

Final Report of Nishi Property Particulate Measurements

Prepared for
Tim Ruff
of
Norcal Land,

by

Dr. David E. Barnes
Department of Physics
University of California, Davis
Davis, CA 95616

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I. ASSIGNMENT

I was asked to conduct a preliminary study of particulates using the methods developed by the UC Davis DELTA Group, especially utilizing the ability to collect and analyze separately, the ultra-fine component of PM 2.5. The purpose of this study was to help assess potential impacts on the Nishi property, due to its proximity to interstate 80. The results of the study would be a report, to include a brief interpretation of the data, including all detectable elemental and mass concentrations available using the DELTA Group analysis techniques. Final data would include providing concentrations of PM10, PM2.5 and, ultra-fine (0.09 to 0.0 μm) total mass and elemental components (if detected using the applied techniques).

One goal of this study was to provide measurements and analysis on a short time frame. There were two reasons for this. The primary being the impact of concern is ultra-fine components from the nearby freeway, impacts of this nature are biggest during our strong winter inversions. The time of year and weather forecasts suggested that potential for these conditions would vastly decrease very soon. The second reason was to provide some preliminary data that might allow the overall project to continue to progress, by using data specific to the property location for the Environmental Impact Report.

II. SITE SELECTION

The property is located adjacent to interstate 80 which borders to the south and east, the UC Davis campus (proper) to the west and north and the City of Davis to the east and north, see Figure 1. Note the freeway generally passes to the south of the property and angled from southwest to slightly north of east.

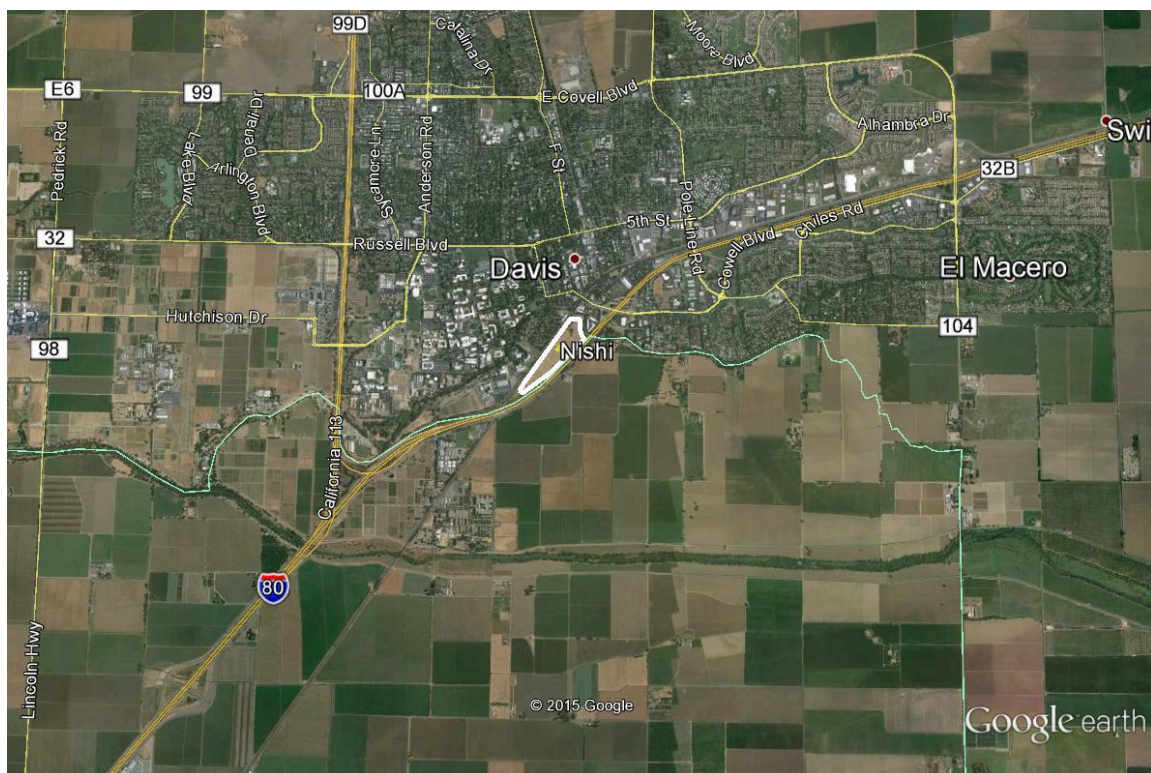


Figure 1 Overview of Nishi property and Interstate 80.

I visited the property and nearby areas with Tim Ruff to determine the most feasible and appropriate site location. We had had several preliminary conversations primarily dealing with the logistics required of a site, but also discussed potential locations on and adjacent to the Nishi property. We visited the area and determined a location immediately east of the property, near Olive Drive would provide the facilitation necessary for siting. Although the Olive Drive site (OIDr) location was not on the property, the position with respect to the freeway was analogous to the middle of the property and therefore should provide comparable results, Figure 2.

Given the project timeline, this was the only viable site, as any other site would have involved facilitation efforts. Additionally, the analysis exposure procedures had already begun on a batch of samples at ALS. With this in mind I scheduled these samples into the active analysis queue and ran the deployment as long as possible without the current synchrotron analysis window closing. The synchrotron analysis is run in large batches which occur approximately every 4 to 6 months due to scheduling logistics.

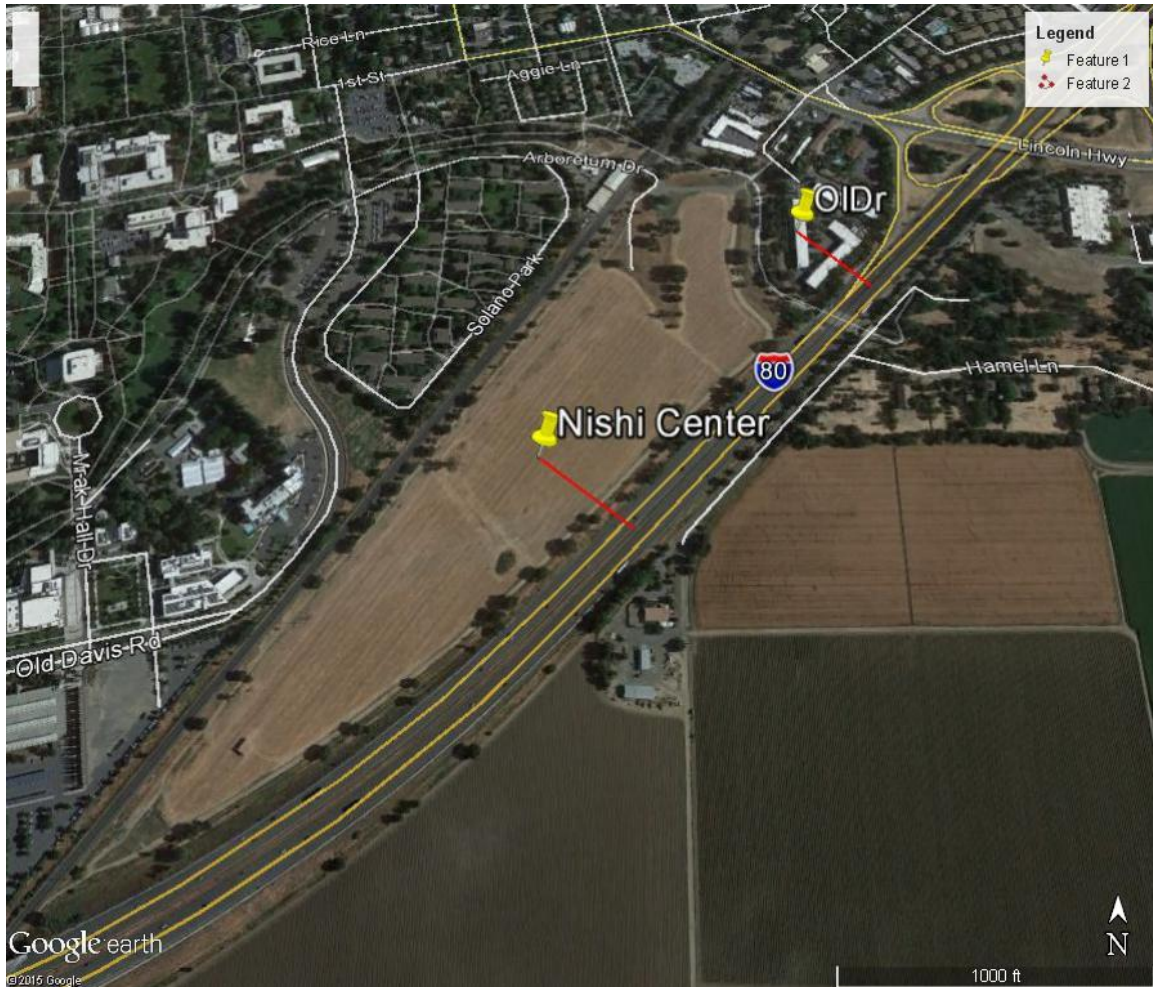


Figure 2 Relationship between Nishi property and Olive Drive sampling location.

As Figure 2 shows the sampling location is slightly closer to the freeway than the center of the property. The distances are 118 meters and 138 meters to freeway center respectively. These distances are well within the expected influence of freeway particulates, especially considering recent changes in measured distances of influence for ultra-fine particles Hu (2009), and the growing concerns with the increased effective toxicity of ultra-fine particles, Lippmann (2009).

The freeway tends to loop around the property, Figure 1 and Figure 2, thus giving slightly more exposure directions for air movement, than a straight section of freeway would. One can see the potential freeway impacting directions could involve air that moves to the property from the east, southeast, south and south west, in degrees on the compass from 90° to 225°.

III. SUMMARY ANALYSIS, INTERPRETATION AND RESULTS

One requirement of the study is to generate a set of data that could be utilized for evaluation, while meteorological conditions (inversions) still existed that might be more favorable for detection of near roadway emissions. The validated data for the study extends from February 3, 6:20 PM to February 13, 9:20 PM. So we have over a week worth of data which includes a weekend and therefore the extra exposure involved with the heavier traffic at those times.

Beta Mass including ultra-fines

The second purpose was to include the measurement of the ultra-fine size mode using the prototype continuous ultra-fine filter system (9th stage). Figure 3 shows particulate matter mass for PM10, PM2.5 and ultra-fines, 0.09 μm to 0.0 μm . There is strong correlation with time to PM2.5 and PM10, this is certainly the result of such clean conditions overall.

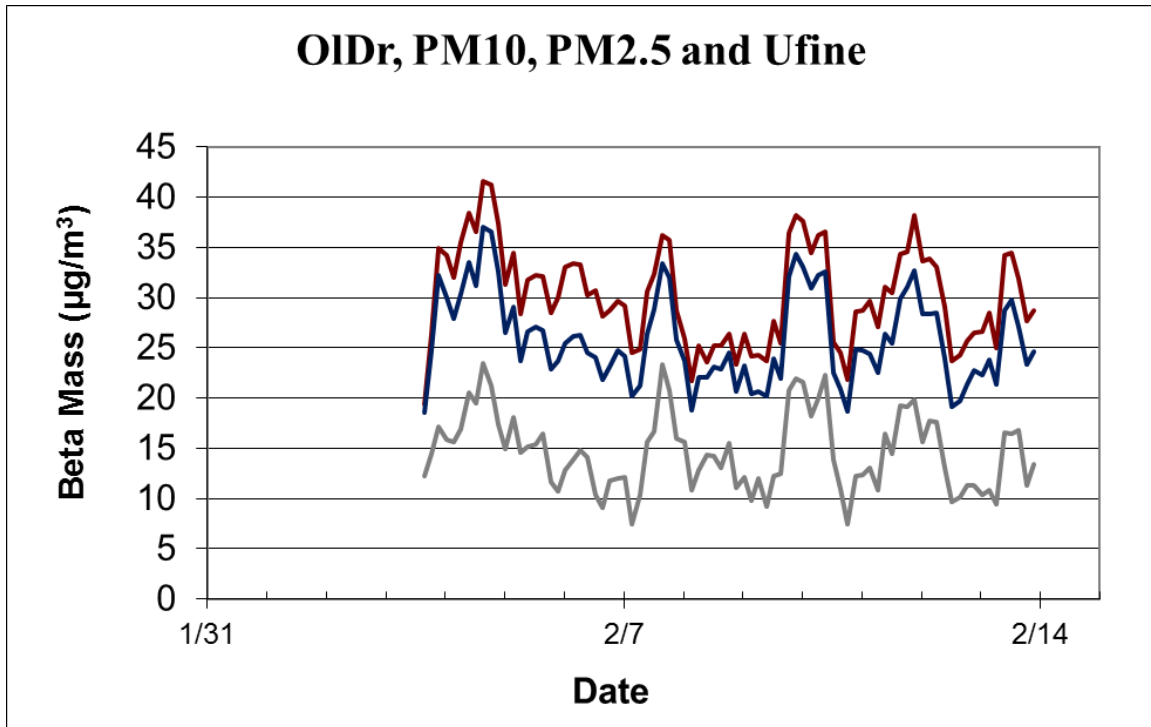


Figure 3. PM10, PM2.5 and Ultra-fine mass

It is not unusual for the ultra-fine mass to be a large fraction of PM2.5, but often it does not correlate with PM2.5 in either time or composition. The first test of the 9th stage, in Sacramento in winter 2009, also had large mass ratios.

Note:

The total mass concentration allows for direct calculation of constituent concentrations for every sample. To clarify, each data point, of each size mode represents an independent aerosol sample for which a concentration of a given element can be calculated.

Included in the digital files (see Attachment 7) are the beta mass concentrations for the study representing over 700 individual mass sample concentrations across 9 size modes.

S-XRF Analysis

Ultra-fine signature in elemental data

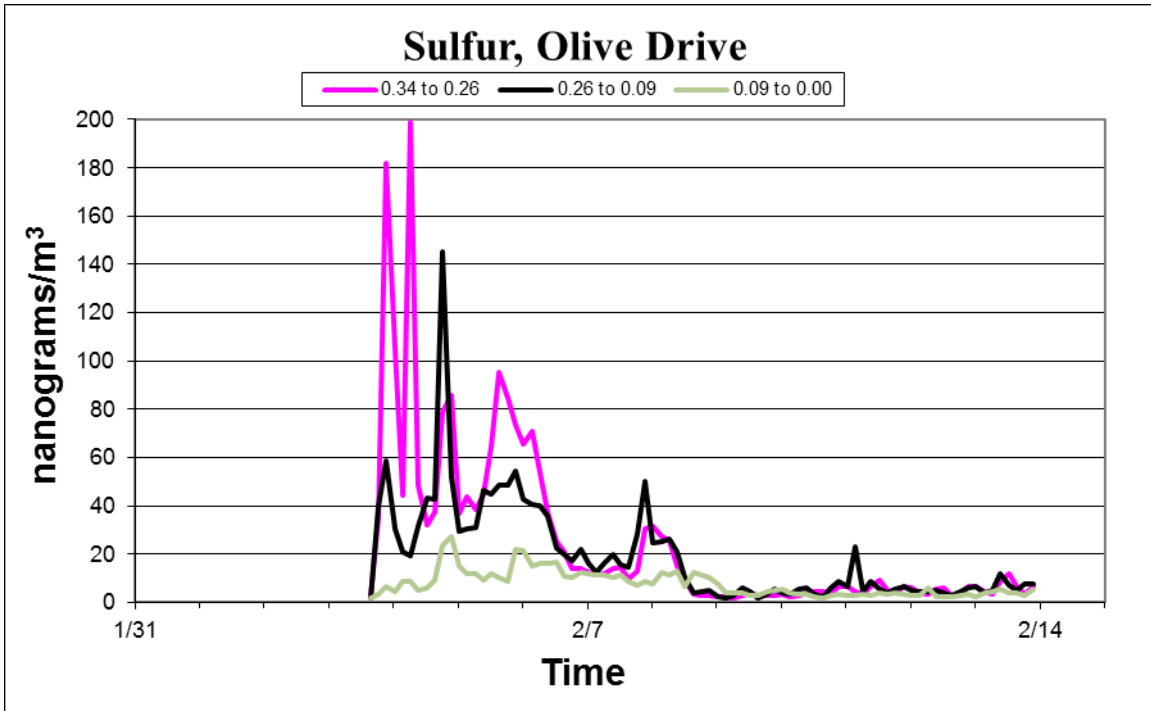


Figure 4. Three finest size modes of sulfur

The presence of sulfur in stage 8 and 9 is an indication that even though conditions were clean overall we can detect ultra-fine signatures associated with roadway traffic. The lack of sulfur in this size range during the later portion of the study is due to unfavorable meteorology for measurement, namely higher wind speeds and wind directions that do not bring emissions from the freeway.

Ultra-fine element concentrations

A recent paper reported ultra-fine species data from Watt Avenue in Sacramento. This is a good set of data for comparison as it is local, and includes both spring and winter (inversion) conditions. The paper showed meteorological differences between winter inversion conditions and spring conditions profoundly affect the ability to detect potential local emission issues, Cahill (2014).

Table 5 below compares concentrations for ultra-fine elements from the current OI Dr study to those found downwind of a heavily traveled secondary road. The table has the OI Dr concentrations in the center, with the spring and winter data

on either side, followed subsequently by the ratio of ODr concentrations to each data set.

	Ratio ODr to Spring ArMi	Spring ArMi (ng/m ³)	ODr (ng/m ³)	Winter ArMi (ng/m ³)	Ratio ODr to Winter ArMi
Calcium	9.1	0.41	3.77	2.58	1.46
Sulfur	0.3	32.25	9.72	9.78	0.99
Potassium	1.6	2.90	4.61	5.00	0.92
Chromium	5.5	0.01	0.07	0.21	0.33
Manganese	33.3	0.04	1.33	0.33	4.10
Iron	0.4	1.20	0.50	7.28	0.07
Nickel	4.4	0.08	0.33	2.88	0.11
Copper	3.2	0.10	0.32	2.03	0.16
Zinc	1.6	0.50	0.80	3.20	0.25
Arsenic	-	0.08	nd	0.10	-
Selenium	-	0.06	nd	0.04	-
Bromine	0.5	0.45	0.23	0.29	0.77
Lead	1.2	0.35	0.43	0.41	1.07

Table 1 Comparison of Nishi ultra-fine metals to Watt Avenue study, both winter and spring.

Five of eleven ultra-fine metal concentrations are comparable or greater than the winter concentrations which were known to be influenced by inversion conditions.

Comparing the sum of the elements in the ultra-fine mode to PM2.5 and PM10 there is a large fraction (Figure 5, percent ultra-fine/PM2.5 dotted line) which comes in the ultra-fine mode when source contributions and meteorology come together.

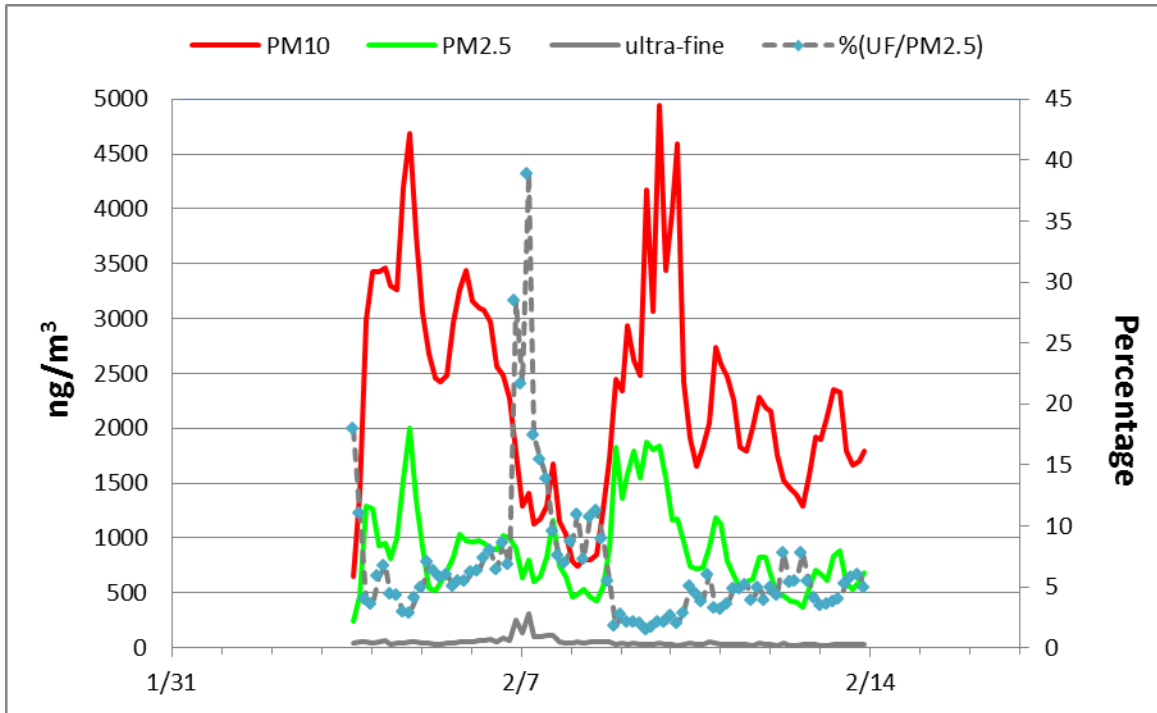


Figure 5. Summed elements for PM10, PM2.5, ultra-fines and the ratio Uf/PM2.5

This peak in ultra-fine elements extends from Friday afternoon to late Saturday. This is the time most likely to be affected by weekend traffic. This is the only time during the study the site was exposed to the weekend traffic and it shows up clearly as the largest concentrations in the ultra-fine signal.

Note:

All of the S-XRF concentrations data included in the digital files will be provided in the form of Excel spread sheets, Attachment 7. The elemental concentrations for the study represent over 13,000 separate elemental concentrations across 9 size modes.

Meteorology

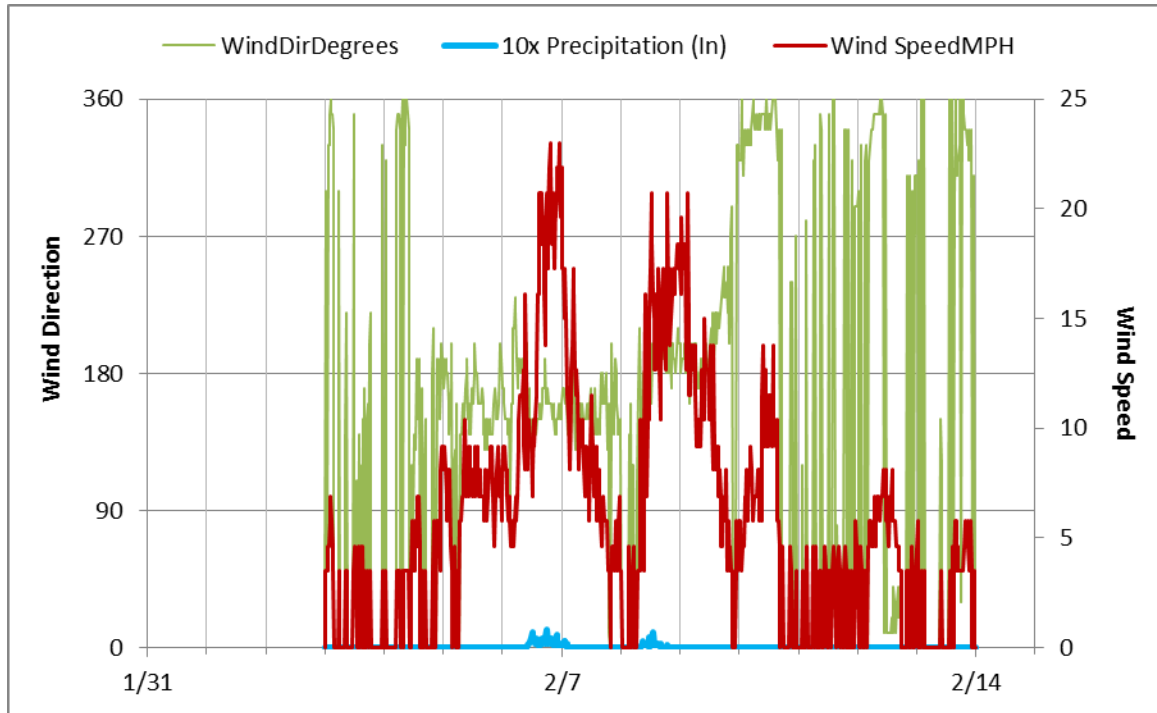


Figure 6. Wind Direction, Wind Speed, and Rain

Wind Direction, Wind Speed, Rain

Best detection would occur for winds speeds below 5 mph (right axis), optimum detectable wind direction is 135° to 180°, rain removes particles, ultra-fines less efficiently but these concentrations will also be continually reduced.

The general observations for the meteorology: wind direction was most favorable for detection about 30% of the time. During those times the wind speed was less than 6 mph less than 25% of the time. From early on the 5th to the 10th the slower winds occurred mostly late at night and in the early mornings when traffic impacts are reduced.

Based on the meteorological data optimum exposure for the sampling site to detect freeway emission occurred less than 10% of the time. This conclusion was corroborated by the HYSPLIT trajectories and the local AQI data.

Given the meteorological conditions during the Olive Drive study, the comparison to Watt avenue concentrations is surprising. It is not surprising that the emissions are generally more than the spring conditions for the Watt avenue study, because this freeway carries more traffic. It is a concern that several species are comparable to the strongly inversion influenced concentrations of the winter data.

IV. PROJECT PLAN AND BACKGROUND

To include as a data source to the Environmental Impact report with respect to the development of this site, I was asked to utilize DELTA technologies to characterize emissions from the adjacent freeway that could impact the Nishi property. In order to accomplish this I would do/provide the following:

1. Collect samples through the use of a DRUM (Davis Rotating-drum Unit for Monitoring) Sampler.
2. Collect samples with a continuous ultra-fine filter. A prototype system designed by the UC Davis DELTA group to allow separation of the ultra-fine size mode for separate analysis and characterization.
3. Analyze collected samples for concentrations of mass by beta gauge and elemental concentrations by Synchrotron-XRF
4. Provide a brief report summarizing results, including concentration data for all validated analyses, on all samples.
5. In addition, because these technologies are not broadly known I will also provide a context for how these measurements have been used in prior studies.

Importance of Aerosol Characterization as a Function of Time

Despite the fact that the 8-DRUM sampler takes 48 separate samples to equal a single 24 hour PM_{2.5} Federal Reference Method (FRM) filter, the results for mass are identical to within a few percent, as seen in a yearlong side by side study for the California Air Resources Board in Sacramento (Cahill et al, 2011a).

However, the additional samples allow the DRUM to follow and correlate to the meteorology. This is of primary importance for characterizations as meteorology can have the greatest impact on observed aerosols at a specific location.

The DELTA DRUM technology and analysis is capable of providing a clear signature of a potential source in aerosols and can validate source identification with concentration changes as a function of distance and particle size distributions.

Importance of Aerosol Characterization as a Function of Size

The particle size distribution of aerosols evolves with distance from the particles source(s) this changes the aerosol concentration size profile with time. Thus particle size is a critical component of aerosol characterization. The evolution of source constituent profiles provides another tool to separate confounding sources from a specific source of interest.

Size also effects deposition (not expected to be important in this study).

Almost all atmospheric aerosols are eventually removed from the atmosphere by deposition, either by dry or wet processes (Seinfeld and Pandis, 1998). If the aerosol has sufficient mass and the aerosol contains toxic contaminants of concern, the deposition process can lead to surface contamination resulting in exposure through ingestion via hand to mouth contact. Aerosols consisting of solid particulate matter, which contain certain heavy metals, and have sufficient mass to settle close to a source can result in a deposition at concentrations that exceed DTSC's regulatory thresholds (California Code of Regulations, title 22, section 66261.24).

Information must be gained on the types and concentrations of toxic materials in the atmosphere segregated by size, since size dominates the calculation of settling velocity and later deposition rates (Seinfeld and Pandis, 1998). Information on the sources of a potentially airborne deposited waste is enormously aided by information on the airborne material before deposition, as then all the tools of meteorology, particle size, and composition can be brought to bear to identify sources. Table 2 below identifies some size classifications of particulate matter and their corresponding size ranges.

Particulate Matter	Size Range
Very Coarse	10 – 35 µm
Coarse	2.5 – 10 µm
Fine	< 2.5 µm
Very Fine	< 0.25 µm
Ultra-Fine	< 0.10 µm

Table 2. Size Classifications of Particulate Matter

Sources which potentially produce aerosol particles containing toxic constituents must be evaluated with respect to deposition rates (i.e. size characterization). In order to properly protect surrounding areas from potential hazardous waste disposal issues, source evaluation must include particle size and composition characterization. It is important to include even larger sizes than PM₁₀, when the coarsest modes (10 – 35 µm, 2.5 – 10 µm) contain a significant contribution of a toxic material.

The DRUM sampler (and the Continuous Ultra-fine filter) and associated analyses allow the DELTA Group to measure quantitatively the elemental content and mass as a function of size and time thus more fully characterizing aerosols and providing data that allows correlation to health impacts e.g. Cahill (2011b) .

V. SAMPLE COLLECTION METHODOLOGIES

8-DRUM Sampler

The DRUM sampler consists of 8 rotating drums that are wrapped with a Mylar® substrate then coated with a thin layer of Apiezon-L grease (Wesolowski et al, 1978, Cahill 1979). The substrate (Mylar® and grease) is well characterized and provides a uniform, contaminant free background for high sensitivity analysis. The rotation rate of the substrate was set for 4 mm/day, which allows for 5½ weeks of sample collection without substrate change. All DRUM samples are particulate matter samples collected by impaction onto this type of clean/coated Mylar® substrates. An 8-DRUM sampler contains eight substrates to allow collection of ambient particulate aerosols into eight different size modes. Once collection is complete each of the eight substrates holds a record (samples) of the aerosol particles for a given size range, (Raabe et al, 1988), as a function of time sampled.

Continuous Ultra-fine sampler

The ultra-fine filter system was designed to be in-line with a DRUM sampler so the filter is capturing the particles remaining below the well-defined size modes of the 8-DRUM. The photo, Figure 3, shows the Teflon filter is mounted on an archival frame while in the unit and does not need remounting once sampling is completed. The system pictured is the original prototype; the system used in this study is functionally equivalent. One can clearly see the time evolution of the dark deposit at the right end of the frame (For sample photos of current study, see Attachment 4.)



Figure 7. Continuous Ultra-fine sampling system (DRUM stage 9)

Meteorological Data

The first level meteorological data required for aerosol assessments is simple wind speed, wind direction and precipitation. The data examined for these analyses come from online resources, such as weather underground, local air districts and a UC Davis/NOAA weather site.

VI. ANALYTICAL TECHNIQUES

Soft Beta Ray Transmission

The UC Davis DELTA Group measures mass concentration using Beta particles. Radioactive elements in general emit different types of radiation when they decay. Depending on the element, this radiation will be some combination of alpha particles (Helium nuclei), Beta particles (high energy electrons), neutrons, and gamma rays. A property that is common to all of these radioactive by-products is that their flux decreases exponentially as it travels through matter.

The element Nickel-63 (^{63}Ni) decays by emitting a 67 kiloelectron volt (keV) electron. These electrons are at a similar energy as those in the beam of electrons in an old-style cathode ray tube in a TV or computer monitor. Since the flux of these particles decreases in a predictable manner as it passes through matter, it is possible to measure the mass of a thin deposit on a uniform substrate.

Specifically, a detector is placed facing a ^{63}Ni source. A series of standards, with known aerial densities, are placed between the source and detector to calibrate the system. It is known that the flux of beta particles will obey the equation $I = I_0 e^{-\alpha m}$ where I_0 is the flux of particles with no sample between the source and detector, α is a coefficient specific to 67 keV electrons and m is the aerial density of the sample. The aerial density of the sample is then calculated to be:

$$m = -\frac{1}{\alpha} \ln \frac{I}{I_0}.$$

Synchrotron X-Ray Fluorescence (S-XRF)

The UC Davis DELTA Group uses two synchrotrons, the Advanced Light Source (ALS) located at the Lawrence Berkeley National Laboratory, and the Stanford Synchrotron Radiation Lightsource (SSRL) located at the SLAC National Accelerator Laboratory.

X-ray fluorescence is a fundamental and widely used method for quantitatively measuring the amounts of all elements heavier than sodium. It relies on an x-ray beam knocking an electron from an atom, which then immediately decays by emitting an x-ray characteristic of that particular element. Each x-ray spectrum is unique, and thus determinations are definitive.

S-XRF has been developed and extensively used for 100s of thousands of aerosol samples since 1997 at the ALS, Lawrence Berkeley NL. An initial x-ray beam passes through the sample, knocking electrons out of the atoms, which then fills the vacancy by dropping in another electron and giving off the extra energy as a characteristic x-ray. Each element has a unique set of characteristic x-rays, which are then detected by modern energy dispersive x-ray detectors and data reduction programs. The system is calibrated by standards, including both commercial standards and Standard Research Materials (SRMs) from the

National Bureau of Standards, now National Institute for Standards and Technology (NIST).

In the Advanced Light Source (ALS), Lawrence Berkeley NL, the UC Davis DELTA Group has sponsored Beam Line 10.3.1 for the purpose of the most sensitive possible x-ray analyses of thin ($< 100 \mu\text{g}/\text{cm}^2$) aerosol samples. The analyses are based on a 14 keV polarized x-ray "white" beam collimated to typically 0.5 mm. Among the many choices necessary to achieve this capability, the analyses are done in a vacuum chamber, and the detector is optimized to handle high count rates of low energy x-rays, 1 keV to about 12 keV. It has achieved sensitivities in the femtogram/ m^3 range in size and time resolved aerosol samples.

We also utilize a second system, the design of the SSRL capability was driven by the need to handle medium and heavy transition metals not available from the ALS, many of which are toxic, in the range from about 6 keV to 38 keV. The analyses are currently done in helium, not vacuum, and the detector is optimized for higher energy x-rays. The facility can handle samples of almost any size, a capability which is not available at the ALS.

Both systems have the capability to analyze aerosols impacted onto a Mylar® strip about 17 cm long, delivered by a rotating drum impactor which collects aerosols continuously as a function of time, typically for 5½ weeks. By collimating the beam to 0.5 mm, time resolution of 3 hour is achieved on standard 4 mm/day deposits.

Table 3 lists the title 22 elements, including regulatory thresholds, and the S-XRF facility capabilities and detectable limits for each element.

Metals and compounds	STLC mg/L	TTLIC wet mg/kg	ALS, White beam ppm	SSRL, 38 keV ppm
Antimony	15	500	na	0.2
Arsenic	5.0	500	0.2	1.6
Barium	100	10,000	na	0.8
Beryllium	0.75	75	na	na
Cadmium	1.0	100	na	0.6
Chromium VI	5	500	na	na
Chromium, Cr III	5	2500	0.2	0.2
Cobalt	80	8,000	0.4	0.6
Copper	25	2,500	0.2	0.4
Flouride salts	180	18,000	na	na
Lead	5.0	1,000	1.3	1.6
Mercury	0.2	20	1.0	0.2
Molybdenum	350	3,500	6.6	0.4
Nickel	20	2,000	0.4	0.2
Selenium	1.0	100	0.2	0.2
Silver	5.0	500	na	0.2
Thallium	7.0	700	na	0.2
Vanadium	24	2,400	0.2	0.3
Zinc	250	5,000	0.4	0.6

Table 3. Title 22 elements of concern, regulatory thresholds and S-XRF capability.

The key advantage of S-XRF is that the polarization and intensity of the x-ray beams from synchrotrons give far better sensitivity than standard x-ray methods, while retaining the advantage of seeing a large suite of elements simultaneously and quantitatively.

Thus, not only are toxic elements like lead and other title 22 elements possible to measure, but many other trace and abundant elements can also be measured. It is important to note that this is not simply useful in identifying sources, but is an absolute necessity for this purpose. In general, a single element rarely constitutes, nor could be easily attributed to a single source.

The accuracy and precision of the analyses are confirmed using standard foils. Below we show the NIST (NBS) Standard Reference Materials (SRM) 1832 and 1833. These values are NIST certified. Also, note that UC Davis was one of the 5 certifying laboratories chosen by NIST.

Standards						
NBS (NIST)		SRM 1832		Area		
		1.73	Mg	37 mm foil	Areal	
	Atomic #	Elements	(%m/m)		Density	
Sodium	11	Na	6.6	0	14.2	µg/cm ²
Aluminum	13	Al	7.5	0.7	16.1	µg/cm ²
Silicon	14	Si	19.7	0.6	42.4	µg/cm ²
Argon	18	Ar	1	0	2.2	µg/cm ²
Calcium	20	Ca	11.8	0.8	25.4	µg/cm ²
Vanadium	23	V	2.4	0.3	5.2	µg/cm ²
Manganese	25	Mn	2.5	0.3	5.4	µg/cm ²

Cobalt	27	Co	0.61	0.04	1.3	$\mu\text{g}/\text{cm}^2$
Copper	29	Cu	1.4	0.1	3.0	$\mu\text{g}/\text{cm}^2$
NBS (NIST)		SRM 1833		Area		
		1.556	Mg	37 mm foil	Areal	
		Elements	(%/m)		Density	
Silicon	14	Si	21.9	1.4	42.4	$\mu\text{g}/\text{cm}^2$
Argon	18	Ar	1	0	1.9	$\mu\text{g}/\text{cm}^2$
Potassium	19	K	11.2	1.1	21.7	$\mu\text{g}/\text{cm}^2$
Titanium	22	Ti	7	1	13.5	$\mu\text{g}/\text{cm}^2$
Iron	26	Fe	8.4	0.3	16.3	$\mu\text{g}/\text{cm}^2$
Zinc	30	Zn	3.3	0.3	6.4	$\mu\text{g}/\text{cm}^2$
Lead	82	Pb	13.4	0.7	25.9	$\mu\text{g}/\text{cm}^2$
					Areal	
Micromatter Inc certified					Density	
Cadmium selenide		CdSe	46.8	$\mu\text{g}/\text{cm}^2$	46.8	$\mu\text{g}/\text{cm}^2$
Cadmium	48	Cd			31.17	$\mu\text{g}/\text{cm}^2$
Selenium	34	Se			15.58	$\mu\text{g}/\text{cm}^2$
Antimony	51	Sb	50.8	$\mu\text{g}/\text{cm}^2$	50.8	$\mu\text{g}/\text{cm}^2$

Table 4. Standards used in the S-XRF analyses

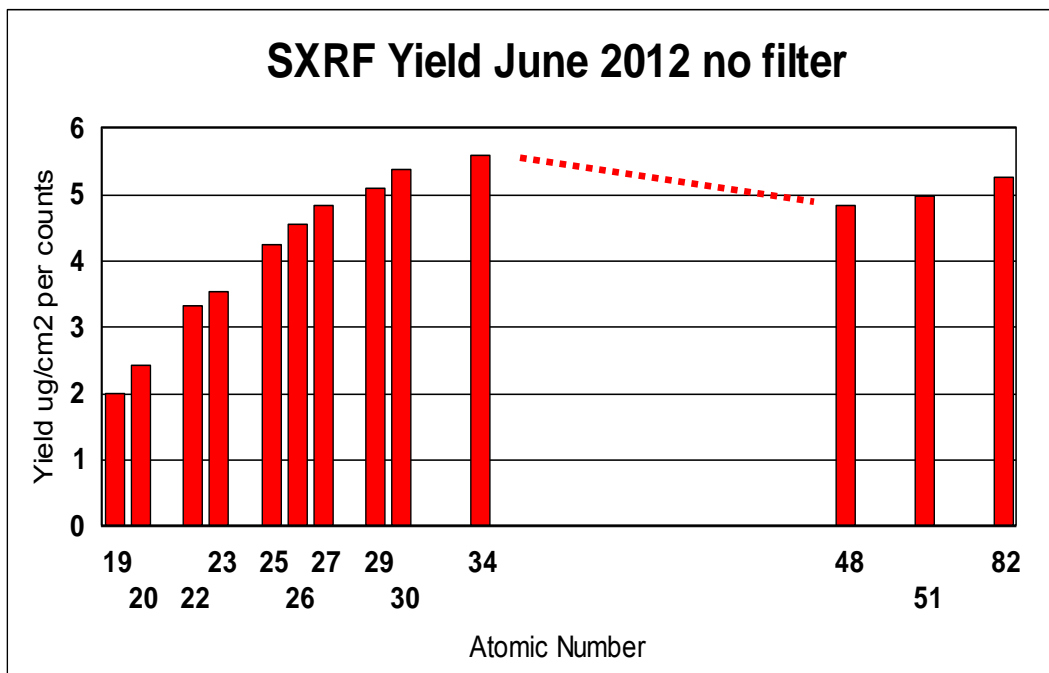


Figure 8. Yield curve for the tailored white beam based on NIST SRM and Micromatter Inc. standards.

The gap from $Z = 35$ to $Z = 47$ was caused by lack of standards, but atomic theory demands smooth transitions element to element (dashed line).

VII. SAMPLING ACTIVITIES

The timeframe of the deployment was from February 3, to February 21, 2015. This was extended beyond the initial week to provide as much data as possible, within the available timeline. The normal 5 ½ week duration was superseded so that the S-XRF analysis could be completed within the current analysis window.

The sampling site (Oldr) was setup on Tuesday, February 3, 2015 with the following two sampling systems, an 8-DRUM cascade impactor and in-line, a Continuous Ultra-fine sampler (9th stage). The system was started (vacuum pump turned on) at 6:20 PM.

The site was visited one week after deployment, Tuesday, 2/10/2015 at 15:45. The systems were observed to be running well, motion, flow and vacuum systems checks were good.

On Saturday, February 21, 2015 the site was visited for shutdown of the site. The 8-DRUM had rotated as expected, based on the elapsed time and the preset rotation rate (4mm/day). The flow was then measured and found too low. After further inspection the 9th stage was found to have stopped prematurely. Normally the ultra-fine filter is mechanically moved across in front of its orifice, Figure 7. This allows the filter to retain a time signature of deposited particles.

Because the motion stopped the ultra-fine particles build up in one location on the filter strip and eventually adversely affect the system flow. This explained the low flow reading. This was the system state, the deposit was short but otherwise the ultra-fine deposit looked normal.

The vacuum pump was shut down at 5:15 PM and the site was removed. The length of the deployment was about 1 day short of an automatic mid-deployment protocol movement that would have placed an in-situ blank on the Mylar® substrate. For longer deployments this blank helps with timing.

After site removal the sampling systems were taken to the DELTA Group laboratory at UC Davis with the samples inside. Other operational and quality assurance checks are made once the samplers (with samples) are back in the laboratory. In this case this will include accurate determination if possible of the length of time the system was improperly functioning.

In the laboratory in Physics by measuring the ultra-fine deposit length to center of stop peak, the time the continuous ultra-fine system stopped was determined to be 2/14/15 4:25 AM.

Because of the buildup of materials where the system stopped, data for the ultra-fines was affected before the stop so any data affected by the stop peak accumulation were also discarded. The material on the 9th stage near the peak does not affect the deposits and data on the 8-DRUM stages before the actual stop time on the 9th stage. This is because the corresponding deposits are no longer in the active deposition area due to drum rotation within each stage.

However, the 8-DRUM data after the ninth stage stopped has larger error due to variable flow restriction. It is difficult to accurately determine how quickly the effect would occur and what its variability may be. For this reason the data after the continuous after-filter system stopped should be ignored for primary analysis.

After the 9th stage stalled the flow effect is variable, but the final flow measured was 6.4 l/m, this corresponds to an error at the 8 stage cut-point (sizing) of more than 30% which is too large to consider sizing to be valid in the 8-DRUM system. For this reason, **only concentration data before the 9th stage stopped can be considered valid**. The validated data for the study extends from February 3, 6:20 PM to February 13, 9:20 PM

VIII. ANALYTICAL RESULTS

Archiving and validation of DRUM and Ultra-fine samples

After removing sample substrates from the sampler, sampler operations are checked for consistency to pre-field operations, which includes flow characteristics and electro-mechanical function. Prior to mounting the DRUM samples onto labeled analysis/archival frames, the collected sample dimensions were measured to verify expected lengths. Deposits were also examined visually to detect any anomalies during sample collection and to examine and confirm imbedded time markers (if any). The ultra-fine substrate is pre-mounted to its archival frame so it is simply removed from the system ready for initial measurements. All further analyses are done directly on the frame mounted deposits. For each DRUM sampler, information from these evaluations, e.g. sampler flow or timing is included in Attachment 3: Summary Notes from Archiving and Beta Sample Analysis.

Beta Mass Analysis

All archived DRUM and Ultra-fine samples were analyzed for particle mass concentration in 3 hour increments by soft beta ray transmission. Each archival frame contains a deposit of the material (aerosol particles) from a single size mode; therefore, the plots of mass concentration below provide a characterization of how the mass is distributed across different size regimes as a function of time sampling. The graphs that follow are the eight size modes from

the 8-DRUM sampler and the ninth size mode from the continuous ultra-fine sampler, all from site OIdr.

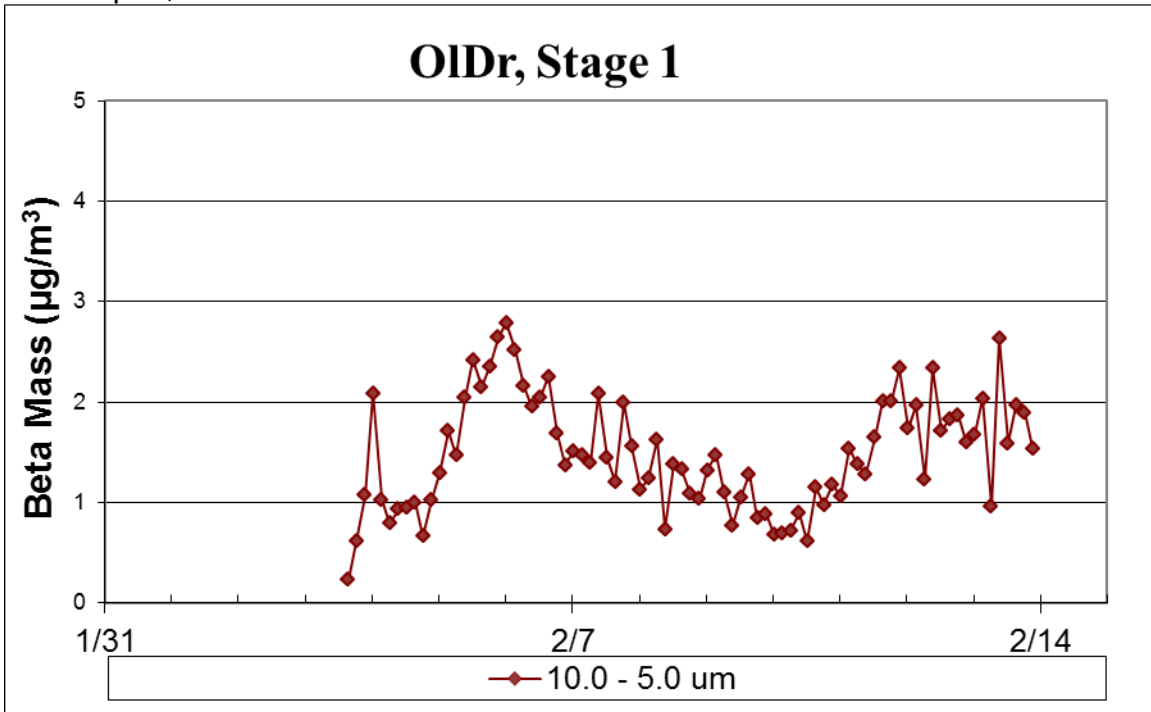


Figure 9. Mass concentration versus date for Stage 1, 10.0 to 5.0 μm size range

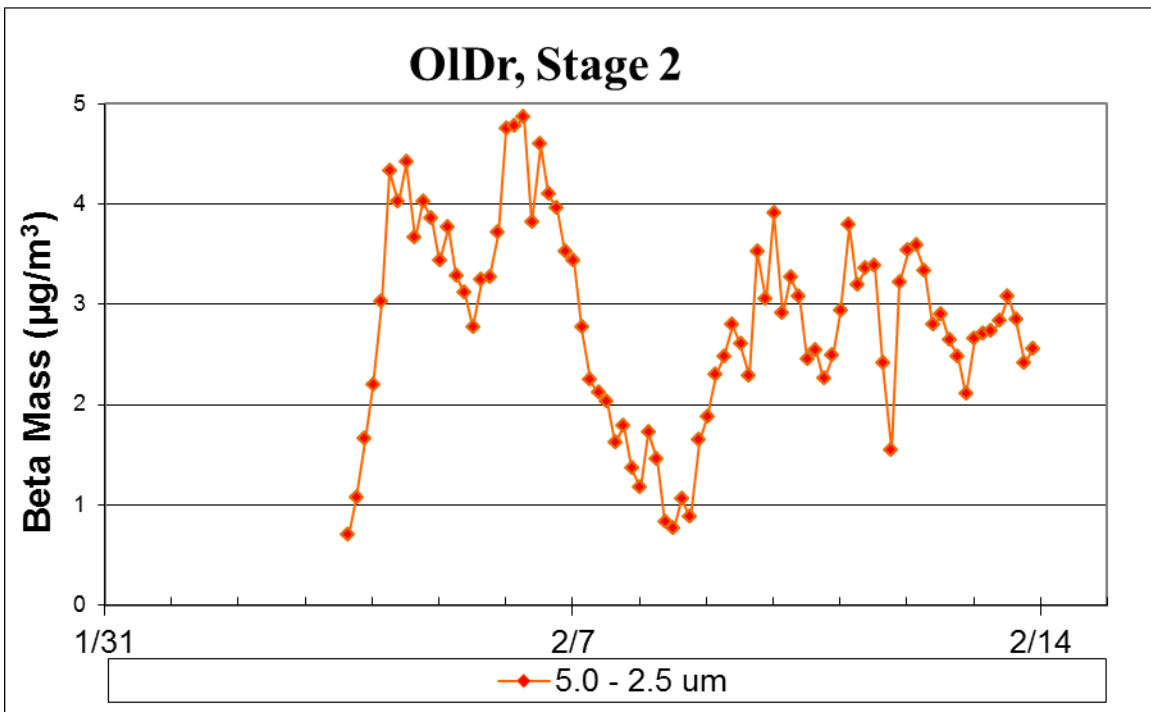


Figure 10. Mass concentration versus date for Stage 2, 5.0 to 2.5 μm size range

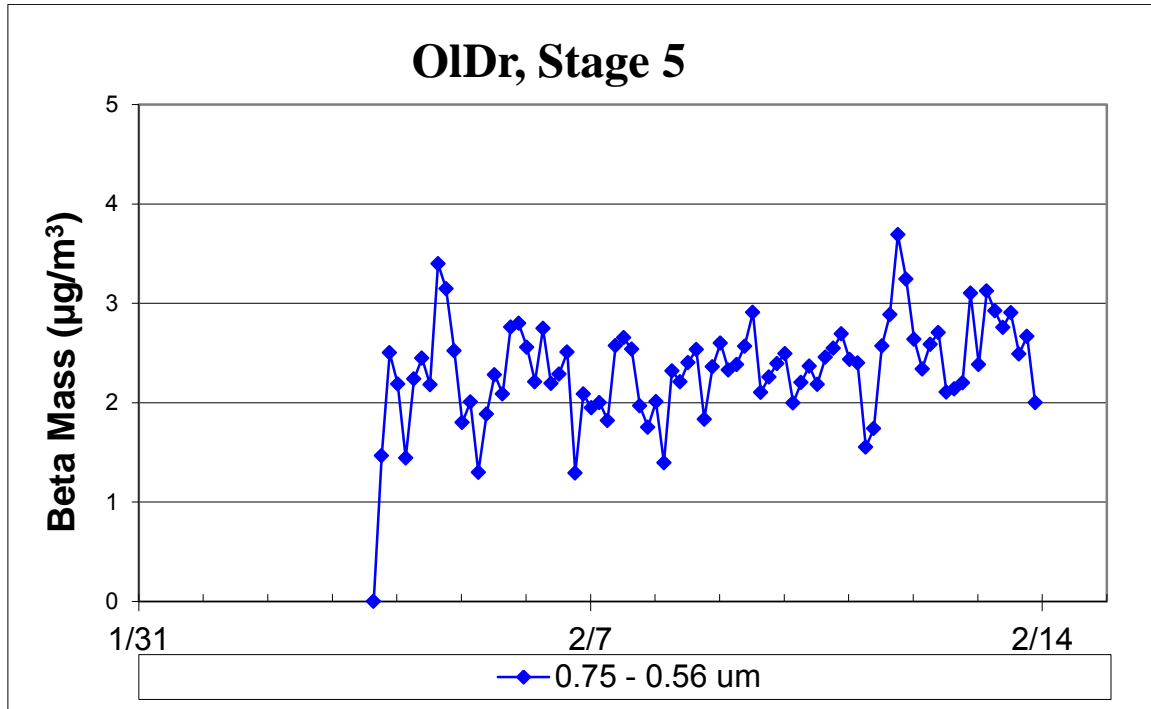


Figure 13. Mass concentration versus date for Stage 5, 0.75 to 0.56 μm size range

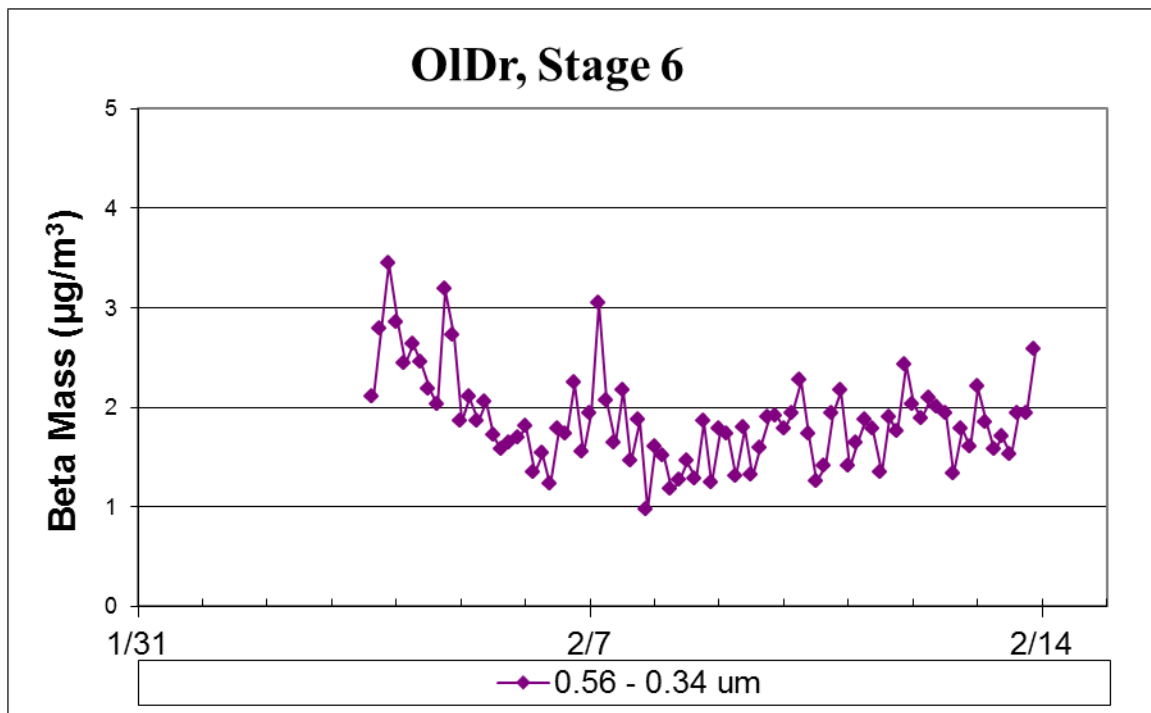


Figure 14. Mass concentration versus date for Stage 6, 0.56 to 0.34 μm size range

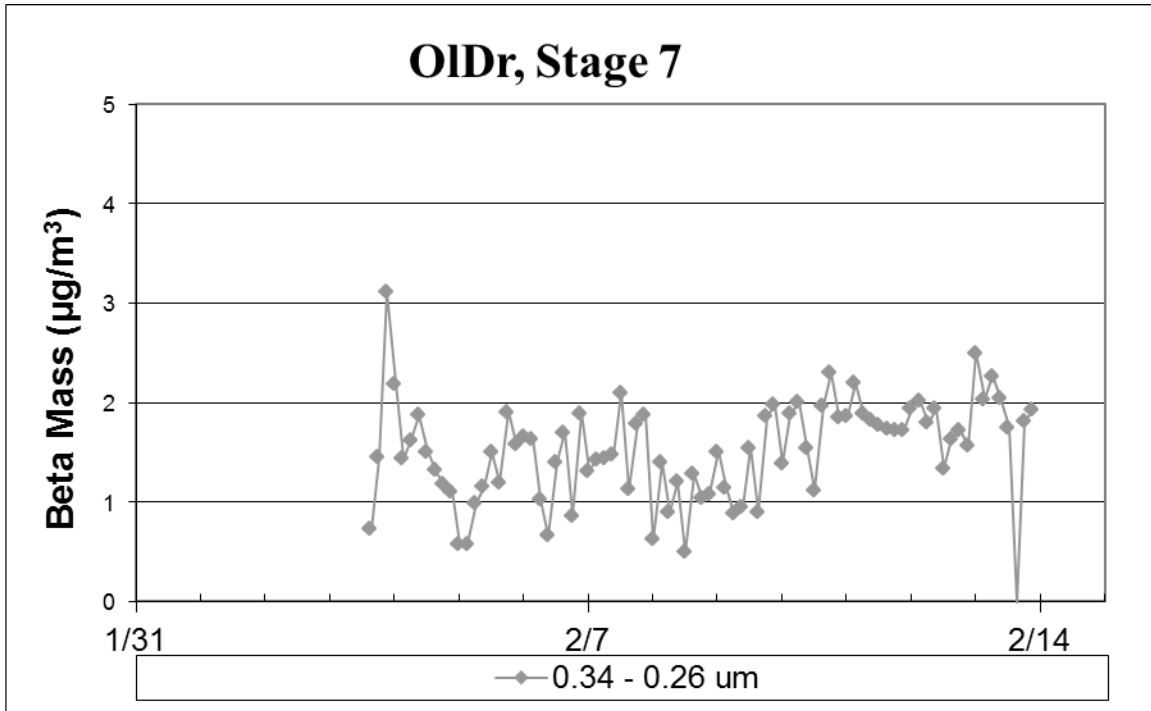


Figure 15. Mass concentration versus date for Stage 7, 0.34 to 0.26 μm size range

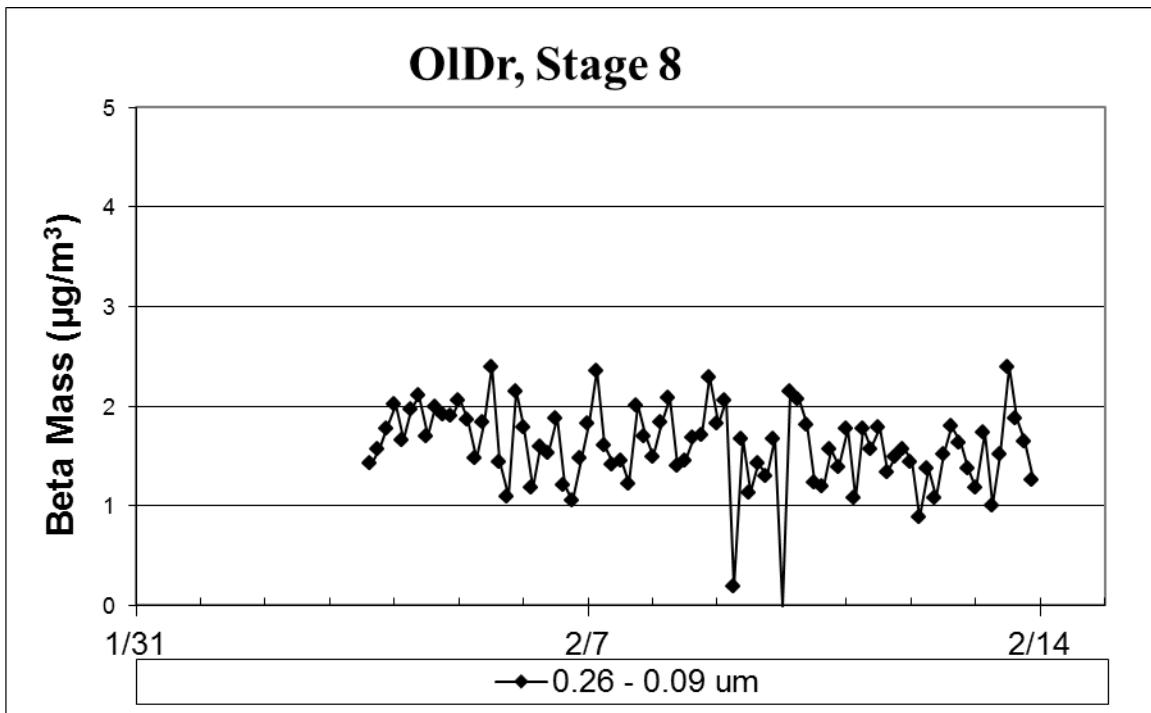


Figure 16. Mass concentration versus date for Stage 8, 0.26 to 0.09 μm size range

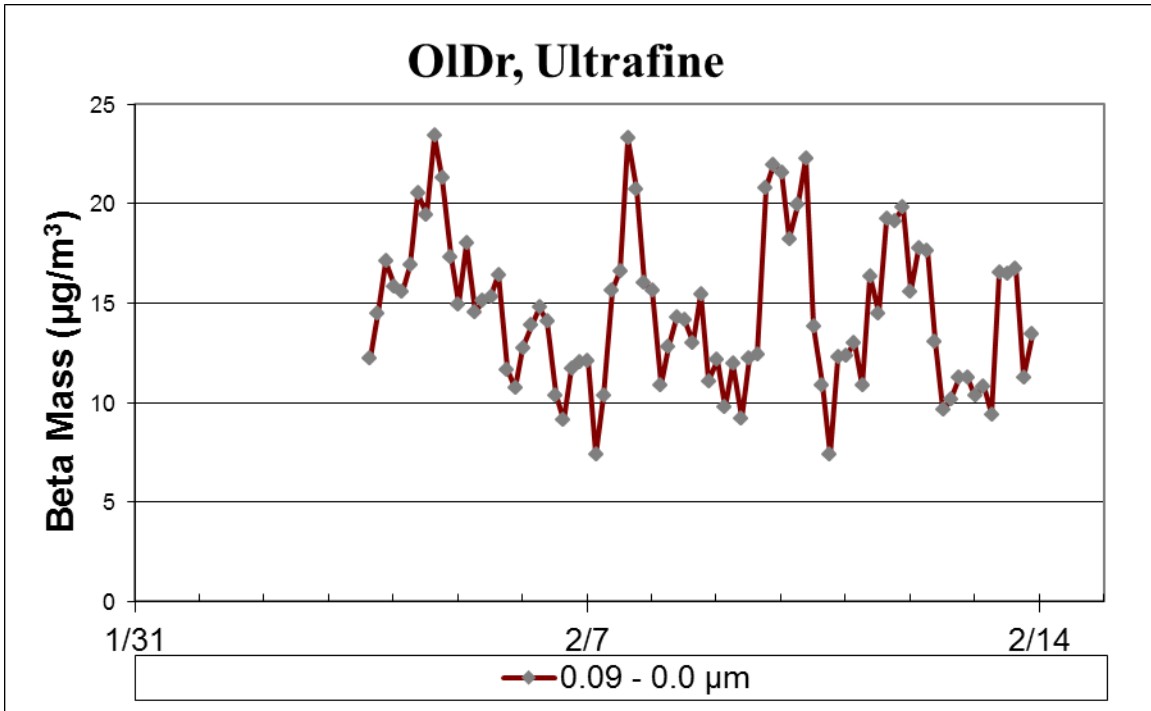


Figure 17. Mass concentration versus date for Stage 9, 0.09 to 0.0 µm size range

Now we look at the standard views for particulate matter PM10 and PM2.5. To that we add the component of mass of particular interest in this study, mass from the ultra-fine stage, 0.09 µm to 0.0 µm, Figure 18. Notice the correlation in time to PM2.5 and PM10, this is certainly the result of such clean conditions overall. It is not unusual for the ultra-fine mass to be a large fraction of PM2.5, but often it does not correlate with PM2.5 in either time or composition. The first test of the 9th stage, in Sacramento in winter 2009, also had large mass ratios, Figure 19.

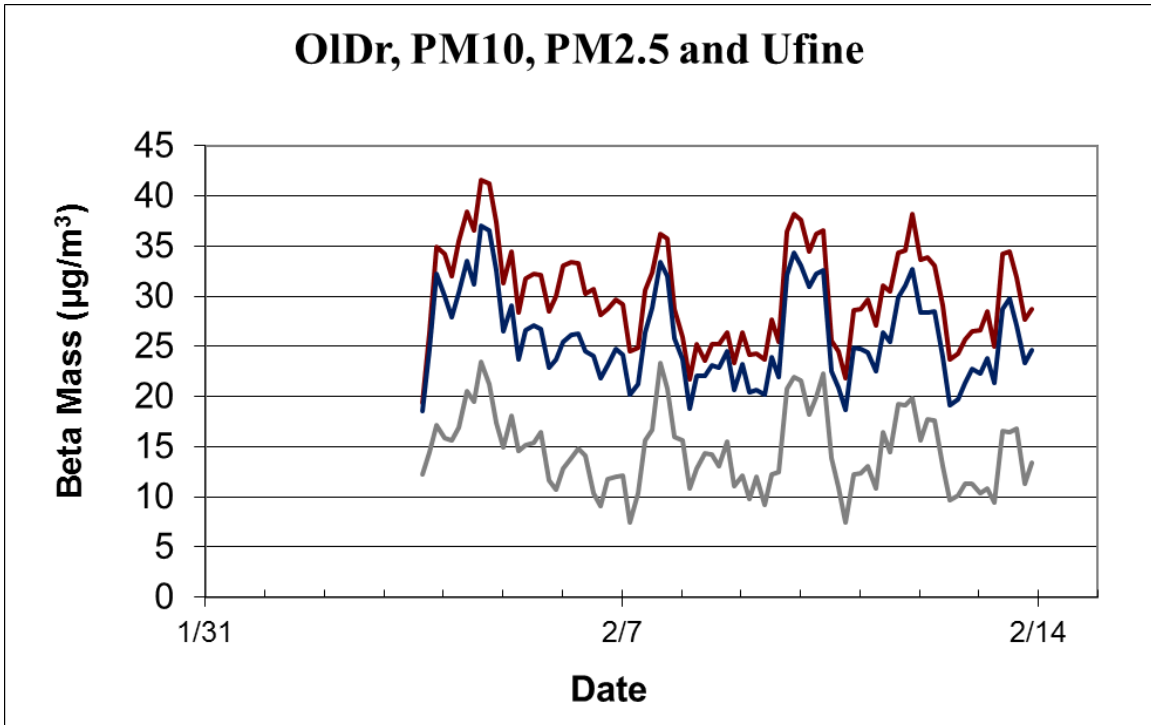


Figure 18. PM10, PM2.5 and Ultra-fine mass

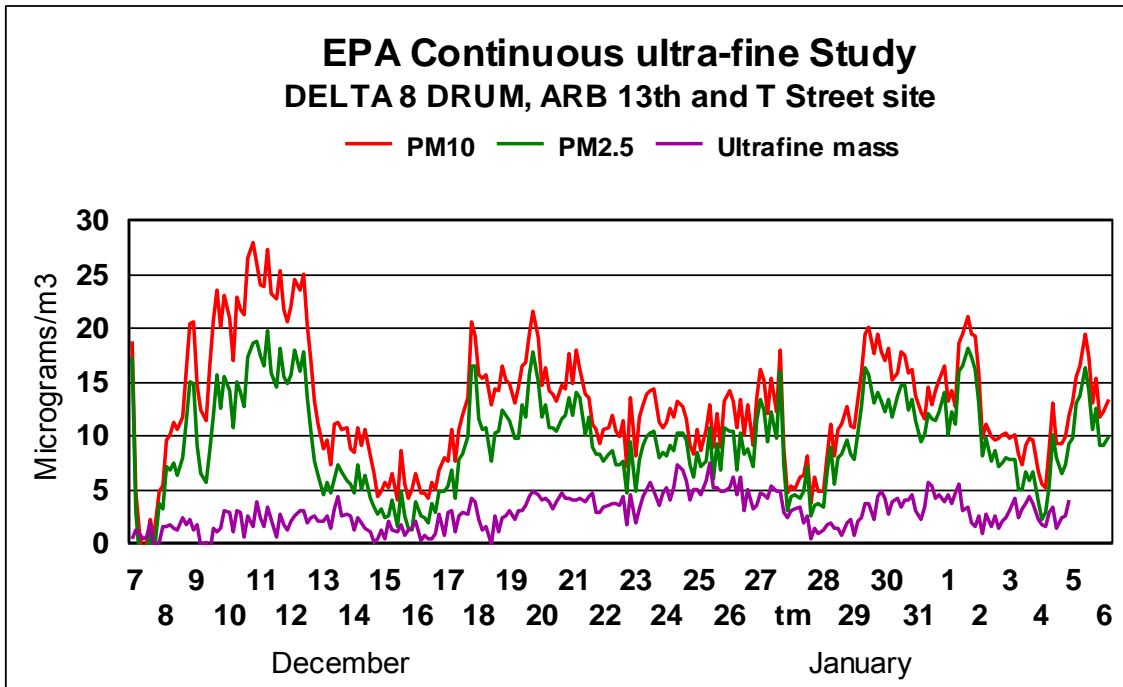


Figure 19. Ultra-fine contribution to mass in early test of ultra-fine system

The total mass concentration also allows for direct calculation of constituent concentrations for every sample. To clarify, each data point, of each size mode represents an independent aerosol sample for which a concentration of a given element (if detected by S-XRF) can be calculated.

For any aerosol sample the size profile is a function of the sources which originally produced the particles and, therefore, a particle size profile is as important in characterizing aerosols as elemental composition. In considering equivalency of two aerosols, it is not enough to say that there is a certain total concentration of a given element in the two samples. Equivalency requires that the aerosols must also show the same concentration of that element within each size mode.

Note:

Included in the digital files (Attachment 7) are the beta mass concentrations for the study representing over 700 individual mass sample concentrations across 9 size modes.

S-XRF Analysis

The DRUM samples were analyzed on the UC Davis DELTA Group beam line 10.3.1 of the Advanced Light Source, Lawrence Berkeley National Laboratory. The sensitivity and quality assurance of S-XRF is shown in Attachment 2, DRUM Quality Assurance Protocols.

The four plots in Figure 20 are examples of elemental concentrations versus time and size (four different size mode plots) from the Olive Drive site. Shown are elements aluminum (Al), silicon (Si), potassium (K), calcium (Ca), iron (Fe) and sulfur (S) which, except for sulfur are generally soil constituents in coarse size modes. Examine the plots going from stage 1 (10.0 to 5.0 μm), stage 2 (5.0 to 2.5 μm), stage 3 (2.5 to 1.15 μm) and stage 4 (1.15 to 0.75 μm).

Notice that the ratio of these elements changes within each graph as a function of time. When you observe a change in ratios between elements within the same size mode that is aerosol of a different character (i.e. different source, different influences). Notice stage 1 and stage 2 look very similar. That results from these elements being representative of soils, and soils dominate these size modes. Sulfur becomes more important by stage four where it corresponds to accumulation mode sulfate particles.

Notice also at a given time across the sequence of four plots, you will observe compositional changes with size. This is the result of particle sizes being tied to the particle formation process. So, in essence looking across size modes inherently is looking across different source signatures.

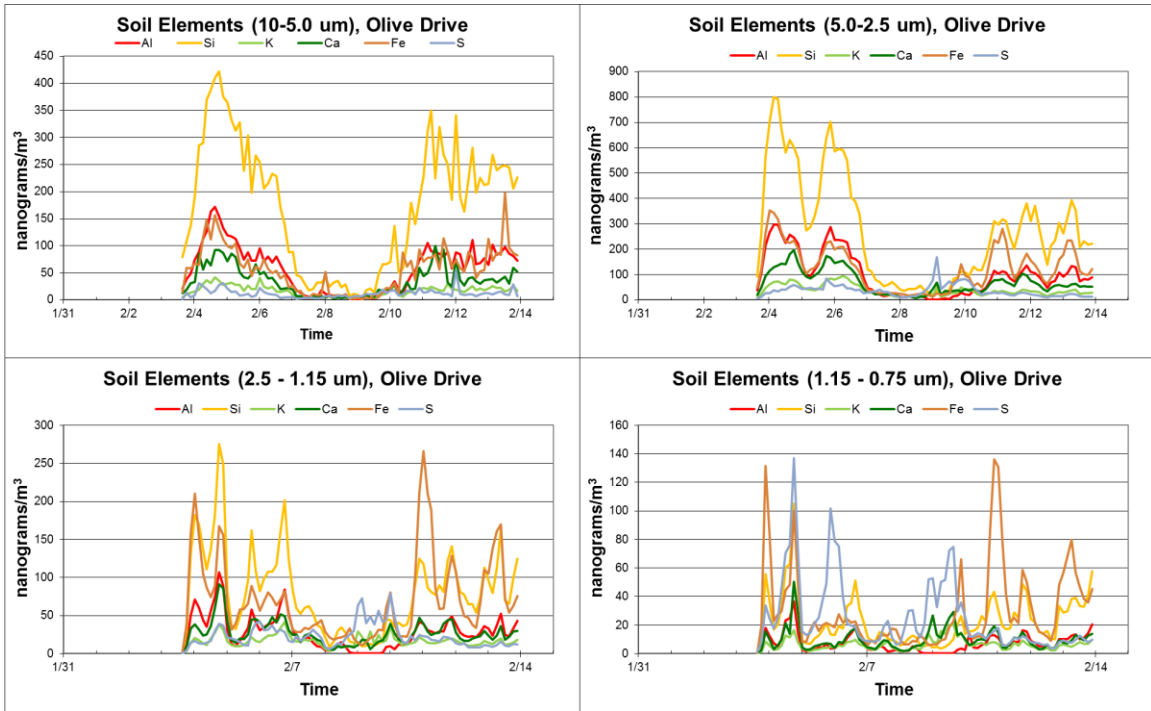


Figure 20. Soil Elements (plus S) versus Time, for four coarsest size modes

Ultra-fine signature in elemental data

Now let's look at the size mode of greatest interest in this study and whether we see evidence of roadway emissions. For that we can look at sulfur in the finest size modes, Figure 21. In stage 8 (0.26 to 0.09 μm) and stage 9 (0.09 to 0.0 μm) sulfur is representative of roadway emissions. Stage 7 (0.34 to 0.09 μm) is often overwhelmed by the influence of accumulation mode sulfates but in this study it tracks well with stage 8 and 9, this is likely due to the overall clean conditions of the study.

