.62 ††					4.17 †	5.49 ††	3.03 ††	5.67 ††
50042	4A1	5.26	5.52	8.49	5.88	6.82	7.63	5.81 ††	5.77	4.84 ††	6.1 ††	3.52 ††	6.55
50081	4A1	5.45 ††	5.66	7.67 ††	6.37 ††	6.73	7.48	5.87 ††	5.85 ††	4.49	5.92	3.21	6.22

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 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10166	4B1	4.73	4.87	7.18 †	5.39 †	5.76	6.43	5.08	5.02				
20204	4B3	4.68	4.82	7.78	5.32								
21043	4B1					5.86	6.69	4.95 †	4.91	3.81	5.29	3.3	5.74
21088	4B1	4.71	4.83	7.9	5.33					3.8	5.3	3.2	5.6
21091	4B1					6.07	6.89	5.01	4.97	5.3 ††	4.4 ††	4.51 ††	7.88 ††
21138	4B3	4.66	4.78	7.8	5.27 †	5.99	6.75	5.09	4.99				
21232	4B1	4.76	5.01 ††	7.96	5.45 ††					4 ††	5.4	3.3	5.8

23187	4B1	4.69	4.8	7.65	5.32	5.92	6.71	5.06	4.97	3.86	5.41	3.28	5.68
50005	4B1	4.68	4.82	7.55	5.33	5.9	6.32 ††	5.09	5.02	3.83	5.37	3.25	5.67
50014	4B1	4.69	4.77	6.75 ††	5.36	5.89	6.64	5.06	4.97	3.72 †	5.28	3.16	5.67
50019	4B1	4.9 ††	5 ††	7.9	5.5 ††	5.96	6.4 †	5.64 ††	5.54 ††				
50020	4B1	4.86 ††	5.03 ††	7.86	5.44 †	6.02	6.78	5.17 †	5.1 †	4.17 ††	5.44	3.3	5.73
50024	4B1	4.66	4.79	7.54	5.3	6	6.76	5.12	5.05	3.78	5.32	3.17	5.67
50027	4B1	4.68	4.77	7.67	5.34	5.97	6.7	5.04	4.96	3.78	5.27	3.24	5.62
50030	4B1	4.74	4.86	7.82	5.33	5.96	6.78	5.06	4.98	3.83	5.34	3.27	5.73
50038	4B1									3.6 ††	5.17	3.01 ††	5.35 ††
50081	4B1	4.74	4.797	6.31 ††	5.94 ††	5.81	6.27 ††	5.21 †	5.12 ††	3.81	5.27	3.16	5.34 ††

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 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	4B4	4.67	4.94	7.71	5.42 †	6.08 †	6.57 †	5.16	5.04	4.11 ††	5.49	3.39 ††	5.72
10181	4B2	4.73	4.87	7.92	5.34	5.66 ††	6.37 ††	5.21 ††	5.07	3.91	5.24	3.25	5.67
20204	4B2					6	6.81	5.07	4.99	3.9	5.3	3.26	5.65
21043	4B2	4.63	4.75	7.8	5.24								
21088	4B2					5.88	6.66	5.02	4.95				
21100	4B2	4.69	4.82	7.82	5.28	5.96	6.78	5.1	5.03	3.76	5.29	3.21	5.68
21124	4B2					5.9	6.57 †	5	4.9 †				
21130	4B2	4.78	4.9	7.8	5.39 †	5.92	6.78	5.08	5.04	3.85	5.42	3.18	5.77
21138	4B4									3.85	5.4	3.2	5.79
21182	4B2					5.7 ††	6.3 ††	5.02	4.95	4.1 ††	5.3	3.5 ††	5.6
21193	4B2	4.73	4.82	7.85	5.26	5.39 ††	7.15 ††	5.06	5.01	3.78	5.25	3.18	5.31 ††
21196	4B2	4.71	4.85	7.78	5.31	5.77 †	6.49 †	4.76 ††	4.77 ††	3.88	5.35	3.22	5.72
21229	4B2	4.74	4.86	8	5.36	6.03	6.86	5.11	5.06	3.88	5.41	3.26	5.81
21230	4B2	4.78	4.93	7.96	5.34	5.96	6.75	5.07	5.02	3.8	5.5	3.3 †	5.8
21232	4B2					6.2 ††	6.9	5.2 ††	5.3 ††				

23187	4B2	4.64	4.71	7.64	5.29	5.93	6.63	5.12	4.97	3.84	5.39	3.23	5.67
50005	4B2	4.7	4.85	7.81	5.29	5.97	6.34 ††	5.09	5.04	3.83	5.39	3.25	5.69
50011	4B2	4.76	4.89	7.79	5.32	5.97	6.75	5.07	5.03	3.84	5.37	3.2	5.68
50012	4B4	4.69	4.8	7.77	5.35	5.95	6.75	5.05	4.95	3.8	5.32	3.19	5.56
50013	4B2	4.6	4.8	7.5 †	5.3	5.9	6.7	5.1	5	3.75	5.22	3.16	5.58
50017	4B2	4.74	4.86	8	5.32	5.92	6.75	5.06	5.02	3.81	5.3	3.15	5.68
50019	4B2	4.9 ††	5	7.9	5.5 ††	5.96	6.4 ††	5.64 ††	5.54 ††				
50022	4B2	4.66	4.78	7.78	5.29	6.01	6.76	5.14	4.96				
50023	4B2	4.67	4.8	7.91	5.29	5.9	6.77	5.04	4.99	3.99 ††	5.37	3.18	5.64
50029	4B2	4.7	4.81	7.48 ††	5.33	5.88	6.66	4.99	4.92	3.79	5.33	3.19	5.7
50037	4B2	4.74	4.85	7.9	5.3	5.91	6.71	5.09	5.04	3.82	5.37	3.26	5.77
50038	4B2	4.49 ††	5	8.09	5.54 ††								

87 Lab. Code #	Method Codes	Soil sample identification and values for Water soluble Cl - potentiometric (5A1) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	5A1	31	38	9	24	6	8	17	34	23 †	18	6213	28
20204	5A1	33	62 ††	23 ††	30	16	16	23	37	16	20	5715	21
21043	5A1	25	35	6.1	19	12	16	26	44 †	12	18	5938	20
21088	5A1	35	50 †	7.9	28					16	20	5780	20
21091	5A1					10	28	51 ††	55 ††	160 ††	8 ††	270 ††	6200 ††
21100	5A1	25	44	11	30	15	23	32	36				
21182	5A1	30	52 †	7	36	18	21	53 ††	58 ††	17	20	6300	25
21193	5A1	16	14 ††	9	24	24 ††	27		39	15	16	6260	24
21196	5A1	23	36	3.3	17	11	9	30	43	12	18	5442	21
21230	5A1	23	34	6.7	20	19	18	32	38	13	16	5729	23
21232	5A1	25	33	17 †	25	19	14	29	39	11	22	6300	59 ††
23187	5A1	26	37	5.9	8	11	10	27	39	8.3	18	6810	21
50004	5A1	25	37	6.5	9	12	10	26	36	8.8	18	6089	20

50005	5A1	44 ††	12 ††	25 ††	25	14	31	40 †	40	15	20	6907	30 †
50011	5A1	27	38	12	25	11	12	28	37	14	19	5300	18
50012	5A1					9.4	9.5	25	36				
50013	5A1	33	54 ††	9.2	34	15	15	39 †	52 ††	21	25 ††	5850	26
50017	5A1									10	17	7032	18
50019	5A1					8.9	8.1	23	36	16	12	4920	30 †
50023	5A1	27	41	6.7	24					13	16	6047	19
50025	5A1	22	40	16 †	56 ††	11	17	22	36	9.5	18	6933	54 ††
50027	5A1	15	40	10	40	6	12	23	44 †	16	16	6560	94 ††
50031	5A1	24	38	4.5	22	8.5	8	24	35	14	20	6450	23
50032	5A1	36	63 ††	21 ††	299 ††	25 ††	29	40 †	59 ††	38 ††	28 ††	3879 ††	73 ††
50042	5A1	8 ††	15 ††	7	144 ††	14	8	17	15 ††	19	1.6 ††	15 ††	10 †
50081	5A1	35	64 ††	21 ††	174 ††	18	18	32	46 †	14	21	8526 ††	25

67 Lab. Code #	Method Codes	Soil sample identification and values for Water soluble Cl - autocolour (5A2) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
21100	5A2									17	21	5420 †	118 ††
21124	5A2									19	22	6660	23
21229	5A2	32	44	14 ††	22	15	13	31	45	14	24	6607	26
50012	5A2	22	35	5.4	18					10	16	6020	19
50014	5A2	25	37	5	22	3	7.6	37	39	15	24	6458	24
50017	5A2	20	40	5.2	25	9.2	13	24	29				
50020	5A2	32	59 ††	8.9 †	49 ††	50	50 ††	44	53	40 ††	45 ††	6310	100 ††
50029	5A2	32	41	18 ††	25	36	35 †	42	44	19	25	4385 ††	62 ††
50037	5A2	26	41	6.1	23	12	9.2	33	39	14	21	6412	23

Lab. Code #	Method Codes	Soil sample identification and values for Organic Carbon - W&B (6A1) % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	6A1	4.6	4.15 †	0.798 ††	4.07	1.61 ††	1.02 ††	2.76	3.33				
10173	6A1	4.62	3.8	0.53	3.99	1.43 ††	1.14 ††	2.67	3.39	2.15	2.11	1.24	0.93
20204	6A1	4.52	3.87	0.54	3.96	1.02	0.59	2.49	3.02	2.23	2.02	1.33	1.13
21043	6A1	4.47	3.91	0.649 †	3.86	1	0.639	2.47	3.36	2.2	1.81	1.19	0.97
21100	6A1	4.15	3.45 †	0.55	3.55	1	0.64	2.04	2.66	2.26	2.12	1.6 †	1.55 ††
21138	6A1	4.3	3.85	0.411	3.84	1.06	0.619	2.39	2.89	2.04	1.84	2.07 ††	0.952
21182	6A1	4.4	4	0.57	4	1.4 ††	0.89 ††	3 ††	3.7	2.5 †	2.1	1.2	1
21193	6A1	4.53	3.97	0.455	3.85	1.22	0.69	2.46	3.18	2.09	2.27	1.49	1.16
21196	6A1	4.24	3.58	0.395	3.65	0.93	0.535	2.2	2.9	2.13	1.93	1.32	0.999
21229	6A1	4.43	3.93	0.407	3.75	1	0.559	2.37	2.97	2.2	1.89	1.28	0.985
21232	6A1	5.38 ††	4.74 ††	0.82 ††	4.55 ††	0.84 ††	0.24 ††	2.27	3.08	2.3	1.4 ††	1	1.2 †
21234	6A1	5.21 ††	4.55 ††	0.73 ††	4.66 ††	1.21	0.68	2.96 ††	3.66	1.21 ††	2.15	0.98	0.75 ††
50005	6A1	4.85	4.19 †	0.417	3.8	1.1	0.578	2.58	3.1	2.21	1.94	1.27	1.01
50006	6A1	5.56 ††	4.39 ††	5.22 ††	4.12	3.34 ††	4.08 ††	7.63 ††	5.63 ††	11.5 ††	11.3 ††	12.9 ††	10.6 ††
50011	6A1	4.19	3.76	0.43	3.75	1.03	0.59	2.44	3.11	2.1	1.93	1.41	1.03
50012	6A1	4.4	3.87	0.444	3.78	1.21	0.667	2.55	3.41	2.1	2.1	1.48	1.22 †
50014	6A1	4.49	3.8	0.534	4.17	1.02	0.609	2.61	2.71	2.26	1.92	1.19	1.04
50022	6A1	4.24	3.74	0.446	3.68	1.03	0.66	2.41	2.84				
50025	6A1	4.25	3.79	0.499	3.66	1.09	0.73	2.28	2.85	1.59 ††	1.69	1	0.756 ††
50027	6A1	2.86 ††	2.32 ††	0.35	2.9 ††	1.11	0.619	2.4	2.97	2.2	1.99	1.42	1.06
50029	6A1	4.11	3.5 †	0.38	3.54	1.06	0.543	2.21	3.01	1.93 †	1.71	1.28	0.94
50030	6A1	4.43	3.78	0.43	3.9	1.05	0.61	2.35	3.27	1.87 †	1.81	1.22	1.03
50031	6A1					1.11	0.66	2.32	3.13	2.23	2.04	1.45	0.961
50032	6A1	4.33	3.86	0.42	3.8	0.99	0.57	2.29	3	1.96	1.79	1.14	0.84
50038	6A1	3.38 ††	3.32 ††	0.49	3.38								
50081	6A1	5.77 ††	5.15 ††	0.441	5.02 ††	1.49 ††	0.69	3.3 ††	4.05 ††	2.73 ††	2.6 ††	1.31	1.18

Lab. Code #	Method Codes	Soil sample identification and values for Total Organic C - Heanes (6B1) % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
50012	6B1	4.87	4.43	0.591	4.29	1.24	0.783	2.99	3.49	2.6 ††	2.21	1.46	1.12
50014	6B1	5.03	4.17	0.608	4.2	1.3	0.826	2.82	3.21	2.26	2.1	1.51	1.12
50030	6B1	4.82	4.35	0.55	4.29	1.15	0.71	2.66	3.54	2.24	2.05	1.44	1.07

