

Australasian Soil and Plant Analysis Council Inc.



ASPAC Soil Proficiency Testing Program Report

2012-13

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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 now Global Proficiency Ltd. This company operates mainly out of New Zealand, with key personnel and contact details provided on page iv.

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

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

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

Dr Roger Hill
Convenor, ASPAC-LPC

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

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

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

Memberships

Membership of ASPAC's LPC 2012-13† ‡

Name [†]	Location	Email
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D.J. Lyons	Queensland, Australia	daveandtrish8@bigpond.com

[†] Mr B.K. Daly of Palmerston North, NZ, who retired from the ASPAC-LPC on 10 June 2013, was 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

Name, Street and Postal Address	Key Personnel & Current Emails.
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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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Your Notes

1. Introduction

This not-for-profit, annual ASPAC Soil Proficiency Testing Program Report for 2012-13 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

What is now GPL- see page iv -under its “Soil Chek” arrangements, was contracted by ASPAC as the soil ILPP provider for 2012-13. 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 59 laboratories submitted results for at least one soil test. Names and other summary contact details for the participants are provided in Appendix 1. There were 40 laboratories involved from Australia (NSW=11; QLD=10; VIC=7; SA=6; WA=4, TAS=1; ACT=1), 8 from New Zealand (up one new participant from 2011-12), 3 from Vietnam, 2 each from Fiji, Papua New Guinea and The Philippines, and 1 (one) each from Samoa and Thailand (another new participant).

Most reported results (see Table 2.1) across the three “rounds” combined (average of 44), were submitted for method 4A1 (pH, 1:5 soil-water) and method 3A1 (Electrical conductivity, 1:5 soil-water). The median was 18 laboratories for each method.

Table 2.1. Test methods, corresponding method codes [from Rayment and Lyons 2011] and arithmetic average numbers of results per round submitted by laboratories in the ASPAC 2012-13 soil ILPP

Soil Tests	Method Codes ⁱ	Number of participants		
		Dec 12	Mar 13	May 13
Electrical conductivity 1:5 soil-water	3A1	46	42	46
Soil pH, 1:5 soil-water	4A1	45	42	46
Soil pH, 1:5 0.01 M CaCl ₂ — direct	4B1+4B3	12	11	14
Soil pH, 1:5 0.01 M CaCl ₂ — indirect	4B2+4B4	25	24	25
Water soluble Cl — potentiometric	5A1	23	21	22
Water soluble Cl — autocolour	5A2	8	8	8
Organic Carbon —W&B	6A1	30	27	29
Total Organic C — Heanes	6B1	3	3	3
Total Organic C — Dumas	6B2	13	21	15
Total Organic C — HF Induction, IR	6B3	19	16	18
Total N — Kjeldahl, steam distillation	7A1	23	23	24
Total N — Kjeldahl, autocolour	7A2	6	6	6
Total N — Dumas	7A5	17	16	16
Water Soluble Nitrate N — autocolour	7B1	20	19	20
KCl Extractable Nitrate N — autocolour	7C2	24	23	26
KCl Ext. Ammonium N — autocolour	7C2	25	26	24
Total P – all methods	9A1 and others	19	20	19
Colwell Extractable P	9B1+9B2	30	31	30
Olsen Extractable P	9C1+9C2	24	25	26
Bray-1 Extractable P	9E1+9E2	12	9	9
Acid Extractable P	9G1+9G2	7	9	8
Phosphorus buffer index (with Colwell P)	9I2a + 9I2b + 9I2c ⁱⁱ	23	23	22
Phosphorus buffer index (with Olsen P)	9I3a + 9I3b + 9I3c ⁱⁱ	2	2	2
Phosphorus buffer index (unadj)	9I4a + 9I4b + 9I4c ⁱⁱ	12	14	11
Phosphate Extractable S	10B Pooled	7	9	7
KCl 40 Extractable S	10D1	16	18	17
DTPA Extractable Fe	12A1	29	28	31
DTPA Extractable Cu	12A1	29	29	31
DTPA Extractable Mn	12A1	28	27	30
DTPA Extractable Zn	12A1	28	29	31
Hot CaCl ₂ Extractable B — manual colour	12C1+12C2	19	20	20
Exchangeable Ca — 1M NH ₄ Cl extract	15A1	18	15	17
Exchangeable Mg — 1M NH ₄ Cl extract	15A1	18	15	17
Exchangeable Na — 1M NH ₄ Cl extract	15A1	18	15	17
Exchangeable K — 1M NH ₄ Cl extract	15A1	18	15	17

Soil Tests	Method Codes ⁱ	Number of participants		
		Dec 12	Mar 13	May 13
Exchangeable Ca — 1M NH ₄ OAc extract	15D3	24	24	24
Exchangeable Mg — 1M NH ₄ OAc extract	15D3	24	24	24
Exchangeable Na — 1M NH ₄ OAc extract	15D3	22	24	24
Exchangeable K — 1M NH ₄ OAc extract	15D3	25	25	25
Exchangeable Al — 1M KCl extract	15G1	16	15	16
Extractable Silicon	Other	2	2	2
Bicarbonate Extractable K	18A1	3	4	3
Aluminium	18F1	17	15	16
Boron	18F1	16	15	16
Calcium	18F1	18	16	18
Copper	18F1	19	16	19
Iron	18F1	18	16	18
Magnesium	18F1	19	16	19
Manganese	18F1	19	16	19
Phosphorus - ICP	18F1	16	14	15
Potassium	18F1	18	16	18
Sodium	18F1	18	16	17
Sulphur	18F1	15	13	14
Zinc	18F1	19	16	19
Phosphorus - Col	18F2	3	3	3

2.3 Tests and methods

The three proficiency “rounds” for soils – each comprised of four samples – were offered in December 2012, March 2013 and May 2013. 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. Data summaries in Section 3 also indicate where there was method “pooling”, as the expectation was that similar test results would be expected.

Participating laboratories were required by ASPAC to report all tests on an air dry (40°C) soil-weight basis (not a soil-volume basis), which at times differed from the soil-moisture 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. Those laboratories that initially used a volume of soil for their sample for one or more test methods should also have applied a “soil volume to weight conversion factor” to achieve the required dry-weight equivalent results.

Table 2.2. Method “pooling” summary details for the ASPAC 2012-13 soil ILPP.

Soil Tests	Method Codes	Average participants
Soil pH, 1:5 0.01 M CaCl ₂ - direct, pooled air dry	4B1 + 4B3	12
Soil pH, 1:5 0.01 M CaCl ₂ - indirect, pooled air dry	4B2 + 4B4	25
Total P – pooled % oven dry	9A1 + Others	19
Colwell Extractable P – pooled mg/kg air dry	9B1 + 9B2	30
Olsen Extractable P – pooled mg/kg air dry	9C1 + 9C2	25
Bray-1 Extractable P – pooled mg/kg air dry	9E1 + 9E2	10
Acid Extractable P – pooled mg/kg air dry	9G1 + 9G2	8
Phosphorous Buffer Index (Colwell) L/kg dry wt	9I2a + 9I2b + 9I2c	23
Phosphorous Buffer Index (Olsen) L/kg dry wt	9I3a + 9I3b + 9I3c	2
Phosphorous Buffer Index (Unadj) L/kg dry wt	9I4a + 9I4b + 9I4c	12
Phosphate Extractable S, pooled mg/kg air dry	10B	8
Hot CaCl ₂ Extractable B – pooled mg/kg air dry	12C1 + 12C2	20

2.4 Sample preparation and identification

In common with practices documented for the 2004-05 soils³ 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 2012-13 program were distributed and coded as follows: December 2012 (Round 212) — ASS 121-124; March 2013 (Round 412) — ASS 31-34; and May 2013 (Round 612) — ASS 51-54. The association between sample code and origin of the various soils are 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 2012-13 soil ILPP

Sample ID	Sample origin	Sample ID	Sample origin
ASS 121	Victoria	ASS 33	New Zealand
ASS 122	New Zealand	ASS 34	New South Wales
ASS 123	Tasmania	ASS 51	New South Wales
ASS 124	New South Wales	ASS 52	Tasmania
ASS 31	New South Wales	ASS 53	New South Wales
ASS 32	Victoria	ASS 54	New Zealand

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 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

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.)

misinterpretations. In addition, occasional 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 2012-13 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.

The same procedure applied to "pooled" methods but there was a caveat. When both "un-pooled" and "pooled" data for a test could be assessed statistically and both subsequently qualified for certification, only the "un-pooled" method was recorded on the Certificate rather than both.

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 provided details of certified laboratories by test on its public web site. Those certifications remain / remained 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

Statistical term	Meaning and/or derivation
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>Median</u> of the <u>Absolute Deviations</u> , 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 2012-13. 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.

2012-13: Air-Dry Moisture Content (2A1) % oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	33	33	33	33	31	31	31	31	34	34	34	34
Minimum	1.56	1.9	0.72	0.72	1.05	1.04	1.05	0.6	0.39	0.55	2.48	1.55
Maximum	4.13	3.71	1.80	6.41	5.19	4.42	3.44	1.64	1.91	2.01	5.6	7.1
Median i	3.59	3.19	1.29	1.27	4.39	3.57	2.58	1.2	1.16	1.58	4.39	2.58
Mean i	3.45	3.10	1.23	1.35	4.21	3.46	2.49	1.2	1.16	1.57	4.36	2.68
MAD i	0.23	0.23	0.1	0.1	0.28	0.3	0.18	0.16	0.115	0.108	0.315	0.16
IQR i	0.445	0.352	0.167	0.17	0.297	0.489	0.311	0.245	0.174	0.209	0.509	0.239
Robust CV % i	12	11	13	13	6.8	14	12	20	15	13	12	9.3
Median f	3.60	3.25	1.30	1.28	4.48	3.6	2.6	1.25	1.16	1.58	4.4	2.58
Mean f	3.58	3.22	1.30	1.24	4.52	3.65	2.62	1.26	1.16	1.58	4.43	2.59
MAD f	0.22	0.2	0.07	0.055	0.165	0.15	0.1	0.14	0.115	0.07	0.28	0.145
IQR f	0.335	0.33	0.128	0.13	0.259	0.311	0.156	0.213	0.169	0.104	0.497	0.211
Robust CV % f	9.3	10	9.8	10	5.8	8.6	6	17	15	6.6	11	8.2
Outliers	3	4	5	6	5	2	4	1	2	7	3	4
Stragglers	0	0	2	3	2	6	4	0	0	3	0	2

2012-13: Electrical conductivity 1:5 soil-water (3A1) dS/m air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	46	46	46	46	42	42	42	42	46	46	46	46
Minimum	0.106	0.118	0.183	0.061	0.14	0.17	0.06	0.085	0.083	0.358	0.117	0.139
Maximum	285	165	234	117	208	246	196	99	0.995	0.47	0.233	0.19
Median i	0.25	0.144	0.22	0.100	0.218	0.251	0.203	0.095	0.103	0.409	0.137	0.159
Mean i	6.45	3.74	5.31	2.65	9.06	10.5	8.26	4.17	0.142	0.408	0.141	0.161
MAD i	0.010	0.006	0.010	0.005	0.008	0.005	0.0055	0.005	0.004	0.012	0.006	0.005
IQR i	0.012	0.008	0.012	0.008	0.011	0.008	0.008	0.007	0.007	0.022	0.009	0.007
Robust CV % i	4.9	5.41	5.4	7.63	5.1	3.1	4.1	7.1	6.5	5.4	6.9	4.7
Median f	0.245	0.144	0.219	0.099	0.217	0.251	0.202	0.094	0.103	0.409	0.136	0.158
Mean f	0.246	0.144	0.217	0.098	0.217	0.251	0.202	0.0943	0.102	0.407	0.135	0.159
MAD f	0.007	0.004	0.007	0.004	0.006	0.005	0.004	0.004	0.004	0.009	0.004	0.004
IQR f	0.0	0.0	0.0	0.0	0.007	0.007	0.007	0.006	0.005	0.015	0.007	0.006
Robust CV % f	4.3	4.4	4.7	6.5	3.4	2.8	3.5	6.2	5.3	3.6	4.9	3.8
Outliers	7	6	4	6	6	5	4	4	7	5	6	7
Stragglers	1	3	2	0	2	0	1	1	2	2	7	0

2012-13: Soil pH, 1:5 soil-water (4A1) air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	45	45	45	45	42	42	42	42	46	46	46	46
Minimum	4.95	4.81	6.04	3.66	5.4	5.1	5.67	4	3.9	5.1	6.2	5.5
Maximum	6.2	6	7.2	4.8	6.45	6.72	6.98	6.3	4.63	5.69	7.37	6.09
Median i	5.63	5.68	6.88	4.4	5.86	5.63	6.6	4.45	4.4	5.5	7.14	5.91
Mean i	5.62	5.64	6.83	4	5.86	5.65	6.55	4.47	4.36	5.49	7.09	5.89
MAD i	0.07	0.07	0.09	0.08	0.06	0.04	0.078	0.05	0.05	0.06	0.15	0.06
IQR i	0.122	0.093	0.159	0.122	0.085	0.067	0.131	0.087	0.089	0.085	0.241	0.087
Robust CV % i	2.2	1.6	2.3	2.8	1.5	1.2	2	2	2	1.5	3.4	1.5
Median f	5.64	5.69	6.90	4.4	5.86	5.63	6.6	4.45	4.41	5.51	7.17	5.91
Mean f	5.64	5.68	6.88	4.4	5.85	5.63	6.59	4.44	4.4	5.51	7.12	5.92
MAD f	0.04	0.03	0.075	0.06	0.055	0.03	0.07	0.05	0.01	0.045	0.13	0.04
IQR f	0.1	0.1	0.1	0.1	0.077	0.042	0.107	0.058	0.02	0.072	0.23	0.059
Robust CV % f	1.3	1.3	1.8	2.2	1.3	0.75	1.6	1.3	0.46	1.3	3.2	1
Outliers	6	6	5	4	4	7	3	6	11	4	2	6
Stragglers	3	4	0	2	0	4	0	0	9	2	0	2

2012-13: Soil pH, 1:5 0.01 M CaCl₂ — direct, pooled (4B1 + 4B3) air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	12	12	12	12	11	11	11	11	14	14	14	14
Minimum	4.7	4.75	5.8	3.48	4.9	4.6	5.6	3.2	3.2	4.6	6.08	5
Maximum	5.4	5.3	6.7	4.3	6.6	5.5	6.23	4.21	4.34	5.31	6.81	5.93
Median i	5.07	5.02	6.34	3.76	5.35	5.09	5.98	3.83	3.74	5.05	6.42	5.34
Mean i	5.08	5.04	6.31	3.79	5.42	5.11	5.97	3.82	3.71	4.99	6.36	5.34
MAD i	0.1	0.115	0.08	0.135	0.09	0.05	0.08	0.08	0.06	0.065	0.115	0.1
IQR i	0.215	0.245	0.12	0.187	0.133	0.148	0.126	0.17	0.133	0.148	0.206	0.213
Robust CV % i	4.2	4.9	1.9	5	2.5	2.9	2.1	4.5	3.6	2.9	3.2	4
Median f	5.07	5.02	6.38	3.75	5.35	5.08	6	3.83	3.74	5.07	6.42	5.32
Mean f	5.08	5.04	6.36	3.75	5.34	5.1	6.01	3.84	3.73	5.05	6.36	5.29
MAD f	0.1	0.115	0.08	0.12	0.09	0.035	0.08	0.07	0.05	0.01	0.115	0.1
IQR f	0.215	0.245	0.107	0.119	0.13	0.074	0.126	0.122	0.067	0.056	0.206	0.211
Robust CV % f	4.2	4.9	1.7	3.2	2.4	1.5	2.1	3.2	1.8	1.1	3.2	4
Outliers	0	0	3	1	2	2	1	2	3	3	0	1
Stragglers	0	0	0	0	0	1	0	0	0	2	0	0

2012-13: Soil pH, 1:5 0.01 M CaCl₂ — indirect, pooled (4B2 + 4B4) air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	25	25	25	25	24	24	24	24	25	25	25	25
Minimum	4.65	4.61	5.58	3.4	5.15	4.95	5.28	3.7	3.6	4.82	5.9	5.25
Maximum	5.4	5.3	6.5	4.2	6	5.5	6.1	4.16	4.25	5.4	6.65	5.58
Median i	5.1	5.02	6.45	3.78	5.3	5.11	5.97	3.83	3.78	5.1	6.53	5.38
Mean i	5.07	4.99	6.31	3.77	5.33	5.11	5.94	3.86	3.79	5.09	6.46	5.39
MAD i	0.05	0.04	0.05	0.02	0.02	0.03	0.055	0.039	0.03	0.05	0.04	0.05
IQR i	0.089	0.085	0.196	0.063	0.034	0.043	0.085	0.061	0.048	0.085	0.107	0.074
Robust CV % i	1.7	1.7	3	1.7	0.64	0.83	1.4	1.6	1.3	1.7	1.6	1.4
Median f	5.12	5.04	6.46	3.79	5.3	5.11	5.97	3.83	3.78	5.1	6.54	5.36
Mean f	5.12	5.03	6.47	3.79	5.3	5.1	5.97	3.84	3.77	5.09	6.54	5.37
MAD f	0.02	0.02	0.025	0.01	0.01	0.025	0.05	0.02	0.02	0.05	0.02	0.04
IQR f	0.037	0.022	0.035	0.022	0.015	0.035	0.074	0.045	0.045	0.082	0.052	0.067
Robust CV % f	0.72	0.44	0.55	0.59	0.28	0.69	1.2	1.2	1.2	1.6	0.79	1.2
Outliers	5	5	7	9	7	4	1	3	5	2	5	1
Stragglers	3	4	2	1	3	0	0	3	1	0	1	1

2012-13: Water soluble Cl — potentiometric (5A1) mg Cl/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	23	23	23	23	21	21	21	21	22	22	22	22
Minimum	12	20	0.5	5.95	7.6	13	14	6.7	8.4	10	10	10
Maximum	278	72	39	170	46	199	55	37	227	74	120	53
Median i	22	39	15	16	26	24	28	16	17	30	24	20
Mean i	48	43	17	27	26	32	28	17	27	32	30	21
MAD i	4.3	4.4	4.6	5	7.1	4	2.1	3.4	4.4	5.5	4	3.5
IQR i	10	7.4	7.5	7.4	11	5.9	4.1	5.9	6.7	9.8	7.1	5.4
Robust CV % i	47	19	52	46	41	25	15	38	40	33	29	27
Median f	20	39	14	16	26	24	27	15	16	30	23	20
Mean f	20	39	14	15	26	24	27	15	16	30	22	18
MAD f	2.3	2.9	4.6	3.7	7.1	3.6	2	2.9	4	4.1	3	3
IQR f	4.4	5.5	7.0	5.6	11	5.7	3.5	4.5	5.9	6.6	4.4	4.9
Robust CV % f	22	14	50	35	41	24	13	29	36	22	19	25
Outliers	5	5	3	2	0	1	3	1	2	3	4	2
Stragglers	1	0	0	1	0	0	1	0	0	1	1	0

2012-13: Water soluble Cl — autocolour (5A2) mg Cl/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	8	8	8	8	8	8	8	8	8	8	8	8
Minimum	14	29	10	11	20	19	23	9.7	11	24	20	15
Maximum	83	45	22	20	37	84	31	20	22	42	66	34
Median i	22	39	17	13	23	26	27	15	13	28	23	21
Mean i	34	38	17	14	26	36	28	15	14	30	29	23
MAD i	7.9	4	3.8	1.2	2.8	5.7	1.7	1.9	0.7	1.9	2.9	4.2
IQR i	31	8.8	5.6	2.9	6.6	24	2.8	3.2	1.2	5.4	7.7	9.2
Robust CV % i	140	22	34	23	28	92	10	22	9.5	20	33	44
Median f	20	39	17	12	23	23	27	15	12	27	23	21
Mean f	20	38	17	12	24	24	28	15	13	27	24	23
MAD f	3.9	4	3.8	0.2	1.8	3.3	1.7	1.9	0.6	0.65	2.7	4.2
IQR f	7.3	8.8	5.6	0.852	5	5.9	2.8	3.2	1.0	1.9	4.3	9.2
Robust CV % f	36	22	34	7.0	22	26	10	22	8.4	6.9	19	44
Outliers	2	0	0	1	1	2	0	0	1	1	1	0
Stragglers	0	0	0	2	0	0	0	0	1	0	0	0

2012-13: Organic Carbon — W&B (6A1) %C oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	30	30	30	30	27	27	27	27	29	29	29	29
Minimum	3.07	2.55	2.09	1.19	2.25	2.38	2.2	1.96	2.33	2.23	0.785	1.18
Maximum	17.8	10.3	5.94	6.85	4.74	4.49	3.5	2.83	3.6	4.81	2.29	2.63
Median i	3.65	3.08	2.9	2.81	3.78	3.72	2.79	2.2	2.83	2.5	1.61	1.94
Mean i	4.12	3.39	2.95	2.92	3.74	3.72	2.8	2.26	2.86	2.59	1.64	1.99
MAD i	0.245	0.122	0.17	0.14	0.252	0.21	0.18	0.109	0.14	0.16	0.13	0.1
IQR i	0.373	0.245	0.235	0.236	0.393	0.363	0.267	0.17	0.222	0.256	0.182	0.167
Robust CV % i	10	7.9	8.1	8.4	10	9.8	9.6	7.7	7.9	10	11	8.6
Median f	3.64	3.06	2.89	2.8	3.78	3.72	2.78	2.2	2.82	2.46	1.61	1.93
Mean f	3.64	3.07	2.83	2.81	3.77	3.74	2.75	2.17	2.81	2.47	1.62	1.96
MAD f	0.25	0.07	0.15	0.09	0.168	0.21	0.16	0.085	0.13	0.14	0.11	0.085
IQR f	0.352	0.111	0.204	0.152	0.252	0.322	0.259	0.143	0.163	0.234	0.18	0.133
Robust CV % f	9.7	3.6	7.1	5.4	6.7	8.7	9.3	6.5	5.8	9.5	11	6.9
Outliers	1	7	5	3	3	2	1	4	4	2	3	4
Stragglers	0	3	0	2	1	0	1	1	0	1	0	1

2012-13: Organic Carbon — Heanes (6B1) %C oven dry NOT ASSESSABLE

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212) NOT ASSESSABLE				March 2013 (Round 412)				May 2013 (Round 612) NOT ASSESSABLE			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	3	3	3	3	3	3	3	3	3	3	3	3
Minimum	3.96	3.25	3.08	3.05	4.27	4.06	3	2.42	2.94	2.67	1.73	2.07
Maximum	4.3	3.64	3.27	3.38	4.4	4.12	3.15	2.68	3.63	2.98	1.86	2.32
Median i	4.14	3.62	3.2	3.23	4.33	4.07	3.05	2.46	3.32	2.96	1.85	2.31
Mean i	4.13	3.5	3.18	3.22	4.33	4.08	3.07	2.52	3.3	2.87	1.81	2.23
MAD i	0.16	0.02	0.07	0.15	0.06	0.01	0.05	0.04	0.31	0.02	0.01	0.01
IQR i	0.252	0.289	0.141	0.245	0.096	0.045	0.111	0.193	0.511	0.23	0.096	0.185
Robust CV % i	6.1	8	4.4	7.6	2.2	1.1	3.6	7.8	15	7.8	5.2	8
Median f	4.14	3.63	3.2	3.23	4.33	4.07	3.05	2.46	3.32	2.97	1.86	2.32
Mean f	4.13	3.63	3.18	3.22	4.33	4.08	3.07	2.52	3.3	2.97	1.86	2.32
MAD f	0.16	0.01	0.07	0.15	0.06	0.01	0.05	0.04	0.31	0.01	0.005	0.005
IQR f	0.252		0.141	0.245	0.096	0.045	0.111	0.193	0.511			
Robust CV % f	6.1		4.4	7.6	2.2	1.1	3.6	7.8	15			
Outliers	0	1	0	0	0	0	0	0	0	1	1	1
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2012-13: Total Organic Carbon — Dumas (6B2) %C oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	13	13	13	13	21	21	21	21	15	15	15	15
Minimum	4.25	3.19	2.82	2.94	3.53	4.3	2.89	2.29	3.1	2.65	1.55	2.08
Maximum	4.74	3.7	3.49	3.63	5.2	5.1	3.8	3	3.56	3.38	2.13	2.35
Median i	4.39	3.5	3.03	3.2	4.46	4.42	3.17	2.44	3.23	2.81	1.85	2.19
Mean i	4.43	3.46	3.06	3.21	4.41	4.44	3.17	2.49	3.25	2.85	1.85	2.2
MAD i	0.04	0.1	0.11	0.1	0.12	0.05	0.08	0.09	0.05	0.06	0.06	0.04
IQR i	0.137	0.185	0.2	0.159	0.17	0.093	0.137	0.163	0.082	0.119	0.111	0.059
Robust CV % i	3.1	5.3	6.6	5	3.8	2.1	4.3	6.7	2.5	4.2	6	2.7
Median f	4.37	3.5	3.01	3.18	4.46	4.42	3.14	2.42	3.2	2.81	1.87	2.19
Mean f	4.36	3.46	3.03	3.18	4.43	4.41	3.12	2.45	3.2	2.81	1.86	2.18
MAD f	0.05	0.1	0.085	0.095	0.075	0.05	0.08	0.07	0.05	0.055	0.06	0.03
IQR f	0.093	0.185	0.156	0.15	0.143	0.095	0.141	0.148	0.070	0.095	0.095	0.059
Robust CV % f	2.1	5.3	5.2	4.7	3.2	2.1	4.5	6.1	2.2	3.4	5.1	2.7
Outliers	3	0	1	1	2	1	2	1	2	1	2	1
Stragglers	0	0	0	0	1	0	0	1	0	1	1	1

2012-13: Total Organic Carbon — HF Induction, IR (6B3) %C oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	19	19	19	19	16	16	16	16	18	18	18	18
Minimum	1.51	1.57	1.57	1.57	0.09	0.07	0.03	0.03	2.8	2.7	1.4	1.8
Maximum	4.73	3.69	3.28	3.47	4.6	7	3.57	2.77	5.7	5.4	3.2	4.2
Median i	4.28	3.31	2.9	3.18	4.31	4.24	3.07	2.44	3.2	2.83	1.87	2.19
Mean i	3.93	3.18	2.81	2.98	4.04	4.16	2.86	2.31	3.3	3	1.93	2.3
MAD i	0.17	0.14	0.14	0.12	0.16	0.095	0.075	0.165	0.135	0.095	0.075	0.095
IQR i	0.4	0.22	0.141	0.214	0.241	0.158	0.161	0.235	0.169	0.185	0.132	0.161
Robust CV % i	9.4	6.7	4.9	6.7	5.6	3.7	5.3	9.6	5.3	6.5	7	7.4
Median f	4.28	3.44	2.95	3.21	4.39	4.24	3.07	2.48	3.19	2.82	1.87	2.19
Mean f	4.25	3.41	2.98	3.2	4.36	4.24	3.02	2.46	3.16	2.86	1.86	2.22
MAD f	0.13	0.13	0.09	0.025	0.14	0.065	0.075	0.14	0.03	0.09	0.025	0.08
IQR f	0.208	0.156	0.158	0.035	0.224	0.117	0.158	0.245	0.141	0.156	0.041	0.15
Robust CV % f	4.8	4.5	5.3	1.1	5.1	2.8	5.1	9.9	4.4	5.5	2.2	6.9
Outliers	4	3	3	3	2	2	2	1	1	1	2	2
Stragglers	0	1	0	4	0	0	0	0	2	0	4	0

2012-13: Total N — Kjeldahl, steam distillation (7A1) %N oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	22	22	22	22	22	22	22	22	24	23	24	24
Minimum	0.349	0.228	0.196	0.204	0.209	0.197	0.216	0.152	0.099	0.1	0.099	0.079
Maximum	0.761	0.417	0.395	0.382	0.44	0.47	0.34	0.24	0.48	0.3	0.88	0.24
Median i	0.421	0.264	0.247	0.239	0.38	0.404	0.283	0.19	0.237	0.23	0.17	0.18
Mean i	0.431	0.273	0.259	0.246	0.374	0.391	0.276	0.185	0.242	0.224	0.199	0.176
MAD i	0.02	0.014	0.014	0.019	0.018	0.033	0.027	0.011	0.014	0.017	0.014	0.014
IQR i	0.037	0.022	0.023	0.027	0.026	0.048	0.041	0.017	0.029	0.027	0.020	0.021
Robust CV % i	8.8	8.2	9.4	12	6.8	12	15	9.1	12	12	12	12
Median f	0.421	0.262	0.243	0.238	0.38	0.407	0.283	0.19	0.239	0.234	0.17	0.18
Mean f	0.418	0.263	0.244	0.24	0.382	0.406	0.276	0.184	0.235	0.235	0.167	0.177
MAD f	0.020	0.012	0.01	0.018	0.014	0.026	0.027	0.01	0.009	0.013	0.01	0.01
IQR f	0.034	0.021	0.015	0.027	0.023	0.045	0.041	0.015	0.013	0.019	0.016	0.02
Robust CV % f	8.2	8.1	5.9	11	6	11	15	7.7	5.6	8.2	9.2	11
Outliers	2	2	3	1	2	2	0	3	6	3	5	4
Stragglers	0	0	2	0	1	0	0	0	1	1	2	1

2012-13: Total N — Kjeldahl, autocolour (7A2) %N oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	7	7	7	7	7	7	7	7	6	6	6	6
Minimum	0.362	0.241	0.226	0.222	0.355	0.382	0.228	0.169	0.201	0.207	0.13	0.159
Maximum	0.454	0.285	0.281	0.237	0.415	0.419	0.29	0.196	2160	2260	1650	1780
Median i	0.402	0.262	0.25	0.233	0.365	0.396	0.271	0.179	0.234	0.235	0.145	0.171
Mean i	0.407	0.265	0.253	0.231	0.374	0.398	0.266	0.18	360	377	275	297
MAD i	0.009	0.009	0.009	0.003	0.005	0.005	0.008	0.006	0.027	0.012	0.009	0.004
IQR i	0.018	0.017	0.022	0.009	0.024	0.010	0.022	0.013	400	419	306	330
Robust CV % i	4.4	6.5	8.6	3.8	6.5	2.4	7.9	7				
Median f	0.402	0.262	0.25	0.233	0.361	0.396	0.273	0.179	0.222	0.232	0.14	0.169
Mean f	0.406	0.265	0.253	0.231	0.362	0.398	0.272	0.18	0.227	0.227	0.142	0.168
MAD f	0.005	0.009	0.009	0.003	0.004	0.005	0.006	0.006	0.021	0.01	0.01	0.003
IQR f	0.013	0.017	0.022	0.009	0.007	0.010	0.0146	0.013	0.036	0.020	0.014	0.008
Robust CV % f	3.2	6.5	8.6	3.8	2	2.4	5.4	7	16	8.8	10	4.6
Outliers	1	0	0	0	1	0	0	0	1	1	1	1
Stragglers	1	0	0	0	1	0	0	0	0	0	0	0

