European Union LIFE+ and Forest Service, Department of Agriculture, Fisheries and Food

# Forest Health and Ecosystem Monitoring in Ireland, 2009

## FutMon Project, Further Development and Implementation of an EU-Level Forest Monitoring System, project number LIFE07 ENV/D/000218

**Thomas Cummins, Fiona Harrington and Pat Neville**

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UCD Soil Science
University College Dublin
Belfield
Dublin 4, Ireland

Coillte Research & Environment
Newtownmountkennedy
Co. Wicklow, Ireland

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### Research Team

**Coillte**: Ms Katarzyna Bialczak, Mr Charlie Byrne, Mr Frank Daly, Ms Susan Dowd, Mr Peter Doyle, Mr Andrew Fitzgerald, Ms. Deborah Hackett, Mr Pat Halligan, Ms Fiona Harrington, Mr John Lenighan, Mr Richard Miley, Mr Michael Mulhern, Mr Pat Neville, Dr Philip O'Dea, Mr Brendan Waugh, Mr Gavan White.

Mr. Patrick McDonagh.

**UCD**: Ms Maria Callanan, Dr Thomas Cummins, Prof. Edward P. Farrell, Ms Anne Killion, Ms Ines Kölmel, Mr Darragh O'Brien, Ms Beatriz Segura-Zamora, Mr Cian Woods.

**Trent University**, Peterborough Ontario: Prof. Julian Aherne, Mr James Johnson.

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## Executive Summary

This work aims to protect forests in Europe from effects of air pollution, and climate change, and to provide a basis for sustainable management of forest for multiple commercial and societal values. Monitoring of forest health and forest ecosystem processes reported here for 2009 was done under the EU Life+ FutMon Project *Further Development and Implementation of an EU-Level Forest Monitoring System, project number LIFE07 ENV/D/000218*. These studies extend a continuous series of projects at these sites since 1991, and related work begun in Ireland in 1988, of which the latest accessible report is Farrell and Boyle (2005). Reports for intervening years, 2003–2008 are in preparation.

The monitoring procedures built on those in the previous projects and closely follow the ICP Manual (UN/ECE, 1998 and updates), while data reporting is in the formates specified by FutMon. FutMon surveys carried out in 2009, and reported here, are: visual assessment of crown condition and damaging agents; leaf-area-index measurements; air quality measurements; sampling and analysis of litterfall; sampling and analysis of deposition, and; sampling and analysis of soil-solution.

The health status of the forests in Ireland is good. Level I plots were assessed between June and September 2009. The key indicator of that health status is defoliation, which has a mean value of 16% for the Level I network of thirty-two plots assessed here. Discolouration also shows low values, with a mean value of 0.61, averaged from values on a a scale of 0–4. This indicates that the central value for this survey is below 10% of crown discolouration, within the class of least damage.

Leaf-area index measurements were done using hemispheric photographs. The values represent the ratio of green-leaf area to ground area, using upper-leaf area for broadleaves, and half of total-green area for needle-leaves. Leaf Area Index is lowest (2.11) for Brackloon, which is unmanaged, open-canopy semi-natural ancient oak, being much higher for the two productive spruce stands. The much higher values for the two spruce stands, around 6, are at the higher end of the range of LAI observed for boreal spruce forests.

Air quality was assessed with Gradko passive samplers for ammonia, nitrogen dioxide, sulphur dioxide, and ozone ($NH_3$, $NO_2$, $SO_2$ and $O_3$). Ammonia levels were higher than in a comparable survey in 1999.

Litterfall was collected, separated into fractions, and analysed for contents of nutrients and trace metals.

Deposition, measured as precipitation, throughfall and stemflow, was collected and analysed weekly, and analysed for nutrient and other major elemental constituents. Soil-solution was also periodically

sampled below the forest-floor organic horizon, and at two levels within the root-zone at two sites. Analysis demonstrates major elemental-turnover and redistribution processes at forest-ecosystem level, including dry-deposition onto foliage, foliar exchange, concentration by evaporation, interaction with soil organic matter, uptake by roots, effects of mineral weathering, and outputs to deep-soil water. These observations, combined with those throughout the twenty-year monitoring history, provide a basis for detecting change with external influences including major weather events, climate changes, specific deposition events, and also underpins investigation of the impact of novel management approaches, particularly whole-tree harvesting and more intensive recovery of harvest residues, as well as providing the means to assess exceedance of critical loads of acidity and of nutrient nitrogen.

In combination, this monitoring provides the basis for ensuring forest health and the consequences of continued good health for forest-ecosystem services, and identifying change; for understanding the drivers of such change, including climate changes, and the effects of long-range transboundary air pollution; and for positive assessment of the effects of management decisions on sustainability.

## Introduction

The FutMon EU/Life+ project provides a basis for understanding forest health, through monitoring of tree condition throughout Europe, allied to permanent intensive plot-based monitoring of biogeochemical deposition, fluxes and cycling in important forest ecosystems. The Irish implementation of FutMon subscribes to, and aims to make continuous progression towards, conformity with ICP-Forests and FutMon protocols. This report relates to data submitted to FutMon for monitoring at Level I and Level II plots in Ireland during the calendar year 2009. Funding for this work in 2009–2010 is provided by the European Union under the *Life+* Programme through the FutMon project *Further Development and Implementation of an EU-Level Forest Monitoring System* (LIFE07 ENV/D/000218). FutMon is being carried out by 38 beneficiaries from nearly all EU-Member States. The project has a total budget of 34.44 M€. Under the funding of Life+ the EU contributes 16.14 M€ to the total budget. The remaining budget is provided by national authorities, in Ireland by the Department of Agriculture, Food and Fisheries. FutMon (futmon.org) is part of ICP-Forests (icp-forests.org).

## Background

The FutMon EU/Life+ Project operates in partnership with the Convention on Long-Range Transboundary Air Pollution (CLRTAP), through one of several International Cooperative

Programmes, ICP-Forests. Celebrating 25 years in 2010 (with Ireland contributing for 21 years), ICP-Forests now operates in 41 countries to understand and protect forest health in Europe through forest-health surveys at about 5000 "Level I" sites, and to provide intensive monitoring of forest biogeochemistry at between a few hundred and around 800 "Level II" sites, depending on the survey details. FutMon aims to complete the establishment a pan-European forest monitoring system, providing the evidence-base for policy development and decision-making on issues concerning forests in the European Union.

In the 1980s, serious concerns arose about the health and survival of forest trees, and forest ecosystems, with acidification due to deposition of sulphur emitted from combustion sources as a key pressure underlying feared loss of ecosystem quality (Johnson 2010). Sulphur emissions have been actively reduced because of this, through CLRTAP and other clean-air policies, leading to a reduction of about 70% in deposition of oxidisable S to forest ecosystems. As well as promoting emissions reduction, a major monitoring effort was established under ICP-Forests, which can address multiple issues, and give overall indication of the sustainability of forest ecosystems under external drivers, and as may be affected by forest management. Complementing the forest-health assessments, specific issues addressed include the deposition of nitrogen species, the effects of gaseous substances including ozone ($O_3$), biodiversity loss, and climate-change impacts, as well as providing a strategic information base for potential future pressures not currently recognised. A central tool in these efforts is the "critical loads" concept, which identifies the maximum inputs of specific substances below which significant impacts do not occur according to current knowledge. This monitoring is now being further harmonised and improved to give the basis for permanent continuous monitoring. Application of the revised monitoring system is planned to be demonstrated under a follow-up project called *Forests in the European Union—Provision of Policy-Relevant Information* (ForEU), while the current activity of FutMon reported here is aimed at consolidating the existing monitoring base, intensifying observations at Level II plots, improving harmonisation, and increasing the efficiency of data collection through more precise monitoring methods (FutMon 2010).

The FutMon and the preceding Forest Focus projects have been managed in Ireland by Coillte, the commercial semi-State forestry company, with support from UCD Soil Science at University College Dublin. The work extends a continuous series of intensive-monitoring projects at the same forest plots since 1991, built on related work begun in 1988, all under ICP-Forests. The most recent report from this research is Farrell and Boyle (2005), which is available online, while reports for the intermediate period (2003–2008) are in preparation (Aherne et al. in preparation; Cummins et al. in preparation; Harper et al. in preparation). The full series of reports is being prepared for hosting on the UCD Institutional Repository.

Intensive monitoring has operated in the period 1986–2002 under EC Regulation 3528/86 (project numbers 8860 IR 001.0, 9360IR0030, 9560IR0030, 9760 IR 0030, 9860 IR 0030, 9960 IR 0030, 2000 60 IR, 2001.60.IR and 2002.60.IR), running into the Forest Focus project under Regulation (EC) 2152/2003 (2003-2006). Monitoring continued in 2007–2008 funded by the Irish government through the Forest Service of the Department of Agriculture, Fisheries and Food. The project reported here is titled *Further Development and Implementation of an EU-Level Forest Monitoring System* (LIFE07 ENV/D/000218), relating to 2009–2010. It is referred to as the FutMon Project, and operates under the broader FutMon system (futmon.org), part of ICP-Forests (icp-forests.org). The period 2007–2011 coincides with related work funded by the Department of Agriculture, Food and Fisheries under the STIMULUS programme, in the project *Biogeochemistry of Irish Forests ForFlux* (RSF_07_510).

# Methods

Methods used in this work are aligned with those of the current ICP-Forests *Manual* (ICP Forests 2010). Where "national" methods are used for the 2009 surveys reported here, they are described in greater detail, allowing comparison with the ICP-Forests standards. More detail on these national methods, and on methods previously used on these sites, are given by Farrell and Boyle (2005).

## Implementation of ICP-Forests Objectives and Strategy in Ireland

ICP Forests pursues two main objectives, a periodic assessment of forest condition in Europe, with regard to stress factors, in particular air pollution, and a better understanding of the relationships between those stresses and forest condition, at the ecosystem scale (Lorenz 2010, p. 6). These objectives are the same as those of the Irish monitoring effort. These objectives underlie the critical-loads approach to assessing sustainable management of ecosystems under the influence of remote emissions, again synonymous with their use in the Irish investigations, where critical-load estimation is active, ongoing, and fully integrated with the monitoring effort. Collaboration on monitoring, critical loads, and broadening our understanding of ecosystem processes has been ongoing for over two decades, involving Coillte, UCD Forest Ecosystem Research Group, UCD Soil Science, Trent University, Peterborough, Ontario, and Lehrstühl für Bodenkunde der Ludwig Maximilans Universität, München (Kreutzer et al. 1994; Aherne and Farrell 2000; 2001; Huber et al. 2010; Johnson 2010).

Across Europe, and so in Ireland, ICP Forests operates its monitoring programmes at two intensities, an extensive systematic network, the so-called Level I network, and a further network of fewer, more-intensively-studied forest-ecosystem plots, the Level II network. Ireland's monitoring operations are embedded in the ICP-Forests strategies of quality-assurance-and-control, data-evaluation-and-reporting, and deliverables. Fully within this vision is the contribution of the Irish monitoring to assessing the health and stability of forests, understanding the effects of atmospheric deposition, the functioning of forest ecosystems in controlling soil and water quality, and the emerging potential to provide a basis for understanding biodiversity and climate-change effects in forests, both in Ireland and in Europe as a whole.

### Application of ICP-Forests Design Principles in Ireland

Level I plots form an extensive network to represent the whole forest estate of Europe. Plots are selected using a systematic 16 × 16 km grid laid over Europe including Ireland. The number of Level I plots stands at 32 for the 2009 monitoring campaign. This network is in transition, towards alignment with the Irish National Forest Inventory network, which is operated by the Forest Service, Department of Agriculture, Fisheries and Food.

The intensively-monitored Level II sites are not chosen systematically, but are selected using subjective criteria, in order to provide efficient representation of important forest ecosystems for Ireland. Detailed site descriptions of the three sites operated in 2009, including local placenames, site-selection criteria, site histories, forest-stand descriptions, growth estimates, vegetation descriptions, statements of representativeness, site layouts, ownership, management, planned operations, and other peculiarities of the individual location, have been given in previous reports and are freely accessible (Farrell and Boyle 2005). Further details reported here relate specifically to the monitoring year 2009, and to those surveys performed under FutMon with the specific reporting requirements of the FutMon programme. Site details are in Table 1.

*Table 1. Details of the FutMon–ICP-Forests Level II plots monitored in 2009 in Ireland.*

| Site | FutMon site code | Latitude & Longitude | Altitude | Year site established |
|---|---|---|---|---|
| Cloosh | 10 | 53° 21’41”N 09°20’47”W | 102 m | 1991 |
| Brackloon | 11 | 53° 45’51”N 09°33’44”W | 75 m | 1991 |
| Ballinastoe | 16 | 53° 06’20”N 06°14’28”W | 470 m | 2003 |

*These locations were previously published in DD-MM.00 format, but are given here in DD-MM-SS; the sites have not moved. Positions given are approximate, identified from satellite imagery.*

### Quality Assurance and Control in Laboratories

Coillte Laboratories manage the collection, transport, storage, preservation, analysis and initial data compilation for all samples in this report, and have done so for the Level II monitoring network since taking over from UCD Forest Ecosystem Research Group in 2003.

> Coillte Laboratories have been accredited by the Irish National Accreditation Board (INAB) since 2006, INAB Lab registration certificate number 174T, applicable to: ammonia, nitrate, orthophosphate, total phosphorus, chloride, sulphate and fluoride.

For parameters not accredited under INAB, accreditation takes the form of mandatory participation in LGC/Aquacheck, Environmental Protection Agency (EPA) and EMEP testing.

Aquacheck Proficiency Scheme, Lab number 82, is applicable to: pH, conductivity, alkalinity, calcium, magnesium, hardness, potassium, sodium, manganese, aluminium, nitrate, ammonia, orthophosphate, chloride and sulphate, following Scheme description 2008-2009 version 2, UKAS accredited.

EPA Proficiency Testing, Lab number 99, applicable to: pH, conductivity, alkalinity, calcium, magnesium, hardness, potassium, sodium, manganese, aluminium, nitrate, ammonia, orthophosphate, chloride and sulphate.

EMEP Proficiency Testing – Lab number 160. Parameters submitted for comparison were Calcium, Magnesium, Potassium, Sodium, Nitrates, Ammonia, Chloride, Sulphate.

DOC analysis for 2009 was subcontracted to Alcontrol. Alcontrol is UKAS accredited.

Laboratory quality-control data, which are associated with Ballinastoe (Plot code 16) and have been submitted to FutMon, are given for the deposition survey in Table 2, and for soil-solution measurements, using data from Cloosh (Plot code 10) in Table 3.

*Table 2. Quality-control data for Deposition at Ballinastoe (Site Code 16), 2009.*

| Param-eter | Quantif-ication limit | Control-chart mean | Control-chart standard deviation | Ring-test particip-ation | Ring-test No. | Lab ID | Within % | Requal-ification | Within % requal. |
|---|---|---|---|---|---|---|---|---|---|
| pH | 0.01 | 100.1 | 0.4 | Yes | 4 | A69 | 60 | 0 | |
| Cond | 1 | 102.6 | 5.8 | Yes | 4 | A69 | 100 | 0 | |
| K | 0.2 | 100.7 | 0.7 | Yes | 4 | A69 | 60 | 0 | |
| Ca | 0.2 | 100.9 | 0.9 | Yes | 4 | A69 | 60 | 0 | |
| Mg | 0.2 | 103.0 | 3.0 | Yes | 4 | A69 | 100 | 0 | |
| Na | 0.2 | 102.9 | 2.9 | Yes | 4 | A69 | 100 | 0 | |
| N_NH4 | 0.02 | 98.6 | 2.1 | Yes | 4 | A69 | 100 | 0 | |
| Cl | 0.4 | 101.3 | 2.4 | Yes | 4 | A69 | 100 | 0 | |
| N_NO3 | 0.02 | 100.2 | 1.6 | Yes | 4 | A69 | 100 | 0 | |
| S_SO4 | 0.1 | 102.2 | 2.2 | Yes | 4 | A69 | 100 | 0 | |
| Alkalin | 20 | 98.1 | 2.6 | Yes | 4 | A69 | 17 | 1 | 100 |
| N_total | 0.05 | 105.0 | 5.0 | Yes | 4 | A69 | 100 | 0 | |
| Al | 5 | 99.6 | 0.4 | No | | | | | |
| Mn | 5 | 103.3 | 3.3 | No | | | | | |
| Fe | 5 | 100.2 | 0.2 | No | | | | | |
| P_PO4 | 0.003 | 98.9 | 1.4 | No | | | | | |
| Cu | 5 | 101.5 | 1.5 | No | | | | | |
| Zn | 5 | 105.1 | 5.1 | No | | | | | |
| Ni | 5 | 103.2 | 3.2 | No | | | | | |
| DOC | 3 | 105.0 | 5.0 | Yes | 4 | A69 | 60 | 0 | |

*Table 3. Quality-control data for Soil Solution at Cloosh (Site Code 10), 2009.*

| Param-eter | Quantif-ication limit | Control-chart mean | Control-chart standard deviation | Ring-test particip-ation | Ring-test No. | Lab ID | Within % | Requal-ification | Within % requal. |
|---|---|---|---|---|---|---|---|---|---|
| pH | 0.01 | 100.1 | 0.4 | Yes | 4 | A69 | 60 | No | |
| Cond | 1 | 102.6 | 5.8 | Yes | 4 | A69 | 100 | No | |
| K | 0.2 | 100.7 | 0.7 | Yes | 4 | A69 | 60 | No | |
| Ca | 0.2 | 100.9 | 0.9 | Yes | 4 | A69 | 60 | No | |
| Mg | 0.2 | 103 | 3 | Yes | 4 | A69 | 100 | No | |
| Na | 0.2 | 102.9 | 2.9 | Yes | 4 | A69 | 100 | No | |
| N_NH4 | 0.02 | 98.6 | 2.1 | Yes | 4 | A69 | 100 | No | |
| Cl | 0.4 | 101.3 | 2.4 | Yes | 4 | A69 | 100 | No | |
| N_NO3 | 0.02 | 100.2 | 1.6 | Yes | 4 | A69 | 100 | No | |
| S_SO4 | 0.1 | 102.2 | 2.2 | Yes | 4 | A69 | 100 | No | |
| Alkalin | 20 | 98.1 | 2.6 | Yes | 4 | A69 | 17 | Yes | 100 |
| DOC | 3 | 105 | 5 | Yes | 4 | A69 | 60 | No | |
| Al | 5 | 99.6 | 0.4 | No | | | | | |
| Mn | 5 | 103.3 | 3.3 | No | | | | | |
| Fe | 5 | 100.2 | 0.2 | No | | | | | |
| P_PO4 | 0.003 | 98.9 | 1.4 | No | | | | | |
| Cu | 5 | 101.5 | 1.5 | No | | | | | |
| Zn | 5 | 105.1 | 5.1 | No | | | | | |
| Ni | 5 | 103.2 | 3.2 | No | | | | | |

*Cond, conductivity; Alkalin, alkalinity; DOC, dissolved organic carbon.*

Quality-control data for litterfall analysis at the three Level II plots for 2009 is given in Table 4.

*Table 4 Quality-control data for Litterfall analysis at Level II plots, 2009.*

| Plot | Param-eter | Quantif-ication limit | Control-chart mean | Control-chart standard deviation | Ring-test particip-ation | Ring-test No. | Lab ID | Within % |
|---|---|---|---|---|---|---|---|---|
| 16 | C | 0.2 | 48.6 | 1 | Yes | 12 | A69 | 100 |
| 16 | N | 0.60 | 100.7 | 2 | Yes | 12 | A69 | 100 |
| 16 | S | 4.30 | 1659 | 2 | Yes | 12 | A69 | 50 |
| 16 | P | 0.06 | 103.2 | 4 | Yes | 12 | A69 | 100 |
| 16 | Ca | 0.06 | 99.9 | 2 | Yes | 12 | A69 | 100 |
| 16 | Mg | 0.02 | 100 | 2 | Yes | 12 | A69 | 100 |
| 16 | K | 0.04 | 99.6 | 2 | Yes | 12 | A69 | 100 |
| 16 | Zn | 1.00 | 100.8 | 3 | Yes | 12 | A69 | 100 |
| 16 | Mn | 1.00 | 100.9 | 3 | Yes | 12 | A69 | 75 |
| 16 | Fe | 1.00 | 100.5 | 5 | Yes | 12 | A69 | 100 |
| 16 | Cu | 0.10 | 127 | 58 | Yes | 12 | A69 | 100 |
| 16 | Pb | 0.10 | 135.7 | 37 | Yes | 12 | A69 | 100 |
| 16 | Cd | 10.00 | 107.8 | 20 | Yes | 12 | A69 | 100 |
| 16 | B | 0.50 | 97.6 | 7 | Yes | 12 | A69 | 100 |
| 10 | C | 0.2 | 48.6 | 1 | Yes | 12 | A69 | 100 |
| 10 | N | 0.60 | 100.7 | 2 | Yes | 12 | A69 | 100 |
| 10 | S | 4.30 | 1659 | 2 | Yes | 12 | A69 | 50 |
| 10 | P | 0.06 | 103.2 | 4 | Yes | 12 | A69 | 100 |
| 10 | Ca | 0.06 | 99.9 | 2 | Yes | 12 | A69 | 100 |
| 10 | Mg | 0.02 | 100 | 2 | Yes | 12 | A69 | 100 |
| 10 | K | 0.04 | 99.6 | 2 | Yes | 12 | A69 | 100 |
| 10 | Zn | 1.00 | 100.8 | 3 | Yes | 12 | A69 | 100 |
| 10 | Mn | 1.00 | 100.9 | 3 | Yes | 12 | A69 | 75 |
| 10 | Fe | 1.00 | 100.5 | 5 | Yes | 12 | A69 | 100 |
| 10 | Cu | 0.10 | 127 | 58 | Yes | 12 | A69 | 100 |
| 10 | Pb | 0.10 | 135.7 | 37 | Yes | 12 | A69 | 100 |

*Table 4 Continued.*

| Plot | Parameter | Quantification limit | Control-chart mean | Control-chart standard deviation | Ring-test participation | Ring-test No. | Lab ID | Within % |
|---|---|---|---|---|---|---|---|---|
| 10 | Cd | 10.00 | 107.8 | 20 | Yes | 12 | A69 | 100 |
| 10 | B | 0.50 | 97.6 | 7 | Yes | 12 | A69 | 100 |
| 11 | C | 0.2 | 48.6 | 1 | Yes | 12 | A69 | 100 |
| 11 | N | 0.60 | 100.7 | 2 | Yes | 12 | A69 | 100 |
| 11 | S | 4.30 | 1659 | 2 | Yes | 12 | A69 | 50 |
| 11 | P | 0.06 | 103.2 | 4 | Yes | 12 | A69 | 100 |
| 11 | Ca | 0.06 | 99.9 | 2 | Yes | 12 | A69 | 100 |
| 11 | Mg | 0.02 | 100 | 2 | Yes | 12 | A69 | 100 |
| 11 | K | 0.04 | 99.6 | 2 | Yes | 12 | A69 | 100 |
| 11 | Zn | 1.00 | 100.8 | 3 | Yes | 12 | A69 | 100 |
| 11 | Mn | 1.00 | 100.9 | 3 | Yes | 12 | A69 | 75 |
| 11 | Fe | 1.00 | 100.5 | 5 | Yes | 12 | A69 | 100 |
| 11 | Cu | 0.10 | 127 | 58 | Yes | 12 | A69 | 100 |
| 11 | Pb | 0.10 | 135.7 | 37 | Yes | 12 | A69 | 100 |
| 11 | Cd | 10.00 | 107.8 | 20 | Yes | 12 | A69 | 100 |
| 11 | B | 0.50 | 97.6 | 7 | Yes | 12 | A69 | 100 |

## Visual Assessment of Crown Condition and Damaging Agents

Crown condition was assessed at thirty two Level I plots in 2009, with the assessments occurring on individual dates between 25-June and 28-September 2009, and at the three Level II plots during August 2009. Plot locations are shown on the map in Figure 1.

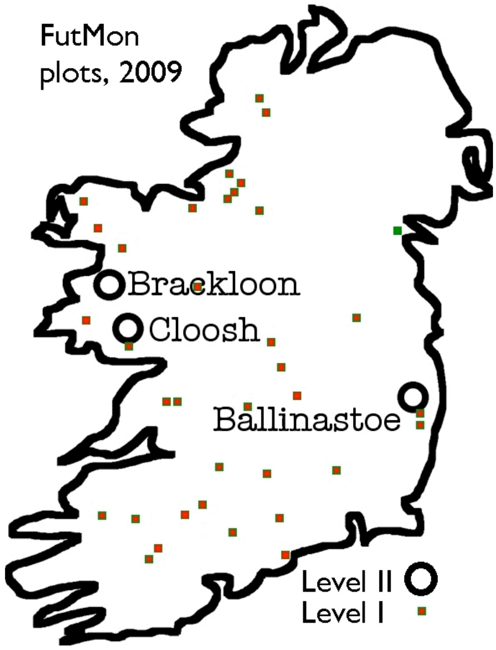


*Figure 1. Locations of FutMon–ICP-Forests Level I and Level II plots assessed for crown-condition and damaging agents in 2009.*

Water availability to the principal tree species was assessed as "sufficient" in 28 plots, with three cases (Plots 26, 44, 139) of "excessive" water, and one (Plot 228) where water availability was "insufficient". Altitudes range from above 50 m to below 450 m above sea level. All aspects, and flat land, are represented. The mean age of forest stands includes three 20-year age bands, with no stands above 60 years represented. One plot (243) visited had been felled since the 2008 assessment, while one other (157) was assessed, but was felled subsequently in 2009.

Results of this forest-health survey have already been reported to ICP-Forests (Lorenz et al. 2009; Fischer et al. 2010), and are given in Table 8.

## Leaf-Area-Index Measurements

Leaf-Area Index (LAI) is defined by ICP-forests as half the total green leaf area (for needle-leaved trees such as spruces, and one-sided area for broadleaves) per unit ground area, a composite measure from all tree and tall shrub species in the plot, and is a unitless value. LAI was measured on the three Level II plots. The method for determining LAI was with a *Hemi-View* digital camera in all cases, as in the example image in Figure 2. The method of hemispherical photography for measuring LAI is preferred in a recent comparison (Thimonier et al. 2010). A `.jpeg` format photo file is stored, and the name submitted to FutMon, in each case, but FutMon doesn't hold copies of the images. The plot-

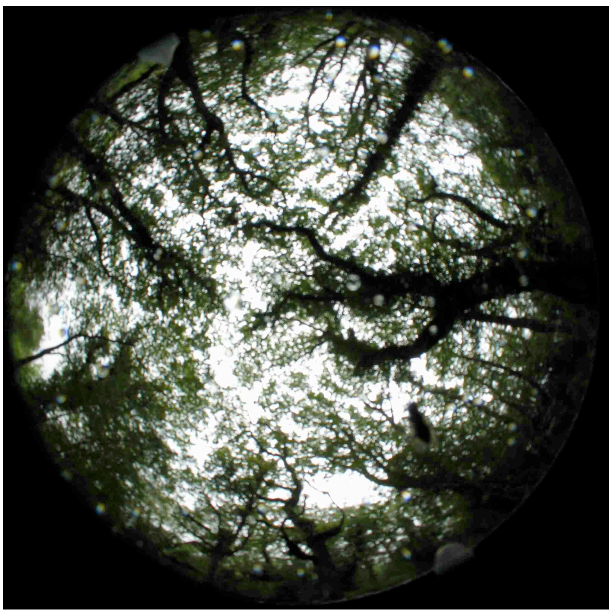

*Figure 2. Hemispheric-camera image used for leaf-area-index (LAI) assessment. This example is from the archived file 07001100B405080912162301.jpg*

level information for this survey was submitted to FutMon as the file IE2009.LAM and is reproduced in the Appendix. Hemi-View image filenames are of the format XXPPPPNNNNDDDDDDTTTTTTSS.jpg where the codes referred to are: XX, Country code (07 for Ireland); PPPP, Plot Number (0011 for Brackloon); NNNN, Permanent Measurement Point number (00B4); DDDDDDTTTTTT, date and time of image production (5-August 2009, 12:16:23); SS, sequence of images from this point (01).

Results of the leaf-area-index measurements are given in Table 9.

### Air Quality Measurements

Measurements were made of atmospheric concentrations of the gases ammonia ($NH_3$), nitrogen dioxide ($NO_2$), sulphur dioxide ($SO_2$), and ozone ($O_3$), at the three Level II plots. Passive-diffusion samplers were used, supplied by Gradko Environment. Analysis of samples was done by Gradko. For each exposure of samplers, three replicate samplers were used. Blank tubes were also deployed and measured (but not exposed to the atmosphere), and the results reported are corrected for the values obtained from the blanks.

$O_3$ measurements were made in the period May–August, at Cloosh (10) and Ballinastoe (16).

An intercomparison of passive samplers carried out under the FutMon programme suggested that the Gradko samplers overestimated $SO_2$ and $O_3$, which was attributed to the lack of a sampler shelter. In contrast, the Gradko $NO_2$ samplers compared well to an active air monitoring system despite the lack of a shelter. The trial, comprising six different passive samplers, was carried out in Spain (CEAM 2009). A further trial to evaluate this issue under Irish conditions for cumulative exposure periods (1 to 4 weeks) with and without shelters was carried out during August 2010 at Kilkitt, Co. Monaghan, and will be reported with the 2010 results. The Gradko $NH_3$ samplers are currently being evaluated against 'Willems Badge' passive samplers at Ballinastoe; these samplers were previously used at the the Level II plots (1995–2003), and as part of a network of 40 sites around Ireland during 1999 (De Kluizenaar and Farrell 2000).

Results of the passive-diffusion gas sampling for 2009 are presented in Table 10.

### Sampling and Analysis of Litterfall

Litterfall is the continuous deposition of biomass (or necromass) from the aboveground parts of the forest, free-falling onto the forest soil surface. It includes leaves, bark, stems, flowers, fruit, bud-scales, moss, lichens, and animals from the tree crowns. Litter traps were present at the three Level II plots throughout 2009, numbering six or seven per plot, with a total collecting area of 0.75–0.88 $m^2$ per plot. This size of trap does not catch large branches which may fall; nor does this method assess root-litter, a major turnover or organic matter, which occurs within the soil. Litterfall traps were open continuously, with the accumulated litter collected approximately monthly.

Collected litter is transferred to the laboratory, where it is separated into fractions representing the principal tree species and other woody plants, flowers, seeds, branches, and other biomass. The fractions were assessed for dry-weight per unit ground area; the area of 100 leaves or 1000 needles; and the oven-dry mass of 100 leaves or 1000 needles. The fractions were separately analysed for total contents of C, N, S, P, Ca, Mg, K, Zn, Mn, Fe, Cu, Pb, B and Cd. Uniform analytical methods for litter analysis were used for the three Level II sites, and were submitted to FutMon in the file IE2009LF.LQA and are shown in Table 5.

*Table 5. Pretreatments and analytical determinations used for litterfall measurement.*

| Element | Pretreatment | Determination |
|---|---|---|
| C | None | C/N-Analyzer (Carlo-Erba=CE Instruments) |
| N | Wet ashing $H_2SO_4/H_2O_2$ | Continuous flow method, Indophenol blue |
| S | Microwave digestion $HNO_3$ | ICP-AES without Ultrasonic nebulisation |
| P, Ca, Mg, K, Zn, Mn, Fe, Cu, Pb, B, Cd. | Extraction aqua regia | ICP-MS |

The results of litter analysis are presented in Table 11.

### Sampling and Analysis of Deposition and Soil Solution

Precipitation deposition, consisting of open-land precipitation (here referred to as "precipitation"), was collected at an open site adjacent to the forest plot. This and precipitation in the inter-stem space below the tree crowns, known as "throughfall", were collected at the three Level II plots, sampled on a weekly basis during 2009. In addition, water running or dripping on or near the tree stems, called "stemflow", was collected at Cloosh (Site code 10) and Ballinastoe (16). Sampler designs in each case are national models (not ICP-Forests-harmonised), installation details of which are in Table 6.

For collection of precipitation and throughfall, national-design deposition samplers with a funnel opening of 10 cm diameter (area 0.0079 $m^2$) have been used since 1991. FutMon/ICP-Forests standard collectors—"harmonised samplers"—for precipitation and throughfall deposition, with a larger funnel opening, 0.078 $m^2$ (which equates to 15.8 cm diameter) were tested in a special survey at the Ballinastoe site (site code 16), in the period 17-August 2009 to 5-September 2010, in parallel with the national-design samplers. Three harmonised samplers were used at the open site, thirty at the forest site, with samples bulked for analysis.

*Table 6 Design features of deposition collectors at Level II plots, 2009.*

| Site | Sample | Count | Height | Area* |
|---|---|---|---|---|
| Cloosh (10) | | | | |
| | Precipitation, national | 4 | 1.3 m | 0.008 $m^2$ |
| | Throughfall, national | 11 | 1.3 m | 0.008 $m^2$ |
| | Stemflow, national | 6 | 1.6 m | 0.5 $m^2$ |
| Brackloon (11) | | | | |
| | Precipitation, national | 4 | 1.3 m | 0.008 $m^2$ |
| | Throughfall, national | 24 | 1.3 m | 0.008 $m^2$ |
| Ballinastoe (16) | | | | |
| | Precipitation, national | 4 | 1.3 m | 0.008 $m^2$ |
| | Precipitation, harmonised | 3 | 1.3 m | 0.078 $m^2$ |
| | Throughfall, national | 30 | 1.3 m | 0.008 $m^2$ |
| | Throughfall, harmonised | 30 | 1.3 m | 0.078 $m^2$ |
| | Stemflow, national | 6 | 1.6 m | 0.4 $m^2$ |

**Note the "area" of the stemflow apparatus is taken as the sum of the basal-areas (cross-sectional area of the stem at 1.3 m height) of the stemflow sample trees.*

Stemflow was collected on six trees at each of Cloosh (Site code 10) and Ballinastoe (16) sites. The national-style collectors were silicon-rubber gutters attached to these trees, with the gutter outlet about 1.6 m above ground level, and the inner surface of the gutter sealed to the bark with silicon mastic. The stemflow samples were collected in graduated 80 litre, PVC bins in the field, from which a subsample was collected. Stemflow was sampled weekly, sub-sampled into 500 mL bottles.

Soil solution was collected at the three Level II Plots during 2009. At all three plots, soil-solution was collected below the O-horizon of forest-derived leaf-litter, that is, at "0 cm" depth, using zero-tension, gravity-flow tray lysimeters, collected weekly. At Cloosh (10) and Ballinastoe (16), additional sampling was done at multi-week intervals, within and below the root-zone in the soil, nominally at depths of 25 and 75 cm, using Prenart-type teflon–quartz suction lysimeters.

Water samples were transferred to the processing laboratory by courier, and there stored in the dark at 4°C. Sample pretreatments and analytical determination methods are given in Table 7.

*Table 7. Pretreatments and analytical determinations used for deposition and soil-solution samples.*

| Element | Pretreatment | Determination |
|---|---|---|
| pH | None | pH electrode |
| Conductivity | None | Conductimetry |
| K, Ca, Mg, Na, Al, Mn, Fe, Cu, Zn, Ni | Filtration, 45µm | ICP-MS |
| $N\_NH_4^+$, $N\_NO_3^-$ | Filtration, 45µm | Colourimetric N-determination |
| N_Total | Kjeldahl digest | Colourimetric N-determination |
| $P\_PO_4^{3-}$ | Filtration, 45µm | Colourimetric P-determination |
| $Cl^-$, $S\_SO_4^{2-}$ | Filtration, 45µm | Anion-Chromatography with chemical suppression |
| Alkalinity | Filtration, 45µm | Potentiometric titrations |
| DOC | Filtration, 45µm | C/N-Analyzer |

*Nitrogen, phosphorus and sulphur species are reported as N, P & S, respectively. DOC: dissolved organic carbon.*

Results of analysis of deposition, reported as volume-weighted means, is given with arithmetic-mean values for soil-solution sampling, in Table 12.

### FutMon Surveys scheduled for 2010

FutMon carries out further surveys, operating at the Level I and Level II plots in Ireland as appropriate, but which were not scheduled for 2009, or not undertaken for other reasons listed here.

Automatic weather stations were installed under FutMon at Level II plots in late 2009; **meteorological measurements** are available from April 2010, and will be reported from then onwards. **Phenological observations** began under FutMon in 2010, and will be reported for 2010. **Observation of ozone injury** was undertaken on an informal basis following the ICP-Forest standard methods during 2010. This survey may be reported with the 2010 data, but will be subject to peer review, since appropriate approved training was not undertaken (the assessment showed no evidence of ozone damage in 2009). **Tree growth** is assessed on the Level II plots at five-year intervals, with an assessment taken in 2010, which will be reported. Continuous monitoring of tree growth, with weekly recording, using **dendrometer bands** began in 2010. **Vegetation** is assessed every three years, and has been surveyed at the Level II plots in 2010. In addition, a nutrient analysis of ground vegetation was undertaken in 2010 as part of FutMon Action D2—*Nutrient Cycling and Critical Loads*. This will be fully reported with remaining 2010 data. **Analysis of Leaves and Needles** is undertaken every two years, and was done in 2010, to be reported with that year's data. **Soil sampling** is undertaken every ten years. The most recent survey was in 2005–6, under the BioSoil project, with analyses complete, and that report awaiting publication.

# Results

The following results are presented by FutMon survey. All results presented here have been submitted to FutMon using the FutMon Data Submission Application at www.futmon.org. The full dataset is in the Appendix, in the specified data formats given in the manual for 2009 (FutMon–ICP-Forests 2010).

### Visual Assessment of Crown Condition and Damaging Agents

Table 8 gives the crown-condition assessment results from the survey late in the 2009 growing season.

*Table 8. Crown-condition results from Level I plots, 2009.*

| Plot | Tree count | Species | Defoliation | Discolouration* | Fruiting | Note (if most trees affected) |
|---|---|---|---|---|---|---|
| # | # | | % of crown | 0–4 | 1–3 | |
| 15 | 26 | lodgepole pine<br>Sitka spruce | 33 | 0.92 | 1.00 | |
| 22 | 21 | lodgepole pine | 13 | 1.00 | 1.00 | |
| 26 | 21 | Sitka spruce | 1 | 0.0 | 1.00 | |
| 32 | 21 | lodgepole pine | 25 | 1.24 | 1.00 | Exposed |
| 33 | 21 | lodgepole pine | 24 | 1.19 | 1.00 | Exposed |
| 34 | 21 | Sitka spruce | 0 | 0.0 | 1.00 | |
| 44 | 25 | Sitka spruce<br>lodgepole pine | 26 | 1.00 | 1.00 | |
| 80 | 21 | lodgepole pine<br>Sitka spruce | 31 | 0.95 | 1.00 | Shoot die-back |
| 139 | 25 | Sitka spruce | 28 | 0.56 | 1.00 | Poor nutrition, frost |
| 157 | 21 | Norway spruce | 100 | 4.00 | | Felled 2009 |
| 159 | 22 | Sitka spruce | 5 | 0.18 | 1.43 | |
| 196 | 21 | Sitka spruce | 0 | 0.0 | 1.00 | |
| 208 | 21 | Norway spruce | 15 | 0.15 | 1.00 | |
| 228 | 21 | Sitka spruce | 4 | 0.0 | 1.00 | |
| 243 | 21 | lodgepole pine | 100 | 4.00 | | Felled 2008 |
| 254 | 21 | Sitka spruce<br>lodgepole pine | 16 | 0.81 | 1.00 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 277 | 25 | Sitka spruce | 0 | 0.0 | 1.00 | |
| 278 | 21 | Sitka spruce | 5 | 0.05 | 1.00 | |
| 279 | 21 | Sitka spruce | 4 | 0.0 | 1.10 | |
| 701 | 25 | Sitka spruce | 18 | 0.52 | 1.04 | Aphid damage |
| 703 | 21 | Sitka spruce | 0 | 0.05 | 1.00 | Poor nutrition |
| 704 | 21 | Sitka spruce | 0 | 0.0 | 1.00 | |
| 705 | 21 | Sitka spruce | 17 | 0.48 | 1.00 | |
| 706 | 27 | lodgepole pine | 10 | 0.33 | 1.00 | |
| 707 | 25 | lodgepole pine | 15 | 0.56 | 1.00 | Shoot die-back |
| 708 | 25 | lodgepole pine | 16 | 0.96 | 1.00 | Shoot die-back |
| 709 | 21 | Sitka spruce | 2 | 0.0 | 1.00 | |
| 710 | 21 | Sitka spruce lodgepole pine | 7 | 0.43 | 1.00 | |
| 711 | 22 | Sitka spruce | 5 | 0.18 | 1.00 | |
| 712 | 21 | Sitka spruce | 0 | 0.0 | 1.10 | |
| 713 | 25 | Sitka spruce | 4 | 0.08 | 1.00 | |
| 714 | 25 | Norway spruce | 2 | 0.0 | 1.00 | |

*Discolouration codes: 0, 0–10% of leaves discoloured; 1, 10–25%, 2, 25–60%, 3, >60%.*

Overall mean defoliation recorded for 2009 was 9.6% and discolouration was in the category of 1–10%. These results indicate that overall mean defoliation remained unchanged and mean discolouration levels showed a slight disimprovement since the 2008 survey. Defoliation levels recorded in 2009 were significantly below the respective long term 21 year average of 14.3% whilst discolouration levels were slightly below the long term average.

In terms of species, defoliation decreased in the order of lodgepole pine (*Pinus contorta*) (15.8%) > Norway spruce (*Picea abies*) (8.0%) > Sitka spruce (*Picea sitchensis*) (6.9%), while the trend in discolouration was in the order of lodgepole pine (16.8%) > Norway spruce (2.2%) > Sitka spruce (1.8%). In previous years, Norway spruce exhibited the greatest defoliation of the three species in this survey. However, following the 2008 survey, sample trees of Norway spruce were felled as part of normal forest operations. Hence the apparent improvement in condition of Norway spruce in 2009 is directly attributable to a change in the number of sample trees rather than an overall improvement in condition. Exposure continued to be the greatest single cause of damage to the sample trees in 2009.

Other damage types (aphid, shoot die-back, top dying and nutritional problems) accounted for damage in a smaller percentage of trees. No instances of damage attributable to atmospheric deposition were recorded in the 2009 survey. Long-term data on defoliation and discolouration, averaged over all monitored sites and tree species, is shown in Figure 3.

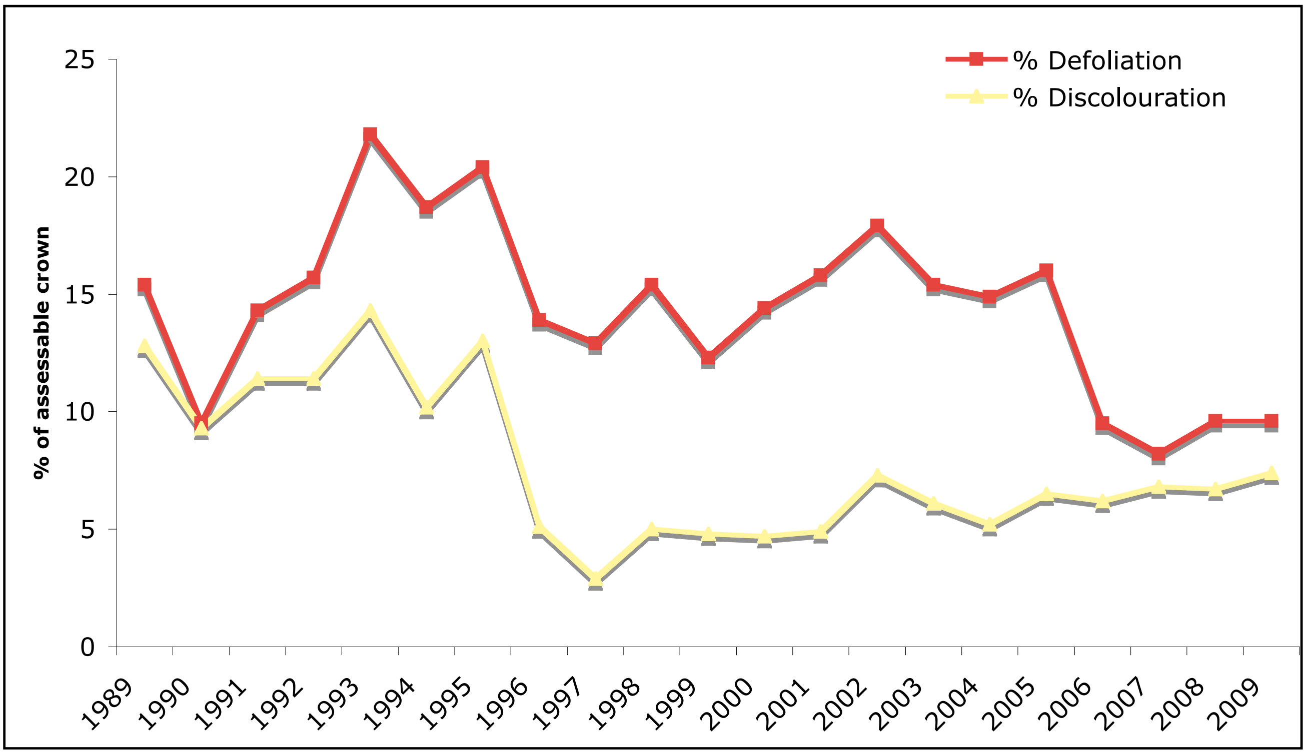


*Figure 3. Defoliation and discolouration levels, averaged over all Level 1 sites, and including all assessed species, 1989–2009.*

### Leaf-Area-Index Measurements

Mean leaf-area index measurements for the three Level II plots are given in Table 9.

*Table 9. Leaf-Area Index measurements (LAI) for 2009 at Level II plots. LAI is a unitless ratio representing one-half the green-leaf area per unit of ground area.*

| Plot | date | analysis date | LAI |
|---|---|---|---|
| Cloosh (10) | 4-August 2009 | 6-August 2009 | 5.64 |
| Brackloon (11) | 5-August 2009 | 6-August 2009 | 2.11 |
| Ballinastoe (16) | 14-July 2009 | 14-July 2009 | 6.21 |

Leaf Area Index is lowest (2.11) for Brackloon, which is unmanaged, open-canopy semi-natural ancient oak, being much higher for the two productive spruce stands. Values of around 6 for the two spruce stands are at the higher end of the range of LAI observed in boreal spruce forests (Chen et al. 1997).

### Air Quality Measurements

The results of air-quality measurements, using median values from all collection periods, corrected for blanks, are presented in Table 10.

*Table 10. Air-quality results for Level II plots, 2009.*

| Site | $NH_3$ | $NO_2$ | $SO_2$ | $O_3$ |
|---|---|---|---|---|
| Unit | µg/m³ | µg/m³ | µg/m³ | ppb |
| Cloosh (10) | 1.79 | 1.26 | 1.69 | 39 |
| Brackloon (11) | 2.04 | 1.37 | 2.12 | — |
| Ballinastoe (16) | 1.25 | 1.67 | 1.23 | 37 |

Median values of ammonia measured during 1999 (De Kluizenaar and Farrell 2000), using the same methods, were: Cloosh, 0.08, Brackloon, 0.50 and Roundwood (adjacent to the Ballinastoe site): 0.31 $\mu/m^3$. The 2009 values are considerably higher. While these passive-sampling methods do not indicate short-term maximum values, all these values are very low with respect to established limits regarding human health, protection of vegetation, or other direct impacts (CAFE 2008).

### Sampling and Analysis of Litterfall

Litterfall analysis is presented in Table 11. Foliage mass deposition was measured at at 90–140 $g/m^2$ which equates to 0.9–1.4 Mg/ha. Carbon contents (g/100 = %) are around 50%, with lower C content in foliage than in other fractions of litter, which are typically more woody than leaves. Nitrogen contents are below 1% at Cloosh, and above this at Ballinastoe, indicating a substantial difference in nitrogen status between these two forest stands. At Brackloon, nitrogen content of non-oak foliage is greater than that in the oak foliage. Manganese levels are much higher in the two mineral-soil sites than at the peat site, Cloosh, perhaps reflecting the availability of this element from soil minerals; this difference is not evident for iron (Fe), however, which is often associated with manganese in soils, with no obvious difference between the Fe content of foliage between the three Level II sites. The heavy-metals Cu, Pb and Cd, along with the micronutrient B, are not clearly different between sites, except for cadmium in the fraction of "other species" (i.e. not oak) foliage at Brackloon, which shows a relatively high value at 227 ng/g.

### Sampling and Analysis of Deposition and Soil-Solution

Analytical results for deposition are presented with those for soil-solution in Table 12. At all three sites, precipitation is acid (which is always expected), and the pH of the water decreases as it passes through the forest. In Cloosh and Ballinastoe, where there is soil-solution sampling through the root zone, pH increases from a minimum at the 0 cm level below the forest floor. Conductivity values demonstrate the combined effect of additional solutes and water removal as precipitation enters the forest, with increased conductivity from precipitation through to soil-water. Potassium levels are consistent with a large contribution of this nutrient element (as $K^+$ ions) leached from foliage, appearing in throughfall and stemflow, but rapidly taken up by roots, so that water exiting below the root zone has low potassium concentrations. Nitrogen levels show interaction with the tree foliage: at Cloosh and Brackloon, ammonium concentrations are lower in throughfall than in precipitation, indicating apparent nitrogen uptake in this form by the foliage. Since water is lost, the constant concentration of nitrate in precipitation and throughfall at Brackloon (and an increase smaller than that for chloride at Brackloon) indicates a net decrease in nitrate flux, suggesting uptake of nitrate by foliage at Brackloon. Nitrate increases in the passage of water through the tree crowns at Cloosh, as do both N species at Ballinastoe. Chloride values reflect the removal of water alone, with evaporation off tree surfaces leading to an increased chloride concentration in throughfall relative to precipitation, and further increased concentrations due to water uptake by roots in soil-solution samples. Aluminium, manganese and iron are present in deposition at all three sites, with much reduced values observed in soil-solution samples.

Table 13 compares analytical mean values for 2009 from the comparison of "nation" design and "harmonised" design precipitation and throughfall samplers. The results from the two sampler types are highly comparable. The significance of any differences will be best assessed on the full comparison, which includes the period reported here for 2009, and all of 2010. However, these initial results do not show any obvious large or systematic differences, suggesting that the two sampler types are comparable, and therefore that there is as yet no reason to doubt the representativeness of the national-design samplers in use since 1991.

A time-series comparison, which gives the individual values, is shown in Figure 4. This does indicate a difference, in the case of a single low-volume sample which was not collectable using the national-design samplers, but did give a measurable volume in the larger-funneled harmonised-design units. For this single low-volume sample, a low pH is observed. This does suggest the potential for a real and meaningful difference between the two sampler types, should this individual observed difference be replicated.

*Table 11. Litterfall at Level II Plots, 2009. Mass (kg/m$^2$) and analytical values.*

| **Site** (site code) Sample (fraction code) | Mass | Mass | C | N | S | P | Ca | Mg | K | Zn | Mn | Fe | Cu | Pb | B | Cd |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit | kg/m$^2$ | | g/100g | mg/g | mg/g | mg/g | mg/g | mg/g | mg/g | µg/g | µg/g | µg/g | µg/g | µg/g | µg/g | ng/g |
| **Cloosh** (10) | | g/1000 | | | | | | | | | | | | | | |
| Main Foliage (11.1) | 0.09 | 3.3 | 49 | 9.4 | 0.9 | 0.7 | 8.6 | 1.5 | 1.6 | 10 | 81 | 220 | 3.0 | 0.5 | 27 | 2 |
| Bud scales (15) | 0.003 | | 54 | 9.9 | 0.9 | 1.3 | 4.8 | 1.6 | 1.6 | 22 | 62 | 232 | 4.4 | 1.8 | 18 | 32 |
| Twigs (16) | 0.04 | | 54 | 6.0 | 0.7 | 0.4 | 4.4 | 1.1 | 0.6 | 14 | 41 | 336 | 3.7 | 2.7 | 9 | 12 |
| **Brackloon** (11) | | g/100 | | | | | | | | | | | | | | |
| Main Foliage (11.1) | 0.12 | 17.4 | 51 | 10.1 | 0.9 | 0.5 | 10.7 | 1.7 | 2.3 | 22 | 968 | 230 | 6.0 | 0.5 | 38 | 26 |
| Other Foliage (11.2) | 0.02 | | 54 | 15.1 | 1.2 | 0.8 | 9.9 | 2.3 | 2.6 | 97 | 1058 | 148 | 7.7 | 0.5 | 28 | 227 |
| Fruit/seeds (14) | 0.003 | | 52 | 11.8 | 1.0 | 1.0 | 3.7 | 1.1 | 6.8 | 19 | 488 | 55 | 7.3 | 0.3 | 19 | 30 |
| Twigs (16) | 0.01 | | 53 | 7.9 | 0.7 | 0.4 | 7.8 | 1.4 | 1.6 | 39 | 610 | 126 | 7.7 | 0.9 | 22 | 97 |
| Other biomass (19) | 0.001 | | | | | | | | | | | | | | | |
| **Ballinastoe** (16) | | g/1000 | | | | | | | | | | | | | | |
| Main Foliage (11.1) | 0.143 | 3.4 | 54 | 10.8 | 1.0 | 0.8 | 4.7 | 1.0 | 2.1 | 21 | 838 | 180 | 3.5 | 1.9 | 31 | 55 |
| Bud scales (15) | 0.002 | | 54 | 12.8 | 0.0 | 1.4 | 1.9 | 1.0 | 3.2 | 38 | 510 | 162 | 7.3 | 0.0 | 0 | 0 |
| Twigs (16) | 0.04 | | 55 | 9.7 | 1.0 | 0.7 | 2.6 | 0.7 | 0.8 | 39 | 252 | 379 | 6.8 | 13.8 | 8 | 154 |

*g/100 and g/1000 are the mass of 100 leaves and 1000 needles respectively. From FutMon files IE2009.LFM and ~.LFO*

*Table 12. Deposition volume-weighted-mean and soil-solution arithmetic-mean values, 2009 at Level II sites.*

| | pH | Cond. | K | Ca | Mg | Na | N $NH_4^+$ | $Cl^-$ | N $NO_3^-$ | S $SO_4^{2-}$ | Alk. | N total | DOC | Al | Mn | Fe | P $PO_4^{3-}$ | Cu | Zn | Ni | Pb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Cloosh** | | µS/cm | mg/L | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L |
| Precipitation | 5.80 | 31 | 0.29 | 0.37 | 0.49 | 3.8 | 0.21 | 6.7 | 0.08 | 0.48 | 164 | | | 51.6 | 2.0 | 10.9 | 0.15 | 5.09 | 6.82 | 2.80 | |
| Throughfall | 5.69 | 91 | 2.29 | 1.22 | 1.53 | 12.2 | 0.14 | 22.7 | 0.10 | 1.21 | 39 | 0.53 | | 33.4 | 21.3 | 11.7 | 0.01 | 4.55 | 6.63 | 3.00 | |
| Stemflow | 5.26 | 99 | 3.94 | 1.67 | 1.43 | 12.9 | 0.10 | 24.8 | 0.03 | 1.16 | 34 | 0.50 | 21 | 21.8 | 16.3 | 19.8 | 0.04 | 2.80 | 9.44 | 3.07 | |
| SS 0 cm (litter) | 3.93 | 120 | 0.42 | 0.86 | 3.86 | 10.9 | 0.20 | 19.9 | 0.11 | 0.83 | | | 50 | 0.04 | 0.01 | 0.09 | 0.02 | 8.5 | 11.4 | 2.9 | |
| SS 25 cm (peat) | 3.77 | 209 | 0.15 | 1.09 | 2.80 | 20.0 | 1.49 | 41.7 | 0.62 | 1.35 | | | 42 | 0.23 | 0.01 | 0.86 | 0.43 | 90.7 | 46.1 | 8.1 | 242 |
| SS 75 cm (peat) | 4.13 | 148 | 0.22 | 2.74 | 4.96 | 20.4 | 1.29 | 43.1 | 0.55 | 3.61 | | | 29 | 0.17 | 0.02 | 0.81 | | 8.7 | 10.1 | 10.8 | |
| **Brackloon** | | | | | | | | | | | | | | | | | | | | | |
| Precipitation | 5.52 | 39 | 0.33 | 0.38 | 0.65 | 5.1 | 0.14 | 9.2 | 0.06 | 0.49 | 39 | | | 18.0 | 2.1 | | 0.04 | | | | |
| Throughfall | 5.62 | 87 | 2.09 | 0.97 | 1.39 | 11.4 | 0.11 | 21.4 | 0.06 | 3.24 | 39 | 0.42 | | 7.0 | 67.2 | | 0.03 | | | | |
| SS 0 cm (litter) | 4.15 | 161 | 1.11 | 0.66 | 2.33 | 19.9 | 0.19 | 30.1 | 0.04 | 1.33 | | | 68 | 0.21 | 0.05 | | 0.02 | | | | |
| **Ballinastoe** | | | | | | | | | | | | | | | | | | | | | |
| Precipitation | 5.73 | 19 | 0.13 | 0.61 | 0.25 | 2.0 | 0.20 | 3.2 | 0.20 | 0.39 | 34 | | | 48.4 | 83.5 | 17.8 | 0.01 | 7.00 | 8.27 | 4.73 | |
| Throughfall | 5.39 | 48 | 2.19 | 0.77 | 0.61 | 4.8 | 0.32 | 9.3 | 0.39 | 0.71 | 42 | 0.93 | | 157.7 | 2.5 | 11.2 | 0.97 | 7.87 | 7.02 | 3.82 | |
| Stemflow | 4.71 | 95 | 3.47 | 1.52 | 1.24 | 9.7 | 0.45 | 19.3 | 0.52 | 1.41 | 47 | 1.25 | 21 | 37.7 | 166.0 | 43.6 | 0.02 | 4.87 | 26.81 | 5.55 | |
| SS 0 cm (litter) | 3.66 | 150 | 0.66 | 0.96 | 0.96 | 8.9 | 0.43 | 15.4 | 0.47 | 1.31 | | | 61 | 0.28 | 0.08 | 0.49 | 0.10 | 12.8 | 31.3 | 4.7 | |
| SS 25 cm | 3.73 | 138 | 0.09 | 0.65 | 1.27 | 11.2 | 0.05 | 19.6 | 0.97 | 1.93 | | | 56 | 1.42 | 0.06 | 0.91 | 0.00 | 7.2 | 41.5 | 9.2 | |
| SS 75 cm | 4.31 | 110 | 0.09 | 0.32 | 1.08 | 12.2 | 0.05 | 21.5 | 0.45 | 2.60 | | | 9 | 1.73 | 0.03 | 0.07 | | 10.9 | 64.2 | 9.5 | |

SS: Soil solution. DOC: dissolved organic carbon. Cond.: Conductivity; Alk.: Alkalinity. See FutMon files IE2009.DEM, -.DEO, -.SSM, -.SSO.

*Table 13. Deposition volume-weighted-means from "national" and "harmonised" samplers, for comparison period, 2009, Ballinastoe (16)*

| Ballinastoe | pH | Cond. µS/cm | K mg/L | Ca mg/L | Mg mg/L | Na mg/L | N $NH_4^+$ mg/L | $Cl^-$ mg/L | N $NO_3^-$ mg/L | S $SO_4^{2-}$ mg/L | Alk. mg/L | N total mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Precipitation, national | 5.40 | 45 | 2.13 | 0.53 | 0.55 | 4.95 | 0.17 | 9.63 | 0.14 | 0.57 | 40 | 0.58 |
| Precipitation, harmonised | 5.59 | 43 | 2.08 | 0.48 | 0.48 | 4.51 | 0.17 | 8.85 | 0.12 | 0.51 | 36 | 0.61 |
| Throughfall, national | 5.70 | 18 | 0.12 | 0.19 | 0.22 | 2.12 | 0.13 | 3.54 | 0.13 | 0.38 | | |
| Throughfall, harmonised | 5.55 | 18 | 0.17 | 0.25 | 0.24 | 2.12 | 0.12 | 3.51 | 0.13 | 0.38 | 26 | 0.41 |

Cond.: Conductivity; Alk.: Alkalinity. Based on FutMon files IE2009.DEM, ~.DEH.