Lab. Code #	Method Codes	Soil sample identification and values for Total C - Dumas (6B2) % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	6B2	4.76	4.29	0.916	4.34	1.2	0.736	2.77	3.39				
10173	6B2	5.14	4.65	0.6 ††	4.76	1.2	0.76	2.97	3.43	2.34	2.26	2.28 ††	1.12
10181	6B2	4.89	4.44	0.886	4.61	1.26	0.84	2.91	3.5	2.48	2.23	1.41	1.24 ††
20204	6B2	4.64 †	4.19	0.87	4.3	1.24	0.79	2.84	3.35	2.44	2.23	1.36	1.16
21043	6B2	5.02	4.45	0.913	4.52	1.26	0.788	2.8	3.48	2.51	2.1	1.31	1.11
21100	6B2	4.94	4.41	0.87	4.42	1.26	0.76	2.91	3.53	2.64	2.27	1.36	1.18
21138	6B2	4.61 ††	4.11 ††	0.932	4.16 †	1.19	0.77	2.82	3.4	2.24	2.05	1.24	1.06 ††
21182	6B2	6.5 ††	6.1 ††	0.75	6.1 ††	1.3 ††	0.82	2.9	3.6				
21230	6B2	4.98	4.36	0.941	4.54	1.22	0.787	2.86	3.45	2.5	2.3	1.3	1.1
21232	6B2	4.95	4.32	0.82	4.52	1.18	0.7	2.69	3.38	2.4	2.2	1.3	1.2
22	6B2	4.78	4.36	0.875	4.29	1.22	0.724	2.77	3.33	2.62	2.11	1.31	1.15
50004	6B2	4.76	4.26	0.817	4.22	1.2	0.696	2.77	3.51	2.37	2.13	1.32	1.16
50005	6B2	4.87	4.26	0.473 ††	4.47	1.18	0.723	2.78	3.52	2.42	2.12	1.31	1.16
50011	6B2	4.98	4.53	0.86	4.53	1.23	0.75	2.85	3.6	2.41	2.2	1.4	1.13
50012	6B2	5.09	4.66	0.888	4.71	1.19	0.743	2.75	3.35	2.52	2.11	1.29	1.15
50014	6B2	4.94	4.46	0.884	4.49	1.18	0.737	2.8	3.37	2.43	2.16	1.29	1.11
50017	6B2	4.84	4.32	0.997	4.4	1.23	0.788	2.81	3.36	2.36	2.21	1.37	1.13

50019	6B2	5.03	4.57	0.99	4.59	1.47 ††	0.939 ††	3.33 ††	3.87 ††	2.55	2.36	1.44 ††	1.18
50021	6B2	4.81	4.32	0.776	4.44								
50024	6B2	4.99	4.53	0.928	4.7	1.2	0.734	2.82	3.48	2.4	2.22	1.31	1.12
50027	6B2	4.45 ††	4.25	1.06 †	3.69 ††								
50029	6B2	4.99	4.49	0.936	4.63	1.22	0.762	3.02	3.63	2.55	2.27	1.33	1.16
50030	6B2					1.23	0.77	2.82	3.52	2.21	2.13	1.31	1.12
50032	6B2	5.01	4.4	0.96	4.53	1.21	0.73	2.97	3.57	2.42	2.22	1.33	1.16
50033	6B2	4.9	4.35	0.94	4.43	1.22	0.75	2.88	3.45	2.21	2.16	1.35	1.16
50039	6B2	4.84	4.42	0.88	4.44	1.24	0.77	2.86	3.56	2.35	2.16	1.35	1.16
50043	6B2	5.05	4.49	1.07 ††	4.81	1.31 ††	0.852 †	2.91	3.54	2.35	2.13	1.38	1.16

Lab. Code #	Method Codes	Soil sample identification and values for Total Organic C - HF Induction, IR (6B3) % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	6B3									2.44	2.14	1.32	1.13
20204	6B3	4.6 †	4.15	0.82 ††	4.29	1.03 ††	0.61	2.52 ††	3.05 ††	2.42	2.21	1.33	1.13
21088	6B3	4.64	4.09	0.483	4.01 †	1.36 ††	0.826	2.89	3.37	2.45	2.09	1.43	0.972 ††
21091	6B3					1.2	0.738	3	3.6	3.5 ††	0.11 ††	2.8 ††	1.2 ††
21100	6B3	4.86	4.35	0.58	4.42	1.2	0.74	2.85	3.78	2.34	2.2	1.3	1.13
21138	6B3									1.6 ††	1.28 ††	1.07 ††	0.645 ††
21182	6B3	5.6 ††	5.4 ††	0.43	5.8 ††	1.2	0.77	2.5 ††	3.6				
21230	6B3	4.98	4.36	0.549	4.54	1.22	0.787	2.86	3.45	2.5	2.3	1.3	1.1
50005	6B3	4.81	4.19	0.355	4.38					2.42	2.12	2.3 ††	1.13
50011	6B3	4.83	4.41	0.6	4.41	1.12 †	0.68	2.8	3.55	2.45	2.16	1.62 ††	1.15
50012	6B3	4.84	4.26	0.541	4.42	1.19	0.727	2.85	3.3	2.28 †	2.05	1.28	1.12
50013	6B3	3.9 ††	3.9 ††	0.456	3.88 ††	1.15	0.642	2.73	3.4	1.6 ††	1.42 ††	0.992 ††	0.75 ††
50014	6B3	4.87	4.48	0.529	4.45	1.19	0.734	2.89	3.49	2.37	2.18	1.28	1.1
50020	6B3	4.78	4.31	0.474	4.55	1.05 ††	0.608	2.47 ††	2.95 ††	1.94 ††	2.14	1.1 ††	1.06 ††
50021	6B3					1.11 †	0.673	2.78	3.27				

50023	6B3	4.96	4.42	0.63	4.59	1.17	0.715	2.79	3.48	2.31	2.15	1.37	1.12
50030	6B3	5	4.48	0.92 ††	4.66								
50032	6B3	5.01	4.4	0.47	4.53	1.21	0.73	2.97	3.57	2.41	2.23	1.33	1.14
50037	6B3	4.86	4.462	0.586	4.41	1.22	0.73	2.81	3.45	2.5	2.21	1.31	1.14
50039	6B3	4.84	4.48	0.51	4.38	1.24	0.77	2.86	3.56	2.41	2.26	1.36	1.14
50043	6B3					1.32 ††	0.876	2.93	3.49	2.39	2.15	1.36	1.17 †

Lab. Code #	Method Codes	Soil sample identification and values for Total N - Kjeldahl, steam distillation (7A1) % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	7A1	0.327	0.257	0.028	0.381	0.112	0.060	0.238	0.263	0.183	0.173	0.067	0.088
20204	7A1					0.116	0.068	0.249	0.27	0.19	0.18	0.058	0.08
21088	7A1	0.311	0.244	0.0385	0.385	0.129	0.071	0.249	0.265	0.177	0.188	0.08	0.096
21091	7A1					0.122	0.067	0.276	0.312 ††	0.262 ††	0.003 ††	0.088	0.036 ††
21100	7A1	0.334	0.26	0.0499	0.41	0.124	0.073	0.239	0.272	0.212 †	0.2	0.082	0.092
21138	7A1					0.104	0.056	0.211 ††	0.246 †				
21182	7A1	0.26 ††	0.28	0.04	0.38	0.12	0.07	0.25	0.28	0.18	0.03 ††	0.08	0.11
21190	7A1					0.124	0.067	0.232	0.278	0.189	0.189	0.091	0.102
21193	7A1	0.354	0.269	0.046	0.383	0.12	0.634 ††	0.256	0.272	0.177	0.178	0.072	0.09
21196	7A1	0.075 ††	0.085 ††	0.119 ††	0.122 ††	0.27 ††	0.078	0.093 ††	0.115 ††	0.74 ††	0.772 ††	0.923 ††	0.929 ††
21230	7A1	0.353	0.267	0.038	0.408	0.121	0.068	0.247	0.275	0.19	0.19	0.08	0.09
21232	7A1	0.34	0.28	0.03	0.41	0.11	0.04 ††	0.24	0.28	0.18	0.18	0.09	0.09
21234	7A1	0.37	0.3	0.04	0.44 ††	0.1 †	0.05 †	0.23	0.26	0.15 †	0.14 ††	0.06	0.08
50004	7A1	0.318	0.264	0.082 ††	0.379	0.139	0.074	0.262	0.292	0.214 †	0.203	0.084	0.098
50011	7A1	0.35	0.28	0.048	0.39	0.12	0.06	0.25	0.28	0.2	0.18	0.07	0.08
50013	7A1	0.284 ††	0.209 ††	0.034	0.371	0.101	0.057	0.209 ††	0.242 †	0.163	0.166	0.075	0.096
50014	7A1	0.346	0.275	0.046	0.398	0.119	0.07	0.246	0.271	0.19	0.187	0.080	0.097
50019	7A1	0.329	0.258	0.029	0.378	0.133	0.065	0.258	0.288				
50021	7A1	0.337	0.26	0.033	0.39	0.115	0.065	0.240	0.275				

50024	7A1	0.362	0.288	0.06	0.43	0.131	0.078	0.256	0.302 †	0.207	0.203	0.089	0.114 ††
50030	7A1	0.351	0.274	0.038	0.41	0.114	0.063	0.242	0.275	0.167	0.173	0.068	0.088
50031	7A1	0.34	0.262	0.042	0.39	0.115	0.066	0.228	0.259	0.188	0.18	0.074	0.09
50043	7A1	0.339	0.247	0.0168	0.376	0.135	0.085 †	0.263	0.294 †	0.182	0.188	0.087	0.103

Lab. Code #	Method Codes	Soil sample identification and values for Total N – Dumas (7A5) % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	7A5									0.178	0.177	0.08	0.096
10173	7A5	0.36	0.27	0.02	0.44 ††	0.1	0.06	0.24	0.25	0.18	0.18	0.04 ††	0.07
10181	7A5	0.353	0.286	0.058	0.419	0.12	0.07	0.26	0.28	0.2	0.19	0.09	0.11
20204	7A5	0.347	0.268	0.032	0.394								
21043	7A5	0.339	0.261	0.032	0.393	0.11	0.047	0.229	0.267	0.171	0.157 ††	0.051 ††	0.069
22	7A5	0.352	0.287	0.049	0.394	0.149	0.093 ††	0.274 †	0.295	0.242 ††	0.216 ††	0.109 ††	0.125
50005	7A5	0.367 ††	0.291	0.056	0.411	0.116	0.073	0.242	0.278	0.193	0.184	0.078	0.099
50012	7A5	0.338	0.272	0.035	0.396	0.113	0.063	0.237	0.263	0.192	0.178	0.076	0.094
50014	7A5	0.346	0.275	0.046	0.398					0.19	0.187	0.080	0.097
50017	7A5	0.334	0.263	0.039	0.387	0.122	0.065	0.239	0.259	0.188	0.187	0.083	0.095
50020	7A5	0.371 ††	0.294	0.056	0.418	0.129	0.078	0.247	0.289	0.201	0.195	0.083	0.107
50023	7A5	0.325	0.25	0.02	0.38	0.09	0.04 ††	0.22 †	0.26	0.16	0.16 ††	0.06 ††	0.07
50027	7A5	0.328	0.269	0.062	0.364 ††	0.12	0.068	0.239	0.264	0.208	0.196	0.084	0.109
50029	7A5	0.427 ††	0.281	0.011	0.437 ††	0.087	0.035 ††	0.195 ††	0.297	0.185	0.178	0.058 ††	0.072
50032	7A5	0.337	0.258	0.04	0.406	0.153	0.113 ††	0.183 ††	0.194 ††	0.177	0.183	0.128 ††	0.139 ††
50033	7A5	0.34	0.27	0.04	0.4	0.12	0.07	0.25	0.27	0.17	0.18	0.08	0.09
50037	7A5	0.335	0.273	0.037	0.408	0.109	0.06	0.245	0.274	0.198	0.184	0.081	0.101
50039	7A5	0.34	0.27	0.03	0.4	0.12	0.06	0.25	0.28	0.19	0.18	0.08	0.1

Lab. Code #	Method Codes	Soil sample identification and values for Total N – Pooled (7A1, 7A2, 7A5) % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	7A2	0.342	0.278	0.052	0.413	0.131	0.08	0.236	0.258	0.178	0.177	0.08	0.096
10069	7A5									0.178	0.177	0.08	0.096
10156	7A1	0.327	0.257	0.028	0.381	0.112	0.060	0.238	0.263	0.183	0.173	0.0671	0.088
10173	7A5	0.36	0.27	0.02	0.44 ††	0.1	0.06	0.24	0.25	0.18	0.18	0.04 ††	0.07 ††
10181	7A5	0.353	0.286	0.058	0.419	0.12	0.07	0.26	0.28	0.2	0.19	0.09	0.11
20204	7A5	0.347	0.268	0.032	0.394	0.116	0.068	0.249	0.27	0.19	0.18	0.058 ††	0.08
21043	7A5	0.339	0.261	0.032	0.393	0.11	0.047	0.229	0.267	0.171	0.157 †	0.051 ††	0.069 ††
21088	7A1	0.311	0.244	0.039	0.385	0.129	0.071	0.249	0.265	0.177	0.188	0.08	0.096
21091	7A1					0.122	0.067	0.276 ††	0.312 ††	0.262 ††	0.003 ††	0.088	0.036 ††
21100	7A1	0.334	0.26	0.050	0.41	0.124	0.073	0.239	0.272	0.212	0.2 †	0.082	0.092
21138	7A1					0.104	0.056	0.211 †	0.246	0.172	0.169	0.071	0.086
21182	7A1	0.26 ††	0.28	0.04	0.38	0.12	0.07	0.25	0.28	0.18	0.03 ††	0.08	0.11
21190	7A1					0.1235	0.067	0.232	0.278	0.189	0.189	0.091	0.102
21193	7A1	0.354	0.269	0.046	0.383	0.12	0.634 ††	0.256	0.272	0.177	0.178	0.072	0.09
21196	7A1	0.075 ††	0.085 ††	0.119 ††	0.122 ††	0.27 ††	0.078	0.093 ††	0.115 ††	0.74 ††	0.772 ††	0.923 ††	0.929 ††
21229	7A2	0.326	0.261	0.047	0.365	0.104	0.062	0.226	0.243 †	0.192	0.185	0.086	0.102
21230	7A1	0.353	0.267	0.038	0.408	0.121	0.068	0.247	0.275	0.19	0.19	0.08	0.09
21232	7A1	0.34	0.28	0.03	0.41	0.11	0.04 ††	0.24	0.28	0.18	0.18	0.09	0.09
21234	7A1	0.37	0.3 †	0.04	0.44 ††	0.1	0.05	0.23	0.26	0.15 ††	0.14 ††	0.06 †	0.08
22	7A5	0.352	0.287	0.049	0.394	0.149 †	0.093 ††	0.274 ††	0.295	0.242 ††	0.216 ††	0.109 ††	0.125 ††
23187	7A2	0.311	0.241	0.031	0.355	0.109	0.057	0.234	0.269	0.172	0.171	0.075	0.09
50004	7A1	0.318	0.264	0.082 ††	0.379	0.139	0.074	0.262	0.292	0.214	0.203 †	0.084	0.098
50005	7A5	0.367	0.291	0.056	0.411	0.116	0.073	0.242	0.278	0.193	0.184	0.078	0.099
50011	7A1	0.35	0.28	0.048	0.39	0.12	0.06	0.25	0.28	0.2	0.18	0.07	0.08
50012	7A2	0.334	0.264	0.035	0.397	0.114	0.062	0.238	0.272	0.189	0.181	0.076	0.091