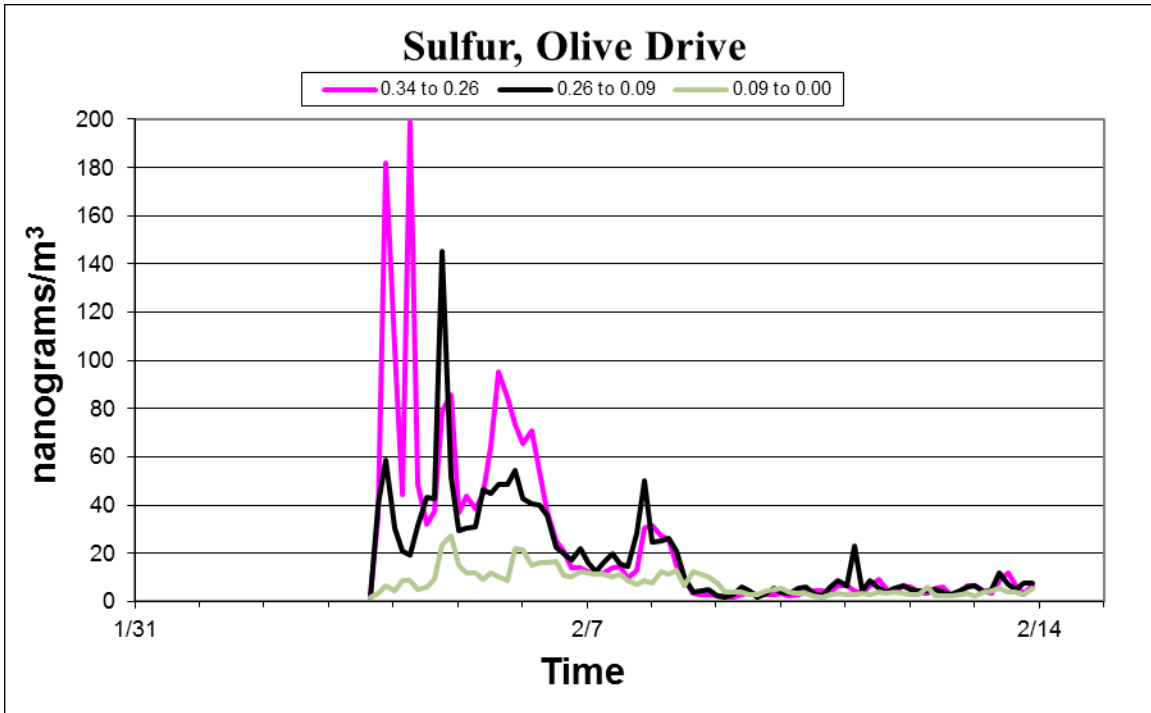


Figure 21. Three finest size modes of sulfur

The presence of sulfur in stage 8 and 9 is an indication that even though conditions were clean overall we can detect ultra-fine signatures associated with roadway traffic.

Ultra-fine elements compared to local heavily traveled secondary road

A recent paper generated a list of observed elements in the ultra-fine mode and measured the concentrations Cahill (2014). Since it is data from Sacramento and includes both spring and winter (inversion) conditions this is a good set of data for comparison. The paper showed meteorological differences between winter inversion conditions and spring conditions profoundly affect the ability to detect potential local emission issues.

Table 5 below compares concentrations for ultra-fine elements from OI Dr to those found downwind of a heavily traveled secondary road in Sacramento, Cahill (2014). The table has the OI Dr concentrations in the center, with the spring and winter data on either side, followed subsequently by the ratio of OI Dr concentrations to each data set.

The paper used a 4 week average, since we did not have that much data; a comparison to one week of data was used. The OI Dr concentrations are based on the first full week of data, starting on the first full day 2/4/2015. The four week average concentrations from the paper were divided by four to get a one week average for comparison.

	Ratio OI Dr to Spring ArMi	Spring ArMi (ng/m ³)	OI Dr (ng/m ³)	Winter ArMi (ng/m ³)	Ratio OI Dr to Winter ArMi
Calcium	9.1	0.41	3.77	2.58	1.46
Sulfur	0.3	32.25	9.72	9.78	0.99
Potassium	1.6	2.90	4.61	5.00	0.92
Chromium	5.5	0.01	0.07	0.21	0.33
Manganese	33.3	0.04	1.33	0.33	4.10
Iron	0.4	1.20	0.50	7.28	0.07
Nickel	4.4	0.08	0.33	2.88	0.11
Copper	3.2	0.10	0.32	2.03	0.16
Zinc	1.6	0.50	0.80	3.20	0.25
Arsenic	-	0.08	nd	0.10	-
Selenium	-	0.06	nd	0.04	-
Bromine	0.5	0.45	0.23	0.29	0.77
Lead	1.2	0.35	0.43	0.41	1.07

Table 5 Comparison of Nishi ultra-fine metals to Watt Avenue study, both winter and spring.

The comparison shows the concentrations of eight out of eleven of these ultra-fine elements seen during the Nishi study are significantly larger than that seen in spring conditions in the Watt Avenue study. In fact five out of eleven are comparable or more than the winter concentrations which were known to be influenced by inversion conditions, which would make the levels higher.

Given the favorable meteorological conditions, i.e. conditions that would tend to reduce measurable freeway emission levels, this result is surprising. It is not surprising that the emissions are generally more than the spring conditions for the Watt avenue study, because this freeway carries more traffic. It is a concern that several species are comparable to the strongly inversion influenced concentrations of the winter data.

If we consider the sum of the elements measured in the ultra-fine mode to that in PM2.5 and PM10 there is a relatively large fraction (Figure 22, percent ultra-fine/PM2.5 dotted line) which comes in the ultra-fine mode when source contributions and meteorology come together.

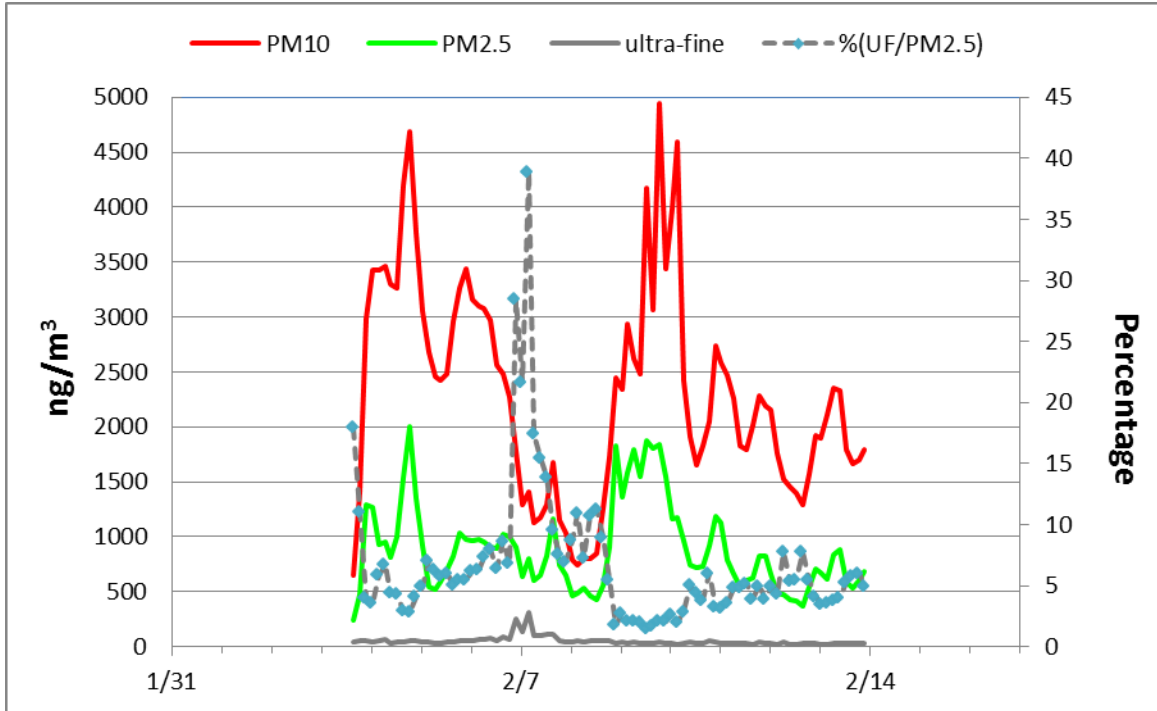


Figure 22. Summed elements for PM10, PM2.5, ultra-fines and the ratio Uf/PM2.5

This peak in ultra-fine elements at 2/7 extends from Friday afternoon to late Saturday. This is the time most likely to be affected by weekend traffic. This is the only time during the study the site was exposed to the weekend traffic and it shows up clearly as the largest concentrations in the ultra-fine signal.

The overall PM values are coming down at the time the ultra-fines are peaking. This is due to the fact that rain does not remove ultra-fines quite as efficiently as larger particles. So the rise while PM is falling is directly consistent with the different particle size behaviors during rain, see Figure 23.

Note that this is a sum of detectable elements only and cannot be compared directly with the mass concentrations. (What is missing primarily is the large mass contributions of lighter elements which make-up organics and oxides, namely hydrogen, carbon, and oxygen.)

Note:

All of the S-XRF concentrations data included in the digital files will be provided in the form of Excel spread sheets, Attachment 7. The elemental concentrations

for the study represent over 13,000 separate elemental concentrations across 9 size modes.

Meteorological Results

Meteorological data was utilized to determine what periods of the deployment might best represent a signature of the freeway at the sampling site. In larger studies, an upwind sampling site can provide actual baseline data for direct comparison (the concentrations of the baseline site can be subtracted from the concentrations of the downwind site). In this study however, we could not have deployed two such sites in the timeframe available, given the short timeline goal. Meteorology is however, always the basis which determines the intervals of greatest interest for characterizations.

Two types of meteorological sources were used to obtain the data to evaluate the likelihood of aerosol impact from the freeway: local weather from the University AP site utilizing weather underground, and NOAA READY HYSPLIT trajectory modeling.

Wind Direction, Wind Speed and Rain

Wind Direction

For favorable detection we are interested in times when the wind direction would bring the air across the freeway directly to the site in the shortest distance. The best wind directions to see an influence would be from the south or southeast as these are most direct (shortest distance) to the measurement site. On the graph this is the green line between 135° and 180°.

However in looking at the site overview, Figure 1, Page 4, air moving in from the southwest around the south to the east also crosses the freeway, this may allow more detection opportunity but with more distance there is more concentration fall-off possible.

In Figure 23 wind direction is represented by a green line, the left vertical axis is in units of degrees which means 0° = North, 90° = East, 180° = South, and 270° = West, then 360° is back to North.

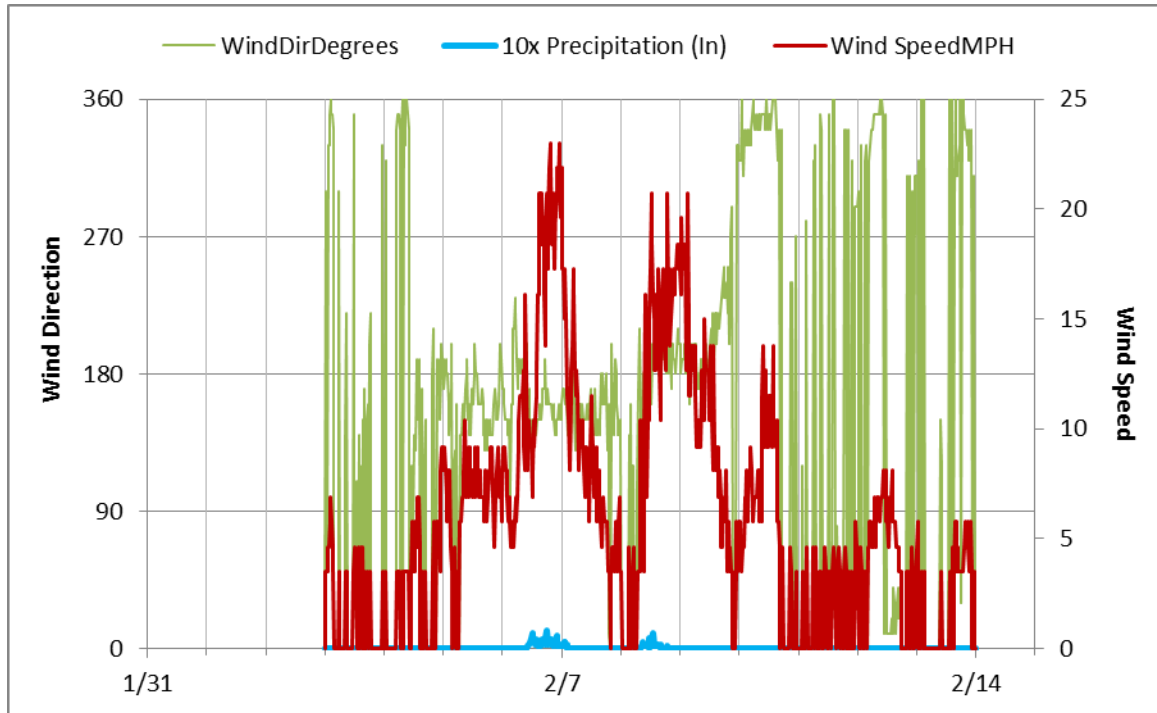


Figure 23. Wind Direction, Wind Speed, and Rain

Wind Speed

Higher wind speed means more dilution of a source by the crossing air volume. If there are no winds the local emission will “pile-up” near the source. Therefore easiest detection will occur if wind velocities are low. Wind Speed is indicated by the red line, Best detection would be the red line below 5 mph (right axis).

Rain

Rain tends to remove particles from the air, so during rain any build-up is reduced and levels will be lower. Larger particles are removed more efficiently than ultra-fine but these concentrations will also be continually reduced.

So considering the meteorology during the study, I can make the following observations: wind was from the south or southwest about 30% of the time. During those times the wind speed was less than 6 mph less than 25% of the time. From early on the 5th to the 10th the slower winds occurred mostly late at night and in the early mornings when traffic impacts are reduced. Optimum exposure for the sampling site to detect freeway emission occurred less than 10% of the time.

Additional Air Quality Data

In order to corroborate whether these aerosol measurements are indicative of relatively clean conditions for most of the deployment interval, I checked the Air Quality Index (AQI) during the time of the study.

The most significant effects from local sources are most easily measured during periods of low air movement and especially our winter inversions as they trap local emissions. If such conditions exist the AQI should also suffer.

The data in Table 6 below were taken from the spare the air web site. These data are from a station identified as “UC Davis campus”. The AQI, in this case is referenced to PM2.5 mass.

http://www.sparetheair.com		
sacramento region		Site
		Davis UCD Campus
		Max PM2.5 AQI
Saturday	1/31/2015	18
Sunday	2/1/2015	91
Monday	2/2/2015	67
Tuesday	2/3/2015	63
Wednesday	2/4/2015	87
Thursday	2/5/2015	63
Friday	2/6/2015	55
Saturday	2/7/2015	39
Sunday	2/8/2015	41
Monday	2/9/2015	38
Tuesday	2/10/2015	26
Wednesday	2/11/2015	35
Thursday	2/12/2015	28
Friday	2/13/2015	48
Saturday	2/14/2015	31
Sunday	2/15/2015	35
Deploy Average =		47.5
Good Rating is 50 or below		
Moderate rating is between 50 and 100		

Table 6. Air Quality Index during OI Dr study from 2/3 to 2/13

The local AQI data shows we had good air during almost the entire study. In fact the highest reading during the study (boxed data) was 87 on the first full day of the study (Wednesday, Feb. 4th). It is also the only reading above the halfway point of the moderate AQI range of 50 to 100. Seven of the 11 days were in the good air range of AQI (0-50), and the average over the study is 47.5, this was “good” air and thus unlikely to have had many inversion impacts.

Thus AQI, overall low mass and elemental concentrations and meteorology suggests, the study interval was not a strong inversion period.

Separation of source interferences using measured air trajectory

While local meteorology is very useful to determine immediate on-to-site wind direction, regional wind patterns are also important to identify potential upwind sources, or establish downwind impacted areas. For this we used HTSPLIT, Draxler (2012), Rolph (2012) and Attachment 6. Trajectories were determined for particles arriving at 7 AM and 5 PM for the days of the study. These times were chosen above other times of day as these represent the likely times of highest traffic impact.

Figure 1 below shows the direction from which the given trajectory moved onto the Nishi property, for each trajectory end time 7 AM and 5 PM, on every day of the study.

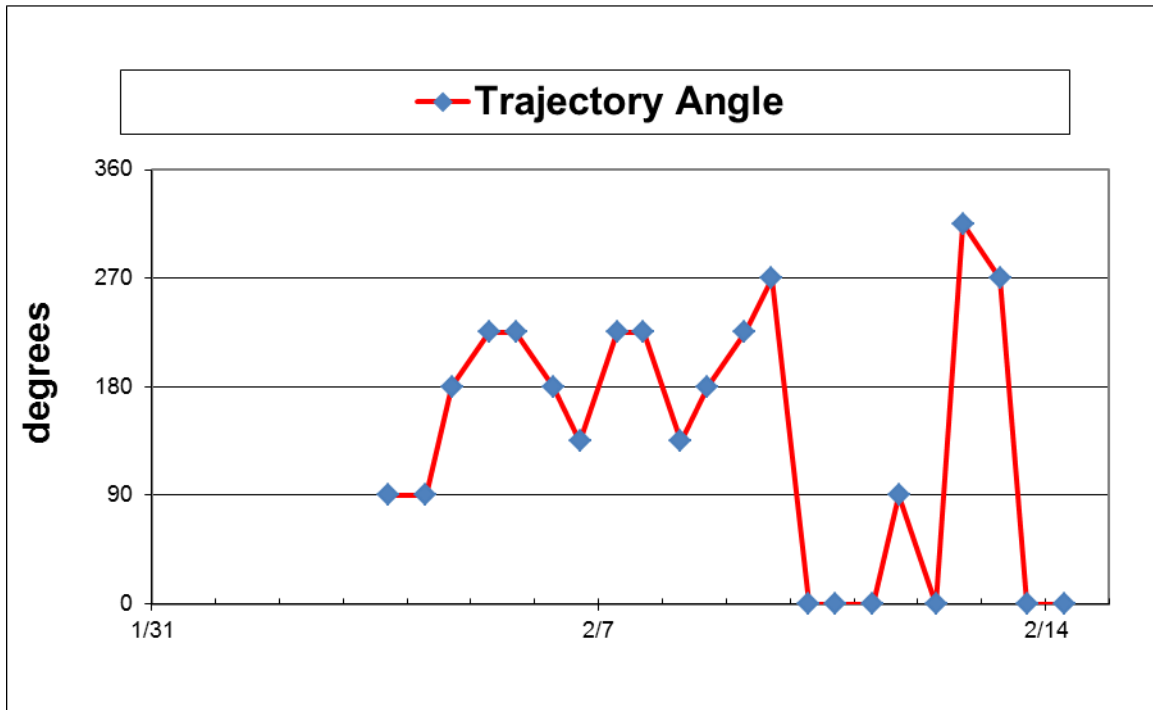


Figure 24 Direction entering Nishi for each modeled HYSPLIT Trajectory

So the positions of the points along the time axis are the times during the highest daily traffic impact (chosen as 7AM and 5PM), and the vertical axis is the angle the trajectory enters the property at that time. The angles corresponding to the most direct exposure are 180° and 135°. All of these occurred during the first six days of the study. Even further, considering the broader exposure angles 90° to 225°, all but one occurs within the first 6 days.

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The S-XRF elemental analysis was performed at the Advanced Light Source, Lawrence Berkeley National Laboratory by Dr. Yongjing Zhao, standards calibrations and data reduction also by Dr. Zhao, University of California, Davis.

All field preparation, sample preparation, beta mass attenuation analysis, remaining elemental data analysis, and report generation and project management performed by Dr. David E. Barnes.

SIGNATURE

David E. Barnes
DELTA Group, Project Scientist
University of California, Davis

IX. REFERENCES

Cahill, T.A., David E. Barnes, Nicholas J. Spada, Seasonal variability of ultra-fine metals downwind of a heavily traveled secondary road, *Atmospheric Environment* 94, 173 – 179 (2014), doi:10.1016/j.atmosenv.2014.05.025 (PDF in soft copy)

Cahill, Thomas A. Comments on surface coatings for lundgren-type impactors. *Aerosol Measurement*. Dale A. Lundgren, Editor. University Presses of Florida, Pp. 131-134 (1979).

Cahill, T. A., David E. Barnes, Earl Withycombe, and Mitchell Watnik, Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 2: 1974 – 1991, *Aerosol Science and Technology* 45, 1135-1142 (2011a).

Cahill, T. A., David E. Barnes, Nicholas J. Spada, Jonathan A. Lawton, and Thomas M. Cahill, Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003 – 2007, *Aerosol Science and Technology* 45, 1125-1134 (2011b).

Draxler, R.R. and Rolph, G.D., 2012. HYSPLIT (HYbrid Single-Particle Lagrangian Integrated Trajectory) Model access via NOAA ARL READY Website (<http://ready.arl.noaa.gov/HYSPLIT.php>). NOAA Air Resources Laboratory, Silver Spring, MD.

Hu S., Fruin S., Kozawa K., Mara S., Paulson S., Winer A.M., A wide area of air pollutant impact downwind of a freeway during pre-sunrise hours. *Atmospheric Environment*; 43:2541–2549, (2009).

Lippmann, Morton, Semi-continuous speciation analysis for ambient air particulate matter: an urgent need for health effects studies. *J. Expo. Sci. Epidemiol. Stud.* 19, 235-247 (2009)

Raabe, Otto G., David A. Braaten, Richard L. Axelbaum, Stephen V. Teague, and Thomas A. Cahill. Calibration Studies of the DRUM Impactor. *Journal of Aerosol Science.* 19.2:183-195 (1988).

Rolph, G.D., 2012. Real-time Environmental Applications and Display sYstem (READY) Website (<http://ready.arl.noaa.gov>). NOAA Air Resources Laboratory, Silver Spring, MD.

Seinfeld, J.H, and Pandis, S.N., *Atmospheric Chemistry and Physics: From Air Pollution to Climate Change*, Wiley Interscience (1998).

Wesolowski, J.J., W. John, W. Devor, T.A. Cahill, P.J. Feeney, G. Wolfe, R. Flocchini. Collection surfaces of cascade impactors. In *X-ray fluorescence*

analysis of environmental samples. Dzubay, T., Editor. Ann Arbor Science, Pp. 121-130 (1978).

Attachment 1: Curriculum Vita for David E. Barnes, Ph.D.

Project Scientist/Manager, DELTA Group,
One Shields Ave, University of California, Davis, CA 95616
E-mail: debarnes@ucdavis.edu

PROFESSIONAL PREPARATION

1993 **Ph.D. in Physics**, University of California, Davis
1987 **M.S. in Physics**, University of California, Davis
1982 **B.S. in Physics, B.S. in Oceanography**, Humboldt State University, Arcata, Calif.

PROFESSIONAL EXPERIENCE

2007-June 2014 Assistant Project Scientist III - V, JMIE, University of California, Davis
2005-2007 Post-Doc/Researcher/Project Manager, CEMS Dept., UC Davis
2003-2004 Researcher/Lecturer, Physics Dept., University of California, Davis
2000-2002 Process Development Engineer, CSpeed Corp., Santa Clara, CA
1998-2000 Microfabrication Process Engineer, Consulting, Davis, CA
1998 Sputter Process Engineer, HMT Technology, Fremont, CA
1997 Senior Advisory Yield Engineer, Seagate Recording Media, Milpitas, CA
1995-1997 Manager, Microfabrication Facility, ECE Dept., UC Davis, CA
1988-1995 Lecturer, Researcher, Research Assistant, Physics Dept., UC Davis

AEROSOLS RESEARCH STUDIES (DELTA GROUP)

- A. I have been Projects Manager for all DELTA Group programs, 2005 – 2014. I also have been a Research Scientist with 8 peer reviewed publications and 15 research projects, including development of a new S-XRF beam line at SSRL, SLAC, Stanford. Below is a partial list of the funded studies that I have managed, including being primarily responsible for all field and day-to-day activities for these contracts, with T. A. Cahill, P.I. or co-P.I. with Prof. Jim Shackelford (Chem. Eng./MS) or Geoff Schladow (TERC).
- 1) Aerosols on the Greenland Ice Cap, Summit site, NSF Polar , 2003 – 14, 185 K
 - 2) Continuous measurement of ultra-fine aerosols, near roadways and Indoor/Outdoor
 - a) (OAPQS/ORD, Additional funding analysis/publication 2011 – 13, \$20K
 - b) (OAPQS/ORD, Detroit, NEXUS study) EPA 2010 – 11, \$25 K
 - c) (OAPQS/ORD, Cleveland study) EPA 2009 – 10, \$24.4 K
 - 3) Design and Development of Extension of S-XRF Analysis capabilities for Improved Aerosol Characterization Technology, UAF 2009 – 11, \$20K
 - 4) Antioch Dunes National Wildlife Refuge, Study of Aerosols to access Impacts on endangered species, Costs shared analysis, personnel 2012 – 13, few K
 - 5) Deposition of toxic aerosols in California CA DTSC 2009 – 12, \$350 K
 - a) Aerosols from a Wilmington car shredder 2009 – 11
 - b) Aerosols from the BNSF rail yard, San Bernardino 2010 – 11
 - c) Aerosols near the Exide battery recycling plant 2010 – 12
 - d) Aerosols impacting salt ponds in Redwood city 2011 – 13
 - 6) Design and Development of Better Aerosol Characterization Technology, UAF, 2009 – 11, \$200⁺K
 - 7) Field Sampling Support And Mass/Chemical Analyses Using DRUM Technology
 - a) AK – Dept. of Environmental Conservation, subcontract through University of Alaska, Fairbanks, sampling related to Regional Haze Rule 2009 – 2010, \$150K

- 8) Effect of off-road vehicles on PM₁₀, Oceano Dunes, San Luis Obispo, APCD, 2008-2010, \$118 K
- 9) Aerosol Research Studies and Educational Programs with Breathe Calif.
 - a) Smoke at Del Paso Manor SMAQMD, BCSET 2009 – 2010, \$26 K
 - b) Impact of near roadway aerosols SMAQMD, BCSET 2007 – 2009, \$50 K
 - c) Comparison of DRUM sampler with ARB FRMs, Breathe California/ARB, volunteer effort, 2007 – 2008
- 10) Aerosol Measurements for El Paso Asthma study, NIH 2008 – 2011. \$52 K
- 11) Aerosols from the Roseville rail yard, BCSET, EPA Region IX, 2005 – 2008, \$26 K
- 12) Central Valley aerosols and ischemic heart disease, BCSET, Legacy Law Group, 2008 – 2009, \$26K
- 13) Fine particulate pollution at Lake Tahoe, TERC, EPA Region IX, 2006 – 2009, \$180
- 14) Aerosols before and after Ice-Slicer™ Applications to Highway 50 at South Lake Tahoe, Cal Trans Storm Water Studies, 2005 – 2006, 73 K

Related Peer Reviewed Articles

T.A. Cahill, David E. Barnes, N. J. Spada, J. A. Lawton, and T. M. Cahill, **Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003 – 2007**, Aerosol Science and Technology, Special Issue on Air Pollution and Health: Bridging the Gap from Sources to Health Outcomes, Vol. 45, No. 9, Sept. 2011

T. A. Cahill , David E. Barnes, E. Withycombe, and M. Watnik , **Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 2: 1974 – 1991** , Aerosol Science and Technology, Special Issue on Air Pollution and Health, Vol. 45, No. 9, Sept. 2011

T. A. Cahill, T. M. Cahill, David E. Barnes, N. J. Spada and R. Miller, **Inorganic and organic aerosols downwind of California's Roseville rail yard**, Aerosol Science and Technology, Special Issue on Air Pollution and Health, Vol. 45, No. 9, Sept. 2011

C. F. Cahill, P. G. Rinkleff, J. Dehn, P. W. Webley, T. A. Cahill, David E. Barnes, **Aerosol measurements from a recent Alaskan volcanic eruption: Implications for volcanic ash transport predictions**, Journal of Volcanology and Geothermal Research 198 (2010) 76–80,

R. VanCuren, T. A. Cahill, J. Burkhart, David E. Barnes, Y. Zhao, K. Perry, S. Cliff, and J. McConnell. **Aerosols and their sources at Summit Greenland – First results of continuous size- and time-resolved sampling**. Atmospheric Environment, 52: 82-97
doi:10.1016/j.atmosenv.2011.10.047

Peter Jenniskens (NASA), ...Thomas A. Cahill, David E. Barnes, Jonathan Lawton (UCDavis), ... and 66 additional authors, **Radar enabled recovery of Sutter's Mill Meteorite, a unique carbonaceous chondrite regolith breccia**, Science Magazine 338:1583-1587 (2012) doi: 10.1126/science.1227163, (10/2012)

S.R. Barberie, T.A. Cahill, C.F. Cahill, T.M. Cahill, C.R. Iceman, D.E. Barnes. **UC Davis XIPLINE ("zipline") end-station at the Stanford Synchrotron Radiation Lightsource: Development and experimental results**. Nucl. Instrum. Meth. Phys. Res. A: Accelerators, Spectrometers, Detectors and Associated Equipment 729:930-933 (2013) doi:10.1016/j.nima.2013.08.043

T. A. Cahill , David E. Barnes, N. J. Spada, **Seasonal variability of ultra-fine metals downwind of a heavily traveled secondary road**, Atmospheric Environment, 94 (2014)173-179, doi:10.1016/j.atmosenv.2014.05.025

Attachment 2: Overview of DRUM Quality Assurance Protocols

Summary of Quality Control and Quality Assurance procedures and validations
Validations in peer reviewed literature

Background:

The University of California, Davis designed and built rotating drum impactors, with the UC Davis 8 DRUM the dominant design. This sampler uses the principle of Lundgren et al 1967 to impact aerosols onto sticky surfaces in 8 size modes, selected aerodynamically by a series of smaller and smaller slot orifices. The impaction surfaces are slowly rotating drums, allowing collection of aerosols continuously over extended periods, typically 5 weeks. This allows use of focused beam analytical techniques to analyze for mass, optical behavior, and elemental composition with typical time resolution from 1 hr to 3 hr. Thus, the 8 DRUM collects typically 2,500 aerosol samples in a 5 week period, at the rate of 48 samples /day (3 hr time resolution, 8 size cuts). These can be directly compared with meteorological information source activities, etc. to identify sources in a way impossible for a 24 hr averaging Federal Reference Method (FRM) filter.

The 8 DRUM is a diagnostic tool and not meant to be a replacement for FRM sampling . However, it is important that data from the 8 DRUM can be compared to FRM data to obtain maximum relevance to regulatory needs. In this summary, we will provide some of the tests that support the accuracy and precision of 8 DRUM sampling and analysis. These will be presented in several categories:

1. Information from peer reviewed publications in the refereed literature,
 - a. Sample collection and analysis for mass
 - i. Sample analysis and analysis for mass
 - ii. Elements by XRF and S-XRF analysis
2. Data required by the US EPA in Qapp/QC documentation required for EPA-funded research studies, and
3. Data from legal actions vetted by depositions and discovery actions.

i. DRUM sizing

An extremely important point is that Marple (1974) established analytical solutions for the size cuts of cascade impactors for both jetted and slotted designs. These were extensively validated at the U. Minnesota (Rao, thesis 1979 among others) which means that unlike many other types of samplers (MOUDI, ..) any validations are merely confirmations of a validated theory. After the DRUM sampler was invented, the size cuts in sample collection were independently validated in a peer reviewed paper Raabe et al (1988).

Raabe, Otto G., David A. Braaten, Richard L. Axelbaum, Stephen V. Teague, and Thomas A. Cahill. **Calibration Studies of the DRUM Impactor.** *Journal of Aerosol Science.* 19.2:183-195 (1988).

Two different methods were used to establish the cut points. The results are given below in Table 1 Recently, the initial cut point was validated against an EPA FRM PM₁₀ inlet during and extensively and formally peer reviewed EPA/SLOAPCVD funded study of dust at Oceano

Dunes , and the final two cut points were re-confirmed by the University of Alaska, summer, 2008.

Table 7 Parameters of the DELTA DRUM Slotted Drum Impactor

The width of the mass at full width, half maximum, W_{mass} , represents the measured footprint of a non-rotating DRUM, accurate to about $\pm 15\%$. This results in a resolution in time using a 42 day rotation period (4 mm/day) given in T (hr). The after filter was not used in this work.

Stage No.	W (s) cm	L Cm	S cm	P out kPa	Re	u out m/s	ECD ae, μm	W (d) μm	ΔTime hr
1	0.360	0.6	1.44	101.3	2231	7.7	5.0	750	4.5
2	0.163	0.6	0.65	101.1	2810	17.1	2.5	500	3.0
3	0.073	0.6	0.29	100.2	3195	38.3	1.15	300	1.8
4	0.049	0.6	0.20	98.3	3331	58.3	0.75	265	1.6
5	0.038	0.6	0.15	94.9	3416	77.4	0.56	240	1.4
6	0.026	0.6	0.11	86.8	3575	122.2	0.34	245	1.8
7	0.024	0.6	0.10	75.1	3692	156.0	0.26	180	0.9
8	0.021	0.6	0.10	39.7	4595	315.9	0.09	175	0.9
filter									

This impactor (along with an IMPROVED DRUM) was deployed in the EPA/NPS IMPROVE BRAVO study in Big Bend NP, July - October 1999, and has been in almost continuous use in scores of EPA and NSF supported studies since that time. The time resolution was obtained by the size of the analytical beams used, and could be low as 1 hr when analyzed at the synchrotron x-ray fluorescence microprobe of the Advanced Light Source, Lawrence Berkley NL. Peer reviewed papers based upon this sampler, together with its analytical use, is summarized in Appendix C.

a. Sample collection versus FRM $\text{PM}_{2.5}$ and analysis for mass

Since the FRM standard is based on mass, the DELTA Group has developed mass analysis based on soft beta ray transmission through DRUM strips and filters. The 67 keV betas of Ni^{63} are a good match to the $500 \mu\text{g}/\text{cm}^2$ Mylar® drum strips. The beta takes measurements every 0.5 mm, resulting in a time resolution of 3 hr when the DRUM is used in a continuous 5 week field study.

An example of the precision achieved for mass is shown in an inter-comparisons done as part of an extensive set of quality assurance tests under contract with the US EPA.

well superior to the EPA criterion of $\pm 15\%$. These results were peer reviewed and included in two papers in an EPA sponsored Special Issue of Aerosol Science and Technology.

Thomas A. Cahill, David E. Barnes, Nicholas J. Spada, Jonathan A. Lawton, and Thomas M. Cahill, Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003 – 2007, *Aerosol Science and Technology* 45, 1125-1134 (2011)

Thomas A. Cahill, Thomas M. Cahill, David E. Barnes, Nicholas J. Spada and Roger Miller, Inorganic and organic aerosols downwind of California’s Roseville Railyard, *Aerosol Science and Technology* 45, 1049-1059 (2011)

b. Elements by XRF and S-XRF analysis

Although the FRM standard is based on mass, two major EPA-sponsored ambient aerosol programs also add elemental and chemical analysis, the non-urban IMPROVE program (which I started and ran 1977-1997), and the similar but urban Species Trends Network (STN). Both rely on protocols using x-ray analysis.

Our XRF protocols use NIST FRMs 1832 and 1833 (which we helped develop) and 65 thin elemental standards from Micromatter Corp., Seattle, WA. We participated in inter-comparisons with IMPROVE and major commercial and university laboratories, (below).

Table 2 Summary of intercomparisons, DELTA S-XRF versus other laboratories

Study and date	Methods	Average ratio, Al to Fe	Std. dev.	Average ratio, Cu to Pb	Std. dev.
BRAVO, 1999	PIXE vs S-XRF	0.99	0.04		
BRAVO, 1999	CNL XRF vs S-XRF			1.24	0.14
FACES, 2001	ARB XRF vs S-XRF	0.93	0.21	1.02	0.08
ARB LTAD 2005	DRI XRF vs S-XRF	1.037	0.085	0.907	0.009
All prior studies	Average	0.984	0.15	0.977	0.115

A recent inter-comparison is in a Table 7, in the Science issue of Dec 21, 2012, showing excellent agreement with XRF and ICP/MS laboratories, (1.005 ± 0.30) even to the ppb level. (Appendix B) For additional details, In Appendix C one can requisition the official US EPA QAPP/QC documentation supporting a recent study in Cleveland, Ohio.

c. Validation, mass versus sum of species

A key validation of any technique is comparison of diverse methods. As part of the side by side study with the CA ARB at 13th and T Street, the ultra-fine fraction was analyzed for mass (gravimetrically by weighing the filters) and then compared to the sum of all species. The organic matter was estimated using the technique developed by the DELTA Group and

extensively used in the IMPROVE Program, including 10s of thousands of comparisons, organic matter by combustion (DRI) versus organic matter by hydrogen.

Table 3 Mass closure for ultra-fine mass, $D_p < 0.09 \mu\text{m}$. Note the dominance of the non-soil iron, nickel, copper, and zinc in the transition metals.

Mass	ng/m ³		Minor ultra-fine species	ng/m ³
Mass (gravimetric)	2,040 ± 200		Phosphorus	2.4 ± 0.2
Mass (reconstructed)	2,150 ± 350		Vanadium	0.15 ± 0.01
			Chromium	0.45 ± 0.04
Major ultra-fine species			Iron (non-soil)	38.0 ± 6
Organic mass (OMH)	1,720 ± 200		Nickel	3.5 ± 0.4
Ammonium Sulfate	340 ± 150		Copper	8.3 ± 0.8
Salt	40 ± 4		Zinc	11.5 ± 1.2
Soil (IMPROVE)	48 ± 5		Arsenic	0.6 ± 0.2
K non	53 ± 5		Selenium	0.3 ± 0.1
Metals (- iron)	0.035 ± 0.002		Bromine	3.7 ± 0.4
			Lead	4 ± 0.4

Cahill, T.A., R.A. Eldred, N. Motallebi, and W.C. Malm. **Indirect measurement of hydrocarbon aerosols across the United States by nonsulfate hydrogen-remaining gravimetric mass correlations.** *Aerosol Science and Technology*. 10:421-429 (1989).

Quality Control and Quality Assurance validations

The Quality Control and Quality Assurance protocols set the standard for all such groups around the world, as evidences by peer reviewed publications based on the techniques of the DELTA Group.

Overviews of aerosol compositional analysis:

Cahill, Thomas A. and Paul Wakabayashi. **Compositional analysis of size-segregated aerosol samples.** Chapter in the ACS book *Measurement Challenges in Atmospheric Chemistry*. Leonard Newman, Editor. Chapter 7, Pp. 211-228 (1993).

Cahill, Thomas A. **Compositional Analysis of Atmospheric Aerosols.** 1995 *Particle-Induced X-Ray Emission Spectrometry*, Edited by Sven A. E. Johansson, John L. Campbell, and Klas G. Malmqvist. *Chemical Analysis Series*, Vol. 133, pp. 237-311. John Wiley & Sons, Inc.

Publications using S-XRF (early - SSRL)

Cahill, Thomas A., Kent Wilkinson, and Russ Schnell. **Compositional analyses of size-resolved aerosol samples taken from aircraft downwind of Kuwait, Spring, 1991.** *Journal of Geophysical Research*. Vol. 97, No. D13, Paper no. 92JD01373, Pp. 14513-14520, September 20 (1992).

Cahill, Thomas A., Kent Wilkinson, Paul Wakabayashi, Robert Eldred, and William Malm. **Observation of oil smoke in the upper troposphere at Mauna Loa Observatory - a middle eastern source?** *CMDL No. 20 Summary Report 1991* Eldon E. Ferguson, Editor. Boulder, CO. pp. 89-90, December (1992).

Reid, Jeffrey S., Thomas A. Cahill, and Micheal R. Dunlap. **Geometric/aerodynamic equivalent diameter ratios of ash aggregate aerosols collected in burning Kuwaiti well fields.** 1994 *Atmospheric Environment*, Vol.28, No. 13, pp. 2227-2234

Reid, J.S., T.A. Cahill, E.A. Gearhart, R.G. Flocchini, J.S. Schweitzer, and C.A. Peterson. **Elemental analysis of Kuwaiti petroleum and combustion products.** *Journal of Nuclear Geophysics*. Vol. 7, No. 1, Pp. 81-86 (1993).

Publications using S-XRF (ALS)

- 14-1 Cahill, Thomas A., , David E. Barnes, Nicholas J. Spada, **Seasonal variability of ultra-fine metals downwind of a heavily traveled secondary road,** , *Atmospheric Environment* 94, 173 – 179 (2014)
- 13-2 Baldauf, Richard, Greg McPherson, Linda Wheaton, Max Zhabg, Tom Cahill, Chad Bailey, Christina Hemphill-Fuller, Earl Withycombe, and Kori Titus, **Integrating Vegetation and Green Infrastructure into Sustainable Transportation Planning,** *Transportation Research Bulletin*, National Academy of Sciences (2013)
- 13-1 Cahill, Thomas M., and Thomas A. Cahill. **Seasonal variability of particle-associated organic compounds near a heavily traveled secondary road.** *Aerosol Science and Technology* (2013) doi: 10.1080/02786826.2013.857757
- 12-2 VanCuren, Richard, Thomas Cahill, John Burkhart, David Barnes, Yongjing Zhao, Kevin Perry, Steven Cliff, and Joe McConnell, **Aerosols and their sources at Summit Greenland – First results of continuous size- and time-resolved sampling.** *Atmospheric Environment*, 52:82-97 (2012) doi:10.1016/j.atmosenv.2011.10.047
- 11-1 Thomas A. Cahill, David E. Barnes, Earl Withycombe, and Mitchell Watnik, **Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 2: 1974 – 1991,** *Aerosol Science and Technology* 45, 1135-1142 (2011)
- 11.2 Thomas A. Cahill, David E. Barnes, Nicholas J. Spada, Jonathan A. Lawton, and Thomas M. Cahill , **Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003 – 2007,** *Aerosol Science and Technology* 45, 1125-1134 (2011)
- 11.3 Thomas A. Cahill, Thomas M. Cahill, David E. Barnes, Nicholas J. Spada, and Roger Miller, **Inorganic and organic aerosols downwind of California’s Roseville Railyard,** *Aerosol Science and Technology* 45, 1049-1059 (2011)
- 10-2 Cahill, Catherine F., Peter G. Rinkleff, Jonathan Dehn, Peter V. Webley, Thomas A. Cahill, and David E. Barnes, **Aerosol measurements from a recent Alaskan volcanic eruption: implications for ash transport predictions,** *J. Volcanology and Geothermal Research* 198, 76 - 80 (2010)
- 07-1 Emma Pere-Trepat, Eugene Kim, Pentti Taatero, and Philp k. Hopke, **Source Apportionment of time and size resolved ambient particulate matter measured with a rotating DRUM impactor,** *Atmospheric Environ.* 41: 5921–5933 (2007).

- 05-1 Perry, Kevin; Cliff, Steven S.; Jimenez-Cruz, Michael P.; **Evidence for hygroscopic mineral dust particles from the Intercontinental Transport and Chemical Transformation Experiment.** *Journal of Geophysical Research*, Vol. 109, 2004.
- 04-1 Thomas A. Cahill, Steven S. Cliff, Michael Jimenez-Cruz, James F. Shackelford¹, Michael Dunlap¹, Michael Meier¹, Peter B. Kelly², Sarah Riddle², Jodye Selco^{3,*}, Graham Bench⁴, Patrick Grant⁴, Dawn Ueda⁴, Kevin D. Perry⁵, and Robert Leifer⁶, **Analysis of Aerosols from the World Trade center Collapse Site, New York, October 2 to October 30, 2001.** *Aerosol Science and Technology* 38; 165–183 (2004)
- 04-2 Han, J.S, K.J. Moon, J.Y. Ahn, Y.D. Hong, Y.J Kim, S. Y. Rhu, Steven S. Cliff, and Thomas A. Cahill, **Characteristics of Ion Components and Trace Elements of Fine Particles at Gosan, Korea in Spring Time from 2002 to 2002,** *Environmental Monitoring and Assessment* 00: 1-21, 2003
- 04-3 Seinfeld, J.H., Carmichael, G.R., Arimoto, R, Conant, W. C., Brechtel, F. J., Bates, T. S., Cahill, T. A., Clarke, A.D., Flatau, B.J., Huebert, B.J., Kim, J., Markowicz, K.M., Masonis, S.J., Quinn, P.K., Russell, L.M., Russell, P.B., Shimizu, A., Shinozuka, Y., Song, C.H., Tang, Y., Uno, I, Vogelmann, A.M., Weber, R.J., Woo, J-H., Zhang, Y. **ACE-Asia: Regional Climatic and Atmospheric Chemical Effects of Asian Dust and Pollution,** *Bulletin American Meteorological Society* 85 (3): 367+ MARCH 2004
- 04-4 Cahill, T. A., Cliff, S. S., Shackelford, J. F., Meier, M., Perry, K. D., Bench, G., and Leifer, R. **Very Fine Aerosols from the World Trade Center Collapse Piles: Anaerobic Incineration?** *Advances in Chemistry* (2004)
- 03-1 Cahill, C.F. **Asian Aerosol Transport to Alaska during ACE-Asia.** *J. Geophys. Res.* *JGR Manuscript Number: 2002JD003271*
- 00-1 Miller, Alan E. and Thomas A. Cahill. **Size and compositional analyses of biologically active aerosols from a CO₂ and diode laser plume.** 2000 *International Journal of PIXE.* Vol. 9, Nos. 3 & 4.5

Publications using S-XRF (recent - SSRL)

- 14.1 Sean R. Barberie, Christopher R. Iceman, Catherine F. Cahill, and Thomas M. Cahill, **Evaluation of Different Synchrotron Beamline Configurations for S X-ray Fluorescence Analysis of Environmental Samples** , in press, *Analytical Chemistry* (2014)
- 13.3 S.R. Barberie, T.A. Cahill, C.F. Cahill, T.M. Cahill, C.R. Iceman, D.E. Barnes. **UC Davis XIPLINE ("zipline") end-station at the Stanford Synchrotron Radiation Lightsource: Development and experimental results.** *Nucl. Instrum. Meth. Phys. Res. A: Accelerators, Spectrometers, Detectors and Associated Equipment* 729:930-933 (2013) oi:10.1016/j. nima. 2013.08.043

- 12-1 Peter Jenniskens, Marc D. Fries, Qing-Zhu Yin, Michael Zolensky, Alexander N. Krot, Scott A. Sandford, Derek Sears, Robert Beauford, Denton S. Ebel, Jon M. Friedrich, Kazuhide Nagashima, Josh Wimpenny, Akane Yamakawa, Kunihiko Nishiizumi, Yasunori Hamajima, Marc W. Caffee, Kees C. Welten, Matthias Laubenstein, Andrew M. Davis, Steven B. Simon, Philipp R. Heck, Edward D. Young, Issaku E. Kohl, Mark H. Thiemens, Morgan H. Nunn, Takashi Mikouchi, Kenji Hagiya, Kazumasa Ohsumi, Thomas A. Cahill, Jonathan A. Lawton, David Barnes, Andrew Steele, Pierre Rochette, Kenneth L. Verosub, Jérôme Gattacceca, George Cooper, Daniel P. Glavin, Aaron S. Burton, Jason P. Dworkin, Jamie E. Elsila, Sandra Pizzarello, Ryan Ogliore, Phillippe Schmitt-Kopplin, Mourad Harir, Norbert Hertkorn, Alexander Verchovsky, Monica Grady, Keisuke Nagao, Ryuji Okazaki, Hiroyuki Takechi, Takahiro Hiroi, Ken Smith, Elizabeth A. Silber, Peter G. Brown, Jim Albers, Doug Klotz, Mike Hankey, Robert Matson, Jeffrey A. Fries, Richard J. Walker, Igor Puchtel, Cin-Ty A. Lee, Monica E. Erdman, Gary R. Eppich, Sarah Roeske, Zelimir Gabelica, Michael Lerche, Michel Nuevo, Beverly Girten, Simon P. Worden. **Radar-enabled recovery of the Sutter's Mill Meteorite, a carbonaceous chondrite regolith breccia.** *Science*, 338:1583-1587 (2012) doi: 10.1126/science.1227163

Attachment 3: Summary Notes from Archiving and Beta Sample Analysis

OIDr, Dep 609	
Input Prog Start datetime	2/3/15 18:20
predicted gap start datetime	
Predicted end datetime	
*Apparent end datetime	
*Apparent marker date	
Timing:	Field Stop = 2/21/2015 5:15:00 PM Deployment ended before any protocol motions so no off-sets needed in analysis. Site Visit: 2/10/2015 15:45 System running well no problems. Flow measured 7.89 l/min.
	Ninth Stage stopped at 10.42 days, measured to center of end deposit. Ninth Stage stopped at (peak center) 2/14/15 04:25
	Data after ninth stage stopped has larger error due to variable flow restriction.
Measured Flow (l/min)	
7.89	After Ufine continuos after filter stalls, the flow is affected and variable. measured value at end of deployment is 6.4 l/m
Beta Background	
	Ninth Stage stopped after, 2/13/15 6:56 ~7AM
Stage	Notes
1	very clean hard to see
2	21.5-94
3	21.5-94
4	20-92
5	23.5-95+-0.25 tilt
6	20.5-92: Only 1st 7_8mm slight moisture time averaging
7	25-97
8	23.5-95 moistureafterout2 108mm
9	start ~37-38mm then heavy deposit centered at 41.5+-2.5
	notes Beta only
1	
2	
3	
4	
5	
6	
7	
8	
9	
* Apparent datetimes (after mid-gap) are /w protocol mid-gap time shift 6mm mid-protocol gap (6mm @ 4mm/day is 36 hours offset after Midgap)	

Attachment 4: Photo record of the DRUM samples for Olive Drive

First with a black background that shows scattering aerosols, then with a white background which shows absorbing aerosols.



10 to 5.0



5.0 to 2.5



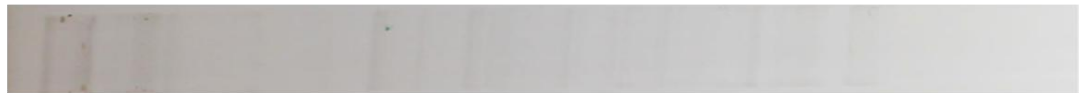
2.5 to 1.15



1.15 to 0.75



0.75 to 0.56



0.56 to 0.34



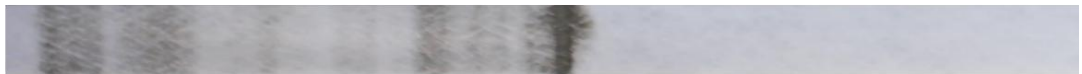
0.34 to 0.26



0.26 to 0.09



0.09 to 0.0



Attachment 5: Excerpt of Weather Underground Meteorological station data table

From Weather Underground, University AP site

Date	Time PST	Temperature F	Dew Point F	Humidity	Sea Level Pressure In	Visibility MPH	Wind Direction	Wind Speed MPH	Gust Speed MPH	Precipitation In	Events	Conditions	WindDir Degrees
2/4/2015	12:00 AM	48.2	46.4	93	30.09	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	12:20 AM	48.2	46.4	93	30.09	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	12:40 AM	46.4	44.6	93	30.09	10	NW	3.5	-	N/A		Clear	320
2/4/2015	1:00 AM	48.2	46.4	93	30.09	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	1:20 AM	48.2	46.4	93	30.09	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	1:40 AM	48.2	46.4	93	30.08	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	2:00 AM	46.4	46.4	100	30.08	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	2:20 AM	48.2	46.4	93	30.08	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	2:40 AM	46.4	44.6	93	30.08	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	3:00 AM	46.4	46.4	100	30.08	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	3:20 AM	48.2	46.4	93	30.08	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	3:40 AM	46.4	44.6	93	30.07	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	4:00 AM	44.6	44.6	100	30.07	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	4:20 AM	44.6	44.6	100	30.07	9	Calm	Calm	-	N/A		Clear	0
2/4/2015	4:40 AM	44.6	44.6	100	30.08	10	Calm	Calm	-	N/A		Clear	0
2/4/2015	5:00 AM	46.4	44.6	93	30.07	10	NNW	3.5	-	N/A		Clear	340
2/4/2015	5:20 AM	46.4	44.6	93	30.07	10	North	3.5	-	N/A		Clear	350
2/4/2015	5:40 AM	46.4	46.4	100	30.07	10	North	3.5	-	N/A		Clear	350
2/4/2015	6:00 AM	46.4	44.6	93	30.07	10	North	3.5	-	N/A		Clear	350
2/4/2015	6:20 AM	46.4	44.6	93	30.08	8	NNW	3.5	-	N/A		Clear	340
2/4/2015	6:40 AM	44.6	44.6	100	30.08	8	Calm	Calm	-	N/A		Clear	0
2/4/2015	7:00 AM	46.4	44.6	93	30.09	9	NNW	3.5	-	N/A		Clear	340
2/4/2015	7:20 AM	44.6	44.6	100	30.1	7	North	3.5	-	N/A		Clear	360
2/4/2015	7:40 AM	44.6	44.6	100	30.1	7	Calm	Calm	-	N/A		Clear	0
2/4/2015	8:00 AM	46.4	44.6	93	30.1	8	North	3.5	-	N/A		Clear	360
2/4/2015	8:20 AM	48.2	46.4	93	30.11	7	NNW	3.5	-	N/A		Clear	330
2/4/2015	8:40 AM	48.2	46.4	93	30.11	8	North	3.5	-	N/A		Clear	360
2/4/2015	9:00 AM	48.2	46.4	93	30.1	7	North	3.5	-	N/A		Clear	360
2/4/2015	9:20 AM	48.2	48.2	100	30.11	8	North	3.5	-	N/A		Clear	350
2/4/2015	9:40 AM	50	48.2	94	30.11	10	North	3.5	-	N/A		Clear	350
2/4/2015	10:00 AM	53.6	50	88	30.11	10	NNW	3.5	-	N/A		Clear	340
2/4/2015	10:20 AM	55.4	50	82	30.11	9	Calm	Calm	-	N/A		Clear	0
2/4/2015	10:40 AM	57.2	51.8	82	30.11	6	Calm	Calm	-	N/A		Clear	0
2/4/2015	11:00 AM	59	51.8	77	30.11	5	East	3.5	-	N/A		Clear	100
2/4/2015	11:20 AM	59	51.8	77	30.1	4	ESE	5.8	-	N/A		Clear	120
2/4/2015	11:40 AM	59	51.8	77	30.09	5	ENE	3.5	-	N/A		Clear	70
2/4/2015	12:00 PM	59	51.8	77	30.09	4	SE	3.5	-	N/A		Clear	140
2/4/2015	12:20 PM	60.8	53.6	77	30.09	4	SE	3.5	-	N/A		Clear	130
2/4/2015	12:40 PM	60.8	51.8	72	30.08	4	SE	5.8	-	N/A		Clear	130
2/4/2015	1:00 PM	60.8	51.8	72	30.07	4	South	4.6	-	N/A		Clear	190
2/4/2015	1:20 PM	60.8	51.8	72	30.06	4	South	4.6	-	N/A		Clear	170
2/4/2015	1:40 PM	60.8	51.8	72	30.04	4	SSE	6.9	-	N/A		Clear	150
2/4/2015	2:00 PM	62.6	51.8	68	30.04	4	South	6.9	-	N/A		Clear	190
2/4/2015	2:20 PM	62.6	51.8	68	30.03	4	SSE	4.6	-	N/A		Clear	160
2/4/2015	2:40 PM	62.6	51.8	68	30.03	4	Calm	Calm	-	N/A		Clear	0
2/4/2015	3:00 PM	64.4	51.8	64	30.03	4	Calm	Calm	-	N/A		Clear	0
2/4/2015	3:20 PM	62.6	53.6	72	30.03	4	South	3.5	-	N/A		Clear	170
2/4/2015	3:40 PM	64.4	51.8	64	30.03	4	Calm	Calm	-	N/A		Clear	0
2/4/2015	4:00 PM	62.6	51.8	68	30.02	4	Calm	Calm	-	N/A		Clear	0
2/4/2015	4:20 PM	62.6	53.6	72	30.01	4	ESE	3.5	-	N/A		Clear	120
2/4/2015	4:40 PM	62.6	51.8	68	30.01	4	SSE	3.5	-	N/A		Clear	150
2/4/2015	5:00 PM	62.6	51.8	68	30.01	4	Calm	Calm	-	N/A		Clear	0

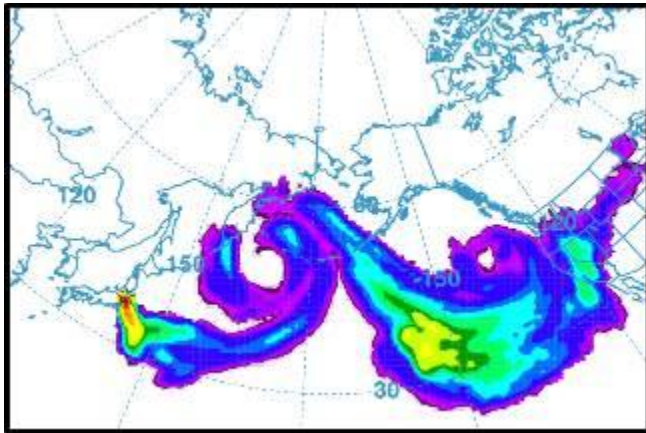
Attachment 6: HYSPLIT Analyses of upwind sources/downwind receptors HYSPLIT trajectory analyses

While local meteorology is very useful to determine on-to-site wind direction, regional wind patterns are also important to identify potential upwind sources, or establish downwind impacts. For this we used HTSPLIT.

Hybrid Single-Particle Lagrangian Integrated Trajectory — (HYSPLIT) Model

Description

The HYSPLIT model is a complete system for computing simple air parcel trajectories to complex dispersion and deposition simulations. The initial development was a result of a joint effort between NOAA and Australia's Bureau of Meteorology. Recent upgrades include enhancements provided by a number of different contributors. Some new features include improved advection algorithms, updated stability and dispersion equations, continued improvements to the graphical user interface, and the option to include modules for chemical transformations. Without the additional dispersion modules, Hysplit computes the advection of a single pollutant particle, or simply its trajectory.



The dispersion of a pollutant is calculated by assuming either puff or particle dispersion. In the puff model, puffs expand until they exceed the size of the meteorological grid cell (either horizontally or vertically) and then split into several new puffs, each with its share of the pollutant mass. In the particle model, a fixed number of particles are advected about the model domain by the mean wind field and spread by a turbulent component. The model's default configuration assumes a 3-dimensional particle distribution (horizontal and vertical).

The model can be run interactively on the Web through the [READY system](#) on our site or the code executable and meteorological data can be downloaded to a Windows or Mac PC. The web version has been configured with some limitations to avoid computational saturation of our web server. The registered PC version is complete with no computational restrictions, except that user's must obtain their own meteorological data files. The unregistered version is identical to the registered version except that plume concentrations cannot be calculated with with forecast meteorology data files. The trajectory-only model has no restrictions and forecast or archive trajectories may be computed with either version

Publications using HYSPLIT results, maps or other READY products provided by NOAA ARL are requested to include an acknowledgement of, and citation to, the NOAA Air Resources Laboratory. Appropriate versions of the following are recommended:

Citation

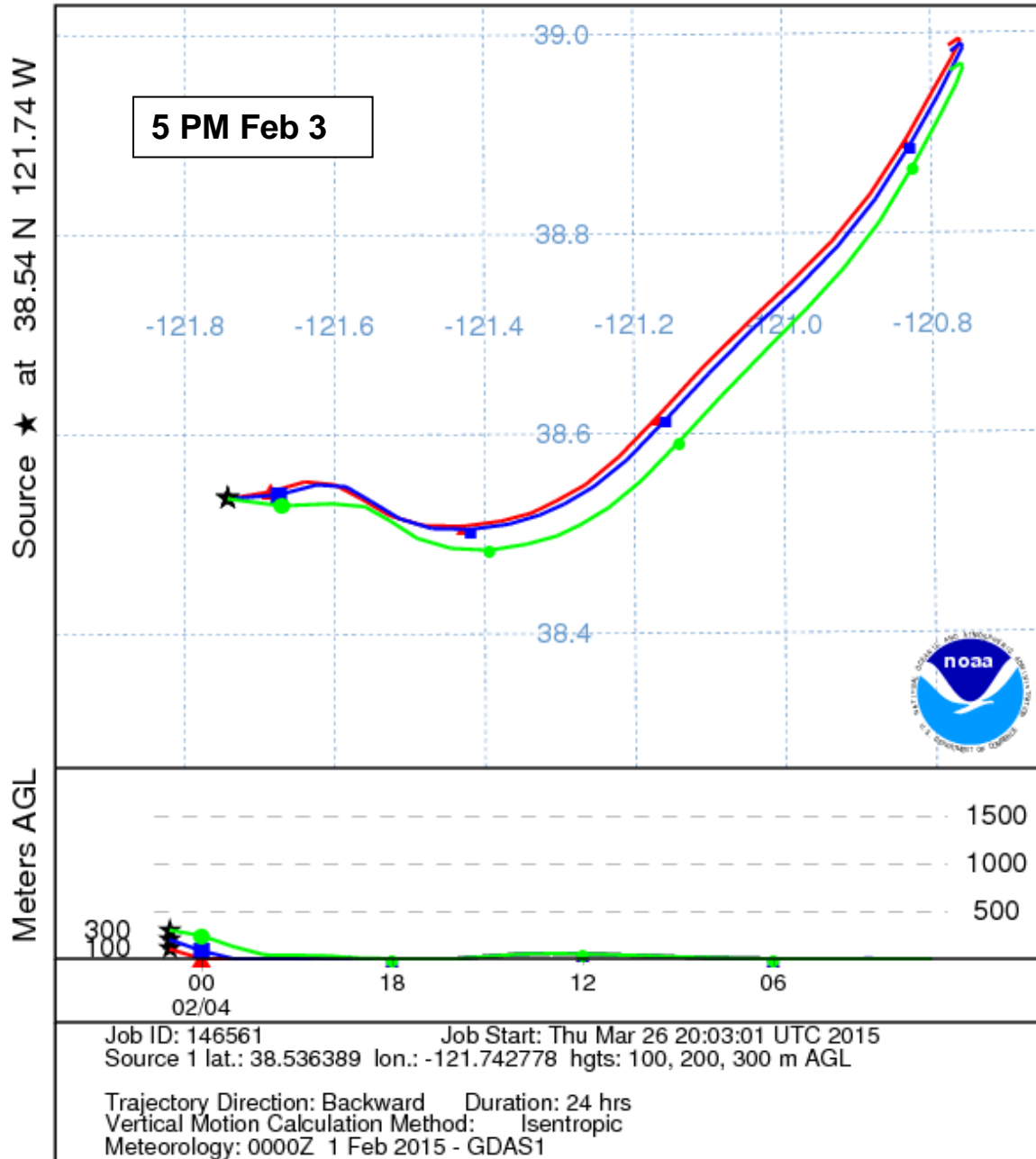
Draxler, R.R. and Rolph, G.D., 2013. HYSPLIT (HYbrid Single-Particle Lagrangian Integrated Trajectory) Model access via NOAA ARL READY Website (<http://www.arl.noaa.gov/HYSPLIT.php>). NOAA Air Resources Laboratory, College Park, MD.

Rolph, G.D., 2013. Real-time Environmental Applications and Display sYstem (READY) Website (<http://www.ready.noaa.gov>). NOAA Air Resources Laboratory, College Park, MD.

Acknowledgment

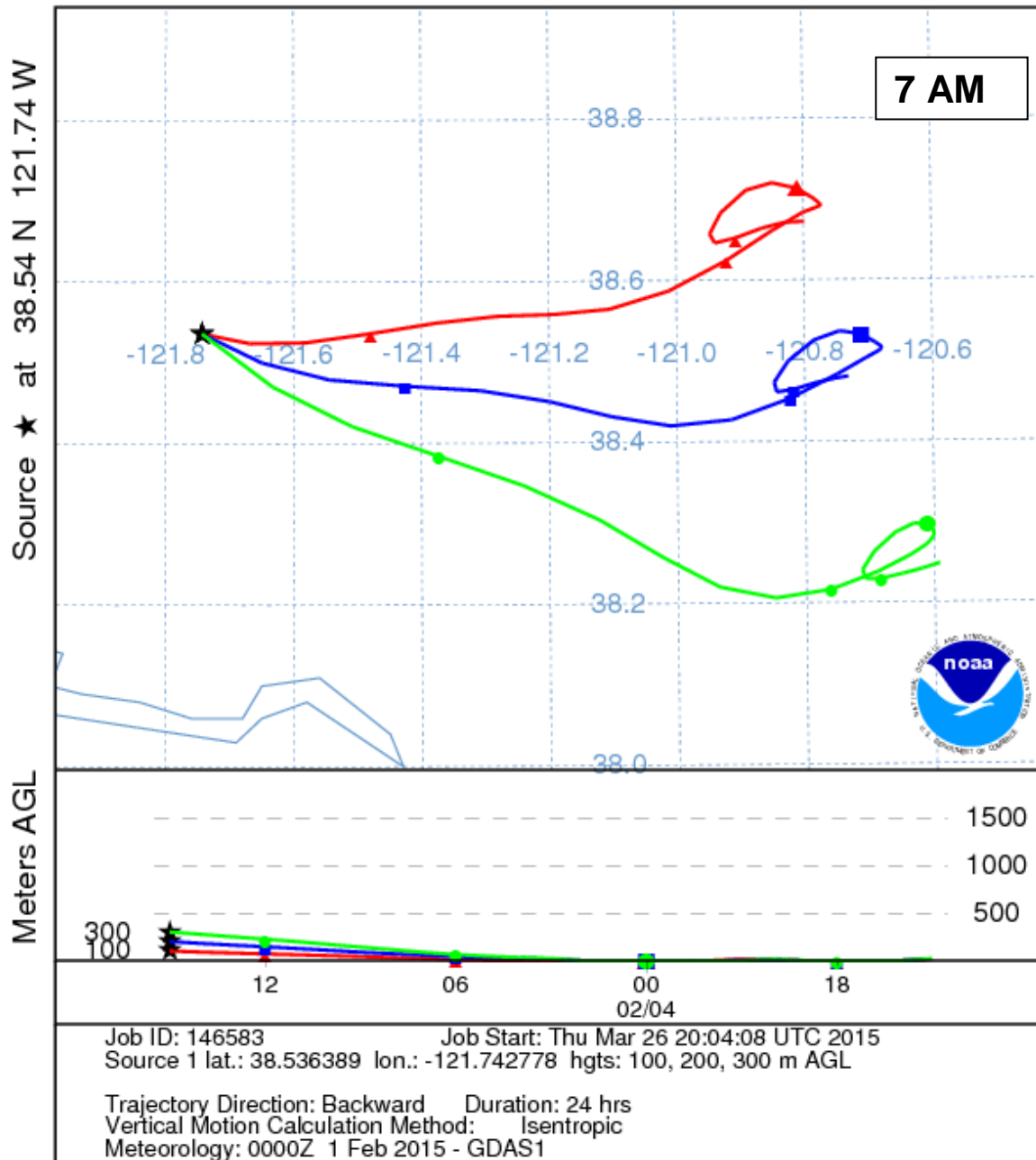
The authors gratefully acknowledge the NOAA Air Resources Laboratory (ARL) for the provision of the HYSPLIT transport and dispersion model and/or READY website (<http://www.ready.noaa.gov>) used in this publication.

NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 04 Feb 15
 GDAS Meteorological Data

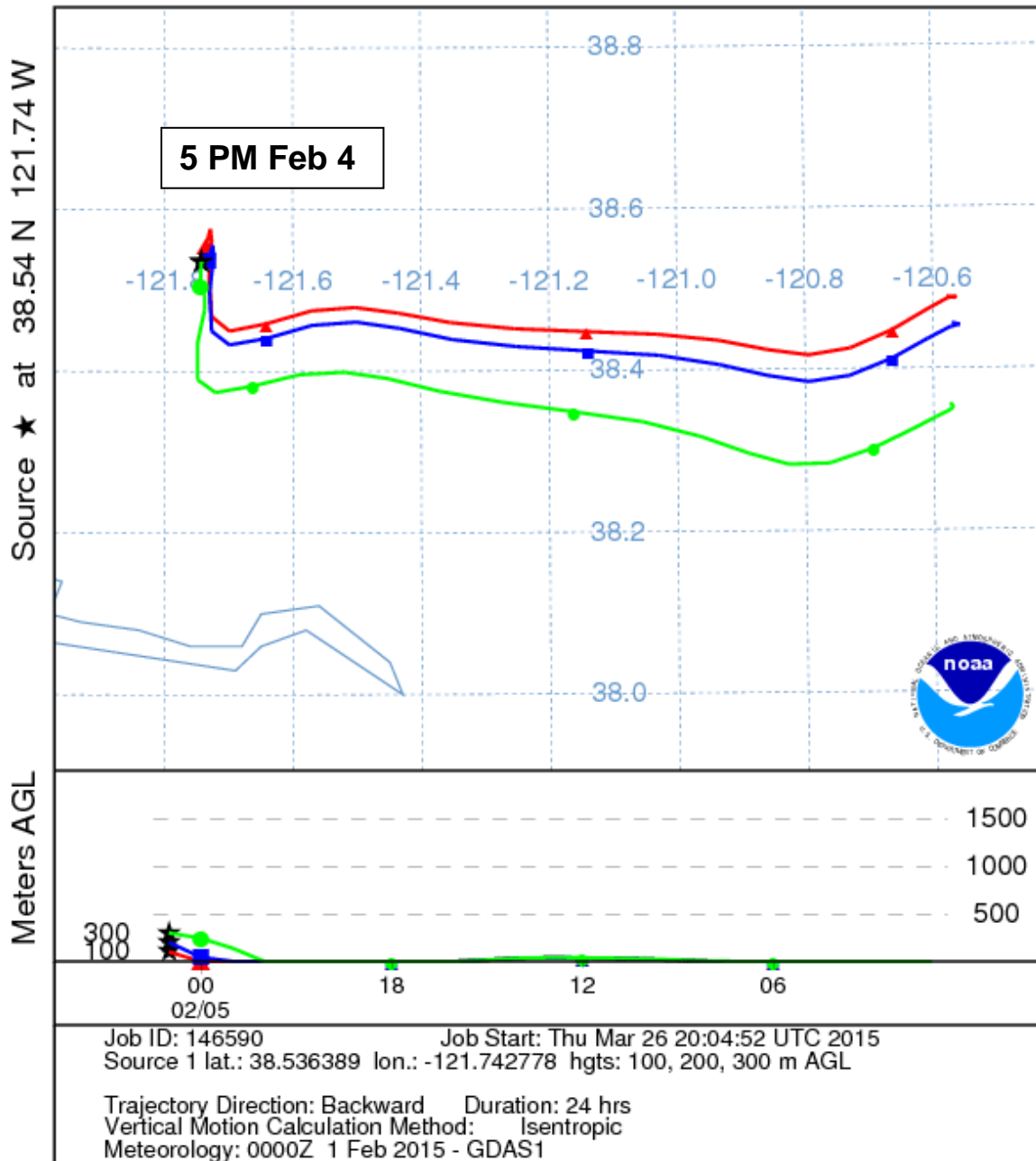


HYSPLIT Trajectory to February 3rd at 5 PM

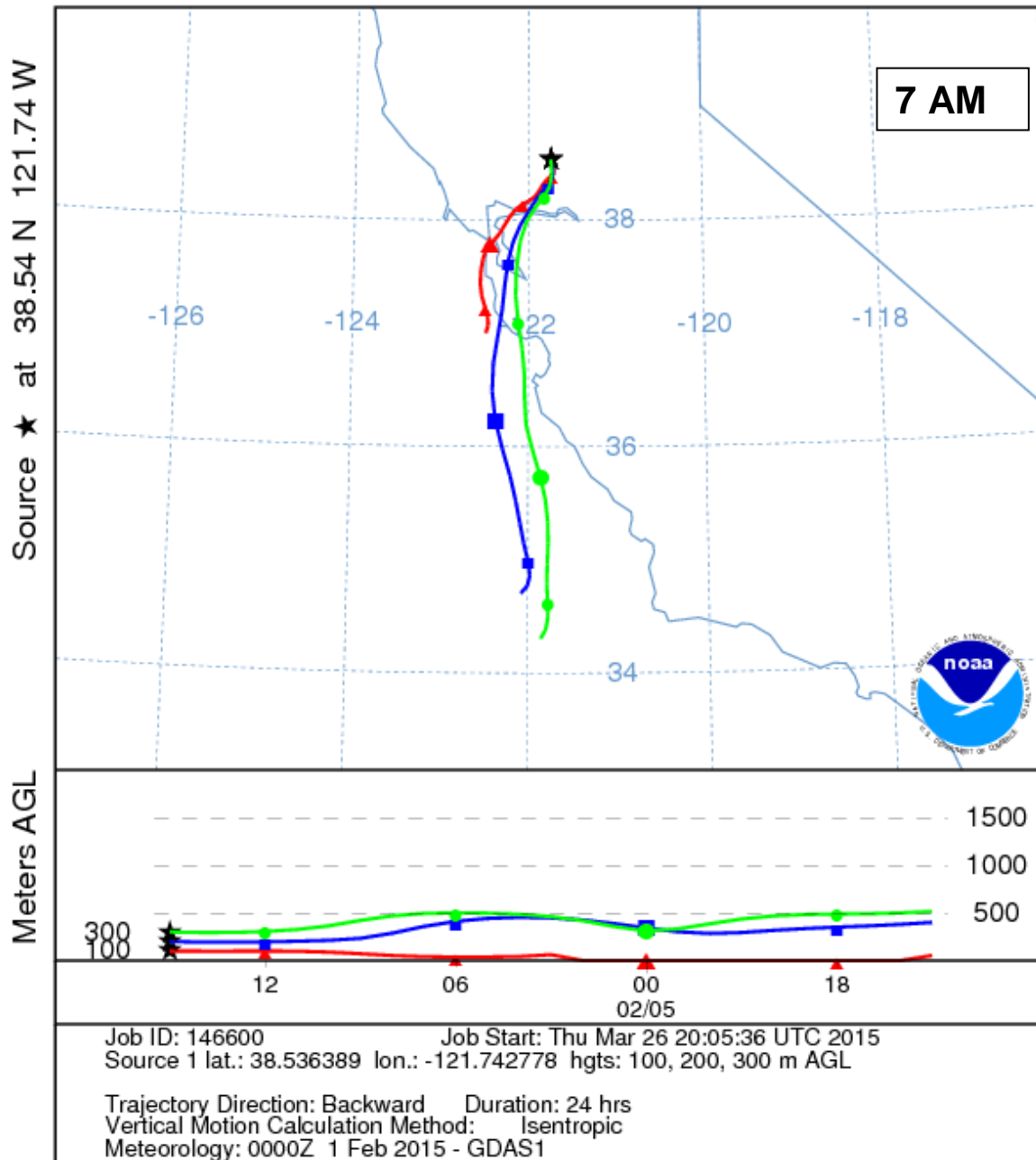
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 04 Feb 15
 GDAS Meteorological Data



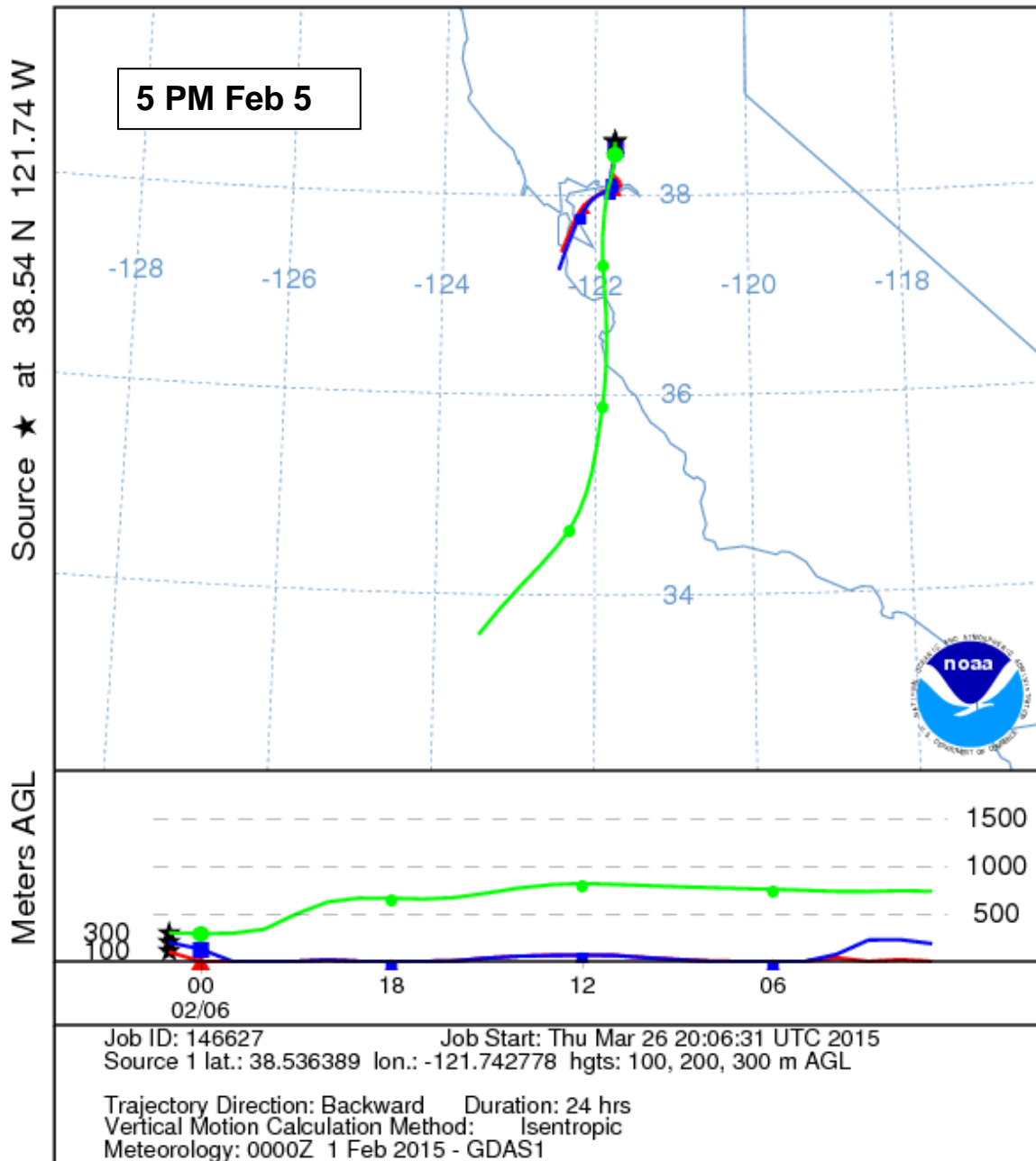
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 05 Feb 15
 GDAS Meteorological Data



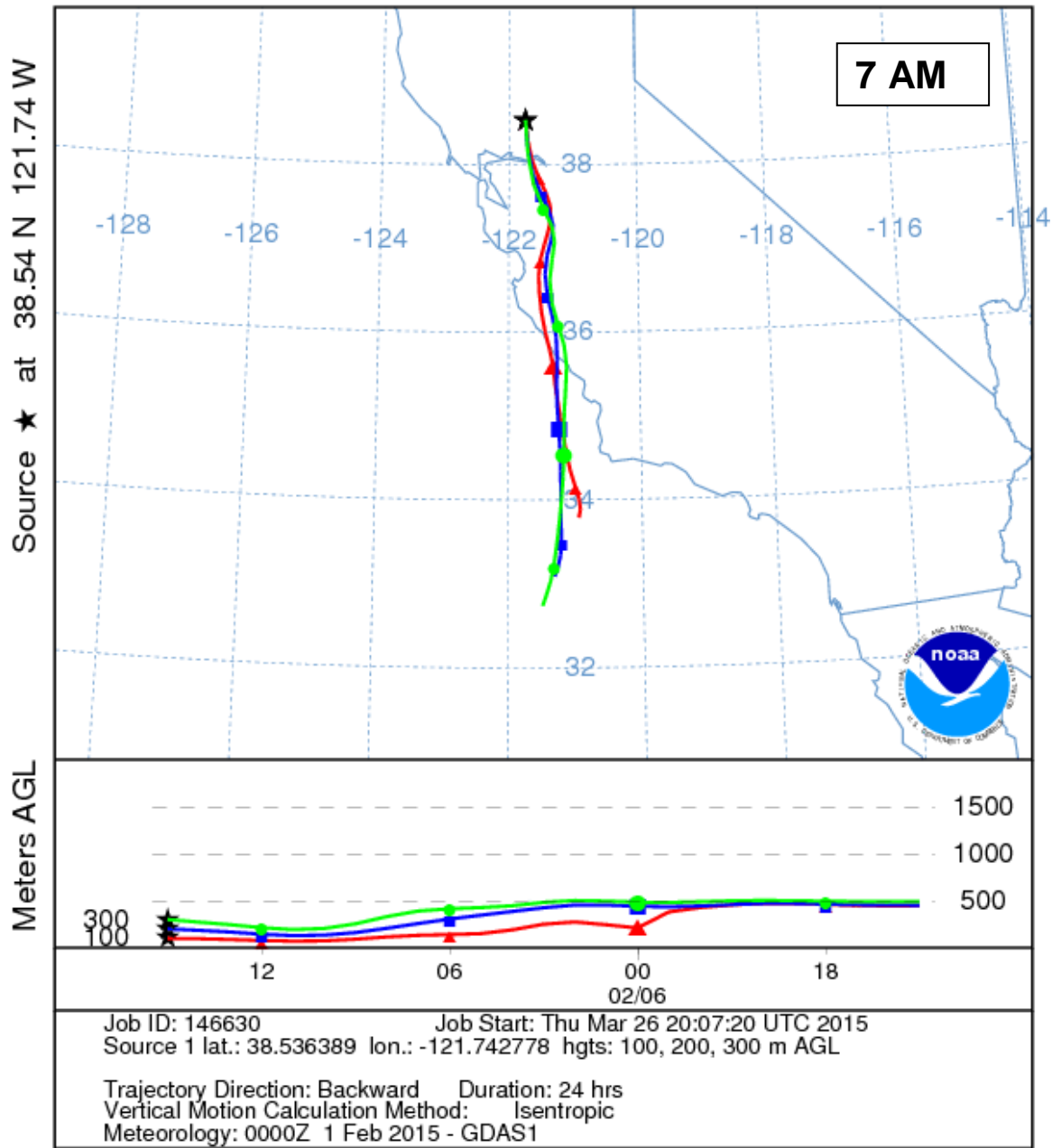
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 05 Feb 15
 GDAS Meteorological Data



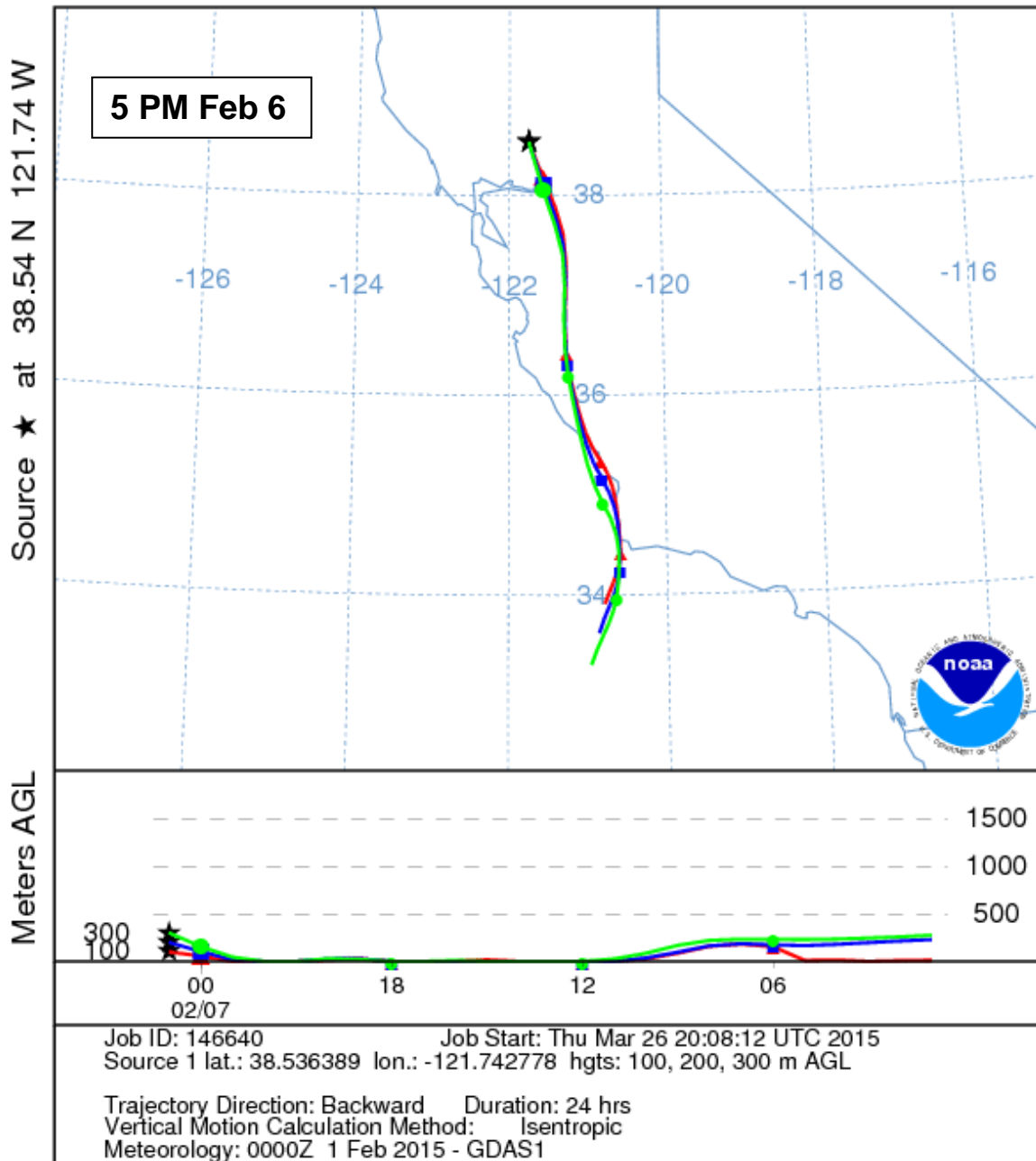
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 06 Feb 15
 GDAS Meteorological Data



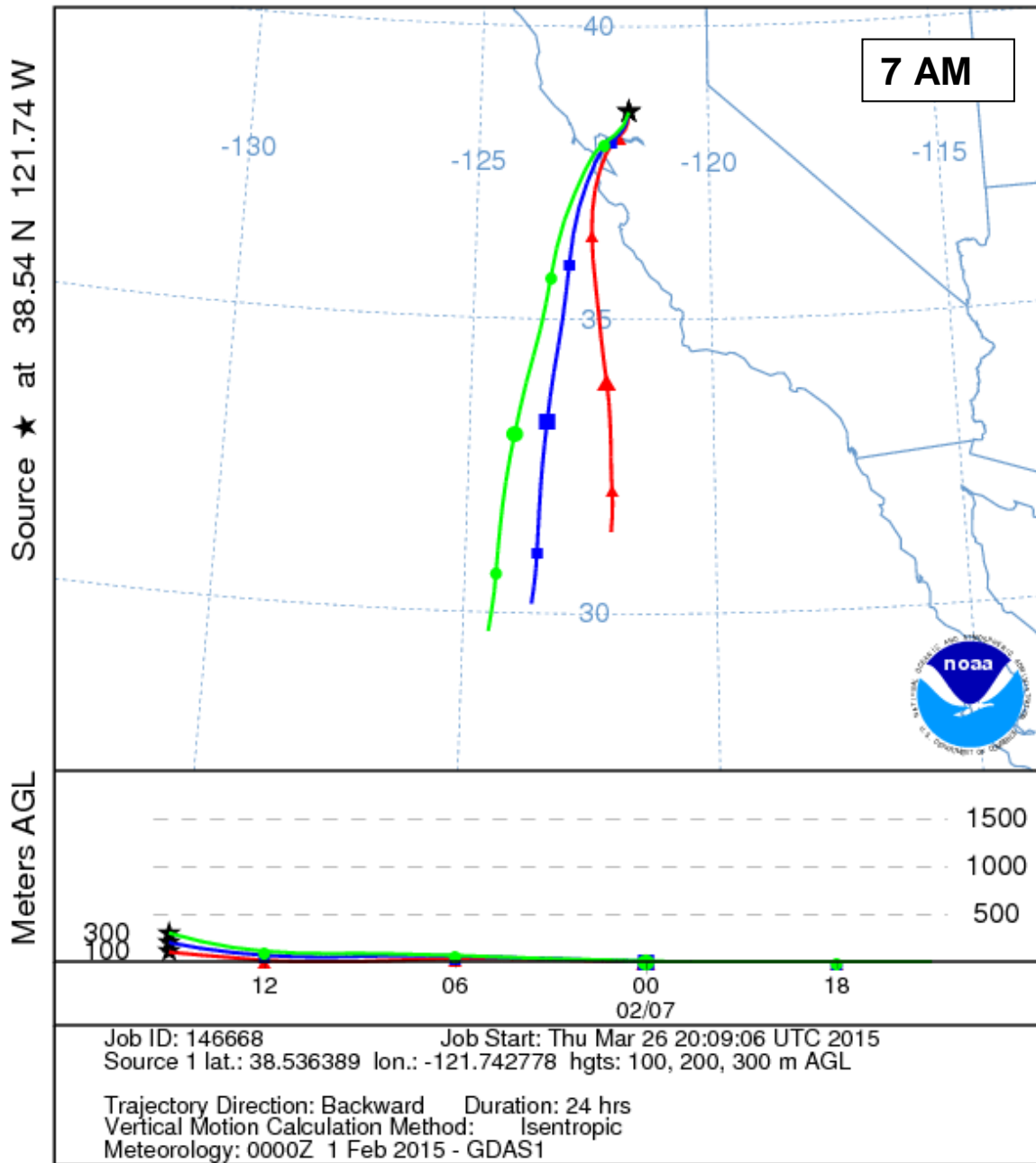
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 06 Feb 15
 GDAS Meteorological Data



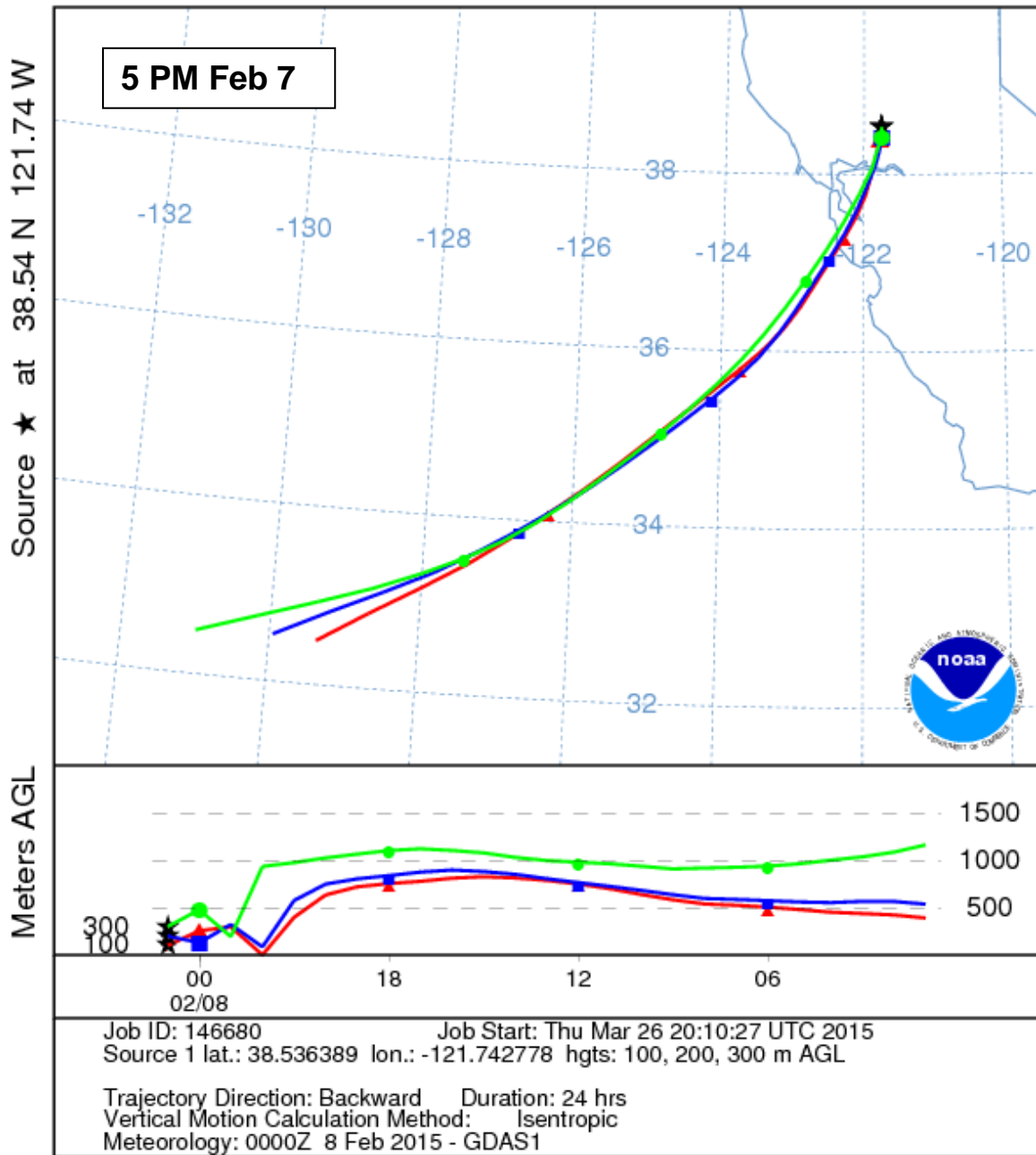
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 07 Feb 15
 GDAS Meteorological Data



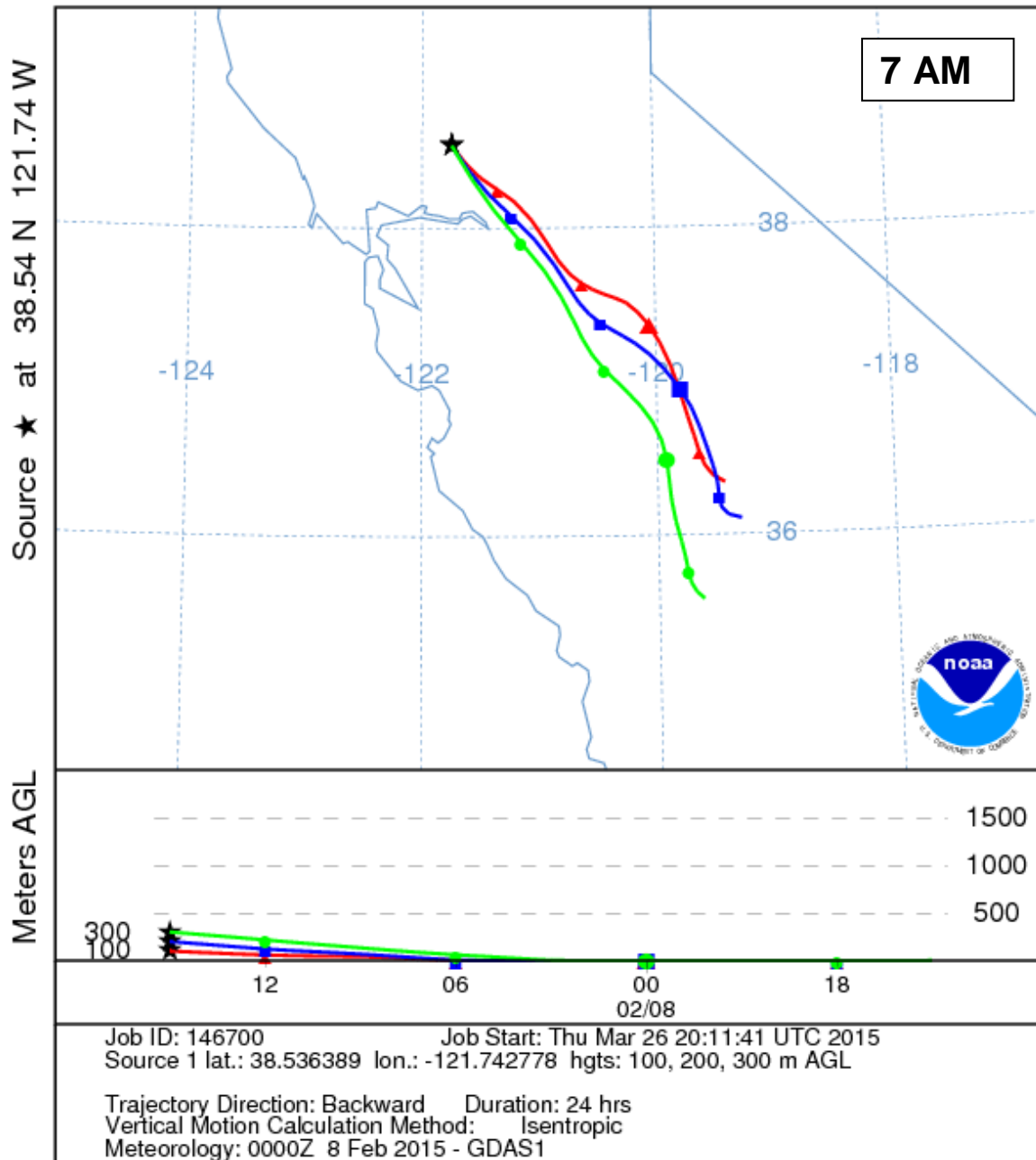
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 07 Feb 15
 GDAS Meteorological Data



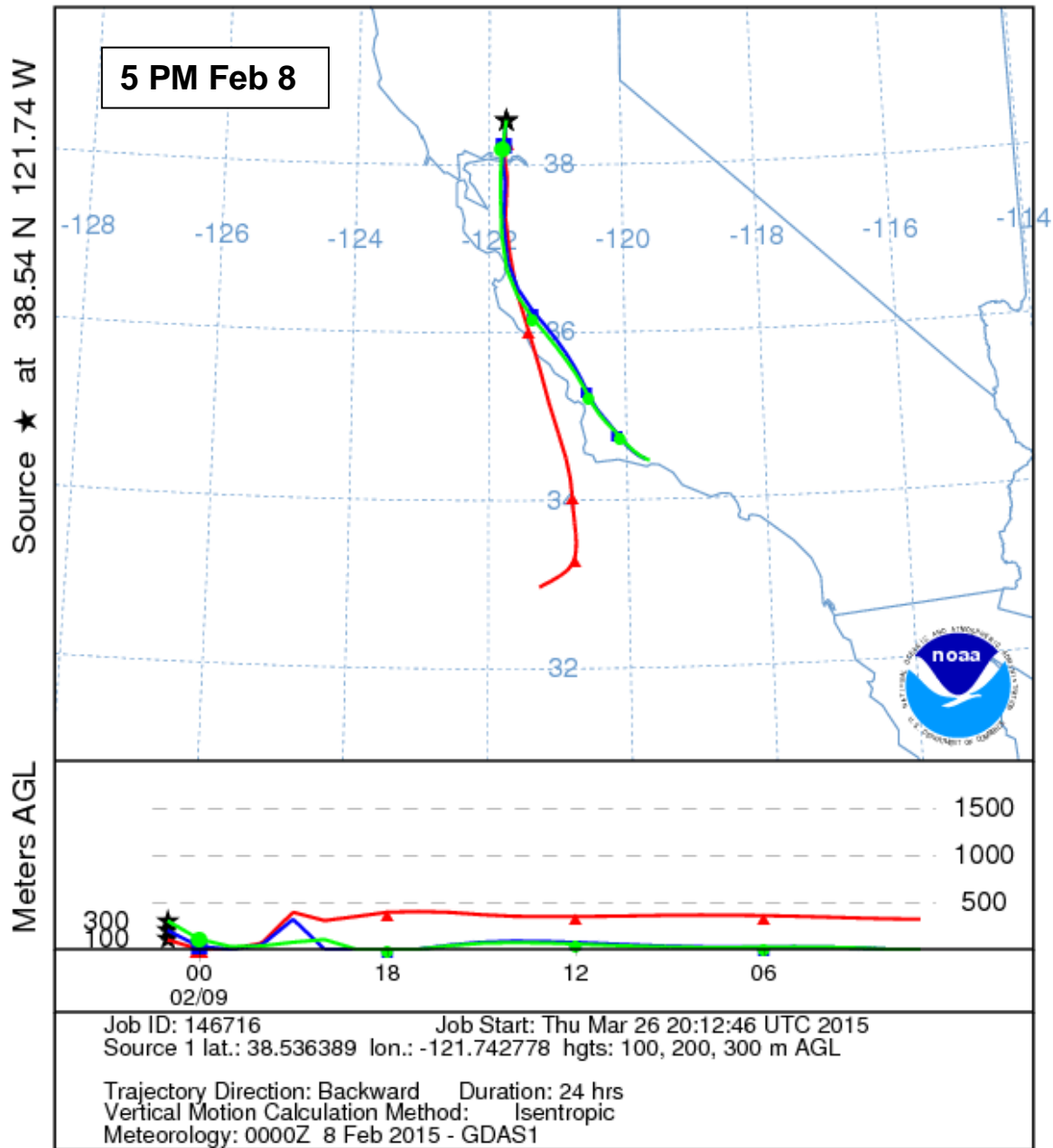
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 08 Feb 15
 GDAS Meteorological Data



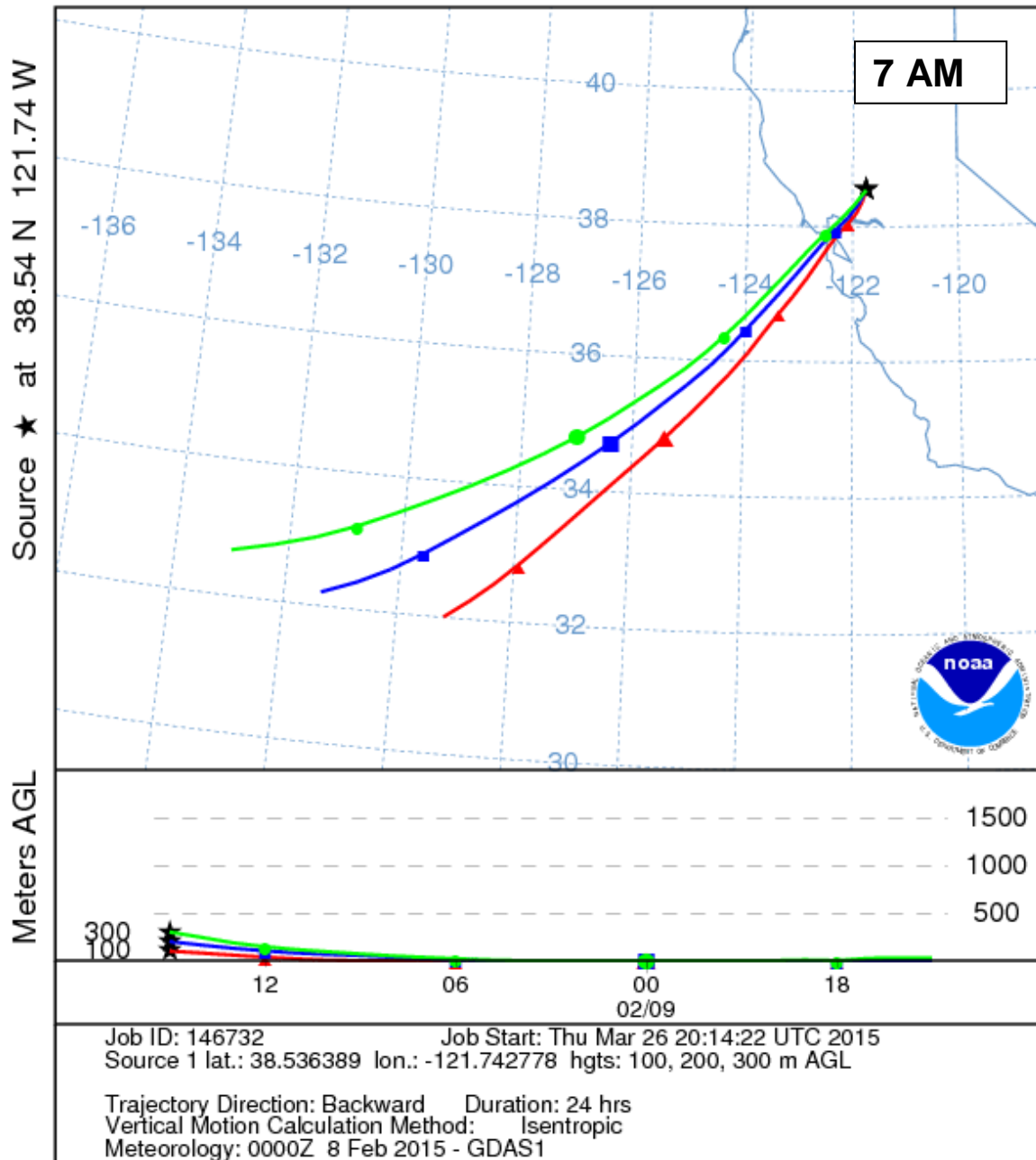
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 08 Feb 15
 GDAS Meteorological Data



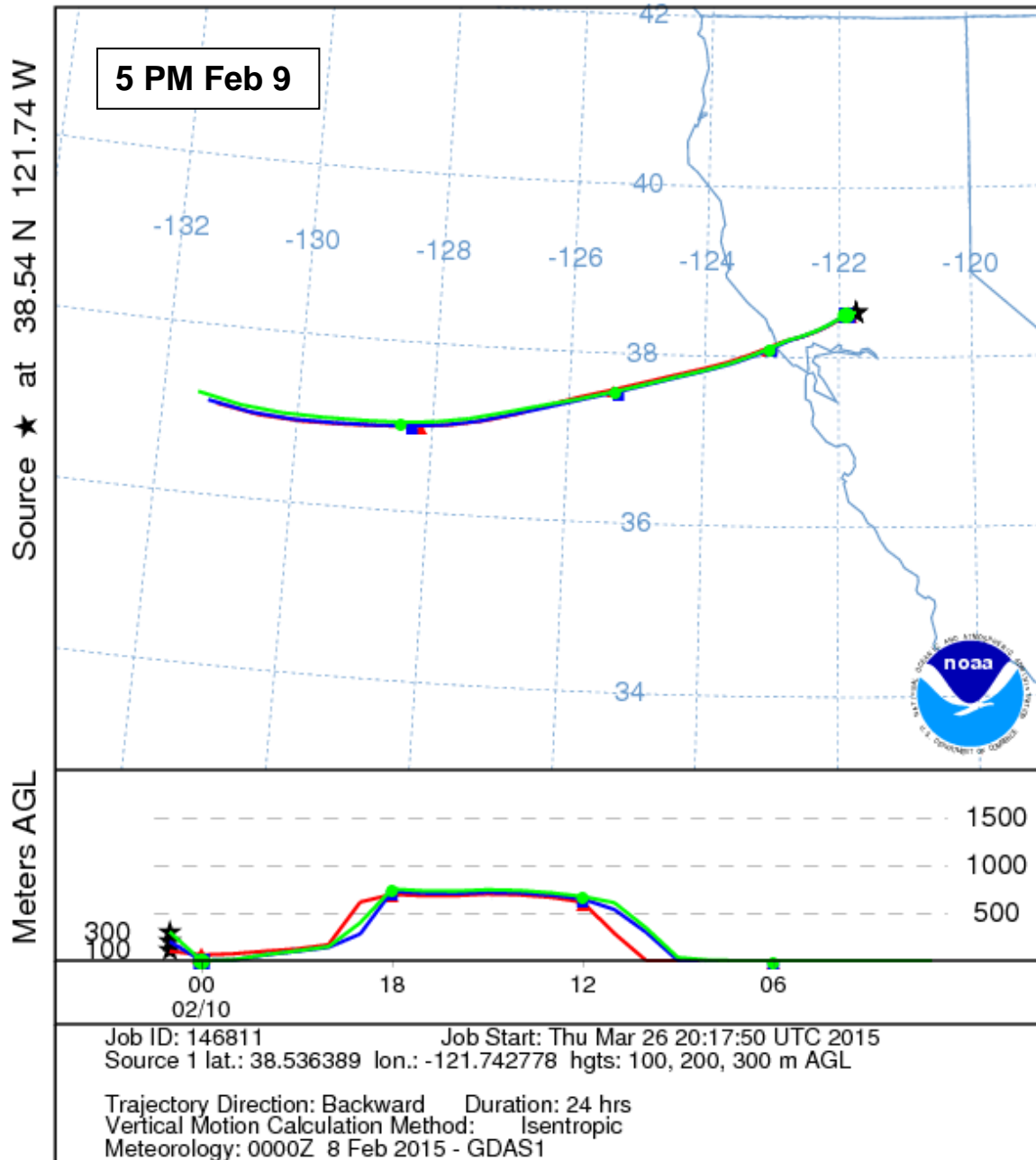
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 09 Feb 15
 GDAS Meteorological Data



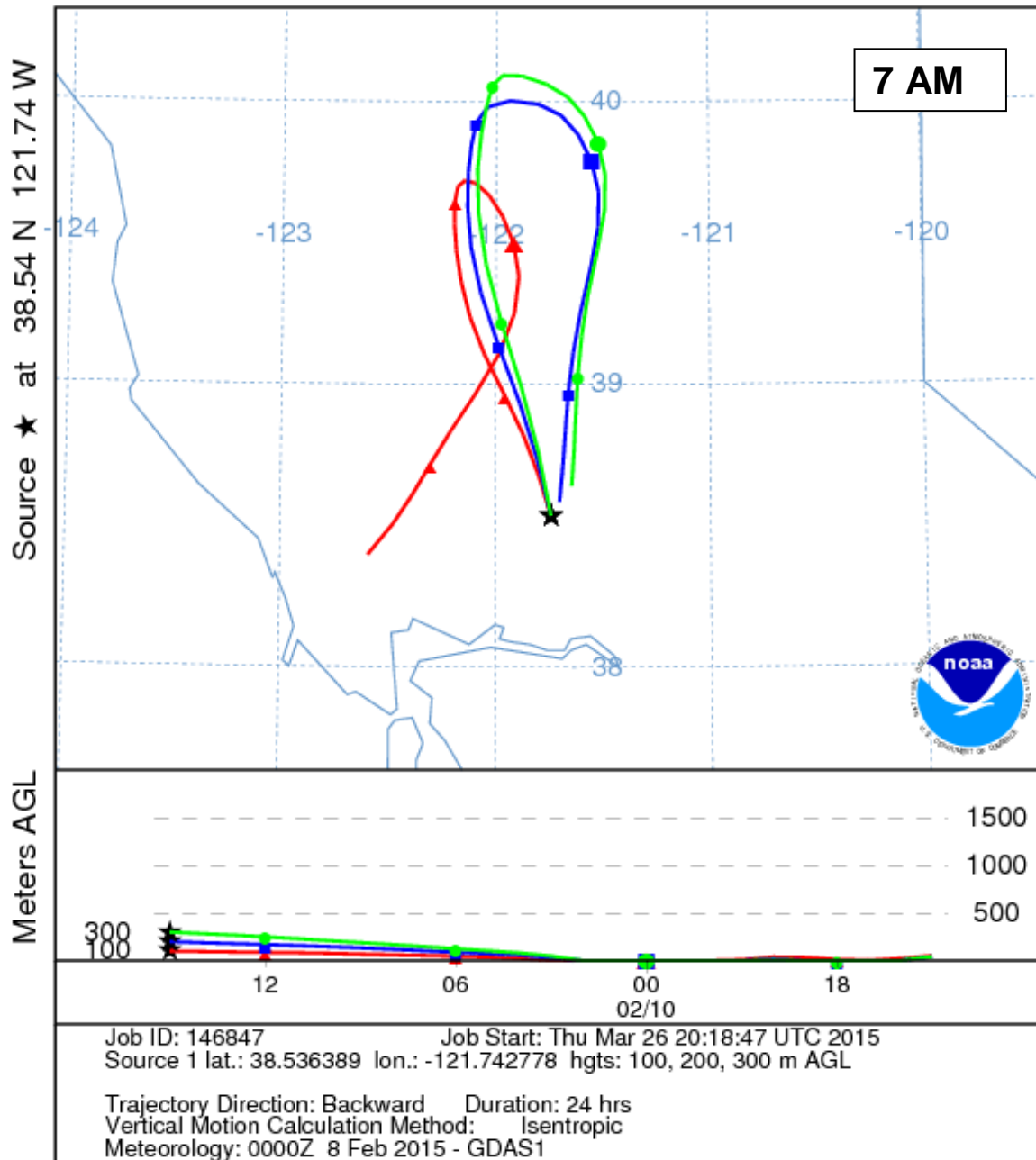
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 09 Feb 15
 GDAS Meteorological Data



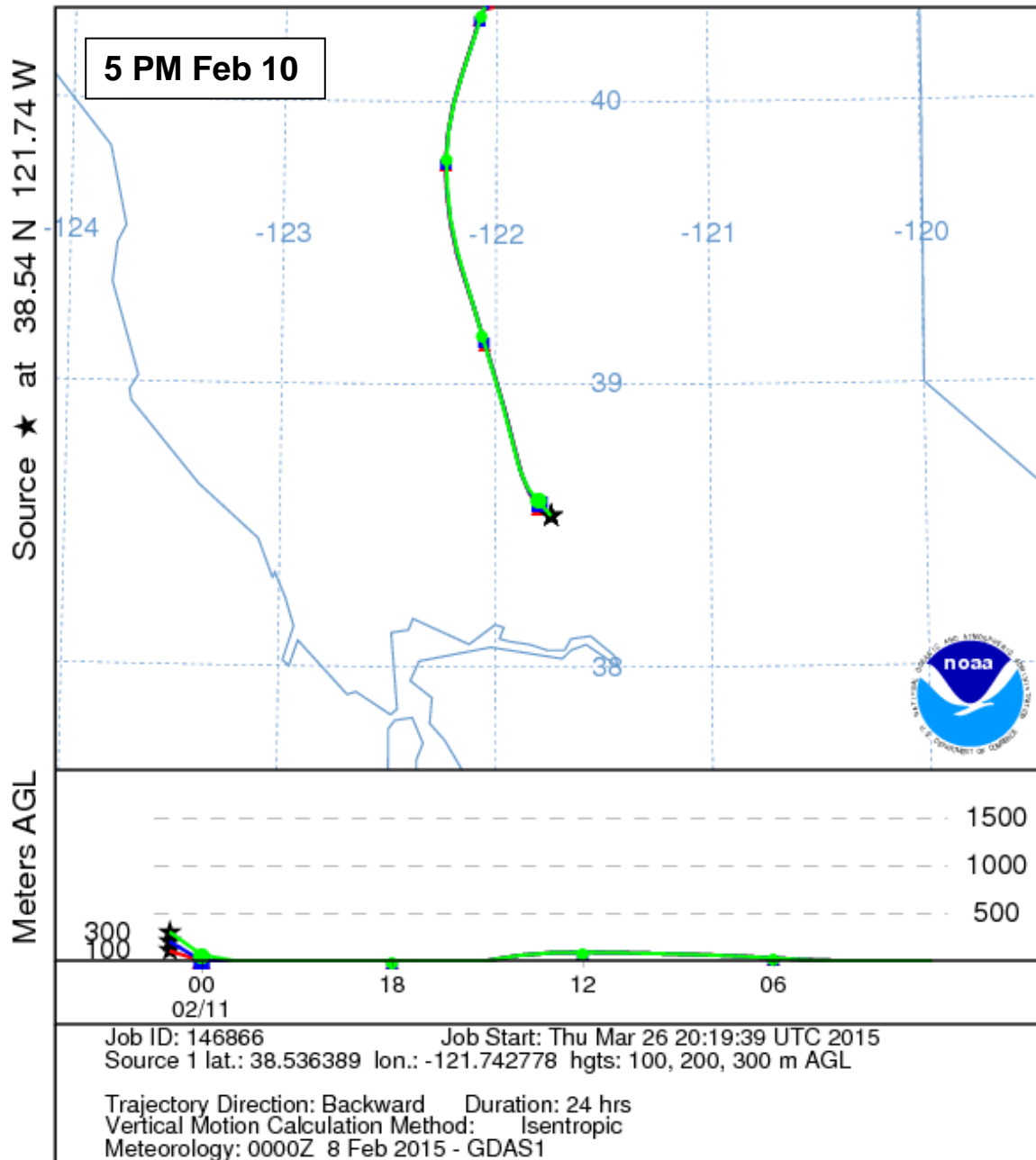
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 Backward trajectories ending at 0100 UTC 10 Feb 15
 GDAS Meteorological Data



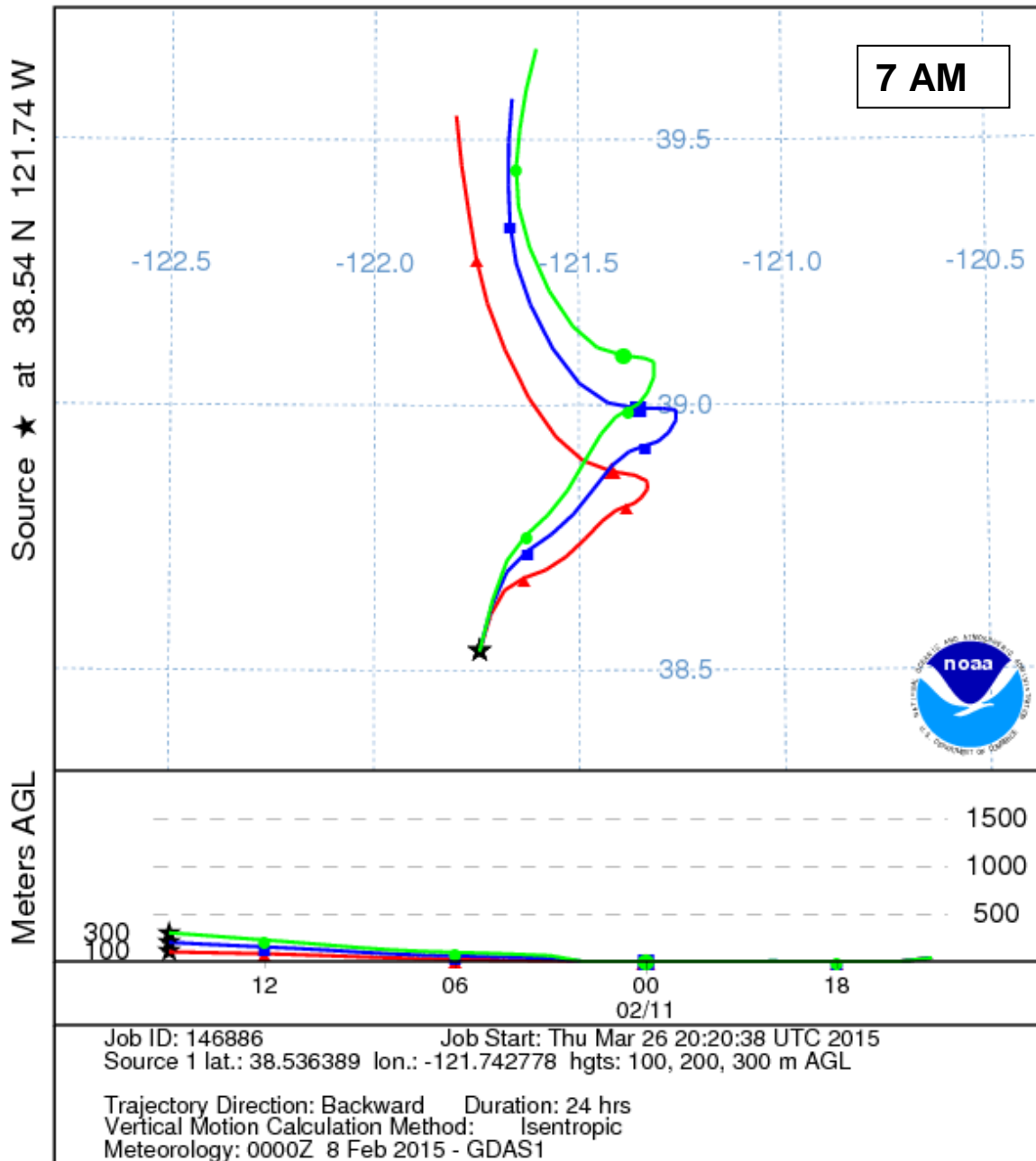
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 10 Feb 15
 GDAS Meteorological Data



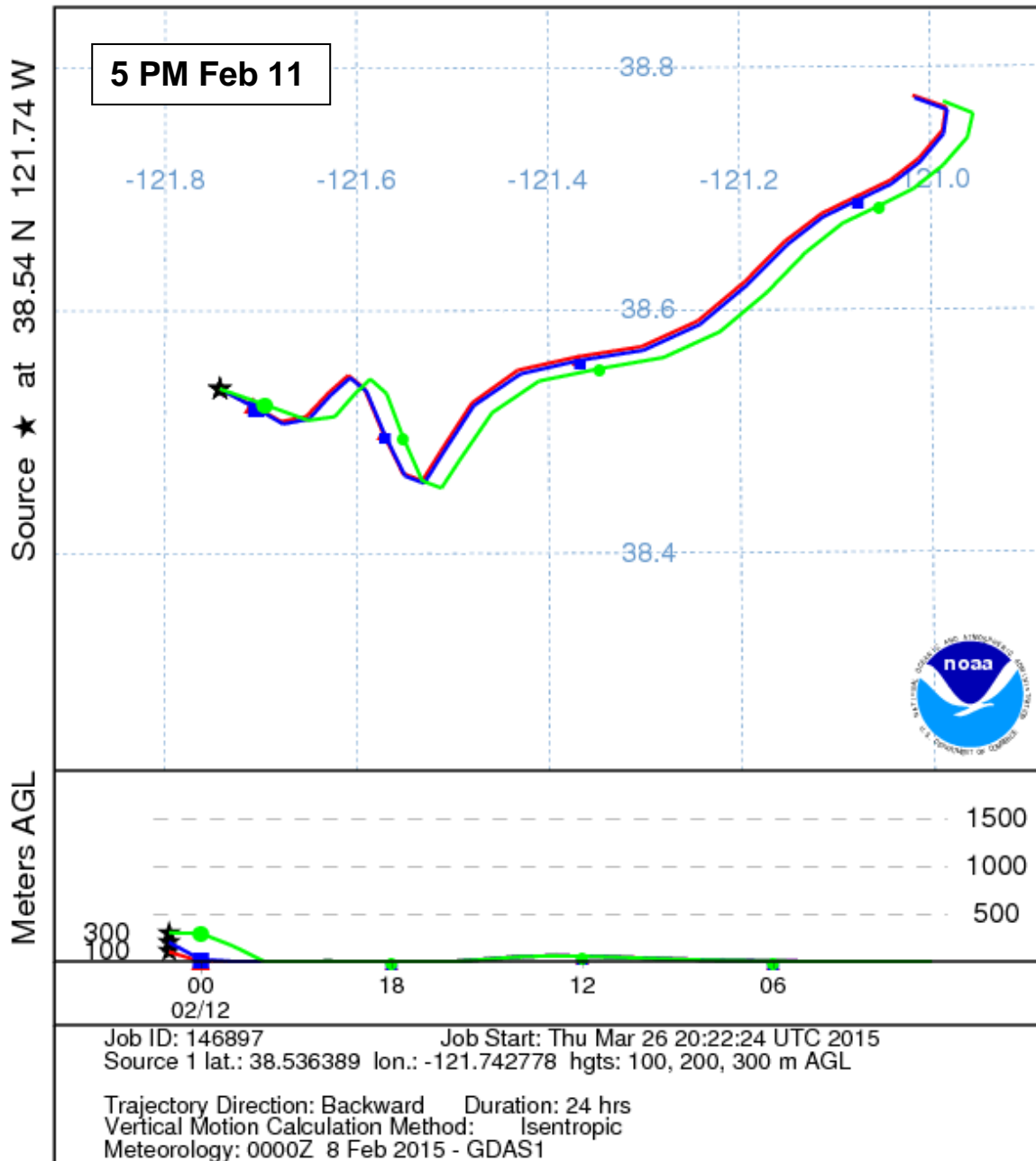
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 11 Feb 15
 GDAS Meteorological Data



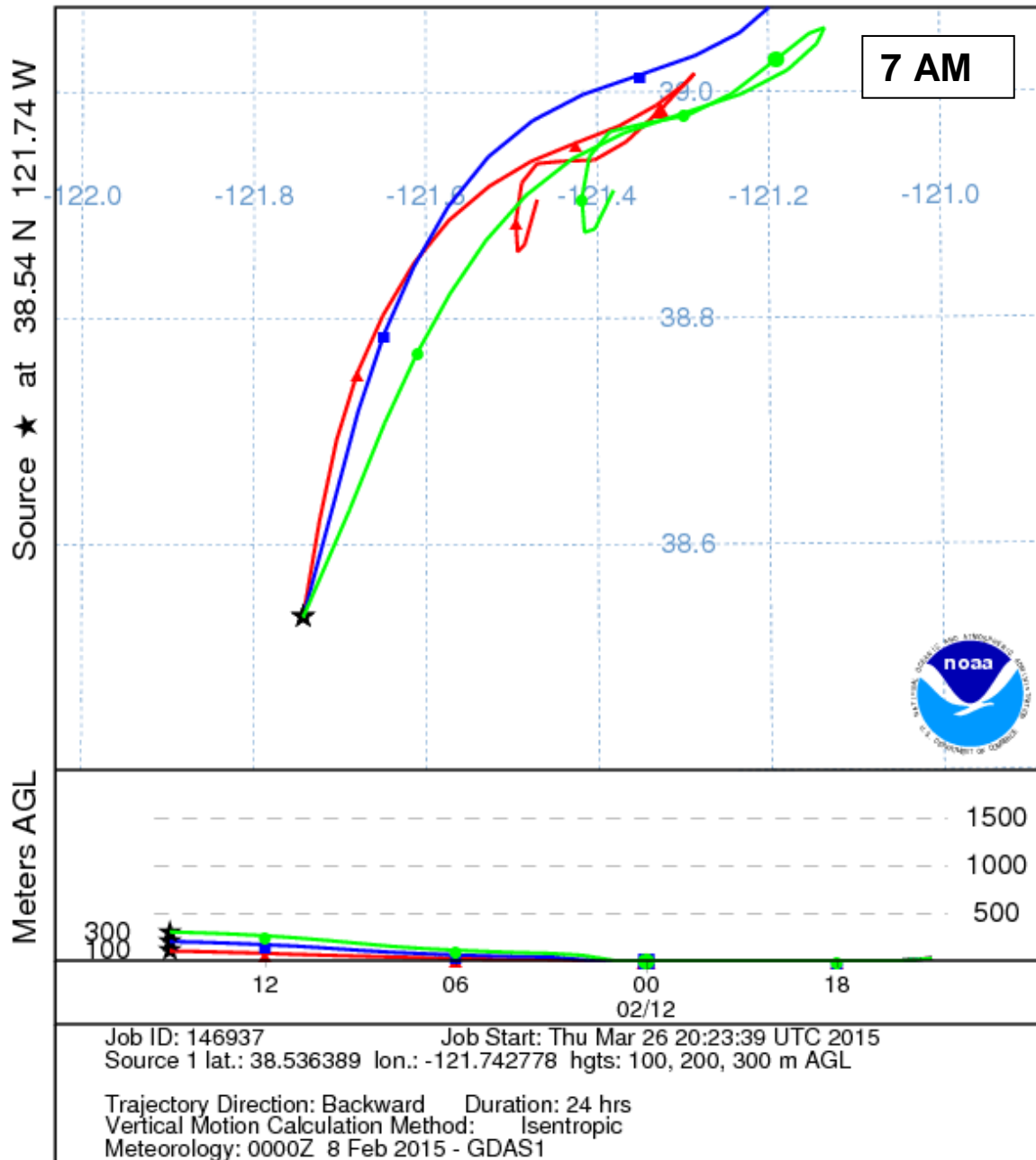
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 11 Feb 15
 GDAS Meteorological Data



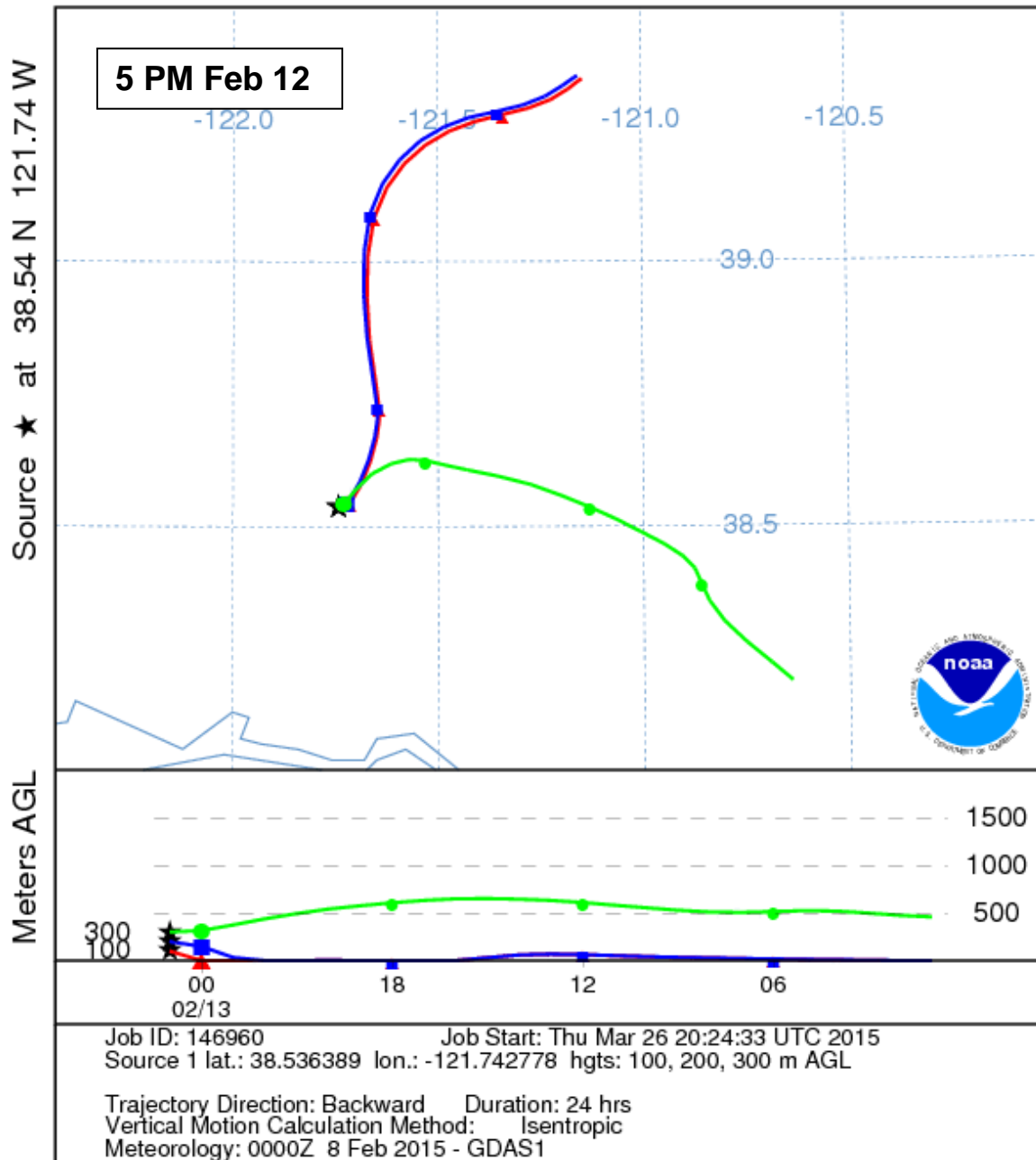
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 12 Feb 15
 GDAS Meteorological Data



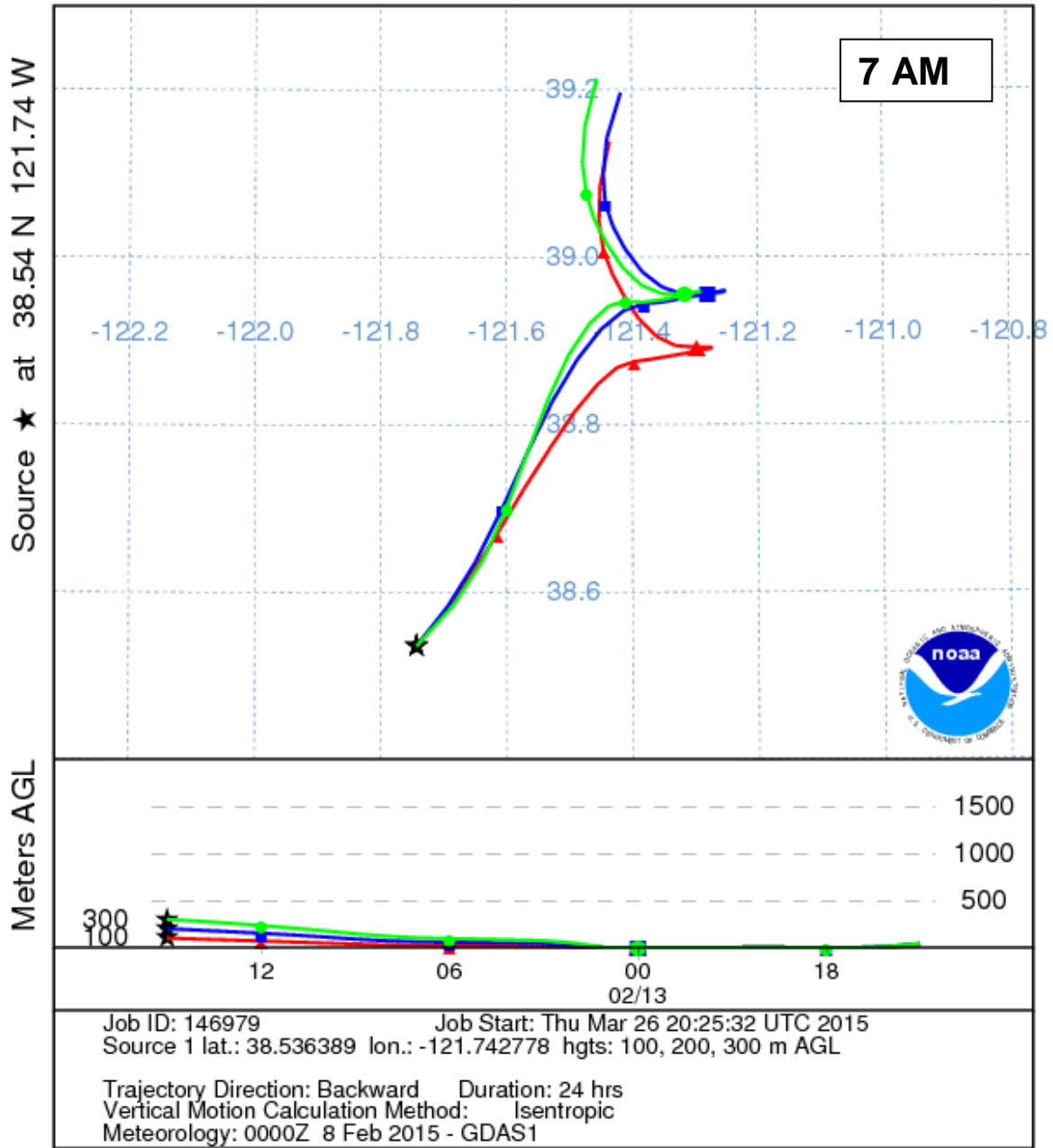
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 12 Feb 15
 GDAS Meteorological Data



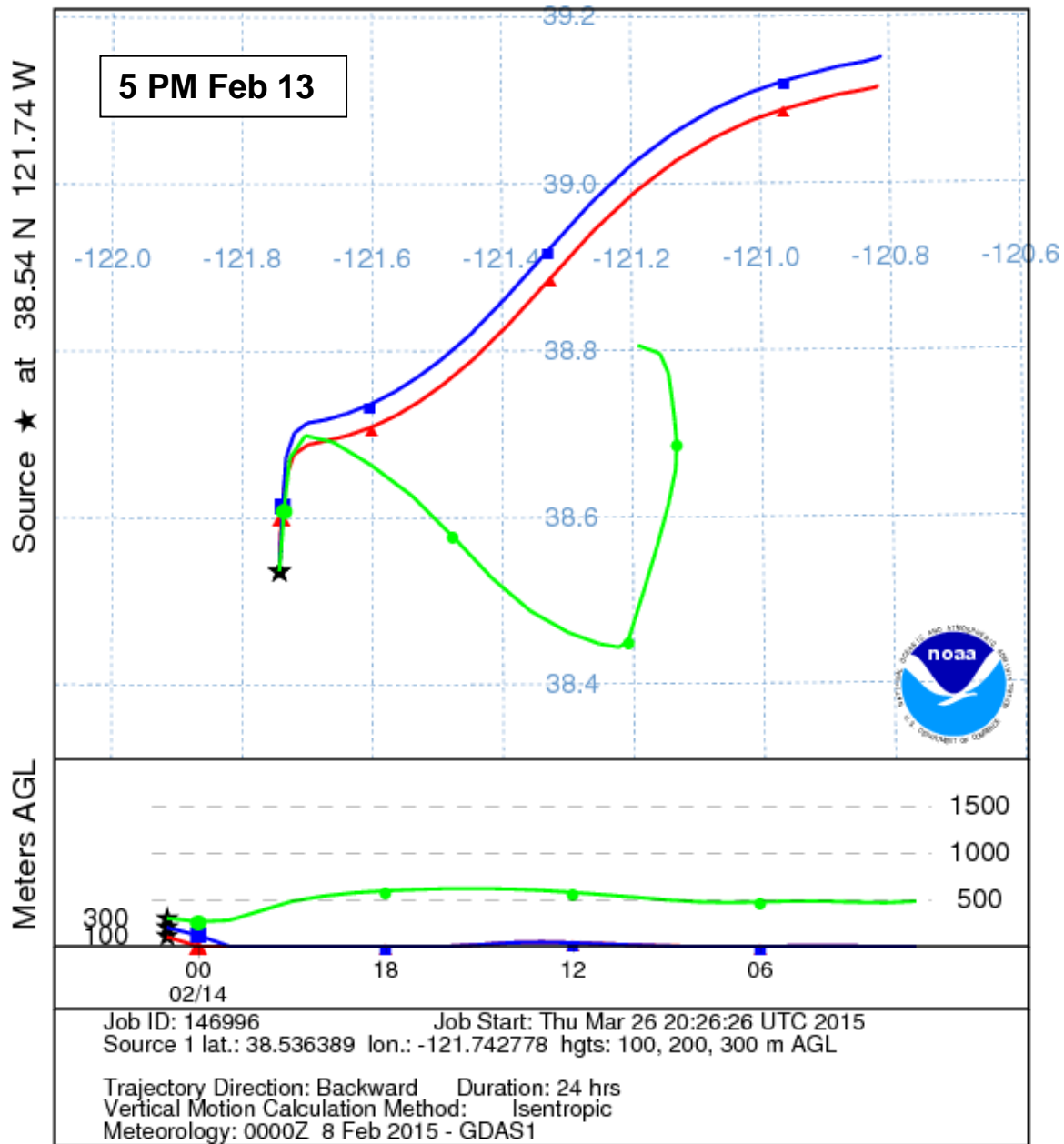
NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 13 Feb 15
 GDAS Meteorological Data



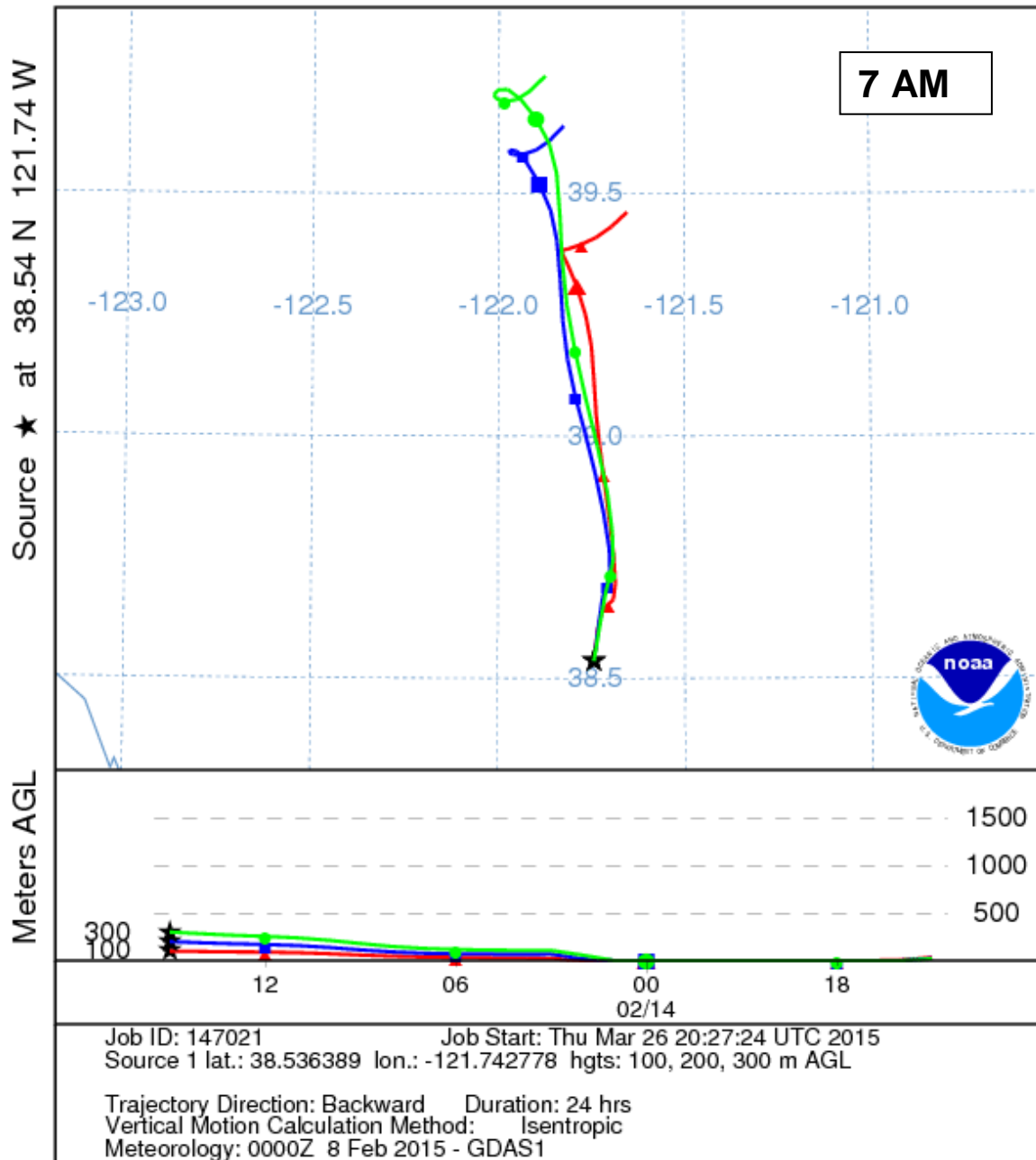
NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 13 Feb 15
 GDAS Meteorological Data



NOAA HYSPLIT MODEL
 Backward trajectories ending at 0100 UTC 14 Feb 15
 GDAS Meteorological Data



NOAA HYSPLIT MODEL
 Backward trajectories ending at 1500 UTC 14 Feb 15
 GDAS Meteorological Data



UTC (Zulu) Time Conversion Chart

UTC (Zulu)	PST/ALDT	PDT/MST	MDT/CST	CDT/EST	EDT/AST	ALST	HST	UTC (Zulu)	PST/ALDT	PDT/MST	MDT/CST	CDT/EST	EDT/AST	ALST	HST
0000*	1600	1700	1800	1900	2000	1500	1400	1300	0500	0600	0700	0800	0900	0400	0300
0100	1700	1800	1900	2000	2100	1600	1500	1400	0600	0700	0800	0900	1000	0500	0400
0200	1800	1900	2000	2100	2200	1700	1600	1500	0700	0800	0900	1000	1100	0600	0500
0300	1900	2000	2100	2200	2300	1800	1700	1600	0800	0900	1000	1100	1200	0700	0600
0400	2000	2100	2200	2300	0000*	1900	1800	1700	0900	1000	1100	1200	1300	0800	0700
0500	2100	2200	2300	0000*	0100	2000	1900	1800	1000	1100	1200	1300	1400	0900	0800
0600	2200	2300	0000*	0100	0200	2100	2000	1900	1100	1200	1300	1400	1500	1000	0900
0700	2300	0000*	0100	0200	0300	2200	2100	2000	1200	1300	1400	1500	1600	1100	1000
0800	0000*	0100	0200	0300	0400	2300	2200	2100	1300	1400	1500	1600	1700	1200	1100
0900	0100	0200	0300	0400	0500	0000*	2300	2200	1400	1500	1600	1700	1800	1300	1200
1000	0200	0300	0400	0500	0600	0100	0000*	2100	1500	1600	1700	1800	1900	1400	1300
1100	0300	0400	0500	0600	0700	0200	0100	2000	1600	1700	1800	1900	2000	1500	1400
1200	0400	0500	0600	0700	0800	0300	0200	1900	1700	1800	1900	2000	2100	1600	1500

*0000 and 2400 are interchangeable.

2400 is associated with the date of the day ending, 0000 with the day just starting.

-
- UTC** = Coordinated Universal Time, or **Zulu**
 - PST** = Pacific Standard Time (UTC - 8 hours)
 - ALDT** = Alaskan Daylight Time (UTC - 8 hours)
 - PDT** = Pacific Daylight Time (UTC - 7 hours)
 - MST** = Mountain Standard Time (UTC - 7 hours)
 - MDT** = Mountain Daylight Time (UTC - 6 hours)
 - CST** = Central Standard Time (UTC - 6 hours)
 - CDT** = Central Daylight Time (UTC - 5 hours)
 - EST** = Eastern Standard Time (UTC - 5 hours)
 - EDT** = Eastern Daylight Time (UTC - 4 hours)
 - AST** = Atlantic Standard Time (UTC - 4 hours)
 - ALST** = Alaskan Standard Time (UTC - 9 hours)
 - HST** = Hawaiian Standard Time (UTC - 10 hours)

Attachment 7: File list for extended data in digital report only

The following files are a part of this report but not included in the hard document. The files include complete sets of data generated from the analyses, and a full version of the DELTA quality assurance document, and a pdf of the paper used for the ultra-fine species comparison. These files will be provided with the softcopy of this report.

Excel files:

S-XRF elemental analyses concentrations filename, OI Dr 609 Elements Data.xlsx
Full Beta Mass analyses concentrations for site Olive Drive: OI Dr 609 Beta Data.xlsx
Data are from Norcal project site: Site 1, Olive Drive.

Documents:

Full DELTA Group DRUM Quality Assurance Protocols: DQAP.pdf

Recent paper (.pdf) used in ultra-fine elemental comparison:

Seasonal variability of ultra-fine metals downwind of a heavily traveled secondary road, Atmospheric Environment, 94 (2014)173-179,
doi:10.1016/j.atmosenv.2014.05.025

OIDr, Dep 609

Input Prog Start datetime 2/3/15 18:20

predicted gap start datetime

Predicted end datetime

*Apparent end datetime

*Apparent marker date

Timing:

Field Stop = 2/21/2015 5:15:00 PM

Deployment ended before any protocol motions so no off-sets needed in analysis.

Site Visit: 2/10/2015 15:45 System running well no problems.

Flow measured 7.89 l/min.

Ninth Stage stopped at 10.42 days, measured to center of end deposit.

Ninth Stage stopped at (peak center) 2/14/15 04:25

Data after ninth stage stopped has larger error due to variable flow restriction.