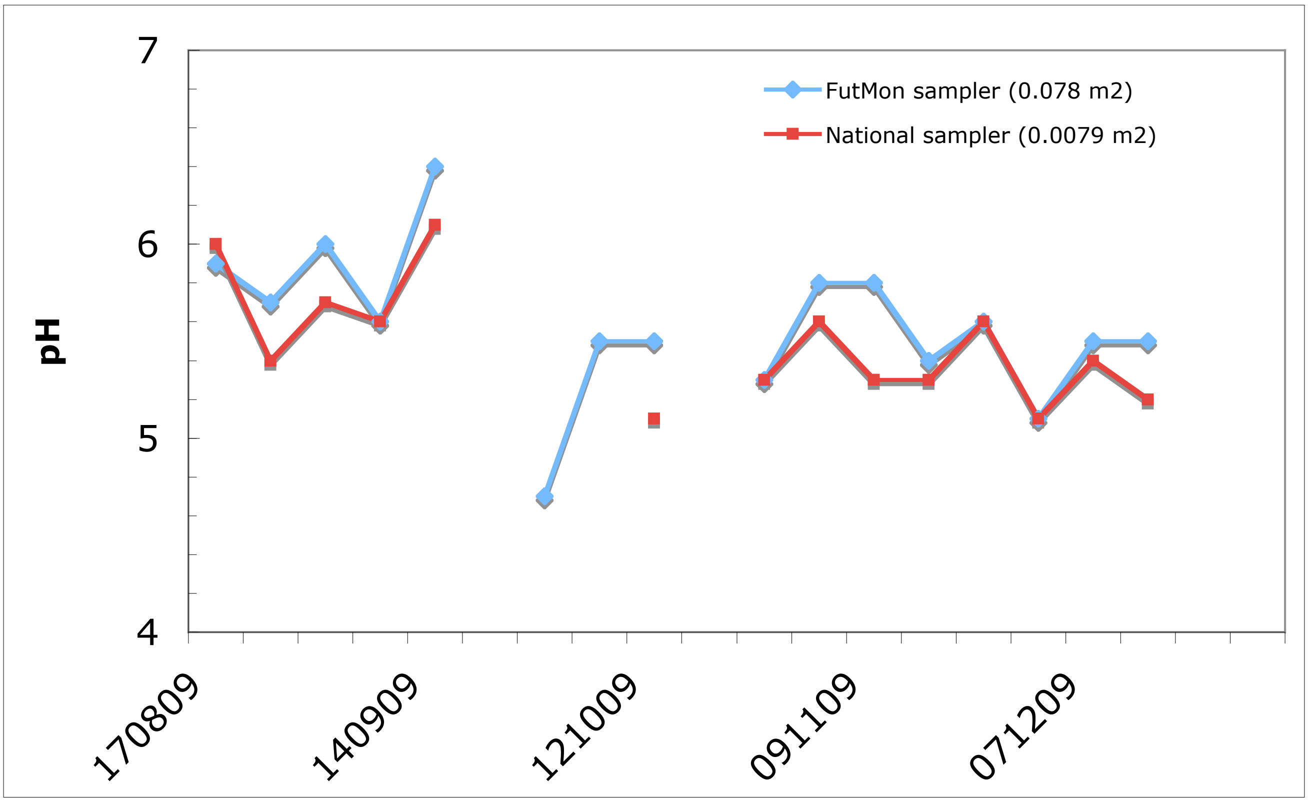


*Figure 4. Comparison of national-design samplers with FutMon "harmonised" samplers for throughfall during late 2009 for pH. There is close correspondence of values, though the additional presence of a low-pH event detected with the FutMon samplers during rainfall that was too low to give a sample with the national-design equipment suggests an advantage of using a larger collector area.*

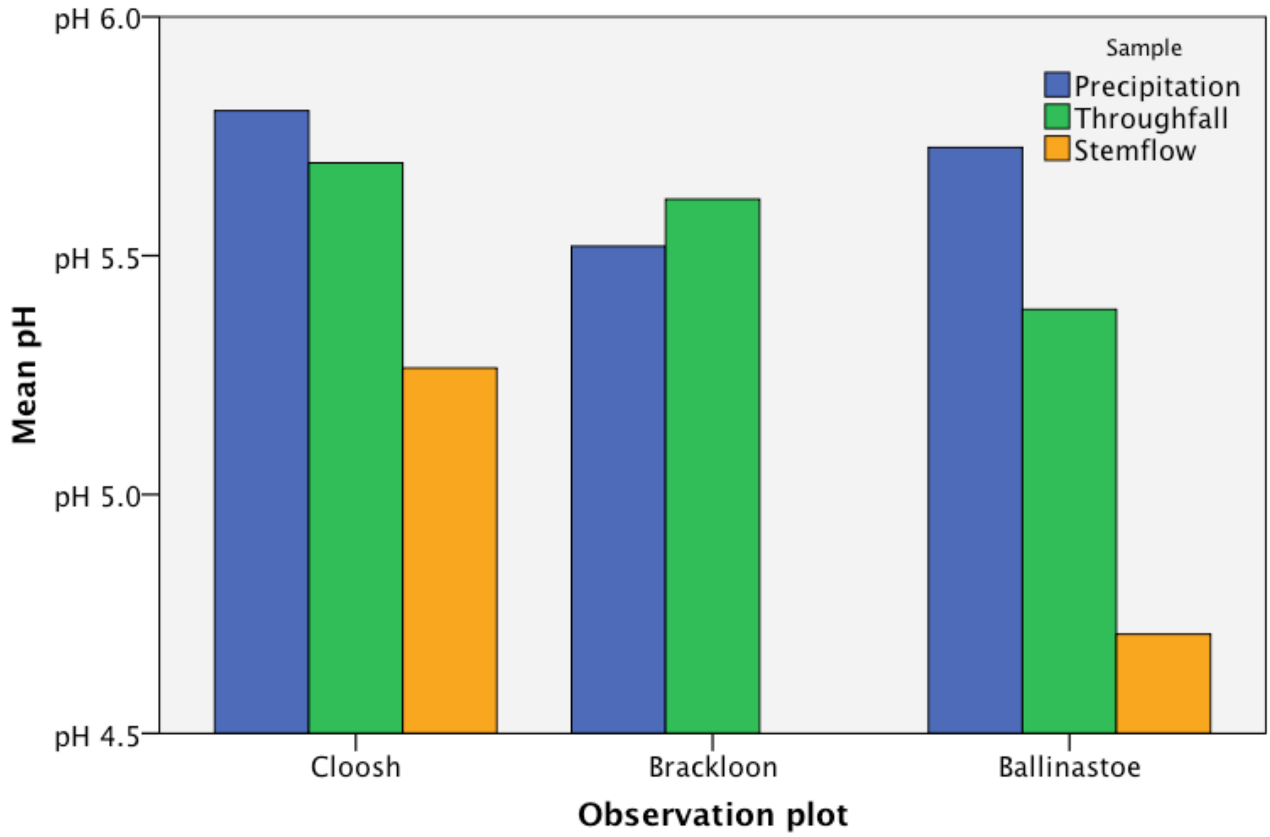


*Figure 5. Volume-weighted mean pH in deposition waters at Level II Plots, 2009.*

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The mean pH values for deposition samples at the three Level II plots show the real differences in chemical composition of water as it enters the forest from falling precipitation, and contacts plant surfaces, upon which evaporation occurs, and the water picks up new soluble substances. Since the low-solute precipitation is weakly buffered, pH is likely to change rapidly on contact, as shown in Figure 5. The increased pH of Brackloon throughfall compared to precipitation is notable.

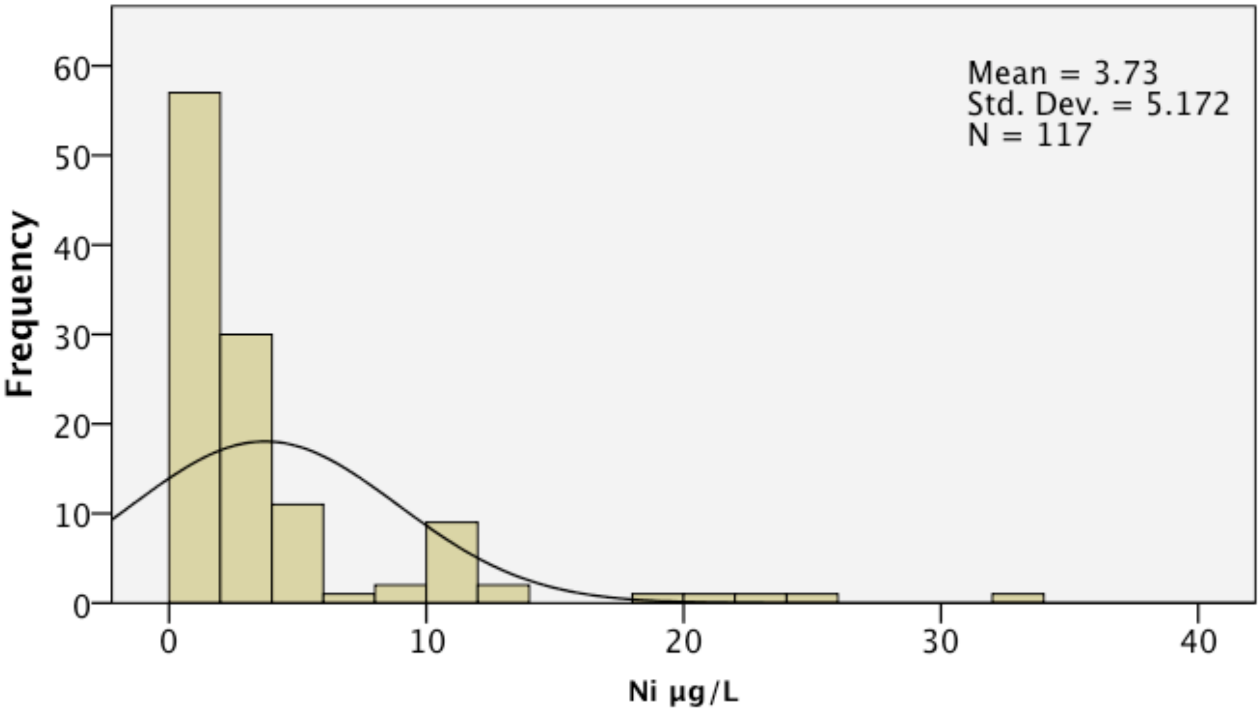


*Figure 6. Frequency-distribution of nickel concentrations from all soil-water samples, Level II plots, 2009, with a normal distribution overlain.*

The frequency distribution for nickel concentrations in soil waters (including both organic- and mineral-dominated layers) from the three Level II in Figure 6 plots shows a strong positive skew, characteristic of nearly all the analytical values recorded. It is important to note, then, that assumptions of normality in distribution of variables do not hold, and data transformations would be required before any tests requiring normally-distributed values.

## Discussion

These results supplement and improve the emerging long-term database of observations stretching back now over two decades for these three Level II sites (including Roundwood). A single, individual year's observational values may be of enormous value during unanticipated extreme events such as major storms, or the incidence of a major pollution event such as a volcanic eruption or a nuclear-fallout event. In addition to that immediate value, the principal value of this monitoring is in developing long-term means, variation, and trends, against which long-term change, whether gradual or sudden, can be assessed, and which can be used as a basis for ecosystem-scale modeling and decision-making. The current year's data presented here contributes to this effort, in being collected using consistent and internationally-recognised standards, with continuous sampling so all temporal variation is accounted for, and being operated on multiple sites so that spatial and site-specific variation can be used to infer effects of species, soils, or management.

Observation of crown condition and specific forest-health indicators on a systematic annual basis on a network of 32 sites give the only objective assessment of survival-relevant whole-tree condition applicable to assessing unknown influences. More stress-specific observations (which are made) are significant for identifying specific causes (Johnson 2010), but for non-specific impacts potentially affecting ecosystem function, and particularly for the effects of unanticipated impacts, crown-condition assessment is the most-specific method available. The 2009 assessment from the Level I plots presented continues the long-term observation that forest condition is good in Ireland, and is a primary indicator that the ability of those ecosystems to supply socially-valuable ecosystem services is also good. It is established by this survey that Ireland's forests are healthy, are not being damaged over large areas by any known or unknown factor, and are performing sustainably under current conditions.

Leaf-area-index measurements give an integrated ecosystem-scale measure of primary-productivity potential for these sites. The figures for Cloosh and Ballinastoe, which are at the upper end of the expected range, are consistent with the generally high productivity of Sitka spruce plantations in Ireland, while the much lower value for Brackloon is indicative of its productivity (while recognising that Brackloon has other values than timber production).

Air-quality measurements at the Level II sites are of direct relevance to interpreting the deposition measurements, as the composition of the liquid deposition phase is determined by the gaseous composition of the ambient atmosphere, and its interaction with the tree crowns. Deposition of the monitored species, ammonia, nitrogen dioxide and sulphur dioxide, account for part of the difference between precipitation and throughfall, the remainder being related to particulate deposition, foliar exchange, and the loss of water off foliage surfaces through evaporation. The results presented show substantially higher values at the three Level II sites for ammonia than those reported for 1999 using the same sampling locations and methods (De Kluizenaar and Farrell 2000). Ammonia concentrations are notably variable, both spatially and temporally, so while three sites is inadequate as a basis for national estimates, these results do contribute to interpreting deposition results, and at least give some indication of the broader picture of ammonia concentrations.

## Implications for Policy and Practice

Critical loads are defined by the OECD (Organisation for Economic Co-operation and Development) as quantitative estimates of the level of exposure of natural systems to pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur. Put more simply, a critical load is a threshold that a forest ecosystem may tolerate before the ecosystem begins to break down (EEA 2011). Critical-loads assessments, and determination of critical-loads exceedance, are based on data collected by the FutMon Project. These assessments are underway through a project funded by the Environmental Protection Agency's Climate Change Research Programme, and operated by UCD and Trent University, Peterborough, Ontario: *Development of Critical Loads for Ireland: Simulating Impacts on Systems* (SIOS), 2008-CCRP-4.1a. Previous assessment of critical loads for Ireland (Aherne and Farrell 2000) contributed to the basis for sulphur emissions reductions across Europe. However, despite significant reductions in sulphur emissions and deposition levels to forests, emissions of nitrogen remain chronically high (Bobbink et al. 2010). Further assessment of critical loads, including critical loads of nutrient nitrogen, is now underway through this project, and a related study on upland lakes, which uses the FutMon deposition data and site-specific sampling campaigns to assess the impacts of acid deposition and nutrient nitrogen on sensitive upland ecosystems throughout Ireland: *Assessing the Influence of Trans-boundary Air Pollution on Irish lakes and Soils: Sampling of Upland Acid Systems* (SUAS), 2007-CCRP-4.4.4b. These two projects, with reporting in late 2012 and 2011 respectively, will provide policy-relevant outputs (using the FutMon monitoring data) of direct importance for protecting forest ecosystems and maintaining forest-derived ecosystem services, and will extend that knowledge to other sensitive ecosystems in Ireland which require protection.

The project *Biogeochemistry of Irish Forests* RSF_07_510 funded by the Department of Agriculture, Food and Fisheries STIMULUS Programme adds further value to the FutMon monitoring data, through a suite of tasks transferring the observations gathered at forest level by the FutMon Project to a greater understanding of ecosystem processes. While FutMon gives elemental concentrations in specific water strata within the forest ecosystem, ForFlux models soil water percolation, assesses mineral-weathering rates, quantifies the release of nonacid cations (calcium, magnesium, potassium and sodium) and nitrogen from forest soils, and determines input–output balances. In addition, it analyses trends in long-term records of rainfall, throughfall and soil-water chemistry. The ForFlux Project offers a critique, within the context of sustainable forest management, of whole-tree-harvesting and the utilisation of forest residues for energy, an increasingly important market demand on Irish forests. It develops a better understanding of biogeochemical cycles within the forest, and the influence of forest cover on nutrient and water fluxes, quantifying nutrient inputs through weathering, and losses through leaching and uptake, allowing for a more complete assessment of the potential long-term impacts of changes in forest management practices. This further supports critical-load and dynamic geochemical model assessments aimed at defining long-term ecosystem sustainability. These assessments, which are in progress (Nicolaou 2010; O'Brien 2010; Johnson, in preparation × 3), have practical significance by informing revisions of national forest policy documents such as the *Code of Best Forest Practice*.

The FutMon monitoring gives a direct assessment of forest health at the ecosystem scale, through crown-condition monitoring. Monitoring of key indicators of sustainability such as deposition and soil-solution, litterfall, air-quality, leaf-area-index, carried out in 2009, and combined with the additional surveys of meteorological measurements, assessment of ozone injury, ground vegetation, analysis of leaves and needles, tree growth and soil chemistry that will be available from 2010 and from the BioSoil Project, will provide an unequalled dataset of forest-ecosystem observations in Ireland, compatible with hundreds to thousands of sites across Europe, and building on a growing record of twenty years' data. This increasingly harmonised and accessible dataset is the basis for assessing critical loads of acidity and nutrient nitrogen to Irish forest ecosystems, relevant to forests as well as to other low-input ecosystems, and providing the basis for assessing the sustainability of management proposals such as the more-intensive recovery of forest biomass as fuel.

## Conclusions and Recommendations

This report itemises the methods and results of monitoring at three Level II and thirty-two Level I sites under the FutMon Project during 2009 in Irish forests. The full submitted dataset (excluding leaf-area-index images) is appended. This work forms part of and extends compatible work in a large network of European sites, and continues similar work in Ireland through its twentieth year. Forest health, as assessed by crown-condition measurements, is good. Air quality as assessed here is good, though ammonia levels are higher than previously assessed. Leaf-area index reflects the productivity of these Irish forests, which high values for productive managed spruce stands. Monitoring of litterfall, deposition, and soil solution through 2009 contributes to the knowledge and evidence-base for assessing whole-ecosystem processes in Irish forests, specifically assessing critical loads and their exceedance, and investigating the sustainability of novel management practices including greater biomass removals from forest as fuel material.

It is recommended that such resources as can be allocated to the monitoring be directed at continued crown-condition assessment, establishing security of access to monitoring sites, monitoring of deposition and soil-solution, and supporting the ongoing efforts to harmonise monitoring with FutMon and ICP-Forests international standards of best practice. There is currently no barrier to exchange of data from the monitoring with researchers in critical loads, forest management, ecosystem sustainability, and throughout the ICP-Forests communities and beyond, and this freedom should be fostered and facilitated.

## Full List of Outputs from the Project

**Data submission to FutMon for 2009** for the following surveys:

Crown Condition on Level I plots

Crown Condition on Level II plots

Air Quality

Leaf Area Index

Litterfall

Deposition

Special Deposition Survey

Soil Solution

The full submitted datasets are appended.

**COFORD Connects Leaflet** *A new vision of forest monitoring in Ireland and Europe The FutMon project* (Harrington et al. 2010).

Poster *Investigating the influence of storms, droughts and longterm climate trends on humus water in Irish forests* presented at **Biogeomon**, Helsinki (Johnson et al. 2009).

In September 2009 the Ballinastoe site provided the location and research-case-study material for a **practical field session in the module Soil Science Applications AESC30220** at UCD for 66 students.

The FutMon monitoring provides the substance of **Task 1 of the project Biogeochemistry of Irish Forests (ForFlux)**, funded by the Research Stimulus Fund of the Department of Agriculture, Food and Fisheries (RSF_07_510).

# Appendices

The Appendices are based on the FutMon submission formats and submission website. The table "Survey Summary for Ireland, 2009" identifies the surveys, which are linked from the first column. For each survey, the submitted files are linked from the individual survey table. These files are formatted according to the document FutMon Forms and Explanatory Items 2009 Version 5.3e, last updated 25th Nov 2010.

## Survey Summary for Ireland, 2009

| Survey | Survey code | Last change | Uploaded files |
|---:|---:|---:|---:|
| Crown Condition | CC | 23.02.2011 12:51 | 3 files |
| Soil Solution | SS | 23.02.2011 12:49 | 4 files |
| Litterfall | LF | 23.02.2011 12:21 | 4 files |
| Air Quality | AQ | 23.02.2011 12:20 | 3 files |
| Leaf Area Index | LA | 23.02.2011 12:19 | 4 files |
| Deposition | DP | 23.02.2011 12:12 | 4 files |
| System Instalment | SI | 23.02.2011 12:02 | 1 file |
| Crown Condition Level 1 | C1 | 14.03.2010 21:30 | 3 files |
| Spez. Deposition | DH | 04.02.2011 22:22 | 2 files |

## Data Details for Crown Condition

| Form | Type | File Name | Date |
|---|---|---|---|
| Contents of file with the information on plot level to be used with the crown assessment on Level II | PLT | IE2009.PLT | 23.02.2011 12:51 |
| Crown condition parameters Level II | TRC | IE2009.TRC | 02.11.2010 15:26 |
| Damage parameters Level II | TRD | IE2009.TRD | 02.11.2010 15:10 |

## Data Details for Soil Solution

| Form | Type | File Name | Date |
|---|---|---|---|
| Contents of reduced plot file to be used in combination with the soil solution measurements | PSS | IE2009.PSS | 23.02.2011 12:49 |
| Contents of datafile with soil solution measurements (mandatory) | SSM | IE2009.SSM | 08.12.2010 13:25 |
| Soil Solution - Laboratory QA/QC information | SS.LQA | IE2009SS.LQA | 08.12.2010 13:14 |
| Contents of datafile with soil solution measurements (Optional) | SSO | IE2009.SSO | 08.12.2010 13:14 |

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## Data Details for Litterfall

| Form | Type | File Name | Date |
|---|---|---|---|
| Contents of reduced plot file to be used in combination with the survey on litterfall | LFP | IE2009.LFP | 23.02.2011 12:21 |
| Contents of data file with litterfall analysis information (mandatory) | LFM | IE2009.LFM | 09.02.2011 17:10 |
| Contents of data file with litterfall analysis information (Optional) | LFO | IE2009.LFO | 04.02.2011 21:45 |
| Litterfall - Laboratory QA/QC information | LF.LQA | IE2009LF.LQA | 14.10.2010 14:25 |

## Data Details for Air Quality

| Form | Type | File Name | Date |
|---|---|---|---|
| Form with information on passive sampler(s) on intensive monitoring plot and at stations | PPS | IE2009.PPS | 23.02.2011 12:20 |
| data file to be used for data from passive samplers | AQP | IE2009.AQP | 20.10.2010 15:32 |
| Submission of Analyses of Blanks (blank passive samplers) | AQB | IE2009.AQB | 20.10.2010 15:08 |

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## Data Details for Leaf Area Index

| Form | Type | File Name | Date |
|---|---|---|---|
| reduced plot file on LAI measurements | PLA | IE2009.PLA | 23.02.2011 12:19 |
| coordinates of LAI measurement points and other surveys | LAC | IE2009.LAC | 23.11.2010 17:06 |
| Leaf Area Index (LAI) measurement outcome | LAM | IE2009.LAM | 08.10.2010 11:48 |
| Leaf Area Index (LAI) photo documentation | LAP | IE2009.LAP | 08.10.2010 11:37 |

## Data Details for Deposition

| Form | Type | File Name | Date |
|---|---|---|---|
| Contents of reduced plot file to be used in combination with the deposition measurements | PLD | IE2009.PLD | 23.02.2011 12:12 |
| Contents of datafile with deposition measurements (mandatory) | DEM | IE2009.DEM | 29.11.2010 17:57 |
| Contents of datafile with deposition measurements (Optional) | DEO | IE2009.DEO | 29.11.2010 17:57 |
| Deposition - Laboratory QA/QC information | DP.LQA | IE2009DP.LQA | 25.11.2010 21:10 |

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## Data Details for System Instalment

| Form | Type | File Name | Date |
|---|---|---|---|
| Contents of file with the information on Plot level | GENER.PLT | GENER.PLT | 23.02.2011 12:02 |

## Data Details for Crown Condition Level 1

| Form | Type | File Name |
|---|---|---|
| Damage parameters Level I | TRF | IE2009.TRF |
| Crown condition parameters Level I | TRE | IE2009.TRE |
| Contents of file with the information on Plot level to be used in combination with the tree vitality inventory Level I | PLO | IE2009.PLO |
| Data Accompanying Report | DAR-Q | IE_CC_2009.doc |

## Data Details for Spez. Deposition

| Form | Type | File Name | Date |
|---|---|---|---|
| spez. Contents of datafile with deposition measurements (mandatory) | DEH | IE2009.DEH | 04.02.2011 22:22 |
| spez. Contents of reduced plot file to be used in combination with the deposition measurements | PLH | IE2009.PLH | 08.12.2010 13:45 |

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```
!PLT
!Sequence, country, plot, date, latitude, longitude, altitude, other_observations
  01  7   16 200809  530620 -061428 10
  02  7   10 030809  532141 -092047  3
  03  7   11 020809  534551 -093344  2
!TRC
!Sequence, plot, date, tree, tree_species, removal_mortality, social_class, shading_crown, visibility, defol, discol,
flowering_assess, flowering_whole, fruiting_assess, fruiting_whole, transparency, form_crown, secondary_shoots, other_observations
   01   16 200809   01 120  1 2 3 2   0 0
   02   16 200809   02 120  1 2 3 2   0 0
   03   16 200809   03 120  1 2 3 2   0 0
   04   16 200809   04 120  1 2 3 2   0 0
   05   16 200809   05 120  1 2 3 2   0 0
   06   16 200809   06 120  1 2 3 2   0 0
   07   16 200809   07 120  1 2 3 2   0 0
   08   16 200809   08 120  1 2 3 2   0 0
   09   16 200809   09 120  1 2 3 2   0 0
   10   16 200809   10 120  1 2 3 2   0 0
   11   16 200809   11 120  1 2 3 2   0 0
   12   16 200809   12 120  1 2 3 2   0 0
   13   16 200809   13 120  1 2 3 2   0 0
   14   16 200809   14 120  1 2 3 2   0 0
   15   16 200809   15 120  1 2 3 2   0 0
   16   16 200809   16 120  1 2 3 2   0 0
   17   16 200809   17 120  1 2 3 2   0 0
   18   16 200809   18 120  1 2 3 2   0 0
   19   16 200809   19 120  1 2 3 2   0 0
   20   16 200809   20 120  1 2 3 2   0 0
   21   16 200809   21 120  1 2 3 2   0 0
   22   10 280809    1 120  1 2 3 2   0 0
   23   10 280809    2 120  1 2 3 2   0 0
   24   10 280809    3 120  1 2 3 2   0 0
   25   10 280809    4 120  1 2 3 2   5 0
   26   10 280809    5 120  1 2 3 2   0 0
   27   10 280809    6 120  1 2 3 2   0 0
   28   10 280809    7 120  1 2 3 2   0 0
   29   10 280809    8 120  1 2 3 2   0 0
   30   10 280809    9 120  1 2 3 2   0 0
   31   10 280809   10 120  1 2 3 2   0 0
   32   10 280809   11 120  1 2 3 2   0 0
   33   10 280809   12 120  1 2 3 2   0 0
   34   10 280809   13 120  1 2 3 2   0 0
   35   10 280809   14 120  1 2 3 2  50 2                   Supression
```

```
   36   10 280809   15 120  1 2 3 2   0 0
   37   10 280809   16 120  1 2 3 2   0 0
   38   10 280809   17 120  1 2 3 2   0 0
   39   10 280809   18 120  1 2 3 2   0 0
   40   10 280809   19 120  1 2 3 2   0 0
   41   10 280809   20 120  1 2 3 2   0 0                  Leader broken
   42   10 280809   21 120  1 2 3 2   0 0
   43   11 010909    2 048  1 2 4 2   5 0
   44   11 010909    3 048  1 2 4 2  10 0
   45   11 010909    4 048  1 2 4 2   5 0
   46   11 010909    5 048  1 2 4 2  10 0
   47   11 010909   12 048  1 2 4 2  10 0
   48   11 010909   13 048  1 2 4 2  10 0
   49   11 010909   15 048  1 2 4 2  10 0
   50   11 010909   20 048  1 2 4 2  15 1
   51   11 010909   45 048 02 2 4 2  10 0                  new alive tree
   52   11 010909   46 048  1 2 4 2  10 0
   53   11 010909   47 048  1 2 4 2  10 0
   54   11 010909   53 048  1 2 4 2  10 0
   55   11 010909   58 048  1 2 4 2  10 0
   56   11 010909   60 048  1 2 4 2  10 0
   57   11 010909   68 048  1 2 4 2  10 0
   58   11 010909   79 048  1 2 4 2   5 0
   59   11 010909   80 048  1 2 4 2  10 0
   60   11 010909   85 048  1 2 4 2  10 0
   61   11 010909   87 048  1 2 4 2  10 0
   62   11 010909   89 048  1 2 4 2  10 0
   63   11 010909   91 048  1 2 4 2  10 0
   64   11 010909  124 048 18
!TRD
!Sequence, plot, date, tree, affected_part, symptom, symptom_spec, crown_loc, damage_age, cause, cause_sc_name, extent,
other_observations
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   02   16 200809   02 00
   03   16 200809   03 00
   04   16 200809   04 00
   05   16 200809   05 00
   06   16 200809   06 00
   07   16 200809   07 00
   08   16 200809   08 00
   09   16 200809   09 00
   10   16 200809   10 00
   11   16 200809   11 00
```

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 16 | 200809 | 12 | 00 | | | | | | |
| 13 | 16 | 200809 | 13 | 00 | | | | | | |
| 14 | 16 | 200809 | 14 | 00 | | | | | | |
| 15 | 16 | 200809 | 15 | 00 | | | | | | |
| 16 | 16 | 200809 | 16 | 00 | | | | | | |
| 17 | 16 | 200809 | 17 | 00 | | | | | | |
| 18 | 16 | 200809 | 18 | 00 | | | | | | |
| 19 | 16 | 200809 | 19 | 00 | | | | | | |
| 20 | 16 | 200809 | 20 | 00 | | | | | | |
| 21 | 16 | 200809 | 21 | 00 | | | | | | |
| 22 | 10 | 280809 | 01 | 00 | | | | | | |
| 23 | 10 | 280809 | 02 | 00 | | | | | | |
| 24 | 10 | 280809 | 03 | 00 | | | | | | |
| 25 | 10 | 280809 | 04 | 00 | | | | | | |
| 26 | 10 | 280809 | 05 | 00 | | | | | | |
| 27 | 10 | 280809 | 06 | 00 | | | | | | |
| 28 | 10 | 280809 | 07 | 00 | | | | | | |
| 29 | 10 | 280809 | 08 | 00 | | | | | | |
| 30 | 10 | 280809 | 09 | 00 | | | | | | |
| 31 | 10 | 280809 | 10 | 00 | | | | | | |
| 32 | 10 | 280809 | 11 | 00 | | | | | | |
| 33 | 10 | 280809 | 12 | 00 | | | | | | |
| 34 | 10 | 280809 | 13 | 00 | | | | | | |
| 35 | 10 | 280809 | 14 | 13 | 03 | 37 | 4 | 3 | 999 | 4 |
| 36 | 10 | 280809 | 15 | 00 | | | | | | |
| 37 | 10 | 280809 | 16 | 00 | | | | | | |
| 38 | 10 | 280809 | 17 | 00 | | | | | | |
| 39 | 10 | 280809 | 18 | 00 | | | | | | |
| 40 | 10 | 280809 | 19 | 00 | | | | | | |
| 41 | 10 | 280809 | 20 | 31 | 13 | | 2 | 2 | 420 | 4 |
| 42 | 10 | 280809 | 21 | 00 | | | | | | |
| 43 | 11 | 010909 | 2 | 00 | | | | | | |
| 44 | 11 | 010909 | 3 | 00 | | | | | | |
| 45 | 11 | 010909 | 4 | 00 | | | | | | |
| 46 | 11 | 010909 | 5 | 00 | | | | | | |
| 47 | 11 | 010909 | 12 | 00 | | | | | | |
| 48 | 11 | 010909 | 13 | 00 | | | | | | |
| 49 | 11 | 010909 | 15 | 00 | | | | | | |
| 50 | 11 | 010909 | 20 | 14 | 1 | 33 | 1 | 1 | 420 | 2 |
| 51 | 11 | 010909 | 45 | 00 | | | | | | |
| 52 | 11 | 010909 | 46 | 00 | | | | | | |
| 53 | 11 | 010909 | 47 | 00 | | | | | | |
| 54 | 11 | 010909 | 53 | 00 | | | | | | |

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```
   55   11 010909   58 00
   56   11 010909   60 00
   57   11 010909   68 00
   58   11 010909   79 00
   59   11 010909   80 00
   60   11 010909   85 00
   61   11 010909   87 00
   62   11 010909   89 00
   63   11 010909   91 00
   64   11 010909  124 09
!PSS
!Sequence, country, plot, latitude, longitude, altitude, sampler, sampler_type, layer, depth, date_monitoring_1st,
date_monitoring_last, periods, other_observations
  01 07   16 +530640 -061411 10                              1 2 H     0 291208 311209 52
  02 07   16 +530640 -061411 10                              2 1 M -0.25 291208 311209 25
  03 07   16 +530640 -061411 10                              3 1 M -0.75 291208 311209 25
  04 07   10 +532104 -092040  3                              1 2 H     0 291208 311209 52
  05 07   10 +532104 -092040  3                              4 1 O -0.25 291208 311209 20
  06 07   10 +532104 -092040  3                              5 1 O -0.75 291208 311209 19
  07 07   11 +534530 -093314  2                              1 2 H     0 291208 311209 32
!SSM
!Sequence, plot, date_start, date_end, period, sampler, pH, conductivity, K, Ca, Mg, N_NO3, S_SO4, alkalinity, Al, DOC,
other_observations
    1   16 291208 040109  1  1                                                         No collection
    2   16 050109 110109  2  1                                                         No collection
    3   16 120109 180109  3  1 3.5  193  1.29  2.43  2.21  1.46  2.60   -1 0.392  52.2
    4   16 190109 250109  4  1 3.5  208  0.82  0.91  1.42  0.96  2.20   -1 0.275  52.6
    5   16 260109 010209  5  1 3.6  149  0.49  0.71  0.89  0.22  1.40   -1 0.027  51.1
    6   16 020209 080209  6  1                                                         No collection
    7   16 090209 150209  7  1                                                         No collection
    8   16 160209 220209  8  1 3.7  135  2.27  0.66  0.59  0.49  1.31   -1 0.048  33.2
    9   16 230209 010309  9  1 4.0   77  0.25  0.41  0.29  0.11  0.85   -1 0.077  28.1
   10   16 020309 080309 10  1                             0.08  0.84
   11   16 090309 150309 11  1           0.66  1.14  0.73   0.8  0.96      0.507
   12   16 160309 220309 12  1           0.12  0.73  0.58  0.16  0.77      0.623  76.8
   13   16 230309 290309 13  1                                                         Low sample
   14   16 300309 050409 14  1                                                         No sample
   15   16 060409 120409 15  1 3.4  396  2.58  4.32  5.29  1.94  4.34   -1 0.228  33.1
   16   16 130409 190409 16  1 3.5  233  0.99  1.15  1.73  0.76  1.90   -1 0.285  49.9
   17   16 200409 260409 17  1 3.6  153  0.35  0.46  0.83  0.56  1.57   -1 0.254    51
   18   16 270409 030509 18  1 3.7  140  0.35  0.51  0.82   0.8  2.10   -1 0.399    62
   19   16 040509 100509 19  1 3.7  143  0.27  0.45  0.76   0.7  2.03   -1 0.357  60.7
   20   16 110509 170509 20  1 3.5  160  0.33  0.82  0.78  0.09  2.67   -1 0.181  68.6
```

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| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 16 | 180509 | 240509 | 21 | 1 | 3.6 | 173 | 0.39 | 0.69 | 0.95 | 0.5 | 1.80 | -1 | 0.363 | 63.1 | |
| 22 | 16 | 250509 | 310509 | 22 | 1 | 3.6 | 140 | -1 | 0.59 | 0.71 | 0.25 | 1.27 | -1 | 0.33 | 50.4 | |
| 23 | 16 | 010609 | 070609 | 23 | 1 | | | | | | | | | | | Low sample |
| 24 | 16 | 080609 | 140609 | 24 | 1 | 3.9 | 85 | -1 | -1 | 0.34 | 0.04 | 0.67 | -1 | 0.21 | | |
| 25 | 16 | 150609 | 210609 | 25 | 1 | 4.0 | 82 | 1.09 | 0.67 | 0.44 | 0.71 | 0.87 | -1 | 0.075 | 27.9 | |
| 26 | 16 | 220609 | 280609 | 26 | 1 | 3.8 | 138 | 0.58 | 1.02 | 0.76 | 0.41 | 0.77 | -1 | 0.264 | 70.1 | |
| 27 | 16 | 290609 | 050709 | 27 | 1 | | | | | | | | | | | Low sample |
| 28 | 16 | 060709 | 120709 | 28 | 1 | 3.7 | 131 | 0.69 | 0.98 | 0.73 | 0.46 | 0.73 | -1 | 0.23 | 68.8 | |
| 29 | 16 | 130709 | 190709 | 29 | 1 | 3.8 | 97 | 0.3 | -1 | 0.47 | 0.18 | 0.47 | -1 | 0.196 | 70 | |
| 30 | 16 | 200709 | 260709 | 30 | 1 | 3.8 | 110 | 0.44 | 1.57 | 0.65 | 0.25 | 0.70 | -1 | 0.615 | 91.6 | |
| 31 | 16 | 270709 | 020809 | 31 | 1 | 3.6 | 133 | 0.25 | -1 | 0.74 | 0.12 | 0.80 | -1 | 0.308 | 6.91 | |
| 32 | 16 | 030809 | 090809 | 32 | 1 | 3.6 | 159 | 0.24 | 0.61 | 0.8 | 0.08 | 1.07 | -1 | 0.541 | 99.5 | |
| 33 | 16 | 100809 | 160809 | 33 | 1 | 3.7 | 123 | 0.51 | 0.73 | 0.56 | 0.2 | 0.70 | -1 | 0.354 | 107 | |
| 34 | 16 | 170809 | 230809 | 34 | 1 | | | | | | | | | | | |
| 35 | 16 | 240809 | 300809 | 35 | 1 | 3.6 | 140 | 0.46 | 1.2 | 0.97 | 0.12 | 0.90 | -1 | 0.391 | 97.6 | |
| 36 | 16 | 310809 | 060909 | 36 | 1 | 3.5 | 157 | 0.38 | 1.19 | 1.02 | 0.1 | 1.17 | -1 | 0.005 | 101 | |
| 37 | 16 | 070909 | 130909 | 37 | 1 | 3.6 | 138 | 0.63 | 0.98 | 1.14 | 0.14 | 0.93 | -1 | 0.412 | 86.6 | |
| 38 | 16 | 140909 | 200909 | 38 | 1 | | | | | | | | | | | Low sample |
| 39 | 16 | 210909 | 270909 | 39 | 1 | | | | | | | | | | | No sample |
| 40 | 16 | 280909 | 041009 | 40 | 1 | | | | | | | | | | | No sample |
| 41 | 16 | 051009 | 111009 | 41 | 1 | | | | | | | | | | | No sample |
| 42 | 16 | 121009 | 181009 | 42 | 1 | 3.6 | 226 | 1.9 | 2.14 | 2.02 | 1.34 | 1.90 | -1 | 0.166 | -1 | |
| 43 | 16 | 191009 | 251009 | 43 | 1 | | | | | | | | | | | Low sample |
| 44 | 16 | 261009 | 011109 | 44 | 1 | 3.5 | 209 | 0.85 | 1.48 | 1.48 | 1.11 | 1.70 | -1 | 0.286 | 62.5 | |
| 45 | 16 | 021109 | 081109 | 45 | 1 | 3.6 | 150 | 0.38 | 0.64 | 0.76 | 0.38 | 1.23 | -1 | 0.357 | 69.6 | |
| 46 | 16 | 091109 | 151109 | 46 | 1 | 3.8 | 99 | 0.33 | 0.47 | 0.42 | 0.2 | 0.90 | -1 | 0.33 | 76.2 | |
| 47 | 16 | 161109 | 221109 | 47 | 1 | 3.6 | 136 | 0.35 | 0.53 | 0.68 | 0.4 | 0.97 | -1 | 0.254 | 64 | |
| 48 | 16 | 231109 | 291109 | 48 | 1 | 3.8 | 91 | 0.23 | 0.28 | 0.32 | 0.23 | 0.47 | -1 | 0.2 | 55.2 | |
| 49 | 16 | 301109 | 061209 | 49 | 1 | 3.7 | 137 | 0.61 | 0.65 | 0.7 | 0.37 | 1.00 | -1 | 0.204 | 40.2 | |
| 50 | 16 | 071209 | 131209 | 50 | 1 | 3.7 | 134 | 0.5 | 0.43 | 0.57 | 0.38 | 0.93 | -1 | 0.179 | 33.8 | |
| 51 | 16 | 141209 | 201209 | 51 | 1 | 3.6 | 136 | -1 | 0.23 | 0.54 | 0.13 | 0.93 | -1 | 0.223 | 44.2 | |
| 52 | 16 | 211209 | 281209 | 52 | 1 | | | | | | | | | | | |
| 53 | 16 | 291208 | 040109 | 1 | 2 | | | | | | | | | | | No collection |
| 54 | 16 | 120109 | 180109 | 3 | 2 | 3.6 | 121 | 0.14 | 0.88 | 1.06 | 0.89 | 2.03 | -1 | 1.135 | 32.4 | |
| 55 | 16 | 260109 | 010209 | 5 | 2 | 3.8 | 143 | 0.04 | 0.91 | 1.92 | 1.31 | 2.73 | -1 | 1.823 | 23.1 | |
| 56 | 16 | 090209 | 150209 | 7 | 2 | | | | | | | | | | | Low sample |
| 57 | 16 | 230209 | 010309 | 9 | 2 | 3.8 | 118 | 0.06 | 0.45 | 1 | 1.12 | 1.55 | -1 | 1.093 | 27.9 | |
| 58 | 16 | 090309 | 150309 | 11 | 2 | 3.9 | 100 | 0.02 | 0.44 | 0.83 | 0.94 | 1.59 | -1 | 1.081 | 30.5 | |
| 59 | 16 | 230309 | 290309 | 13 | 2 | 3.8 | 115 | -1 | 0.45 | 0.94 | 1 | 1.64 | -1 | 1.174 | 38.5 | |
| 60 | 16 | 060409 | 120409 | 15 | 2 | 3.8 | 70 | 0.09 | 0.68 | 0.94 | 0.72 | 1.52 | -1 | 1.093 | | |
| 61 | 16 | 200409 | 260409 | 17 | 2 | 3.6 | 187 | -1 | 0.65 | 1.75 | 1.51 | 2.10 | -1 | 1.489 | 28.9 | |
| 62 | 16 | 040509 | 100509 | 19 | 2 | 3.7 | 170 | 0.09 | 0.56 | 1.35 | 0.95 | 2.33 | -1 | 1.237 | 33.1 | |
| 63 | 16 | 180509 | 240509 | 21 | 2 | 3.7 | 141 | -1 | 0.54 | 1.01 | 0.69 | 2.20 | -1 | 1.284 | 312 | |

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| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 16 | 010609 | 070609 | 23 | 2 | 3.6 | 200 | -1 | 0.54 | 1.23 | 0.8 | 2.07 | -1 | 1.275 | | |
| 65 | 16 | 150609 | 210609 | 25 | 2 | 3.7 | 163 | -1 | 0.54 | 1.09 | 0.99 | 1.93 | -1 | 1.365 | 30.6 | |
| 66 | 16 | 290609 | 050709 | 27 | 2 | | | -1 | 1.48 | 2.09 | 2.12 | 2.30 | | 2.617 | | |
| 67 | 16 | 130709 | 190709 | 29 | 2 | 3.7 | 160 | -1 | -1 | 1.16 | 0.78 | 1.73 | -1 | 1.461 | 40.4 | |
| 68 | 16 | 270709 | 020809 | 31 | 2 | 3.7 | 182 | -1 | 0.91 | 1.82 | 1.57 | 2.07 | -1 | 1.64 | 40.7 | |
| 69 | 16 | 100809 | 160809 | 33 | 2 | 3.6 | 160 | -1 | 0.5 | 1.19 | 1.01 | 1.77 | -1 | 1.635 | 51.6 | |
| 70 | 16 | 240809 | 300809 | 35 | 2 | | | 0.1 | 0.92 | 1.59 | 1.01 | 1.83 | | 1.525 | | |
| 71 | 16 | 070909 | 130909 | 37 | 2 | 3.6 | 196 | 0.06 | 0.83 | 1.84 | 1.18 | 2.00 | -1 | 1.808 | 70.7 | |
| 72 | 16 | 210909 | 270909 | 39 | 2 | 3.8 | 147 | 0.04 | 0.56 | 1.24 | 0.77 | 2.03 | -1 | 1.761 | | |
| 73 | 16 | 051009 | 111009 | 41 | 2 | | | 0.04 | 0.93 | 1.02 | 0.61 | 2.03 | | 1.214 | | |
| 74 | 16 | 191009 | 251009 | 43 | 2 | 3.7 | 18 | 0.04 | 0.62 | 1.76 | 1.18 | 2.20 | -1 | 1.99 | | |
| 75 | 16 | 021109 | 081109 | 45 | 2 | 3.7 | 130 | 0.1 | 0.31 | 0.82 | 0.23 | 1.73 | -1 | 1.168 | | |
| 76 | 16 | 231109 | 291109 | 48 | 2 | 3.8 | 138 | 0.14 | 0.42 | 1.11 | 0.8 | 1.63 | -1 | 1.055 | 29.2 | |
| 77 | 16 | 071209 | 131209 | 50 | 2 | 3.9 | 91 | 0.25 | 0.22 | 0.55 | 0.17 | 1.30 | -1 | 0.834 | | |
| 78 | 16 | 291208 | 040109 | 1 | 3 | | | | | | | | | | | No collection |
| 79 | 16 | 120109 | 180109 | 3 | 3 | 4.4 | 91 | 0.19 | 0.76 | 1.56 | 0.69 | 1.77 | -1 | 2.011 | 8.19 | |
| 80 | 16 | 260109 | 010209 | 5 | 3 | 4.1 | 91 | 0.02 | 0.27 | 0.89 | 0.41 | 2.33 | -1 | 1.523 | 15.9 | |
| 81 | 16 | 090209 | 150209 | 7 | 3 | | | | | | | | | | | Low sample |
| 82 | 16 | 230209 | 010309 | 9 | 3 | 4.3 | 86 | 0.04 | 0.27 | 0.8 | 0.47 | 2.91 | -1 | 1.7 | | |
| 83 | 16 | 090309 | 150309 | 11 | 3 | | | 0.115 | 0.18 | 0.82 | 0.53 | 2.98 | -1 | 1.709 | | |
| 84 | 16 | 230309 | 290309 | 13 | 3 | | | 0.04 | 0.29 | 0.8 | 0.7 | 2.87 | -1 | 1.474 | | |
| 85 | 16 | 060409 | 120409 | 15 | 3 | | | | | | | | | | | Low sample |
| 86 | 16 | 200409 | 260409 | 17 | 3 | 4.3 | 101 | | 0.27 | 0.84 | 0.39 | 2.87 | -1 | 1.61 | 7.41 | |
| 87 | 16 | 040509 | 100509 | 19 | 3 | 4.4 | 104 | 0.05 | 0.16 | 0.88 | 0.32 | 3.07 | -1 | 1.869 | 8.26 | |
| 88 | 16 | 180509 | 240509 | 21 | 3 | 4.4 | 98 | -1 | -1 | 0.9 | 0.35 | | -1 | 1.8 | | |
| 89 | 16 | 010609 | 070609 | 23 | 3 | 4.2 | 100 | -1 | -1 | 0.73 | 0.31 | 3.00 | -1 | 1.741 | | |
| 90 | 16 | 150609 | 210609 | 25 | 3 | 4.3 | 98 | -1 | -1 | 0.7 | 0.27 | 2.83 | -1 | 1.933 | | |
| 91 | 16 | 290609 | 050709 | 27 | 3 | 4.4 | 96 | -1 | -1 | 0.72 | 0.31 | 2.93 | -1 | 1.563 | | |
| 92 | 16 | 130709 | 190709 | 29 | 3 | 3.8 | 135 | -1 | -1 | 0.65 | 0.27 | 2.90 | -1 | 1.589 | 12.6 | |
| 93 | 16 | 270709 | 020809 | 31 | 3 | 4.4 | 97 | -1 | -1 | 0.78 | 0.18 | 2.97 | -1 | 1.526 | | |
| 94 | 16 | 100809 | 160809 | 33 | 3 | 4.3 | 117 | -1 | 0.17 | 1.18 | 0.3 | 2.40 | -1 | 1.742 | 9.69 | |
| 95 | 16 | 240809 | 300809 | 35 | 3 | 4.4 | 120 | 0.11 | 0.36 | 1.58 | 0.38 | 2.33 | -1 | 1.714 | 8.74 | |
| 96 | 16 | 070909 | 130909 | 37 | 3 | 4.4 | 104 | 0.08 | 0.63 | 1.23 | 0.26 | 2.70 | -1 | | 8.71 | |
| 97 | 16 | 210909 | 270909 | 39 | 3 | 4.4 | 127 | 0.06 | 0.43 | 1.55 | 0.43 | 2.40 | -1 | 1.617 | 7.53 | |
| 98 | 16 | 051009 | 111009 | 41 | 3 | 4.2 | 150 | 0.07 | 0.45 | 1.93 | 0.64 | 2.00 | -1 | 1.683 | | |
| 99 | 16 | 191009 | 251009 | 43 | 3 | 4.4 | 130 | 0.12 | -1 | 1.57 | 0.5 | 2.13 | -1 | 2.016 | 7.69 | |
| 100 | 16 | 021109 | 081109 | 45 | 3 | 4.3 | 137 | 0.14 | 0.22 | 1.61 | 0.61 | 2.30 | -1 | 2.083 | 7.63 | |
| 101 | 16 | 231109 | 291109 | 48 | 3 | 4.3 | 124 | -1 | 0.14 | 1.36 | 1.24 | 2.20 | -1 | 1.796 | 9.96 | |
| 102 | 16 | 071209 | 131209 | 50 | 3 | 4.4 | 90 | -1 | 0.16 | 0.68 | 0.33 | 2.67 | -1 | 1.577 | | |
| 103 | 10 | 291208 | 040109 | 1 | 1 | | | | | | | | | | | No Sample |
| 104 | 10 | 050109 | 110109 | 2 | 1 | | | | | | | | | | | No Sample |
| 105 | 10 | 120109 | 180109 | 3 | 1 | 3.9 | 80 | 0.27 | 0.63 | 1.3 | 0.03 | 0.87 | -1 | 0.037 | 60.8 | |
| 106 | 10 | 190109 | 250109 | 4 | 1 | 3.6 | 160 | 0.09 | 0.89 | 3.04 | 0.13 | 1.43 | -1 | 0.048 | 36.1 | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107 | 10 | 260109 | 010209 | 5 | 1 | 3.8 | 157 | 0.76 | 1.05 | 2.67 | 0.03 | 1.63 | -1 | 0.028 | 23.6 | |
| 108 | 10 | 020209 | 080209 | 6 | 1 | | | 0.02 | 0.79 | 1.58 | 0.02 | 0.97 | -1 | 0.01 | | |
| 109 | 10 | 090209 | 150209 | 7 | 1 | | | | | | | | | | | No Sample |
| 110 | 10 | 160209 | 220209 | 8 | 1 | | | | | | | | | | | No Sample |
| 111 | 10 | 230209 | 010309 | 9 | 1 | | | | | | | | | | | No Sample |
| 112 | 10 | 020309 | 080309 | 10 | 1 | | | | | | | | | | | No Sample |
| 113 | 10 | 090309 | 150309 | 11 | 1 | 3.9 | 91 | 0.01 | 0.66 | 1.52 | 0.04 | 0.24 | -1 | 0.035 | | |
| 114 | 10 | 160309 | 220309 | 12 | 1 | 4.0 | 147 | 0.04 | 1.79 | 2.19 | 0.16 | 1.43 | -1 | 0.03 | 52 | |
| 115 | 10 | 230309 | 290309 | 13 | 1 | | | 0.1 | 2.45 | 2.44 | 0.16 | 1.89 | -1 | 0.042 | | |
| 116 | 10 | 300309 | 050409 | 14 | 1 | | | | | | | | | | | No Sample |
| 117 | 10 | 060409 | 120409 | 15 | 1 | | | | | | | | -1 | | | No Sample |
| 118 | 10 | 130409 | 190409 | 16 | 1 | 3.7 | 216 | 0.05 | 1.11 | 4.18 | 0.05 | 1.19 | -1 | 0.025 | 55.7 | |
| 119 | 10 | 200409 | 260409 | 17 | 1 | | | | | | | | | | | No Sample |
| 120 | 10 | 270409 | 030509 | 18 | 1 | 3.7 | 90 | 0.15 | 1.06 | 2.79 | 0.04 | 0.80 | -1 | 0.042 | 69.1 | |
| 121 | 10 | 040509 | 100509 | 19 | 1 | | | 0.16 | 1.07 | 1.98 | 0.05 | 0.43 | -1 | 0.051 | | |
| 122 | 10 | 110509 | 170509 | 20 | 1 | 3.7 | 222 | 0.07 | 0.95 | 3.12 | 0.11 | 1.93 | -1 | 0.062 | 60.1 | |
| 123 | 10 | 180509 | 240509 | 21 | 1 | 3.8 | 173 | -1 | 1.06 | 2.46 | 0.11 | 1.23 | -1 | 0.059 | 57.6 | |
| 124 | 10 | 250509 | 310509 | 22 | 1 | 3.9 | 148 | -1 | 0.87 | 1.78 | 0.03 | 1.13 | -1 | 0.039 | 41.6 | |
| 125 | 10 | 010609 | 070609 | 23 | 1 | 4.0 | 80 | -1 | 0.72 | 0.86 | 0.04 | 0.43 | -1 | 0.034 | | |
| 126 | 10 | 080609 | 140609 | 24 | 1 | | | | | | | | | | | No Sample |
| 127 | 10 | 150609 | 210609 | 25 | 1 | | | | | | | | | | | No Sample |
| 128 | 10 | 220609 | 280609 | 26 | 1 | | | | | | | | | | | No Sample |
| 129 | 10 | 290609 | 050709 | 27 | 1 | 5.7 | 117 | 3.61 | 1.76 | 0.97 | -1 | 1.03 | -1 | -1 | 34.3 | |
| 130 | 10 | 060709 | 120709 | 28 | 1 | 3.9 | 137 | -1 | 1.02 | 2.04 | 0.09 | 0.80 | -1 | 0.052 | 72.7 | |
| 131 | 10 | 130709 | 190709 | 29 | 1 | 3.9 | 101 | -1 | 0.71 | 1.69 | 0.03 | 0.53 | -1 | 0.106 | 69.1 | |
| 132 | 10 | 200709 | 260709 | 30 | 1 | 3.8 | 137 | -1 | -1 | 1.37 | 0.09 | 0.73 | -1 | 0.083 | 81.6 | |
| 133 | 10 | 270709 | 020809 | 31 | 1 | | | | | | 1.29 | | -1 | | | No Sample |
| 134 | 10 | 030809 | 090809 | 32 | 1 | 3.9 | 104 | -1 | 0.75 | 1.56 | -1 | 0.50 | -1 | 0.045 | | |
| 135 | 10 | 100809 | 160809 | 33 | 1 | | | | | | | | | | | No Sample |
| 136 | 10 | 170809 | 230809 | 34 | 1 | 3.8 | 128 | -1 | 0.6 | 1.92 | 0.1 | 0.63 | -1 | 0.055 | 74.2 | |
| 137 | 10 | 240809 | 300809 | 35 | 1 | 4.0 | 69 | -1 | -1 | 69 | 0.04 | 0.30 | -1 | 0.039 | 53.1 | |
| 138 | 10 | 310809 | 060909 | 36 | 1 | 4.2 | 44 | 0.09 | 0.36 | 0.38 | 0.09 | 0.23 | -1 | 0.027 | 45.3 | |
| 139 | 10 | 070909 | 130909 | 37 | 1 | 4.1 | 61 | 0.01 | 0.28 | 0.53 | 0.06 | 0.27 | -1 | 0.049 | 48.7 | |
| 140 | 10 | 140909 | 200909 | 38 | 1 | 4.0 | 66 | 0.02 | 0.34 | 0.62 | 0.05 | 0.30 | -1 | 0.02 | 46.3 | |
| 141 | 10 | 210909 | 270909 | 39 | 1 | | | | | | | | | | | No Sample |
| 142 | 10 | 280909 | 041009 | 40 | 1 | | | | | | | | | | | No Sample |
| 143 | 10 | 051009 | 111009 | 41 | 1 | | | | | | | | | | | No Sample |
| 144 | 10 | 121009 | 181009 | 42 | 1 | 3.9 | 127 | 1.31 | 1.35 | 2.08 | -1 | 0.80 | -1 | 0.014 | 28.3 | |
| 145 | 10 | 191009 | 251009 | 43 | 1 | | | | | | | | | | | No Sample |
| 146 | 10 | 261009 | 011109 | 44 | 1 | 3.7 | 146 | -1 | 0.69 | 2.53 | 0.02 | 0.77 | -1 | 0.03 | | |
| 147 | 10 | 021109 | 081109 | 45 | 1 | 3.7 | 122 | -1 | 0.61 | 1.9 | 0.11 | 0.60 | -1 | 0.035 | 58.2 | |
| 148 | 10 | 091109 | 151109 | 46 | 1 | 4.0 | 77 | -1 | 0.25 | 0.95 | 0.04 | 0.40 | -1 | 0.017 | | |
| 149 | 10 | 161109 | 221109 | 47 | 1 | 3.8 | 122 | -1 | 0.4 | 1.79 | 0.03 | 0.73 | -1 | 0.019 | 27.2 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 150 | 10 | 231109 | 291109 | 48 | 1 | 4.0 | 86 | -1 | 0.46 | 0.76 | 0.03 | 0.57 | -1 | 0.026 | 30.4 | |
| 151 | 10 | 301109 | 061209 | 49 | 1 | 4.0 | 87 | -1 | 0.45 | 0.68 | -1 | 0.53 | -1 | 0.043 | 36.2 | |
| 152 | 10 | 071209 | 131209 | 50 | 1 | 3.8 | 144 | -1 | 0.74 | 1.82 | 0.02 | 1.03 | -1 | 0.053 | 29 | |
| 153 | 10 | 141209 | 201209 | 51 | 1 | | | | | | | | | | | No Sample |
| 154 | 10 | 211209 | 281209 | 52 | 1 | 3.7 | 174 | -1 | 0.83 | 2.82 | -1 | 1.20 | -1 | 0.002 | | |
| 155 | 10 | 291208 | 040109 | 1 | 4 | 3.9 | 186 | 0.25 | 0.79 | 2.93 | 0.23 | 0.77 | -1 | 0.297 | 47.2 | |
| 156 | 10 | 260109 | 010209 | 5 | 4 | 4.0 | 155 | 0.15 | 0.77 | 2.47 | 0.25 | 0.83 | -1 | 0.217 | 36.8 | |
| 157 | 10 | 230209 | 010309 | 9 | 4 | 3.9 | 190 | 0.18 | 0.78 | 2.56 | 0.3 | 0.43 | -1 | 0.164 | | |
| 158 | 10 | 300309 | 050409 | 14 | 4 | 3.8 | 203 | 0.14 | 0.63 | 2.61 | 0.39 | 0.51 | -1 | 0.125 | 31.5 | |
| 159 | 10 | 270409 | 030509 | 18 | 4 | 3.7 | 222 | 0.08 | 0.83 | 3.03 | 0.61 | 1.03 | -1 | 0.14 | 37.3 | |
| 160 | 10 | 250509 | 310509 | 22 | 4 | 3.8 | 183 | -1 | 1.25 | 2.5 | 0.33 | 1.33 | -1 | 0.271 | 37.5 | |
| 161 | 10 | 080609 | 140609 | 24 | 4 | 3.7 | 242 | -1 | 1.55 | 3.08 | 0.99 | 2.50 | -1 | 0.268 | | |
| 162 | 10 | 290609 | 050709 | 27 | 4 | 3.7 | 179 | -1 | 0.97 | 2 | 0.73 | 1.13 | -1 | 0.158 | | |
| 163 | 10 | 060709 | 120709 | 28 | 4 | 3.7 | 229 | -1 | 0.84 | 2.34 | 0.42 | 0.77 | -1 | 0.111 | 35.3 | |
| 164 | 10 | 200709 | 260709 | 30 | 4 | 3.7 | 183 | -1 | 3.28 | 5.33 | 3.55 | 4.23 | -1 | 0.52 | | |
| 165 | 10 | 030809 | 090809 | 32 | 4 | 3.6 | 273 | -1 | 1.48 | 3.77 | 1.31 | 2.60 | -1 | 0.229 | | |
| 166 | 10 | 170809 | 230809 | 34 | 4 | 3.7 | 226 | -1 | 1.07 | 2.87 | 0.72 | 1.87 | -1 | 0.226 | 37 | |
| 167 | 10 | 310809 | 060909 | 36 | 4 | 3.7 | 223 | 0.17 | 1.53 | 2.89 | 0.1 | 1.40 | -1 | 0.408 | 51.4 | |
| 168 | 10 | 140909 | 200909 | 38 | 4 | 3.7 | 249 | 0.11 | 1.61 | 3.03 | 0.16 | 2.03 | -1 | 0.434 | 58.8 | |
| 169 | 10 | 280909 | 041009 | 40 | 4 | 3.8 | 192 | 0.17 | 0.85 | 2.26 | 0.3 | 0.83 | -1 | 0.152 | | |
| 170 | 10 | 121009 | 181009 | 42 | 4 | 3.8 | 216 | 0.12 | 0.61 | 2.58 | 0.36 | 0.60 | -1 | 0.131 | | |
| 171 | 10 | 261009 | 011109 | 44 | 4 | | | 0.15 | 0.68 | 2.13 | 0.16 | 1.17 | | 0.11 | | |
| 172 | 10 | 091109 | 151109 | 46 | 4 | 3.8 | 213 | -1 | 0.63 | 2.52 | 0.6 | 1.10 | -1 | 0.21 | 45.8 | |
| 173 | 10 | 231109 | 291109 | 48 | 4 | 3.8 | 204 | -1 | 0.56 | 2.35 | 0.27 | 0.60 | -1 | 0.212 | 48.2 | |
| 174 | 10 | 071209 | 131209 | 50 | 4 | | | | | | | | | | | |
| 175 | 10 | 291208 | 040109 | 1 | 5 | | | 0.43 | 0.82 | 4.15 | -1 | 0.13 | | 0.057 | 28.8 | |
| 176 | 10 | 260109 | 010209 | 5 | 5 | | | 0.35 | 1.04 | 3.97 | 0.08 | 0.17 | | 0.08 | | |
| 177 | 10 | 230209 | 010309 | 9 | 5 | | | | | | | | | | | Low volume |
| 178 | 10 | 300309 | 050409 | 14 | 5 | 4.1 | 144 | 0.19 | 0.46 | 3.76 | -1 | 0.12 | -1 | 0.044 | | |
| 179 | 10 | 250509 | 310509 | 22 | 5 | | | 0.21 | 0.93 | 3.32 | 0.03 | 0.17 | | 0.052 | | |
| 180 | 10 | 080609 | 140609 | 24 | 5 | 4.2 | 118 | 0.25 | 3.14 | 4.17 | 0.28 | 3.37 | -1 | 0.2 | | |
| 181 | 10 | 290609 | 050709 | 27 | 5 | 4.1 | 196 | 0.24 | 3.23 | 4.38 | 0.61 | 3.60 | -1 | 0.16 | | |
| 182 | 10 | 060709 | 120709 | 28 | 5 | | | | | | | | | | | Low volume |
| 183 | 10 | 200709 | 260709 | 30 | 5 | 4.1 | 134 | -1 | 3.07 | 4.74 | 1.09 | 4.67 | -1 | 0.176 | | |
| 184 | 10 | 030809 | 090809 | 32 | 5 | | | -1 | 3.49 | 5.14 | 1 | 4.97 | | 0.183 | | |
| 185 | 10 | 170809 | 230809 | 34 | 5 | | | | | | 0.13 | 4.30 | | | | |
| 186 | 10 | 310809 | 060909 | 36 | 5 | | | 0.22 | 4.03 | 5.72 | 0.42 | 4.17 | | 0.359 | | |
| 187 | 10 | 140909 | 200909 | 38 | 5 | | | 0.15 | 3.53 | 5.33 | 0.11 | 5.20 | | 0.291 | | |
| 188 | 10 | 280909 | 041009 | 40 | 5 | | | 0.12 | 3.41 | 5.37 | 0.35 | 5.20 | | 0.178 | | |
| 189 | 10 | 121009 | 181009 | 42 | 5 | | | 0.15 | 3.28 | 5.94 | 0.63 | 5.70 | | 0.182 | | |
| 190 | 10 | 261009 | 011109 | 44 | 5 | | | 0.26 | 4.16 | 7.07 | 1.3 | 6.70 | | 0.226 | | |
| 191 | 10 | 091109 | 151109 | 46 | 5 | | | | | | 0.93 | 5.63 | | | | |
| 192 | 10 | 231109 | 291109 | 48 | 5 | | | 0.1 | 3.72 | 6.45 | 0.8 | | | 0.21 | | |