50012	7A5	0.338	0.272	0.035	0.397	0.114	0.063	0.239	0.28	0.192	0.183	0.076	0.094
50013	7A1	0.284 ††	0.209 ††	0.034	0.371	0.101	0.057	0.209 †	0.242 ††	0.163	0.166	0.075	0.096
50014	7A2	0.337	0.265	0.041	0.38 ††	0.113	0.65	0.226 ††	0.254 ††	0.117 †	0.176 ††	0.072 ††	0.091
50014	7A5	0.346	0.275	0.046	0.398	0.119	0.07	0.246	0.271	0.19	0.187	0.080	0.097
50017	7A5	0.334	0.263	0.039	0.387	0.122	0.065	0.239	0.259	0.188	0.187	0.083	0.095
50019	7A1	0.329	0.258	0.029	0.378	0.133	0.065	0.258	0.288				
50020	7A5	0.371	0.294	0.056	0.418	0.129	0.078	0.247	0.289	0.201	0.195	0.083	0.107
50021	7A1	0.337	0.26	0.033	0.39	0.115	0.065	0.240	0.275				
50023	7A5	0.325	0.25	0.02	0.38	0.09 ††	0.04 ††	0.22	0.26	0.16	0.16 †	0.06 †	0.07 ††
50024	7A1	0.362	0.288	0.06	0.43	0.131	0.078	0.256	0.302 ††	0.207	0.203 †	0.089	0.114
50027	7A5	0.328	0.269	0.062	0.364	0.12	0.068	0.239	0.264	0.208	0.196	0.084	0.109
50029	7A5	0.427 ††	0.281	0.011 ††	0.437	0.087 ††	0.035 ††	0.195 ††	0.297	0.185	0.178	0.058 ††	0.072 †
50030	7A1	0.351	0.274	0.038	0.41	0.114	0.063	0.242	0.275	0.167	0.173	0.068	0.088
50031	7A1	0.34	0.262	0.042	0.39	0.115	0.066	0.228	0.259	0.188	0.18	0.074	0.09
50032	7A5	0.337	0.258	0.04	0.406	0.153 ††	0.113 ††	0.183 ††	0.194 ††	0.177	0.183	0.128 ††	0.139 ††
50033	7A5	0.34	0.27	0.04	0.4	0.12	0.07	0.25	0.27	0.17	0.18	0.08	0.09
50037	7A5	0.335	0.273	0.037	0.408	0.109	0.06	0.245	0.274	0.198	0.184	0.081	0.101
50039	7A5	0.34	0.27	0.03	0.4	0.12	0.06	0.25	0.28	0.19	0.18	0.08	0.1
50043	7A1	0.339	0.247	0.0168	0.376	0.135	0.0849	0.263	0.294	0.182	0.188	0.087	0.103

Lab. Code #	Method Codes	Soil sample identification and values for Water Soluble Nitrate N - autocolour (7B1) mg/kg dry wt											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	7B1	41	0.1	3.6	6.3	0.2	11	179	8.3	19	23	0.2	21
20204	7B1	35	6.6 ††	2.8	8.7	1 †	10	153	8.3	21	23	8.6 ††	22
21088	7B1	37	0.11	2.9	5.6		9.4	201	18 ††	18	23	0.23	22
21091	7B1					0.5	11	160	7.8				
21138	7B1									20	22	0.6	22
21182	7B1	58 ††	0.2	4	7	0.123	2.4 ††	105 ††	0.448 ††	20	25	0.31	23

21196	7B1	37	0.1	2	5	0.03	8.5	189	8.7	19	25	2.5 ††	23
21232	7B1	44	0.5	3.9	7.1	0.4	9.6	187	8.2	20	23	0.4	16 ††
23187	7B1	43	0.3	3	6	0.4	8.7	180	6.8	18	23	0.3	22
50004	7B1	42	0.232	3.6	6.8	0.115	9	177	7.4	20	23	0.149	22
50005	7B1	41	0.015	3.2	11 ††	0.044	11	174	7.8	20	24	0.235	21
50013	7B1	41	1.5 †	3.5	3.2 ††	0.009	9.6	200	9	20	25	0.1	24
50014	7B1									17 †	21	0.016	19
50020	7B1					0.027	10	190	8.5	22	26	1.4 †	25
50021	7B1					0.19	8.9	178	7.7				
50025	7B1	41	0.225	3.6	7.5	1.1 †	10	156	8.7	20	24	0.892	22
50029	7B1	35	0.76 †	3.5	5.9	1.1 †	8.2	155	8.2	16 ††	19 ††	0.919	18
50031	7B1	43	0.4	3.4	6.4	0.1	11	195	8.5	22	24	0.5	25
50032	7B1	49	1.8 ††	4	9.2 †	0.88	8.2	167	8.8	24 ††	23	19 ††	25
50037	7B1	46	0.86 †	4	6.6	0.464	8.6	159	7.6	20	24	0.53	24
50042	7B1	27 ††	10 ††	17 ††	11 ††	12 ††	21 ††	108 ††	17 ††	8.1 ††	21	132 ††	21
50081	7B1	32	4.3 ††	6.6 ††	11 ††	4.2 ††	10	172	8.9	23 †	31 ††	1.2 †	24

Lab. Code #	Method Codes	Soil sample identification and values for KCL Extractable Nitrate N - autocolour (7C2) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	7C2	43	0.886 ††	4.6	7.4					24 ††	28 ††	0.1	26 ††
10173	7C2	43	0.1	3.6	6.3	0.2	11	182	8.5	19	23	0.47	22
10181	7C2	40 †	0.395	3.1	5.7	0.12	6.5 †	145 ††	7	18	22	0.01	21
21043	7C2	43	0.082	3.8	6.7	0.07	8.7	183	7.8	22	25	0.052	24
21100	7C2	44	0.215	3.4	6.1	1.1 ††	8.1	209 †	6.9	20	24	1.4	23
21138	7C2	42		3.8	6.9	0.461	9.4	180	8.2	20	23	0.6	23
21182	7C2	44	0	4	7	0.626 †	20 ††	392 ††	17 ††	21	25	0.47	24
21196	7C2	38 ††	0.1	2.1 ††	5.2	0.331	0.085 ††	0.095 ††	0.126 ††	19	22	1.2	21
21229	7C2	41	0.14	2.6	5.7	0.23	7.8	182	7.6	21	23	0.23	22

21230	7C2	36 ††	0.741 ††	2.4	4.9	0.142	6.1 ††	163 †	6.3	19	23	0.123	20 ††
21232	7C2	43	0.6 †	3.9	7	0.3	10	102 ††	8.3	20	22	0.4	20 ††
22	7C2	43		3.5	5.8	0.086	9.2	185	7.7	19	25		23
23187	7C2	42		3	6	0.3	8.6	176	7.2	18	23		22
50004	7C2	40	0.412	3.9	6.2	0.067	8.5	119 ††	7.2	20	25	0.035	24
50005	7C2	40	0.014	3.2	12 ††	0.046	11 †	179	7.9	20	24	0.231	20 ††
50011	7C2	41	0.5	4.8	7.3	0.05	9.7	186	9	20	24	1.3	22
50012	7C2	43	0.049	3.5	6.3	0.097	9.05	187	8	18	24	0.42	22
50014	7C2	42	0.305	3.2	6.1	1.4 ††	8.4	168	6.6	17	23	1	23
50017	7C2	42	0.497	3.8	6.7	1.2 ††	10	181	8.6	20	24	1.3	23
50019	7C2					1.2 ††	7.8	118 ††	8.9	21	29 ††	1	23
50020	7C2	43	0.205	3.5	6.6								
50023	7C2					0.01	8.7	157 †	7.5				
50027	7C2	41	0.13	3.5	5.7	0.48 †	9.3	182	9	21	24	0.3	22
50031	7C2	45 †	0.11	4.2	7.2	0.3	11	190	9.3	23	27 ††	0.57	26 ††
50033	7C2	38 ††	0.18	2.2 ††	4.5	0.13	8.9	207 †	7.5	19	23	0.56	22

Lab. Code #	Method Codes	Soil sample identification and values for KCL Extractable Ammonium N - autocolour (7C2) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	7C2	71	176	6.6 ††	196					36 ††	52 ††	36	24 ††
10173	7C2	71	155	5.1	170	18	4.4	35	55	28	41	36	15
10181	7C2	69	163	4.2	191	22 †	4.4	34	58	32	46 †	37	17
20204	7C2	27 ††	118 ††	5.4	181	28 ††	3.8	22 ††	55	26	42	40 †	26 ††
21043	7C2	64	163	3.6	182	18	5.6	41 †	58	31	45	36	14
21088	7C2	24 ††	55 ††	0.38 ††	42 ††	32 ††	19 ††	49 ††	67 ††	14 ††	14 ††	22 ††	3.6 ††
21091	7C2					20	9.1 ††	41 †	62 †	84 ††	2.3 ††	28 ††	7.9 ††
21100	7C2	64	153	5	170	18	3.9	36	55	29	41	34	13
21124	7C2									24 †	36 ††	24 ††	12

21138	7C2	64	155	3.2	176	17	4.1	35	56	29	43	35	14
21182	7C2	82 ††	180 †	25 ††	200	38 ††	11 ††	74 ††	110 ††	22 ††	49 ††	29 †	8 ††
21196	7C2	26 ††	57 ††	0.378 ††	46 ††	15	2.4	32	51	37 ††	54 ††	43 ††	21 ††
21229	7C2	59	151	2.3	164	18	4.6	34	51	28	41	34	14
21230	7C2	63	150	6 †	173	23 ††	5.3	37	57	33 †	46 †	39 †	18 †
21232	7C2	82 ††	206 ††	3.6	242 ††	2 ††	0.53 ††	3.9 ††	6 ††	35 †	50 ††	43 ††	16
22	7C2	60	158	4.2	163	17	5.2	33	52	30	41	38	18 †
23187	7C2	65	160	3	179	18	3.5	34	54	30	42	35	14
50004	7C2	62	156	6.3 †	180	17	4.7	32	55	26	36 ††	26 ††	15
50005	7C2	64	218 ††	2.4	179	9.3 ††	13 ††	54 ††	52	26	40	19 ††	12 †
50011	7C2	65	152	2.2	180	18	4.7	34	53	27	42	33	12
50012	7C2	66	160	4.1	187	13 ††	4.4	36	57	30	43	36	14
50014	7C2	65	144	3.2	191	16	3	35	54	29	43	35	15
50017	7C2	68	164	3.1	191	18	3.5	38	57	30	44	36	14
50019	7C2					17	2 †	33	56	29	49 ††	41 †	21 ††
50021	7C2					18	5	31	64 ††				
50023	7C2	67	154	3.6	195	19	3.7	32	51				
50027	7C2	65	142	4.3	181	18	5.2	36	55	29	42	34	14
50031	7C2	67	169	3.4	196	19	5.6	37	58	31	44	34	16
50032	7C2	66	159	2.9	181	15	4.1	33	53	30	41	34	15
50033	7C2	72	119 ††	2.7	138 ††	21	4.7	39	61	30	44	33	14

Lab. Code #	Method Codes	Soil sample identification and values for Total P - Pooled % oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10181	Pooled	0.068	0.037	0.111	0.1								
20204	Pooled	0.069	0.038	0.071 †	0.102	0.024	0.018	0.041	0.06	0.017	0.056	0.012 ††	0.081
21043	Pooled	0.056 ††	0.032	0.095	0.095	0.024	0.014	0.043	0.061	0.015 †	0.055	0.025 †	0.079
21088	Pooled	0.063	0.035	0.096	0.091	0.031 ††	0.174 ††	0.426 ††	0.682 ††	0.022 ††	0.07 ††	0.042 †	0.09

21091	Pooled					0.03 ††	0.019	0.041	0.072 †	0.054 ††	0.004 ††	0.018 ††	0.018 ††
21100	Pooled	0.057 ††	0.033	0.106	0.098	0.026	0.011	0.039	0.056 †	0.015 †	0.053	0.033	0.07
21138	Pooled	0.066	0.038	0.164 ††	0.037 ††	0.025	0.013	0.041	0.066	0.017	0.059	0.033	0.078
21182	Pooled	0.056 ††	0.035	0.1	0.087								
21196	Pooled	0.066	0.033	0.112	0.112	0.022	0.011	0.038	0.054 ††	0.001 ††	0.047 ††	0.026 †	0.06
21229	Pooled					0.028	0.017	0.041	0.063	0.018	0.062	0.034	0.087
21230	Pooled	0.071	0.036	0.107	0.087	0.024	0.012	0.04	0.059	0.017	0.065	0.038 †	0.096
21232	Pooled					0.025	0.014	0.042	0.064	161.2 ††	596 ††	372 ††	801 ††
50004	Pooled	0.05 ††	0.027 ††	0.082	0.065 ††								
50005	Pooled	0.065	0.36 ††	0.098	0.09	0.022	0.019	0.041	0.064	0.016	0.057	0.015 ††	0.068
50011	Pooled	0.065	0.035	0.094	0.093	0.025	0.013	0.042	0.064	0.017	0.06	0.034	0.071
50012	Pooled	0.067	0.037	0.104	0.1	0.026	0.014	0.038	0.065	0.017	0.061	0.034	0.08
50013	Pooled	0.07	0.027 ††	0.079	0.075	0.025	0.008	0.036	0.073 ††	0.016	0.057	0.033	0.069
50019	Pooled	0.1 ††	0.033	0.092	0.08								
50021	Pooled	0.064	0.069 ††	0.038 ††	0.103	0.259 ††	0.119 ††	0.25 ††	0.131 ††				
50031	Pooled	0.064	0.035	0.092	0.089	0.025	0.015	0.038	0.063	0.017	0.059	0.034	0.072
50037	Pooled	0.064	0.035	0.098	0.098	0.027	0.013	0.042	0.064	0.016	0.06	0.035	0.075