Measured Flow (l/min)**7.89**

After Ufine continuos after filter stalls, the flow is affected and variable.

measured value at end of deployment is 6.4 l/m

Beta Background

Stage	Notes
1	very clean hard to see
2	21.5-94
3	21.5-94
4	20-92
5	23.5-95+-0.25 tilt
6	20.5-92: Only 1st 7_8mm slight moisture time averaging
7	25-97
8	23.5-95 moistureafterout2 108mm
9	start ~37-38mm then heavy deposit centered at 41.5+-2.5
	notes Beta only
1	
2	
3	
4	
5	
6	
7	
8	
9	

Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3571	2	4/2/2015 15:16	26	3449	119.9867	
609	3571	2	4/2/2015 15:16	26.5	3453	118.8167	
609	3571	2	4/2/2015 15:17	27	3487	110.4606	
609	3571	2	4/2/2015 15:17	27.5	3651	72.11755	
609	3571	2	4/2/2015 15:18	28	3604	82.64838	
609	3571	2	4/2/2015 15:19	28.5	3525	100.8363	
609	3571	2	4/2/2015 15:19	29	3433	122.6249	
609	3571	2	4/2/2015 15:20	29.5	3240	170.7272	
609	3571	2	4/2/2015 15:20	30	3440	120.5176	
609	3571	2	4/2/2015 15:21	30.5	3486	109.26	
609	3571	2	4/2/2015 15:21	31	3457	116.0031	
609	3571	2	4/2/2015 15:22	31.5	3454	116.5197	
609	3571	2	4/2/2015 15:22	32	3442	119.2105	
609	3571	2	4/2/2015 15:23	32.5	3508	103.2069	
609	3571	2	4/2/2015 15:24	33	3435	120.4934	
609	3571	2	4/2/2015 15:24	33.5	3383	132.9968	
609	3571	2	4/2/2015 15:25	34	3302	153.0197	
609	3571	2	4/2/2015 15:25	34.5	3347	141.509	
609	3571	2	4/2/2015 15:26	35	3239	168.7201	
609	3571	2	4/2/2015 15:26	35.5	3170	186.5603	
609	3571	2	4/2/2015 15:27	36	3218	173.7548	
609	3571	2	4/2/2015 15:28	36.5	3181	183.2419	
609	3571	2	4/2/2015 15:28	37	3128	197.1385	
609	3571	2	4/2/2015 15:29	37.5	3102	203.9471	
609	3571	2	4/2/2015 15:29	38	3148	191.3729	
609	3571	2	4/2/2015 15:30	38.5	3213	174.025	
609	3571	2	4/2/2015 15:30	39	3249	164.4877	
609	3571	2	4/2/2015 15:31	39.5	3231	168.9319	
609	3571	2	4/2/2015 15:31	40	3193	178.6381	
609	3571	2	4/2/2015 15:32	40.5	3296	151.8549	
609	3571	2	4/2/2015 15:33	41	3355	136.8313	
609	3571	2	4/2/2015 15:33	41.5	3327	143.6201	
609	3571	2	4/2/2015 15:34	42	3335	141.4077	
609	3571	2	4/2/2015 15:34	42.5	3347	138.2025	
609	3571	2	4/2/2015 15:35	43	3219	170.5997	
609	3571	2	4/2/2015 15:35	43.5	3337	140.2858	
609	3571	2	4/2/2015 15:36	44	3382	128.9028	
609	3571	2	4/2/2015 15:36	44.5	3233	166.3432	
609	3571	2	4/2/2015 15:37	45	3313	145.6918	
609	3571	2	4/2/2015 15:38	45.5	3394	125.3281	
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609	3571	2	4/2/2015 15:39	46.5	3297	149.1146	
609	3571	2	4/2/2015 15:39	47	3468	106.7449	
609	3571	2	4/2/2015 15:40	47.5	3342	137.3763	
609	3571	2	4/2/2015 15:40	48	3351	134.9241	

Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

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609	3571	2	4/2/2015 15:43	50	3321	141.6005	
609	3571	2	4/2/2015 15:43	50.5	3390	124.2337	
609	3571	2	4/2/2015 15:44	51	3454	108.4478	
609	3571	2	4/2/2015 15:44	51.5	3400	121.3625	
609	3571	2	4/2/2015 15:45	52	3354	132.5137	
609	3571	2	4/2/2015 15:50	52.5	3438	111.6881	
609	3571	2	4/2/2015 15:51	53	3429	113.913	
609	3571	2	4/2/2015 15:52	53.5	3469	104.3026	
609	3571	2	4/2/2015 15:52	54	3468	104.5848	
609	3571	2	4/2/2015 15:53	54.5	3462	106.0677	
609	3571	2	4/2/2015 15:53	55	3428	114.3254	
609	3571	2	4/2/2015 15:54	55.5	3484	100.8834	
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609	3571	2	4/2/2015 15:56	57	3374	127.7271	
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609	3571	2	4/2/2015 15:57	58	3306	144.8077	
609	3571	2	4/2/2015 15:57	58.5	3337	137.0549	
609	3571	2	4/2/2015 15:58	59	3355	132.6074	
609	3571	2	4/2/2015 15:58	59.5	3286	150.0065	
609	3571	2	4/2/2015 15:59	60	3219	167.2887	
609	3571	2	4/2/2015 15:59	60.5	3220	167.0709	
609	3571	2	4/2/2015 16:00	61	3161	182.6185	
609	3571	2	4/2/2015 16:01	61.5	3270	154.2575	
609	3571	2	4/2/2015 16:01	62	3228	165.1194	
609	3571	2	4/2/2015 16:02	62.5	3366	130.1729	
609	3571	2	4/2/2015 16:02	63	3162	182.5224	
609	3571	2	4/2/2015 16:03	63.5	3276	152.8937	
609	3571	2	4/2/2015 16:03	64	3254	158.5728	
609	3571	2	4/2/2015 16:04	64.5	3247	160.4175	
609	3571	2	4/2/2015 16:05	65	3297	147.6785	
609	3571	2	4/2/2015 16:05	65.5	3283	151.278	
609	3571	2	4/2/2015 16:06	66	3217	168.3172	
609	3571	2	4/2/2015 16:06	66.5	3420	117.245	
609	3571	2	4/2/2015 16:07	67	3110	196.7878	
609	3571	2	4/2/2015 16:07	67.5	3300	147.1299	
609	3571	2	4/2/2015 16:08	68	3230	165.1085	
609	3571	2	4/2/2015 16:08	68.5	3243	161.7878	
609	3571	2	4/2/2015 16:09	69	3310	144.7285	
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609	3571	2	4/2/2015 16:11	70.5	3186	176.8139	
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Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

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609	3571	2	4/2/2015 16:13	73	3180	178.6061	
609	3571	2	4/2/2015 16:14	73.5	3248	160.9211	
609	3571	2	4/2/2015 16:15	74	3287	150.9789	
609	3571	2	4/2/2015 16:15	74.5	3100	200.1298	
609	3571	2	4/2/2015 16:21	75	3212	170.3817	
609	3571	2	4/2/2015 16:21	75.5	3307	146.0007	
609	3571	2	4/2/2015 16:22	76	3260	157.9763	
609	3571	2	4/2/2015 16:22	76.5	3226	166.7599	
609	3571	2	4/2/2015 16:23	77	3316	143.7518	
609	3571	2	4/2/2015 16:24	77.5	3295	149.0675	
609	3571	2	4/2/2015 16:24	78	3201	173.2998	
609	3571	2	4/2/2015 16:25	78.5	3258	158.5258	
609	3571	2	4/2/2015 16:25	79	3200	173.5761	
609	3571	2	4/2/2015 16:26	79.5	3375	129.068	
609	3571	2	4/2/2015 16:26	80	3181	178.5836	
609	3571	2	4/2/2015 16:27	80.5	3170	181.4965	
609	3571	2	4/2/2015 16:27	81	3241	162.9404	
609	3571	2	4/2/2015 16:28	81.5	3289	150.6487	
609	3571	2	4/2/2015 16:29	82	3240	163.2131	
609	3571	2	4/2/2015 16:29	82.5	3234	164.7723	
609	3571	2	4/2/2015 16:30	83	3288	150.9245	
609	3571	2	4/2/2015 16:30	83.5	3240	163.2347	
609	3571	2	4/2/2015 16:31	84	3168	182.0765	
609	3571	2	4/2/2015 16:31	84.5	3264	157.0728	
609	3571	2	4/2/2015 16:32	85	3230	165.8446	
609	3571	2	4/2/2015 16:33	85.5	3218	168.9694	
609	3571	2	4/2/2015 16:33	86	3247	161.4642	
609	3571	2	4/2/2015 16:34	86.5	3224	167.4234	
609	3571	2	4/2/2015 16:34	87	3324	141.8832	
609	3571	2	4/2/2015 16:35	87.5	3130	192.2579	
609	3571	2	4/2/2015 16:35	88	3229	166.1472	
609	3571	2	4/2/2015 16:36	88.5	3322	142.4075	
609	3571	2	4/2/2015 16:36	89	3323	142.1633	
609	3571	2	4/2/2015 16:37	89.5	3365	131.6871	
609	3571	2	4/2/2015 16:38	90	3235	164.6214	
609	3571	2	4/2/2015 16:38	90.5	3315	144.1983	
609	3571	2	4/2/2015 16:39	91	3228	166.4498	
609	3571	2	4/2/2015 16:39	91.5	3318	143.457	
609	3571	2	4/2/2015 16:40	92	3343	137.1965	
609	3571	2	4/2/2015 16:40	92.5	3326	141.4601	
609	3571	2	4/2/2015 16:41	93	3313	144.7384	
609	3571	2	4/2/2015 16:42	93.5	3214	170.1266	
609	3571	2	4/2/2015 16:42	94	3239	163.6445	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3571	2	4/2/2015 16:43	94.5	3102	199.9107	
609	3571	2	4/2/2015 16:43	95	3271	155.4321	
609	3571	2	4/2/2015 16:44	95.5	3274	154.6725	
609	3571	2	4/2/2015 16:44	96	3345	136.7549	
609	3571	2	4/2/2015 16:45	96.5	3302	147.5676	
609	3571	2	4/2/2015 16:50	97	3427	116.5779	
609	3571	2	4/2/2015 16:51	97.5	3333	139.8098	
609	3571	2	4/2/2015 16:52	98	3332	140.1006	
609	3571	2	4/2/2015 16:52	98.5	3340	138.1389	
609	3571	2	4/2/2015 16:53	99	3248	161.5262	
609	3571	2	4/2/2015 16:53	99.5	3309	146.007	
609	3571	2	4/2/2015 16:54	100	3407	121.6956	
609	3571	2	4/2/2015 16:54	100.5	3334	139.8013	
609	3571	2	4/2/2015 16:55	101	3380	128.4082	
609	3571	2	4/2/2015 16:55	101.5	3410	121.0832	
609	3571	2	4/2/2015 16:56	102	3228	166.9394	
609	3571	2	4/2/2015 16:57	102.5	3294	150.0457	
609	3571	2	4/2/2015 16:57	103	3286	152.1187	
609	3571	2	4/2/2015 16:58	103.5	3303	147.8459	
609	3571	2	4/2/2015 16:58	104	3404	122.7521	
609	3571	2	4/2/2015 16:59	104.5	3332	140.6247	
609	3571	2	4/2/2015 16:59	105	3253	160.7225	
609	3571	2	4/2/2015 17:00	105.5	3299	149.0198	
609	3571	2	4/2/2015 17:01	106	3323	143.0043	
609	3571	2	4/2/2015 17:01	106.5	3301	148.5939	
609	3571	2	4/2/2015 17:02	107	3406	122.5045	
609	3571	2	4/2/2015 17:02	107.5	3413	120.8342	
609	3571	2	4/2/2015 17:03	108	3359	134.1708	
609	3571	2	4/2/2015 17:03	108.5	3340	138.945	
609	3571	2	4/2/2015 17:04	109	3457	110.2897	
609	3571	2	4/2/2015 17:04	109.5	3411	121.4836	
609	3571	2	4/2/2015 17:05	110	3306	147.6111	
609	3571	2	4/2/2015 17:06	110.5	3470	107.2877	
609	3571	2	4/2/2015 17:06	111	3304	148.1973	
609	3571	2	4/2/2015 17:07	111.5	3460	109.7692	
609	3571	2	4/2/2015 17:07	112	3290	151.8268	
609	3571	2	4/2/2015 17:08	112.5	3467	108.1683	
609	3571	2	4/2/2015 17:08	113	3308	147.3474	
609	3571	2	4/2/2015 17:09	113.5	3361	134.1172	
609	3571	2	4/2/2015 17:10	114	3387	127.7307	
609	3571	2	4/2/2015 17:10	114.5	3229	167.6871	
609	3571	2	4/2/2015 17:11	115	3424	118.7579	
609	3571	2	4/2/2015 17:11	115.5	3284	153.6348	
609	3571	2	4/2/2015 17:12	116	3376	130.6041	
609	3571	2	4/2/2015 17:12	116.5	3326	143.0963	
609	3571	2	4/2/2015 17:13	117	3350	137.1343	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3571	2	4/2/2015 17:13	117.5	3325	143.4279	
609	3571	2	4/2/2015 17:14	118	3455	111.4959	
609	3571	2	4/2/2015 17:15	118.5	3311	147.0328	
609	3571	2	4/2/2015 17:15	119	3538	91.84216	
609	3571	2	4/2/2015 17:21	119.5	3318	145.3491	
609	3571	2	4/2/2015 17:21	120	3482	105.0387	
609	3571	2	4/2/2015 17:22	120.5	3477	106.1316	
609	3571	2	4/2/2015 17:22	121	3295	150.8545	
609	3571	2	4/2/2015 17:23	121.5	3360	134.4395	
609	3571	2	4/2/2015 17:24	122	3306	147.8649	
609	3571	2	4/2/2015 17:24	122.5	3318	144.7357	
609	3571	2	4/2/2015 17:25	123	3333	140.8666	
609	3571	2	4/2/2015 17:25	123.5	3336	140.0131	
609	3571	2	4/2/2015 17:26	124	3322	143.4225	
609	3571	2	4/2/2015 17:26	124.5	3382	128.3826	
609	3571	2	4/2/2015 17:27	125	3345	137.4572	
609	3571	2	4/2/2015 17:27	125.5	3356	134.615	
609	3571	2	4/2/2015 17:28	126	3565	84.24176	
609	3571	2	4/2/2015 17:29	126.5	3297	149.2221	
609	3571	2	4/2/2015 17:29	127	3344	137.2973	
609	3571	2	4/2/2015 17:30	127.5	3346	136.6959	
609	3572	1	4/2/2015 17:40	25	3632	72.95264	
609	3572	1	4/2/2015 17:41	25.5	3624	74.44696	
609	3572	1	4/2/2015 17:41	26	3775	40.40244	
609	3572	1	4/2/2015 17:42	26.5	3628	72.87439	
609	3572	1	4/2/2015 17:43	27	3549	90.77271	
609	3572	1	4/2/2015 17:43	27.5	3432	118.2649	
609	3572	1	4/2/2015 17:44	28	3328	143.5466	
609	3572	1	4/2/2015 17:44	28.5	3172	183.3214	
609	3572	1	4/2/2015 17:45	29	2946	245.1054	
609	3572	1	4/2/2015 17:50	29.5	2998	230.0284	
609	3572	1	4/2/2015 17:51	30	2930	249.0386	
609	3572	1	4/2/2015 17:52	30.5	3056	213.2478	
609	3572	1	4/2/2015 17:52	31	2993	230.4404	
609	3572	1	4/2/2015 17:53	31.5	3020	222.5494	
609	3572	1	4/2/2015 17:53	32	3092	202.4175	
609	3572	1	4/2/2015 17:54	32.5	3033	218.2728	
609	3572	1	4/2/2015 17:54	33	3116	195.2662	
609	3572	1	4/2/2015 17:55	33.5	3145	187.1678	
609	3572	1	4/2/2015 17:55	34	3204	171.2749	
609	3572	1	4/2/2015 17:56	34.5	3120	193.1936	
609	3572	1	4/2/2015 17:57	35	3113	194.745	
609	3572	1	4/2/2015 17:57	35.5	3035	215.7247	
609	3572	1	4/2/2015 17:58	36	2862	264.8989	
609	3572	1	4/2/2015 17:58	36.5	2857	266.0457	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3572	1	4/2/2015 17:59	37	2841	270.4671	
609	3572	1	4/2/2015 17:59	37.5	3013	220.5131	
609	3572	1	4/2/2015 18:00	38	2883	257.3829	
609	3572	1	4/2/2015 18:01	38.5	2962	234.226	
609	3572	1	4/2/2015 18:01	39	2986	227.0917	
609	3572	1	4/2/2015 18:02	39.5	3058	206.712	
609	3572	1	4/2/2015 18:02	40	3072	202.5406	
609	3572	1	4/2/2015 18:03	40.5	3189	170.8693	
609	3572	1	4/2/2015 18:03	41	3284	146.004	
609	3572	1	4/2/2015 18:04	41.5	3306	140.0993	
609	3572	1	4/2/2015 18:04	42	3321	135.9901	
609	3572	1	4/2/2015 18:05	42.5	3397	116.812	
609	3572	1	4/2/2015 18:06	43	3364	124.6021	
609	3572	1	4/2/2015 18:06	43.5	3445	104.4763	
609	3572	1	4/2/2015 18:07	44	3482	95.26898	
609	3572	1	4/2/2015 18:07	44.5	3373	121.3723	
609	3572	1	4/2/2015 18:08	45	3423	108.7953	
609	3572	1	4/2/2015 18:08	45.5	3547	78.92169	
609	3572	1	4/2/2015 18:09	46	3558	76.02002	
609	3572	1	4/2/2015 18:10	46.5	3497	90.0235	
609	3572	1	4/2/2015 18:10	47	3533	81.19244	
609	3572	1	4/2/2015 18:11	47.5	3380	117.632	
609	3572	1	4/2/2015 18:11	48	3334	128.708	
609	3572	1	4/2/2015 18:12	48.5	3253	148.8914	
609	3572	1	4/2/2015 18:12	49	3219	157.3352	
609	3572	1	4/2/2015 18:13	49.5	3160	172.4789	
609	3572	1	4/2/2015 18:13	50	3195	162.9208	
609	3572	1	4/2/2015 18:14	50.5	3251	148.0579	
609	3572	1	4/2/2015 18:15	51	3029	207.0051	
609	3572	1	4/2/2015 18:15	51.5	3111	184.2301	
609	3572	1	4/2/2015 18:21	52	2962	225.166	
609	3572	1	4/2/2015 18:21	52.5	3136	177.5195	
609	3572	1	4/2/2015 18:22	53	3074	194.6122	
609	3572	1	4/2/2015 18:22	53.5	3108	185.717	
609	3572	1	4/2/2015 18:23	54	3221	156.1463	
609	3572	1	4/2/2015 18:24	54.5	3207	160.1268	
609	3572	1	4/2/2015 18:24	55	3261	146.5095	
609	3572	1	4/2/2015 18:25	55.5	3219	157.6789	
609	3572	1	4/2/2015 18:25	56	3140	178.8165	
609	3572	1	4/2/2015 18:26	56.5	2994	219.1529	
609	3572	1	4/2/2015 18:26	57	3097	191.0554	
609	3572	1	4/2/2015 18:27	57.5	3069	199.0179	
609	3572	1	4/2/2015 18:27	58	3067	199.9023	
609	3572	1	4/2/2015 18:28	58.5	3241	154.0084	
609	3572	1	4/2/2015 18:29	59	3405	113.1938	
609	3572	1	4/2/2015 18:29	59.5	3100	191.9263	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
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609	3572	1	4/2/2015 18:30	60.5	3038	209.5693	
609	3572	1	4/2/2015 18:31	61	3082	197.8229	
609	3572	1	4/2/2015 18:31	61.5	3179	172.1794	
609	3572	1	4/2/2015 18:32	62	3161	177.2697	
609	3572	1	4/2/2015 18:32	62.5	3209	164.9916	
609	3572	1	4/2/2015 18:33	63	3240	157.29	
609	3572	1	4/2/2015 18:34	63.5	3312	139.279	
609	3572	1	4/2/2015 18:34	64	3210	165.7366	
609	3572	1	4/2/2015 18:35	64.5	3202	168.1587	
609	3572	1	4/2/2015 18:35	65	3200	169.0162	
609	3572	1	4/2/2015 18:36	65.5	3183	173.8081	
609	3572	1	4/2/2015 18:36	66	3139	185.8013	
609	3572	1	4/2/2015 18:37	66.5	3182	174.7399	
609	3572	1	4/2/2015 18:38	67	3263	154.0591	
609	3572	1	4/2/2015 18:38	67.5	3238	160.8177	
609	3572	1	4/2/2015 18:39	68	3333	137.0206	
609	3572	1	4/2/2015 18:39	68.5	3187	174.7618	
609	3572	1	4/2/2015 18:40	69	3311	143.2087	
609	3572	1	4/2/2015 18:40	69.5	3389	124.1461	
609	3572	1	4/2/2015 18:41	70	3336	137.605	
609	3572	1	4/2/2015 18:41	70.5	3342	136.4409	
609	3572	1	4/2/2015 18:42	71	3365	131.0613	
609	3572	1	4/2/2015 18:43	71.5	3346	136.1102	
609	3572	1	4/2/2015 18:43	72	3442	112.9076	
609	3572	1	4/2/2015 18:44	72.5	3254	160.0323	
609	3572	1	4/2/2015 18:44	73	3250	161.3922	
609	3572	1	4/2/2015 18:45	73.5	3453	111.2539	
609	3572	1	4/2/2015 18:50	74	3443	113.9957	
609	3572	1	4/2/2015 18:51	74.5	3569	84.22186	
609	3572	1	4/2/2015 18:52	75	3406	123.0686	
609	3572	1	4/2/2015 18:52	75.5	3482	104.7767	
609	3572	1	4/2/2015 18:53	76	3388	127.5675	
609	3572	1	4/2/2015 18:53	76.5	3306	148.0236	
609	3572	1	4/2/2015 18:54	77	3247	163.0999	
609	3572	1	4/2/2015 18:54	77.5	3284	153.6844	
609	3572	1	4/2/2015 18:55	78	3287	152.9677	
609	3572	1	4/2/2015 18:55	78.5	3354	136.1908	
609	3572	1	4/2/2015 18:56	79	3276	155.8558	
609	3572	1	4/2/2015 18:57	79.5	3373	131.5776	
609	3572	1	4/2/2015 18:57	80	3439	115.5051	
609	3572	1	4/2/2015 18:58	80.5	3346	138.3611	
609	3572	1	4/2/2015 18:58	81	3227	168.6251	
609	3572	1	4/2/2015 18:59	81.5	3287	153.2845	
609	3572	1	4/2/2015 18:59	82	3279	155.3634	
609	3572	1	4/2/2015 19:00	82.5	3316	146.0483	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3572	1	4/2/2015 19:00	83	3297	150.8858	
609	3572	1	4/2/2015 19:01	83.5	3374	131.6928	
609	3572	1	4/2/2015 19:02	84	3457	111.5297	
609	3572	1	4/2/2015 19:02	84.5	3377	131.0435	
609	3572	1	4/2/2015 19:03	85	3509	99.22681	
609	3572	1	4/2/2015 19:03	85.5	3332	142.3073	
609	3572	1	4/2/2015 19:04	86	3520	96.72113	
609	3572	1	4/2/2015 19:04	86.5	3512	98.65356	
609	3572	1	4/2/2015 19:05	87	3426	119.2864	
609	3572	1	4/2/2015 19:06	87.5	3456	112.0867	
609	3572	1	4/2/2015 19:06	88	3360	135.562	
609	3572	1	4/2/2015 19:07	88.5	3347	138.836	
609	3572	1	4/2/2015 19:07	89	3350	138.1348	
609	3572	1	4/2/2015 19:08	89.5	3422	120.4836	
609	3572	1	4/2/2015 19:08	90	3449	113.9971	
609	3572	1	4/2/2015 19:09	90.5	3505	100.6705	
609	3572	1	4/2/2015 19:09	91	3506	100.479	
609	3572	1	4/2/2015 19:10	91.5	3384	129.9531	
609	3572	1	4/2/2015 19:11	92	3397	126.8079	
609	3572	1	4/2/2015 19:11	92.5	3493	103.697	
609	3572	1	4/2/2015 19:12	93	3514	98.76904	
609	3572	1	4/2/2015 19:12	93.5	3570	85.70892	
609	3572	1	4/2/2015 19:13	94	3587	81.81982	
609	3572	1	4/2/2015 19:13	94.5	3450	114.163	
609	3572	1	4/2/2015 19:14	95	3435	117.8289	
609	3572	1	4/2/2015 19:15	95.5	3374	132.7779	
609	3572	1	4/2/2015 19:15	96	3414	123.0173	
609	3572	1	4/2/2015 19:21	96.5	3342	140.8046	
609	3572	1	4/2/2015 19:21	97	3402	125.8817	
609	3572	1	4/2/2015 19:22	97.5	3434	117.9877	
609	3572	1	4/2/2015 19:22	98	3437	117.1526	
609	3572	1	4/2/2015 19:23	98.5	3403	125.3091	
609	3572	1	4/2/2015 19:23	99	3416	122.0287	
609	3572	1	4/2/2015 19:24	99.5	3425	119.7316	
609	3572	1	4/2/2015 19:25	100	3326	144.0383	
609	3572	1	4/2/2015 19:25	100.5	3433	117.5734	
609	3572	1	4/2/2015 19:26	101	3494	102.8364	
609	3572	1	4/2/2015 19:26	101.5	3572	84.42212	
609	3572	1	4/2/2015 19:27	102	3554	88.49805	
609	3572	1	4/2/2015 19:27	102.5	3574	83.7395	
609	3572	1	4/2/2015 19:28	103	3498	101.449	
609	3572	1	4/2/2015 19:29	103.5	3614	74.30646	
609	3572	1	4/2/2015 19:29	104	3536	92.26837	
609	3572	1	4/2/2015 19:30	104.5	3611	74.77454	
609	3572	1	4/2/2015 19:30	105	3457	110.7992	
609	3572	1	4/2/2015 19:31	105.5	3439	115.0269	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3572	1	4/2/2015 19:31	106	3515	96.76947	
609	3572	1	4/2/2015 19:32	106.5	3622	71.8194	
609	3572	1	4/2/2015 19:32	107	3615	73.31036	
609	3572	1	4/2/2015 19:33	107.5	3450	111.9349	
609	3572	1	4/2/2015 19:34	108	3513	96.80298	
609	3572	1	4/2/2015 19:34	108.5	3535	91.5163	
609	3572	1	4/2/2015 19:35	109	3568	83.7063	
609	3572	1	4/2/2015 19:35	109.5	3581	80.58435	
609	3572	1	4/2/2015 19:36	110	3479	104.4346	
609	3572	1	4/2/2015 19:36	110.5	3536	90.8429	
609	3572	1	4/2/2015 19:37	111	3604	74.95471	
609	3572	1	4/2/2015 19:38	111.5	3518	94.8551	
609	3572	1	4/2/2015 19:38	112	3577	80.96106	
609	3572	1	4/2/2015 19:39	112.5	3592	77.38611	
609	3572	1	4/2/2015 19:39	113	3529	91.93683	
609	3572	1	4/2/2015 19:40	113.5	3367	130.8713	
609	3572	1	4/2/2015 19:40	114	3505	97.37695	
609	3572	1	4/2/2015 19:41	114.5	3556	85.28961	
609	3572	1	4/2/2015 19:41	115	3406	120.958	
609	3572	1	4/2/2015 19:42	115.5	3451	109.9375	
609	3572	1	4/2/2015 19:43	116	3482	102.401	
609	3572	1	4/2/2015 19:43	116.5	3462	107.0741	
609	3572	1	4/2/2015 19:44	117	3479	102.8966	
609	3572	1	4/2/2015 19:44	117.5	3507	96.13416	
609	3572	1	4/2/2015 19:45	118	3540	88.25745	
609	3572	1	4/2/2015 19:50	118.5	3578	79.30078	
609	3572	1	4/2/2015 19:51	119	3559	83.97351	
609	3572	1	4/2/2015 19:51	119.5	3388	125.1208	
609	3572	1	4/2/2015 19:52	120	3483	102.399	
609	3572	1	4/2/2015 19:53	120.5	3481	103.1377	
609	3572	1	4/2/2015 19:53	121	3406	121.4982	
609	3572	1	4/2/2015 19:54	121.5	3593	77.40833	
609	3572	1	4/2/2015 19:54	122	3546	88.57703	
609	3572	1	4/2/2015 19:55	122.5	3538	90.71063	
609	3572	1	4/2/2015 19:55	123	3539	90.73779	
609	3572	1	4/2/2015 19:56	123.5	3517	96.16974	
609	3572	1	4/2/2015 19:57	124	3517	96.43109	
609	3572	1	4/2/2015 19:57	124.5	3571	84.06268	
609	3572	1	4/2/2015 19:58	125	3571	84.32379	
609	3572	1	4/2/2015 19:58	125.5	3504	100.2862	
609	3572	1	4/2/2015 19:59	126	3576	83.68671	
609	3572	1	4/2/2015 19:59	126.5	3577	83.716	
609	3572	1	4/2/2015 20:00	127	3516	98.2326	
609	3572	1	4/2/2015 20:00	127.5	3499	102.514	
609	3573	1	4/2/2015 20:11	25	3730	52.66507	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3573	1	4/2/2015 20:12	25.5	3564	89.97406	
609	3573	1	4/2/2015 20:12	26	3724	53.3349	
609	3573	1	4/2/2015 20:13	26.5	3695	59.45959	
609	3573	1	4/2/2015 20:13	27	3732	50.90457	
609	3573	1	4/2/2015 20:14	27.5	3777	40.68909	
609	3573	1	4/2/2015 20:15	28	3652	68.14166	
609	3573	1	4/2/2015 20:15	28.5	3462	112.0779	
609	3573	1	4/2/2015 20:21	29	3331	143.8354	
609	3573	1	4/2/2015 20:21	29.5	3385	130.1141	
609	3573	1	4/2/2015 20:22	30	3470	109.17	
609	3573	1	4/2/2015 20:22	30.5	3595	79.50177	
609	3573	1	4/2/2015 20:23	31	3464	109.9453	
609	3573	1	4/2/2015 20:23	31.5	3390	127.5627	
609	3573	1	4/2/2015 20:24	32	3190	177.965	
609	3573	1	4/2/2015 20:25	32.5	3103	200.8006	
609	3573	1	4/2/2015 20:25	33	3315	145.2009	
609	3573	1	4/2/2015 20:26	33.5	3577	81.6701	
609	3573	1	4/2/2015 20:26	34	3651	64.39642	
609	3573	1	4/2/2015 20:27	34.5	3518	94.78876	
609	3573	1	4/2/2015 20:27	35	3518	94.45673	
609	3573	1	4/2/2015 20:28	35.5	3412	119.5291	
609	3573	1	4/2/2015 20:28	36	3432	114.3382	
609	3573	1	4/2/2015 20:29	36.5	3348	134.6224	
609	3573	1	4/2/2015 20:30	37	3360	131.3103	
609	3573	1	4/2/2015 20:30	37.5	3241	161.0518	
609	3573	1	4/2/2015 20:31	38	3426	114.4617	
609	3573	1	4/2/2015 20:31	38.5	3368	128.3316	
609	3573	1	4/2/2015 20:32	39	3249	157.9932	
609	3573	1	4/2/2015 20:32	39.5	3334	136.1154	
609	3573	1	4/2/2015 20:33	40	3163	179.7613	
609	3573	1	4/2/2015 20:34	40.5	3228	162.4105	
609	3573	1	4/2/2015 20:34	41	3299	143.9123	
609	3573	1	4/2/2015 20:35	41.5	3428	111.6422	
609	3573	1	4/2/2015 20:35	42	3484	97.84979	
609	3573	1	4/2/2015 20:36	42.5	3512	90.87433	
609	3573	1	4/2/2015 20:36	43	3448	105.8058	
609	3573	1	4/2/2015 20:37	43.5	3455	103.7866	
609	3573	1	4/2/2015 20:37	44	3489	95.32184	
609	3573	1	4/2/2015 20:38	44.5	3443	106.0073	
609	3573	1	4/2/2015 20:39	45	3639	59.78308	
609	3573	1	4/2/2015 20:39	45.5	3675	51.31116	
609	3573	1	4/2/2015 20:40	46	3625	62.3006	
609	3573	1	4/2/2015 20:40	46.5	3652	55.82907	
609	3573	1	4/2/2015 20:41	47	3568	74.74811	
609	3573	1	4/2/2015 20:41	47.5	3552	78.13568	
609	3573	1	4/2/2015 20:42	48	3584	70.3714	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3573	1	4/2/2015 20:43	48.5	3529	82.84808	
609	3573	1	4/2/2015 20:43	49	3473	95.78223	
609	3573	1	4/2/2015 20:44	49.5	3506	87.59808	
609	3573	1	4/2/2015 20:44	50	3418	108.3715	
609	3573	1	4/2/2015 20:45	50.5	3381	117.0879	
609	3573	1	4/2/2015 20:50	51	3273	143.8075	
609	3573	1	4/2/2015 20:51	51.5	3438	103.033	
609	3573	1	4/2/2015 20:51	52	3366	120.8203	
609	3573	1	4/2/2015 20:52	52.5	3388	115.5823	
609	3573	1	4/2/2015 20:53	53	3140	179.237	
609	3573	1	4/2/2015 20:53	53.5	3259	148.306	
609	3573	1	4/2/2015 20:54	54	3490	91.48718	
609	3573	1	4/2/2015 20:54	54.5	3571	72.65002	
609	3573	1	4/2/2015 20:55	55	3586	69.36279	
609	3573	1	4/2/2015 20:55	55.5	3669	50.62061	
609	3573	1	4/2/2015 20:56	56	3417	109.7802	
609	3573	1	4/2/2015 20:57	56.5	3328	131.9315	
609	3573	1	4/2/2015 20:57	57	3205	163.5546	
609	3573	1	4/2/2015 20:58	57.5	3433	106.4479	
609	3573	1	4/2/2015 20:58	58	3370	122.0367	
609	3573	1	4/2/2015 20:59	58.5	3534	82.74878	
609	3573	1	4/2/2015 20:59	59	3467	98.81189	
609	3573	1	4/2/2015 21:00	59.5	3514	87.82129	
609	3573	1	4/2/2015 21:00	60	3494	92.73956	
609	3573	1	4/2/2015 21:01	60.5	3347	128.656	
609	3573	1	4/2/2015 21:02	61	3377	121.4097	
609	3573	1	4/2/2015 21:02	61.5	3525	85.96265	
609	3573	1	4/2/2015 21:03	62	3517	88.02985	
609	3573	1	4/2/2015 21:03	62.5	3533	84.44952	
609	3573	1	4/2/2015 21:04	63	3608	67.2348	
609	3573	1	4/2/2015 21:04	63.5	3591	71.32678	
609	3573	1	4/2/2015 21:05	64	3570	76.36615	
609	3573	1	4/2/2015 21:05	64.5	3442	106.8375	
609	3573	1	4/2/2015 21:06	65	3441	107.2619	
609	3573	1	4/2/2015 21:07	65.5	3374	123.7966	
609	3573	1	4/2/2015 21:07	66	3382	122.0084	
609	3573	1	4/2/2015 21:08	66.5	3453	104.9182	
609	3573	1	4/2/2015 21:08	67	3426	111.6236	
609	3573	1	4/2/2015 21:09	67.5	3363	127.246	
609	3573	1	4/2/2015 21:09	68	3500	94.24335	
609	3573	1	4/2/2015 21:10	68.5	3503	93.71521	
609	3573	1	4/2/2015 21:11	69	3515	91.06116	
609	3573	1	4/2/2015 21:11	69.5	3369	126.4923	
609	3573	1	4/2/2015 21:12	70	3535	86.72186	
609	3573	1	4/2/2015 21:12	70.5	3530	88.07764	
609	3573	1	4/2/2015 21:13	71	3419	114.7839	

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Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3573	1	4/2/2015 21:13	71.5	3469	102.9043	
609	3573	1	4/2/2015 21:14	72	3509	93.57251	
609	3573	1	4/2/2015 21:14	72.5	3527	89.51172	
609	3573	1	4/2/2015 21:15	73	3488	98.91705	
609	3573	1	4/2/2015 21:21	73.5	3481	100.7665	
609	3573	1	4/2/2015 21:21	74	3585	76.41095	
609	3573	1	4/2/2015 21:22	74.5	3527	89.97314	
609	3573	1	4/2/2015 21:22	75	3498	96.86926	
609	3573	1	4/2/2015 21:23	75.5	3605	71.95166	
609	3573	1	4/2/2015 21:23	76	3472	103.1581	
609	3573	1	4/2/2015 21:24	76.5	3404	119.6423	
609	3573	1	4/2/2015 21:25	77	3482	100.8677	
609	3573	1	4/2/2015 21:25	77.5	3537	87.91718	
609	3573	1	4/2/2015 21:26	78	3669	57.64233	
609	3573	1	4/2/2015 21:26	78.5	3546	85.90796	
609	3573	1	4/2/2015 21:27	79	3644	63.39069	
609	3573	1	4/2/2015 21:27	79.5	3621	68.67566	
609	3573	1	4/2/2015 21:28	80	3671	57.38608	
609	3573	1	4/2/2015 21:28	80.5	3556	83.76855	
609	3573	1	4/2/2015 21:29	81	3432	113.2683	
609	3573	1	4/2/2015 21:30	81.5	3447	109.6931	
609	3573	1	4/2/2015 21:30	82	3449	109.2598	
609	3573	1	4/2/2015 21:31	82.5	3584	77.46655	
609	3573	1	4/2/2015 21:31	83	3545	86.57813	
609	3573	1	4/2/2015 21:32	83.5	3612	71.12238	
609	3573	1	4/2/2015 21:32	84	3470	104.4125	
609	3573	1	4/2/2015 21:33	84.5	3399	121.6408	
609	3573	1	4/2/2015 21:34	85	3489	99.97675	
609	3573	1	4/2/2015 21:34	85.5	3526	91.27515	
609	3573	1	4/2/2015 21:35	86	3608	72.28156	
609	3573	1	4/2/2015 21:35	86.5	3675	57.11642	
609	3573	1	4/2/2015 21:36	87	3770	36.10016	
609	3573	1	4/2/2015 21:36	87.5	3574	80.26483	
609	3573	1	4/2/2015 21:37	88	3322	141.0594	
609	3573	1	4/2/2015 21:37	88.5	3329	139.3535	
609	3573	1	4/2/2015 21:38	89	3514	94.44116	
609	3573	1	4/2/2015 21:39	89.5	3559	83.94226	
609	3573	1	4/2/2015 21:39	90	3586	77.73151	
609	3573	1	4/2/2015 21:40	90.5	3541	88.24054	
609	3573	1	4/2/2015 21:40	91	3531	90.63324	
609	3573	1	4/2/2015 21:41	91.5	3514	94.68335	
609	3573	1	4/2/2015 21:41	92	3541	88.38586	
609	3573	1	4/2/2015 21:42	92.5	3521	93.12988	
609	3573	1	4/2/2015 21:42	93	3647	64.06714	
609	3573	1	4/2/2015 21:43	93.5	3572	81.30957	
609	3573	1	4/2/2015 21:44	94	3611	72.36877	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3573	1	4/2/2015 21:44	94.5	3620	70.35773	
609	3573	1	4/2/2015 21:45	95	3636	66.75848	
609	3573	1	4/2/2015 21:50	95.5	3575	80.80792	
609	3573	1	4/2/2015 21:51	96	3483	102.2563	
609	3573	1	4/2/2015 21:51	96.5	3493	99.71094	
609	3573	1	4/2/2015 21:52	97	3448	110.3104	
609	3573	1	4/2/2015 21:53	97.5	3556	84.5575	
609	3573	1	4/2/2015 21:53	98	3559	83.69269	
609	3573	1	4/2/2015 21:54	98.5	3650	62.63257	
609	3573	1	4/2/2015 21:54	99	3537	88.49847	
609	3573	1	4/2/2015 21:55	99.5	3545	86.45972	
609	3573	1	4/2/2015 21:55	100	3568	80.93549	
609	3573	1	4/2/2015 21:56	100.5	3596	74.29675	
609	3573	1	4/2/2015 21:56	101	3634	65.43335	
609	3573	1	4/2/2015 21:57	101.5	3669	57.34326	
609	3573	1	4/2/2015 21:58	102	3661	58.98065	
609	3573	1	4/2/2015 21:58	102.5	3725	44.5011	
609	3573	1	4/2/2015 21:59	103	3576	78.08191	
609	3573	1	4/2/2015 21:59	103.5	3763	35.79477	
609	3573	1	4/2/2015 22:00	104	3588	74.97479	
609	3573	1	4/2/2015 22:00	104.5	3748	38.75571	
609	3573	1	4/2/2015 22:01	105	3589	74.41077	
609	3573	1	4/2/2015 22:02	105.5	3571	78.40729	
609	3573	1	4/2/2015 22:02	106	3657	58.55109	
609	3573	1	4/2/2015 22:03	106.5	3615	67.93665	
609	3573	1	4/2/2015 22:03	107	3564	79.53204	
609	3573	1	4/2/2015 22:04	107.5	3623	65.77411	
609	3574	1	4/2/2015 22:14	24	337	3128.346	
609	3574	1	4/2/2015 22:15	24.5	364	2849.235	
609	3574	1	4/2/2015 22:20	25	365	2840.308	
609	3574	1	4/2/2015 22:21	25.5	3343	139.9098	
609	3574	1	4/2/2015 22:22	26	3636	69.93988	
609	3574	1	4/2/2015 22:22	26.5	3666	62.82922	
609	3574	1	4/2/2015 22:23	27	3578	82.57928	
609	3574	1	4/2/2015 22:23	27.5	3603	76.49591	
609	3574	1	4/2/2015 22:24	28	3562	85.63458	
609	3574	1	4/2/2015 22:24	28.5	3631	69.44629	
609	3574	1	4/2/2015 22:25	29	3705	52.46695	
609	3574	1	4/2/2015 22:25	29.5	3617	71.98505	
609	3574	1	4/2/2015 22:26	30	3536	90.39191	
609	3574	1	4/2/2015 22:27	30.5	3553	86.09491	
609	3574	1	4/2/2015 22:27	31	3390	124.7117	
609	3574	1	4/2/2015 22:28	31.5	3372	128.8093	
609	3574	1	4/2/2015 22:28	32	3437	112.6227	
609	3574	1	4/2/2015 22:29	32.5	3544	86.88519	

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Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3574	1	4/2/2015 22:29	33	3486	100.2261	
609	3574	1	4/2/2015 22:30	33.5	3490	98.94788	
609	3574	1	4/2/2015 22:31	34	3372	127.1714	
609	3574	1	4/2/2015 22:31	34.5	3461	105.2104	
609	3574	1	4/2/2015 22:32	35	3362	128.9846	
609	3574	1	4/2/2015 22:32	35.5	3477	100.7291	
609	3574	1	4/2/2015 22:33	36	3390	121.4335	
609	3574	1	4/2/2015 22:33	36.5	3535	86.36542	
609	3574	1	4/2/2015 22:34	37	3599	71.19232	
609	3574	1	4/2/2015 22:34	37.5	3634	62.86584	
609	3574	1	4/2/2015 22:35	38	3527	87.25476	
609	3574	1	4/2/2015 22:36	38.5	3475	99.23334	
609	3574	1	4/2/2015 22:36	39	3397	117.7459	
609	3574	1	4/2/2015 22:37	39.5	3456	103.1216	
609	3574	1	4/2/2015 22:37	40	3467	100.1563	
609	3574	1	4/2/2015 22:38	40.5	3298	141.3618	
609	3574	1	4/2/2015 22:38	41	3363	124.7882	
609	3574	1	4/2/2015 22:39	41.5	3456	101.8024	
609	3574	1	4/2/2015 22:40	42	3421	109.92	
609	3574	1	4/2/2015 22:40	42.5	3482	94.92651	
609	3574	1	4/2/2015 22:41	43	3551	78.34253	
609	3574	1	4/2/2015 22:41	43.5	3510	87.62811	
609	3574	1	4/2/2015 22:42	44	3536	81.1853	
609	3574	1	4/2/2015 22:42	44.5	3556	76.18585	
609	3574	1	4/2/2015 22:43	45	3553	76.55334	
609	3574	1	4/2/2015 22:43	45.5	3557	75.29108	
609	3574	1	4/2/2015 22:44	46	3635	57.02594	
609	3574	1	4/2/2015 22:45	46.5	3675	47.6586	
609	3574	1	4/2/2015 22:45	47	3755	29.56976	
609	3574	1	4/2/2015 22:51	47.5	3576	69.55756	
609	3574	1	4/2/2015 22:51	48	3783	23.21942	
609	3574	1	4/2/2015 22:52	48.5	3562	73.00281	
609	3574	1	4/2/2015 22:52	49	3592	66.16577	
609	3574	1	4/2/2015 22:53	49.5	3664	49.86969	
609	3574	1	4/2/2015 22:54	50	3708	40.12051	
609	3574	1	4/2/2015 22:54	50.5	3616	60.96124	
609	3574	1	4/2/2015 22:55	51	3570	71.64679	
609	3574	1	4/2/2015 22:55	51.5	3538	79.19824	
609	3574	1	4/2/2015 22:56	52	3578	69.99524	
609	3574	1	4/2/2015 22:56	52.5	3513	85.27069	
609	3574	1	4/2/2015 22:57	53	3609	63.0625	
609	3574	1	4/2/2015 22:57	53.5	3596	66.14545	
609	3574	1	4/2/2015 22:58	54	3491	90.77588	
609	3574	1	4/2/2015 22:59	54.5	3487	91.82605	
609	3574	1	4/2/2015 22:59	55	3564	73.83795	
609	3574	1	4/2/2015 23:00	55.5	3520	84.22125	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3574	1	4/2/2015 23:00	56	3613	62.7464	
609	3574	1	4/2/2015 23:01	56.5	3601	65.59601	
609	3574	1	4/2/2015 23:01	57	3508	87.34961	
609	3574	1	4/2/2015 23:02	57.5	3778	26.20734	
609	3574	1	4/2/2015 23:02	58	3530	82.37115	
609	3574	1	4/2/2015 23:03	58.5	3603	65.53632	
609	3574	1	4/2/2015 23:04	59	3523	84.21454	
609	3574	1	4/2/2015 23:04	59.5	3485	93.29993	
609	3574	1	4/2/2015 23:05	60	3620	61.94537	
609	3574	1	4/2/2015 23:05	60.5	3595	67.77301	
609	3574	1	4/2/2015 23:06	61	3700	44.099	
609	3574	1	4/2/2015 23:06	61.5	3627	60.64838	
609	3574	1	4/2/2015 23:07	62	3654	54.62259	
609	3574	1	4/2/2015 23:08	62.5	3459	100.1078	
609	3574	1	4/2/2015 23:08	63	3551	78.45831	
609	3574	1	4/2/2015 23:09	63.5	3672	50.86514	
609	3574	1	4/2/2015 23:09	64	3621	62.51477	
609	3574	1	4/2/2015 23:10	64.5	3652	55.573	
609	3574	1	4/2/2015 23:10	65	3650	56.12494	
609	3574	1	4/2/2015 23:11	65.5	3677	50.14066	
609	3574	1	4/2/2015 23:11	66	3564	76.03229	
609	3574	1	4/2/2015 23:12	66.5	3594	69.19897	
609	3574	1	4/2/2015 23:13	67	3564	76.23145	
609	3574	1	4/2/2015 23:13	67.5	3579	72.85663	
609	3574	1	4/2/2015 23:14	68	3507	89.77893	
609	3574	1	4/2/2015 23:14	68.5	3413	112.4147	
609	3574	1	4/2/2015 23:15	69	3628	61.91492	
609	3574	1	4/2/2015 23:20	69.5	3485	95.29266	
609	3574	1	4/2/2015 23:21	70	3600	68.52228	
609	3574	1	4/2/2015 23:22	70.5	3381	120.65	
609	3574	1	4/2/2015 23:22	71	3592	70.57159	
609	3574	1	4/2/2015 23:23	71.5	3504	91.20667	
609	3574	1	4/2/2015 23:23	72	3509	90.13019	
609	3574	1	4/2/2015 23:24	72.5	3551	80.38293	
609	3574	1	4/2/2015 23:24	73	3493	94.12695	
609	3574	1	4/2/2015 23:25	73.5	3506	91.15363	
609	3574	1	4/2/2015 23:25	74	3560	78.60303	
609	3574	1	4/2/2015 23:26	74.5	3625	63.74744	
609	3574	1	4/2/2015 23:27	75	3434	108.6755	
609	3574	1	4/2/2015 23:27	75.5	3534	84.9848	
609	3574	1	4/2/2015 23:28	76	3444	106.472	
609	3574	1	4/2/2015 23:28	76.5	3513	90.13037	
609	3574	1	4/2/2015 23:29	77	3576	75.52228	
609	3574	1	4/2/2015 23:29	77.5	3662	55.98972	
609	3574	1	4/2/2015 23:30	78	3474	99.69702	
609	3574	1	4/2/2015 23:31	78.5	3428	110.8608	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3574	1	4/2/2015 23:31	79	3344	131.5832	
609	3574	1	4/2/2015 23:32	79.5	3367	125.9871	
609	3574	1	4/2/2015 23:32	80	3528	87.3349	
609	3574	1	4/2/2015 23:33	80.5	3563	79.26843	
609	3574	1	4/2/2015 23:33	81	3631	63.74347	
609	3574	1	4/2/2015 23:34	81.5	3447	106.9019	
609	3574	1	4/2/2015 23:34	82	3535	86.11243	
609	3574	1	4/2/2015 23:35	82.5	3468	102.0729	
609	3574	1	4/2/2015 23:36	83	3299	143.6994	
609	3574	1	4/2/2015 23:36	83.5	3377	124.3591	
609	3574	1	4/2/2015 23:37	84	3420	113.9522	
609	3574	1	4/2/2015 23:37	84.5	3540	85.46552	
609	3574	1	4/2/2015 23:38	85	3487	98.06598	
609	3574	1	4/2/2015 23:38	85.5	3388	122.0747	
609	3574	1	4/2/2015 23:39	86	3462	104.2413	
609	3574	1	4/2/2015 23:39	86.5	3511	92.6958	
609	3574	1	4/2/2015 23:40	87	3398	119.9395	
609	3574	1	4/2/2015 23:41	87.5	3358	129.8868	
609	3574	1	4/2/2015 23:41	88	3424	113.8181	
609	3574	1	4/2/2015 23:42	88.5	3366	128.117	
609	3574	1	4/2/2015 23:42	89	3566	80.3501	
609	3574	1	4/2/2015 23:43	89.5	3472	102.5807	
609	3574	1	4/2/2015 23:43	90	3460	105.5565	
609	3574	1	4/2/2015 23:44	90.5	3463	104.9421	
609	3574	1	4/2/2015 23:45	91	3358	130.618	
609	3574	1	4/2/2015 23:45	91.5	3458	106.3494	
609	3574	1	4/2/2015 23:51	92	3417	116.3528	
609	3574	1	4/2/2015 23:51	92.5	3517	92.75873	
609	3574	1	4/2/2015 23:52	93	3480	101.851	
609	3574	1	4/2/2015 23:52	93.5	3329	139.0273	
609	3574	1	4/2/2015 23:53	94	3427	115.2388	
609	3574	1	4/2/2015 23:53	94.5	3335	138.1843	
609	3574	1	4/2/2015 23:54	95	3318	142.7656	
609	3574	1	4/2/2015 23:55	95.5	3324	141.5891	
609	3574	1	4/2/2015 23:55	96	3314	144.4247	
609	3574	1	4/2/2015 23:56	96.5	3302	147.7728	
609	3574	1	4/2/2015 23:56	97	3330	141.0694	
609	3574	1	4/2/2015 23:57	97.5	3319	144.1505	
609	3574	1	4/2/2015 23:57	98	3434	116.1627	
609	3574	1	4/2/2015 23:58	98.5	3424	118.9101	
609	3574	1	4/2/2015 23:59	99	3357	135.6574	
609	3574	1	4/2/2015 23:59	99.5	3517	97.33972	
609	3574	1	4/3/2015 0:00	100	3365	134.3305	
609	3574	1	4/3/2015 0:00	100.5	3386	129.485	
609	3574	1	4/3/2015 0:01	101	3253	163.172	
609	3574	1	4/3/2015 0:01	101.5	3425	120.6242	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3574	1	4/3/2015 0:02	102	3488	105.8298	
609	3574	1	4/3/2015 0:02	102.5	3332	144.1575	
609	3574	1	4/3/2015 0:03	103	3381	132.3412	
609	3574	1	4/3/2015 0:04	103.5	3487	107.0434	
609	3574	1	4/3/2015 0:04	104	3376	134.2216	
609	3574	1	4/3/2015 0:05	104.5	3439	119.1898	
609	3574	1	4/3/2015 0:05	105	3526	98.80316	
609	3574	1	4/3/2015 0:06	105.5	3364	138.1563	
609	3574	1	4/3/2015 0:06	106	3541	95.9375	
609	3574	1	4/3/2015 0:07	106.5	3437	120.9708	
609	3574	1	4/3/2015 0:08	107	3579	87.7536	
609	3574	1	4/3/2015 0:08	107.5	3405	129.3857	
609	3575	1	4/3/2015 0:24	26	2669	317.4178	
609	3575	1	4/3/2015 0:24	26.5	3394	116.4996	
609	3575	1	4/3/2015 0:25	27	3603	67.46143	
609	3575	1	4/3/2015 0:25	27.5	3477	97.16663	
609	3575	1	4/3/2015 0:26	28	3659	55.41425	
609	3575	1	4/3/2015 0:26	28.5	3366	124.6729	
609	3575	1	4/3/2015 0:27	29	3498	93.17328	
609	3575	1	4/3/2015 0:28	29.5	3519	88.55713	
609	3575	1	4/3/2015 0:28	30	3566	77.93536	
609	3575	1	4/3/2015 0:29	30.5	3500	93.68195	
609	3575	1	4/3/2015 0:29	31	3521	89.06842	
609	3575	1	4/3/2015 0:30	31.5	3551	82.39264	
609	3575	1	4/3/2015 0:30	32	3609	69.36053	
609	3575	1	4/3/2015 0:31	32.5	3402	118.4743	
609	3575	1	4/3/2015 0:31	33	3465	103.6193	
609	3575	1	4/3/2015 0:32	33.5	3618	68.28687	
609	3575	1	4/3/2015 0:33	34	3458	105.943	
609	3575	1	4/3/2015 0:33	34.5	3418	115.8937	
609	3575	1	4/3/2015 0:34	35	3472	103.254	
609	3575	1	4/3/2015 0:34	35.5	3240	160.9116	
609	3575	1	4/3/2015 0:35	36	3288	149.0167	
609	3575	1	4/3/2015 0:35	36.5	3409	119.3776	
609	3575	1	4/3/2015 0:36	37	3554	85.27856	
609	3575	1	4/3/2015 0:37	37.5	3514	94.94568	
609	3575	1	4/3/2015 0:37	38	3661	61.48547	
609	3575	1	4/3/2015 0:38	38.5	3541	89.27643	
609	3575	1	4/3/2015 0:38	39	3463	107.9991	
609	3575	1	4/3/2015 0:39	39.5	3503	98.83307	
609	3575	1	4/3/2015 0:39	40	3372	130.688	
609	3575	1	4/3/2015 0:40	40.5	3366	132.4879	
609	3575	1	4/3/2015 0:40	41	3414	121.0844	
609	3575	1	4/3/2015 0:41	41.5	3484	104.6221	
609	3575	1	4/3/2015 0:42	42	3380	130.0201	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3575	1	4/3/2015 0:42	42.5	3490	103.8475	
609	3575	1	4/3/2015 0:43	43	3473	108.2061	
609	3575	1	4/3/2015 0:43	43.5	3430	118.8323	
609	3575	1	4/3/2015 0:44	44	3680	61.11176	
609	3575	1	4/3/2015 0:44	44.5	3517	98.77466	
609	3575	1	4/3/2015 0:45	45	3546	92.31921	
609	3575	1	4/3/2015 0:51	45.5	3537	94.73907	
609	3575	1	4/3/2015 0:51	46	3574	86.2063	
609	3575	1	4/3/2015 0:52	46.5	3423	121.9191	
609	3575	1	4/3/2015 0:52	47	3408	125.6066	
609	3575	1	4/3/2015 0:53	47.5	3431	120.0922	
609	3575	1	4/3/2015 0:53	48	3545	93.13654	
609	3575	1	4/3/2015 0:54	48.5	3589	83.01514	
609	3575	1	4/3/2015 0:54	49	3537	95.10577	
609	3575	1	4/3/2015 0:55	49.5	3664	66.08478	
609	3575	1	4/3/2015 0:56	50	3475	109.8165	
609	3575	1	4/3/2015 0:56	50.5	3497	104.6539	
609	3575	1	4/3/2015 0:57	51	3459	113.7362	
609	3575	1	4/3/2015 0:57	51.5	3433	120.029	
609	3575	1	4/3/2015 0:58	52	3574	86.83484	
609	3575	1	4/3/2015 0:58	52.5	3468	111.7449	
609	3575	1	4/3/2015 0:59	53	3421	123.0836	
609	3575	1	4/3/2015 1:00	53.5	3475	110.1829	
609	3575	1	4/3/2015 1:00	54	3464	112.8561	
609	3575	1	4/3/2015 1:01	54.5	3428	121.549	
609	3575	1	4/3/2015 1:01	55	3362	137.7012	
609	3575	1	4/3/2015 1:02	55.5	3521	99.52893	
609	3575	1	4/3/2015 1:02	56	3490	106.8852	
609	3575	1	4/3/2015 1:03	56.5	3463	113.3564	
609	3575	1	4/3/2015 1:03	57	3444	117.9583	
609	3575	1	4/3/2015 1:04	57.5	3543	94.59686	
609	3575	1	4/3/2015 1:05	58	3502	104.2588	
609	3575	1	4/3/2015 1:05	58.5	3469	112.1346	
609	3575	1	4/3/2015 1:06	59	3506	103.4205	
609	3575	1	4/3/2015 1:06	59.5	3452	116.3009	
609	3575	1	4/3/2015 1:07	60	3434	120.6776	
609	3575	1	4/3/2015 1:07	60.5	3406	127.5058	
609	3575	1	4/3/2015 1:08	61	3457	115.2609	
609	3575	1	4/3/2015 1:08	61.5	3464	113.6407	
609	3575	1	4/3/2015 1:09	62	3637	73.48193	
609	3575	1	4/3/2015 1:10	62.5	3598	82.41595	
609	3575	1	4/3/2015 1:10	63	3431	121.7144	
609	3575	1	4/3/2015 1:11	63.5	3370	136.6207	
609	3575	1	4/3/2015 1:11	64	3219	174.736	
609	3575	1	4/3/2015 1:12	64.5	3302	153.6317	
609	3575	1	4/3/2015 1:12	65	3419	124.8229	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3575	1	4/3/2015 1:13	65.5	3478	110.7249	
609	3575	1	4/3/2015 1:14	66	3429	122.5105	
609	3575	1	4/3/2015 1:14	66.5	3406	128.1331	
609	3575	1	4/3/2015 1:15	67	3525	99.79419	
609	3575	1	4/3/2015 1:20	67.5	3519	101.2529	
609	3575	1	4/3/2015 1:21	68	3505	104.2256	
609	3575	1	4/3/2015 1:21	68.5	3328	146.7982	
609	3575	1	4/3/2015 1:22	69	3466	112.8328	
609	3575	1	4/3/2015 1:22	69.5	3321	147.9061	
609	3575	1	4/3/2015 1:23	70	3358	138.3979	
609	3575	1	4/3/2015 1:24	70.5	3389	130.464	
609	3575	1	4/3/2015 1:24	71	3359	137.5114	
609	3575	1	4/3/2015 1:25	71.5	3438	117.9415	
609	3575	1	4/3/2015 1:25	72	3402	126.3331	
609	3575	1	4/3/2015 1:26	72.5	3533	94.7774	
609	3575	1	4/3/2015 1:26	73	3441	116.2588	
609	3575	1	4/3/2015 1:27	73.5	3463	110.6677	
609	3575	1	4/3/2015 1:28	74	3532	94.04913	
609	3575	1	4/3/2015 1:28	74.5	3456	111.699	
609	3575	1	4/3/2015 1:29	75	3467	108.7507	
609	3575	1	4/3/2015 1:29	75.5	3339	139.5768	
609	3575	1	4/3/2015 1:30	76	3366	132.5788	
609	3575	1	4/3/2015 1:30	76.5	3268	156.7753	
609	3575	1	4/3/2015 1:31	77	3222	168.2396	
609	3575	1	4/3/2015 1:31	77.5	3418	118.9173	
609	3575	1	4/3/2015 1:32	78	3323	141.9532	
609	3575	1	4/3/2015 1:33	78.5	3268	155.4882	
609	3575	1	4/3/2015 1:33	79	3339	137.3248	
609	3575	1	4/3/2015 1:34	79.5	3392	123.951	
609	3575	1	4/3/2015 1:34	80	3357	132.2224	
609	3575	1	4/3/2015 1:35	80.5	3356	132.1469	
609	3575	1	4/3/2015 1:35	81	3307	144.0245	
609	3575	1	4/3/2015 1:36	81.5	3337	136.209	
609	3575	1	4/3/2015 1:37	82	3382	124.7831	
609	3575	1	4/3/2015 1:37	82.5	3259	155.1989	
609	3575	1	4/3/2015 1:38	83	3329	137.2305	
609	3575	1	4/3/2015 1:38	83.5	3262	153.7877	
609	3575	1	4/3/2015 1:39	84	3415	115.4493	
609	3575	1	4/3/2015 1:39	84.5	3283	147.8094	
609	3575	1	4/3/2015 1:40	85	3303	142.4427	
609	3575	1	4/3/2015 1:40	85.5	3373	124.7263	
609	3575	1	4/3/2015 1:41	86	3413	114.6388	
609	3575	1	4/3/2015 1:42	86.5	3303	141.4705	
609	3575	1	4/3/2015 1:42	87	3321	136.6359	
609	3575	1	4/3/2015 1:43	87.5	3230	159.3918	
609	3575	1	4/3/2015 1:43	88	3388	119.4288	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3575	1	4/3/2015 1:44	88.5	3331	133.1678	
609	3575	1	4/3/2015 1:44	89	3389	118.5347	
609	3575	1	4/3/2015 1:45	89.5	3429	108.4959	
609	3575	1	4/3/2015 1:50	90	3277	145.7597	
609	3575	1	4/3/2015 1:51	90.5	3375	121.3841	
609	3575	1	4/3/2015 1:52	91	3269	147.931	
609	3575	1	4/3/2015 1:52	91.5	3274	146.7316	
609	3575	1	4/3/2015 1:53	92	3181	170.772	
609	3575	1	4/3/2015 1:53	92.5	3237	156.3187	
609	3575	1	4/3/2015 1:54	93	3248	153.5684	
609	3575	1	4/3/2015 1:54	93.5	3291	142.7114	
609	3575	1	4/3/2015 1:55	94	3192	168.1785	
609	3575	1	4/3/2015 1:56	94.5	3266	149.1861	
609	3575	1	4/3/2015 1:56	95	3201	165.975	
609	3575	1	4/3/2015 1:57	95.5	3324	134.7114	
609	3575	1	4/3/2015 1:57	96	3239	156.2972	
609	3575	1	4/3/2015 1:58	96.5	3185	170.358	
609	3575	1	4/3/2015 1:58	97	3198	167.0367	
609	3575	1	4/3/2015 1:59	97.5	3167	175.2197	
609	3575	1	4/3/2015 1:59	98	3222	160.9551	
609	3575	1	4/3/2015 2:00	98.5	3344	130.1574	
609	3575	1	4/3/2015 2:01	99	3310	138.7054	
609	3575	1	4/3/2015 2:01	99.5	3329	134.0266	
609	3575	1	4/3/2015 2:02	100	3273	148.1801	
609	3575	1	4/3/2015 2:02	100.5	3176	173.2769	
609	3575	1	4/3/2015 2:03	101	3204	166.0383	
609	3575	1	4/3/2015 2:03	101.5	3073	200.9219	
609	3575	1	4/3/2015 2:04	102	3126	186.7156	
609	3575	1	4/3/2015 2:05	102.5	3168	175.6588	
609	3575	1	4/3/2015 2:05	103	3191	169.7038	
609	3575	1	4/3/2015 2:06	103.5	3212	164.3138	
609	3575	1	4/3/2015 2:06	104	3341	131.674	
609	3575	1	4/3/2015 2:07	104.5	3407	115.5355	
609	3575	1	4/3/2015 2:07	105	3229	160.1327	
609	3575	1	4/3/2015 2:08	105.5	3307	140.3706	
609	3575	1	4/3/2015 2:08	106	3270	149.7841	
609	3575	1	4/3/2015 2:09	106.5	3302	141.7668	
609	3575	1	4/3/2015 2:10	107	3341	132.0949	
609	3575	1	4/3/2015 2:10	107.5	3287	145.6874	
609	3576	1	4/3/2015 2:21	24	282	NULL	
609	3576	1	4/3/2015 2:21	24.5	278	NULL	
609	3576	1	4/3/2015 2:22	25	931	NULL	
609	3576	1	4/3/2015 2:22	25.5	3229	NULL	
609	3576	1	4/3/2015 2:23	26	3447	NULL	
609	3576	1	4/3/2015 2:24	26.5	3679	NULL	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	1	4/3/2015 2:24	27	3629	NULL	
609	3576	1	4/3/2015 2:25	27.5	3530	NULL	
609	3576	1	4/3/2015 2:25	28	3602	NULL	
609	3576	1	4/3/2015 2:26	28.5	3387	NULL	
609	3576	1	4/3/2015 2:26	29	3390	NULL	
609	3576	1	4/3/2015 2:27	29.5	2976	NULL	
609	3576	1	4/3/2015 2:27	30	3104	NULL	
609	3576	1	4/3/2015 2:28	30.5	3429	NULL	
609	3576	1	4/3/2015 2:29	31	3418	NULL	
609	3576	1	4/3/2015 2:29	31.5	3337	NULL	
609	3576	1	4/3/2015 2:30	32	3563	NULL	
609	3576	1	4/3/2015 2:30	32.5	3478	NULL	
609	3576	1	4/3/2015 2:31	33	3444	NULL	
609	3576	1	4/3/2015 2:31	33.5	3226	NULL	
609	3576	1	4/3/2015 2:32	34	3196	NULL	
609	3576	1	4/3/2015 2:32	34.5	3208	NULL	
609	3576	1	4/3/2015 2:33	35	3384	NULL	
609	3576	1	4/3/2015 2:34	35.5	3307	NULL	
609	3576	1	4/3/2015 2:34	36	3443	NULL	
609	3576	1	4/3/2015 2:35	36.5	3470	NULL	
609	3576	1	4/3/2015 2:35	37	3436	NULL	
609	3576	1	4/3/2015 2:36	37.5	3400	NULL	
609	3576	1	4/3/2015 2:36	38	3332	NULL	
609	3576	1	4/3/2015 2:37	38.5	3338	NULL	
609	3576	1	4/3/2015 2:38	39	3338	NULL	
609	3576	1	4/3/2015 2:38	39.5	3403	NULL	
609	3576	1	4/3/2015 2:39	40	3388	NULL	
609	3576	1	4/3/2015 2:39	40.5	3590	NULL	
609	3576	1	4/3/2015 2:40	41	3591	NULL	
609	3576	1	4/3/2015 2:40	41.5	3521	NULL	
609	3576	1	4/3/2015 2:41	42	3564	NULL	
609	3576	1	4/3/2015 2:41	42.5	3693	NULL	
609	3576	1	4/3/2015 2:42	43	3558	NULL	
609	3576	1	4/3/2015 2:43	43.5	3425	NULL	
609	3576	1	4/3/2015 2:43	44	3504	NULL	
609	3576	1	4/3/2015 2:44	44.5	3569	NULL	
609	3576	1	4/3/2015 2:44	45	3597	NULL	
609	3576	1	4/3/2015 2:45	45.5	3432	NULL	
609	3576	1	4/3/2015 2:50	46	3460	NULL	
609	3576	1	4/3/2015 2:51	46.5	3469	NULL	
609	3576	1	4/3/2015 2:52	47	3423	NULL	
609	3576	1	4/3/2015 2:52	47.5	3605	NULL	
609	3576	1	4/3/2015 2:53	48	3533	NULL	
609	3576	1	4/3/2015 2:53	48.5	3548	NULL	
609	3576	1	4/3/2015 2:54	49	3525	NULL	
609	3576	1	4/3/2015 2:54	49.5	3675	NULL	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	1	4/3/2015 2:55	50	3606	NULL	
609	3576	1	4/3/2015 2:55	50.5	3573	NULL	
609	3576	1	4/3/2015 2:56	51	3498	NULL	
609	3576	1	4/3/2015 2:57	51.5	3625	NULL	
609	3576	1	4/3/2015 2:57	52	3637	NULL	
609	3576	1	4/3/2015 2:58	52.5	3631	NULL	
609	3576	1	4/3/2015 2:58	53	3545	NULL	
609	3576	1	4/3/2015 2:59	53.5	3545	NULL	
609	3576	1	4/3/2015 2:59	54	3611	NULL	
609	3576	1	4/3/2015 3:00	54.5	3516	NULL	
609	3576	1	4/3/2015 3:01	55	3581	NULL	
609	3576	1	4/3/2015 3:01	55.5	3625	NULL	
609	3576	1	4/3/2015 3:02	56	3673	NULL	
609	3576	1	4/3/2015 3:02	56.5	3662	NULL	
609	3576	1	4/3/2015 3:03	57	3465	NULL	
609	3576	1	4/3/2015 3:03	57.5	3404	NULL	
609	3576	1	4/3/2015 3:04	58	3410	NULL	
609	3576	1	4/3/2015 3:04	58.5	3566	NULL	
609	3576	1	4/3/2015 3:05	59	3609	NULL	
609	3576	1	4/3/2015 3:06	59.5	3533	NULL	
609	3576	1	4/3/2015 3:06	60	3488	NULL	
609	3576	1	4/3/2015 3:07	60.5	3588	NULL	
609	3576	1	4/3/2015 3:07	61	3518	NULL	
609	3576	1	4/3/2015 3:08	61.5	3467	NULL	
609	3576	1	4/3/2015 3:08	62	3452	NULL	
609	3576	1	4/3/2015 3:09	62.5	3420	NULL	
609	3576	1	4/3/2015 3:10	63	3540	NULL	
609	3576	1	4/3/2015 3:10	63.5	3467	NULL	
609	3576	1	4/3/2015 3:11	64	3468	NULL	
609	3576	1	4/3/2015 3:11	64.5	3542	NULL	
609	3576	1	4/3/2015 3:12	65	3454	NULL	
609	3576	1	4/3/2015 3:12	65.5	3533	NULL	
609	3576	1	4/3/2015 3:13	66	3462	NULL	
609	3576	1	4/3/2015 3:13	66.5	3511	NULL	
609	3576	1	4/3/2015 3:14	67	3455	NULL	
609	3576	1	4/3/2015 3:15	67.5	3529	NULL	
609	3576	1	4/3/2015 3:15	68	3486	NULL	
609	3576	1	4/3/2015 3:21	68.5	3504	NULL	
609	3576	1	4/3/2015 3:21	69	3449	NULL	
609	3576	1	4/3/2015 3:22	69.5	3496	NULL	
609	3576	1	4/3/2015 3:22	70	3498	NULL	
609	3576	1	4/3/2015 3:23	70.5	3602	NULL	
609	3576	1	4/3/2015 3:24	71	3493	NULL	
609	3576	1	4/3/2015 3:24	71.5	3560	NULL	
609	3576	1	4/3/2015 3:25	72	3555	NULL	
609	3576	1	4/3/2015 3:25	72.5	3467	NULL	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	1	4/3/2015 3:26	73	3444	NULL	
609	3576	1	4/3/2015 3:26	73.5	3400	NULL	
609	3576	1	4/3/2015 3:27	74	3552	NULL	
609	3576	1	4/3/2015 3:27	74.5	3410	NULL	
609	3576	1	4/3/2015 3:28	75	3442	NULL	
609	3576	1	4/3/2015 3:29	75.5	3551	NULL	
609	3576	1	4/3/2015 3:29	76	3469	NULL	
609	3576	1	4/3/2015 3:30	76.5	3640	NULL	
609	3576	1	4/3/2015 3:30	77	3475	NULL	
609	3576	1	4/3/2015 3:31	77.5	3364	NULL	
609	3576	1	4/3/2015 3:31	78	3270	NULL	
609	3576	1	4/3/2015 3:32	78.5	3293	NULL	
609	3576	1	4/3/2015 3:32	79	3350	NULL	
609	3576	1	4/3/2015 3:33	79.5	3380	NULL	
609	3576	1	4/3/2015 3:34	80	3473	NULL	
609	3576	1	4/3/2015 3:34	80.5	3466	NULL	
609	3576	1	4/3/2015 3:35	81	3410	NULL	
609	3576	1	4/3/2015 3:35	81.5	3303	NULL	
609	3576	1	4/3/2015 3:36	82	3408	NULL	
609	3576	1	4/3/2015 3:36	82.5	3435	NULL	
609	3576	1	4/3/2015 3:37	83	3535	NULL	
609	3576	1	4/3/2015 3:38	83.5	3351	NULL	
609	3576	1	4/3/2015 3:38	84	3341	NULL	
609	3576	1	4/3/2015 3:39	84.5	3330	NULL	
609	3576	1	4/3/2015 3:39	85	3410	NULL	
609	3576	1	4/3/2015 3:40	85.5	3154	NULL	
609	3576	1	4/3/2015 3:40	86	3266	NULL	
609	3576	1	4/3/2015 3:41	86.5	3241	NULL	
609	3576	1	4/3/2015 3:41	87	3256	NULL	
609	3576	1	4/3/2015 3:42	87.5	3132	NULL	
609	3576	1	4/3/2015 3:43	88	3087	NULL	
609	3576	1	4/3/2015 3:43	88.5	3023	NULL	
609	3576	1	4/3/2015 3:44	89	3052	NULL	
609	3576	1	4/3/2015 3:44	89.5	3125	NULL	
609	3576	1	4/3/2015 3:45	90	3215	NULL	
609	3576	1	4/3/2015 3:50	90.5	3150	NULL	
609	3576	1	4/3/2015 3:51	91	3269	NULL	
609	3576	1	4/3/2015 3:52	91.5	3268	NULL	
609	3576	1	4/3/2015 3:52	92	3148	NULL	
609	3576	1	4/3/2015 3:53	92.5	3088	NULL	
609	3576	1	4/3/2015 3:53	93	3003	NULL	
609	3576	1	4/3/2015 3:54	93.5	3018	NULL	
609	3576	1	4/3/2015 3:54	94	3150	NULL	
609	3576	1	4/3/2015 3:55	94.5	3223	NULL	
609	3576	1	4/3/2015 3:55	95	3115	NULL	
609	3576	1	4/3/2015 3:56	95.5	3156	NULL	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	1	4/3/2015 3:57	96	3337	NULL	
609	3576	1	4/3/2015 3:57	96.5	3385	NULL	
609	3576	1	4/3/2015 3:58	97	3164	NULL	
609	3576	1	4/3/2015 3:58	97.5	2887	NULL	
609	3576	1	4/3/2015 3:59	98	3048	NULL	
609	3576	1	4/3/2015 3:59	98.5	3028	NULL	
609	3576	1	4/3/2015 4:00	99	3157	NULL	
609	3576	1	4/3/2015 4:01	99.5	3087	NULL	
609	3576	1	4/3/2015 4:01	100	2961	NULL	
609	3576	1	4/3/2015 4:02	100.5	3166	NULL	
609	3576	1	4/3/2015 4:02	101	3277	NULL	
609	3576	1	4/3/2015 4:03	101.5	3448	NULL	
609	3576	1	4/3/2015 4:03	102	3282	NULL	
609	3576	1	4/3/2015 4:04	102.5	3485	NULL	
609	3576	1	4/3/2015 4:04	103	3403	NULL	
609	3576	1	4/3/2015 4:05	103.5	3427	NULL	
609	3576	1	4/3/2015 4:06	104	3487	NULL	
609	3576	1	4/3/2015 4:06	104.5	3467	NULL	
609	3576	1	4/3/2015 4:07	105	3447	NULL	
609	3576	1	4/3/2015 4:07	105.5	3398	NULL	
609	3576	1	4/3/2015 4:08	106	3507	NULL	
609	3576	1	4/3/2015 4:08	106.5	3544	NULL	
609	3576	1	4/3/2015 4:09	107	3479	NULL	
609	3576	1	4/3/2015 4:10	107.5	3462	NULL	
609	3576	2	4/3/2015 11:46	24	2804	236.5347	
609	3576	2	4/3/2015 11:46	24.5	3030	170.9734	
609	3576	2	4/3/2015 11:47	25	3247	112.9222	
609	3576	2	4/3/2015 11:48	25.5	3246	113.217	
609	3576	2	4/3/2015 11:48	26	3257	110.4232	
609	3576	2	4/3/2015 11:49	26.5	3486	53.78928	
609	3576	2	4/3/2015 11:49	27	3300	99.53021	
609	3576	2	4/3/2015 11:50	27.5	3176	131.6312	
609	3576	2	4/3/2015 11:50	28	3060	162.9341	
609	3576	2	4/3/2015 11:51	28.5	3164	134.881	
609	3576	2	4/3/2015 11:51	29	3238	115.5421	
609	3576	2	4/3/2015 11:52	29.5	3203	124.6822	
609	3576	2	4/3/2015 11:53	30	3237	115.8748	
609	3576	2	4/3/2015 11:53	30.5	3286	103.3431	
609	3576	2	4/3/2015 11:54	31	3317	95.53394	
609	3576	2	4/3/2015 11:54	31.5	3107	150.3708	
609	3576	2	4/3/2015 11:55	32	3189	128.5393	
609	3576	2	4/3/2015 11:55	32.5	3348	87.87878	
609	3576	2	4/3/2015 11:56	33	3303	99.21558	
609	3576	2	4/3/2015 11:57	33.5	3348	87.95294	
609	3576	2	4/3/2015 11:57	34	3312	97.01636	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	2	4/3/2015 11:58	34.5	3377	80.83258	
609	3576	2	4/3/2015 11:58	35	3404	74.23175	
609	3576	2	4/3/2015 11:59	35.5	3392	77.21191	
609	3576	2	4/3/2015 11:59	36	3382	79.71008	
609	3576	2	4/3/2015 12:00	36.5	3359	85.43823	
609	3576	2	4/3/2015 12:00	37	3448	63.68494	
609	3576	2	4/3/2015 12:01	37.5	3412	72.46124	
609	3576	2	4/3/2015 12:02	38	3473	57.74829	
609	3576	2	4/3/2015 12:02	38.5	3364	84.34552	
609	3576	2	4/3/2015 12:03	39	3374	81.90698	
609	3576	2	4/3/2015 12:03	39.5	3278	106.0477	
609	3576	2	4/3/2015 12:04	40	3411	72.89056	
609	3576	2	4/3/2015 12:04	40.5	3335	91.71857	
609	3576	2	4/3/2015 12:05	41	3133	144.0724	
609	3576	2	4/3/2015 12:06	41.5	3311	97.82404	
609	3576	2	4/3/2015 12:06	42	3393	77.44751	
609	3576	2	4/3/2015 12:07	42.5	3293	102.4531	
609	3576	2	4/3/2015 12:07	43	3429	68.72913	
609	3576	2	4/3/2015 12:08	43.5	3350	88.19513	
609	3576	2	4/3/2015 12:08	44	3525	45.83997	
609	3576	2	4/3/2015 12:09	44.5	3402	75.42499	
609	3576	2	4/3/2015 12:09	45	3419	71.30933	
609	3576	2	4/3/2015 12:10	45.5	3485	55.43518	
609	3576	2	4/3/2015 12:11	46	3466	60.01874	
609	3576	2	4/3/2015 12:11	46.5	3430	68.74536	
609	3576	2	4/3/2015 12:12	47	3464	60.57294	
609	3576	2	4/3/2015 12:12	47.5	3353	87.7442	
609	3576	2	4/3/2015 12:13	48	3474	58.24905	
609	3576	2	4/3/2015 12:13	48.5	3368	84.09454	
609	3576	2	4/3/2015 12:14	49	3379	81.41235	
609	3576	2	4/3/2015 12:14	49.5	3460	61.71912	
609	3576	2	4/3/2015 12:15	50	3366	84.70093	
609	3576	2	4/3/2015 12:21	50.5	3459	62.03357	
609	3576	2	4/3/2015 12:21	51	3405	75.14673	
609	3576	2	4/3/2015 12:22	51.5	3347	89.48517	
609	3576	2	4/3/2015 12:22	52	3344	90.24585	
609	3576	2	4/3/2015 12:23	52.5	3368	84.2915	
609	3576	2	4/3/2015 12:23	53	3339	91.51929	
609	3576	2	4/3/2015 12:24	53.5	3277	107.1905	
609	3576	2	4/3/2015 12:25	54	3379	81.60901	
609	3576	2	4/3/2015 12:25	54.5	3471	59.25055	
609	3576	2	4/3/2015 12:26	55	3440	66.72778	
609	3576	2	4/3/2015 12:26	55.5	3339	91.58051	
609	3576	2	4/3/2015 12:27	56	3296	102.4188	
609	3576	2	4/3/2015 12:27	56.5	3442	66.2807	
609	3576	2	4/3/2015 12:28	57	3396	77.49915	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	2	4/3/2015 12:28	57.5	3353	88.13763	
609	3576	2	4/3/2015 12:29	58	3370	83.93115	
609	3576	2	4/3/2015 12:30	58.5	3454	63.43323	
609	3576	2	4/3/2015 12:30	59	3346	89.91827	
609	3576	2	4/3/2015 12:31	59.5	3375	82.73145	
609	3576	2	4/3/2015 12:31	60	3248	114.7858	
609	3576	2	4/3/2015 12:32	60.5	3322	95.96472	
609	3576	2	4/3/2015 12:32	61	3349	89.21942	
609	3576	2	4/3/2015 12:33	61.5	3312	98.5072	
609	3576	2	4/3/2015 12:34	62	3329	94.24371	
609	3576	2	4/3/2015 12:34	62.5	3340	91.50201	
609	3576	2	4/3/2015 12:35	63	3457	62.82104	
609	3576	2	4/3/2015 12:35	63.5	3369	84.31342	
609	3576	2	4/3/2015 12:36	64	3405	75.46509	
609	3576	2	4/3/2015 12:36	64.5	3290	104.1498	
609	3576	2	4/3/2015 12:37	65	3358	87.07813	
609	3576	2	4/3/2015 12:37	65.5	3410	74.27936	
609	3576	2	4/3/2015 12:38	66	3384	80.67023	
609	3576	2	4/3/2015 12:39	66.5	3420	71.86456	
609	3576	2	4/3/2015 12:39	67	3340	91.61224	
609	3576	2	4/3/2015 12:40	67.5	3340	91.62445	
609	3576	2	4/3/2015 12:40	68	3222	121.7107	
609	3576	2	4/3/2015 12:41	68.5	3279	107.0477	
609	3576	2	4/3/2015 12:41	69	3344	90.66217	
609	3576	2	4/3/2015 12:42	69.5	3384	80.75592	
609	3576	2	4/3/2015 12:43	70	3261	111.6882	
609	3576	2	4/3/2015 12:43	70.5	3217	123.0728	
609	3576	2	4/3/2015 12:44	71	3296	102.7861	
609	3576	2	4/3/2015 12:44	71.5	3256	113.0088	
609	3576	2	4/3/2015 12:45	72	3245	115.853	
609	3576	2	4/3/2015 12:45	72.5	3294	103.3301	
609	3576	2	4/3/2015 12:51	73	3237	117.9437	
609	3576	2	4/3/2015 12:51	73.5	3190	130.1951	
609	3576	2	4/3/2015 12:52	74	3244	116.1313	
609	3576	2	4/3/2015 12:53	74.5	3303	101.056	
609	3576	2	4/3/2015 12:53	75	3167	136.2577	
609	3576	2	4/3/2015 12:54	75.5	3407	75.18585	
609	3576	2	4/3/2015 12:54	76	3352	88.7536	
609	3576	2	4/3/2015 12:55	76.5	3252	114.0596	
609	3576	2	4/3/2015 12:55	77	3263	111.2322	
609	3576	2	4/3/2015 12:56	77.5	3129	146.3809	
609	3576	2	4/3/2015 12:56	78	3294	103.3215	
609	3576	2	4/3/2015 12:57	78.5	3262	111.4823	
609	3576	2	4/3/2015 12:58	79	3229	119.9905	
609	3576	2	4/3/2015 12:58	79.5	3254	113.5325	
609	3576	2	4/3/2015 12:59	80	3024	175.0916	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	2	4/3/2015 12:59	80.5	3139	143.6885	
609	3576	2	4/3/2015 13:00	81	3064	164.0182	
609	3576	2	4/3/2015 13:00	81.5	3107	152.2932	
609	3576	2	4/3/2015 13:01	82	2992	184.0556	
609	3576	2	4/3/2015 13:02	82.5	2860	222.2214	
609	3576	2	4/3/2015 13:02	83	2931	201.4528	
609	3576	2	4/3/2015 13:03	83.5	2921	204.3416	
609	3576	2	4/3/2015 13:03	84	2972	189.709	
609	3576	2	4/3/2015 13:04	84.5	3104	153.0926	
609	3576	2	4/3/2015 13:04	85	3031	173.1219	
609	3576	2	4/3/2015 13:05	85.5	2993	183.759	
609	3576	2	4/3/2015 13:05	86	3092	156.3433	
609	3576	2	4/3/2015 13:06	86.5	2918	205.1985	
609	3576	2	4/3/2015 13:07	87	2833	230.2505	
609	3576	2	4/3/2015 13:07	87.5	2945	197.4051	
609	3576	2	4/3/2015 13:08	88	3039	170.8884	
609	3576	2	4/3/2015 13:08	88.5	3116	149.8328	
609	3576	2	4/3/2015 13:09	89	2975	188.8362	
609	3576	2	4/3/2015 13:09	89.5	3063	164.2575	
609	3576	2	4/3/2015 13:10	90	3100	154.1538	
609	3576	2	4/3/2015 13:11	90.5	3179	133.0206	
609	3576	2	4/3/2015 13:11	91	3162	137.5167	
609	3576	2	4/3/2015 13:12	91.5	2889	213.6334	
609	3576	2	4/3/2015 13:12	92	2879	216.569	
609	3576	2	4/3/2015 13:13	92.5	2878	216.8613	
609	3576	2	4/3/2015 13:13	93	2983	186.5523	
609	3576	2	4/3/2015 13:14	93.5	2976	188.5337	
609	3576	2	4/3/2015 13:14	94	2925	203.1401	
609	3576	2	4/3/2015 13:15	94.5	3067	163.1381	
609	3576	2	4/3/2015 13:21	95	3016	177.2622	
609	3576	2	4/3/2015 13:21	95.5	3254	113.4985	
609	3576	2	4/3/2015 13:22	96	3216	123.3638	
609	3576	2	4/3/2015 13:22	96.5	3303	101.0623	
609	3576	2	4/3/2015 13:23	97	3216	123.425	
609	3576	2	4/3/2015 13:23	97.5	3298	102.3894	
609	3576	2	4/3/2015 13:24	98	3258	112.6236	
609	3576	2	4/3/2015 13:25	98.5	3181	132.6886	
609	3576	2	4/3/2015 13:25	99	3206	126.1567	
609	3576	2	4/3/2015 13:26	99.5	3263	111.4324	
609	3576	2	4/3/2015 13:26	100	3290	104.5722	
609	3576	2	4/3/2015 13:27	100.5	3296	103.08	
609	3576	2	4/3/2015 13:27	101	3312	99.06427	
609	3576	2	4/3/2015 13:28	101.5	3275	108.4846	
609	3576	2	4/3/2015 13:28	102	3374	83.64575	
609	3576	2	4/3/2015 13:29	102.5	3194	129.5139	
609	3576	2	4/3/2015 13:30	103	3328	95.16174	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3576	2	4/3/2015 13:30	103.5	3294	103.7708	
609	3576	2	4/3/2015 13:31	104	3259	112.7339	
609	3576	2	4/3/2015 13:31	104.5	3310	99.78302	
609	3576	2	4/3/2015 13:32	105	3345	91.03076	
609	3576	2	4/3/2015 13:32	105.5	3308	100.3491	
609	3576	2	4/3/2015 13:33	106	3349	90.0946	
609	3576	2	4/3/2015 13:33	106.5	3322	96.88269	
609	3576	2	4/3/2015 13:34	107	3384	81.48407	
609	3576	2	4/3/2015 13:35	107.5	3378	82.9942	
609	3577	1	4/3/2015 13:45	28	3288	144.7888	
609	3577	1	4/3/2015 13:51	28.5	3485	96.68909	
609	3577	1	4/3/2015 13:51	29	3345	130.8046	
609	3577	1	4/3/2015 13:52	29.5	3045	209.2707	
609	3577	1	4/3/2015 13:52	30	3208	165.8687	
609	3577	1	4/3/2015 13:53	30.5	3350	130.002	
609	3577	1	4/3/2015 13:54	31	3314	139.1179	
609	3577	1	4/3/2015 13:54	31.5	3268	150.8812	
609	3577	1	4/3/2015 13:55	32	3338	133.4169	
609	3577	1	4/3/2015 13:55	32.5	3374	124.6618	
609	3577	1	4/3/2015 13:56	33	3402	117.9556	
609	3577	1	4/3/2015 13:56	33.5	3417	114.4556	
609	3577	1	4/3/2015 13:57	34	3523	89.32471	
609	3577	1	4/3/2015 13:58	34.5	3523	89.47003	
609	3577	1	4/3/2015 13:58	35	3441	109.095	
609	3577	1	4/3/2015 13:59	35.5	3410	116.736	
609	3577	1	4/3/2015 13:59	36	3343	133.3376	
609	3577	1	4/3/2015 14:00	36.5	3402	118.973	
609	3577	1	4/3/2015 14:00	37	3268	152.4803	
609	3577	1	4/3/2015 14:01	37.5	3329	137.2573	
609	3577	1	4/3/2015 14:01	38	3317	140.4014	
609	3577	1	4/3/2015 14:02	38.5	3321	139.5455	
609	3577	1	4/3/2015 14:03	39	3440	110.4975	
609	3577	1	4/3/2015 14:03	39.5	3512	93.50677	
609	3577	1	4/3/2015 14:04	40	3367	128.5634	
609	3577	1	4/3/2015 14:04	40.5	3311	142.6307	
609	3577	1	4/3/2015 14:05	41	3474	102.9378	
609	3577	1	4/3/2015 14:05	41.5	3276	151.753	
609	3577	1	4/3/2015 14:06	42	3387	124.2321	
609	3577	1	4/3/2015 14:07	42.5	3365	129.7812	
609	3577	1	4/3/2015 14:07	43	3363	130.4193	
609	3577	1	4/3/2015 14:08	43.5	3357	132.0457	
609	3577	1	4/3/2015 14:08	44	3240	161.6699	
609	3577	1	4/3/2015 14:09	44.5	3426	115.4692	
609	3577	1	4/3/2015 14:09	45	3299	146.9517	
609	3577	1	4/3/2015 14:10	45.5	3283	151.1373	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3577	1	4/3/2015 14:10	46	3528	91.63422	
609	3577	1	4/3/2015 14:11	46.5	3376	128.2327	
609	3577	1	4/3/2015 14:12	47	3474	104.676	
609	3577	1	4/3/2015 14:12	47.5	3414	119.2442	
609	3577	1	4/3/2015 14:13	48	3556	85.68359	
609	3577	1	4/3/2015 14:13	48.5	3401	122.6948	
609	3577	1	4/3/2015 14:14	49	3448	111.4712	
609	3577	1	4/3/2015 14:14	49.5	3441	113.2982	
609	3577	1	4/3/2015 14:15	50	3359	133.4324	
609	3577	1	4/3/2015 14:21	50.5	3429	116.48	
609	3577	1	4/3/2015 14:21	51	3482	103.7833	
609	3577	1	4/3/2015 14:22	51.5	3468	107.1143	
609	3577	1	4/3/2015 14:22	52	3352	135.3022	
609	3577	1	4/3/2015 14:23	52.5	3477	104.9662	
609	3577	1	4/3/2015 14:23	53	3292	150.2983	
609	3577	1	4/3/2015 14:24	53.5	3271	155.6168	
609	3577	1	4/3/2015 14:24	54	3381	128.1489	
609	3577	1	4/3/2015 14:25	54.5	3287	151.556	
609	3577	1	4/3/2015 14:26	55	3266	156.8833	
609	3577	1	4/3/2015 14:26	55.5	3352	135.2888	
609	3577	1	4/3/2015 14:27	56	3434	115.2523	
609	3577	1	4/3/2015 14:27	56.5	3272	155.3511	
609	3577	1	4/3/2015 14:28	57	3211	171.0121	
609	3577	1	4/3/2015 14:28	57.5	3293	150.0287	
609	3577	1	4/3/2015 14:29	58	3291	150.5317	
609	3577	1	4/3/2015 14:29	58.5	3230	166.0932	
609	3577	1	4/3/2015 14:30	59	3286	151.7917	
609	3577	1	4/3/2015 14:31	59.5	3298	148.7601	
609	3577	1	4/3/2015 14:31	60	3309	145.9916	
609	3577	1	4/3/2015 14:32	60.5	3316	144.2343	
609	3577	1	4/3/2015 14:32	61	3317	143.9819	
609	3577	1	4/3/2015 14:33	61.5	3317	143.98	
609	3577	1	4/3/2015 14:33	62	3277	154.0604	
609	3577	1	4/3/2015 14:34	62.5	3262	157.874	
609	3577	1	4/3/2015 14:35	63	3304	147.2365	
609	3577	1	4/3/2015 14:35	63.5	3277	154.0547	
609	3577	1	4/3/2015 14:36	64	3391	125.6621	
609	3577	1	4/3/2015 14:36	64.5	3334	139.7236	
609	3577	1	4/3/2015 14:37	65	3318	143.7163	
609	3577	1	4/3/2015 14:37	65.5	3348	136.2416	
609	3577	1	4/3/2015 14:38	66	3175	180.3745	
609	3577	1	4/3/2015 14:38	66.5	3259	158.624	
609	3577	1	4/3/2015 14:39	67	3217	169.4189	
609	3577	1	4/3/2015 14:40	67.5	3257	159.131	
609	3577	1	4/3/2015 14:40	68	3313	144.9575	
609	3577	1	4/3/2015 14:41	68.5	3663	61.88831	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3577	1	4/3/2015 14:41	69	3301	147.9683	
609	3577	1	4/3/2015 14:42	69.5	3279	153.5244	
609	3577	1	4/3/2015 14:42	70	3260	158.3555	
609	3577	1	4/3/2015 14:43	70.5	3381	128.0859	
609	3577	1	4/3/2015 14:44	71	3429	116.4017	
609	3577	1	4/3/2015 14:44	71.5	3217	169.4017	
609	3577	1	4/3/2015 14:45	72	3428	116.6395	
609	3577	1	4/3/2015 14:45	72.5	3208	171.7316	
609	3577	1	4/3/2015 14:51	73	3227	166.8115	
609	3577	1	4/3/2015 14:51	73.5	3084	204.5378	
609	3577	1	4/3/2015 14:52	74	3245	161.9977	
609	3577	1	4/3/2015 14:52	74.5	3288	150.9571	
609	3577	1	4/3/2015 14:53	75	3253	159.7652	
609	3577	1	4/3/2015 14:54	75.5	3330	140.2288	
609	3577	1	4/3/2015 14:54	76	3272	154.7372	
609	3577	1	4/3/2015 14:55	76.5	3230	165.3951	
609	3577	1	4/3/2015 14:55	77	3307	145.7097	
609	3577	1	4/3/2015 14:56	77.5	3156	184.5277	
609	3577	1	4/3/2015 14:56	78	3246	161.0065	
609	3577	1	4/3/2015 14:57	78.5	3181	177.7634	
609	3577	1	4/3/2015 14:58	79	3170	180.5599	
609	3577	1	4/3/2015 14:58	79.5	3309	144.7479	
609	3577	1	4/3/2015 14:59	80	3318	142.3998	
609	3577	1	4/3/2015 14:59	80.5	3238	162.6007	
609	3577	1	4/3/2015 15:00	81	3286	150.2684	
609	3577	1	4/3/2015 15:00	81.5	3319	141.8737	
609	3577	1	4/3/2015 15:01	82	3138	188.4738	
609	3577	1	4/3/2015 15:01	82.5	3233	163.5192	
609	3577	1	4/3/2015 15:02	83	3184	176.15	
609	3577	1	4/3/2015 15:03	83.5	3340	136.2688	
609	3577	1	4/3/2015 15:03	84	3198	172.3092	
609	3577	1	4/3/2015 15:04	84.5	3283	150.3838	
609	3577	1	4/3/2015 15:04	85	3237	162.0298	
609	3577	1	4/3/2015 15:05	85.5	3156	183.0563	
609	3577	1	4/3/2015 15:05	86	3146	185.6125	
609	3577	1	4/3/2015 15:06	86.5	3278	151.2827	
609	3577	1	4/3/2015 15:06	87	3274	152.2059	
609	3577	1	4/3/2015 15:07	87.5	3216	166.9888	
609	3577	1	4/3/2015 15:08	88	3165	180.2203	
609	3577	1	4/3/2015 15:08	88.5	3170	178.8116	
609	3577	1	4/3/2015 15:09	89	2905	251.8294	
609	3577	1	4/3/2015 15:09	89.5	2945	240.243	
609	3577	1	4/3/2015 15:10	90	3105	195.8304	
609	3577	1	4/3/2015 15:10	90.5	3058	208.4926	
609	3577	1	4/3/2015 15:11	91	3333	136.6291	
609	3577	1	4/3/2015 15:12	91.5	3105	195.5538	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3577	1	4/3/2015 15:12	92	3204	169.2736	
609	3577	1	4/3/2015 15:13	92.5	3127	189.4717	
609	3577	1	4/3/2015 15:13	93	3095	197.9731	
609	3577	1	4/3/2015 15:14	93.5	3160	180.5253	
609	3577	1	4/3/2015 15:14	94	3101	196.17	
609	3577	1	4/3/2015 15:15	94.5	3255	155.6644	
609	3577	1	4/3/2015 15:20	95	3230	161.989	
609	3577	1	4/3/2015 15:21	95.5	3208	167.5244	
609	3577	1	4/3/2015 15:22	96	3174	176.2487	
609	3577	1	4/3/2015 15:22	96.5	3138	185.6094	
609	3577	1	4/3/2015 15:23	97	3227	162.1367	
609	3577	1	4/3/2015 15:23	97.5	3150	182.1107	
609	3577	1	4/3/2015 15:24	98	3271	150.5544	
609	3577	1	4/3/2015 15:24	98.5	3261	152.9444	
609	3577	1	4/3/2015 15:25	99	3204	167.468	
609	3577	1	4/3/2015 15:26	99.5	3066	204.0676	
609	3577	1	4/3/2015 15:26	100	3091	197.1195	
609	3577	1	4/3/2015 15:27	100.5	3262	152.0626	
609	3577	1	4/3/2015 15:27	101	3205	166.5811	
609	3577	1	4/3/2015 15:28	101.5	3187	171.1178	
609	3577	1	4/3/2015 15:28	102	3251	154.4023	
609	3577	1	4/3/2015 15:29	102.5	3228	160.1549	
609	3577	1	4/3/2015 15:29	103	3274	148.2244	
609	3577	1	4/3/2015 15:30	103.5	3281	146.2917	
609	3577	1	4/3/2015 15:31	104	3323	135.5658	
609	3577	1	4/3/2015 15:31	104.5	3306	139.6691	
609	3577	1	4/3/2015 15:32	105	3351	128.2861	
609	3577	1	4/3/2015 15:32	105.5	3368	123.9308	
609	3577	1	4/3/2015 15:33	106	3300	140.7072	
609	3577	1	4/3/2015 15:33	106.5	3361	125.3425	
609	3577	1	4/3/2015 15:34	107	3362	124.9385	
609	3577	1	4/3/2015 15:35	107.5	3379	120.5979	
609	3577	1	4/3/2015 15:35	108	3272	147.1617	
609	3577	1	4/3/2015 15:36	108.5	3243	154.4107	
609	3577	1	4/3/2015 15:36	109	3331	131.9976	
609	3577	1	4/3/2015 15:37	109.5	3283	143.8993	
609	3577	1	4/3/2015 15:37	110	3380	119.5661	
609	3577	1	4/3/2015 15:38	110.5	3247	152.7555	
609	3577	1	4/3/2015 15:38	111	3201	164.4792	
609	3577	1	4/3/2015 15:39	111.5	3439	104.7548	
609	3577	1	4/3/2015 15:40	112	3335	130.0568	
609	3577	1	4/3/2015 15:40	112.5	3269	146.5081	
609	3578	1	4/3/2015 15:51	27	3488	94.12811	
609	3578	1	4/3/2015 15:51	27.5	3406	113.9446	
609	3578	1	4/3/2015 15:52	28	3415	111.8268	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	1	4/3/2015 15:52	28.5	3503	90.79376	
609	3578	1	4/3/2015 15:53	29	3423	110.0319	
609	3578	1	4/3/2015 15:54	29.5	3558	78.04041	
609	3578	1	4/3/2015 15:54	30	3558	78.1145	
609	3578	1	4/3/2015 15:55	30.5	3402	115.3655	
609	3578	1	4/3/2015 15:55	31	3516	88.09515	
609	3578	1	4/3/2015 15:56	31.5	3547	80.89972	
609	3578	1	4/3/2015 15:56	32	3510	89.65826	
609	3578	1	4/3/2015 15:57	32.5	3588	71.53857	
609	3578	1	4/3/2015 15:57	33	3479	97.15955	
609	3578	1	4/3/2015 15:58	33.5	3527	85.87811	
609	3578	1	4/3/2015 15:59	34	3496	93.26654	
609	3578	1	4/3/2015 15:59	34.5	3583	72.98822	
609	3578	1	4/3/2015 16:00	35	3518	88.21655	
609	3578	1	4/3/2015 16:00	35.5	3391	118.7973	
609	3578	1	4/3/2015 16:01	36	3543	82.50037	
609	3578	1	4/3/2015 16:01	36.5	3487	95.77344	
609	3578	1	4/3/2015 16:02	37	3430	109.5208	
609	3578	1	4/3/2015 16:03	37.5	3448	105.2504	
609	3578	1	4/3/2015 16:03	38	3486	96.23328	
609	3578	1	4/3/2015 16:04	38.5	3455	103.7155	
609	3578	1	4/3/2015 16:04	39	3512	90.22284	
609	3578	1	4/3/2015 16:05	39.5	3440	107.4741	
609	3578	1	4/3/2015 16:05	40	3590	72.18805	
609	3578	1	4/3/2015 16:06	40.5	3364	126.1831	
609	3578	1	4/3/2015 16:06	41	3458	103.3653	
609	3578	1	4/3/2015 16:07	41.5	3602	69.65063	
609	3578	1	4/3/2015 16:08	42	3418	113.1706	
609	3578	1	4/3/2015 16:08	42.5	3527	87.21002	
609	3578	1	4/3/2015 16:09	43	3557	80.27155	
609	3578	1	4/3/2015 16:09	43.5	3540	84.31128	
609	3578	1	4/3/2015 16:10	44	3597	71.1687	
609	3578	1	4/3/2015 16:10	44.5	3382	122.3376	
609	3578	1	4/3/2015 16:11	45	3503	93.23621	
609	3578	1	4/3/2015 16:11	45.5	3481	98.53241	
609	3578	1	4/3/2015 16:12	46	3414	114.7344	
609	3578	1	4/3/2015 16:13	46.5	3351	130.2907	
609	3578	1	4/3/2015 16:13	47	3502	93.76831	
609	3578	1	4/3/2015 16:14	47.5	3483	98.35168	
609	3578	1	4/3/2015 16:14	48	3432	110.6633	
609	3578	1	4/3/2015 16:15	48.5	3550	82.71478	
609	3578	1	4/3/2015 16:20	49	3442	108.396	
609	3578	1	4/3/2015 16:21	49.5	3486	97.93323	
609	3578	1	4/3/2015 16:22	50	3533	86.91052	
609	3578	1	4/3/2015 16:22	50.5	3365	127.4137	
609	3578	1	4/3/2015 16:23	51	3530	87.76166	