2012-13: Total N – Dumas (7A5) %N oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	17	17	17	17	16	16	16	16	16	16	16	16
Minimum	0.294	0.197	0.155	0.211	0.321	0.387	0.242	0.16	0.2	0.164	0.114	0.156
Maximum	0.466	0.3	0.286	0.27	0.428	0.46	0.308	0.216	0.284	0.269	0.196	0.211
Median i	0.425	0.274	0.258	0.243	0.405	0.436	0.294	0.196	0.244	0.246	0.17	0.185
Mean i	0.42	0.268	0.256	0.244	0.396	0.433	0.289	0.194	0.249	0.24	0.165	0.186
MAD i	0.015	0.01	0.012	0.008	0.01	0.013	0.012	0.01	0.01	0.007	0.01	0.008
IQR i	0.026	0.018	0.016	0.012	0.015	0.019	0.020	0.016	0.025	0.010	0.021	0.013
Robust CV % i	6.1	6.6	6.3	5.0	3.6	4.3	6.9	8.3	10	4.2	13	6.8
Median f	0.431	0.276	0.26	0.243	0.407	0.436	0.294	0.196	0.243	0.248	0.172	0.184
Mean f	0.432	0.276	0.262	0.245	0.406	0.436	0.292	0.194	0.245	0.25	0.171	0.184
MAD f	0.012	0.008	0.011	0.007	0.009	0.011	0.01	0.01	0.002	0.007	0.008	0.001
IQR f	0.021	0.014	0.014	0.010	0.015	0.019	0.019	0.016	0.005	0.011	0.014	0.001
Robust CV % f	4.8	5.1	5.5	4.0	3.6	4.3	6.6	8.3	2.1	4.3	8.3	0.71
Outliers	1	2	1	1	2	1	1	0	3	3	1	1
Stragglers	1	0	0	1	0	0	0	0	3	0	1	7

2012-13: Water Soluble Nitrate N—autocolour (7B1) mg N/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	20	20	20	20	19	19	19	19	20	20	20	20
Minimum	53	5	20	3.7	0.73	22	12	16	5.4	74	12	12
Maximum	74	71	55	22	15	75	35	23	141	230	60	27
Median i	69	7.9	49	17	6.7	70	31	20	17	174	20	24
Mean i	67	12	47	16	6.7	67	31	21	22	158	22	23
MAD i	3	1.6	3.5	1	1.6	2	1	0.8	0.85	19	1.9	1.7
IQR i	4.5	2.5	5	2.2	2.1	3.3	1.9	1.2	1.3	47	3.2	3.4
Robust CV % i	6.5	32	10	13	32	4.8	6	5.9	7.7	27	16	14
Median f	70	7.7	50	17	6.7	70	31	20	18	178	20	24
Mean f	70	7.7	49	17	6.5	70	31	21	18	178	20	24
MAD f	2.4	1.5	3.3	0.25	0.8	1	1	0.7	0.6	6.3	1.7	1.5
IQR f	3.9	2.1	4.8	0.537	1.6	2.1	1.3	0.908	0.741	12	2.4	2.1
Robust CV % f	5.6	27	9.7	3.2	24	3	4.2	4.5	4.2	6.6	12	9
Outliers	3	3	2	4	2	2	2	1	4	4	2	2
Stragglers	0	0	0	4	4	2	0	2	1	4	0	0

2012-13: KCl Extractable Nitrate N — autocolour (7C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	24	24	24	24	23	23	23	23	26	26	26	25
Minimum	59	6.4	28	13	5.4	60	27	17	1.5	16	1.6	2
Maximum	170	54	57	41	13	80	34	23	52	249	32	45
Median i	69	8.1	48	17	6.8	69	31	20	16	180	19	24
Mean i	74	11	48	17	7.1	69	31	20	18	153	17	25
MAD i	2.3	0.735	3	1.8	0.61	2.5	1.2	1.2	1.4	9.9	2	1.6
IQR i	3.9	1.3	5.0	3.0	0.778	4.4	2.6	1.9	2.2	35	2.5	2.2
Robust CV % i	5.6	16	10	18	11	6.5	8.4	9.7	14	20	13	9.2
Median f	69	7.9	48	17	6.8	68	31	20	16	182	19	24
Mean f	69	8.0	49	16	6.6	68	31	20	16	182	18	24
MAD f	1.7	0.63	3	1.6	0.45	2	1.2	1.2	1	4	0.8	1.1
IQR f	2.7	1	4.5	2.7	0.741	3.7	2.6	1.9	1.5	5.9	1.9	1.6
Robust CV % f	3.8	13	9.3	17	11	5.4	8.4	9.7	9.3	3.3	10	6.7
Outliers	5	3	1	2	2	1	0	0	4	8	4	5
Stragglers	1	0	0	0	0	2	0	0	3	4	1	2

2012-13: KCl Ext. Ammonium N — autocolour (7C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	25	25	25	25	26	26	26	26	24	24	24	24
Minimum	69	7.2	31	30	51	88	12	15	4.4	3.8	1.1	4.7
Maximum	189	62	60	49	436	182	41	55	56	53	31	62
Median i	161	52	51	38	181	165	15	27	39	34	8.3	41
Mean i	156	50	51	38	179	161	16	28	37	33	9.3	39
MAD i	9	2.7	1.9	2.2	12	9.8	1.3	1.9	1.8	1	0.92	1.1
IQR i	17	4.2	3.6	3.4	23	16	2.2	3.2	2.2	1.5	1.4	2.1
Robust CV % i	10	8.0	6.9	9.0	13	9.9	15	12	5.7	4.5	17	5.1
Median f	163	53	51	38	181	165	15	27	39	34	8.1	41
Mean f	163	53	52	38	178	164	15	27	39	34	8.2	41
MAD f	7.7	1	1.7	2	12	9.6	1.1	1.8	1.1	0.9	0.65	1
IQR f	12	1.5	2.7	3.1	20	15	1.5	2.9	2.0	0.871	0.921	1.5
Robust CV % f	7.2	2.8	5.3	8.1	11	9.2	10	11	5.2	2.6	11	3.7
Outliers	2	4	4	4	3	1	3	2	4	6	5	6
Stragglers	1	6	0	0	0	0	0	0	0	1	0	0

2012-13: Total P – Pooled % oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	19	19	19	19	20	20	20	20	19	19	19	19
Minimum	0.067	0.041	0.027	0.013	0.039	0.062	0.08	0.011	0.014	0.027	0.031	0.037
Maximum	0.128	0.655	0.406	0.206	0.112	0.219	0.147	0.143	0.023	0.045	0.061	0.066
Median i	0.112	0.063	0.042	0.02	0.098	0.115	0.11	0.017	0.020	0.04	0.052	0.057
Mean i	0.107	0.091	0.059	0.029	0.09	0.117	0.108	0.023	0.019	0.039	0.051	0.056
MAD i	0.008	0.004	0.003	0.001	0.009	0.007	0.008	0.001	0.001	0.002	0.005	0.003
IQR i	0.016	0.005	0.004	0.002	0.016	0.012	0.012	0.002	0.003	0.004	0.009	0.006
Robust CV % i	14	8.3	10	11	16	10	11	12	15	9.1	18	10
Median f	0.114	0.064	0.042	0.02	0.099	0.117	0.11	0.016	0.02	0.041	0.053	0.059
Mean f	0.111	0.063	0.042	0.020	0.096	0.118	0.109	0.016	0.020	0.041	0.052	0.058
MAD f	0.007	0.004	0.002	0.001	0.005	0.006	0.005	0.0003	0.001	0.001	0.004	0.003
IQR f	0.012	0.005	0.004	0.002	0.014	0.011	0.009	0.001	0.002	0.002	0.007	0.004
Robust CV % f	11	7.2	8.5	7.7	14	9.3	8.1	3.6	9.8	4	14	6.2
Outliers	2	4	2	5	2	3	2	5	1	3	1	2
Stragglers	0	0	2	0	1	1	1	2	1	1	0	0

2012-13: Colwell Extractable P — pooled (9B1 + 9B2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	30	30	30	30	31	31	31	31	30	30	30	30
Minimum	33	54	105	13	31	20	54	4	6	85	40	34
Maximum	57	106	148	39	1080	1330	1110	193	38	147	68	78
Median i	44	68	125	28	71	44	155	16	28	102	48	48
Mean i	44	70	128	28	102	85	183	22	27	104	49	48
MAD i	4	2.9	6	1.5	4.2	3	7.3	2	2.3	5.5	3.6	3.1
IQR i	6.3	6.5	11	2.4	5.9	4.1	13	2.2	3.6	8.4	5.4	4.8
Robust CV % i	14	9.6	8.8	8.5	8.4	9.3	8.6	14	13	8.2	11	10
Median f	44	67	125	28	72	44	154	16	29	102	47	48
Mean f	44	68	126	28	72	44	154	16	28	101	48	47
MAD f	4	1.3	5	1	3	1.2	6.6	1.2	1.6	3	3.2	1.3
IQR f	6.3	2.0	7.4	1.6	4.8	2.4	11	1.6	2.6	4.6	5.3	1.9
Robust CV % f	14	3	5.9	5.8	6.7	5.4	6.8	10	9.2	4.5	11	4.1
Outliers	0	4	3	6	4	7	6	5	4	3	1	6
Stragglers	0	6	2	1	2	2	1	2	1	4	0	4

2012-13: Olsen Extractable P — Pooled (9C1 + 9C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	24	24	24	24	25	25	25	25	26	26	26	26
Minimum	9.2	20	39	8.4	2.5	2.2	3.2	2.2	4	20	7.6	6.5
Maximum	41	30	82	31	34	21	59	29	167	134	30	27
Median i	12	24	47	18	23	11	39	9.5	17	42	19	13
Mean i	13	24	48	18	22	11	40	9.9	23	44	19	15
MAD i	1.5	2	3.2	1.7	2.2	1	3.1	1.5	1.5	3.2	1.2	1.8
IQR i	2.2	3.5	4.6	2.7	3.5	1.9	4.5	2.3	2.5	4.7	1.6	2.2
Robust CV % i	19	15	9.9	15	15	17	12	24	15	11	8.5	17
Median f	11	24	46	17	24	11	39	9.5	17	42	19	13
Mean f	11	24	45	17	23	11	40	9.4	17	42	19	13
MAD f	1.1	2	1.9	1.2	2.3	1	3.0	1.5	1	2.3	0.95	0.6
IQR f	1.6	3.5	3.5	2.1	3	1.1	3.7	2.3	1.6	3.6	1.0	1.2
Robust CV % f	14	15	7.7	12	13	10	9.5	24	9.4	8.5	5.5	9.1
Outliers	3	0	3	5	4	4	3	2	5	4	5	4
Stragglers	1	0	1	0	1	0	0	0	0	1	1	3

2012-13: Bray-1 Extractable P — pooled (9E1 + 9E2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	12	12	12	12	9	9	9	9	9	9	9	9
Minimum	6.8	22	37	5.1	16	8.89	48	5.8	6.8	12	5	12
Maximum	34	170	224	29	27	14	77	14	21	63	120	100
Median i	9.9	31	86	13	18	10	57	8.2	14	45	16	16
Mean i	12	43	86	14	19	11	59	8.8	14	43	26	25
MAD i	0.885	3	23	2.6	1.2	1.2	3.6	0.9	2.2	6.9	3.8	3
IQR i	1.6	4.7	36	5.9	3.3	2.7	9.5	1.8	4.0	17	5.6	4.7
Robust CV % i	16	15	42	47	18	26	17	22	29	39	35	29
Median f	9.9	30	85	12	18	10	55	8.2	14	46	15	16
Mean f	10	30	74	11	18	11	55	8.2	14	47	15	15
MAD f	0.57	3	21	1.4	0.95	1.2	2.1	0.655	2.2	7.2	3.4	2
IQR f	1.3	4.9	28	2.4	2.5	2.7	3.6	1.6	4.0	15	5.0	3.0
Robust CV % f	13	16	33	21	14	26	6.5	19	29	33	32	19
Outliers	1	2	1	1	0	1	1	0	1	1	1	1
Stragglers	1	0	0	2	0	0	1	0	0	0	0	0

2012-13: Acid Extractable P — pooled (9G1 + 9G2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	7	7	7	7	9	9	9	9	8	8	8	8
Minimum	29	119	161	24	102	26	300	15	24	140	84	84
Maximum	39	179	228	33	154	64	527	31	31	250	121	168
Median i	36	156	207	30	111	31	410	18	26	160	109	111
Mean i	36	153	205	30	116	34	405	19	27	172	105	117
MAD i	2	4	6	2	8	2	36	2.8	1.5	15	13	8.8
IQR i	2.8	10	8.9	3.3	13	4.5	59	4.9	3.8	30	23	27
Robust CV % i	7.8	6.7	4.3	11	12	14	14	27	15	19	21	24
Median f	36	157	210	30	111	31	410	17	26	159	109	105
Mean f	36	157	213	30	111	31	405	18	27	160	105	104
MAD f	2	1	4.5	2	7.8	1.6	36	1.8	1.5	13	13	5.8
IQR f	2.8	3.0	10	3.3	12	3.6	59	4.2	3.8	21	23	12
Robust CV % f	7.8	1.9	4.9	11	11	12	14	24	15	14	21	12
Outliers	0	2	1	0	1	1	0	1	0	1	0	1
Stragglers	0	1	0	0	0	0	0	0	0	0	0	1

2012-13: Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	23	23	23	23	23	23	23	23	22	22	22	22
Minimum	99	87	49.1	63.6	103	346	185	91	79.9	54	61.7	231
Maximum	712	677	392	112	165	503	250	117	103	83	123	351
Median i	437	364	77	92	141	439	226	104	93	70.9	105	277
Mean i	430	368	91.5	88	140	436	223	104	92.7	70.9	103	278
MAD i	34	40	4	2.2	5	20	10.5	5	2.35	4.6	4.25	19.5
IQR i	45.2	60	6.67	10.3	7.41	29.7	16.3	7.56	4.61	7.67	6.86	25
Robust CV % i	10	16	8.7	11	5.3	6.8	7.2	7.3	5	11	6.6	9
Median f	451	365	77	92	141	440	228	104	93	71	105	275
Mean f	450	372	76.8	92	140	440	226	104	92.5	71.7	104	274
MAD f	25	20.5	2.1	1.35	5	19	11	5	1	3.9	3.75	20
IQR f	35.6	43.2	3.48	2.22	7.41	28.9	16.1	7.56	2.74	7.38	6.3	29.3
Robust CV % f	7.9	12	4.5	2.4	5.3	6.6	7.1	7.3	2.9	10	6	11
Outliers	3	4	5	8	2	1	2	0	3	1	2	1
Stragglers	1	1	1	1	0	0	0	0	2	0	0	0

2012-13: Phosphorus buffer index - Olsen (9I3a + 9I3b + 9I3c) L/kg air dry NOT ASSESSABLE

Statistical parameters	Soil sample identification and value											
	December 2012 (Round 212) NOT ASSESSABLE				March 2013 (Round 412)				May 2013 (Round 612) NOT ASSESSABLE			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	2	2	2	2	2	2	2	2	2	2	2	2
Minimum	507	417	91	83.1	134	510	209	90.6	83.3	84	113	306
Maximum	512	420	91.6	83.6	136	512	210	91.2	84	86	115	309
Median i	510	419	91.3	83.4	135	511	210	90.9	83.7	85	114	308
Mean i	510	419	91.3	83.4	135	511	210	90.9	83.7	85	114	308
MAD i	2.5	1.5	0.3	0.25	1	1	0.5	0.3	0.35	1	1	1.5
IQR i												
Robust CV % i												
Median f	510	419	91.3	83.4	135	511	210	90.9	83.7	85	114	308
Mean f	510	419	91.3	83.4	135	511	210	90.9	83.7	85	114	308
MAD f	2.5	1.5	0.3	0.25	1	1	0.5	0.3	0.35	1	1	1.5
IQR f												
Robust CV % f												
Outliers	0	0	0	0	0	0	0	0	0	0	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2012-13: Phosphorus buffer index - Unadj (9I4a + 9I4b + 9I4c) L/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	12	12	12	12	14	14	14	14	11	11	11	11
Minimum	184	184	29.6	56.8	89	331	148	87	74.6	43	52.2	220
Maximum	515	622	85	107	149	487	246	114	98	72.2	133	315
Median i	395	322	51	85.8	122	409	181	98.7	86.7	50	90	261
Mean i	385	333	51.9	82	123	409	185	99.6	86.6	52	92	259
MAD i	49	59.5	5	8	5	13	14	4.5	3.3	6.6	3	9
IQR i	88.4	96.2	7.14	11.5	8.71	24.6	21.5	7.88	5.19	12.3	5.56	27.4
Robust CV % i	22	30	14	13	7.1	6	12	8	6	25	6.2	11
Median f	409	307	51	85.8	121	409	179	98.7	86.7	50	89.7	262
Mean f	403	307	50.8	82	121	409	180	99.6	86.6	52	90.6	261
MAD f	37	52	3.5	8	3	11.5	11	4.5	3.3	6.6	2.25	7.5
IQR f	63.8	83	5.84	11.5	4.45	18.7	18.9	7.88	5.19	12.3	4.73	10.7
Robust CV % f	16	27	11	13	3.7	4.6	11	8	6	25	5.3	4.1
Outliers	1	1	2	0	3	2	1	0	0	0	2	2
Stragglers	0	0	0	0	0	0	0	0	0	1	1	1

2012-13: Phosphate Extractable S – Pooled (10B1 + 10B2 + 10B3 +10B4) mg/kg air dry

Statistical parameters	Soil sample identification and value											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	7	7	7	7	9	9	9	9	7	7	7	7
Minimum	24	31	11	2	15	23	35	5.7	12	18	12	30
Maximum	87	67	33	27	41	70	54	20	25	38	19	59
Median i	58	47	24	17	32	57	43	17	17	30	15	48
Mean i	56	49	24	16	31	50	44	15	18	30	15	48
MAD i	9.4	13	3.5	7.7	3.4	13	7	1.4	3	1.7	2.9	3.5
IQR i	19	21	5.2	14	7.5	26	9.1	4.3	6.8	6.7	5.0	9.7
Robust CV % i	32	45	21	81	24	45	21	26	40	22	34	20
Median f	58	47	24	17	32	57	43	18	17	30	15	49
Mean f	56	49	24	16	33	50	44	18	18	32	15	51
MAD f	9.4	13	3.5	7.7	2.7	13	7	1.5	3	1.6	2.9	3.6
IQR f	19	21	5.2	14	7	26	9.1	2.4	6.8	6.2	5.0	8.9
Robust CV % f	32	45	21	81	22	45	21	14	40	21	34	18
Outliers	0	0	0	0	1	0	0	2	0	1	0	1
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2012-13: KCl₄₀ Extractable S (10D1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	16	16	16	16	18	18	18	18	17	17	17	17
Minimum	16	23	23	5	28	21	32	7.4	5.9	25	6.5	18
Maximum	39	41	34	17	50	43	53	16	23	38	42	51
Median i	27	32	27	13	30	28	38	10	14	32	12	33
Mean i	27	33	27	13	32	28	38	10	14	32	15	34
MAD i	4.2	3	1.8	1.2	1.7	2.5	1.4	0.93	0.7	1.3	1.1	1.3
IQR i	7	5.7	3.1	2.1	2.7	4.4	2.9	1.6	1.1	2.3	2.4	2.1
Robust CV % i	26	18	12	16	9	16	7.6	16	7.9	7.2	21	6.3
Median f	27	32	27	14	30	28	38	9.9	14	32	12	33
Mean f	27	33	27	14	30	27	38	9.8	14	32	12	34
MAD f	4.2	3	1.7	0.875	1.4	2.5	1.3	0.86	0.325	0.65	0.88	1.1
IQR f	7	5.7	3	2	2.3	4.1	2.4	1.5	0.58	1.3	0.815	1.8
Robust CV % f	26	18	11	14	7.7	15	6.5	15	4.1	4.1	6.9	5.3
Outliers	0	0	1	2	1	1	2	1	5	2	4	2
Stragglers	0	0	0	0	1	0	0	0	1	0	0	0

2012-13: DTPA Extractable Cu (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	29	29	29	28	29	29	29	29	31	31	31	31
Minimum	0.353	0.703	0.17	0.062	0.522	0.162	0.279	0.097	0.03	0.068	2	0.678
Maximum	0.74	2.6	0.56	0.38	2.8	1.18	2.2	0.6	0.982	1.8	6.65	2.2
Median i	0.57	1.3	0.33	0.231	2.1	0.574	1.5	0.29	0.23	0.542	3.64	1.2
Mean i	0.572	1.3	0.347	0.235	2.0	0.601	1.5	0.295	0.274	0.591	3.8	1.2
MAD i	0.064	0.1	0.041	0.022	0.1	0.042	0.14	0.03	0.025	0.058	0.25	0.06
IQR i	0.093	0.163	0.068	0.036	0.174	0.077	0.204	0.053	0.054	0.087	0.385	0.096
Robust CV % i	16	13	21	16	8.3	13	13	18	24	16	11	8.3
Median f	0.572	1.3	0.326	0.229	2.1	0.572	1.6	0.29	0.225	0.538	3.6	1.1
Mean f	0.580	1.3	0.336	0.229	2.1	0.575	1.6	0.292	0.226	0.537	3.7	1.1
MAD f	0.058	0.09	0.029	0.019	0.09	0.039	0.1	0.017	0.006	0.046	0.15	0.05
IQR f	0.082	0.145	0.057	0.029	0.115	0.059	0.159	0.027	0.011	0.069	0.311	0.087
Robust CV % f	14	11	17	13	5.4	10	10	9.5	4.8	13	8.6	7.8
Outliers	1	4	3	3	7	6	3	7	7	4	6	7
Stragglers	0	1	1	1	1	0	1	3	4	1	2	0

2012-13: DTPA Extractable Fe (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	29	29	29	29	28	28	28	28	31	31	31	31
Minimum	84	62	154	242	53	45	70	147	147	0.318	21	83
Maximum	303	237	364	647	268	233	183	534	985	656	71	315
Median i	129	155	193	402	207	124	105	390	402	296	35	136
Mean i	141	160	202	414	200	125	108	380	427	309	39	145
MAD i	25	16	11	27	14	11	5	15	46	33	5.3	16
IQR i	40	32	20	53	21.5	15	8.0	21	81	49	9.6	20
Robust CV % i	31	21	11	13	10	12	7.6	5.4	20	17	27	15
Median f	128	155	190	402	208	124	105	392	402	295	35	132
Mean f	135	153	190	406	211	122	105	394	410	298	36	132
MAD f	24	9.9	8.8	20	11	7	5	11	40	30	4.2	11
IQR f	39	15	13	31	16	11	7.4	16	61	45	8.7	16
Robust CV % f	30	9.8	7	7.8	7.8	9	7.1	4.2	15	15	25	12
Outliers	1	4	6	6	4	4	5	6	4	4	3	4
Stragglers	0	1	1	1	1	3	0	0	0	1	1	1

2012-13: DTPA Extractable Mn (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	28	28	28	28	27	27	27	27	30	30	30	30
Minimum	40	40	6	1.7	9	6.4	5.6	1.3	1.1	5	9.2	50
Maximum	93	141	18	10	216	108	72	11	479	29	163	289
Median i	72	103	7.7	5.0	169	76	38	7.1	5.3	17	91	151
Mean i	71	99	8.8	4.7	149	74	37	6.5	21	17	90	154
MAD i	4.9	8.5	0.795	0.605	14	4.4	2.9	0.39	0.51	1.1	8.1	9
IQR i	7.6	12	2.1	1.8	42	8.1	4.2	0.801	0.986	1.8	13	13
Robust CV % i	11	12	28	36	25	11	11	11	19	11	14	8.9
Median f	72	103	7.2	5.3	172	76	38	7.2	5.4	17	91	149
Mean f	73	102	7.3	5.3	174	77	38	7.2	5.4	17	90	150
MAD f	4.5	7	0.5	0.35	7.5	3.6	2.4	0.12	0.145	0.695	8	5.5
IQR f	7.1	10	0.817	0.474	12	6.2	4	0.237	0.278	0.995	10	9.5
Robust CV % f	9.8	10	11	8.9	6.8	8.2	11	3.3	5.1	5.9	11	6.3
Outliers	4	4	5	5	6	7	7	8	7	7	5	7
Stragglers	0	1	3	5	3	0	0	2	5	3	0	1

2012-13: DTPA Extractable Zn (12A1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	28	28	28	28	29	29	29	29	31	31	31	31
Minimum	1	2	2	1	1.7	1.1	3.2	0.508	0.51	1.8	0.93	1.1
Maximum	8.2	9	8.3	5.7	3.6	3.94	13	2.2	2.2	6.1	2.3	3.9
Median i	2.8	4	3.3	1	2.8	2.8	10	0.91	1.1	3.4	1.3	2.1
Mean i	2.9	4.2	3.5	1.2	2.8	2.8	10	0.989	1.1	3.5	1.4	2.2
MAD i	0.195	0.245	0.115	0.087	0.12	0.08	0.54	0.07	0.05	0.177	0.11	0.18
IQR i	0.298	0.343	0.195	0.118	0.196	0.137	0.834	0.150	0.148	0.294	0.163	0.274
Robust CV % i	11	8.5	5.9	12	7	4.9	8.1	16	14	8.6	13	13
Median f	3	4	3.3	1	2.8	2.8	10	0.897	1.0	3.4	1.2	2.1
Mean f	2.8	4.1	3.3	1.0	2.8	2.8	10	0.9	1.0	3.4	1.2	2.1
MAD f	0.175	0.14	0.055	0.08	0.11	0.06	0.5	0.032	0.033	0.12	0.09	0.13
IQR f	0.258	0.215	0.085	0.093	0.178	0.1	0.738	0.057	0.052	0.215	0.152	0.208
Robust CV % f	9.3	5.3	2.6	9.3	6.3	3	7.1	6.4	5	6.3	12	10
Outliers	2	3	5	3	6	6	4	7	7	5	5	5
Stragglers	0	3	3	0	0	1	0	2	3	1	1	2

2012-13: Hot CaCl₂ Extractable B — pooled (12C1 + 12C2) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	19	19	19	19	20	20	20	20	20	20	20	20
Minimum	0.527	0.353	0.493	0.023	0.442	0.416	0.88	0.074	0.103	0.293	0.39	0.208
Maximum	1.7	1.2	2.9	1.4	0.98	1.3	1.6	0.91	2.5	1.0	2.9	1.8
Median i	0.94	0.545	0.827	0.301	0.8	0.929	1.3	0.352	0.307	0.629	0.936	0.407
Mean i	1.0	0.601	1.0	0.458	0.792	0.920	1.3	0.359	0.451	0.629	1.0	0.467
MAD i	0.17	0.055	0.044	0.099	0.06	0.082	0.12	0.060	0.047	0.07	0.091	0.044
IQR i	0.319	0.096	0.111	0.275	0.111	0.142	0.178	0.086	0.113	0.103	0.147	0.070
Robust CV % i	34	18	13	91	14	15	13	25	37	16	16	17
Median f	0.94	0.542	0.827	0.3	0.8	0.929	1.4	0.352	0.302	0.628	0.936	0.403
Mean f	0.927	0.533	0.836	0.269	0.814	0.934	1.4	0.339	0.291	0.613	0.962	0.396
MAD f	0.16	0.039	0.036	0.02	0.032	0.06	0.1	0.039	0.028	0.048	0.087	0.032
IQR f	0.245	0.067	0.061	0.068	0.086	0.085	0.141	0.065	0.041	0.074	0.142	0.050
Robust CV % f	26	12	7.4	23	11	9.2	10	18	14	12	15	13
Outliers	2	3	5	4	2	4	1	4	6	3	2	3
Stragglers	0	2	0	2	1	0	0	2	1	2	0	0

2012-13: Exchangeable Ca — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	18	18	15	15	15	15	17	17	17	17
Minimum	6.7	5.24	9.2	0.662	15	6.39	8.3	1	0.8	4.27	16.8	0.119
Maximum	8.28	6.56	11	2.51	19.9	9.5	9.51	2.12	8.58	8.97	24.1	6.8
Median i	7.6	5.85	10.1	1.1	18.2	7.6	8.9	1.13	1.09	7.95	21.7	5.97
Mean i	7.53	5.85	10.1	1.17	18.2	7.73	8.91	1.22	1.52	7.83	21.3	5.69
MAD i	0.35	0.205	0.195	0.075	0.3	0.2	0.29	0.05	0.06	0.26	0.49	0.23
IQR i	0.552	0.313	0.404	0.122	0.371	0.274	0.445	0.074	0.119	0.545	1	0.315
Robust CV % i	7.3	5.4	4	11	2	3.6	5	6.6	11	6.9	4.6	5.3
Median f	7.6	5.85	10.1	1.09	18.2	7.6	8.9	1.11	1.08	7.98	21.7	5.97
Mean f	7.53	5.85	10.2	1.08	18.2	7.6	8.91	1.11	1.08	8.07	21.4	5.99
MAD f	0.35	0.205	0.125	0.06	0.2	0.1	0.29	0.04	0.045	0.225	0.49	0.19
IQR f	0.552	0.313	0.261	0.111	0.259	0.163	0.445	0.059	0.070	0.469	0.778	0.23
Robust CV % f	7.3	5.4	2.6	10	1.4	2.1	5	5.3	6.5	5.9	3.6	3.8
Outliers	0	0	3	3	2	3	0	2	3	3	4	1
Stragglers	0	0	1	0	3	1	0	0	2	0	0	1