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  193   10 071209 131209 50  5                                                                    Low volume
  194   11 190109 250109  4  1
  195   11 260109 010209  5  1 4.2  213   2.7  0.86  3.91    -1  2.33    -1 0.078  25.7
  196   11 160209 220209  8  1 3.7  298  0.81  0.59  0.84    -1  3.35    -1 0.026  18.2
  197   11 090309 150309 11  1 4.0  204  2.04  0.71  3.39    -1  1.58    -1 0.163  66.4
  198   11 130409 190409 16  1 3.9  272  2.16  0.97  4.07  0.02  2.13    -1 0.143  60.2
  199   11 110509 170509 20  1 4.0  227  1.34  0.68  3.33    -1  1.80    -1 0.225    92
  200   11 150609 210609 25  1 4.0  195  1.28  0.73  2.06  0.02  1.37    -1 0.107  70.3
  201   11 290609 050709 27  1                             0.06  1.30
  202   11 060709 120709 28  1 4.2  113  0.67    -1  1.45  0.02  0.87    -1 0.141    -1
  203   11 200709 260709 30  1 4.2  121  0.42    -1  1.64  0.02  0.83    -1   0.2  8.88
  204   11 270709 020809 31  1 4.1  152  0.46  1.02  3.14  0.05  0.97    -1 0.434   173
  205   11 030809 090809 32  1           0.51  1.17  2.75  0.06  1.07    -1 0.431
  206   11 100809 160809 33  1                                                                    No Sample
  207   11 170809 230809 34  1 4.1  174   0.5  0.64  4.07  0.05  2.17    -1 0.532   181
  208   11 240809 300809 35  1 5.7  140  0.48  0.76  2.24  0.04  0.77    -1 0.398   123
  209   11 310809 060909 36  1 4.2  112  0.46  0.81  1.98  0.07  0.73    -1 0.334  95.2
  210   11 070909 130909 37  1 4.3  107  0.24  0.47  1.45  0.04  0.63    -1 0.203  79.8
  211   11 140909 200909 38  1 4.2  112  0.33  0.63  1.49  0.04  0.60    -1 0.242  90.1
  212   11 210909 270909 39  1                                                                    No Sample
  213   11 280909 041009 40  1                                                                    No Sample
  214   11 051009 111009 41  1                                                                    No Sample
  215   11 121009 181009 42  1                                                                    No Sample
  216   11 191009 251009 43  1                                                                    No Sample
  217   11 261009 011109 44  1 4.0  162  0.59  0.48  2.65  0.02  1.43    -1 0.247  89.7
  218   11 021109 081109 45  1 4.2  112  0.55  0.24  1.54  0.02  0.70    -1 0.296    63
  219   11 091109 151109 46  1 4.3  109  0.76  0.29  1.38  0.02  0.90    -1  0.16  39.2
  220   11 161109 221109 47  1 4.0  165  1.41  0.56  2.57    -1  1.37    -1 0.103  38.5
  221   11 231109 291109 48  1 4.2   80  0.94  0.25  0.89    -1  0.50    -1 0.083  35.6
  222   11 301109 061209 49  1 4.1  127  1.97  0.52  1.47    -1  1.13    -1 0.042  21.8
  223   11 071209 131209 50  1 4.0  154  2.17  0.74  2.51    -1  1.43    -1 0.182  28.7
  224   11 141209 201209 51  1 3.9  186  2.73  0.78  2.68    -1  1.77    -1 0.067  32.8
  225   11 211209 281209 52  1 4.0  171                        -1  1.43    -1
!SS.LQA
!Sequence, country, plot, date_start, date_end, parameter, determination, quantification_limit, control_chart_mean, control_chart_std,
ring_test_participation, ring_test_number, Laboratory_ID, percentage_within, requalification, percentage_within_requal,
other_observations
   1  7   10 010109 311209        pH 72.1   0.01  100.1 0.4 1  04 A69  60 0
   2  7   10 010109 311209      Cond   71      1  102.6 5.8 1  04 A69 100 0
   3  7   10 010109 311209         K   35    0.2  100.7 0.7 1  04 A69  60 0
   4  7   10 010109 311209        Ca   35    0.2  100.9 0.9 1  04 A69  60 0
   5  7   10 010109 311209        Mg   35    0.2  103.0 3.0 1  04 A69 100 0
   6  7   10 010109 311209        Na   35    0.2  102.9 2.9 1  04 A69 100 0
```

```
   7  7   10 010109 311209     N_NH4   51   0.02   98.6 2.1 1  04 A69 100 0
   8  7   10 010109 311209        Cl 61.1    0.4  101.3 2.4 1  04 A69 100 0
   9  7   10 010109 311209     N_NO3   51   0.02  100.2 1.6 1  04 A69 100 0
  10  7   10 010109 311209     S_SO4 61.1    0.1  102.2 2.2 1  04 A69 100 0
  11  7   10 010109 311209   Alkalin   73     20   98.1 2.6 1  04 A69  17 1 100
  12  7   10 010109 311209       DOC   15      3  105.0 5.0 1  04 A69  60 0
  13  7   10 010109 311209        Al   35      5   99.6 0.4 0
  14  7   10 010109 311209        Mn   35      5  103.3 3.3 0
  15  7   10 010109 311209        Fe   35      5  100.2 0.2 0
  16  7   10 010109 311209     P_PO4   53  0.003   98.9 1.4 0
  17  7   10 010109 311209        Cu   35      5  101.5 1.5 0
  18  7   10 010109 311209        Zn   35      5  105.1 5.1 0
  19  7   10 010109 311209        Ni   35      5  103.2 3.2 0
!SSO
!Sequence, plot, date_start, date_end, period, sampler, water_vol, Na, Al_labile, Fe, Mn, P, N_NH4, Cl, Cr, Ni, Zn, Cu, Pb, Cd, Si,
other_observations
    1   16 291208 040109  1  1    0                                                                      No collection
    2   16 050109 110109  2  1    0                                                                      No collection
    3   16 120109 180109  3  1 1900    12       0.694 0.254        0.34  22.9           4   44    1
    4   16 190109 250109  4  1 7130 11.56       0.456 0.106        0.34  22.4           3   23    3
    5   16 260109 010209  5  1 3342  9.42       0.525 0.063        0.14  16.7           5  294    4
    6   16 020209 080209  6  1    0                                                                      No collection
    7   16 090209 150209  7  1    0                                                                      No collection
    8   16 160209 220209  8  1 9999  7.61       0.023 0.056        0.24 14.12           3   16   14      VALUE FOR  is
<11200>
    9   16 230209 010309  9  1  868  5.22       0.131 0.013        0.07  8.11           2   20   70
   10   16 020309 080309 10  1   67                                0.36  7.95
   11   16 090309 150309 11  1  137  6.32       1.052  0.07        0.35  6.27           7   26   15
   12   16 160309 220309 12  1  124  5.44       1.245 0.025        0.09  7.64           8   19   10
   13   16 230309 290309 13  1   18                                                                      Low sample
   14   16 300309 050409 14  1    0                                                                      No sample
   15   16 060409 120409 15  1 1490 25.37       0.214 0.644        0.94 66.43           3   52   -1
   16   16 130409 190409 16  1 6650 13.74       0.447 0.157        0.42  28.9           4   27    2
   17   16 200409 260409 17  1 6600  9.16       0.456 0.057        0.08  15.1           3    9   -1
   18   16 270409 030509 18  1 2550  9.12        0.71 0.052        0.09  11.5           4   11   -1
   19   16 040509 100509 19  1 2270     9       0.643 0.037        0.12  11.1           4   16    2
   20   16 110509 170509 20  1  300 10.58       0.335 0.037         0.2  15.8           3   21    3
   21   16 180509 240509 21  1 5950 10.43       0.585 0.059        0.12  19.2          -1   18   -1
   22   16 250509 310509 22  1 2398  8.55       0.521 0.025         0.1  17.2          -1   51   -1
   23   16 010609 070609 23  1   25                                                                      Low sample
   24   16 080609 140609 24  1 4733  4.32       0.396              0.13   8.3          -1   -1   -1
   25   16 150609 210609 25  1  520  5.83       0.094 0.073        0.43  10.6          -1   10   -1
   26   16 220609 280609 26  1 1214  8.22       0.399 0.082        0.29  13.5          -1   -1   -1
```

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 | 16 | 290609 | 050709 | 27 | 1 | 22 | | | | | | | | | | Low sample |
| 28 | 16 | 060709 | 120709 | 28 | 1 | 4350 | 8.02 | 0.341 | 0.093 | | 0.47 | 14 | -1 | 13 | -1 | |
| 29 | 16 | 130709 | 190709 | 29 | 1 | 4600 | 6.7 | 0.301 | 0.036 | | 0.27 | 8.7 | -1 | -1 | -1 | |
| 30 | 16 | 200709 | 260709 | 30 | 1 | 1453 | 7.28 | 0.603 | 0.055 | | 0.65 | 9.1 | -1 | 33 | -1 | |
| 31 | 16 | 270709 | 020809 | 31 | 1 | 7100 | 8.58 | 0.408 | 0.023 | | 0.32 | 11.1 | -1 | 47 | 63 | |
| 32 | 16 | 030809 | 090809 | 32 | 1 | 4250 | 8.88 | 0.855 | 0.045 | | 0.4 | 15.2 | -1 | 22 | 11 | |
| 33 | 16 | 100809 | 160809 | 33 | 1 | 354 | 7.73 | 0.637 | 0.067 | | 1.33 | 9.7 | -1 | 32 | 24 | |
| 34 | 16 | 170809 | 230809 | 34 | 1 | 25 | | | | | 2.11 | | | | | |
| 35 | 16 | 240809 | 300809 | 35 | 1 | 2093 | 9.27 | 0.531 | 0.07 | | 0.5 | 12.1 | 6 | 29 | 22 | |
| 36 | 16 | 310809 | 060909 | 36 | 1 | 3750 | 9.75 | 0.641 | 0.044 | | 0.22 | 13.2 | 4 | 34 | 21 | |
| 37 | 16 | 070909 | 130909 | 37 | 1 | 5050 | 10.2 | 0.561 | 0.056 | | 0.28 | 11.7 | 6 | 17 | 8 | |
| 38 | 16 | 140909 | 200909 | 38 | 1 | 43 | | | | | | | | | | Low sample |
| 39 | 16 | 210909 | 270909 | 39 | 1 | 0 | | | | | | | | | | No sample |
| 40 | 16 | 280909 | 041009 | 40 | 1 | 0 | | | | | | | | | | No sample |
| 41 | 16 | 051009 | 111009 | 41 | 1 | 0 | | | | | | | | | | No sample |
| 42 | 16 | 121009 | 181009 | 42 | 1 | 2832 | 12.39 | 0.195 | 0.19 | | 1.07 | 28.5 | 7 | 33 | 8 | |
| 43 | 16 | 191009 | 251009 | 43 | 1 | 18 | | | | | | | | | | Low sample |
| 44 | 16 | 261009 | 011109 | 44 | 1 | 7350 | 11.63 | 0.453 | 0.104 | | 1.05 | 23.2 | 8 | 22 | 9 | |
| 45 | 16 | 021109 | 081109 | 45 | 1 | 9999 | 8.15 | 0.561 | 0.037 | | 0.33 | 12.8 | 9 | 15 | 6 | VALUE FOR IS |
| <10550> | | | | | | | | | | | | | | | | |
| 46 | 16 | 091109 | 151109 | 46 | 1 | 1160 | 6.07 | 0.61 | 0.024 | 0.205 | 0.78 | 7.7 | 5 | 15 | 7 | |
| 47 | 16 | 161109 | 221109 | 47 | 1 | 9999 | 6.77 | 0.495 | 0.049 | 0.094 | 0.34 | 12.7 | 3 | 6 | 6 | VALUE FOR is |
| <10800> | | | | | | | | | | | | | | | | |
| 48 | 16 | 231109 | 291109 | 48 | 1 | 9750 | 4.57 | 0.391 | 0.023 | 0.095 | 0.34 | 6.6 | 1 | 7 | 5 | |
| 49 | 16 | 301109 | 061209 | 49 | 1 | 9800 | 7.34 | 0.352 | 0.053 | 0.08 | 0.25 | 17 | 4.5 | 9 | 3 | |
| 50 | 16 | 071209 | 131209 | 50 | 1 | 5000 | 7.2 | 0.289 | 0.038 | 0.074 | 0.26 | 15.7 | 6.6 | 10 | 3 | |
| 51 | 16 | 141209 | 201209 | 51 | 1 | 1278 | 6.58 | 0.34 | 0.017 | 0.056 | 0.4 | 15.4 | -1 | -1 | 1 | |
| 52 | 16 | 211209 | 281209 | 52 | 1 | | | | | | | | | | | |
| 53 | 16 | 291208 | 040109 | 1 | 2 | 0 | | | | | | | | | | No collection |
| 54 | 16 | 120109 | 180109 | 3 | 2 | 448 | 10.62 | 0.884 | 0.056 | | 0.03 | 14.3 | 5 | 39 | -1 | |
| 55 | 16 | 260109 | 010209 | 5 | 2 | 314 | 12.44 | 0.75 | 0.066 | | 0.02 | 22.3 | 13 | 87 | 4 | |
| 56 | 16 | 090209 | 150209 | 7 | 2 | 18 | | | | | | | | | | Low sample |
| 57 | 16 | 230209 | 010309 | 9 | 2 | 425 | 8.41 | 0.769 | 0.027 | | -1 | 12.96 | 17 | 31 | 9 | |
| 58 | 16 | 090309 | 150309 | 11 | 2 | 420 | 8.03 | 0.843 | 0.04 | | 0.02 | 11.94 | 6 | 24 | 3 | |
| 59 | 16 | 230309 | 290309 | 13 | 2 | 276 | 8.57 | 0.818 | 0.068 | | -1 | 14.68 | 6 | 31 | 3 | |
| 60 | 16 | 060409 | 120409 | 15 | 2 | 98 | 8.78 | 0.74 | 0.041 | | 0.07 | 12.42 | 6 | 24 | 5 | |
| 61 | 16 | 200409 | 260409 | 17 | 2 | 616 | 12.55 | 0.801 | 0.055 | | -1 | 24.4 | 5 | 48 | -1 | |
| 62 | 16 | 040509 | 100509 | 19 | 2 | 658 | 11.97 | 0.855 | 0.042 | | 0.05 | 20.8 | 6 | 37 | -1 | |
| 63 | 16 | 180509 | 240509 | 21 | 2 | 319 | 10.73 | 0.747 | 0.052 | | 0.05 | 19.1 | -1 | 48 | 12 | |
| 64 | 16 | 010609 | 070609 | 23 | 2 | 353 | 13.22 | 0.729 | 0.031 | | 0.04 | 27.4 | -1 | 33 | -1 | |
| 65 | 16 | 150609 | 210609 | 25 | 2 | 415 | 10.93 | 0.76 | 0.046 | | 0.03 | 22 | -1 | 34 | -1 | |
| 66 | 16 | 290609 | 050709 | 27 | 2 | 57 | 16.47 | 1.064 | 0.114 | | 0.11 | 37.3 | -1 | 71 | -1 | |
| 67 | 16 | 130709 | 190709 | 29 | 2 | 412 | 11.31 | 0.879 | 0.062 | | 0.05 | 21.3 | -1 | 29 | -1 | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 68 | 16 | 270709 | 020809 | 31 | 2 | 287 | 13.15 | 1.149 | 0.096 | | 0.04 | 22.6 | -1 | 76 | -1 | |
| 69 | 16 | 100809 | 160809 | 33 | 2 | 380 | 10.38 | 1.302 | 0.072 | | 0.04 | 18.8 | -1 | 46 | -1 | |
| 70 | 16 | 240809 | 300809 | 35 | 2 | 107 | 14.18 | 1.434 | 0.057 | | 0.1 | 22.4 | 11 | 59 | 23 | |
| 71 | 16 | 070909 | 130909 | 37 | 2 | 260 | 15.38 | 1.679 | 0.07 | | 0.07 | 24.6 | 10.6 | 52 | 4 | |
| 72 | 16 | 210909 | 270909 | 39 | 2 | 176 | 11.24 | 1.04 | 0.065 | | 0.06 | 18.1 | 7 | 39 | 8 | |
| 73 | 16 | 051009 | 111009 | 41 | 2 | 63 | 9.17 | 0.66 | 0.062 | | 0.08 | 15.3 | 19 | 33 | 14 | |
| 74 | 16 | 191009 | 251009 | 43 | 2 | 120 | 16.06 | 1.107 | 0.133 | | -1 | 28.2 | 12 | 39 | 3 | |
| 75 | 16 | 021109 | 081109 | 45 | 2 | 217 | 8.94 | 0.705 | 0.04 | | 0.04 | 14.8 | 12.47 | 23.7 | 4.32 | |
| 76 | 16 | 231109 | 291109 | 48 | 2 | 400 | 9.2 | 0.715 | 0.049 | 0.003 | 0.04 | 15.1 | 2 | 27 | 1 | |
| 77 | 16 | 071209 | 131209 | 50 | 2 | 260 | 6.89 | 0.468 | 0.036 | -1 | 0.06 | 10.9 | 9.16 | 23 | 8 | |
| 78 | 16 | 291208 | 040109 | 1 | 3 | 0 | | | | | | | | | | No collection |
| 79 | 16 | 120109 | 180109 | 3 | 3 | 203 | 11.23 | 0.093 | 0.077 | | 0.07 | 20.7 | 10 | 104 | 1 | |
| 80 | 16 | 260109 | 010209 | 5 | 3 | 270 | 9.34 | 0.285 | 0.054 | | -1 | 15.2 | 5 | 43 | 2 | |
| 81 | 16 | 090209 | 150209 | 7 | 3 | 2 | | | | | | | | | | Low sample |
| 82 | 16 | 230209 | 010309 | 9 | 3 | 180 | 10.25 | 0.052 | 0.015 | | -1 | 16.17 | 7 | 64 | 82 | |
| 83 | 16 | 090309 | 150309 | 11 | 3 | 161 | 9.68 | 0.027 | 0.01 | | -1 | 15.26 | 5 | 46 | 4 | |
| 84 | 16 | 230309 | 290309 | 13 | 3 | 90 | 10.12 | 0.041 | 0.023 | | -1 | 16.88 | 5 | 54 | 5 | |
| 85 | 16 | 060409 | 120409 | 15 | 3 | 17 | | | | | | | | | | Low sample |
| 86 | 16 | 200409 | 260409 | 17 | 3 | 290 | 11.24 | 0.065 | 0.015 | | -1 | 17.9 | 6 | 46 | -1 | |
| 87 | 16 | 040509 | 100509 | 19 | 3 | 294 | 11.91 | 0.037 | 0.013 | | 0.09 | 19.5 | 6 | 56 | -1 | |
| 88 | 16 | 180509 | 240509 | 21 | 3 | 137 | 11.29 | 0.054 | 0.016 | | 0.03 | | -1 | 52 | -1 | |
| 89 | 16 | 010609 | 070609 | 23 | 3 | 242 | 10.48 | 0.035 | 0.01 | | 0.02 | 18.4 | -1 | 46 | -1 | |
| 90 | 16 | 150609 | 210609 | 25 | 3 | 250 | 9.95 | 0.042 | 0.013 | | 0.02 | 18.5 | -1 | 55 | -1 | |
| 91 | 16 | 290609 | 050709 | 27 | 3 | 192 | 10.59 | 0.036 | 0.054 | | 0.1 | 18.9 | -1 | 53 | -1 | |
| 92 | 16 | 130709 | 190709 | 29 | 3 | 304 | 9.77 | 0.043 | 0.019 | | 0.07 | 18.5 | -1 | 54 | -1 | |
| 93 | 16 | 270709 | 020809 | 31 | 3 | 229 | 11.17 | 0.04 | 0.056 | | 0.1 | 18.1 | -1 | 63 | -1 | |
| 94 | 16 | 100809 | 160809 | 33 | 3 | 454 | 12.42 | 0.078 | 0.033 | | 0.02 | 25.7 | 11 | 80 | -1 | |
| 95 | 16 | 240809 | 300809 | 35 | 3 | 329 | 15.21 | 0.084 | 0.037 | | 0.07 | 27.3 | 17 | 79 | 11 | |
| 96 | 16 | 070909 | 130909 | 37 | 3 | 441 | 12.89 | 0.055 | 0.032 | | 0.02 | 22.3 | 7 | 61 | 5 | |
| 97 | 16 | 210909 | 270909 | 39 | 3 | 336 | 14.54 | 0.112 | 0.041 | | 0.02 | 28.6 | 23 | 91 | 6 | |
| 98 | 16 | 051009 | 111009 | 41 | 3 | 174 | 17.18 | 0.06 | 0.048 | | 0.02 | 33.7 | 11 | 89 | 8 | |
| 99 | 16 | 191009 | 251009 | 43 | 3 | 287 | 16.68 | 0.058 | 0.048 | | -1 | 30 | 9.27 | 76.0 | 4.89 | |
| 100 | 16 | 021109 | 081109 | 45 | 3 | 428 | 17.27 | 0.053 | 0.046 | | 0.04 | 30 | 11.22 | 77.3 | 5.35 | |
| 101 | 16 | 231109 | 291109 | 48 | 3 | 505 | 13.89 | 0.067 | 0.049 | -1 | 0.02 | 23.5 | 6 | 63 | 3 | |
| 102 | 16 | 071209 | 131209 | 50 | 3 | 197 | 10.7 | 0.054 | 0.019 | -1 | -1 | 16.6 | 12.27 | 60 | 4 | |
| 103 | 10 | 291208 | 040109 | 1 | 1 | 0 | | | | | | | | | | No Sample |
| 104 | 10 | 050109 | 110109 | 2 | 1 | 0 | | | | | | | | | | No Sample |
| 105 | 10 | 120109 | 180109 | 3 | 1 | 1060 | 8.29 | 0.088 | 0.007 | | 0.37 | 13.3 | 1 | 12 | 4 | |
| 106 | 10 | 190109 | 250109 | 4 | 1 | 1800 | 13.33 | 0.17 | 0.037 | | 0.28 | 29.2 | 1 | 13 | 6 | |
| 107 | 10 | 260109 | 010209 | 5 | 1 | 3400 | 16.11 | 0.146 | 0.013 | | 0.17 | 34.3 | 4 | 9 | -1 | |
| 108 | 10 | 020209 | 080209 | 6 | 1 | 78 | 8.42 | 0.022 | 0.007 | | -1 | 19.2 | 2 | 12 | 7 | |
| 109 | 10 | 090209 | 150209 | 7 | 1 | 0 | | | | | | | | | | No Sample |
| 110 | 10 | 160209 | 220209 | 8 | 1 | 0 | | | | | | | | | | No Sample |

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| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 111 | 10 | 230209 | 010309 | 9 | 1 | 0 | | | | | | | | | | No Sample |
| 112 | 10 | 020309 | 080309 | 10 | 1 | 0 | | | | | | | | | | No Sample |
| 113 | 10 | 090309 | 150309 | 11 | 1 | 164 | 8.2 | 0.039 | 0.006 | | 0.16 | 11.58 | 1 | 5 | 8 | |
| 114 | 10 | 160309 | 220309 | 12 | 1 | 553 | 16.78 | 0.173 | 0.018 | | 0.22 | 28.76 | 1 | 24 | 4 | |
| 115 | 10 | 230309 | 290309 | 13 | 1 | 61 | 23.13 | 0.308 | 0.017 | | 0.36 | 41.28 | 2 | 46 | 7 | |
| 116 | 10 | 300309 | 050409 | 14 | 1 | 0 | | | | | | | | | | No Sample |
| 117 | 10 | 060409 | 120409 | 15 | 1 | 0 | | | | | | | | | | No Sample |
| 118 | 10 | 130409 | 190409 | 16 | 1 | 928 | 15.06 | 0.075 | 0.008 | | 0.12 | 44.75 | 12 | 13 | -1 | |
| 119 | 10 | 200409 | 260409 | 17 | 1 | 0 | | | | | | | | | | No Sample |
| 120 | 10 | 270409 | 030509 | 18 | 1 | 132 | 12.67 | 0.072 | 0.005 | | 0.41 | 24.7 | 2 | 12 | 6 | |
| 121 | 10 | 040509 | 100509 | 19 | 1 | 98 | 10.57 | 0.158 | 0.008 | | 0.29 | 17.1 | 2 | 17 | 11 | |
| 122 | 10 | 110509 | 170509 | 20 | 1 | 1422 | 24.11 | 0.238 | 0.005 | | 0.3 | 42.8 | 2 | 11 | -1 | |
| 123 | 10 | 180509 | 240509 | 21 | 1 | 930 | 16.76 | 0.168 | -1 | | 0.21 | 31.5 | -1 | 11 | -1 | |
| 124 | 10 | 250509 | 310509 | 22 | 1 | 1246 | 14.43 | 0.139 | -1 | | 0.31 | 28.6 | -1 | 10 | -1 | |
| 125 | 10 | 010609 | 070609 | 23 | 1 | 138 | 6.34 | 0.048 | -1 | | 0.21 | 8.5 | -1 | 44 | 76 | |
| 126 | 10 | 080609 | 140609 | 24 | 1 | 0 | | | | | | | | | | No Sample |
| 127 | 10 | 150609 | 210609 | 25 | 1 | 11 | | | | | | | | | | No Sample |
| 128 | 10 | 220609 | 280609 | 26 | 1 | 0 | | | | | | | | | | No Sample |
| 129 | 10 | 290609 | 050709 | 27 | 1 | 1172 | 12.52 | -1 | 0.013 | | 0.21 | 24.2 | -1 | -1 | -1 | |
| 130 | 10 | 060709 | 120709 | 28 | 1 | 752 | 10.88 | 0.075 | 0.058 | | 0.5 | 18.9 | -1 | -1 | -1 | |
| 131 | 10 | 130709 | 190709 | 29 | 1 | 1815 | 10.62 | 0.042 | -1 | | 0.22 | 13.3 | -1 | -1 | -1 | |
| 132 | 10 | 200709 | 260709 | 30 | 1 | 1296 | 12.97 | 0.205 | -1 | | 0.24 | 20.2 | -1 | -1 | -1 | |
| 133 | 10 | 270709 | 020809 | 31 | 1 | 220 | | | | | 0.37 | | | | | |
| 134 | 10 | 030809 | 090809 | 32 | 1 | 303 | 8.03 | 0.047 | -1 | | 0.31 | 11 | -1 | -1 | -1 | |
| 135 | 10 | 100809 | 160809 | 33 | 1 | 8 | | | | | | | | | | No Sample |
| 136 | 10 | 170809 | 230809 | 34 | 1 | 1300 | 9.7 | 0.05 | -1 | | 0.14 | 15.6 | -1 | -1 | -1 | |
| 137 | 10 | 240809 | 300809 | 35 | 1 | 4100 | 5.52 | 0.043 | -1 | | 0.13 | 5.7 | -1 | -1 | -1 | |
| 138 | 10 | 310809 | 060909 | 36 | 1 | 630 | 4.07 | 0.024 | 0.004 | | 0.12 | 2.9 | -1 | 7 | 7 | |
| 139 | 10 | 070909 | 130909 | 37 | 1 | 2600 | 4.67 | 0.037 | 0.002 | | 0.09 | 5.6 | 3 | 4 | 5 | |
| 140 | 10 | 140909 | 200909 | 38 | 1 | 1300 | 4.9 | 0.028 | 0.002 | | 0.07 | 6.6 | 8 | 8 | 3 | |
| 141 | 10 | 210909 | 270909 | 39 | 1 | 11 | | | | | | | | | | No Sample |
| 142 | 10 | 280909 | 041009 | 40 | 1 | 0 | | | | | | | | | | No Sample |
| 143 | 10 | 051009 | 111009 | 41 | 1 | 0 | | | | | | | | | | No Sample |
| 144 | 10 | 121009 | 181009 | 42 | 1 | 600 | 8.34 | 0.02 | 0.009 | | 0.16 | 20.6 | 4 | 2 | 3 | |
| 145 | 10 | 191009 | 251009 | 43 | 1 | 0 | | | | | | | | | | No Sample |
| 146 | 10 | 261009 | 011109 | 44 | 1 | 600 | 9.6 | 0.03 | 0.007 | | 0.14 | 19.3 | 2 | 1 | 4 | |
| 147 | 10 | 021109 | 081109 | 45 | 1 | 2105 | 20 | 0.02 | 0.003 | | 0.1 | 16.3 | -1 | 1 | 2 | |
| 148 | 10 | 091109 | 151109 | 46 | 1 | 954 | 5.15 | 0.025 | 0.002 | 0.022 | 0.03 | 8.6 | 2 | 3 | 1 | |
| 149 | 10 | 161109 | 221109 | 47 | 1 | 2600 | 6.7 | 0.034 | 0.003 | 0.01 | 0.04 | 17.5 | 1 | -1 | 4 | |
| 150 | 10 | 231109 | 291109 | 48 | 1 | 5350 | 6.46 | 0.077 | 0.002 | 0.017 | 0.07 | 12.1 | -1 | 4 | -1 | |
| 151 | 10 | 301109 | 061209 | 49 | 1 | 1843 | 7.4 | 0.169 | 0.002 | 0.021 | 0.06 | 12.8 | -1 | 4 | 1 | |
| 152 | 10 | 071209 | 131209 | 50 | 1 | 1320 | 10.53 | 0.172 | 0.004 | 0.014 | 0.09 | 25.1 | -1 | -1 | -1 | |
| 153 | 10 | 141209 | 201209 | 51 | 1 | 0 | | | | | | | | | | No Sample |

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| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 154 | 10 | 211209 | 281209 | 52 | 1 | 255 | 8.64 | 0.012 | 0.005 | 0.009 | 0.05 | 25.8 | 2 | 1 | 2 | | |
| 155 | 10 | 291208 | 040109 | 1 | 4 | 335 | 23.5 | 1.388 | 0.002 | | 1.83 | 46.1 | 8 | 4 | 4 | 178 | |
| 156 | 10 | 260109 | 010209 | 5 | 4 | 310 | 18.94 | 0.874 | 0.002 | | 2.42 | 38 | 5 | 5 | 2 | 335 | |
| 157 | 10 | 230209 | 010309 | 9 | 4 | 206 | 20.67 | 0.938 | 0.002 | | 3.1 | 43.22 | 12 | 17 | 70 | 470 | |
| 158 | 10 | 300309 | 050409 | 14 | 4 | 165 | 20.32 | 0.772 | 0.002 | | 1.28 | 43.55 | 4 | 8 | -1 | 210 | |
| 159 | 10 | 270409 | 030509 | 18 | 4 | 294 | 23.29 | 0.763 | 0.002 | | 1.49 | 46.5 | 4 | 4 | -1 | 184 | |
| 160 | 10 | 250509 | 310509 | 22 | 4 | 211 | 16.27 | 0.844 | -1 | | 0.47 | 35.4 | -1 | -1 | -1 | 89 | |
| 161 | 10 | 080609 | 140609 | 24 | 4 | 135 | 22.24 | 0.649 | -1 | | 0.64 | 45.3 | -1 | -1 | -1 | 65 | |
| 162 | 10 | 290609 | 050709 | 27 | 4 | 136 | 13.86 | 0.712 | 0.148 | | 0.18 | 30.4 | -1 | -1 | -1 | 113 | |
| 163 | 10 | 060709 | 120709 | 28 | 4 | 167 | 20.3 | 0.63 | -1 | | 1.2 | 43.3 | -1 | -1 | -1 | 290 | |
| 164 | 10 | 200709 | 260709 | 30 | 4 | 142 | 22.94 | 0.952 | -1 | | 0.15 | 46.8 | -1 | -1 | -1 | 3 | |
| 165 | 10 | 030809 | 090809 | 32 | 4 | 261 | 24.14 | 0.681 | -1 | | 1.31 | 51.6 | -1 | -1 | -1 | 202 | |
| 166 | 10 | 170809 | 230809 | 34 | 4 | 358 | 18.75 | 0.811 | -1 | | 1.04 | 41.5 | -1 | -1 | -1 | 211 | |
| 167 | 10 | 310809 | 060909 | 36 | 4 | 358 | 19.91 | 1.122 | 0.004 | | 1.53 | 39.2 | 7 | 18 | 20 | 238 | |
| 168 | 10 | 140909 | 200909 | 38 | 4 | 373 | 20.76 | 1.517 | 0.01 | | 1.31 | 45.9 | 20 | 11 | 13 | 146 | |
| 169 | 10 | 280909 | 041009 | 40 | 4 | 170 | 17.65 | 0.672 | 0.002 | | 1.93 | 42.1 | 17 | 475 | 780 | 314 | |
| 170 | 10 | 121009 | 181009 | 42 | 4 | 252 | 19.43 | 0.648 | 0.004 | | 1.78 | 41.7 | 6 | 2 | 3 | 355 | |
| 171 | 10 | 261009 | 011109 | 44 | 4 | 50 | 16.36 | 0.693 | 0.001 | | 1.09 | 32.8 | 7 | 3 | 8 | 204 | |
| 172 | 10 | 091109 | 151109 | 46 | 4 | 375 | 21.26 | 0.819 | 0.002 | 0.405 | 1.92 | 40.8 | 4 | 3 | 5 | 338 | |
| 173 | 10 | 231109 | 291109 | 48 | 4 | 375 | 20.08 | 0.884 | 0.001 | 0.46 | 2.16 | 38.5 | 3 | 3 | 2 | 392 | |
| 174 | 10 | 071209 | 131209 | 50 | 4 | 31 | | | | | 3.05 | | | | | 498 | |
| 175 | 10 | 291208 | 040109 | 1 | 5 | 118 | 28.59 | 0.883 | 0.002 | | 3.43 | 57.6 | 4 | 6 | -1 | | |
| 176 | 10 | 260109 | 010209 | 5 | 5 | 50 | 26.49 | 0.845 | 0.003 | | 4.03 | 58.8 | 7 | 11 | 7 | | |
| 177 | 10 | 230209 | 010309 | 9 | 5 | 14 | | | | | | | | | | | Low volume |
| 178 | 10 | 300309 | 050409 | 14 | 5 | 120 | 25.24 | 0.742 | 0.005 | | 3.18 | 59.26 | 4 | 13 | 5 | | |
| 179 | 10 | 250509 | 310509 | 22 | 5 | 60 | 24.93 | 0.674 | 0.028 | | 2.86 | 60.3 | 11 | 13 | -1 | | |
| 180 | 10 | 080609 | 140609 | 24 | 5 | 108 | 15.87 | 0.989 | -1 | | 0.63 | 36.7 | -1 | -1 | -1 | | |
| 181 | 10 | 290609 | 050709 | 27 | 5 | 116 | 17 | 0.572 | -1 | | 0.49 | 38.5 | -1 | -1 | -1 | | |
| 182 | 10 | 060709 | 120709 | 28 | 5 | 15 | | | | | | | | | | | Low volume |
| 183 | 10 | 200709 | 260709 | 30 | 5 | 113 | 15.36 | 0.568 | -1 | | 0.45 | 36.5 | -1 | -1 | -1 | | |
| 184 | 10 | 030809 | 090809 | 32 | 5 | 116 | 16.11 | 0.611 | -1 | | 0.65 | 38.1 | -1 | -1 | -1 | | |
| 185 | 10 | 170809 | 230809 | 34 | 5 | 38 | | | | | 0.74 | 35.7 | | | | | |
| 186 | 10 | 310809 | 060909 | 36 | 5 | 31 | 18.18 | 1.59 | 0.011 | | 0.73 | 30.8 | 8 | 21 | 24 | | |
| 187 | 10 | 140909 | 200909 | 38 | 5 | 114 | 17.23 | 1.905 | 0.085 | | 0.71 | 38.9 | 49 | 7 | 3 | | |
| 188 | 10 | 280909 | 041009 | 40 | 5 | 52 | 17.57 | 0.589 | 0.019 | | 0.47 | 38.1 | 5 | 12 | 13 | | |
| 189 | 10 | 121009 | 181009 | 42 | 5 | 78 | 18.58 | 0.512 | 0.007 | | 0.56 | 39.3 | 3 | 3 | 4 | | |
| 190 | 10 | 261009 | 011109 | 44 | 5 | 107 | 22.95 | 0.028 | 0.028 | | 0.61 | 40.6 | 6 | 5 | 5 | | |
| 191 | 10 | 091109 | 151109 | 46 | 5 | 59 | | | | | 0.48 | 37.5 | | | | | |
| 192 | 10 | 231109 | 291109 | 48 | 5 | 105 | 21.68 | | 0.03 | | 0.69 | | | | | | |
| 193 | 10 | 071209 | 131209 | 50 | 5 | 2 | | | | | | | | | | | Low volume |
| 194 | 11 | 190109 | 250109 | 4 | 1 | 0 | | | | | | | | | | | |
| 195 | 11 | 260109 | 010209 | 5 | 1 | 5500 | 26.1 | | 0.003 | | -1 | 49.4 | | | | | |
| 196 | 11 | 160209 | 220209 | 8 | 1 | 1950 | 8.48 | | 0.026 | | -1 | 73.17 | | | | | |

```
  197   11 090309 150309 11  1 3210 28.52             0.007        0.06 46.58
  198   11 130409 190409 16  1 2380 33.87             0.022        0.16  57.6
  199   11 110509 170509 20  1 2758 33.06                -1        0.16  48.2
  200   11 150609 210609 25  1 1900 26.02                -1        0.18  38.5
  201   11 290609 050709 27  1   63                                0.64    21
  202   11 060709 120709 28  1 3570 15.75             0.011        0.22    17
  203   11 200709 260709 30  1 1563 17.28                -1        0.28    18
  204   11 270709 020809 31  1  540 21.89                -1        0.32  18.4
  205   11 030809 090809 32  1   99 19.18              0.75        0.49  17.7
  206   11 100809 160809 33  1    9
  207   11 170809 230809 34  1  564 24.51                -1        0.35  23.8
  208   11 240809 300809 35  1 2520 19.28                -1        0.16  19.6
  209   11 310809 060909 36  1 1280  18.9             0.003        0.19  17.1
  210   11 070909 130909 37  1  700 15.31              0.01        0.19  16.3
  211   11 140909 200909 38  1  820 15.77             0.003        0.19  16.2
  212   11 210909 270909 39  1    0
  213   11 280909 041009 40  1    0
  214   11 051009 111009 41  1    0
  215   11 121009 181009 42  1    0
  216   11 191009 251009 43  1    0
  217   11 261009 011109 44  1 6336 24.79             0.006        0.18  29.2
  218   11 021109 081109 45  1 6100 15.95             0.005        0.11  22.1
  219   11 091109 151109 46  1 5890 14.12             0.012 0.019  0.02    22
  220   11 161109 221109 47  1 3290 19.57             0.002 0.024  0.05  33.7
  221   11 231109 291109 48  1 7480  9.48             0.003 0.029  0.07    14
  222   11 301109 061209 49  1 3705 12.92             0.002 0.017  0.12  27.4
  223   11 071209 131209 50  1 4850  16.3             0.012 0.016  0.06  33.4
  224   11 141209 201209 51  1  623 19.59             0.001 0.016  0.16    39
  225   11 211209 281209 52  1  250                         0.027  0.08  33.6
!LFP
!Sequence, country, plot, latitude, longitude, altitude, traps, collecting_area, date_monitoring_1st, date_monitoring_last,
other_observations
  01  7   16 +530640 -061411 10   6 0.75 121208 240110
  02  7   10 +532104 -092040  3   6 0.75 010109 080210
  03  7   11 +534530 -093314  2   7 0.88 191108 301109
!LFM
!Sequence, plot, date_start, date_end, trap, tree_species, sample, dry_weight, dry_mass, area, C, N, S, P, Ca, Mg, K,
other_observations
   01   16 121208 120109  6 120 11.1 0.011 3.43       53.7  9.74  0.88 0.76  4.66  0.88  1.71
   02   16 120109 090309  6 120 11.1 0.005 3.66       53.8 13.57  1.15 1.07  3.97  1.03  1.91
   03   16 090309 050509  6 120 11.1 0.009 3.33       54.8 12.92  1.13 1.19  4.44  1.15  2.76
   04   16 050509 020609  6 120 11.1 0.005 3.48       54.5 12.80  1.10  1.2  4.40  0.97  3.23
   05   16 020609 290609  6 120 11.1 0.012 3.46       55.8  9.34  0.90 0.71  4.66  0.94  2.02
```

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```
   06   16 290609 270709  6 120 11.1 0.020 3.05       55.3  9.97  0.89 0.71  5.64  0.90  1.52
   07   16 270709 240809  6 120 11.1 0.022 3.17       56.6 10.13  0.88 0.74  5.27  0.90  1.61
   08   16 240809 220909  6 120 11.1 0.013 3.38       54.2  9.95  0.89 0.75  5.11  0.89  2.13
   09   16 220909 191009  6 120 11.1 0.009 3.02       54.7  8.78  0.85 0.63  4.96  0.98  1.63
   10   16 191009 161109  6 120 11.1 0.014 3.29       52.7  8.55  0.80 0.58  4.33  0.96  2.07
   11   16 161109 141209  6 120 11.1 0.015 3.64       53.5 10.41  0.91 0.76  4.93  0.88  1.73
   12   16 141209 240110  6 120 11.1 0.008 3.61       50.4 12.99  1.20 1.00  4.09  0.96  3.04
   13   16 121208 160209  6 120   16 0.004            54.9 10.21  1.11 0.63  2.35  0.63  0.57
   14   16 160209 141209  6 120   16 0.012            55.5 10.20  0.97 0.81  2.98  0.83  1.36
   15   16 141209 240110  6 120   16 0.024            55.7  8.69  0.93 0.51  2.41  0.64  0.54
   16   16 121208 141209  6 120   15 0.002            54.4 12.78       1.41  1.89  1.03  3.16
   17   10 010109 120209  6 120 11.1 0.017 3.41       55.5  8.84  0.85 0.60  8.35  1.33  0.94
   18   10 120209 210609  6 120 11.1 0.021 3.21       41.9 11.74  1.02 0.96  7.53  1.62  2.22
   19   10 210609 190709  6 120 11.1 0.004 2.95       44.6 11.21  0.94 0.89  7.84  1.45  2.04
   20   10 190709 130909  6 120 11.1 0.005 3.21       53.5 11.20  0.94 0.90  6.80  1.36  1.92
   21   10 130909 111009  6 120 11.1 0.007 3.26       46.3  8.23  0.93 0.60 10.39  2.01  1.56
   22   10 111009 081109  6 120 11.1 0.014 3.40       46.9  6.85  0.77 0.45  9.73  1.68  0.84
   23   10 081109 061209  6 120 11.1 0.015 3.51       50.2  7.67  0.80 0.49  9.61  1.46  0.79
   24   10 061209 080210  6 120 11.1 0.010  3.8       51.9  9.42  0.90 0.68  8.70  1.43  2.30
   25   10 010109 120209  6 120   16 0.009            54.3  5.88  0.74 0.38  4.69  1.07  0.50
   26   10 120209 210609  6 120   16 0.020            52.7  3.62  0.48 0.25  2.98  0.76  0.45
   27   10 210609 061209  6 120   16 0.003            55.9  7.64  0.89 0.51  5.31  1.45  0.89
   28   10 051209 080210  6 120   16 0.008            54.9  6.98  0.84 0.44  4.67  1.16  0.63
   29   10 010109 061209  6 120   15 0.003            53.6  9.86  0.90 1.32  4.78  1.62  1.61
   30   11 191108 150109  7 048 11.1 0.007 15.7       51.2 14.09  1.13 0.88 10.93  2.03  2.16
   31   11 310809 210909  7 048 11.1 0.006 16.7       51.2  9.54  0.93 0.54  9.92  1.69  4.40
   32   11 210909 121009  7 048 11.1 0.021 16.7       50.8  9.47  0.91 0.45 10.35  1.59  2.89
   33   11 121009 271009  7 048 11.1 0.047 18.4       50.7  9.31  0.85 0.43 11.34  1.38  1.85
   34   11 271009 101109  7 048 11.1 0.027 20.1       51.0  8.97  0.85 0.42 10.43  1.47  1.52
   35   11 101109 301109  7 048 11.1 0.015 16.6       51.2  9.47  0.86 0.48 11.17  1.79  0.99
   36   11 191108 210909  7 048 11.2 0.010            56.4 19.71  1.27 0.91  9.65  2.06  2.14
   37   11 210909 301109  7 048 11.2 0.007            52.3 10.55  1.15 0.76 10.19  2.62  3.07
   38   11 191108 310809  7 048   16 0.002            53.7  8.00  0.63 0.46  8.10  1.32  1.82
   39   11 310809 301109  7 048   16 0.009            52.2  7.88  0.77 0.41  7.48  1.56  1.28
   40   11 191108 301109  7 048   14 0.003            51.8 11.80  0.99 1.04  3.70  1.10  6.76
   41   11 191108 301109  7 048   19 0.001
!LFO
!Sequence, plot, date_start, date_end, trap, tree_species, sample, Zn, Mn, Fe, Cu, Pb, B, Cd, other_observations
   01   16 121208 120109 -9 120 11.1        20.9 792.63 105.5   3.11  1.62       26.3 57.00
   02   16 120109 090309 -9 120 11.1       26.64 619.08 284.3   5.07  6.60       17.4 104.0
   03   16 090309 050509 -9 120 11.1       23.29 783.41 96.11   3.50  1.33       23.4 59.00
   04   16 050509 020609 -9 120 11.1       24.38 820.25 103.3   4.51  0.91       27.4 62.00
   05   16 020609 290609 -9 120 11.1       19.90 949.62 80.04   2.44  0.65       87.6 34.00
```

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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06 | 16 | 290609 | 270709 | -9 | 120 | 11.1 | 19.51 | 1020.7 | 61.33 | 2.37 | 0.52 | 18.8 | 37.00 |
| 07 | 16 | 270709 | 240809 | -9 | 120 | 11.1 | 19.70 | 1036.6 | 62.55 | 2.46 | 0.56 | 30.4 | 40.00 |
| 08 | 16 | 240809 | 220909 | -9 | 120 | 11.1 | 18.65 | 952.46 | 474.6 | 3.44 | 0.63 | 57.9 | 39.00 |
| 09 | 16 | 220909 | 191009 | -9 | 120 | 11.1 | 2.42 | 1000.9 | 104.9 | 2.42 | 0.79 | 23.3 | 42.00 |
| 10 | 16 | 191009 | 161109 | -9 | 120 | 11.1 | 29.80 | 671.75 | 328.5 | 4.63 | 1.45 | 19.5 | 47.00 |
| 11 | 16 | 161109 | 141209 | -9 | 120 | 11.1 | 24.37 | 711.27 | 136.7 | 3.17 | 2.34 | 17.5 | 59.00 |
| 12 | 16 | 141209 | 240110 | -9 | 120 | 11.1 | 25.41 | 695.63 | 320.9 | 4.32 | 5.08 | 16.6 | 76.00 |
| 13 | 16 | 121208 | 160209 | -9 | 120 | 16 | 37.09 | 204.86 | 410.3 | 7.11 | 18.99 | 7.7 | 166.0 |
| 14 | 16 | 160209 | 141209 | -9 | 120 | 16 | 44.53 | 338.17 | 392.6 | 6.86 | 9.51 | 10.1 | 156.0 |
| 15 | 16 | 141209 | 240110 | -9 | 120 | 16 | 36.43 | 212.64 | 333.2 | 6.35 | 12.87 | 7.6 | 141.0 |
| 16 | 16 | 121208 | 141209 | -9 | 120 | 15 | 37.80 | 509.87 | 161.5 | 7.27 | | | |
| 17 | 16 | 121208 | 240110 | -9 | 120 | 19 | | | | | | | |
| 18 | 10 | 010109 | 120209 | -9 | 120 | 11.1 | 8.26 | 67.73 | 110.9 | 1.86 | 0.57 | 21.2 | 0.00 |
| 19 | 10 | 120209 | 210609 | -9 | 120 | 11.1 | 13.43 | 95.89 | 239.9 | 3.39 | 0.65 | 27.3 | 4.00 |
| 20 | 10 | 210609 | 190709 | -9 | 120 | 11.1 | 13.88 | 88.32 | 639.2 | 3.05 | 0.55 | 23.9 | 4.00 |
| 21 | 10 | 190709 | 130909 | -9 | 120 | 11.1 | 12.60 | 92.36 | 416.5 | 7.84 | 0.49 | 22.4 | 8.00 |
| 22 | 10 | 130909 | 111009 | -9 | 120 | 11.1 | 6.26 | 72.82 | 44.39 | 1.94 | 0.28 | 40.3 | 0.00 |
| 23 | 10 | 111009 | 081109 | -9 | 120 | 11.1 | 5.83 | 81.29 | 90.31 | 1.87 | 0.29 | 34.6 | 0.00 |
| 24 | 10 | 081109 | 061209 | -9 | 120 | 11.1 | 7.62 | 78.11 | 67.28 | 2.11 | 0.38 | 24.0 | 0.00 |
| 25 | 10 | 061209 | 080210 | -9 | 120 | 11.1 | 8.69 | 75.26 | 151.6 | 2.31 | 0.48 | 23.2 | 0.00 |
| 26 | 10 | 010109 | 120209 | -9 | 120 | 16 | 12.59 | 36.81 | 260.8 | 3.22 | 2.93 | 9.0 | 12.00 |
| 27 | 10 | 120209 | 210609 | -9 | 120 | 16 | 11.81 | 29.62 | 374.3 | 2.93 | 1.45 | 5.3 | 8.00 |
| 28 | 10 | 210609 | 061209 | -9 | 120 | 16 | 17.89 | 61.72 | 455.8 | 5.18 | 3.77 | 12.1 | 13.00 |
| 29 | 10 | 051209 | 080210 | -9 | 120 | 16 | 13.97 | 37.78 | 253.0 | 3.46 | 2.83 | 9.8 | 16.00 |
| 30 | 10 | 010109 | 061209 | -9 | 120 | 15 | 21.84 | 62.32 | 232.4 | 4.40 | 1.82 | 17.5 | 32.00 |
| 31 | 10 | 010109 | 061209 | -9 | 120 | 13 | | | | | | | |
| 32 | 10 | 010109 | 061209 | -9 | 120 | 14 | | | | | | | |
| 33 | 10 | 010109 | 061209 | -9 | 120 | 19 | | | | | | | |
| 34 | 11 | 191108 | 150109 | -9 | 048 | 11.1 | 34.54 | 954.18 | 291.7 | 7.58 | 0.59 | 27.0 | 83.00 |
| 35 | 11 | 310809 | 210909 | -9 | 048 | 11.1 | 18.09 | 940.41 | 188.8 | 5.95 | 0.33 | 39.7 | 18.00 |
| 36 | 11 | 210909 | 121009 | -9 | 048 | 11.1 | 21.01 | 963.94 | 294.0 | 5.66 | 0.39 | 41.9 | 12.00 |
| 37 | 11 | 121009 | 271009 | -9 | 048 | 11.1 | 19.17 | 1006.6 | 234.3 | 5.60 | 0.61 | 52.8 | 12.00 |
| 38 | 11 | 271009 | 101109 | -9 | 048 | 11.1 | 19.05 | 1062.1 | 122.2 | 5.44 | 0.41 | 36.9 | 12.00 |
| 39 | 11 | 101109 | 301109 | -9 | 048 | 11.1 | 18.97 | 882.33 | 247.9 | 5.75 | 0.39 | 31.2 | 20.00 |
| 40 | 11 | 191108 | 210909 | -9 | 048 | 11.2 | 148.63 | 1009.7 | 168.8 | 9.49 | 0.61 | 17.5 | 380.0 |
| 41 | 11 | 210909 | 301109 | -9 | 048 | 11.2 | 45.67 | 1107.1 | 126.9 | 6.00 | 0.37 | 37.6 | 74.0 |
| 42 | 11 | 191108 | 310809 | -9 | 048 | 16 | 36.31 | 606.73 | 108.9 | 7.62 | 0.51 | 21.7 | 83.0 |
| 43 | 11 | 310809 | 301109 | -9 | 048 | 16 | 42.66 | 613.27 | 142.8 | 7.84 | 1.23 | 22.9 | 110.0 |
| 44 | 11 | 191108 | 301109 | -9 | 048 | 14 | 18.90 | 488.15 | 55.45 | 7.29 | 0.30 | 19.4 | 30.0 |
| 45 | 11 | 191108 | 301109 | -9 | 048 | 19 | | | | | | | |

```
!LF.LQA
!Sequence, country, plot, date_start, date_end, parameter, pretreatment, determination, quantification_limit, control_chart_mean,
control_chart_std, ring_test_participation, ring_test_number, Laboratory_ID, percentage_within, requalification,
percentage_within_requal, other_observations
  01  7   16 121208 240110  C    1 15.1    0.2   48.6   1 1  12 A69 100 0
  02  7   16 121208 240110  N 3.31 51.3   0.60  100.7   2 1  12 A69 100 0
  03  7   16 121208 240110  S  5.1   31   4.30   1659   2 1  12 A69  50 0
  04  7   16 121208 240110  P  2.3   35   0.06  103.2   4 1  12 A69 100 0
  05  7   16 121208 240110 Ca  2.3   35   0.06   99.9   2 1  12 A69 100 0
  06  7   16 121208 240110 Mg  2.3   35   0.02    100   2 1  12 A69 100 0
  07  7   16 121208 240110  K  2.3   35   0.04   99.6   2 1  12 A69 100 0
  08  7   16 121208 240110 Zn  2.3   35   1.00  100.8   3 1  12 A69 100 0
   9  7   16 121208 240110 Mn  2.3   35   1.00  100.9   3 1  12 A69  75 0
  10  7   16 121208 240110 Fe  2.3   35   1.00  100.5   5 1  12 A69 100 0
  11  7   16 121208 240110 Cu  2.3   35   0.10    127  58 1  12 A69 100 0
  12  7   16 121208 240110 Pb  2.3   35   0.10  135.7  37 1  12 A69 100 0
  13  7   16 121208 240110 Cd  2.3   35  10.00  107.8  20 1  12 A69 100 0
  14  7   16 121208 240110  B  2.3   35   0.50   97.6   7 1  12 A69 100 0
  15  7   10 010109 080210  C    1 15.1    0.2   48.6   1 1  12 A69 100 0
  16  7   10 010109 080210  N 3.31 51.3   0.60  100.7   2 1  12 A69 100 0
  17  7   10 010109 080210  S  5.1   31   4.30   1659   2 1  12 A69  50 0
  18  7   10 010109 080210  P  2.3   35   0.06  103.2   4 1  12 A69 100 0
  19  7   10 010109 080210 Ca  2.3   35   0.06   99.9   2 1  12 A69 100 0
  20  7   10 010109 080210 Mg  2.3   35   0.02    100   2 1  12 A69 100 0
  21  7   10 010109 080210  K  2.3   35   0.04   99.6   2 1  12 A69 100 0
  22  7   10 010109 080210 Zn  2.3   35   1.00  100.8   3 1  12 A69 100 0
  23  7   10 010109 080210 Mn  2.3   35   1.00  100.9   3 1  12 A69  75 0
  24  7   10 010109 080210 Fe  2.3   35   1.00  100.5   5 1  12 A69 100 0
  25  7   10 010109 080210 Cu  2.3   35   0.10    127  58 1  12 A69 100 0
  26  7   10 010109 080210 Pb  2.3   35   0.10  135.7  37 1  12 A69 100 0
  27  7   10 010109 080210 Cd  2.3   35  10.00  107.8  20 1  12 A69 100 0
  28  7   10 010109 080210  B  2.3   35   0.50   97.6   7 1  12 A69 100 0
  29  7   11 191108 301109  C    1 15.1    0.2   48.6   1 1  12 A69 100 0
  30  7   11 191108 301109  N 3.31 51.3   0.60  100.7   2 1  12 A69 100 0
  31  7   11 191108 301109  S  5.1   31   4.30   1659   2 1  12 A69  50 0
  32  7   11 191108 301109  P  2.3   35   0.06  103.2   4 1  12 A69 100 0
  33  7   11 191108 301109 Ca  2.3   35   0.06   99.9   2 1  12 A69 100 0
  34  7   11 191108 301109 Mg  2.3   35   0.02    100   2 1  12 A69 100 0
  35  7   11 191108 301109  K  2.3   35   0.04   99.6   2 1  12 A69 100 0
  36  7   11 191108 301109 Zn  2.3   35   1.00  100.8   3 1  12 A69 100 0
  37  7   11 191108 301109 Mn  2.3   35   1.00  100.9   3 1  12 A69  75 0
  38  7   11 191108 301109 Fe  2.3   35   1.00  100.5   5 1  12 A69 100 0
  39  7   11 191108 301109 Cu  2.3   35   0.10    127  58 1  12 A69 100 0
```