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Dep 609 Start 2/3/2015 18:20
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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	1	4/3/2015 16:23	51.5	3474	101.0877	
609	3578	1	4/3/2015 16:24	52	3518	90.72974	
609	3578	1	4/3/2015 16:24	52.5	3434	110.8441	
609	3578	1	4/3/2015 16:25	53	3463	103.9395	
609	3578	1	4/3/2015 16:25	53.5	3468	102.8165	
609	3578	1	4/3/2015 16:26	54	3481	99.78748	
609	3578	1	4/3/2015 16:27	54.5	3617	68.13556	
609	3578	1	4/3/2015 16:27	55	3560	81.34601	
609	3578	1	4/3/2015 16:28	55.5	3503	94.78638	
609	3578	1	4/3/2015 16:28	56	3507	93.91449	
609	3578	1	4/3/2015 16:29	56.5	3569	79.47791	
609	3578	1	4/3/2015 16:29	57	3520	90.99652	
609	3578	1	4/3/2015 16:30	57.5	3506	94.37195	
609	3578	1	4/3/2015 16:31	58	3544	85.51685	
609	3578	1	4/3/2015 16:31	58.5	3436	111.2457	
609	3578	1	4/3/2015 16:32	59	3509	93.88434	
609	3578	1	4/3/2015 16:32	59.5	3320	139.9442	
609	3578	1	4/3/2015 16:33	60	2113	525.5765	
609	3578	1	4/3/2015 16:33	60.5	619	1807.05	
609	3578	1	4/3/2015 16:34	61	305	3697.789	
609	3578	1	4/3/2015 16:34	61.5	366	2829.764	
609	3578	1	4/3/2015 16:35	62	261	NULL	
609	3578	1	4/3/2015 16:36	62.5	253	NULL	
609	3578	1	4/3/2015 16:36	63	294	NULL	
609	3578	1	4/3/2015 16:37	63.5	257	NULL	
609	3578	1	4/3/2015 16:37	64	242	NULL	
609	3578	1	4/3/2015 16:38	64.5	268	NULL	
609	3578	1	4/3/2015 16:38	65	254	NULL	
609	3578	1	4/3/2015 16:39	65.5	239	NULL	
609	3578	1	4/3/2015 16:40	66	261	NULL	
609	3578	1	4/3/2015 16:40	66.5	278	NULL	
609	3578	1	4/3/2015 16:41	67	278	NULL	
609	3578	1	4/3/2015 16:41	67.5	252	NULL	
609	3578	1	4/3/2015 16:42	68	248	NULL	
609	3578	1	4/3/2015 16:42	68.5	241	NULL	
609	3578	1	4/3/2015 16:43	69	246	NULL	
609	3578	1	4/3/2015 16:43	69.5	265	NULL	
609	3578	1	4/3/2015 16:44	70	245	NULL	
609	3578	1	4/3/2015 16:45	70.5	278	NULL	
609	3578	1	4/3/2015 16:45	71	274	NULL	
609	3578	1	4/3/2015 16:51	71.5	263	NULL	
609	3578	1	4/3/2015 16:51	72	272	NULL	
609	3578	1	4/3/2015 16:52	72.5	255	NULL	
609	3578	1	4/3/2015 16:52	73	238	NULL	
609	3578	1	4/3/2015 16:53	73.5	319	NULL	
609	3578	1	4/3/2015 16:54	74	265	NULL	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	1	4/3/2015 16:54	74.5	254	NULL	
609	3578	1	4/3/2015 16:55	75	267	NULL	
609	3578	1	4/3/2015 16:55	75.5	277	NULL	
609	3578	1	4/3/2015 16:56	76	251	NULL	
609	3578	1	4/3/2015 16:56	76.5	248	NULL	
609	3578	1	4/3/2015 16:57	77	265	NULL	
609	3578	1	4/3/2015 16:57	77.5	288	NULL	
609	3578	1	4/3/2015 16:58	78	286	NULL	
609	3578	1	4/3/2015 16:59	78.5	244	NULL	
609	3578	1	4/3/2015 16:59	79	240	NULL	
609	3578	1	4/3/2015 17:00	79.5	249	NULL	
609	3578	1	4/3/2015 17:00	80	283	NULL	
609	3578	1	4/3/2015 17:01	80.5	269	NULL	
609	3578	1	4/3/2015 17:01	81	266	NULL	
609	3578	1	4/3/2015 17:02	81.5	248	NULL	
609	3578	1	4/3/2015 17:03	82	249	NULL	
609	3578	1	4/3/2015 17:03	82.5	282	NULL	
609	3578	1	4/3/2015 17:04	83	267	NULL	
609	3578	1	4/3/2015 17:04	83.5	380	NULL	
609	3578	1	4/3/2015 17:05	84	279	NULL	
609	3578	1	4/3/2015 17:05	84.5	257	NULL	
609	3578	1	4/3/2015 17:06	85	268	NULL	
609	3578	1	4/3/2015 17:06	85.5	263	NULL	
609	3578	1	4/3/2015 17:07	86	265	NULL	
609	3578	1	4/3/2015 17:08	86.5	262	NULL	
609	3578	1	4/3/2015 17:08	87	254	NULL	
609	3578	1	4/3/2015 17:09	87.5	267	NULL	
609	3578	1	4/3/2015 17:09	88	247	NULL	
609	3578	1	4/3/2015 17:10	88.5	294	NULL	
609	3578	1	4/3/2015 17:10	89	246	NULL	
609	3578	1	4/3/2015 17:11	89.5	285	NULL	
609	3578	1	4/3/2015 17:12	90	271	NULL	
609	3578	1	4/3/2015 17:12	90.5	266	NULL	
609	3578	1	4/3/2015 17:13	91	323	NULL	
609	3578	1	4/3/2015 17:13	91.5	240	NULL	
609	3578	1	4/3/2015 17:14	92	284	NULL	
609	3578	1	4/3/2015 17:14	92.5	265	NULL	
609	3578	1	4/3/2015 17:15	93	376	NULL	
609	3578	1	4/3/2015 17:20	93.5	1327	NULL	
609	3578	1	4/3/2015 17:21	94	2758	NULL	
609	3578	1	4/3/2015 17:22	94.5	3514	NULL	
609	3578	1	4/3/2015 17:22	95	3666	NULL	
609	3578	1	4/3/2015 17:23	95.5	3578	NULL	
609	3578	1	4/3/2015 17:23	96	3671	NULL	
609	3578	1	4/3/2015 17:24	96.5	3727	NULL	
609	3578	1	4/3/2015 17:24	97	3581	NULL	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	1	4/3/2015 17:25	97.5	3550	NULL	
609	3578	1	4/3/2015 17:26	98	3668	NULL	
609	3578	1	4/3/2015 17:26	98.5	3560	NULL	
609	3578	1	4/3/2015 17:27	99	3573	NULL	
609	3578	1	4/3/2015 17:27	99.5	3607	NULL	
609	3578	1	4/3/2015 17:28	100	3474	NULL	
609	3578	1	4/3/2015 17:28	100.5	3525	NULL	
609	3578	1	4/3/2015 17:29	101	3302	NULL	
609	3578	1	4/3/2015 17:29	101.5	3399	NULL	
609	3578	1	4/3/2015 17:30	102	3496	NULL	
609	3578	1	4/3/2015 17:31	102.5	3562	NULL	
609	3578	1	4/3/2015 17:31	103	3436	NULL	
609	3578	1	4/3/2015 17:32	103.5	3460	NULL	
609	3578	1	4/3/2015 17:32	104	3468	NULL	
609	3578	1	4/3/2015 17:33	104.5	3510	NULL	
609	3578	1	4/3/2015 17:33	105	3468	NULL	
609	3578	1	4/3/2015 17:34	105.5	3538	NULL	
609	3578	1	4/3/2015 17:34	106	3459	NULL	
609	3578	1	4/3/2015 17:35	106.5	3449	NULL	
609	3578	1	4/3/2015 17:36	107	3404	NULL	
609	3578	1	4/3/2015 17:36	107.5	3513	NULL	
609	3578	1	4/3/2015 17:37	108	3497	NULL	
609	3578	1	4/3/2015 17:37	108.5	3424	NULL	
609	3578	1	4/3/2015 17:38	109	3574	NULL	
609	3578	1	4/3/2015 17:38	109.5	3465	NULL	
609	3578	1	4/3/2015 17:39	110	3431	NULL	
609	3578	1	4/3/2015 17:40	110.5	3432	NULL	
609	3578	1	4/3/2015 17:40	111	3458	NULL	
609	3578	1	4/3/2015 17:41	111.5	3521	NULL	
609	3578	1	4/3/2015 17:41	112	3478	NULL	
609	3578	1	4/3/2015 17:42	112.5	3506	NULL	
609	3578	1	4/3/2015 17:42	113	3525	NULL	
609	3578	1	4/3/2015 17:43	113.5	3535	NULL	
609	3578	1	4/3/2015 17:43	114	3589	NULL	
609	3578	1	4/3/2015 17:44	114.5	3485	NULL	
609	3578	1	4/3/2015 17:45	115	3725	NULL	
609	3578	1	4/3/2015 17:45	115.5	3551	NULL	
609	3578	1	4/3/2015 17:51	116	3537	NULL	
609	3578	1	4/3/2015 17:51	116.5	3499	NULL	
609	3578	1	4/3/2015 17:52	117	3442	NULL	
609	3578	1	4/3/2015 17:52	117.5	3450	NULL	
609	3578	1	4/3/2015 17:53	118	3530	NULL	
609	3578	1	4/3/2015 17:54	118.5	3609	NULL	
609	3578	1	4/3/2015 17:54	119	3505	NULL	
609	3578	1	4/3/2015 17:55	119.5	3570	NULL	
609	3578	1	4/3/2015 17:55	120	3633	NULL	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	1	4/3/2015 17:56	120.5	3444	NULL	
609	3578	1	4/3/2015 17:56	121	3532	NULL	
609	3578	1	4/3/2015 17:57	121.5	3624	NULL	
609	3578	1	4/3/2015 17:57	122	3640	NULL	
609	3578	1	4/3/2015 17:58	122.5	3658	NULL	
609	3578	1	4/3/2015 17:59	123	3583	NULL	
609	3578	1	4/3/2015 17:59	123.5	3660	NULL	
609	3578	1	4/3/2015 18:00	124	3571	NULL	
609	3578	1	4/3/2015 18:00	124.5	3522	NULL	
609	3578	1	4/3/2015 18:01	125	3519	NULL	
609	3578	1	4/3/2015 18:01	125.5	3585	NULL	
609	3578	1	4/3/2015 18:02	126	3528	NULL	
609	3578	1	4/3/2015 18:03	126.5	3531	NULL	
609	3578	1	4/3/2015 18:03	127	3498	NULL	
609	3578	1	4/3/2015 18:04	127.5	3503	NULL	
609	3578	2	4/4/2015 20:23	27	3688	64.14685	
609	3578	2	4/4/2015 20:23	27.5	3442	121.1147	
609	3578	2	4/4/2015 20:29	28	3525	101.1769	
609	3578	2	4/4/2015 20:30	28.5	3624	78.07959	
609	3578	2	4/4/2015 20:30	29	3595	84.54718	
609	3578	2	4/4/2015 20:31	29.5	3550	94.79596	
609	3578	2	4/4/2015 20:31	30	3502	105.8988	
609	3578	2	4/4/2015 20:32	30.5	3573	89.09808	
609	3578	2	4/4/2015 20:32	31	3510	103.6554	
609	3578	2	4/4/2015 20:33	31.5	3481	110.3582	
609	3578	2	4/4/2015 20:33	32	3562	91.12213	
609	3578	2	4/4/2015 20:34	32.5	3502	105.0186	
609	3578	2	4/4/2015 20:35	33	3516	101.5356	
609	3578	2	4/4/2015 20:35	33.5	3519	100.6526	
609	3578	2	4/4/2015 20:36	34	3487	108.0492	
609	3578	2	4/4/2015 20:36	34.5	3525	98.88867	
609	3578	2	4/4/2015 20:37	35	3604	80.36627	
609	3578	2	4/4/2015 20:37	35.5	3530	97.36169	
609	3578	2	4/4/2015 20:38	36	3418	123.9327	
609	3578	2	4/4/2015 20:39	36.5	3608	78.91974	
609	3578	2	4/4/2015 20:39	37	3680	62.41772	
609	3578	2	4/4/2015 20:40	37.5	3463	112.5437	
609	3578	2	4/4/2015 20:40	38	3536	95.07251	
609	3578	2	4/4/2015 20:41	38.5	3660	66.38806	
609	3578	2	4/4/2015 20:41	39	3573	86.10095	
609	3578	2	4/4/2015 20:42	39.5	3587	82.68848	

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	2	4/4/2015 20:42	40	3514	99.53687	
609	3578	2	4/4/2015 20:43	40.5	3651	67.71497	
609	3578	2	4/4/2015 20:44	41	3683	60.33185	
609	3578	2	4/4/2015 20:44	41.5	3594	80.36859	
609	3578	2	4/4/2015 20:45	42	3521	97.18048	
609	3578	2	4/4/2015 20:45	42.5	3416	122.1222	
609	3578	2	4/4/2015 20:46	43	3565	86.54156	
609	3578	2	4/4/2015 20:46	43.5	3603	77.59222	
609	3578	2	4/4/2015 20:47	44	3594	79.48376	
609	3578	2	4/4/2015 20:48	44.5	3642	68.33856	
609	3578	2	4/4/2015 20:48	45	3480	105.8285	NULL
609	3578	2	4/4/2015 20:49	45.5	3542	91.01514	NULL
609	3578	2	4/4/2015 20:49	46	3583	81.3111	NULL
609	3578	2	4/4/2015 20:50	46.5	3512	97.7077	NULL
609	3578	2	4/4/2015 20:50	47	3463	109.1822	NULL
609	3578	2	4/4/2015 20:51	47.5	3601	76.63397	NULL
609	3578	2	4/4/2015 20:51	48	3589	79.21759	NULL
609	3578	2	4/4/2015 20:52	48.5	3540	90.41907	NULL
609	3578	2	4/4/2015 20:53	49	3534	91.64667	NULL
609	3578	2	4/4/2015 20:53	49.5	3418	119.1548	NULL
609	3578	2	4/4/2015 20:59	50	3511	96.70178	NULL
609	3578	2	4/4/2015 20:59	50.5	3463	108.2216	NULL
609	3578	2	4/4/2015 21:00	51	3856	19.52728	NULL
609	3578	2	4/4/2015 21:00	51.5	3541	89.96472	NULL
609	3578	2	4/4/2015 21:01	52	3653	64.31244	NULL
609	3578	2	4/4/2015 21:02	52.5	3594	77.8761	NULL
609	3578	2	4/4/2015 21:02	53	3620	72.01935	NULL
609	3578	2	4/4/2015 21:03	53.5	3543	89.91296	NULL
609	3578	2	4/4/2015 21:03	54	3903	10.1911	NULL
609	3578	2	4/4/2015 21:04	54.5	3450	112.1748	NULL
609	3578	2	4/4/2015 21:04	55	3466	108.4388	NULL
609	3578	2	4/4/2015 21:05	55.5	3517	96.4303	NULL
609	3578	2	4/4/2015 21:05	56	3635	69.2251	NULL
609	3578	2	4/4/2015 21:06	56.5	3645	67.0589	NULL
609	3578	2	4/4/2015 21:07	57	3569	84.58679	NULL
609	3578	2	4/4/2015 21:07	57.5	3605	76.38751	NULL
609	3578	2	4/4/2015 21:08	58	3528	94.36212	NULL
609	3578	2	4/4/2015 21:08	58.5	3671	61.60352	NULL
609	3578	2	4/4/2015 21:09	59	3527	94.80457	NULL

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Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	2	4/4/2015 21:09	59.5	3569	85.10583	NULL
609	3578	2	4/4/2015 21:10	60	3527	95.01208	NULL
609	3578	2	4/4/2015 21:11	60.5	3618	74.03394	NULL
609	3578	2	4/4/2015 21:11	61	3588	81.02362	NULL
609	3578	2	4/4/2015 21:12	61.5	3572	84.82544	NULL
609	3578	2	4/4/2015 21:12	62	3598	78.92889	NULL
609	3578	2	4/4/2015 21:13	62.5	3716	52.37805	NULL
609	3578	2	4/4/2015 21:13	63	3614	75.46704	NULL
609	3578	2	4/4/2015 21:14	63.5	3675	61.74158	NULL
609	3578	2	4/4/2015 21:14	64	3584	82.5686	NULL
609	3578	2	4/4/2015 21:15	64.5	3529	95.47571	NULL
609	3578	2	4/4/2015 21:16	65	3561	88.10394	NULL
609	3578	2	4/4/2015 21:16	65.5	3616	75.52783	NULL
609	3578	2	4/4/2015 21:17	66	3657	66.31445	NULL
609	3578	2	4/4/2015 21:17	66.5	3543	92.61066	NULL
609	3578	2	4/4/2015 21:18	67	3695	57.98666	NULL
609	3578	2	4/4/2015 21:18	67.5	3588	82.37091	NULL
609	3578	2	4/4/2015 21:19	68	3413	123.9297	NULL
609	3578	2	4/4/2015 21:20	68.5	3516	99.36218	NULL
609	3578	2	4/4/2015 21:20	69	3562	88.69995	NULL
609	3578	2	4/4/2015 21:21	69.5	3644	69.98108	NULL
609	3578	2	4/4/2015 21:21	70	3519	98.96594	NULL
609	3578	2	4/4/2015 21:22	70.5	3513	100.4835	NULL
609	3578	2	4/4/2015 21:22	71	3485	107.2214	NULL
609	3578	2	4/4/2015 21:23	71.5	3559	89.91486	NULL
609	3578	2	4/4/2015 21:23	72	3522	98.67358	NULL
609	3578	2	4/4/2015 21:29	72.5	3586	83.86694	NULL
609	3578	2	4/4/2015 21:30	73	3511	101.2512	NULL
609	3578	2	4/4/2015 21:30	73.5	3593	82.01758	NULL
609	3578	2	4/4/2015 21:31	74	3566	88.14081	NULL
609	3578	2	4/4/2015 21:31	74.5	3608	78.33575	NULL
609	3578	2	4/4/2015 21:32	75	3543	93.2619	NULL
609	3578	2	4/4/2015 21:32	75.5	3540	93.84521	NULL
609	3578	2	4/4/2015 21:33	76	3556	89.9928	NULL
609	3578	2	4/4/2015 21:34	76.5	3538	94.0769	NULL
609	3578	2	4/4/2015 21:34	77	3560	88.82562	NULL
609	3578	2	4/4/2015 21:35	77.5	3557	89.40533	NULL
609	3578	2	4/4/2015 21:35	78	3566	87.19513	NULL
609	3578	2	4/4/2015 21:35	78.5	3356	137.4462	NULL

Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	2	4/4/2015 21:35	79	3672	62.74286	NULL
609	3578	2	4/4/2015 21:36	79.5	3530	95.24231	NULL
609	3578	2	4/4/2015 21:36	80	3573	85.09882	NULL
609	3578	2	4/4/2015 21:37	80.5	3521	97.12067	NULL
609	3578	2	4/4/2015 21:38	81	3478	107.1892	NULL
609	3578	2	4/4/2015 21:38	81.5	3507	100.1857	NULL
609	3578	2	4/4/2015 21:39	82	3543	91.60565	NULL
609	3578	2	4/4/2015 21:39	82.5	3514	98.29614	NULL
609	3578	2	4/4/2015 21:40	83	3541	91.83636	NULL
609	3578	2	4/4/2015 21:40	83.5	3667	62.80237	NULL
609	3578	2	4/4/2015 21:41	84	3546	90.43091	NULL
609	3578	2	4/4/2015 21:41	84.5	3598	78.26428	NULL
609	3578	2	4/4/2015 21:42	85	3547	89.96033	NULL
609	3578	2	4/4/2015 21:43	85.5	3655	65.03546	NULL
609	3578	2	4/4/2015 21:43	86	3627	71.27112	NULL
609	3578	2	4/4/2015 21:44	86.5	3659	63.89478	NULL
609	3578	2	4/4/2015 21:44	87	3510	98.17328	NULL
609	3578	2	4/4/2015 21:45	87.5	3588	79.85504	NULL
609	3578	2	4/4/2015 21:45	88	3640	67.8399	NULL
609	3578	2	4/4/2015 21:46	88.5	3563	85.40381	NULL
609	3578	2	4/4/2015 21:47	89	3533	92.28687	NULL
609	3578	2	4/4/2015 21:47	89.5	3459	109.7188	NULL
609	3578	2	4/4/2015 21:48	90	3507	98.17004	NULL
609	3578	2	4/4/2015 21:48	90.5	3565	84.46448	NULL
609	3578	2	4/4/2015 21:49	91	3564	84.57794	NULL
609	3578	2	4/4/2015 21:49	91.5	3533	91.69318	NULL
609	3578	2	4/4/2015 21:50	92	3638	67.34424	NULL
609	3578	2	4/4/2015 21:50	92.5	3499	99.4693	NULL
609	3578	2	4/4/2015 21:51	93	3560	85.03235	NULL
609	3578	2	4/4/2015 21:52	93.5	3542	89.11066	NULL
609	3578	2	4/4/2015 21:52	94	3598	76.00897	NULL
609	3578	2	4/4/2015 21:58	94.5	3534	90.74573	NULL
609	3578	2	4/4/2015 21:58	95	3581	79.85205	NULL
609	3578	2	4/4/2015 21:59	95.5	3506	97.42523	NULL
609	3578	2	4/4/2015 21:59	96	3599	75.79242	NULL
609	3578	2	4/4/2015 22:00	96.5	3604	74.68835	NULL
609	3578	2	4/4/2015 22:01	97	3413	119.8679	NULL
609	3578	2	4/4/2015 22:01	97.5	3534	91.01007	NULL
609	3578	2	4/4/2015 22:02	98	3509	96.93658	NULL

Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	2	4/4/2015 22:02	98.5	3519	94.62225	NULL
609	3578	2	4/4/2015 22:03	99	3584	79.51166	NULL
609	3578	2	4/4/2015 22:03	99.5	3528	92.59393	NULL
609	3578	2	4/4/2015 22:04	100	3556	86.091	NULL
609	3578	2	4/4/2015 22:04	100.5	3579	80.79889	NULL
609	3578	2	4/4/2015 22:05	101	3596	76.92267	NULL
609	3578	2	4/4/2015 22:06	101.5	3565	84.13068	NULL
609	3578	2	4/4/2015 22:06	102	3529	92.57941	NULL
609	3578	2	4/4/2015 22:07	102.5	3465	107.7974	NULL
609	3578	2	4/4/2015 22:07	103	3521	94.54779	NULL
609	3578	2	4/4/2015 22:08	103.5	3617	72.32776	NULL
609	3578	2	4/4/2015 22:08	104	3535	91.34827	NULL
609	3578	2	4/4/2015 22:09	104.5	3497	100.3488	NULL
609	3578	2	4/4/2015 22:10	105	3606	74.97821	NULL
609	3578	2	4/4/2015 22:10	105.5	3606	75.02228	NULL
609	3578	2	4/4/2015 22:11	106	3529	92.93152	NULL
609	3578	2	4/4/2015 22:11	106.5	3588	79.24927	NULL
609	3578	2	4/4/2015 22:12	107	3580	81.14008	NULL
609	3578	2	4/4/2015 22:12	107.5	3633	69.03156	NULL
609	3578	2	4/4/2015 22:13	108	3447	112.6042	NULL
609	3578	2	4/4/2015 22:13	108.5	3662	62.55103	NULL
609	3578	2	4/4/2015 22:14	109	3567	84.32672	NULL
609	3578	2	4/4/2015 22:15	109.5	3412	121.212	NULL
609	3578	2	4/4/2015 22:15	110	3519	95.63477	NULL
609	3578	2	4/4/2015 22:16	110.5	3571	83.53113	NULL
609	3578	2	4/4/2015 22:16	111	3550	88.45758	NULL
609	3578	2	4/4/2015 22:17	111.5	3562	85.70776	NULL
609	3578	2	4/4/2015 22:17	112	3518	96.0462	NULL
609	3578	2	4/4/2015 22:18	112.5	3495	101.5272	NULL
609	3578	2	4/4/2015 22:19	113	3498	100.8598	NULL
609	3578	2	4/4/2015 22:19	113.5	3541	90.77966	NULL
609	3578	2	4/4/2015 22:20	114	3581	81.52484	NULL
609	3578	2	4/4/2015 22:20	114.5	3662	63.07886	NULL
609	3578	2	4/4/2015 22:21	115	3590	79.53613	NULL
609	3578	2	4/4/2015 22:21	115.5	3547	89.55347	NULL
609	3578	2	4/4/2015 22:22	116	3534	92.63843	NULL
609	3578	2	4/4/2015 22:22	116.5	3555	87.776	NULL
609	3578	2	4/4/2015 22:28	117	3496	101.6857	NULL
609	3578	2	4/4/2015 22:29	117.5	3685	58.44562	NULL

Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3578	2	4/4/2015 22:29	118	3505	100.1872	NULL
609	3578	2	4/4/2015 22:30	118.5	3681	59.97485	NULL
609	3578	2	4/4/2015 22:30	119	3592	80.5166	NULL
609	3578	2	4/4/2015 22:31	119.5	3515	98.77423	NULL
609	3578	2	4/4/2015 22:31	120	3444	116.016	NULL
609	3578	2	4/4/2015 22:32	120.5	3736	49.00241	NULL
609	3578	2	4/4/2015 22:33	121	3580	84.5484	NULL
609	3578	2	4/4/2015 22:33	121.5	3537	94.86768	NULL
609	3578	2	4/4/2015 22:34	122	3538	94.94891	NULL
609	3578	2	4/4/2015 22:34	122.5	3609	78.82104	NULL
609	3578	2	4/4/2015 22:35	123	3399	128.8338	NULL
609	3578	2	4/4/2015 22:35	123.5	3639	72.60834	NULL
609	3578	2	4/4/2015 22:36	124	3565	89.91425	NULL
609	3578	2	4/4/2015 22:36	124.5	3470	112.6112	NULL
609	3578	2	4/4/2015 22:37	125	3554	93.10175	NULL
609	3578	2	4/4/2015 22:38	125.5	3548	94.81531	NULL
609	3578	2	4/4/2015 22:38	126	3455	117.1494	NULL
609	3578	2	4/4/2015 22:39	126.5	3467	114.5864	NULL
609	3578	2	4/4/2015 22:39	127	3555	94.12585	NULL
609	3578	2	4/4/2015 22:40	127.5	3707	59.83661	NULL
							NULL
609	3579	1	4/3/2015 20:09	28	655	1736.008	NULL
609	3579	1	4/3/2015 20:10	28.5	742	1578.146	NULL
609	3579	1	4/3/2015 20:10	29	682	1683.673	NULL
609	3579	1	4/3/2015 20:11	29.5	621	1808.329	NULL
609	3579	1	4/3/2015 20:11	30	649	1748.792	NULL
609	3579	1	4/3/2015 20:12	30.5	656	1734.717	NULL
609	3579	1	4/3/2015 20:13	31	626	1797.758	NULL
609	3579	1	4/3/2015 20:13	31.5	556	1968.617	NULL
609	3579	1	4/3/2015 20:14	32	575	1918.525	NULL
609	3579	1	4/3/2015 20:14	32.5	510	2106.275	NULL
609	3579	1	4/3/2015 20:15	33	543	2005.434	NULL
609	3579	1	4/3/2015 20:15	33.5	617	1818.407	NULL
609	3579	1	4/3/2015 20:16	34	671	1706.125	NULL
609	3579	1	4/3/2015 20:16	34.5	603	1850.764	NULL
609	3579	1	4/3/2015 20:17	35	682	1685.411	NULL
609	3579	1	4/3/2015 20:18	35.5	667	1714.342	NULL
609	3579	1	4/3/2015 20:18	36	662	1724.329	NULL
609	3579	1	4/3/2015 20:19	36.5	637	1775.681	NULL

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Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3579	1	4/3/2015 20:19	37	761	1550.056	NULL
609	3579	1	4/3/2015 20:20	37.5	790	1505.808	NULL
609	3579	1	4/3/2015 20:20	38	729	1602.526	NULL
609	3579	1	4/3/2015 20:21	38.5	699	1655.058	NULL
609	3579	1	4/3/2015 20:22	39	676	1697.951	NULL
609	3579	1	4/3/2015 20:22	39.5	694	1664.438	NULL
609	3579	1	4/3/2015 20:23	40	802	1488.89	NULL
609	3579	1	4/3/2015 20:23	40.5	845	1428.974	NULL
609	3579	1	4/3/2015 20:24	41	760	1552.789	NULL
609	3579	1	4/3/2015 20:24	41.5	751	1567.282	NULL
609	3579	1	4/3/2015 20:25	42	749	1570.652	NULL
609	3579	1	4/3/2015 20:25	42.5	910	1346.885	NULL
609	3579	1	4/3/2015 20:26	43	804	1486.854	NULL
609	3579	1	4/3/2015 20:27	43.5	656	1738.474	NULL
609	3579	1	4/3/2015 20:27	44	634	1784.229	NULL
609	3579	1	4/3/2015 20:28	44.5	513	2099.987	NULL
609	3579	1	4/3/2015 20:28	45	554	1978.002	NULL
609	3579	1	4/3/2015 20:29	45.5	648	1755.322	
609	3579	1	4/3/2015 20:29	46	656	1739.194	NULL
609	3579	1	4/3/2015 20:30	46.5	787	1512.878	NULL
609	3579	1	4/3/2015 20:30	47	729	1605.121	NULL
609	3579	1	4/3/2015 20:31	47.5	690	1674.096	NULL
609	3579	1	4/3/2015 20:32	48	693	1668.72	NULL
609	3579	1	4/3/2015 20:32	48.5	724	1614.038	NULL
609	3579	1	4/3/2015 20:33	49	661	1730.061	NULL
609	3579	1	4/3/2015 20:33	49.5	781	1522.77	NULL
609	3579	1	4/3/2015 20:34	50	749	1572.956	NULL
609	3579	1	4/3/2015 20:34	50.5	824	1460.596	NULL
609	3579	1	4/3/2015 20:35	51	755	1563.607	NULL
609	3579	1	4/3/2015 20:36	51.5	843	1434.833	NULL
609	3579	1	4/3/2015 20:36	52	747	1576.77	NULL
609	3579	1	4/3/2015 20:37	52.5	742	1585.072	NULL
609	3579	1	4/3/2015 20:37	53	553	1983.061	NULL
609	3579	1	4/3/2015 20:38	53.5	534	2037.587	NULL
609	3579	1	4/3/2015 20:38	54	540	2020.135	NULL
609	3579	1	4/3/2015 20:44	54.5	601	1861.22	NULL
609	3579	1	4/3/2015 20:44	55	568	1943.011	NULL
609	3579	1	4/3/2015 20:45	55.5	529	2052.6	NULL
609	3579	1	4/3/2015 20:46	56	703	1652.089	NULL

Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3579	1	4/3/2015 20:46	56.5	788	1513.177	NULL
609	3579	1	4/3/2015 20:47	57	912	1347.298	NULL
609	3579	1	4/3/2015 20:47	57.5	746	1578.353	NULL
609	3579	1	4/3/2015 20:48	58	743	1583.122	NULL
609	3579	1	4/3/2015 20:48	58.5	724	1614.75	NULL
609	3579	1	4/3/2015 20:49	59	788	1512.545	NULL
609	3579	1	4/3/2015 20:50	59.5	640	1773.271	NULL
609	3579	1	4/3/2015 20:50	60	685	1684.007	NULL
609	3579	1	4/3/2015 20:51	60.5	581	1908.291	NULL
609	3579	1	4/3/2015 20:51	61	583	1903.164	NULL
609	3579	1	4/3/2015 20:52	61.5	570	1936.142	NULL
609	3579	1	4/3/2015 20:52	62	658	1735.725	NULL
609	3579	1	4/3/2015 20:53	62.5	610	1838.299	NULL
609	3579	1	4/3/2015 20:53	63	612	1833.606	NULL
609	3579	1	4/3/2015 20:54	63.5	722	1616.904	NULL
609	3579	1	4/3/2015 20:55	64	828	1453.78	NULL
609	3579	1	4/3/2015 20:55	64.5	810	1478.993	NULL
609	3579	1	4/3/2015 20:56	65	774	1532.216	NULL
609	3579	1	4/3/2015 20:56	65.5	774	1532.089	NULL
609	3579	1	4/3/2015 20:57	66	804	1487.249	NULL
609	3579	1	4/3/2015 20:57	66.5	788	1510.643	NULL
609	3579	1	4/3/2015 20:58	67	835	1443.388	NULL
609	3579	1	4/3/2015 20:59	67.5	635	1781.821	NULL
609	3579	1	4/3/2015 20:59	68	637	1777.444	NULL
609	3579	1	4/3/2015 21:00	68.5	631	1790.136	NULL
609	3579	1	4/3/2015 21:00	69	774	1531.2	NULL
609	3579	1	4/3/2015 21:01	69.5	711	1634.473	NULL
609	3579	1	4/3/2015 21:01	70	795	1499.374	NULL
609	3579	1	4/3/2015 21:02	70.5	883	1379.539	NULL
609	3579	1	4/3/2015 21:02	71	924	1329.463	NULL
609	3579	1	4/3/2015 21:03	71.5	896	1363.091	NULL
609	3579	1	4/3/2015 21:04	72	1023	1220.571	NULL
609	3579	1	4/3/2015 21:04	72.5	1093	1152.006	NULL
609	3579	1	4/3/2015 21:05	73	1222	1039.88	NULL
609	3579	1	4/3/2015 21:05	73.5	1097	1148.02	NULL
609	3579	1	4/3/2015 21:06	74	1080	1163.879	NULL
609	3579	1	4/3/2015 21:06	74.5	1230	1033.066	NULL
609	3579	1	4/3/2015 21:07	75	1161	1090.291	NULL
609	3579	1	4/3/2015 21:08	75.5	1147	1102.346	NULL

Oldr

Dep 609 Start 2/3/2015 18:20
Stop 2/21/2015 17:15

Note: This sheet contains raw data

DeployID	FrameID	Beta_RunNum	Beta_Time	Beta_Pos	Beta_Count	Beta_ugcm2	Beta_ugm:
609	3579	1	4/3/2015 21:08	76	1105	1139.975	NULL
609	3579	1	4/3/2015 21:14	76.5	1106	1138.927	NULL
609	3579	1	4/3/2015 21:14	77	1275	997.4357	NULL
609	3579	1	4/3/2015 21:15	77.5	1426	890.0024	NULL
609	3579	1	4/3/2015 21:15	78	1197	1059.714	NULL
609	3579	1	4/3/2015 21:16	78.5	1185	1069.821	NULL
609	3579	1	4/3/2015 21:16	79	1175	1078.359	NULL
609	3579	1	4/3/2015 21:17	79.5	1152	1098.247	NULL
609	3579	1	4/3/2015 21:18	80	1176	1077.686	NULL
609	3579	1	4/3/2015 21:18	80.5	1102	1143.323	NULL
609	3579	1	4/3/2015 21:19	81	1098	1147.12	NULL
609	3579	1	4/3/2015 21:19	81.5	1014	1229.568	NULL
609	3579	1	4/3/2015 21:20	82	919	1334.951	NULL
609	3579	1	4/3/2015 21:20	82.5	1087	1157.677	NULL
609	3579	1	4/3/2015 21:21	83	990	1255.093	NULL
609	3579	1	4/3/2015 21:22	83.5	1019	1224.761	NULL
609	3579	1	4/3/2015 21:22	84	1150	1100.785	NULL
609	3579	1	4/3/2015 21:23	84.5	1089	1156.147	NULL
609	3579	1	4/3/2015 21:23	85	997	1247.991	NULL
609	3579	1	4/3/2015 21:24	85.5	1102	1144.203	NULL
609	3579	1	4/3/2015 21:24	86	1019	1225.201	NULL
609	3579	1	4/3/2015 21:25	86.5	937	1314.645	NULL
609	3579	1	4/3/2015 21:25	87	1103	1143.543	NULL
609	3579	1	4/3/2015 21:26	87.5	1136	1113.738	NULL

Flow 7.89 L/min
 Time 1440 min/day
 Volume 11.36 m3/day
 Rotation 4 mm/day
 Slot 6 mm
 Area 0.24 cm2/day
 Cnv Cost 0.0211 cm2/m3

Stage 1 10.0 - 5.0 um
Stage 2 5.0 - 2.5 um
Stage 3 2.5 - 1.15 um
Stage 4 1.15 - 0.75 um
Stage 5 0.75 - 0.56 um
Stage 6 0.56 - 0.34 um
Stage 7 0.34 - 0.26 um
Stage 8 0.26 - 0.09 um
Ultra-fine 0.09 - 0.00 um

9th Slot 7.6 mm
 9th Cnv Cost 0.0268 cm2/m3

Dep 609 OI Dr

Field Start
 2/3/2015 18:20

Flow conversions were performed, so we have concentrations in ng/m³.
 Note: Continuous After Filter (stage 9) has a different conversion constant due to the larger slit width.
 Stage to stage alignment has been done.

David Barnes
 17-Apr-15

This sample was analyzed using s-XRF at ALS during the period of Feb-March, 2015.
 The raw XRF data have been calibrated using the Nist standards.
 The corrections of particle loading and particle size were applied.
 No flow conversion was performed, so the unit is deposit density in ug/cm², not the concentrations in ng/m³.
 No initial alignment between the stages was made.

Yongjing Zhao
 31-Mar-15

Stage 1	7.89 L/m	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day								
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	37.044	MDL	12.166	MDL	50.333	MDL	147.988
Marks	0.02112 cm2/m3	AveAll	28.889	0.401	14.785	0.106	59.560	0.042	175.549
2/3/15 18:20	18	22.201	8.555	9.527	3.380	38.234	9.907	108.027	
2/3/15 21:20	19	5.661	2.197	18.547	6.591	48.690	12.611	136.650	
2/4/15 0:20	20	23.152	8.914	24.335	8.640	74.673	19.328	191.698	
2/4/15 3:20	21	0.000	0.190	19.708	6.992	88.762	22.983	285.087	
2/4/15 6:20	22	6.147	2.366	18.040	6.401	113.118	29.278	289.839	
2/4/15 9:20	23	18.906	7.288	34.390	12.210	126.553	32.763	368.969	
2/4/15 12:20	24	13.223	5.112	19.455	6.907	163.477	42.311	388.213	
2/4/15 15:20	25	0.000	0.380	64.533	22.919	171.314	44.339	410.034	
2/4/15 18:20	26	15.125	5.830	36.185	12.864	154.563	40.008	422.053	
2/4/15 21:20	27	7.562	2.915	31.812	11.301	132.172	34.221	374.546	
2/5/15 0:20	28	29.763	11.470	35.551	12.632	119.476	30.925	365.294	
2/5/15 3:20	29	32.615	12.569	27.820	9.886	117.385	30.376	332.129	
2/5/15 6:20	30	25.518	9.823	23.194	8.238	113.012	29.256	312.442	
2/5/15 9:20	31	22.687	8.745	11.724	4.161	95.416	24.694	328.221	
2/5/15 12:20	32	15.589	5.999	42.628	15.146	74.271	19.223	238.276	
2/5/15 15:20	33	0.000	0.190	16.477	5.851	88.171	22.814	303.908	
2/5/15 18:20	34	43.473	16.730	17.005	6.041	72.011	18.631	197.529	
2/5/15 21:20	35	18.906	7.288	20.215	7.182	72.793	18.842	266.688	
2/6/15 0:20	36	34.030	13.097	5.788	2.070	95.691	24.778	253.274	
2/6/15 3:20	37	0.000	0.190	16.223	5.767	71.335	18.462	205.175	
2/6/15 6:20	38	10.879	4.183	18.040	6.401	79.827	20.659	215.441	
2/6/15 9:20	39	4.732	1.838	9.273	3.295	69.286	17.934	233.249	
2/6/15 12:20	40	3.781	1.458	21.124	7.499	80.587	20.870	228.982	
2/6/15 15:20	41	14.639	5.640	15.209	5.408	64.808	16.772	169.540	
2/6/15 18:20	42	5.661	2.197	12.357	4.394	51.056	13.223	139.396	
2/6/15 21:20	43	18.420	7.098	5.408	1.922	41.128	10.646	87.748	
2/7/15 0:20	44	0.000	7.309	0.000	2.134	27.376	7.140	88.847	
2/7/15 3:20	45	14.174	5.471	0.634	0.232	17.554	4.542	46.620	
2/7/15 6:20	46	4.732	1.838	4.246	1.521	13.921	3.612	42.459	
2/7/15 9:20	47	5.661	2.197	1.796	0.634	8.386	2.176	30.038	
2/7/15 12:20	48	31.665	12.188	4.774	1.690	5.344	1.373	17.997	
2/7/15 15:20	49	25.053	9.654	5.154	1.838	5.809	1.500	20.300	
2/7/15 18:20	50	11.808	4.563	12.886	4.584	4.753	1.225	31.707	
2/7/15 21:20	51	40.156	15.463	2.957	1.056	17.554	4.542	32.256	
2/8/15 0:20	52	33.545	12.928	5.534	1.965	11.449	2.957	40.621	
2/8/15 3:20	53	10.393	4.014	1.542	0.549	9.358	2.429	24.060	
2/8/15 6:20	54	24.567	9.463	2.577	0.908	8.133	2.112	31.876	
2/8/15 9:20	55	33.545	12.928	2.577	0.908	8.006	2.070	34.812	
2/8/15 12:20	56	37.812	16.117	0.000	1.986	6.358	1.774	23.532	
2/8/15 15:20	57	23.638	9.104	1.162	0.422	9.801	2.535	29.299	
2/8/15 18:20	58	52.450	21.293	0.000	1.880	1.225	0.655	6.738	
2/8/15 21:20	59	52.450	21.483	5.027	2.662	0.000	0.613	11.597	
2/9/15 0:20	60	69.941	27.989	0.000	2.091	0.000	0.655	8.766	
2/9/15 3:20	61	98.754	38.720	9.020	3.760	0.000	0.591	3.443	
2/9/15 6:20	62	118.610	46.367	11.343	4.563	5.851	1.669	17.997	
2/9/15 9:20	63	101.605	39.945	8.640	3.739	2.324	0.908	21.124	
2/9/15 12:20	64	95.923	36.924	4.119	1.458	2.640	0.676	13.118	
2/9/15 15:20	65	113.878	44.677	0.000	2.260	6.358	1.817	47.381	
2/9/15 18:20	66	129.954	50.042	4.647	1.648	13.984	3.612	65.547	
2/9/15 21:20	67	179.573	69.138	9.400	3.338	12.526	3.253	66.117	
2/10/15 0:20	68	150.275	57.858	2.197	0.782	22.687	5.872	69.751	
2/10/15 3:20	69	65.209	25.116	0.782	0.296	33.777	8.745	137.305	
2/10/15 6:20	70	72.307	27.841	2.577	0.908	18.864	4.880	50.359	

Stage 1	7.89 L/m	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day								
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	37.044	MDL	12.166	MDL	50.333	MDL	147.988
Marks	0.02112 cm2/m3	AveAll	28.889	0.401	14.785	0.106	59.560	0.042	175.549
2/10/15 9:20	71	46.303	17.828	9.020	3.211	10.118	2.619	57.161	
2/10/15 12:20	72	35.446	13.646	8.640	3.063	31.136	8.069	104.457	
2/10/15 15:20	73	10.879	4.183	6.316	2.239	45.311	11.724	179.932	
2/10/15 18:20	74	13.223	5.091	2.577	0.908	53.443	13.836	139.945	
1wk end 2/10/15 21:20	75	6.147	2.366	4.647	1.648	73.743	19.096	184.453	
#####	76	12.759	4.922	22.793	8.090	85.953	22.243	227.693	
2/11/15 3:20	77	14.639	5.640	34.643	12.315	104.880	27.144	311.597	
2/11/15 6:20	78	4.732	1.838	24.081	8.555	89.459	23.152	350.000	
2/11/15 9:20	79	2.831	1.098	26.405	9.379	87.347	22.602	223.807	
2/11/15 12:20	80	0.000	8.238	36.586	13.266	85.763	22.243	319.138	
2/11/15 15:20	81	8.513	3.274	13.519	4.795	80.313	20.786	267.533	
2/11/15 18:20	82	10.879	4.183	25.370	9.020	88.973	23.025	250.253	
2/11/15 21:20	83	12.759	4.922	7.076	2.514	58.238	15.082	185.488	
2/12/15 0:20	84	7.562	2.915	12.104	4.309	87.833	22.729	340.663	
2/12/15 3:20	85	11.343	4.373	6.950	2.471	84.601	21.905	190.452	
2/12/15 6:20	86	13.709	5.281	15.336	5.450	55.408	14.343	162.759	
2/12/15 9:20	87	7.098	2.725	32.721	11.618	74.292	19.223	222.222	
2/12/15 12:20	88	14.174	5.471	41.994	14.913	110.520	28.602	281.559	
2/12/15 15:20	89	20.321	7.816	12.484	4.436	65.526	16.962	198.014	
2/12/15 18:20	90	3.781	1.458	15.061	5.344	67.681	17.512	225.095	
2/12/15 21:20	91	16.075	6.189	17.512	6.232	76.574	19.814	211.745	
2/13/15 0:20	92	11.808	4.563	20.870	7.414	64.618	16.730	214.681	
2/13/15 3:20	93	0.000	0.190	16.477	5.851	102.450	26.510	268.399	
2/13/15 6:20	94	3.316	1.289	24.482	8.682	82.974	21.483	239.924	
2/13/15 9:20	95	10.393	4.014	24.081	8.555	88.150	22.814	246.493	
2/13/15 12:20	96	8.513	3.274	24.609	8.745	97.275	25.180	248.585	
2/13/15 15:20	97	16.540	6.379	23.046	8.196	85.741	22.201	244.973	
2/13/15 18:20	98	31.179	12.019	12.484	4.436	81.749	21.166	205.154	
2/13/15 21:20	99	23.638	9.104	12.357	4.394	71.990	18.631	226.806	

Stage 1	7.89 L/m	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day								
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	3.442	MDL	11.387	MDL	55.957	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	3.570	0.528	12.079	0.063	42.172	0.021

	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
2/3/15 18:20	18	15.737	3.211	0.866	13.540	1.204	2.070	0.211
2/3/15 21:20	19	19.856	6.717	1.267	4.542	0.444	4.647	0.444
2/4/15 0:20	20	27.799	3.781	0.929	9.400	0.845	4.901	0.486
2/4/15 3:20	21	41.234	3.929	0.951	30.608	2.640	7.689	0.739
2/4/15 6:20	22	41.910	3.528	0.887	25.856	2.239	5.619	0.549
2/4/15 9:20	23	53.316	7.436	1.352	19.856	1.732	11.576	1.120
2/4/15 12:20	24	56.084	4.309	0.993	12.738	1.141	12.738	1.246
2/4/15 15:20	25	59.231	4.816	1.035	16.371	1.436	17.786	1.732
2/4/15 18:20	26	60.963	6.105	1.204	27.165	2.345	37.431	3.633
2/4/15 21:20	27	54.119	4.161	0.972	31.073	2.683	32.066	3.105
2/5/15 0:20	28	52.788	6.168	1.204	21.589	1.880	43.853	4.267
2/5/15 3:20	29	48.014	5.809	1.162	14.977	1.331	63.667	6.189
2/5/15 6:20	30	45.184	3.464	0.887	16.075	1.415	54.563	5.302
2/5/15 9:20	31	47.444	2.070	0.718	8.450	0.760	72.835	7.076
2/5/15 12:20	32	34.495	2.408	0.760	8.893	0.803	79.785	7.752
2/5/15 15:20	33	43.937	6.041	1.183	11.132	0.993	62.611	6.084
2/5/15 18:20	34	28.623	6.992	1.289	6.126	0.570	44.381	4.309
2/5/15 21:20	35	38.593	6.802	1.267	8.196	0.739	44.951	4.373
2/6/15 0:20	36	36.650	5.471	1.120	22.053	1.922	64.237	6.232
2/6/15 3:20	37	29.721	3.422	0.887	14.723	1.310	38.931	3.781
2/6/15 6:20	38	31.200	5.788	1.162	11.111	0.993	33.988	3.295
2/6/15 9:20	39	33.777	5.767	1.162	9.992	0.908	39.692	3.845
2/6/15 12:20	40	33.164	3.802	0.929	8.724	0.803	18.842	1.838
2/6/15 15:20	41	24.588	3.338	0.866	3.845	0.380	18.948	1.838
2/6/15 18:20	42	20.258	6.548	1.246	4.901	0.465	10.520	1.014
2/6/15 21:20	43	12.822	4.816	1.056	4.267	0.422	5.344	0.528
2/7/15 0:20	44	12.991	4.774	1.098	5.703	0.591	11.555	1.141
2/7/15 3:20	45	6.886	3.042	0.845	1.584	0.190	7.203	0.697
2/7/15 6:20	46	6.295	2.408	0.760	2.260	0.253	6.696	0.655
2/7/15 9:20	47	4.499	3.084	0.845	3.823	0.380	10.097	0.972
2/7/15 12:20	48	2.767	2.957	0.824	5.006	0.486	9.379	0.908
2/7/15 15:20	49	3.105	2.683	0.803	3.781	0.380	9.421	0.908
2/7/15 18:20	50	4.753	1.922	0.718	2.450	0.253	7.752	0.760
2/7/15 21:20	51	4.837	3.211	0.866	3.253	0.338	18.568	1.796
2/8/15 0:20	52	6.041	4.035	0.951	7.076	0.655	14.618	1.415
2/8/15 3:20	53	3.654	5.175	1.077	8.006	0.739	12.822	1.246
2/8/15 6:20	54	4.774	2.218	0.739	4.499	0.444	2.493	0.232
2/8/15 9:20	55	5.196	3.316	0.866	8.365	0.760	19.349	1.880
2/8/15 12:20	56	3.591	3.105	0.908	7.309	0.718	24.504	2.387
2/8/15 15:20	57	4.394	2.176	0.739	8.386	0.760	39.480	3.823
2/8/15 18:20	58	1.183	1.627	0.739	3.781	0.422	29.383	2.873
2/8/15 21:20	59	1.880	2.556	0.845	6.802	0.676	58.999	5.746
2/9/15 0:20	60	1.479	2.007	0.782	7.013	0.697	87.643	8.513
2/9/15 3:20	61	0.739	2.873	0.866	6.675	0.655	90.980	8.851
2/9/15 6:20	62	2.809	1.056	0.676	11.111	1.035	123.532	11.998
2/9/15 9:20	63	3.253	2.556	0.845	10.625	0.993	139.501	13.561
2/9/15 12:20	64	2.070	1.605	0.676	11.449	1.014	132.341	12.843
2/9/15 15:20	65	7.034	0.317	0.613	12.315	1.141	169.434	16.455
2/9/15 18:20	66	9.611	0.929	0.591	18.504	1.627	198.627	19.286
2/9/15 21:20	67	9.696	1.056	0.613	11.893	1.056	207.119	20.110
2/10/15 0:20	68	10.224	0.887	0.591	16.413	1.436	257.414	24.989
2/10/15 3:20	69	19.962	2.324	0.760	18.019	1.584	214.132	20.786
2/10/15 6:20	70	7.436	1.711	0.676	7.647	0.697	92.712	8.999

Stage 1	7.89 L/m								
2/13/2015 6:56	1440 min/day	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
Marks	11.3616 m3/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	3.442	MDL	11.387	MDL	55.957	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	3.570	0.528	12.079	0.063	42.172	0.021

	2/10/15 9:20	71	8.407	2.049	0.718	9.886	0.887	97.444	9.463
	2/10/15 12:20	72	15.230	1.817	0.697	17.047	1.500	60.963	5.915
	2/10/15 15:20	73	26.088	2.155	0.739	16.688	1.458	67.850	6.591
	2/10/15 18:20	74	20.342	1.246	0.634	10.456	0.929	42.290	4.098
1wk end	2/10/15 21:20	75	26.743	3.126	0.845	21.736	1.901	42.332	4.119
	#####	76	32.974	2.746	0.803	13.392	1.183	37.136	3.612
	2/11/15 3:20	77	45.057	2.915	0.824	14.259	1.267	24.968	2.429
	2/11/15 6:20	78	50.591	4.204	0.972	18.800	1.648	18.166	1.774
	2/11/15 9:20	79	32.404	3.992	0.951	13.752	1.225	20.828	2.028
	2/11/15 12:20	80	46.155	4.985	1.141	13.921	1.267	14.237	1.394
	2/11/15 15:20	81	38.720	2.746	0.803	10.646	0.951	13.329	1.289
	2/11/15 18:20	82	36.227	3.992	0.951	11.555	1.035	13.477	1.310
	2/11/15 21:20	83	26.891	3.507	0.887	7.393	0.676	7.372	0.718
	2/12/15 0:20	84	49.240	3.802	0.929	54.415	4.647	14.111	1.373
	2/12/15 3:20	85	27.609	4.140	0.972	11.534	1.035	9.400	0.908
	2/12/15 6:20	86	23.616	2.302	0.760	9.252	0.845	9.907	0.972
	2/12/15 9:20	87	32.193	3.549	0.908	10.456	0.929	6.253	0.613
	2/12/15 12:20	88	40.727	4.415	0.993	10.034	0.908	3.802	0.380
	2/12/15 15:20	89	28.707	5.471	1.120	7.034	0.655	5.471	0.528
	2/12/15 18:20	90	32.594	3.295	0.866	9.759	0.887	6.760	0.655
	2/12/15 21:20	91	30.672	3.549	0.887	12.379	1.098	4.140	0.401
	2/13/15 0:20	92	31.094	4.415	0.993	12.104	1.077	4.816	0.465
	2/13/15 3:20	93	38.826	2.260	0.739	9.907	0.887	78.792	7.647
	2/13/15 6:20	94	34.728	2.852	0.824	13.794	1.225	4.964	0.486
	2/13/15 9:20	95	35.678	4.816	1.056	15.526	1.373	3.507	0.338
	2/13/15 12:20	96	35.974	3.823	0.929	10.710	0.951	3.485	0.338
	2/13/15 15:20	97	35.467	3.845	0.929	8.851	0.803	6.253	0.613
	2/13/15 18:20	98	29.721	4.077	2.134	28.517	2.471	3.823	0.380
	2/13/15 21:20	99	32.847	4.330	0.993	6.738	0.613	2.767	0.275