2012-13: Exchangeable Mg — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	18	18	15	15	15	15	17	17	17	17
Minimum	0.98	0.86	0.77	0.2	3.82	1.05	1.93	0.35	0.2	0.541	7.99	0.031
Maximum	1.33	1.16	1.05	0.54	4.83	1.65	2.31	0.588	2.63	4.81	14.2	1
Median i	1.2	1.03	0.877	0.255	4.52	1.21	2.1	0.38	0.263	4.23	12.9	0.865
Mean i	1.19	1.04	0.875	0.275	4.52	1.22	2.08	0.395	0.534	4.04	12.4	0.83
MAD i	0.015	0.03	0.039	0.024	0.1	0.04	0.05	0.012	0.029	0.2	0.8	0.035
IQR i	0.026	0.069	0.052	0.032	0.141	0.052	0.045	0.025	0.053	0.319	1	0.063
Robust CV % i	2.2	6.7	5.9	12	3.1	4.3	2.1	6.4	20	7.5	7.8	7.3
Median f	1.2	1.03	0.874	0.254	4.56	1.21	2.1	0.38	0.262	4.24	13	0.863
Mean f	1.2	1.03	0.865	0.259	4.58	1.2	2.08	0.381	0.264	4.26	12.9	0.865
MAD f	0.01	0.02	0.034	0.023	0.09	0.03	0.04	0.011	0.026	0.18	0.69	0.029
IQR f	0.015	0.037	0.050	0.032	0.146	0.048	0.041	0.019	0.042	0.308	1.04	0.045
Robust CV % f	1.2	3.6	5.7	13	3.2	4	1.9	5	16	7.3	8	5.2
Outliers	6	3	1	1	1	2	1	1	2	1	1	2
Stragglers	1	1	0	0	0	0	1	0	0	1	1	1

2012-13: Exchangeable Na — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	18	18	15	15	15	15	17	17	17	17
Minimum	0.13	0.2	0.01	0.03	0.052	0.075	0.15	0.019	0.02	0.281	0.6	0.099
Maximum	0.355	0.499	0.219	0.27	1.2	0.216	0.315	0.12	0.648	0.63	0.92	0.78
Median i	0.184	0.27	0.045	0.061	0.126	0.182	0.256	0.093	0.061	0.555	0.728	0.25
Mean i	0.196	0.283	0.061	0.078	0.205	0.174	0.26	0.088	0.121	0.533	0.734	0.289
MAD i	0.019	0.025	0.014	0.011	0.021	0.018	0.036	0.01	0.021	0.029	0.048	0.032
IQR i	0.035	0.041	0.024	0.016	0.039	0.025	0.035	0.013	0.032	0.059	0.074	0.06
Robust CV % i	19	15	53	26	31	13	14	14	53	11	10	24
Median f	0.182	0.265	0.04	0.06	0.12	0.183	0.256	0.093	0.06	0.561	0.698	0.231
Mean f	0.174	0.265	0.037	0.059	0.118	0.186	0.26	0.093	0.057	0.56	0.71	0.244
MAD f	0.012	0.023	0.009	0.01	0.018	0.016	0.036	0.01	0.004	0.026	0.037	0.019
IQR f	0.021	0.033	0.013	0.016	0.028	0.023	0.035	0.015	0.009	0.041	0.051	0.032
Robust CV % f	12	13	33	26	23	13	14	16	15	7.3	7.3	14
Outliers	2	1	3	3	2	1	0	1	3	2	1	3
Stragglers	2	1	1	0	0	1	0	0	4	0	1	1

2012-13: Exchangeable K — 1M NH₄Cl extract (15A1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	18	18	15	15	15	15	17	17	17	17
Minimum	0.268	0.59	0.548	0.183	1.77	0.298	1.56	0.247	0.06	0.38	0.65	0.162
Maximum	0.361	0.809	0.69	0.282	2.22	0.488	2.28	0.38	0.779	0.944	1.69	0.532
Median i	0.306	0.726	0.603	0.23	2.1	0.317	2.01	0.263	0.23	0.41	0.844	0.483
Mean i	0.307	0.713	0.605	0.23	2.04	0.328	2	0.278	0.247	0.442	0.881	0.45
MAD i	0.016	0.045	0.024	0.014	0.08	0.013	0.11	0.013	0.02	0.017	0.034	0.035
IQR i	0.023	0.073	0.037	0.024	0.148	0.019	0.148	0.023	0.030	0.026	0.068	0.050
Robust CV % i	7.6	10	6.2	10	7.1	5.8	7.4	8.7	13	6.4	8	10
Median f	0.306	0.726	0.6	0.23	2.11	0.315	2.06	0.261	0.23	0.402	0.844	0.487
Mean f	0.307	0.713	0.6	0.226	2.08	0.317	2.04	0.263	0.224	0.406	0.843	0.49
MAD f	0.016	0.045	0.024	0.01	0.06	0.012	0.085	0.011	0.016	0.011	0.03	0.018
IQR f	0.023	0.073	0.037	0.019	0.096	0.019	0.133	0.019	0.027	0.022	0.041	0.035
Robust CV % f	7.6	10	6.2	8.4	4.6	6.1	6.5	7.1	12	5.3	4.9	7.1
Outliers	0	0	1	1	1	1	1	2	2	2	4	2
Stragglers	0	0	0	2	1	0	0	0	0	0	0	1

2012-13: Exchangeable Ca — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	24	24	24	24	24	24	24	24	24	24	24	24
Minimum	0.035	0.027	0.05	0.005	12.6	5.86	5.99	0.901	0.777	6.31	17.2	5.1
Maximum	10.9	10.7	18.2	1.7	19.7	8.6	10.4	1.64	3.36	21	37	20
Median i	7.02	5.34	9.84	0.981	17.1	7.36	8.48	1.05	1.01	7.93	21.1	5.77
Mean i	6.58	4.79	8.7	0.931	17.3	7.29	8.5	1.14	1.15	8.54	21.7	6.46
MAD i	0.26	0.23	0.45	0.16	0.6	0.225	0.42	0.07	0.065	0.36	1.1	0.375
IQR i	0.5	0.373	0.689	0.315	1.02	0.315	0.65	0.16	0.092	0.58	2.06	0.56
Robust CV % i	7.1	7	7	32	6	4.3	7.7	15	9.1	7.3	9.8	9.7
Median f	7.09	5.41	9.85	0.987	17.1	7.36	8.48	1.03	0.996	7.93	21	5.71
Mean f	7.01	5.45	9.86	1.01	17.3	7.34	8.53	1.05	0.987	7.87	20.9	5.71
MAD f	0.18	0.155	0.3	0.066	0.287	0.22	0.335	0.05	0.055	0.285	0.5	0.35
IQR f	0.276	0.217	0.471	0.132	0.887	0.293	0.541	0.093	0.083	0.465	0.845	0.545
Robust CV % f	3.9	4	4.8	13	5.2	4	6.4	9	8.3	5.9	4	9.5
Outliers	5	6	7	4	4	3	2	4	4	3	3	2
Stragglers	1	0	0	2	2	0	2	1	0	1	4	0

2012-13: Exchangeable Mg — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	24	24	24	24	24	24	24	24	24	24	24	24
Minimum	0.01	0.009	0.008	0.002	3.85	0.992	1.63	0.317	0.191	3.39	0.195	0.71
Maximum	8.36	5.48	9.78	1.17	5.23	1.5	2.5	0.67	1.68	7.47	13.2	4.33
Median i	1.14	1	0.83	0.247	4.28	1.12	1.98	0.373	0.251	4.09	12.4	0.843
Mean i	1.43	1.13	1.18	0.257	4.32	1.14	1.96	0.395	0.319	4.17	11.6	1.1
MAD i	0.095	0.082	0.045	0.026	0.2	0.05	0.09	0.033	0.023	0.235	0.64	0.055
IQR i	0.217	0.116	0.065	0.042	0.317	0.072	0.122	0.046	0.042	0.334	1.11	0.076
Robust CV % i	19	12	7.8	17	7.4	6.5	6.2	12	17	8.2	9	9
Median f	1.13	1	0.827	0.248	4.26	1.11	1.98	0.372	0.249	4.07	12.5	0.806
Mean f	1.11	0.99	0.825	0.243	4.28	1.12	1.97	0.377	0.248	4.03	12.3	0.81
MAD f	0.03	0.025	0.026	0.008	0.22	0.04	0.07	0.03	0.02	0.22	0.47	0.051
IQR f	0.06	0.055	0.044	0.013	0.297	0.074	0.111	0.049	0.033	0.341	0.815	0.063
Robust CV % f	5.3	5.5	5.3	5.1	7	6.7	5.6	13	13	8.4	6.5	7.8
Outliers	6	5	6	5	1	1	3	2	2	1	2	3
Stragglers	4	3	0	4	0	0	0	0	1	0	1	2

2012-13: Exchangeable Na — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	22	23	22	22	24	24	24	24	24	24	24	24
Minimum	0.001	0.001	0.0002	0.0003	0.07	0.11	0.14	0.06	0.047	0.43	0.57	0.196
Maximum	1.17	2.09	2.03	1.78	0.393	0.295	0.383	0.26	0.307	0.89	1.49	0.56
Median i	0.17	0.257	0.048	0.061	0.117	0.169	0.239	0.091	0.073	0.547	0.73	0.246
Mean i	0.273	0.329	0.169	0.209	0.131	0.175	0.247	0.103	0.096	0.573	0.769	0.287
MAD i	0.021	0.027	0.016	0.016	0.020	0.016	0.019	0.015	0.019	0.037	0.062	0.023
IQR i	0.050	0.042	0.054	0.022	0.031	0.024	0.030	0.023	0.042	0.062	0.093	0.038
Robust CV % i	29	16	110	36	26	14	12	26	58	11	13	16
Median f	0.166	0.258	0.043	0.060	0.113	0.168	0.238	0.09	0.06	0.539	0.727	0.242
Mean f	0.166	0.263	0.041	0.058	0.116	0.17	0.237	0.090	0.063	0.534	0.72	0.238
MAD f	0.004	0.013	0.008	0.001	0.017	0.009	0.01	0.013	0.01	0.021	0.051	0.016
IQR f	0.007	0.026	0.010	0.001	0.027	0.013	0.016	0.020	0.018	0.041	0.081	0.030
Robust CV % f	4	9.9	23	2.5	24	7.9	6.9	22	30	7.6	11	13
Outliers	6	5	7	5	2	3	5	2	4	3	2	5
Stragglers	5	2	2	6	0	2	1	1	3	2	0	0

2012-13: Exchangeable K — 1M NH₄OAc extract (15D3) cmol+/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	25	25	25	25	25	25	25	25	25	25	25	25
Minimum	0.001	0.002	0.001	0.001	0.23	0.255	0.3	0.205	0.14	0.31	0.63	0.324
Maximum	5.11	1.53	1.22	0.246	2.25	2.24	2.16	2.32	0.39	0.6	1.15	0.7
Median i	0.289	0.68	0.58	0.22	1.9	0.291	1.9	0.242	0.223	0.383	0.786	0.45
Mean i	0.466	0.666	0.588	0.2	1.85	0.37	1.83	0.339	0.226	0.4	0.8	0.452
MAD i	0.027	0.051	0.047	0.009	0.06	0.01	0.09	0.014	0.015	0.02	0.061	0.015
IQR i	0.042	0.085	0.072	0.018	0.11	0.017	0.159	0.021	0.02	0.033	0.111	0.026
Robust CV % i	14	12	12	8.1	5.8	5.9	8.4	8.7	9	8.7	14	5.8
Median f	0.289	0.682	0.58	0.223	1.89	0.291	1.9	0.24	0.223	0.383	0.775	0.45
Mean f	0.291	0.675	0.582	0.223	1.87	0.29	1.91	0.239	0.22	0.384	0.785	0.448
MAD f	0.004	0.030	0.008	0.005	0.05	0.009	0.09	0.01	0.014	0.019	0.050	0.009
IQR f	0.012	0.058	0.017	0.007	0.076	0.0143	0.126	0.016	0.016	0.027	0.103	0.018
Robust CV % f	4.1	8.4	2.9	3.2	4	4.9	6.6	6.5	7.1	7.1	13	4.1
Outliers	5	6	8	5	4	5	2	3	5	4	1	5
Stragglers	5	1	4	2	2	0	0	1	0	0	0	2

2012-13: Exchangeable Al — 1M KCl (15G1) cmol+/kg oven dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	16	16	16	17	15	15	14	16	16	16	15	16
Minimum	0.011	0.014	0.005	0.252	0.005	0.029	0.003	1.49	0.933	0.006	0.001	0.008
Maximum	0.109	0.196	0.042	1.76	0.03	0.12	0.024	1.98	1.8	0.06	0.017	0.09
Median i	0.041	0.148	0.013	1.45	0.011	0.042	0.010	1.73	1.47	0.034	0.007	0.036
Mean i	0.043	0.122	0.015	1.33	0.015	0.047	0.010	1.74	1.47	0.032	0.008	0.035
MAD i	0.009	0.022	0.003	0.1	0.002	0.002	0.002	0.141	0.108	0.006	0.001	0.007
IQR i	0.017	0.082	0.004	0.162	0.007	0.004	0.003	0.222	0.167	0.013	0.002	0.014
Robust CV % i	42	56	28	11	67	8.8	27	13	11	37	33	40
Median f	0.040	0.156	0.012	1.47	0.011	0.042	0.010	1.73	1.47	0.037	0.007	0.036
Mean f	0.036	0.161	0.012	1.5	0.011	0.042	0.010	1.74	1.49	0.034	0.007	0.035
MAD f	0.009	0.01	0.002	0.08	0.002	0.002	0.002	0.141	0.06	0.007	0.0003	0.006
IQR f	0.019	0.025	0.003	0.148	0.003	0.003	0.002	0.222	0.115	0.007	0.001	0.009
Robust CV % f	47	16	28	10	24	7.1	21	13	7.8	20	11	24
Outliers	2	5	2	3	4	4	1	0	1	3	7	3
Stragglers	0	0	0	0	0	0	1	0	1	0	0	0

2012-13: Extractable K — Bicarbonate (18A1) mg/kg air dry NOT ASSESSABLE

Statistical parameters	Soil sample identification and values											
	NOT ASSESSABLE				Soil sample identification and values				NOT ASSESSABLE			
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54	
No of results	3	3	3	3	4	4	4	4	3	3	3	3
Minimum	118	295	277	82	1.9	0.287	2.2	0.259	83	165	270	172
Maximum	150	365	308	136	849	153	910	164	165	190	310	215
Median i	136	318	295	133	719	117	808	141	92	180	284	182
Mean i	135	326	293	117	572	97	632	111	113	178	288	190
MAD i	14	23	13	3	82	22	80	22	9	10	14	10
IQR i	24	52	23	40	484	87	526	99	61	19	30	32
Robust CV % i	17	16	7.8	30	67	75	65	70	66	10	10	18
Median f	136	318	295	135	753	117	865	141	92	180	284	182
Mean f	135	326	293	135	762	97	842	111	113	178	288	190
MAD f	14	23	13	1.5	68	22	45	22	9	10	14	10
IQR f	24	52	23		122	87	119	99	61	19	30	32
Robust CV % f	17	16	7.8		16	75	14	70	66	10	10	18
Outliers	0	0	0	1	1	0	1	0	0	0	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

2012-13: Aluminium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	16	16	17	17	15	15	15	15	16	16	16	16
Minimum	785	1340	414	204	612	929	1072	627	471	300	486	1068
Maximum	3710	6010	1190	1550	806	1110	1507	853	1333	1834	2126	2014
Median i	1030	1620	442	668	729	1028	1340	751	663	442	667	1481
Mean i	1190	1860	491	680	726	1020	1339	759	697	525	765	1450
MAD i	68	100	24	65	47	48	40	28	33	49	44	117
IQR i	107	163	34	91	73	67	67	53	77	71	64	158
Robust CV % i	10	10	7.6	14	10	6.5	5	7.1	12	16	9.6	11
Median f	1030	1580	442	668	729	1028	1340	751	663	440	663	1480
Mean f	1030	1590	447	654	726	1020	1349	762	664	437	667	1412
MAD f	31	96	22	48	47	48	23	19	7.5	47	35	110
IQR f	58	155	33	63	73	67	47	40	11	57	60	153
Robust CV % f	5.7	9.8	7.4	9.4	10	6.5	3.5	5.3	1.7	13	9	10
Outliers	1	1	1	2	0	0	2	1	3	1	3	1
Stragglers	3	0	0	0	0	0	2	1	5	0	0	0

2012-13: Boron — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	16	16	16	14	15	15	15	15	16	16	16	16
Minimum	0.412	0.207	0.588	0.001	0.402	0.404	0.876	0.025	0.001	0.119	0.709	0.083
Maximum	1.2	0.73	1.8	1.0	2.2	1.89	2.78	1.8	1.2	9.9	1.1	0.536
Median i	0.55	0.335	0.798	0.123	0.585	0.582	1.2	0.16	0.118	0.344	0.869	0.291
Mean i	0.596	0.382	0.877	0.224	0.719	0.673	1.4	0.275	0.187	0.990	0.887	0.305
MAD i	0.068	0.058	0.045	0.038	0.112	0.095	0.2	0.05	0.034	0.097	0.109	0.09
IQR i	0.105	0.112	0.093	0.099	0.220	0.159	0.304	0.079	0.057	0.142	0.158	0.170
Robust CV % i	19	33	12	81	38	27	25	50	48	41	18	58
Median f	0.53	0.329	0.8	0.121	0.553	0.555	1.2	0.145	0.115	0.34	0.869	0.291
Mean f	0.556	0.341	0.799	0.116	0.614	0.586	1.2	0.127	0.110	0.323	0.887	0.305
MAD f	0.045	0.055	0.01	0.019	0.109	0.079	0.18	0.04	0.008	0.090	0.109	0.09
IQR f	0.105	0.085	0.017	0.030	0.167	0.144	0.271	0.082	0.020	0.157	0.158	0.170
Robust CV % f	20	26	2.1	25	30	26	23	57	17	46	18	58
Outliers	1	2	5	3	1	1	2	3	2	2	0	0
Stragglers	0	0	2	1	0	0	0	0	3	0	0	0

2012-13: Calcium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	18	18	16	16	16	16	18	18	18	18
Minimum	1360	1020	2100	66	2712	1088	1654	180	1	20	51	14
Maximum	2430	2020	3780	275	3977	1586	2183	236	4771	2062	5177	1467
Median i	1460	1120	2270	203	3337	1444	1874	215	208	1666	3983	1130
Mean i	1520	1190	2340	200	3400	1432	1879	213	447	1632	3805	1067
MAD i	67	47	98	24	120	48	65	14	12	105	242	55
IQR i	109	92	137	36	319	81	97	21	19	189	419	114
Robust CV % i	7.4	8.2	6.0	18	9.6	5.6	5.2	9.9	9.2	11	11	10
Median f	1460	1110	2260	205	3322	1442	1870	215	208	1665	3983	1130
Mean f	1470	1120	2250	208	3357	1435	1854	213	209	1684	3967	1146
MAD f	70	33	96	21	67	26	36	14	7	75	109	49
IQR f	103	67	126	33	135	51	79	21	11	151	161	78
Robust CV % f	7.1	6.0	5.6	16	4.1	3.5	4.2	9.9	5.3	9.1	4	6.9
Outliers	1	3	1	1	5	1	2	0	3	2	4	4
Stragglers	0	0	0	0	1	2	1	0	2	1	2	0

2012-13: Copper — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	19	19	18	18	16	16	16	15	18	19	19	19
Minimum	0.003	0.54	0.003	0.003	1.9	0.492	1.7	0.103	0.107	0.048	4.3	0.75
Maximum	9.4	7	0.75	0.57	4.58	3.57	4.3	1.49	4.5	3.5	34	4.4
Median i	0.56	1.6	0.391	0.19	2.1	0.557	2	0.235	0.2	0.182	5.4	1.4
Mean i	1.0	1.8	0.41	0.199	2.3	0.746	2.2	0.346	0.526	0.636	7.0	1.5
MAD i	0.11	0.15	0.117	0.023	0.1	0.042	0.195	0.025	0.015	0.082	0.37	0.08
IQR i	0.185	0.23	0.175	0.041	0.154	0.047	0.271	0.040	0.039	0.293	0.608	0.133
Robust CV % i	33	15	45	22	7.3	8.5	14	17	19	160	11	9.5
Median f	0.555	1.6	0.391	0.19	2.1	0.553	2	0.23	0.193	0.146	5.3	1.4
Mean f	0.575	1.5	0.41	0.187	2.1	0.543	2.0	0.224	0.195	0.157	5.4	1.4
MAD f	0.097	0.045	0.117	0.012	0.085	0.026	0.19	0.016	0.007	0.041	0.145	0.07
IQR f	0.145	0.148	0.175	0.023	0.135	0.049	0.289	0.027	0.009	0.071	0.356	0.093
Robust CV % f	26	9.3	45	12	6.5	8.8	14	12	4.5	49	6.8	6.6
Outliers	3	3	0	4	2	2	1	4	5	5	2	2
Stragglers	0	2	0	2	0	0	0	0	1	0	3	0

2012-13: Iron — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	18	18	16	16	16	16	18	18	18	18
Minimum	125	172	396	156	268	128	174	413	430	270	145	255
Maximum	82700	15200	6840	7720	388	173	263	602	848	840	392	681
Median i	146	203	542	533	318	141	196	473	539	585	171	273
Mean i	4730	1040	897	898	323	145	201	480	550	583	193	308
MAD i	13	16	48	36	26	3.4	9.2	20	39	53	9.5	13
IQR i	25	25	98	62	44	8.7	15	29	61	86	18	24
Robust CV % i	17	12	18	12	14	6.2	7.8	6.2	11	15	10	8.8
Median f	142	202	543	540	318	139	196	473	538	585	170	271
Mean f	147	202	567	529	323	139	197	472	532	587	165	272
MAD f	11	15	31	20	26	2	8	19	38	47	8.6	6
IQR f	18	23	84	42	44	3	14	30	53	73	19	12
Robust CV % f	13	12	15	7.8	14	2.1	7.2	6.3	9.9	13	11	4.3
Outliers	1	1	1	4	0	3	1	1	1	2	3	3
Stragglers	1	0	2	1	0	2	0	0	0	0	0	1

2012-13: Magnesium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	19	19	19	19	16	16	16	16	19	19	19	19
Minimum	54	97	95	8.6	55	118	210	36	0.08	1.1	3.2	0.27
Maximum	165	1310	384	99	616	1310	284	52	122	1294	3758	119
Median i	139	120	112	30	510	141	252	46	30	510	1423	101
Mean i	132	184	133	32	479	212	249	45	35	534	1430	92
MAD i	7	6	4	2.9	28	8	16	3.6	2	28	122	4
IQR i	15	9.6	4.5	4.7	64	12	22	5.9	3.7	42	184	8.5
Robust CV % i	11	8.0	4.0	16	13	8.3	8.7	13	12	8.3	13	8.4
Median f	140	120	110	30	521	141	252	46	29	507	1423	101
Mean f	139	120	110	29	515	139	249	45	29	499	1420	101
MAD f	4	4	3	2.8	17	8	16	3.6	1.7	25	100	3.7
IQR f	7.4	6.3	4.5	4.4	34	11	22	5.9	2.4	41	148	5.7
Robust CV % f	5.3	5.3	4.0	15	6.5	7.9	8.7	13	8.2	8	10	5.7
Outliers	3	4	4	2	3	1	0	0	4	3	3	4
Stragglers	1	1	0	0	1	0	0	0	1	1	1	0

2012-13: Manganese — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	19	19	19	19	16	16	16	16	19	19	19	19
Minimum	22	73	19	2	158	71	58	6.9	4.5	16	123	12
Maximum	394	526	86	18	334	115	94	12	358	144	767	615
Median i	82	117	23	5.6	194	81	65	8	5.7	20	137	201
Mean i	98	141	30	6.5	202	85	69	8.2	25	29	181	221
MAD i	3.8	5	2.1	0.5	17	4.8	2.4	0.45	0.3	1.0	12	20
IQR i	7.7	11	5.9	0.741	31	6.3	5.4	0.799	0.660	2.4	26	33
Robust CV % i	9.4	9.5	26	13	16	7.8	8.4	10	12	12	19	16
Median f	82	115	22	5.4	191	80	64	8.0	6	20	137	200
Mean f	82	116	22	5.4	189	81	64	8.0	5.7	20	139	199
MAD f	3.2	3	1.1	0.47	12	3.1	0.9	0.32	0.295	0.7	9.3	14
IQR f	4.6	6.7	2	0.704	26	5.4	1.7	0.667	0.424	1.0	16	20
Robust CV % f	5.6	5.8	9.1	13	14	6.7	2.7	8.4	7.4	5.2	12	10
Outliers	6	6	4	4	1	2	3	1	3	3	3	4
Stragglers	0	2	2	0	1	0	3	0	0	3	0	0

2012-13: Phosphorus - ICP — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	15	16	16	16	14	14	14	14	15	15	15	15
Minimum	11	38	115	9.9	11	1.6	122	16	23	1.6	26	25
Maximum	17	108	226	55	41	17	171	26	46	122	160	37
Median i	13	43	150	31	36	13	133	18	31	99	30	28
Mean i	13	48	154	30	35	12	137	19	32	95	39	29
MAD i	1	3.1	3.5	3.4	2.5	0.5	7.5	0.8	1.7	4.9	1.3	1.6
IQR i	1.5	4.9	9.5	5.6	4.4	0.982	17	2.2	2.2	7.8	4.7	2.4
Robust CV % i	11	11	6.3	18	12	7.8	13	12	7.2	7.9	16	8.6
Median f	13	43	150	31	37	13	131	18	31	99	29	28
Mean f	13	44	149	30	36	13	133	18	31	99	29	28
MAD f	0.945	3	2	1.6	2.5	0.5	5.5	0.1	1.6	2	0.9	1.3
IQR f	1.5	5.0	3.7	3.8	3.8	0.667	9.1	0.556	1.8	3.8	1.5	2.5
Robust CV % f	12	12	2.5	13	10	5.3	6.9	3.1	6	3.8	5.1	8.9
Outliers	1	1	6	3	1	3	1	2	3	3	4	2
Stragglers	0	0	1	1	0	0	1	3	0	2	0	1

2012-13: Potassium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	18	18	16	16	16	16	18	18	18	18
Minimum	95	205	200	22	553	103	684	86	0.27	0.36	0.51	0.36
Maximum	144	342	301	113	891	128	882	110	916	178	914	207
Median i	112	258	238	79	720	115	735	93	80	143	271	163
Mean i	114	266	240	78	733	115	755	95	121	134	291	154
MAD i	5	13	13	7	23	5	21	4.6	4.4	6	19	9.5
IQR i	8.2	23	20	12	34	7.6	52	9.2	7.5	10	31	17
Robust CV % i	7.3	9	8.5	15	4.7	6.6	7.1	9.9	9.3	7.1	11	10
Median f	111	255	237	79	717	115	729	93	80	143	271	164
Mean f	112	257	237	79	720	115	732	95	80	143	272	167
MAD f	4	6	12	7	5.5	5	19	4.6	3.5	4	13	3.5
IQR f	7.2	13	19	10	12	7.6	28	9.2	5.6	6.3	19	9.3
Robust CV % f	6.5	4.9	8.1	13	1.7	6.6	3.9	9.9	6.9	4.4	7	5.7
Outliers	1	3	1	2	3	0	3	0	4	6	6	4
Stragglers	2	2	0	0	3	0	0	0	0	0	0	2

2012-13: Sodium — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	18	18	17	18	16	16	16	16	17	17	17	17
Minimum	28	38	2.1	1.4	17	25	43	13	0.48	0.6	0.68	0.48
Maximum	59	78	20	26	257	280	284	261	30	164	183	74
Median i	39	59	9.6	13	27	39	58	19	13	126	158	52
Mean i	39	59	10	13	40	53	72	34	13	114	142	51
MAD i	3	5.2	0.79	2.5	4.5	3	4	1.7	1	9	18	4.1
IQR i	5.2	8.1	2.0	4.1	7.7	3.7	6.4	3.8	2.0	16	27	8.4
Robust CV % i	13	14	21	33	28	9.6	11	20	16	12	17	16
Median f	39	59	9.5	13	27	39	56	19	13	128	160	54
Mean f	38	59	9.3	12	25	39	57	19	13	127	163	54
MAD f	3	5	0.51	2	4.1	2.3	5.6	1.1	1	6	12	4.1
IQR f	5.2	7.5	1.3	3.3	7.5	3.7	5.9	2.5	1.5	10	19	6.8
Robust CV % f	13	13	13	26	28	9.6	11	13	11	8.1	12	13
Outliers	1	2	3	2	1	2	1	1	2	4	3	3
Stragglers	0	0	2	0	0	0	0	2	0	0	0	0

2012-13: Sulphur — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	15	15	15	15	13	13	13	13	14	14	14	14
Minimum	28	45	27	6.7	26	16	42	8.5	20	34	12	42
Maximum	52	74	51	42	52	42	54	29	37	47	46	57
Median i	36	51	34	23	38	36	47	20	24	39	17	45
Mean i	39	54	36	26	38	35	47	20	25	40	20	46
MAD i	2	3	2	2.1	1.4	0.6	1.6	1.5	2.2	1.2	1.9	1.1
IQR i	8.9	6.7	5.2	6.7	2.7	2.1	3.2	2.7	3.6	2.8	8.4	2.4
Robust CV % i	25	13	15	29	7	5.8	6.9	14	15	7	49	5.4
Median f	35	50	34	22	39	36	47	20	22	39	16	45
Mean f	36	51	36	23	39	36	46	20	24	39	16	45
MAD f	1.1	1.6	1.7	0.5	0.7	0.3	1.3	1.3	0.6	0.25	0.95	0.95
IQR f	1.8	3.6	4.5	0.964	1.1	0.5	2.6	2.3	3	0.556	1.7	1.5
Robust CV % f	5.1	7.1	13	4.3	2.8	1.5	5.5	11	14	1.4	11	3.4
Outliers	5	2	1	5	3	5	1	2	1	3	4	2
Stragglers	1	1	1	2	2	1	0	0	2	3	0	0

2012-13: Zinc — Mehlich3 (18F1) mg/kg air dry

Statistical parameters	Soil sample identification and values											
	December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	19	19	19	19	16	16	16	16	19	19	19	19
Minimum	2.2	3.5	3.8	0.392	2.9	2.2	12	0.832	0.882	3	1.4	2
Maximum	54	52	16	8	5.73	4.94	19	1.3	8.6	20	71	591
Median i	2.8	4.2	4.8	1.1	3.6	2.7	14	0.99	1.1	3.7	2.2	2.5
Mean i	5.7	7.2	5.9	1.7	3.8	2.9	14	1	1.9	5.0	6.9	34
MAD i	0.23	0.32	0.31	0.19	0.175	0.14	0.96	0.063	0.08	0.55	0.24	0.3
IQR i	0.348	0.83	0.682	0.282	0.298	0.211	1.1	0.111	0.341	0.860	0.511	0.385
Robust CV % i	12	20	14	26	8.2	7.8	8.2	11	31	24	23	15
Median f	2.7	4.1	4.7	1.1	3.6	2.7	14	0.98	1.1	3.6	2.2	2.5
Mean f	2.8	4.3	4.8	1.1	3.6	2.7	14	0.997	1.1	3.5	2.2	2.5
MAD f	0.25	0.245	0.2	0.169	0.15	0.06	0.98	0.053	0.045	0.1	0.2	0.215
IQR f	0.348	0.504	0.293	0.274	0.211	0.095	1.2	0.111	0.056	0.300	0.289	0.393
Robust CV % f	13	12	6.2	25	5.9	3.5	8.5	11	5.3	8.4	13	16
Outliers	2	2	4	3	3	2	1	2	5	4	3	3
Stragglers	0	1	2	0	0	2	0	0	2	2	1	0

2012-13: Phosphorus Colorimetric — Mehlich3 (18F2) mg/kg air dry **NOT ASSESSABLE**

Statistical parameters	Soil sample identification and value											
	December 2012 (Round 212) NOT ASSESSABLE				March 2013 (Round 412)				May 2013 (Round 612) NOT ASSESSABLE			
	ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
No of results	3	3	3	3	3	3	3	3	3	3	3	3
Minimum	12	39	154	32	32	10	131	17	21	93	29	24
Maximum	15	50	162	39	38	13	139	22	38	105	33	26
Median i	12	43	159	37	36	12	134	20	33	100	30	25
Mean i	13	44	158	36	35	12	135	20	31	99	31	25
MAD i	0.2	4.4	3	1.7	2	0.9	3	2	5	5.2	0.9	0.9
IQR i	2.2	8.0	5.9	5.1	4.2	2.1	5.9	4.0	13	8.9	3.0	1.8
Robust CV % i	18	18	3.7	14	12	17	4.4	20	39	8.9	9.9	7.1
Median f	12	43	159	37	36	12	134	20	33	100	30	25
Mean f	12	44	158	36	35	12	135	20	31	99	31	25
MAD f	0.1	4.4	3	1.7	2	0.9	3	2	5	5.2	0.9	0.9
IQR f		8.0	5.9	5.1	4.2	2.1	5.9	4	13	8.9	3.0	1.8
Robust CV % f		18	3.7	14	12	17	4.4	20	39	8.9	9.9	7.1
Outliers	1	0	0	0	0	0	0	0	0	0	0	0
Stragglers	0	0	0	0	0	0	0	0	0	0	0	0

4. Comments on Measurement Performance

None of the 12 test soils were alkaline, based on grand median soil/water pH values. Five soils were slightly acidic to neutral, while the remaining seven were very strongly acidic with three extremely acidic (ASS 124, 34 and 51). Only one soil had a median EC concentration above 0.3 dS/m, that being ASS 52 which was 0.41 dS/m. As such, it would be considered only slightly saline. Chloride concentrations for all 12 soils were all <50 mg/kg Cl, and can be classified very low. Soil ASS 52 had elevated mineral nitrate-nitrogen which is the likely reason it is just outside the non-saline category. More alkaline and saline soils need to be introduced into the Soil Chek program in future. Soils from inland Australia are commonly alkaline and/or saline, with salinity coming from inorganic forms of carbon, and/or from gypsum.