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```
  40  7   11 191108 301109 Pb  2.3   35   0.10  135.7  37 1  12 A69 100 0
  41  7   11 191108 301109 Cd  2.3   35  10.00  107.8  20 1  12 A69 100 0
  42  7   11 191108 301109  B  2.3   35   0.50   97.6   7 1  12 A69 100 0
!PPS
!Sequence, country, plot, latitude, longitude, altitude, compound, sampler, manufacturer, date_monitoring_1st, date_monitoring_last,
measurements, col, altitude_m, elevation_lowest2500, elevation_lowest5000, other_observations
  01 07   16 +530640 -061411 10 NH3 01 04 120109 180110 13 N
  02 07   16 +530640 -061411 10 NH3 02 04 120109 180110 13 N
  03 07   16 +530640 -061411 10 NH3 03 04 120109 180110 13 N
  04 07   16 +530640 -061411 10 NO2 01 04 120109 180110 13 N
  05 07   16 +530640 -061411 10 NO2 02 04 120109 180110 13 N
  06 07   16 +530640 -061411 10 NO2 03 04 120109 180110 13 N
  07 07   16 +530640 -061411 10 SO2 01 04 120109 180110 13 N
  08 07   16 +530640 -061411 10 SO2 02 04 120109 180110 13 N
  09 07   16 +530640 -061411 10 SO2 03 04 120109 180110 13 N
  10 07   16 +530640 -061411 10  O3 01 04 250509 211009  5 N  470  240  232
  11 07   16 +530640 -061411 10  O3 02 04 250509 211009  5 N  470  240  232
  12 07   16 +530640 -061411 10  O3 03 04 250509 211009  5 N  470  240  232
  13 07   11 +534530 -093314  2 NH3 01 04 160109 040110 13 N
  14 07   11 +534530 -093314  2 NH3 02 04 160109 040110 13 N
  15 07   11 +534530 -093314  2 NH3 03 04 160109 040110 13 N
  16 07   11 +534530 -093314  2 NO2 01 04 160109 040110 13 N
  17 07   11 +534530 -093314  2 NO2 02 04 160109 040110 13 N
  18 07   11 +534530 -093314  2 NO2 03 04 160109 040110 13 N
  19 07   11 +534530 -093314  2 SO2 01 04 160109 040110 13 N
  20 07   11 +534530 -093314  2 SO2 02 04 160109 040110 13 N
  21 07   11 +534530 -093314  2 SO2 03 04 160109 040110 13 N
  22 07   10 +532104 -092040  3 NH3 01 04 110109 090110 11 N
  23 07   10 +532104 -092040  3 NH3 02 04 110109 090110 11 N
  24 07   10 +532104 -092040  3 NH3 03 04 110109 090110 11 N
  25 07   10 +532104 -092040  3 NO2 01 04 110109 090110 09 N
  26 07   10 +532104 -092040  3 NO2 02 04 110109 090110 09 N
  27 07   10 +532104 -092040  3 NO2 03 04 110109 090110 09 N
  28 07   10 +532104 -092040  3 SO2 01 04 110109 090110 09 N
  29 07   10 +532104 -092040  3 SO2 02 04 110109 090110 09 N
  30 07   10 +532104 -092040  3 SO2 03 04 110109 090110 09 N
  31 07   10 +532104 -092040  3  O3 01 04 240509 111009  5 N  102   72   70
  32 07   10 +532104 -092040  3  O3 02 04 240509 111009  5 N  102   72   70
  33 07   10 +532104 -092040  3  O3 03 04 240509 111009  5 N  102   72   70
!AQP
!Sequence, country, plot, sampler, date_start, date_end, compound, value, other_observations
   1 07   16 01 120109 260109 NH3     -1 ugNH3/m3. All values are blank corrected
   2 07   16 02 120109 260109 NH3     -1
```

| | | | | | | | | |
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| 3 | 07 | 16 | 03 | 120109 | 260109 | NH3 | -1 | |
| 4 | 07 | 16 | 01 | 260109 | 160209 | NH3 | 2.21 | |
| 5 | 07 | 16 | 02 | 260109 | 160209 | NH3 | 2.14 | |
| 6 | 07 | 16 | 03 | 260109 | 160209 | NH3 | -1 | |
| 7 | 07 | 16 | 01 | 160209 | 230209 | NH3 | 11.17 | |
| 8 | 07 | 16 | 02 | 160209 | 230209 | NH3 | -1 | |
| 9 | 07 | 16 | 03 | 160209 | 230209 | NH3 | -1 | |
| 10 | 07 | 16 | 01 | 230209 | 140409 | NH3 | | No tubes available |
| 11 | 07 | 16 | 02 | 230209 | 140409 | NH3 | | No tubes available |
| 12 | 07 | 16 | 03 | 230209 | 140409 | NH3 | | No tubes available |
| 13 | 07 | 16 | 01 | 150409 | 270409 | NH3 | 9.85 | |
| 14 | 07 | 16 | 02 | 150409 | 270409 | NH3 | 4.66 | |
| 15 | 07 | 16 | 03 | 150409 | 270409 | NH3 | 6.28 | |
| 16 | 07 | 16 | 01 | 270409 | 250509 | NH3 | 1.72 | |
| 17 | 07 | 16 | 02 | 270409 | 250509 | NH3 | 1.96 | |
| 18 | 07 | 16 | 03 | 270409 | 250509 | NH3 | 1.65 | |
| 19 | 07 | 16 | 01 | 250509 | 220609 | NH3 | 2.46 | |
| 20 | 07 | 16 | 02 | 250509 | 220609 | NH3 | 3.45 | |
| 21 | 07 | 16 | 03 | 250509 | 220609 | NH3 | 2.62 | |
| 22 | 07 | 16 | 01 | 220609 | 200709 | NH3 | 0.88 | |
| 23 | 07 | 16 | 02 | 220609 | 200709 | NH3 | 1.72 | |
| 24 | 07 | 16 | 03 | 220609 | 200709 | NH3 | 0.74 | |
| 25 | 07 | 16 | 01 | 200709 | 170809 | NH3 | 0.47 | |
| 26 | 07 | 16 | 02 | 200709 | 170809 | NH3 | 0.26 | |
| 27 | 07 | 16 | 03 | 200709 | 170809 | NH3 | 0.47 | |
| 28 | 07 | 16 | 01 | 170809 | 140909 | NH3 | 0.76 | |
| 29 | 07 | 16 | 02 | 170809 | 140909 | NH3 | 0.42 | |
| 30 | 07 | 16 | 03 | 170809 | 140909 | NH3 | 0.81 | |
| 31 | 07 | 16 | 01 | 140909 | 121009 | NH3 | 1.25 | |
| 32 | 07 | 16 | 02 | 140909 | 121009 | NH3 | 1.59 | |
| 33 | 07 | 16 | 03 | 140909 | 121009 | NH3 | 0.83 | |
| 34 | 07 | 16 | 01 | 121009 | 091109 | NH3 | 0.17 | |
| 35 | 07 | 16 | 02 | 121009 | 091109 | NH3 | 0.29 | |
| 36 | 07 | 16 | 03 | 121009 | 091109 | NH3 | 0.50 | |
| 37 | 07 | 16 | 01 | 091109 | 071209 | NH3 | 1.59 | |
| 38 | 07 | 16 | 02 | 091109 | 071209 | NH3 | 0.71 | |
| 39 | 07 | 16 | 03 | 091109 | 071209 | NH3 | 1.34 | |
| 40 | 07 | 16 | 01 | 071209 | 180110 | NH3 | 0.45 | |
| 41 | 07 | 16 | 02 | 071209 | 180110 | NH3 | 0.94 | |
| 42 | 07 | 16 | 03 | 071209 | 180110 | NH3 | 0.38 | |
| 43 | 07 | 16 | 01 | 120109 | 260109 | NO2 | -1 | ugNO2/m3 |
| 44 | 07 | 16 | 02 | 120109 | 260109 | NO2 | 0.49 | |
| 45 | 07 | 16 | 03 | 120109 | 260109 | NO2 | -1 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 46 | 07 | 16 | 01 | 260109 | 160209 | NO2 | 2.06 | |
| 47 | 07 | 16 | 02 | 260109 | 160209 | NO2 | 3.61 | |
| 48 | 07 | 16 | 03 | 260109 | 160209 | NO2 | 2.12 | |
| 49 | 07 | 16 | 01 | 160209 | 230209 | NO2 | 0.72 | |
| 50 | 07 | 16 | 02 | 160209 | 230209 | NO2 | 0.22 | |
| 51 | 07 | 16 | 03 | 160209 | 230209 | NO2 | 0.91 | |
| 52 | 07 | 16 | 01 | 230209 | 140409 | NO2 | | No tubes available |
| 53 | 07 | 16 | 02 | 230209 | 140409 | NO2 | | No tubes available |
| 54 | 07 | 16 | 03 | 230209 | 140409 | NO2 | | No tubes available |
| 55 | 07 | 16 | 01 | 150409 | 270409 | NO2 | 5.59 | |
| 56 | 07 | 16 | 02 | 150409 | 270409 | NO2 | 4.07 | |
| 57 | 07 | 16 | 03 | 150409 | 270409 | NO2 | 5.67 | |
| 58 | 07 | 16 | 01 | 270409 | 250509 | NO2 | 2.69 | |
| 59 | 07 | 16 | 02 | 270409 | 250509 | NO2 | 1.70 | |
| 60 | 07 | 16 | 03 | 270409 | 250509 | NO2 | 1.52 | |
| 61 | 07 | 16 | 01 | 250509 | 220609 | NO2 | 1.02 | |
| 62 | 07 | 16 | 02 | 250509 | 220609 | NO2 | 1.02 | |
| 63 | 07 | 16 | 03 | 250509 | 220609 | NO2 | 0.97 | |
| 64 | 07 | 16 | 01 | 220609 | 200709 | NO2 | 1.54 | |
| 65 | 07 | 16 | 02 | 220609 | 200709 | NO2 | 0.95 | |
| 66 | 07 | 16 | 03 | 220609 | 200709 | NO2 | 1.64 | |
| 67 | 07 | 16 | 01 | 200709 | 170809 | NO2 | 1.79 | |
| 68 | 07 | 16 | 02 | 200709 | 170809 | NO2 | 1.47 | |
| 69 | 07 | 16 | 03 | 200709 | 170809 | NO2 | 1.15 | |
| 70 | 07 | 16 | 01 | 170809 | 140909 | NO2 | 3.06 | |
| 71 | 07 | 16 | 02 | 170809 | 140909 | NO2 | 3.28 | |
| 72 | 07 | 16 | 03 | 170809 | 140909 | NO2 | 1.57 | |
| 73 | 07 | 16 | 01 | 140909 | 121009 | NO2 | -1 | Suspected contamination results queried |
| 74 | 07 | 16 | 02 | 140909 | 121009 | NO2 | -1 | Suspected contamination results queried |
| 75 | 07 | 16 | 03 | 140909 | 121009 | NO2 | -1 | Suspected contamination results queried |
| 76 | 07 | 16 | 01 | 121009 | 091109 | NO2 | -1 | Suspected contamination results queried |
| 77 | 07 | 16 | 02 | 121009 | 091109 | NO2 | -1 | Suspected contamination results queried |
| 78 | 07 | 16 | 03 | 121009 | 091109 | NO2 | -1 | Suspected contamination results queried |
| 79 | 07 | 16 | 01 | 091109 | 071209 | NO2 | -1 | Suspected contamination results queried |
| 80 | 07 | 16 | 02 | 091109 | 071209 | NO2 | -1 | Suspected contamination results queried |
| 81 | 07 | 16 | 03 | 091109 | 071209 | NO2 | -1 | Suspected contamination results queried |
| 82 | 07 | 16 | 01 | 071209 | 180110 | NO2 | 2.36 | |
| 83 | 07 | 16 | 02 | 071209 | 180110 | NO2 | 2.08 | |
| 84 | 07 | 16 | 03 | 071209 | 180110 | NO2 | 2.18 | |
| 85 | 07 | 16 | 01 | 120109 | 260109 | SO2 | -1 | |
| 86 | 07 | 16 | 02 | 120109 | 260109 | SO2 | 0.61 | ugSO2/m3 |
| 87 | 07 | 16 | 03 | 120109 | 260109 | SO2 | -1 | |
| 88 | 07 | 16 | 01 | 260109 | 160209 | SO2 | .4 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 89 | 07 | 16 | 02 | 260109 | 160209 | SO2 | -1 | |
| 90 | 07 | 16 | 03 | 260109 | 160209 | SO2 | -1 | |
| 91 | 07 | 16 | 01 | 160209 | 230209 | SO2 | -1 | |
| 92 | 07 | 16 | 02 | 160209 | 230209 | SO2 | -1 | |
| 93 | 07 | 16 | 03 | 160209 | 230209 | SO2 | -1 | |
| 94 | 07 | 16 | 01 | 230209 | 140409 | SO2 | | No tubes available |
| 95 | 07 | 16 | 02 | 230209 | 140409 | SO2 | | No tubes available |
| 96 | 07 | 16 | 03 | 230209 | 140409 | SO2 | | No tubes available |
| 97 | 07 | 16 | 01 | 150409 | 270409 | SO2 | 3.89 | |
| 98 | 07 | 16 | 02 | 150409 | 270409 | SO2 | 1.56 | |
| 99 | 07 | 16 | 03 | 150409 | 270409 | SO2 | 0.82 | |
| 100 | 07 | 16 | 01 | 270409 | 250509 | SO2 | -1 | |
| 101 | 07 | 16 | 02 | 270409 | 250509 | SO2 | 0.27 | |
| 102 | 07 | 16 | 03 | 270409 | 250509 | SO2 | -1 | |
| 103 | 07 | 16 | 01 | 250509 | 220609 | SO2 | 0.73 | |
| 104 | 07 | 16 | 02 | 250509 | 220609 | SO2 | 2.00 | |
| 105 | 07 | 16 | 03 | 250509 | 220609 | SO2 | 0.60 | |
| 106 | 07 | 16 | 01 | 220609 | 200709 | SO2 | 0.97 | |
| 107 | 07 | 16 | 02 | 220609 | 200709 | SO2 | 0.74 | |
| 108 | 07 | 16 | 03 | 220609 | 200709 | SO2 | 1.15 | |
| 109 | 07 | 16 | 01 | 200709 | 170809 | SO2 | 1.06 | |
| 110 | 07 | 16 | 02 | 200709 | 170809 | SO2 | 0.69 | |
| 111 | 07 | 16 | 03 | 200709 | 170809 | SO2 | 1.26 | |
| 112 | 07 | 16 | 01 | 170809 | 140909 | SO2 | 1.44 | |
| 113 | 07 | 16 | 02 | 170809 | 140909 | SO2 | 1.06 | |
| 114 | 07 | 16 | 03 | 170809 | 140909 | SO2 | 1.08 | |
| 115 | 07 | 16 | 01 | 140909 | 121009 | SO2 | 6.85 | |
| 116 | 07 | 16 | 02 | 140909 | 121009 | SO2 | 7.01 | |
| 117 | 07 | 16 | 03 | 140909 | 121009 | SO2 | 7.37 | |
| 118 | 07 | 16 | 01 | 121009 | 091109 | SO2 | 7.46 | |
| 119 | 07 | 16 | 02 | 121009 | 091109 | SO2 | 8.15 | |
| 120 | 07 | 16 | 03 | 121009 | 091109 | SO2 | 7.04 | |
| 121 | 07 | 16 | 01 | 091109 | 071209 | SO2 | 7.06 | |
| 122 | 07 | 16 | 02 | 091109 | 071209 | SO2 | 12.67 | |
| 123 | 07 | 16 | 03 | 091109 | 071209 | SO2 | 14.75 | |
| 124 | 07 | 16 | 01 | 071209 | 180110 | SO2 | -1 | |
| 125 | 07 | 16 | 02 | 071209 | 180110 | SO2 | 0.23 | |
| 126 | 07 | 16 | 03 | 071209 | 180110 | SO2 | 1.23 | |
| 127 | 07 | 16 | 01 | 250509 | 080609 | O3 | 57.74 | ppb |
| 128 | 07 | 16 | 02 | 250509 | 080609 | O3 | 52.57 | |
| 129 | 07 | 16 | 03 | 250509 | 080609 | O3 | 54.29 | |
| 130 | 07 | 16 | 01 | 080609 | 220609 | O3 | 41.30 | |
| 131 | 07 | 16 | 02 | 080609 | 220609 | O3 | 43.88 | |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 132 | 07 | 16 | 03 | 080609 | 220609 | O3 | 37.86 | |
| 133 | 07 | 16 | 01 | 220609 | 060709 | O3 | 37.00 | |
| 134 | 07 | 16 | 02 | 220609 | 060709 | O3 | 37.86 | |
| 135 | 07 | 16 | 03 | 220609 | 060709 | O3 | 37.00 | |
| 136 | 07 | 16 | 01 | 060709 | 200709 | O3 | 30.12 | |
| 137 | 07 | 16 | 02 | 060709 | 200709 | O3 | 31.84 | |
| 138 | 07 | 16 | 03 | 060709 | 200709 | O3 | 31.84 | |
| 139 | 07 | 16 | 01 | 200709 | 030809 | O3 | 37.00 | |
| 140 | 07 | 16 | 02 | 200709 | 030809 | O3 | 36.14 | |
| 141 | 07 | 16 | 03 | 200709 | 030809 | O3 | 33.56 | |
| 142 | 07 | 11 | 01 | 160109 | 290109 | NH3 | -1 | ugNH3/m3 |
| 143 | 07 | 11 | 02 | 160109 | 290109 | NH3 | -1 | |
| 144 | 07 | 11 | 03 | 160109 | 290109 | NH3 | 4.27 | |
| 145 | 07 | 11 | 01 | 290109 | 180209 | NH3 | 4.75 | |
| 146 | 07 | 11 | 02 | 290109 | 180209 | NH3 | 12.55 | |
| 147 | 07 | 11 | 03 | 290109 | 180209 | NH3 | 2.33 | |
| 148 | 07 | 11 | 01 | 180209 | 050309 | NH3 | 5.58 | |
| 149 | 07 | 11 | 02 | 180209 | 050309 | NH3 | 2.84 | |
| 150 | 07 | 11 | 03 | 180209 | 050309 | NH3 | 1.87 | |
| 151 | 07 | 11 | 01 | 050309 | 170409 | NH3 | | No tubes available |
| 152 | 07 | 11 | 02 | 050309 | 170409 | NH3 | | No tubes available |
| 153 | 07 | 11 | 03 | 050309 | 170409 | NH3 | | No tubes available |
| 154 | 07 | 11 | 01 | 170409 | 290409 | NH3 | 8.93 | |
| 155 | 07 | 11 | 02 | 170409 | 290409 | NH3 | 9.50 | |
| 156 | 07 | 11 | 03 | 170409 | 290409 | NH3 | 4.00 | |
| 157 | 07 | 11 | 01 | 290409 | 280509 | NH3 | 4.01 | |
| 158 | 07 | 11 | 02 | 290409 | 280509 | NH3 | 4.06 | |
| 159 | 07 | 11 | 03 | 290409 | 280509 | NH3 | 2.98 | |
| 160 | 07 | 11 | 01 | 280509 | 220609 | NH3 | 3.01 | |
| 161 | 07 | 11 | 02 | 280509 | 220609 | NH3 | 5.27 | |
| 162 | 07 | 11 | 03 | 280509 | 220609 | NH3 | 2.04 | |
| 163 | 07 | 11 | 01 | 220609 | 200709 | NH3 | 2.95 | |
| 164 | 07 | 11 | 02 | 220609 | 200709 | NH3 | 2.55 | |
| 165 | 07 | 11 | 03 | 220609 | 200709 | NH3 | 2.93 | |
| 166 | 07 | 11 | 01 | 200709 | 170809 | NH3 | 1.80 | |
| 167 | 07 | 11 | 02 | 200709 | 170809 | NH3 | 1.49 | |
| 168 | 07 | 11 | 03 | 200709 | 170809 | NH3 | 1.44 | |
| 169 | 07 | 11 | 01 | 170809 | 140909 | NH3 | 1.80 | |
| 170 | 07 | 11 | 02 | 170809 | 140909 | NH3 | 1.46 | |
| 171 | 07 | 11 | 03 | 170809 | 140909 | NH3 | 1.35 | |
| 172 | 07 | 11 | 01 | 140909 | 121009 | NH3 | 1.80 | |
| 173 | 07 | 11 | 02 | 140909 | 121009 | NH3 | 1.90 | |
| 174 | 07 | 11 | 03 | 140909 | 121009 | NH3 | 2.61 | |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 175 | 07 | 11 | 01 | 121009 | 091109 | NH3 | 0.93 | |
| 176 | 07 | 11 | 02 | 121009 | 091109 | NH3 | 1.13 | |
| 177 | 07 | 11 | 03 | 121009 | 091109 | NH3 | 0.95 | |
| 178 | 07 | 11 | 01 | 091109 | 071209 | NH3 | 2.04 | |
| 179 | 07 | 11 | 02 | 091109 | 071209 | NH3 | 1.02 | |
| 180 | 07 | 11 | 03 | 091109 | 071209 | NH3 | 1.72 | |
| 181 | 07 | 11 | 01 | 071209 | 040110 | NH3 | 1.96 | |
| 182 | 07 | 11 | 02 | 071209 | 040110 | NH3 | 0.95 | |
| 183 | 07 | 11 | 03 | 071209 | 040110 | NH3 | 1.54 | |
| 184 | 07 | 11 | 01 | 160109 | 290109 | NO2 | -1 | ugNO2/m3 |
| 185 | 07 | 11 | 02 | 160109 | 290109 | NO2 | -1 | |
| 186 | 07 | 11 | 03 | 160109 | 290109 | NO2 | -1 | |
| 187 | 07 | 11 | 01 | 290109 | 180209 | NO2 | .63 | |
| 188 | 07 | 11 | 02 | 290109 | 180209 | NO2 | 1.90 | |
| 189 | 07 | 11 | 03 | 290109 | 180209 | NO2 | 0.87 | |
| 190 | 07 | 11 | 01 | 180209 | 050309 | NO2 | 0.81 | |
| 191 | 07 | 11 | 02 | 180209 | 050309 | NO2 | 1.61 | |
| 192 | 07 | 11 | 03 | 180209 | 050309 | NO2 | 1.37 | |
| 193 | 07 | 11 | 01 | 050309 | 170409 | NO2 | | No tubes available |
| 194 | 07 | 11 | 02 | 050309 | 170409 | NO2 | | No tubes available |
| 195 | 07 | 11 | 03 | 050309 | 170409 | NO2 | | No tubes available |
| 196 | 07 | 11 | 01 | 170409 | 290409 | NO2 | -1 | |
| 197 | 07 | 11 | 02 | 170409 | 290409 | NO2 | 1.14 | |
| 198 | 07 | 11 | 03 | 170409 | 290409 | NO2 | -1 | |
| 199 | 07 | 11 | 01 | 290409 | 280509 | NO2 | 0.69 | |
| 200 | 07 | 11 | 02 | 290409 | 280509 | NO2 | 1.22 | |
| 201 | 07 | 11 | 03 | 290409 | 280509 | NO2 | 0.50 | |
| 202 | 07 | 11 | 01 | 280509 | 220609 | NO2 | 2.21 | |
| 203 | 07 | 11 | 02 | 280509 | 220609 | NO2 | 2.15 | |
| 204 | 07 | 11 | 03 | 280509 | 220609 | NO2 | 4.95 | |
| 205 | 07 | 11 | 01 | 220609 | 200709 | NO2 | 2.55 | |
| 206 | 07 | 11 | 02 | 220609 | 200709 | NO2 | 3.22 | |
| 207 | 07 | 11 | 03 | 220609 | 200709 | NO2 | 3.65 | |
| 208 | 07 | 11 | 01 | 200709 | 170809 | NO2 | 1.41 | |
| 209 | 07 | 11 | 02 | 200709 | 170809 | NO2 | 0.45 | |
| 210 | 07 | 11 | 03 | 200709 | 170809 | NO2 | 0.63 | |
| 211 | 07 | 11 | 01 | 170809 | 140909 | NO2 | 1.47 | |
| 212 | 07 | 11 | 02 | 170809 | 140909 | NO2 | 1.38 | |
| 213 | 07 | 11 | 03 | 170809 | 140909 | NO2 | 1.26 | |
| 214 | 07 | 11 | 01 | 140909 | 121009 | NO2 | -1 | Suspected contamination results queried |
| 215 | 07 | 11 | 02 | 140909 | 121009 | NO2 | -1 | Suspected contamination results queried |
| 216 | 07 | 11 | 03 | 140909 | 121009 | NO2 | -1 | Suspected contamination results queried |
| 217 | 07 | 11 | 01 | 121009 | 091109 | NO2 | -1 | Suspected contamination results queried |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 218 | 07 | 11 | 02 | 121009 | 091109 | NO2 | -1 | Suspected contamination results queried |
| 219 | 07 | 11 | 03 | 121009 | 091109 | NO2 | -1 | Suspected contamination results queried |
| 220 | 07 | 11 | 01 | 091109 | 071209 | NO2 | -1 | Suspected contamination results queried |
| 221 | 07 | 11 | 02 | 091109 | 071209 | NO2 | -1 | Suspected contamination results queried |
| 222 | 07 | 11 | 03 | 091109 | 071209 | NO2 | -1 | Suspected contamination results queried |
| 223 | 07 | 11 | 01 | 071209 | 040110 | NO2 | 1.65 | |
| 224 | 07 | 11 | 02 | 071209 | 040110 | NO2 | 1.37 | |
| 225 | 07 | 11 | 03 | 071209 | 040110 | NO2 | 0.70 | |
| 226 | 07 | 11 | 01 | 160109 | 290109 | SO2 | 4.15 | ugSO2/m3 |
| 227 | 07 | 11 | 02 | 160109 | 290109 | SO2 | 4.86 | |
| 228 | 07 | 11 | 03 | 160109 | 290109 | SO2 | 1.83 | |
| 229 | 07 | 11 | 01 | 290109 | 180209 | SO2 | 0.74 | |
| 230 | 07 | 11 | 02 | 290109 | 180209 | SO2 | -1 | |
| 231 | 07 | 11 | 03 | 290109 | 180209 | SO2 | 5.21 | |
| 232 | 07 | 11 | 01 | 180209 | 050309 | SO2 | 1.92 | |
| 233 | 07 | 11 | 02 | 180209 | 050309 | SO2 | 2.88 | |
| 234 | 07 | 11 | 03 | 180209 | 050309 | SO2 | 4.36 | |
| 235 | 07 | 11 | 01 | 050309 | 170409 | SO2 | | No tubes available |
| 236 | 07 | 11 | 02 | 050309 | 170409 | SO2 | | No tubes available |
| 237 | 07 | 11 | 03 | 050309 | 170409 | SO2 | | No tubes available |
| 238 | 07 | 11 | 01 | 170409 | 290409 | SO2 | 9.82 | |
| 239 | 07 | 11 | 02 | 170409 | 290409 | SO2 | 4.08 | |
| 240 | 07 | 11 | 03 | 170409 | 290409 | SO2 | 4.74 | |
| 241 | 07 | 11 | 01 | 290409 | 280509 | SO2 | 0.63 | |
| 242 | 07 | 11 | 02 | 290409 | 280509 | SO2 | -1 | |
| 243 | 07 | 11 | 03 | 290409 | 280509 | SO2 | 2.44 | |
| 244 | 07 | 11 | 01 | 280509 | 220609 | SO2 | 1.29 | |
| 245 | 07 | 11 | 02 | 280509 | 220609 | SO2 | 1.30 | |
| 246 | 07 | 11 | 03 | 280509 | 220609 | SO2 | 1.19 | |
| 247 | 07 | 11 | 01 | 220609 | 200709 | SO2 | 1.06 | |
| 248 | 07 | 11 | 02 | 220609 | 200709 | SO2 | 1.02 | |
| 249 | 07 | 11 | 03 | 220609 | 200709 | SO2 | 1.08 | |
| 250 | 07 | 11 | 01 | 200709 | 170809 | SO2 | 1.46 | |
| 251 | 07 | 11 | 02 | 200709 | 170809 | SO2 | 1.00 | |
| 252 | 07 | 11 | 03 | 200709 | 170809 | SO2 | 1.29 | |
| 253 | 07 | 11 | 01 | 170809 | 140909 | SO2 | 1.80 | |
| 254 | 07 | 11 | 02 | 170809 | 140909 | SO2 | 1.23 | |
| 255 | 07 | 11 | 03 | 170809 | 140909 | SO2 | 2.12 | |
| 256 | 07 | 11 | 01 | 140909 | 121009 | SO2 | 7.41 | |
| 257 | 07 | 11 | 02 | 140909 | 121009 | SO2 | 6.79 | |
| 258 | 07 | 11 | 03 | 140909 | 121009 | SO2 | 7.34 | |
| 259 | 07 | 11 | 01 | 121009 | 091109 | SO2 | 7.23 | |
| 260 | 07 | 11 | 02 | 121009 | 091109 | SO2 | 7.81 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 261 | 07 | 11 | 03 | 121009 | 091109 | SO2 | 7.48 | |
| 262 | 07 | 11 | 01 | 091109 | 071209 | SO2 | 7.38 | |
| 263 | 07 | 11 | 02 | 091109 | 071209 | SO2 | 7.25 | |
| 264 | 07 | 11 | 03 | 091109 | 071209 | SO2 | 7.52 | |
| 265 | 07 | 11 | 01 | 071209 | 040110 | SO2 | 0.70 | |
| 266 | 07 | 11 | 02 | 071209 | 040110 | SO2 | 0.56 | |
| 267 | 07 | 11 | 03 | 071209 | 040110 | SO2 | 0.34 | |
| 268 | 07 | 10 | 01 | 110109 | 250109 | NH3 | 34.32 | ugNH3/m3 |
| 269 | 07 | 10 | 02 | 110109 | 250109 | NH3 | -1 | |
| 270 | 07 | 10 | 03 | 110109 | 250109 | NH3 | 4.65 | |
| 271 | 07 | 10 | 01 | 250109 | 150209 | NH3 | -1 | |
| 272 | 07 | 10 | 02 | 250109 | 150209 | NH3 | 1.01 | |
| 273 | 07 | 10 | 03 | 250109 | 150209 | NH3 | -1 | |
| 274 | 07 | 10 | 01 | 150209 | 240509 | NH3 | | No tubes available |
| 275 | 07 | 10 | 02 | 150209 | 240509 | NH3 | | No tubes available |
| 276 | 07 | 10 | 03 | 150209 | 240509 | NH3 | | No tubes available |
| 277 | 07 | 10 | 01 | 240509 | 310509 | NH3 | 4.04 | |
| 278 | 07 | 10 | 02 | 240509 | 310509 | NH3 | 1.13 | |
| 279 | 07 | 10 | 03 | 240509 | 310509 | NH3 | 2.88 | |
| 280 | 07 | 10 | 01 | 310509 | 210609 | NH3 | 6.16 | |
| 281 | 07 | 10 | 02 | 310509 | 210609 | NH3 | 3.80 | |
| 282 | 07 | 10 | 03 | 310509 | 210609 | NH3 | 2.48 | |
| 283 | 07 | 10 | 01 | 210609 | 190709 | NH3 | 2.86 | |
| 284 | 07 | 10 | 02 | 210609 | 190709 | NH3 | 2.93 | |
| 285 | 07 | 10 | 03 | 210609 | 190709 | NH3 | 3.71 | |
| 286 | 07 | 10 | 01 | 190709 | 150809 | NH3 | 1.53 | |
| 287 | 07 | 10 | 02 | 190709 | 150809 | NH3 | 2.05 | |
| 288 | 07 | 10 | 03 | 190709 | 150809 | NH3 | 1.12 | |
| 289 | 07 | 10 | 01 | 150809 | 130909 | NH3 | 0.71 | |
| 290 | 07 | 10 | 02 | 150809 | 130909 | NH3 | 1.43 | |
| 291 | 07 | 10 | 03 | 150809 | 130909 | NH3 | 1.47 | |
| 292 | 07 | 10 | 01 | 130909 | 111009 | NH3 | 4.09 | |
| 293 | 07 | 10 | 02 | 130909 | 111009 | NH3 | 4.16 | |
| 294 | 07 | 10 | 03 | 130909 | 111009 | NH3 | 5.77 | |
| 295 | 07 | 10 | 01 | 111009 | 081109 | NH3 | 0.90 | |
| 296 | 07 | 10 | 02 | 111009 | 081109 | NH3 | 0.71 | |
| 297 | 07 | 10 | 03 | 111009 | 081109 | NH3 | 0.73 | |
| 298 | 07 | 10 | 01 | 081109 | 061209 | NH3 | 7.75 | |
| 299 | 07 | 10 | 02 | 081109 | 061209 | NH3 | 0.54 | |
| 300 | 07 | 10 | 03 | 081109 | 061209 | NH3 | 0.54 | |
| 301 | 07 | 10 | 01 | 061209 | 090110 | NH3 | 0.31 | |
| 302 | 07 | 10 | 02 | 061209 | 090110 | NH3 | 0.21 | |
| 303 | 07 | 10 | 03 | 061209 | 090110 | NH3 | 0.78 | |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 304 | 07 | 10 | 01 | 110109 | 250109 | NO2 | 1.20 | |
| 305 | 07 | 10 | 02 | 110109 | 250109 | NO2 | -1 | |
| 306 | 07 | 10 | 03 | 110109 | 250109 | NO2 | -1 | |
| 307 | 07 | 10 | 01 | 250109 | 150209 | NO2 | 1.81 | |
| 308 | 07 | 10 | 02 | 250109 | 150209 | NO2 | 1.59 | |
| 309 | 07 | 10 | 03 | 250109 | 150209 | NO2 | 1.24 | |
| 310 | 07 | 10 | 01 | 150209 | 210609 | NO2 | | No tubes available |
| 311 | 07 | 10 | 02 | 150209 | 210609 | NO2 | | No tubes available |
| 312 | 07 | 10 | 03 | 150209 | 210609 | NO2 | | No tubes available |
| 313 | 07 | 10 | 01 | 210609 | 190709 | NO2 | 1.28 | |
| 314 | 07 | 10 | 02 | 210609 | 190709 | NO2 | 1.56 | |
| 315 | 07 | 10 | 03 | 210609 | 190709 | NO2 | 0.97 | |
| 316 | 07 | 10 | 01 | 190709 | 150809 | NO2 | 0.35 | |
| 317 | 07 | 10 | 02 | 190709 | 150809 | NO2 | 0.29 | |
| 318 | 07 | 10 | 03 | 190709 | 150809 | NO2 | -1 | |
| 319 | 07 | 10 | 01 | 150809 | 130909 | NO2 | 4.56 | |
| 320 | 07 | 10 | 02 | 150809 | 130909 | NO2 | 2.92 | |
| 321 | 07 | 10 | 03 | 150809 | 130909 | NO2 | 3.13 | |
| 322 | 07 | 10 | 01 | 130909 | 111009 | NO2 | -1 | Suspected contamination results queried |
| 323 | 07 | 10 | 02 | 130909 | 111009 | NO2 | -1 | Suspected contamination results queried |
| 324 | 07 | 10 | 03 | 130909 | 111009 | NO2 | -1 | Suspected contamination results queried |
| 325 | 07 | 10 | 01 | 111009 | 081109 | NO2 | -1 | Suspected contamination results queried |
| 326 | 07 | 10 | 02 | 111009 | 081109 | NO2 | -1 | Suspected contamination results queried |
| 327 | 07 | 10 | 03 | 111009 | 081109 | NO2 | -1 | Suspected contamination results queried |
| 328 | 07 | 10 | 01 | 081109 | 061209 | NO2 | -1 | Suspected contamination results queried |
| 329 | 07 | 10 | 02 | 081109 | 061209 | NO2 | -1 | Suspected contamination results queried |
| 330 | 07 | 10 | 03 | 081109 | 061209 | NO2 | -1 | Suspected contamination results queried |
| 331 | 07 | 10 | 01 | 061209 | 090110 | NO2 | 0.84 | |
| 332 | 07 | 10 | 02 | 061209 | 090110 | NO2 | 0.71 | |
| 333 | 07 | 10 | 03 | 061209 | 090110 | NO2 | -1 | |
| 334 | 07 | 10 | 01 | 110109 | 250109 | SO2 | -1 | ugSO2/m3 |
| 335 | 07 | 10 | 02 | 110109 | 250109 | SO2 | 0.67 | |
| 336 | 07 | 10 | 03 | 110109 | 250109 | SO2 | 4.38 | |
| 337 | 07 | 10 | 01 | 250109 | 150209 | SO2 | 0.74 | |
| 338 | 07 | 10 | 02 | 250109 | 150209 | SO2 | 2.69 | |
| 339 | 07 | 10 | 03 | 250109 | 150209 | SO2 | 1.61 | |
| 340 | 07 | 10 | 01 | 150209 | 210609 | SO2 | | No tubes available |
| 341 | 07 | 10 | 02 | 150209 | 210609 | SO2 | | No tubes available |
| 342 | 07 | 10 | 03 | 150209 | 210609 | SO2 | | No tubes available |
| 343 | 07 | 10 | 01 | 210609 | 190709 | SO2 | 0.93 | |
| 344 | 07 | 10 | 02 | 210609 | 190709 | SO2 | 0.80 | |
| 345 | 07 | 10 | 03 | 210609 | 190709 | SO2 | 0.92 | |
| 346 | 07 | 10 | 01 | 190709 | 150809 | SO2 | 1.76 | |

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 347 07   10 02 190709 150809 SO2   1.02
 348 07   10 03 190709 150809 SO2   0.61
 349 07   10 01 150809 130909 SO2   1.40
 350 07   10 02 150809 130909 SO2   1.52
 351 07   10 03 150809 130909 SO2   1.62
 352 07   10 01 130909 111009 SO2   8.10
 353 07   10 02 130909 111009 SO2   7.10
 354 07   10 03 130909 111009 SO2  10.79
 355 07   10 01 111009 081109 SO2   6.81
 356 07   10 02 111009 081109 SO2   7.38
 357 07   10 03 111009 081109 SO2   7.19
 358 07   10 01 081109 061209 SO2   9.07
 359 07   10 02 081109 061209 SO2   7.54
 360 07   10 03 081109 061209 SO2   7.06
 361 07   10 01 061209 090110 SO2     -1
 362 07   10 02 061209 090110 SO2     -1
 363 07   10 03 061209 090110 SO2   0.73
 364 07   10 01 240509 070609  O3  54.37 ppb
 365 07   10 02 240509 070609  O3  48.33
 366 07   10 03 240509 070609  O3  50.05
 367 07   10 01 070609 210609  O3  46.91
 368 07   10 02 070609 210609  O3  44.35
 369 07   10 03 070609 210609  O3  42.64
 370 07   10 01 210609 050709  O3  34.57
 371 07   10 02 210609 050709  O3  33.71
 372 07   10 03 210609 050709  O3  38.89
 373 07   10 01 050709 190709  O3  33.39
 374 07   10 02 050709 190709  O3  30.82
 375 07   10 03 050709 190709  O3  31.68
 376 07   10 01 190709 030809  O3  31.32
 377 07   10 02 190709 030809  O3  39.35
 378 07   10 03 190709 030809  O3  34.53
!AQB
!Sequence, country, plot, sampler, date_start, date_end, compound, value, other_observations
  01 07   16 01 120109 230209 NH3   2.45 Coillte lab blank. ugNH3/m3
  02 07   16 01 150409 250509 NH3   3.66 Coillte lab blank
  03 07   16 01 250509 140909 NH3   2.82 Gradko lab blank
  04 07   16 01 140909 071209 NH3   3.01 Gradko lab blank
  05 07   16 01 071209 180110 NH3   3.18 Coillte lab blank
  06 07   16 01 120109 230209 NO2   2.13 Coillte lab blank. ugNO2/m3
  07 07   16 01 150409 250509 NO2   0.40 Gradko lab blank
  08 07   16 01 250509 140909 NO2   0.43 Coillte lab blank
  09 07   16 01 140909 071209 NO2   0.02 Coillte lab blank
```

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  10 07   16 01 071209 180110 NO2   1.02 Coillte lab blank
  11 07   16 01 120109 230209 SO2   2.03 Coillte lab blank. Ug/SO2/m3
  12 07   16 01 150409 250509 SO2    9.6 Gradko lab blank
  13 07   16 01 250909 140909 SO2   0.89 Coillte lab blank
  14 07   16 01 140909 071209 SO2   3.21 Gradko lab blank
  15 07   16 01 071209 180110 SO2   1.02 Coillte lab blank
  16 07   16 01 250509 030809  O3   5.19 Coillte lab blank. ppb
  17 07   16 01 240809 121009  O3   3.96 Coillte lab blank
  18 07   11 01 160109 050309 NH3   2.45 Coillte lab blank. ugNH3/m3
  19 07   11 01 170409 280509 NH3   3.66 Coillte lab blank
  20 07   11 01 280509 140909 NH3   2.82 Gradko lab blank
  21 07   11 01 140909 071209 NH3   3.01 Gradko lab blank
  22 07   11 01 071209 040110 NH3   3.18 Coillte lab blank
  23 07   11 01 160109 050309 NO2   2.13 Coillte lab blank. ugNO2/m3
  24 07   11 01 170409 280509 NO2   0.40 Gradko lab blank
  25 07   11 01 280509 140909 NO2   0.43 Coillte lab blank
  26 07   11 01 140909 071209 NO2   0.02 Coillte lab blank
  27 07   11 01 071209 040110 NO2   1.02 Coillte lab blank
  28 07   11 01 160109 050309 SO2   2.03 Coillte lab blank. Ug/SO2/m3
  29 07   11 01 170409 280509 SO2    9.6 Gradko lab blank
  30 07   11 01 280509 140909 SO2   0.89 Coillte lab blank
  31 07   11 01 140909 071209 SO2   3.21 Gradko lab blank
  32 07   11 01 071209 040110 SO2   1.02 Coillte lab blank
  33 07   10 01 110109 250209 NH3   2.45 Coillte lab blank. ugNH3/m3
  34 07   10 01 240509 210609 NH3   3.24 Coillte lab blank
  35 07   10 01 130909 061209 NH3   3.01 Gradko lab blank
  36 07   10 01 061209 090110 NH3   3.18 Coillte lab blank
  37 07   10 01 110109 250209 NO2   2.13 Coillte lab blank. ugNO2/m3
  38 07   10 01 210609 130909 NO2   0.40 Gradko lab blank
  39 07   10 01 130909 061209 NO2   0.43 Coillte lab blank
  40 07   10 01 061209 090109 NO2   0.52 Coillte lab blank
  41 07   10 01 110109 250209 SO2   2.03 Coillte lab blank. Ug/SO2/m3
  42 07   10 01 210609 130909 SO2    9.6 Gradko lab blank
  43 07   10 01 130909 061209 SO2   0.89 Coillte lab blank
  44 07   10 01 061209 090109 SO2   3.21 Gradko lab blank
  45 07   10 02 061209 090109 SO2   1.02 Coillte lab blank
  46 07   10 01 240509 030809  O3   5.19 Coillte lab blank. ppb
  47 07   10 01 030809 270909  O3   3.96 Coillte lab blank
!PLA
!Sequence, country, plot, latitude, longitude, altitude, slope, exposition, tree_cover, shrub_height, shrub_cover, storey,
date_monitoring_1st, date_monitoring_last, other_observations
   1 07 0016 +530640 -061411 10 13 157  85         0   1 140709 140709
   2 07 0010 +532104 -092040  3  1 315  85         0   1 040809 040809
```

```
   3 07 0011 +534530 -093314  2  7 130  70 0.65   19 2.3 050809 050809
!LAC
!Sequence, country, plot, survey, device, x_coordinate, y_coordinate, other_observations
   1 07 0016 LA  A1  -12.944   15.248 Point of Origin 0,0 is the centre of the
   2 07 0016 LA  A2   -4.612   19.266 GPS for 0,0 is E 110334.64, N 234183.874
   3 07 0016 LA  A3    1.687   23.452
   4 07 0016 LA  A4   10.113   30.058
   5 07 0016 LA  B1   -8.658      8.1
   6 07 0016 LA  B2   -1.043   11.455
   7 07 0016 LA  B3     8.71   17.484
   8 07 0016 LA  B4    16.33   19.993
   9 07 0016 LA  C1   -4.034     0.77
  10 07 0016 LA  C2    2.859    4.891
  11 07 0016 LA  C3   12.112    9.398
  12 07 0016 LA  C4   18.765   13.384
  13 07 0016 LA  D1    0.223    -7.16
  14 07 0016 LA  D2    6.992   -3.349
  15 07 0016 LA  D3   13.006    0.313
  16 07 0016 LA  D4   21.011    4.922
  17 07 0010 LA  A1    -3.89   21.321 Point of Origin 0,0 is the centre of the
  18 07 0010 LA  A2    5.058   16.443 GPS for 0,0 is E 110334.64, N 234183.874
  19 07 0010 LA  A3   11.256   10.688
  20 07 0010 LA  A4   16.649    6.463
  21 07 0010 LA  B1   -8.888   13.869
  22 07 0010 LA  B2   -1.379    7.312
  23 07 0010 LA  B3    5.131    1.795
  24 07 0010 LA  B4   10.832    -1.52
  25 07 0010 LA  C1  -14.055     6.41
  26 07 0010 LA  C2   -5.893   -0.384
  27 07 0010 LA  C3    0.456   -6.133
  28 07 0010 LA  C4    6.328   -8.947
  29 07 0010 LA  D1  -19.916    -1.94
  30 07 0010 LA  D2  -11.808   -7.031
  31 07 0010 LA  D3   -3.775  -10.826
  32 07 0010 LA  D4    2.692  -14.787
  33 07 0011 LA  A1   -6.086   13.974 Point of Origin 0,0 is the centre of the
  34 07 0011 LA  A2    3.349   14.627 GPS for 0,0 is E 97533.806, N 279898.417
  35 07 0011 LA  A3   16.787   14.811
  36 07 0011 LA  A4   30.715   10.266
  37 07 0011 LA  B1   -4.914   10.028
  38 07 0011 LA  B2    2.447   10.443
  39 07 0011 LA  B3    9.593   12.588
  40 07 0011 LA  B4     28.5      9.6 not mapped;estimated coordinates
```