Lab. Code #	Method Codes	Soil sample identification and values for Colwell Extractable P – pooled (9B1, 9B2) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	9B2	59	30	26	68	12	16	105	68	19 ††	45	56	35
20204	9B1	63	29	25	75	18	20	111	69	16	48	51	25
21043	9B2	72	33	24	80	12	14	114	65	16	46	57	27
21088	9B1	66	33	25	78	13	15	106	81				
21100	9B1	65	31	23	74	17	16	105	77	14	50	50	27
21138	9B2	64	30	24	73	13	15	103	70	16	50	53	30
21182	9B1	81	40	36 ††	92 ††	16	19	140 ††	92 ††	20 ††	64 ††	77 ††	38 ††

21193	9B1	64	27	27 †	76	16	9.3 ††	99	60	14	47	54	30
21196	9B1	54	19	20 †	56	13	23 ††	127 ††	87 †	13 ††	49	59	31
21229	9B2	57	25	22	66	11	13	96	61	18 ††	45	48	26
21230	9B1	100 ††	60 ††	60 ††	93 ††	15	17	121 †	81	15	51	46	23
21232	9B1	188 ††	150 ††	40 ††	122 ††	15	17	105	75	17	38 †	50	23
21234	9B1									10 ††	13 ††	17 ††	14 ††
50005	9B1	54	24	35 ††	74	8.5	27 ††	103	68	16	48	64	29
50011	9B1	63	29	23	69	15	18	116	76	16	47	57	30
50012	9B2	62	30	24	72	13	15	100	67	16	41	55	24
50013	9B1	52	25	22	74	15	19	124 †	78	9.1 ††	48	35 ††	23
50014	9B2	74	35	24	56	14	17	99	66	15	47	53	29
50017	9B2	53	27	25	68	14	17	110	70	14	38 †	48	23
50019	9B1	55	30	23	65	14	16	108	63	15	43	55	26
50020	9B1	75	40	32 ††	83	24 ††	10 ††	95	64	17	40	42 †	15 ††
50023	9B1	64	33	25	71	15	17	105	70	19 ††	50	60	31
50025	9B1	40 †	27	21	55 †	11	14	81 ††	51 ††	11 ††	29 ††	29 ††	17 †
50027	9B2	63	25	25	61	11	13	99	70	15	46	57	29
50029	9B2	72	40	23	69	21 ††	16	96	64	19 ††	42	46	25
50030	9B1	54	30	22	65	12	14	95	64	15	50	56	39 ††
50031	9B1	64	32	26	75	15	17	122 †	78	16	44	62	27
50032	9B1	61	34	26	71	20	21 †	104	70	16	53	54	36 †
50037	9B2	60	24	19 ††	73	12	13	97	67	16	48	46	21
50045	9B1	53	26	20 †	61	12	14	103	71	16	48	52	29
50081	9B1	72	39	27	81	17	17	94	66	23 ††	43	56	27

Lab. Code #	Method Codes	Soil sample identification and values for Olsen Extractable P – pooled (9C1, 9C2) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	9C2	20	11	9	23	3.8	6.4	41	24	8.9	14	16	7.8
10156	9C2	24	12	8.4	23	3.5	6.5	38	24				
10173	9C2	19	10	9.6	20	3.4	6.5	39	21	8.2	12	16	7.4
10181	9C2	23	12	10	27	4.3	7.3	47	24	8.9	15	18	8
21043	9C2	30 ††	14	9.4	26	5.2	8	47	30 ††	8	13	18	7.2
21100	9C1	24	13	11	26	4.1	6.5	40	24	9.2	14	18	8.1
21190	9C1					5.8	6.9	52 ††	30 ††				
21196	9C1	13 †	7.5	8.2	21	2.4	5.5	41	21	6.5 †	12	16	7
21229	9C2	19	9.9	8.1	21	3.7	5.7	39	21	8.7	13	14	7
21232	9C1	24	14	10	23	4.5	5.9	41	21	10	13	17	7.4
62 50005	9C1	16	7.9	12	21	3	22 ††	40	24	9.6	13	18	9.3
50011	9C1	21	11	9.1	23	4.5	7.5	40	22	9	13	16	8.5
50013	9C1	13 †	9.8	14 ††	16 ††	4.1	6.8	38	21	7.4	13	16	6.4
50017	9C2	19	11	11	23	5.3	8.6	48	27	7.9	12	13	4.6 ††
50020	9C1	20	12	8.9	21	3.8	6.6	45	23	16 ††	13	18	6.9
50023	9C1	20	11	9.9	22	3.9	6.6	44	25	8.8	13	19	7.2
50027	9C2	20	12	8.6	21	2.6	5	41	24	8.8	16	20	8
50029	9C2	30 ††	19 ††	9.2	27	4.5	5.6	36	22	12 ††	15	21	13 ††
50031	9C1	25	15 ††	12 †	27								
50033	9C2	18	9.5	7.5	21					7.6	12	15	6.5
50037	9C2	19	11	9	23	4.2	6.0	38	24	9.7	13	16	8.2

Lab. Code #	Method Codes	Soil sample identification and values for Bray-1 Extractable P - pooled (9E1, 9E2) m/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
20204	9E1	8.6	3	2.1	21	5.2	6.9	44	30	9	15	46	4.5
21100	9E1	23	5.1	7.4	15	3.7	7	32	30	7.6	23 ††	54	3.7
21229	9E2	19	5.2	3.8	17	4.9	4.6	50	29	9.8	16	38	2.3
50005	9E1	22	6.2	7.0	18	5.1	14	37	32	8.1	16	37	2.9
50012	9E2	18	3.9	6.7	19	5.3	9	43	29	8.0	14	31	3.3
50013	9E1	20	5.5	5.3	24	6.6	11	72	36 ††	13 ††	20	45	3.9
50019	9E1	16	4.8	4.8	13	7	7.8	33	30				
50020	9E1									7.2	1.4 ††	13	0.596
50022	9E1	16	3.8	3.5	21	7	9.1	63	29				
50023	9E1					13 ††	19 ††	58	31				

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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 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	9G2	127	51	604	123	19	23	156	145	15	99	54	25
20204	9G1	145	50	517	108	24 ††	28	157	158	20	98	53	26
21100	9G2	164	58	630	136	15	28	169	160	20	91	50	5 ††
21229	9G2	134	51	719	134	18	21	176	171	12	92	61	17
21230	9G2	222 ††	39	772	119	10 ††	10	181	221 ††	17	218 ††	105 ††	40 ††
50014	9G2	166	65	672	124	21	28	149	151	17	118	65	26
50025	9G1	110	55	685	126	17	21	152	147	21	105	66	23
50029	9G2	132	57	589	107	18	21	122	102 ††	22	90	53	21
50031	9G2	146	53	660	100					20	118	70	21
50032	9G1	162	68	650	129	19	29	162	187	23	142 †	77	61 ††

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg dry wt											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	9I2a	491	288	129	138.5	48	67.5	73.5	329	103	258	232	299
20204	9I2a	547	341 ††	136	147	59 †	76	92 ††	359	101	295	274	352 ††
21043	9I2a									95	229 ††	250	265
21088	9I2a	474	288	132	143	27.7 ††	46.3 ††	48.6 ††	313				
21100	9I2a	516	328	145	142	55.9	79.3	85.4	430 †	109	278	303	303
21138	9I2a	459	273 †	121	130								
21193	9I2a	496	299	128	145	44	62	49 ††	316	100	302 ††	253	308
21196	9I2a	544	314	136	142	58 †	72	74	411	97	274	297	293
21229	9I2a	517	310	131	141	45.8	69.4	71.5	351	100	263	243	288
21230	9I2a	501	305	147 ††	152	46	66	70	334	100	249	264	265
50005	9I2a	474	287	132	139	43	62.9	64.2	319	102	278	263	321
50011	9I2a	525	305	140	145	43	64	63	350	103	273	305	310
50012	9I2a	562	326	128	143	55	74.6	73.8	364	101	270	282	299
50014	9I2b	501	295	128	133	43	61	67	328	96	269	268	285
50017	9I2a	499	298	136	136	49.9	67.8	71.2	456 ††	93.5	261	281	290
50019	9I2a	520	327	149 ††	154	67.5 ††	87.7 ††	99.2 ††	389	115 ††	263	262	307
50025	9I2a	534	305	137	132	47.5	68.8	65	307	96	244 †	235	275
50027	9I2a	502	305	132	142	46	65	52 †	303	98	270	243	324
50029	9I2a	536	312	148 ††	136	51	69	70	311	104	259	235	286
50030	9I2a					123 ††	131 ††	80	349	84 ††	220 ††	206	241 ††
50031	9I2a	483	282	112 ††	127 ††								
50032	9I2a	389 ††	255 ††	121	128 ††	46	26 ††	66	363	96	214 ††	248	273
50037	9I2a	630 ††	330	121	142	39.4	55.7	54.8 †	368	103	270	198	311
50045	9I2a	505	310	133	146	43	64	73	340	98	274	268	309
50081	9I2a	546	313	132	150	63 ††	87 ††	90 †	438 †				

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus buffer index - Unadj (9I4a + 9I4b + 9I4c) L/kg dry wt											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
21088	9I4a	908 ††	823 ††	570 ††	568 ††	25.5 ††	43.6 ††	30.5 †	284				
21100	9I4a	534	330	144	151 †								
21138	9I4a					43.6	62.2	62.7	323	89.4	253	218	276
21196	9I4a					68 ††	62	67.2	8.29 ††	52.2 ††	17.1 ††	15.2 ††	14.7 ††
21230	9I4a	459	287	135	134	44	63	49	305	97	235	251	258
21232	9I4a	422	278	115	116	39	58	48	285	101	236	316 ††	286
50005	9I4a	448	279	125	123	41.6	58	46.5	296	98.9	263	244	311
50017	9I4a	497	295	129	128	47.4	64.8	52	424 ††	90.7	249	266	282
50019	9I4a	491	318	143	140	61 ††	84.5 ††	79.5 ††	370	112 ††	250	246	298
50025	9I4a	496	297	129	130	45.3	66	55	396	93	225	219	266
50027	9I4a	471	297	127	130	44	63	72	328	95	256	227	315
50029	9I4a	498	298	143	128	47	66	53	289	100	247	222	277
50031	9I4a	451	272	106	110								
50032	9I4a	362 ††	244 †	116	113	42	23 ††	46	336	92	199 ††	231	260
50045	9I4a	476	299	128	132	41	61	54	314	91	248	241	287

Lab. Code #	Method Codes	Soil sample identification and values for Phosphate Extractable S – Pooled (10B1, B2, B3, B4) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	10B3	502 ††	312 ††	91 ††	363 ††	6.93	7.1	32	46	13	52	7357	123 ††
21229	10B3	52	32	7.1	36	9.8	7.2	32	53	18	51	7317	22
21232	10B3	55	33	6.9	37	12	9.3	35	55	22	64	6183	28
50014	10B3	64	38	8	43 †	11	8	35	59	22	58	7851	29
50025	10B3	53	30	6	36	9.1	6.7	32	53	18	53	6653	25

50027	10B3	55	34	8.4	37	12	10	33	55	20	47	5720	24
50029	10B3	43	21	6.3	25 †	7.7	5.5	25	35	15	31 ††	4666	11
50032	10B1	84 †	12 †	29 ††	5.1 ††	28 ††	24 ††	49 ††	65	1.2 ††	42	6825	51 ††
50045	10B3					11	6.6	27	44				
50081	10B3	68	39	8.3	44 †	13	8.7	37	63	18	48	5395	28

Lab. Code #	Method Codes	Soil sample identification and values for KCl ₄₀ Extractable S (10D1) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	10D1	46 †	29	8	38	7	4.5 ††	32	40	13 ††	43 ††	8392	16 †
20204	10D1	36	22	7.1	29	9.5 †	7.9 †	37	31	9.9	32	7083	14
21043	10D1	36	19	5.7	30	7.5	6.4	34	36	11	36	233 ††	11
21088	10D1	50 ††	30	7.6	39	9.4 †	7.6	38	42	15 ††	50 ††	9140 ††	23 ††
21100	10D1	38	23	6.4	33	8	6.6	38	38	12	37	6537	29 ††
21130	10D1					45 ††	66 ††	92 ††	34				
21182	10D1	80 ††	33	5	28								
21193	10D1	34	21	6.9	29	10 ††	6.7	31	42	12	39 ††	6440	12
21196	10D1	31	18	3.9	28	7.7	5.8	30	31	11	34	12228 ††	14
21229	10D1	33	22	5.2	30	6.6	5.4	31	34	10	32	9190 ††	12
21232	10D1	33	19	5.0	28	7.3	5.9	30	35	7.8 †	29	5075 ††	22 ††
50005	10D1	31	21	6.6	33	8.6	29 ††	32	32	10.0	33	6930	12
50011	10D1	34	20	6	30	8	6	31	31	10	32	7300	11
50012	10D1	43	26	7.0	34	7.3	6.4	34	34	9.6	32	7260	12
50013	10D1									1.3 ††	4.7 ††	1090 ††	1.3 ††
50017	10D1	40	25	6.9	34	7.4	6.0	33	35	11	33	5589	11
50023	10D1	42	27	7	32								
50037	10D1	36	22	5.3	30	7.1	6.5	28	32	9.9	33	7142	9.6
50045	10D1	34	18	5.4	38	7.2	5.3	31	35	9.3	34	6502	11
50081	10D1	42	26	6.5	34	11 ††	6.6	35	38	11	37	6492	17 †