Collectively these 12 test soils had a program median robust CV across all tests of 7.8% (8.93% in 2011-12), with a range of 6.6% to 10.0% (6.5% to 12.0% in 2011-12) and a central robust CV value of 7.95% (8.9% in 2011-12). The test sample sequence from lowest to highest %CV (sorted data) is shown in Table 4.1, along with the unsorted data.

All 12 samples for 2012-13 were deemed to be homogenous..

Table 4.1. Final grand median robust %CVs for the 12 test samples used in 2012-13, both unsorted and sorted for robust %CVs.

Test	Unsorted		Sorted	
	Sample	%CV final	Sample	%CV final
ASS	121	7.9	32	6.6
ASS	122	9.3	31	6.7
ASS	123	7.1	33	6.9
ASS	124	10	54	7.1
ASS	31	6.7	123	7.1
ASS	32	6.6	52	7.3
ASS	33	6.9	51	7.4
ASS	34	9.5	121	7.9
ASS	51	7.4	122	9.3
ASS	52	7.3	34	9.5
ASS	53	10	124	10
ASS	54	7.1	53	10

Equally important are the ranges of values reported by participating laboratories for all test methods across the 12 test samples. These are recorded in Table 4.2. Within reason, all ranges ought to be as wide as possible, while median values for each test should be close to the mid-point of the range for the same test. Moreover, both minimum and maximum values must be realistic. For the most part, values and ranges for the majority of tests

performed in 2012-13 were reasonable. However, median values were often “skewed” to the disadvantage of many laboratories in Australia. For example, the range for water soluble Cl is too narrow (all very low), as is electrical conductivity, for many Australian landscapes of semi-arid and arid regions.

Table 4.2. Final soil test results (see Section 3 for units of reporting) aggregated across 12 test samples used in ASPAC’s Soil Proficiency Testing Program of 2012-13.

2012-13: Soil Test Methods	Min	Median	Max	Range
Air dry moisture	0.88	2.59	5.23	4.35
Electrical conductivity 1:5 soil-water	0.08	0.18	0.43	0.35
Soil pH, 1:5 soil-water	4.18	5.66	7.37	3.19
Soil pH, 1:5 0.01 M CaCl ₂ — direct	3.59	5.08	6.81	3.22
Soil pH, 1:5 0.01 M CaCl ₂ — indirect	3.74	5.12	6.64	2.90
Water soluble Cl — potentiometric	0.5	21.5	47	46.5
Water soluble Cl — autocolour	11	22	45	34
Organic C — W&B	1.46	2.81	4.46	3.0
Total Organic C 6B2	1.72	3.16	4.59	2.87
Total Organic C 6B3	1.75	3.13	4.73	2.98
Total N — Kjeldahl, steam distillation	0.21	0.24	0.49	0.28
Total N — Kjeldahl, autocolour	0.13	0.24	0.42	0.29
Total N — Dumas	0.147	0.254	0.466	0.319
Water Soluble Nitrate N — autocolour	5	22	191	186
KCl Ext. Ammonium N — steam distillation	6.8	40	200	193.2
KCl Ext. Nitrate N — steam distillation	7	22	189	182
Total P – all methods	0.015	0.056	0.127	0.112
Colwell Extractable P — manual, autocolour	13	47.5	173	160
Olsen Extractable P — manual, autocolour	7.3	18	52	44.7
Bray-1 Extractable P — manual, autocolour	5.8	15.5	106	100.2
Acid Extractable P — manual, autocolour	15	107	527	512
Phosphorus buffer index (with Colwell P)	60	123	505	445
Phosphorus buffer index (Unadj)	43	110	443	400
Phosphate Extractable S	2	31	87	85
KCl ₄₀ Extractable S	7	28	42	35
DTPA Extractable Cu	0.2	0.57	4.0	3.8
DTPA Extractable Fe	21	172	518	497
DTPA Extractable Mn	4.6	55	197	192
DTPA Extractable Zn	0.79	2.8	11	10.2
Hot CaCl ₂ Extractable B — ICPAES	0.2	0.71	1.6	1.4
Exchangeable Ca — 1M NH ₄ Cl extract	0.91	7.6	22.4	21.5
Exchangeable Mg — 1M NH ₄ Cl extract	0.2	1.12	13.8	13.6
Exchangeable Na — 1M NH ₄ Cl extract	0.01	0.18	0.83	0.82

2012-13: Soil Test Methods	Min	Median	Max	Range
Exchangeable K — 1M NH ₄ Cl extract	0.17	0.44	2.28	2.11
Exchangeable Ca — 1M NH ₄ OAc extract	0.68	7.22	22.8	22.1
Exchangeable Mg — 1M NH ₄ OAc extract	0.2	1.05	13.2	13
Exchangeable Na — 1M NH ₄ OAc extract	0.035	0.16	0.87	0.83
Exchangeable K — 1M NH ₄ OAc extract	0.19	0.42	2.16	1.97
Exchangeable Al — 1M KCl extract	0.004	0.038	1.98	1.98
Mehlich 3 Extractable Al	300	740	1839	1539
Mehlich 3 Extractable B	0.02	0.44	1.6	1.6
Mehlich 3 Extractable Ca	180	1451	4589	4410
Mehlich 3 Extractable Cu	0.1	0.55	5.9	5.8
Mehlich 3 Extractable Fe	125	294	711	596
Mehlich 3 Extractable Mg	20	130	1834	1814
Mehlich 3 Extractable Mn	2	72	237	235
Mehlich 3 Extractable P – ICP finish	11	31	153	142
Mehlich 3 Extractable K	64	154	798	734
Mehlich 3 Extractable Na	8	39	183	175
Mehlich 3 Extractable S	15	35.5	58	43
Mehlich 3 Extractable Zn	0.8	2.7	17	16.2

Grand median robust % CVs across the 12 samples by test in 2012-13, after the deletion of “outliers” and “stragglers” and following removal of very small data sets that were not assessed, ranged from 0.76% [pH (4B2 + 4B4) to 27% (calcium phosphate extractable S). In 2011-12, the worst performing test was KCl ext Al (15G1) which had 46.5% CV. This year both the soluble Cl methods (5A1 and 5A2), Bray P (9E) and Meh 3 extractable B also had higher robust %CV’s than KCl ext. Al. Figure 4.1 presents all qualifying %CV data in ascending order, acknowledging this data-set ignores the likelihood that robust %CV are often influenced by analyte concentrations.

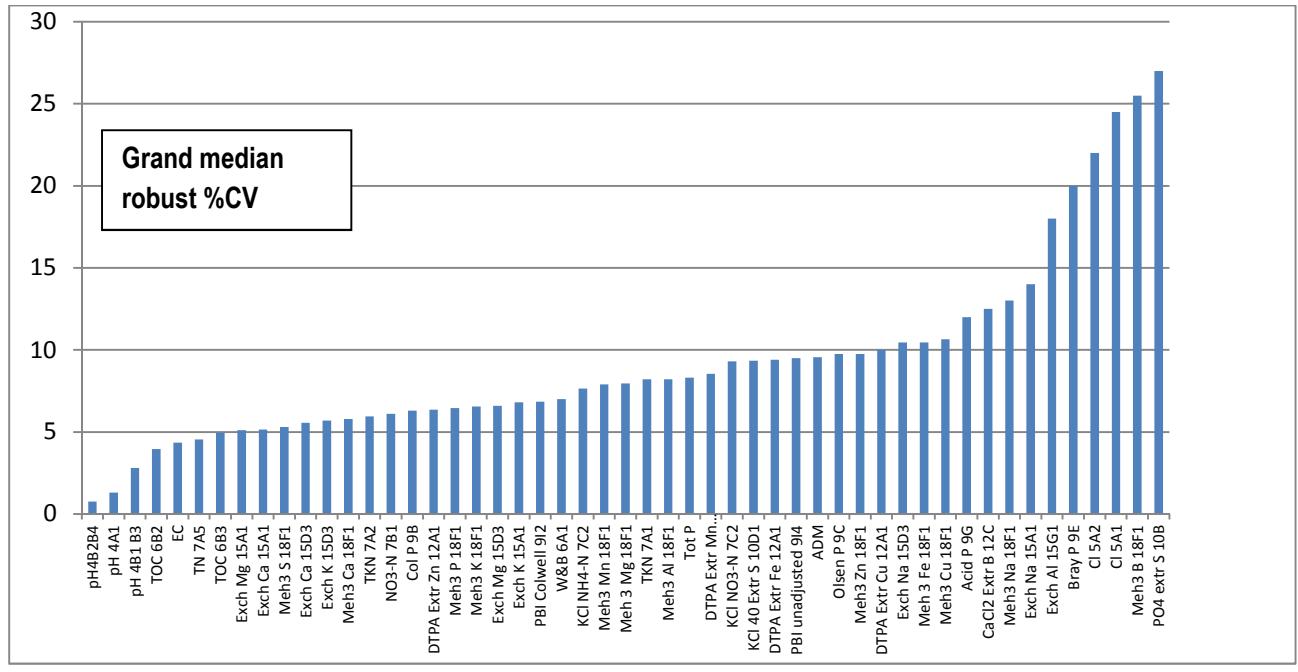


Figure 4.1. Grand median robust %CVs (final) for soil-program year 2012-13.

Appendix 1: List of laboratories (including contact details) who participated in ASPAC's Soil ILPP in 2012-13, arranged by country

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Appendix 2: Summary of homogeneity data and statistical assessments for soil samples used in the ASPAC Soil ILPP in the 2012-13

Sample name		ASS 121	ASS 122	ASS 123	ASS 124	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
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	0.43	0.255	0.228	0.27	0.4	0.43	0.27	0.19	0.275	0.258	0.189	0.191
	replicate 2	0.43	0.245	0.244	0.28	0.39	0.43	0.271	0.18	0.280	0.264	0.165	0.185
Sample 2	replicate 1	0.43	0.232	0.235	0.25	0.4	0.43	0.263	0.19	0.248	0.258	0.180	0.187
	replicate 2	0.42	0.244	0.241	0.25	0.4	0.42	0.252	0.18	0.248	0.259	0.157	0.185
Sample 3	replicate 1	0.42	0.232	0.233	0.26	0.39	0.42	0.247	0.18	0.255	0.257	0.182	0.190
	replicate 2	0.43	0.239	0.219	0.26	0.39	0.43	0.254	0.17	0.257	0.26	0.159	0.188
Sample 4	replicate 1	0.43	0.235	0.228	0.25	0.39	0.43	0.245	0.18	0.247	0.257	0.177	0.193
	replicate 2	0.42	0.241	0.223	0.25	0.39	0.42	0.249	0.18	0.254	0.26	0.164	0.189
Sample 5	replicate 1	0.42	0.252	0.235	0.26	0.4	0.42	0.267	0.19	0.262	0.262	0.182	0.188
	replicate 2	0.43	0.238	0.246	0.25	0.39	0.43	0.255	0.18	0.253	0.258	0.160	0.193
Sample 6	replicate 1	0.43	0.245	0.223	0.26	0.4	0.43	0.261	0.18	0.257	0.26	0.175	0.189
	replicate 2	0.43	0.252	0.211	0.25	0.39	0.43	0.249	0.17	0.253	0.261	0.170	0.191
Sample 7	replicate 1	0.43	0.247	0.23	0.25	0.4	0.43	0.272	0.18	0.249	0.261	0.175	0.189
	replicate 2	0.43	0.241	0.227	0.26	0.39	0.43	0.265	0.17	0.257	0.261	0.172	0.188
Sample 8	replicate 1	0.42	0.251	0.229	0.26	0.4	0.42	0.252	0.18	0.261	0.258	0.175	0.187
	replicate 2	0.43	0.242	0.22	0.26	0.4	0.43	0.259	0.18	0.259	0.261	0.173	0.189
Sample 9	replicate 1	0.42	0.255	0.232	0.24	0.41	0.42	0.262	0.18	0.238	0.259	0.171	0.189
	replicate 2	0.42	0.247	0.229	0.28	0.41	0.42	0.269	0.18	0.283	0.262	0.180	0.188
Sample 10	replicate 1	0.42	0.258	0.233	0.27	0.41	0.42	0.234	0.2	0.266	0.265	0.178	0.186
	replicate 2	0.43	0.253	0.215	0.26	0.4	0.43	0.265	0.19	0.264	0.265	0.185	0.185
Mean		0.426	0.245	0.229	0.259	0.398	0.426	0.258	0.182	0.258	0.26	0.173	0.189
Analytical Variance		0.00003	0.00004	0.0001	0.0001	0.00003	0.00003	0.0001	0.00004	0.0001	0.00004	0.0001	0.00004
Sampling Variance		0	0.00002	0.00002	0.000003	0.00003	0	0.00003	0.00002	0.00001	0.000001	0	0.000001
SD of proficiency data		0.018	0.012	0.016	0.01	0.0133	0.016	0.015	0.015	0.003	0.01	0.012	0.001
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” ($\ddagger\ddagger$) and “stragglers” (\dagger) 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 $[(X - \mu)/f@]$ (called the “ASPAC Score” for convenience) > 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” ($\ddagger\ddagger$). 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” (\dagger). 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” 2012-13 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 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L007	2A1	3.79	3.39	1.37	6.41 ††	1.05 ††	1.04 ††	1.05 ††	1.03	1.05	1.51	4.51	2.51
L009	2A1	3.6	3.33	1.37	1.28	4.31	3.6	2.57	1.3	1.28	1.67	4.17	2.72
L011	2A1	3.57	3.19	1.36	1.34	4.75	3.87	2.74	1.44	1.27	1.75	4.74	2.69
L013	2A1	3.8	3.4	1.5	1.3	4.3	3.4	2.4	1.2	1.2	1.8	5.6 ††	7.1 ††
L014	2A1									1.17	1.65	4.5	2.6
L018	2A1	3.2	2.3 ††	1 †	1 †	4.35	3.5	2.3	0.99	1.11	1.66	4.65	2.39
L019	2A1	2.63 ††	2.39 ††	0.74 ††	0.72 ††	4.57	3.67	2.49	1.23	1.07	1.52	4.36	2.48
L022	2A1	3.48	3.25	1.29	1.28	4.49	3.58	2.6	1.25	1.29	1.55	4.8	2.75
L023	2A1	3.95	3.4	1.27	1.27	5.19 †	4.42 †	3.07 †	1.64	1.91 ††	2.01 ††	4.12	2.38
L028	2A1	3.6	3	1.34	1.25	4.67	4.31 †	2.77	1.58	0.99	1.03 ††	3.59	2.42
L030	2A1	3.81	3.45	1.45	1.64 ††	4.37	3.73	2.68	1.37	1.48	1.45	4.82	2.61
L032	2A1	3.76	3.44	1.33	1.33	4.48	3.74	2.54	1.24	1.41	1.93 †	5.23	3.04 †
L036	2A1	3.82	3.6	1.44	1.34	4.85	4.03	2.8	1.48	1.28	1.62	4.4	2.8
L040	2A1	3.59	3.01	1.28	1.29	4.35	3.44	2.58	1.28	1.25	1.61	4.41	2.52
L042	2A1	4.13	3.71	1.48	1.39	4.91	4.03	2.86	1.45	1.42	2.01 ††	5.06	3.06 †
L045	2A1	3.33	2.99	1.09	1.12	4.27	3.73	2.53	1.07	1.12	1.57	4.13	2.52
L056	2A1	3.7	3.45	1.3	1.25	4.48	3.74	2.58	1.24	1.36	1.97 ††	5	2.86
L063	2A1	3.76	3.39	1.34	1.19	4.67	2.83 †	2.65	1.36	1.04	1.49	3.93	2.55
L133	2A1					2.69 ††	2.55 ††	1.82 ††	0.6 ††	0.95	1.42	3.69	2.3
L135	2A1	1.56 ††	1.9 ††	0.74 ††	0.77 ††								
L137	2A1	4.02	3.45	1.37	1.36	4.72	3.9	2.6	1.31	0.793	1.24 †	3.74	2.03 ††

L139	2A1	3.37	3.09	1.19	1.11	4.11	3.39	2.32	1.19	1.12	1.58	4.21	2.5
L158	2A1	3.01	2.93	1.18	1.08	4.7	4.1	2.9	1.5	1.3	2 ††	4.9	3
L160	2A1	4	3.3	1.3	1.3	5	4.1	2.7	1.6	1.3	1.9 †	5.2	2.9
L161	2A1	3.21	2.96	1.18	1.28	4.32	3.48	2.52	1.06	1.13	1.58	4.11	2.72
L163	2A1	4	3.6	1.8 ††	1.6 †					1.12	1.6	4.25	2.37
L164	2A1	3.82	3.51	1.35	1.29	4.61	2.86 †	2.7	1.23	1.25	1.56	5.14	2.72
L166	2A1	3.4	2.8	1.2	1.1	4.4	3.5	2.8	1.4	1.2	1.5	3.9	2.7
L168	2A1	2.3 ††	2.27 ††	0.72 ††	0.74 ††	3.85 †	3.21	2.04 †	1.16	0.86	1.07 ††	2.9 ††	1.93 ††
L178	2A1	3.54	3.02	1.29	1.31	4.34	3.45	2.56	1.27	1.26	1.59	4.4	2.49
L179	2A1	2.95	2.75	0.9 ††	0.9 ††	2.88 ††	2.7 †	1.56 ††	0.814	0.836	1.37	4.2	2.23
L180	2A1	3.59	3.22	1.26	1.17					1.14	1.81	4.37	2.63
L181	2A1	3.5	3.08	1.19	1.08	4.39	3.57	3.44 ††	1.14	1.04	1.44	4.4	2.41
L187	2A1	3.2	3	1.1	1.1	3.15 ††	2.81 †	2 †	0.88	0.39 ††	0.55 ††	2.48 ††	1.55 ††
L192	2A1	2.94	2.76	0.986 †	0.985 †	3.25 ††	3.08	2.02 †	1.02	1.06	1.52	4.26	2.7

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Lab. Code #	Method Codes	Soil sample identification and values for Electrical conductivity 1:5 soil-water (3A1) dS/m air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	3A1	0.27 †	0.152	0.246 †	0.104	0.217	0.249	0.192	0.096	0.105	0.404	0.137	0.161
L007	3A1	0.238	0.146	0.212	0.094	0.16 ††	0.17 ††	0.06 ††	0.2 ††	0.09 †	0.43	0.14	0.16
L009	3A1	0.236	0.14	0.219	0.099	0.225	0.241	0.209	0.09	0.99 ††	0.422	0.163 ††	0.181 ††
L011	3A1	0.26	0.147	0.229	0.094	0.22	0.253	0.195	0.109 †	0.103	0.374 †	0.129	0.157
L012	3A1	0.25	0.14	0.21	0.1	0.23	0.24	0.27 ††	0.22 ††	0.1	0.39	0.14	0.15
L013	3A1	0.23	0.13 †	0.2	0.09	0.196 †	0.229 ††	0.186 †	0.087	0.095	0.358 ††	0.119 †	0.139 ††
L014	3A1	0.99 ††	0.58 ††	0.79 ††	0.39 ††					0.12 ††	0.47 ††	0.18 ††	0.19 ††
L018	3A1	0.25	0.14	0.21	0.1	0.213	0.252	0.209	0.094	0.091	0.422	0.137	0.165
L019	3A1	0.239	0.147	0.22	0.102	0.207	0.246	0.193	0.090	0.103	0.39	0.13	0.157
L022	3A1	0.243	0.136	0.212	0.095	0.22	0.249	0.195	0.087	0.097	0.406	0.138	0.149

L023	3A1	0.241	0.137	0.209	0.089	0.211	0.242	0.197	0.089	0.103	0.405	0.14	0.157							
L026	3A1	0.256	0.145	0.217	0.099	0.244	††	0.266	0.21	0.100	0.107	0.42	0.168	††	0.177	††				
L027	3A1	0.246	0.146	0.209	0.091	0.229	0.256	0.21	0.101	0.107	0.408	0.14	0.17							
L028	3A1	0.29	††	0.16	†	0.23	0.11	0.218	0.245	0.198	0.091	0.107	0.42	0.135	0.162					
L030	3A1	0.249	0.142	0.208	0.1	0.233	0.255	0.204	0.094	0.103	0.421	0.167	††	0.166						
L032	3A1	0.254	0.149	0.225	0.105	0.214	0.249	0.2	0.094	0.108	0.417	0.133	0.162							
L036	3A1	0.254	0.154	0.219	0.106	0.211	0.25	0.207	0.091	0.106	0.413	0.133	0.161							
L040	3A1	0.237	0.135	0.216	0.095	0.218	0.241	0.203	0.091	0.100	0.401	0.132	0.157							
L042	3A1	0.253	0.144	0.216	0.098	0.218	0.252	0.206	0.092	0.103	0.42	0.141	0.165							
L044	3A1	0.255	0.151	0.222	0.108	0.21	0.255	0.208	0.098	0.11	0.413	0.139	0.164							
L045	3A1	0.23	0.14	0.23	0.09	0.21	0.25	0.21	0.09	0.097	0.387	0.127	0.15							
L055	3A1	0.262	0.152	0.223	0.103	0.223	0.267	0.206	0.099	0.104	0.426	0.136	0.167							
L056	3A1	0.251	0.144	0.22	0.1	0.225	0.258	0.205	0.094	0.096	0.403	0.134	0.15							
L063	3A1	0.25	0.15	0.23	0.11	0.215	0.252	0.202	0.095	0.102	0.4	0.13	0.157							
L064	3A1	0.241	0.144	0.221	0.095	0.217	0.248	0.2	0.091	0.104	0.414	0.131	0.157							
L080	3A1	0.232	0.141	0.226	0.103	0.21	0.251	0.198	0.095	0.995	††	0.386	0.126	0.149						
L133	3A1	0.253	0.147	0.226	0.061	††	0.216	0.257	0.212	0.096	0.111	0.412	0.145	0.168						
L135	3A1	0.26	0.13	†	0.19	†	0.09	0.245	††	0.251	0.195	0.09	0.09	†	0.38	0.12	†	0.14	††	
L137	3A1	0.239	0.141	0.212	0.099	0.216	0.253	0.198	0.1	0.096	0.364	††	0.117	†	0.146					
L139	3A1	0.233	0.118	††	0.208	0.08	††	0.239	†	0.253	0.19	0.085	0.083	††	0.372	†	0.154	†	0.154	
L140	3A1	0.21	††	0.15	0.23	0.1	0.14	††	0.23	††	0.2	0.1	0.12	††	0.46	††	0.16	††	0.19	††
L142	3A1	0.243	0.151	0.22	0.104	164	††	183	††	143	††	72.1	††	0.124	††	0.425	0.233	††	0.169	
L143	3A1	0.24	0.14	0.21	0.1	0.22	0.26	0.2	0.1	0.11	0.41	0.14	0.16							
L156	3A1	0.24	0.139	0.2	0.105	208	††	246	††	196	††	99	††	0.105	0.389	0.143	0.158			
L158	3A1	0.251	0.145	0.224	0.097	0.224	0.261	0.216	0.102	0.098	0.404	0.136	0.157							
L160	3A1	0.259	0.154	0.23	0.105	0.227	0.26	0.202	0.101	0.102	0.409	0.136	0.155							
L161	3A1	0.238	0.137	0.221	0.094	0.209	0.246	0.197	0.09	0.106	0.414	0.136	0.163							
L164	3A1	0.24	0.132	0.2	0.086	0.21	0.243	0.198	0.094	0.102	0.415	0.136	0.162							
L166	3A1	0.25	0.14	0.22	0.097	0.21	0.25	0.2	0.098	0.093	0.39	0.13	0.15							
L168	3A1	0.3	††	0.17	††	0.22	0.12	††	0.204	0.261	0.215	0.1	0.098	0.407	0.15	†	0.159			
L178	3A1	0.235	0.134	0.21	0.096	0.219	0.246	0.204	0.092	0.099	0.398	0.134	0.158							
L180	3A1	0.106	††	0.124	††	0.183	††	0.088			0.107	0.383	0.124	0.157						

L186	3A1	0.379 ††	0.21 ††	0.332 ††	0.156 ††					0.102	0.405	0.137	0.155
L187	3A1	285 ††	165 ††	234 ††	117 ††	0.218	0.251	0.203	0.097	0.102	0.423	0.151 †	0.158
L188	3A1	0.251	0.148	0.216	0.1					0.128 ††	0.46 ††	0.153 †	0.188 ††
L192	3A1	0.24	0.142	0.206	0.096	0.217	0.245	0.203	0.094	0.103	0.409	0.128	0.163

Lab. Code #	Method Codes	Soil sample identification and values for Soil pH, 1:5 soil-water (4A1) air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	4A1	5.64	5.6	6.83	4.38	5.81	5.6	6.41	4.47	4.43	5.44	6.98	5.92
L007	4A1	5.6	5.58	6.93	4.27	5.9	5.8 ††	6.5	4.6	4.3 †	5.5	7.2	5.9
L009	4A1	5.59	5.58	6.94	4.42	5.83	5.63	6.68	4.46	4.42	5.52	6.83	5.83
L011	4A1	5.67	5.7	6.95	4.44	6.09 ††	5.87 ††	6.98 ††	4.64 ††	4.4	5.58	7.33	5.98
L012	4A1	5.47 †	6 ††	6.51 ††	4.5	6.45 ††	5.94 ††	5.67 ††	6.3 ††	4.3 †	5.4	6.8	5.9
L013	4A1	5.55	5.67	6.88	4.37	5.81	5.65	6.54	4.47	4.57 ††	5.43	7.05	5.82
L014	4A1	5.36 ††	5.43 ††	6.56 ††	4.21					4.58 ††	5.24 ††	6.64 ††	5.7 ††
L018	4A1	5.71	5.75	7.08	4.42	5.93	5.68	6.69	4.46	4.4	5.55	7.24	5.91
L019	4A1	5.71	5.72	7.01	4.48	5.88	5.65	6.66	4.45	4.42	5.63	7.31	5.97
L022	4A1	5.6	5.67	6.96	4.39	5.84	5.68	6.61	4.39	4.41	5.57	7.27	5.95
L023	4A1	5.65	5.73	6.86	4.44	5.9	5.68	6.7	4.53	4.52 †	5.61	7.36	6.02
L026	4A1	5.67	5.68	6.95	4.4	5.91	5.63	6.63	4.41	4.42	5.6	7.3	5.97
L027	4A1	5.6	5.6	6.7	4.4	5.8	5.7	6.7	4.5	4.5 †	5.5	6.9	5.9
L028	4A1	5.36 ††	5.48 †	6.76	4.23	5.88	5.6	6.69	4.43	4.29 †	5.49	6.99	5.87
L030	4A1	5.45 †	5.48 †	6.73	4.16 †	5.73	5.5 †	6.47	4.31	4.41	5.56	7.22	5.91
L032	4A1	5.72	5.77	7.06	4.54	5.97	5.76 †	6.73	4.58	4.4	5.53	7.26	5.96
L036	4A1	5.49	5.5 †	6.79	4.23	5.78	5.56	6.54	4.35	4.35	5.53	7.22	5.89
L040	4A1	5.72	5.68	6.95	4.41	5.94	5.65	6.63	4.42	4.42	5.69 †	7.16	5.98
L041	4A1									4.21 ††	5.4	6.92	5.79
L042	4A1	5.72	5.77	6.81	4.54	5.95	5.77 ††	6.6	4.63 ††	4.44	5.49	7.1	5.92