```
  41 07 0011 LA  C1   -4.359    3.497
  42 07 0011 LA  C2    2.868    4.222
  43 07 0011 LA  C3    12.17    6.622
  44 07 0011 LA  C4   21.989    5.006
  45 07 0011 LA  D1   -5.948   -3.721
  46 07 0011 LA  D2    8.023     -2.1
  47 07 0011 LA  D3   14.978   -0.418
  48 07 0011 LA  D4   21.249   -2.538
!LAM
!Sequence, country, plot, date, measurement_point, date_analysis, determination, parameter, photo_file, value, other_observations
   1 07 0016 140709  1 140709 32 320   070016A11407091133451.jpeg     5.99
   2 07 0016 140709  1 140709 32 320   070016A21407091156171.jpeg     3.30
   3 07 0016 140709  1 140709 32 320   070016A31407091252341.jpeg     5.21
   4 07 0016 140709  1 140709 32 320   070016A41407091300021.jpeg     6.27
   5 07 0016 140709  1 140709 32 320   070016B11407091146541.jpeg     7.64
   6 07 0016 140709  1 140709 32 320   070016B21407091204031.jpeg     5.24
   7 07 0016 140709  1 140709 32 320   070016B31407091247231.jpeg     3.88
   8 07 0016 140709  1 140709 32 320   070016B41407091306531.jpeg     4.90
   9 07 0016 140709  1 140709 32 320   070016C11407091138091.jpeg     8.31
  10 07 0016 140709  1 140709 32 320   070016C21407091209491.jpeg     6.22
  11 07 0016 140709  1 140709 32 320   070016C31407091242561.jpeg     6.01
  12 07 0016 140709  1 140709 32 320   070016C41407091309231.jpeg     5.58
  13 07 0016 140709  1 140709 32 320   070016D11407091130241.jpeg     7.26
  14 07 0016 140709  1 140709 32 320   070016D21407091214561.jpeg     5.50
  15 07 0016 140709  1 140709 32 320   070016D31407091222121.jpeg     8.83
  16 07 0016 140709  1 140709 32 320   070016D41407091312341.jpeg     9.23
  17 07 0010 040809  1 060809 32 320   070010A10408091652561.jpeg     4.84
  18 07 0010 040809  1 060809 32 320   070010A20408091656211.jpeg     5.11
  19 07 0010 040809  1 060809 32 320   070010A30408091817011.jpeg     4.14
  20 07 0010 040809  1 060809 32 320   070010A40408091819071.jpeg     5.87
  21 07 0010 040809  1 060809 32 320   070010B10408091650021.jpeg     5.88
  22 07 0010 040809  1 060809 32 320   070010B20408091658481.jpeg     5.72
  23 07 0010 040809  1 060809 32 320   070010B30408091810341.jpeg     4.78
  24 07 0010 040809  1 060809 32 320   070010B40408091821231.jpeg     5.00
  25 07 0010 040809  1 060809 32 320   140010C10408091643351.jpeg     4.67
  26 07 0010 040809  1 060809 32 320   070010C20408091701231.jpeg     4.71
  27 07 0010 040809  1 060809 32 320   070010C30408091805211.jpeg     4.14
  28 07 0010 040809  1 060809 32 320   070010C40408091825341.jpeg     4.66
  29 07 0010 040809  1 060809 32 320   070010D10408091629231.jpeg     6.64
  30 07 0010 040809  1 060809 32 320   070010D20408091705551.jpeg     3.98
  31 07 0010 040809  1 060809 32 320   070010D30408091801451.jpeg     5.94
  32 07 0010 040809  1 060809 32 320   070010D40408091835141.jpeg     4.99
  33 07 0011 050809  1 060809 32 320   070011A10508091131011.jpeg     2.32
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  34 07 0011 050809  1 060809 32 320   070011A20508091134261.jpeg     1.82
  35 07 0011 050809  1 060809 32 320   070011A30508091200011.jpeg     2.29
  36 07 0011 050809  1 060809 32 320   070011A40508091213451.jpeg     1.76
  37 07 0011 050809  1 060809 32 320   070011B10508091125321.jpeg     1.74
  38 07 0011 050809  1 060809 32 320   070011B20508091139561.jpeg     2.05
  39 07 0011 050809  1 060809 32 320   070011B30508091156171.jpeg     2.29
  40 07 0011 050809  1 060809 32 320   070011B40508091216231.jpeg     1.74
  41 07 0011 050809  1 060809 32 320   070011C10508091113241.jpeg     2.73
  42 07 0011 050809  1 060809 32 320   070011C20508091142461.jpeg     1.79
  43 07 0011 050809  1 060809 32 320   070011C30508091152341.jpeg     1.90
  44 07 0011 050809  1 060809 32 320   070011C40508091238471.jpeg     1.79
  45 07 0011 050809  1 060809 32 320   070011D10508091116381.jpeg     2.51
  46 07 0011 050809  1 060809 32 320   070011D20508091147101.jpeg     3.15
  47 07 0011 050809  1 060809 32 320   070011D30508091149151.jpeg     2.13
  48 07 0011 050809  1 060809 32 320   070011D40508091240291.jpeg     1.80
!LAP
!Sequence, country, plot, date, time, measurement_point, photo_file, parameter, value, other_observations
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   2 07 0016 140709 115617  1   070016A21407091156171.jpeg   Aper 5.40
   3 07 0016 140709 125234  1   070016A31407091252341.jpeg   Aper 5.40
   4 07 0016 140709 130002  1   070016A41407091300021.jpeg   Aper 5.40
   5 07 0016 140709 114654  1   070016B11407091146541.jpeg   Aper 5.40
   6 07 0016 140709 120403  1   070016B21407091204031.jpeg   Aper 5.40
   7 07 0016 140709 124723  1   070016B31407091247231.jpeg   Aper 5.40
   8 07 0016 140709 130653  1   070016B41407091306531.jpeg   Aper 5.40
   9 07 0016 140709 113809  1   070016C11407091138091.jpeg   Aper 5.40
  10 07 0016 140709 120949  1   070016C21407091209491.jpeg   Aper 5.40
  11 07 0016 140709 124256  1   070016C31407091242561.jpeg   Aper 5.40
  12 07 0016 140709 130923  1   070016C41407091309231.jpeg   Aper 5.40
  13 07 0016 140709 113024  1   070016D11407091130241.jpeg   Aper 5.40
  14 07 0016 140709 121456  1   070016D21407091214561.jpeg   Aper 5.40
  15 07 0016 140709 122212  1   070016D31407091222121.jpeg   Aper 5.40
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sampler_height, sampler_surface, samplers, other_observations
   1  7   16 1 +530640 -061411 10 010109 311209 47 1  1.3 0.008 30
   2  7   16 2 +530640 -061411 10 010109 311209 47 1  1.3 0.008  4
   3  7   16 4 +530640 -061411 10 010109 311209 47 1  1.6   0.4  6
   4  7   10 1 +532104 -092040  3 010109 311209 52 1  1.3 0.008 11
   5  7   10 2 +532104 -092040  3 010109 311209 52 1  1.3 0.008  4
   6  7   10 4 +532104 -092040  3 010109 311209 52 1  1.6   0.5  6
   7  7   11 1 +534530 -093314  2 010109 311209 32 1  1.3 0.008 24
   8  7   11 2 +534530 -093314  2 010109 311209 32 1  1.3 0.008  4
!DEM
!Sequence, plot, date_start, date_end, period, sampler, V_sampling, quantity, pH, conductivity, K, Ca, Mg, Na, N_NH4, Cl, N_NO3,
S_SO4, alkalinity, N_total, DOC, other_observations
    1   16 120109 180109  1 1 1 14.0 5.1  124  4.9  3.38 2.88 14.71  0.97  26.8  2.12  3.03   64  4.74
    1   16 190109 250109  2 1 1 55.9 5.4   41 1.16  0.41 0.42  4.72  0.13     9  0.13  0.57   38  0.48
    1   16 260109 010209  3 1 1 20.4 5.0   90 1.92  0.92  1.4 11.89  0.12  23.2  0.04  1.17   -1  0.62
    1   16 160209 220209  4 1 1 48.1 5.2   31 0.17   0.2 0.39  3.13  0.34  4.18  0.46  0.60   -1     1
    1   16 230209 010309  5 1 8  0.5          4.02  2.86  2.7    19                                             Low sample
    1   16 020309 080309  6 1 7  0.0                                                                           Low sample
    1   16 090309 150309  7 1 1 10.5 5.1   84  1.9  1.24 1.34  8.73   1.5 17.67  0.73  2.01   -1  2.44
```

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| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16 | 160309 | 220309 | 8 | 1 | 1 | 3.2 | 4.9 | 154 | 2.75 | 2.35 | 2.61 | 16.34 | 1.52 | 38.43 | 0.43 | 2.34 | -1 | 2.31 | |
| 1 | 16 | 230309 | 290309 | 9 | 1 | 7 | 0.0 | | | | | | | | | | | | | No sample |
| 1 | 16 | 300309 | 050409 | 10 | 1 | 1 | 0.8 | 5.5 | 350 | 10.8 | 8.49 | 10.2 | | 4.48 | 133.0 | 4.49 | 8.70 | | | |
| 1 | 16 | 060409 | 120409 | 11 | 1 | 1 | 17.2 | 5.8 | 190 | 3.51 | 2.89 | 3.03 | 19.69 | 2.39 | 41.11 | 1.89 | 3.06 | -1 | | |
| 1 | 16 | 130409 | 190409 | 12 | 1 | 1 | 53.8 | 5.3 | 41 | 0.95 | 0.31 | 0.3 | 4.27 | 0.44 | 6.62 | 0.29 | 0.64 | -1 | 1.22 | |
| 1 | 16 | 200409 | 260409 | 13 | 1 | 1 | 33.2 | 5.4 | 64 | 1.31 | 0.65 | 0.72 | 4.51 | 1.53 | 5.5 | 2.17 | 2.00 | -1 | 4.04 | |
| 1 | 16 | 270409 | 030509 | 14 | 1 | 1 | 23.4 | 5.1 | 52 | 1.61 | 0.63 | 0.71 | 3.46 | 1 | 4.9 | 1.89 | 1.13 | -1 | 3.06 | |
| 1 | 16 | 040509 | 100509 | 15 | 1 | 1 | 18.4 | 5.1 | 27 | 1.06 | 0.31 | 0.28 | 2.15 | 0.3 | 3.4 | 0.49 | 0.40 | -1 | 1.13 | |
| 1 | 16 | 110509 | 170509 | 16 | 1 | 7 | 0.1 | | | | | | | | | | | | | Low sample |
| 1 | 16 | 180509 | 240509 | 17 | 1 | 1 | 38.6 | 4.9 | 77 | 2.83 | 1.41 | 1.16 | 7.3 | 0.28 | 17.6 | 0.55 | 1.13 | -1 | 1.33 | |
| 1 | 16 | 250509 | 310509 | 18 | 1 | 1 | 14.7 | 5.7 | 21 | 0.88 | -1 | -1 | 2.01 | -1 | 3.7 | -1 | 0.20 | -1 | 0.3 | |
| 1 | 16 | 010609 | 070609 | 19 | 1 | 7 | 0.2 | | | | | | | | | | | | | Low sample |
| 1 | 16 | 080609 | 140609 | 20 | 1 | 1 | 58.2 | 4.8 | 45 | 3.17 | -1 | 0.39 | 3.39 | 0.11 | 6.1 | 0.63 | 0.63 | -1 | 1.17 | |
| 1 | 16 | 150609 | 210609 | 21 | 1 | 1 | 1.6 | 5.1 | 88 | 19.4 | 1.04 | 0.73 | 5.33 | 0.13 | 17.1 | 0.16 | 1.37 | -1 | | |
| 1 | 16 | 220609 | 280609 | 22 | 1 | 1 | 21.1 | 5.1 | 35 | 2.59 | -1 | 0.28 | 2.8 | 0.06 | 5.8 | 0.11 | 0.30 | -1 | 0.47 | |
| 1 | 16 | 290609 | 050709 | 23 | 1 | 1 | 0.8 | 4.6 | 120 | 22.8 | 1.04 | 0.63 | 5.08 | 0.03 | 13.7 | 0.06 | 1.87 | | | |
| 1 | 16 | 060709 | 120709 | 24 | 1 | 1 | 50.8 | 5.9 | 30 | 3.1 | -1 | 0.2 | 2.23 | -1 | 4.2 | -1 | 0.20 | 38 | 0.68 | |
| 1 | 16 | 130709 | 190709 | 25 | 1 | 1 | 27.0 | 6.3 | 18 | 1.97 | -1 | -1 | 1.22 | 0.18 | 2.5 | 0.02 | -1.00 | 64 | 0.72 | |
| 1 | 16 | 200709 | 260709 | 26 | 1 | 1 | 17.4 | 5.6 | 34 | 3.08 | 5.47 | 0.53 | 2.7 | 0.23 | 6 | 0.03 | 0.30 | 42 | 0.89 | |
| 1 | 16 | 270709 | 020809 | 27 | 1 | 1 | 39.6 | 5.8 | 27 | 2.96 | -1 | 0.24 | 2.55 | 0.16 | 4.5 | 0.02 | 0.27 | -1 | 0.42 | |
| 1 | 16 | 030809 | 090809 | 28 | 1 | 1 | 37.6 | 5.7 | 38 | 3.37 | -1 | 0.36 | 3.12 | 0.03 | 6.6 | -1 | 0.37 | 34 | 0.45 | |
| 1 | 16 | 100809 | 160809 | 29 | 1 | 7 | 0.0 | | | | | | | | | | | | | Low sample |
| 1 | 16 | 170809 | 230809 | 30 | 1 | 1 | 2.8 | 6.0 | 51 | 7.07 | 0.5 | 0.33 | 3.43 | 1.83 | 8.7 | 0.19 | 0.60 | 130 | 2.81 | |
| 1 | 16 | 240809 | 300809 | 31 | 1 | 1 | 26.9 | 5.4 | 38 | 4.3 | 0.52 | 0.36 | 2.84 | 0.29 | 6.1 | 0.04 | 0.33 | 54 | 1.08 | |
| 1 | 16 | 310809 | 060909 | 32 | 1 | 1 | 29.4 | 5.7 | 21 | 2.51 | 0.34 | 0.17 | 2.51 | 0.1 | 4 | -1 | 0.30 | | 0.37 | |
| 1 | 16 | 070909 | 130909 | 33 | 1 | 1 | 35.4 | 5.6 | 33 | 2.3 | 0.63 | 0.42 | 3.14 | 0.23 | 6.5 | 0.02 | 0.33 | 42 | 0.62 | |
| 1 | 16 | 140909 | 200909 | 34 | 1 | 1 | 1.3 | 6.1 | 47 | 4.19 | 0.67 | 0.32 | 4.16 | 0.87 | 7.4 | 0.06 | 0.47 | | 1.95 | |
| 1 | 16 | 210909 | 270909 | 35 | 1 | 7 | 0.0 | | | | | | | | | | | | | No sample |
| 1 | 16 | 280909 | 041009 | 36 | 1 | 1 | 0.2 | | | 20.9 | 13.28 | 13.6 | 61.41 | 2.26 | | 1.97 | | | | |
| 1 | 16 | 051009 | 111009 | 37 | 1 | 1 | 0.2 | | | 10.9 | 5.56 | 4.93 | 30.54 | | | | | | | |
| 1 | 16 | 121009 | 181009 | 38 | 1 | 1 | 33.6 | 5.1 | 64 | 4.61 | 0.81 | 0.84 | 5.78 | 0.41 | 12.3 | 0.42 | 0.73 | -1 | 1.25 | |
| 1 | 16 | 191009 | 251009 | 39 | 1 | 7 | 0.0 | | | | | | | | | | | | | No sample |
| 1 | 16 | 261009 | 011109 | 40 | 1 | 1 | 58.9 | 5.3 | 64 | 3.01 | 0.59 | 0.75 | 7.47 | 0.21 | 15 | 0.2 | 0.90 | -1 | 0.69 | |
| 1 | 16 | 021109 | 081109 | 41 | 1 | 1 | 60.7 | 5.6 | 27 | 1.54 | 0.5 | 0.26 | 3.18 | 0.18 | 4.4 | 0.3 | 0.53 | 30 | 0.69 | |
| 1 | 16 | 091109 | 151109 | 42 | 1 | 1 | 6.1 | 5.3 | 93 | 2.87 | 1.38 | 1.65 | 10.15 | 0.25 | 23.9 | 0.07 | 1.10 | 24 | 0.81 | |
| 1 | 16 | 161109 | 221109 | 43 | 1 | 1 | 59.8 | 5.3 | 41 | 1.29 | 0.45 | 0.56 | 4.14 | 0.1 | 8.3 | 0.09 | 0.47 | -1 | 0.48 | |
| 1 | 16 | 231109 | 291109 | 44 | 1 | 1 | 61.0 | 5.6 | 37 | 1.18 | 0.36 | 0.46 | 4.04 | 0.05 | 7.6 | 0.02 | 0.37 | -1 | 0.18 | |
| 1 | 16 | 301109 | 061209 | 45 | 1 | 1 | 59.3 | 5.1 | 63 | 1.39 | 0.55 | 0.71 | 7.47 | 0.06 | 15.4 | 0.12 | 0.83 | -1 | 0.34 | |
| 1 | 16 | 071209 | 131209 | 46 | 1 | 1 | 38.9 | 5.4 | 44 | 1.05 | 0.47 | 0.5 | 5.31 | 0.07 | 10 | 0.06 | 0.53 | -1 | 0.42 | |
| 1 | 16 | 141209 | 201209 | 47 | 1 | 1 | 7.3 | 5.2 | 67 | 1.39 | 0.66 | 0.92 | 7.69 | 0.11 | 16.1 | 0.03 | 0.70 | -1 | 0.37 | |
| 2 | 16 | 120109 | 180109 | 1 | 2 | 1 | 24.6 | 6.4 | 11 | 0.21 | 0.52 | 0.14 | 1.18 | 0.18 | -1 | 0.19 | 0.20 | 38 | | |
| 2 | 16 | 190109 | 250109 | 2 | 2 | 1 | 69.4 | 5.5 | 20 | 0.11 | 0.06 | 0.22 | 2.24 | 0.04 | 4.1 | 0.08 | 0.30 | -1 | | |
| 2 | 16 | 260109 | 010209 | 3 | 2 | 1 | 31.1 | 5.3 | 30 | 0.18 | 0.3 | 0.39 | 3.77 | 0.03 | 6.5 | 0.02 | 0.33 | -1 | | |

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| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 16 | 160209 | 220209 | 4 | 2 | 1 | 75.7 | 4.7 | 41 | 0.19 | 0.26 | 0.64 | 5.09 | 0.75 | 5.16 | 0.73 | 0.68 | -1 | |
| 2 | 16 | 230209 | 010309 | 5 | 2 | 8 | 3.0 | | | 0.25 | 0.48 | 0.29 | 2.7 | | | | | | |
| 2 | 16 | 020309 | 080309 | 6 | 2 | 7 | 2.6 | | | | | | | 1.41 | 6.37 | 0.75 | 1.04 | | |
| 2 | 16 | 090309 | 150309 | 7 | 2 | 1 | 27.9 | 5.6 | 17 | 0.07 | 0.11 | 0.17 | 1.87 | 0.15 | 3.14 | 0.06 | 0.26 | -1 | |
| 2 | 16 | 160309 | 220309 | 8 | 2 | 1 | 10.9 | 5.6 | 18 | 0.15 | 0.18 | 0.18 | 16.34 | 0.25 | 13.14 | 0.14 | 0.27 | -1 | |
| 2 | 16 | 230309 | 290309 | 9 | 2 | 7 | 0.0 | | | | | | | | | | | | No sample |
| 2 | 16 | 300309 | 050409 | 10 | 2 | 1 | 10.4 | 5.4 | 50 | 0.27 | 0.56 | 0.64 | 5.55 | 0.49 | 10.51 | 0.22 | 0.78 | 36 | |
| 2 | 16 | 060409 | 120409 | 11 | 2 | 1 | 19.0 | 7.5 | 20 | 0.11 | 0.11 | 0.17 | 1.34 | 0.54 | 1.74 | 0.38 | 0.35 | -1 | |
| 2 | 16 | 130409 | 190409 | 12 | 2 | 1 | 52.9 | 5.1 | 17 | 0.03 | 0.09 | 0.13 | 1.13 | 0.29 | 1.9 | 0.22 | 0.32 | -1 | |
| 2 | 16 | 200409 | 260409 | 13 | 2 | 1 | 27.7 | 6.6 | 44 | 0.14 | 0.27 | 0.19 | 1.09 | 0.03 | 1.8 | -1 | 1.50 | -1 | |
| 2 | 16 | 270409 | 030509 | 14 | 2 | 1 | 26.2 | 6.6 | 14 | 0.05 | 0.13 | 0.1 | 0.44 | 0.61 | 1 | 0.49 | 0.37 | -1 | |
| 2 | 16 | 040509 | 100509 | 15 | 2 | 1 | 31.1 | 5.2 | 12 | 0.02 | 0.04 | 0.06 | 0.65 | 0.32 | 1.3 | 0.23 | 0.27 | -1 | |
| 2 | 16 | 110509 | 170509 | 16 | 2 | 7 | 6.4 | 6.8 | 21 | 0.19 | 0.3 | 0.35 | 3.61 | 0.43 | 7.1 | 0.13 | 0.53 | -1 | |
| 2 | 16 | 180509 | 240509 | 17 | 2 | 1 | 42.1 | 5.5 | 24 | -1 | -1 | 0.22 | 1.84 | 0.36 | 3.5 | 0.41 | 0.37 | -1 | |
| 2 | 16 | 250509 | 310509 | 18 | 2 | 1 | 35.9 | 6.5 | 10 | 0.25 | -1 | -1 | 0.41 | 0.34 | 1 | 0.73 | -1.00 | 32 | |
| 2 | 16 | 010609 | 070609 | 19 | 2 | 7 | 5.1 | 5.7 | 18 | -1 | -1 | -1 | 1.13 | 0.4 | 2.5 | 0.17 | 0.33 | | |
| 2 | 16 | 080609 | 140609 | 20 | 2 | 1 | 61.1 | 4.5 | 29 | -1 | -1 | 0.24 | 2.13 | 0.27 | 4 | 0.27 | 0.47 | -1 | |
| 2 | 16 | 150609 | 210609 | 21 | 2 | 1 | 6.7 | 7.5 | 25 | 0.26 | -1 | 0.19 | 1.7 | 0.79 | 2.8 | 0.48 | 0.67 | | |
| 2 | 16 | 220609 | 280609 | 22 | 2 | 1 | 28.6 | 5.4 | 7 | -1 | -1 | -1 | 0.43 | 0.07 | -1 | 0.06 | -1.00 | -1 | |
| 2 | 16 | 290609 | 050709 | 23 | 2 | 1 | 3.9 | 5.0 | 21 | -1 | 0.63 | 0.17 | 0.53 | 0.58 | 1.2 | 0.81 | 0.50 | | |
| 2 | 16 | 060709 | 120709 | 24 | 2 | 1 | 63.6 | 6.8 | 10 | -1 | -1 | -1 | 0.42 | 0.13 | 0.7 | 0.13 | 0.17 | -1 | |
| 2 | 16 | 130709 | 190709 | 25 | 2 | 1 | 31.6 | 6.9 | 7 | -1 | -1 | -1 | 0.57 | 0.09 | 1.2 | 0.06 | -1.00 | -1 | |
| 2 | 16 | 200709 | 260709 | 26 | 2 | 1 | 30.1 | 5.4 | 12 | 0.23 | 10.61 | 0.78 | 1.39 | 0.15 | 1.7 | 0.09 | 0.23 | -1 | |
| 2 | 16 | 270709 | 020809 | 27 | 2 | 1 | 46.9 | 5.6 | 11 | -1 | -1 | -1 | 1.08 | 0.08 | 1.8 | 0.08 | 0.20 | 34 | |
| 2 | 16 | 030809 | 090809 | 28 | 2 | 1 | 46.5 | 6.7 | 11 | -1 | -1 | -1 | 0.85 | 0.11 | 1.1 | 0.07 | 0.17 | -1 | |
| 2 | 16 | 100809 | 160809 | 29 | 2 | 7 | 4.0 | | | 0.3 | -1 | 0.26 | 2.47 | 0.51 | 4.6 | 0.2 | 0.43 | | |
| 2 | 16 | 170809 | 230809 | 30 | 2 | 1 | 10.4 | 5.7 | 11 | 0.06 | 0.2 | 0.03 | 0.17 | 0.28 | 0.5 | 0.11 | 0.23 | | |
| 2 | 16 | 240809 | 300809 | 31 | 2 | 1 | 35.8 | 5.7 | 8 | -1 | -1 | -1 | 0.51 | 0.09 | 0.7 | 0.09 | -1.00 | -1 | |
| 2 | 16 | 310809 | 060909 | 32 | 2 | 1 | 39.4 | 5.6 | 10 | 0.11 | 0.24 | 0.08 | 0.98 | 0.07 | 1.5 | 0.04 | 0.17 | -1 | |
| 2 | 16 | 070909 | 130909 | 33 | 2 | 1 | 44.9 | 5.5 | 7 | 0.03 | 0.04 | 0.03 | 0.51 | 0.11 | 0.9 | 0.05 | -1.00 | -1 | |
| 2 | 16 | 140909 | 200909 | 34 | 2 | 1 | 4.8 | 5.4 | 7 | 0.09 | 0.26 | 0.09 | 0.61 | 0.1 | 1.4 | 0.06 | -1.00 | | |
| 2 | 16 | 210909 | 270909 | 35 | 2 | 7 | 0.6 | | | | | | | | | | | | Low Sample |
| 2 | 16 | 280909 | 041009 | 36 | 2 | 1 | 0.2 | | | | | | | | | | | | Low Sample |
| 2 | 16 | 051009 | 111009 | 37 | 2 | 1 | 3.3 | | | 0.26 | 0.6 | 0.23 | 2.05 | 0.8 | 3.6 | 0.21 | 0.63 | | |
| 2 | 16 | 121009 | 181009 | 38 | 2 | 1 | 36.9 | 5.0 | 14 | 0.06 | 0.09 | 0.1 | 1.02 | 0.18 | 1.2 | 0.29 | -1.00 | -1 | |
| 2 | 16 | 191009 | 251009 | 39 | 2 | 7 | 0.5 | | | | | | | | | | | | Low Sample |
| 2 | 16 | 261009 | 011109 | 40 | 2 | 1 | 83.9 | 5.6 | 32 | 0.19 | 0.2 | 0.43 | 4.04 | 0.21 | 7.2 | 0.2 | 0.47 | -1 | |
| 2 | 16 | 021109 | 081109 | 41 | 2 | 1 | 73.3 | 4.9 | 14 | -1 | -1 | -1 | -1 | 0.4 | 1.5 | 0.41 | 0.27 | -1 | |
| 2 | 16 | 091109 | 151109 | 42 | 2 | 1 | 23.0 | 6.7 | 26 | -1 | -1 | 0.31 | 3.24 | 0.03 | 6.4 | 0.04 | 0.33 | -1 | |
| 2 | 16 | 161109 | 221109 | 43 | 2 | 1 | 95.2 | 5.2 | 14 | -1 | -1 | 0.11 | -1 | 0.1 | 2.2 | 0.09 | -1.00 | -1 | |
| 2 | 16 | 231109 | 291109 | 44 | 2 | 1 | 114 | 7.0 | 12 | -1 | -1 | 0.11 | 1.15 | 0.05 | 2.1 | 0.02 | -1.00 | -1 | |
| 2 | 16 | 301109 | 061209 | 45 | 2 | 1 | 85.8 | 5.1 | 41 | 0.14 | 0.26 | 0.55 | 4.80 | 0.06 | 9.6 | 0.14 | 0.50 | -1 | |
| 2 | 16 | 071209 | 131209 | 46 | 2 | 1 | 36.7 | 6.8 | 11 | -1 | -1 | 0.1 | 1.14 | 0.05 | | 0.04 | | -1 | |

back to **Survey Summary for Ireland, 2009**

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 16 | 141209 | 201209 | 47 | 2 | 1 | 18.8 | 5.5 | 12 | -1 | -1 | 0.11 | 0.80 | 0.07 | 2.4 | 0.03 | -1.00 | -1 | | | |
| 3 | 16 | 120109 | 180109 | 1 | 4 | 1 | 0.4 | 4.3 | 259 | 11.1 | 7.08 | 5.89 | 32.76 | 1.07 | 65.8 | 3 | 5.00 | -1 | 6.13 | 33.4 | |
| 3 | 16 | 190109 | 250109 | 2 | 4 | 1 | 1.31 | 4.9 | 69 | 2.71 | 0.72 | 0.7 | 7.56 | 0.16 | 14.5 | 0.1 | 1.03 | -1 | 0.56 | 13 | |
| 3 | 16 | 260109 | 010209 | 3 | 4 | 1 | 0.4 | 4.6 | 161 | 4.33 | 2.32 | 2.15 | 19.29 | 0.22 | 40.4 | 0.08 | 2.07 | -1 | 0.73 | 16.2 | |
| 3 | 16 | 160209 | 220209 | 4 | 4 | 1 | 2.2 | 4.6 | 70 | 0.58 | 0.34 | 0.35 | 3.06 | 0.24 | 11.74 | 0.71 | 1.37 | -1 | 1.18 | 7.63 | |
| 3 | 16 | 230209 | 010309 | 5 | 4 | 8 | 0.01 | 4.8 | 220 | 5.47 | 4.52 | 4.29 | 22.02 | 3.25 | 46.85 | 3.12 | 5.32 | 42 | 6.31 | 21.9 | |
| 3 | 16 | 020309 | 080309 | 6 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No sample |
| 3 | 16 | 090309 | 150309 | 7 | 4 | 1 | 0.03 | 4.3 | 381 | 10.0 | 10.06 | 9.43 | 37.6 | 5.12 | 87.76 | 3.5 | 9.70 | -1 | 8.63 | 65 | |
| 3 | 16 | 160309 | 220309 | 8 | 4 | 1 | 0.01 | 4.3 | 728 | 11.6 | 16.59 | 17.1 | 81.19 | 2.94 | | 1.38 | 10.87 | -1 | 7.47 | 43.5 | |
| 3 | 16 | 230309 | 290309 | 9 | 4 | 7 | 0.00 | | | | | | | | | | | | | | No sample |
| 3 | 16 | 300309 | 050409 | 10 | 4 | 1 | 0.01 | 3.9 | 1 | 25.4 | 49.49 | 41.6 | 243.3 | 25.78 | | 14.19 | 30.55 | -1 | | 87.1 | |
| 3 | 16 | 060409 | 120409 | 11 | 4 | 1 | 0.29 | 4.0 | 676 | 16.1 | 15.43 | 14.8 | 68.06 | 5.24 | 157.9 | 3.4 | 11.29 | -1 | | 79.8 | |
| 3 | 16 | 130409 | 190409 | 12 | 4 | 1 | 1.2 | 4.6 | 91 | 2.82 | 0.85 | 0.68 | 9.92 | 0.76 | 15.21 | 0.35 | 1.26 | -1 | 1.85 | 31.2 | |
| 3 | 16 | 200409 | 260409 | 13 | 4 | 1 | 0.6 | 4.6 | 106 | 3.78 | 1.07 | 1.18 | 12.42 | 0.42 | 12.7 | 2.26 | 2.90 | -1 | 3.3 | 23.4 | |
| 3 | 16 | 270409 | 030509 | 14 | 4 | 1 | 0.24 | 4.6 | 107 | 6.22 | 2.78 | 2.35 | 19.54 | 1.06 | 21.5 | 5.11 | 3.53 | -1 | | | |
| 3 | 16 | 040509 | 100509 | 15 | 4 | 1 | 0.21 | 4.8 | 77 | 2.71 | 1.06 | 0.85 | 8.47 | 0.64 | 9.5 | 1.44 | 1.10 | -1 | 2.61 | 36.5 | |
| 3 | 16 | 110509 | 170509 | 16 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No sample |
| 3 | 16 | 180509 | 240509 | 17 | 4 | 1 | 0.5 | 4.7 | 203 | 6.85 | 4.86 | 3.64 | 19.27 | 0.8 | 46.3 | 1.09 | 2.83 | -1 | 2.83 | 40.4 | |
| 3 | 16 | 250509 | 310509 | 18 | 4 | 1 | 0.22 | | | | | | | | | | | | | | No sample |
| 3 | 16 | 010609 | 070609 | 19 | 4 | 7 | .002 | 6.0 | 22 | 11.0 | 4.35 | 2.49 | 30.76 | 5.54 | 56 | 0.11 | 2.80 | | | | |
| 3 | 16 | 080609 | 140609 | 20 | 4 | 1 | 1.55 | 4.4 | 52 | 2.23 | 0.62 | 0.41 | 4.14 | 0.11 | 6.8 | 0.48 | 0.80 | | 0.88 | | |
| 3 | 16 | 150609 | 210609 | 21 | 4 | 1 | .003 | 5.4 | 121 | 7.77 | 1.38 | 0.95 | 9.97 | 2.95 | 22.7 | 0.93 | 2.20 | | | | |
| 3 | 16 | 220609 | 280609 | 22 | 4 | 1 | 0.3 | | | | | | | | | | | | | | Contaminated |
| 3 | 16 | 290609 | 050709 | 23 | 4 | 1 | 0.0 | | | | | | | | | | | | | | Low sample |
| 3 | 16 | 060709 | 120709 | 24 | 4 | 1 | 0.9 | 4.8 | 66 | 3.59 | 0.99 | 0.6 | 6.18 | 0.36 | 10.4 | 0.12 | 0.33 | -1 | 1.56 | 45.6 | |
| 3 | 16 | 130709 | 190709 | 25 | 4 | 1 | 0.5 | 5.4 | 33 | 2.2 | -1 | 0.2 | 3.46 | 0.48 | 4.1 | 0.02 | 0.20 | 52 | 1.38 | 29.6 | |
| 3 | 16 | 200709 | 260709 | 26 | 4 | 1 | 0.08 | 5.4 | 80 | 4.63 | 4.71 | 0.85 | 7.62 | 1.35 | 14.2 | 0.04 | 0.50 | 68 | 2.14 | 39.6 | |
| 3 | 16 | 270709 | 020809 | 27 | 4 | 1 | 0.4 | 4.8 | 74 | 4.84 | 1.11 | 0.86 | 8.06 | 0.54 | 12.4 | 0.03 | 0.63 | -1 | 1.31 | 33.1 | |
| 3 | 16 | 030809 | 090809 | 28 | 4 | 1 | 0.5 | 4.9 | 70 | 4.13 | 0.92 | 0.71 | 6.29 | 0.47 | 13.2 | 0.03 | 0.70 | -1 | 1.1 | 26.4 | |
| 3 | 16 | 100809 | 160809 | 29 | 4 | 7 | 0.0 | | | | | | | | | | | | | | Low sample |
| 3 | 16 | 170809 | 230809 | 30 | 4 | 1 | 0.0 | | | | | | | | | | | | | | Low sample |
| 3 | 16 | 240809 | 300809 | 31 | 4 | 1 | 0.3 | 4.9 | 87 | 5.62 | 2.56 | 1.28 | 8.95 | 0.71 | 16.9 | 0.02 | 0.67 | | 1.66 | | |
| 3 | 16 | 310809 | 060909 | 32 | 4 | 1 | 0.3 | 5.2 | 40 | 2.84 | 0.65 | 0.33 | 4.32 | 0.3 | 6.9 | 0.02 | 0.47 | 32 | 0.75 | 9.56 | |
| 3 | 16 | 070909 | 130909 | 33 | 4 | 1 | 0.3 | 5.0 | 87 | 5.86 | 1.85 | 1.45 | 8.87 | 0.72 | 19.1 | 0.02 | 0.87 | -1 | 1.42 | 28.1 | |
| 3 | 16 | 140909 | 200909 | 34 | 4 | 1 | 0.01 | 5.9 | 182 | 9.04 | 2.28 | 2.05 | 17.83 | 3.75 | 39.8 | 0.29 | 2.17 | | 4.6 | | |
| 3 | 16 | 210909 | 270909 | 35 | 4 | 7 | 0.00 | | | | | | | | | | | | | | No sample |
| 3 | 16 | 280909 | 041009 | 36 | 4 | 1 | 0.0 | | | | | | | | | | | | | | Contaminated |
| 3 | 16 | 051009 | 111009 | 37 | 4 | 1 | .005 | 4.8 | 364 | 13.1 | 6.65 | 5.64 | 34.44 | 2.02 | 86.1 | 0.6 | 6.43 | | 3.34 | | |
| 3 | 16 | 121009 | 181009 | 38 | 4 | 1 | 0.3 | 4.6 | 161 | 10.4 | 2.92 | 2.59 | 13.04 | 1.29 | 32 | 0.52 | 1.90 | -1 | 2.37 | 42.1 | |
| 3 | 16 | 191009 | 251009 | 39 | 4 | 7 | 0.0 | | | | | | | 3.22 | | 0.49 | | | | | |
| 3 | 16 | 261009 | 011109 | 40 | 4 | 1 | 0.7 | 4.6 | 90 | 5.42 | 1.32 | 0.92 | 9.03 | 0.27 | 19.8 | 0.13 | 1.07 | -1 | 0.9 | 20.2 | |
| 3 | 16 | 021109 | 081109 | 41 | 4 | 1 | 0.8 | 4.8 | 44 | 2.19 | 0.7 | 0.39 | 4.71 | 0.12 | 7.4 | 0.16 | 0.67 | -1 | 0.59 | 16.7 | |
| 3 | 16 | 091109 | 151109 | 42 | 4 | 1 | 0.1 | 4.6 | 233 | 6.79 | 4.45 | 4.24 | 25.68 | 0.3 | 62.1 | 0.05 | 2.77 | -1 | | 8.36 | |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16 | 161109 | 221109 | 43 | 4 | 1 | 0.8 | 4.6 | 104 | 3.27 | 1.53 | 1.41 | 10.58 | 0.17 | 23.2 | 0.05 | 1.10 | -1 | 0.58 | 14.7 | |
| 3 | 16 | 231109 | 291109 | 44 | 4 | 1 | 1.2 | 5.1 | 51 | 1.88 | 0.53 | 0.49 | 5.45 | 0.16 | 10.9 | 0.02 | 0.47 | -1 | 0.46 | 10.5 | |
| 3 | 16 | 301109 | 061209 | 45 | 4 | 1 | 1.5 | 4.6 | 90 | 2.49 | 0.85 | 0.81 | 9.95 | 0.03 | 22.3 | 0.05 | 1.13 | -1 | 0.23 | 6.73 | |
| 3 | 16 | 071209 | 131209 | 46 | 4 | 1 | 0.6 | 4.7 | 72 | 1.97 | 0.76 | 0.68 | 8.66 | 0.07 | 15.7 | 0.04 | 0.83 | -1 | 0.5 | 16.5 | |
| 3 | 16 | 141209 | 201209 | 47 | 4 | 1 | 0.1 | 4.7 | 122 | 3.52 | 1.58 | 1.34 | 14.62 | 0.42 | 29.6 | 0.05 | 1.20 | -1 | 0.9 | 21.2 | |
| 4 | 10 | 291208 | 040109 | 1 | 1 | 8 | 0.79 | | | 5.1 | 4.49 | 6.45 | 43.76 | 0.33 | 83.3 | 0.06 | 3.90 | 100 | | | |
| 4 | 10 | 050109 | 110109 | 2 | 1 | 7 | 0.00 | | | | | | | | | | | | | | No Sample |
| 4 | 10 | 120109 | 180109 | 3 | 1 | 1 | 21.3 | 5.3 | 142 | 3.58 | 2.05 | 3.01 | 25.39 | 0.06 | 44.1 | 0.37 | 2.87 | 30 | 0.96 | | |
| 4 | 10 | 190109 | 250109 | 4 | 1 | 1 | 32.2 | 5.6 | 110 | 1.91 | 1.07 | 1.76 | 16.77 | -1 | 29 | -1 | 1.53 | 30 | 0.29 | | |
| 4 | 10 | 260109 | 010209 | 5 | 1 | 1 | 43.2 | 5.5 | 150 | 1.81 | 1.88 | 3.61 | 26.81 | 0.06 | 49.1 | 0.02 | 2.40 | -1 | 0.3 | | |
| 4 | 10 | 020209 | 080209 | 6 | 1 | 1 | 8.94 | 3.8 | 77 | 1.25 | 0.68 | 0.82 | 11.8 | 0.1 | 19.1 | 0.09 | 1.13 | 30 | 0.73 | | |
| 4 | 10 | 090209 | 150209 | 7 | 1 | 1 | 3.36 | 5.0 | 1 | 0.06 | 0.13 | 0.17 | 10.88 | 0.24 | 17.1 | 0.63 | 1.57 | -1 | 1.24 | | |
| 4 | 10 | 160209 | 220209 | 8 | 1 | 8 | 0.77 | | | | | | | 0.3 | 16.66 | 0.38 | 1.03 | | | | |
| 4 | 10 | 230209 | 010309 | 9 | 1 | 7 | 0.18 | | | | | | | | | | | | | | Low sample |
| 4 | 10 | 020309 | 080309 | 10 | 1 | 1 | 2.13 | 5.5 | 108 | 3.71 | 2.25 | 3.17 | 23.33 | 0.86 | 43.73 | 0.42 | 3.24 | | 1.88 | | |
| 4 | 10 | 090309 | 150309 | 11 | 1 | 1 | 15.1 | 5.3 | 129 | 2.6 | 1.42 | 2.46 | 20.2 | 0.06 | 36.15 | 0.05 | 2.24 | 24 | 0.35 | | |
| 4 | 10 | 160309 | 220309 | 12 | 1 | 1 | 12.1 | 5.3 | 200 | 3.02 | 2 | 3.77 | 29.13 | 0.09 | 55.45 | 0.03 | 2.62 | -1 | 0.55 | | |
| 4 | 10 | 230309 | 290309 | 13 | 1 | 7 | 0.00 | | | | | | | | | | | | | | No Sample |
| 4 | 10 | 300309 | 050409 | 14 | 1 | 1 | 8.13 | 5.4 | 452 | 7.37 | 5.47 | 10.3 | | 0.08 | 127.5 | 0.38 | 6.59 | 32 | 1.67 | | |
| 4 | 10 | 060409 | 120409 | 15 | 1 | 1 | 0.39 | 5.8 | 219 | 3.96 | 2.71 | 3.77 | 30.14 | 0.73 | 54.93 | 0.44 | 3.15 | 96 | | | |
| 4 | 10 | 130409 | 190409 | 16 | 1 | 1 | 32.5 | 5.5 | 97 | 1.85 | 0.82 | 1.23 | 13.06 | 0.05 | 22.96 | 0.03 | 1.27 | 30 | 0.78 | | |
| 4 | 10 | 200409 | 260409 | 17 | 1 | 7 | 0.00 | | | | | | | | | | | | | | No Sample |
| 4 | 10 | 270409 | 030509 | 18 | 1 | 1 | 16.9 | 7.7 | 51 | 2.55 | 0.41 | 0.59 | 6.48 | 0.2 | 9.1 | 0.31 | 1.17 | 50 | 1.13 | | |
| 4 | 10 | 040509 | 100509 | 19 | 1 | 1 | 13.3 | 5.5 | 61 | 1.95 | 0.52 | 0.55 | 7.71 | 0.18 | 13.4 | 0.1 | 0.77 | 38 | | | |
| 4 | 10 | 110509 | 170509 | 20 | 1 | 1 | 14.9 | 5.4 | 206 | 4.67 | 2.18 | 4.22 | 29.69 | 0.07 | 56.8 | 0.02 | 2.80 | 30 | 0.86 | | |
| 4 | 10 | 180509 | 240509 | 21 | 1 | 1 | 25.1 | 5.7 | 58 | 2.38 | 0.67 | 0.55 | 7.51 | 0.05 | 14.1 | 0.09 | 0.73 | 42 | 0.34 | | |
| 4 | 10 | 250509 | 310509 | 22 | 1 | 1 | 16.6 | 5.6 | 31 | 1.73 | -1 | -1 | 3.68 | 0.03 | 6.3 | -1 | 0.27 | 42 | 0.42 | | |
| 4 | 10 | 010609 | 070609 | 23 | 1 | 1 | 12.1 | 5.8 | 81 | 3.16 | 0.67 | 0.76 | 9.34 | 0.24 | 17.5 | -1 | 0.83 | 58 | 0.85 | | |
| 4 | 10 | 080609 | 140609 | 24 | 1 | 7 | 0.00 | | | | | | | | | | | | | | No Sample |
| 4 | 10 | 150609 | 210609 | 25 | 1 | 8 | 1.11 | | | | | | | 2.06 | | 1.76 | | | | | |
| 4 | 10 | 220609 | 280609 | 26 | 1 | 7 | 0.00 | | | | | | | | | | | | | | No Sample |
| 4 | 10 | 290609 | 050709 | 27 | 1 | 1 | 21.0 | 6.3 | 91 | 3.99 | 1.25 | 1.03 | 9.06 | 0.31 | 17 | 0.39 | 1.23 | 66 | 1.26 | | |
| 4 | 10 | 060709 | 120709 | 28 | 1 | 1 | 13.5 | 5.6 | 41 | 2.27 | -1 | 0.35 | 3.9 | 0.22 | 6.6 | 0.19 | 0.57 | 46 | 0.87 | | |
| 4 | 10 | 130709 | 190709 | 29 | 1 | 1 | 35.3 | 6.3 | 35 | 1.97 | 1.37 | 0.36 | 3.76 | 0.15 | 10.1 | 0.03 | 0.37 | 48 | 0.54 | | |
| 4 | 10 | 200709 | 260709 | 30 | 1 | 1 | 16.6 | 5.5 | 70 | 2.46 | 0.52 | 0.89 | 7.5 | 0.22 | 16.6 | 0.03 | 0.80 | -1 | 0.63 | | |
| 4 | 10 | 270709 | 020809 | 31 | 1 | 1 | 15.1 | 5.8 | 42 | 2.43 | -1 | 0.39 | 4.4 | 0.36 | 7.1 | 0.06 | 0.50 | 60 | 0.81 | | |
| 4 | 10 | 030809 | 090809 | 32 | 1 | 1 | 30.8 | 6.0 | 120 | 3.64 | 1.44 | 1.88 | 13.35 | 0.44 | 29.3 | 0.02 | 1.37 | -1 | 0.82 | | |
| 4 | 10 | 100809 | 160809 | 33 | 1 | 1 | 6.2 | 5.8 | 114 | 3.71 | 1.34 | 1.76 | 12.65 | 0.44 | 28.3 | 0.03 | 1.50 | 52 | 0.98 | | |
| 4 | 10 | 170809 | 230809 | 34 | 1 | 1 | 40.6 | 5.7 | 37 | 1.63 | -1 | 0.34 | 4.38 | 0.14 | 6.8 | -1 | 0.40 | 42 | 0.51 | | |
| 4 | 10 | 240809 | 300809 | 35 | 1 | 1 | 60.5 | 5.5 | 27 | 1.15 | -1 | 0.25 | 3 | 0.18 | 4.9 | 0.03 | 0.40 | 30 | 0.45 | | |
| 4 | 10 | 310809 | 060909 | 36 | 1 | 1 | 16.6 | 5.7 | 56 | 2.13 | 0.85 | 0.8 | 6.93 | 0.2 | 12.4 | -1 | 0.63 | -1 | 0.69 | | |
| 4 | 10 | 070909 | 130909 | 37 | 1 | 1 | 49.4 | 5.7 | 48 | 1.62 | 0.67 | 0.69 | 5.38 | 0.12 | 11.3 | -1 | 0.57 | 34 | 0.41 | | |
| 4 | 10 | 140909 | 200909 | 38 | 1 | 1 | 20.1 | 6.3 | 31 | 1.33 | 0.21 | 0.23 | 3.96 | 0.12 | 6.1 | -1 | 0.33 | 30 | 0.42 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 10 | 210909 | 270909 | 39 | 1 | 7 | 0.77 | | | | | | | | | | | | | Low sample |
| 4 | 10 | 280909 | 041009 | 40 | 1 | 1 | 2.02 | 5.6 | 223 | 11.0 | 3.08 | 4.83 | 26.97 | 0.23 | 60.6 | 0.1 | 2.93 | | | |
| 4 | 10 | 051009 | 111009 | 41 | 1 | 7 | 0.43 | | | | | | | | | | | | | Low sample |
| 4 | 10 | 121009 | 181009 | 42 | 1 | 1 | 7.75 | 5.8 | 186 | 9.26 | 2.48 | 3.9 | 19.3 | 0.18 | 44.9 | 0.03 | 2.10 | 94 | 1.05 | |
| 4 | 10 | 191009 | 251009 | 43 | 1 | 1 | 0.47 | | | | | | | 0.51 | | 0.56 | | | | |
| 4 | 10 | 261009 | 011109 | 44 | 1 | 1 | 22.8 | 5.8 | 123 | | 1.75 | | | 0.11 | 30.9 | 0.05 | 1.27 | 54 | 0.65 | |
| 4 | 10 | 021109 | 081109 | 45 | 1 | 1 | 38.2 | 5.8 | 65 | 2.88 | 0.74 | 0.87 | 11 | 0.08 | 16.3 | -1 | 0.67 | 46 | 0.29 | |
| 4 | 10 | 091109 | 151109 | 46 | 1 | 1 | 27.0 | 5.3 | 170 | 3.58 | 1.85 | 3.32 | 8.83 | -1 | 15.8 | -1 | 2.00 | 36 | 0.23 | |
| 4 | 10 | 161109 | 221109 | 47 | 1 | 1 | 40.0 | 5.6 | 45 | 1.1 | 0.28 | 0.42 | 22.51 | 0.05 | 9.6 | 0.02 | 0.53 | 34 | 0.33 | |
| 4 | 10 | 231109 | 291109 | 48 | 1 | 1 | 62.5 | 5.7 | 51 | 0.94 | 0.47 | 0.72 | 6.41 | -1 | 11.6 | -1 | 0.50 | 30 | 0.15 | |
| 4 | 10 | 301109 | 061209 | 49 | 1 | 1 | 23.2 | 5.1 | 286 | 2.91 | 3.57 | 5.78 | 36.06 | 0.02 | 84.6 | -1 | 3.80 | -1 | 0.32 | |
| 4 | 10 | 071209 | 131209 | 50 | 1 | 1 | 24.6 | 5.9 | 132 | 2.08 | 1.49 | 2.21 | 18.51 | 0.04 | 33.8 | -1 | 1.73 | 30 | 0.33 | |
| 4 | 10 | 141209 | 201209 | 51 | 1 | 7 | 0.0 | | | | | | | | | | | | | No Sample |
| 4 | 10 | 211209 | 281209 | 52 | 1 | 1 | 11.0 | 6.2 | 180 | 2.17 | 1.98 | 2.76 | 22.97 | 0.15 | 44.9 | 0.08 | 2.10 | 32 | | |
| 5 | 10 | 291208 | 040109 | 1 | 2 | 8 | 3.3 | | | 0.36 | 0.43 | 0.63 | 6.22 | 0.44 | 11.1 | 0.15 | 0.63 | | | |
| 5 | 10 | 050109 | 110109 | 2 | 2 | 7 | 0.0 | | | | | | | | | | | | | No Sample |
| 5 | 10 | 120109 | 180109 | 3 | 2 | 1 | 26.2 | 4.5 | 55 | 0.33 | 0.47 | 0.84 | 7.40 | 0.28 | 12.9 | 0.20 | 0.73 | -1 | | |
| 5 | 10 | 190109 | 250109 | 4 | 2 | 1 | 37.2 | 5.5 | 74 | 0.44 | 0.48 | 1.24 | 11.00 | 0.02 | 19.2 | 0.05 | 0.93 | -1 | | |
| 5 | 10 | 260109 | 010209 | 5 | 2 | 1 | 70.5 | 5.8 | 42 | 0.27 | 0.25 | 0.77 | 7.00 | -1.00 | 11.5 | 0.03 | 0.57 | -1 | | |
| 5 | 10 | 020209 | 080209 | 6 | 2 | 1 | 17.8 | 5.3 | 17 | 0.17 | 0.18 | 0.18 | 1.88 | 0.06 | 4.5 | 0.13 | 0.20 | -1 | | |
| 5 | 10 | 090209 | 150209 | 7 | 2 | 1 | 9.8 | 5.6 | 10 | | | | | 0.31 | 2.6 | 0.38 | 0.33 | -1 | | |
| 5 | 10 | 160209 | 220209 | 8 | 2 | 8 | 4.8 | 4.8 | 28 | 0.63 | 0.60 | 0.75 | 8.17 | 0.22 | 8.2 | 0.22 | 0.56 | | | |
| 5 | 10 | 230209 | 010309 | 9 | 2 | 7 | 3.0 | | | | | | | | | | | | | Low Sample |
| 5 | 10 | 020309 | 080309 | 10 | 2 | 1 | 8.4 | 5.9 | 22 | 0.20 | 0.40 | 0.48 | 4.08 | 0.26 | 8.2 | 0.24 | 0.58 | -1 | | |
| 5 | 10 | 090309 | 150309 | 11 | 2 | 1 | 29.2 | 5.3 | 40 | 0.21 | 0.28 | 0.68 | 5.97 | -1.00 | 10.1 | 0.04 | 0.61 | -1 | | |
| 5 | 10 | 160309 | 220309 | 12 | 2 | 1 | 23.0 | 5.2 | 57 | 0.29 | 0.31 | 0.88 | 8.03 | 0.02 | 14.6 | 0.06 | 0.67 | -1 | | |
| 5 | 10 | 230309 | 290309 | 13 | 2 | 7 | 0.0 | | | | | | | | | | | | | No Sample |
| 5 | 10 | 300309 | 050409 | 14 | 2 | 1 | 20.2 | 5.2 | 85 | 0.50 | 0.56 | 1.39 | 12.07 | 0.07 | 21.8 | 0.15 | 1.16 | -1 | | |
| 5 | 10 | 060409 | 120409 | 15 | 2 | 1 | 9.8 | 5.6 | 24 | 0.32 | 0.54 | 0.34 | 2.48 | 0.26 | 4.5 | 0.28 | 0.50 | -1 | | |
| 5 | 10 | 130409 | 190409 | 16 | 2 | 1 | 51.6 | 5.9 | 17 | 0.02 | 0.13 | 0.19 | 1.64 | 0.08 | 4.9 | 0.05 | 0.33 | -1 | | |
| 5 | 10 | 200409 | 260409 | 17 | 2 | 7 | 0.0 | | | | | | | | | | | | | No Sample |
| 5 | 10 | 270409 | 030509 | 18 | 2 | 1 | 32.1 | 8.3 | 21 | 0.16 | 0.07 | 0.10 | 1.17 | 0.75 | 2.2 | 0.27 | 0.57 | 24 | | |
| 5 | 10 | 040509 | 100509 | 19 | 2 | 1 | 21.8 | 5.4 | 26 | 0.21 | 0.24 | 0.29 | 2.98 | 0.17 | 5.3 | 0.13 | 0.40 | -1 | | |
| 5 | 10 | 110509 | 170509 | 20 | 2 | 1 | 29.1 | 5.7 | 60 | 0.42 | 0.31 | 0.92 | 8.32 | 0.48 | 15.1 | 0.09 | 0.93 | 38 | | |
| 5 | 10 | 180509 | 240509 | 21 | 2 | 1 | 38.9 | 5.3 | 18 | -1.0 | -1 | -1.0 | 1.70 | 0.17 | 3.7 | 0.18 | 0.27 | -1 | | |
| 5 | 10 | 250509 | 310509 | 22 | 2 | 1 | 26.5 | 5.1 | 10 | -1.0 | -1 | -1.0 | 0.58 | 0.04 | 1.2 | 0.05 | -1 | -1 | | |
| 5 | 10 | 010609 | 070609 | 23 | 2 | 1 | 18.8 | 6.3 | 47 | 0.71 | -1 | 0.43 | 3.27 | 1.86 | 6.4 | 0.13 | 0.83 | 118 | | |
| 5 | 10 | 080609 | 140609 | 24 | 2 | 7 | 0.0 | | | | | | | | | | | | | No Sample |
| 5 | 10 | 150609 | 210609 | 25 | 2 | 8 | 7.3 | 6.4 | 74 | 1.20 | 1.38 | 0.47 | 2.72 | 3.81 | 6.3 | 0.68 | 1.13 | | | |
| 5 | 10 | 220609 | 280609 | 26 | 2 | 7 | 0.0 | | | | | | | | | | | | | No Sample |
| 5 | 10 | 290609 | 050709 | 27 | 2 | 1 | 34.7 | 7.2 | 34 | 0.43 | -1 | -1.0 | 2.00 | 0.26 | 3.5 | 0.20 | 0.30 | 74 | | |
| 5 | 10 | 060709 | 120709 | 28 | 2 | 1 | 26.7 | 5.5 | 10 | -1.0 | -1 | -1.0 | 0.35 | 0.25 | 1.1 | 0.17 | 0.20 | -1 | | |
| 5 | 10 | 130709 | 190709 | 29 | 2 | 1 | 53.0 | 7.2 | 20 | 0.11 | 1.40 | 0.26 | 1.95 | 0.10 | 4.0 | 0.07 | 0.30 | -1 | | |

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| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 10 | 200709 | 260709 | 30 | 2 | 1 | 26.8 | 5.1 | 18 | -1.0 | -1.00 | -1.0 | 1.48 | -1.0 | 3.1 | 0.06 | 0.23 | 760 | | | |
| 5 | 10 | 270709 | 020809 | 31 | 2 | 1 | 26.1 | 4.2 | 47 | -1.0 | -1.00 | 0.25 | 1.73 | 0.15 | 3.0 | 0.15 | 1.70 | -1 | | | |
| 5 | 10 | 030809 | 090809 | 32 | 2 | 1 | 46.8 | 4.9 | 34 | -1.0 | 0.19 | 0.39 | 3.56 | -1.00 | 6.9 | 0.05 | 0.40 | -1 | | | |
| 5 | 10 | 100809 | 160809 | 33 | 2 | 1 | 16.1 | 5.1 | 36 | -1.0 | -1.00 | 0.42 | 3.87 | 0.06 | 7.6 | 0.06 | 0.50 | -1 | | | |
| 5 | 10 | 170809 | 230809 | 34 | 2 | 1 | 49.4 | 5.6 | 11 | -1.0 | -1.00 | -1.0 | 0.43 | 0.05 | 0.9 | 0.04 | -1 | -1 | | | |
| 5 | 10 | 240809 | 300809 | 35 | 2 | 1 | 107 | 6.0 | 14 | -1.0 | -1.00 | -1.0 | 1.47 | 0.07 | 2.4 | 0.06 | 0.27 | -1 | | | |
| 5 | 10 | 310809 | 060909 | 36 | 2 | 1 | 27.8 | 5.5 | 26 | 0.21 | 0.48 | 0.42 | 3.89 | -1 | 5.8 | 0.03 | 0.33 | -1 | | | |
| 5 | 10 | 070909 | 130909 | 37 | 2 | 1 | 71.0 | 5.9 | 17 | 0.14 | 0.56 | 0.28 | 2.35 | 0.03 | 3.8 | 0.04 | 0.30 | -1 | | | |
| 5 | 10 | 140909 | 200909 | 38 | 2 | 1 | 22.2 | 6.4 | 11 | 0.04 | 0.07 | 0.08 | 0.99 | 0.05 | 2.1 | 0.04 | -1 | -1 | | | |
| 5 | 10 | 210909 | 270909 | 39 | 2 | 7 | 4.0 | | | 0.25 | 1.03 | 0.35 | 5.56 | 0.35 | 9.1 | 0.40 | 0.70 | | | | |
| 5 | 10 | 280909 | 041009 | 40 | 2 | 1 | 8.1 | 5.4 | 53 | 0.35 | 0.47 | 0.88 | 8.13 | 0.06 | 15.3 | 0.11 | 0.83 | | | | |
| 5 | 10 | 051009 | 111009 | 41 | 2 | 7 | 7.5 | 5.2 | 57 | 0.30 | 0.44 | 0.83 | 7.40 | 0.09 | 14.2 | 0.15 | 0.83 | | | | |
| 5 | 10 | 121009 | 181009 | 42 | 2 | 1 | 16.9 | 5.8 | 22 | 0.49 | 0.19 | 0.23 | 2.44 | 0.55 | 3.8 | 0.12 | 0.30 | 760 | | | |
| 5 | 10 | 191009 | 251009 | 43 | 2 | 1 | 4.4 | 4.6 | 17 | -1 | 0.20 | 0.16 | 1.51 | 0.35 | 3.2 | 0.46 | 0.63 | | | | |
| 5 | 10 | 261009 | 011109 | 44 | 2 | 1 | 27.7 | 5.2 | 34 | 0.19 | 0.15 | 0.44 | 4.54 | 0.13 | 8.1 | 0.12 | 0.43 | -1 | | | |
| 5 | 10 | 021109 | 081109 | 45 | 2 | 1 | 54.8 | 5.3 | 11 | -1.0 | -1.00 | 0.07 | -1.00 | 0.04 | 1.6 | 0.04 | -1 | -1 | | | |
| 5 | 10 | 091109 | 151109 | 46 | 2 | 1 | 50.1 | 5.4 | 64 | 0.42 | 0.43 | 0.98 | 8.83 | 0.23 | 15.8 | 0.02 | 0.73 | 42 | | | |
| 5 | 10 | 161109 | 221109 | 47 | 2 | 1 | 61.1 | 5.4 | 14 | -1.0 | -1.00 | 0.11 | 1.10 | 0.05 | 2.2 | 0.04 | 0.13 | -1 | | | |
| 5 | 10 | 231109 | 291109 | 48 | 2 | 1 | 131 | 6.5 | 26 | -1.0 | 0.17 | 0.37 | 3.39 | -1.00 | 6.0 | 0.02 | 0.27 | -1 | | | |
| 5 | 10 | 301109 | 061209 | 49 | 2 | 1 | 32.5 | 5.3 | 65 | 0.28 | 0.34 | 1.00 | 8.83 | -1.00 | 18.5 | -1.00 | 0.80 | -1 | | | |
| 5 | 10 | 071209 | 131209 | 50 | 2 | 1 | 29.8 | 7.0 | 41 | -1.0 | 0.17 | 0.52 | 4.34 | 0.22 | 8.7 | 0.03 | 0.47 | 28 | | | |
| 5 | 10 | 141209 | 201209 | 51 | 2 | 7 | 0.0 | | | | | | | | | | | | | | No Sample |
| 5 | 10 | 211209 | 281209 | 52 | 2 | 1 | 29.7 | 6.6 | 54 | 0.54 | 0.38 | 0.74 | 6.39 | 0.36 | 11.7 | 0.05 | 0.63 | 36 | | | |
| 6 | 10 | 291208 | 040109 | 1 | 4 | 8 | 0.1 | 4.8 | 229 | 6.96 | 6.96 | 7.34 | 41.95 | 0.24 | 90.6 | 0.03 | 4.27 | 60 | 1.03 | 23.1 | |
| 6 | 10 | 050109 | 110109 | 2 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 120109 | 180109 | 3 | 4 | 1 | 3.8 | 4.7 | 132 | 4.09 | 2 | 2.23 | 21.6 | 0.06 | 38.4 | -1 | 2.30 | -1 | 0.38 | 17.5 | |
| 6 | 10 | 190109 | 250109 | 4 | 4 | 1 | 4.7 | 5.1 | 99 | 2.5 | 0.87 | 1.11 | 14.29 | -1 | 25.1 | -1 | 1.43 | -1 | 0.24 | 13.9 | |
| 6 | 10 | 260109 | 010209 | 5 | 4 | 1 | 5.6 | | 185 | 2.52 | 3.4 | 4.27 | 24.93 | 0.11 | 53.6 | 0.03 | 2.60 | -1 | | 11.3 | |
| 6 | 10 | 020209 | 080209 | 6 | 4 | 1 | 0.6 | 4.9 | 120 | 2.28 | 1.29 | 1.3 | 18.84 | -1 | 30.6 | -1 | 1.60 | -1 | 0.38 | 20 | |
| 6 | 10 | 090209 | 150209 | 7 | 4 | 1 | 0.02 | 5.2 | 1 | 1.28 | 0.7 | 1.09 | 10.88 | 0.41 | 32.7 | 0.07 | 3.47 | 22 | 1.24 | 31.1 | |
| 6 | 10 | 160209 | 220209 | 8 | 4 | 8 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 230209 | 010309 | 9 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 020309 | 080309 | 10 | 4 | 1 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 090309 | 150309 | 11 | 4 | 1 | 1.0 | 4.7 | 157 | 5.79 | 4.54 | 4.63 | 35.48 | 0.22 | 65.62 | 0.03 | 4.18 | -1 | 1.08 | 48.3 | |
| 6 | 10 | 160309 | 220309 | 12 | 4 | 1 | 0.3 | 4.7 | 180 | 6.32 | 4.37 | 4.51 | 40.13 | 0.03 | 77.71 | -1 | 3.48 | -1 | | | |
| 6 | 10 | 230309 | 290309 | 13 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 300309 | 050409 | 14 | 4 | 1 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 060409 | 120409 | 15 | 4 | 1 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 130409 | 190409 | 16 | 4 | 1 | 2.0 | 4.7 | 251 | 5.18 | 3.52 | 3.47 | 33.18 | 0.15 | 63.33 | 0.03 | 3.19 | -1 | 0.94 | 38.4 | |
| 6 | 10 | 200409 | 260409 | 17 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 270409 | 030509 | 18 | 4 | 1 | 0.03 | 4.7 | 305 | 10.7 | 5.63 | 5.47 | 43.28 | 0.84 | 68.9 | 0.06 | 5.00 | -1 | 2.39 | 118 | |
| 6 | 10 | 040509 | 100509 | 19 | 4 | 1 | 0.3 | 5.2 | 110 | 2.97 | 1.17 | 0.69 | 16.24 | 0.08 | 24.3 | 0.02 | 1.03 | -1 | 0.64 | 31.5 | |
| 6 | 10 | 110509 | 170509 | 20 | 4 | 1 | 0.7 | 4.6 | 417 | 11.0 | 6.69 | 8.22 | | 0.45 | 114.2 | -1 | 5.50 | -1 | 1.3 | 43.4 | |

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| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 10 | 180509 | 240509 | 21 | 4 | 1 | 2.8 | 4.9 | 120 | 4.17 | 1.4 | 1.02 | 17.63 | 0.08 | 28.5 | -1 | 1.37 | -1 | 0.69 | 38.3 | |
| 6 | 10 | 250509 | 310509 | 22 | 4 | 1 | 1.4 | 5.3 | 60 | 2.46 | 0.59 | 0.33 | 8.75 | 0.04 | 13.2 | -1 | 0.50 | 30 | 0.6 | 27.5 | |
| 6 | 10 | 010609 | 070609 | 23 | 4 | 1 | 1.1 | 5.2 | 82 | 3 | 0.95 | 0.47 | 11.28 | 0.07 | 16.9 | 0.02 | 0.53 | 34 | 0.79 | 37.9 | |
| 6 | 10 | 080609 | 140609 | 24 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 150609 | 210609 | 25 | 4 | 8 | 0.0 | | | | | | | | | | | | | | |
| 6 | 10 | 220609 | 280609 | 26 | 4 | 7 | 0.0 | | | | | | | | | | | | | | |
| 6 | 10 | 290609 | 050709 | 27 | 4 | 1 | 0.6 | | | | | | | | | | | | | | Contaminated |
| 6 | 10 | 060709 | 120709 | 28 | 4 | 1 | 0.8 | 5.1 | 140 | 5.66 | 2.73 | 1.28 | 18.16 | 0.5 | 26.7 | 0.02 | 0.67 | 68 | 1.85 | 84.7 | |
| 6 | 10 | 130709 | 190709 | 29 | 4 | 1 | 3.3 | 5.7 | 14 | 2.47 | 1.07 | 0.3 | 6.78 | 0.1 | 6.7 | -1 | 0.27 | 56 | 0.75 | | |
| 6 | 10 | 200709 | 260709 | 30 | 4 | 1 | 0.5 | 5.2 | 137 | 4.63 | 2.02 | 1.26 | 16.57 | 0.15 | 34.3 | 0.02 | 0.77 | 30 | 0.62 | | |
| 6 | 10 | 270709 | 020809 | 31 | 4 | 1 | 0.1 | 6.1 | 149 | 5.52 | 4.63 | 1.63 | 18.17 | 1.69 | 27.5 | 0.12 | 0.67 | | 2.73 | | |
| 6 | 10 | 030809 | 090809 | 32 | 4 | 1 | 0.8 | 5.3 | 165 | 5.67 | 3.45 | 2.05 | 19.48 | 0.23 | 40.8 | 0.02 | 1.40 | | 0.69 | | |
| 6 | 10 | 100809 | 160809 | 33 | 4 | 1 | 0.4 | 5.2 | 97 | 3.73 | 1.71 | 1.03 | 12.67 | 0.15 | 20.7 | 0.03 | 0.77 | 40 | | | |
| 6 | 10 | 170809 | 230809 | 34 | 4 | 1 | 4.5 | 5.4 | 60 | 2.5 | 0.87 | 0.59 | 8.6 | 0.1 | 12.1 | -1 | 0.60 | 26 | 0.67 | | |
| 6 | 10 | 240809 | 300809 | 35 | 4 | 1 | 9.4 | 5.4 | 36 | 1.68 | -1 | 0.2 | 4.5 | 0.07 | 5.3 | -1 | 0.37 | 22 | 0.38 | 19.8 | |
| 6 | 10 | 310809 | 060909 | 36 | 4 | 1 | 1.4 | 5.3 | 64 | 4.29 | 0.89 | 0.66 | 8.69 | 0.11 | 14.4 | -1 | 0.57 | -1 | 0.44 | 16.4 | |
| 6 | 10 | 070909 | 130909 | 37 | 4 | 1 | 3.8 | 5.2 | 56 | 3.71 | 0.86 | 0.63 | 7.26 | 0.08 | 11.9 | -1 | 0.50 | 24 | 0.45 | 17.9 | |
| 6 | 10 | 140909 | 200909 | 38 | 4 | 1 | 3.0 | 5.4 | 46 | 2.66 | 0.64 | 0.4 | 5.78 | 0.08 | 9.1 | -1 | 0.40 | 28 | 0.42 | 17.3 | |
| 6 | 10 | 210909 | 270909 | 39 | 4 | 7 | 0.0 | | | 3.11 | 0.6 | 0.29 | 6.72 | 6.34 | | 2.93 | | | | | |
| 6 | 10 | 280909 | 041009 | 40 | 4 | 1 | 0.0 | | | | | | | | | | | | | | Contaminated |
| 6 | 10 | 051009 | 111009 | 41 | 4 | 7 | 0.0 | | | | | | | | | | | | | | Low sample |
| 6 | 10 | 121009 | 181009 | 42 | 4 | 1 | 0.01 | 5.1 | 482 | 12.5 | 1.94 | 0.18 | 173.4 | 4.05 | 113.3 | 1.17 | 4.20 | | | | |
| 6 | 10 | 191009 | 251009 | 43 | 4 | 1 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 261009 | 011109 | 44 | 4 | 1 | 1.2 | 4.7 | 180 | 6.52 | 4.59 | 3.67 | 21.84 | 0.17 | 43.6 | 0.08 | 1.43 | 32 | 1.04 | | |
| 6 | 10 | 021109 | 081109 | 45 | 4 | 1 | 4.2 | 5.1 | 110 | 9.28 | 1.6 | 1.3 | 16 | 0.17 | 27.1 | -1 | 0.87 | 42 | 0.79 | 37.2 | |
| 6 | 10 | 091109 | 151109 | 46 | 4 | 1 | 3.4 | 5.0 | 193 | 11.9 | 3.13 | 3.17 | 20.08 | -1 | 48.9 | -1 | 1.97 | -1 | 0.43 | 23.1 | |
| 6 | 10 | 161109 | 221109 | 47 | 4 | 1 | 4.4 | 5.1 | 67 | 2.42 | 0.6 | 0.63 | 8.44 | 0.08 | 14.4 | -1 | 0.67 | 26 | 0.39 | 19.7 | |
| 6 | 10 | 231109 | 291109 | 48 | 4 | 1 | 16.3 | 5.8 | 40 | 2.81 | 0.35 | 0.18 | 4.35 | 0.04 | 7.3 | -1 | 0.30 | 42 | 0.26 | 11.8 | |
| 6 | 10 | 301109 | 061209 | 49 | 4 | 1 | 2.2 | 4.5 | 319 | 8.63 | 6.15 | 6.53 | 34.13 | 0.06 | 91.2 | -1 | 4.00 | -1 | 0.42 | 19.9 | |
| 6 | 10 | 071209 | 131209 | 50 | 4 | 1 | 1.4 | 4.6 | 202 | 4.4 | 3.34 | 3.5 | 25.37 | 0.05 | 50.8 | -1 | 2.67 | -1 | 0.44 | 26.6 | |
| 6 | 10 | 141209 | 201209 | 51 | 4 | 7 | 0.0 | | | | | | | | | | | | | | No Sample |
| 6 | 10 | 211209 | 281209 | 52 | 4 | 1 | 0.3 | 5.4 | 319 | 13.4 | 4.5 | 4.61 | 33.75 | 0.91 | 77 | 0.03 | 3.73 | 56 | 1.38 | 23.1 | |
| 7 | 11 | 190109 | 250109 | 1 | 1 | 1 | 65.0 | 5.7 | 89 | 1.25 | 1.11 | 1.44 | 12.42 | 0.15 | 21.6 | 0.11 | 3.6 | 20 | 0.56 | | |
| 7 | 11 | 260109 | 010209 | 2 | 1 | 1 | 83.7 | 5.4 | 238 | 1.8 | 2.23 | 4.61 | 36.42 | -1 | 66.3 | 0.02 | 9.4 | -1 | 0.22 | | |
| 7 | 11 | 160209 | 220209 | 3 | 1 | 1 | 26.9 | 5.7 | 57 | 0.25 | 0.29 | 0.41 | 8.48 | 0.06 | 14.03 | 0.14 | 2.62 | -1 | 0.42 | | |
| 7 | 11 | 090309 | 150309 | 4 | 1 | 1 | 62.3 | 5.7 | 117 | 1.18 | 0.94 | 2.05 | 17.42 | 0.05 | 32.04 | 0.04 | 4.67 | -1 | 0.38 | | |
| 7 | 11 | 130409 | 190409 | 5 | 1 | 1 | 62.7 | 5.6 | 157 | 1.62 | 1.38 | 2.56 | 20.15 | 0.19 | 37 | 0.13 | 6.3 | -1 | 0.35 | | |
| 7 | 11 | 110509 | 170509 | 6 | 1 | 1 | 70.7 | 5.6 | 82 | 2.39 | 1 | 1 | 9.7 | -1 | 19.5 | 0.06 | 3.4 | 44 | 0.73 | | |
| 7 | 11 | 150609 | 210609 | 7 | 1 | 1 | 45.6 | 6.0 | 57 | 3.5 | 0.68 | 0.51 | 4.64 | 0.63 | 9 | 0.14 | 2.2 | 80 | 1.24 | | |
| 7 | 11 | 290609 | 050709 | 8 | 1 | 1 | 15.3 | 5.6 | 87 | 6.08 | 1.21 | 0.92 | 7.71 | -1 | 15.8 | 0.04 | 3.5 | 82 | 1.03 | | |
| 7 | 11 | 060709 | 120709 | 9 | 1 | 1 | 55.5 | 6.9 | 21 | 1.54 | -1 | -1 | 1.51 | 0.06 | 2.6 | 0.02 | 0.8 | 36 | 0.48 | | |
| 7 | 11 | 200709 | 260709 | 10 | 1 | 1 | 36.8 | 5.6 | 31 | 2.27 | -1 | 0.27 | 3.01 | 0.03 | 5.1 | -1 | 1.2 | 30 | 0.4 | | |
| 7 | 11 | 270709 | 020809 | 11 | 1 | 1 | 24.4 | 5.6 | 41 | 2.58 | 0.63 | 0.45 | 4.28 | 0.04 | 8.1 | -1 | 1.3 | 30 | 0.27 | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 11 | 030809 | 090809 | 12 | 1 | 1 | 24.1 | 5.7 | 67 | 2.93 | 0.81 | 0.78 | 6.69 | 0.02 | 15.5 | -1 | 2.3 | 22 | 0.12 | |
| 7 | 11 | 100809 | 160809 | 13 | 1 | 1 | 2.7 | 6.3 | 74 | 3.65 | 0.98 | 0.65 | 7.75 | 0.41 | 15.9 | 0.14 | 3 | 84 | 1.38 | |
| 7 | 11 | 170809 | 230809 | 14 | 1 | 1 | 22.7 | 5.6 | 35 | 2.78 | 0.76 | 0.34 | 3.08 | 0.12 | 6.1 | -1 | 1.2 | 46 | 0.48 | |
| 7 | 11 | 240809 | 300809 | 15 | 1 | 1 | 49.7 | 4.1 | 29 | 1.8 | -1 | 0.27 | 2.69 | 0.14 | 5.1 | -1 | 1 | 32 | 0.37 | |
| 7 | 11 | 310809 | 060909 | 16 | 1 | 1 | 37.6 | 5.7 | 47 | 2.44 | 0.8 | 0.67 | 5.7 | 0.05 | 9.9 | -1 | 1.7 | 38 | 0.3 | |
| 7 | 11 | 070909 | 130909 | 17 | 1 | 1 | 22.7 | 6.5 | 63 | 2.18 | 0.72 | 0.73 | 5.8 | 0.38 | 13 | 0.03 | 2.2 | 70 | 1.13 | |
| 7 | 11 | 140909 | 200909 | 18 | 1 | 1 | 12.4 | 5.9 | 40 | 2.25 | 0.65 | 0.49 | 4.2 | 0.14 | 7.9 | 0.02 | 1.4 | 42 | 0.53 | |
| 7 | 11 | 210909 | 270909 | 19 | 1 | 1 | 1.6 | 5.8 | 133 | 8.73 | 2.8 | 2.12 | 12.48 | | 29.3 | 0.27 | 5.6 | | | |
| 7 | 11 | 280909 | 041009 | 20 | 1 | 8 | 0.5 | | | 11.7 | 4.6 | 3.89 | 28.58 | 0.61 | | 0.12 | | | | |
| 7 | 11 | 051009 | 111009 | 21 | 1 | 1 | 7.2 | 5.8 | 190 | 10.6 | 2.85 | 3.47 | 18.68 | 0.03 | 45.7 | 0.04 | 7.6 | 70 | 0.58 | |
| 7 | 11 | 121009 | 181009 | 22 | 1 | 1 | 6.6 | 5.5 | 101 | 8.27 | 1.21 | 1.56 | 9.39 | 0.18 | 23.2 | 0.04 | 2.9 | 62 | 1.01 | |
| 7 | 11 | 191009 | 251009 | 23 | 1 | 1 | 7.9 | 5.6 | 84 | 6.43 | 1.55 | 1.14 | 7.02 | 0.03 | 20.1 | 0.15 | 1.6 | 54 | 0.7 | |
| 7 | 11 | 261009 | 011109 | 24 | 1 | 1 | 63.4 | 5.7 | 66 | 4.24 | 0.68 | 0.87 | 7.34 | 0.05 | 14.7 | 0.03 | 1.9 | 38 | 0.42 | |
| 7 | 11 | 021109 | 081109 | 25 | 1 | 1 | 50.6 | 5.8 | 37 | 2.13 | 0.13 | 0.32 | 5 | 0.05 | 8 | 0.02 | 0.9 | 36 | 0.15 | |
| 7 | 11 | 091109 | 151109 | 26 | 1 | 1 | 61.0 | 5.1 | 134 | 2.32 | 1.28 | 2.16 | 18.23 | -1 | 35 | -1 | 4.5 | -1 | 0.09 | |
| 7 | 11 | 161109 | 221109 | 27 | 1 | 1 | 35.9 | 5.5 | 34 | 0.84 | 0.18 | 0.32 | 3.93 | 0.05 | 7.1 | 0.03 | 0.9 | 28 | 0.31 | |
| 7 | 11 | 231109 | 291109 | 28 | 1 | 1 | 99.9 | 5.6 | 47 | 0.96 | 0.45 | 0.66 | 6.06 | 0.02 | 10.5 | -1 | 1.3 | 34 | 0.16 | |
| 7 | 11 | 301109 | 061209 | 29 | 1 | 1 | 51.7 | 5.3 | 170 | 1.52 | 1.64 | 2.79 | 23.37 | 0.06 | 48 | 0.03 | 6.4 | -1 | 0.26 | |
| 7 | 11 | 071209 | 131209 | 30 | 1 | 1 | 39.4 | 5.3 | 84 | 0.72 | 0.75 | 1.3 | 11.04 | 0.09 | 21.6 | 0.02 | 3.1 | -1 | 0.34 | |
| 7 | 11 | 141209 | 201209 | 31 | 1 | 1 | 10.5 | 5.4 | 86 | 0.64 | 0.65 | 1.2 | 11.74 | 0.13 | 22.2 | 0.03 | 3.1 | 20 | 0.34 | |
| 7 | 11 | 211209 | 281209 | 32 | 1 | 1 | 9.8 | 7.7 | 68 | 0.9 | 0.76 | 0.92 | 8.66 | 0.21 | 15.3 | 0.1 | 2.7 | 32 | 0.93 | |
| 8 | 11 | 190109 | 250109 | 1 | 2 | 1 | 50.0 | 5.6 | 45 | 0.23 | 0.34 | 0.59 | 5.56 | 0.12 | 9.8 | 0.09 | 0.53 | -1 | | estimated from met. Data |
| 8 | 11 | 260109 | 010209 | 2 | 2 | 1 | 67.9 | 5.4 | 112 | 0.63 | 0.92 | 1.93 | 17.16 | 0.02 | 30 | 0.02 | 1.40 | -1 | | |
| 8 | 11 | 160209 | 220209 | 3 | 2 | 1 | 37.4 | 6.7 | 27 | 0.2 | 0.55 | 0.58 | 4.6 | 0.3 | 5.8 | 0.13 | 0.48 | 24 | | |
| 8 | 11 | 090309 | 150309 | 4 | 2 | 1 | 67.0 | 6.3 | 56 | 0.26 | 0.33 | 0.87 | 8 | 0.07 | 16.18 | 0.03 | 0.69 | -1 | | |
| 8 | 11 | 130409 | 190409 | 5 | 2 | 1 | 78.8 | 5.6 | 54 | 0.34 | 0.39 | 0.85 | 6.96 | 0.13 | 12.2 | 0.11 | 0.67 | -1 | | |
| 8 | 11 | 110509 | 170509 | 6 | 2 | 1 | 94.7 | 5.2 | 41 | 0.22 | -1 | 0.49 | 4.54 | 0.07 | 9.5 | 0.09 | 0.57 | -1 | | |
| 8 | 11 | 150609 | 210609 | 7 | 2 | 1 | 64.9 | 5.5 | 18 | 0.21 | -1 | -1 | 1.55 | 0.27 | 3.1 | 0.11 | 0.30 | -1 | | |
| 8 | 11 | 290609 | 050709 | 8 | 2 | 1 | 29.0 | 5.0 | 35 | 0.24 | -1 | 0.37 | 3.43 | 0.06 | 6.5 | 0.12 | 0.43 | -1 | | |
| 8 | 11 | 060709 | 120709 | 9 | 2 | 1 | 67.7 | 5.5 | 10 | -1 | -1 | -1 | 0.4 | 0.22 | 1.2 | 0.09 | 0.20 | -1 | | |
| 8 | 11 | 200709 | 260709 | 10 | 2 | 1 | 63.8 | 5.1 | 14 | -1 | -1 | -1 | 1.36 | 0.13 | 2.2 | 0.07 | 0.23 | -1 | | |
| 8 | 11 | 270709 | 020809 | 11 | 2 | 1 | 36.2 | 5.1 | 26 | -1 | -1 | 0.29 | 2.85 | 0.07 | 4.9 | 0.05 | 0.33 | -1 | | |
| 8 | 11 | 030809 | 090809 | 12 | 2 | 1 | 37.0 | 5.4 | 37 | -1 | -1 | 0.45 | 4.16 | 0.31 | 8.5 | 0.04 | 0.40 | 44 | | |
| 8 | 11 | 100809 | 160809 | 13 | 2 | 1 | 6.2 | 6.6 | 64 | 1.58 | -1 | 0.54 | 4.92 | 2.3 | 9.4 | 0.07 | 0.80 | | | |
| 8 | 11 | 170809 | 230809 | 14 | 2 | 1 | 27.7 | 5.5 | 12 | -1 | -1 | -1 | 1.02 | 0.19 | 2.5 | 0.05 | 0.23 | 20 | | |
| 8 | 11 | 240809 | 300809 | 15 | 2 | 1 | 64.0 | 5.2 | 17 | -1 | -1 | 0.22 | 1.8 | 0.06 | 3 | 0.04 | 0.20 | 28 | | |
| 8 | 11 | 310809 | 060909 | 16 | 2 | 1 | 49.2 | 5.1 | 24 | 0.27 | 0.45 | 0.39 | 3.3 | 0.05 | 4.7 | 0.03 | 0.27 | -1 | | |
| 8 | 11 | 070909 | 130909 | 17 | 2 | 1 | 33.0 | 6.9 | 34 | 0.21 | 0.19 | 0.5 | 4.17 | 0.06 | 7.6 | 0.03 | 0.40 | -1 | | |
| 8 | 11 | 140909 | 200909 | 18 | 2 | 1 | 16.2 | 5.7 | 23 | 0.16 | 0.18 | 0.22 | 2.58 | 0.23 | 4.6 | 0.08 | 0.27 | 22 | | |
| 8 | 11 | 210909 | 270909 | 19 | 2 | 1 | 2.3 | | | 1.08 | 1.11 | 0.81 | 6.76 | | | | | | | |
| 8 | 11 | 280909 | 041009 | 20 | 2 | 8 | 2.0 | | | 1.43 | 1.84 | 2.54 | 21.64 | 1.22 | | 0.23 | | | | |
| 8 | 11 | 051009 | 111009 | 21 | 2 | 1 | 9.5 | 7.0 | 80 | 1.13 | 0.57 | 0.89 | 9.81 | 0.96 | 18.3 | 0.12 | 0.93 | 96 | | |
| 8 | 11 | 121009 | 181009 | 22 | 2 | 1 | 10.1 | 5.3 | 21 | 0.21 | 0.39 | 0.26 | 2.41 | 0.24 | 4.2 | 0.11 | 0.37 | 20 | | |