Stage 1	7.89 L/m	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day		4 mm/day						
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	15.323	MDL	30.916	MDL	4.608	MDL	0.183
Marks	0.02112 cm2/m3	AveAll	16.772	0.021	35.494	0.021	5.669	0.021	0.216

	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/3/15 18:20	18	10.351	0.760	19.054	1.415	2.493	0.190	0.148
2/3/15 21:20	19	13.097	0.951	30.989	2.281	4.035	0.296	0.148
2/4/15 0:20	20	15.272	1.120	32.721	2.408	5.091	0.380	0.317
2/4/15 3:20	21	18.758	1.373	85.847	6.253	4.584	0.338	0.232
2/4/15 6:20	22	30.292	2.218	55.703	4.056	8.555	0.613	0.549
2/4/15 9:20	23	36.164	2.640	75.053	5.471	10.372	0.739	0.528
2/4/15 12:20	24	30.693	2.239	63.836	4.647	11.005	0.803	0.528
2/4/15 15:20	25	42.290	3.084	92.586	6.738	15.061	1.077	0.549
2/4/15 18:20	26	35.298	2.577	92.036	6.696	10.520	0.760	0.507
2/4/15 21:20	27	27.250	1.986	86.417	6.295	12.928	0.929	0.338
2/5/15 0:20	28	30.249	2.218	71.800	5.239	13.730	0.993	0.444
2/5/15 3:20	29	32.319	2.366	85.678	6.232	9.949	0.718	0.507
2/5/15 6:20	30	27.630	2.028	78.834	5.746	14.766	1.056	0.613
2/5/15 9:20	31	27.862	2.028	50.486	3.676	8.133	0.591	0.296
2/5/15 12:20	32	17.026	1.246	41.867	3.063	6.422	0.465	0.211
2/5/15 15:20	33	26.912	1.965	39.269	2.873	7.351	0.528	0.359
2/5/15 18:20	34	19.603	1.436	47.803	3.485	3.443	0.253	0.211
2/5/15 21:20	35	20.110	1.479	65.927	4.795	6.379	0.465	0.211
2/6/15 0:20	36	40.853	2.978	46.916	3.422	9.125	0.655	0.275
2/6/15 3:20	37	24.335	1.774	52.091	3.802	14.533	1.035	0.401
2/6/15 6:20	38	21.208	1.542	39.945	2.915	5.006	0.359	0.380
2/6/15 9:20	39	24.060	1.753	40.706	2.978	5.767	0.422	0.211
2/6/15 12:20	40	16.181	1.183	30.503	2.239	4.077	0.296	0.275
2/6/15 15:20	41	14.449	1.056	20.068	1.479	2.788	0.211	0.148
2/6/15 18:20	42	17.279	1.267	20.617	1.521	4.288	0.317	0.169
2/6/15 21:20	43	16.455	1.204	21.736	1.605	1.817	0.148	0.063
2/7/15 0:20	44	8.682	0.634	18.779	1.394	1.648	0.127	0.063
2/7/15 3:20	45	6.971	0.507	6.591	0.507	0.866	0.063	0.042
2/7/15 6:20	46	4.732	0.338	7.224	0.549	0.845	0.063	0.042
2/7/15 9:20	47	5.196	0.380	5.450	0.422	0.591	0.042	0.042
2/7/15 12:20	48	3.908	0.296	3.359	0.275	0.401	0.042	0.021
2/7/15 15:20	49	3.338	0.253	9.337	0.697	0.655	0.063	0.063
2/7/15 18:20	50	2.683	0.190	3.971	0.317	0.507	0.042	0.021
2/7/15 21:20	51	3.908	0.296	6.527	0.507	0.507	0.042	0.042
2/8/15 0:20	52	4.288	0.317	4.985	0.380	1.901	0.148	0.042
2/8/15 3:20	53	8.090	0.591	7.985	0.613	0.676	0.063	0.021
2/8/15 6:20	54	3.929	0.296	2.683	0.232	1.056	0.084	0.042
2/8/15 9:20	55	4.394	0.317	4.880	0.380	0.549	0.042	0.021
2/8/15 12:20	56	4.795	0.359	3.908	0.317	3.697	0.275	0.000
2/8/15 15:20	57	7.013	0.507	4.373	0.338	0.655	0.063	0.042
2/8/15 18:20	58	2.049	0.169	2.408	0.211	0.253	0.042	0.000
2/8/15 21:20	59	2.683	0.211	3.654	0.296	0.317	0.042	0.021
2/9/15 0:20	60	3.570	0.275	5.070	0.401	0.253	0.042	0.000
2/9/15 3:20	61	2.450	0.190	3.485	0.296	0.084	0.021	0.000
2/9/15 6:20	62	4.605	0.338	10.308	0.782	0.951	0.084	0.000
2/9/15 9:20	63	4.330	0.317	5.260	0.422	0.211	0.042	0.000
2/9/15 12:20	64	4.077	0.296	6.379	0.486	0.401	0.042	0.000
2/9/15 15:20	65	7.076	0.528	19.159	1.415	0.401	0.042	0.000
2/9/15 18:20	66	10.266	0.760	16.899	1.246	3.697	0.275	0.042
2/9/15 21:20	67	11.174	0.824	20.089	1.479	3.739	0.275	0.148
2/10/15 0:20	68	17.575	1.289	19.772	1.458	1.774	0.127	0.063
2/10/15 3:20	69	28.179	2.070	29.383	2.155	1.880	0.148	0.084
2/10/15 6:20	70	8.745	0.634	9.654	0.718	0.739	0.063	0.063

Stage 1	7.89 L/m	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day								
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	15.323	MDL	30.916	MDL	4.608	MDL	0.183
Marks	0.02112 cm2/m3	AveAll	16.772	0.021	35.494	0.021	5.669	0.021	0.216
2/10/15 9:20	71	5.767	0.422	17.765	1.310	1.711	0.127	0.063	
2/10/15 12:20	72	12.843	0.929	33.650	2.471	2.049	0.148	0.084	
2/10/15 15:20	73	16.096	1.183	19.371	1.436	3.908	0.296	0.253	
2/10/15 18:20	74	11.872	0.866	21.251	1.563	3.929	0.296	0.190	
1wk end 2/10/15 21:20	75	20.258	1.479	59.252	4.330	21.504	1.542	0.422	
#####	76	22.476	1.648	44.085	3.232	12.653	0.908	0.359	
2/11/15 3:20	77	20.575	1.500	49.620	3.633	7.583	0.549	0.275	
2/11/15 6:20	78	24.144	1.774	66.836	4.880	8.745	0.634	0.380	
2/11/15 9:20	79	21.314	1.563	99.641	7.245	6.041	0.444	0.275	
2/11/15 12:20	80	18.251	1.352	68.547	5.006	37.178	2.662	1.120	
2/11/15 15:20	81	16.751	1.225	93.684	6.823	8.323	0.613	0.253	
2/11/15 18:20	82	30.165	2.197	32.129	2.366	6.654	0.486	0.422	
2/11/15 21:20	83	20.511	1.500	24.968	1.838	3.802	0.275	0.148	
2/12/15 0:20	84	18.885	1.373	75.201	5.471	7.985	0.570	0.317	
2/12/15 3:20	85	16.455	1.204	36.206	2.662	5.598	0.401	0.359	
2/12/15 6:20	86	14.660	1.077	26.595	1.965	4.140	0.296	0.169	
2/12/15 9:20	87	20.004	1.458	40.114	2.936	10.583	0.760	0.232	
2/12/15 12:20	88	25.053	1.838	41.403	3.021	8.344	0.613	0.338	
2/12/15 15:20	89	17.448	1.267	34.664	2.535	8.492	0.613	0.211	
2/12/15 18:20	90	21.546	1.584	30.249	2.218	3.823	0.275	0.211	
2/12/15 21:20	91	17.512	1.289	36.101	2.640	5.746	0.422	0.253	
2/13/15 0:20	92	20.997	1.542	37.431	2.746	4.330	0.317	0.169	
2/13/15 3:20	93	25.032	1.838	38.340	2.809	8.682	0.634	0.317	
2/13/15 6:20	94	22.433	1.648	31.855	2.345	4.943	0.359	0.275	
2/13/15 9:20	95	22.771	1.669	37.938	2.767	7.520	0.549	0.169	
2/13/15 12:20	96	16.139	1.183	42.564	3.105	6.358	0.465	0.317	
2/13/15 15:20	97	18.821	1.373	29.869	2.197	8.133	0.591	0.190	
2/13/15 18:20	98	24.989	1.838	58.872	4.288	10.139	0.739	0.190	
2/13/15 21:20	99	16.857	1.225	52.260	3.823	4.520	0.338	0.169	

Stage 1	7.89 L/m	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day		4 mm/day						
3	6 mm	Ave1stwk	MDL	0.135	MDL	0.836	MDL	46.301	MDL
2/3/2015 18:20	0.24 cm2/day	AveAll	0.021	0.222	0.021	1.007	0.021	56.814	0.021
Marks	0.02112 cm2/m3								

	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
2/3/15 18:20	18	0.000	1.035	0.063	0.824	0.063	59.358	4.183
2/3/15 21:20	19	0.000	0.148	0.021	1.246	0.084	58.787	4.140
2/4/15 0:20	20	0.021	0.275	0.021	0.866	0.063	67.322	4.732
2/4/15 3:20	21	0.021	0.190	0.021	3.443	0.232	64.998	4.563
2/4/15 6:20	22	0.042	0.359	0.021	1.817	0.127	115.610	8.133
2/4/15 9:20	23	0.042	0.401	0.021	2.366	0.169	147.571	10.372
2/4/15 12:20	24	0.042	0.275	0.021	1.605	0.106	112.210	7.879
2/4/15 15:20	25	0.042	0.655	0.042	3.908	0.275	156.358	10.984
2/4/15 18:20	26	0.042	0.380	0.021	2.324	0.169	131.327	9.231
2/4/15 21:20	27	0.021	0.380	0.021	1.711	0.127	112.273	7.900
2/5/15 0:20	28	0.021	0.275	0.021	1.521	0.106	99.535	6.992
2/5/15 3:20	29	0.042	0.148	0.021	2.091	0.148	94.951	6.675
2/5/15 6:20	30	0.042	0.211	0.021	1.458	0.106	104.246	7.330
2/5/15 9:20	31	0.021	0.127	0.000	1.458	0.106	67.300	4.732
2/5/15 12:20	32	0.021	0.127	0.000	1.056	0.084	59.400	4.183
2/5/15 15:20	33	0.021	0.169	0.021	1.500	0.106	74.504	5.239
2/5/15 18:20	34	0.021	0.106	0.000	0.824	0.063	44.001	3.084
2/5/15 21:20	35	0.021	0.190	0.021	1.035	0.063	61.787	4.351
2/6/15 0:20	36	0.021	0.127	0.000	1.500	0.106	56.020	3.929
2/6/15 3:20	37	0.021	0.106	0.000	2.324	0.169	75.201	5.281
2/6/15 6:20	38	0.021	0.634	0.042	0.929	0.063	57.562	4.056
2/6/15 9:20	39	0.021	0.127	0.000	1.014	0.063	50.063	3.528
2/6/15 12:20	40	0.021	0.190	0.021	1.077	0.084	53.718	3.781
2/6/15 15:20	41	0.000	0.063	0.000	0.676	0.042	39.501	2.767
2/6/15 18:20	42	0.021	0.169	0.021	0.782	0.063	46.071	3.232
2/6/15 21:20	43	0.000	0.042	0.000	0.380	0.021	23.257	1.627
2/7/15 0:20	44	0.021	0.042	0.021	0.317	0.021	26.595	1.880
2/7/15 3:20	45	0.000	0.021	0.000	0.232	0.021	15.589	1.098
2/7/15 6:20	46	0.000	0.063	0.000	0.275	0.021	16.371	1.141
2/7/15 9:20	47	0.000	0.021	0.000	0.084	0.000	5.323	0.380
2/7/15 12:20	48	0.000	0.000	0.000	0.063	0.000	3.612	0.253
2/7/15 15:20	49	0.000	0.021	0.000	0.148	0.021	11.407	0.803
2/7/15 18:20	50	0.000	0.042	0.000	0.169	0.021	9.421	0.655
2/7/15 21:20	51	0.000	0.042	0.000	0.106	0.000	9.865	0.697
2/8/15 0:20	52	0.000	0.380	0.021	0.570	0.042	51.774	3.633
2/8/15 3:20	53	0.000	0.000	0.000	0.148	0.000	6.358	0.444
2/8/15 6:20	54	0.000	0.021	0.000	0.084	0.000	8.513	0.591
2/8/15 9:20	55	0.000	0.021	0.000	0.127	0.000	8.682	0.613
2/8/15 12:20	56	0.021	0.106	0.021	0.148	0.021	7.837	0.549
2/8/15 15:20	57	0.000	0.021	0.000	0.148	0.021	9.569	0.676
2/8/15 18:20	58	0.021	0.000	0.021	0.042	0.021	1.077	0.084
2/8/15 21:20	59	0.021	0.021	0.021	0.084	0.021	3.866	0.275
2/9/15 0:20	60	0.021	0.042	0.021	0.084	0.021	3.211	0.232
2/9/15 3:20	61	0.021	0.000	0.021	0.042	0.000	1.627	0.127
2/9/15 6:20	62	0.021	0.021	0.021	0.127	0.021	4.457	0.317
2/9/15 9:20	63	0.021	0.000	0.021	0.063	0.021	2.809	0.190
2/9/15 12:20	64	0.000	0.106	0.000	0.127	0.000	11.703	0.824
2/9/15 15:20	65	0.021	0.000	0.021	0.106	0.021	5.767	0.401
2/9/15 18:20	66	0.000	0.042	0.000	0.275	0.021	14.132	0.993
2/9/15 21:20	67	0.000	0.000	0.000	0.275	0.021	22.074	1.542
2/10/15 0:20	68	0.000	0.063	0.000	0.380	0.021	20.870	1.458
2/10/15 3:20	69	0.000	0.063	0.000	0.444	0.021	30.672	2.155
2/10/15 6:20	70	0.000	0.042	0.000	0.232	0.021	12.738	0.887

Stage 1	7.89 L/m								
2/13/2015 6:56	1440 min/day	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
Marks	11.3616 m3/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.135	MDL	0.836	MDL	46.301	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	0.222	0.021	1.007	0.021	56.814	0.021

	2/10/15 9:20	71	0.000	0.084	0.000	0.803	0.063	88.023	6.189
	2/10/15 12:20	72	0.000	0.211	0.021	0.782	0.063	61.935	4.351
	2/10/15 15:20	73	0.021	0.148	0.000	0.782	0.063	72.962	5.133
	2/10/15 18:20	74	0.021	0.084	0.000	0.570	0.042	36.227	2.556
1wk end	2/10/15 21:20	75	0.021	0.084	0.000	1.331	0.084	93.008	6.548
	#####	76	0.021	0.253	0.021	1.943	0.127	70.427	4.943
	2/11/15 3:20	77	0.021	0.232	0.021	1.415	0.106	78.221	5.492
	2/11/15 6:20	78	0.021	0.211	0.021	1.394	0.106	77.820	5.471
	2/11/15 9:20	79	0.021	0.782	0.063	1.098	0.084	84.664	5.957
	2/11/15 12:20	80	0.106	0.106	0.021	1.035	0.084	56.168	3.950
	2/11/15 15:20	81	0.021	0.211	0.021	1.774	0.127	114.111	8.027
	2/11/15 18:20	82	0.021	0.232	0.021	1.098	0.084	88.002	6.189
	2/11/15 21:20	83	0.021	0.338	0.021	0.866	0.063	60.963	4.288
	2/12/15 0:20	84	0.021	0.253	0.021	1.331	0.084	73.257	5.154
	2/12/15 3:20	85	0.021	0.570	0.042	0.887	0.063	59.400	4.183
	2/12/15 6:20	86	0.021	0.169	0.021	1.458	0.106	51.669	3.633
	2/12/15 9:20	87	0.021	0.275	0.021	1.986	0.148	88.678	6.232
	2/12/15 12:20	88	0.021	0.275	0.021	1.479	0.106	76.891	5.408
	2/12/15 15:20	89	0.021	0.106	0.000	1.352	0.084	41.170	2.894
	2/12/15 18:20	90	0.021	0.190	0.021	0.866	0.063	53.211	3.739
	2/12/15 21:20	91	0.021	0.169	0.021	1.120	0.084	54.880	3.866
	2/13/15 0:20	92	0.021	0.211	0.021	1.584	0.106	112.357	7.900
	2/13/15 3:20	93	0.021	0.211	0.021	1.267	0.084	71.990	5.070
	2/13/15 6:20	94	0.021	0.380	0.021	1.648	0.106	86.143	6.063
	2/13/15 9:20	95	0.021	2.028	0.148	1.711	0.127	83.545	5.872
	2/13/15 12:20	96	0.021	0.845	0.063	2.070	0.148	198.500	13.963
	2/13/15 15:20	97	0.021	0.232	0.021	1.225	0.084	96.409	6.781
	2/13/15 18:20	98	0.021	1.035	0.063	1.584	0.106	86.502	6.084
	2/13/15 21:20	99	0.021	0.190	0.021	1.479	0.106	82.805	5.830

Stage 1	7.89 L/m	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day		4 mm/day						
3	6 mm	Ave1stwk	0.229	MDL	0.083	MDL	0.775	MDL	1.549
2/3/2015 18:20	0.24 cm2/day	AveAll	0.281	0.021	0.113	0.021	0.712	0.021	2.658
Marks	0.02112 cm2/m3								

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/3/15 18:20	18	0.296	0.021	0.021	0.000	0.655	0.063	2.007
2/3/15 21:20	19	0.296	0.021	0.127	0.000	0.253	0.042	1.838
2/4/15 0:20	20	0.317	0.021	0.063	0.000	2.471	0.190	2.915
2/4/15 3:20	21	0.253	0.021	0.063	0.000	0.211	0.042	3.971
2/4/15 6:20	22	0.507	0.042	0.148	0.000	2.429	0.190	4.351
2/4/15 9:20	23	0.718	0.042	0.042	0.000	1.711	0.127	3.866
2/4/15 12:20	24	0.507	0.042	0.084	0.000	0.401	0.042	3.591
2/4/15 15:20	25	0.824	0.063	0.275	0.021	0.803	0.084	2.324
2/4/15 18:20	26	0.613	0.042	0.169	0.021	0.528	0.063	5.133
2/4/15 21:20	27	0.528	0.042	0.042	0.000	0.317	0.042	2.471
2/5/15 0:20	28	0.465	0.042	0.106	0.000	0.296	0.042	3.126
2/5/15 3:20	29	0.444	0.021	0.042	0.000	5.598	0.401	2.450
2/5/15 6:20	30	0.465	0.042	0.084	0.000	0.929	0.084	2.577
2/5/15 9:20	31	0.296	0.021	0.169	0.021	0.655	0.063	1.458
2/5/15 12:20	32	0.296	0.021	0.253	0.021	0.190	0.042	1.098
2/5/15 15:20	33	0.380	0.021	0.084	0.000	1.141	0.106	0.845
2/5/15 18:20	34	0.211	0.021	0.106	0.000	0.127	0.021	0.803
2/5/15 21:20	35	0.317	0.021	0.106	0.000	0.169	0.021	0.908
2/6/15 0:20	36	0.317	0.021	0.063	0.000	0.084	0.021	1.880
2/6/15 3:20	37	0.380	0.021	0.148	0.000	0.465	0.042	2.662
2/6/15 6:20	38	0.275	0.021	0.190	0.021	3.676	0.275	2.176
2/6/15 9:20	39	0.275	0.021	0.084	0.000	0.253	0.042	1.521
2/6/15 12:20	40	0.253	0.021	0.127	0.000	1.943	0.148	0.718
2/6/15 15:20	41	0.190	0.021	0.063	0.000	0.063	0.021	0.760
2/6/15 18:20	42	0.232	0.021	0.063	0.000	0.127	0.021	0.718
2/6/15 21:20	43	0.084	0.000	0.063	0.000	0.063	0.021	0.760
2/7/15 0:20	44	0.127	0.021	0.063	0.021	0.084	0.042	0.634
2/7/15 3:20	45	0.084	0.000	0.042	0.000	0.127	0.021	0.317
2/7/15 6:20	46	0.106	0.000	0.063	0.000	0.063	0.021	0.401
2/7/15 9:20	47	0.042	0.000	0.106	0.000	0.042	0.021	0.444
2/7/15 12:20	48	0.042	0.000	0.063	0.000	0.042	0.021	0.338
2/7/15 15:20	49	0.106	0.000	0.042	0.000	0.148	0.021	1.648
2/7/15 18:20	50	0.063	0.000	0.042	0.000	0.084	0.021	0.549
2/7/15 21:20	51	0.063	0.000	0.063	0.000	0.084	0.021	0.338
2/8/15 0:20	52	0.296	0.021	0.021	0.000	1.479	0.127	1.098
2/8/15 3:20	53	0.042	0.000	0.042	0.000	0.106	0.021	1.246
2/8/15 6:20	54	0.042	0.000	0.063	0.000	0.148	0.021	1.035
2/8/15 9:20	55	0.063	0.000	0.063	0.000	0.106	0.021	1.098
2/8/15 12:20	56	0.042	0.021	0.148	0.021	0.169	0.042	0.676
2/8/15 15:20	57	0.084	0.000	0.042	0.000	0.232	0.042	0.739
2/8/15 18:20	58	0.021	0.021	0.063	0.021	0.084	0.042	0.169
2/8/15 21:20	59	0.042	0.021	0.063	0.021	0.084	0.042	0.465
2/9/15 0:20	60	0.042	0.021	0.106	0.021	0.127	0.042	0.232
2/9/15 3:20	61	0.021	0.021	0.063	0.021	0.148	0.042	0.169
2/9/15 6:20	62	0.042	0.021	0.063	0.021	0.148	0.042	0.422
2/9/15 9:20	63	0.021	0.021	0.063	0.021	0.106	0.042	0.549
2/9/15 12:20	64	0.063	0.000	0.042	0.000	0.021	0.021	0.253
2/9/15 15:20	65	0.042	0.021	0.084	0.021	0.106	0.042	0.422
2/9/15 18:20	66	0.106	0.000	0.063	0.000	0.169	0.021	2.070
2/9/15 21:20	67	0.106	0.000	0.042	0.000	4.753	0.359	0.951
2/10/15 0:20	68	0.084	0.000	0.084	0.000	0.106	0.021	1.310
2/10/15 3:20	69	0.127	0.000	0.021	0.000	2.112	0.169	1.056
2/10/15 6:20	70	0.063	0.000	0.063	0.000	0.106	0.021	0.507

Stage 1	7.89 L/m	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day								
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	0.229	MDL	0.083	MDL	0.775	MDL	1.549
Marks	0.02112 cm2/m3	AveAll	0.281	0.021	0.113	0.021	0.712	0.021	2.658
2/10/15 9:20	71	0.444	0.021	0.000	0.000	0.106	0.021	1.267	
2/10/15 12:20	72	0.317	0.021	0.106	0.000	0.211	0.042	2.218	
2/10/15 15:20	73	0.338	0.021	0.000	0.000	3.211	0.253	2.746	
2/10/15 18:20	74	0.169	0.021	0.042	0.000	1.753	0.148	2.493	
1wk end 2/10/15 21:20	75	0.444	0.042	0.169	0.021	2.471	0.190	5.788	
#####	76	0.359	0.021	0.401	0.021	2.345	0.190	5.196	
2/11/15 3:20	77	0.422	0.021	0.401	0.021	0.803	0.063	5.281	
2/11/15 6:20	78	0.359	0.021	0.084	0.000	0.317	0.042	21.398	
2/11/15 9:20	79	0.317	0.021	0.063	0.000	0.507	0.042	3.718	
2/11/15 12:20	80	0.211	0.042	0.021	0.021	0.422	0.063	6.063	
2/11/15 15:20	81	0.549	0.042	0.084	0.000	0.232	0.042	13.857	
2/11/15 18:20	82	0.422	0.021	0.127	0.000	1.796	0.148	4.837	
2/11/15 21:20	83	0.253	0.021	0.021	0.000	0.169	0.021	2.577	
2/12/15 0:20	84	0.359	0.021	0.127	0.000	0.190	0.021	4.943	
2/12/15 3:20	85	0.253	0.021	0.084	0.000	0.127	0.021	3.211	
2/12/15 6:20	86	0.296	0.021	0.063	0.000	0.275	0.042	5.133	
2/12/15 9:20	87	0.465	0.042	0.190	0.021	0.211	0.042	4.246	
2/12/15 12:20	88	0.401	0.021	0.211	0.021	0.296	0.042	4.098	
2/12/15 15:20	89	0.211	0.021	0.063	0.000	0.444	0.042	2.535	
2/12/15 18:20	90	0.253	0.021	0.148	0.000	0.232	0.042	3.464	
2/12/15 21:20	91	0.232	0.021	0.063	0.000	0.169	0.021	5.809	
2/13/15 0:20	92	0.591	0.042	0.063	0.000	0.296	0.042	4.098	
2/13/15 3:20	93	0.380	0.021	0.063	0.000	0.486	0.042	3.612	
2/13/15 6:20	94	0.486	0.042	0.106	0.000	0.613	0.063	3.929	
2/13/15 9:20	95	0.359	0.021	1.458	0.106	2.598	0.190	5.112	
2/13/15 12:20	96	1.098	0.084	0.021	0.000	0.359	0.042	2.788	
2/13/15 15:20	97	0.507	0.042	0.042	0.000	0.570	0.063	4.563	
2/13/15 18:20	98	0.444	0.021	0.570	0.042	0.422	0.042	4.098	
2/13/15 21:20	99	0.401	0.021	0.000	0.000	0.211	0.042	2.788	

Stage 1	7.89 L/m	ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
2/13/2015 6:56	1440 min/day						
Marks	11.3616 m3/day	Ave1stwk	MDL	0.220	MDL	0.476	MDL
	4 mm/day						
3	6 mm	AveAll	0.042	0.187	0.021	0.501	0.021
2/3/2015 18:20	0.24 cm2/day						
Marks	0.02112 cm2/m3						

Date/Time	ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
2/3/15 18:20	18	0.169	0.127	0.000	0.591	0.042
2/3/15 21:20	19	0.169	0.148	0.000	0.000	0.000
2/4/15 0:20	20	1.817	0.106	0.000	0.380	0.021
2/4/15 3:20	21	0.317	0.106	0.000	0.211	0.021
2/4/15 6:20	22	0.338	0.106	0.000	0.760	0.063
2/4/15 9:20	23	0.296	0.084	0.000	1.563	0.106
2/4/15 12:20	24	0.275	0.127	0.000	1.098	0.084
2/4/15 15:20	25	0.190	0.021	0.000	1.436	0.106
2/4/15 18:20	26	0.401	0.190	0.021	1.289	0.084
2/4/15 21:20	27	0.211	0.148	0.000	0.951	0.063
2/5/15 0:20	28	0.253	0.253	0.021	0.951	0.063
2/5/15 3:20	29	0.211	0.232	0.021	0.866	0.063
2/5/15 6:20	30	0.211	0.169	0.021	0.507	0.042
2/5/15 9:20	31	0.127	0.275	0.021	0.866	0.063
2/5/15 12:20	32	0.106	0.253	0.021	0.422	0.021
2/5/15 15:20	33	0.084	0.190	0.021	0.401	0.021
2/5/15 18:20	34	0.084	0.211	0.021	0.317	0.021
2/5/15 21:20	35	0.106	0.084	0.000	0.444	0.042
2/6/15 0:20	36	0.169	0.148	0.000	0.570	0.042
2/6/15 3:20	37	0.211	0.127	0.000	0.824	0.063
2/6/15 6:20	38	0.190	0.127	0.000	0.401	0.021
2/6/15 9:20	39	0.148	0.084	0.000	0.782	0.063
2/6/15 12:20	40	0.084	0.106	0.000	0.106	0.000
2/6/15 15:20	41	0.084	0.084	0.000	0.190	0.021
2/6/15 18:20	42	0.084	0.148	0.000	0.697	0.042
2/6/15 21:20	43	0.084	0.106	0.000	0.676	0.042
2/7/15 0:20	44	0.084	0.084	0.063	0.000	0.380
2/7/15 3:20	45	0.063	0.127	0.000	0.000	0.000
2/7/15 6:20	46	0.063	0.169	0.021	0.106	0.000
2/7/15 9:20	47	0.063	0.106	0.000	0.655	0.042
2/7/15 12:20	48	0.063	0.169	0.021	0.296	0.021
2/7/15 15:20	49	0.148	0.084	0.000	0.380	0.021
2/7/15 18:20	50	0.063	0.148	0.000	0.507	0.042
2/7/15 21:20	51	0.063	0.169	0.021	0.148	0.021
2/8/15 0:20	52	0.106	0.106	0.000	0.190	0.021
2/8/15 3:20	53	0.127	0.127	0.000	0.549	0.042
2/8/15 6:20	54	0.106	0.042	0.000	0.275	0.021
2/8/15 9:20	55	0.106	0.190	0.021	0.359	0.021
2/8/15 12:20	56	0.084	0.169	0.084	0.000	0.359
2/8/15 15:20	57	0.084	0.211	0.021	0.042	0.000
2/8/15 18:20	58	0.063	0.211	0.084	0.634	0.359
2/8/15 21:20	59	0.063	0.317	0.084	0.000	0.359
2/9/15 0:20	60	0.063	0.253	0.084	0.000	0.338
2/9/15 3:20	61	0.042	0.338	0.084	0.000	0.359
2/9/15 6:20	62	0.063	0.444	0.084	0.591	0.338
2/9/15 9:20	63	0.084	0.465	0.084	0.634	0.359
2/9/15 12:20	64	0.042	0.570	0.042	0.422	0.021
2/9/15 15:20	65	0.063	0.549	0.084	0.000	0.359
2/9/15 18:20	66	0.169	0.549	0.042	0.211	0.021
2/9/15 21:20	67	0.106	0.570	0.042	0.211	0.021
2/10/15 0:20	68	0.127	0.634	0.042	0.317	0.021
2/10/15 3:20	69	0.106	0.718	0.042	0.444	0.042
2/10/15 6:20	70	0.063	0.275	0.021	0.127	0.000

Stage 1	7.89 L/m	ID#	Zn_err	Br	Br_err	Pb	Pb_err
2/13/2015 6:56	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day						
	4 mm/day						
3	6 mm						
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.220	MDL	0.476	MDL
Marks	0.02112 cm2/m3	AveAll	0.042	0.187	0.021	0.501	0.021
	2/10/15 9:20	71	0.127	0.359	0.021	0.613	0.042
	2/10/15 12:20	72	0.190	0.190	0.021	0.169	0.021
	2/10/15 15:20	73	0.232	0.148	0.000	0.422	0.021
	2/10/15 18:20	74	0.211	0.169	0.021	0.253	0.021
1wk end	2/10/15 21:20	75	0.444	0.190	0.021	1.394	0.106
	#####	76	0.401	0.106	0.000	0.887	0.063
	2/11/15 3:20	77	0.401	0.106	0.000	0.591	0.042
	2/11/15 6:20	78	1.542	0.190	0.021	0.380	0.021
	2/11/15 9:20	79	0.296	0.106	0.000	0.465	0.042
	2/11/15 12:20	80	0.465	0.190	0.084	0.697	0.401
	2/11/15 15:20	81	1.014	0.106	0.000	0.444	0.042
	2/11/15 18:20	82	0.380	0.148	0.000	1.098	0.084
	2/11/15 21:20	83	0.211	0.063	0.000	0.697	0.042
	2/12/15 0:20	84	0.380	0.127	0.000	0.422	0.021
	2/12/15 3:20	85	0.253	0.169	0.021	0.465	0.042
	2/12/15 6:20	86	0.401	0.127	0.000	0.507	0.042
	2/12/15 9:20	87	0.338	0.127	0.000	0.317	0.021
	2/12/15 12:20	88	0.317	0.169	0.021	0.824	0.063
	2/12/15 15:20	89	0.211	0.106	0.000	0.528	0.042
	2/12/15 18:20	90	0.275	0.063	0.000	0.760	0.063
	2/12/15 21:20	91	0.444	0.063	0.000	0.338	0.021
	2/13/15 0:20	92	0.317	0.127	0.000	0.380	0.021
	2/13/15 3:20	93	0.296	0.063	0.000	0.317	0.021
	2/13/15 6:20	94	0.317	0.063	0.000	0.655	0.042
	2/13/15 9:20	95	0.401	0.084	0.000	0.000	0.000
	2/13/15 12:20	96	0.232	0.063	0.000	1.289	0.084
	2/13/15 15:20	97	0.359	0.063	0.000	0.465	0.042
	2/13/15 18:20	98	0.317	0.127	0.000	0.655	0.042
	2/13/15 21:20	99	0.232	0.190	0.021	0.613	0.042

Stage 1	7.89 L/m	ID#	Sum of Elements
2/13/2015 6:56	1440 min/day		
Marks	11.3616 m3/day		
	4 mm/day		
3	6 mm	Ave1stwk	AveAll
2/3/2015 18:20	0.24 cm2/day		
Marks	0.02112 cm2/m3		

2/3/15 18:20	18	293.768
2/3/15 21:20	19	336.565
2/4/15 0:20	20	460.055
2/4/15 3:20	21	618.652
2/4/15 6:20	22	683.333
2/4/15 9:20	23	868.124
2/4/15 12:20	24	840.114
2/4/15 15:20	25	1001.943
2/4/15 18:20	26	978.940
2/4/15 21:20	27	859.147
2/5/15 0:20	28	844.444
2/5/15 3:20	29	829.679
2/5/15 6:20	30	780.756
2/5/15 9:20	31	700.782
2/5/15 12:20	32	590.473
2/5/15 15:20	33	641.445
2/5/15 18:20	34	505.281
2/5/15 21:20	35	596.219
2/6/15 0:20	36	638.424
2/6/15 3:20	37	523.405
2/6/15 6:20	38	507.583
2/6/15 9:20	39	496.937
2/6/15 12:20	40	475.116
2/6/15 15:20	41	369.371
2/6/15 18:20	42	321.800
2/6/15 21:20	43	232.636
2/7/15 0:20	44	195.374
2/7/15 3:20	45	121.821
2/7/15 6:20	46	107.182
2/7/15 9:20	47	80.989
2/7/15 12:20	48	89.438
2/7/15 15:20	49	99.578
2/7/15 18:20	50	91.487
2/7/15 21:20	51	139.818
2/8/15 0:20	52	184.009
2/8/15 3:20	53	96.747
2/8/15 6:20	54	94.297
2/8/15 9:20	55	130.524
2/8/15 12:20	56	124.313
2/8/15 15:20	57	137.114
2/8/15 18:20	58	102.218
2/8/15 21:20	59	149.049
2/9/15 0:20	60	188.361
2/9/15 3:20	61	220.173
2/9/15 6:20	62	311.681
2/9/15 9:20	63	300.887
2/9/15 12:20	64	285.361
2/9/15 15:20	65	383.397
2/9/15 18:20	66	480.714
2/9/15 21:20	67	551.817
2/10/15 0:20	68	582.657
2/10/15 3:20	69	566.730
2/10/15 6:20	70	279.531

Stage 1	7.89 L/m		
2/13/2015 6:56	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

	2/10/15 9:20	71	348.986
	2/10/15 12:20	72	374.271
	2/10/15 15:20	73	449.514
	2/10/15 18:20	74	342.184
1wk end	2/10/15 21:20	75	542.501
	#####	76	563.963
	2/11/15 3:20	77	673.426
	2/11/15 6:20	78	711.703
	2/11/15 9:20	79	597.951
	2/11/15 12:20	80	664.639
	2/11/15 15:20	81	646.979
	2/11/15 18:20	82	571.631
	2/11/15 21:20	83	397.212
	2/12/15 0:20	84	703.887
	2/12/15 3:20	85	442.205
	2/12/15 6:20	86	373.933
	2/12/15 9:20	87	524.018
	2/12/15 12:20	88	626.278
	2/12/15 15:20	89	421.652
	2/12/15 18:20	90	446.451
	2/12/15 21:20	91	464.428
	2/13/15 0:20	92	515.948
	2/13/15 3:20	93	629.045
	2/13/15 6:20	94	525.834
	2/13/15 9:20	95	558.259
	2/13/15 12:20	96	669.413
	2/13/15 15:20	97	550.338
	2/13/15 18:20	98	556.612
	2/13/15 21:20	99	511.111

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3
2/3/2015 18:20

ID#

Na Na_err Mg Mg_err Al Al_err Si
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk
AveAll

110.225	MDL	49.196	MDL	101.148	MDL	272.180
78.574	0.190	43.543	0.127	100.955	0.084	276.890

	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
2/3/15 18:20	8	5.112	0.972	30.503	5.302	107.351	14.428	265.970
2/3/15 21:20	9	7.351	1.415	80.862	14.068	215.230	28.918	565.463
2/4/15 0:20	10	3.190	0.697	97.191	16.899	266.688	35.826	704.077
2/4/15 3:20	11	24.926	4.668	98.775	17.174	295.965	39.755	799.366
2/4/15 6:20	12	10.541	2.007	102.070	17.744	297.254	39.924	790.853
2/4/15 9:20	13	12.146	2.302	79.193	13.773	258.640	34.749	673.046
2/4/15 12:20	14	6.084	1.183	67.131	11.681	224.123	30.101	581.834
2/4/15 15:20	15	0.000	0.380	94.170	16.371	257.119	34.537	630.545
2/4/15 18:20	16	5.112	1.014	97.993	17.026	246.092	33.059	602.260
2/4/15 21:20	17	21.420	4.014	92.670	16.117	223.363	29.996	558.640
2/5/15 0:20	18	91.107	16.962	65.082	11.322	144.254	19.371	390.938
2/5/15 3:20	19	210.646	39.227	57.203	9.949	94.106	12.632	274.102
2/5/15 6:20	20	153.760	28.644	44.867	7.795	95.268	12.801	287.410
2/5/15 9:20	21	102.281	19.054	47.803	8.302	118.251	15.885	328.834
2/5/15 12:20	22	69.371	12.928	63.836	11.111	142.184	19.096	397.212
2/5/15 15:20	23	85.657	15.948	90.811	15.779	211.681	28.433	551.500
2/5/15 18:20	24	53.697	10.013	83.798	14.575	248.268	33.354	640.325
2/5/15 21:20	25	83.756	15.610	97.803	17.005	288.213	38.720	702.091
2/6/15 0:20	26	47.634	8.872	74.567	12.970	235.657	31.665	585.572
2/6/15 3:20	27	50.507	9.421	72.708	12.632	236.122	31.707	595.775
2/6/15 6:20	28	42.184	7.858	62.695	10.900	234.749	31.538	591.677
2/6/15 9:20	29	92.374	17.216	69.603	12.104	226.236	30.397	551.648
2/6/15 12:20	30	54.330	10.118	49.472	8.597	166.012	22.307	404.711
2/6/15 15:20	31	40.283	7.520	50.275	8.745	161.597	21.715	387.812
2/6/15 18:20	32	3.190	0.697	42.480	7.393	146.726	19.708	339.058
2/6/15 21:20	33	28.454	5.302	25.708	4.478	86.692	11.639	203.654
2/7/15 0:20	34	46.662	8.703	11.343	1.986	45.839	6.147	118.948
2/7/15 3:20	35	63.604	11.850	8.597	1.500	42.374	5.682	111.893
2/7/15 6:20	36	77.672	14.470	4.436	0.782	29.404	3.950	80.672
2/7/15 9:20	37	86.629	16.139	3.823	0.676	20.807	2.788	71.504
2/7/15 12:20	38	69.054	12.864	9.928	1.732	14.892	2.007	55.577
2/7/15 15:20	39	63.604	11.850	21.546	3.739	17.934	2.408	58.238
2/7/15 18:20	40	21.420	3.992	14.723	2.556	22.539	3.021	71.546
2/7/15 21:20	41	15.653	2.915	17.469	3.042	15.230	2.049	56.738
2/8/15 0:20	42	0.000	7.309	6.020	2.387	11.534	1.732	39.776
2/8/15 3:20	43	22.053	4.119	3.021	0.528	10.668	1.436	35.615
2/8/15 6:20	44	14.702	2.746	5.936	1.035	15.272	2.049	43.008
2/8/15 9:20	45	35.171	6.548	0.613	0.127	16.434	2.218	41.888
2/8/15 12:20	46	54.014	10.055	9.928	1.732	16.667	2.239	45.057
2/8/15 15:20	47	151.183	30.038	9.041	3.190	18.209	2.640	57.499
2/8/15 18:20	48	220.870	41.128	23.680	4.119	9.675	1.310	37.220
2/8/15 21:20	49	51.774	9.654	39.290	6.823	1.436	0.190	31.136
2/9/15 0:20	50	172.602	33.988	56.844	10.351	0.000	0.887	20.659
2/9/15 3:20	51	0.000	12.548	180.798	31.728	0.000	1.120	39.142
2/9/15 6:20	52	102.598	19.117	37.410	6.506	2.915	0.401	22.349
2/9/15 9:20	53	104.520	22.286	40.515	7.710	4.626	1.120	30.820
2/9/15 12:20	54	489.058	92.438	40.262	7.943	2.535	1.204	37.748
2/9/15 15:20	55	50.190	15.336	80.967	14.597	14.977	2.345	82.932
2/9/15 18:20	56	771.948	144.867	58.872	11.090	16.033	2.556	90.368
2/9/15 21:20	57	140.959	26.257	108.175	18.800	28.433	3.823	111.766
2/10/15 0:20	58	599.345	112.886	64.195	11.956	21.821	3.253	108.365
2/10/15 3:20	59	763.308	143.388	51.162	9.970	20.046	3.063	97.360
2/10/15 6:20	60	305.577	58.450	21.990	5.218	35.129	4.880	132.214
2/10/15 9:20	61	167.807	31.263	11.618	2.028	29.658	3.992	117.364
2/10/15 12:20	62	108.048	20.131	6.210	1.077	36.037	4.837	118.103

Stage 2	7.89 L/m 1440 min/day	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
Marks	11.3616 m3/day 4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	110.225	MDL	49.196	MDL	101.148	MDL	272.180
Marks	0.02112 cm2/m3	AveAll	78.574	0.190	43.543	0.127	100.955	0.084	276.890
2/10/15 15:20	63	65.843	12.273	10.815	1.880	46.705	6.274	160.668	
2/10/15 18:20	64	24.292	4.542	26.426	4.605	75.032	10.076	232.256	
2/10/15 21:20	65	19.814	3.718	41.403	7.203	116.160	15.610	310.731	
2/11/15 0:20	66	3.507	0.760	29.256	5.091	102.408	13.752	296.282	
2/11/15 3:20	67	6.084	1.183	34.770	6.041	112.146	15.061	318.864	
2/11/15 6:20	68	6.717	1.310	35.213	6.126	107.436	14.428	311.681	
2/11/15 9:20	69	11.512	2.176	20.406	3.549	85.678	11.512	248.395	
2/11/15 12:20	70	6.401	1.246	19.518	3.401	72.708	9.759	201.817	
2/11/15 15:20	71	27.165	5.070	34.664	6.020	93.621	12.569	267.575	
2/11/15 18:20	72	11.829	2.239	44.064	7.668	115.167	15.463	332.214	
2/11/15 21:20	73	22.053	4.119	35.108	6.105	136.417	18.314	379.806	
2/12/15 0:20	74	15.653	2.936	29.447	5.112	111.534	14.977	310.372	
2/12/15 3:20	75	19.497	3.654	33.164	5.767	105.196	14.132	371.293	
2/12/15 6:20	76	14.702	2.746	25.539	4.436	92.755	12.463	285.023	
2/12/15 9:20	77	16.941	3.169	22.877	3.971	71.546	9.611	208.619	
2/12/15 12:20	78	14.385	2.683	12.421	2.155	47.993	6.443	137.537	
2/12/15 15:20	79	2.556	0.507	19.772	3.443	68.504	9.210	212.400	
2/12/15 18:20	80	7.668	1.436	23.046	4.014	75.898	10.203	234.981	
2/12/15 21:20	81	5.429	1.077	28.200	4.901	107.436	14.428	304.880	
2/13/15 0:20	82	0.000	0.190	34.495	5.999	90.853	12.210	261.365	
2/13/15 3:20	83	7.351	1.415	37.600	6.527	104.668	14.068	325.496	
2/13/15 6:20	84	6.084	1.183	46.916	8.154	133.439	17.913	391.445	
2/13/15 9:20	85	24.926	4.668	40.959	7.119	129.806	17.427	353.591	
2/13/15 12:20	86	4.478	0.845	21.715	3.781	74.292	9.970	207.879	
2/13/15 15:20	87	5.429	1.035	32.362	5.619	83.502	11.217	231.136	
2/13/15 18:20	88	4.161	0.803	17.469	3.042	79.510	10.689	216.772	
2/13/15 21:20	89	13.435	2.514	25.180	4.373	88.973	11.956	222.053	

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Si_err
0 ng/cm^2

P
ng/cm^2

P_err
ng/cm^2

S
ng/cm^2

S_err
ng/cm^2

Cl
ng/cm^2

Cl_err
ng/cm^2

Ave1stwk
AveAll

MDL
0.021

7.037
7.075

MDL
0.380

44.829
36.775

MDL
0.021

251.103
176.842

MDL
0.021

	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
2/3/15 18:20	8	24.102	4.288	0.634	12.780	0.951	2.408	0.190
2/3/15 21:20	9	51.246	9.970	1.077	25.708	1.880	5.175	0.401
2/4/15 0:20	10	63.794	10.013	1.098	27.186	1.986	5.978	0.444
2/4/15 3:20	11	72.433	14.533	1.458	37.326	2.725	7.520	0.570
2/4/15 6:20	12	71.652	11.449	1.204	34.580	2.535	8.914	0.676
2/4/15 9:20	13	60.984	11.217	1.183	41.508	3.021	17.448	1.331
2/4/15 12:20	14	52.725	8.597	0.972	40.262	2.936	23.553	1.796
2/4/15 15:20	15	57.140	9.020	1.014	52.028	3.802	89.734	6.823
2/4/15 18:20	16	54.563	7.267	0.866	59.970	4.373	133.185	10.118
2/4/15 21:20	17	50.613	6.506	0.803	51.204	3.739	153.485	11.660
2/5/15 0:20	18	35.425	5.049	0.676	42.564	3.105	232.826	17.681
2/5/15 3:20	19	24.842	5.239	0.697	44.613	3.253	368.695	27.989
2/5/15 6:20	20	26.046	5.978	0.760	48.627	3.549	254.880	19.349
2/5/15 9:20	21	29.806	6.274	0.782	43.029	3.147	194.571	14.766
2/5/15 12:20	22	35.995	4.246	0.613	45.944	3.359	144.909	11.005
2/5/15 15:20	23	49.979	6.675	0.824	39.839	2.915	103.591	7.858
2/5/15 18:20	24	58.027	7.499	0.887	83.988	6.126	96.472	7.330
2/5/15 21:20	25	63.625	10.900	1.162	66.857	4.880	85.932	6.527
2/6/15 0:20	26	53.063	11.597	1.225	53.823	3.929	85.657	6.506
2/6/15 3:20	27	53.992	12.210	1.267	55.788	4.077	100.211	7.605
2/6/15 6:20	28	53.612	14.406	1.436	62.210	4.542	117.765	8.935
2/6/15 9:20	29	49.979	16.455	1.605	45.374	3.316	118.948	9.041
2/6/15 12:20	30	36.671	13.984	1.415	45.543	3.316	101.352	7.689
2/6/15 15:20	31	35.150	12.041	1.246	38.466	2.809	84.263	6.401
2/6/15 18:20	32	30.714	11.259	1.183	40.600	2.957	109.421	8.302
2/6/15 21:20	33	18.462	9.147	1.014	27.271	2.007	102.598	7.795
2/7/15 0:20	34	10.773	7.562	0.887	28.200	2.070	94.550	7.182
2/7/15 3:20	35	10.139	11.491	1.204	32.277	2.366	103.000	7.816
2/7/15 6:20	36	7.309	11.153	1.183	32.383	2.366	95.332	7.245
2/7/15 9:20	37	6.485	11.745	1.225	40.706	2.978	120.279	9.125
2/7/15 12:20	38	5.027	7.520	0.887	31.411	2.302	119.561	9.083
2/7/15 15:20	39	5.281	8.365	0.951	31.031	2.260	133.143	10.118
2/7/15 18:20	40	6.485	5.492	0.718	19.138	1.415	87.917	6.675
2/7/15 21:20	41	5.133	7.182	0.866	15.653	1.162	55.577	4.225
2/8/15 0:20	42	3.654	5.239	0.782	9.865	0.782	25.032	1.922
2/8/15 3:20	43	3.232	6.696	0.824	9.696	0.718	17.850	1.352
2/8/15 6:20	44	3.908	7.900	0.908	12.146	0.887	17.026	1.289
2/8/15 9:20	45	3.802	9.421	1.035	14.385	1.056	41.550	3.147
2/8/15 12:20	46	4.077	6.210	0.782	15.653	1.162	101.014	7.668
2/8/15 15:20	47	5.260	5.915	0.866	25.158	1.880	232.446	17.659
2/8/15 18:20	48	3.380	4.415	0.634	33.883	2.471	321.504	24.419
2/8/15 21:20	49	2.831	2.619	0.486	50.380	3.676	226.531	17.195
2/9/15 0:20	50	1.943	1.605	0.591	77.102	5.640	389.480	29.594
2/9/15 3:20	51	3.612	1.120	0.634	169.307	12.336	579.447	44.022
2/9/15 6:20	52	2.028	6.612	0.803	43.663	3.190	236.692	17.976
2/9/15 9:20	53	2.852	1.943	0.613	56.485	4.161	305.365	23.194
2/9/15 12:20	54	3.485	0.190	0.570	74.187	5.450	1278.538	97.106
2/9/15 15:20	55	7.562	3.042	0.718	59.738	4.394	434.368	32.995
2/9/15 18:20	56	8.238	0.972	0.655	76.362	5.598	1450.317	110.139
2/9/15 21:20	57	10.118	1.521	0.401	80.313	5.851	623.300	47.338
2/10/15 0:20	58	9.865	0.507	0.634	83.164	6.084	1177.461	89.417
2/10/15 3:20	59	8.872	1.627	0.718	72.835	5.344	1667.089	126.595
2/10/15 6:20	60	12.019	5.387	0.866	50.613	3.739	483.587	36.734
2/10/15 9:20	61	10.625	4.288	0.613	34.601	2.535	322.095	24.461
2/10/15 12:20	62	10.710	2.535	0.486	19.877	1.458	170.448	12.949

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Si_err

P

P_err

S

S_err

Cl

Cl_err

0 ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

Ave1stwk

MDL
0.021

7.037

MDL
0.380

44.829

MDL
0.021

251.103

MDL
0.021

AveAll

ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
2/10/15 15:20	63	14.554	3.401	0.549	25.687	1.880	13.773
2/10/15 18:20	64	21.039	3.380	0.549	26.172	1.922	9.337
2/10/15 21:20	65	28.158	5.450	0.718	29.742	2.176	7.985
2/11/15 0:20	66	26.848	4.880	0.676	25.898	1.901	5.598
2/11/15 3:20	67	28.897	7.203	0.866	28.264	2.070	5.027
2/11/15 6:20	68	28.243	6.569	0.803	24.166	1.774	2.746
2/11/15 9:20	69	22.497	6.168	0.782	19.877	1.458	2.704
2/11/15 12:20	70	18.293	2.894	0.507	18.019	1.331	2.197
2/11/15 15:20	71	24.250	6.569	0.803	26.933	1.965	2.366
2/11/15 18:20	72	30.101	5.725	0.739	29.362	2.155	2.260
2/11/15 21:20	73	34.411	7.795	0.908	27.355	2.007	1.436
2/12/15 0:20	74	28.116	6.929	0.845	22.856	1.669	0.803
2/12/15 3:20	75	33.650	10.034	1.098	19.497	1.436	0.591
2/12/15 6:20	76	25.834	7.964	0.929	17.786	1.310	0.444
2/12/15 9:20	77	18.906	5.661	0.739	12.717	0.929	0.380
2/12/15 12:20	78	12.463	4.183	0.613	10.710	0.803	0.401
2/12/15 15:20	79	19.244	7.055	0.845	14.470	1.056	0.613
2/12/15 18:20	80	21.293	8.027	0.929	15.019	1.098	0.782
2/12/15 21:20	81	27.630	6.738	0.824	15.378	1.141	0.655
2/13/15 0:20	82	23.680	7.140	0.845	15.885	1.162	0.570
2/13/15 3:20	83	29.489	9.294	1.035	22.138	1.627	0.634
2/13/15 6:20	84	35.467	9.759	1.077	24.778	1.817	0.570
2/13/15 9:20	85	32.045	7.943	0.929	22.243	1.627	0.507
2/13/15 12:20	86	18.842	5.746	0.739	14.766	1.098	0.380
2/13/15 15:20	87	20.934	9.675	1.056	13.498	0.993	0.380
2/13/15 18:20	88	19.645	9.337	1.035	12.231	0.908	0.359
2/13/15 21:20	89	20.131	8.576	0.972	12.843	0.951	0.380

Stage 2	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
	4 mm/day		0 ng/cm ²	ng/cm ²	ng/cm ²	ng/cm ²	ng/cm ²	ng/cm ²	ng/cm ²
	6 mm								
3	0.24 cm2/day	Ave1stwk	41.759	MDL	72.487	MDL	9.586	MDL	0.538
2/3/2015 18:20	0.02112 cm2/m3	AveAll	38.132	0.021	69.779	0.021	9.915	0.021	0.538
Marks									

	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/3/15 18:20	8	24.313	1.711	50.465	3.570	8.787	0.634	0.570
2/3/15 21:20	9	47.655	3.359	94.613	6.675	19.814	1.394	1.246
2/4/15 0:20	10	61.534	4.330	115.040	8.112	21.884	1.542	1.204
2/4/15 3:20	11	70.152	4.943	129.278	9.104	30.989	2.176	1.310
2/4/15 6:20	12	73.574	5.175	135.171	9.506	28.200	1.986	1.289
2/4/15 9:20	13	67.005	4.711	143.093	10.076	20.997	1.479	1.162
2/4/15 12:20	14	61.998	4.351	139.861	9.844	22.560	1.584	0.929
2/4/15 15:20	15	79.552	5.598	179.341	12.611	20.068	1.415	1.246
2/4/15 18:20	16	77.841	5.471	197.465	13.899	19.413	1.373	1.162
2/4/15 21:20	17	67.913	4.774	146.536	10.308	18.145	1.289	1.183
2/5/15 0:20	18	50.697	3.570	110.837	7.816	10.541	0.739	0.739
2/5/15 3:20	19	42.374	2.978	91.149	6.422	8.048	0.570	0.401
2/5/15 6:20	20	41.318	2.915	84.263	5.936	9.400	0.676	0.486
2/5/15 9:20	21	38.340	2.704	97.212	6.844	10.562	0.739	0.634
2/5/15 12:20	22	42.839	3.021	107.626	7.583	12.674	0.887	0.634
2/5/15 15:20	23	61.555	4.330	134.706	9.485	18.209	1.289	0.993
2/5/15 18:20	24	77.440	5.450	173.384	12.210	19.413	1.373	1.056
2/5/15 21:20	25	85.784	6.041	167.047	11.745	21.631	1.521	1.436
2/6/15 0:20	26	79.848	5.619	146.451	10.308	19.349	1.373	1.120
2/6/15 3:20	27	88.171	6.210	150.444	10.583	21.208	1.500	1.120
2/6/15 6:20	28	93.135	6.548	154.520	10.879	18.166	1.289	1.098
2/6/15 9:20	29	86.375	6.084	136.354	9.590	22.708	1.605	1.162
2/6/15 12:20	30	69.645	4.901	121.567	8.555	11.703	0.824	0.697
2/6/15 15:20	31	60.689	4.267	103.992	7.330	16.413	1.162	0.549
2/6/15 18:20	32	57.393	4.035	72.539	5.112	9.970	0.697	0.528
2/6/15 21:20	33	41.635	2.936	45.817	3.232	5.809	0.422	0.253
2/7/15 0:20	34	28.580	2.007	29.172	2.070	4.964	0.359	0.190
2/7/15 3:20	35	32.193	2.260	31.136	2.218	5.260	0.380	0.127
2/7/15 6:20	36	27.440	1.922	22.011	1.563	3.950	0.275	0.084
2/7/15 9:20	37	26.912	1.901	25.011	1.774	2.387	0.169	0.106
2/7/15 12:20	38	18.864	1.331	21.546	1.542	2.239	0.169	0.148
2/7/15 15:20	39	20.004	1.415	21.905	1.563	2.556	0.190	0.190
2/7/15 18:20	40	17.153	1.204	21.948	1.563	2.767	0.211	0.190
2/7/15 21:20	41	13.540	0.951	18.399	1.310	4.415	0.317	0.190
2/8/15 0:20	42	10.499	0.739	11.280	0.824	3.295	0.232	0.296
2/8/15 3:20	43	11.322	0.803	10.330	0.739	1.711	0.127	0.084
2/8/15 6:20	44	13.308	0.929	14.216	1.014	1.479	0.106	0.084
2/8/15 9:20	45	15.610	1.098	9.886	0.718	1.817	0.127	0.084
2/8/15 12:20	46	14.491	1.014	8.809	0.634	2.155	0.169	0.084
2/8/15 15:20	47	18.673	1.331	13.350	0.972	2.429	0.190	0.106
2/8/15 18:20	48	15.737	1.098	13.076	0.951	1.331	0.106	0.063
2/8/15 21:20	49	19.117	1.352	21.251	1.521	1.479	0.106	0.042
2/9/15 0:20	50	14.047	0.993	41.867	2.957	1.310	0.106	0.127
2/9/15 3:20	51	51.183	3.612	68.779	4.858	1.542	0.127	0.127
2/9/15 6:20	52	12.041	0.845	20.638	1.479	1.584	0.127	0.127
2/9/15 9:20	53	16.434	1.162	34.770	2.471	1.289	0.106	0.106
2/9/15 12:20	54	23.194	1.648	33.016	2.345	2.387	0.190	0.359
2/9/15 15:20	55	29.320	2.070	36.840	2.619	7.436	0.528	0.422
2/9/15 18:20	56	26.975	1.901	39.163	2.788	5.112	0.380	0.739
2/9/15 21:20	57	49.810	3.507	32.826	2.324	4.837	0.338	0.232
2/10/15 0:20	58	38.086	2.683	42.733	3.021	6.527	0.465	0.549
2/10/15 3:20	59	42.248	2.978	35.192	2.493	3.401	0.253	0.655
2/10/15 6:20	60	32.742	2.302	45.205	3.211	3.359	0.253	0.148
2/10/15 9:20	61	22.645	1.584	36.058	2.556	2.915	0.211	0.211
2/10/15 12:20	62	17.469	1.225	30.439	2.155	2.978	0.211	0.148

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

K K_err Ca Ca_err Ti Ti_err V
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk
AveAll

41.759 MDL 72.487 MDL 9.586 MDL 0.538
 38.132 0.021 69.779 0.021 9.915 0.021 0.538

2/10/15 15:20	63	21.314	1.500	43.790	3.105	5.725	0.401	0.253
2/10/15 18:20	64	25.581	1.796	62.653	4.415	11.470	0.803	0.613
2/10/15 21:20	65	35.192	2.471	78.306	5.513	12.653	0.887	0.866
2/11/15 0:20	66	31.496	2.218	76.785	5.408	12.569	0.887	0.676
2/11/15 3:20	67	34.685	2.450	83.418	5.872	13.435	0.951	0.718
2/11/15 6:20	68	30.629	2.155	69.772	4.922	13.899	0.972	0.887
2/11/15 9:20	69	26.341	1.859	64.829	4.584	9.147	0.655	0.549
2/11/15 12:20	70	23.828	1.669	55.196	3.908	7.288	0.528	0.317
2/11/15 15:20	71	31.263	2.197	85.129	5.999	9.886	0.697	0.465
2/11/15 18:20	72	41.086	2.894	102.408	7.224	16.857	1.183	0.570
2/11/15 21:20	73	38.340	2.704	96.092	6.781	12.188	0.866	0.718
2/12/15 0:20	74	34.157	2.408	76.553	5.408	10.266	0.718	0.486
2/12/15 3:20	75	33.143	2.324	67.385	4.753	10.013	0.718	0.465
2/12/15 6:20	76	30.651	2.155	59.168	4.183	6.992	0.507	0.465
2/12/15 9:20	77	21.990	1.542	43.853	3.105	4.689	0.338	0.338
2/12/15 12:20	78	15.061	1.056	34.622	2.450	6.675	0.465	0.275
2/12/15 15:20	79	22.581	1.584	46.451	3.295	7.562	0.528	0.380
2/12/15 18:20	80	26.215	1.838	55.661	3.929	7.626	0.549	0.380
2/12/15 21:20	81	31.010	2.176	58.999	4.161	10.414	0.739	0.444
2/13/15 0:20	82	28.116	1.986	54.014	3.823	12.210	0.866	0.549
2/13/15 3:20	83	33.439	2.345	51.141	3.612	11.998	0.845	0.465
2/13/15 6:20	84	37.093	2.619	61.491	4.330	15.864	1.120	0.634
2/13/15 9:20	85	39.396	2.767	63.815	4.499	12.548	0.887	0.697
2/13/15 12:20	86	24.356	1.711	52.260	3.697	8.640	0.613	0.401
2/13/15 15:20	87	27.419	1.922	53.866	3.802	9.104	0.655	0.444
2/13/15 18:20	88	25.581	1.796	52.091	3.676	9.928	0.697	0.507
2/13/15 21:20	89	28.411	2.007	52.471	3.718	7.837	0.549	0.359

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

V_err Cr Cr_err Mn Mn_err Fe Fe_err
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk

AveAll

MDL	0.498	MDL	2.015	MDL	113.639	MDL
0.021	0.596	0.021	2.114	0.021	125.776	0.021

	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
2/3/15 18:20	8	0.042	0.359	0.021	1.817	0.127	120.934	8.471
2/3/15 21:20	9	0.084	1.183	0.084	4.119	0.296	264.301	18.526
2/4/15 0:20	10	0.084	1.711	0.127	5.577	0.401	353.253	24.757
2/4/15 3:20	11	0.084	2.070	0.148	5.809	0.401	344.677	24.166
2/4/15 6:20	12	0.084	1.141	0.084	5.577	0.401	317.490	22.243
2/4/15 9:20	13	0.084	0.929	0.063	5.070	0.359	266.962	18.716
2/4/15 12:20	14	0.063	0.760	0.063	4.140	0.296	230.524	16.160
2/4/15 15:20	15	0.084	0.591	0.042	4.035	0.275	225.475	15.801
2/4/15 18:20	16	0.084	0.718	0.042	4.373	0.317	234.685	16.455
2/4/15 21:20	17	0.084	1.014	0.063	4.204	0.296	203.633	14.280
2/5/15 0:20	18	0.042	0.422	0.021	2.704	0.190	140.832	9.865
2/5/15 3:20	19	0.021	0.317	0.021	1.817	0.127	102.767	7.203
2/5/15 6:20	20	0.042	0.549	0.042	2.387	0.169	120.891	8.471
2/5/15 9:20	21	0.042	0.401	0.021	2.176	0.148	127.693	8.956
2/5/15 12:20	22	0.042	0.486	0.042	2.725	0.190	150.760	10.562
2/5/15 15:20	23	0.063	0.697	0.042	3.697	0.253	185.636	13.012
2/5/15 18:20	24	0.084	0.676	0.042	4.098	0.296	225.644	15.822
2/5/15 21:20	25	0.106	1.077	0.084	4.246	0.296	232.087	16.265
2/6/15 0:20	26	0.084	0.697	0.042	3.929	0.275	198.310	13.899
2/6/15 3:20	27	0.084	0.549	0.042	4.161	0.296	209.041	14.660
2/6/15 6:20	28	0.084	0.570	0.042	4.373	0.317	210.963	14.787
2/6/15 9:20	29	0.084	0.486	0.042	4.035	0.275	180.524	12.653
2/6/15 12:20	30	0.042	0.338	0.021	3.676	0.253	145.501	10.203
2/6/15 15:20	31	0.042	0.528	0.042	3.274	0.232	133.270	9.337
2/6/15 18:20	32	0.042	0.296	0.021	2.387	0.169	110.076	7.710
2/6/15 21:20	33	0.021	0.211	0.021	1.479	0.106	69.159	4.837
2/7/15 0:20	34	0.021	0.084	0.000	0.866	0.063	37.431	2.619
2/7/15 3:20	35	0.000	0.148	0.021	0.824	0.063	37.790	2.640
2/7/15 6:20	36	0.000	0.084	0.000	0.613	0.042	30.292	2.112
2/7/15 9:20	37	0.000	0.021	0.000	0.486	0.042	26.109	1.838
2/7/15 12:20	38	0.000	0.000	0.000	0.549	0.042	28.306	1.986
2/7/15 15:20	39	0.021	0.063	0.000	0.422	0.021	29.341	2.049
2/7/15 18:20	40	0.021	0.253	0.021	0.444	0.021	27.271	1.901
2/7/15 21:20	41	0.021	0.021	0.000	0.401	0.021	26.109	1.838
2/8/15 0:20	42	0.042	0.084	0.021	0.317	0.021	24.187	1.690
2/8/15 3:20	43	0.000	0.063	0.000	0.296	0.021	21.145	1.479
2/8/15 6:20	44	0.000	0.063	0.000	0.338	0.021	17.765	1.246
2/8/15 9:20	45	0.000	0.042	0.000	0.380	0.021	20.406	1.436
2/8/15 12:20	46	0.000	0.042	0.000	0.401	0.021	22.687	1.584
2/8/15 15:20	47	0.021	0.084	0.021	0.465	0.042	24.187	1.690
2/8/15 18:20	48	0.000	0.084	0.000	0.422	0.021	25.116	1.753
2/8/15 21:20	49	0.000	1.458	0.106	0.190	0.021	18.969	1.331
2/9/15 0:20	50	0.021	0.021	0.021	0.169	0.021	13.076	0.929
2/9/15 3:20	51	0.021	0.211	0.021	0.359	0.042	26.151	1.838
2/9/15 6:20	52	0.000	0.021	0.000	0.190	0.021	18.399	1.289
2/9/15 9:20	53	0.021	0.106	0.021	0.211	0.021	23.046	1.627
2/9/15 12:20	54	0.042	0.084	0.042	0.296	0.021	25.264	1.774
2/9/15 15:20	55	0.042	0.232	0.021	0.634	0.042	68.209	4.774
2/9/15 18:20	56	0.063	0.845	0.063	0.972	0.084	80.608	5.661
2/9/15 21:20	57	0.021	0.528	0.042	1.605	0.106	140.325	9.844
2/10/15 0:20	58	0.063	0.275	0.042	1.373	0.106	95.754	6.717
2/10/15 3:20	59	0.063	0.232	0.042	1.183	0.084	86.439	6.063
2/10/15 6:20	60	0.021	0.444	0.042	0.887	0.063	55.218	3.866
2/10/15 9:20	61	0.021	0.211	0.021	0.824	0.063	66.012	4.626
2/10/15 12:20	62	0.000	0.317	0.021	0.739	0.042	49.578	3.464

Stage 2	7.89 L/m 1440 min/day	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
Marks	11.3616 m3/day 4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.498	MDL	2.015	MDL	113.639	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	0.596	0.021	2.114	0.021	125.776	0.021
2/10/15 15:20	63	0.021	0.718	0.042	1.204	0.084	82.087	5.746	
2/10/15 18:20	64	0.042	2.028	0.148	2.007	0.148	161.301	11.301	
2/10/15 21:20	65	0.063	1.796	0.127	2.831	0.190	235.361	16.498	
2/11/15 0:20	66	0.042	1.204	0.084	2.662	0.190	224.799	15.758	
2/11/15 3:20	67	0.042	2.302	0.169	3.338	0.232	280.144	19.645	
2/11/15 6:20	68	0.063	1.225	0.084	3.105	0.211	231.855	16.244	
2/11/15 9:20	69	0.042	0.591	0.042	2.155	0.148	140.938	9.886	
2/11/15 12:20	70	0.021	0.232	0.021	1.373	0.106	81.390	5.703	
2/11/15 15:20	71	0.042	0.655	0.042	1.859	0.127	107.964	7.562	
2/11/15 18:20	72	0.042	0.824	0.063	2.429	0.169	149.894	10.499	
2/11/15 21:20	73	0.042	0.951	0.063	3.000	0.211	181.939	12.759	
2/12/15 0:20	74	0.042	0.760	0.063	2.493	0.169	153.739	10.773	
2/12/15 3:20	75	0.042	0.549	0.042	2.176	0.148	137.959	9.675	
2/12/15 6:20	76	0.042	0.993	0.063	1.943	0.127	113.181	7.943	
2/12/15 9:20	77	0.021	0.232	0.021	1.584	0.106	78.644	5.513	
2/12/15 12:20	78	0.021	0.253	0.021	1.141	0.084	64.174	4.499	
2/12/15 15:20	79	0.021	0.486	0.042	1.605	0.106	88.150	6.189	
2/12/15 18:20	80	0.021	0.845	0.063	1.753	0.127	107.119	7.499	
2/12/15 21:20	81	0.042	0.718	0.042	2.915	0.211	158.344	11.090	
2/13/15 0:20	82	0.042	0.676	0.042	2.767	0.190	177.165	12.421	
2/13/15 3:20	83	0.042	2.197	0.148	3.000	0.211	234.432	16.434	
2/13/15 6:20	84	0.042	0.993	0.063	3.126	0.211	232.995	16.329	
2/13/15 9:20	85	0.042	0.845	0.063	3.084	0.211	183.502	12.864	
2/13/15 12:20	86	0.021	0.380	0.021	1.732	0.127	112.400	7.879	
2/13/15 15:20	87	0.021	0.317	0.021	1.922	0.127	101.838	7.140	
2/13/15 18:20	88	0.042	0.253	0.021	1.627	0.106	99.599	6.971	
2/13/15 21:20	89	0.021	0.951	0.063	1.796	0.127	122.455	8.576	

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Co Co_err Ni Ni_err Cu Cu_err Zn
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk

AveAll

0.465 MDL 0.107 MDL 2.347 MDL 2.475
 0.530 0.021 0.098 0.021 2.594 0.021 2.897

	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
2/3/15 18:20	8	0.549	0.042	0.084	0.000	1.627	0.127	1.986
2/3/15 21:20	9	1.162	0.084	0.127	0.000	4.732	0.338	4.140
2/4/15 0:20	10	1.627	0.106	0.021	0.000	5.344	0.380	5.196
2/4/15 3:20	11	1.394	0.106	0.317	0.021	7.562	0.549	5.703
2/4/15 6:20	12	1.310	0.084	0.148	0.000	5.175	0.380	4.457
2/4/15 9:20	13	1.035	0.063	0.232	0.021	5.492	0.401	9.632
2/4/15 12:20	14	0.972	0.063	0.106	0.000	3.507	0.253	3.485
2/4/15 15:20	15	0.887	0.063	0.021	0.000	4.373	0.317	4.161
2/4/15 18:20	16	0.972	0.063	0.106	0.000	4.056	0.296	4.415
2/4/15 21:20	17	0.824	0.063	0.169	0.021	3.338	0.253	3.105
2/5/15 0:20	18	0.486	0.042	0.148	0.021	2.260	0.169	2.091
2/5/15 3:20	19	0.401	0.021	0.148	0.021	1.880	0.148	1.605
2/5/15 6:20	20	0.507	0.042	0.169	0.021	2.091	0.169	2.366
2/5/15 9:20	21	0.486	0.042	0.253	0.021	2.598	0.190	2.091
2/5/15 12:20	22	0.634	0.042	0.169	0.021	3.633	0.275	1.901
2/5/15 15:20	23	0.718	0.042	0.253	0.021	3.401	0.253	3.190
2/5/15 18:20	24	0.866	0.063	0.232	0.021	5.070	0.380	3.295
2/5/15 21:20	25	0.951	0.063	0.063	0.000	5.006	0.359	3.760
2/6/15 0:20	26	0.845	0.063	0.021	0.000	4.183	0.317	3.359
2/6/15 3:20	27	0.760	0.063	0.021	0.000	4.499	0.338	3.633
2/6/15 6:20	28	0.824	0.063	0.084	0.000	4.098	0.296	4.119
2/6/15 9:20	29	0.676	0.042	0.148	0.021	3.549	0.253	3.253
2/6/15 12:20	30	0.613	0.042	0.084	0.000	2.598	0.190	2.978
2/6/15 15:20	31	0.591	0.042	0.169	0.021	1.415	0.106	2.049
2/6/15 18:20	32	0.444	0.021	0.211	0.021	0.845	0.063	1.458
2/6/15 21:20	33	0.338	0.021	0.063	0.000	0.718	0.063	1.162
2/7/15 0:20	34	0.148	0.021	0.063	0.000	0.591	0.063	0.676
2/7/15 3:20	35	0.127	0.000	0.190	0.021	0.338	0.042	0.782
2/7/15 6:20	36	0.148	0.021	0.063	0.000	0.507	0.042	0.887
2/7/15 9:20	37	0.106	0.000	0.000	0.000	1.120	0.084	1.120
2/7/15 12:20	38	0.148	0.000	0.021	0.000	1.225	0.106	0.993
2/7/15 15:20	39	0.127	0.000	0.021	0.000	1.584	0.127	1.162
2/7/15 18:20	40	0.106	0.000	0.063	0.000	1.436	0.106	1.753
2/7/15 21:20	41	0.148	0.000	0.000	0.000	1.859	0.148	1.627
2/8/15 0:20	42	0.127	0.021	0.000	0.021	1.352	0.106	1.141
2/8/15 3:20	43	0.106	0.000	0.042	0.000	1.183	0.106	1.310
2/8/15 6:20	44	0.106	0.000	0.021	0.000	0.549	0.063	0.591
2/8/15 9:20	45	0.106	0.000	0.042	0.000	0.549	0.063	0.634
2/8/15 12:20	46	0.063	0.000	0.042	0.000	0.444	0.042	0.422
2/8/15 15:20	47	0.084	0.021	0.042	0.021	0.845	0.084	0.887
2/8/15 18:20	48	0.084	0.000	0.084	0.000	0.613	0.063	0.697
2/8/15 21:20	49	0.063	0.000	0.021	0.000	0.908	0.084	0.676
2/9/15 0:20	50	0.063	0.021	0.000	0.021	0.803	0.084	0.591
2/9/15 3:20	51	0.106	0.021	0.042	0.021	0.866	0.084	0.739
2/9/15 6:20	52	0.106	0.000	0.063	0.000	1.035	0.084	0.676
2/9/15 9:20	53	0.106	0.021	0.000	0.021	0.845	0.084	0.676
2/9/15 12:20	54	0.084	0.021	0.000	0.021	0.908	0.084	0.739
2/9/15 15:20	55	0.338	0.042	0.000	0.021	2.049	0.169	1.500
2/9/15 18:20	56	0.317	0.042	0.000	0.021	1.796	0.148	2.155
2/9/15 21:20	57	0.676	0.042	0.000	0.000	2.239	0.169	2.324
2/10/15 0:20	58	0.422	0.063	0.000	0.021	1.648	0.148	2.598
2/10/15 3:20	59	0.296	0.042	0.000	0.021	1.225	0.106	2.112
2/10/15 6:20	60	0.253	0.042	0.000	0.021	0.739	0.084	8.682
2/10/15 9:20	61	0.317	0.021	0.042	0.000	0.887	0.084	1.690
2/10/15 12:20	62	0.232	0.021	0.211	0.021	0.951	0.084	1.352