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Cu (12A1) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10166	12A1	1.1	1.3 ††	1.1	2.2	1.3	1.1	0.71	1.6	0.41	1.2	1.3 ††	1.4
10173	12A1	0.82	0.58	0.8	1.9 †	1.4	0.92	0.92 ††	1.2	0.34	0.94	0.88	1.2
20204	12A1	1.1	0.71	0.93	2.2	1.4	0.88	0.63	1.3	0.33	1.2	0.63	1.3
21088	12A1	0.918	0.666	0.982	2.2	1.2	0.906	0.5	1.2	0.259	1.1	0.817	1.4
21100	12A1	0.913	0.517	1	1.9 †	1.3	1	0.491	1.1	0.3	1.1	0.679	1.2
21130	12A1	1	0.853	0.948	2.2	1.4	0.928	0.536	1.3	0.193 †	0.993	0.649	1.2
21190	12A1					1.4	0.759	0.306 ††	1.1	1.3 ††	1.4	0.983	1.4
21193	12A1	1.3	0.89 †	1.1	2.8 ††	1.2	0.99	0.85 ††	1.5	0.42 †	1.3	0.7	2 ††
21196	12A1	1.2	0.77	0.88	2.8 ††	1.3	0.89	0.54	1.5	0.321	1.3	0.358	1.4
21229	12A1	0.899	0.528	0.891	2.1	1.2	0.887	0.526	1.3	0.259	1.2	0.477	1.3
21232	12A1	0.91	0.61	0.9	2.1	1.2	0.88	0.46	1.1	0.27	0.95	0.65	1.1
21234	12A1	1.1	0.66	1.1	2.5 †	0.07 ††	0.07 ††	0.04 ††	0.05 ††	0.14 ††	0.74 ††	0.82	1.4
50005	12A1	0.865	1.5 ††	0.798	2.1	1.2	0.622 ††	0.436	1.3	0.288	1.1	0.973	1.6
50011	12A1	1	0.63	0.95	2.2	1.3	0.93	0.61	1.3	0.31	1.1	0.6	1.4
50012	12A1	0.892	0.631	0.907	2.1	1.6	1	0.596	1.4	0.278	1.1	0.553	1.2
50013	12A1	1.1	1.1 ††	1	2.3	1.6	1.3 ††	0.703	1.5	0.302	1.4	1	1.6
50014	12A1	1.1	0.65	1	2.3	1.3	1	0.553	1.4	0.308	1.3	1.2 †	1.5
50017	12A1	0.922	0.542	0.925	2.2	1.5	0.985	0.521	1.3	0.263	1.2	0.494	1.4
50019	12A1					1	0.877	0.52	1.2				
50024	12A1					1.4	1	0.57	1.6	0.31	1.2	0.76	1.4
50025	12A1	0.81	0.56	0.798	1.4 ††	1.2	0.898	0.475	1.3	0.241	1.1	0.755	1.2
50027	12A1	0.914	0.838	0.923	2.1	1.2	0.851	0.552	1.2	0.436 †	1.2	0.792	1.3
50029	12A1	1.1	0.663	0.895	1.9 †	1.3	0.938	0.595	1.4	0.458 ††	1.1	0.647	1.1
50030	12A1	1.5 ††	1.4 ††	1.3 ††	2.6 ††	1.1	0.8	0.52	1.6	0.41	1.3	0.77	1.5
50031	12A1	1.1	0.613	1	2.3	1.5	1.1 †	0.667	1.5	0.319	1.2	0.953	1.3

50032	12A1	0.98	0.51	0.95	2.2	1.2	0.93	0.55	1.3	0.305	1.2	0.915	1.3
50037	12A1	0.91	0.676	0.817	2.1	1.2	0.816	0.47	1.3	0.295	1.1	0.847	1.2
50038	12A1	1.6 ††	2.2 ††	1.5 ††	2.9 ††					0.361	1.2	2.54 ††	1.8 ††
50081	12A1	0.825	0.532	0.759	2	1.5	1.2 ††	0.778 ††	1.3	0.156 ††	0.861 ††	0.495	0.982 †

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Fe (12A1) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10166	12A1	319 ††	753 ††	29 ††	239	28	16	186 ††	371 ††	304	108	264	14
10173	12A1	216	467	18	168	22	11	272	117	282 †	106	176	15
20204	12A1	296 †	615	23	210	25	14	335	160	369	123	206	19
21088	12A1	296 †	576	21	216	25	10	344	160	420	153	241	13
21100	12A1	255	514	20	172	27	17 †	301	153	547 ††	140	328	18
21130	12A1	248	528	13 ††	191	25	11	312	168	376	126	169	10
21190	12A1					27	12	161 ††	262 ††	436	142	186	14
21193	12A1	15 ††	614	26 ††	237	31	15	362	205 †	444	162	256	270 ††
21196	12A1	358 ††	688	18	263 ††	28	12	358	257 ††	579 ††	147	174	12
21229	12A1	251	546	18	195	24	13	302	150	372	126	261	15
21232	12A1	245	477	24 ††	178	23	12	265	136	431	109	239	12
21234	12A1	268	509	14 ††	167	1.5 ††	0.89 ††	21 ††	6.4 ††	20 ††	8.1 ††	13 ††	1.8 ††
50005	12A1	282	659	19	210	35 ††	172 ††	248	158	390	138	139	16
50011	12A1	280	548	20	203	28	15	340	186	405	140	280	12
50012	12A1	233	486	19	157	30	12	310	177	359	120	298	11
50013	12A1	336 ††	768 ††	23	246	30	24 ††	369	160	410	163	221	24 ††
50014	12A1	272	543	19	203	25	14	326	169	407	141	236	14
50017	12A1	246	489	18	187	28	16	298	145	380	140	281	17
50019	12A1					17 ††	12	298	123				
50024	12A1					27	13	380	254 ††	442	131	168	9.9
50025	12A1	252	561	18	132 ††	171 ††	21 ††	454 ††	323 ††	450	138	211	12

50027	12A1	265	686	24 ††	199	26	13	342	152	402	144	260	18
50029	12A1	261	459	18	171	22	14	244	144	314	112	158	12
50030	12A1	209 †	539	19	212	19	2.7 ††	326	255 ††	66 ††	356 ††	158	199 ††
50031	12A1	242	512	15 †	195	26	14	310	154	399	133	267	13
50032	12A1	238	470	20	181	23	13	293	144	364	120	239	14
50037	12A1	265	564	20	210	32	15	290	156	396	134	196	19 †
50038	12A1	244	652	15 ††	158					518 †	167	399 ††	32 ††
50081	12A1	256	488	21	190	21	18 †	364	174	327	119	152	14

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Mn (12A1) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10166	12A1	79 ††	14 ††	13 ††	110 ††	290	86	18	123	7.2	178	61	2.9 ††
10173	12A1	120	7.8	22	226	271	82	19	107	7.8	163	53	251
20204	12A1	95	3.95	13 ††	182	273	75	14	105	8	150	36 ††	332 †
21088	12A1	138	9.76	20	183	300	83	16	115	7.4	172	64 ††	276
21100	12A1	98	6	18	184	277	95	17	103	7.7	161	61	256
21130	12A1	128	9.5	20	198	286	62	16	94	7.5	151	54	282
21190	12A1					142 ††	89	25 ††	114	6.8	183	52	364 ††
21193	12A1	136	8.2	20	220	268	82	17	107	5 ††	158	53	259
21196	12A1	157 ††	12	21	251 ††	279	75	18	115	11 ††	178	52	292
21229	12A1	113	6.1	18	182	264	73	17	109	7.6	158	50	258
21232	12A1	123	7.8	18	191	261	80	17	106	8.1	155	53	256
21234	12A1	112	5	23	193	182 †	34 ††	4.9 ††	16 ††	2.6 ††	97 ††	36 ††	696 ††
50005	12A1	122	49 ††	20	170	211	49 ††	18	103	7.2	149	51	246
50011	12A1	120	8	18	168	205	73	16	92	7	146	55	240
50012	12A1	119	7.4	21	178	295	73	19	113	7.2	147	60	231
50013	12A1	138	12	18	193	320	216 ††	17	117	5.4 ††	171	57	289
50014	12A1	135	6.7	20	206	279	74	18	117	7.8	173	63 †	281

50017	12A1	117	5.8	20	203	280	79	17	121	6.9	158	50	240
50019	12A1					239	90	20	130 †				
50024	12A1					328	86	21 ††	139 ††	7.8	165	55	278
50025	12A1	87 ††	5.1	13 ††	152	38 ††	55	12 ††	74 ††	8.8 †	194	60	308
50027	12A1	127	9.8	18	195	214	68	20	109	9.3 ††	148	53	233
50029	12A1	114	7.5	20	136 †	175 †	69	17	100	8.1	132	42 †	162 ††
50031	12A1	113	5.7	20	224	306	88	19	127	7	167	53	277
50032	12A1	112	6	21	187	260	74	17	112	7	145	53	246
50037	12A1	128	7.5	18	174	219	71	18	101	7.2	146	41 ††	202
50038	12A1	98	32 ††	14 ††	135 ††					6.1	137	47	278
50081	12A1	111	7.1	18	168	414 ††	114 ††	33 ††	151 ††	7.4	145	45	233

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Zn (12A1) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10166	12A1	4.9 ††	2.6 ††	0.53	4 ††	1.3	0.36	3.9	5 †	0.98	2.1	22	407 ††
10173	12A1	3.9	1.2	0.36	2.6	1.1	0.36	3	3.5	1.2 †	1.5 ††	12	3.5
20204	12A1	4.8 ††	1.2	0.56	3	1.4	0.45	3.5	4.2	0.98	2	14	3.7
21088	12A1	3.3	1.3	0.468	2.4 †	1.1	0.372	2.8	3.7	0.753	2	17	3.5
21100	12A1	3.5	1.2	0.462	2.8	1.1	0.383	3	3.4 †	1.3 ††	2.1	16	3.7
21130	12A1	3.6	1.7 †	0.375	2.8	1.3	0.351	3.6	4.3	0.79	1.8	13	3.4
21190	12A1					1.6 ††	0.203 ††	4.7 ††	5.7 ††	0.788	2	17	4
21193	12A1	5.2 ††	1.9 ††	0.65 ††	4.1 ††	1.4	0.47	4	4.8	1.2 †	3.6 ††	18	5 ††
21196	12A1	3.7	1.4	0.39	2.8	1.2	0.462	3.4	4.7	1.3 ††	2.6 ††	18	4
21229	12A1	4	1	0.37	2.7	1.2	0.365	3.4	4.2	0.925	2.1	14	3.9
21232	12A1	3.4	1.3	0.46	2.7	1.1	0.36	3	3.5	0.88	1.8	16	3.4
21234	12A1	3.3	1.3	0.6 ††	2.7	0.09 ††	0.02 ††	0.12 ††	0.15 ††	0.36 ††	1.4 ††	12	3.5
50005	12A1	4.3	2.5 ††	0.491	3	1.2	2.26 ††	3.1	4.1	0.9	2.1	15	4.2
50011	12A1	3.8	1.4	0.5	2.8	1.2	0.42	3.4	3.9	0.82	2.1	19	3.8

50012	12A1	3.8	1.2	0.4	2.7	1.2	0.259 †	3.5	4.5	0.871	2	19	3.6
50013	12A1	4.4	1.9 ††	0.377	2.9	1.5	0.524	4	4.4	0.704 †	2.4 ††	16	4
50014	12A1	3.6	1.4	0.5	3.1	1.2	0.402	3.5	4.1	0.889	2.3	19	3.9
50017	12A1	3.9	1.1	0.384	2.9	1.3	0.41	3.4	4.4	0.809	2.3	17	3.8
50019	12A1					1	0.405	3.9	4.1				
50024	12A1					1.4	0.42	3.5	4.9	0.87	2	14	3.7
50025	12A1	3.5	1.3	0.371	2.3 ††	1.2	0.406	3.4	4.3	1	2	15	3.7
50027	12A1	3.7	1.8 †	0.404	3.1	1.3	0.45	3.5	4.1	0.933	2	17	3.9
50029	12A1	3.9	1.3	0.442	2.5	1.2	0.469	3.1	4	1	1.9	11	3 ††
50030	12A1	4.1	1.3	0.43	3.1	1.4	0.44	4	5.4 ††	1.2 †	2.2	16	3.9
50031	12A1	3.5	1	0.44	2.9	1.4	0.523	3.7	4.3	0.985	2	18	3.7
50032	12A1	4	0.93	0.47	2.8	1.2	0.43	3.2	4	0.93	2	17	3.7
50037	12A1	3.5	1.3	0.391	2.8	1.2	0.369	3.1	4	0.896	2.1	13	3.7
50038	12A1	2.1 ††	1.6	0.43	2 ††					0.944	1.7	18	3.2
50081	12A1	4.1	1.1	0.413	2.8	1.7 ††	0.996 ††	5.7 ††	4.9	1.2 †	2.4 ††	21	4.9 ††

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Lab. Code #	Method Codes	Soil sample identification and values for Hot CaCl2 Extractable B – pooled (12C1, 12C2) mg/kg air dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10166	12C2	0.84 ††	1.7 ††	0.67	1.2 ††					0.56	7.2 ††	0.51	0.9 ††
10173	12C2	0.25	0.65	0.6 †	0.75	0.25	0.7	0.5	0.45	0.25	0.45	1.6	0.35
20204	12C2	0.33	0.84	0.8	0.83	0.98 ††	0.32 ††	0.51	0.52	0.36	0.36	3.6	0.5
21043	12C2	0.396	0.818	0.697	0.803	0.343	0.925	0.645	0.617	0.398	0.428	3.9	0.431
21088	12C2	0.51	1.09	1.1 ††	0.79	0.32	1.2	0.656	0.689	0.328	0.362	3.1	0.524
21100	12C2	0.434	0.994	0.41 ††	0.698	0.269	0.761	0.55	0.473	0.526	0.391	1.8	0.351
21130	12C2	0.312	0.431	1	1.1 ††	0.397	1.4 ††	0.669	0.753	0.074 ††	0.436	2.5	0.451
21193	12C2	0.29	0.71	0.77	0.68	0.36	0.78	0.49	0.19 ††	0.46	0.41	2.3	0.45
21196	12C2	0.26	0.33	0.36 ††	0.76	0.293	0.441 †	0.401	0.474	0.434	0.514 ††	6.4 ††	0.602
21229	12C2	0.348	0.888	0.803	0.734	0.276	0.859	0.567	0.521	0.36	0.383	3.4	0.376

21232	12C2	0.35	0.91	0.9	0.96 †	0.4	1.1	0.72	0.75	0.41	0.55 ††	2.4	0.68
50005	12C2	0.486	0.985	0.842	0.721	0.352	0.756	0.608	0.544	0.36	0.403	1.8	0.395
50011	12C2	0.39	0.8	0.85	0.74	0.32	0.83	0.55	0.5	0.36	0.38	2.2	0.37
50012	12C2	0.395	0.958	0.942	1 †	0.386	1.2	0.658	0.632	0.295	0.438	4	0.558
50014	12C2					0.282	0.944	0.485	0.449	0.27	0.392	3.4	0.466
50017	12C2	0.338	0.803	0.662	0.756	0.31	0.921	0.589	0.534	0.296	0.418	4.3	0.543
50025	12C2	0.468	0.65	0.87	0.799	0.348	0.921	0.489	0.66	0.06 ††	0.364	1.2	0.469
50027	12C2	0.273	0.67	0.853	0.946 †	0.282	0.873	0.599	0.616	0.158	0.264 ††	1	0.287
50029	12C2	0.222	0.359	0.892	0.54 ††	0.268	0.666	0.227 ††	0.244 †	0.257	0.385	0.146	0.5
50037	12C2	0.348	0.836	0.815	0.81	0.324	0.914	0.628	0.548	0.358	0.412	3.2	0.387
50081	12C2	0.747 ††	1.2	0.911	1.3 ††	0.554 ††	1.1	0.844 †	0.835 †	1.5 ††	0.975 ††	4.5	0.687