L044	4A1	5.4	††	5.7	6.2	††	4.6	5.7	5.5	†	6.5	4.3	3.9	††	5.2	††	6.2	††	5.5	††		
L045	4A1	5.69		5.71	6.8		4.53	5.85	5.63		6.58	4.46	4.41		5.5		7.07		5.97			
L055	4A1	5.63		5.69	6.96		4.47	5.89	5.65		6.65	4.48	4.35		5.51		7.19		5.9			
L056	4A1	5.66		5.7	6.98		4.42	5.82	5.56		6.54	4.34	4.41		5.57		7.28		5.91			
L063	4A1	5.7		5.7	6.9		4.4	5.90	5.66		6.68	4.47	4.4		5.59		7.37		5.95			
L064	4A1	5.48		5.45	††	6.72		4.18	5.76	5.55		6.53	4.31	4.35		5.47		7.12		5.86		
L080	4A1	5.61		5.59	6.89		4.29	5.8	5.59		6.53	4.29	4.4		5.5		6.89		5.89			
L133	4A1	6.2	††	6	††	7.2	††	4.8	††	5.85		5.64	6.68	4.15	††	4.33		5.54		7.26		
L135	4A1	5.42	†	5.37	††	6.69		4.1	††	5.95		5.59	6.6	4.45		4.2	††	5.4		6.8		
L137	4A1	5.52		5.57	6.79		4.33		5.9		5.63		6.68		4.4		4.3	†	5.47		7.28	
L139	4A1	5.65		5.71	6.83		4.48		5.83		5.61		6.61		4.44		4.42		5.5		7.2	
L140	4A1	5.5		5.5	†	6.7		4.1	††	5.4	††	5.1	††	6.5		4	††	3.9	††	5.1	††	
L142	4A1	4.95	††	4.81	††	6.04	††	3.66	††	5.63	††	5.41	††	6.39		4.2	††	4.18	††	5.46		
L143	4A1	5.8		5.8	7		4.5		5.9		5.65		6.7		4.5		4.5	†	5.6		7.3	
L156	4A1	5.63		5.64	6.73		4.44		5.73		5.69		6.38		4.46		4.18	††	5.47		6.93	
L158	4A1	5.73		5.72	6.99		4.48		5.9		5.67		6.65		4.45		4.49		5.6		7.25	
L160	4A1	5.6		5.6	6.9		4.3		5.8		5.6		6.6		4.4		4.3	†	5.5		7.1	
L161	4A1	5.6		5.61	6.84		4.36		5.87		5.66		6.62		4.47		4.4		5.56		6.99	
L164	4A1	5.63		5.63	6.7		4.32		5.79		5.5	†	6.46		4.56		4.11	††	5.38		6.94	
L166	4A1	6.2	††	5.8	6.9		4.4		5.8		5.6		6.5		4.4		4.3	†	5.4		7	
L168	4A1	5.6		5.7	6.9		4.4		5.96		5.63		6.59		4.5		4.37		5.51		7.1	
L178	4A1	5.7		5.69	6.97		4.4		5.93		5.63		6.61		4.43		4.43		5.69	†	7.18	
L180	4A1	5.71		5.59	6.83		4.34									4.18	††	5.3	††	6.95		
L187	4A1	5.64		5.7	6.87		4.65	†	5.94		6.72	††	5.73	††	4.56		4.63	††	5.62		7.34	
L188	4A1	5.67		5.68	6.97		4.4									4.36		5.5		7.32		
L192	4A1	5.64		5.66	6.98		4.45		5.74		5.56		6.56		4.36		4.41		5.55		7.23	

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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 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	4B1	5.17	5.02	6.38	3.75	5.44	5.07	5.95	3.83	3.74	5.03	6.24	5.66
L014	4B1	4.7	4.75	6 ††	3.48					3.59	4.82 †	6.08	5.08
L019	4B1	5.06	5	6.39	3.75	5.35	5.12	5.98	3.86				
L028	4B1	4.97	4.91	6.3	3.63	5.27	5.05	6.01	3.75	3.69	5.07	6.47	5.32
L041	4B1	5	5.03	6.26	3.76					3.68	4.96	6.31	5.32
L044	4B1	5.4	5.3	5.8 ††	4.2	6.6 ††	5.5 ††	6.1	4	3.6	4.9 †	6.1	5
L045	4B1					5.35	5.16	6.01	3.98	3.92	5.08	6.43	5.45
L055	4B1	5.09	5.02	6.4	3.77	5.28	5.04	5.9	3.77	3.74	5.08	6.54	5.35
L064	4B1									3.8	4.98	6.44	5.28
L135	4B1	4.9	4.9	6.27	3.6	5.22	5.09	5.89	3.75	3.75	5.07	6.45	5.39
L140	4B1	5.3	5.3	6.6	3.9	4.9 ††	4.6 ††	5.6 ††	3.2 ††	3.2 ††	4.6 ††	6.2	5
L143	4B1	5.3	5.3	6.7 ††	4.3 ††	5.49	5.28 †	6.23	4.21 ††				
L158	4B1	5.08	5.03	6.42	3.77	5.26	5.05	5.91	3.76	3.77	5.11	6.41	5.42
L168	4B1					5.44	5.25	6.07	3.86	3.75	5.07	6.45	5.36
L180	4B1	5.01	4.9	6.25	3.61					3.41 ††	4.76 ††	6.11	5.16
L186	4B1									4.34 ††	5.31 ††	6.81	5.93 ††

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 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	4B2	5.18	5.03	6.46	3.79	5.24 †	5.15	5.97	3.83	3.78	5.05	6.24 ††	5.58 ††
L011	4B2	5.11	5.04	6.43	3.77	5.53 ††	5.31 ††	5.28 ††	4.16 ††	3.85	5.11	6.65	5.45
L013	4B4	4.83 ††	4.82 ††	6.22 ††	3.65 ††	5.23 ††	5.08	5.95	3.94 †	3.9 ††	5.02	6.55	5.34

L014	4B2	4.65 ††	4.61 ††	5.99 ††	3.4 ††					3.73	5	6.18 ††	5.4
L018	4B2	5.1	5	6.45	3.71 ††	5.28	5.04	5.96	3.75 †	3.76	5.09	6.49	5.34
L019	4B2	5.14	5.05	6.5	3.77	5.3	5.08	5.99	3.83	3.75	5.09	6.49	5.35
L022	4B2	5.1	5.05	6.46	3.79	5.31	5.11	6.02	3.81	3.79	5.13	6.54	5.4
L023	4B4	5.13	5.06	6.42	3.77	5.37 ††	5.12	6.05	3.87	3.8	5.15	6.53	5.43
L026	4B2	5.16	5.08	6.5	3.81	5.33	5.11	6.03	3.83	3.8	5.15	6.62	5.43
L027	4B2	5 †	4.9 †	6.2 ††	3.7 ††	5.3	5 ††	5.9	3.9	3.8	5.1	6.4 †	5.4
L030	4B2	5.01 †	4.93 †	6.33 †	3.71 ††	5.23 ††	5.04	5.93	3.83	3.72	4.98	6.42	5.28
L032	4B2	5.09	5.02	6.46	3.77	5.36 †	5.16	6.08	3.87	3.74	5.07	6.53	5.36
L036	4B2	5.07	5.02	6.41	3.76	5.29	5.07	5.98	3.84	3.78	5.11	6.54	5.38
L040	4B2	5.12	5.05	6.48	3.78	5.3	5.13	6.01	3.82	3.78	5.17	6.54	5.47
L042	4B2	5.13	5.05	6.3 †	3.8	5.3	5.15	5.88	3.87	3.72	5.03	6.32 ††	5.33
L044	4B2	5.4 ††	5.3 ††	5.8 ††	4.2 ††	6 ††	5.5 ††	6.1	4 ††				
L045	4B2	5.22 †	5.15 †	6.46	4 ††								
L055	4B2	5.09	5.02	6.47	3.8	5.28	5.04	5.92	3.79	3.67 ††	5.08	6.56	5.32
L056	4B2	5.16	5.06	6.5	3.8	5.36 †	5.12	5.88	3.81	3.8	5.11	6.54	5.36
L063	4B2	5.1	5	6.5	3.8	5.31	5.10	5.96	3.87	3.74	5.03	6.64	5.35
L064	4B2	5.04	4.94 †	6.45	3.86 ††	5.3	5.07	5.97	3.99 ††				
L133	4B2					5.31	5.09	6.05	3.83	3.8	5.18	6.56	5.46
L139	4B2	4.84 ††	4.78 ††	6.07 ††	3.53 ††	5.19 ††	4.95 ††	5.85	3.7 †	3.7 †	5.04	6.44	5.29
L143	4B2									4.25 ††	5.2	6.6	5.5 †
L164	4B2	5.15	4.98	5.58 ††	3.72 †	5.15 ††	5.11	5.93	3.81	3.75	5.1	6.49	5.34
L166	4B2	4.8 ††	4.8 ††	5.7 ††	3.8	5.3	5.1	5.8	3.9	3.9 ††	5.4 ††	5.9 ††	5.4
L178	4B2	5.13	5.04	6.49	3.8	5.29	5.12	6.02	3.81	3.78	5.16	6.52	5.48
L180	4B2									3.6 ††	4.82 ††	6.2 ††	5.25

Lab. Code #	Method Codes	Soil sample identification and values for Water soluble Cl - potentiometric (5A1) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	5A1	20	67 ††	15	15	24	21	28	16	15	45	41 ††	15
L011	5A1	21	43	6	11	22	24	28	6.7	14	31	25	20
L013	5A1	19	34	9	16	34	27	23	22	10	19	13	12
L019	5A1	33 †	39	20	16	34	24	29	14	15	30	24	15
L022	5A1	18	35	14	14	15	20	28	15	16	30	24	23
L027	5A1	26	40	18	19	29	23	27	24	19	44	23	20
L030	5A1	20	35	9	10	19	20	26	12	10	22	19	16
L032	5A1	22	37	19	18	20	19	23	14	20	27	16	11
L044	5A1	12	36	9	7.8					9.2	27	22	20
L055	5A1	14	38	10	7.8	8.4	13	25	9.3	8.4	26	23	19
L063	5A1					27	29	29	13				
L064	5A1	153 ††	45	18	16	40	25	24	17	17	30	25	22
L080	5A1	43 ††	57 ††	39 ††	21	27	28	30	16	28	43	47 ††	47 ††
L135	5A1	24	33	17	27	15	22	30	18	21	10 ††	10 †	10
L140	5A1	16	46	24	31 †	37	35	40 ††	24	44 ††	51 ††	64 ††	27
L143	5A1	22	37	14	17	23	23	27	17	19	30	33	24
L160	5A1	21	40	10	12	20	20	23	10	12	25	20	18
L161	5A1	278 ††	68 ††	36 ††	117 ††								
L164	5A1	53 ††	36	13	16	36	28	14 ††	12	21	23	28	22
L166	5A1	30	47	24	21	31	35	35 †	24	19	36	26	20
L168	5A1	25	44	19	16	26	25	30	18	21	34	25	20
L187	5A1	20	20 ††	0.5	6	46	199 ††	55 ††	37 ††	17	12 †	13	11
L188	5A1	190 ††	72 ††	35 ††	170 ††					227 ††	74 ††	120 ††	53 ††
L192	5A1	14	39	9.9	6.9	7.6	13	26	7.9	12	26	20	18

Lab. Code #	Method Codes	Soil sample identification and values for Water soluble Cl - autocolour (5A2) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L023	5A2	19	38	10	11	21	21	26	12	12	28	23	19
L026	5A2	22	40	14	13	24	27	30	15	14	28	24	25
L028	5A2	22	43	21	12	20	25	29	16	13	30	23	23
L036	5A2	83 ††	43	21	16 †	31	84 ††	23	10	11	24	26	15
L040	5A2	14	30	13	12	22	20	27	13	12	26	20	17
L045	5A2	66 ††	45	19	16 †	37 ††	59 ††	28	17	22 ††	42 ††	66 ††	31
L139	5A2	30	35	22	20 ††	28	31	31	20	14	35 †	33	34
L178	5A2	14	29	14	12	23	19	27	14	12	27	20	18

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Lab. Code #	Method Codes	Soil sample identification and values for Organic Carbon - W&B (6A1) % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	6A1	4.13	3.36 †	2.98	2.98	2.83 ††	3.12	3.12	2.63 ††	2.83	2.63	1.46	1.95
L003	6A1	3.41	3.01	3.06	2.8								
L007	6A1	3.95	3.05	3.04	2.78	3.8	4	2.2	2.3	3.23	2.69	2.29 ††	2.25 †
L009	6A1	4.03	3.56 ††	2.7	2.81	4.43 †	3.7	2.79	2.19	2.84	2.95 †	1.56	1.87
L011	6A1	3.15	2.55 ††	2.09 ††	2.38 †	3.68	3.7	2.78	2.03	2.68	2.23	1.48	1.74
L012	6A1	3.39	4.46 ††	3.71 ††	3.11	2.25 ††	2.38 ††	3.04	2.58 ††	3.6 ††	2.8	1.6	2.3 ††
L013	6A1	3.89	3	2.89	2.63	4.07	3.93	2.97	2.83 ††	3.14	2.65	1.74	2.03
L014	6A1	3.23	3.5 ††	2.98	1.19 ††					3.35 ††	2.7	1.74	2.24
L018	6A1	3.83	3.05	2.73	2.86	3.76	3.86	2.74	2.14	2.8	2.34	1.59	1.84
L019	6A1	3.3	2.69 †	2.21 ††	2.74	3.35	3.3	2.28	1.96	2.95	4.81 ††	2.18 ††	2.33 ††

L022	6A1	3.35	3.12	2.71	2.88	3.64	3.55	2.72	2.22	2.83	2.5	1.55	1.93
L023	6A1	3.91	2.92	2.61	2.66	4.06	4.02	2.92	2.12	2.86	2.46	1.71	2.08
L026	6A1	3.63	3.07	2.52	2.83	3.78	3.72	3.06	2.20	2.64	2.39	1.54	1.91
L028	6A1	3.48	3.24	2.75	2.75	3.52	3.39	2.49	2.02	2.96	2.32	1.49	1.89
L030	6A1	3.77	3.09	2.95	3.03	3.69	3.89	3.06	2.26	2.85	2.46	1.81	2.04
L041	6A1	17.8 ††	10.3 ††	5.94 ††	6.85 ††								
L056	6A1	3.66	3.14	2.47	2.65	3.95	3.7	2.63	2.15	2.76	2.32	1.66	1.77
L064	6A1	3.6	2.97	2.9	2.88	4.09	4.17	2.78	2.33	2.82	2.4	1.74	1.93
L080	6A1	3.3	3.02	2.39	2.67	3.33	3.78	2.42	1.97	2.5	2.36	1.61	1.93
L135	6A1	3.45	2.97	2.96	2.52	3.34	3.6	2.85	2.23	2.76	2.66	1.62	2.1
L137	6A1	3.7	3.06	2.87	2.79	3.71	3.8	2.57	2.1	2.74	2.5	1.64	2.01
L139	6A1	3.58	2.72 †	3.16	2.91	3.53	4.14	2.78	2.03	2.53	2.26	1.42	1.77
L142	6A1	3.84	3.5 ††	3.18	3.00	4.74 ††	4.49 ††	3.5 ††	2.55 †	3.01	2.70	1.47	2.06
L143	6A1	3.9	3.2	3	3.2 †	4.11	4.04	2.98	2.39	2.75	2.55	1.79	2.11
L158	6A1	3.39	3.2	2.72	2.71	3.95	3.51	2.62	2.07	2.56	2.39	1.5	1.85
L160	6A1	3.64	2.98	2.77	2.81	3.75	3.47	2.8	2.31	2.85	2.5	1.67	1.94
L161	6A1	3.07	2.94	2.93	2.66	3.98	3.48	2.84	2.2	2.69	2.29	1.48	1.89
L164	6A1	3.78	3.1	2.67	2.8	3.8	3.9	2.8	2.2	2.52	2.28	1.57	1.9
L179	6A1	3.81	3.29	2.93	3.03	3.79	3.66	2.51	2.25	3.14	2.58	1.77	2.18
L180	6A1									2.33 ††	2.31	0.785 ††	1.18 ††
L187	6A1	4.46	3.71 ††	3.54 ††	3.54 ††	4.09	4.02	3.39 †	2.77 ††	3.33 ††	3.11 ††	1.97	2.63 ††

Lab. Code #	Method Codes	Soil sample identification and values for Total Organic C - Heanes (6B1) % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L023	6B1	4.14	3.62	3.2	3.23	4.27	4.07	3.05	2.42	3.63	2.98	1.86	2.32
L028	6B1	3.96	3.25 ††	3.08	3.05	4.4	4.12	3	2.68	3.32	2.96	1.85	2.31
L158	6B1	4.3	3.64	3.27	3.38	4.33	4.06	3.15	2.46	2.94	2.67 ††	1.73 ††	2.07 ††

Lab. Code #	Method Codes	Soil sample identification and values for Total Organic C - Dumas (6B2) % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	6B2	4.65 ††	3.6	2.95	3.22	4.5	4.39	3.19	2.56	3.23	3.38 ††	1.8	2.15
L013	6B2	4.6 ††	3.62	3.25	3.31	4.59	4.52	3.32	2.44				
L018	6B2					4.34	4.3	2.98	2.37	3.15	2.71	1.88	2.08
L019	6B2					4.34	4.3	3.09	2.29				
L022	6B2	4.25	3.51	3.14	3.25	4.47	4.37	3.21	2.67	3.23	2.93	1.94	2.22
L023	6B2					4.52	4.43	3.14	2.6	3.51 ††	2.74	1.79	2.33 †
L028	6B2	4.38	3.55	2.95	3.07	4.43	4.45	3.05	2.47	3.14	2.76	1.85	2.09
L030	6B2	4.42	3.5	3.03	3.46	4.46	4.42	3.21	2.42	3.13	2.8	1.98	2.23
L032	6B2					4.53	4.46	3.02	2.33				
L036	6B2	4.36	3.49	3.06	3.1	4.54	4.48	3.2	2.5	3.2	2.81	1.9	2.18
L042	6B2	4.43	3.53	2.9	3.16	4.58	4.46	2.98	2.73 †	3.1	2.87	1.99	2.32
L064	6B2					4.27	4.48	2.96	2.37				
L097	6B2					4.19	4.32	2.89	2.38	3.25	2.84	1.63 †	2.13
L135	6B2	4.74 ††	3.19	3.07	2.94	3.53 ††	4.42	3.23	2.6				
L143	6B2	4.3	3.7	3.3	3.2	4.27	4.46	3.54 ††	2.49	3.19	2.78	1.72	2.19
L156	6B2					4.39	4.41	3.2	2.41	3.35	2.81	1.81	2.17
L158	6B2	4.42	3.27	3.49 ††	3.63 ††								
L163	6B2									3.23	2.83	1.88	2.22
L166	6B2					5.2 ††	5.1 ††	3.8 ††	3 ††				
L181	6B2	4.28	3.31	2.98	3.29	4.46	4.32	3.14	2.33				
L186	6B2	4.36	3.41	2.85	3.1	4.11 †	4.37	3.17	2.36	3.56 ††	2.65	1.55 ††	2.19
L192	6B2	4.39	3.34	2.82	3.03	4.33	4.31	3.25	2.57	3.26	2.92	1.83	2.19
L195	6B2					4.53	4.5	3.06	2.35	3.18	2.95	2.13 ††	2.35 ††

Lab. Code #	Method Codes	Soil sample identification and values for Total Organic C - HF Induction, IR (6B3) % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L018	6B3	4.15	3.23	2.86	3 †								
L019	6B3	4.29	3.29	2.81	3.03	4.23	4.13	2.93	2.23	3.18	2.92	1.85	2.12
L022	6B3	3.81	3.45	3.05	3.18	4.28	4.23	3.05	2.53	3.2	2.84	1.83	2.1
L023	6B3	4.52	3.69	3.16	3.37	4.5	4.38	3.12	2.39	3.19	2.82	1.89	2.12
L027	6B3	1.51 ††	1.57 ††	1.57 ††	1.57 ††	4.6	4.1	2.9	2.4	2.8 †	2.8	1.4 ††	2.4
L028	6B3	4.28	3.43	2.86	3.06	4.43	4.21	3.11	2.48	3.02	2.78	1.86	2.17
L032	6B3	4.45	3.57	2.89	3.22					3.4	2.9	1.9	2.2
L040	6B3	4.21	3.44	3.12	3.21	4.48	4.26	3.1	2.61	3.22	3.08	1.98	2.35
L045	6B3	3.41 ††	2.8 ††	2.26 ††	2.52 ††	4.2	4.19	3.14	2.27	3.36	2.73	1.87	2.14
L063	6B3	4.32	3.5	3.04	3.23	4.34	4.24	3.57 ††	2.52	3.02	2.71	1.86	2.11
L064	6B3	3.47 ††	2.9 †	2.86	2.84 †	4.16	4.37	2.9	2.27	3.22	2.81	1.89	2.22
L135	6B3	4.73	3.17	3.05	2.93 †	3.48 ††	4.27	3.08	2.5	3.03	3.04	1.75	2.3
L140	6B3	3.86	3.28	2.92	3.47 †	4.2	7 ††	2.8	2.7	5.7 ††	5.4 ††	3.2 ††	4.2 ††
L156	6B3	4.34	3.44	2.86	3.22								
L158	6B3					4.55	4.46	2.99	2.77	3.09	2.88	2.05 †	2.29
L163	6B3	4.43	3.54	3.28	3.21								
L166	6B3	2.5 ††	2.1 ††	1.9 ††	1.9 ††					3.6 †	2.7	1.7 †	1.8 ††
L168	6B3	3.8	3.3	2.9	3.2	4.06	4.01	2.86	2.28	2.84	2.71	1.76	2.08
L178	6B3	4.28	3.47	3.08	3.18	4.51	4.24	3.09	2.62	3.2	3.06	2.02 †	2.33
L181	6B3	4.28	3.31	2.98	3.29	4.46	4.32	3.14	2.33	3.2	2.79	1.87	2.14
L195	6B3					0.09 ††	0.07 ††	0.03 ††	0.03 ††	3.16	3.01	2.06 †	2.41

Lab. Code #	Method Codes	Soil sample identification and values for Total N - Kjeldahl, steam distillation (7A1) % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	7A1	0.448	0.266	0.28 †	0.224	0.308 ††	0.336	0.224	0.21	0.399 ††	0.28	0.252 ††	0.224 †
L003	7A1	0.402	0.264	0.254	0.232	0.38	0.37	0.3	0.19	0.24	0.23	0.17	0.19
L007	7A1	0.435	0.294	0.395 ††	0.238	0.38	0.39	0.32	0.19	0.25	0.22	0.18	0.19
L011	7A1					0.209 ††	0.197 ††	0.238	0.177	0.099 ††	0.111 ††	0.099 ††	0.079 ††
L012	7A1	0.39	0.26	0.23	0.23								
L014	7A1									0.16 ††	0.1 ††	0.88 ††	0.08 ††
L019	7A1	0.4	0.252	0.233	0.225	0.407	0.438	0.29	0.19	0.239	0.245	0.172	0.187
L022	7A1	0.415	0.283	0.251	0.24	0.385	0.421	0.291	0.19	0.234	0.23	0.164	0.18
L027	7A1	0.39	0.228	0.196 ††	0.204	0.401	0.407	0.321	0.155	0.174 ††	0.176 †	0.178	0.158
L028	7A1					0.408	0.449	0.298	0.193	0.244	0.247	0.176	0.184
L032	7A1	0.431	0.277	0.243	0.24	0.4	0.429	0.28	0.178	0.25	0.25	0.18	0.19
L044	7A1	0.384	0.252	0.241	0.257	0.364	0.371	0.261	0.195	0.208	0.226	0.122 †	0.163
L063	7A1	0.41	0.26	0.24	0.22	0.38	0.41	0.31	0.18				
L064	7A1									0.244	0.246	0.159	0.171
L135	7A1									0.24	0.196	0.233 ††	0.23 ††
L137	7A1	0.453	0.297	0.277	0.295	0.373	0.385	0.261	0.18	0.233	0.243	0.158	0.194
L140	7A1	0.49	0.28	0.26	0.26	0.44 †	0.47	0.31	0.24 ††	0.31 ††	0.3 ††	0.23 ††	0.24 ††
L142	7A1	0.373	0.241	0.233	0.218	0.332	0.349	0.219	0.157	0.23	0.221	0.132 †	0.167
L143	7A1	0.44	0.28	0.25	0.26	0.38	0.47	0.34	0.19	0.26	0.25	0.15	0.18
L156	7A1	0.421	0.268	0.243	0.239								
L158	7A1	0.42	0.25	0.28 †	0.27	0.416	0.443	0.286	0.21	0.227	0.236	0.17	0.181
L160	7A1	0.425	0.264	0.256	0.245	0.368	0.407	0.234	0.168	0.228	0.223	0.173	0.178
L164	7A1	0.37	0.24	0.22	0.22	0.38	0.4	0.27	0.19	0.48 ††		0.17	0.17
L166	7A1	0.44	0.33 ††	0.24	0.28								
L168	7A1	0.43	0.25	0.25	0.21	0.405	0.356	0.216	0.152 †	0.197 †	0.234	0.154	0.161
L187	7A1	0.349 ††	0.26	0.227	0.226	0.343	0.294 †	0.256	0.2	0.219	0.209	0.139	0.16

L192	7A1	0.761 ††	0.417 ††	0.388 ††	0.382 ††	0.394	0.429	0.293	0.171	0.247	0.268	0.187	0.209
L195	7A1					0.37	0.39	0.25	0.16	0.207	0.211	0.152	0.156

Lab. Code #	Method Codes	Soil sample identification and values for Total N - Kjeldahl, autocolour (7A2) % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L018	7A2	0.397	0.257	0.242	0.233	0.361	0.391	0.271	0.179	0.206	0.207	0.15	0.159
L023	7A2	0.402	0.271	0.241	0.224	0.393 ††	0.419	0.275	0.179	0.259	0.242	0.154	0.172
L026	7A2	0.411	0.285	0.281	0.237	0.355	0.391	0.266	0.196	0.201	0.218	0.136	0.167
L028	7A2	0.421	0.262	0.259	0.236	0.365	0.404	0.29	0.175	0.246	0.232	0.14	0.175
L055	7A2	0.454 ††	0.28	0.25	0.234	0.361	0.396	0.279	0.173				
L179 CH	7A2	0.4	0.26	0.27	0.23	0.37	0.4	0.25	0.19	0.222	0.238	0.13	0.169
L082	7A2	0.362 †	0.241	0.226	0.222	0.415 ††	0.382	0.228 ††	0.169	2160 ††	2260 ††	1650 ††	1780 ††

Lab. Code #	Method Codes	Soil sample identification and values for Total N – Dumas (7A5) % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	7A5	0.459	0.299	0.264	0.251	0.411	0.435	0.3	0.208	0.242	0.269	0.196	0.211 †
L011	7A5	0.294 ††	0.197 ††	0.155 ††	0.211 ††								
L013	7A5	0.44	0.28	0.27	0.25	0.412	0.46	0.307	0.197	0.26	0.25	0.18	0.2 †
L023	7A5	0.425	0.281	0.258	0.238	0.401	0.421	0.272	0.19	0.284 ††	0.241	0.164	0.156 ††
L028	7A5	0.431	0.283	0.257	0.243	0.408	0.449	0.298	0.193	0.244	0.247	0.176	0.184
L030	7A5	0.416	0.264	0.24	0.243	0.395	0.422	0.294	0.182	0.234	0.238	0.173	0.184
L036	7A5	0.433	0.276	0.261	0.238	0.423	0.447	0.308	0.198	0.241	0.244	0.171	0.187
L040	7A5	0.399	0.254	0.258	0.242	0.406	0.426	0.293	0.205	0.244	0.253	0.147	0.185

L042	7A5	0.419	0.269	0.237	0.231	0.391	0.387 ††	0.242 ††	0.169	0.242	0.248	0.18	0.197 †
L045	7A5	0.46	0.3	0.27	0.27 †	0.424	0.45	0.304	0.216	0.283 ††	0.264	0.194	0.208 †
L063	7A5									0.2 ††	0.21 ††	0.15	0.16 †
L064	7A5	0.425	0.268	0.285	0.25	0.404	0.445	0.293	0.195				
L097	7A5	0.431	0.274	0.274	0.257	0.373	0.432	0.278	0.19	0.277 †	0.258	0.172	0.207 †
L135	7A5	0.373 †	0.225 ††	0.28	0.235	0.331 ††	0.442	0.301	0.215				
L139	7A5	0.423	0.259	0.247	0.232	0.428	0.447	0.261	0.16	0.214 †	0.164 ††	0.136 †	0.157 †
L156	7A5					0.395	0.436	0.308	0.206	0.254	0.241	0.164	0.182
L163	7A5	0.466	0.29	0.286	0.261					0.239	0.241	0.169	0.185
L178	7A5	0.401	0.257	0.256	0.244	0.41	0.422	0.29	0.206	0.245	0.251	0.151	0.183
L186	7A5	0.447	0.282	0.253	0.255	0.321 ††	0.407	0.275	0.181	0.278 †	0.217 ††	0.114 ††	0.184

Lab. Code # 09	Method Codes	Soil sample identification and values for Water Soluble Nitrate N - autocolour (7B1) mg/kg dry wt											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	7B1	70	15 ††	50	17	12 †	70	33	22	17	74 ††	12 ††	13 ††
L011	7B1	69	7.7	45	17	7.2	64 †	30	20	17	177	19	24
L013	7B1	73	8.5	47	4 ††	6.7	67	30	20	17	150	20	23
L014	7B1									141 ††	141 †	60 ††	20
L027	7B1	66	9.4	47	15	3.6	71	31	20	16	180	18	26
L028	7B1	67	8	49	17								
L040	7B1	70	6.2	51	17	2.1 †	70	33	21	17	175	23	27
L045	7B1	72	7.8	54	17	7.8	73	35 ††	23 †	18	193	21	26
L055	7B1	68	6.8	46	16	6	72	30	20	15 †	190	18	23
L064	7B1	66	9.2	51	18	15 ††	72	32	22	18	118 †	24	25
L080	7B1	74	9.8	55	20 †	7.9	70	32	21	18	181	20	24
L135	7B1	56 ††	15 ††	20 ††	22 ††	11 †	69	31	21				
L139	7B1	64	5.5	45	13 ††	5.1	59 ††	31	16 ††	11 ††	216 †	19	22

L140	7B1	72	5.6	54	14 †	5	69	31	19	18	170	20	25
L143	7B1	69	71 ††	48	17	7.5	73	33	21	19	180	25	26
L160	7B1	73	8.5	53	18	7.5	75 †	32	23 †	19	230 †	21	25
L161	7B1	66	7.4	52	16	8.3	71	31	20	18	172	16	23
L166	7B1				0.73 ††	22 ††	12 ††	19	18	77 ††	18	24	
L178	7B1	70	5.9	51	17	2.2 †	69	33	22	17	172	23	26
L187	7B1	55 ††	5	35 ††	14 †	5.9	69	30	20	13 ††	93 ††	18	21
L188	7B1	53 ††	13	44	11 ††					5.4 ††	77 ††	21	12 ††
L192	7B1	72	6.6	43	14 †	6.4	66	32	20	16	191	18	21