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Co Co_err Ni Ni_err Cu Cu_err Zn
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk

AveAll

0.465

MDL

0.107

MDL

2.347

MDL

2.475

0.530

0.021

0.098

0.021

2.594

0.021

2.897

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	
2/10/15 15:20	63	0.253	0.021	0.190	0.021	2.598	0.190	3.823
2/10/15 18:20	64	0.634	0.042	1.035	0.063	6.063	0.444	5.725
2/10/15 21:20	65	0.866	0.063	0.338	0.021	4.985	0.359	5.408
2/11/15 0:20	66	0.972	0.063	0.000	0.000	4.626	0.338	4.985
2/11/15 3:20	67	1.183	0.084	0.169	0.021	4.309	0.317	5.577
2/11/15 6:20	68	1.098	0.084	0.042	0.000	3.443	0.253	4.373
2/11/15 9:20	69	0.591	0.042	0.042	0.000	4.351	0.317	3.971
2/11/15 12:20	70	0.359	0.021	0.042	0.000	2.155	0.169	2.788
2/11/15 15:20	71	0.465	0.042	0.148	0.000	2.281	0.169	3.316
2/11/15 18:20	72	0.634	0.042	0.190	0.021	3.169	0.232	4.689
2/11/15 21:20	73	0.824	0.063	0.084	0.000	4.774	0.359	6.506
2/12/15 0:20	74	0.655	0.042	0.063	0.000	3.105	0.232	3.950
2/12/15 3:20	75	0.613	0.042	0.063	0.000	2.619	0.190	4.689
2/12/15 6:20	76	0.507	0.042	0.084	0.000	2.239	0.169	3.549
2/12/15 9:20	77	0.380	0.021	0.063	0.000	1.458	0.127	2.577
2/12/15 12:20	78	0.275	0.021	0.021	0.000	1.753	0.148	2.809
2/12/15 15:20	79	0.465	0.042	0.042	0.000	2.957	0.232	2.640
2/12/15 18:20	80	0.486	0.042	0.084	0.000	2.788	0.211	3.211
2/12/15 21:20	81	0.676	0.042	0.084	0.000	2.683	0.211	3.992
2/13/15 0:20	82	0.739	0.042	0.127	0.000	3.781	0.275	3.570
2/13/15 3:20	83	1.056	0.063	0.063	0.000	2.725	0.211	6.168
2/13/15 6:20	84	1.098	0.084	0.084	0.000	4.668	0.338	5.239
2/13/15 9:20	85	0.760	0.063	0.084	0.000	2.852	0.211	3.992
2/13/15 12:20	86	0.465	0.042	0.042	0.000	2.239	0.169	2.387
2/13/15 15:20	87	0.444	0.021	0.063	0.000	2.767	0.211	2.345
2/13/15 18:20	88	0.422	0.021	0.084	0.000	5.196	0.380	2.324
2/13/15 21:20	89	0.549	0.042	0.042	0.000	1.943	0.148	3.147

Stage 2

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err
0 ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Ave1stwk

MDL
0.021

0.591
0.427

MDL
0.021

1.137
1.171

MDL
0.021

AveAll

	ID#	Zn_err	Br	Br_err	Pb	Pb_err
2/3/15 18:20	8	0.169	0.021	0.000	1.394	0.106
2/3/15 21:20	9	0.317	0.000	0.000	4.457	0.317
2/4/15 0:20	10	0.380	0.000	0.000	6.274	0.444
2/4/15 3:20	11	0.422	0.000	0.000	4.183	0.296
2/4/15 6:20	12	0.338	0.000	0.000	4.394	0.317
2/4/15 9:20	13	0.697	0.021	0.000	2.852	0.190
2/4/15 12:20	14	0.275	0.000	0.000	2.387	0.169
2/4/15 15:20	15	0.317	0.106	0.000	3.147	0.211
2/4/15 18:20	16	0.338	0.106	0.000	2.704	0.190
2/4/15 21:20	17	0.232	0.148	0.021	1.648	0.106
2/5/15 0:20	18	0.169	0.444	0.021	0.972	0.063
2/5/15 3:20	19	0.148	0.486	0.042	0.380	0.021
2/5/15 6:20	20	0.190	0.655	0.042	0.000	0.000
2/5/15 9:20	21	0.169	0.338	0.021	1.436	0.106
2/5/15 12:20	22	0.169	0.190	0.021	0.887	0.063
2/5/15 15:20	23	0.253	0.190	0.021	2.155	0.148
2/5/15 18:20	24	0.253	0.232	0.021	2.936	0.211
2/5/15 21:20	25	0.296	0.169	0.021	3.063	0.211
2/6/15 0:20	26	0.253	0.106	0.000	2.070	0.148
2/6/15 3:20	27	0.275	0.106	0.000	2.662	0.190
2/6/15 6:20	28	0.317	0.000	0.000	1.901	0.127
2/6/15 9:20	29	0.253	0.253	0.021	1.880	0.127
2/6/15 12:20	30	0.232	0.275	0.021	1.331	0.084
2/6/15 15:20	31	0.169	0.232	0.021	1.310	0.084
2/6/15 18:20	32	0.127	0.275	0.021	1.225	0.084
2/6/15 21:20	33	0.106	0.275	0.021	0.317	0.021
2/7/15 0:20	34	0.063	0.317	0.021	0.507	0.042
2/7/15 3:20	35	0.084	0.275	0.021	0.444	0.042
2/7/15 6:20	36	0.084	0.296	0.021	0.380	0.021
2/7/15 9:20	37	0.106	0.359	0.021	0.528	0.042
2/7/15 12:20	38	0.106	0.422	0.021	0.465	0.042
2/7/15 15:20	39	0.106	0.338	0.021	0.317	0.021
2/7/15 18:20	40	0.148	0.211	0.021	0.190	0.021
2/7/15 21:20	41	0.148	0.190	0.021	0.676	0.042
2/8/15 0:20	42	0.106	0.084	0.063	0.000	0.359
2/8/15 3:20	43	0.127	0.127	0.000	0.296	0.021
2/8/15 6:20	44	0.063	0.211	0.021	0.084	0.000
2/8/15 9:20	45	0.063	0.253	0.021	0.253	0.021
2/8/15 12:20	46	0.063	0.106	0.000	0.042	0.000
2/8/15 15:20	47	0.106	0.359	0.084	0.000	0.359
2/8/15 18:20	48	0.084	0.591	0.042	0.106	0.000
2/8/15 21:20	49	0.063	0.972	0.063	0.338	0.021
2/9/15 0:20	50	0.084	1.584	0.148	0.000	0.338
2/9/15 3:20	51	0.084	4.647	0.359	0.000	0.359
2/9/15 6:20	52	0.063	1.141	0.084	0.465	0.042
2/9/15 9:20	53	0.084	2.007	0.169	0.000	0.359
2/9/15 12:20	54	0.084	3.147	0.253	0.000	0.359
2/9/15 15:20	55	0.148	3.084	0.253	0.000	0.401
2/9/15 18:20	56	0.190	2.028	0.169	0.000	0.401
2/9/15 21:20	57	0.190	2.302	0.169	0.465	0.042
2/10/15 0:20	58	0.211	0.803	0.106	0.000	0.401
2/10/15 3:20	59	0.190	1.458	0.148	0.000	0.422
2/10/15 6:20	60	0.634	0.317	0.084	0.000	0.401
2/10/15 9:20	61	0.148	0.359	0.021	0.591	0.042
2/10/15 12:20	62	0.127	0.211	0.021	0.634	0.042

Stage 2	7.89 L/m						
	1440 min/day						
Marks	11.3616 m3/day	ID#	Zn_err	Br	Br_err	Pb	Pb_err
	4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
3	6 mm						
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.591	MDL	1.137	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	0.427	0.021	1.171	0.021

ID#	Zn_err	Br	Br_err	Pb	Pb_err	
2/10/15 15:20	63	0.296	0.190	0.021	0.676	0.042
2/10/15 18:20	64	0.422	0.000	0.000	1.922	0.127
2/10/15 21:20	65	0.401	0.084	0.000	2.155	0.148
2/11/15 0:20	66	0.380	0.063	0.000	0.887	0.063
2/11/15 3:20	67	0.422	0.000	0.000	3.084	0.211
2/11/15 6:20	68	0.338	0.127	0.000	2.239	0.148
2/11/15 9:20	69	0.296	0.063	0.000	0.718	0.042
2/11/15 12:20	70	0.211	0.169	0.021	0.655	0.042
2/11/15 15:20	71	0.253	0.042	0.000	0.824	0.063
2/11/15 18:20	72	0.359	0.084	0.000	0.908	0.063
2/11/15 21:20	73	0.486	0.042	0.000	1.141	0.084
2/12/15 0:20	74	0.296	0.021	0.000	0.655	0.042
2/12/15 3:20	75	0.359	0.084	0.000	1.310	0.084
2/12/15 6:20	76	0.275	0.106	0.000	0.655	0.042
2/12/15 9:20	77	0.211	0.190	0.021	0.338	0.021
2/12/15 12:20	78	0.232	0.084	0.000	0.570	0.042
2/12/15 15:20	79	0.211	0.127	0.000	0.359	0.021
2/12/15 18:20	80	0.253	0.063	0.000	0.739	0.042
2/12/15 21:20	81	0.296	0.021	0.000	1.098	0.084
2/13/15 0:20	82	0.275	0.148	0.021	1.521	0.106
2/13/15 3:20	83	0.465	0.063	0.000	1.838	0.127
2/13/15 6:20	84	0.401	0.063	0.000	2.302	0.169
2/13/15 9:20	85	0.296	0.106	0.000	1.669	0.127
2/13/15 12:20	86	0.190	0.042	0.000	0.634	0.042
2/13/15 15:20	87	0.190	0.063	0.000	0.570	0.042
2/13/15 18:20	88	0.190	0.000	0.000	0.676	0.042
2/13/15 21:20	89	0.253	0.106	0.000	1.098	0.084

Stage 2	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		0
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/3/15 18:20	8	641.318
2/3/15 21:20	9	1357.309
2/4/15 0:20	10	1692.987
2/4/15 3:20	11	1881.855
2/4/15 6:20	12	1833.587
2/4/15 9:20	13	1617.681
2/4/15 12:20	14	1422.814
2/4/15 15:20	15	1655.619
2/4/15 18:20	16	1699.894
2/4/15 21:20	17	1559.147
2/5/15 0:20	18	1294.994
2/5/15 3:20	19	1306.379
2/5/15 6:20	20	1155.872
2/5/15 9:20	21	1125.264
2/5/15 12:20	22	1192.860
2/5/15 15:20	23	1505.154
2/5/15 18:20	24	1728.390
2/5/15 21:20	25	1861.872
2/6/15 0:20	26	1554.795
2/6/15 3:20	27	1609.696
2/6/15 6:20	28	1619.540
2/6/15 9:20	29	1562.041
2/6/15 12:20	30	1196.409
2/6/15 15:20	31	1099.218
2/6/15 18:20	32	950.380
2/6/15 21:20	33	650.760
2/7/15 0:20	34	456.696
2/7/15 3:20	35	482.869
2/7/15 6:20	36	417.807
2/7/15 9:20	37	439.755
2/7/15 12:20	38	382.869
2/7/15 15:20	39	411.893
2/7/15 18:20	40	316.561
2/7/15 21:20	41	251.077
2/8/15 0:20	42	150.127
2/8/15 3:20	43	153.612
2/8/15 6:20	44	164.808
2/8/15 9:20	45	209.527
2/8/15 12:20	46	298.331
2/8/15 15:20	47	560.963
2/8/15 18:20	48	709.252
2/8/15 21:20	49	468.652
2/9/15 0:20	50	791.952
2/9/15 3:20	51	1124.567
2/9/15 6:20	52	508.724
2/9/15 9:20	53	623.870
2/9/15 12:20	54	2011.998
2/9/15 15:20	55	876.278
2/9/15 18:20	56	2625.581
2/9/15 21:20	57	1332.636
2/10/15 0:20	58	2245.627
2/10/15 3:20	59	2847.866
2/10/15 6:20	60	1182.488
2/10/15 9:20	61	820.194
2/10/15 12:20	62	566.519

Stage 2	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		0
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/10/15 15:20	63	657.182
2/10/15 18:20	64	791.445
2/10/15 21:20	65	1009.379
2/11/15 0:20	66	897.592
2/11/15 3:20	67	1005.851
2/11/15 6:20	68	890.663
2/11/15 9:20	69	681.791
2/11/15 12:20	70	526.130
2/11/15 15:20	71	732.003
2/11/15 18:20	72	891.846
2/11/15 21:20	73	973.933
2/12/15 0:20	74	794.191
2/12/15 3:20	75	827.545
2/12/15 6:20	76	670.152
2/12/15 9:20	77	499.768
2/12/15 12:20	78	360.203
2/12/15 15:20	79	506.654
2/12/15 18:20	80	581.770
2/12/15 21:20	81	748.120
2/13/15 0:20	82	702.725
2/13/15 3:20	83	863.456
2/13/15 6:20	84	985.720
2/13/15 9:20	85	899.535
2/13/15 12:20	86	539.755
2/13/15 15:20	87	581.855
2/13/15 18:20	88	542.586
2/13/15 21:20	89	597.275

Stage 3

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Na

ng/cm^2

Na_err

ng/cm^2

Mg

ng/cm^2

Mg_err

ng/cm^2

Al

ng/cm^2

Al_err

ng/cm^2

Si

ng/cm^2

51.351

MDL

20.300

MDL

26.706

MDL

76.335

40.018

0.211

16.934

0.063

28.282

0.021

81.404

	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
2/3/15 18:20	8	14.512	1.373	2.028	0.190	10.942	0.887	29.130
2/3/15 21:20	9	11.428	1.077	20.300	1.859	49.979	4.056	131.031
2/4/15 0:20	10	3.802	0.507	23.131	2.112	71.039	5.767	182.003
2/4/15 3:20	11	10.245	0.972	19.561	1.774	60.139	4.880	169.793
2/4/15 6:20	12	7.626	0.739	15.378	1.394	44.106	3.570	136.439
2/4/15 9:20	13	8.323	0.803	14.174	1.289	35.340	2.873	110.815
2/4/15 12:20	14	4.520	0.465	11.597	1.056	56.189	4.563	137.136
2/4/15 15:20	15	1.183	0.211	16.181	1.479	74.567	6.041	182.214
2/4/15 18:20	16	13.561	1.310	44.318	4.035	107.098	8.682	275.201
2/4/15 21:20	17	13.815	1.331	39.332	3.570	89.227	7.245	249.092
2/5/15 0:20	18	27.144	2.556	21.589	1.965	28.982	2.345	81.728
2/5/15 3:20	19	66.181	6.168	11.998	1.098	12.632	1.035	36.882
2/5/15 6:20	20	60.224	5.619	8.830	0.803	9.865	0.803	32.129
2/5/15 9:20	21	37.621	3.507	11.005	0.993	16.477	1.331	48.373
2/5/15 12:20	22	50.697	4.732	10.245	0.929	24.039	1.943	66.012
2/5/15 15:20	23	46.177	4.309	21.589	1.965	33.904	2.746	95.754
2/5/15 18:20	24	66.413	6.189	26.785	2.429	58.069	4.711	162.041
2/5/15 21:20	25	31.897	9.463	13.414	3.042	41.614	3.570	107.985
2/6/15 0:20	26	50.697	10.139	10.456	2.788	30.397	2.683	81.812
2/6/15 3:20	27	39.523	3.697	10.520	0.972	34.833	2.831	98.437
2/6/15 6:20	28	59.992	5.598	9.168	0.845	38.255	3.105	107.900
2/6/15 9:20	29	51.901	4.837	9.780	0.887	39.776	3.232	107.816
2/6/15 12:20	30	34.052	3.190	20.849	1.901	44.339	3.591	116.202
2/6/15 15:20	31	63.561	5.936	24.419	2.218	65.758	5.344	160.604
2/6/15 18:20	32	49.514	4.626	34.136	3.105	84.537	6.865	201.500
2/6/15 21:20	33	38.572	3.612	18.272	1.669	51.415	4.183	122.793
2/7/15 0:20	34	20.701	1.943	9.569	0.887	30.820	2.493	81.179
2/7/15 3:20	35	44.043	4.098	4.732	0.422	21.293	1.732	59.316
2/7/15 6:20	36	50.465	4.711	2.218	0.211	16.540	1.352	52.704
2/7/15 9:20	37	43.557	4.077	3.845	0.359	20.110	1.627	60.435
2/7/15 12:20	38	60.942	5.682	7.562	0.697	21.060	1.711	62.822
2/7/15 15:20	39	115.927	15.167	19.033	3.507	13.899	1.542	53.232
2/7/15 18:20	40	67.131	6.253	19.561	1.774	9.442	0.760	37.220
2/7/15 21:20	41	55.936	5.218	13.012	1.183	8.534	0.697	33.354
2/8/15 0:20	42	17.617	1.648	3.908	0.359	4.415	0.359	20.173
2/8/15 3:20	43	20.469	1.922	0.000	0.063	3.021	0.253	8.555
2/8/15 6:20	44	11.196	1.056	0.127	0.063	5.365	0.444	15.484
2/8/15 9:20	45	24.525	2.281	5.260	0.486	12.125	0.993	29.911
2/8/15 12:20	46	8.576	0.824	3.908	0.359	14.871	1.204	34.537
2/8/15 15:20	47	51.648	4.816	4.795	0.444	8.640	0.697	27.123
2/8/15 18:20	48	48.796	4.563	15.251	1.394	2.049	0.169	15.822
2/8/15 21:20	49	173.067	16.117	33.059	3.000	0.042	0.042	14.237
2/9/15 0:20	50	98.542	9.189	58.619	5.323	0.000	0.042	14.132
2/9/15 3:20	51	29.278	2.746	100.106	9.104	0.000	0.042	9.294
2/9/15 6:20	52	14.280	1.352	39.523	3.591	0.000	0.042	10.034
2/9/15 9:20	53	59.506	5.556	41.762	3.802	0.000	0.042	12.822
2/9/15 12:20	54	83.080	7.752	25.771	2.345	0.275	0.042	10.182
2/9/15 15:20	55	3.105	0.465	51.669	4.711	0.000	0.042	13.752
2/9/15 18:20	56	233.756	25.222	32.573	4.415	1.183	0.972	15.758
2/9/15 21:20	57	126.891	11.829	23.954	2.176	8.766	0.718	45.078
2/10/15 0:20	58	0.000	0.380	84.052	7.647	9.696	0.782	43.726
2/10/15 3:20	59	152.345	18.800	26.785	4.119	5.640	1.141	35.277
2/10/15 6:20	60	178.538	16.624	8.640	0.803	11.850	0.972	40.959
2/10/15 9:20	61	69.751	6.506	3.570	0.338	11.428	0.929	36.375
2/10/15 12:20	62	56.189	5.239	5.387	0.507	11.872	0.972	38.213

Stage 3	7.89 L/m								
	1440 min/day	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
Marks	11.3616 m3/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	51.351	MDL	20.300	MDL	26.706	MDL	76.335
Marks	0.02112 cm2/m3	AveAll	40.018	0.211	16.934	0.063	28.282	0.021	81.404
	2/10/15 15:20	63	70.469	6.569	5.936	0.549	18.251	1.479	56.506
	2/10/15 18:20	64	21.187	2.007	14.428	1.310	30.292	2.450	91.213
	2/10/15 21:20	65	26.891	2.535	21.462	1.943	41.466	3.359	124.673
	2/11/15 0:20	66	11.196	1.098	18.019	1.648	39.142	3.169	117.765
	2/11/15 3:20	67	10.245	1.014	10.668	0.972	30.228	2.450	86.903
	2/11/15 6:20	68	17.131	1.648	8.154	0.760	28.834	2.345	81.221
	2/11/15 9:20	69	21.905	2.049	6.337	0.591	26.531	2.155	77.081
	2/11/15 12:20	70	32.615	3.042	8.302	0.760	29.299	2.387	89.438
	2/11/15 15:20	71	41.656	9.780	8.830	2.746	29.214	2.598	81.052
	2/11/15 18:20	72	21.673	2.028	14.026	1.289	43.071	3.485	122.476
	2/11/15 21:20	73	19.286	1.838	17.406	1.584	48.310	3.929	140.980
	2/12/15 0:20	74	18.568	1.732	11.597	1.056	38.614	3.126	104.246
	2/12/15 3:20	75	13.329	1.246	9.442	0.866	27.609	2.239	81.031
	2/12/15 6:20	76	9.041	0.866	2.091	0.190	23.954	1.943	77.207
	2/12/15 9:20	77	22.856	2.134	5.471	0.507	21.926	1.774	65.167
	2/12/15 12:20	78	11.893	1.120	3.443	0.317	22.898	1.859	64.871
	2/12/15 15:20	79	14.512	1.373	5.387	0.486	20.997	1.711	54.098
	2/12/15 18:20	80	11.428	1.077	6.485	0.591	27.588	2.239	73.659
	2/12/15 21:20	81	8.809	0.845	7.816	0.718	36.312	2.957	112.653
	2/13/15 0:20	82	22.138	2.070	11.259	1.035	32.594	2.640	95.691
	2/13/15 3:20	83	5.471	0.549	4.309	0.401	23.975	1.943	79.806
	2/13/15 6:20	84	17.850	1.669	15.040	1.373	36.460	2.957	111.555
	2/13/15 9:20	85	0.000	0.190	19.096	1.732	52.070	4.225	164.195
	2/13/15 12:20	86	10.245	0.972	9.717	0.887	24.144	1.965	69.328
	2/13/15 15:20	87	21.420	2.007	6.548	0.591	22.666	1.838	65.568
	2/13/15 18:20	88	9.041	0.866	12.886	1.183	33.312	2.704	99.197
	2/13/15 21:20	89	7.626	0.739	7.161	0.655	42.924	3.485	124.989

Stage 3

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

Si_err
ng/cm^2

P
ng/cm^2

P_err
ng/cm^2

S
ng/cm^2

S_err
ng/cm^2

Cl
ng/cm^2

Cl_err
ng/cm^2

MDL
0.021

2.999
3.434

MDL
0.148

27.533
23.083

MDL
0.042

92.816
64.911

MDL
0.021

ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
8	2.134	3.190	0.359	4.542	0.359	0.507	0.042
2/3/15 21:20	9	9.506	4.014	0.422	14.322	1.035	0.127
2/4/15 0:20	10	13.202	4.499	0.465	16.709	1.204	0.148
2/4/15 3:20	11	12.315	4.774	0.465	13.456	0.972	0.063
2/4/15 6:20	12	9.907	4.563	0.465	12.695	0.929	0.084
2/4/15 9:20	13	8.048	3.718	0.401	14.047	1.014	0.063
2/4/15 12:20	14	9.949	3.232	0.359	16.836	1.204	0.063
2/4/15 15:20	15	13.223	5.218	0.507	29.869	2.134	0.127
2/4/15 18:20	16	19.962	5.365	0.507	39.121	2.767	0.613
2/4/15 21:20	17	18.061	5.429	0.528	37.136	2.640	0.676
2/5/15 0:20	18	5.936	2.281	0.296	21.546	1.542	1.141
2/5/15 3:20	19	2.704	1.986	0.275	19.540	1.394	0.380
2/5/15 6:20	20	2.345	2.577	0.317	18.272	1.310	0.169
2/5/15 9:20	21	3.528	2.408	0.317	15.441	1.120	0.106
2/5/15 12:20	22	4.795	3.464	0.380	10.921	0.803	0.084
2/5/15 15:20	23	6.950	3.570	0.380	10.013	0.739	0.106
2/5/15 18:20	24	11.766	4.119	0.422	28.834	2.049	0.148
2/5/15 21:20	25	7.900	4.056	0.591	39.818	2.852	0.148
2/6/15 0:20	26	5.999	2.788	0.507	42.395	3.042	0.127
2/6/15 3:20	27	7.161	4.478	0.444	30.545	2.176	0.296
2/6/15 6:20	28	7.837	5.429	0.528	31.031	2.197	0.317
2/6/15 9:20	29	7.837	4.436	0.444	36.608	2.598	2.387
2/6/15 12:20	30	8.428	4.267	0.444	28.074	2.007	4.267
2/6/15 15:20	31	11.660	5.344	0.507	31.263	2.218	4.901
2/6/15 18:20	32	14.618	6.274	0.570	28.580	2.028	5.091
2/6/15 21:20	33	8.914	3.887	0.401	16.941	1.225	3.253
2/7/15 0:20	34	5.894	2.746	0.338	14.787	1.056	2.007
2/7/15 3:20	35	4.309	3.190	0.359	22.666	1.627	3.274
2/7/15 6:20	36	3.845	4.267	0.444	16.329	1.183	3.781
2/7/15 9:20	37	4.394	4.689	0.465	21.546	1.542	4.351
2/7/15 12:20	38	4.563	3.507	0.380	25.116	1.796	7.119
2/7/15 15:20	39	3.929	2.387	0.507	31.559	2.281	14.005
2/7/15 18:20	40	2.725	3.169	0.359	25.792	1.838	8.407
2/7/15 21:20	41	2.429	3.633	0.401	20.215	1.436	5.767
2/8/15 0:20	42	1.479	3.485	0.380	7.921	0.591	0.760
2/8/15 3:20	43	0.634	3.190	0.359	5.408	0.401	0.190
2/8/15 6:20	44	1.141	4.288	0.444	8.851	0.655	0.148
2/8/15 9:20	45	2.197	5.302	0.507	13.540	0.972	0.317
2/8/15 12:20	46	2.514	2.429	0.317	11.998	0.866	1.267
2/8/15 15:20	47	1.986	1.732	0.253	19.328	1.394	5.999
2/8/15 18:20	48	1.162	2.662	0.317	24.905	1.774	7.985
2/8/15 21:20	49	1.056	0.803	0.190	30.017	2.134	24.588
2/9/15 0:20	50	1.035	0.253	0.148	63.414	4.478	21.567
2/9/15 3:20	51	0.697	0.211	0.148	72.624	5.112	17.406
2/9/15 6:20	52	0.739	0.676	0.190	39.861	2.831	9.273
2/9/15 9:20	53	0.951	0.127	0.148	48.204	3.401	14.850
2/9/15 12:20	54	0.760	0.296	0.148	38.530	2.725	15.399
2/9/15 15:20	55	1.014	0.401	0.169	55.978	3.950	9.970
2/9/15 18:20	56	1.267	0.908	0.465	41.656	3.000	39.523
2/9/15 21:20	57	3.295	0.676	0.190	44.825	3.169	22.877
2/10/15 0:20	58	3.190	0.972	0.211	78.897	5.556	12.041
2/10/15 3:20	59	2.662	0.887	0.465	48.796	3.485	31.200
2/10/15 6:20	60	2.978	2.683	0.317	26.489	1.880	20.934
2/10/15 9:20	61	2.662	1.796	0.253	14.850	1.077	9.442
2/10/15 12:20	62	2.788	1.521	0.253	13.371	0.972	9.442

Stage 3	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	Si_err ng/cm^2	P ng/cm^2	P_err ng/cm^2	S ng/cm^2	S_err ng/cm^2	Cl ng/cm^2	Cl_err ng/cm^2
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	2.999	MDL	27.533	MDL	92.816	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	3.434	0.148	23.083	0.042	64.911	0.021

ID#	Si_err ng/cm^2	P ng/cm^2	P_err ng/cm^2	S ng/cm^2	S_err ng/cm^2	Cl ng/cm^2	Cl_err ng/cm^2
2/10/15 15:20	63	4.119	1.880	0.275	22.856	1.627	131.052
2/10/15 18:20	64	6.633	2.049	0.275	17.343	1.246	56.929
2/10/15 21:20	65	9.041	2.957	0.338	24.461	1.753	58.851
2/11/15 0:20	66	8.555	3.021	0.359	22.962	1.648	50.401
2/11/15 3:20	67	6.316	3.929	0.422	21.736	1.563	17.575
2/11/15 6:20	68	5.915	3.992	0.422	18.103	1.289	6.823
2/11/15 9:20	69	5.598	3.380	0.380	17.195	1.225	3.485
2/11/15 12:20	70	6.506	3.401	0.380	15.505	1.120	2.915
2/11/15 15:20	71	5.936	3.105	0.528	21.969	1.605	3.295
2/11/15 18:20	72	8.893	4.795	0.486	21.187	1.521	2.831
2/11/15 21:20	73	10.224	5.218	0.507	18.716	1.352	3.021
2/12/15 0:20	74	7.562	4.077	0.422	13.752	0.993	2.345
2/12/15 3:20	75	5.894	4.225	0.444	12.294	0.887	1.711
2/12/15 6:20	76	5.619	4.035	0.422	13.245	0.951	1.669
2/12/15 9:20	77	4.732	3.887	0.401	8.259	0.613	1.922
2/12/15 12:20	78	4.711	3.950	0.422	8.407	0.613	1.542
2/12/15 15:20	79	3.929	3.739	0.401	7.943	0.591	2.155
2/12/15 18:20	80	5.365	3.739	0.401	8.090	0.591	1.901
2/12/15 21:20	81	8.175	4.668	0.465	11.555	0.845	2.535
2/13/15 0:20	82	6.950	5.999	0.570	10.287	0.760	2.429
2/13/15 3:20	83	5.809	5.788	0.549	9.083	0.676	2.345
2/13/15 6:20	84	8.112	6.337	0.591	10.858	0.782	2.767
2/13/15 9:20	85	11.914	4.901	0.486	16.054	1.162	2.978
2/13/15 12:20	86	5.049	4.520	0.465	10.266	0.739	1.120
2/13/15 15:20	87	4.774	5.344	0.507	9.992	0.739	1.458
2/13/15 18:20	88	7.203	5.767	0.549	12.400	0.908	1.627
2/13/15 21:20	89	9.083	4.626	0.465	12.273	0.887	1.796

Stage 3

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

K

ng/cm^2

K_err

ng/cm^2

Ca

ng/cm^2

Ca_err

ng/cm^2

Ti

ng/cm^2

Ti_err

ng/cm^2

V

ng/cm^2

17.788

MDL

27.061

MDL

4.324

MDL

0.282

16.689

0.021

26.918

0.021

4.707

0.021

0.307

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/3/15 18:20	8	3.401	0.232	8.787	0.634	2.387	0.169
2/3/15 21:20	9	14.322	1.014	33.016	2.345	8.450	0.613
2/4/15 0:20	10	20.342	1.436	38.382	2.725	10.794	0.760
2/4/15 3:20	11	17.596	1.225	31.200	2.218	7.816	0.549
2/4/15 6:20	12	13.245	0.929	23.553	1.669	6.084	0.444
2/4/15 9:20	13	10.942	0.760	25.180	1.796	6.443	0.465
2/4/15 12:20	14	19.920	1.394	36.185	2.556	6.443	0.465
2/4/15 15:20	15	27.207	1.901	60.351	4.267	7.330	0.528
2/4/15 18:20	16	38.128	2.683	90.938	6.401	12.188	0.866
2/4/15 21:20	17	31.390	2.197	85.720	6.041	14.660	1.035
2/5/15 0:20	18	16.096	1.120	42.248	2.978	4.858	0.359
2/5/15 3:20	19	11.196	0.782	17.110	1.225	2.978	0.211
2/5/15 6:20	20	9.696	0.676	13.984	1.014	2.429	0.190
2/5/15 9:20	21	9.632	0.676	19.371	1.373	3.042	0.232
2/5/15 12:20	22	11.259	0.782	18.906	1.352	3.845	0.275
2/5/15 15:20	23	15.864	1.120	25.518	1.817	6.063	0.444
2/5/15 18:20	24	21.060	1.479	44.233	3.126	7.499	0.528
2/5/15 21:20	25	16.223	1.141	45.332	3.211	6.485	0.465
2/6/15 0:20	26	14.913	1.056	41.466	2.936	5.387	0.401
2/6/15 3:20	27	19.962	1.394	32.911	2.324	5.830	0.422
2/6/15 6:20	28	23.828	1.669	37.790	2.683	5.915	0.422
2/6/15 9:20	29	23.426	1.648	47.592	3.359	5.936	0.422
2/6/15 12:20	30	26.236	1.838	40.663	2.873	5.323	0.380
2/6/15 15:20	31	33.840	2.366	51.267	3.612	6.189	0.444
2/6/15 18:20	32	41.360	2.894	49.049	3.464	7.436	0.528
2/6/15 21:20	33	26.236	1.838	30.798	2.176	4.415	0.317
2/7/15 0:20	34	17.258	1.204	24.292	1.732	3.147	0.232
2/7/15 3:20	35	15.801	1.098	24.947	1.774	2.281	0.169
2/7/15 6:20	36	16.730	1.183	15.209	1.098	2.028	0.148
2/7/15 9:20	37	17.871	1.246	23.363	1.669	4.014	0.296
2/7/15 12:20	38	16.477	1.162	25.708	1.838	3.147	0.232
2/7/15 15:20	39	19.941	1.415	22.349	1.605	5.091	0.380
2/7/15 18:20	40	14.090	0.993	18.124	1.289	3.760	0.275
2/7/15 21:20	41	11.153	0.782	15.801	1.141	4.267	0.317
2/8/15 0:20	42	5.894	0.422	7.710	0.570	2.852	0.211
2/8/15 3:20	43	3.316	0.232	5.408	0.401	1.458	0.106
2/8/15 6:20	44	5.450	0.380	5.091	0.380	1.141	0.084
2/8/15 9:20	45	9.717	0.676	9.273	0.676	1.922	0.148
2/8/15 12:20	46	8.640	0.613	8.069	0.591	1.753	0.127
2/8/15 15:20	47	9.104	0.634	9.231	0.676	2.471	0.190
2/8/15 18:20	48	9.759	0.676	9.611	0.697	2.725	0.211
2/8/15 21:20	49	9.654	0.676	7.858	0.570	1.796	0.127
2/9/15 0:20	50	28.792	2.028	10.879	0.782	1.077	0.084
2/9/15 3:20	51	21.863	1.542	17.828	1.267	0.803	0.063
2/9/15 6:20	52	12.674	0.887	17.174	1.225	1.246	0.106
2/9/15 9:20	53	29.341	2.049	5.788	0.422	1.479	0.106
2/9/15 12:20	54	12.717	0.887	10.837	0.782	1.500	0.106
2/9/15 15:20	55	24.144	1.690	15.674	1.120	2.281	0.169
2/9/15 18:20	56	15.019	1.056	17.005	1.225	2.239	0.169
2/9/15 21:20	57	17.533	1.225	25.032	1.774	3.190	0.232
2/10/15 0:20	58	36.185	2.535	39.058	2.767	2.450	0.190
2/10/15 3:20	59	19.096	1.352	26.764	1.901	1.880	0.148
2/10/15 6:20	60	15.779	1.098	19.054	1.352	1.352	0.106
2/10/15 9:20	61	10.372	0.718	15.188	1.098	1.204	0.084
2/10/15 12:20	62	11.893	0.824	13.836	0.993	1.077	0.084

Stage 3	7.89 L/m 1440 min/day	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
Marks	11.3616 m3/day 4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	17.788	MDL	27.061	MDL	4.324	MDL	0.282
Marks	0.02112 cm2/m3	AveAll	16.689	0.021	26.918	0.021	4.707	0.021	0.307
2/10/15 15:20	63	13.392	0.929	22.919	1.627	4.119	0.296	0.127	
2/10/15 18:20	64	15.378	1.077	29.447	2.091	6.126	0.444	0.338	
2/10/15 21:20	65	21.525	1.500	47.169	3.338	10.858	0.782	0.845	
2/11/15 0:20	66	18.166	1.267	38.847	2.746	10.097	0.718	0.803	
2/11/15 3:20	67	14.512	1.014	29.278	2.070	8.090	0.570	0.718	
2/11/15 6:20	68	13.477	0.951	24.250	1.732	6.295	0.444	0.486	
2/11/15 9:20	69	13.498	0.951	26.848	1.901	5.450	0.401	0.359	
2/11/15 12:20	70	15.125	1.056	27.841	1.986	4.880	0.359	0.275	
2/11/15 15:20	71	16.878	1.183	39.332	2.788	5.936	0.422	0.296	
2/11/15 18:20	72	18.927	1.331	44.001	3.105	6.738	0.486	0.422	
2/11/15 21:20	73	19.687	1.373	44.994	3.190	8.133	0.591	0.486	
2/12/15 0:20	74	17.195	1.204	27.207	1.922	6.738	0.486	0.359	
2/12/15 3:20	75	13.942	0.972	19.962	1.415	3.802	0.275	0.232	
2/12/15 6:20	76	12.738	0.887	16.751	1.204	2.915	0.211	0.148	
2/12/15 9:20	77	10.752	0.760	16.962	1.204	3.443	0.253	0.211	
2/12/15 12:20	78	10.625	0.739	19.603	1.394	2.450	0.190	0.127	
2/12/15 15:20	79	10.879	0.760	21.018	1.500	2.746	0.211	0.148	
2/12/15 18:20	80	11.935	0.845	22.940	1.627	5.281	0.380	0.232	
2/12/15 21:20	81	16.962	1.183	29.848	2.112	7.583	0.549	0.570	
2/13/15 0:20	82	14.449	1.014	23.722	1.690	5.070	0.359	0.317	
2/13/15 3:20	83	12.548	0.887	17.955	1.289	3.950	0.296	0.232	
2/13/15 6:20	84	16.308	1.141	23.722	1.690	4.499	0.317	0.275	
2/13/15 9:20	85	19.371	1.352	35.932	2.535	8.259	0.591	0.570	
2/13/15 12:20	86	11.491	0.803	18.166	1.289	4.711	0.338	0.359	
2/13/15 15:20	87	12.780	0.887	22.053	1.563	4.753	0.338	0.296	
2/13/15 18:20	88	14.280	0.993	29.256	2.070	5.598	0.401	0.380	
2/13/15 21:20	89	18.124	1.267	29.510	2.091	5.619	0.401	0.338	

Stage 3

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID# V_err Cr Cr_err Mn Mn_err Fe Fe_err
ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk AveAll

MDL 0.021

0.199 0.290

MDL 0.021

0.820 0.950

MDL 0.021

58.238 72.095

MDL 0.021

ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/3/15 18:20	8	0.021	0.106	0.000	0.444	0.021	38.255	2.683
2/3/15 21:20	9	0.042	0.993	0.063	1.838	0.127	157.288	11.069
2/4/15 0:20	10	0.063	0.929	0.063	2.471	0.169	209.780	14.744
2/4/15 3:20	11	0.042	0.528	0.042	1.943	0.127	153.316	10.773
2/4/15 6:20	12	0.021	0.444	0.021	1.331	0.084	104.584	7.351
2/4/15 9:20	13	0.021	0.275	0.021	1.141	0.084	86.417	6.084
2/4/15 12:20	14	0.021	0.253	0.021	1.162	0.084	73.870	5.196
2/4/15 15:20	15	0.021	0.253	0.021	1.458	0.106	89.058	6.274
2/4/15 18:20	16	0.063	0.676	0.042	2.683	0.190	167.174	11.766
2/4/15 21:20	17	0.063	0.824	0.063	2.281	0.169	155.915	10.963
2/5/15 0:20	18	0.021	0.127	0.000	0.866	0.063	59.823	4.204
2/5/15 3:20	19	0.000	0.021	0.000	0.275	0.021	31.010	2.176
2/5/15 6:20	20	0.021	0.148	0.021	0.528	0.042	38.931	2.746
2/5/15 9:20	21	0.021	0.106	0.000	0.613	0.042	57.605	4.056
2/5/15 12:20	22	0.021	0.169	0.021	0.718	0.042	58.809	4.140
2/5/15 15:20	23	0.021	0.169	0.021	1.120	0.084	65.526	4.605
2/5/15 18:20	24	0.042	0.359	0.021	1.458	0.106	88.952	6.253
2/5/15 21:20	25	0.042	0.190	0.021	1.120	0.084	73.659	5.175
2/6/15 0:20	26	0.042	0.169	0.021	0.760	0.063	56.020	3.950
2/6/15 3:20	27	0.021	0.190	0.021	0.929	0.063	68.652	4.837
2/6/15 6:20	28	0.021	0.380	0.021	1.120	0.084	80.524	5.661
2/6/15 9:20	29	0.021	0.148	0.000	1.225	0.084	73.236	5.154
2/6/15 12:20	30	0.021	0.127	0.000	1.458	0.106	63.012	4.436
2/6/15 15:20	31	0.021	0.190	0.021	1.605	0.106	70.891	4.985
2/6/15 18:20	32	0.021	0.253	0.021	1.774	0.127	81.622	5.746
2/6/15 21:20	33	0.021	0.106	0.000	1.120	0.084	48.352	3.401
2/7/15 0:20	34	0.000	0.063	0.000	0.718	0.042	31.115	2.197
2/7/15 3:20	35	0.000	0.063	0.000	0.528	0.042	28.559	2.007
2/7/15 6:20	36	0.000	0.063	0.000	0.465	0.042	28.158	1.986
2/7/15 9:20	37	0.021	0.063	0.000	0.486	0.042	33.671	2.366
2/7/15 12:20	38	0.021	0.063	0.000	0.591	0.042	31.812	2.239
2/7/15 15:20	39	0.042	0.042	0.021	0.465	0.042	36.671	2.577
2/7/15 18:20	40	0.021	0.084	0.000	0.422	0.021	39.354	2.767
2/7/15 21:20	41	0.021	0.106	0.000	0.465	0.042	44.191	3.105
2/8/15 0:20	42	0.021	0.063	0.000	0.317	0.021	28.074	1.965
2/8/15 3:20	43	0.000	0.021	0.000	0.253	0.021	21.652	1.521
2/8/15 6:20	44	0.000	0.042	0.000	0.253	0.021	17.913	1.267
2/8/15 9:20	45	0.000	0.084	0.000	0.359	0.021	20.406	1.436
2/8/15 12:20	46	0.000	0.084	0.000	0.359	0.021	21.546	1.521
2/8/15 15:20	47	0.021	0.084	0.000	0.359	0.021	23.490	1.648
2/8/15 18:20	48	0.021	0.148	0.000	0.317	0.021	33.185	2.345
2/8/15 21:20	49	0.000	0.063	0.000	0.148	0.000	19.349	1.352
2/9/15 0:20	50	0.000	0.021	0.000	0.148	0.000	14.639	1.035
2/9/15 3:20	51	0.000	0.000	0.000	0.106	0.000	11.555	0.803
2/9/15 6:20	52	0.000	0.021	0.000	0.106	0.000	14.956	1.056
2/9/15 9:20	53	0.000	0.000	0.000	0.148	0.021	20.638	1.458
2/9/15 12:20	54	0.000	0.042	0.000	0.317	0.021	22.455	1.584
2/9/15 15:20	55	0.021	0.042	0.000	0.253	0.021	31.707	2.239
2/9/15 18:20	56	0.042	0.063	0.021	0.253	0.021	30.376	2.134
2/9/15 21:20	57	0.021	0.190	0.021	0.591	0.042	60.815	4.267
2/10/15 0:20	58	0.000	0.275	0.021	0.760	0.063	80.482	5.661
2/10/15 3:20	59	0.021	0.084	0.021	0.507	0.042	40.389	2.852
2/10/15 6:20	60	0.000	0.042	0.000	0.338	0.021	22.095	1.563
2/10/15 9:20	61	0.000	0.042	0.000	0.296	0.021	22.560	1.584
2/10/15 12:20	62	0.000	0.169	0.021	0.401	0.021	22.264	1.563

Stage 3	7.89 L/m 1440 min/day	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
Marks	11.3616 m3/day 4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
3	6 mm	Ave1stwk	MDL	0.199	MDL	0.820	MDL	58.238	MDL
2/3/2015 18:20	0.24 cm2/day	AveAll	0.021	0.290	0.021	0.950	0.021	72.095	0.021
Marks	0.02112 cm2/m3								
2/10/15 15:20	63	0.000	0.211	0.021	0.591	0.042	36.143	2.535	
2/10/15 18:20	64	0.021	0.613	0.042	1.183	0.084	102.662	7.224	
2/10/15 21:20	65	0.063	1.141	0.084	2.281	0.169	211.681	14.892	
2/11/15 0:20	66	0.063	1.415	0.106	2.598	0.190	266.012	18.716	
2/11/15 3:20	67	0.042	1.014	0.063	2.007	0.148	209.738	14.744	
2/11/15 6:20	68	0.042	0.760	0.063	2.007	0.148	189.058	13.308	
2/11/15 9:20	69	0.021	0.401	0.021	0.908	0.063	86.650	6.105	
2/11/15 12:20	70	0.021	0.211	0.021	0.951	0.063	58.956	4.140	
2/11/15 15:20	71	0.042	0.211	0.021	0.824	0.063	59.696	4.204	
2/11/15 18:20	72	0.021	0.760	0.063	1.120	0.084	99.979	7.034	
2/11/15 21:20	73	0.042	0.591	0.042	1.542	0.106	128.433	9.041	
2/12/15 0:20	74	0.021	0.465	0.042	1.246	0.084	107.774	7.583	
2/12/15 3:20	75	0.021	0.211	0.021	0.866	0.063	67.892	4.774	
2/12/15 6:20	76	0.000	0.232	0.021	0.782	0.063	49.514	3.485	
2/12/15 9:20	77	0.021	0.591	0.042	0.760	0.063	46.937	3.295	
2/12/15 12:20	78	0.000	0.106	0.000	0.549	0.042	37.452	2.640	
2/12/15 15:20	79	0.000	0.148	0.000	0.591	0.042	33.946	2.387	
2/12/15 18:20	80	0.021	0.338	0.021	0.908	0.063	65.505	4.605	
2/12/15 21:20	81	0.042	0.422	0.021	1.436	0.106	109.506	7.710	
2/13/15 0:20	82	0.021	0.549	0.042	1.289	0.084	105.175	7.393	
2/13/15 3:20	83	0.021	0.549	0.042	1.500	0.106	137.537	9.675	
2/13/15 6:20	84	0.021	0.570	0.042	1.817	0.127	160.646	11.301	
2/13/15 9:20	85	0.042	0.887	0.063	2.155	0.148	169.835	11.935	
2/13/15 12:20	86	0.021	0.211	0.021	0.972	0.063	72.624	5.112	
2/13/15 15:20	87	0.021	0.169	0.021	0.718	0.042	54.225	3.823	
2/13/15 18:20	88	0.021	0.232	0.021	1.077	0.084	62.548	4.394	
2/13/15 21:20	89	0.021	0.507	0.042	1.056	0.084	75.285	5.302	

Stage 3

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Co

ng/cm^2

Co_err

ng/cm^2

Ni

ng/cm^2

Ni_err

ng/cm^2

Cu

ng/cm^2

Cu_err

ng/cm^2

Zn

ng/cm^2

0.272

MDL

0.049

MDL

2.209

MDL

1.046

0.344

0.021

0.045

0.021

2.467

0.021

1.228

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/3/15 18:20	8	0.211	0.021	0.042	0.000	1.627	0.127	0.739
2/3/15 21:20	9	0.782	0.063	0.021	0.000	5.154	0.380	2.070
2/4/15 0:20	10	1.035	0.063	0.084	0.000	5.894	0.422	2.788
2/4/15 3:20	11	0.718	0.042	0.000	0.000	2.746	0.211	1.331
2/4/15 6:20	12	0.570	0.042	0.063	0.000	2.049	0.169	1.415
2/4/15 9:20	13	0.401	0.021	0.021	0.000	1.986	0.148	1.225
2/4/15 12:20	14	0.338	0.021	0.042	0.000	2.218	0.169	1.204
2/4/15 15:20	15	0.380	0.021	0.063	0.000	2.471	0.190	1.732
2/4/15 18:20	16	0.739	0.042	0.042	0.000	4.943	0.359	2.725
2/4/15 21:20	17	0.655	0.042	0.148	0.000	5.260	0.380	2.324
2/5/15 0:20	18	0.275	0.021	0.021	0.000	2.598	0.211	0.993
2/5/15 3:20	19	0.127	0.000	0.063	0.000	0.908	0.084	0.528
2/5/15 6:20	20	0.232	0.021	0.063	0.000	1.669	0.127	0.760
2/5/15 9:20	21	0.296	0.021	0.042	0.000	2.197	0.169	0.760
2/5/15 12:20	22	0.296	0.021	0.042	0.000	2.366	0.190	0.972
2/5/15 15:20	23	0.275	0.021	0.042	0.000	3.443	0.253	1.394
2/5/15 18:20	24	0.465	0.042	0.106	0.000	4.330	0.317	1.711
2/5/15 21:20	25	0.317	0.042	0.000	0.021	3.866	0.296	1.458
2/6/15 0:20	26	0.253	0.042	0.042	0.021	2.767	0.211	1.204
2/6/15 3:20	27	0.296	0.021	0.000	0.000	2.873	0.211	1.289
2/6/15 6:20	28	0.338	0.021	0.042	0.000	3.401	0.253	1.479
2/6/15 9:20	29	0.296	0.021	0.021	0.000	2.260	0.169	1.373
2/6/15 12:20	30	0.275	0.021	0.063	0.000	1.965	0.148	1.394
2/6/15 15:20	31	0.296	0.021	0.106	0.000	1.711	0.148	1.500
2/6/15 18:20	32	0.401	0.021	0.127	0.000	1.521	0.127	1.500
2/6/15 21:20	33	0.211	0.021	0.084	0.000	1.077	0.084	0.929
2/7/15 0:20	34	0.148	0.021	0.021	0.000	0.739	0.063	0.676
2/7/15 3:20	35	0.148	0.000	0.042	0.000	0.824	0.084	0.528
2/7/15 6:20	36	0.148	0.021	0.021	0.000	0.655	0.063	0.444
2/7/15 9:20	37	0.148	0.021	0.021	0.000	1.225	0.106	0.760
2/7/15 12:20	38	0.169	0.021	0.021	0.000	1.690	0.127	0.782
2/7/15 15:20	39	0.169	0.042	0.000	0.021	2.324	0.190	0.993
2/7/15 18:20	40	0.148	0.021	0.021	0.000	3.485	0.253	1.225
2/7/15 21:20	41	0.148	0.021	0.000	0.000	4.161	0.317	1.183
2/8/15 0:20	42	0.106	0.000	0.021	0.000	2.598	0.211	0.782
2/8/15 3:20	43	0.106	0.000	0.021	0.000	1.267	0.106	0.465
2/8/15 6:20	44	0.106	0.000	0.042	0.000	0.824	0.084	0.507
2/8/15 9:20	45	0.106	0.000	0.063	0.000	0.697	0.063	0.613
2/8/15 12:20	46	0.127	0.000	0.063	0.000	0.993	0.084	0.486
2/8/15 15:20	47	0.127	0.000	0.063	0.000	1.458	0.127	0.697
2/8/15 18:20	48	0.211	0.021	0.042	0.000	2.134	0.169	1.014
2/8/15 21:20	49	0.106	0.000	0.063	0.000	2.725	0.211	0.380
2/9/15 0:20	50	0.106	0.000	0.063	0.000	0.972	0.084	0.317
2/9/15 3:20	51	0.063	0.000	0.063	0.000	0.782	0.063	0.317
2/9/15 6:20	52	0.084	0.000	0.042	0.000	0.676	0.063	0.359
2/9/15 9:20	53	0.106	0.000	0.063	0.000	1.183	0.106	0.486
2/9/15 12:20	54	0.106	0.000	0.042	0.000	1.141	0.106	0.465
2/9/15 15:20	55	0.169	0.021	0.000	0.000	1.584	0.127	0.465
2/9/15 18:20	56	0.148	0.021	0.084	0.021	2.070	0.169	0.655
2/9/15 21:20	57	0.275	0.021	0.000	0.000	1.922	0.148	0.803
2/10/15 0:20	58	0.401	0.021	0.000	0.000	2.683	0.211	0.929
2/10/15 3:20	59	0.169	0.042	0.000	0.021	1.077	0.106	0.570
2/10/15 6:20	60	0.127	0.000	0.042	0.000	0.634	0.063	0.338
2/10/15 9:20	61	0.084	0.000	0.021	0.000	0.613	0.063	0.338
2/10/15 12:20	62	0.084	0.000	0.063	0.000	0.655	0.063	0.338

Stage 3	7.89 L/m 1440 min/day	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
Marks	11.3616 m3/day 4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	0.272	MDL	0.049	MDL	2.209	MDL	1.046
Marks	0.02112 cm2/m3	AveAll	0.344	0.021	0.045	0.021	2.467	0.021	1.228
	2/10/15 15:20	63	0.253	0.021	0.127	0.000	1.077	0.084	0.824
	2/10/15 18:20	64	0.444	0.021	0.232	0.021	3.823	0.296	2.345
	2/10/15 21:20	65	0.908	0.063	0.042	0.000	8.513	0.613	3.507
	2/11/15 0:20	66	1.331	0.084	0.000	0.000	8.471	0.613	3.739
	2/11/15 3:20	67	0.972	0.063	0.000	0.000	5.429	0.401	2.556
	2/11/15 6:20	68	0.951	0.063	0.042	0.000	3.485	0.253	1.669
	2/11/15 9:20	69	0.422	0.021	0.000	0.000	2.577	0.190	1.394
	2/11/15 12:20	70	0.253	0.021	0.063	0.000	2.450	0.190	1.415
	2/11/15 15:20	71	0.275	0.042	0.042	0.021	2.619	0.211	1.352
	2/11/15 18:20	72	0.486	0.042	0.063	0.000	3.126	0.232	2.049
	2/11/15 21:20	73	0.613	0.042	0.000	0.000	4.816	0.359	2.324
	2/12/15 0:20	74	0.591	0.042	0.063	0.000	3.063	0.232	1.880
	2/12/15 3:20	75	0.338	0.021	0.084	0.000	1.817	0.148	1.204
	2/12/15 6:20	76	0.253	0.021	0.127	0.000	0.803	0.084	0.866
	2/12/15 9:20	77	0.253	0.021	0.042	0.000	1.183	0.106	0.908
	2/12/15 12:20	78	0.169	0.021	0.021	0.000	0.866	0.084	1.056
	2/12/15 15:20	79	0.169	0.021	0.042	0.000	1.014	0.084	0.845
	2/12/15 18:20	80	0.296	0.021	0.021	0.000	1.774	0.148	1.120
	2/12/15 21:20	81	0.549	0.042	0.000	0.000	6.548	0.486	1.774
	2/13/15 0:20	82	0.528	0.042	0.042	0.000	4.014	0.296	1.774
	2/13/15 3:20	83	0.634	0.042	0.063	0.000	2.302	0.190	1.246
	2/13/15 6:20	84	0.845	0.063	0.021	0.000	1.711	0.148	1.774
	2/13/15 9:20	85	0.782	0.063	0.021	0.000	3.105	0.232	2.450
	2/13/15 12:20	86	0.338	0.021	0.021	0.000	2.683	0.211	1.563
	2/13/15 15:20	87	0.275	0.021	0.000	0.000	2.831	0.211	1.035
	2/13/15 18:20	88	0.338	0.021	0.042	0.000	2.577	0.190	1.458
	2/13/15 21:20	89	0.296	0.021	0.063	0.000	2.514	0.190	1.880

Stage 3

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Zn_err
ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

MDL
0.210

0.262

MDL
0.021

0.542

MDL
0.021

0.664

0.021

ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2	
2/3/15 18:20	8	0.084	0.106	0.000	0.380	0.021
2/3/15 21:20	9	0.169	0.063	0.000	1.859	0.127
2/4/15 0:20	10	0.211	0.042	0.000	1.901	0.127
2/4/15 3:20	11	0.127	0.084	0.000	1.225	0.084
2/4/15 6:20	12	0.127	0.084	0.000	1.056	0.084
2/4/15 9:20	13	0.106	0.063	0.000	0.591	0.042
2/4/15 12:20	14	0.106	0.106	0.000	0.317	0.021
2/4/15 15:20	15	0.148	0.127	0.000	0.866	0.063
2/4/15 18:20	16	0.211	0.000	0.000	1.204	0.084
2/4/15 21:20	17	0.190	0.021	0.000	2.324	0.169
2/5/15 0:20	18	0.084	0.148	0.000	0.824	0.063
2/5/15 3:20	19	0.063	0.127	0.000	0.021	0.000
2/5/15 6:20	20	0.084	0.148	0.021	0.042	0.000
2/5/15 9:20	21	0.084	0.148	0.021	0.296	0.021
2/5/15 12:20	22	0.084	0.127	0.000	0.211	0.021
2/5/15 15:20	23	0.127	0.232	0.021	0.760	0.063
2/5/15 18:20	24	0.148	0.084	0.000	1.098	0.084
2/5/15 21:20	25	0.127	0.169	0.084	0.570	0.401
2/6/15 0:20	26	0.106	0.148	0.084	0.507	0.380
2/6/15 3:20	27	0.106	0.084	0.000	1.331	0.084
2/6/15 6:20	28	0.127	0.190	0.021	0.887	0.063
2/6/15 9:20	29	0.127	0.169	0.021	0.444	0.021
2/6/15 12:20	30	0.127	0.190	0.021	0.359	0.021
2/6/15 15:20	31	0.127	0.232	0.021	0.718	0.042
2/6/15 18:20	32	0.127	0.253	0.021	0.676	0.042
2/6/15 21:20	33	0.084	0.275	0.021	0.718	0.042
2/7/15 0:20	34	0.063	0.169	0.021	0.296	0.021
2/7/15 3:20	35	0.063	0.190	0.021	0.253	0.021
2/7/15 6:20	36	0.063	0.253	0.021	0.063	0.000
2/7/15 9:20	37	0.084	0.211	0.021	0.697	0.042
2/7/15 12:20	38	0.084	0.338	0.021	0.380	0.021
2/7/15 15:20	39	0.106	0.465	0.084	0.000	0.359
2/7/15 18:20	40	0.106	0.296	0.021	0.190	0.021
2/7/15 21:20	41	0.106	0.148	0.021	0.253	0.021
2/8/15 0:20	42	0.084	0.042	0.000	0.000	0.000
2/8/15 3:20	43	0.063	0.106	0.000	0.317	0.021
2/8/15 6:20	44	0.063	0.127	0.000	0.528	0.042
2/8/15 9:20	45	0.063	0.232	0.021	0.317	0.021
2/8/15 12:20	46	0.063	0.127	0.000	0.084	0.000
2/8/15 15:20	47	0.063	0.232	0.021	0.232	0.021
2/8/15 18:20	48	0.106	0.275	0.021	0.000	0.000
2/8/15 21:20	49	0.042	0.613	0.042	0.338	0.021
2/9/15 0:20	50	0.042	0.972	0.063	0.211	0.021
2/9/15 3:20	51	0.042	1.267	0.084	0.275	0.021
2/9/15 6:20	52	0.042	0.739	0.042	0.317	0.021
2/9/15 9:20	53	0.063	0.782	0.063	0.000	0.000
2/9/15 12:20	54	0.063	0.401	0.021	0.380	0.021
2/9/15 15:20	55	0.063	0.718	0.042	0.422	0.021
2/9/15 18:20	56	0.084	0.549	0.084	0.803	0.359
2/9/15 21:20	57	0.084	0.317	0.021	0.253	0.021
2/10/15 0:20	58	0.084	0.697	0.042	0.127	0.000
2/10/15 3:20	59	0.063	0.359	0.084	0.000	0.359
2/10/15 6:20	60	0.042	0.127	0.000	0.190	0.021
2/10/15 9:20	61	0.042	0.148	0.021	0.338	0.021
2/10/15 12:20	62	0.042	0.169	0.021	0.190	0.021

Stage 3

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err
ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Ave1stwk
AveAll

MDL
0.210

0.262
0.212

MDL
0.021

0.542
0.664

MDL
0.021

ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2	
2/10/15 15:20	63	0.084	0.127	0.000	0.422	0.021
2/10/15 18:20	64	0.190	0.063	0.000	0.528	0.042
2/10/15 21:20	65	0.275	0.148	0.000	2.978	0.211
2/11/15 0:20	66	0.296	0.148	0.021	3.464	0.253
2/11/15 3:20	67	0.211	0.211	0.021	2.176	0.148
2/11/15 6:20	68	0.148	0.106	0.000	1.648	0.106
2/11/15 9:20	69	0.127	0.190	0.021	0.697	0.042
2/11/15 12:20	70	0.127	0.127	0.000	0.106	0.000
2/11/15 15:20	71	0.127	0.190	0.084	0.845	0.401
2/11/15 18:20	72	0.169	0.084	0.000	0.908	0.063
2/11/15 21:20	73	0.190	0.084	0.000	0.951	0.063
2/12/15 0:20	74	0.148	0.084	0.000	0.697	0.042
2/12/15 3:20	75	0.106	0.127	0.000	0.380	0.021
2/12/15 6:20	76	0.084	0.106	0.000	0.317	0.021
2/12/15 9:20	77	0.084	0.063	0.000	0.380	0.021
2/12/15 12:20	78	0.106	0.148	0.021	0.253	0.021
2/12/15 15:20	79	0.084	0.106	0.000	0.655	0.042
2/12/15 18:20	80	0.106	0.106	0.000	0.697	0.042
2/12/15 21:20	81	0.148	0.042	0.000	0.528	0.042
2/13/15 0:20	82	0.148	0.063	0.000	0.908	0.063
2/13/15 3:20	83	0.106	0.106	0.000	1.141	0.084
2/13/15 6:20	84	0.148	0.021	0.000	0.993	0.063
2/13/15 9:20	85	0.190	0.127	0.000	2.028	0.148
2/13/15 12:20	86	0.127	0.084	0.000	0.591	0.042
2/13/15 15:20	87	0.106	0.063	0.000	0.528	0.042
2/13/15 18:20	88	0.127	0.106	0.000	0.634	0.042
2/13/15 21:20	89	0.148	0.063	0.000	0.359	0.021

Stage 3	7.89 L/m	ID#	Sum of Elements
Marks	1440 min/day		
	11.3616 m3/day		
	4 mm/day		
3	6 mm	Ave1stwk	AveAll
2/3/2015 18:20	0.24 cm2/day		
Marks	0.02112 cm2/m3		

	2/3/15 18:20	8	121.504
	2/3/15 21:20	9	459.379
	2/4/15 0:20	10	598.458
	2/4/15 3:20	11	497.909
	2/4/15 6:20	12	376.679
	2/4/15 9:20	13	322.455
	2/4/15 12:20	14	372.856
	2/4/15 15:20	15	502.809
	2/4/15 18:20	16	815.801
	2/4/15 21:20	17	746.092
	2/5/15 0:20	18	328.580
	2/5/15 3:20	19	219.202
	2/5/15 6:20	20	203.000
	2/5/15 9:20	21	227.038
	2/5/15 12:20	22	264.575
	2/5/15 15:20	23	333.249
	2/5/15 18:20	24	520.237
	2/5/15 21:20	25	389.861
	2/6/15 0:20	26	343.452
	2/6/15 3:20	27	357.436
	2/6/15 6:20	28	412.611
	2/6/15 9:20	29	440.579
	2/6/15 12:20	30	449.916
	2/6/15 15:20	31	589.438
	2/6/15 18:20	32	663.118
	2/6/15 21:20	33	412.759
	2/7/15 0:20	34	267.131
	2/7/15 3:20	35	276.151
	2/7/15 6:20	36	260.646
	2/7/15 9:20	37	298.564
	2/7/15 12:20	38	363.477
	2/7/15 15:20	39	523.595
	2/7/15 18:20	40	363.202
	2/7/15 21:20	41	298.796
	2/8/15 0:20	42	117.068
	2/8/15 3:20	43	77.862
	2/8/15 6:20	44	79.616
	2/8/15 9:20	45	139.163
	2/8/15 12:20	46	136.734
	2/8/15 15:20	47	246.177
	2/8/15 18:20	48	282.467
	2/8/15 21:20	49	643.874
	2/9/15 0:20	50	599.620
	2/9/15 3:20	51	513.752
	2/9/15 6:20	52	284.474
	2/9/15 9:20	53	433.481
	2/9/15 12:20	54	427.588
	2/9/15 15:20	55	344.022
	2/9/15 18:20	56	956.717
	2/9/15 21:20	57	686.439
	2/10/15 0:20	58	552.725
	2/10/15 3:20	59	803.739
	2/10/15 6:20	60	626.806
	2/10/15 9:20	61	323.131
	2/10/15 12:20	62	311.977

Stage 3	7.89 L/m	ID#	Sum of Elements
Marks	1440 min/day		
	11.3616 m3/day		
	4 mm/day		
3	6 mm	Ave1stwk	AveAll
2/3/2015 18:20	0.24 cm2/day		
Marks	0.02112 cm2/m3		

2/10/15 15:20	63	387.283
2/10/15 18:20	64	396.620
2/10/15 21:20	65	612.357
2/11/15 0:20	66	617.596
2/11/15 3:20	67	457.985
2/11/15 6:20	68	408.492
2/11/15 9:20	69	295.311
2/11/15 12:20	70	294.128
2/11/15 15:20	71	317.617
2/11/15 18:20	72	408.724
2/11/15 21:20	73	465.589
2/12/15 0:20	74	360.562
2/12/15 3:20	75	260.499
2/12/15 6:20	76	216.793
2/12/15 9:20	77	211.977
2/12/15 12:20	78	190.431
2/12/15 15:20	79	181.136
2/12/15 18:20	80	244.043
2/12/15 21:20	81	360.118
2/13/15 0:20	82	338.297
2/13/15 3:20	83	310.541
2/13/15 6:20	84	414.068
2/13/15 9:20	85	504.816
2/13/15 12:20	86	243.156
2/13/15 15:20	87	232.721
2/13/15 18:20	88	292.755
2/13/15 21:20	89	337.009

Stage 4

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Na Na_err Mg Mg_err Al Al_err Si
 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si	
Ave1stwk	52.383	MDL	8.261	MDL	6.266	MDL	20.098	
AveAll	39.456	0.190	6.552	0.063	7.305	0.021	22.734	
2/3/15 18:20	7	9.273	0.718	2.831	0.211	2.408	0.169	7.013
2/3/15 21:20	8	8.006	0.613	5.978	0.444	17.997	1.289	55.746
2/4/15 0:20	9	8.851	0.676	4.584	0.338	12.104	0.866	36.354
2/4/15 3:20	10	15.167	1.141	5.006	0.380	7.055	0.507	16.667
2/4/15 6:20	11	7.795	0.613	0.486	0.063	5.154	0.380	20.384
2/4/15 9:20	12	3.992	0.359	1.394	0.106	9.992	0.718	32.404
2/4/15 12:20	13	0.000	7.478	7.245	2.408	23.300	1.922	60.308
2/4/15 15:20	14	0.000	7.858	8.809	2.493	24.736	2.028	62.886
2/4/15 18:20	15	10.520	0.803	16.667	1.246	36.565	2.619	104.858
2/4/15 21:20	16	14.322	1.077	6.886	0.507	14.047	1.014	45.712
2/5/15 0:20	17	26.320	1.943	5.682	0.422	2.662	0.190	9.337
2/5/15 3:20	18	26.743	1.986	1.141	0.106	1.542	0.106	7.140
2/5/15 6:20	19	25.475	1.880	0.613	0.063	2.809	0.211	6.612
2/5/15 9:20	20	26.743	1.986	3.443	0.253	3.253	0.232	10.710
2/5/15 12:20	21	38.741	2.873	3.739	0.275	4.394	0.317	12.484
2/5/15 15:20	22	24.419	7.710	0.000	2.091	4.457	0.739	16.730
2/5/15 18:20	23	9.485	0.718	0.296	0.063	6.844	0.486	21.863
2/5/15 21:20	24	15.991	1.204	2.831	0.211	3.633	0.253	13.287
2/6/15 0:20	25	18.314	1.373	0.063	0.063	4.056	0.296	12.907
2/6/15 3:20	26	15.801	1.183	2.049	0.169	5.830	0.422	19.054
2/6/15 6:20	27	25.053	1.859	2.408	0.190	6.168	0.444	17.490
2/6/15 9:20	28	23.574	1.753	6.633	0.486	11.111	0.803	33.207
2/6/15 12:20	29	18.948	1.415	6.401	0.486	14.090	1.014	35.572
2/6/15 15:20	30	19.793	1.479	6.696	0.507	18.504	1.331	51.246
2/6/15 18:20	31	19.582	1.458	7.119	0.528	11.724	0.845	31.052
2/6/15 21:20	32	14.956	1.120	2.049	0.169	7.541	0.549	22.138
2/7/15 0:20	33	22.307	1.669	3.147	0.232	2.978	0.211	11.512
2/7/15 3:20	34	26.531	1.965	1.563	0.127	2.514	0.190	8.766
2/7/15 6:20	35	19.582	1.458	2.239	0.169	2.514	0.190	8.745
2/7/15 9:20	36	22.940	1.711	0.549	0.063	5.492	0.401	15.188
2/7/15 12:20	37	59.168	4.373	5.323	0.401	4.246	0.296	14.406
2/7/15 15:20	38	147.169	10.879	15.167	1.120	1.521	0.106	10.435
2/7/15 18:20	39	44.635	3.295	7.119	0.528	1.774	0.127	9.400
2/7/15 21:20	40	10.942	0.824	2.345	0.190	2.535	0.190	8.576
2/8/15 0:20	41	20.427	1.521	0.190	0.063	1.436	0.106	5.619
2/8/15 3:20	42	27.588	2.049	2.239	0.169	2.007	0.148	7.034
2/8/15 6:20	43	8.217	6.569	0.000	1.880	1.796	0.591	10.689
2/8/15 9:20	44	0.000	6.548	0.000	1.922	5.239	0.739	12.632
2/8/15 12:20	45	13.688	6.633	3.443	1.943	3.992	0.676	11.301
2/8/15 15:20	46	43.578	3.232	5.556	0.422	1.056	0.084	5.640
2/8/15 18:20	47	100.211	7.414	13.350	0.993	0.000	0.021	5.049
2/8/15 21:20	48	188.002	13.878	34.833	2.577	0.000	0.042	6.358
2/9/15 0:20	49	44.212	3.274	21.990	1.627	0.000	0.021	4.119
2/9/15 3:20	50	197.064	14.554	18.906	1.394	0.148	0.021	4.732
2/9/15 6:20	51	285.699	24.926	35.213	4.140	0.000	0.866	3.464
2/9/15 9:20	52	130.123	9.611	26.384	1.965	0.000	0.042	4.858
2/9/15 12:20	53	216.223	20.427	32.003	4.035	0.000	0.929	6.844
2/9/15 15:20	54	240.431	22.180	50.359	5.070	0.000	0.951	10.245
2/9/15 18:20	55	122.750	9.062	16.603	1.225	2.746	0.190	20.321
2/9/15 21:20	56	109.273	8.069	22.222	1.648	3.316	0.232	26.130
2/10/15 0:20	57	114.956	13.054	8.154	2.640	2.809	0.824	13.730
2/10/15 3:20	58	65.484	4.837	3.380	0.253	13.773	0.993	15.420
2/10/15 6:20	59	55.577	4.098	4.520	0.338	4.457	0.317	15.991
2/10/15 9:20	60	66.941	4.943	2.049	0.169	4.077	0.296	17.955
2/10/15 12:20	61	51.584	3.823	3.866	0.296	6.020	0.444	26.299
2/10/15 15:20	62	41.677	3.084	2.535	0.190	7.245	0.528	22.349

Stage 4	7.89 L/m									
	1440 min/day									
Marks	11.3616 m3/day	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si	
	4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
3	6 mm									
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	52.383	MDL	8.261	MDL	6.266	MDL	20.098	
Marks	0.02112 cm2/m3	AveAll	39.456	0.190	6.552	0.063	7.305	0.021	22.734	
	2/3/15 18:20	7	9.273	0.718	2.831	0.211	2.408	0.169	7.013	
	2/10/15 18:20	63	15.589	1.162	2.767	0.211	12.780	0.908	38.065	
	2/10/15 21:20	64	10.308	0.782	12.379	0.929	12.864	0.929	43.198	
	2/11/15 0:20	65	24.208	1.796	5.788	0.422	10.984	0.782	30.376	
	2/11/15 3:20	66	10.308	0.782	0.655	0.063	6.274	0.444	19.371	
	2/11/15 6:20	67	3.570	0.317	0.000	0.063	5.091	0.359	17.131	
	2/11/15 9:20	68	20.638	1.542	2.471	0.190	5.936	0.422	17.554	
	2/11/15 12:20	69	12.632	7.351	3.992	2.155	8.323	0.951	28.644	
	2/11/15 15:20	70	21.060	1.563	2.049	0.169	8.217	0.591	24.884	
	2/11/15 18:20	71	4.415	0.380	3.570	0.275	16.350	1.183	48.479	
	2/11/15 21:20	72	17.047	1.267	3.316	0.253	15.484	1.120	44.212	
	2/12/15 0:20	73	17.258	1.289	1.817	0.148	8.809	0.634	24.102	
	2/12/15 3:20	74	15.378	1.141	3.253	0.253	7.583	0.549	22.095	
	2/12/15 6:20	75	10.308	0.782	1.986	0.148	4.964	0.359	14.956	
	2/12/15 9:20	76	12.421	0.929	3.380	0.253	5.175	0.380	14.047	
	2/12/15 12:20	77	11.787	0.887	0.549	0.063	5.281	0.380	16.054	
	2/12/15 15:20	78	4.626	0.380	0.486	0.063	3.316	0.232	9.907	
	2/12/15 18:20	79	14.322	1.077	2.049	0.169	3.950	0.275	10.118	
	2/12/15 21:20	80	11.153	0.845	3.739	0.275	10.097	0.718	33.143	
	2/13/15 0:20	81	17.892	1.331	1.563	0.127	10.076	0.718	28.771	
	2/13/15 3:20	82	13.054	0.972	3.021	0.232	10.097	0.718	29.700	
	2/13/15 6:20	83	5.894	0.465	4.098	0.317	12.653	0.908	38.424	
	2/13/15 9:20	84	9.485	0.718	3.866	0.296	13.223	0.951	38.952	
	2/13/15 12:20	85	11.153	0.845	4.901	0.359	9.970	0.718	33.333	
	2/13/15 15:20	86	8.428	0.655	2.894	0.211	11.111	0.803	32.995	
	2/13/15 18:20	87	2.324	0.253	3.084	0.232	14.280	1.035	40.959	
	2/13/15 21:20	88	5.260	0.422	3.316	0.253	20.448	1.458	57.731	