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Ca - 1M NH4Cl extract (15A1) cmol+/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
20204	15A1	5.93	4.78	39	18.2	8.7	12.7	8.01	5.97	1.21	6.1	9.22	4.37
21088	15A1	5.3	3.9 †	34	16.9	8.75	12.8	8.44	5.79				
21130	15A1	5.3	4.4	34	18	8.95	12.9	7.49	6.12	1.05	5.94	9.32	4.44
21138	15A1	6.07	4.62	40	19	8.75	13.3	8.13	6.06	1.16	6.04	9.44	4.41
21182	15A1	6.2	4.9	37	19	8.5	13	7.6	5.7	1.1	6	8	4.4
21193	15A1	5.1	3.75 ††	33.1	17.4	9.04	13.2	8.53	6.35	1.01	5.75	7.87	4.14
21196	15A1	3.6 ††	2.79 ††	22.9 ††	10.7 ††	11 ††	18 ††	10 ††	8 ††	1.18	7.08 ††	10	5.06 ††
21232	15A1	5.8	4.6	36.2	18.1	9.2	13.6	8.3	6.1	1.41 ††	6.2	9.4	4.5
21234	15A1									0.5 ††	4.66 ††	7.54	3.56 ††
50005	15A1	6.15	4.49	37.5	18.2	8.91	10.8 ††	8.28	5.84	1.1	5.93	9.95	4.4
50011	15A1	5.7	4.6	34	18	8.5	12	8.4	5.9	1.05	5.9	8.7	4.2
50012	15A1	5.65	4.27	35.1	17.8	8.66	12.8	8.01	5.67	1.02	5.59	9.32	4.15
50013	15A1	5.7	4.4	36	17	8.54	12.7	8.54	6.08	1.01	5.5	8.82	4.05
50014	15A1	5.83	4.55	37.7	18.13	8.85	13.1	8.42	6.24	1.15	6.11	9.7	4.57

50017	15A1	5.61	4.24	36.7	18.4	8.31	12.5	7.76	5.77	1.09	5.93	9.23	4.37
50019	15A1	5.5	4.52	33.7	16.9	8.04	11.6 †	8.28	5.98	1.18	6.13	9.84	4.64
50020	15A1	1.81 ††	0.518 ††	1.28 ††	2.25 ††	9.18	13.7	8.48	6.49	1.1	6.25	9.2	4.47
50025	15A1	4.9	3.85 †	33	16.8								
50031	15A1					8.63	12.2	7.84	5.87	0.973	5.71	8.44	4.01 †
50038	15A1	25.2 ††	23.8 ††	364 ††	103 ††								

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Mg - 1M NH4Cl extract (15A1) cmol+/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
20204	15A1	0.812	4.09	19.4	4.41	2.4	4.86	4.08	1.06	0.393	0.869	20.3	2.24
21088	15A1	0.73	3.6	18.5	4.2	2.73	5.74	4.8 ††	1.06				
21130	15A1	0.783	4.3	19	4.6	2.73	5.48	4.21	1.16	0.322	0.804	18	2.2
21138	15A1	0.835	4.19	21	4.79	2.53	5.36	4.31	1.02	0.363	0.833	20	2.28
21182	15A1	0.98 ††	4.5	21	5.1	2.6	5.4	4.3	1.1	0.37	0.88	16 ††	2.3
21193	15A1	0.88	4.04	17.9	5.21 †	2.65	5.52	4.45	1.11	0.33	0.73 ††	18.2	1.96 ††
21196	15A1	0.484 ††	2.39 ††	11 ††	2.53 ††	3.1 ††	6.1 ††	5.1 ††	1.3 ††	0.355	0.918	18.1	2.19
21232	15A1	0.82	4.06	20.0	4.62	2.68	5.41	4.36	1.11	0.48 ††	0.88	19.3	2.34
21234	15A1									0.23 ††	0.75	19	1.99 ††
50005	15A1	0.874	4.14	18.1	4.47	2.53	4.72	4.25	1.03	0.381	0.865	17.3	2.3
50011	15A1	0.78	3.9	19	4.5	2.5	5	4.3	1	0.37	0.83	18	2.1
50012	15A1	0.847	4	19.4	4.63	2.61	5.41	4.39	1.06	0.414	0.908	18.8	2.32
50013	15A1	0.81	4	19	4	2.45	5.18	4.35	1.04	0.351	0.808	18.3	2.08
50014	15A1	0.816	4.17	20.1	4.54	2.56	5.29	4.45	1.11	0.396	0.887	20.2	2.38
50017	15A1	0.791	3.84	18.6	4.3	2.42	5.09	4.14	1.01	0.353	0.811	18.7	2.18
50019	15A1	0.7 †	3.67	16.1 †	3.85 †	2.37	4.67	4.21	1.06	0.411	0.885	19.4	2.34
50020	15A1	0.493 ††	0.922 ††	1.19 ††	0.986 ††	1.4 ††	1.9 ††	0.876 ††	1.68 ††	0.719 ††	1.19 ††	0.288 ††	2.36
50025	15A1	0.783	3.5 †	18.4	2.5 ††								
50031	15A1					2.6	5.17	4.28	1.08	0.375	0.853	19.2	2.25

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Ca — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	15D3	5.2	4.05	28.5	16.2	8.05	11.3	7.24 †	5.3	1.02	5.29 ††	8.58	3.94
10156	15D3	7.72 ††	7 ††	83 ††	37 ††								
10166	15D3	4.49 †	3.34 †	26.1 †	16.4	10.7 ††	14.0	8.05	6.19	1.25 ††	5.80	8.68	4.76
10173	15D3	5.25	4.08	40.2	17.5	9.02	13.3	7.96	5.63	1.24 ††	6.02	8	4.4
10181	15D3	4.85	3.52 †	30.9	15.8	8.55	12.7	7.29 †	5.1	0.99	5.6	9.26	4.18
20204	15D3	5.74	4.55 †	39.4	18.2	9.01	13	8.01	5.79	1.15	6.11	9.42	4.46
21043	15D3	5.07	3.95	33	17.4	8.34	12.3	7.62	5.37	1.02	5.83	8.61	4.21
21088	15D3									0.929	5.66	7.75	4.04
21100	15D3	5.49	4.26	32.8	17	8.68	13.2	8.26	5.61	1.2 †	6.06	7.77	4.53
21138	15D3									1.15	5.9	9.14	4.31
21182	15D3	6.2 ††	4.9 ††	38	20 ††	8.4	12	8.1	5.9	0.9	5.8	6.8 †	4.2
21190	15D3					10.3 ††	14.6	10.4 ††	7.20 ††	0.87 †	6.15	9.09	4.90 ††
21196	15D3	5.94 †	4.65 †	36.1	18.9	9.8 †	15	9.2 ††	6.3 ††	1.03	6.3	9.63	4.53
21229	15D3	5.17	3.98	36.8	17.8	8.78	12.7	8.12	5.66	1.03	5.83	8.99	4.15
21234	15D3	4.24 ††	3.24 ††	26.8	13.6 ††	7.16 ††	9.84	6.61 ††	3.97 ††				
50005	15D3	5.02	4.13	35.2	17.1	8.72	10.4	8.26	5.43	1.05	5.66	8.75	4.09
50006	15D3	1.13 ††	0.86 ††	13.96 ††	9.51 ††	9	14	8.37	5.81	1.33 ††	7.05 ††	10	5.91 ††
50024	15D3	5.28	4.06	33.9	16.8	8.42	12.2	7.74	5.56	1.02	5.76	8.32	4.16
50025	15D3					8.97	15.5	8.29	5.80	1.09	5.95	9.25	4.46
50027	15D3	5.51	4.28	33.3	17.7	8.63	12.3	7.87	5.54	1.57 ††	5.91	9.3	4.27
50029	15D3	5.08	4.03	34.1	16.4	7.91	10.9	7.97	5.62	1.05	5.6	6.99	4.01
50030	15D3	5.24	4.05	42.6	19.8 ††	9.39	14.6	8.47	6.17	0.99	5.96	9.52	4.38
50032	15D3	5.28	4	35.5	16.5	9.28	13.8	8.35	5.78	1.07	5.95	9.54	4.58
50037	15D3	5.1	4.01	35.5	17	8.25	12.2	7.68	5.44	1.03	5.75	8.3	4.47
50038	15D3									1.08	4.38 ††	6.66 ††	3.32 ††
50081	15D3	5.66	4.45 †	41.6	18.0	8.88	13	8.14	5.78	1	6	8.5	4.3

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Mg — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	15D3	0.563 ††	3.32	16 †	3.82	2.26	4.62	3.8	0.925	0.286 ††	0.695 ††	16.2	1.87
10156	15D3	1.02 ††	5.87 ††	32 ††	8.68 ††								
10166	15D3	0.57 †	3.51	19.2	4.02	2.84	5.14	4.11	1.00	0.597 ††	1.28 ††	23.6	3.49 ††
10173	15D3	0.755	4.61 ††	20.1	5.47 ††	2.52	5.1	4.06	0.99	0.348	0.857	15.4	2.26
10181	15D3	0.729	3.68	18.5	4.05	2.43	4.85	3.82	0.99	0.4	0.82	17.1	2.13
20204	15D3	0.809	3.92	19.3	4.34	2.48	5.01	4.19	1.03	0.377	0.861	20	2.38
21043	15D3	0.753	3.74	18.3	4.28	2.32	4.81	3.9	0.943	0.37	0.821	17.7	2.1
21088	15D3									0.311	0.828	19.6	2.18
21100	15D3	0.809	3.92	17.9	4.36	2.44	5.08	4.24	1	0.4	0.83	14.8	2.24
21138	15D3									0.359	0.814	19.4	2.23
21182	15D3	0.95 ††	4.6 ††	21	5.2 ††	2.5	5	4.3	1.1 †	0.29 ††	0.71 ††	14	1.9
21190	15D3					3.37 ††	5.87 ††	5.16 ††	1.29 ††	0.493 ††	1.30 ††	8.90 ††	3.18 ††
21196	15D3	0.929 ††	4.22	19.4	4.66	2.6	5.6 †	4.5	1.1 †	0.346	0.82	18.8	3.57 ††
21229	15D3	0.741	3.86	19.3	4.33	2.46	4.97	4.2	0.984	0.365	0.793	18.8	2.03
21234	15D3	0.7	3.32	12.8 ††	2.4 ††	2.14	3.92 ††	3.55 †	0.75 ††				
50005	15D3	0.73	3.67	16.4 †	4.26	2.52	4.58	4.15	1	0.367	0.806	16.1	2.1
50006	15D3	0.01 ††	0.08 ††	0.002 ††	0.16 ††	1.31 ††	2.59 ††	2.08 ††	0.5 ††	0.37	0.91 †	19.9	2.24
50024	15D3	0.79	3.84	17.4	4.23	2.31	4.67	3.82	0.94	0.36	0.79	17.2	2.01
50025	15D3					2.57	5.35	4.13	1.05	0.39	0.848	17.6	2.15
50027	15D3	0.904 †	3.88	17.8	4.49	2.41	4.89	3.94	1	0.661 ††	1.04 ††	19.4	2.37
50029	15D3	0.698	3.64	19	4.05	2.28	4.62	4.15	0.93	0.368	0.76	15.5	1.99
50030	15D3	0.76	4.25	21.5 †	4.91 †	2.63	5.24	4.45	1.2 ††	0.35	0.85	19.5	2.3
50032	15D3	0.69	3.39	18.9	3.91	2.25	4.68	3.74	1.1 †	0.333	0.775	16.8	1.98
50037	15D3	0.726	3.78	19.1	4.21	2.27	4.91	4.11	1.01	0.373	0.81	18.6	2.12
50038	15D3									0.32	0.614 ††	13.1	1.47 ††
50081	15D3	0.73	3.89	19.1	4.11	2.58	5.2	4.2	1.02	0.4	0.8	18	2.1

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Na — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	15D3	0.199	0.278	0.916	0.187 ††	0.087	1.36	0.47 †	0.239	0.087	0.206	16.4	0.109
10156	15D3	0.155 ††	0.273	1.86 ††	0.347 ††								
10166	15D3	0.182	0.266	0.9	0.126	0.65 ††	0.793 ††	0.381 ††	0.698 ††	18.8 ††	48.6 ††	4340 ††	842 ††
10173	15D3	0.228	0.339	0.966	0.118	0.1 †	1.91	0.53	0.26	0.088	0.273	162 ††	0.132
10181	15D3	0.208	0.331	0.975	0.093	0.05	1.57	0.57	0.25	0.07	0.2	20.4	0.09
20204	15D3	0.229	0.33	1.12	0.13	0.051	1.69	0.557	0.248	0.092	0.222	22.3	0.122
21043	15D3	0.25	0.352	1.05	0.131	0.087	1.73	0.586	0.291	0.127 †	0.271	20.5	0.143
21088	15D3									0.073	0.22	22	0.098
21100	15D3	0.227	0.338	1.01	0.109	0.072	1.59	0.551	0.269	0.101	0.247	17.7	0.23 ††
21138	15D3									0.084	0.341 ††	20.4	0.133
21182	15D3	0.3 ††	0.41	1.2	0.21 ††	0.07	2	0.59	0.28	0.06	0.2	14	0.09
21190	15D3					0.025	1.46	0.591	0.232	0.072	0.235	17.5	0.229 ††
21196	15D3	0.227	0.302	0.884	0.14	0.141 ††	1.6	0.595	0.333 ††	0.119	0.277	18.1	0.152
21229	15D3	0.244	0.363	1.09	0.111	0.057	1.77	0.579	0.267	0.088	0.247	23.4	0.111
21234	15D3	0.21	0.26	0.72 †	0.11	0.06	1.49	0.47 †	0.21				
50005	15D3	0.174	0.308	0.864	0.105	0.056	1.14 †	0.558	0.259	0.090	0.234	18.9	0.106
50006	15D3					0.05	0.89 ††	0.28 ††	0.1 ††	0.09	0.28	23.8	0.13
50024	15D3	0.25	0.33	1.01	0.1	0.28 ††	1.86	0.76 ††	0.5 ††	0.38 ††	0.47 ††	21.5	0.15
50025	15D3					0.063	2.04 †	0.625	0.277	0.121	0.282	22.0	0.16
50027	15D3	0.239	0.355	1.05	0.121	0.073	1.67	0.611	0.284	0.107	0.256	21.6	0.302 ††
50029	15D3	0.232	0.391	1.41 ††	0.217 ††	0.088	1.78	0.602	0.262	0.082	0.245	18.9	0.133
50030	15D3	0.19	0.29	0.92	0.09	0.05	1.58	0.51	0.24	0.06	0.2	19.7	0.1
50032	15D3	0.21	0.31	0.95	0.11	0.052	1.62	0.56	0.26	0.084	0.223	19.9	0.131
50037	15D3	0.213	0.312	0.93	0.114	0.061	1.58	0.524	0.26	0.087	0.24	15.1	0.13
50038	15D3									0.171 ††	0.327	6.94 ††	0.781 ††
50081	15D3	0.273	0.369	1.48 ††	0.267 ††	0.161 ††	1.69	0.569	0.297	0.076	0.267	20	0.12