I9 Lab. Code #	Method Codes	Soil sample identification and values for KCL Extractable Nitrate N - autocolour (7C2) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	7C2	72	15 ††	52	17	13 ††	70	33	22	17	74 ††	12 †	13 ††
L011	7C2	78 ††	9.3	48	14	7.7	80 ††	31	18	16	173	21	26
L013	7C2	73	8.5	49	17	6.3	65	28	19	16	152 †	19	26
L014	7C2									20 †	20 ††	20	
L018	7C2	68	7.5	46	18	6.1	65	31	21	17	181	19	25
L019	7C2	79 ††	6.9	57	13	6.1	62	27	19	15	203 †	19	25
L022	7C2	71	8.9	50	16	7.2	69	32	20	17	180	19	23
L023	7C2	69	7.7	42	14	6.8	70	32	18	14	185	19	24
L026	7C2	69	7.9	52	15	5.4	62	28	19	14	158 †	16	22
L028	7C2	77 †	9.3	55	19	7	77 †	34	21	17	186	19	26
L030	7C2	69	8.6	49	19	7	71	34	20	16	203 †	18	23
L032	7C2	59 ††	6.4	40	13	6.8	62	27	18	2 ††	16 ††	1.6 ††	2 ††
L036	7C2	65	7.7	42	17	6.9	67	31	20	18	178	19	25
L042	7C2	63	7	46	15	5.4	60 †	27	17	14	178	15	23
L044	7C2	74	14 ††	51	23 ††	7.8	71	30	23	21 †	215 ††	22	29 †

L055	7C2	67	6.7	46	14	5.9	69	29	19	15	186	16	22
L063	7C2	68	8.3	53	17								
L097	7C2	69	7	48	13	5.7	67	30	17	12 †	185	17	23
L135	7C2	59 ††	10	28 ††	20	12 ††	72	34	22	28 ††	100 ††	32 ††	37 ††
L140	7C2									42 ††	37 ††	9.9 ††	45 ††
L158	7C2					6.7	70	31	20				
L160	7C2	70	8.4	55	18	7.4	75	32	22	18	249 ††	21	26
L163	7C2	67	7.4	45	13					15	189	19	24
L166	7C2	69	8	46	17					52 ††	18 ††	10 ††	44 ††
L168	7C2	71	8.2	45	17	5.4	67	28	17	17	183	16	24
L179	7C2	170 ††	54 ††	56	41 ††	7	71	31	19	16	180	19	24
L186	7C2					6.3	68	31	20	14	169	15	20 †
L192	7C2	70	7.9	46	16	6.8	68	32	21	15	188	18	24

Lab. Code # 62	Method Codes	Soil sample identification and values for KCL Extractable Ammonium N - autocolour (7C2) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	7C2	134 †	37 ††	50	36	89 ††	161	14	26	37	35	11	30 ††
L011	7C2	169	55	59 ††	42	193	181	18	32	41	36	9.2	43
L013	7C2	158	53	53	39	160	148	16	28	41	35	8.3	43
L018	7C2	166	52	50	38	179	165	14	26	40	34	8.6	42
L019	7C2	158	54	55	40	161	153	13	24	39	33	8.4	40
L022	7C2	153	49 †	52	36	181	165	15	27	37	34	7.1	40
L023	7C2	178	53	51	36	191	175	16	28	39	34	7.7	41
L026	7C2	162	49 †	49	30 ††	164	158	15	27	37	33	7.4	38
L028	7C2	161	52	50	36	185	172	12	25	39	33	7.4	41
L030	7C2	156	56	54	40	150	145	17	29	39	33	6.8	40
L032	7C2	170	54	53	41	200	182	20 ††	33	4 ††	4 ††	1.4 ††	5 ††

L036	7C2	169	52	51	39	193	179	16	29	40	33	7.1	42
L042	7C2	171	53	50	35	183	168	13	25	37	33	8.6	43
L044	7C2	117 ††	52	47	35	196	160	41 ††	55 ††	56 ††	53 ††	31 ††	62 ††
L055	7C2	164	52	53	38	187	176	18	31	40	35	7.9	41
L064	7C2	142	58 †	55	39	179	163	14	24				
L097	7C2	154	47 †	52	36	147	152	14	25	38	34	9.3	41
L135	7C2	139	42 ††	31 ††	30 ††	436 ††	167	16	23	26 ††	24 ††	16 ††	48 ††
L140	7C2	180	62 ††	60 ††	47 ††	190	180	20 ††	32				
L158	7C2					141	136	14	27				
L160	7C2	189	56	56	40	194	175	15	28	41	34	8.7	42
L161	7C2	172	54	57	40	181	168	17	30	41	38 ††	11 †	42
L163	7C2	143	50	50	32					37	33	8	40
L168	7C2	171	61 †	32 ††	42	51 ††	88 ††	13	15 ††	23 ††	17 ††	1.1 ††	14 ††
L179	7C2	69 ††	7.2 ††	46	49 ††	169	153	17	27	40	38 ††	15 ††	47 ††
L186	7C2					190	169	15	26	38	33	7.4	38
L092	7C2	157	46 †	50	35	173	156	15	27	39	34	8.2	40

Lab. Code #	Method Codes	Soil sample identification and values for Total P - Pooled % oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	Pooled	0.107	0.059	0.042	0.020	0.089	0.111	0.115	0.016	0.02	0.04	0.041	0.051
L011	Pooled	0.125	0.06	0.033 †	0.014 ††	0.112	0.127	0.11	0.016	0.014 ††	0.03 ††	0.043	0.044 ††
L013	Pooled	0.067 ††	0.045 ††	0.044	0.02								
L018	Pooled	0.106	0.655 ††	0.406 ††	0.206 ††	0.099	0.123	0.114	0.018 †	0.021	0.042	0.059	0.064
L019	Pooled	0.114	0.066	0.043	0.019	0.101	0.11	0.147 ††	0.017	0.019	0.042	0.061	0.057
L022	Pooled	0.094	0.064	0.043	0.021	0.082	0.111	0.11	0.016	0.02	0.041	0.041	0.06
L023	Pooled	0.117	0.069	0.043	0.020	0.103	0.127	0.121	0.019 †	0.022	0.041	0.056	0.066

L026	Pooled	0.128	0.071	0.050	0.026 ††	0.098	0.115	0.108	0.021 ††	0.022	0.042	0.048	0.059
L027	Pooled	0.098	0.041 ††	0.038	0.022	0.046 ††	0.062 ††	0.092	0.016	0.017	0.027 ††	0.044	0.057
L030	Pooled	0.112	0.06	0.038	0.018	0.098	0.112	0.095	0.017	0.016	0.035 †	0.053	0.052
L032	Pooled	0.114	0.060	0.039	0.017	0.081	0.12	0.101	0.011 ††	0.018	0.038	0.051	0.055
L040	Pooled	0.116	0.064	0.042	0.019	0.102	0.116	0.112	0.016	0.020	0.043	0.057	0.06
L044	Pooled	0.089	0.042 ††	0.027 ††	0.013 ††	0.077	0.219 ††	0.08 ††	0.143 ††	0.023	0.029 ††	0.031 ††	0.037 ††
L064	Pooled	0.12	0.059	0.045	0.021	0.094	0.118	0.112	0.017	0.02	0.04	0.052	0.055
L140	Pooled	0.081 ††	0.055	0.032 †	0.02	0.039 ††	0.1	0.12	0.02 ††	0.021	0.037	0.05	0.061
L160	Pooled	0.096	0.066	0.04	0.019	0.082	0.092 ††	0.097	0.017	0.021	0.039	0.056	0.059
L166	Pooled					0.075 †	0.12	0.09 †	0.015	0.017	0.04	0.05	0.05
L168	Pooled	0.11	0.066	0.041	0.021	0.104	0.094 †	0.104	0.017	0.019	0.045	0.055	0.056
L178	Pooled	0.115	0.063	0.042	0.02	0.101	0.113	0.111	0.016	0.02	0.044	0.057	0.06
L182	Pooled					0.11	0.13	0.11	0.02 ††				
L187	Pooled	0.127	0.068	0.035	0.015 ††	0.106	0.13	0.121	0.016	0.015 †	0.041	0.061	0.06

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Lab. Code#	Method Codes	Soil sample identification and values for Colwell Extractable P – pooled (9B1, 9B2) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	9B1	42	68	131	28	77	44	151	16	28	101	57	47
L011	9B1	39	65	121	23 †	68	40	144	13	29	104	49	34 ††
L013	9B2	35	66	117	27	57 ††	29 ††	122 ††	12	31	102	53	47
L018	9B2	40	67	120	27	75	45	153	17	25	101	45	47
L019	9B1	45	69	135	28	78	52 †	173	14	24	102	44	46
L022	9B1	43	71	124	27	67	44	155	17	28	107	52	48
L023	9B2	44	68	139	32	73	45	161	18	30	98	46	47
L026	9B2	42	66	131	26	71	43	153	16	29	100	43	44
L027	9B1	49	77 †	123	16 ††	72	54 ††	188 ††	4 ††	6 ††	131 ††	58	78 ††

L028	9B2	46	75 †	118	29	78	42	178 †	16	21 †	89	43	48
L030	9B2	47	67	126	27	60 †	34 ††	146	13	25	91	42	42
L032	9B1	55	106 ††	146 ††	30	84 †	53 †	204 ††	18	29	147 ††	49	56 †
L036	9B2	39	65	123	29	73	44	161	15	29	103	47	44
L040	9B2	42	67	127	29	74	44	156	16	29	102	52	50
L044	9B1	57	66	119	38 ††	69	41	140	16	26	96	50	40 †
L045	9B1	49	73	119	39 ††	69	45	141	26 ††	33	85 †	45	35 ††
L063	9B1	45	67	122	30	78	47	157	26 ††	34	108	54	51
L064	9B1	41	68	140	29	63	48	157	16	27	111	54	54 †
L080	9B1	33	54 ††	117	13 ††	54 ††	27 ††	113 ††	13	23	88 †	45	36 ††
L135	9B1	50	75 †	137.6	27	63	47	162	17	34	96	44	46
L139	9B2	45	71	128	34 ††	67	43	162	21 †	29	87 †	40	40 †
L142	9B1					31 ††	20 ††	54 ††	7 ††				
L143	9B1	50	66	148 ††	32								
L158	9B1	48	77 †	130	27	67	46	149	15	20 ††	93	43	50
L160	9B1	49	75 †	148 ††	28	75	48	159	18	38 ††	104	47	48
L161	9B1	44	72	125	26	74	48	162	21 †	29	105	52	49
L164	9B1	37	68	125	24	70	43	151	15	20 ††	103	46	48
L166	9B1					70	40	144	15	31	130 ††	68 ††	59 ††
L168	9B1	41	81 ††	121	27	82	57 ††	172	18	28	119 †	56	60 ††
L178	9B2	42	67	125	29	74	44	154	15	29	104	50	51
L182	9B2	50	78 ††	144 †	29	1080 ††	1330 ††	1110 ††	193 ††	26	98	49	45
L194	9B1	37	59 †	105 †	22 ††	70	45	144	18	24	108	47	48

Lab. Code #	Method Codes	Soil sample identification and values for Olsen Extractable P – pooled (9C1, 9C2) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	9C1	11	22	47	14	26	12	47	6.8	16	49	18	17 †
L007	9C1	12	26	42	20	25	13	43	12	20	44	19	15

L009	9C1	10	21	47	19	21	11	39	10	18	39	20	13
L011	9C1	12	24	40	15	24	11	36	8.1	17	41	19	13
L013	9C2	10	21	39	15	21	10	36	8	16	42	21	14
L014	9C1	20 ††	23	40	31 ††					167 ††	134 ††	25 ††	24 ††
L019	9C1	12	26	50	18	32 ††	17 ††	59 ††	10	15	44	18	15
L022	9C1	12	24	46	17	25	11	40	9.7	18	46	19	17 †
L026	9C2	9.4	21	44	15	21	9.9	39	7.9	16	41	18	13
L027	9C1	12	21	49	8 ††	19	10	34	8.2	4 ††	24 ††	30 ††	27 ††
L030	9C2	11	24	44	15	20	9.2	38	7.09	14	37	16	13
L036	9C2	9.2	22	43	16	21	8.5	38	7.9	15	40	19	13
L040	9C2	9.8	20	47	18	21	11	38	11	18	43	18	13
L042	9C2	13	26	47	17	25	11	42	8.3				
L044	9C1				34 ††	21 ††	57 ††	29 ††					
L045	9C1	10	26	47	28 ††	23	11	35	14	23 ††	39	16	11
L063	9C1	11	26	45	19	24	10	45	7.6	18	42	19	15
L085	9C1	16 †	29	64 ††	17	15 ††	12	40	9.5	19	42	18	12
L137	9C1	21 ††	26	58 ††	17	26	13	42	11	16	43	19	15
L139	9C2	41 ††	30	52	24 ††	24	12	42	11	18	37	15 †	13
L142	9C1	14	23	82 ††	28 ††					30 ††	55 ††	26 ††	20 ††
L143	9C1	13	24	45	18	26	15 ††	43	13	17	39	19	12
L156	9C2				3 ††	2.2 ††	3 ††	2.2 ††		16	46	20	11
L160	9C1	13	28	56 †	18	27	14	47	11	20	46	21	18 †
L178	9C2	9.9	20	47	18	21	11	38	10	17	43	18	13
L179	9C2	10	24	41	16	22	10	39	8.3	14	37	18	13
L180	9C1					16 †	9	36	7.3	8.4 ††	20 ††	7.6 ††	6.5 ††
L187	9C1									20	33 †	12 ††	11

Lab. Code #	Method Codes	Soil sample identification and values for Bray-1 Extractable P - pooled (9E1, 9E2) m/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	9E1	12	34	90	11	18	10	53	7.7	12	38	19	22
L014	9E1	9.4	35	47	5.1					17	12 ††	120 ††	100 ††
L019	9E1	10	31	52	12	18	10	70 †	8.2	13	45	15	17
L023	9E2	9.2	26	52	12	18	8.9	55	8.4	12	40	16	13
L026	9E2	9.8	29	88	10	17	8.9	57	10	6.8	51	12	17
L027	9E1	12	31	104	20 †	22	14	58	5.8	21	62	20	15
L044	9E1									15	28	5	16
L056	9E1	11	29	106	19 †	21	11	62	10	17	63	18	13
L063	9E1	10	28	85	13	27 ††	14	77 ††	14 ††				
L064	9E1	8.2	48 ††	87	16	16	8.9	53	7.3	14	48	12	12
L135	9E1	6.8 †	34	61	9.6	17	10	48	8.1				
L160	9E1	34 ††	170 ††	224 ††	29 ††								
L187	9E1	10	22	37	13								

Lab. Code #	Method Codes	Soil sample identification and values for Acid Extractable P — pooled (9G1 + 9G2) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L013	9G2	39	155	205	33	119	64 ††	375	31 ††	29	161	93	114
L026	9G2	35	157	207	28	102	32	400	23	25	146	88	102
L028	9G2	36	156	217	31	110	31	410	16	26	159	99	108
L032	9G2	29	179 ††	228	30	154 ††	27	527	16	31	191	118	168 ††
L064	9G1	35	146 †	213	33	104	30	420	18				

L080	9G1					120	31	300	16	26	250	††	118	102
L139	9G2	39	119	††	161	††	24	103	26	344	15	24	140	84
L160	9G2					111	33	457	19	25	150		121	115
L161	9G1	38	160		206	30	122	36	412	22	31	175	121	146

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus buffer index - Colwell (9I2a + 9I2b + 9I2c) L/kg dry wt											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	9I2a	427	364	79.7	93.9	128	439	228	99.5	93.3	60.3	98.5	280
L011	9I2a	412	313	62 ††	72.3 ††	136	415	216	94.2	79.9 ††	61.1	99.5	243
L013	9I2a	451	382	79	102 ††	145	440	216	110	98	81	109	270
L018	9I2a	425	359	70	90	136	419	208	101	93	71	104	304
L019	9I2a	522	444	83	99 †	132	461	200	110	91.5	54 ††	123 ††	299
L022	9I2a	434	347	75.6	93.1	141	429	226	102	93	74	111	278
L023	9I2a	426	353	78.1	89.1	138	421	214	96.7	88.8	69.3	101	272
L026	9I2a	437	360	81	93.2	146	439	222	98.6	93.9	74.9	108	297
L028	9I2b	473	373	120 ††	65 ††	150	452	235	98	88	70	102	295
L032	9I2a	371	292	70	80 ††	146	416	228	104	89	73	99	271
L036	9I2a	464	419	74.4	94.2	139	459	250	98.8	88.8	67.9	98.6	275
L040	9I2a	510	409	79	92	141	457	240	105	92.5	67.2	109	234
L044	9I2a	198 ††	200 ††	49.1 ††	63.6 ††	165 ††	346 ††	236	117	103 ††	81	105	231
L064	9I2a	712 ††	535 ††	83	94.5	148	503	239	109	95	80.3	107	351 ††
L080	9I2a	99 ††	441	392 ††	66 ††	138	397	186 ††	108	94	76	103	270
L135	9I2a	320 †	270 †	110 ††	112 ††	141	464	244	112	95.7	70.7	105	283
L139	9I2a	421	347	77	90	149	424	225	106	101 †	83	107	297
L160	9I2a	466	365	75	92	134	427	230	99				
L161	9I2a	460	388	74.9	90.5	103 ††	389	185 ††	107	93.4	62.7	61.7 ††	243
L164	9I2a	488	87 ††	76	91	149	463	228	106	99 †	79	109	325

L168	9I2a	471	677	††	72	92	141	446	221	110	93	64	99	275
L178	9I2a	505	404		78.6	93	140	454	242	103	92.1	68	110	236
L194	9I2a	387	328		64	†	76	††	132	466	203	91	83	††

Lab. Code #	Method Codes	Soil sample identification and values for											
		NOT ASSESSABLE				Phosphorus buffer index - Olsen (9I3a + 9I3b + 9I3c) L/kg dry wt				NOT ASSESSABLE			
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L040	9I3a	512	420	91.6	83.1	136	512	210	90.6	83.3	84	113	306
L178	9I3a	507	417	91	83.6	134	510	209	91.2	84	86	115	309

Lab. Code #	Method Codes	Soil sample identification and values for											
		Phosphorus buffer index - Unadj (9I4a + 9I4b + 9I4c) L/kg dry wt											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	9I4a	409	338	56.5	88.6	112	419	189	96.4	84.6	43.1	87.5	265
L011	9I4a	381	291	41.5	68	121	397	179	91.5	74.6	43.4	90	233
L019	9I4a	515	416	60	93	149	††	487	††	246	††	113	96.2
L026	9I4a					130	420	183	95.5				
L032	9I4a	359	272	52	76	129	394	177	101	83	47	89	254
L036	9I4a	445	391	52.8	88.5	124	438	207	95.7	83.4	50	89.4	261
L044	9I4a	184	††	184	29.6	††	56.8	149	††	331	††	198	114
L080	9I4a					123	383	165	104				
L135	9I4a	302	247	85	††	107	118	412	196	101	89.6	54.3	95
L143	9I4a	314	237	46	77	118	402	168	91	90	60	102	†
L160	9I4a	443	337	50	86	118	405	189	95				
L161	9I4a	441	359	53	85.5	89	††	370	148	102	86.7	44.3	52.2
L168	9I4a	450	622	††	50	86	123	420	178	107	88	43	87
L194	9I4a	372	307	46	72	116	443	166	87	79	52	92	263

Lab. Code #	Method Codes	Soil sample identification and values for Phosphate Extractable S – Pooled (10B1, B2, B3, B4) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L013	10B3	50	46	24	13	31	47	40	9.7 ††	12	29	15	44
L026	10B3	66	57	28	21	32	57	41	16	19	30	15	48
L028	10B3	87	67	33	25	41	70	50	20	25	37	19	59
L080	10B3					32	58	43	17	17	18 ††	12	46
L135	10B3	58	47	21	17	35	62	45	18				
L139	10B3	42	31	23	27	26	23	36	16	14	28	12	30 ††
L143	10B3	67	62	28	2	41	70	51	19	23	38	19	57
L161	10B1					30	36	54	18	15	31	16	50
L179	10B4	24	34	11	6.2	15 ††	26	35	5.7 ††				

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Lab. Code #	Method Codes	Soil sample identification and values for KCl ₄₀ Extractable S (10D1) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	10D1	16	28	27	13	34	28	38	10	13	35	15	35
L011	10D1	25	30	25	16	30	29	39	10	14	32	12	35
L013	10D1	34	41	32	13	32	30	42	11	14	31	11	31
L019	10D1	33	37	25	12	29	24	34	7.4	15	34	12	35
L022	10D1	24	31	27	14	29	26	38	9.7	14	32	12	33
L023	10D1	17	23	23	11	30	22	37	9.5	15	34	12	34
L026	10D1	26	30	25	5.2 ††	30	30	40	11	5.9 ††	31	11	32
L030	10D1	27	31	26	13	30	23	34	8.2	14	36 †	14	34
L036	10D1	31	37	29	15	30	27	39	11	15	32	12	32
L040	10D1	29	33	27	14	28	28	37	9.9	14	29	10	33

L044	10D1	39	38	30	16	33	28	42	12					
L064	10D1	19	29	30	13	28	24	37	10	11	††	32	11	33
L133	10D1					50 ††	30	36	8.7	13		38 ††	41 ††	36
L135	10D1									22	††	32	17 ††	51 ††
L143	10D1	28	34	27	14	29	21	32 ††	8					
L164	10D1					32	32	41	12	14		32	12	33
L168	10D1	36	40	34 ††	17	36 †	43 ††	53 ††	16 ††	23 ††	25 ††	42 ††	18 ††	
L178	10D1	29	33	27	14	28	28	36	9.9	14		29	10	33
L194	10D1	23	29	26	7 ††	32	27	38	8.5	9.1 ††	31	7 ††	37	

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Cu (12A1) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	12A1	0.48	1.3	0.17 ††	0.062 ††	2.2	0.57	1.7	0.166 ††	0.33 ††	0.672	4.3 †	1.4 ††
L003	12A1					2.2	0.57	1.7	0.26	0.21	0.45	4	1.2
L007	12A1	0.353 ††	0.819 ††	0.416	0.256	0.76 ††	0.29 ††	1.2 †	0.14 ††	0.5 ††	0.84 ††	4.8 ††	1.7 ††
L009	12A1	0.475	1.4	0.301	0.23	2.0	0.572	1.5	0.285	0.23	0.464	3.3	1.1
L011	12A1	0.574	1.2	0.283	0.211	2	0.479	1.4	0.226	0.253	0.534	3.9	1.2
L013	12A1	0.64	1.4	0.32	0.24	2.1	0.6	1.6	0.31	0.2	0.56	3.5	1.2
L014	12A1	0.68	1.4	0.43	0.3 †					0.03 ††	0.44	4.4 †	1.5 ††
L019	12A1	0.473	1.3	0.333	0.201	2.1	0.535	1.7	0.297	0.229	0.536	4	1.2
L022	12A1	0.55	1.2	0.32	0.21	2.1	0.631	1.5	0.29	0.23	0.7	4.0	1.0
L023	12A1	0.522	1.2	0.279	0.208	0.522 ††	1.18 ††	0.279 ††	0.208 †	0.204	0.483	3.5	1.1
L026	12A1	0.468	1.2	0.337	0.205	2	0.51	1.5	0.273	0.262	0.539	3.4	1.1
L027	12A1	0.683	1.7 ††	0.371	0.238	2.2	0.614	1.5	0.28	0.457 ††	0.957 ††	6.7 ††	2.2 ††
L028	12A1	0.712	1.5	0.353	0.268	2.2	0.6	1.7	0.3	0.265	0.571	3.9	1.2
L036	12A1	0.597	1.3	0.326	0.234	2.1	0.532	1.6	0.264	0.224	0.498	3.6	1.1
L040	12A1	0.575	1.2	0.31	0.224	2.1	0.576	1.5	0.301	0.225	0.471	3.5	1.2

L041	12A1	0.74	2.6 ††	0.45 †	0.34 ††	2.3	0.74 ††	1.7	0.44 ††	0.31 †	0.61	3.8	1.2
L044	12A1	0.638	1.6	0.486 ††	0.186	2.8	1 ††	1.6	0.46 ††	0.217	0.558	3.6	1.2
L064	12A1	0.49	1.2	0.26	0.26	2.08	0.54	1.6	0.35	0.215	0.47	3.4	1.1
L080	12A1	0.506	1.2	0.278	0.161	1.7 ††	0.533	1.4	0.197 †	0.205	0.582	3.5	1.1
L133	12A1	0.58	1.4	0.297	0.232	2.4 †	0.613	1.6	0.272	0.231	0.508	3.9	1.2
L135	12A1	0.55	1.1	0.34	0.22	1.5 ††	0.605	1.5	0.32	0.344 ††	0.542	3.7	1.2
L139	12A1	0.58	0.703 ††	0.56 ††	0.38 ††	0.882 ††	0.162 ††	0.905 ††	0.097 ††	0.127 ††	0.068 ††	2.4 ††	0.678 ††
L142	12A1	0.555	1.5	0.38	0.25	2.5 ††	0.82 ††	2.2 ††	0.6 ††	0.23	0.72 †	4.7 ††	1.5 ††
L143	12A1	0.55	1.2	0.29	0.21	2.0	0.52	1.4	0.29	0.22	0.49	3.6	1.0
L158	12A1	0.57	1.3	0.32	0.26	2.3	0.67	1.8	0.31	0.29 †	0.57	3.9	1.1
L160	12A1	0.64	1.4	0.382	0.245	2.3	0.641	1.8	0.322	0.287 †	0.599	3.6	1.1
L161	12A1	0.55	1.3	0.33	0.22	2.1	0.54	1.5	0.29	0.225	0.545	3.6	1.1
L164	12A1	0.69	1.6 †	0.4	0.29	2.3	0.7	1.7	0.52 ††	0.3 †	0.6	1.8 ††	1.2
L168	12A1	0.61	1.4	0.43		2.0	0.506	1.4	0.195 †	0.22	0.496	3.6	1.1
L178	12A1	0.57	1.2	0.307	0.227	2.1	0.574	1.5	0.303	0.227	0.465	3.5	1.1
L180	12A1									0.982 ††	1.77 ††	4.6 ††	1.8 ††

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Fe (12A1) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	12A1	200	237 ††	364 ††	472	198	129	108	534 ††	340	293	50	161
L003	12A1					242	142	122	384	442	387	43	160
L007	12A1	84	132	188	359	53 ††	51 ††	71 ††	147 ††	807 ††	487 ††	43	229 ††
L009	12A1	303 ††	237 ††	187	401	268 ††	131	104	390	402	264	33	127
L011	12A1	106	133	173	402	208	132	100	357	448	321	31	140
L013	12A1	116	145	190	408	205	105	100	401	414	325	33	137
L014	12A1	95	121	156 †	357					518	481 ††	59 ††	263 ††
L019	12A1	181	187	213	423	204	187 ††	120	393	484	371	41	171

L022	12A1	109	136	193	405	205	127	106	390	408	306	44	139
L023	12A1	161	155	183	375	161 †	155 †	183 ††	375	380	284	30	120
L026	12A1	130	159	204	381	194	124	100	385	413	304	31	131
L027	12A1	199	198 †	250 ††	526 ††	231	122	111	421	985 ††	656 ††	71 ††	315 ††
L028	12A1	169	184	203	480 †	219	126	110	405	471	331	35	147
L036	12A1	121	144	182	383	174	102	93	328 ††	362	251	30	112
L040	12A1	115	158	196	401	208	123	103	405	401	284	37	136
L041	12A1	155	163	207	468	229	113	106	387	394	265	34	119
L044	12A1	124	181	268 ††	625 ††	222	156 †	138 ††	410	392	235	31	122
L064	12A1	126	139	188	408	211	113	111	396	415	304	53 †	146
L080	12A1	129	160	162	264 ††	206	233 ††	108	451 ††	327	0.318 ††	21	107
L133	12A1	129	156	159	396					413	308	36	141
L135	12A1	132	139	200	399	138 ††	125	98	383	349	253	35	126
L139	12A1	84	62 ††	154 ††	308 ††	105 ††	45 ††	70 ††	179 ††	147 ††	187 †	50	83 ††
L142	12A1	171	225 ††	239 ††	647 ††	235	141	134 ††	389	375	329	43	141
L143	12A1	166	185	219	429	186	109	89	418	366	273	33	120
L158	12A1	96	118	168	242 ††	217	95 †	105	315 ††	217 ††	244	35	102
L160	12A1	121	154	200	394	200	111	105	379	356	263	28	113
L161	12A1	154	157	185	358	192	117	98	379	340	273	35	114
L164	12A1	171	154	190	432	220	127	110	417	492	372	58 ††	179 †
L168	12A1	125	155	240 ††	470	243	122	104	408	480	330	29	140
L178	12A1	112	153	195	403	212	125	105	401	399	289	36	133
L180	12A1									497	296	45	131