```
    8   11 191009 251009 23 2 1  9.6 5.5    7   -1  0.18 0.07  0.66   0.2     1  0.18  0.23   -1
    8   11 261009 011109 24 2 1 40.2 5.3   21 0.12   0.1 0.24  2.46  0.15   4.6  0.09  0.27   -1
    8   11 021109 081109 25 2 1 31.8 5.5   14 0.06    -1 0.14    -1  0.07   2.8  0.05  0.17   -1
    8   11 091109 151109 26 2 1 76.0 5.1   65  0.3  0.31 1.01  9.19    -1  17.7  0.02  0.77   26
    8   11 161109 221109 27 2 1 45.7 5.3   16   -1    -1 0.18  1.57  0.06   3.1  0.05  0.17   -1
    8   11 231109 291109 28 2 1  110 5.4   27   -1  0.12 0.39  3.55  0.03   6.2  0.02  0.27   -1
    8   11 301109 061209 29 2 1 50.9 5.4   91 0.45  0.56 1.57 13.52  0.03  25.4  0.02  1.10   -1
    8   11 071209 131209 30 2 1 59.7                                                                          Contaminated
    8   11 141209 201209 31 2 1 11.8 5.9   59 0.44  0.23 0.68  6.75  0.87  13.8  0.04  0.67   72
    8   11 211209 281209 32 2 1 14.3 8.1   67 1.51  0.57 0.59  5.95        10.9  0.06  0.73  182
!DEO
!Sequence, plot, date_start, date_end, period, sampler, V_sampling, quantity, Al, Mn, Fe, P_PO4, Cu, Zn, Hg, Pb, Co, Mo, Ni, Cd,
S_total, C_total, other_observations
    1   16 120109 180109  1 1 1 14.0   34   402    42 .085   -1   36                        -1
    1   16 190109 250109  2 1 1 55.9   11    48    12   -1    2    4                         1
    1   16 260109 010209  3 1 1 20.4   12   157    21   -1    3   16                        -1
    1   16 160209 220209  4 1 1 48.1   73     1    11   -1   41    6                         2
    1   16 230209 010309  5 1 8  0.5   57   225    54       121   63                        10                Low sample
    1   16 020309 080309  6 1 7  0.0                                                                          Low sample
    1   16 090309 150309  7 1 1 10.5    9   149    22   -1    7   19                         1
    1   16 160309 220309  8 1 1  3.2    8   287    15   -1   11   31                         4
    1   16 230309 290309  9 1 7  0.0                                                                          No sample
    1   16 300309 050409 10 1 1  0.8   87   887    93   -1   21   75                         5
    1   16 060409 120409 11 1 1 17.2   35   353    50   -1    6   34                         2
    1   16 130409 190409 12 1 1 53.8    6    41    18   -1   -1   -1                        -1
    1   16 200409 260409 13 1 1 33.2    8   154    13   -1   -1   10                        -1
    1   16 270409 030509 14 1 1 23.4   18   149    14 .008   -1    7                        -1
    1   16 040509 100509 15 1 1 18.4   10    45    18   -1   -1   11                         2
    1   16 110509 170509 16 1 7  0.1                                                                          Low sample
    1   16 180509 240509 17 1 1 38.6   13   224    28   -1   -1   10                        -1
    1   16 250509 310509 18 1 1 14.7   10    19    11   -1   -1   -1                        -1
    1   16 010609 070609 19 1 7  0.2                                                                          Low sample
    1   16 080609 140609 20 1 1 58.2   14    52    -1   -1   -1   -1                        -1
    1   16 150609 210609 21 1 1  1.6   22    83    28 .003   12   -1                        -1
    1   16 220609 280609 22 1 1 21.1   13    23    26   -1   -1   -1                        -1
    1   16 290609 050709 23 1 1  0.8   50    67    68 .015   15   10                        -1
    1   16 060709 120709 24 1 1 50.8   14    42    27   -1   -1   -1                        -1
    1   16 130709 190709 25 1 1 27.0   16    -1    10 .005   -1   -1                        -1
    1   16 200709 260709 26 1 1 17.4 1988    26    70 .013   -1   38                        -1
    1   16 270709 020809 27 1 1 39.6   -1    22    -1 .011   -1   -1                        -1
    1   16 030809 090809 28 1 1 37.6   24   120    38 .003   -1   11                        -1
    1   16 100809 160809 29 1 7  0.0                                                                          Low sample
    1   16 170809 230809 30 1 1  2.8   26    22    33 .329   16    7                         3
```

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16 | 240809 | 300809 | 31 | 1 | 1 | 26.9 | 62 | 50 | 33 | .017 | 18 | -1 | -1 | |
| 1 | 16 | 310809 | 060909 | 32 | 1 | 1 | 29.4 | 4 | 13 | 3 | .007 | 4 | 6 | -1 | |
| 1 | 16 | 070909 | 130909 | 33 | 1 | 1 | 35.4 | 7 | 33 | 10 | .013 | 3 | 5 | -1 | |
| 1 | 16 | 140909 | 200909 | 34 | 1 | 1 | 1.3 | -1 | 16 | 22 | .057 | 14 | 6 | 2 | |
| 1 | 16 | 210909 | 270909 | 35 | 1 | 7 | 0.0 | | | | | | | | No sample |
| 1 | 16 | 280909 | 041009 | 36 | 1 | 1 | 0.2 | 59 | 1046 | 69 | .128 | 21 | 93 | 18 | |
| 1 | 16 | 051009 | 111009 | 37 | 1 | 1 | 0.2 | 43 | 416 | 43 | | 61 | 58 | 11 | |
| 1 | 16 | 121009 | 181009 | 38 | 1 | 1 | 33.6 | 14 | 105 | 14 | -1 | 3 | 7 | 2 | |
| 1 | 16 | 191009 | 251009 | 39 | 1 | 7 | 0.0 | | | | | | | | No sample |
| 1 | 16 | 261009 | 011109 | 40 | 1 | 1 | 58.9 | 9 | 143 | 15 | -1 | 2 | 6 | 4 | |
| 1 | 16 | 021109 | 081109 | 41 | 1 | 1 | 60.7 | 10 | 38 | 17 | .006 | 3 | 5 | 3 | |
| 1 | 16 | 091109 | 151109 | 42 | 1 | 1 | 6.1 | -1 | 170 | 10 | 0.01 | 1 | 8 | 1 | |
| 1 | 16 | 161109 | 221109 | 43 | 1 | 1 | 59.8 | 12 | 71 | 12 | .003 | 3 | 2 | 1 | |
| 1 | 16 | 231109 | 291109 | 44 | 1 | 1 | 61.0 | 5 | 65 | 9 | -1 | 1 | 3 | -1 | |
| 1 | 16 | 301109 | 061209 | 45 | 1 | 1 | 59.3 | 3 | 82 | 4 | -1 | -1 | 3 | 11 | |
| 1 | 16 | 071209 | 131209 | 46 | 1 | 1 | 38.9 | 4 | 77 | 12 | .003 | 3 | 5 | 20 | |
| 1 | 16 | 141209 | 201209 | 47 | 1 | 1 | 7.3 | 6 | 113 | 4 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 120109 | 180109 | 1 | 2 | 1 | 24.6 | 20 | 2 | 36 | -1 | -1 | 8 | -1 | |
| 2 | 16 | 190109 | 250109 | 2 | 2 | 1 | 69.4 | 3 | 1 | 2 | -1 | 1 | 5 | 1 | |
| 2 | 16 | 260109 | 010209 | 3 | 2 | 1 | 31.1 | -1 | 1 | 10 | -1 | -1 | 15 | 2 | |
| 2 | 16 | 160209 | 220209 | 4 | 2 | 1 | 75.7 | 45 | 1 | 10 | -1 | 26 | 5 | 1 | |
| 2 | 16 | 230209 | 010309 | 5 | 2 | 8 | 3.0 | 64 | 3 | 26 | | 35 | 13 | 10 | |
| 2 | 16 | 020309 | 080309 | 6 | 2 | 7 | 2.6 | | | | .011 | | | | |
| 2 | 16 | 090309 | 150309 | 7 | 2 | 1 | 27.9 | -1 | 1 | 1 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 160309 | 220309 | 8 | 2 | 1 | 10.9 | -1 | 3 | 1 | -1 | 2 | 6 | 1 | |
| 2 | 16 | 230309 | 290309 | 9 | 2 | 7 | 0.0 | | | | | | | | No sample |
| 2 | 16 | 300309 | 050409 | 10 | 2 | 1 | 10.4 | 3 | 7 | 10 | -1 | 2 | 22 | 1 | |
| 2 | 16 | 060409 | 120409 | 11 | 2 | 1 | 19.0 | 7 | 2 | 9 | -1 | -1 | 6 | 3 | |
| 2 | 16 | 130409 | 190409 | 12 | 2 | 1 | 52.9 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 200409 | 260409 | 13 | 2 | 1 | 27.7 | 19 | 9 | 31 | -1 | -1 | 4 | 1 | |
| 2 | 16 | 270409 | 030509 | 14 | 2 | 1 | 26.2 | 21 | 3 | 11 | 5 | -1 | -1 | -1 | |
| 2 | 16 | 040509 | 100509 | 15 | 2 | 1 | 31.1 | 6 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 110509 | 170509 | 16 | 2 | 7 | 6.4 | 5 | 4 | 6 | -1 | -1 | 8 | 1 | |
| 2 | 16 | 180509 | 240509 | 17 | 2 | 1 | 42.1 | -1 | -1 | 11 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 250509 | 310509 | 18 | 2 | 1 | 35.9 | -1 | -1 | -1 | .088 | -1 | -1 | -1 | |
| 2 | 16 | 010609 | 070609 | 19 | 2 | 7 | 5.1 | -1 | -1 | 13 | .007 | 34 | 14 | -1 | |
| 2 | 16 | 080609 | 140609 | 20 | 2 | 1 | 61.1 | -1 | -1 | -1 | .004 | -1 | -1 | -1 | |
| 2 | 16 | 150609 | 210609 | 21 | 2 | 1 | 6.7 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 220609 | 280609 | 22 | 2 | 1 | 28.6 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 290609 | 050709 | 23 | 2 | 1 | 3.9 | 23 | 12 | 43 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 060709 | 120709 | 24 | 2 | 1 | 63.6 | 31 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 130709 | 190709 | 25 | 2 | 1 | 31.6 | 78 | -1 | 10 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 200709 | 260709 | 26 | 2 | 1 | 30.1 | 4292 | -1 | 114 | -1 | -1 | 71 | -1 | |

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| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 16 | 270709 | 020809 | 27 | 2 | 1 | 46.9 | -1 | -1 | -1 | -1 | -1 | -1 | 32 | |
| 2 | 16 | 030809 | 090809 | 28 | 2 | 1 | 46.5 | 21 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 100809 | 160809 | 29 | 2 | 7 | 4.0 | 21 | 68 | 54 | .001 | -1 | -1 | -1 | |
| 2 | 16 | 170809 | 230809 | 30 | 2 | 1 | 10.4 | 36 | 2 | 7 | -1 | 5 | 6 | 5 | |
| 2 | 16 | 240809 | 300809 | 31 | 2 | 1 | 35.8 | 43 | -1 | 10 | -1 | 10 | -1 | -1 | |
| 2 | 16 | 310809 | 060909 | 32 | 2 | 1 | 39.4 | 2 | 1 | 1 | -1 | 1 | 5 | -1 | |
| 2 | 16 | 070909 | 130909 | 33 | 2 | 1 | 44.9 | 24 | 1 | 24 | -1 | -1 | 1 | 1 | |
| 2 | 16 | 140909 | 200909 | 34 | 2 | 1 | 4.8 | -1 | 6 | 5 | -1 | 4 | 5 | 1 | |
| 2 | 16 | 210909 | 270909 | 35 | 2 | 7 | 0.6 | | | | | | | | Low Sample |
| 2 | 16 | 280909 | 041009 | 36 | 2 | 1 | 0.2 | | | | | | | | Low Sample |
| 2 | 16 | 051009 | 111009 | 37 | 2 | 1 | 3.3 | 20 | 12 | 8 | .021 | 181 | 35 | 12 | |
| 2 | 16 | 121009 | 181009 | 38 | 2 | 1 | 36.9 | 4 | 2 | 2 | -1 | -1 | 1 | 1 | |
| 2 | 16 | 191009 | 251009 | 39 | 2 | 7 | 0.5 | | | | | | | | Low Sample |
| 2 | 16 | 261009 | 011109 | 40 | 2 | 1 | 83.9 | 4 | 3 | 4 | -1 | -1 | 3 | 1 | |
| 2 | 16 | 021109 | 081109 | 41 | 2 | 1 | 73.3 | -1 | 1 | -1 | -1 | 1 | 3 | -1 | |
| 2 | 16 | 091109 | 151109 | 42 | 2 | 1 | 23.0 | -1 | 2 | 4 | -1 | 1 | 1 | -1 | |
| 2 | 16 | 161109 | 221109 | 43 | 2 | 1 | 95.2 | 19 | 4 | 4 | -1 | 1 | -1 | -1 | |
| 2 | 16 | 231109 | 291109 | 44 | 2 | 1 | 114 | -1 | -1 | 3 | -1 | -1 | -1 | -1 | |
| 2 | 16 | 301109 | 061209 | 45 | 2 | 1 | 85.8 | 3 | 1 | 4 | -1 | -1 | 1 | 2 | |
| 2 | 16 | 071209 | 131209 | 46 | 2 | 1 | 36.7 | -1 | -1 | -1 | -1 | -1 | 1 | 1 | |
| 2 | 16 | 141209 | 201209 | 47 | 2 | 1 | 18.8 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 3 | 16 | 120109 | 180109 | 1 | 4 | 1 | 0.4 | 62 | 597 | 104 | .048 | 2 | 96 | 1 | |
| 3 | 16 | 190109 | 250109 | 2 | 4 | 1 | 1.31 | 17 | 82 | 28 | .009 | 1 | 17 | -1 | |
| 3 | 16 | 260109 | 010209 | 3 | 4 | 1 | 0.4 | 24 | 283 | 47 | .008 | 2 | 65 | 1 | |
| 3 | 16 | 160209 | 220209 | 4 | 4 | 1 | 2.2 | 47 | 42 | 3 | .008 | 10 | 4 | -1 | |
| 3 | 16 | 230209 | 010309 | 5 | 4 | 8 | 0.0 | 50 | 466 | 66 | .159 | 84 | 128 | 1 | |
| 3 | 16 | 020309 | 080309 | 6 | 4 | 7 | 0.0 | | | | | | | | No sample |
| 3 | 16 | 090309 | 150309 | 7 | 4 | 1 | 0.0 | 125 | 830 | 179 | 0.1 | 13 | 224 | 3 | |
| 3 | 16 | 160309 | 220309 | 8 | 4 | 1 | 0.0 | 58 | 1497 | 115 | .107 | 4 | 283 | 3 | |
| 3 | 16 | 230309 | 290309 | 9 | 4 | 7 | 0.00 | | | | | | | | No sample |
| 3 | 16 | 300309 | 050409 | 10 | 4 | 1 | 0.0 | 178 | 4341 | 222 | .089 | 7 | 560 | 7 | |
| 3 | 16 | 060409 | 120409 | 11 | 4 | 1 | 0.29 | 136 | 1514 | 210 | .105 | 6 | 185 | 4 | |
| 3 | 16 | 130409 | 190409 | 12 | 4 | 1 | 1.2 | 33 | 126 | 80 | 0.01 | -1 | 20 | -1 | |
| 3 | 16 | 200409 | 260409 | 13 | 4 | 1 | 0.6 | 17 | 318 | 41 | -1 | -1 | 29 | 1 | |
| 3 | 16 | 270409 | 030509 | 14 | 4 | 1 | 0.24 | 51 | 696 | 102 | .032 | -1 | 65 | 1 | |
| 3 | 16 | 040509 | 100509 | 15 | 4 | 1 | .211 | 41 | 180 | 109 | .021 | -1 | 34 | 1 | |
| 3 | 16 | 110509 | 170509 | 16 | 4 | 7 | 0.0 | | | | | | | | No sample |
| 3 | 16 | 180509 | 240509 | 17 | 4 | 1 | 0.5 | 53 | 602 | 98 | .022 | -1 | 66 | -1 | |
| 3 | 16 | 250509 | 310509 | 18 | 4 | 1 | 0.22 | | | | | | | | No sample |
| 3 | 16 | 010609 | 070609 | 19 | 4 | 7 | 0.0 | 98 | 600 | 248 | .549 | 17 | 105 | -1 | |
| 3 | 16 | 080609 | 140609 | 20 | 4 | 1 | 1.55 | 21 | 61 | 36 | .009 | -1 | -1 | -1 | |
| 3 | 16 | 150609 | 210609 | 21 | 4 | 1 | 0.0 | 37 | 161 | 65 | .097 | 10 | 20 | -1 | |
| 3 | 16 | 220609 | 280609 | 22 | 4 | 1 | 0.3 | | | | | | | | Contaminated |

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| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16 | 290609 | 050709 | 23 | 4 | 1 | 0.0 | | | | | | | | Low sample |
| 3 | 16 | 060709 | 120709 | 24 | 4 | 1 | 0.9 | 57 | 124 | 72 | 0.01 | -1 | 19 | -1 | |
| 3 | 16 | 130709 | 190709 | 25 | 4 | 1 | 0.5 | 17 | 46 | 53 | 0.03 | -1 | -1 | -1 | |
| 3 | 16 | 200709 | 260709 | 26 | 4 | 1 | .084 | 1431 | 91 | 120 | .088 | -1 | 52 | -1 | |
| 3 | 16 | 270709 | 020809 | 27 | 4 | 1 | 0.4 | 39 | 98 | 47 | .049 | -1 | 28 | -1 | |
| 3 | 16 | 030809 | 090809 | 28 | 4 | 1 | 0.5 | 14 | 131 | 61 | .035 | -1 | 25 | -1 | |
| 3 | 16 | 100809 | 160809 | 29 | 4 | 7 | 0.0 | | | | | | | | Low sample |
| 3 | 16 | 170809 | 230809 | 30 | 4 | 1 | 0.0 | | | | | | | | Low sample |
| 3 | 16 | 240809 | 300809 | 31 | 4 | 1 | 0.3 | 124 | 401 | 119 | .059 | 24 | 63 | 3 | |
| 3 | 16 | 310809 | 060909 | 32 | 4 | 1 | 0.3 | 47 | 56 | 28 | .028 | 11 | 17 | 1 | |
| 3 | 16 | 070909 | 130909 | 33 | 4 | 1 | 0.3 | 31 | 1.97 | 59 | .061 | 7 | 32 | 1 | |
| 3 | 16 | 140909 | 200909 | 34 | 4 | 1 | 0.0 | 26 | 213 | 77 | .491 | 9 | 45 | 1 | |
| 3 | 16 | 210909 | 270909 | 35 | 4 | 7 | 0.00 | | | | | | | | No sample |
| 3 | 16 | 280909 | 041009 | 36 | 4 | 1 | 0.0 | | | | | | | | Contaminated |
| 3 | 16 | 051009 | 111009 | 37 | 4 | 1 | 0.0 | 48 | 960 | 78 | 0.21 | 7 | 102 | 2 | |
| 3 | 16 | 121009 | 181009 | 38 | 4 | 1 | 0.3 | 89 | 334 | 102 | .121 | 4 | 58 | 2 | |
| 3 | 16 | 191009 | 251009 | 39 | 4 | 7 | 0.0 | | | | .318 | | | | |
| 3 | 16 | 261009 | 011109 | 40 | 4 | 1 | 0.7 | 19 | 155 | 39 | .017 | 2 | 18 | 24 | |
| 3 | 16 | 021109 | 081109 | 41 | 4 | 1 | 0.8 | 17 | 65 | 26 | .007 | 4 | 16 | 3 | |
| 3 | 16 | 091109 | 151109 | 42 | 4 | 1 | 0.1 | -1 | 517 | 26 | .007 | 2 | 60 | 1 | |
| 3 | 16 | 161109 | 221109 | 43 | 4 | 1 | 0.8 | 13 | 152 | 23 | .009 | 6 | 22 | 1 | |
| 3 | 16 | 231109 | 291109 | 44 | 4 | 1 | 1.2 | 11 | 67 | 18 | .011 | 2 | 13 | -1 | |
| 3 | 16 | 301109 | 061209 | 45 | 4 | 1 | 1.5 | 5 | 75 | 6 | -1 | 2 | 12 | 11 | |
| 3 | 16 | 071209 | 131209 | 46 | 4 | 1 | 0.6 | 12 | 121 | 24 | .004 | 1 | 14 | 3 | |
| 3 | 16 | 141209 | 201209 | 47 | 4 | 1 | 0.1 | 19 | 169 | 33 | .026 | -1 | 18 | -1 | |
| 4 | 10 | 291208 | 040109 | 1 | 1 | 8 | 0.79 | 7 | 71 | 45 | .009 | 12 | 28 | 2 | |
| 4 | 10 | 050109 | 110109 | 2 | 1 | 7 | 0.00 | | | | | | | | No Sample |
| 4 | 10 | 120109 | 180109 | 3 | 1 | 1 | 21.3 | 12 | 37 | 20 | -1 | 18 | 20 | 2 | |
| 4 | 10 | 190109 | 250109 | 4 | 1 | 1 | 32.2 | 5 | 23 | 10 | -1 | 3 | 6 | 1 | |
| 4 | 10 | 260109 | 010209 | 5 | 1 | 1 | 43.2 | 5 | 29 | 18 | -1 | 2 | 4 | 1 | |
| 4 | 10 | 020209 | 080209 | 6 | 1 | 1 | 8.94 | 7 | 10 | 13 | -1 | 3 | 9 | 3 | |
| 4 | 10 | 090209 | 150209 | 7 | 1 | 1 | 3.36 | 7 | 1 | 23 | -1 | -1 | 1 | 1 | |
| 4 | 10 | 160209 | 220209 | 8 | 1 | 8 | 0.77 | | | | .011 | | | | |
| 4 | 10 | 230209 | 010309 | 9 | 1 | 7 | 0.18 | | | | | | | | Low sample |
| 4 | 10 | 020309 | 080309 | 10 | 1 | 1 | 2.13 | 15 | 33 | 25 | .066 | 8 | 18 | 10 | |
| 4 | 10 | 090309 | 150309 | 11 | 1 | 1 | 15.1 | 7 | 25 | 14 | .004 | 2 | 4 | -1 | |
| 4 | 10 | 160309 | 220309 | 12 | 1 | 1 | 12.1 | -1 | 31 | 4 | .004 | 2 | 4 | 2 | |
| 4 | 10 | 230309 | 290309 | 13 | 1 | 7 | 0.00 | | | | | | | | No Sample |
| 4 | 10 | 300309 | 050409 | 14 | 1 | 1 | 8.13 | 8 | 83 | 24 | -1 | 3 | 17 | 1 | |
| 4 | 10 | 060409 | 120409 | 15 | 1 | 1 | 0.39 | 7 | 32 | 20 | .034 | 6 | 17 | 3 | |
| 4 | 10 | 130409 | 190409 | 16 | 1 | 1 | 32.5 | 4 | 16 | 9 | -1 | -1 | -1 | -1 | |
| 4 | 10 | 200409 | 260409 | 17 | 1 | 7 | 0.00 | | | | | | | | No Sample |
| 4 | 10 | 270409 | 030509 | 18 | 1 | 1 | 16.9 | 7 | 10 | 16 | .004 | -1 | 1 | 22 | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 10 | 040509 | 100509 | 19 | 1 | 1 | 13.3 | 8 | 6 | 11 | -1 | -1 | 8 | 1 | |
| 4 | 10 | 110509 | 170509 | 20 | 1 | 1 | 14.9 | 8 | 39 | 7 | -1 | -1 | 5 | 1 | |
| 4 | 10 | 180509 | 240509 | 21 | 1 | 1 | 25.1 | -1 | 10 | 16 | -1 | -1 | -1 | -1 | |
| 4 | 10 | 250509 | 310509 | 22 | 1 | 1 | 16.6 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 4 | 10 | 010609 | 070609 | 23 | 1 | 1 | 12.1 | -1 | 12 | -1 | -1 | -1 | -1 | -1 | |
| 4 | 10 | 080609 | 140609 | 24 | 1 | 7 | 0.00 | | | | | | | | No Sample |
| 4 | 10 | 150609 | 210609 | 25 | 1 | 8 | 1.11 | | | | .317 | | | | |
| 4 | 10 | 220609 | 280609 | 26 | 1 | 7 | 0.00 | | | | | | | | No Sample |
| 4 | 10 | 290609 | 050709 | 27 | 1 | 1 | 21.0 | 25 | 12 | 16 | -1 | -1 | -1 | -1 | |
| 4 | 10 | 060709 | 120709 | 28 | 1 | 1 | 13.5 | 11 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 4 | 10 | 130709 | 190709 | 29 | 1 | 1 | 35.3 | 402 | -1 | 21 | .004 | -1 | -1 | -1 | |
| 4 | 10 | 200709 | 260709 | 30 | 1 | 1 | 16.6 | 96 | 13 | -1 | .027 | -1 | -1 | -1 | |
| 4 | 10 | 270709 | 020809 | 31 | 1 | 1 | 15.1 | -1 | -1 | -1 | .016 | -1 | -1 | -1 | |
| 4 | 10 | 030809 | 090809 | 32 | 1 | 1 | 30.8 | 22 | 24 | 13 | .049 | -1 | -1 | -1 | |
| 4 | 10 | 100809 | 160809 | 33 | 1 | 1 | 6.2 | 17 | 24 | 14 | .027 | -1 | -1 | -1 | |
| 4 | 10 | 170809 | 230809 | 34 | 1 | 1 | 40.6 | -1 | -1 | 10 | .005 | -1 | -1 | -1 | |
| 4 | 10 | 240809 | 300809 | 35 | 1 | 1 | 60.5 | -1 | -1 | 11 | 0.01 | -1 | -1 | -1 | |
| 4 | 10 | 310809 | 060909 | 36 | 1 | 1 | 16.6 | 48 | 8 | 8 | .015 | 11 | 13 | 1 | |
| 4 | 10 | 070909 | 130909 | 37 | 1 | 1 | 49.4 | 6 | 9 | 8 | .009 | 2 | 3 | -1 | |
| 4 | 10 | 140909 | 200909 | 38 | 1 | 1 | 20.1 | 6 | 2 | 6 | .007 | 9 | 5 | -1 | |
| 4 | 10 | 210909 | 270909 | 39 | 1 | 7 | 0.77 | | | | | | | | Low sample |
| 4 | 10 | 280909 | 041009 | 40 | 1 | 1 | 2.02 | -1 | 20 | 12 | .009 | 144 | 76 | 5 | |
| 4 | 10 | 051009 | 111009 | 41 | 1 | 7 | 0.43 | | | | | | | | Low sample |
| 4 | 10 | 121009 | 181009 | 42 | 1 | 1 | 7.75 | 15 | 29 | 12 | .005 | 3 | 4 | 4 | |
| 4 | 10 | 191009 | 251009 | 43 | 1 | 1 | 0.47 | | | | .003 | | | | |
| 4 | 10 | 261009 | 011109 | 44 | 1 | 1 | 22.8 | | | | .005 | | | | |
| 4 | 10 | 021109 | 081109 | 45 | 1 | 1 | 38.2 | 5 | 11 | 12 | .003 | 3 | 6 | 3 | |
| 4 | 10 | 091109 | 151109 | 46 | 1 | 1 | 27.0 | -1 | 35 | 11 | -1 | 2 | 9 | 1 | |
| 4 | 10 | 161109 | 221109 | 47 | 1 | 1 | 40.0 | 4 | 35 | 9 | -1 | 1 | 3 | 3 | |
| 4 | 10 | 231109 | 291109 | 48 | 1 | 1 | 62.5 | 2 | 11 | 10 | -1 | 3 | -1 | 2 | |
| 4 | 10 | 301109 | 061209 | 49 | 1 | 1 | 23.2 | 3 | 56 | 8 | -1 | -1 | 1 | -1 | |
| 4 | 10 | 071209 | 131209 | 50 | 1 | 1 | 24.6 | 20 | 28 | 3 | -1 | -1 | -1 | -1 | |
| 4 | 10 | 141209 | 201209 | 51 | 1 | 7 | 0.0 | | | | | | | | No Sample |
| 4 | 10 | 211209 | 281209 | 52 | 1 | 1 | 11.0 | 2 | 18 | 10 | -1 | 3 | 17 | 9 | |
| 5 | 10 | 291208 | 040109 | 1 | 2 | 8 | 3.3 | -1 | 3 | 27 | -1 | 5 | 7 | 1 | |
| 5 | 10 | 050109 | 110109 | 2 | 2 | 7 | 0.0 | | | | | | | | No Sample |
| 5 | 10 | 120109 | 180109 | 3 | 2 | 1 | 26.2 | 7 | 1 | 22 | -1 | 22 | 17 | 2 | |
| 5 | 10 | 190109 | 250109 | 4 | 2 | 1 | 37.2 | 3 | 2 | 18 | -1 | 4 | 7 | 1 | |
| 5 | 10 | 260109 | 010209 | 5 | 2 | 1 | 70.5 | 4 | -1 | 4 | -1 | 1 | 3 | -1 | |
| 5 | 10 | 020209 | 080209 | 6 | 2 | 1 | 17.8 | -1 | 1 | -1 | -1 | 1 | 5 | 1 | |
| 5 | 10 | 090209 | 150209 | 7 | 2 | 1 | 9.8 | | | | -1 | | | | |
| 5 | 10 | 160209 | 220209 | 8 | 2 | 8 | 4.8 | 177 | 54 | 282 | -1 | 32 | 19 | 9 | |
| 5 | 10 | 230209 | 010309 | 9 | 2 | 7 | 3.0 | | | | | | | | Low Sample |

back to **Survey Summary for Ireland, 2009**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 10 | 020309 | 080309 | 10 | 2 | 1 | 8.4 | 12 | 2 | 13 | -1 | 2 | 7 | 1 | |
| 5 | 10 | 090309 | 150309 | 11 | 2 | 1 | 29.2 | 11 | 1 | 7 | -1 | 1 | 2 | -1 | |
| 5 | 10 | 160309 | 220309 | 12 | 2 | 1 | 23.0 | -1 | 1 | -1 | -1 | 1 | 3 | -1 | |
| 5 | 10 | 230309 | 290309 | 13 | 2 | 7 | 0.0 | | | | | | | | No Sample |
| 5 | 10 | 300309 | 050409 | 14 | 2 | 1 | 20.2 | 7 | 3 | 27 | -1 | -1 | 9 | 1 | |
| 5 | 10 | 060409 | 120409 | 15 | 2 | 1 | 9.8 | 2 | 2 | 12 | -1 | 4 | 13 | 1 | |
| 5 | 10 | 130409 | 190409 | 16 | 2 | 1 | 51.6 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 200409 | 260409 | 17 | 2 | 7 | 0.0 | | | | | | | | No Sample |
| 5 | 10 | 270409 | 030509 | 18 | 2 | 1 | 32.1 | -1 | 1 | 4 | .168 | -1 | 1 | -1 | |
| 5 | 10 | 040509 | 100509 | 19 | 2 | 1 | 21.8 | 3 | 1 | -1 | -1 | -1 | 6 | 1 | |
| 5 | 10 | 110509 | 170509 | 20 | 2 | 1 | 29.1 | 3 | 2 | 9 | .133 | -1 | 4 | -1 | |
| 5 | 10 | 180509 | 240509 | 21 | 2 | 1 | 38.9 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 250509 | 310509 | 22 | 2 | 1 | 26.5 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 010609 | 070609 | 23 | 2 | 1 | 18.8 | -1 | -1 | -1 | .746 | -1 | -1 | -1 | |
| 5 | 10 | 080609 | 140609 | 24 | 2 | 7 | 0.0 | | | | | | | | No Sample |
| 5 | 10 | 150609 | 210609 | 25 | 2 | 8 | 7.3 | -1 | -1 | 17 | 0.88 | -1 | 22 | -1 | |
| 5 | 10 | 220609 | 280609 | 26 | 2 | 7 | 0.0 | | | | | | | | No Sample |
| 5 | 10 | 290609 | 050709 | 27 | 2 | 1 | 34.7 | -1 | -1 | -1 | .162 | -1 | -1 | -1 | |
| 5 | 10 | 060709 | 120709 | 28 | 2 | 1 | 26.7 | 4 | -1 | 15 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 130709 | 190709 | 29 | 2 | 1 | 53.0 | 481 | -1 | 13 | .004 | -1 | -1 | -1 | |
| 5 | 10 | 200709 | 260709 | 30 | 2 | 1 | 26.8 | 163 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 270709 | 020809 | 31 | 2 | 1 | 26.1 | -1 | -1 | -1 | .006 | -1 | 10 | 12 | |
| 5 | 10 | 030809 | 090809 | 32 | 2 | 1 | 46.8 | 13 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 100809 | 160809 | 33 | 2 | 1 | 16.1 | -1 | -1 | 21 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 170809 | 230809 | 34 | 2 | 1 | 49.4 | -1 | -1 | 10 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 240809 | 300809 | 35 | 2 | 1 | 107 | 56 | -1 | -1 | -1 | 11 | -1 | -1 | |
| 5 | 10 | 310809 | 060909 | 36 | 2 | 1 | 27.8 | 28 | 1 | 5 | -1 | 9 | 9 | 1 | |
| 5 | 10 | 070909 | 130909 | 37 | 2 | 1 | 71.0 | 9 | 1 | 18 | -1 | 2 | 14 | 1 | |
| 5 | 10 | 140909 | 200909 | 38 | 2 | 1 | 22.2 | 13 | -1 | 2 | -1 | 7 | -1 | -1 | |
| 5 | 10 | 210909 | 270909 | 39 | 2 | 7 | 4.0 | -1 | 13 | 11 | -1 | 7 | 19 | 10 | |
| 5 | 10 | 280909 | 041009 | 40 | 2 | 1 | 8.1 | -1 | 5 | 9 | -1 | 4 | 9 | 2 | |
| 5 | 10 | 051009 | 111009 | 41 | 2 | 7 | 7.5 | 4 | 2 | 28 | -1 | 2 | 6 | 5 | |
| 5 | 10 | 121009 | 181009 | 42 | 2 | 1 | 16.9 | 11 | 1 | 10 | .102 | 1 | 4 | 4 | |
| 5 | 10 | 191009 | 251009 | 43 | 2 | 1 | 4.4 | -1 | 1 | 4 | -1 | 1 | 4 | 1 | |
| 5 | 10 | 261009 | 011109 | 44 | 2 | 1 | 27.7 | 1 | 1 | 1 | -1 | -1 | -1 | 10 | |
| 5 | 10 | 021109 | 081109 | 45 | 2 | 1 | 54.8 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 091109 | 151109 | 46 | 2 | 1 | 50.1 | -1 | -1 | 5 | .114 | -1 | 2 | -1 | |
| 5 | 10 | 161109 | 221109 | 47 | 2 | 1 | 61.1 | 2 | -1 | 4 | -1 | 1 | -1 | 1 | |
| 5 | 10 | 231109 | 291109 | 48 | 2 | 1 | 131 | -1 | -1 | 5 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 301109 | 061209 | 49 | 2 | 1 | 32.5 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | |
| 5 | 10 | 071209 | 131209 | 50 | 2 | 1 | 29.8 | 24 | -1 | -1 | .075 | -1 | -1 | -1 | |
| 5 | 10 | 141209 | 201209 | 51 | 2 | 7 | 0.0 | | | | | | | | No Sample |
| 5 | 10 | 211209 | 281209 | 52 | 2 | 1 | 29.7 | 11 | 2 | 3 | .125 | 1 | 2 | -1 | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 10 | 291208 | 040109 | 1 | 4 | 8 | 0.1 | 5 | 55 | 37 | .015 | 5 | 18 | 1 | |
| 6 | 10 | 050109 | 110109 | 2 | 4 | 7 | 0.0 | | | | 0 | | | | No Sample |
| 6 | 10 | 120109 | 180109 | 3 | 4 | 1 | 3.8 | 8 | 22 | 17 | .005 | 2 | 8 | 1 | |
| 6 | 10 | 190109 | 250109 | 4 | 4 | 1 | 4.7 | 6 | 14 | 17 | .003 | 1 | 5 | -1 | |
| 6 | 10 | 260109 | 010209 | 5 | 4 | 1 | 5.6 | 12 | 34 | 18 | -1 | 1 | 10 | 4 | |
| 6 | 10 | 020209 | 080209 | 6 | 4 | 1 | 0.6 | 8 | 10 | 19 | -1 | 1 | 6 | 1 | |
| 6 | 10 | 090209 | 150209 | 7 | 4 | 1 | 0.0 | 5 | 11 | 13 | .057 | 2 | 6 | 1 | |
| 6 | 10 | 160209 | 220209 | 8 | 4 | 8 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 230209 | 010309 | 9 | 4 | 7 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 020309 | 080309 | 10 | 4 | 1 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 090309 | 150309 | 11 | 4 | 1 | 1.0 | 38 | 45 | 78 | .019 | 3 | 14 | 0 | |
| 6 | 10 | 160309 | 220309 | 12 | 4 | 1 | 0.3 | -1 | 37 | 30 | -1 | 4 | 15 | 1 | |
| 6 | 10 | 230309 | 290309 | 13 | 4 | 7 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 300309 | 050409 | 14 | 4 | 1 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 060409 | 120409 | 15 | 4 | 1 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 130409 | 190409 | 16 | 4 | 1 | 2.0 | 24 | 36 | 52 | 0.01 | -1 | 14 | 2 | |
| 6 | 10 | 200409 | 260409 | 17 | 4 | 7 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 270409 | 030509 | 18 | 4 | 1 | 0.0 | 84 | 50 | 118 | .044 | 1 | 17 | 5 | |
| 6 | 10 | 040509 | 100509 | 19 | 4 | 1 | 0.3 | 17 | 5 | 37 | -1 | 3 | 6 | 1 | |
| 6 | 10 | 110509 | 170509 | 20 | 4 | 1 | 0.7 | 32 | 68 | 39 | .045 | -1 | 19 | 1 | |
| 6 | 10 | 180509 | 240509 | 21 | 4 | 1 | 2.8 | 20 | 13 | 30 | .005 | -1 | -1 | -1 | |
| 6 | 10 | 250509 | 310509 | 22 | 4 | 1 | 1.4 | 13 | -1 | 25 | -1 | -1 | -1 | -1 | |
| 6 | 10 | 010609 | 070609 | 23 | 4 | 1 | 1.1 | 16 | -1 | 31 | -1 | -1 | -1 | -1 | |
| 6 | 10 | 080609 | 140609 | 24 | 4 | 7 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 150609 | 210609 | 25 | 4 | 8 | 0.0 | | | | | | | | |
| 6 | 10 | 220609 | 280609 | 26 | 4 | 7 | 0.0 | | | | | | | | |
| 6 | 10 | 290609 | 050709 | 27 | 4 | 1 | 0.6 | | | | | | | | Contaminated |
| 6 | 10 | 060709 | 120709 | 28 | 4 | 1 | 0.8 | 48 | 41 | 68 | .014 | -1 | -1 | -1 | |
| 6 | 10 | 130709 | 190709 | 29 | 4 | 1 | 3.3 | 214 | -1 | 27 | -1 | -1 | -1 | -1 | |
| 6 | 10 | 200709 | 260709 | 30 | 4 | 1 | 0.5 | 109 | 14 | 26 | .004 | -1 | -1 | -1 | |
| 6 | 10 | 270709 | 020809 | 31 | 4 | 1 | 0.1 | 32 | 22 | 56 | .105 | -1 | -1 | -1 | |
| 6 | 10 | 030809 | 090809 | 32 | 4 | 1 | 0.8 | 26 | 20 | 42 | .008 | -1 | -1 | -1 | |
| 6 | 10 | 100809 | 160809 | 33 | 4 | 1 | 0.4 | 24 | -1 | 38 | .005 | -1 | -1 | -1 | |
| 6 | 10 | 170809 | 230809 | 34 | 4 | 1 | 4.5 | 13 | -1 | 25 | .004 | -1 | -1 | -1 | |
| 6 | 10 | 240809 | 300809 | 35 | 4 | 1 | 9.4 | 13 | -1 | 15 | .004 | -1 | -1 | -1 | |
| 6 | 10 | 310809 | 060909 | 36 | 4 | 1 | 1.4 | 75 | 3 | 13 | .009 | 17 | 13 | 1 | |
| 6 | 10 | 070909 | 130909 | 37 | 4 | 1 | 3.8 | 11 | 5 | 20 | .005 | 4 | 5 | 10 | |
| 6 | 10 | 140909 | 200909 | 38 | 4 | 1 | 3.0 | 36 | 3 | 28 | .004 | 4 | 7 | -1 | |
| 6 | 10 | 210909 | 270909 | 39 | 4 | 7 | 0.0 | 1 | 2 | 27 | .884 | 21 | 18 | 2 | |
| 6 | 10 | 280909 | 041009 | 40 | 4 | 1 | 0.0 | | | | | | | | Contaminated |
| 6 | 10 | 051009 | 111009 | 41 | 4 | 7 | 0.0 | | | | | | | | Low sample |
| 6 | 10 | 121009 | 181009 | 42 | 4 | 1 | 0.0 | 2 | 1 | 76 | .431 | 19 | 20 | 1 | |
| 6 | 10 | 191009 | 251009 | 43 | 4 | 1 | 0.0 | | | | | | | | No Sample |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 10 | 261009 | 011109 | 44 | 4 | 1 | 1.2 | 25 | 36 | 34 | .021 | 3 | 8 | -1 | |
| 6 | 10 | 021109 | 081109 | 45 | 4 | 1 | 4.2 | 14 | 15 | 16 | .186 | 2 | 16 | 1 | |
| 6 | 10 | 091109 | 151109 | 46 | 4 | 1 | 3.4 | -1 | 28 | 17 | .208 | -1 | 7 | -1 | |
| 6 | 10 | 161109 | 221109 | 47 | 4 | 1 | 4.4 | 7 | 6 | 14 | .023 | 3 | -1 | -1 | |
| 6 | 10 | 231109 | 291109 | 48 | 4 | 1 | 16.3 | 2 | 2 | 8 | .065 | -1 | -1 | -1 | |
| 6 | 10 | 301109 | 061209 | 49 | 4 | 1 | 2.2 | 7 | 49 | 15 | .043 | 1 | 12 | 2 | |
| 6 | 10 | 071209 | 131209 | 50 | 4 | 1 | 1.4 | 15 | 29 | 14 | .013 | -1 | -1 | 1 | |
| 6 | 10 | 141209 | 201209 | 51 | 4 | 7 | 0.0 | | | | | | | | No Sample |
| 6 | 10 | 211209 | 281209 | 52 | 4 | 1 | 0.3 | 1 | 30 | 12 | .326 | 3 | 8 | 1 | |
| 7 | 11 | 190109 | 250109 | 1 | 1 | 1 | 65.0 | 3 | 59 | | .021 | | | | |
| 7 | 11 | 260109 | 010209 | 2 | 1 | 1 | 83.7 | 5 | 96 | | -1 | | | | |
| 7 | 11 | 160209 | 220209 | 3 | 1 | 1 | 26.9 | 50 | 2 | | -1 | | | | |
| 7 | 11 | 090309 | 150309 | 4 | 1 | 1 | 62.3 | -1 | 47 | | .003 | | | | |
| 7 | 11 | 130409 | 190409 | 5 | 1 | 1 | 62.7 | 2 | 68 | | .012 | | | | |
| 7 | 11 | 110509 | 170509 | 6 | 1 | 1 | 70.7 | -1 | 34 | | -1 | | | | |
| 7 | 11 | 150609 | 210609 | 7 | 1 | 1 | 45.6 | -1 | 44 | | .239 | | | | |
| 7 | 11 | 290609 | 050709 | 8 | 1 | 1 | 15.3 | 12 | 126 | | .118 | | | | |
| 7 | 11 | 060709 | 120709 | 9 | 1 | 1 | 55.5 | -1 | 40 | | -1 | | | | |
| 7 | 11 | 200709 | 260709 | 10 | 1 | 1 | 36.8 | -1 | 37 | | -1 | | | | |
| 7 | 11 | 270709 | 020809 | 11 | 1 | 1 | 24.4 | -1 | 51 | | .015 | | | | |
| 7 | 11 | 030809 | 090809 | 12 | 1 | 1 | 24.1 | -1 | 130 | | -1 | | | | |
| 7 | 11 | 100809 | 160809 | 13 | 1 | 1 | 2.7 | 17 | 56 | | .004 | | | | |
| 7 | 11 | 170809 | 230809 | 14 | 1 | 1 | 22.7 | 10 | 45 | | .010 | | | | |
| 7 | 11 | 240809 | 300809 | 15 | 1 | 1 | 49.7 | -1 | 45 | | .012 | | | | |
| 7 | 11 | 310809 | 060909 | 16 | 1 | 1 | 37.6 | 6 | 66 | | .008 | | | | |
| 7 | 11 | 070909 | 130909 | 17 | 1 | 1 | 22.7 | 11 | 80 | | .065 | | | | |
| 7 | 11 | 140909 | 200909 | 18 | 1 | 1 | 12.4 | 45 | 40 | | .013 | | | | |
| 7 | 11 | 210909 | 270909 | 19 | 1 | 1 | 1.6 | 13 | 143 | | .005 | | | | |
| 7 | 11 | 280909 | 041009 | 20 | 1 | 8 | 0.5 | 49 | 273 | | .011 | | | | |
| 7 | 11 | 051009 | 111009 | 21 | 1 | 1 | 7.2 | 8 | 379 | | .003 | | | | |
| 7 | 11 | 121009 | 181009 | 22 | 1 | 1 | 6.6 | 7 | 189 | | .064 | | | | |
| 7 | 11 | 191009 | 251009 | 23 | 1 | 1 | 7.9 | 20 | 284 | | -1 | | | | |
| 7 | 11 | 261009 | 011109 | 24 | 1 | 1 | 63.4 | 3 | 148 | | .010 | | | | |
| 7 | 11 | 021109 | 081109 | 25 | 1 | 1 | 50.6 | 5 | 49 | | .007 | | | | |
| 7 | 11 | 091109 | 151109 | 26 | 1 | 1 | 61.0 | -1 | 137 | | -1 | | | | |
| 7 | 11 | 161109 | 221109 | 27 | 1 | 1 | 35.9 | 3 | 21 | | .005 | | | | |
| 7 | 11 | 231109 | 291109 | 28 | 1 | 1 | 99.9 | 2 | 29 | | .014 | | | | |
| 7 | 11 | 301109 | 061209 | 29 | 1 | 1 | 51.7 | 4 | 80 | | -1 | | | | |
| 7 | 11 | 071209 | 131209 | 30 | 1 | 1 | 39.4 | 6 | 40 | | .013 | | | | |
| 7 | 11 | 141209 | 201209 | 31 | 1 | 1 | 10.5 | 3 | 29 | | .003 | | | | |
| 7 | 11 | 211209 | 281209 | 32 | 1 | 1 | 9.8 | 7 | 30 | | .043 | | | | |
| 8 | 11 | 190109 | 250109 | 1 | 2 | 1 | 0.0 | 2 | 1 | | .006 | | | | |
| 8 | 11 | 260109 | 010209 | 2 | 2 | 1 | 67.9 | 7 | 1 | | -1 | | | | |