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable K — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10069	15D3	0.383 ††	0.326 †	0.525	1.86	0.604	0.772	0.317 †	0.629 †	0.239	0.43	0.064	0.925
10156	15D3	0.623 ††	0.606 ††	0.89 ††	3.46 ††								
10166	15D3	0.455	0.389	0.575	1.87	0.065 ††	1.56 ††	0.518 ††	0.274 ††	0.205 ††	0.393 ††	0.084	0.816 ††
10173	15D3	0.498	0.413	0.635	2.06	0.72	0.86	0.38	0.7	0.245	0.459	0.047	0.985
10181	15D3	0.426	0.365	0.516	1.92	0.51 †	0.63 ††	0.37	0.52 ††	0.22 ††	0.43	0.05	0.97
20204	15D3	0.374 ††	0.354	0.633	1.79	0.676	0.872	0.432 †	0.709	0.272 †	0.517 ††	0.112 †	1.04
21043	15D3	0.472	0.397	0.61	1.96	0.676	0.824	0.382	0.713	0.256	0.454	0.075	0.954
21088	15D3									0.224	0.438	0.09	0.899
21100	15D3	0.474	0.396	0.571	1.84	0.655	0.825	0.39	0.702	0.279 ††	0.472	0.059	1.01
21138	15D3									0.268	0.499	0.064	1.06
21182	15D3	0.53 ††	0.46 ††	0.73 †	2.1	0.75	0.92	0.43 †	0.82 †	0.25	0.49	0.09	1.1 ††
21190	15D3					0.736	0.892	0.448 †	0.817 †	0.265	0.474	0.068	0.984
21196	15D3	0.292 ††	0.224 ††	0.38 ††	1.59 ††	0.662	0.946	0.351	0.196 ††	0.246	0.45	0.104 †	0.906
21229	15D3	0.458	0.391	0.557	1.92	0.654	0.785	0.373	0.703	0.253	0.44	0.051	0.941
21234	15D3	0.37 ††	0.31 ††	0.39 ††	1.63 ††	0.55	0.66 †	0.31 †	0.51 ††				
50005	15D3	0.431	0.372	0.573	1.75	0.658	0.638 ††	0.382	0.685	0.24	0.448	0.058	0.944
50006	15D3					0.39 ††	0.49 ††	0.23 ††	0.39 ††	0.25	0.47	0.06	1.06
50024	15D3	0.46	0.38	0.57	1.95	0.56	0.69 †	0.31 †	0.61 †	0.29 ††	0.46	0.13 ††	0.9
50025	15D3					0.673	0.846	0.38	0.712	0.241	0.445	0.063	0.969
50027	15D3	0.464	0.396	0.568	1.93	0.66	0.798	0.386	0.695	0.261	0.465	0.076	0.982
50029	15D3	0.478	0.417	0.816 ††	1.99	0.607	0.875	0.392	0.747	0.246	0.47	0.101 †	0.933
50030	15D3	0.44	0.38	0.55	1.89	0.58	0.72	0.35	0.65	0.24	0.45	0.06	1
50032	15D3	0.45	0.38	0.54	1.93	0.66	0.81	0.38	0.71	0.256	0.453	0.074	0.944
50037	15D3	0.447	0.398	0.676	1.9	0.61	0.864	0.408	0.68	0.241	0.447	0.134 ††	0.826 ††
50038	15D3									0.233	0.381 ††	0.108 †	0.779 ††
50045	15D3	0.491	0.419	0.605	2.1	0.696	0.842	0.393	0.739	0.248	0.465	0.065	0.986

50081	15D3	0.463	0.405	0.939 ††	2.15	0.62	0.835	0.346	0.609 †	0.433 ††	0.482	0.773 ††	1
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Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Al — 1M KCl (15G1) cmol+/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10173	15G1	0.754	0.18	0.021	0.016	0.003	0.003	0.031	0.155	1.05 ††	0.051	14 ††	0.164 ††
10181	15G1	0.862	0.213	0.028 ††	0.043 ††								
20204	15G1	0.372 ††	0.08	0.003	0.008	0.005	0.004	0.02	0.1 ††	1.76	0.032	26.9	0.011
21043	15G1	0.905	0.206	0.013	0.017	0.006	0.004	0.031	0.172	1.78	0.047	27.2	0.013
21088	15G1	0.663	0.151	0.006	0.007		0.04 ††	0.07 †	0.15		0.08 †		0.02
21100	15G1	0.438 †	0.1	0.016	0.023	0.041 ††	0.054 ††	0.088 ††	0.214 ††	0.512 ††	0.031	7.04 ††	0.032
21193	15G1	0.76	0.082	0.001	0.017	0.01	0.001	0.05	0.17	1.64	0.11 ††	8.12 ††	0.02
21196	15G1									5.46 ††	0.063	94.3 ††	0.037 †
21229	15G1	0.846	0.192	0.000001	0.01	0.0001	0.008	0.016	0.163	1.86	0.028	25	0.009
21232	15G1	0.93	0.34	0.01	0.04 ††	0.001	0.001	0.33 ††	0.18	1.94	0.18 ††	26.4	0.33 ††
50005	15G1	0.191 ††	0.04	0.001	0.01	0.009	0.008	0.159 ††	0.146	1.7	0.036	13.9 ††	0.005
50011	15G1	0.775	0.135	0.004	0.011	0.007	0.006	0.015	0.159	1.71	0.04	14.9 ††	0.006
50013	15G1									1.8	0.02	25.2	0.02
50014	15G1	0.756	0.132	0.016	0.016	0.015	0.015 †	0.031	0.135	1.5 †	0.062	14.4 ††	0.016
50017	15G1	0.788	0.179	0.008	0.011	0.002	0.003	0.026	0.145	1.79	0.035	25	0.006
50019	15G1									1.97 †	0.037	26.8	0.074 ††
50032	15G1	0.775	0.215	0.009	0.074 ††	0.008	0.002	0.036	0.168	1.73	0.018	24.1	0.003
50037	15G1	0.691	0.156	0.005	0.011	0.007	0.007	0.032	0.154	1.72	0.007	24.7	0.020
50081	15G1	0.187 ††	0.076	0.009	0.007	0.010	0.010	0.02	0.045 ††	0.326 ††	0.624 ††	4.7 ††	0.091 ††

Lab. Code #	Method Codes	Soil sample identification and values for											
		NOT ASSESSABLE				Extractable K — Bicarbonate (18A1) mg/kg air dry				NOT ASSESSABLE			
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64		
10173	18A1	164 ††	143	222	688	351	320	174	273	105	189	62	367
21193	18A1	187	162	210	764	483	479	184	472	118	211	69	415 ††
21232	18A1	203 ††	189	216	661	285	277	176	228	254 ††	491 ††	347 ††	387
50017	18A1	188	163	226	765	298	355	108 ††	239	97	175	56	384
50027	18A1	185	176	224	708	327	325	151	280	106	191	60	381

Lab. Code #	Method Codes	Soil sample identification and values for											
		Aluminium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64		
10156	18F1	1728	1016	725	784	1861 ††	1611 ††	1205 ††	4355 ††				
21088	18F1	1930 †	1150	762	830	651	628	470	1520	811	1500	2450	962
21100	18F1	1602	957	677	711	552	621	467	1468	785	1470	2820	945
21196	18F1	2580 ††	1512 ††	912	1112 ††	871 ††	948 ††	744 ††	2545 ††	13006 ††	37318 ††	44823 ††	25673 ††
21229	18F1	1650	960	594	705	566	590	456	1650	743	1500	2560	988
21232	18F1	1694	994	650	717	618	634	484	1604	828	1550	2999	1074
22	18F1	1638	957	598	664	492	525	388	1456	698	1504	2522	967
50004	18F1	1803	1060	716	587	448	402 ††	420	1420	718	1326 ††	2961	764 †
50005	18F1	1630	925	591	693	639	510	491	1610	751	1410 †	2080	893
50011	18F1	1710	1020	660	733	535	530	375 ††	1735	760	1500	2900	960
50014	18F1	1740	1020	697	781	547	595	447	1620	726	1408 †	2550	912
50020	18F1	2050 ††	1210 †	756	770	632	634	484	1810	1150 ††	2390 ††	3640 ††	1490 ††
50024	18F1					546	564	419	2100 †	696	1523	2719	929
50037	18F1	1658	961	620	724	573	610	439	1570	748	1482	2416	882

50042	18F1	2299 ††	1489 ††	906	1077 ††	732	707	471	1796	978 ††	2278 ††	2229	1605 ††
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Lab. Code #	Method Codes	Soil sample identification and values for Boron – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	0.565 ††	0.785 †	1.22	0.724	0.365	1.03	0.4	0.606 †				
21088	18F1	0.53 ††	1.02 ††	1.26	0.86	0.299	0.675	0.634	0.382			0.53	
21100	18F1	0.146	0.373	1	0.506	0.203	0.872	0.269	0.269	0.293	0.379	0.402	0.342
21196	18F1	1.6 ††	2.5 ††	2.3 ††	2.1 ††	0.63 †	1.7 ††	1.3 ††	0.8 ††	36 ††	38 ††	39 ††	38 ††
21229	18F1	0.125	0.333	0.809	0.409	0.448	0.873	0.374	0.417	0.151	0.375	0.675	0.548 †
21232	18F1	0.13	0.52	0.67	0.52	0.44	0.92	0.51	0.38	0.34	0.11	0.34	0.27
22	18F1	0.097 †	0.323	0.799	0.378	0.14	0.663	0.21	0.175	0.024	0.139	0.284	0.307
50004	18F1	0.212 †	0.399	0.913	0.318	0.285	0.55	0.33	0.265	0.137	0.333	0.431	0.353
50005	18F1	0.609 ††	1.08 ††	1.11	0.53	0.343	0.563	0.532	0.388	0.152	0.304	0.393	0.221
50011	18F1	0.2 †	0.38	0.86	0.49	0.28	0.74	0.35	0.32	0.15	0.3	0.34	0.37
50014	18F1	0.125	0.125	0.92	0.298	0.271	0.885	0.335	0.326	0.032	0.225	0.274	0.305
50020	18F1	0.618 ††	0.873 †	1.5	0.889 †	0.865 ††	1.6 ††	0.811 †	0.811 ††	1.2 ††	1.4 ††	1.3 ††	1.4 ††
50024	18F1					12 ††	9.2 ††	5.6 ††	2.6 ††				
50037	18F1	0.123	0.51	0.72	0.522	0.146	0.685	0.46	0.33	0.14	0.286	4.79 ††	0.271
50042	18F1	0.13	0.42	1.1	0.45	0.3	0.87	0.28	0.32	0.4	0.64 ††	0.54	0.61 †

Lab. Code #	Method Codes	Soil sample identification and values for Calcium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	912	761	12441 ††	2890 ††	2392 ††	3027 ††	2255 ††	1525 ††				
21088	18F1	1040	872	7490	3350	1540	2490	1670	1050	217	1110	1700	791
21100	18F1	958	806	7521	3156	1806	2538	1745	1171	211	1200	1810	826
21196	18F1	1373 ††	1073 ††	12258 ††	5636 ††	2580 ††	3862 ††	2704 ††	1760 ††	2852 ††	16595 ††	20541 ††	10742 ††
21229	18F1	994	802	6260	3230	1755	2394	1684	1137	212	1130	1580	841
21232	18F1	994	796	8585	3308	1805	2392	1661	1245	226	1239	1779	940
22	18F1	946	749	7234	3246	1680	2399	1596	1064	189 †	1164	1638	842
50004	18F1	1047	845	7793	2559 ††	1494	1815 ††	1687	987	182 ††	1005	1768	647 ††
50005	18F1	965	836	5290	3300	1580	1680 ††	1520	1100	220	1110	1450	835
50011	18F1	995	805	7400	3325	1666	2390	1622	1150	230	1160	1506	900
50014	18F1	1000	819	7360	3390	1690	2540	1690	1110	216	1234	1832	885
50020	18F1	1190 ††	960 ††	8610	3570	2000	2760 ††	1830	1220	308 ††	1570 ††	2330 ††	1100 ††
50024	18F1					1792	2447	1758	1212	219	1243	1781	925
50032	18F1	917	714	8126	3496	1568	2341	1505	993	121 ††	1002	1478	761
50037	18F1	963	776	6316	3325	1710	2384	1640	1114	218	1138	1498	849
50042	18F1	960	738	6180	2928 ††	1421	2320	1363 ††	913	244 †	1159	1319	831

Lab. Code #	Method Codes	Soil sample identification and values for Copper – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	0.555 ††	0.336	1.6	1.6 ††	4.1 ††	2.2 ††	0.148	2.1 ††				
21088	18F1	0.64 ††	0.27	1.9	2	2.4	1.4	0.102	1.4		1.29	1.5	2
21100	18F1	1	0.27	1.6	2	2.3	1.4	0.174	1.4	0.224	1.3	1.3	2.1
21196	18F1	1.4 ††	0.473 ††	2.5 ††	2.9 ††	3.7 ††	2.5 ††	0.223	2.4 ††	1.7 ††	12 ††	25 ††	43 ††