Lab. Code#	Method Codes	Soil sample identification and values for DTPA Extractable Mn (12A1) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	12A1	51 ††	61 ††	18 ††	10 ††	9 ††	6.4 ††	5.6 ††	1.3 ††	5.2	20 †	86	144
L003	12A1					213 †	95 ††	49 ††	7.1	2.1 ††	21 ††	106	99 ††
L007	12A1	54 ††	40 ††	7.7	1.7 ††	64 ††	53 ††	41	1.8 ††	8.9 ††	25 ††	9 ††	206 ††
L009	12A1	77	103	7.1	5.0	151	73	35	7.3	5.1	16	81	129
L011	12A1	72	95	6.6	6.1	167	73	35	6.8	5.5	15	83	161
L013	12A1	78	109	8.2	6.6 †	171	83	43	9 ††	4.2 †	19	104	169
L014	12A1	62	86	10 †	3.5 †					1.9 ††	20 †	139 ††	197 ††
L019	12A1	69	97	8	4.9	169	76	41	7.2	5.4	16	89	149
L022	12A1	72	103	7.0	5.3	158	75	36	7.3	5.0	17	83	133
L023	12A1	72	102	7.3	5.5	72 ††	102 ††	7.3 ††	5.5 ††	5.5	18	93	149
L026	12A1	63	93	6.4	4.6	167	72	37	7	5.8	17	92	157
L027	12A1	83	107	12 ††	2.5 ††	164	79	35	5.1 ††	8.3 ††	29 ††	163 ††	289 ††
L028	12A1	84	118	9.7 †	5.5	182	83	42	8.2 †	5.8	18	99	160
L036	12A1	73	105	8.3	5.7	165	73	38	7	5.4	17	91	153
L040	12A1	68	92	7.1	4.9	179	72	35	7.2	5.3	18	81	143
L041	12A1	81	112	7.4	6.0	183	82	40	7.7	5.6	17	95	152
L044	12A1	69	141 ††	14 ††	2.0 ††	216 †	108 ††	72 ††	11 ††	7 †	20 †	96	180 †
L064	12A1	74	106	6.3	4.83	177	79	36	6.2 †	4.3 †	13 ††	90	153
L080	12A1	76	99	8	5.6	126 †	54 ††	26 ††	4.8 ††	4.2 †	12 ††	64	129
L133	12A1	71	96	6	5.2					5.4	17	81	146
L135	12A1	67	87	7.1	5.4	116 ††	77	39	7.2	5.8	17	86	147
L139	12A1	40 ††	57 ††	10 †	2 ††	58 ††	23 ††	20 ††	2.3 ††	1.1 ††	5 ††	36 ††	50 ††
L142	12A1	87	122	12 ††	3 †	195	88	48 ††	6.7	1.8 ††	16	123 ††	189 ††
L143	12A1	76	107	7.6	5.4	172	73	36	7.1	5.3	16	92	149
L160	12A1	81	110	8.7	2.9 †	17 ††	83	41	7.1	5.5	17	96	157
L161	12A1	68	92	7.0	4.9	189	76	40	7.5	5.0	16	91	148

L164	12A1	71	103	6.8	5.5	172	81	41	7.6	479 ††	15	99	159
L168	12A1	93 ††	128 †	15 ††	3 †	197	77	38	6.7	4.7	17	102	164
L178	12A1	67	92	7.2	4.9	181	72	36	7.2	5.3	17	81	145
L180	12A1									3.8 †	12 ††	81	112 ††

Lab. Code #	Method Codes	Soil sample identification and values for DTPA Extractable Zn (12A1) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	12A1	8.2 ††	9.0 ††	8.3 ††	5.7 ††	3	3.3 ††	11	1.5 ††	1.3 ††	3.8	1.7 †	2.6 †
L003	12A1					3.6 ††	3.7 ††	13 ††	1.1 †	1.6 ††	4.1 ††	1.7 ††	3.1 ††
L007	12A1	2.3	3.4 †	3.2	0.919	1.8 ††	1.8 ††	9.1	0.62 ††	1.3 ††	5.5 ††	1.9 ††	3 ††
L009	12A1	3.1	4.5	3.2	1	2.9	2.8	10	0.868	1	3.2	0.93	1.9
L011	12A1	3	4.1	3.3	1.2	3.1	2.7	11	0.932	1.2 †	3.5	1.4	2
L013	12A1	3	4	3.3	1.1	2.8	2.8	11	1.0	1	3.5	1.1	2.2
L014	12A1									1.1	3.6	1.7 ††	3.5 ††
L019	12A1	2.6	4	3.2	1	2.5	2.7	9.9	0.894	1.2 †	3.3	1.2	2.2
L022	12A1	2.6	3.7	3.3	0.98	2.9	2.8	10	0.91	1	3.6	1.4	2.1
L023	12A1	2.7	3.9	3.2	0.972	2.7	3.9 ††	3.2 ††	0.972	1	3.5	1.2	2.1
L026	12A1	2.7	4.1	3.5	0.977	2.7	2.7	11	0.868	1.1	3.4	1.2	2
L027	12A1	3.1	4.7 †	3.6 †	0.859	2.8	2.8	9.8	0.805	2.1 ††	6.1 ††	2.3 ††	3.9 ††
L028	12A1	2.9	4.3	3.3	1.1	3.1	2.8	11	1.1 †	1.1	3.5	1.4	2.1
L036	12A1	2.9	4.3	3.3	1.1	2.8	2.7	11	0.828	0.997	3.3	1.3	2.3
L040	12A1	2.7	3.9	3.2	0.99	2.7	2.8	10	0.89	1	3.4	1.2	2.2
L041	12A1	3.1	4.3	3.6 †	1.2	3	3	11	0.98	1.1	3.5	1.4	1.9
L044	12A1	3.2	4.9 ††	4.1 ††	1.3 ††	2.8	3.1 ††	8.9	2.2 ††	1.2 †	4 †	1.4	2.1
L064	12A1	2.9	4.1	3.3	1.1	2.8	2.8	11	0.9	1	3.8	1.2	2.5
L080	12A1	2.6	3.9	3.5	0.987	2.3 ††	2.8	9.9	0.966	1.1	3.2	1.2	2
L133	12A1	2.5	4.2	3.0 †	1.4 ††	2.5	2.8	8.3 ††	1.3 ††	0.927	2.6 ††	0.996	1.8

L135	12A1	2.6	3.4 †	3.5	1.1	2.1 ††	2.7	9.8	0.92	1.1	3.2	1.3	2
L139	12A1	1.1 ††	1.8 ††	2.4 ††	1	1.7 ††	1.1 ††	7.4 ††	0.508 ††	0.51 ††	1.8 ††	1	1.1 ††
L142	12A1	2.3	4.4	2.6 ††	1.2	2.8	3 †	11	1.2 ††	2.2 ††	3.6	1.9 ††	2.5
L143	12A1	2.9	4.1	3.3	1	2.7	2.7	10	1.2 ††	1.1	3.3	1.3	1.9
L158	12A1	2.6	3.7	3.1	0.96	2.8	2.7	11	0.82	0.9	3	1.2	1.6 †
L160	12A1	2.8	4	3.4	0.917	3	2.8	11	0.903	1	3.4	1.4	1.8
L161	12A1	2.6	3.8	3.2	0.905	3	2.7	9.5	0.88	0.99	3.4	1.4	2
L164	12A1	2.9	4.2	3.4	1.05	2.9	2.8	10	0.95	0.87 ††	3.6	1.3	2.2
L168	12A1	2.7	3.6	3.8 ††	1.1	3.3 ††	2.9	10	0.796	1	3	1.2	2.2
L178	12A1	2.8	4	3.3	1	2.7	2.8	10	0.87	1	3.4	1.2	2.1
L180	12A1									1.1	3	1.3	1.7

Lab. Code #	Method Codes	Soil sample identification and values for Hot CaCl ₂ Extractable B – pooled (12C1, 12C2) mg/kg air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	12C2	0.986	0.545	0.792	0.302	0.718	0.941	1.3	0.369	0.302	0.548	0.929	0.403
L011	12C2	1.3	0.579	0.945	0.202	0.95	1.3 ††	1.6	0.316	0.249	0.841 †	1.2	0.474
L013	12C2	1	0.6	0.9	0.3	0.8	1.1	1.5	0.3	0.25	0.7	1.1	0.4
L014	12C1									2.5 ††	1 ††	2.9 ††	1.8 ††
L019	12C2	0.806	0.539	0.865	0.59 †	0.83	1	1.6	0.559 †	0.597 ††	0.662	0.849	0.41
L022	12C2	0.78	0.51	0.8	0.31	0.74	0.911	1.3	0.363	0.31	0.56	0.89	0.38
L023	12C2	0.77	0.366 †	0.493 ††	0.023 †	0.709	0.792	1.1	0.074 ††	0.33	0.628	0.849	0.417
L026	12C2	0.948	0.534	0.827	0.477	0.823	0.937	1.4	0.462	0.43 †	0.658	0.984	0.371
L028	12C2	0.94	0.454	0.612 ††	0.219	0.8	1	1.1	0.2	0.103 ††	0.348 ††	0.852	0.208 ††
L030	12C2	1.2	0.619	0.826	0.301	0.909	1.2	1.4	0.304	0.312	0.659	1.1	0.415
L036	12C2	0.841	0.495	0.783	0.244	0.768	1	1.5	0.34	0.274	0.66	1	0.428
L040	12C2	0.94	0.582	0.82	0.302	0.79	0.96	1.4	0.381	0.301	0.578	0.932	0.457
L041	12C2	1.4	0.91 ††	2.3 ††	1.1 ††	0.74	0.76	1.3	0.62 ††	0.87 ††	0.58	0.39 ††	0.34

L064	12C2	0.62	0.4	0.84	0.28	0.91	0.9	1.5	0.39	0.34	0.63	0.84	0.33
L080	12C2	1.7 ††	1.1 ††	2.9 ††	1.4 ††	0.79	0.805	1.1	0.143 †				
L135	12C2	1.7 ††	1.2 ††	1.3 ††	1.3 ††	0.8	0.91	1.3	0.39	0.635 ††	0.866 †	1.1	0.623 ††
L139	12C2	0.527	0.353 †	0.75	0.118	0.582 ††	0.48 ††	1.2	0.127 ††	0.112 ††	0.293 ††	0.893	0.305
L143	12C2	1.2	0.57	0.79	0.14	0.95	1.3 ††	1.4	0.27	0.22	0.53	1.0	0.37
L164	12C2					0.98 †	0.88	1.5	0.91 ††	0.27	0.46	0.81	0.35
L168	12C2	0.56	0.47	0.94	0.9 ††	0.442 ††	0.416 ††	0.88 ††	0.284	0.318	0.766	1	0.428
L178	12C2	0.926	0.567	0.83	0.3	0.81	0.92	1.3	0.376	0.303	0.581	0.94	0.462

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Ca - 1M NH4Cl extract (15A1) cmol+/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	15A1	7.4	5.82	10	1.09	18.4	7.5	8.71	1.08	1.09	8.46	22	6.16
L011	15A1	7.63	6	10.6	1.15	17.3 †	7.64	9.03	1.18	1.04	7.81	21.2	6.37
L014	15A1	6.91	5.92	10.1	2.51 ††								
L018	15A1	7.6	6	11 ††	1.2	18.5	7.52	9.43	1.06	1.09	7.86	22	5.95
L022	15A1	7.8	5.88	10.1	1.09	18.1	7.8	8.9	1.15	1.13	8.8	21.2	6.2
L023	15A1	6.9	5.24	9.2 ††	0.919	18.1	7.32	8.58	1	1.06	8.01	21.8	5.9
L027	15A1	7.2	5.6	10.3	1	15 ††	6.39 ††	9.08	1.11	0.8 ††	7.7	16.8 ††	6.8 †
L028	15A1	7.81	5.92	9.99	1.07	19.2 †	8.11 †	9.17	1.14	1.15	8.14	22.4	6.12
L036	15A1	8.28	6.33	10.7 †	1.2	19.1 †	7.72	9.21	1.06	0.986	7.69	21.2	5.5
L044	15A1	7.38	5.76	10.2	1.59 ††	18.2	9.5 ††	9.23	2.12 ††	0.88 †	7.47	20.6	5.66
L045	15A1	8.02	6.12	10.6	1.15	18.5	7.87	8.61	1.19	1.28 †	8.67	23.5 ††	6.32
L064	15A1	7.13	5.61	9.74	1.15	18.2	7.6	8.64	1.15	1.07	8.05	21.7	5.96
L143	15A1	7.6	5.8	10	1.1	18.4	7.6	8.4	1.1	1	8.4	22	6.2
L160	15A1	8.01	5.68	9.95	1.07	17.6	7.4	8.3	1.13	1.32 ††	8.97 ††	24.1 ††	5.89
L164	15A1	8.05	6.13	10.3	1.1	19.9 ††	8.4 ††	9.51	1.67 ††	1.12	4.27 ††	21.7	5.97
L166	15A1	6.7	5.3	9.2 ††	0.95	18	7.6	8.8	1.1	1.2	7.9	20	6

L168	15A1	7.3	5.6	10	0.99												
L180	15A1										8.58	††	6.88	††	20.7	0.119	††
L187	15A1	7.9	6.56	10.5	0.662	††					1.03		7.95		19.8	††	5.64

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Mg - 1M NH4Cl extract (15A1) cmol+/kg oven dry															
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)							
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54				
L009	15A1	1.19	1.03	0.874	0.268	4.48	1.21	2.1	0.381	0.257	4.21	11.9	0.845				
L011	15A1	1.18	1.05	0.899	0.27	4.23	1.12	1.93	†	0.376	0.25	3.83	12.1	0.849			
L014	15A1	1.21	1.14	††	1.05	††	0.54	††									
L018	15A1	1.2	1	0.837	0.241	4.66	1.18	2.1	0.38	0.236	4.15	13	0.83				
L022	15A1	1.21	1.02	0.89	0.25	4.51	1.23	2.05	0.41	0.28	4.25	13	0.88				
L023	15A1	1.16	†	1.02	0.84	0.254	4.62	1.22	2.14	0.38	0.263	4.27	12.9	0.89			
L027	15A1	1.2	1	0.9	0.2	3.82	††	1.05	††	2.05	0.367	0.2	4	10.3	†	1	††
L028	15A1	1.2	1.04	0.844	0.249	4.83	1.25	2.16	0.374	0.269	4.39	13.8	0.892				
L036	15A1	1.19	1.03	0.843	0.255	4.7	1.16	2.11	0.365	2.49	††	4.28	12.5	0.812			
L044	15A1	1.2	1.09	0.93	0.33	4.52	1.65	††	2.05	0.588	††	0.22	4.03	12.3	0.83		
L045	15A1	1.29	††	1.1	0.918	0.277	4.67	1.23	2.06	0.392	0.303	4.72	14.2	0.948			
L064	15A1	1.21	1.05	0.88	0.31	4.6	1.23	2.02	0.403	0.316	4.14	12.7	0.865				
L143	15A1	1.11	††	0.96	0.78	0.23	4.45	1.13	2.31	††	0.35	0.24	4.23	13	0.86		
L160	15A1	1.33	††	1.12	†	0.901	0.284	4.8	1.27	2.1	0.406	0.292	4.68	13.7	0.889		
L164	15A1	1.18	1.03	0.83	0.28	4.48	1.17	1.97	0.37	0.23	3.6	10.7	0.78				
L166	15A1	1.1	††	0.99	0.83	0.23	4.5	1.2	2.1	0.38	0.34	4.5	13	0.97	†		
L168	15A1	0.98	††	0.86	††	0.77	0.22										
L180	15A1									2.63	††	0.541	††	7.99	††	0.031	††
L187	15A1	1.27	††	1.16	††	0.932	0.253				0.262	4.81	14	0.938			

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Na - 1M NH4Cl extract (15A1) air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	15A1	0.183	0.286	0.047	0.060	0.107	0.183	0.254	0.083	0.060	0.555	0.682	0.231
L011	15A1	0.256 ††	0.258	0.143 ††	0.074	0.343 ††	0.216	0.31	0.066	0.041	0.484	0.739	0.211
L014	15A1	0.15	0.25	0.01	0.041								
L018	15A1	0.184	0.341 †	0.037	0.067	0.168	0.182	0.299	0.096	0.061	0.584	0.789	0.332 †
L022	15A1	0.18	0.27	0.045	0.058	0.105	0.185	0.255	0.085	0.06	0.58	0.68	0.25
L023	15A1	0.163	0.255	0.028	0.054	0.102	0.168	0.256	0.081	0.054	0.535	0.664	0.223
L027	15A1	0.2	0.2	0.03	0.05	0.157	0.167	0.315	0.094	0.06	0.6	0.6	0.3
L028	15A1	0.194	0.288	0.044	0.073	0.076	0.118 †	0.194	0.093	0.067	0.572	0.735	0.253
L036	15A1	0.187	0.269	0.041	0.061	0.109	0.163	0.254	0.083	0.060	0.549	0.698	0.218
L044	15A1	0.24 †	0.3	0.15 ††	0.15 ††	0.052	0.075 ††	0.15	0.019 ††	0.09 †	0.54	0.68	0.23
L045	15A1	0.243 †	0.321	0.077 †	0.105 ††	0.126	0.2	0.262	0.098	0.085 †	0.613	0.738	0.265
L064	15A1	0.156	0.237	0.057	0.071	0.143	0.175	0.252	0.093	0.066	0.532	0.728	0.221
L143	15A1	0.13	0.22	0.01	0.03	0.12	0.17	0.22	0.07	0.02 †	0.59	0.76	0.26
L160	15A1	0.183	0.282	0.048	0.075	1.2 ††	0.205	0.295	0.115	0.04	0.473	0.656	0.216
L164	15A1	0.17	0.24	0.03	0.06	0.13	0.2	0.28	0.12	0.2 ††	0.39 ††	0.92 ††	0.78 ††
L166	15A1	0.16	0.26	0.04	0.05	0.14	0.2	0.3	0.12	0.11 †	0.63	0.83	0.3
L168	15A1	0.19	0.31	0.05	0.06								
L180	15A1									0.648 ††	0.281 ††	0.903 †	0.099 ††
L187	15A1	0.355 ††	0.499 ††	0.219 ††	0.27 ††					0.339 ††	0.561	0.67	0.531 ††

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable K - 1M NH4Cl extract (15A1) air dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	15A1	0.315	0.731	0.599	0.23	1.88	0.305	1.98	0.252	0.23	0.38	0.764	0.444
L011	15A1	0.268	0.606	0.548	0.204	1.93	0.32	1.79	0.256	0.188	0.395	0.979 ††	0.48
L014	15A1	0.28	0.67	0.57	0.23								
L018	15A1	0.31	0.752	0.624	0.236	2.18	0.311	2.16	0.269	0.23	0.385	0.842	0.483
L022	15A1	0.29	0.71	0.61	0.23	2.05	0.33	2.1	0.27	0.24	0.42	0.79	0.5
L023	15A1	0.302	0.735	0.598	0.225	2.13	0.307	2.15	0.25	0.223	0.391	0.814	0.474
L027	15A1	0.3	0.7	0.6	0.2	1.77 ††	0.298	1.75	0.247	0.2	0.4	0.7 ††	0.5
L028	15A1	0.342	0.764	0.627	0.247	2.22	0.346	2.28	0.281	0.246	0.427	0.878	0.525
L036	15A1	0.32	0.754	0.631	0.219	2.12	0.317	2.12	0.261	0.236	0.402	0.829	0.465
L044	15A1	0.3	0.59	0.55	0.23	1.81 †	0.488 ††	1.56 ††	0.37 ††	0.21	0.41	0.91	0.44
L045	15A1	0.361	0.809	0.69 ††	0.282 ††	2.14	0.332	2.14	0.297	0.269	0.437	0.908	0.518
L064	15A1	0.286	0.656	0.633	0.231	2.11	0.302	2.01	0.249	0.204	0.391	0.859	0.398 †
L143	15A1	0.28	0.67	0.58	0.21	2.11	0.33	1.97	0.28	0.22	0.41	0.86	0.49
L160	15A1	0.324	0.774	0.619	0.247	2.1	0.313	2	0.263	0.23	0.397	0.813	0.484
L164	15A1	0.32	0.77	0.6	0.28 †	2.01	0.3	1.94	0.25	0.06 ††	0.49 ††	0.65 ††	0.23 ††
L166	15A1	0.29	0.65	0.55	0.21	2	0.32	2.1	0.38 ††	0.26	0.43	0.85	0.52
L168	15A1	0.32	0.72	0.65	0.24								
L180	15A1									0.779 ††	0.944 ††	1.69 ††	0.162 ††
L187	15A1	0.321	0.77	0.605	0.183 †					0.174	0.412	0.844	0.532

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Ca — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	15D3	7.22	5.45	10.4	0.959	17.1	7.54	8.76	1.42 ††	0.841	8.06	19.6	5.4
L007	15D3	5.87 ††	5.37	10.6	1.32	19.7 ††	8.6 ††	10.4 ††	1.6 ††	3.36 ††	13.6 ††	26.7 ††	9.56 ††
L009	15D3	7.3	5.57	10.2	0.96	17.1	7.1	8.31	1.05	0.971	7.91	20.3	5.57
L011	15D3	6.96	5.3	9.82	0.966	17.2	7.27	8.39	1.04	0.964	7.4	20.3	5.39
L012	15D3	5.67 ††	4.25 ††	8.1 ††	0.68	19.3 ††	7.85	9.42	1.03	0.91	6.9	18.9	5.33
L013	15D3	7.2	5.9	9.3	1.7 ††	17.2	7.46	9.03	1.61 ††	0.969	6.31 ††	17.7 †	5.1
L014	15D3									1.07	21 ††	37 ††	20 ††
L019	15D3	7.08	5.56	9.85	1.1	19.3 ††	6.88	8.13	1.03	1.03	7.67	21.5	5.73
L026	15D3	6.91	5.29	9.85	0.693	16.6	6.93	7.95	0.906	0.777 ††	8.23	22.8	5.9
L030 [∞]	15D3	7.45	5.65	10.2	0.991	17.1	7.18	7.75	0.901	0.971	7.58	21.3	5.45
L040	15D3	7.21	5.57	10.1	1.01	16.8	7.13	8.34	1.02	0.992	8.09	21.4	6.15
L041	15D3	7.31	5.82	9.58	1.46 †	16.8	7.47	7.79	1.64 ††	1.73 ††	6.78	17.9 †	5.13
L042	15D3	6.43	5.15	9.25	0.891								
L064	15D3					18.2	7.65	8.62	1.21	1.05	8.17	21.8	6.01
L080	15D3	7.11	0.585 ††	0.464 ††	0.581 †	18.1	7.35	8.61	1.13	1.08	7.95	21	5.69
L133	15D3	6.7	5.3	9.5	1.3	15.6 †	6.38 ††	7.16 †	1.18				
L135	15D3	6.86	5.34	9.77	0.98	16.6	6.88	8.56	0.985	1.9 ††	8.36	20.5	6.23
L137	15D3	7.91 †	5.04	9.28	1.18	17.1	7.36	8.1	1.22	1.06	7.9	21.1	5.92
L139	15D3	6.9	5.25	11.4 ††	0.982	18	7.64	9.86 †	1.24 †	0.806	6.72 †	19.1	5.3
L142	15D3	0.035 ††	0.027 ††	0.050 ††	0.005 ††	16.4	7.46	9	1.11	1	8.2	20.7	6.14
L156	15D3	10.9 ††	10.7 ††	18.2 ††	1.35								
L158	15D3	6.78	5.34	9.87	0.86	18.3	7.13	8.35	0.98	0.94	7.56	24.4 †	5.5
L161	15D3	7.09	5.67	10.2	1.02	18.1	7.51	8.94	1.09	1.07	8.61	23.9 †	6.33
L166	15D3					17	7.5	8.8	0.98	1.1	7.9	21	5.8
L168	15D3					18.6 †	7.61	9.44	1.01	1.04	8.9	23	6.1
L178	15D3	7.17	5.55	9.93	1.02	16.9	7.14	8.32	1.05	1.01	8.12	21.3	6.18

L179	15D3	6.49	0.235 ††	1.02 ††	0.174 ††	12.6 ††	5.86 ††	5.99 ††	0.998	0.873	7.11	17.2 ††	5.24
L180	15D3	1.29 ††	1.01 ††	2 ††	0.163 ††								

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Mg — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	15D3	1.17	1.27 †	1.15 ††	0.215	3.94	1.08	2.02	0.453	0.236	3.81	12.9	0.789
L007	15D3	0.92 †	0.91	0.798	0.315 †	4.9	1.5 ††	2.5 ††	0.67 ††	1.68 ††	7.47 ††	8.73 ††	3.46 ††
L009	15D3	1.13	1	0.878	0.245	4.26	1.13	1.93	0.367	0.244	4.04	11.7	0.806
L011	15D3	1.14	0.994	0.886	0.265	4.48	1.14	2.1	0.359	0.273	3.85	11.3	0.789
L012	15D3	1.02	0.885	0.734	0.205	4.55	1.1	2.01	0.34	0.23	3.77	12.7	0.76
L013	15D3	1.13	1.08	0.81	0.26	4.37	1.17	1.89	0.41	0.241	3.44	10.6 †	0.748
L014	15D3									0.29	4.16	13	1.02 †
L019	15D3	1.15	0.99	0.83	0.248	5.23 ††	1.18	2.07	0.373	0.256	4.19	13.2	0.861
L026	15D3	1.05	0.916	0.796	0.174 †	4.09	1.07	1.87	0.333	0.208	4.23	13	0.828
L030	15D3	1.16	1.01	0.83	0.248	4.25	1.11	1.81	0.33	0.254	3.96	12.7	0.786
L040	15D3	1.14	1.01	0.878	0.25	4.01	1.11	1.93	0.371	0.249	4.73	12.4	0.865
L041	15D3	1.38 †	1.26 †	0.99 ††	0.32 †	4.30	1.23	1.80	0.516 ††	0.437 ††	4.32	13.1	1.15 ††
L042	15D3	1.09	1	0.809	0.242								
L064	15D3					4.53	1.22	2	0.411	0.301	4.15	12.8	0.885
L080	15D3	2.3 ††	5.48 ††	9.78 ††	1.17 ††	4.52	1.19	1.97	0.447	0.327 †	4.07	12.3	0.87
L133	15D3	1.5 ††	1.1	0.834	0.315 †	3.85	0.992	1.65 ††	0.436				
L135	15D3	1.08	0.958	0.824	0.248	4.16	1.08	1.98	0.359	0.251	3.71	11.6	1.03 †
L137	15D3	1.4 †	1.02	0.892	0.272	4.4	1.18	2.02	0.4	0.274	3.98	13.2	0.87
L139	15D3	0.968 †	0.762 †	0.807	0.108 ††	4.48	1.2	2.19	0.41	0.191	3.39	12	0.738
L142	15D3	0.01 ††	0.009 ††	0.008 ††	0.002 ††	3.99	1.09	1.87	0.39	0.277	4.23	0.195 ††	4.33 ††
L156	15D3	1.61 ††	1.8 ††	1.43 ††	0.24								
L158	15D3	1.11	1	0.85	0.22	4.81	1.17	2.15	0.36	0.22	4.59	12.8	0.86

L161	15D3	1.03	0.938	0.788	0.233	3.92	1.04	1.75	0.375	0.23	3.48	11.1	0.71
L166	15D3					4.1	1.1	2	0.34	0.29	4.1	12	0.81
L168	15D3					4.36	1.11	2.04	0.345	0.229	4.1	12	0.776
L178	15D3	1.16	1.03	0.846	0.249	4.08	1.12	1.91	0.373	0.25	4.75	12.5	0.857
L179	15D3	8.36 ††	0.501 ††	0.757	0.083 ††	4.13	1.02	1.63 ††	0.317	0.222	3.54	10.8	0.777
L180	15D3	0.231 ††	0.198 ††	0.192 ††	0.047 ††								

Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Na — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	15D3					0.139	0.202	0.325 ††	0.14 †	0.102 †	0.878 ††	1.11 ††	0.51 ††
L007	15D3	0.166	0.216	0.155 ††	0.097 †	0.12	0.19	0.26	0.11	0.17 ††	0.78 ††	0.7	0.36 ††
L009	15D3	0.176	0.259	0.045	0.060	0.109	0.161	0.238	0.090	0.060	0.527	0.658	0.217
L011	15D3	0.157	0.181 †	0.105 ††	0.033 †	0.393 ††	0.219 †	0.31 ††	0.074	0.049	0.515	0.716	0.202
L012	15D3	1.17 ††	0.487 ††	0.33 ††	1.78 ††	0.08	0.11 ††	0.18 †	0.26 ††	0.06	0.56	0.73	0.25
L013	15D3	0.16	0.28	0.05	0.06	0.12	0.152	0.207	0.09	0.077	0.455	0.587	0.198
L014	15D3									0.25 ††	0.89 ††	1.49 ††	0.56 ††
L019	15D3	0.162	0.243	0.036	0.059	0.125	0.178	0.267	0.097	0.062	0.566	0.768	0.243
L026	15D3	0.17	0.253	0.035	0.046	0.093	0.155	0.226	0.077	0.053	0.618	0.79	0.258
L030	15D3	0.202 †	0.287	0.058	0.082 †	0.111	0.188	0.235	0.093	0.083	0.56	0.725	0.244
L040	15D3	0.172	0.263	0.045	0.059	0.114	0.17	0.237	0.081	0.059	0.539	0.759	0.239
L041	15D3	0.23 †	0.32	0.1 †	0.131 ††	0.2 ††	0.295 ††	0.315 ††	0.174 ††	0.307 ††	0.455	0.801	0.519 ††
L042	15D3	0.167	0.257	0.035	0.059								
L064	15D3					0.147	0.174	0.247	0.089	0.076	0.526	0.733	0.236
L080	15D3	0.546 ††	2.09 ††	2.03 ††	1.54 ††	0.144	0.188	0.265	0.127	0.138 ††	0.555	0.729	0.284
L133	15D3	0.227 †	0.284	0.106 ††	0.118 ††	0.109	0.167	0.223	0.121				
L135	15D3	0.164	0.247	0.043	0.064	0.122	0.177	0.245	0.091	0.118 †	0.532	0.603	0.274
L137	15D3	0.226 †	0.294	0.056	0.083 †	0.133	0.172	0.248	0.104	0.082	0.552	0.721	0.247

L139	15D3	0.272 ††	0.353 ††	0.113 ††	0.078 †	0.165	0.238 ††	0.383 ††	0.106	0.056	0.505	0.872	0.261
L142	15D3	0.001 ††	0.001 ††	0.0002 †	0.0003 ††	0.07	0.12 †	0.14 ††	0.06	0.133 †	0.43 †	0.57	0.4 ††
L156	15D3		0.255										
L158	15D3	0.14 †	0.23	0.03	0.05	0.08	0.14	0.21	0.07	0.05	0.49	0.64	0.21
L161	15D3	0.161	0.257	0.035	0.061	0.104	0.165	0.239	0.087	0.052	0.554	0.689	0.228
L166	15D3					0.1	0.16	0.24	0.1	0.08	0.6	0.8	0.26
L168	15D3					0.089	0.15	0.217	0.073	0.047	0.626 †	0.826	0.196
L178	15D3	0.169	0.263	0.046	0.06	0.112	0.168	0.236	0.086	0.060	0.542	0.761	0.242
L179	15D3	1.12 ††	0.174 †	0.243 ††	0.063	0.163	0.167	0.231	0.074	0.07	0.498	0.666	0.241
L180	15D3	0.049 ††	0.071 ††	0.017	0.02 †								