```
   8    11 160209 220209  3 2 1 37.4   44     4         .020
   8    11 090309 150309  4 2 1 67.0    7     3           -1
   8    11 130409 190409  5 2 1 78.8   -1     2         .003
   8    11 110509 170509  6 2 1 94.7   -1    -1           -1
   8    11 150609 210609  7 2 1 64.9   -1    -1         .004
   8    11 290609 050709  8 2 1 29.0   -1    -1           -1
   8    11 060709 120709  9 2 1 67.7   -1    -1           -1
   8    11 200709 260709 10 2 1 63.8   -1    -1           -1
   8    11 270709 020809 11 2 1 36.2   -1    -1           -1
   8    11 030809 090809 12 2 1 37.0   -1    -1         .027
   8    11 100809 160809 13 2 1  6.2   -1    -1         .691
   8    11 170809 230809 14 2 1 27.7   -1    -1         .008
   8    11 240809 300809 15 2 1 64.0   61    -1           -1
   8    11 310809 060909 16 2 1 49.2   21     3           -1
   8    11 070909 130909 17 2 1 33.0   15     8           -1
   8    11 140909 200909 18 2 1 16.2   -1     2           -1
   8    11 210909 270909 19 2 1  2.3   -1     9
   8    11 280909 041009 20 2 8  2.0   -1     6         .176
   8    11 051009 111009 21 2 1  9.5    3     5           -1
   8    11 121009 181009 22 2 1 10.1    9     2           -1
   8    11 191009 251009 23 2 1  9.6   37     3         .003
   8    11 261009 011109 24 2 1 40.2    1     1           -1
   8    11 021109 081109 25 2 1 31.8    4     1           -1
   8    11 091109 151109 26 2 1 76.0   -1     2           -1
   8    11 161109 221109 27 2 1 45.7    2 0.733           -1
   8    11 231109 291109 28 2 1  110   -1     1           -1
   8    11 301109 061209 29 2 1 50.9   -1     1           -1
   8    11 071209 131209 30 2 1 59.7                                                        Contaminated
   8    11 141209 201209 31 2 1 11.8    2    -1         .057
   8    11 211209 281209 32 2 1 14.3    4     2         .260
!DP.LQA
!Sequence, country, plot, date_start, date_end, parameter, pretreatment, determination, quantification_limit, control_chart_mean,
control_chart_std, ring_test_participation, ring_test_number, Laboratory_ID, percentage_within, requalification,
percentage_within_requal, other_observations
   1  7   16 010109 311209     pH    1 72.1   0.01  100.1 0.4 1  04 A69  60 0
   2  7   16 010109 311209   Cond    1   71      1  102.6 5.8 1  04 A69 100 0
   3  7   16 010109 311209      K    0   35    0.2  100.7 0.7 1  04 A69  60 0
   4  7   16 010109 311209     Ca    0   35    0.2  100.9 0.9 1  04 A69  60 0
   5  7   16 010109 311209     Mg    0   35    0.2  103.0 3.0 1  04 A69 100 0
   6  7   16 010109 311209     Na    0   35    0.2  102.9 2.9 1  04 A69 100 0
   7  7   16 010109 311209  N_NH4    0   51   0.02   98.6 2.1 1  04 A69 100 0
   8  7   16 010109 311209     Cl    0 61.1    0.4  101.3 2.4 1  04 A69 100 0
   9  7   16 010109 311209  N_NO3    0   51   0.02  100.2 1.6 1  04 A69 100 0
```

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  10  7   16 010109 311209   S_SO4    0 61.1    0.1  102.2 2.2 1  04 A69 100 0
  11  7   16 010109 311209 Alkalin    0   73     20   98.1 2.6 1  04 A69  17 1 100
  12  7   16 010109 311209 N_total  8.2   51   0.05  105.0 5.0 1  04 A69 100 0
  13  7   16 010109 311209      Al    0   35      5   99.6 0.4 0
  14  7   16 010109 311209      Mn    0   35      5  103.3 3.3 0
  15  7   16 010109 311209      Fe    0   35      5  100.2 0.2 0
  16  7   16 010109 311209   P_PO4    0   53  0.003   98.9 1.4 0
  17  7   16 010109 311209      Cu    0   35      5  101.5 1.5 0
  18  7   16 010109 311209      Zn    0   35      5  105.1 5.1 0
  19  7   16 010109 311209      Ni    0   35      5  103.2 3.2 0
  20  7   16 010109 311209     DOC    0   15      3  105.0 5.0 1  04 A69  60 0
!GENER.PLT
!Sequence, country, plot, latitude, longitude, altitude, orientation, date_installation, plot_size, trees, sub_plot_size, mean_age,
tree_species, yield_abs, yield_relative, other_observations
  10  7   10 +532104 -092040  3 2 010191   0.25  610 0.0525  2 120 3 2 Cloosh
  11  7   11 +534530 -093314  2 1 010191   0.25  151  0.125  7  48 1 2 Brackloon
  16  7   16 +530640 -061411 10 2 010701   0.25  302   0.25  3 120 3 2 Ballinastoe, Revised altitude
!TRF
!Sequence, plot, date, tree, affected_part, symptom, symptom_spec, crown_loc, damage_age, cause, cause_sc_name, extent,
other_observations
    1  277 160909    1  0
    2  277 160909    2  0
    3  277 160909    3  0
    4  277 160909    4  0
    5  277 160909    5  0
    6  277 160909    6  0
    7  277 160909    7  0
    8  277 160909    8  0
    9  277 160909    9  0
   10  277 160909   10  0
   11  277 160909   11  0
   12  277 160909   12  0
   13  277 160909   13  0
   14  277 160909   14  0
   15  277 160909   15  0
   16  277 160909   16  0
   17  277 160909   17  0
   18  277 160909   18  0
   19  277 160909   19  0
   20  277 160909   20  0
   21  277 160909   21  0
   22  277 160909   22  0
   23  277 160909   23  0
```

| | | | | | | |
|---|---|---|---|---|---|---|
| 24 | 277 | 160909 | 24 | 0 | | |
| 25 | 277 | 160909 | 25 | 0 | | |
| 26 | 196 | 160909 | 1 | 0 | | |
| 27 | 196 | 160909 | 2 | 0 | | |
| 28 | 196 | 160909 | 3 | 0 | | |
| 29 | 196 | 160909 | 4 | 0 | | |
| 30 | 196 | 160909 | 5 | 0 | | |
| 31 | 196 | 160909 | 6 | 0 | | |
| 32 | 196 | 160909 | 7 | 0 | | |
| 33 | 196 | 160909 | 8 | 0 | | |
| 34 | 196 | 160909 | 9 | 0 | | |
| 35 | 196 | 160909 | 10 | 0 | | |
| 36 | 196 | 160909 | 11 | 0 | | |
| 37 | 196 | 160909 | 12 | 0 | | |
| 38 | 196 | 160909 | 13 | 0 | | |
| 39 | 196 | 160909 | 14 | 0 | | |
| 40 | 196 | 160909 | 15 | 0 | | |
| 41 | 196 | 160909 | 16 | 0 | | |
| 42 | 196 | 160909 | 17 | 0 | | |
| 43 | 196 | 160909 | 18 | 0 | | |
| 44 | 196 | 160909 | 19 | 0 | | |
| 45 | 196 | 160909 | 20 | 0 | | |
| 46 | 196 | 160909 | 21 | 0 | | |
| 47 | 228 | 140809 | 1 | 0 | | |
| 48 | 228 | 140809 | 2 | 9 | | |
| 49 | 228 | 140809 | 3 | 0 | | |
| 50 | 228 | 140809 | 4 | 9 | | |
| 51 | 228 | 140809 | 5 | 9 | | |
| 52 | 228 | 140809 | 7 | 0 | | |
| 53 | 228 | 140809 | 8 | 0 | | |
| 54 | 228 | 140809 | 10 | 9 | | |
| 55 | 228 | 140809 | 12 | 9 | | |
| 56 | 228 | 140809 | 13 | 0 | | |
| 57 | 228 | 140809 | 14 | 0 | | |
| 58 | 228 | 140809 | 17 | 9 | | |
| 59 | 228 | 140809 | 18 | 9 | | |
| 60 | 228 | 140809 | 19 | 0 | | |
| 61 | 228 | 140809 | 20 | 0 | | |
| 62 | 228 | 140809 | 21 | 13 | 1 | 420 |
| 63 | 228 | 140809 | 31 | 13 | 1 | 420 |
| 64 | 228 | 140809 | 33 | 0 | | |
| 65 | 228 | 140809 | 35 | 0 | | |
| 66 | 228 | 140809 | 36 | 0 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 67 | 228 | 140809 | 37 | 0 | | | | |
| 68 | 243 | 120809 | 1 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 69 | 243 | 120809 | 2 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 70 | 243 | 120809 | 4 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 71 | 243 | 120809 | 5 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 72 | 243 | 120809 | 6 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 73 | 243 | 120809 | 7 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 74 | 243 | 120809 | 8 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 75 | 243 | 120809 | 9 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 76 | 243 | 120809 | 10 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 77 | 243 | 120809 | 11 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 78 | 243 | 120809 | 12 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 79 | 243 | 120809 | 13 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 80 | 243 | 120809 | 14 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 81 | 243 | 120809 | 15 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 82 | 243 | 120809 | 16 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 83 | 243 | 120809 | 17 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 84 | 243 | 120809 | 18 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 85 | 243 | 120809 | 19 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 86 | 243 | 120809 | 20 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 87 | 243 | 120809 | 21 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 88 | 243 | 120809 | 31 | 4 | 9 | | 541 | Plot felled in 2008 after assessment |
| 89 | 278 | 140809 | 1 | 0 | | | 210 | |
| 90 | 278 | 140809 | 2 | 0 | | | | |
| 91 | 278 | 140809 | 3 | 0 | | | | |
| 92 | 278 | 140809 | 4 | 0 | | | | |
| 93 | 278 | 140809 | 5 | 9 | | | | |
| 94 | 278 | 140809 | 6 | 0 | | | | |
| 95 | 278 | 140809 | 7 | 9 | | | | |
| 96 | 278 | 140809 | 8 | 12 | 1 | | 210 | |
| 97 | 278 | 140809 | 9 | 34 | 12 | | 850 | |
| 98 | 278 | 140809 | 10 | 9 | | | | |
| 99 | 278 | 140809 | 11 | 12 | 1 | | 210 | |
| 100 | 278 | 140809 | 12 | 0 | | | | |
| 101 | 278 | 140809 | 13 | 9 | | | | |
| 102 | 278 | 140809 | 14 | 0 | | | | |
| 103 | 278 | 140809 | 15 | 0 | | | | |
| 104 | 278 | 140809 | 16 | 0 | | | | |
| 105 | 278 | 140809 | 17 | 0 | | | | |
| 106 | 278 | 140809 | 18 | 0 | | | | |
| 107 | 278 | 140809 | 19 | 0 | | | | |
| 108 | 278 | 140809 | 20 | 0 | | | | |
| 109 | 278 | 140809 | 21 | 0 | | | | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 110 | 254 | 200709 | 1 | 13 | 3 | 301 |
| 111 | 254 | 200709 | 2 | 0 | | |
| 112 | 254 | 200709 | 3 | 13 | 3 | 301 |
| 113 | 254 | 200709 | 4 | 0 | | |
| 114 | 254 | 200709 | 5 | 13 | 3 | 301 |
| 115 | 254 | 200709 | 6 | 0 | | |
| 116 | 254 | 200709 | 7 | 13 | 3 | 301 |
| 117 | 254 | 200709 | 8 | 0 | | |
| 118 | 254 | 200709 | 9 | 0 | | |
| 119 | 254 | 200709 | 11 | 9 | | |
| 120 | 254 | 200709 | 12 | 34 | 12 | 850 |
| 121 | 254 | 200709 | 15 | 34 | 12 | 850 |
| 122 | 254 | 200709 | 17 | 13 | 3 | 301 |
| 123 | 254 | 200709 | 18 | 13 | 3 | 301 |
| 124 | 254 | 200709 | 19 | 0 | | |
| 125 | 254 | 200709 | 20 | 0 | | |
| 126 | 254 | 200709 | 21 | 9 | | |
| 127 | 254 | 200709 | 31 | 13 | 3 | 301 |
| 128 | 254 | 200709 | 32 | 0 | | |
| 129 | 254 | 200709 | 33 | 0 | | |
| 130 | 254 | 200709 | 34 | 0 | | |
| 131 | 208 | 120809 | 1 | 9 | | |
| 132 | 208 | 120809 | 2 | 9 | | |
| 133 | 208 | 120809 | 3 | 0 | | |
| 134 | 208 | 120809 | 4 | 0 | | |
| 135 | 208 | 120809 | 5 | 13 | 3 | 301 |
| 136 | 208 | 120809 | 5 | 21 | 8 | 420 |
| 137 | 208 | 120809 | 6 | 9 | | |
| 138 | 208 | 120809 | 7 | 0 | | |
| 139 | 208 | 120809 | 8 | 13 | 3 | 301 |
| 140 | 208 | 120809 | 8 | 21 | 8 | 420 |
| 141 | 208 | 120809 | 9 | 0 | | |
| 142 | 208 | 120809 | 10 | 31 | 13 | 420 |
| 143 | 208 | 120809 | 11 | 13 | 3 | 301 |
| 144 | 208 | 120809 | 11 | 21 | 8 | 420 |
| 145 | 208 | 120809 | 12 | 9 | | |
| 146 | 208 | 120809 | 13 | 13 | 3 | 301 |
| 147 | 208 | 120809 | 13 | 21 | 8 | 420 |
| 148 | 208 | 120809 | 14 | 0 | | |
| 149 | 208 | 120809 | 15 | 9 | | |
| 150 | 208 | 120809 | 16 | 13 | 3 | 301 |
| 151 | 208 | 120809 | 16 | 21 | 8 | 420 |
| 152 | 208 | 120809 | 17 | 9 | | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 153 | 208 | 120809 | 18 | 13 | 3 | 301 | |
| 154 | 208 | 120809 | 18 | 21 | 8 | 420 | |
| 155 | 208 | 120809 | 19 | 0 | | | |
| 156 | 208 | 120809 | 33 | 9 | | | |
| 157 | 208 | 120809 | 34 | 0 | | | |
| 158 | 157 | 120809 | 1 | 4 | 9 | 541 | Plot felled in 2009 |
| 159 | 157 | 120809 | 4 | 4 | 9 | 541 | Plot felled in 2009 |
| 160 | 157 | 120809 | 5 | 4 | 9 | 541 | Plot felled in 2009 |
| 161 | 157 | 120809 | 7 | 4 | 9 | 541 | Plot felled in 2009 |
| 162 | 157 | 120809 | 11 | 4 | 9 | 541 | Plot felled in 2009 |
| 163 | 157 | 120809 | 15 | 4 | 9 | 541 | Plot felled in 2009 |
| 164 | 157 | 120809 | 16 | 4 | 9 | 541 | Plot felled in 2009 |
| 165 | 157 | 120809 | 17 | 4 | 9 | 541 | Plot felled in 2009 |
| 166 | 157 | 120809 | 19 | 4 | 9 | 541 | Plot felled in 2009 |
| 167 | 157 | 120809 | 20 | 4 | 9 | 541 | Plot felled in 2009 |
| 168 | 157 | 120809 | 21 | 4 | 9 | 541 | Plot felled in 2009 |
| 169 | 157 | 120809 | 32 | 4 | 9 | 541 | Plot felled in 2009 |
| 170 | 157 | 120809 | 35 | 4 | 9 | 541 | Plot felled in 2009 |
| 171 | 157 | 120809 | 36 | 4 | 9 | 541 | Plot felled in 2009 |
| 172 | 157 | 120809 | 38 | 4 | 9 | 541 | Plot felled in 2009 |
| 173 | 157 | 120809 | 39 | 4 | 9 | 541 | Plot felled in 2009 |
| 174 | 157 | 120809 | 40 | 4 | 9 | 541 | Plot felled in 2009 |
| 175 | 157 | 120809 | 41 | 4 | 9 | 541 | Plot felled in 2009 |
| 176 | 157 | 120809 | 42 | 4 | 9 | 541 | Plot felled in 2009 |
| 177 | 157 | 120809 | 43 | 4 | 9 | 541 | Plot felled in 2009 |
| 178 | 157 | 120809 | 44 | 4 | 9 | 541 | Plot felled in 2009 |
| 179 | 139 | 230909 | 1 | 13 | 2 | 410 | |
| 180 | 139 | 230909 | 1 | 11 | 4 | 424 | |
| 181 | 139 | 230909 | 2 | 13 | 2 | 410 | |
| 182 | 139 | 230909 | 2 | 11 | 4 | 424 | |
| 183 | 139 | 230909 | 3 | 13 | 2 | 410 | |
| 184 | 139 | 230909 | 3 | 11 | 4 | 424 | |
| 185 | 139 | 230909 | 4 | 13 | 2 | 410 | |
| 186 | 139 | 230909 | 4 | 11 | 4 | 424 | |
| 187 | 139 | 230909 | 5 | 13 | 2 | 410 | |
| 188 | 139 | 230909 | 5 | 11 | 4 | 424 | |
| 189 | 139 | 230909 | 6 | 13 | 2 | 410 | |
| 190 | 139 | 230909 | 6 | 11 | 4 | 424 | |
| 191 | 139 | 230909 | 7 | 13 | 2 | 410 | |
| 192 | 139 | 230909 | 7 | 11 | 4 | 424 | |
| 193 | 139 | 230909 | 8 | 13 | 2 | 410 | |
| 194 | 139 | 230909 | 8 | 11 | 4 | 424 | |
| 195 | 139 | 230909 | 9 | 13 | 2 | 410 | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 196 | 139 | 230909 | 9 | 11 | 4 | 424 |
| 197 | 139 | 230909 | 10 | 13 | 2 | 410 |
| 198 | 139 | 230909 | 10 | 11 | 4 | 424 |
| 199 | 139 | 230909 | 11 | 13 | 2 | 410 |
| 200 | 139 | 230909 | 11 | 11 | 4 | 424 |
| 201 | 139 | 230909 | 12 | 13 | 2 | 410 |
| 202 | 139 | 230909 | 12 | 11 | 4 | 424 |
| 203 | 139 | 230909 | 13 | 13 | 2 | 410 |
| 204 | 139 | 230909 | 13 | 11 | 4 | 424 |
| 205 | 139 | 230909 | 14 | 13 | 2 | 410 |
| 206 | 139 | 230909 | 14 | 11 | 4 | 424 |
| 207 | 139 | 230909 | 15 | 13 | 2 | 410 |
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| 209 | 139 | 230909 | 16 | 13 | 2 | 410 |
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| 211 | 139 | 230909 | 17 | 13 | 2 | 410 |
| 212 | 139 | 230909 | 17 | 11 | 4 | 424 |
| 213 | 139 | 230909 | 18 | 13 | 2 | 410 |
| 214 | 139 | 230909 | 18 | 11 | 4 | 424 |
| 215 | 139 | 230909 | 19 | 13 | 2 | 410 |
| 216 | 139 | 230909 | 19 | 11 | 4 | 424 |
| 217 | 139 | 230909 | 20 | 13 | 2 | 410 |
| 218 | 139 | 230909 | 20 | 11 | 4 | 424 |
| 219 | 139 | 230909 | 21 | 13 | 2 | 410 |
| 220 | 139 | 230909 | 21 | 11 | 4 | 424 |
| 221 | 139 | 230909 | 22 | 13 | 2 | 410 |
| 222 | 139 | 230909 | 22 | 11 | 4 | 424 |
| 223 | 139 | 230909 | 23 | 13 | 2 | 410 |
| 224 | 139 | 230909 | 23 | 11 | 4 | 424 |
| 225 | 139 | 230909 | 24 | 13 | 2 | 410 |
| 226 | 139 | 230909 | 24 | 11 | 4 | 424 |
| 227 | 139 | 230909 | 25 | 13 | 2 | 410 |
| 228 | 139 | 230909 | 25 | 11 | 4 | 424 |
| 229 | 80 | 240909 | 1 | 0 | | |
| 230 | 80 | 240909 | 2 | 9 | | |
| 231 | 80 | 240909 | 3 | 24 | 13 | 420 |
| 232 | 80 | 240909 | 4 | 9 | | |
| 233 | 80 | 240909 | 5 | 9 | | |
| 234 | 80 | 240909 | 6 | 13 | 3 | 301 |
| 235 | 80 | 240909 | 7 | 13 | 3 | 301 |
| 236 | 80 | 240909 | 8 | 13 | 3 | 301 |
| 237 | 80 | 240909 | 9 | 13 | 3 | 301 |
| 238 | 80 | 240909 | 10 | 13 | 3 | 301 |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 239 | 80 | 240909 | 11 | 9 | | |
| 240 | 80 | 240909 | 12 | 13 | 3 | 301 |
| 241 | 80 | 240909 | 13 | 13 | 3 | 301 |
| 242 | 80 | 240909 | 14 | 13 | 3 | 301 |
| 243 | 80 | 240909 | 15 | 13 | 3 | 301 |
| 244 | 80 | 240909 | 16 | 13 | 3 | 301 |
| 245 | 80 | 240909 | 17 | 13 | 3 | 301 |
| 246 | 80 | 240909 | 18 | 13 | 2 | 410 |
| 247 | 80 | 240909 | 19 | 13 | 2 | 410 |
| 248 | 80 | 240909 | 20 | 13 | 2 | 410 |
| 249 | 80 | 240909 | 21 | 13 | 2 | 410 |
| 250 | 22 | 250609 | 1 | 9 | | |
| 251 | 22 | 250609 | 3 | 9 | | |
| 252 | 22 | 250609 | 4 | 13 | 3 | 301 |
| 253 | 22 | 250609 | 5 | 13 | 3 | 301 |
| 254 | 22 | 250609 | 6 | 13 | 3 | 301 |
| 255 | 22 | 250609 | 7 | 9 | | |
| 256 | 22 | 250609 | 8 | 9 | | |
| 257 | 22 | 250609 | 9 | 9 | | |
| 258 | 22 | 250609 | 10 | 9 | | |
| 259 | 22 | 250609 | 11 | 13 | 3 | 301 |
| 260 | 22 | 250609 | 12 | 9 | | |
| 261 | 22 | 250609 | 14 | 9 | | |
| 262 | 22 | 250609 | 15 | 34 | 12 | 850 |
| 263 | 22 | 250609 | 16 | 9 | | |
| 264 | 22 | 250609 | 17 | 9 | | |
| 265 | 22 | 250609 | 18 | 13 | 3 | 301 |
| 266 | 22 | 250609 | 19 | 13 | 3 | 301 |
| 267 | 22 | 250609 | 20 | 9 | | |
| 268 | 22 | 250609 | 21 | 9 | | |
| 269 | 22 | 250609 | 31 | 9 | | |
| 270 | 22 | 250609 | 37 | 9 | | |
| 271 | 26 | 260909 | 1 | 0 | | |
| 272 | 26 | 260909 | 2 | 0 | | |
| 273 | 26 | 260909 | 3 | 0 | | |
| 274 | 26 | 260909 | 4 | 0 | | |
| 275 | 26 | 260909 | 5 | 0 | | |
| 276 | 26 | 260909 | 6 | 0 | | |
| 277 | 26 | 260909 | 7 | 0 | | |
| 278 | 26 | 260909 | 8 | 0 | | |
| 279 | 26 | 260909 | 9 | 0 | | |
| 280 | 26 | 260909 | 10 | 0 | | |
| 281 | 26 | 260909 | 11 | 0 | | |

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|---|---|---|---|---|---|---|
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| 283 | 26 | 260909 | 13 | 0 | | |
| 284 | 26 | 260909 | 14 | 0 | | |
| 285 | 26 | 260909 | 15 | 9 | | |
| 286 | 26 | 260909 | 16 | 9 | | |
| 287 | 26 | 260909 | 17 | 9 | | |
| 288 | 26 | 260909 | 18 | 0 | | |
| 289 | 26 | 260909 | 19 | 0 | | |
| 290 | 26 | 260909 | 20 | 0 | | |
| 291 | 26 | 260909 | 21 | 0 | | |
| 292 | 32 | 250609 | 1 | 13 | 4 | 420 |
| 293 | 32 | 250609 | 2 | 13 | 4 | 420 |
| 294 | 32 | 250609 | 3 | 13 | 4 | 420 |
| 295 | 32 | 250609 | 4 | 13 | 4 | 420 |
| 296 | 32 | 250609 | 7 | 13 | 4 | 420 |
| 297 | 32 | 250609 | 8 | 13 | 4 | 420 |
| 298 | 32 | 250609 | 9 | 13 | 4 | 420 |
| 299 | 32 | 250609 | 10 | 13 | 4 | 420 |
| 300 | 32 | 250609 | 11 | 13 | 4 | 420 |
| 301 | 32 | 250609 | 12 | 13 | 4 | 420 |
| 302 | 32 | 250609 | 13 | 13 | 4 | 420 |
| 303 | 32 | 250609 | 14 | 13 | 4 | 420 |
| 304 | 32 | 250609 | 15 | 13 | 4 | 420 |
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| 306 | 32 | 250609 | 17 | 13 | 4 | 420 |
| 307 | 32 | 250609 | 18 | 13 | 4 | 420 |
| 308 | 32 | 250609 | 19 | 13 | 4 | 420 |
| 309 | 32 | 250609 | 20 | 13 | 4 | 420 |
| 310 | 32 | 250609 | 21 | 13 | 4 | 420 |
| 311 | 32 | 250609 | 32 | 13 | 4 | 420 |
| 312 | 32 | 250609 | 33 | 13 | 4 | 420 |
| 313 | 33 | 270909 | 1 | 13 | 4 | 420 |
| 314 | 33 | 270909 | 2 | 13 | 4 | 420 |
| 315 | 33 | 270909 | 3 | 13 | 4 | 420 |
| 316 | 33 | 270909 | 4 | 13 | 4 | 420 |
| 317 | 33 | 270909 | 5 | 13 | 4 | 420 |
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| 319 | 33 | 270909 | 7 | 13 | 4 | 420 |
| 320 | 33 | 270909 | 8 | 13 | 4 | 420 |
| 321 | 33 | 270909 | 9 | 13 | 4 | 420 |
| 322 | 33 | 270909 | 10 | 13 | 4 | 420 |
| 323 | 33 | 270909 | 11 | 13 | 4 | 420 |
| 324 | 33 | 270909 | 12 | 13 | 4 | 420 |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 325 | 33 | 270909 | 13 | 13 | 4 | 420 |
| 326 | 33 | 270909 | 14 | 13 | 4 | 420 |
| 327 | 33 | 270909 | 16 | 13 | 4 | 420 |
| 328 | 33 | 270909 | 17 | 13 | 4 | 420 |
| 329 | 33 | 270909 | 18 | 13 | 4 | 420 |
| 330 | 33 | 270909 | 19 | 13 | 4 | 420 |
| 331 | 33 | 270909 | 20 | 13 | 4 | 420 |
| 332 | 33 | 270909 | 21 | 13 | 4 | 420 |
| 333 | 33 | 270909 | 31 | 13 | 4 | 420 |
| 334 | 34 | 270909 | 1 | 0 | | |
| 335 | 34 | 270909 | 2 | 0 | | |
| 336 | 34 | 270909 | 4 | 0 | | |
| 337 | 34 | 270909 | 5 | 0 | | |
| 338 | 34 | 270909 | 6 | 0 | | |
| 339 | 34 | 270909 | 7 | 0 | | |
| 340 | 34 | 270909 | 8 | 0 | | |
| 341 | 34 | 270909 | 9 | 0 | | |
| 342 | 34 | 270909 | 10 | 0 | | |
| 343 | 34 | 270909 | 11 | 0 | | |
| 344 | 34 | 270909 | 12 | 0 | | |
| 345 | 34 | 270909 | 13 | 0 | | |
| 346 | 34 | 270909 | 14 | 0 | | |
| 347 | 34 | 270909 | 15 | 0 | | |
| 348 | 34 | 270909 | 16 | 0 | | |
| 349 | 34 | 270909 | 17 | 0 | | |
| 350 | 34 | 270909 | 18 | 0 | | |
| 351 | 34 | 270909 | 19 | 0 | | |
| 352 | 34 | 270909 | 20 | 0 | | |
| 353 | 34 | 270909 | 21 | 0 | | |
| 354 | 34 | 270909 | 31 | 0 | | |
| 355 | 15 | 260909 | 2 | 9 | | |
| 356 | 15 | 260909 | 4 | 9 | | |
| 357 | 15 | 260909 | 5 | 9 | | |
| 358 | 15 | 260909 | 10 | 9 | | |
| 359 | 15 | 260909 | 31 | 9 | | |
| 360 | 15 | 260909 | 33 | 9 | | |
| 361 | 15 | 260909 | 34 | 0 | | |
| 362 | 15 | 260909 | 39 | 4 | 12 | 420 |
| 363 | 15 | 260909 | 40 | 4 | 9 | 431 |
| 364 | 15 | 260909 | 45 | 13 | 4 | 420 |
| 365 | 15 | 260909 | 47 | 13 | 4 | 420 |
| 366 | 15 | 260909 | 50 | 13 | 4 | 420 |
| 367 | 15 | 260909 | 52 | 13 | 4 | 420 |

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| 369 | 15 | 260909 | 54 | 13 | 4 | 420 |
| 370 | 15 | 260909 | 55 | 13 | 4 | 420 |
| 371 | 15 | 260909 | 56 | 13 | 4 | 420 |
| 372 | 15 | 260909 | 57 | 4 | 9 | 431 |
| 373 | 15 | 260909 | 58 | 4 | 9 | 431 |
| 374 | 15 | 260909 | 59 | 9 | | |
| 375 | 15 | 260909 | 60 | 4 | 9 | 431 |
| 376 | 15 | 260909 | 61 | 13 | 4 | 420 |
| 377 | 15 | 260909 | 62 | 9 | | |
| 378 | 15 | 260909 | 63 | 9 | | |
| 379 | 15 | 260909 | 64 | 9 | | |
| 380 | 15 | 260909 | 65 | 9 | | |
| 381 | 44 | 280909 | 13 | 4 | 9 | 431 |
| 382 | 44 | 280909 | 14 | 4 | 9 | 431 |
| 383 | 44 | 280909 | 16 | 9 | | |
| 384 | 44 | 280909 | 17 | 13 | 4 | 420 |
| 385 | 44 | 280909 | 18 | 13 | 4 | 420 |
| 386 | 44 | 280909 | 20 | 0 | | |
| 387 | 44 | 280909 | 21 | 0 | | |
| 388 | 44 | 280909 | 31 | 13 | 4 | 420 |
| 389 | 44 | 280909 | 32 | 9 | | |
| 390 | 44 | 280909 | 33 | 13 | 4 | 420 |
| 391 | 44 | 280909 | 34 | 9 | | |
| 392 | 44 | 280909 | 35 | 9 | | |
| 393 | 44 | 280909 | 36 | 4 | 12 | 420 |
| 394 | 44 | 280909 | 37 | 9 | | |
| 395 | 44 | 280909 | 38 | 9 | | |
| 396 | 44 | 280909 | 39 | 9 | | |
| 397 | 44 | 280909 | 40 | 9 | | |
| 398 | 44 | 280909 | 41 | 0 | | |
| 399 | 44 | 280909 | 42 | 9 | | |
| 400 | 44 | 280909 | 43 | 4 | 12 | 420 |
| 401 | 44 | 280909 | 44 | 13 | 4 | 420 |
| 402 | 44 | 280909 | 45 | 13 | 4 | 420 |
| 403 | 44 | 280909 | 46 | 13 | 4 | 420 |
| 404 | 44 | 280909 | 47 | 9 | | |
| 405 | 44 | 280909 | 48 | 9 | | |
| 406 | 279 | 170909 | 1 | 0 | | |
| 407 | 279 | 170909 | 2 | 0 | | |
| 408 | 279 | 170909 | 3 | 0 | | |
| 409 | 279 | 170909 | 4 | 0 | | |
| 410 | 279 | 170909 | 5 | 0 | | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 411 | 279 | 170909 | 6 | 9 | | |
| 412 | 279 | 170909 | 7 | 9 | | |
| 413 | 279 | 170909 | 8 | 0 | | |
| 414 | 279 | 170909 | 9 | 0 | | |
| 415 | 279 | 170909 | 10 | 0 | | |
| 416 | 279 | 170909 | 11 | 9 | | |
| 417 | 279 | 170909 | 12 | 9 | | |
| 418 | 279 | 170909 | 13 | 9 | | |
| 419 | 279 | 170909 | 14 | 9 | | |
| 420 | 279 | 170909 | 15 | 0 | | |
| 421 | 279 | 170909 | 16 | 9 | | |
| 422 | 279 | 170909 | 17 | 9 | | |
| 423 | 279 | 170909 | 18 | 9 | | |
| 424 | 279 | 170909 | 19 | 9 | | |
| 425 | 279 | 170909 | 20 | 0 | | |
| 426 | 279 | 170909 | 21 | 9 | | |
| 427 | 159 | 300709 | 1 | 0 | | |
| 428 | 159 | 300709 | 2 | 0 | | |
| 429 | 159 | 300709 | 3 | 0 | | |
| 430 | 159 | 300709 | 4 | 0 | | |
| 431 | 159 | 300709 | 5 | 0 | | |
| 432 | 159 | 300709 | 6 | 0 | | |
| 433 | 159 | 300709 | 7 | 0 | | |
| 434 | 159 | 300709 | 12 | 4 | 12 | 420 |
| 435 | 159 | 300709 | 13 | 0 | | |
| 436 | 159 | 300709 | 14 | 0 | | |
| 437 | 159 | 300709 | 15 | 0 | | |
| 438 | 159 | 300709 | 21 | 0 | | |
| 439 | 159 | 300709 | 31 | 0 | | |
| 440 | 159 | 300709 | 32 | 0 | | |
| 441 | 159 | 300709 | 33 | 0 | | |
| 442 | 159 | 300709 | 34 | 0 | | |
| 443 | 159 | 300709 | 35 | 0 | | |
| 444 | 159 | 300709 | 36 | 0 | | |
| 445 | 159 | 300709 | 37 | 0 | | |
| 446 | 159 | 300709 | 38 | 0 | | |
| 447 | 159 | 300709 | 39 | 0 | | |
| 448 | 159 | 300709 | 40 | 0 | | |
| 449 | 701 | 180809 | 1 | 0 | | |
| 450 | 701 | 180809 | 2 | 0 | | |
| 451 | 701 | 180809 | 3 | 0 | | |
| 452 | 701 | 180809 | 4 | 9 | | |
| 453 | 701 | 180809 | 5 | 12 | 1 | 210 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 454 | 701 | 180809 | 6 | 9 | | |
| 455 | 701 | 180809 | 7 | 9 | | |
| 456 | 701 | 180809 | 8 | 9 | | |
| 457 | 701 | 180809 | 9 | 9 | | |
| 458 | 701 | 180809 | 10 | 0 | | |
| 459 | 701 | 180809 | 11 | 12 | 1 | 210 |
| 460 | 701 | 180809 | 12 | 12 | 1 | 210 |
| 461 | 701 | 180809 | 13 | 12 | 1 | 210 |
| 462 | 701 | 180809 | 14 | 12 | 1 | 210 |
| 463 | 701 | 180809 | 15 | 0 | | |
| 464 | 701 | 180809 | 16 | 34 | 12 | 850 |
| 465 | 701 | 180809 | 17 | 9 | | |
| 466 | 701 | 180809 | 18 | 12 | 1 | 210 |
| 467 | 701 | 180809 | 19 | 12 | 1 | 210 |
| 468 | 701 | 180809 | 20 | 12 | 1 | 210 |
| 469 | 701 | 180809 | 21 | 12 | 1 | 210 |
| 470 | 701 | 180809 | 22 | 12 | 1 | 210 |
| 471 | 701 | 180809 | 23 | 12 | 1 | 210 |
| 472 | 701 | 180809 | 24 | 12 | 1 | 210 |
| 473 | 701 | 180809 | 25 | 12 | 1 | 210 |
| 474 | 703 | 190709 | 1 | 0 | | |
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| 476 | 703 | 190709 | 3 | 0 | | |
| 477 | 703 | 190709 | 4 | 13 | 2 | 410 |
| 478 | 703 | 190709 | 5 | 13 | 2 | 410 |
| 479 | 703 | 190709 | 6 | 13 | 2 | 410 |
| 480 | 703 | 190709 | 7 | 0 | | |
| 481 | 703 | 190709 | 8 | 0 | | |
| 482 | 703 | 190709 | 9 | 13 | 2 | 410 |
| 483 | 703 | 190709 | 10 | 13 | 2 | 410 |
| 484 | 703 | 190709 | 11 | 13 | 2 | 410 |
| 485 | 703 | 190709 | 12 | 13 | 2 | 410 |
| 486 | 703 | 190709 | 13 | 13 | 2 | 410 |
| 487 | 703 | 190709 | 14 | 13 | 2 | 410 |
| 488 | 703 | 190709 | 15 | 13 | 2 | 410 |
| 489 | 703 | 190709 | 16 | 13 | 2 | 410 |
| 490 | 703 | 190709 | 17 | 13 | 2 | 410 |
| 491 | 703 | 190709 | 18 | 13 | 2 | 410 |
| 492 | 703 | 190709 | 19 | 13 | 2 | 410 |
| 493 | 703 | 190709 | 20 | 13 | 2 | 410 |
| 494 | 703 | 190709 | 21 | 13 | 2 | 410 |
| 495 | 704 | 190709 | 1 | 0 | | |
| 496 | 704 | 190709 | 2 | 0 | | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 497 | 704 | 190709 | 3 | 0 | | |
| 498 | 704 | 190709 | 4 | 0 | | |
| 499 | 704 | 190709 | 5 | 0 | | |
| 500 | 704 | 190709 | 6 | 0 | | |
| 501 | 704 | 190709 | 7 | 0 | | |
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| 505 | 704 | 190709 | 11 | 0 | | |
| 506 | 704 | 190709 | 12 | 0 | | |
| 507 | 704 | 190709 | 13 | 0 | | |
| 508 | 704 | 190709 | 14 | 0 | | |
| 509 | 704 | 190709 | 15 | 0 | | |
| 510 | 704 | 190709 | 16 | 0 | | |
| 511 | 704 | 190709 | 17 | 0 | | |
| 512 | 704 | 190709 | 18 | 0 | | |
| 513 | 704 | 190709 | 19 | 0 | | |
| 514 | 704 | 190709 | 20 | 0 | | |
| 515 | 704 | 190709 | 21 | 0 | | |
| 516 | 705 | 230909 | 1 | 9 | | |
| 517 | 705 | 230909 | 2 | 0 | | |
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| 519 | 705 | 230909 | 4 | 0 | | |
| 520 | 705 | 230909 | 5 | 0 | | |
| 521 | 705 | 230909 | 6 | 13 | 2 | 410 |
| 522 | 705 | 230909 | 7 | 0 | | |
| 523 | 705 | 230909 | 8 | 13 | 2 | 410 |
| 524 | 705 | 230909 | 9 | 0 | | |
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| 526 | 705 | 230909 | 11 | 13 | 2 | 410 |
| 527 | 705 | 230909 | 12 | 0 | | |
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| 529 | 705 | 230909 | 14 | 13 | 2 | 410 |
| 530 | 705 | 230909 | 15 | 0 | | |
| 531 | 705 | 230909 | 16 | 13 | 2 | 410 |
| 532 | 705 | 230909 | 17 | 0 | | |
| 533 | 705 | 230909 | 18 | 13 | 2 | 410 |
| 534 | 705 | 230909 | 19 | 13 | 2 | 410 |
| 535 | 705 | 230909 | 20 | 13 | 2 | 410 |
| 536 | 705 | 230909 | 21 | 0 | | |
| 537 | 706 | 230909 | 1 | 0 | | |
| 538 | 706 | 230909 | 2 | 0 | | |
| 539 | 706 | 230909 | 3 | 0 | | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 540 | 706 | 230909 | 4 | 9 | | |
| 541 | 706 | 230909 | 5 | 0 | | |
| 542 | 706 | 230909 | 6 | 0 | | |
| 543 | 706 | 230909 | 7 | 9 | | |
| 544 | 706 | 230909 | 8 | 9 | | |
| 545 | 706 | 230909 | 9 | 9 | | |
| 546 | 706 | 230909 | 10 | 0 | | |
| 547 | 706 | 230909 | 11 | 0 | | |
| 548 | 706 | 230909 | 12 | 0 | | |
| 549 | 706 | 230909 | 13 | 0 | | |
| 550 | 706 | 230909 | 14 | 0 | | |
| 551 | 706 | 230909 | 15 | 9 | | |
| 552 | 706 | 230909 | 16 | 0 | | |
| 553 | 706 | 230909 | 17 | 0 | | |
| 554 | 706 | 230909 | 18 | 9 | | |
| 555 | 706 | 230909 | 19 | 0 | | |
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| 557 | 706 | 230909 | 21 | 0 | | |
| 558 | 706 | 230909 | 22 | 4 | 12 | 420 |
| 559 | 706 | 230909 | 23 | 4 | 12 | 420 |
| 560 | 706 | 230909 | 24 | 0 | | |
| 561 | 706 | 230909 | 25 | 0 | | |
| 562 | 706 | 230909 | 31 | 13 | 3 | 301 |
| 563 | 706 | 230909 | 32 | 0 | | |
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| 566 | 707 | 240909 | 3 | 13 | 3 | 301 |
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| 569 | 707 | 240909 | 6 | 13 | 3 | 301 |
| 570 | 707 | 240909 | 7 | 13 | 3 | 301 |
| 571 | 707 | 240909 | 8 | 13 | 3 | 301 |
| 572 | 707 | 240909 | 9 | 13 | 3 | 301 |
| 573 | 707 | 240909 | 10 | 13 | 3 | 301 |
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| 575 | 707 | 240909 | 12 | 13 | 3 | 301 |
| 576 | 707 | 240909 | 13 | 13 | 3 | 301 |
| 577 | 707 | 240909 | 14 | 13 | 3 | 301 |
| 578 | 707 | 240909 | 15 | 13 | 3 | 301 |
| 579 | 707 | 240909 | 16 | 13 | 3 | 301 |
| 580 | 707 | 240909 | 17 | 13 | 3 | 301 |
| 581 | 707 | 240909 | 18 | 13 | 3 | 301 |
| 582 | 707 | 240909 | 19 | 13 | 3 | 301 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 583 | 707 | 240909 | 20 | 13 | 3 | 301 |
| 584 | 707 | 240909 | 21 | 13 | 3 | 301 |
| 585 | 707 | 240909 | 22 | 13 | 3 | 301 |
| 586 | 707 | 240909 | 23 | 13 | 3 | 301 |
| 587 | 707 | 240909 | 24 | 13 | 3 | 301 |
| 588 | 707 | 240909 | 25 | 13 | 3 | 301 |
| 589 | 708 | 240909 | 1 | 13 | 3 | 301 |
| 590 | 708 | 240909 | 2 | 13 | 3 | 301 |
| 591 | 708 | 240909 | 3 | 13 | 3 | 301 |
| 592 | 708 | 240909 | 4 | 13 | 3 | 301 |
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| 597 | 708 | 240909 | 9 | 13 | 3 | 301 |
| 598 | 708 | 240909 | 10 | 13 | 3 | 301 |
| 599 | 708 | 240909 | 11 | 13 | 3 | 301 |
| 600 | 708 | 240909 | 12 | 13 | 3 | 301 |
| 601 | 708 | 240909 | 13 | 13 | 3 | 301 |
| 602 | 708 | 240909 | 14 | 13 | 3 | 301 |
| 603 | 708 | 240909 | 15 | 13 | 3 | 301 |
| 604 | 708 | 240909 | 16 | 13 | 3 | 301 |
| 605 | 708 | 240909 | 17 | 26 | 1 | 420 |
| 606 | 708 | 240909 | 18 | 13 | 3 | 301 |
| 607 | 708 | 240909 | 19 | 13 | 3 | 301 |
| 608 | 708 | 240909 | 20 | 13 | 3 | 301 |
| 609 | 708 | 240909 | 21 | 13 | 3 | 301 |
| 610 | 708 | 240909 | 22 | 13 | 3 | 301 |
| 611 | 708 | 240909 | 23 | 13 | 3 | 301 |
| 612 | 708 | 240909 | 24 | 13 | 3 | 301 |
| 613 | 708 | 240909 | 25 | 13 | 3 | 301 |
| 614 | 709 | 240609 | 1 | 0 | | |
| 615 | 709 | 240609 | 2 | 0 | | |
| 616 | 709 | 240609 | 3 | 0 | | |
| 617 | 709 | 240609 | 4 | 9 | | |
| 618 | 709 | 240609 | 5 | 0 | | |
| 619 | 709 | 240609 | 6 | 9 | | |
| 620 | 709 | 240609 | 7 | 0 | | |
| 621 | 709 | 240609 | 8 | 9 | | |
| 622 | 709 | 240609 | 9 | 9 | | |
| 623 | 709 | 240609 | 10 | 0 | | |
| 624 | 709 | 240609 | 11 | 0 | | |
| 625 | 709 | 240609 | 12 | 9 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 626 | 709 | 240609 | 13 | 0 | | |
| 627 | 709 | 240609 | 14 | 0 | | |
| 628 | 709 | 240609 | 15 | 0 | | |
| 629 | 709 | 240609 | 16 | 0 | | |
| 630 | 709 | 240609 | 17 | 9 | | |
| 631 | 709 | 240609 | 18 | 0 | | |
| 632 | 709 | 240609 | 19 | 0 | | |
| 633 | 709 | 240609 | 20 | 9 | | |
| 634 | 709 | 240609 | 21 | 0 | | |
| 635 | 710 | 250609 | 1 | 0 | | |
| 636 | 710 | 250609 | 2 | 0 | | |
| 637 | 710 | 250609 | 3 | 0 | | |
| 638 | 710 | 250609 | 4 | 13 | 3 | 301 |
| 639 | 710 | 250609 | 4 | 13 | 4 | 420 |
| 640 | 710 | 250609 | 5 | 0 | | |
| 641 | 710 | 250609 | 6 | 0 | | |
| 642 | 710 | 250609 | 7 | 0 | | |
| 643 | 710 | 250609 | 8 | 34 | 12 | 850 |
| 644 | 710 | 250609 | 9 | 0 | | |
| 645 | 710 | 250609 | 10 | 9 | | |
| 646 | 710 | 250609 | 11 | 0 | | |
| 647 | 710 | 250609 | 12 | 9 | | |
| 648 | 710 | 250609 | 13 | 13 | 3 | 301 |
| 649 | 710 | 250609 | 13 | 13 | 4 | 420 |
| 650 | 710 | 250609 | 14 | 13 | 3 | 301 |
| 651 | 710 | 250609 | 14 | 13 | 4 | 420 |
| 652 | 710 | 250609 | 15 | 13 | 3 | 301 |
| 653 | 710 | 250609 | 15 | 13 | 4 | 420 |
| 654 | 710 | 250609 | 16 | 13 | 3 | 301 |
| 655 | 710 | 250609 | 16 | 13 | 4 | 420 |
| 656 | 710 | 250609 | 17 | 0 | | |
| 657 | 710 | 250609 | 18 | 0 | | |
| 658 | 710 | 250609 | 19 | 0 | | |
| 659 | 710 | 250609 | 20 | 0 | | |
| 660 | 710 | 250609 | 21 | 13 | 3 | 301 |
| 661 | 710 | 250609 | 21 | 13 | 4 | 420 |
| 662 | 711 | 260909 | 1 | 0 | | |
| 663 | 711 | 260909 | 2 | 0 | | |
| 664 | 711 | 260909 | 3 | 0 | | |
| 665 | 711 | 260909 | 4 | 0 | | |
| 666 | 711 | 260909 | 5 | 0 | | |
| 667 | 711 | 260909 | 6 | 0 | | |
| 668 | 711 | 260909 | 7 | 4 | 12 | 420 |

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| | | | | |
|---|---|---|---|---|
| 669 | 711 | 260909 | 8 | 0 |
| 670 | 711 | 260909 | 9 | 0 |
| 671 | 711 | 260909 | 10 | 9 |
| 672 | 711 | 260909 | 11 | 0 |
| 673 | 711 | 260909 | 12 | 0 |
| 674 | 711 | 260909 | 13 | 0 |
| 675 | 711 | 260909 | 14 | 0 |
| 676 | 711 | 260909 | 15 | 0 |
| 677 | 711 | 260909 | 16 | 0 |
| 678 | 711 | 260909 | 17 | 0 |
| 679 | 711 | 260909 | 18 | 0 |
| 680 | 711 | 260909 | 19 | 0 |
| 681 | 711 | 260909 | 20 | 0 |
| 682 | 711 | 260909 | 21 | 0 |
| 683 | 711 | 260909 | 31 | 0 |
| 684 | 712 | 260909 | 1 | 0 |
| 685 | 712 | 260909 | 2 | 0 |
| 686 | 712 | 260909 | 3 | 0 |
| 687 | 712 | 260909 | 4 | 0 |
| 688 | 712 | 260909 | 5 | 0 |
| 689 | 712 | 260909 | 6 | 0 |
| 690 | 712 | 260909 | 7 | 0 |
| 691 | 712 | 260909 | 8 | 0 |
| 692 | 712 | 260909 | 9 | 0 |
| 693 | 712 | 260909 | 10 | 0 |
| 694 | 712 | 260909 | 11 | 0 |
| 695 | 712 | 260909 | 12 | 0 |
| 696 | 712 | 260909 | 13 | 0 |
| 697 | 712 | 260909 | 14 | 0 |
| 698 | 712 | 260909 | 15 | 0 |
| 699 | 712 | 260909 | 16 | 0 |
| 700 | 712 | 260909 | 17 | 0 |
| 701 | 712 | 260909 | 18 | 0 |
| 702 | 712 | 260909 | 19 | 0 |
| 703 | 712 | 260909 | 20 | 0 |
| 704 | 712 | 260909 | 21 | 0 |
| 705 | 713 | 200709 | 1 | 9 |
| 706 | 713 | 200709 | 2 | 9 |
| 707 | 713 | 200709 | 3 | 9 |
| 708 | 713 | 200709 | 4 | 0 |
| 709 | 713 | 200709 | 5 | 0 |
| 710 | 713 | 200709 | 6 | 0 |
| 711 | 713 | 200709 | 7 | 0 |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 712 | 713 | 200709 | 8 | 0 | | |
| 713 | 713 | 200709 | 9 | 34 | 12 | 850 |
| 714 | 713 | 200709 | 10 | 0 | | |
| 715 | 713 | 200709 | 11 | 34 | 12 | 850 |
| 716 | 713 | 200709 | 12 | 9 | | |
| 717 | 713 | 200709 | 13 | 0 | | |
| 718 | 713 | 200709 | 14 | 0 | | |
| 719 | 713 | 200709 | 15 | 0 | | |
| 720 | 713 | 200709 | 16 | 0 | | |
| 721 | 713 | 200709 | 17 | 0 | | |
| 722 | 713 | 200709 | 18 | 0 | | |
| 723 | 713 | 200709 | 19 | 0 | | |
| 724 | 713 | 200709 | 20 | 0 | | |
| 725 | 713 | 200709 | 21 | 0 | | |
| 726 | 713 | 200709 | 22 | 0 | | |
| 727 | 713 | 200709 | 23 | 0 | | |
| 728 | 713 | 200709 | 24 | 0 | | |
| 729 | 713 | 200709 | 25 | 0 | | |
| 730 | 714 | 280809 | 1 | 0 | | |
| 731 | 714 | 280809 | 2 | 0 | | |
| 732 | 714 | 280809 | 3 | 0 | | |
| 733 | 714 | 280809 | 4 | 0 | | |
| 734 | 714 | 280809 | 5 | 0 | | |
| 735 | 714 | 280809 | 6 | 0 | | |
| 736 | 714 | 280809 | 7 | 0 | | |
| 737 | 714 | 280809 | 8 | 0 | | |
| 738 | 714 | 280809 | 9 | 0 | | |
| 739 | 714 | 280809 | 10 | 0 | | |
| 740 | 714 | 280809 | 11 | 0 | | |
| 741 | 714 | 280809 | 12 | 0 | | |
| 742 | 714 | 280809 | 13 | 9 | | |
| 743 | 714 | 280809 | 14 | 0 | | |
| 744 | 714 | 280809 | 15 | 0 | | |
| 745 | 714 | 280809 | 16 | 0 | | |
| 746 | 714 | 280809 | 17 | 0 | | |
| 747 | 714 | 280809 | 18 | 0 | | |
| 748 | 714 | 280809 | 19 | 9 | | |
| 749 | 714 | 280809 | 20 | 0 | | |
| 750 | 714 | 280809 | 21 | 0 | | |
| 751 | 714 | 280809 | 22 | 0 | | |
| 752 | 714 | 280809 | 23 | 0 | | |
| 753 | 714 | 280809 | 24 | 0 | | |
| 754 | 714 | 280809 | 25 | 13 | 1 | 420 |

```
!TRE
!Sequence, plot, date, tree, tree_species, defol, discol, fruiting_assess, other_observations
    1  277 160909    1 120   0 0 1
    2  277 160909    2 120   0 0 1
    3  277 160909    3 120   0 0 1
    4  277 160909    4 120   0 0 1
    5  277 160909    5 120   0 0 1
    6  277 160909    6 120   0 0 1
    7  277 160909    7 120   0 0 1
    8  277 160909    8 120   0 0 1
    9  277 160909    9 120   0 0 1
   10  277 160909   10 120   0 0 1
   11  277 160909   11 120   0 0 1
   12  277 160909   12 120   0 0 1
   13  277 160909   13 120   0 0 1
   14  277 160909   14 120   0 0 1
   15  277 160909   15 120   0 0 1
   16  277 160909   16 120   0 0 1
   17  277 160909   17 120   0 0 1
   18  277 160909   18 120   0 0 1
   19  277 160909   19 120   0 0 1
   20  277 160909   20 120   0 0 1
   21  277 160909   21 120   0 0 1
   22  277 160909   22 120   0 0 1
   23  277 160909   23 120   0 0 1
   24  277 160909   24 120   0 0 1
   25  277 160909   25 120   0 0 1
   26  196 160909    1 120   0 0 1
   27  196 160909    2 120   0 0 1
   28  196 160909    3 120   0 0 1
   29  196 160909    4 120   0 0 1
   30  196 160909    5 120   0 0 1
   31  196 160909    6 120   0 0 1
   32  196 160909    7 120   0 0 1
   33  196 160909    8 120   0 0 1
   34  196 160909    9 120   0 0 1
   35  196 160909   10 120   0 0 1
   36  196 160909   11 120   0 0 1
   37  196 160909   12 120   0 0 1
   38  196 160909   13 120   0 0 1
   39  196 160909   14 120   0 0 1
   40  196 160909   15 120   0 0 1
   41  196 160909   16 120   0 0 1
```

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 42 | 196 | 160909 | 17 | 120 | 0 | 0 | 1 | |
| 43 | 196 | 160909 | 18 | 120 | 0 | 0 | 1 | |
| 44 | 196 | 160909 | 19 | 120 | 0 | 0 | 1 | |
| 45 | 196 | 160909 | 20 | 120 | 0 | 0 | 1 | |
| 46 | 196 | 160909 | 21 | 120 | 0 | 0 | 1 | |
| 47 | 228 | 140809 | 1 | 120 | 0 | 0 | 1 | |
| 48 | 228 | 140809 | 2 | 120 | 10 | 0 | 1 | |
| 49 | 228 | 140809 | 3 | 120 | 0 | 0 | 1 | |
| 50 | 228 | 140809 | 4 | 120 | 5 | 0 | 1 | |
| 51 | 228 | 140809 | 5 | 120 | 5 | 0 | 1 | |
| 52 | 228 | 140809 | 7 | 120 | 0 | 0 | 1 | |
| 53 | 228 | 140809 | 8 | 120 | 0 | 0 | 1 | |
| 54 | 228 | 140809 | 10 | 120 | 10 | 0 | 1 | |
| 55 | 228 | 140809 | 12 | 120 | 10 | 0 | 1 | |
| 56 | 228 | 140809 | 13 | 120 | 0 | 0 | 1 | |
| 57 | 228 | 140809 | 14 | 120 | 0 | 0 | 1 | |
| 58 | 228 | 140809 | 17 | 120 | 5 | 0 | 1 | |
| 59 | 228 | 140809 | 18 | 120 | 5 | 0 | 1 | |
| 60 | 228 | 140809 | 19 | 120 | 0 | 0 | 1 | |
| 61 | 228 | 140809 | 20 | 120 | 0 | 0 | 1 | |
| 62 | 228 | 140809 | 21 | 120 | 15 | 0 | 1 | Mechanical damage/exposure |
| 63 | 228 | 140809 | 31 | 120 | 15 | 0 | 1 | Mechanical damage/exposure |
| 64 | 228 | 140809 | 33 | 120 | 0 | 0 | 1 | |
| 65 | 228 | 140809 | 35 | 120 | 0 | 0 | 1 | |
| 66 | 228 | 140809 | 36 | 120 | 0 | 0 | 1 | |
| 67 | 228 | 140809 | 37 | 120 | 0 | 0 | 1 | |
| 68 | 243 | 120809 | 1 | 124 | 100 | 4 | | Plot Felled 2008 |
| 69 | 243 | 120809 | 2 | 124 | 100 | 4 | | Plot Felled 2008 |
| 70 | 243 | 120809 | 4 | 124 | 100 | 4 | | Plot Felled 2008 |
| 71 | 243 | 120809 | 5 | 124 | 100 | 4 | | Plot Felled 2008 |
| 72 | 243 | 120809 | 6 | 124 | 100 | 4 | | Plot Felled 2008 |
| 73 | 243 | 120809 | 7 | 124 | 100 | 4 | | Plot Felled 2008 |
| 74 | 243 | 120809 | 8 | 124 | 100 | 4 | | Plot Felled 2008 |
| 75 | 243 | 120809 | 9 | 124 | 100 | 4 | | Plot Felled 2008 |
| 76 | 243 | 120809 | 10 | 124 | 100 | 4 | | Plot Felled 2008 |
| 77 | 243 | 120809 | 11 | 124 | 100 | 4 | | Plot Felled 2008 |
| 78 | 243 | 120809 | 12 | 124 | 100 | 4 | | Plot Felled 2008 |
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| 80 | 243 | 120809 | 14 | 124 | 100 | 4 | | Plot Felled 2008 |
| 81 | 243 | 120809 | 15 | 124 | 100 | 4 | | Plot Felled 2008 |
| 82 | 243 | 120809 | 16 | 124 | 100 | 4 | | Plot Felled 2008 |
| 83 | 243 | 120809 | 17 | 124 | 100 | 4 | | Plot Felled 2008 |
| 84 | 243 | 120809 | 18 | 124 | 100 | 4 | | Plot Felled 2008 |