21229	18F1	0.985	0.236	1.4	1.9	2.1	1.3	0.107	1.5	0.219	1.4	1.4	2
21232	18F1	0.94	0.24	1.5	1.8	2.3	1.3	0.04	1.4	0.13 ††	1.3	1.2	2.0
22	18F1	0.982	0.31	1.5	1.9	2	1.3	0.214	1.3	0.227	1.4	1.2	2.1
50004	18F1	1.1	0.17	1.8	1.7	1.7 †	0.949 ††	0.074	1.3	0.432 ††	1.4	1.6	1.6 ††
50005	18F1	1.2 †	0.422	1.7	2.1	2.3	0.679 ††	0.24	1.6	0.236	1.4	1.4	2
50011	18F1	1	0.2	1.5	2.1	2.3	1.35	0.14	1.5	0.24	1.5	1.4	2.4 ††
50014	18F1	1	0.331	1.7	2.2	2.2	1.4	0.194	1.6	0.249	1.5	1.6	2.2 †
50020	18F1	0.942	0.287	1.6	1.9	2.5	1.3	0.03	1.5	0.05 ††	1.9 ††	1.9	2.5 ††
50024	18F1					2.1	1.2	0.01	1.3	0.15 ††	1.1	1	1.4 ††
50032	18F1	1	0.29	2	2.3	2.1	1.3	0.1	1.4	0.21	1.3	1.5	2
50037	18F1	1.1	0.325	1.5	2.1	2.3	1.5	0.368	1.6	0.234	1.4	1.3	1.9
50042	18F1	0.92	0.2	1.8	2.3	1.9	1.5	0.02	1.1	0.09 ††	1.1	0.97	2

Lab. Code #	Method Codes	Soil sample identification and values for Iron – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	540 ††	1079 ††	178 †	499 ††	280 ††	204 ††	829 ††	340 ††				
21088	18F1	415	1070 ††	146	330	157	143	651	200	521	282	443	75
21100	18F1	381	749	124	329	115	101	614	201	511	258	543	54
21196	18F1	612 ††	1261 ††	184 ††	522 ††	181	167 †	935 ††	311 ††	6082 ††	2704 ††	6578 ††	1397 ††
21229	18F1	339	702	96	288	122	111	621	208	463	263	427	65
21232	18F1	329	654 †	101	259	131	110	535	190	504	315 †	562	78
22	18F1	361	808	99	283	100	92	604	181	452	249	522	58
50004	18F1	407	861	129	262	97	77	628	184	514	261	610	51
50005	18F1	388	765	126	312	129	468 ††	545	201	471	268	315	68
50011	18F1	371	800	114	309	117	103	550	175	465	280	570	69
50014	18F1	398	833	119	346	121	109	660	208	514	273	480	64
50020	18F1					143	114	618	221	601 †	355 ††	499	85
50024	18F1					120	97	468	172	414	250	358	58

50032	18F1	396	803	122	339	104	92	538	189	466	258	480	60
50037	18F1	384	770	113	314	145	116	604	198	474	272	528	51
50042	18F1	491 ††	892	156	444 ††	152	152 †	675	216	539	357 ††	428	113 ††

Lab. Code #	Method Codes	Soil sample identification and values for Magnesium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	66 ††	415 †	2343	485	399 ††	745 ††	648 ††	153 †				
21088	18F1	89	453	2250	479	253	592	476	105	43	94	2080	236
21100	18F1	91	481	2163	476	317	618	530	126	46	98	2080	243
21196	18F1	94	662 ††	3403 ††	765 ††	490 ††	1050 ††	875 ††	200 ††	655 ††	1499 ††	29995 ††	3919 ††
21229	18F1	96 †	409 †	1890 ††	476	303	625	505	126	48	105	2080	259
21232	18F1	92	469	2242	531	323	676	542	135	49	108	2347	293 †
58 22	18F1	83 ††	438	2273	488	287	607	487	108	41	99	2122	261
50004	18F1	92	473	2462	391 ††	255	453 ††	508	107	41	91	2895 ††	218
50005	18F1	92	397 †	1190 ††	511	263	428 ††	408 †	116	46	101	1090 ††	236
50011	18F1	91	468	2325	518	309	615	499	123	49	105	2280	280
50014	18F1	92	464	2380	530	289	641	512	120	46	105	2228	262
50020	18F1	107 ††	554 ††	2610 ††	548	350	723 ††	579 †	136	70 ††	143 ††	3140 ††	349 ††
50024	18F1					287	590	498	118	41	96	2186	253
50032	18F1	79 ††	426	2370	507	271	586	476	107	44	94	2196	257
50037	18F1	91	462	2311	525	297	602	503	121	46	102	2214	246
50042	18F1	103 ††	462	2295	518	393 †	665	23 ††	122	46	97	1513 ††	229

Lab. Code #	Method Codes	Soil sample identification and values for Manganese – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	161	52	187	254 †	549 ††	657 ††	30 ††	169 ††				
21088	18F1	165	53	176	205	283	324	23 †	122	7.5	198	58	471
21100	18F1	113	40	91	171	377	435	24 ††	126	6.5	169 †	56	358
21196	18F1	213 ††	69 ††	178	333 ††	540 ††	761 ††	37 ††	118	117 ††	3795 ††	983 ††	8421 ††
21229	18F1	137	47	117	208	344	495	19	119	7.5	192	62	422
21232	18F1	141	48	96	204	380	442	21	129	12 ††	220	74 ††	494
22	18F1	131	43	109	200	319	458	18	105	6.7	194	57	438
50004	18F1	151	51	148	179	303	349	20	112	7.3	181	64	330
50005	18F1	131	46	114	193	280	103 ††	19	115	8	199	59	348
50011	18F1	141	48	137	192	305	440	19	115	8.4	200	62	388
98 50014	18F1	148	50	135	231	364	525	20	118	7.7	208	63	453
50020	18F1	167	54	144	218	380	491	21	123	9.9 †	260 ††	79 ††	522
50024	18F1					336	402	19	107	7.6	200	57	442
50032	18F1	160	54	145	249	346	486	18	109	8.8	188	52	433
50037	18F1	140	47	102	193	345	446	20	114	8	198	59	407
50042	18F1	185	56	212	280 ††	265	660 ††	423 ††	102	0.16 ††	227 †	40 ††	567

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus ICP – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	42 †	12	14	38	1.4 ††	1.8 ††	11 ††	5 ††				
21088	18F1	29 †	11	11	34	13	10	113	41	22 ††	27	58	
21196	18F1	43 ††	7.4 ††	6.8 †	47 ††	22 ††	25 ††	172 ††	70 ††	203 ††	573 ††	793 ††	71 ††
21229	18F1	34	12	11	34	13	13	101	46	18	27	49	3.9

21232	18F1	34	12	13	34	16	14	97	44	18	26	53	2.2 †
22	18F1	33	12	11	35	14	15	95	43	19	30 †	43	3.2
50004	18F1	33	11	13	29	12	10	90	39	19	27	55	4.6
50005	18F1	38	15 †	13	37	15	82 ††	104	43	18	28	47	4.7
50011	18F1	33	10	10	36	13	15	95	40	18	28	40	4.3
50014	18F1	35	12	13	40	14	14	104	45	20 †	28	50	4.3
50020	18F1	43 ††	15 †	19 ††	41	18	19 †	108	54 †	22 ††	39 ††	68	7.1 †
50024	18F1					13	13	90	37	17	25 †	43	3.9
50037	18F1	36	12	12	37	15	14	103	43	18	28	41	6
50042	18F1	49 ††	16 †	15	63 ††	30 ††	27 ††	217 ††	95 ††	27 ††	62 ††	66	8.1 ††

Lab. Code #	Method Codes	Soil sample identification and values for Potassium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	141	133	156 †	541 ††	292	338	163	295				
21088	18F1	198	178	271 †	723	264	339	170	286	106	192	42	406
21100	18F1	173	160	203	677	279	329	162	302	103	187	30	375
21196	18F1	249 ††	210 ††	313 ††	1043 ††	298	572 ††	206 ††	334 †	571 ††	1242 ††	331 ††	4948 ††
21229	18F1	173	151	207	707	253	303	150	269	95	169	28	375
21232	18F1	190	166	259 †	795 †	280	383 †	165	301	109	199 †	36	426
22	18F1	168	147	184	681	228	302	138	247	92	175	28	381
50004	18F1	171	151	203	539 ††	214	229 †	141	236	88	154	27	291
50005	18F1	210	173	294 ††	712	232	180 ††	142	260	93	168	38	299
50011	18F1	177	157	205	738	259	312	152	262	100	170	40	423
50014	18F1	171	154	215	748	244	317	146	268	95	180	21	382
50020	18F1	202	183	236	727	264	343	160	291	163 ††	262 ††	52	518
50024	18F1					241	290	140	257	87	172	28	361
50032	18F1	183	160	205	755	257	313	155	269	101	172	29	377
50037	18F1	161	150	220	716	235	307	155	252	93	165	50	321

50042	18F1	83 ††	77 ††	111 ††	318 ††	118 ††	217 ††	69 ††	124 ††	90	124 ††	38	313
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Lab. Code #	Method Codes	Soil sample identification and values for Sodium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	45	94	202	23	72 ††	438	202 ††	114 ††				
21088	18F1	35	94	177	26	9	333	110	45 †	18	38 †	4010 †	23
21100	18F1	43	82	209	23	15	408	142	65	28 ††	52	4670	40
21196	18F1	64	115 ††	276	34	13	522 ††	180 ††	79 †	125 ††	535 ††	63603 ††	235 ††
21229	18F1	50	93	230	24	14	391	132	63	20	52	4990	25
21232	18F1	54	99	254	30	18	360	121	57	21	76 †	4359	45
22	18F1	45	85	199	20	13	371	117	52	17	50	4703	26
50004	18F1	50	86	278	22	9	245 †	100	42 †	20	47	2929 ††	23
50005	18F1	63	99	282	28	24	187 ††	137	58	19	54	4660	25
50011	18F1	49	88	234	27	17	400	127	62	19	53	4700	29
50014	18F1	51	89	228	32	21	396	128	68	21	69 †	4825	32
50020	18F1	54	108	240	25	15	421	136	61	36 ††	75 †	6120 ††	44
50024	18F1					9	375	142	66	15	95 ††	4772	31
50032	18F1	50	91	231	26	15	374	129	60	19	51	4644	38
50037	18F1	48	84	232	27	37 ††	298	120	59	19	54	4090 †	37
50042	18F1	32 ††	62 ††	200	23	12	330	82 ††	41 ††	43 ††	63	2672 ††	49

Lab. Code #	Method Codes	Soil sample identification and values for Sulphur – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1					314 ††	581 ††	1136 ††	1051 ††				
21088	18F1	76 ††	40 †	12	39	5.8 ††	15	32	44	18	38 †	4010 †	23
21100	18F1	54	28	7.8	37	13	39 ††	47 †	60	28 ††	52	4670	40
21196	18F1	83 ††	44 ††	14	53 ††	21 †	15	67 ††	87 ††	125 ††	535 ††	63603 ††	235 ††
21229	18F1	56	30	7.2	37	12	7.5	39	50	20	52	4990	25
21232	18F1	59	31	10	38	15	11	41	53	21	76 †	4359	45
22	18F1	58	31	7.5	37	13	9.1	38	51	17	50	4703	26
50004	18F1	56	29	4.5	26 ††	7.8 †	1 †	36	45	20	47	2929 ††	23
50005	18F1	33 ††	21 †	8.8	38	16	34 ††	39	51	19	54	4660	25
50011	18F1	58	29	7.4	37	14	9.5	38	51	19	53	4700	29
50014	18F1	65	34	8.8	42	13	9	41	55	21	69 †	4825	32
50020	18F1	85 ††	48 ††	17 ††	50 ††	34 ††	26 ††	62 ††	80 †	36 ††	75 †	6120 ††	44
50024	18F1					27 ††	25 †	49 †	62	15	95 ††	4772	31
50032	18F1									19	51	4644	38
50037	18F1	56	30	10	39	13	7.9	38	50	19	54	4090 †	37
50042	18F1	73 †	36 †	6	43 ††	18 †	11	51 †	70 †	43 ††	63	2672 ††	49

Lab. Code #	Method Codes	Soil sample identification and values for Zinc – Mehlich 3 (18F1) mg/kg oven dry											
		December 2013 (Round 213)				March 2014 (Round 413)				June 2014 (Round 613)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 61	ASS 62	ASS 63	ASS 64
10156	18F1	6.4 ††	3.3	2.1 ††	6.2 ††	3.3 ††	1.2	5.4 ††	5.6 ††				
21088	18F1	6.9 ††	3.3	1.3	3.4	2.4	1.0	4.3 ††	5.0	30	48	7200	21
21100	18F1	3.9	2.1	1	3.4	2.3	0.951	3.5	4.3	11 ††	18 ††	2060 ††	11
21196	18F1	7.1 ††	3.1	0.639	5.1 ††	3 ††	1.2	6.3 ††	6.9 ††	169 ††	505 ††	95797 ††	108 ††
21229	18F1	3.9	2.8	0.802	3.2	1.9	0.786	3.5	4.2	22	44	7220	16
21232	18F1	4.3	2.3	1.1	3.3	1.8	0.77	3.2	3.7	24	50	7317	47 ††
22	18F1	4.5	2.2	0.776	3.1	1.7	0.727	3.1 ††	3.9	23	48	7647	17
50004	18F1	4.1	2.5	0.98	2.7	1.6	0.596	3.3	3.6	18	45	6990	9 †
50005	18F1	4.5	2.5	1.1	3.8	2.1	3.3 ††	3.6	4.2	20	45	4830 †	18
06 50011	18F1	4	2.5	1.1	3.6	2.1	0.8	3.7	4.1	20	45	8000	19
50014	18F1	4.2	2.6	1.1	3.8	2	0.943	3.5	4.4	24	49	7269	18
50020	18F1	4.9	2	0.908	3.4	2.6 †	1.3	3.6	4.6	32	64 ††	8070	25
50024	18F1					2	0.79	3.4	3.9	23	50	1697 ††	22
50032	18F1	4.7	2.7	1.3	4.1	2.0	1.0	3.4	4.2				
50037	18F1	4.7	2.6	0.881	3.6	2.1	0.895	3.5	4.1	20	45	6712	16
50042	18F1	4.5	2.2	0.87	3.7	2.1	0.91	3.6	4.5	35 †	64 ††	5596	33 ††

- 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.