Lab Code #	Method Codes	Soil sample identification and values for Exchangeable K — 1M NH ₄ OAc extract (15D3) cmol+/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L002	15D3	0.221 †	0.881 ††	0.785 ††	0.228	1.74	0.255 ††	2.16	0.548 ††	0.211	0.383	0.789	0.474
L007	15D3	0.196 †	0.582	0.481 †	0.223	1.9	0.32	2.1	0.25	0.38 ††	0.6 ††	1.15 ††	0.7 ††
L009	15D3	0.289	0.701	0.588	0.223	1.78	0.289	1.86	0.245	0.223	0.363	0.764	0.426
L011	15D3	0.257	0.572	0.533	0.168 ††	1.79	0.307	1.68	0.224	0.208	0.416	0.888	0.445
L012	15D3	0.183 ††	0.474 ††	0.412 ††	0.142 ††	0.23 ††	2.24 ††	0.3 ††	2.32 ††	0.19	0.31 ††	0.63	0.38 ††
L013	15D3	0.27	0.76	0.53 †	0.21	1.96	0.296	1.54 ††	0.251	0.205	0.32	0.676	0.396 ††
L014	15D3									0.39 ††	0.47 ††	0.92	0.53 ††
L019	15D3	0.289	0.669	0.576	0.22	2.25 ††	0.273	1.99	0.213	0.226	0.375	0.802	0.448
L026	15D3	0.288	0.673	0.588	0.173 ††	1.88	0.281	1.91	0.237	0.177	0.383	0.786	0.45
L030	15D3	0.316	0.735	0.615	0.235	1.98	0.297	1.84	0.231	0.238	0.383	0.796	0.458
L040	15D3	0.305	0.631	0.576	0.214	1.92	0.291	1.82	0.238	0.221	0.402	0.867	0.432
L041	15D3	0.29	0.68	0.58	0.23	1.9	0.361 ††	1.85	0.276	0.168 ††	0.561 ††	0.7	0.324 ††
L042	15D3	0.285	0.69	0.585	0.224								
L064	15D3					2.1 †	0.298	1.95	0.24	0.208	0.413	0.893	0.408 †

L080	15D3	0.293	0.721	0.641 †	0.228	1.84	0.274	1.76	0.21	0.245	0.377	0.73	0.459
L133	15D3	0.358 †	0.529 †	0.467 †	0.223	1.7 †	0.260	1.63	0.304 ††				
L135	15D3	0.283	0.675	0.57	0.224	1.89	0.284	1.99	0.242	0.14 ††	0.36	0.695	0.423
L137	15D3	0.338 †	0.683	0.573	0.217	1.82	0.299	1.9	0.25	0.228	0.369	0.725	0.453
L139	15D3	0.323	0.717	0.752 ††	0.198 †	2.17 ††	0.339 ††	2.14	0.287 †	0.164 ††	0.353	0.89	0.45
L142	15D3	0.001 ††	0.002 ††	0.001 ††	0.001 ††	1.74	0.29	1.78	0.24	0.237	0.403	0.757	0.5 †
L156	15D3	0.447 ††	1.53 ††	1.22 ††	0.219								
L158	15D3	0.29	0.7	0.6	0.21	1.94	0.3	2	0.26	0.23	0.39	0.8	0.46
L161	15D3	0.286	0.705	0.608	0.229	1.92	0.279	1.92	0.259	0.223	0.385	0.733	0.459
L166	15D3					1.9	0.3	1.9	0.26	0.21	0.36	0.75	0.42
L168	15D3					2.17 ††	0.294	2.08	0.228	0.208	0.409	0.91	0.455
L178	15D3	0.301	0.627	0.568	0.219	1.89	0.29	1.86	0.236	0.224	0.396	0.861	0.435
L179	15D3	5.11 ††	0.629	0.913 ††	0.246 †	1.86	0.256 ††	1.77	0.205	0.266	0.44	0.726	0.45
L180	15D3	0.073 ††	0.173 ††	0.16 ††	0.053 ††								
L194	15D3	0.354 †	0.905 ††	0.768 ††	0.241	1.947	0.275	1.927	0.232	0.224	0.38	0.761	0.46

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Lab. Code #	Method Codes	Soil sample identification and values for Exchangeable Al — 1M KCl (15G1) cmol+/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	15G1	0.011	0.032 ††	0.016	0.948 ††	0.005	0.040	0.009	1.68	1.5	0.015	0.004 ††	0.008 ††
L011	15G1	0.049	0.179	0.012	1.34	0.013	0.042	0.008	1.98	1.31	0.028	0.007	0.028
L013	15G1	0.05	0.196	0.01	1.76	0.02 ††	0.044	0.011	1.85	1.67	0.052	0.007	0.045
L019	15G1	0.024	0.033 ††	0.014	0.252 ††	0.01	0.044	0.011	1.97	0.933 ††	0.038	0.014 ††	0.034
L022	15G1	0.02	0.139	0.01	1.35	0.02 ††	0.04	0.01	1.61	1.48	0.045	0.007	0.035
L026	15G1	0.074 ††	0.190	0.029 ††	1.30	0.009	0.071 ††	0.011	1.87	1.47	0.030	0.008	0.036
L028	15G1	0.041	0.154	0.015	1.46	0.016	0.031 ††	0.016	1.51	1.34	0.040	0.015 ††	0.021
L030	15G1	0.033	0.149	0.006	1.54	0.011	0.04	0.024 ††	1.7	1.6	0.031	0.008	0.042
L036	15G1	0.039	0.156	0.012	1.67	0.011	0.039	0.008	1.87	1.44	0.038	0.017 ††	0.046

L040	15G1	0.049	0.146	0.015	1.54	0.011	0.042	0.011	1.72	1.49	0.037	0.007	0.038
L042	15G1								1.8				
L044	15G1	0.05	0.16	0.01	1.43								
L064	15G1	0.033	0.053 ††	0.009	1.38	0.009	0.029 ††	0.007	1.56	1.56	0.021	0.008	0.017
L143	15G1					0.03 ††	0.12 ††		1.92	1.76	0.06 ††	0.01 ††	0.09 ††
L161	15G1	0.109 ††	0.159	0.014	1.54	0.015	0.046	0.004	1.49	1.46	0.01 ††	0.004 ††	0.01 ††
L164	15G1	0.014	0.014 ††	0.005	1.45	0.03 ††	0.038	0.003 †	1.52	1.28	0.006 ††	0.001 ††	0.03
L168	15G1				1.7					1.8 †	0.03		0.04
L178	15G1	0.049	0.142	0.014	1.48	0.01	0.042	0.013	1.74	1.46	0.038	0.007	0.038
L187	15G1	0.041	0.048 ††	0.042 ††	0.423 ††								

Lab. Code #	Method Codes	Soil sample identification and values for											
		NOT ASSESSABLE				Extractable K — Bicarbonate (18A1) mg/kg air dry				NOT ASSESSABLE			
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L013	18A1	118	295	295	82 ††	685	110	750	120	165	180	310	215
L036	18A1					1.92 ††	0.287	2.17 ††	0.259	83	165	284	182
L143	18A1	136	318	277	133	753	153	910	161				
L164	18A1	150	365	308	136	849	123	865	164	92	190	270	172

Lab. Code #	Method Codes	Soil sample identification and values for Aluminium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	1060	1550	429	658	613	1040	1340	751	660	376	584	1170
L011	18F1	1017	1705	424	658	804	1088	1507 ††	841	655	451	709	1604
L013	18F1	1062	1679	462	733	769	1054	1422	810	691	440	637	1530
L018	18F1			491	204 ††								
L019	18F1	928	1458	436	668	729	942	1221 †	751	701 †	389	670	1324
L022	18F1	1062	1671	441	620	781	1060	1340	751	650	600	685	1480
L026	18F1	1032	1650	469	593	806	1100	1380	807	733 †	486	797	1639
L028	18F1	1030	1545	442	676	744	970	1360	770	544 †	414	712	1309
L040 ee	18F1	785 †	1351	417	672	702	1028	1335	744	669	379	633	1481
L045	18F1	1116	1784	471	756	743	1010	1406	779	471 ††	300	486 ††	1068
L097	18F1	973	1583	417	570	682	939	1315	713	576 †	404	663	1516
L143	18F1	953	1470	425	531	725	980	1317	735	573 †	455	716	1504
L156	18F1	3711 ††	6014 ††	1193 ††	1549 ††	678	929	1072 ††	627 ††	1333 ††	1834 ††	2126 ††	1251
L168	18F1	1160	1650	466	744	795	1110	1450 †	853 †	666	445	632	1370
L178	18F1	791 †	1343	414	678	709	1020	1338	746	670	382	628	1486
L188	18F1	1278 †	1839	502	676					904 ††	580	946 ††	2014 ††
L192	18F1	1014	1505	454	572	612	1037	1288	705	654	459	609	1450

Lab. Code #	Method Codes	Soil sample identification and values for Boron – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	0.627	0.45	0.787	0.121	0.697	0.627	1.1	0.155	0.121	0.469	1	0.536
L011	18F1					0.797	0.677	1.5	0.198	0.11	0.348	0.965	0.292
L013	18F1	0.5	0.3	0.7 †	0.1	0.5	0.5	1.2	0.1	0.1	0.3	0.8	0.2
L018	18F1	0.492	0.207	0.612 ††									
L019	18F1	0.636	0.486	0.802	0.307 ††	0.585	0.582	0.876	0.436 ††	0.034 †	9.9 ††	1	0.217
L022	18F1	0.62	0.39	0.8	0.12	0.5	0.52	1.2	0.16	0.115	0.34	0.79	0.29
L026	18F1	0.522	0.422	1.2 ††	0.652 ††	0.676	0.47	0.983	0.135	0.095	0.417	0.98	0.316
L028	18F1	0.53	0.32	0.76	0.125	0.51	0.47	1.2	0.11	0.12	0.119	0.81	0.083
L040	18F1	0.494	0.33	0.796	0.14	0.521	0.523	1.2	0.171	0.123	0.132	0.74	0.181
L045	18F1	0.637	0.396	0.78	0.102	0.884	0.797	1.6	0.371 ††	0.352 ††	0.47	0.927	0.494
L097	18F1	0.412	0.237	0.588 ††	0.001 †	0.402	0.404	1	0.042	0.001 †	0.261	0.796	0.223
L143	18F1	0.5	0.29	0.65 †	0.2	0.84	0.59	1.4	0.207	0.19 †	0.44	1.04	0.38
L156	18F1	1.2 ††	0.73 ††	1.3 ††	0.071	0.702	0.803	2.0 ††	0.047	0.163	0.441	0.974	0.451
L168	18F1	0.57	0.28	0.81		2.2 ††	1.89 ††	2.8 ††	1.8 ††	0.069	0.322	0.78	0.254
L178	18F1	0.485	0.328	0.802	0.13	0.516	0.527	1.2	0.172	0.122	0.128	0.736	0.176
L188	18F1	0.67	0.34	0.85	0.05					0.07	0.34	1.1	0.3
L192	18F1	0.645	0.601 ††	1.8 ††	1.02 ††	0.459	0.715	1.6	0.025	1.2 ††	1.4 ††	0.709	0.482

Lab. Code #	Method Codes	Soil sample identification and values for Calcium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	1530	1210	2260	227	2770 ††	1480	1850	229	210	1880	3890	1380 ††
L011	18F1	1517	1130	2363	185	3977 ††	1586 †	2183 ††	236	217	1901	5005 ††	1232
L013	18F1	1385	1088	2194	192	3450	1421	1860	210	194	1579	3955	1085
L014	18F1									1 ††	20 ††	51 ††	14 ††
L018	18F1	1639	1300 ††	2367	66 ††								
L019	18F1	1532	1192	2327	225	3270	1372	1886	202	225	1590	4108	1246
L022	18F1	1489	1165	2271	214	3349	1454	1906	220	210	1710	3970	1139
L026	18F1	1398	1079	2122	178	3670	1520	1930	220	215	1729	5177 ††	1180
L028	18F1	1405	1075	2110	205	3240	1380	1790	207	201	1641	4130	1120
L040	18F1	1424	1100	2279	226	3325	1446	1878	227	208	1667	3998	1180
L045	18F1	1674	1340 ††	2592	251	3841 ††	1583 †	2120 ††	233	191	1470	3600	1070
L097	18F1	1368	1072	2154	172	3210	1341	1714	196	170 †	1544	3910	1088
L143	18F1	1469	1139	2167	153	3443	1504	1896	205	201	1829	4319	1263
L156	18F1	2432 ††	2016 ††	3777 ††	275	3850 ††	1088 ††	1654 †	199	4771 ††	2062 ††	2632 ††	298 ††
L161	18F1	1355	1110	2286	192	3289	1442	1951	180	154 ††	1627	4114	1114
L168	18F1	1460	1040	2310	235	3680 †	1430	1800	231	226	1630	3430 †	1040
L178	18F1	1421	1105	2263	223	3319	1451	1870	225	207	1665	3996	1177
L188	18F1	1570	1200	2100	200					242 †	2032 †	4589 †	1467 ††
L192	18F1	1375	1021	2144	177	2712 ††	1416	1773	193	207	1794	3616	1108

Lab. Code #	Method Codes	Soil sample identification and values for Copper – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	0.573	1.2 †	0.361	0.19	2.1	0.571	1.9	0.242	0.19	0.198	5.4	1.4
L011	18F1	0.664	1.6	0.668	0.303 ††	2.5 ††	0.571	2.2	0.23	0.188	0.048	6.2 †	1.4
L013	18F1	0.6	1.6	0.3	0.2	2	0.5	1.8	0.2	0.2	0.1	5	1.4
L014	18F1										2.9 ††	6.6 †	0.75 ††
L018	18F1	0.42	1.2 †	0.1	0.08 ††								
L019	18F1	0.547	1.6	0.495	0.211	2.1	0.764 ††	2.3	0.774 ††	0.179	0.279	5.5	1.4
L022	18F1	0.61	1.7	0.4	0.21	2.2	0.57	2	0.26	0.195	0.145	5.2	1.5
L026	18F1	0.432	1.4	0.384	0.165	2.2	0.492	2.2	0.223	0.2	0.0843	5.3	1.4
L028	18F1	0.7	1.6	0.52	0.125 †	2.1	0.55	2	0.36 ††	0.173	0.114	5.9	1.4
L040	18F1	0.848	1.6	0.38	0.192	2	0.561	2	0.235	0.191	0.509 ††	5.1	1.5
L045	18F1	0.003 ††	0.54 ††	0.003	0.003 ††	2	0.51	2	0.103 ††	0.107 ††	0.124	5.2	1.3
L091	18F1	9.4 ††	7 ††							1.6 ††	2.4 ††	34 ††	4.4 ††
L097	18F1	0.467	1.4	0.545	0.203	1.9	0.497	1.8	0.246	0.228 †	0.182	5.2	1.4
L143	18F1	0.5	1.3	0.26	0.14	1.9	0.52	1.8	0.17	0.2	0.11	5.9	1.3
L156	18F1	1.2 ††	3.2 ††	0.75	0.57 ††	4.6 ††	3.6 ††	4.3 ††	1.5 ††	4.5 ††	3.5 ††	4.3 †	1.5
L161	18F1	0.55	1.6	0.69	0.19	2.4	0.645	2.1	0.21	0.215	0.175	5.9	1.4
L168	18F1	0.56	1.3	0.39	0.26 †	2.1	0.506	1.7		0.215	0.146	5.4	1.3
L178	18F1	0.841	1.6	0.391	0.19	2	0.558	2	0.237	0.189	0.515 ††	5.1	1.5
L188	18F1	0.45	1.7	0.26	0.19					0.28 ††	0.22	6.8 ††	1.2
L192	18F1	0.443	1.4	0.487	0.16	2.2	0.556	2.4	0.206	0.403 ††	0.269	5.0	1.3

Lab. Code#	Method Codes	Soil sample identification and values for Iron – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	159	200	526	526	293	141	188	473	530	482	171	262
L011	18F1	184 †	232	576	560	388	172 ††	263 ††	602 ††	608	711	170	300 †
L013	18F1	156	222	543	558	337	151 †	210	496	576	632	174	297
L014	18F1									524	575	392 ††	362 ††
L018	18F1	132	172	396 †	156 ††								
L019	18F1	143	202	564	555	363	142	199	490	524	559	180	273
L022	18F1	148	205	532	511	325	140	194	471	498	618	178	290
L026	18F1	153	204	653	513	368	160 ††	225	499	557	664	170	273
L028	18F1	172	218	574	585	343	139	202	511	556	595	180	276
L040	18F1	134	190	535	540	310	139	194	473	540	559	145	270
L045	18F1	131	197	481	470	310	137	207	466	492	539	163	271
L091	18F1	82670 ††	15207 ††	6838 ††	7718 ††								
L097	18F1	125	187	538	477	284	128 †	181	452	492	599	149	256
L143	18F1	135	172	406 †	385 ††	294	137	186	437	430	517	179	288
L156	18F1					356	173 ††	215	483	547	270 ††	312 ††	681 ††
L161	18F1	141	227	656	489	281	135	196	492	439	472	157	266
L168	18F1	180	213	645	651 †	343	141	174	413	609	644	164	255
L178	18F1	140	193	540	547	306	136	196	471	538	552	147	264
L188	18F1	141	176	471	387 ††					848 ††	840 ††	286 ††	394 ††
L192	18F1	168	226	667	541	268	141	190	450	588	668	153	270

Lab. Code#	Method Codes	Soil sample identification and values for Magnesium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	133	116	105	32	417 †	133	229	47	31	519	1080	97
L011	18F1	140	124	108	29	616 ††	160	284	52	31	532	1645	110
L013	18F1	118 †	102 †	95 ††	25	440	118	210	38	25	417	1175	81 ††
L014	18F1									0.08 ††	1.1 ††	3.2 ††	0.27 ††
L018	18F1	146	127	113	8.6 ††								
L019	18F1	137	113	104	30	487	125	240	39	31	462	1361	103
L022	18F1	146	123	112	30	504	141	258	49	27	512	1430	99
L026	18F1	146	124	113	28	542	149	261	48	32	607 †	1834 †	104
L028	18F1	143	121	113	33	514	142	248	46	33	491	1540	101
L040	18F1	136	119	109	32	532	141	251	49	30	510	1411	103
L045	18F1	165 ††	143 ††	129 ††	38	566	152	279	50	28	454	1340	95
L091	18F1	90 ††	168 ††	384 ††	99 ††					122 ††	764 ††	3758 ††	109
L097	18F1	137	114	107	26	483	133	230	43	26	477	1429	92
L143	18F1	142	120	110	22	538	148	255	45	29	534	1523	105
L156	18F1	54 ††	1308 ††	275 ††	36	55 ††	1310 ††	273	36	54 ††	1294 ††	274 ††	36 ††
L161	18F1	126	106	113	20	506	137	254	43	29	506	1545	101
L168	18F1	126	97 ††	106	29	534	128	223	43	37 †	482	1390	99
L178	18F1	139	120	107	32	528	142	253	49	29	507	1423	105
L188	18F1	150	129	112	30					38 ††	543	1705	119 ††
L192	18F1	141	117	114	27	405 ††	137	233	40	30	533	1297	94

Lab. Code#	Method Codes	Soil sample identification and values for Manganese – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	79	109	23	5.3	182	80	65	7.9	5.4	20	130	198
L011	18F1	86	121	21	5	253 †	105 ††	90 ††	8.9	5.7	20	165	237
L013	18F1	82	121	25	6.2	205	83	68	8.3	5.3	20	137	205
L014	18F1									6.3	28 ††	230 ††	321 ††
L018	18F1	98 ††	139 ††	29 †	2 ††								
L019	18F1	81	117	21	6	187	73	60	7.3	6.3	17	142	196
L022	18F1	81	118	23	5.1	194	80	63	7.9	5.0	19	126	173
L026	18F1	83	121	21	5.1	216	89	75 ††	8.1	5.6	19	165	208
L028	18F1	89	127 †	29 †	6	200	81	66	8	6	20	150	201
L040	18F1	22 ††	74 ††	22	5.9	163	80	64	8	5.5	19	137	186
L045	18F1	76	112	21	5.9	194	86	71 †	8.7	5.9	21	130	200
L091	18F1	394 ††	526 ††	86 ††	18 ††					24 ††	60 ††	767 ††	615 ††
L097	18F1	71	101 †	19	4.6	167	71	58 †	6.9	4.5 ††	17 †	125	178
L143	18F1	80	114	20	4.3	182	77	64	7.4	5.7	23 †	145	226
L156	18F1	157 ††	226 ††	75 ††	8.4 ††	334 ††	115 ††	94 ††	9.1	358 ††	144 ††	123	12 ††
L161	18F1	86	115	25	4	194	87	64	7.2	5.8	19	131	204
L168	18F1	85	115	33 ††	5.6	237	89	69 †	8.2	6.4	22	165	214
L178	18F1	22 ††	72.8 ††	22	6	161	81	64	7.9	5.5	19	137	181
L188	18F1	101 ††	143 ††	35 ††	14 ††					4.8	16 †	209 ††	273 ††
L192	18F1	82	112	24	5.4	158	80	63	12 ††	6	21	123	171

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus ICP – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	12	40	150	31	37	12	134	21 †	31	98	29	25
L011	18F1	14	46	161 †	34	41	17 ††	171 ††	24 ††	37	118 ††	35 ††	35 ††
L013	18F1	11	41	147	29	31	12	136	18	33	96	26	28
L018	18F1	12	49	135 ††	10 ††								
L022	18F1	13	43	152	30	35	12	126	18	30	97	29	29
L026	18F1	12	38	152	26	40	14	149	21 †	32	111 †	29	28
L028	18F1	14	44	153	34	36	13	138	19	33	100	30	29
L040	18F1	12	40	146	31	38	13	124	18	30	101	29	27
L045	18F1	17 ††	54	169 ††	32	39	15 ††	157 †	18	32	106	38 ††	34 †
L097	18F1	14	43	147	29	34	13	132	18	30	94	29	29
L143	18F1	13	40	134 ††	25	36	13	130	18	28	99	39 ††	25
L156	18F1		108 ††	226 ††	11 ††	11 ††	2 ††	149	26 ††	23 ††	2 ††	160 ††	37 ††
L168	18F1	15	47	174 ††	41 †	41	12	128	20	42 ††	122 ††	31	30
L178	18F1	11	41	148	32	38	12	125	17	31	104	31	27
L188	18F1	13	47	115 ††	55 ††					46 ††	84 †	31	28
L192	18F1	14	41	150	26	29	13	122	16 †	29	98	27	25

Lab. Code#	Method Codes	Soil sample identification and values for Potassium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	118	261	237	79	681 †	118	729	92	79	178 ††	354 ††	207 ††
L011	18F1	113	256	223	91	865 ††	128	851 ††	107	82	137	263	162
L013	18F1	115	275	254	85	719	123	734	110	72	109 ††	201 ††	136 †
L014	18F1									0.27 ††	0.36 ††	0.51 ††	0.36 ††
L018	18F1	107	255	223	22 ††								
L019	18F1	127 †	290 †	265	96	744	120	798	100	89	147	262	175
L022	18F1	121	309 ††	249	79	710	114	716	93	70	140	265	170
L026	18F1	107	254	226	72	722	104	752	86	85	147	275	168
L028	18F1	111	259	236	86	713	114	758	95	76	145	288	165
L040	18F1	107	246	239	81	711	109	708	89	80	140	289	163
L045	18F1	119	297 †	261	94	779 †	125	817 ††	106	80	131	251	161
L097	18F1	114	253	232	76	698	110	722	93	75	138	267	163
L143	18F1	117	277	243	64	745	115	736	92	83	173 ††	347 ††	197 †
L156	18F1	144 ††	342 ††	301 ††	113 ††	891 ††	106	882 ††	88	916 ††	144	914 ††	128 ††
L161	18F1	111	272	252	67	720	115	750	95	81	150	280	177
L168	18F1	95 †	205 ††	205	69	760 †	118	725	102	106 ††	166 ††	287	177
L178	18F1	110	249	239	81	715	112	710	89	78	142	292	161
L188	18F1	103	233	200	72					40 ††	77 ††	164 ††	97 ††
L192	18F1	110	250	237	78	553 ††	103	684	86	84	149	241	158

Lab. Code#	Method Codes	Soil sample identification and values for Sodium – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	28	38 ††	9	11	19	39	56	19	12	65 ††	70 ††	58
L011	18F1	48	69	20 ††	26 ††	30	43	64	23	14	116	154	48
L013	18F1	38	69	12 †	14	38	37	67	25 †	14	124	158	61
L014	18F1									0.48 ††	0.6 ††	0.68 ††	0.48 ††
L018	18F1	32	45	2.1 ††	1.4 ††								
L019	18F1	43	59	9.4	15	23	36	54	18	16	164 ††	145	52
L022	18F1	45	64	10	12	18	38	55	19	11	128	160	51
L026	18F1	36	54	7.4	10	25	42	62	19	14	142	176	56
L028	18F1	41	63	12 †	16	32	42	62	23	12	121	163	63
L040	18F1	40	59	10	13	28	39	55	18	12	132	181	55
L045	18F1	42	66	10	16	28	43	62	22	15	108	135	50
L097	18F1	39	54	8.1	11	21	37	53	18	11	117	150	48
L143	18F1	39	64	10	9	29	37	60	17	14	132	182	61
L156	18F1	59 ††	78 ††	14 ††	19	17	25 ††	43	16	30 ††	50 ††	69 ††	29 ††
L161	18F1	36	58	8	8	28	42	63	20	13	126	158	52
L168	18F1	33	53		7.6	257 ††	280 ††	284 ††	261 ††	15	130	159	74 ††
L178	18F1	40	60	10	14	27	39	55	18	12	134	183	56
L188	18F1	33	54	10	11								
L192	18F1	38	53	9.6	13	18	31	49	13 †	12	141	178	48

Lab. Code #	Method Codes	Soil sample identification and values for Sulphur – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	36	49	34	22	40	36	44	20	22	40	17	48
L011	18F1	46 ††	63 ††	40	30 †	41	39 ††	50	24	28 †	42 †	18	50 ††
L018	18F1	28 ††	45	32	7 ††								
L019	18F1	42 †	54	27 †	42 ††	30 ††	32 ††	46	19	27	43 †	26 ††	45
L022	18F1	34	50	35	21	36 †	36	45	20	20	39	15	47
L026	18F1	34	48	33	22	38	36	48	22	26	38	15	44
L028	18F1	51 ††	60 †	41	31 ††	39	36	47	23	27	40	17	46
L040	18F1	36	50	34	23	39	35	42	19	22	39	29 ††	44
L045	18F1	50 ††	74 ††	51 ††	38 ††	26 ††	16 ††	47	15	23	34 ††	12	44
L097	18F1	34	51	34	22	36 †	34 †	46	21	24	36 †	15	45
L143	18F1	34	48	32	18 †	38	36	47	19	22	39	17	46
L168	18F1	52 ††	57	40	38 ††	38	42 ††	50	29 ††	30 †	39	15	43
L178	18F1	35	50	34	23	39	35	42	19	22	39	27 ††	44
L188	18F1	41	58	36	24					37 ††	46 ††	18	57 ††
L192	18F1	37	51	39	23	52 ††	39 ††	54 ††	8.5 ††	22	47 ††	46 ††	42

Lab. Code#	Method Codes	Soil sample identification and values for Zinc – Mehlich 3 (18F1) mg/kg oven dry											
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F1	2.9	4.2	4.4	1	3.8	2.9	14	1.0	1.0	3.7	2.4	2.9
L011	18F1	3.4	5	6.1 ††	1.5	4.3 ††	3.2 †	16	1.3 ††	1.5 ††	4.4 †	2.4	3.2
L013	18F1	2.6	4.6	4.7	1.3	3.6	2.6	14	1.1	0.9	3.1	1.4 †	2.5
L014	18F1									2.4 ††	5.8 ††	2.7	5.0 ††
L018	18F1	3	5.1	6.2 ††	0.392 ††								
L019	18F1	3.0	5.0	5.4	1.3	3.6	2.5	14	0.973	1.1	8.7 ††	2.2	2.5
L022	18F1	2.7	4.4	4.6	0.95	3.5	2.7	14	0.93	1	3.7	2.2	2.8
L026	18F1	2.4	3.9	4.6	0.92	3.9	2.9	15	1.1	1.1	3.8	2	2.4
L028	18F1	3.0	4.5	4.8	1.2	3.6	2.5	15	1.1	1.1	3.6	2.3	2.5
L040	18F1	2.6	4.1	4.5	1.0	3.4	2.7	14	0.98	1.1	3.5	2.1	2.9
L045	18F1	2.8	3.5	4.6	1.4	3.8	2.6	15	0.947	1.1	3.1	1.8	2
L091	18F1	54 ††	52 ††	16 ††	8 ††					8.6 ††	20 ††	71 ††	591 ††
L097	18F1	2.2	3.8	4.8	0.913	2.9 ††	2.2 †	12	0.832	0.882 †	3	1.7	2.2
L143	18F1	2.5	3.9	3.8 †	0.8	3.5	2.7	13	0.98	1.0	3.6	2.2	2.4
L156	18F1	7.1 ††	12 ††	12 ††	5.5 ††	5.7 ††	4.9 ††	19 ††	1.1	6.6 ††	5.9 ††	23 ††	2.1
L161	18F1	2.4	4.1	5.5 †	0.9	3.7	2.7	14	0.925	1.1	3.6	2.7	2.4
L168	18F1	3	3.9	4.9	1.1	4.1	2.7	12	0.96	1.1	3.4	1.8	2.3
L178	18F1	2.6	4.1	4.5	1.1	3.4	2.7	13	1	1.1	3.5	2.2	2.9
L188	18F1	3.4	5.2 †	5.3	1.3					1.9 ††	4.7 †	3.4 ††	4.3 ††
L192	18F1	2.6	4.1	5.0	1.2	3.7	3.5 ††	17	1.3 ††	1.3 †	4.2	2.0	2.4

Lab. Code #	Method Codes	Soil sample identification and values for Phosphorus Col – Mehlich 3 (18F2) mg/kg oven dry											
		NOT ASSESSABLE				NOT ASSESSABLE				NOT ASSESSABLE			
		December 2012 (Round 212)				March 2013 (Round 412)				May 2013 (Round 612)			
		ASS 12 1	ASS 12 2	ASS 12 3	ASS 12 4	ASS 31	ASS 32	ASS 33	ASS 34	ASS 51	ASS 52	ASS 53	ASS 54
L009	18F2	15 ††	50	159	39	36	12	139	22	38	100	30	26
L019	18F2	12	39	154	32	38	13	131	20	33	105	33	25
L161	18F2	12	43	162	37	32	10	134	17	21	93	29	24

- i Unless otherwise indicated, soil method codes are as defined by Rayment, G.E. and Higginson, F.R. (1992). *Australian Laboratory Handbook of Soil and Water Chemical Methods*. Reed International Books Australia P/L, trading as Inkata Press, Port Melbourne. 330 pp.
- 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.