| | | | | | | | | |
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| 85 | 243 | 120809 | 19 | 124 | 100 | 4 | | Plot Felled 2008 |
| 86 | 243 | 120809 | 20 | 124 | 100 | 4 | | Plot Felled 2008 |
| 87 | 243 | 120809 | 21 | 124 | 100 | 4 | | Plot Felled 2008 |
| 88 | 243 | 120809 | 31 | 124 | 100 | 4 | | Plot Felled 2008 |
| 89 | 278 | 140809 | 1 | 120 | 20 | 0 | 1 | |
| 90 | 278 | 140809 | 2 | 120 | 0 | 0 | 1 | |
| 91 | 278 | 140809 | 3 | 120 | 0 | 0 | 1 | |
| 92 | 278 | 140809 | 4 | 120 | 0 | 0 | 1 | |
| 93 | 278 | 140809 | 5 | 120 | 10 | 0 | 1 | |
| 94 | 278 | 140809 | 6 | 120 | 0 | 0 | 1 | |
| 95 | 278 | 140809 | 7 | 120 | 5 | 0 | 1 | |
| 96 | 278 | 140809 | 8 | 120 | 20 | 1 | 1 | Aphid |
| 97 | 278 | 140809 | 9 | 120 | 30 | 0 | 1 | Suppression |
| 98 | 278 | 140809 | 10 | 120 | 5 | 0 | 1 | |
| 99 | 278 | 140809 | 11 | 120 | 15 | 0 | 1 | Aphid |
| 100 | 278 | 140809 | 12 | 120 | 0 | 0 | 1 | |
| 101 | 278 | 140809 | 13 | 120 | 5 | 0 | 1 | |
| 102 | 278 | 140809 | 14 | 120 | 0 | 0 | 1 | |
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| 104 | 278 | 140809 | 16 | 120 | 0 | 0 | 1 | |
| 105 | 278 | 140809 | 17 | 120 | 0 | 0 | 1 | |
| 106 | 278 | 140809 | 18 | 120 | 0 | 0 | 1 | |
| 107 | 278 | 140809 | 19 | 120 | 0 | 0 | 1 | |
| 108 | 278 | 140809 | 20 | 120 | 0 | 0 | 1 | |
| 109 | 278 | 140809 | 21 | 120 | 0 | 0 | 1 | |
| 110 | 254 | 200709 | 1 | 124 | 30 | 2 | 1 | Shoot die-back |
| 111 | 254 | 200709 | 2 | 120 | 0 | 0 | 1 | |
| 112 | 254 | 200709 | 3 | 124 | 30 | 2 | 1 | Shoot die-back |
| 113 | 254 | 200709 | 4 | 120 | 0 | 0 | 1 | |
| 114 | 254 | 200709 | 5 | 124 | 15 | 2 | 1 | Shoot die-back |
| 115 | 254 | 200709 | 6 | 120 | 0 | 0 | 1 | |
| 116 | 254 | 200709 | 7 | 124 | 15 | 2 | 1 | Shoot die-back |
| 117 | 254 | 200709 | 8 | 120 | 0 | 0 | 1 | |
| 118 | 254 | 200709 | 9 | 120 | 0 | 0 | 1 | |
| 119 | 254 | 200709 | 11 | 120 | 10 | 1 | 1 | Value for species is 124 |
| 120 | 254 | 200709 | 12 | 120 | 80 | 1 | 1 | Suppression |
| 121 | 254 | 200709 | 15 | 120 | 80 | 1 | 1 | Suppression |
| 122 | 254 | 200709 | 17 | 124 | 20 | 2 | 1 | Shoot die-back |
| 123 | 254 | 200709 | 18 | 124 | 20 | 2 | 1 | Shoot die-back |
| 124 | 254 | 200709 | 19 | 120 | 0 | 0 | 1 | |
| 125 | 254 | 200709 | 20 | 120 | 0 | 0 | 1 | Value for species is 124 |
| 126 | 254 | 200709 | 21 | 124 | 5 | 0 | 1 | |
| 127 | 254 | 200709 | 31 | 124 | 30 | 2 | 1 | Shoot die-back |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 128 | 254 | 200709 | 32 | 120 | 0 | 0 | 1 | |
| 129 | 254 | 200709 | 33 | 120 | 0 | 0 | 1 | |
| 130 | 254 | 200709 | 34 | 120 | 0 | 0 | 1 | |
| 131 | 208 | 120809 | 1 | 118 | 10 | 0 | 1 | |
| 132 | 208 | 120809 | 2 | 118 | 10 | 0 | 1 | |
| 133 | 208 | 120809 | 3 | 118 | 0 | 0 | 1 | |
| 134 | 208 | 120809 | 4 | 118 | 0 | 0 | 1 | |
| 135 | 208 | 120809 | 5 | 118 | 15 | 0 | 1 | Shoot die-back & top dying |
| 136 | 208 | 120809 | 6 | 118 | 10 | 0 | 1 | |
| 137 | 208 | 120809 | 7 | 118 | 0 | 0 | 1 | |
| 138 | 208 | 120809 | 8 | 118 | 30 | 0 | 1 | Shoot die-back & top dying |
| 139 | 208 | 120809 | 9 | 118 | 0 | 0 | 1 | |
| 140 | 208 | 120809 | 10 | 118 | 99 | | 1 | Whole crown missing |
| 141 | 208 | 120809 | 11 | 118 | 30 | 0 | 1 | Shoot die-back & top dying |
| 142 | 208 | 120809 | 12 | 118 | 10 | 0 | 1 | |
| 143 | 208 | 120809 | 13 | 118 | 15 | 0 | 1 | Shoot die-back & top dying |
| 144 | 208 | 120809 | 14 | 118 | 0 | 0 | 1 | |
| 145 | 208 | 120809 | 15 | 118 | 10 | 0 | 1 | |
| 146 | 208 | 120809 | 16 | 118 | 20 | 1 | 1 | Shoot die-back & top dying |
| 147 | 208 | 120809 | 17 | 118 | 10 | 0 | 1 | |
| 148 | 208 | 120809 | 18 | 118 | 40 | 2 | 1 | Shoot die-back & top dying |
| 149 | 208 | 120809 | 19 | 118 | 0 | 0 | 1 | |
| 150 | 208 | 120809 | 33 | 118 | 5 | 0 | 1 | |
| 151 | 208 | 120809 | 34 | 118 | 0 | 0 | 1 | |
| 152 | 157 | 120809 | 1 | 118 | 100 | 4 | | Plot felled 2009 |
| 153 | 157 | 120809 | 4 | 118 | 100 | 4 | | Plot felled 2009 |
| 154 | 157 | 120809 | 5 | 118 | 100 | 4 | | Plot felled 2009 |
| 155 | 157 | 120809 | 7 | 118 | 100 | 4 | | Plot felled 2009 |
| 156 | 157 | 120809 | 11 | 118 | 100 | 4 | | Plot felled 2009 |
| 157 | 157 | 120809 | 15 | 118 | 100 | 4 | | Plot felled 2009 |
| 158 | 157 | 120809 | 16 | 118 | 100 | 4 | | Plot felled 2009 |
| 159 | 157 | 120809 | 17 | 118 | 100 | 4 | | Plot felled 2009 |
| 160 | 157 | 120809 | 19 | 118 | 100 | 4 | | Plot felled 2009 |
| 161 | 157 | 120809 | 20 | 118 | 100 | 4 | | Plot felled 2009 |
| 162 | 157 | 120809 | 21 | 118 | 100 | 4 | | Plot felled 2009 |
| 163 | 157 | 120809 | 32 | 118 | 100 | 4 | | Plot felled 2009 |
| 164 | 157 | 120809 | 35 | 118 | 100 | 4 | | Plot felled 2009 |
| 165 | 157 | 120809 | 36 | 118 | 100 | 4 | | Plot felled 2009 |
| 166 | 157 | 120809 | 38 | 118 | 100 | 4 | | Plot felled 2009 |
| 167 | 157 | 120809 | 39 | 118 | 100 | 4 | | Plot felled 2009 |
| 168 | 157 | 120809 | 40 | 118 | 100 | 4 | | Plot felled 2009 |
| 169 | 157 | 120809 | 41 | 118 | 100 | 4 | | Plot felled 2009 |
| 170 | 157 | 120809 | 42 | 118 | 100 | 4 | | Plot felled 2009 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 171 | 157 | 120809 | 43 | 118 | 100 | 4 | | Plot felled 2009 |
| 172 | 157 | 120809 | 44 | 118 | 100 | 4 | | Plot felled 2009 |
| 173 | 139 | 230909 | 1 | 120 | 15 | 0 | 1 | Site nutirition poor & frost prone |
| 174 | 139 | 230909 | 2 | 120 | 30 | 0 | 1 | Site nutirition poor & frost prone |
| 175 | 139 | 230909 | 3 | 120 | 35 | 1 | 1 | Site nutirition poor & frost prone |
| 176 | 139 | 230909 | 4 | 120 | 35 | 1 | 1 | Site nutirition poor & frost prone |
| 177 | 139 | 230909 | 5 | 120 | 35 | 1 | 1 | Site nutirition poor & frost prone |
| 178 | 139 | 230909 | 6 | 120 | 35 | 1 | 1 | Site nutirition poor & frost prone |
| 179 | 139 | 230909 | 7 | 120 | 35 | 1 | 1 | Site nutirition poor & frost prone |
| 180 | 139 | 230909 | 8 | 120 | 30 | 0 | 1 | Site nutirition poor & frost prone |
| 181 | 139 | 230909 | 9 | 120 | 30 | 0 | 1 | Site nutirition poor & frost prone |
| 182 | 139 | 230909 | 10 | 120 | 30 | 1 | 1 | Site nutirition poor & frost prone |
| 183 | 139 | 230909 | 11 | 120 | 40 | 0 | 1 | Site nutirition poor & frost prone |
| 184 | 139 | 230909 | 12 | 120 | 30 | 0 | 1 | Site nutirition poor & frost prone |
| 185 | 139 | 230909 | 13 | 120 | 30 | 1 | 1 | Site nutirition poor & frost prone |
| 186 | 139 | 230909 | 14 | 120 | 30 | 1 | 1 | Site nutirition poor & frost prone |
| 187 | 139 | 230909 | 15 | 120 | 15 | 0 | 1 | Site nutirition poor & frost prone |
| 188 | 139 | 230909 | 16 | 120 | 30 | 1 | 1 | Site nutirition poor & frost prone |
| 189 | 139 | 230909 | 17 | 120 | 30 | 1 | 1 | Site nutirition poor & frost prone |
| 190 | 139 | 230909 | 18 | 120 | 25 | 0 | 1 | Site nutirition poor & frost prone |
| 191 | 139 | 230909 | 19 | 120 | 25 | 0 | 1 | Site nutirition poor & frost prone |
| 192 | 139 | 230909 | 20 | 120 | 20 | 0 | 1 | Site nutirition poor & frost prone |
| 193 | 139 | 230909 | 21 | 120 | 30 | 1 | 1 | Site nutirition poor & frost prone |
| 194 | 139 | 230909 | 22 | 120 | 15 | 1 | 1 | Site nutirition poor & frost prone |
| 195 | 139 | 230909 | 23 | 120 | 25 | 1 | 1 | Site nutirition poor & frost prone |
| 196 | 139 | 230909 | 24 | 120 | 25 | 1 | 1 | Site nutirition poor & frost prone |
| 197 | 139 | 230909 | 25 | 120 | 10 | 0 | 1 | Site nutirition poor & frost prone |
| 198 | 80 | 240909 | 1 | 124 | 0 | 0 | 1 | |
| 199 | 80 | 240909 | 2 | 124 | 5 | 0 | 1 | |
| 200 | 80 | 240909 | 3 | 124 | 40 | 1 | 1 | Part of crown missing |
| 201 | 80 | 240909 | 4 | 124 | 10 | 0 | 1 | |
| 202 | 80 | 240909 | 5 | 124 | 10 | 0 | 1 | |
| 203 | 80 | 240909 | 6 | 124 | 20 | 1 | 1 | Shoot die-back |
| 204 | 80 | 240909 | 7 | 124 | 30 | 0 | 1 | Shoot die-back |
| 205 | 80 | 240909 | 8 | 124 | 10 | 1 | 1 | Shoot die-back |
| 206 | 80 | 240909 | 9 | 124 | 5 | 1 | 1 | Shoot die-back |
| 207 | 80 | 240909 | 10 | 124 | 0 | 2 | 1 | Shoot die-back |
| 208 | 80 | 240909 | 11 | 124 | 5 | 0 | 1 | |
| 209 | 80 | 240909 | 12 | 124 | 50 | 0 | 1 | Shoot die-back |
| 210 | 80 | 240909 | 13 | 124 | 20 | 0 | 1 | Shoot die-back |
| 211 | 80 | 240909 | 14 | 124 | 40 | 2 | 1 | Shoot die-back |
| 212 | 80 | 240909 | 15 | 124 | 30 | 2 | 1 | Shoot die-back |
| 213 | 80 | 240909 | 16 | 124 | 50 | 1 | 1 | Shoot die-back |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 214 | 80 | 240909 | 17 | 124 | 35 | 1 | 1 | Shoot die-back |
| 215 | 80 | 240909 | 18 | 120 | 60 | 2 | 1 | Poor nutirition |
| 216 | 80 | 240909 | 19 | 120 | 80 | 2 | 1 | Poor nutirition |
| 217 | 80 | 240909 | 20 | 120 | 70 | 2 | 1 | Poor nutirition |
| 218 | 80 | 240909 | 21 | 120 | 85 | 2 | 1 | Poor nutirition |
| 219 | 22 | 250609 | 1 | 124 | 10 | 0 | 1 | |
| 220 | 22 | 250609 | 3 | 124 | 0 | 1 | 1 | |
| 221 | 22 | 250609 | 4 | 124 | 30 | 1 | 1 | Shoot die-back |
| 222 | 22 | 250609 | 5 | 124 | 30 | 2 | 1 | Shoot die-back |
| 223 | 22 | 250609 | 6 | 124 | 20 | 2 | 1 | Shoot die-back |
| 224 | 22 | 250609 | 7 | 124 | 10 | 0 | 1 | |
| 225 | 22 | 250609 | 8 | 124 | 10 | 0 | 1 | |
| 226 | 22 | 250609 | 9 | 124 | 5 | 1 | 1 | |
| 227 | 22 | 250609 | 10 | 124 | 5 | 1 | 1 | |
| 228 | 22 | 250609 | 11 | 124 | 15 | 1 | 1 | Shoot die-back |
| 229 | 22 | 250609 | 12 | 124 | 10 | 0 | 1 | |
| 230 | 22 | 250609 | 14 | 124 | 10 | 2 | 1 | |
| 231 | 22 | 250609 | 15 | 124 | 40 | 1 | | Suppression |
| 232 | 22 | 250609 | 16 | 124 | 10 | 2 | 1 | |
| 233 | 22 | 250609 | 17 | 124 | 10 | 2 | 1 | |
| 234 | 22 | 250609 | 18 | 124 | 15 | 1 | 1 | Shoot die-back |
| 235 | 22 | 250609 | 19 | 124 | 15 | 2 | 1 | Shoot die-back |
| 236 | 22 | 250609 | 20 | 124 | 5 | 0 | 1 | |
| 237 | 22 | 250609 | 21 | 124 | 5 | 0 | 1 | |
| 238 | 22 | 250609 | 31 | 124 | 10 | 1 | 1 | |
| 239 | 22 | 250609 | 37 | 124 | 10 | 1 | 1 | |
| 240 | 26 | 260909 | 1 | 120 | 0 | 0 | 1 | |
| 241 | 26 | 260909 | 2 | 120 | 0 | 0 | 1 | |
| 242 | 26 | 260909 | 3 | 120 | 0 | 0 | 1 | |
| 243 | 26 | 260909 | 4 | 120 | 0 | 0 | 1 | |
| 244 | 26 | 260909 | 5 | 120 | 0 | 0 | 1 | |
| 245 | 26 | 260909 | 6 | 120 | 0 | 0 | 1 | |
| 246 | 26 | 260909 | 7 | 120 | 0 | 0 | 1 | |
| 247 | 26 | 260909 | 8 | 120 | 0 | 0 | 1 | |
| 248 | 26 | 260909 | 9 | 120 | 0 | 0 | 1 | |
| 249 | 26 | 260909 | 10 | 120 | 0 | 0 | 1 | |
| 250 | 26 | 260909 | 11 | 120 | 0 | 0 | 1 | |
| 251 | 26 | 260909 | 12 | 120 | 0 | 0 | 1 | |
| 252 | 26 | 260909 | 13 | 120 | 0 | 0 | 1 | |
| 253 | 26 | 260909 | 14 | 120 | 0 | 0 | 1 | |
| 254 | 26 | 260909 | 15 | 120 | 5 | 0 | 1 | |
| 255 | 26 | 260909 | 16 | 120 | 5 | 0 | 1 | |
| 256 | 26 | 260909 | 17 | 120 | 5 | 0 | 1 | |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 257 | 26 | 260909 | 18 | 120 | 0 | 0 | 1 | |
| 258 | 26 | 260909 | 19 | 120 | 0 | 0 | 1 | |
| 259 | 26 | 260909 | 20 | 120 | 0 | 0 | 1 | |
| 260 | 26 | 260909 | 21 | 120 | 0 | 0 | 1 | |
| 261 | 32 | 250609 | 1 | 124 | 25 | 1 | 1 | Exposure |
| 262 | 32 | 250609 | 2 | 124 | 25 | 1 | 1 | Exposure |
| 263 | 32 | 250609 | 3 | 124 | 25 | 1 | 1 | Exposure |
| 264 | 32 | 250609 | 4 | 124 | 25 | 1 | 1 | Exposure |
| 265 | 32 | 250609 | 7 | 124 | 55 | 1 | 1 | Exposure |
| 266 | 32 | 250609 | 8 | 124 | 55 | 1 | 1 | Exposure |
| 267 | 32 | 250609 | 9 | 124 | 15 | 1 | 1 | Exposure |
| 268 | 32 | 250609 | 10 | 124 | 15 | 1 | 1 | Exposure |
| 269 | 32 | 250609 | 11 | 124 | 15 | 2 | 1 | Exposure |
| 270 | 32 | 250609 | 12 | 124 | 20 | 1 | 1 | Exposure |
| 271 | 32 | 250609 | 13 | 124 | 20 | 2 | 1 | Exposure |
| 272 | 32 | 250609 | 14 | 124 | 10 | 0 | 1 | Exposure |
| 273 | 32 | 250609 | 15 | 124 | 15 | 1 | 1 | Exposure |
| 274 | 32 | 250609 | 16 | 124 | 30 | 2 | 1 | Exposure |
| 275 | 32 | 250609 | 17 | 124 | 20 | 1 | 1 | Exposure |
| 276 | 32 | 250609 | 18 | 124 | 40 | 2 | 1 | Exposure |
| 277 | 32 | 250609 | 19 | 124 | 20 | 2 | 1 | Exposure |
| 278 | 32 | 250609 | 20 | 124 | 30 | 2 | 1 | Exposure |
| 279 | 32 | 250609 | 21 | 124 | 10 | 1 | 1 | Exposure |
| 280 | 32 | 250609 | 32 | 124 | 30 | 1 | 1 | Exposure |
| 281 | 32 | 250609 | 33 | 124 | 15 | 1 | 1 | Exposure |
| 282 | 33 | 270909 | 1 | 124 | 20 | 1 | 1 | Exposure |
| 283 | 33 | 270909 | 2 | 124 | 15 | 1 | 1 | Exposure |
| 284 | 33 | 270909 | 3 | 124 | 70 | 2 | 1 | Exposure |
| 285 | 33 | 270909 | 4 | 124 | 40 | 2 | 1 | Exposure |
| 286 | 33 | 270909 | 5 | 124 | 50 | 2 | 1 | Exposure |
| 287 | 33 | 270909 | 6 | 124 | 40 | 2 | 1 | Exposure |
| 288 | 33 | 270909 | 7 | 124 | 30 | 2 | 1 | Exposure |
| 289 | 33 | 270909 | 8 | 124 | 25 | 1 | 1 | Exposure |
| 290 | 33 | 270909 | 9 | 124 | 15 | 1 | 1 | Exposure |
| 291 | 33 | 270909 | 10 | 124 | 15 | 0 | 1 | Exposure |
| 292 | 33 | 270909 | 11 | 124 | 10 | 0 | 1 | Exposure |
| 293 | 33 | 270909 | 12 | 124 | 15 | 1 | 1 | Exposure |
| 294 | 33 | 270909 | 13 | 124 | 15 | 1 | 1 | Exposure |
| 295 | 33 | 270909 | 14 | 124 | 15 | 1 | 1 | Exposure |
| 296 | 33 | 270909 | 16 | 124 | 20 | 1 | 1 | Exposure |
| 297 | 33 | 270909 | 17 | 124 | 15 | 1 | 1 | Exposure |
| 298 | 33 | 270909 | 18 | 124 | 10 | 0 | 1 | Exposure |
| 299 | 33 | 270909 | 19 | 124 | 10 | 1 | 1 | Exposure |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 33 | 270909 | 20 | 124 | 10 | 0 | 1 | Exposure |
| 301 | 33 | 270909 | 21 | 124 | 40 | 2 | 1 | Exposure |
| 302 | 33 | 270909 | 31 | 124 | 30 | 3 | 1 | Exposure |
| 303 | 34 | 270909 | 1 | 120 | 0 | 0 | 1 | |
| 304 | 34 | 270909 | 2 | 120 | 0 | 0 | 1 | |
| 305 | 34 | 270909 | 4 | 120 | 0 | 0 | 1 | |
| 306 | 34 | 270909 | 5 | 120 | 0 | 0 | 1 | |
| 307 | 34 | 270909 | 6 | 120 | 0 | 0 | 1 | |
| 308 | 34 | 270909 | 7 | 120 | 0 | 0 | 1 | |
| 309 | 34 | 270909 | 8 | 120 | 0 | 0 | 1 | |
| 310 | 34 | 270909 | 9 | 120 | 0 | 0 | 1 | |
| 311 | 34 | 270909 | 10 | 120 | 0 | 0 | 1 | |
| 312 | 34 | 270909 | 11 | 120 | 0 | 0 | 1 | |
| 313 | 34 | 270909 | 12 | 120 | 0 | 0 | 1 | |
| 314 | 34 | 270909 | 13 | 120 | 0 | 0 | 1 | |
| 315 | 34 | 270909 | 14 | 120 | 0 | 0 | 1 | |
| 316 | 34 | 270909 | 15 | 120 | 0 | 0 | 1 | |
| 317 | 34 | 270909 | 16 | 120 | 0 | 0 | 1 | |
| 318 | 34 | 270909 | 17 | 120 | 0 | 0 | 1 | |
| 319 | 34 | 270909 | 18 | 120 | 0 | 0 | 1 | |
| 320 | 34 | 270909 | 19 | 120 | 0 | 0 | 1 | |
| 321 | 34 | 270909 | 20 | 120 | 0 | 0 | 1 | |
| 322 | 34 | 270909 | 21 | 120 | 0 | 0 | 1 | |
| 323 | 34 | 270909 | 31 | 120 | 0 | 0 | 1 | |
| 324 | 15 | 260909 | 2 | 124 | 10 | 0 | 1 | |
| 325 | 15 | 260909 | 4 | 124 | 5 | 0 | 1 | |
| 326 | 15 | 260909 | 5 | 124 | 15 | 1 | 1 | |
| 327 | 15 | 260909 | 10 | 120 | 10 | 0 | 1 | |
| 328 | 15 | 260909 | 31 | 120 | 10 | 0 | 1 | |
| 329 | 15 | 260909 | 33 | 124 | 5 | 0 | 1 | |
| 330 | 15 | 260909 | 34 | 120 | 0 | 0 | 1 | Value for species is 124 |
| 331 | 15 | 260909 | 39 | 124 | 100 | 4 | | Crown broken removed from survey |
| 332 | 15 | 260909 | 40 | 120 | 100 | 4 | | Wind blown removed from survey |
| 333 | 15 | 260909 | 45 | 124 | 30 | 1 | 1 | Value for species is 120 |
| 334 | 15 | 260909 | 47 | 124 | 40 | 0 | 1 | Value for species is 120 |
| 335 | 15 | 260909 | 50 | 124 | 30 | 0 | 1 | |
| 336 | 15 | 260909 | 52 | 124 | 30 | 0 | 1 | |
| 337 | 15 | 260909 | 53 | 124 | 5 | 0 | 1 | |
| 338 | 15 | 260909 | 54 | 120 | 30 | 0 | 1 | |
| 339 | 15 | 260909 | 55 | 120 | 30 | 0 | 1 | |
| 340 | 15 | 260909 | 56 | 120 | 15 | 0 | 1 | |
| 341 | 15 | 260909 | 57 | 120 | 100 | 4 | | Wind blown removed from survey |
| 342 | 15 | 260909 | 58 | 120 | 100 | 4 | | Wind blown removed from survey |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 343 | 15 | 260909 | 59 | 124 | 10 | 0 | 1 | |
| 344 | 15 | 260909 | 60 | 124 | 100 | 4 | | Wind blown removed from survey |
| 345 | 15 | 260909 | 61 | 124 | 40 | 2 | 1 | New tree in survey replacing #39 |
| 346 | 15 | 260909 | 62 | 124 | 10 | 0 | 1 | New tree in survey replacing #40 |
| 347 | 15 | 260909 | 63 | 124 | 15 | 0 | 1 | New tree in survey replacing #57 |
| 348 | 15 | 260909 | 64 | 124 | 10 | 0 | 1 | New tree in survey replacing #58 |
| 349 | 15 | 260909 | 65 | 124 | 10 | 0 | 1 | New tree in survey replacing #60 |
| 350 | 44 | 280909 | 13 | 120 | 100 | 4 | | Wind blown removed from survey |
| 351 | 44 | 280909 | 14 | 120 | 100 | 4 | | Wind blown removed from survey |
| 352 | 44 | 280909 | 16 | 120 | 5 | 0 | 1 | |
| 353 | 44 | 280909 | 17 | 120 | 15 | 0 | 1 | Exposure |
| 354 | 44 | 280909 | 18 | 120 | 50 | 2 | 1 | Exposure |
| 355 | 44 | 280909 | 20 | 124 | 0 | 0 | 1 | |
| 356 | 44 | 280909 | 21 | 124 | 0 | 0 | 1 | |
| 357 | 44 | 280909 | 31 | 120 | 20 | 1 | 1 | Exposure |
| 358 | 44 | 280909 | 32 | 120 | 10 | 0 | 1 | |
| 359 | 44 | 280909 | 33 | 120 | 15 | 1 | 1 | Exposure |
| 360 | 44 | 280909 | 34 | 120 | 10 | 0 | 1 | |
| 361 | 44 | 280909 | 35 | 120 | 10 | 0 | 1 | |
| 362 | 44 | 280909 | 36 | 120 | 100 | 4 | | Wind blown removed from survey |
| 363 | 44 | 280909 | 37 | 120 | 15 | 1 | 1 | |
| 364 | 44 | 280909 | 38 | 120 | 5 | 0 | 1 | |
| 365 | 44 | 280909 | 39 | 120 | 10 | 0 | 1 | |
| 366 | 44 | 280909 | 40 | 120 | 5 | 0 | 1 | |
| 367 | 44 | 280909 | 41 | 120 | 0 | 0 | 1 | |
| 368 | 44 | 280909 | 42 | 120 | 5 | 0 | 1 | |
| 369 | 44 | 280909 | 43 | 124 | 100 | 4 | | Wind blown removed from survey |
| 370 | 44 | 280909 | 44 | 120 | 30 | 1 | 1 | Exposure |
| 371 | 44 | 280909 | 45 | 120 | 15 | 1 | 1 | New tree in survey replacing #13 |
| 372 | 44 | 280909 | 46 | 120 | 30 | 2 | 1 | New tree in survey replacing #14 |
| 373 | 44 | 280909 | 47 | 120 | 5 | 0 | 1 | New tree in survey replacing #36 |
| 374 | 44 | 280909 | 48 | 120 | 5 | 0 | 1 | New tree in survey replacing #43 |
| 375 | 279 | 170909 | 1 | 120 | 0 | 0 | 1 | |
| 376 | 279 | 170909 | 2 | 120 | 0 | 0 | 1 | |
| 377 | 279 | 170909 | 3 | 120 | 0 | 0 | 1 | |
| 378 | 279 | 170909 | 4 | 120 | 0 | 0 | 1 | |
| 379 | 279 | 170909 | 5 | 120 | 0 | 0 | 1 | |
| 380 | 279 | 170909 | 6 | 120 | 5 | 0 | 1 | |
| 381 | 279 | 170909 | 7 | 120 | 5 | 0 | 1 | |
| 382 | 279 | 170909 | 8 | 120 | 0 | 0 | 1 | |
| 383 | 279 | 170909 | 9 | 120 | 0 | 0 | 1 | |
| 384 | 279 | 170909 | 10 | 120 | 0 | 0 | 2 | |
| 385 | 279 | 170909 | 11 | 120 | 10 | 0 | 1 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 386 | 279 | 170909 | 12 | 120 | 10 | 0 | 2 | |
| 387 | 279 | 170909 | 13 | 120 | 5 | 0 | 1 | |
| 388 | 279 | 170909 | 14 | 120 | 10 | 0 | 1 | |
| 389 | 279 | 170909 | 15 | 120 | 0 | 0 | 1 | |
| 390 | 279 | 170909 | 16 | 120 | 10 | 0 | 1 | |
| 391 | 279 | 170909 | 17 | 120 | 5 | 0 | 1 | |
| 392 | 279 | 170909 | 18 | 120 | 10 | 0 | 1 | |
| 393 | 279 | 170909 | 19 | 120 | 5 | 0 | 1 | |
| 394 | 279 | 170909 | 20 | 120 | 0 | 0 | 1 | |
| 395 | 279 | 170909 | 21 | 120 | 5 | 0 | 1 | |
| 396 | 159 | 300709 | 1 | 120 | 0 | 0 | 2 | |
| 397 | 159 | 300709 | 2 | 120 | 0 | 0 | 1 | |
| 398 | 159 | 300709 | 3 | 120 | 0 | 0 | 2 | |
| 399 | 159 | 300709 | 4 | 120 | 0 | 0 | 1 | |
| 400 | 159 | 300709 | 5 | 120 | 0 | 0 | 1 | |
| 401 | 159 | 300709 | 6 | 120 | 0 | 0 | 1 | |
| 402 | 159 | 300709 | 7 | 120 | 0 | 0 | 1 | |
| 403 | 159 | 300709 | 12 | 120 | 100 | 4 | | Missing removed from survey |
| 404 | 159 | 300709 | 13 | 120 | 0 | 0 | 1 | |
| 405 | 159 | 300709 | 14 | 120 | 0 | 0 | 1 | |
| 406 | 159 | 300709 | 15 | 120 | 0 | 0 | 1 | |
| 407 | 159 | 300709 | 21 | 120 | 0 | 0 | 1 | |
| 408 | 159 | 300709 | 31 | 120 | 0 | 0 | 1 | |
| 409 | 159 | 300709 | 32 | 120 | 0 | 0 | 1 | |
| 410 | 159 | 300709 | 33 | 120 | 0 | 0 | 2 | |
| 411 | 159 | 300709 | 34 | 120 | 0 | 0 | 1 | |
| 412 | 159 | 300709 | 35 | 120 | 0 | 0 | 2 | |
| 413 | 159 | 300709 | 36 | 120 | 0 | 0 | 2 | |
| 414 | 159 | 300709 | 37 | 120 | 0 | 0 | 2 | |
| 415 | 159 | 300709 | 38 | 120 | 0 | 0 | 2 | |
| 416 | 159 | 300709 | 39 | 120 | 0 | 0 | 2 | |
| 417 | 159 | 300709 | 40 | 120 | 0 | 0 | 2 | New tree in survey replacing #12 |
| 418 | 701 | 180809 | 1 | 120 | 0 | 0 | 1 | |
| 419 | 701 | 180809 | 2 | 120 | 0 | 0 | 1 | |
| 420 | 701 | 180809 | 3 | 120 | 0 | 0 | 1 | |
| 421 | 701 | 180809 | 4 | 120 | 5 | 0 | 1 | |
| 422 | 701 | 180809 | 5 | 120 | 40 | 0 | 1 | Aphid damage |
| 423 | 701 | 180809 | 6 | 120 | 15 | 0 | 1 | |
| 424 | 701 | 180809 | 7 | 120 | 5 | 0 | 1 | |
| 425 | 701 | 180809 | 8 | 120 | 15 | 0 | 1 | |
| 426 | 701 | 180809 | 9 | 120 | 5 | 0 | 1 | |
| 427 | 701 | 180809 | 10 | 120 | 0 | 0 | 1 | |
| 428 | 701 | 180809 | 11 | 120 | 30 | 0 | 1 | Aphid damage |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 429 | 701 | 180809 | 12 | 120 | 20 | 1 | 1 | Aphid damage |
| 430 | 701 | 180809 | 13 | 120 | 25 | 1 | 1 | Aphid damage |
| 431 | 701 | 180809 | 14 | 120 | 20 | 1 | 1 | Aphid damage |
| 432 | 701 | 180809 | 15 | 120 | 0 | 0 | 1 | |
| 433 | 701 | 180809 | 16 | 120 | 60 | 2 | 1 | Suppressed |
| 434 | 701 | 180809 | 17 | 120 | 5 | 0 | 1 | |
| 435 | 701 | 180809 | 18 | 120 | 30 | 1 | 1 | Aphid damage |
| 436 | 701 | 180809 | 19 | 120 | 25 | 1 | 1 | Aphid damage |
| 437 | 701 | 180809 | 20 | 120 | 35 | 1 | 1 | Aphid damage |
| 438 | 701 | 180809 | 21 | 120 | 25 | 1 | 2 | Aphid damage |
| 439 | 701 | 180809 | 22 | 120 | 40 | 1 | 1 | Aphid damage |
| 440 | 701 | 180809 | 23 | 120 | 30 | 1 | 1 | Aphid damage |
| 441 | 701 | 180809 | 24 | 120 | 15 | 1 | 1 | Aphid damage |
| 442 | 701 | 180809 | 25 | 120 | 15 | 1 | 1 | Aphid damage |
| 443 | 703 | 190709 | 1 | 120 | 0 | 0 | 1 | |
| 444 | 703 | 190709 | 2 | 120 | 0 | 0 | 1 | |
| 445 | 703 | 190709 | 3 | 120 | 0 | 0 | 1 | |
| 446 | 703 | 190709 | 4 | 120 | 10 | 0 | 1 | Site nutrition poor |
| 447 | 703 | 190709 | 5 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 448 | 703 | 190709 | 6 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 449 | 703 | 190709 | 7 | 120 | 0 | 0 | 1 | |
| 450 | 703 | 190709 | 8 | 120 | 0 | 0 | 1 | |
| 451 | 703 | 190709 | 9 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 452 | 703 | 190709 | 10 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 453 | 703 | 190709 | 11 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 454 | 703 | 190709 | 12 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 455 | 703 | 190709 | 13 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 456 | 703 | 190709 | 14 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 457 | 703 | 190709 | 15 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 458 | 703 | 190709 | 16 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 459 | 703 | 190709 | 17 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 460 | 703 | 190709 | 18 | 120 | 0 | 1 | 1 | Site nutrition poor |
| 461 | 703 | 190709 | 19 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 462 | 703 | 190709 | 20 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 463 | 703 | 190709 | 21 | 120 | 0 | 0 | 1 | Site nutrition poor |
| 464 | 704 | 190709 | 1 | 120 | 0 | 0 | 1 | |
| 465 | 704 | 190709 | 2 | 120 | 0 | 0 | 1 | |
| 466 | 704 | 190709 | 3 | 120 | 0 | 0 | 1 | |
| 467 | 704 | 190709 | 4 | 120 | 0 | 0 | 1 | |
| 468 | 704 | 190709 | 5 | 120 | 0 | 0 | 1 | |
| 469 | 704 | 190709 | 6 | 120 | 0 | 0 | 1 | |
| 470 | 704 | 190709 | 7 | 120 | 0 | 0 | 1 | |
| 471 | 704 | 190709 | 8 | 120 | 0 | 0 | 1 | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 472 | 704 | 190709 | 9 | 120 | 0 | 0 | 1 |
| 473 | 704 | 190709 | 10 | 120 | 0 | 0 | 1 |
| 474 | 704 | 190709 | 11 | 120 | 0 | 0 | 1 |
| 475 | 704 | 190709 | 12 | 120 | 0 | 0 | 1 |
| 476 | 704 | 190709 | 13 | 120 | 0 | 0 | 1 |
| 477 | 704 | 190709 | 14 | 120 | 0 | 0 | 1 |
| 478 | 704 | 190709 | 15 | 120 | 0 | 0 | 1 |
| 479 | 704 | 190709 | 16 | 120 | 0 | 0 | 1 |
| 480 | 704 | 190709 | 17 | 120 | 0 | 0 | 1 |
| 481 | 704 | 190709 | 18 | 120 | 0 | 0 | 1 |
| 482 | 704 | 190709 | 19 | 120 | 0 | 0 | 1 |
| 483 | 704 | 190709 | 20 | 120 | 0 | 0 | 1 |
| 484 | 704 | 190709 | 21 | 120 | 0 | 0 | 1 |
| 485 | 705 | 230909 | 1 | 120 | 5 | 0 | 1 |
| 486 | 705 | 230909 | 2 | 120 | 0 | 0 | 1 |
| 487 | 705 | 230909 | 3 | 120 | 0 | 0 | 1 |
| 488 | 705 | 230909 | 4 | 120 | 0 | 0 | 1 |
| 489 | 705 | 230909 | 5 | 120 | 0 | 0 | 1 |
| 490 | 705 | 230909 | 6 | 120 | 15 | 1 | 1 |
| 491 | 705 | 230909 | 7 | 120 | 0 | 0 | 1 |
| 492 | 705 | 230909 | 8 | 120 | 40 | 1 | 1 |
| 493 | 705 | 230909 | 9 | 120 | 0 | 0 | 1 |
| 494 | 705 | 230909 | 10 | 120 | 0 | 0 | 1 |
| 495 | 705 | 230909 | 11 | 120 | 5 | 0 | 1 |
| 496 | 705 | 230909 | 12 | 120 | 0 | 0 | 1 |
| 497 | 705 | 230909 | 13 | 120 | 80 | 1 | 1 |
| 498 | 705 | 230909 | 14 | 120 | 80 | 1 | 1 |
| 499 | 705 | 230909 | 15 | 120 | 0 | 1 | 1 |
| 500 | 705 | 230909 | 16 | 120 | 15 | 0 | 1 |
| 501 | 705 | 230909 | 17 | 120 | 0 | 0 | 1 |
| 502 | 705 | 230909 | 18 | 120 | 15 | 1 | 1 |
| 503 | 705 | 230909 | 19 | 120 | 50 | 2 | 1 |
| 504 | 705 | 230909 | 20 | 120 | 50 | 1 | 1 |
| 505 | 705 | 230909 | 21 | 120 | 0 | 1 | 1 |
| 506 | 706 | 230909 | 1 | 124 | 0 | 0 | 1 |
| 507 | 706 | 230909 | 2 | 124 | 0 | 0 | 1 |
| 508 | 706 | 230909 | 3 | 124 | 0 | 0 | 1 |
| 509 | 706 | 230909 | 4 | 124 | 5 | 0 | 1 |
| 510 | 706 | 230909 | 5 | 124 | 0 | 0 | 1 |
| 511 | 706 | 230909 | 6 | 124 | 0 | 0 | 1 |
| 512 | 706 | 230909 | 7 | 124 | 5 | 0 | 1 |
| 513 | 706 | 230909 | 8 | 124 | 10 | 0 | 1 |
| 514 | 706 | 230909 | 9 | 124 | 10 | 0 | 1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 515 | 706 | 230909 | 10 | 124 | 0 | 0 | 1 | |
| 516 | 706 | 230909 | 11 | 124 | 0 | 0 | 1 | |
| 517 | 706 | 230909 | 12 | 124 | 0 | 0 | 1 | |
| 518 | 706 | 230909 | 13 | 124 | 0 | 0 | 1 | |
| 519 | 706 | 230909 | 14 | 124 | 0 | 0 | 1 | |
| 520 | 706 | 230909 | 15 | 124 | 5 | 0 | 1 | |
| 521 | 706 | 230909 | 16 | 124 | 0 | 0 | 1 | |
| 522 | 706 | 230909 | 17 | 124 | 0 | 0 | 1 | |
| 523 | 706 | 230909 | 18 | 124 | 5 | 0 | 1 | |
| 524 | 706 | 230909 | 19 | 124 | 0 | 0 | 1 | |
| 525 | 706 | 230909 | 20 | 124 | 5 | 1 | 1 | Shoot die-back |
| 526 | 706 | 230909 | 21 | 124 | 0 | 0 | 1 | |
| 527 | 706 | 230909 | 22 | 124 | 100 | 4 | | Missing removed from survey |
| 528 | 706 | 230909 | 23 | 124 | 100 | 4 | | Missing removed from survey |
| 529 | 706 | 230909 | 24 | 124 | 0 | 0 | 1 | |
| 530 | 706 | 230909 | 25 | 124 | 0 | 0 | 1 | |
| 531 | 706 | 230909 | 31 | 124 | 15 | 0 | 1 | New tree in survey replacing #22 shoot d |
| 532 | 706 | 230909 | 32 | 124 | 0 | 0 | 1 | New tree in survey replacing #23 |
| 533 | 707 | 240909 | 1 | 124 | 25 | 1 | 1 | Shoot die-back |
| 534 | 707 | 240909 | 2 | 124 | 10 | 0 | 1 | Shoot die-back |
| 535 | 707 | 240909 | 3 | 124 | 5 | 0 | 1 | Shoot die-back |
| 536 | 707 | 240909 | 4 | 124 | 20 | 1 | 1 | Shoot die-back |
| 537 | 707 | 240909 | 5 | 124 | 20 | 0 | 1 | Shoot die-back |
| 538 | 707 | 240909 | 6 | 124 | 5 | 0 | 1 | Shoot die-back |
| 539 | 707 | 240909 | 7 | 124 | 10 | 0 | 1 | Shoot die-back |
| 540 | 707 | 240909 | 8 | 124 | 10 | 0 | 1 | Shoot die-back |
| 541 | 707 | 240909 | 9 | 124 | 15 | 0 | 1 | Shoot die-back |
| 542 | 707 | 240909 | 10 | 124 | 15 | 1 | 1 | Shoot die-back |
| 543 | 707 | 240909 | 11 | 124 | 15 | 1 | 1 | Shoot die-back |
| 544 | 707 | 240909 | 12 | 124 | 15 | 1 | 1 | Shoot die-back |
| 545 | 707 | 240909 | 13 | 124 | 15 | 1 | 1 | Shoot die-back |
| 546 | 707 | 240909 | 14 | 124 | 5 | 0 | 1 | Shoot die-back |
| 547 | 707 | 240909 | 15 | 124 | 35 | 1 | 1 | Shoot die-back |
| 548 | 707 | 240909 | 16 | 124 | 15 | 1 | 1 | Shoot die-back |
| 549 | 707 | 240909 | 17 | 124 | 10 | 0 | 1 | Shoot die-back |
| 550 | 707 | 240909 | 18 | 124 | 10 | 0 | 1 | Shoot die-back |
| 551 | 707 | 240909 | 19 | 124 | 10 | 0 | 1 | Shoot die-back |
| 552 | 707 | 240909 | 20 | 124 | 20 | 1 | 1 | Shoot die-back |
| 553 | 707 | 240909 | 21 | 124 | 20 | 1 | 1 | Shoot die-back |
| 554 | 707 | 240909 | 22 | 124 | 15 | 1 | 1 | Shoot die-back |
| 555 | 707 | 240909 | 23 | 124 | 20 | 1 | 1 | Shoot die-back |
| 556 | 707 | 240909 | 24 | 124 | 25 | 1 | 1 | Shoot die-back |
| 557 | 707 | 240909 | 25 | 124 | 20 | 1 | 1 | Shoot die-back |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 558 | 708 | 240909 | 1 | 124 | 10 | 2 | 1 | Shoot die-back |
| 559 | 708 | 240909 | 2 | 124 | 10 | 1 | 1 | Shoot die-back |
| 560 | 708 | 240909 | 3 | 124 | 15 | 1 | 1 | Shoot die-back |
| 561 | 708 | 240909 | 4 | 124 | 15 | 1 | 1 | Shoot die-back |
| 562 | 708 | 240909 | 5 | 124 | 15 | 1 | 1 | Shoot die-back |
| 563 | 708 | 240909 | 6 | 124 | 15 | 1 | 1 | Shoot die-back |
| 564 | 708 | 240909 | 7 | 124 | 15 | 1 | 1 | Shoot die-back |
| 565 | 708 | 240909 | 8 | 124 | 20 | 1 | 1 | Shoot die-back |
| 566 | 708 | 240909 | 9 | 124 | 20 | 1 | 1 | Shoot die-back |
| 567 | 708 | 240909 | 10 | 124 | 10 | 1 | 1 | Shoot die-back |
| 568 | 708 | 240909 | 11 | 124 | 20 | 1 | 1 | Shoot die-back |
| 569 | 708 | 240909 | 12 | 124 | 15 | 1 | 1 | Shoot die-back |
| 570 | 708 | 240909 | 13 | 124 | 15 | 1 | 1 | Shoot die-back |
| 571 | 708 | 240909 | 14 | 124 | 15 | 1 | 1 | Shoot die-back |
| 572 | 708 | 240909 | 15 | 124 | 20 | 1 | 1 | Shoot die-back |
| 573 | 708 | 240909 | 16 | 124 | 5 | 1 | 1 | Shoot die-back |
| 574 | 708 | 240909 | 17 | 124 | 40 | 1 | 1 | No leader |
| 575 | 708 | 240909 | 18 | 124 | 15 | 1 | 1 | Shoot die-back |
| 576 | 708 | 240909 | 19 | 124 | 15 | 1 | 1 | Shoot die-back |
| 577 | 708 | 240909 | 20 | 124 | 40 | 1 | 1 | Shoot die-back |
| 578 | 708 | 240909 | 21 | 124 | 10 | 0 | 1 | Shoot die-back |
| 579 | 708 | 240909 | 22 | 124 | 10 | 0 | 1 | Shoot die-back |
| 580 | 708 | 240909 | 23 | 124 | 15 | 1 | 1 | Shoot die-back |
| 581 | 708 | 240909 | 24 | 124 | 15 | 1 | 1 | Shoot die-back |
| 582 | 708 | 240909 | 25 | 124 | 15 | 1 | 1 | Shoot die-back |
| 583 | 709 | 240609 | 1 | 120 | 0 | 0 | 1 | |
| 584 | 709 | 240609 | 2 | 120 | 0 | 0 | 1 | |
| 585 | 709 | 240609 | 3 | 120 | 0 | 0 | 1 | |
| 586 | 709 | 240609 | 4 | 120 | 5 | 0 | 1 | |
| 587 | 709 | 240609 | 5 | 120 | 0 | 0 | 1 | |
| 588 | 709 | 240609 | 6 | 120 | 5 | 0 | 1 | |
| 589 | 709 | 240609 | 7 | 120 | 0 | 0 | 1 | |
| 590 | 709 | 240609 | 8 | 120 | 5 | 0 | 1 | |
| 591 | 709 | 240609 | 9 | 120 | 5 | 0 | 1 | |
| 592 | 709 | 240609 | 10 | 120 | 0 | 0 | 1 | |
| 593 | 709 | 240609 | 11 | 120 | 0 | 0 | 1 | |
| 594 | 709 | 240609 | 12 | 120 | 10 | 0 | 1 | |
| 595 | 709 | 240609 | 13 | 120 | 0 | 0 | 1 | |
| 596 | 709 | 240609 | 14 | 120 | 0 | 0 | 1 | |
| 597 | 709 | 240609 | 15 | 120 | 0 | 0 | 1 | |
| 598 | 709 | 240609 | 16 | 120 | 0 | 0 | 1 | |
| 599 | 709 | 240609 | 17 | 120 | 10 | 0 | 1 | |
| 600 | 709 | 240609 | 18 | 120 | 0 | 0 | 1 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 601 | 709 | 240609 | 19 | 120 | 0 | 0 | 1 |
| 602 | 709 | 240609 | 20 | 120 | 5 | 0 | 1 |
| 603 | 709 | 240609 | 21 | 120 | 0 | 0 | 1 |
| 604 | 710 | 250609 | 1 | 120 | 0 | 0 | 1 |
| 605 | 710 | 250609 | 2 | 120 | 0 | 0 | 1 |
| 606 | 710 | 250609 | 3 | 120 | 0 | 0 | 1 |
| 607 | 710 | 250609 | 4 | 124 | 10 | 1 | 1 Shoot die-back & exposure |
| 608 | 710 | 250609 | 5 | 120 | 0 | 0 | 1 |
| 609 | 710 | 250609 | 6 | 120 | 0 | 0 | 1 |
| 610 | 710 | 250609 | 7 | 120 | 0 | 0 | 1 |
| 611 | 710 | 250609 | 8 | 120 | 20 | 1 | 1 Suppression |
| 612 | 710 | 250609 | 9 | 120 | 0 | 0 | 1 |
| 613 | 710 | 250609 | 10 | 124 | 5 | 0 | 1 |
| 614 | 710 | 250609 | 11 | 120 | 0 | 0 | 1 |
| 615 | 710 | 250609 | 12 | 124 | 10 | 0 | 1 |
| 616 | 710 | 250609 | 13 | 124 | 20 | 1 | 1 Shoot die-back & exposure |
| 617 | 710 | 250609 | 14 | 124 | 20 | 1 | 1 Shoot die-back & exposure |
| 618 | 710 | 250609 | 15 | 124 | 20 | 1 | 1 Shoot die-back & exposure |
| 619 | 710 | 250609 | 16 | 124 | 10 | 2 | 1 Shoot die-back & exposure |
| 620 | 710 | 250609 | 17 | 120 | 0 | 0 | 1 |
| 621 | 710 | 250609 | 18 | 120 | 0 | 0 | 1 |
| 622 | 710 | 250609 | 19 | 120 | 0 | 0 | 1 |
| 623 | 710 | 250609 | 20 | 120 | 0 | 0 | 1 |
| 624 | 710 | 250609 | 21 | 120 | 40 | 2 | 1 Shoot die-back & exposure |
| 625 | 711 | 260909 | 1 | 120 | 0 | 0 | 1 |
| 626 | 711 | 260909 | 2 | 120 | 0 | 0 | 1 |
| 627 | 711 | 260909 | 3 | 120 | 0 | 0 | 1 |
| 628 | 711 | 260909 | 4 | 120 | 0 | 0 | 1 |
| 629 | 711 | 260909 | 5 | 120 | 0 | 0 | 1 |
| 630 | 711 | 260909 | 6 | 120 | 0 | 0 | 1 |
| 631 | 711 | 260909 | 7 | 120 | 100 | 4 | Missing removed from survey |
| 632 | 711 | 260909 | 8 | 120 | 0 | 0 | 1 |
| 633 | 711 | 260909 | 9 | 120 | 0 | 0 | 1 |
| 634 | 711 | 260909 | 10 | 120 | 5 | 0 | 1 |
| 635 | 711 | 260909 | 11 | 120 | 0 | 0 | 1 |
| 636 | 711 | 260909 | 12 | 120 | 0 | 0 | 1 |
| 637 | 711 | 260909 | 13 | 120 | 0 | 0 | 1 |
| 638 | 711 | 260909 | 14 | 120 | 0 | 0 | 1 |
| 639 | 711 | 260909 | 15 | 120 | 0 | 0 | 1 |
| 640 | 711 | 260909 | 16 | 120 | 0 | 0 | 1 |
| 641 | 711 | 260909 | 17 | 120 | 0 | 0 | 1 |
| 642 | 711 | 260909 | 18 | 120 | 0 | 0 | 1 |
| 643 | 711 | 260909 | 19 | 120 | 0 | 0 | 1 |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 644 | 711 | 260909 | 20 | 120 | 0 | 0 | 1 | |
| 645 | 711 | 260909 | 21 | 120 | 0 | 0 | 1 | |
| 646 | 711 | 260909 | 31 | 120 | 0 | 0 | 1 | New tree in survey replacing #07 |
| 647 | 712 | 260909 | 1 | 120 | 0 | 0 | 1 | |
| 648 | 712 | 260909 | 2 | 120 | 0 | 0 | 1 | |
| 649 | 712 | 260909 | 3 | 120 | 0 | 0 | 1 | |
| 650 | 712 | 260909 | 4 | 120 | 0 | 0 | 1 | |
| 651 | 712 | 260909 | 5 | 120 | 0 | 0 | 1 | |
| 652 | 712 | 260909 | 6 | 120 | 0 | 0 | 1 | |
| 653 | 712 | 260909 | 7 | 120 | 0 | 0 | 1 | |
| 654 | 712 | 260909 | 8 | 120 | 0 | 0 | 1 | |
| 655 | 712 | 260909 | 9 | 120 | 0 | 0 | 1 | |
| 656 | 712 | 260909 | 10 | 120 | 0 | 0 | 1 | |
| 657 | 712 | 260909 | 11 | 120 | 0 | 0 | 1 | |
| 658 | 712 | 260909 | 12 | 120 | 0 | 0 | 1 | |
| 659 | 712 | 260909 | 13 | 120 | 0 | 0 | 2 | |
| 660 | 712 | 260909 | 14 | 120 | 0 | 0 | 1 | |
| 661 | 712 | 260909 | 15 | 120 | 0 | 0 | 1 | |
| 662 | 712 | 260909 | 16 | 120 | 0 | 0 | 1 | |
| 663 | 712 | 260909 | 17 | 120 | 0 | 0 | 1 | |
| 664 | 712 | 260909 | 18 | 120 | 0 | 0 | 1 | |
| 665 | 712 | 260909 | 19 | 120 | 0 | 0 | 1 | |
| 666 | 712 | 260909 | 20 | 120 | 0 | 0 | 1 | |
| 667 | 712 | 260909 | 21 | 120 | 0 | 0 | 2 | |
| 668 | 713 | 200709 | 1 | 120 | 10 | 0 | 1 | |
| 669 | 713 | 200709 | 2 | 120 | 5 | 0 | 1 | |
| 670 | 713 | 200709 | 3 | 120 | 10 | 0 | 1 | |
| 671 | 713 | 200709 | 4 | 120 | 0 | 0 | 1 | |
| 672 | 713 | 200709 | 5 | 120 | 0 | 0 | 1 | |
| 673 | 713 | 200709 | 6 | 120 | 0 | 0 | 1 | |
| 674 | 713 | 200709 | 7 | 120 | 0 | 0 | 1 | |
| 675 | 713 | 200709 | 8 | 120 | 0 | 0 | 1 | |
| 676 | 713 | 200709 | 9 | 120 | 30 | 1 | 1 | Suppression |
| 677 | 713 | 200709 | 10 | 120 | 0 | 0 | 1 | |
| 678 | 713 | 200709 | 11 | 120 | 10 | 1 | 1 | Suppression |
| 679 | 713 | 200709 | 12 | 120 | 10 | 0 | 1 | |
| 680 | 713 | 200709 | 13 | 120 | 0 | 0 | 1 | |
| 681 | 713 | 200709 | 14 | 120 | 0 | 0 | 1 | |
| 682 | 713 | 200709 | 15 | 120 | 0 | 0 | 1 | |
| 683 | 713 | 200709 | 16 | 120 | 0 | 0 | 1 | |
| 684 | 713 | 200709 | 17 | 120 | 0 | 0 | 1 | |
| 685 | 713 | 200709 | 18 | 120 | 0 | 0 | 1 | |
| 686 | 713 | 200709 | 19 | 120 | 5 | 0 | 1 | |

```
  687  713 200709   20 120   0 0 1
  688  713 200709   21 120   0 0 1
  689  713 200709   22 120   5 0 1
  690  713 200709   23 120   0 0 1
  691  713 200709   24 120   0 0 1
  692  713 200709   25 120   5 0 1
  693  714 280809    1 118   0 0 1
  694  714 280809    2 118   0 0 1
  695  714 280809    3 118  15 0 1
  696  714 280809    4 118   5 0 1
  697  714 280809    5 118   0 0 1
  698  714 280809    6 118   0 0 1
  699  714 280809    7 118   0 0 1
  700  714 280809    8 118   0 0 1
  701  714 280809    9 118   0 0 1
  702  714 280809   10 118   0 0 1
  703  714 280809   11 118   0 0 1
  704  714 280809   12 118   5 0 1
  705  714 280809   13 118   5 0 1
  706  714 280809   14 118   0 0 1
  707  714 280809   15 118   0 0 1
  708  714 280809   16 118   0 0 1
  709  714 280809   17 118   0 0 1
  710  714 280809   18 118   0 0 1
  711  714 280809   19 118  10 0 1
  712  714 280809   20 118   0 0 1
  713  714 280809   21 118   0 0 1
  714  714 280809   22 118   0 0 1
  715  714 280809   23 118   0 0 1
  716  714 280809   24 118   0 0 1
  717  714 280809   25 118  15 0 1 Mechanical damage
!PLO
!Sequence, country, plot, date, latitude, longitude, water, humus, altitude, orientation, mean_age, other_observations
   1  7  277 160909  525500  -60945 2 5  5 4  1
   2  7  196 160909  525310  -62435 2 3  5 1  1
   3  7  228 140809  523220  -70235 1 3  5 5  2
   4  7  243 120809  521820  -74200 2 5  8 7  2 Plot felled since 2008 assessment
   5  7  278 140809  520140  -73540 2 6  3 5  2
   6  7  254 200709  520150  -84650 2 5  7 2  2
   7  7  208 120809  523445  -74810 2 5  3 9  3
   8  7  157 120809  525850  -75700 2 6  2 5  3 Plot felled 2009
   9  7  139 230909  530140  -84315 3 5  1 9  1
  10  7   80 240909  532840  -94050 2 5  2 6  2
```

```
  11  7   22 250609  541035  -94415 2 5  1 1  2
  12  7   26 260909  542330  -81140 3 6  4 3  2
  13  7   32 250609  541045  -83950 2 5  4 4  2
  14  7   33 270909  541300  -82535 2 5  4 6  3
  15  7   34 270909  541455  -81025 2 6  5 5  2
  16  7   15 260909  545056  -75340 2 5  5 5  2
  17  7   44 280909  540815  -75140 3 5  8 3  3
  18  7  279 170909  540220  -61840 2 6  4 6  2
  19  7  159 300709  530235  -72915 2 5  4 4  2
  20  7  701 180809  520129  -73909 2    7 2  3
  21  7  703 190709  521831  -90325 2    7 7  3
  22  7  704 190709  521817  -93127 2    5 8  3
  23  7  705 230909  530204  -83553 2    3 3  1
  24  7  706 230909  531350  -74273 2    2 5  1 Value for Longitude is correct; value -7
  25  7  707 240909  531832  -91842 2    1 9  2
  26  7  708 240909  534507  -83615 2    2 1  1
  27  7  709 240609  535319  -92009 2    3 3  2
  28  7  710 250609  540152  -93508 2    2 9  1
  29  7  711 260909  541942  -80719 2    6 6  2
  30  7  712 260909  544539  -75033 2    4 5  3
  31  7  713 200709  520127  -85047 2    7 5  1
  32  7  714 280809  520902  -81046 2    1 8  3

!IECC2009.doc
[not included]

!DEH
!Sequence, plot, date_start, date_end, period, sampler, V_sampling, quantity, pH, conductivity, K, Ca, Mg, Na, N_NH4, Cl, N_NO3,
S_SO4, alkalinity, N_total, DOC, other_observations
```

```
    1   16 170809 230809 34 1 1  2.6 5.9   54 7.71  0.63 0.55   3.7  0.16   9.8  0.03  0.43   96  1.21
    2   16 240809 300809 35 1 1 26.0 5.7   37 4.42    -1 0.37  2.77  0.11   5.9    -1  0.30   54  0.65
    3   16 310809 060909 36 1 1 28.6 6.0   24 2.28  0.44  0.2  2.34  0.13   4.1    -1  0.27   32  0.36
    4   16 070909 130909 37 1 1 35.5 5.6   33 2.39  0.29 0.35  3.16  0.18   6.7  0.02  0.33   65  0.52
    5   16 140909 200909 38 1 1 64.1 6.4   51 3.68  0.79 0.41  3.72  0.61   6.6  0.03  0.37   68  1.72
    6   16 210909 270909 39 1 7  0.0
    7   16 280909 041009 40 1 8  0.4 4.7  548 16.6 10.84 12.2 60.51  2.32 154.4  2.38 10.17       4.73
    8   16 051009 111009 41 1 8  0.2 5.5  130 8.29  2.58  2.6 22.83   0.8  45.9  0.61  3.57
    9   16 121009 181009 42 1 1 31.7 5.5   61 4.53  0.79 0.83  5.57  0.34  11.5  0.42  0.70   26  1.31
   10   16 191009 251009 43 1 7  0.0
   11   16 261009 011109 44 1 1 80.7 5.3   59 2.73  0.43 0.63  6.77  0.13  13.5  0.17  0.77   22  0.54
   12   16 021109 081109 45 1 1 79.9 5.8   21 1.25  0.45 0.19  2.46  0.16   3.4  0.28  0.43   32  0.57
   13   16 091109 151109 46 1 1  7.4 5.8  101 2.83  1.53  1.9 11.01  0.18  26.3  0.05  1.17   20  0.61
   14   16 161109 221109 47 1 1 80.0 5.4   36 1.04  0.26 0.41  3.63  0.08   7.5  0.08  0.40   -1   0.4
```

```
   15   16 231109 291109 48 1 1 71.2 5.6   31 1.01  0.26 0.36  3.31  0.07   6.3  0.02  0.30   22  0.26
   16   16 301109 061209 49 1 1 81.6 5.1   58  1.3  0.58 0.68  7.15  0.03  14.8  0.11  0.77   -1  0.28
   17   16 071209 131209 50 1 1 38.5 5.5   37 1.02  0.37 0.43   4.7  0.04   8.4  0.05  0.47   20  0.35
   18   16 141209 201209 51 1 1  8.2 5.5   52 1.15  0.56 0.68  5.99   0.1  12.7  0.03  0.57   26  0.41
   19   16 201209 271209 52 1 4  0.0
   20   16 271209 040110 53 1 4  0.0
   21   16 170809 230809 34 2 8  8.5 5.8   10 0.07  0.13 0.01  0.14  0.30   0.4  0.12  0.20
   22   16 240809 300809 35 2 1 39.0 5.3    8 -1.0 -1.00   -1  0.57  0.11   0.7   0.1  0.17   -1
   23   16 310809 060909 36 2 1 39.7 5.7   10 0.14  0.32 0.12  1.16  0.06   1.5  0.04 -1.00   -1
   24   16 070909 130909 37 2 1 45.4 5.6    7 0.04  0.15 0.05  0.47  0.06   0.8  0.06 -1.00   -1
   25   16 140909 200909 38 2 1  3.9 5.9    8 0.29  0.45 0.15  0.87   0.2   1.0  0.07 -1.00
   26   16 210909 270909 39 2 7  0.0
   27   16 280909 041009 40 2 7  0.0
   28   16 051009 111009 41 2 8  1.7         0.55  0.69 0.33  2.95  0.85   5.0  0.39  0.83
   29   16 121009 181009 42 2 1 37.2 4.8   14 0.11  0.22 0.14  1.13  0.18   1.1   0.3 -1.00   -1
   30   16 191009 251009 43 2 7  0.4                                1.14
   31   16 261009 011109 44 2 1 84.4 5.5   32 0.20  0.19 0.43  4.17  0.21   7.3  0.19  0.47   -1
   32   16 021109 081109 45 2 1 74.0 5.0   14 0.14  0.37   -1  0.81  0.37   1.2  0.35  0.27   -1
   33   16 091109 151109 46 2 1 21.9 5.9   25   -1  0.10 0.30  3.09  0.03   6.1  0.03  0.33   -1
   34   16 161109 221109 47 2 1 95.7 5.2   13   -1 -1.00 0.11 -1.00  0.06   2.0  0.09 -1.00   -1
   35   16 231109 291109 48 2 1  122 6.6   12   -1 -1.00 0.11  1.21  0.05   2.1  0.03 -1.00   -1
   36   16 301109 061209 49 2 1 88.3 5.1   41 0.16  0.23 0.57  5.01  0.07   9.6  0.13  0.50   -1
   37   16 071209 131209 50 2 1 48.7 5.8   11   -1 -1.00   -1  1.19  0.05   2.2  0.04 -1.00   -1
   38   16 141209 201209 51 2 1  8.2 5.5   52 1.15  0.56 0.68  5.99   0.1  12.7  0.03  0.57   26  0.41
   39   16 201209 271209 52 2 4  0.0
   40   16 271209 040110 53 2 4  0.0
!PLH
!Sequence, country, plot, sampler, latitude, longitude, altitude, date_monitoring_1st, date_monitoring_last, periods, sampler_model,
sampler_height, sampler_surface, samplers, other_observations
   1  7   16 1 +530640 -061411  8 170809 201209 18 2  1.3 0.078 30
   2  7   16 2 +530640 -061411  8 170809 201209 18 2  1.3 0.078  3
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# References

Aherne, J. and E. P. Farrell (2000). Determination and mapping of critical loads for sulphur and nitrogen and critical levels for ozone in Ireland. Wexford.

Aherne, J. and E. P. Farrell (2001). "Deposition of sulphur, nitrogen and acidity in precipitation over Ireland: chemistry, spatial distribution and long-term trends." Atmospheric Environment **36**(8): 1379–1389.

Aherne, J., E. P. Farrell, P. Neville and C. Harper (in preparation). Monitoring of Forest Ecosystems in Ireland 2005 and 2006 Forest Focus Regulation (EC) No. 2125/2003 of the European Parliament and the Council of Europe concerning monitoring of forests and environmental interactions in the Community. Dublin and Newtownmountkennedy: Forest Ecosystem Research Group, UCD and Coillte Teoranta.

Bobbink, R., K. Hicks, J. Galloway, T. Spranger, R. Alkemade, M. Ashmore, M. Bustamante, S. Cinderby, E. Davidson, F. Dentener, B. Emmett, J.-W. Erisman, M. Fenn, F. Gilliam, A. Nordin, L. Pardo and W. De Vries (2010). "Global assessment of nitrogen deposition effects on terrestrial plant diversity: a synthesis." Ecological Applications **20**(1): 30-59.

CAFE (2008). DIRECTIVE 2008/50/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 May 2008 on ambient air quality and cleaner air for Europe. E. Union.

CEAM (2009). Intercomparison of Passive Samplers Action C1-O3-24 (ES). http://www.futmon.org/documents_results/Report_PassiveSampler_RingTest_2009.pdf

Chen, J. M., P. M. Rich, S. T. Gower, J. M. Norman and S. Plummer (1997). "Leaf area index of boreal forests: Theory, techniques and measurements." Journal of Geophysical Research **102**(D24): 29,429–29,443.

Cummins, T., F. Harrington and P. Neville (in preparation). Forest Health and Ecosystem Monitoring in Ireland, 2008. FutMon Project, Further Development and Implementation of an EU-Level Forest Monitoring System, project number LIFE07 ENV/D/000218. Dublin and Newtownmountkennedy: UCD Soil Science and Coillte Research & Environment.

De Kluizenaar, Y. and E. P. Farrell (2000). Ammonia Monitoring in Ireland a full year of monitoring; set-up & results Final Report. R&D Report Series No. 8. Dublin: Forest Ecosystem Research Group, University College Dublin. 66 pp.

EEA. (2011). "European Environment Agency Glossary." from http://glossary.eea.europa.eu/.

Farrell, E. P. and G. M. Boyle (2005). Monitoring of Forest Ecosystems in Ireland, FOREM 9 project, Final Report. Forest Ecosystem Research Group Report Number 72. Dublin: University College Dublin D. o. E. R. Management. http://hdl.handle.net/10197/2526

Fischer, R., M. Lorenz, O. Granke, V. Mues, S. Iost, H. v. Dobben, G. J. Reinds and W. d. Vries (2010). Forest Condition in Europe 2010 Technical Report of ICP Forests. Work Report of the Institute for World Forestry 2010/1. Hamburg. 175 pp.

FutMon. (2010). "Website of FutMon - a project designed for "Further Development and Implementation of an EU-level Forest Monitoring System" co-financed under the EU LIFE+ regulation.", from http://www.futmon.org.

FutMon–ICP-Forests (2010). Forms and Explanatory Items to be applied from data submission 2009 onwards Version 5.3c Last update 09th Nov 2010. Hamburg, ICP-Forests**:** 150 pp.

Harper, C., J. Aherne, E. P. Farrell, G. M. Boyle and P. Neville (in preparation). Monitoring of Forest Ecosystems in Ireland 2003 and 2004 Forest Focus Regulation (EC) No. 2125/2003 of the European Parliament and the Council of Europe concerning monitoring of forests and environmental interactions in the Community. Dublin and Newtownmountkennedy: Forest Ecosystem Research Group, UCD and Coillte Teoranta.

Harrington, F., P. Neville, T. Cummins and E. P. Farrell (2010). A new vision of forest monitoring in Ireland and Europe The FutMon project. COFORD Connect Note. COFORD. Dublin, COFORD.

Huber, C., J. Aherne, W. Weis, E. P. Farrell, A. Göttlein and T. Cummins (2010). "Ion concentrations and fluxes of seepage water before and after clear cutting of Norway spruce stands at Ballyhooly, Ireland, and Höglwald, Germany." Biogeochemistry.

ICP Forests (2010). Manual on Methods and Criteria for Harmonized Sampling, Assessment, Monitoring and Analysis of the Effects of Air Pollution on Forests. Hamburg, UNECE, ICP Forests.

Johnson, J. (2010). "Monitoring the effects of air pollution on forest condition in Europe: is crown defoliation an adequate indicator?" iForest **3**: 86–88.

Johnson, J. (in preparation). "Assessing the sustainability of base cation budgets under stem-only and whole-tree harvesting for plantation forests in Ireland."

Johnson, J. (in preparation). "Modeling of soil and soil water chemistry in Irish forests under nitrogen deposition, meteorological and harvesting scenarios."

Johnson, J. (in preparation). "Nitrogen budgets under stem-only and whole-tree harvesting for plantation forests in Ireland."

Johnson, J., J. Aherne, T. Cummins and E. P. Farrell (2009). Investigating the influence of storms, droughts and longterm climate trends on humus water in Irish forests. Biogeomon. Helsinki.

Kreutzer, K., E. P. Farrell, T. Cummins, A. Rothe, C. Huber and W. Weis (1994). Elemental turnover in Norway spruce stands in Bavaria and Ireland. Ecosystem Manipulation Experiments: Scientific Approaches, Experimental Design and Relevant Results. A. Jenkins, R. C. Ferrier and C. Kirby. Bowness-on-Windermere, Commission of the European Communities**:** 180–181.

Lorenz, M. (2010). Objectives, Strategy and Implementation of ICP Forests. Manual Part I. Manual on Methods and Criteria for Harmonized Sampling, Assessment, Monitoring and Analysis of the Effects of Air Pollution on Forests. ICP Forests. Hamburg, UNECE, ICP Forests**:** 21 pp.

Lorenz, M., R. Fischer, G. Becher, V. Mues, O. Granke, T. Braslavskaya, A. Bobrinsky, N. Clarke, Z. Lachmanová, N. Lukina and C. Schimming (2009). Forest Condition in Europe 2009 Technical Report of ICP Forests. Work report of the Institute for World Forestry 2009 / 1. Hamburg.

Nicolaou, I. (2010). Pedotransfer Functions for estimating Field Capacity and Bulk Density in Irish Forest Soils. M.Sc.(Agr.) in Environmental Resource Management (M.ERM) thesis. UCD Soil Science, University College Dublin. 41 pp.

O'Brien, D. (2010). An Investigation of Nitrogen Mineralisation Rates in Irish Forest Soils. M.Sc.(Agr.) in Environmental Resource Management (M.ERM) thesis. UCD Soil Science, University College Dublin. 55 pp.

Thimonier, A., I. Sedivy and P. Schleppi (2010). "Estimating leaf area index in different types of mature forest stands in Switzerland: a comparison of methods." European Journal of Forest Research **129**(4): 543-562.