Stage 4

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Si_err
ng/cm^2

P
ng/cm^2

P_err
ng/cm^2

S
ng/cm^2

S_err
ng/cm^2

Cl
ng/cm^2

Cl_err
ng/cm^2

Ave1stwk
AveAll

MDL
0.021

1.931
2.352

MDL
0.190

32.422
25.183

MDL
0.042

84.173
57.678

MDL
0.021

	ID#	Si_err ng/cm^2	P ng/cm^2	P_err ng/cm^2	S ng/cm^2	S_err ng/cm^2	Cl ng/cm^2	Cl_err ng/cm^2
2/3/15 18:20	7	0.486	1.458	0.296	8.069	0.591	0.190	0.021
2/3/15 21:20	8	3.908	2.746	0.380	33.861	2.408	0.718	0.042
2/4/15 0:20	9	2.556	2.535	0.380	24.187	1.732	0.338	0.021
2/4/15 3:20	10	1.162	1.943	0.338	17.554	1.267	0.063	0.000
2/4/15 6:20	11	1.436	1.479	0.296	24.947	1.774	0.084	0.000
2/4/15 9:20	12	2.281	3.105	0.401	46.071	3.274	0.296	0.021
2/4/15 12:20	13	4.288	3.760	0.570	70.469	5.006	0.338	0.106
2/4/15 15:20	14	4.478	2.429	0.507	75.982	5.408	0.444	0.106
2/4/15 18:20	15	7.372	3.929	0.465	136.924	9.632	0.549	0.042
2/4/15 21:20	16	3.211	4.246	0.486	71.145	5.027	0.275	0.021
2/5/15 0:20	17	0.655	2.577	0.380	15.653	1.141	0.000	0.000
2/5/15 3:20	18	0.507	2.260	0.359	13.012	0.951	0.042	0.000
2/5/15 6:20	19	0.465	1.690	0.317	14.533	1.056	0.042	0.000
2/5/15 9:20	20	0.760	2.260	0.359	21.335	1.521	0.063	0.000
2/5/15 12:20	21	0.887	2.598	0.380	24.968	1.774	0.021	0.000
2/5/15 15:20	22	1.246	2.155	0.444	38.255	2.746	0.253	0.084
2/5/15 18:20	23	1.542	1.690	0.317	49.261	3.485	0.422	0.021
2/5/15 21:20	24	0.929	2.007	0.338	101.542	7.161	0.634	0.042
2/6/15 0:20	25	0.908	2.852	0.401	78.834	5.556	0.549	0.042
2/6/15 3:20	26	1.331	2.852	0.401	75.116	5.302	0.444	0.021
2/6/15 6:20	27	1.225	2.577	0.380	39.734	2.809	0.275	0.021
2/6/15 9:20	28	2.324	3.169	0.422	20.976	1.500	0.507	0.042
2/6/15 12:20	29	2.493	2.894	0.401	19.455	1.394	0.887	0.063
2/6/15 15:20	30	3.591	2.302	0.359	18.230	1.310	0.993	0.063
2/6/15 18:20	31	2.176	1.901	0.317	11.893	0.866	0.803	0.063
2/6/15 21:20	32	1.563	1.986	0.338	9.168	0.676	0.739	0.042
2/7/15 0:20	33	0.803	2.324	0.359	8.682	0.634	0.444	0.042
2/7/15 3:20	34	0.613	2.049	0.338	8.513	0.634	0.549	0.042
2/7/15 6:20	35	0.613	1.415	0.296	8.259	0.613	0.422	0.021
2/7/15 9:20	36	1.056	1.796	0.317	9.590	0.697	1.605	0.106
2/7/15 12:20	37	1.014	1.246	0.275	18.948	1.352	54.478	3.823
2/7/15 15:20	38	0.739	0.782	0.253	22.814	1.627	148.395	10.393
2/7/15 18:20	39	0.655	1.880	0.317	11.386	0.824	15.505	1.077
2/7/15 21:20	40	0.613	2.831	0.380	6.506	0.486	0.908	0.063
2/8/15 0:20	41	0.401	2.767	0.380	7.330	0.549	0.444	0.021
2/8/15 3:20	42	0.486	2.514	0.359	17.469	1.267	0.169	0.021
2/8/15 6:20	43	0.824	2.197	0.444	30.101	2.176	0.000	0.063
2/8/15 9:20	44	0.972	2.366	0.465	30.397	2.197	0.317	0.084
2/8/15 12:20	45	0.866	1.901	0.444	16.012	1.204	1.014	0.106
2/8/15 15:20	46	0.401	1.310	0.275	11.259	0.824	40.410	2.831
2/8/15 18:20	47	0.359	0.634	0.232	20.427	1.458	152.915	10.710
2/8/15 21:20	48	0.444	0.063	0.190	51.965	3.676	434.601	30.460
2/9/15 0:20	49	0.296	0.000	0.190	52.894	3.739	125.961	8.830
2/9/15 3:20	50	0.338	0.570	0.232	32.678	2.324	409.696	28.728
2/9/15 6:20	51	0.465	0.549	0.465	50.317	3.612	672.539	47.148
2/9/15 9:20	52	0.338	0.084	0.190	51.542	3.654	399.831	28.031
2/9/15 12:20	53	0.655	0.296	0.486	72.095	5.133	554.816	38.910
2/9/15 15:20	54	0.866	0.338	0.486	74.926	5.323	605.534	42.459
2/9/15 18:20	55	1.436	1.183	0.275	29.510	2.112	259.358	18.188
2/9/15 21:20	56	1.838	0.887	0.253	35.699	2.535	266.730	18.695
2/10/15 0:20	57	1.056	1.500	0.465	25.623	1.880	185.403	13.012
2/10/15 3:20	58	1.077	1.796	0.317	11.703	0.845	94.529	6.633
2/10/15 6:20	59	1.120	1.627	0.296	12.252	0.887	63.371	4.436
2/10/15 9:20	60	1.267	0.887	0.253	14.406	1.035	94.635	6.633
2/10/15 12:20	61	1.838	1.838	0.317	13.435	0.972	73.849	5.175
2/10/15 15:20	62	1.563	1.690	0.317	10.139	0.739	31.707	2.218

Stage 4

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Si_err
ng/cm^2

P
ng/cm^2

P_err
ng/cm^2

S
ng/cm^2

S_err
ng/cm^2

Cl
ng/cm^2

Cl_err
ng/cm^2

Ave1stwk

AveAll

MDL
0.021

1.931
2.352

MDL
0.190

32.422
25.183

MDL
0.042

84.173
57.678

MDL
0.021

	ID#	Si_err ng/cm^2	P ng/cm^2	P_err ng/cm^2	S ng/cm^2	S_err ng/cm^2	Cl ng/cm^2	Cl_err ng/cm^2
2/3/15 18:20	7	0.486	1.458	0.296	8.069	0.591	0.190	0.021
2/10/15 18:20	63	2.683	2.366	0.359	13.435	0.972	8.238	0.570
2/10/15 21:20	64	3.042	3.232	0.422	16.075	1.162	6.274	0.444
2/11/15 0:20	65	2.134	2.746	0.380	18.145	1.310	2.514	0.169
2/11/15 3:20	66	1.352	3.105	0.401	5.365	0.401	0.655	0.042
2/11/15 6:20	67	1.204	2.852	0.401	5.619	0.422	0.317	0.021
2/11/15 9:20	68	1.225	3.021	0.401	7.478	0.549	0.465	0.042
2/11/15 12:20	69	2.070	2.725	0.507	11.534	0.887	1.415	0.148
2/11/15 15:20	70	1.753	3.845	0.465	10.266	0.760	0.782	0.063
2/11/15 18:20	71	3.401	2.493	0.359	12.104	0.887	1.120	0.084
2/11/15 21:20	72	3.105	3.950	0.465	10.837	0.782	0.993	0.063
2/12/15 0:20	73	1.690	3.612	0.444	8.196	0.613	0.380	0.021
2/12/15 3:20	74	1.542	3.422	0.422	7.731	0.570	0.275	0.021
2/12/15 6:20	75	1.056	2.324	0.359	7.330	0.549	0.655	0.042
2/12/15 9:20	76	0.993	3.443	0.444	6.105	0.465	0.232	0.021
2/12/15 12:20	77	1.120	2.915	0.401	6.527	0.486	0.401	0.021
2/12/15 15:20	78	0.697	3.169	0.422	3.485	0.275	0.190	0.021
2/12/15 18:20	79	0.718	2.556	0.380	3.739	0.296	0.148	0.000
2/12/15 21:20	80	2.324	3.042	0.401	7.858	0.591	0.380	0.021
2/13/15 0:20	81	2.028	3.845	0.465	9.442	0.697	0.422	0.021
2/13/15 3:20	82	2.091	4.035	0.486	8.069	0.591	0.401	0.021
2/13/15 6:20	83	2.704	2.514	0.359	7.710	0.570	0.634	0.042
2/13/15 9:20	84	2.746	3.591	0.444	9.548	0.697	0.549	0.042
2/13/15 12:20	85	2.345	4.943	0.549	12.695	0.929	0.634	0.042
2/13/15 15:20	86	2.324	3.866	0.465	9.907	0.718	0.549	0.042
2/13/15 18:20	87	2.873	3.380	0.422	8.048	0.591	0.359	0.021
2/13/15 21:20	88	4.056	5.196	0.549	9.675	0.718	0.528	0.042

Stage 4

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

K

ng/cm^2

K_err

ng/cm^2

Ca

ng/cm^2

Ca_err

ng/cm^2

Ti

ng/cm^2

Ti_err

ng/cm^2

V

ng/cm^2

MDL
0.021

MDL
0.021

MDL
0.021

2/3/15 18:20

2/3/15 21:20

2/4/15 0:20

2/4/15 3:20

2/4/15 6:20

2/4/15 9:20

2/4/15 12:20

2/4/15 15:20

2/4/15 18:20

2/4/15 21:20

2/5/15 0:20

2/5/15 3:20

2/5/15 6:20

2/5/15 9:20

2/5/15 12:20

2/5/15 15:20

2/5/15 18:20

2/5/15 21:20

2/6/15 0:20

2/6/15 3:20

2/6/15 6:20

2/6/15 9:20

2/6/15 12:20

2/6/15 15:20

2/6/15 18:20

2/6/15 21:20

2/7/15 0:20

2/7/15 3:20

2/7/15 6:20

2/7/15 9:20

2/7/15 12:20

2/7/15 15:20

2/7/15 18:20

2/7/15 21:20

2/8/15 0:20

2/8/15 3:20

2/8/15 6:20

2/8/15 9:20

2/8/15 12:20

2/8/15 15:20

2/8/15 18:20

2/8/15 21:20

2/9/15 0:20

2/9/15 3:20

2/9/15 6:20

2/9/15 9:20

2/9/15 12:20

2/9/15 15:20

2/9/15 18:20

2/9/15 21:20

2/10/15 0:20

2/10/15 3:20

2/10/15 6:20

2/10/15 9:20

2/10/15 12:20

2/10/15 15:20

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	6.833	MDL	10.607	MDL	1.644	MDL	0.104
AveAll	6.345	0.021	9.939	0.021	1.825	0.021	0.118
7	1.436	0.106	2.345	0.190	1.204	0.084	0.063
8	8.323	0.591	15.695	1.141	5.598	0.401	0.401
9	5.598	0.401	9.548	0.697	3.000	0.211	0.190
10	2.788	0.190	3.021	0.232	0.929	0.084	0.021
11	3.232	0.232	5.894	0.444	1.310	0.106	0.084
12	5.577	0.401	9.865	0.718	3.147	0.232	0.148
13	12.653	0.908	21.398	1.542	3.950	0.296	0.211
14	11.449	0.824	13.921	1.014	4.774	0.359	0.169
15	16.371	1.162	50.169	3.549	6.337	0.465	0.486
16	7.520	0.528	28.285	2.028	4.858	0.359	0.317
17	3.316	0.232	4.478	0.338	0.718	0.063	0.042
18	2.176	0.148	2.640	0.211	0.655	0.063	0.042
19	1.859	0.127	2.936	0.232	0.866	0.063	0.063
20	2.514	0.169	5.154	0.401	1.352	0.106	0.084
21	2.936	0.211	6.126	0.465	1.246	0.106	0.106
22	3.781	0.275	6.717	0.507	1.669	0.127	0.148
23	3.739	0.253	7.055	0.528	1.880	0.148	0.148
24	4.584	0.317	6.907	0.507	1.690	0.127	0.127
25	4.098	0.296	3.739	0.296	1.436	0.106	0.106
26	5.408	0.380	7.900	0.591	1.922	0.148	0.084
27	5.281	0.380	7.816	0.570	1.711	0.127	0.148
28	7.837	0.549	12.780	0.929	2.070	0.148	0.148
29	8.281	0.591	15.991	1.162	1.373	0.106	0.106
30	9.738	0.676	17.575	1.267	1.627	0.127	0.084
31	6.464	0.465	9.738	0.718	1.035	0.084	0.063
32	5.387	0.380	6.675	0.507	1.014	0.084	0.042
33	3.295	0.232	4.499	0.338	0.465	0.042	0.000
34	2.873	0.211	3.739	0.296	0.422	0.042	0.042
35	2.662	0.190	3.190	0.253	0.591	0.042	0.021
36	4.542	0.317	6.443	0.486	0.951	0.084	0.063
37	6.591	0.465	9.337	0.676	1.183	0.084	0.063
38	8.281	0.591	9.041	0.655	1.352	0.106	0.063
39	4.478	0.317	5.049	0.380	1.859	0.148	0.148
40	3.021	0.211	3.697	0.296	1.880	0.148	0.127
41	1.394	0.106	2.302	0.190	0.908	0.063	0.063
42	1.690	0.127	1.965	0.169	0.444	0.042	0.021
43	2.809	0.211	2.070	0.190	0.570	0.063	0.021
44	4.246	0.317	4.309	0.338	0.655	0.063	0.042
45	3.422	0.253	5.661	0.422	0.760	0.063	0.042
46	2.852	0.190	5.725	0.422	1.035	0.084	0.084
47	5.999	0.422	8.112	0.591	0.803	0.063	0.021
48	14.005	0.993	15.505	1.120	0.528	0.042	0.063
49	8.619	0.613	26.510	1.901	0.359	0.042	0.000
50	7.224	0.507	13.097	0.951	0.444	0.042	0.042
51	15.927	1.120	11.069	0.803	0.655	0.063	0.127
52	14.005	0.993	18.652	1.331	0.803	0.063	0.063
53	19.920	1.415	24.820	1.774	1.542	0.127	0.127
54	20.321	1.436	28.961	2.070	1.479	0.127	0.106
55	11.618	0.824	12.907	0.929	2.662	0.190	0.127
56	14.681	1.035	14.449	1.035	2.535	0.190	0.106
57	9.062	0.655	9.907	0.739	0.866	0.084	0.021
58	5.408	0.380	5.936	0.444	0.845	0.063	0.042
59	5.365	0.380	7.098	0.528	0.676	0.063	0.021
60	6.654	0.465	9.506	0.697	0.845	0.063	0.021
61	7.541	0.528	10.224	0.739	0.908	0.063	0.042
62	5.894	0.422	9.210	0.676	1.584	0.127	0.063

Stage 4	7.89 L/m	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
Marks	1440 min/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	11.3616 m3/day								
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	6.833	MDL	10.607	MDL	1.644	MDL	0.104
Marks	0.02112 cm2/m3	AveAll	6.345	0.021	9.939	0.021	1.825	0.021	0.118
	2/3/15 18:20	7	1.436	0.106	2.345	0.190	1.204	0.084	0.063
	2/10/15 18:20	63	7.457	0.528	15.420	1.120	4.351	0.317	0.275
	2/10/15 21:20	64	8.196	0.570	19.244	1.373	6.527	0.465	0.591
	2/11/15 0:20	65	6.591	0.465	14.554	1.056	4.373	0.317	0.401
	2/11/15 3:20	66	2.788	0.190	4.394	0.338	2.366	0.169	0.211
	2/11/15 6:20	67	2.640	0.190	3.866	0.296	1.458	0.106	0.106
	2/11/15 9:20	68	3.401	0.232	6.633	0.486	1.373	0.106	0.106
	2/11/15 12:20	69	7.752	0.549	11.343	0.824	2.070	0.169	0.106
	2/11/15 15:20	70	5.556	0.401	10.435	0.760	1.753	0.127	0.084
	2/11/15 18:20	71	9.252	0.655	14.977	1.077	2.873	0.211	0.148
	2/11/15 21:20	72	6.950	0.486	11.069	0.803	2.809	0.211	0.190
	2/12/15 0:20	73	5.196	0.359	6.992	0.528	1.817	0.127	0.106
	2/12/15 3:20	74	4.098	0.296	5.112	0.380	1.120	0.084	0.063
	2/12/15 6:20	75	2.577	0.190	3.232	0.253	0.676	0.063	0.042
	2/12/15 9:20	76	2.852	0.190	3.591	0.275	0.739	0.063	0.042
	2/12/15 12:20	77	3.760	0.253	6.337	0.465	0.866	0.063	0.063
	2/12/15 15:20	78	2.197	0.148	3.422	0.275	0.591	0.042	0.021
	2/12/15 18:20	79	2.176	0.148	4.267	0.338	0.803	0.063	0.063
	2/12/15 21:20	80	5.429	0.380	9.210	0.676	2.640	0.190	0.190
	2/13/15 0:20	81	6.316	0.444	7.414	0.549	1.627	0.127	0.106
	2/13/15 3:20	82	5.703	0.401	7.140	0.528	1.943	0.148	0.148
	2/13/15 6:20	83	4.689	0.338	9.273	0.676	2.640	0.190	0.127
	2/13/15 9:20	84	6.337	0.444	12.886	0.929	3.507	0.253	0.275
	2/13/15 12:20	85	8.133	0.570	11.090	0.803	3.380	0.253	0.253
	2/13/15 15:20	86	6.929	0.486	9.421	0.697	3.781	0.275	0.190
	2/13/15 18:20	87	6.992	0.486	12.695	0.929	2.683	0.190	0.148
	2/13/15 21:20	88	9.569	0.676	13.646	0.993	2.873	0.211	0.211

Stage 4

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

V_err
ng/cm^2

Cr
ng/cm^2

Cr_err
ng/cm^2

Mn
ng/cm^2

Mn_err
ng/cm^2

Fe
ng/cm^2

Fe_err
ng/cm^2

Ave1stwk

AveAll

MDL
0.021

0.092
MDL
0.131
0.021

0.322
MDL
0.394
0.021

24.064
MDL
30.822
0.021

	ID#	V_err ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2
2/3/15 18:20	7	0.000	0.106	0.000	0.211	0.021	19.603	1.394
2/3/15 21:20	8	0.021	0.739	0.042	1.458	0.106	131.348	9.273
2/4/15 0:20	9	0.021	0.359	0.021	0.908	0.063	81.643	5.767
2/4/15 3:20	10	0.000	0.106	0.000	0.296	0.021	22.983	1.627
2/4/15 6:20	11	0.000	0.127	0.000	0.359	0.021	27.503	1.943
2/4/15 9:20	12	0.021	0.127	0.000	0.507	0.042	29.531	2.091
2/4/15 12:20	13	0.021	0.148	0.021	0.760	0.063	44.487	3.147
2/4/15 15:20	14	0.021	0.190	0.021	0.803	0.063	48.120	3.401
2/4/15 18:20	15	0.042	0.338	0.021	1.584	0.106	100.190	7.076
2/4/15 21:20	16	0.021	0.169	0.021	0.676	0.042	50.824	3.591
2/5/15 0:20	17	0.000	0.021	0.000	0.127	0.000	8.196	0.591
2/5/15 3:20	18	0.000	0.042	0.000	0.106	0.000	8.281	0.591
2/5/15 6:20	19	0.000	0.042	0.000	0.148	0.021	16.540	1.162
2/5/15 9:20	20	0.000	0.063	0.000	0.253	0.021	22.264	1.563
2/5/15 12:20	21	0.000	0.106	0.000	0.211	0.021	15.864	1.120
2/5/15 15:20	22	0.021	0.063	0.021	0.296	0.021	20.068	1.415
2/5/15 18:20	23	0.000	0.063	0.000	0.338	0.021	21.356	1.500
2/5/15 21:20	24	0.000	0.042	0.000	0.380	0.021	20.025	1.415
2/6/15 0:20	25	0.000	0.042	0.000	0.338	0.021	18.357	1.289
2/6/15 3:20	26	0.000	0.084	0.000	0.444	0.021	27.482	1.943
2/6/15 6:20	27	0.000	0.063	0.000	0.317	0.021	21.525	1.521
2/6/15 9:20	28	0.021	0.084	0.000	0.380	0.021	24.187	1.711
2/6/15 12:20	29	0.000	0.063	0.000	0.422	0.021	21.884	1.542
2/6/15 15:20	30	0.000	0.063	0.000	0.486	0.042	22.497	1.584
2/6/15 18:20	31	0.000	0.042	0.000	0.317	0.021	14.956	1.056
2/6/15 21:20	32	0.000	0.021	0.000	0.232	0.021	10.013	0.718
2/7/15 0:20	33	0.000	0.021	0.000	0.106	0.000	6.020	0.422
2/7/15 3:20	34	0.000	0.021	0.000	0.127	0.000	9.294	0.655
2/7/15 6:20	35	0.000	0.021	0.000	0.106	0.000	7.351	0.528
2/7/15 9:20	36	0.000	0.042	0.000	0.169	0.021	12.315	0.866
2/7/15 12:20	37	0.000	0.042	0.000	0.190	0.021	12.864	0.908
2/7/15 15:20	38	0.000	0.042	0.000	0.169	0.021	12.780	0.908
2/7/15 18:20	39	0.000	0.021	0.000	0.190	0.021	17.744	1.246
2/7/15 21:20	40	0.000	0.169	0.021	0.169	0.021	16.582	1.183
2/8/15 0:20	41	0.000	0.021	0.000	0.106	0.000	9.780	0.697
2/8/15 3:20	42	0.000	0.021	0.000	0.084	0.000	6.379	0.444
2/8/15 6:20	43	0.021	0.021	0.021	0.106	0.021	6.422	0.465
2/8/15 9:20	44	0.021	0.021	0.021	0.190	0.021	8.682	0.613
2/8/15 12:20	45	0.021	0.042	0.021	0.169	0.021	8.302	0.591
2/8/15 15:20	46	0.000	0.021	0.000	0.148	0.000	13.435	0.951
2/8/15 18:20	47	0.000	0.000	0.000	0.084	0.000	9.844	0.697
2/8/15 21:20	48	0.000	0.000	0.000	0.084	0.000	6.063	0.422
2/9/15 0:20	49	0.000	0.021	0.000	0.063	0.000	6.232	0.444
2/9/15 3:20	50	0.000	0.000	0.000	0.063	0.000	6.443	0.465
2/9/15 6:20	51	0.021	0.000	0.021	0.127	0.021	9.083	0.655
2/9/15 9:20	52	0.000	0.021	0.000	0.127	0.000	10.266	0.718
2/9/15 12:20	53	0.021	0.063	0.021	0.169	0.021	18.209	1.289
2/9/15 15:20	54	0.021	0.063	0.021	0.211	0.021	22.602	1.605
2/9/15 18:20	55	0.000	0.106	0.000	0.338	0.021	34.685	2.450
2/9/15 21:20	56	0.000	0.211	0.021	0.676	0.042	65.991	4.647
2/10/15 0:20	57	0.021	0.063	0.021	0.211	0.021	19.708	1.394
2/10/15 3:20	58	0.000	0.063	0.000	0.169	0.021	13.202	0.929
2/10/15 6:20	59	0.000	0.063	0.000	0.148	0.000	10.499	0.739
2/10/15 9:20	60	0.000	0.106	0.000	0.169	0.021	12.336	0.866
2/10/15 12:20	61	0.000	0.021	0.000	0.232	0.021	11.829	0.845
2/10/15 15:20	62	0.000	0.232	0.021	0.296	0.021	21.863	1.542

Stage 4	7.89 L/m 1440 min/day	ID#	V_err ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2
Marks	11.3616 m3/day 4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.092	MDL	0.322	MDL	24.064	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	0.131	0.021	0.394	0.021	30.822	0.021
	2/3/15 18:20	7	0.000	0.106	0.000	0.211	0.021	19.603	1.394
	2/10/15 18:20	63	0.021	0.570	0.042	0.887	0.063	85.741	6.041
	2/10/15 21:20	64	0.042	0.570	0.042	1.267	0.084	136.270	9.611
	2/11/15 0:20	65	0.021	0.697	0.042	1.415	0.106	130.714	9.231
	2/11/15 3:20	66	0.021	0.296	0.021	0.718	0.042	78.411	5.534
	2/11/15 6:20	67	0.000	0.127	0.000	0.422	0.021	41.698	2.936
	2/11/15 9:20	68	0.000	0.106	0.000	0.296	0.021	22.243	1.563
	2/11/15 12:20	69	0.021	0.106	0.021	0.338	0.021	25.053	1.774
	2/11/15 15:20	70	0.000	0.084	0.000	0.317	0.021	21.187	1.500
	2/11/15 18:20	71	0.000	0.317	0.021	0.718	0.042	58.597	4.140
	2/11/15 21:20	72	0.021	0.296	0.021	0.613	0.042	50.317	3.549
	2/12/15 0:20	73	0.000	0.148	0.021	0.486	0.042	35.023	2.471
	2/12/15 3:20	74	0.000	0.106	0.000	0.296	0.021	21.884	1.542
	2/12/15 6:20	75	0.000	0.084	0.000	0.190	0.021	15.610	1.098
	2/12/15 9:20	76	0.000	0.063	0.000	0.190	0.021	13.709	0.972
	2/12/15 12:20	77	0.000	0.063	0.000	0.190	0.021	11.745	0.824
	2/12/15 15:20	78	0.000	0.063	0.000	0.148	0.021	9.041	0.634
	2/12/15 18:20	79	0.000	0.127	0.000	0.211	0.021	18.652	1.310
	2/12/15 21:20	80	0.021	0.253	0.021	0.528	0.042	48.204	3.401
	2/13/15 0:20	81	0.000	0.232	0.021	0.782	0.063	56.591	3.992
	2/13/15 3:20	82	0.000	0.275	0.021	0.760	0.063	68.019	4.795
	2/13/15 6:20	83	0.000	0.296	0.021	0.803	0.063	79.594	5.619
	2/13/15 9:20	84	0.021	0.380	0.021	0.655	0.042	56.337	3.971
	2/13/15 12:20	85	0.021	0.211	0.021	0.655	0.042	46.641	3.295
	2/13/15 15:20	86	0.021	0.127	0.000	0.613	0.042	38.466	2.725
	2/13/15 18:20	87	0.000	0.127	0.000	0.507	0.042	35.889	2.535
	2/13/15 21:20	88	0.021	0.169	0.021	0.760	0.063	45.226	3.190

Stage 4

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Co

ng/cm^2

Co_err

ng/cm^2

Ni

ng/cm^2

Ni_err

ng/cm^2

Cu

ng/cm^2

Cu_err

ng/cm^2

Zn

ng/cm^2

MDL

MDL

MDL

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
Ave1stwk	0.119	MDL	0.051	MDL	1.036	MDL	0.759	
AveAll	0.154	0.021	0.042	0.021	1.123	0.021	0.782	
2/3/15 18:20	7	0.106	0.000	0.021	0.000	0.613	0.063	0.296
2/3/15 21:20	8	0.613	0.042	0.021	0.000	3.929	0.296	2.007
2/4/15 0:20	9	0.401	0.021	0.021	0.000	1.605	0.127	1.077
2/4/15 3:20	10	0.106	0.000	0.000	0.000	0.401	0.042	0.380
2/4/15 6:20	11	0.169	0.021	0.021	0.000	0.570	0.063	0.634
2/4/15 9:20	12	0.148	0.000	0.042	0.000	1.077	0.106	0.972
2/4/15 12:20	13	0.232	0.042	0.000	0.021	1.711	0.148	1.627
2/4/15 15:20	14	0.232	0.042	0.042	0.021	2.176	0.169	1.479
2/4/15 18:20	15	0.422	0.021	0.063	0.000	3.190	0.253	2.176
2/4/15 21:20	16	0.232	0.021	0.000	0.000	2.218	0.169	1.436
2/5/15 0:20	17	0.063	0.000	0.042	0.000	0.486	0.063	0.317
2/5/15 3:20	18	0.063	0.000	0.042	0.000	0.401	0.042	0.253
2/5/15 6:20	19	0.127	0.000	0.063	0.000	0.676	0.063	0.359
2/5/15 9:20	20	0.106	0.000	0.021	0.000	0.887	0.084	0.507
2/5/15 12:20	21	0.127	0.000	0.042	0.000	1.014	0.084	0.655
2/5/15 15:20	22	0.106	0.021	0.042	0.021	1.225	0.106	0.908
2/5/15 18:20	23	0.084	0.000	0.021	0.000	1.542	0.127	0.824
2/5/15 21:20	24	0.106	0.000	0.021	0.000	1.352	0.106	1.098
2/6/15 0:20	25	0.148	0.000	0.063	0.000	0.993	0.084	0.993
2/6/15 3:20	26	0.127	0.000	0.000	0.000	1.289	0.106	1.204
2/6/15 6:20	27	0.106	0.000	0.021	0.000	1.394	0.127	0.760
2/6/15 9:20	28	0.106	0.000	0.042	0.000	1.352	0.106	0.887
2/6/15 12:20	29	0.063	0.000	0.063	0.000	0.908	0.084	1.035
2/6/15 15:20	30	0.127	0.000	0.042	0.000	0.528	0.063	0.655
2/6/15 18:20	31	0.063	0.000	0.063	0.000	0.275	0.042	0.317
2/6/15 21:20	32	0.063	0.000	0.063	0.000	0.232	0.042	0.401
2/7/15 0:20	33	0.042	0.000	0.063	0.000	0.232	0.042	0.613
2/7/15 3:20	34	0.063	0.000	0.042	0.000	0.296	0.042	0.655
2/7/15 6:20	35	0.042	0.000	0.042	0.000	0.211	0.042	0.634
2/7/15 9:20	36	0.063	0.000	0.063	0.000	0.570	0.063	0.718
2/7/15 12:20	37	0.084	0.000	0.042	0.000	0.803	0.084	0.634
2/7/15 15:20	38	0.063	0.000	0.021	0.000	1.225	0.106	0.613
2/7/15 18:20	39	0.084	0.000	0.042	0.000	1.732	0.148	0.613
2/7/15 21:20	40	0.084	0.000	0.063	0.000	1.521	0.127	0.676
2/8/15 0:20	41	0.042	0.000	0.042	0.000	0.676	0.063	0.972
2/8/15 3:20	42	0.063	0.000	0.042	0.000	0.253	0.042	1.542
2/8/15 6:20	43	0.042	0.021	0.021	0.021	0.338	0.042	1.796
2/8/15 9:20	44	0.021	0.021	0.063	0.021	0.253	0.042	0.993
2/8/15 12:20	45	0.021	0.021	0.063	0.021	0.444	0.063	0.359
2/8/15 15:20	46	0.084	0.000	0.063	0.000	0.972	0.084	0.422
2/8/15 18:20	47	0.021	0.000	0.021	0.000	0.803	0.084	0.275
2/8/15 21:20	48	0.042	0.000	0.084	0.000	0.444	0.042	0.296
2/9/15 0:20	49	0.063	0.000	0.042	0.000	0.275	0.042	0.211
2/9/15 3:20	50	0.042	0.000	0.042	0.000	0.296	0.042	0.190
2/9/15 6:20	51	0.042	0.021	0.042	0.021	0.866	0.084	0.253
2/9/15 9:20	52	0.021	0.000	0.063	0.000	0.760	0.063	0.317
2/9/15 12:20	53	0.063	0.021	0.042	0.021	1.331	0.127	0.676
2/9/15 15:20	54	0.106	0.021	0.000	0.021	1.901	0.169	0.718
2/9/15 18:20	55	0.169	0.021	0.042	0.000	1.627	0.127	0.718
2/9/15 21:20	56	0.253	0.021	0.613	0.042	1.605	0.127	0.655
2/10/15 0:20	57	0.084	0.021	0.063	0.021	0.486	0.063	0.465
2/10/15 3:20	58	0.063	0.000	0.021	0.000	0.211	0.042	0.296
2/10/15 6:20	59	0.063	0.000	0.021	0.000	0.296	0.042	0.317
2/10/15 9:20	60	0.063	0.000	0.042	0.000	0.338	0.042	0.422
2/10/15 12:20	61	0.063	0.000	0.042	0.000	0.296	0.042	0.338
2/10/15 15:20	62	0.084	0.000	0.106	0.000	0.591	0.063	0.739

Stage 4	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
	4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	6 mm								
3									
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	0.119	MDL	0.051	MDL	1.036	MDL	0.759
Marks	0.02112 cm2/m3	AveAll	0.154	0.021	0.042	0.021	1.123	0.021	0.782
	2/3/15 18:20	7	0.106	0.000	0.021	0.000	0.613	0.063	0.296
	2/10/15 18:20	63	0.422	0.021	0.021	0.000	2.957	0.232	1.542
	2/10/15 21:20	64	0.655	0.042	0.000	0.000	5.915	0.444	1.901
	2/11/15 0:20	65	0.634	0.042	0.000	0.000	3.612	0.275	2.197
	2/11/15 3:20	66	0.422	0.021	0.000	0.000	1.458	0.127	0.824
	2/11/15 6:20	67	0.232	0.021	0.000	0.000	0.866	0.084	0.549
	2/11/15 9:20	68	0.106	0.000	0.042	0.000	1.077	0.106	0.697
	2/11/15 12:20	69	0.127	0.021	0.042	0.021	1.289	0.127	0.782
	2/11/15 15:20	70	0.127	0.000	0.042	0.000	0.972	0.084	0.760
	2/11/15 18:20	71	0.275	0.021	0.000	0.000	2.028	0.169	1.056
	2/11/15 21:20	72	0.190	0.021	0.000	0.000	1.436	0.127	1.056
	2/12/15 0:20	73	0.169	0.021	0.000	0.000	0.951	0.084	0.697
	2/12/15 3:20	74	0.127	0.000	0.042	0.000	0.465	0.042	0.422
	2/12/15 6:20	75	0.063	0.000	0.063	0.000	0.317	0.042	0.465
	2/12/15 9:20	76	0.063	0.000	0.042	0.000	0.359	0.042	0.338
	2/12/15 12:20	77	0.084	0.000	0.063	0.000	0.296	0.042	0.338
	2/12/15 15:20	78	0.084	0.000	0.042	0.000	0.232	0.042	0.232
	2/12/15 18:20	79	0.127	0.000	0.021	0.000	0.549	0.063	0.317
	2/12/15 21:20	80	0.211	0.021	0.000	0.000	2.176	0.169	0.845
	2/13/15 0:20	81	0.296	0.021	0.021	0.000	0.951	0.084	0.993
	2/13/15 3:20	82	0.380	0.021	0.021	0.000	1.246	0.106	0.634
	2/13/15 6:20	83	0.401	0.021	0.021	0.000	0.782	0.063	0.782
	2/13/15 9:20	84	0.253	0.021	0.021	0.000	1.690	0.148	1.035
	2/13/15 12:20	85	0.211	0.021	0.021	0.000	2.514	0.190	1.246
	2/13/15 15:20	86	0.211	0.021	0.021	0.000	1.542	0.127	1.035
	2/13/15 18:20	87	0.190	0.021	0.021	0.000	1.246	0.106	0.803
	2/13/15 21:20	88	0.232	0.021	0.042	0.000	1.479	0.127	1.225

Stage 4

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err
ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Ave1stwk

MDL
0.021

0.220

MDL
0.021

0.319

MDL
0.021

AveAll

	ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
2/3/15 18:20	7	0.042	0.084	0.000	0.148	0.021
2/3/15 21:20	8	0.169	0.106	0.000	0.739	0.063
2/4/15 0:20	9	0.106	0.148	0.021	0.549	0.042
2/4/15 3:20	10	0.063	0.190	0.021	0.444	0.042
2/4/15 6:20	11	0.063	0.148	0.021	0.106	0.000
2/4/15 9:20	12	0.106	0.190	0.021	0.232	0.021
2/4/15 12:20	13	0.148	0.148	0.084	0.000	0.380
2/4/15 15:20	14	0.148	0.169	0.084	0.000	0.401
2/4/15 18:20	15	0.190	0.232	0.021	0.866	0.063
2/4/15 21:20	16	0.127	0.190	0.021	0.486	0.042
2/5/15 0:20	17	0.042	0.084	0.000	0.211	0.021
2/5/15 3:20	18	0.042	0.063	0.000	0.232	0.021
2/5/15 6:20	19	0.063	0.169	0.021	0.084	0.000
2/5/15 9:20	20	0.063	0.148	0.021	0.211	0.021
2/5/15 12:20	21	0.084	0.127	0.000	0.084	0.000
2/5/15 15:20	22	0.106	0.148	0.063	0.000	0.359
2/5/15 18:20	23	0.084	0.169	0.021	0.275	0.021
2/5/15 21:20	24	0.106	0.275	0.021	0.697	0.042
2/6/15 0:20	25	0.106	0.253	0.021	0.253	0.021
2/6/15 3:20	26	0.106	0.232	0.021	0.760	0.063
2/6/15 6:20	27	0.084	0.148	0.021	0.401	0.021
2/6/15 9:20	28	0.084	0.190	0.021	0.359	0.021
2/6/15 12:20	29	0.106	0.148	0.021	0.528	0.042
2/6/15 15:20	30	0.084	0.148	0.000	0.127	0.000
2/6/15 18:20	31	0.042	0.253	0.021	0.634	0.042
2/6/15 21:20	32	0.063	0.253	0.021	0.106	0.000
2/7/15 0:20	33	0.063	0.106	0.000	0.232	0.021
2/7/15 3:20	34	0.084	0.106	0.000	0.296	0.021
2/7/15 6:20	35	0.063	0.063	0.000	0.169	0.021
2/7/15 9:20	36	0.084	0.084	0.000	0.106	0.000
2/7/15 12:20	37	0.063	0.253	0.021	0.359	0.021
2/7/15 15:20	38	0.063	0.211	0.021	0.549	0.042
2/7/15 18:20	39	0.063	0.127	0.000	0.190	0.021
2/7/15 21:20	40	0.084	0.106	0.000	0.106	0.000
2/8/15 0:20	41	0.106	0.127	0.000	0.317	0.021
2/8/15 3:20	42	0.127	0.063	0.000	0.296	0.021
2/8/15 6:20	43	0.169	0.127	0.063	0.000	0.359
2/8/15 9:20	44	0.106	0.169	0.063	0.528	0.338
2/8/15 12:20	45	0.063	0.063	0.063	0.000	0.338
2/8/15 15:20	46	0.063	0.148	0.000	0.169	0.021
2/8/15 18:20	47	0.042	0.422	0.021	0.634	0.042
2/8/15 21:20	48	0.042	0.845	0.063	0.338	0.021
2/9/15 0:20	49	0.042	0.338	0.021	0.824	0.063
2/9/15 3:20	50	0.042	0.422	0.021	0.401	0.021
2/9/15 6:20	51	0.063	0.486	0.084	0.000	0.338
2/9/15 9:20	52	0.042	0.697	0.042	0.718	0.042
2/9/15 12:20	53	0.084	0.655	0.106	0.000	0.338
2/9/15 15:20	54	0.084	0.591	0.106	0.000	0.359
2/9/15 18:20	55	0.084	0.359	0.021	0.000	0.000
2/9/15 21:20	56	0.084	0.359	0.021	0.127	0.000
2/10/15 0:20	57	0.063	0.296	0.084	0.444	0.359
2/10/15 3:20	58	0.042	0.190	0.021	0.528	0.042
2/10/15 6:20	59	0.042	0.127	0.000	0.507	0.042
2/10/15 9:20	60	0.063	0.063	0.000	0.338	0.021
2/10/15 12:20	61	0.042	0.190	0.021	0.528	0.042
2/10/15 15:20	62	0.084	0.106	0.000	0.000	0.000

Stage 4

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err
ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Ave1stwk

MDL
0.021

0.220

MDL
0.187
0.021

0.319

MDL
0.331
0.021

AveAll

2/3/15 18:20

2/10/15 18:20

2/10/15 21:20

2/11/15 0:20

2/11/15 3:20

2/11/15 6:20

2/11/15 9:20

2/11/15 12:20

2/11/15 15:20

2/11/15 18:20

2/11/15 21:20

2/12/15 0:20

2/12/15 3:20

2/12/15 6:20

2/12/15 9:20

2/12/15 12:20

2/12/15 15:20

2/12/15 18:20

2/12/15 21:20

2/13/15 0:20

2/13/15 3:20

2/13/15 6:20

2/13/15 9:20

2/13/15 12:20

2/13/15 15:20

2/13/15 18:20

2/13/15 21:20

7

0.042

0.084

0.000

0.148

0.021

63

0.148

0.063

0.000

0.591

0.042

64

0.169

0.127

0.000

0.908

0.063

65

0.190

0.148

0.021

1.225

0.084

66

0.084

0.106

0.000

0.718

0.042

67

0.063

0.063

0.000

0.486

0.042

68

0.084

0.106

0.000

0.317

0.021

69

0.084

0.148

0.063

0.000

0.359

70

0.084

0.148

0.021

0.190

0.021

71

0.106

0.106

0.000

0.380

0.021

72

0.106

0.106

0.000

0.211

0.021

73

0.084

0.169

0.021

0.760

0.063

74

0.063

0.148

0.000

0.084

0.000

75

0.063

0.042

0.000

0.317

0.021

76

0.042

0.106

0.000

0.063

0.000

77

0.042

0.063

0.000

0.084

0.000

78

0.042

0.106

0.000

0.000

0.000

79

0.042

0.148

0.000

0.190

0.021

80

0.084

0.127

0.000

0.296

0.021

81

0.106

0.127

0.000

0.570

0.042

82

0.063

0.042

0.000

0.127

0.021

83

0.084

0.127

0.000

0.465

0.042

84

0.106

0.106

0.000

0.275

0.021

85

0.127

0.127

0.000

0.422

0.021

86

0.106

0.211

0.021

0.782

0.063

87

0.084

0.106

0.000

0.084

0.000

88

0.106

0.106

0.000

0.380

0.021

Stage 4	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/3/15 18:20	7	57.478
2/3/15 21:20	8	296.029
2/4/15 0:20	9	194.001
2/4/15 3:20	10	95.120
2/4/15 6:20	11	100.486
2/4/15 9:20	12	148.817
2/4/15 12:20	13	252.746
2/4/15 15:20	14	258.809
2/4/15 18:20	15	492.438
2/4/15 21:20	16	253.845
2/5/15 0:20	17	80.334
2/5/15 3:20	18	66.878
2/5/15 6:20	19	75.708
2/5/15 9:20	20	101.373
2/5/15 12:20	21	115.589
2/5/15 15:20	22	121.441
2/5/15 18:20	23	127.355
2/5/15 21:20	24	177.229
2/6/15 0:20	25	148.395
2/6/15 3:20	26	168.082
2/6/15 6:20	27	133.397
2/6/15 9:20	28	149.599
2/6/15 12:20	29	149.113
2/6/15 15:20	30	171.462
2/6/15 18:20	31	118.293
2/6/15 21:20	32	83.080
2/7/15 0:20	33	67.089
2/7/15 3:20	34	68.462
2/7/15 6:20	35	58.281
2/7/15 9:20	36	83.291
2/7/15 12:20	37	190.262
2/7/15 15:20	38	380.693
2/7/15 18:20	39	123.975
2/7/15 21:20	40	62.843
2/8/15 0:20	41	54.964
2/8/15 3:20	42	71.884
2/8/15 6:20	43	67.343
2/8/15 9:20	44	71.124
2/8/15 12:20	45	70.701
2/8/15 15:20	46	133.967
2/8/15 18:20	47	319.624
2/8/15 21:20	48	754.119
2/9/15 0:20	49	292.733
2/9/15 3:20	50	692.501
2/9/15 6:20	51	1086.460
2/9/15 9:20	52	659.337
2/9/15 12:20	53	949.894
2/9/15 15:20	54	1058.893
2/9/15 18:20	55	517.828
2/9/15 21:20	56	566.519
2/10/15 0:20	57	393.853
2/10/15 3:20	58	233.059
2/10/15 6:20	59	182.995
2/10/15 9:20	60	231.855
2/10/15 12:20	61	209.147
2/10/15 15:20	62	158.112

Stage 4	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

	ID#	Sum of Elements
2/3/15 18:20	7	57.478
2/10/15 18:20	63	213.540
2/10/15 21:20	64	286.502
2/11/15 0:20	65	261.322
2/11/15 3:20	66	138.445
2/11/15 6:20	67	87.093
2/11/15 9:20	68	94.064
2/11/15 12:20	69	118.420
2/11/15 15:20	70	112.759
2/11/15 18:20	71	179.256
2/11/15 21:20	72	171.082
2/12/15 0:20	73	116.688
2/12/15 3:20	74	93.705
2/12/15 6:20	75	66.202
2/12/15 9:20	76	66.962
2/12/15 12:20	77	67.469
2/12/15 15:20	78	41.360
2/12/15 18:20	79	64.533
2/12/15 21:20	80	139.523
2/13/15 0:20	81	148.035
2/13/15 3:20	82	154.816
2/13/15 6:20	83	171.926
2/13/15 9:20	84	162.970
2/13/15 12:20	85	152.535
2/13/15 15:20	86	133.080
2/13/15 18:20	87	133.925
2/13/15 21:20	88	178.074

Stage 5

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Na Na_err Mg Mg_err Al Al_err Si
 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

23.231	MDL	2.544	MDL	1.238	MDL	4.222
17.954	0.401	2.160	0.063	1.685	0.021	5.631

	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
2/3/15 18:20	11	5.091	0.697	1.352	0.106	1.436	0.106	2.683
2/3/15 21:20	12	4.288	0.655	0.359	0.063	3.253	0.232	8.766
2/4/15 0:20	13	15.040	1.394	0.929	0.084	0.824	0.063	4.014
2/4/15 3:20	14	11.998	1.183	0.359	0.063	1.246	0.084	2.788
2/4/15 6:20	15	10.984	1.120	1.352	0.106	0.570	0.042	2.704
2/4/15 9:20	16	10.372	6.823	0.000	1.880	1.352	0.591	3.866
2/4/15 12:20	17	6.717	6.971	0.000	1.986	2.471	0.655	9.337
2/4/15 15:20	18	3.676	0.613	2.746	0.211	3.866	0.275	16.434
2/4/15 18:20	19	4.689	0.676	2.218	0.169	8.217	0.570	28.961
2/4/15 21:20	20	7.541	6.781	0.000	1.922	1.120	0.591	4.457
2/5/15 0:20	21	14.639	1.373	3.507	0.253	1.120	0.084	1.458
2/5/15 3:20	22	13.625	1.289	3.274	0.232	0.697	0.042	1.289
2/5/15 6:20	23	10.161	6.443	2.112	1.774	1.310	0.549	1.627
2/5/15 9:20	24	12.210	6.654	0.000	1.817	0.782	0.570	2.239
2/5/15 12:20	25	9.569	1.014	1.225	0.106	1.120	0.084	3.063
2/5/15 15:20	26	14.639	6.865	2.873	1.880	1.436	0.591	3.739
2/5/15 18:20	27	5.915	6.781	0.000	1.922	0.000	0.570	2.197
2/5/15 21:20	28	2.471	0.528	0.760	0.084	0.528	0.042	2.197
2/6/15 0:20	29	8.555	6.802	0.000	1.880	0.000	0.570	1.965
2/6/15 3:20	30	4.689	6.760	0.000	1.922	0.655	0.591	2.450
2/6/15 6:20	31	16.054	1.479	3.866	0.275	0.993	0.063	3.042
2/6/15 9:20	32	0.021	0.359	1.458	0.127	2.535	0.190	9.527
2/6/15 12:20	33	9.569	1.014	1.458	0.127	3.147	0.232	7.583
2/6/15 15:20	34	5.915	0.760	3.274	0.232	3.781	0.275	9.801
2/6/15 18:20	35	8.555	0.951	3.211	0.232	1.584	0.106	4.858
2/6/15 21:20	36	4.077	0.634	0.000	0.063	1.415	0.106	3.570
2/7/15 0:20	37	9.358	0.993	1.880	0.148	1.436	0.106	2.619
2/7/15 3:20	38	9.358	0.993	0.401	0.063	0.824	0.063	1.521
2/7/15 6:20	39	18.293	1.627	2.218	0.169	0.655	0.042	2.408
2/7/15 9:20	40	11.787	1.162	0.824	0.084	1.141	0.084	2.598
2/7/15 12:20	41	23.975	2.028	3.676	0.275	0.507	0.042	2.176
2/7/15 15:20	42	19.307	1.690	2.281	0.169	0.486	0.042	2.218
2/7/15 18:20	43	21.736	1.880	2.915	0.211	0.676	0.042	1.753
2/7/15 21:20	44	8.956	0.972	2.450	0.190	0.718	0.063	2.640
2/8/15 0:20	45	14.829	1.394	2.155	0.169	0.634	0.042	1.310
2/8/15 3:20	46	19.096	1.690	0.063	0.063	0.739	0.063	3.042
2/8/15 6:20	47	12.801	1.246	0.359	0.063	3.422	0.232	2.640
2/8/15 9:20	48	10.372	1.077	2.112	0.169	1.394	0.106	3.422
2/8/15 12:20	49	11.174	1.120	1.056	0.084	0.486	0.042	3.190
2/8/15 15:20	50	21.525	1.859	1.352	0.106	0.106	0.021	0.782
2/8/15 18:20	51	47.909	8.196	4.732	1.901	0.000	0.549	0.676
2/8/15 21:20	52	85.636	10.583	9.062	2.239	0.000	0.591	0.655
2/9/15 0:20	53	79.763	10.034	8.302	2.112	0.000	0.570	1.141
2/9/15 3:20	54	70.828	9.506	6.020	2.028	0.000	0.549	0.422
2/9/15 6:20	55	67.575	9.379	8.069	2.112	0.000	0.570	0.929
2/9/15 9:20	56	91.931	6.865	7.605	0.549	0.000	0.021	0.422
2/9/15 12:20	57	109.168	11.808	11.048	2.281	0.000	0.591	0.845
2/9/15 15:20	58	71.229	9.844	8.365	2.176	0.000	0.613	1.310
2/9/15 18:20	59	66.371	9.506	5.323	2.134	0.000	0.591	2.366
2/9/15 21:20	60	55.809	4.288	2.873	0.211	0.296	0.021	2.345
2/10/15 0:20	61	28.031	2.324	2.577	0.190	0.232	0.021	1.204
2/10/15 3:20	62	11.597	6.464	0.000	1.774	0.000	0.528	1.479
2/10/15 6:20	63	22.349	1.922	0.929	0.084	0.338	0.021	2.429
2/10/15 9:20	64	23.553	2.007	1.352	0.106	1.584	0.106	6.126
2/10/15 12:20	65	20.913	1.817	2.746	0.211	1.162	0.084	7.372

Stage 5	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
	4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	6 mm								
3	0.24 cm2/day	Ave1stwk	23.231	MDL	2.544	MDL	1.238	MDL	4.222
2/3/2015 18:20	0.02112 cm2/m3	AveAll	17.954	0.401	2.160	0.063	1.685	0.021	5.631
Marks									

ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/10/15 15:20	66	17.279	1.563	1.289	0.106	4.056	0.296	12.653
2/10/15 18:20	67	3.485	0.591	3.105	0.232	5.133	0.359	17.807
2/10/15 21:20	68	3.274	0.570	0.697	0.063	2.535	0.169	10.794
2/11/15 0:20	69	7.119	0.845	0.824	0.084	1.373	0.106	4.436
2/11/15 3:20	70	6.929	0.824	1.753	0.127	0.760	0.063	3.021
2/11/15 6:20	71	7.731	0.887	1.056	0.084	1.056	0.084	3.591
2/11/15 9:20	72	4.689	0.676	0.697	0.063	2.281	0.169	8.619
2/11/15 12:20	73	9.759	1.035	0.000	0.063	4.626	0.317	15.420
2/11/15 15:20	74	5.703	0.739	2.387	0.190	5.196	0.359	16.139
2/11/15 18:20	75	4.077	0.634	1.627	0.127	5.725	0.401	19.033
2/11/15 21:20	76	13.223	1.267	2.345	0.169	2.683	0.190	7.647
2/12/15 0:20	77	11.597	1.162	0.887	0.084	1.563	0.106	4.922
2/12/15 3:20	78	5.091	0.697	0.634	0.063	1.563	0.106	4.161
2/12/15 6:20	79	1.859	0.486	1.753	0.127	0.613	0.042	3.105
2/12/15 9:20	80	6.527	0.803	1.120	0.106	2.767	0.190	7.119
2/12/15 12:20	81	9.358	0.993	0.824	0.084	3.274	0.232	11.407
2/12/15 15:20	82	4.077	0.634	1.458	0.127	3.866	0.275	13.878
2/12/15 18:20	83	3.887	0.613	1.627	0.127	4.415	0.317	14.428
2/12/15 21:20	84	6.929	0.824	1.690	0.127	3.866	0.275	10.837
2/13/15 0:20	85	10.583	1.077	1.922	0.148	1.690	0.127	5.830
2/13/15 3:20	86	3.485	0.591	0.634	0.063	1.141	0.084	5.894
2/13/15 6:20	87	5.302	0.718	1.690	0.127	5.302	0.380	20.258
2/13/15 9:20	88	4.077	0.634	3.570	0.253	2.345	0.169	8.766
2/13/15 12:20	89	4.288	0.655	0.000	0.063	3.105	0.211	9.485
2/13/15 15:20	90	9.147	0.993	1.753	0.127	2.007	0.148	5.556
2/13/15 18:20	91	8.555	0.951	1.627	0.127	1.415	0.106	4.732
2/13/15 21:20	92	7.943	0.908	1.056	0.084	1.542	0.106	5.534

Stage 5

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Si_err
ng/cm^2

P
ng/cm^2

P_err
ng/cm^2

S
ng/cm^2

S_err
ng/cm^2

Cl
ng/cm^2

Cl_err
ng/cm^2

Ave1stwk

AveAll

MDL
0.021

1.692
1.782

MDL
0.253

27.178
20.608

MDL
0.042

16.922
11.610

MDL
0.021

	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
2/3/15 18:20	11	0.190	1.690	0.338	19.349	1.394	0.063	0.000
2/3/15 21:20	12	0.613	2.239	0.380	33.566	2.387	0.275	0.021
2/4/15 0:20	13	0.275	2.493	0.401	22.645	1.627	0.232	0.021
2/4/15 3:20	14	0.190	2.091	0.380	18.040	1.310	0.063	0.000
2/4/15 6:20	15	0.190	1.563	0.338	24.673	1.774	0.148	0.021
2/4/15 9:20	16	0.401	2.640	0.507	75.201	5.344	0.359	0.084
2/4/15 12:20	17	0.739	2.598	0.507	109.210	7.752	0.549	0.106
2/4/15 15:20	18	1.162	2.725	0.422	213.456	15.040	1.098	0.084
2/4/15 18:20	19	2.028	2.788	0.422	65.336	4.626	0.275	0.021
2/4/15 21:20	20	0.422	2.176	0.486	46.958	3.380	0.127	0.063
2/5/15 0:20	21	0.106	2.028	0.380	16.329	1.183	0.042	0.000
2/5/15 3:20	22	0.084	2.450	0.401	19.624	1.415	0.000	0.000
2/5/15 6:20	23	0.253	1.753	0.444	27.524	2.007	0.063	0.063
2/5/15 9:20	24	0.296	2.049	0.465	37.431	2.704	0.084	0.063
2/5/15 12:20	25	0.211	2.112	0.380	39.839	2.831	0.253	0.021
2/5/15 15:20	26	0.380	1.986	0.465	62.167	4.436	0.422	0.084
2/5/15 18:20	27	0.296	2.049	0.465	89.565	6.358	0.591	0.084
2/5/15 21:20	28	0.148	2.619	0.422	103.845	7.330	0.697	0.042
2/6/15 0:20	29	0.296	2.324	0.486	62.907	4.499	0.570	0.084
2/6/15 3:20	30	0.317	1.690	0.444	90.452	6.422	0.507	0.084
2/6/15 6:20	31	0.211	1.732	0.359	30.545	2.176	0.148	0.000
2/6/15 9:20	32	0.676	2.091	0.380	19.286	1.394	0.232	0.021
2/6/15 12:20	33	0.528	2.471	0.401	10.139	0.739	0.211	0.021
2/6/15 15:20	34	0.697	2.324	0.401	6.232	0.465	0.063	0.000
2/6/15 18:20	35	0.338	1.753	0.359	5.027	0.380	0.042	0.000
2/6/15 21:20	36	0.253	2.429	0.401	7.436	0.549	0.042	0.000
2/7/15 0:20	37	0.190	1.943	0.359	7.161	0.549	0.021	0.000
2/7/15 3:20	38	0.106	2.070	0.380	7.055	0.528	0.000	0.000
2/7/15 6:20	39	0.169	1.648	0.338	7.774	0.591	0.063	0.000
2/7/15 9:20	40	0.190	2.091	0.380	8.217	0.613	0.275	0.021
2/7/15 12:20	41	0.148	1.627	0.338	6.591	0.507	1.965	0.148
2/7/15 15:20	42	0.148	0.613	0.275	4.858	0.380	1.120	0.084
2/7/15 18:20	43	0.127	1.394	0.317	4.774	0.380	0.190	0.021
2/7/15 21:20	44	0.190	1.753	0.359	6.865	0.528	0.063	0.000
2/8/15 0:20	45	0.084	2.324	0.401	12.083	0.887	0.106	0.000
2/8/15 3:20	46	0.211	1.605	0.338	30.144	2.155	0.000	0.000
2/8/15 6:20	47	0.190	1.521	0.338	41.741	2.978	0.063	0.000
2/8/15 9:20	48	0.232	2.197	0.380	28.137	2.007	0.021	0.000
2/8/15 12:20	49	0.232	2.556	0.401	11.259	0.824	0.106	0.000
2/8/15 15:20	50	0.063	1.098	0.296	2.788	0.232	6.485	0.465
2/8/15 18:20	51	0.232	0.908	0.401	6.168	0.528	48.859	3.443
2/8/15 21:20	52	0.253	0.803	0.422	11.174	0.866	113.899	8.006
2/9/15 0:20	53	0.275	1.056	0.422	9.590	0.760	99.620	7.013
2/9/15 3:20	54	0.232	0.697	0.401	8.640	0.697	73.173	5.154
2/9/15 6:20	55	0.253	0.000	0.359	9.485	0.760	80.735	5.682
2/9/15 9:20	56	0.042	1.289	0.317	14.428	1.056	113.498	7.964
2/9/15 12:20	57	0.275	0.760	0.401	13.498	1.035	95.670	6.738
2/9/15 15:20	58	0.275	0.782	0.401	10.752	0.845	93.916	6.612
2/9/15 18:20	59	0.338	0.549	0.401	9.400	0.739	75.602	5.323
2/9/15 21:20	60	0.169	1.289	0.317	8.006	0.591	52.134	3.654
2/10/15 0:20	61	0.084	1.394	0.317	4.499	0.359	24.694	1.732
2/10/15 3:20	62	0.253	0.697	0.380	2.429	0.275	8.766	0.634
2/10/15 6:20	63	0.169	0.591	0.275	2.324	0.190	8.576	0.613
2/10/15 9:20	64	0.422	0.951	0.296	4.668	0.359	18.885	1.331
2/10/15 12:20	65	0.528	1.584	0.338	4.668	0.359	14.850	1.035

Stage 5	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
	4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	6 mm								
3	0.24 cm2/day	Ave1stwk	MDL	1.692	MDL	27.178	MDL	16.922	MDL
2/3/2015 18:20	0.02112 cm2/m3	AveAll	0.021	1.782	0.253	20.608	0.042	11.610	0.021
Marks									

ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/10/15 15:20	66	0.887	0.972	0.296	5.049	0.401	4.816	0.338
2/10/15 18:20	67	1.246	1.310	0.317	7.414	0.549	1.500	0.106
2/10/15 21:20	68	0.760	1.753	0.359	6.443	0.486	1.162	0.084
2/11/15 0:20	69	0.317	2.218	0.380	5.218	0.401	0.465	0.042
2/11/15 3:20	70	0.211	1.796	0.359	4.351	0.338	0.106	0.000
2/11/15 6:20	71	0.253	1.648	0.338	3.654	0.296	0.000	0.000
2/11/15 9:20	72	0.613	2.556	0.401	4.499	0.359	0.190	0.021
2/11/15 12:20	73	1.077	1.458	0.338	7.900	0.591	0.613	0.042
2/11/15 15:20	74	1.141	1.458	0.338	6.401	0.486	0.253	0.021
2/11/15 18:20	75	1.331	1.711	0.338	6.738	0.507	0.317	0.021
2/11/15 21:20	76	0.528	2.049	0.380	5.809	0.444	0.169	0.021
2/12/15 0:20	77	0.338	1.965	0.359	4.542	0.359	0.106	0.000
2/12/15 3:20	78	0.296	1.035	0.296	4.267	0.338	0.042	0.000
2/12/15 6:20	79	0.211	1.711	0.338	4.119	0.317	0.232	0.021
2/12/15 9:20	80	0.507	2.281	0.380	3.781	0.296	0.127	0.000
2/12/15 12:20	81	0.803	2.598	0.401	4.542	0.359	0.232	0.021
2/12/15 15:20	82	0.972	1.669	0.338	4.204	0.338	0.148	0.021
2/12/15 18:20	83	1.014	1.753	0.359	5.006	0.380	0.317	0.021
2/12/15 21:20	84	0.760	2.387	0.401	5.450	0.422	0.106	0.000
2/13/15 0:20	85	0.401	2.725	0.422	3.866	0.317	0.042	0.000
2/13/15 3:20	86	0.422	1.796	0.359	3.464	0.275	0.084	0.000
2/13/15 6:20	87	1.415	1.479	0.338	4.922	0.380	0.169	0.021
2/13/15 9:20	88	0.613	2.662	0.422	6.041	0.465	0.127	0.000
2/13/15 12:20	89	0.676	2.493	0.401	5.894	0.444	0.127	0.000
2/13/15 15:20	90	0.380	1.986	0.359	3.380	0.275	0.021	0.000
2/13/15 18:20	91	0.338	2.007	0.359	3.126	0.253	0.063	0.000
2/13/15 21:20	92	0.380	2.028	0.380	3.781	0.296	0.000	0.000

Stage 5

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

K

K_err

Ca

Ca_err

Ti

Ti_err

V

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

Ave1stwk

AveAll

2.030

MDL
0.021

2.333

MDL
0.021

0.467

MDL
0.021

0.025

0.030

2/3/15 18:20

2/3/15 21:20

2/4/15 0:20

2/4/15 3:20

2/4/15 6:20

2/4/15 9:20

2/4/15 12:20

2/4/15 15:20

2/4/15 18:20

2/4/15 21:20

2/5/15 0:20

2/5/15 3:20

2/5/15 6:20

2/5/15 9:20

2/5/15 12:20

2/5/15 15:20

2/5/15 18:20

2/5/15 21:20

2/6/15 0:20

2/6/15 3:20

2/6/15 6:20

2/6/15 9:20

2/6/15 12:20

2/6/15 15:20

2/6/15 18:20

2/6/15 21:20

2/7/15 0:20

2/7/15 3:20

2/7/15 6:20

2/7/15 9:20

2/7/15 12:20

2/7/15 15:20

2/7/15 18:20

2/7/15 21:20

2/8/15 0:20

2/8/15 3:20

2/8/15 6:20

2/8/15 9:20

2/8/15 12:20

2/8/15 15:20

2/8/15 18:20

2/8/15 21:20

2/9/15 0:20

2/9/15 3:20

2/9/15 6:20

2/9/15 9:20

2/9/15 12:20

2/9/15 15:20

2/9/15 18:20

2/9/15 21:20

2/10/15 0:20

2/10/15 3:20

2/10/15 6:20

2/10/15 9:20

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1.542

3.992

1.922

1.352

1.901

2.957

4.520

7.795

4.119

1.563

0.613

0.570

0.929

1.246

1.394

1.901

2.514

3.000

1.711

2.978

1.605

2.683

2.049

1.965

1.056

1.331

0.887

0.634

0.824

1.204

1.436

1.648

0.803

0.739

0.929

2.260

2.725

2.134

1.056

0.549

1.310

2.662

2.493

2.239

2.239

3.612

3.464

3.084

2.831

2.155

1.267

0.655

0.866

2.809

2.218

0.106

0.275

0.127

0.106

0.127

0.211

0.338

0.549

0.296

0.127

0.042

0.042

0.084

0.106

0.106

0.148

0.190

0.211

0.127

0.211

0.106

0.190

0.148

0.148

0.084

0.084

0.063

0.042

0.063

0.084

0.106

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0.042

0.063

0.169

0.190

0.148

0.084

0.084

0.106

0.106

0.190

0.169

0.190

0.253

0.253

0.253

0.211

0.148

0.084

0.063

0.190

0.148

0.993

2.640

1.183

0.782

1.014

1.584

2.831

10.900

9.316

2.028

0.634

0.486

0.908

1.458

1.479

2.070

1.183

1.415

1.605

1.774

1.563

4.478

3.253

2.957

1.584

1.542

1.183

0.824

0.718

1.394

1.584

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0.570

0.359

0.613

1.373

2.640

1.141

1.563

2.978

2.746

2.556

2.493

3.718

3.464

3.464

3.464

3.464

2.535

2.281

0.887

1.162

2.408

2.936

0.084

0.211

0.106

0.084

Stage 5	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
	4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	2.030	MDL	2.333	MDL	0.467	MDL	0.025
Marks	0.02112 cm2/m3	AveAll	1.989	0.021	2.434	0.021	0.549	0.021	0.030

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/10/15 15:20	66	2.704	0.190	4.351	0.338	0.845	0.063	0.042
2/10/15 18:20	67	3.316	0.232	7.816	0.570	2.704	0.211	0.190
2/10/15 21:20	68	2.239	0.148	5.239	0.401	2.471	0.190	0.232
2/11/15 0:20	69	1.120	0.084	2.155	0.169	0.824	0.063	0.084
2/11/15 3:20	70	0.655	0.042	1.077	0.106	0.338	0.042	0.042
2/11/15 6:20	71	0.739	0.042	0.993	0.106	0.338	0.042	0.000
2/11/15 9:20	72	1.753	0.127	2.577	0.211	0.845	0.063	0.063
2/11/15 12:20	73	2.598	0.190	4.901	0.380	0.760	0.063	0.042
2/11/15 15:20	74	2.387	0.169	3.697	0.296	0.866	0.063	0.042
2/11/15 18:20	75	3.908	0.275	6.295	0.465	1.415	0.106	0.063
2/11/15 21:20	76	1.880	0.127	2.873	0.232	0.634	0.063	0.021
2/12/15 0:20	77	1.077	0.084	1.436	0.127	0.359	0.042	0.021
2/12/15 3:20	78	0.866	0.063	0.972	0.084	0.232	0.021	0.021
2/12/15 6:20	79	1.014	0.063	1.141	0.106	0.296	0.021	0.021
2/12/15 9:20	80	1.584	0.106	2.345	0.190	0.486	0.042	0.021
2/12/15 12:20	81	2.852	0.190	4.246	0.317	0.908	0.084	0.042
2/12/15 15:20	82	2.366	0.169	4.985	0.380	0.570	0.042	0.021
2/12/15 18:20	83	2.662	0.190	4.922	0.380	0.972	0.084	0.042
2/12/15 21:20	84	2.281	0.169	3.612	0.275	0.908	0.084	0.084
2/13/15 0:20	85	1.267	0.084	1.500	0.127	0.401	0.042	0.021
2/13/15 3:20	86	0.951	0.063	1.436	0.127	0.444	0.042	0.042
2/13/15 6:20	87	2.493	0.169	4.140	0.317	1.289	0.106	0.084
2/13/15 9:20	88	2.471	0.169	3.042	0.232	1.436	0.106	0.084
2/13/15 12:20	89	2.915	0.211	3.063	0.232	0.951	0.084	0.063
2/13/15 15:20	90	1.542	0.106	1.479	0.127	0.845	0.063	0.021
2/13/15 18:20	91	1.204	0.084	1.204	0.106	0.338	0.042	0.021
2/13/15 21:20	92	1.310	0.084	1.246	0.106	0.422	0.042	0.000

Stage 5

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

V_err
ng/cm^2

Cr
ng/cm^2

Cr_err
ng/cm^2

Mn
ng/cm^2

Mn_err
ng/cm^2

Fe
ng/cm^2

Fe_err
ng/cm^2

Ave1stwk
AveAll

MDL
0.021

0.035
MDL
0.051
0.021

0.121
MDL
0.150
0.021

7.431
MDL
9.707
0.021

	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
2/3/15 18:20	11	0.000	0.084	0.000	0.190	0.021	11.787	0.824
2/3/15 21:20	12	0.000	0.169	0.021	0.422	0.021	34.009	2.408
2/4/15 0:20	13	0.000	0.084	0.000	0.169	0.021	12.991	0.908
2/4/15 3:20	14	0.000	0.042	0.000	0.127	0.000	5.978	0.422
2/4/15 6:20	15	0.000	0.042	0.000	0.190	0.021	6.105	0.422
2/4/15 9:20	16	0.021	0.042	0.021	0.296	0.021	5.450	0.380
2/4/15 12:20	17	0.021	0.021	0.021	0.296	0.021	10.668	0.760
2/4/15 15:20	18	0.000	0.063	0.000	0.486	0.042	19.772	1.394
2/4/15 18:20	19	0.000	0.190	0.021	0.380	0.021	32.510	2.302
2/4/15 21:20	20	0.021	0.021	0.021	0.127	0.021	8.344	0.591
2/5/15 0:20	21	0.000	0.021	0.000	0.042	0.000	1.943	0.148
2/5/15 3:20	22	0.000	0.000	0.000	0.042	0.000	3.042	0.211
2/5/15 6:20	23	0.021	0.021	0.021	0.063	0.021	6.907	0.486
2/5/15 9:20	24	0.021	0.021	0.021	0.106	0.021	7.752	0.549
2/5/15 12:20	25	0.000	0.042	0.000	0.127	0.000	5.598	0.401
2/5/15 15:20	26	0.021	0.042	0.021	0.148	0.021	6.591	0.465
2/5/15 18:20	27	0.021	0.021	0.021	0.148	0.021	5.323	0.380
2/5/15 21:20	28	0.000	0.042	0.000	0.211	0.021	5.323	0.380
2/6/15 0:20	29	0.021	0.021	0.021	0.232	0.021	4.689	0.338
2/6/15 3:20	30	0.021	0.021	0.021	0.296	0.021	7.647	0.549
2/6/15 6:20	31	0.000	0.021	0.000	0.127	0.000	5.746	0.401
2/6/15 9:20	32	0.000	0.021	0.000	0.169	0.021	7.858	0.549
2/6/15 12:20	33	0.000	0.042	0.000	0.127	0.000	4.880	0.338
2/6/15 15:20	34	0.000	0.021	0.000	0.106	0.000	4.753	0.338
2/6/15 18:20	35	0.000	0.021	0.000	0.063	0.000	2.387	0.169
2/6/15 21:20	36	0.000	0.021	0.000	0.063	0.000	2.345	0.169
2/7/15 0:20	37	0.000	0.000	0.000	0.063	0.000	2.112	0.148
2/7/15 3:20	38	0.000	0.021	0.000	0.042	0.000	2.493	0.169
2/7/15 6:20	39	0.000	0.000	0.000	0.042	0.000	2.302	0.169
2/7/15 9:20	40	0.000	0.000	0.000	0.042	0.000	3.485	0.253
2/7/15 12:20	41	0.000	0.000	0.000	0.042	0.000	2.704	0.190
2/7/15 15:20	42	0.000	0.000	0.000	0.042	0.000	3.211	0.232
2/7/15 18:20	43	0.000	0.000	0.000	0.063	0.000	4.563	0.317
2/7/15 21:20	44	0.000	0.021	0.000	0.042	0.000	5.006	0.359
2/8/15 0:20	45	0.000	0.000	0.000	0.021	0.000	2.514	0.169
2/8/15 3:20	46	0.000	0.000	0.000	0.021	0.000	1.373	0.106
2/8/15 6:20	47	0.000	0.021	0.000	0.042	0.000	1.669	0.127
2/8/15 9:20	48	0.000	0.021	0.000	0.063	0.000	2.619	0.190
2/8/15 12:20	49	0.000	0.021	0.000	0.042	0.000	4.288	0.296
2/8/15 15:20	50	0.000	0.021	0.000	0.063	0.000	5.661	0.401
2/8/15 18:20	51	0.021	0.021	0.021	0.042	0.021	2.767	0.190
2/8/15 21:20	52	0.021	0.000	0.021	0.042	0.021	2.598	0.190
2/9/15 0:20	53	0.021	0.084	0.021	0.021	0.021	1.774	0.127
2/9/15 3:20	54	0.021	0.000	0.021	0.021	0.000	1.605	0.127
2/9/15 6:20	55	0.021	0.000	0.021	0.042	0.000	2.007	0.148
2/9/15 9:20	56	0.000	0.000	0.000	0.021	0.000	2.978	0.211
2/9/15 12:20	57	0.021	0.042	0.021	0.042	0.021	5.323	0.380
2/9/15 15:20	58	0.021	0.000	0.021	0.063	0.021	4.837	0.338
2/9/15 18:20	59	0.021	0.042	0.021	0.106	0.021	8.471	0.591
2/9/15 21:20	60	0.000	0.063	0.000	0.127	0.000	12.104	0.866
2/10/15 0:20	61	0.000	0.021	0.000	0.042	0.000	3.507	0.253
2/10/15 3:20	62	0.021	0.000	0.000	0.021	0.000	1.415	0.106
2/10/15 6:20	63	0.000	0.000	0.000	0.021	0.000	2.239	0.169
2/10/15 9:20	64	0.000	0.000	0.000	0.084	0.000	4.267	0.296
2/10/15 12:20	65	0.000	0.021	0.000	0.084	0.000	3.908	0.275

Stage 5	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	V_err ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.035	MDL	0.121	MDL	7.431	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	0.051	0.021	0.150	0.021	9.707	0.021

ID#	V_err ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2	
2/10/15 15:20	66	0.000	0.148	0.000	0.190	0.021	14.090	0.993
2/10/15 18:20	67	0.021	0.232	0.021	0.486	0.042	53.823	3.802
2/10/15 21:20	68	0.021	0.275	0.021	0.549	0.042	59.844	4.225
2/11/15 0:20	69	0.000	0.296	0.021	0.275	0.021	29.235	2.070
2/11/15 3:20	70	0.000	0.063	0.000	0.190	0.021	15.357	1.077
2/11/15 6:20	71	0.000	0.021	0.000	0.106	0.000	5.809	0.422
2/11/15 9:20	72	0.000	0.042	0.000	0.232	0.021	9.738	0.697
2/11/15 12:20	73	0.000	0.232	0.021	0.422	0.021	10.034	0.718
2/11/15 15:20	74	0.000	0.084	0.000	0.275	0.021	15.251	1.077
2/11/15 18:20	75	0.000	0.169	0.021	0.422	0.021	31.496	2.218
2/11/15 21:20	76	0.000	0.042	0.000	0.190	0.021	15.970	1.120
2/12/15 0:20	77	0.000	0.042	0.000	0.106	0.000	6.379	0.444
2/12/15 3:20	78	0.000	0.021	0.000	0.084	0.000	5.070	0.359
2/12/15 6:20	79	0.000	0.021	0.000	0.063	0.000	4.795	0.338
2/12/15 9:20	80	0.000	0.042	0.000	0.127	0.000	7.752	0.549
2/12/15 12:20	81	0.000	0.021	0.000	0.148	0.000	10.055	0.718
2/12/15 15:20	82	0.000	0.021	0.000	0.148	0.000	9.062	0.634
2/12/15 18:20	83	0.000	0.148	0.000	0.275	0.021	24.588	1.732
2/12/15 21:20	84	0.000	0.106	0.000	0.211	0.021	21.082	1.479
2/13/15 0:20	85	0.000	0.063	0.000	0.190	0.021	16.815	1.183
2/13/15 3:20	86	0.000	0.042	0.000	0.127	0.000	13.730	0.972
2/13/15 6:20	87	0.000	0.169	0.021	0.380	0.021	35.636	2.514
2/13/15 9:20	88	0.000	0.042	0.000	0.253	0.021	14.449	1.014
2/13/15 12:20	89	0.000	0.169	0.021	0.275	0.021	11.998	0.845
2/13/15 15:20	90	0.000	0.021	0.000	0.169	0.021	7.457	0.528
2/13/15 18:20	91	0.000	0.021	0.000	0.127	0.000	5.196	0.359
2/13/15 21:20	92	0.000	0.021	0.000	0.084	0.000	7.076	0.507

Stage 5

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

Co

ng/cm^2

Co_err

ng/cm^2

Ni

ng/cm^2

Ni_err

ng/cm^2

Cu

ng/cm^2

Cu_err

ng/cm^2

Zn

ng/cm^2

0.052

MDL

0.049

MDL

0.344

MDL

0.508

0.062

0.021

0.044

0.021

0.366

0.021

0.458

2/3/15 18:20

11

0.084

0.000

0.042

0.000

0.338

0.042

0.359

2/3/15 21:20

12

0.190

0.021

0.000

0.000

0.845

0.084

0.803

2/4/15 0:20

13

0.106

0.000

0.063

0.000

0.211

0.042

0.401

2/4/15 3:20

14

0.042

0.000

0.042

0.000

0.148

0.021

0.275

2/4/15 6:20

15

0.042

0.000

0.042

0.000

0.190

0.042

0.232

2/4/15 9:20

16

0.042

0.021

0.042

0.021

0.275

0.042

0.739

2/4/15 12:20

17

0.042

0.021

0.042

0.021

0.613

0.063

0.908

2/4/15 15:20

18

0.106

0.000

0.042

0.000

1.056

0.106

1.373

2/4/15 18:20

19

0.190

0.021

0.021

0.000

0.697

0.063

0.697

2/4/15 21:20

20

0.063

0.021

0.063

0.021

0.444

0.063

0.380

2/5/15 0:20

21

0.021

0.000

0.042

0.000

0.063

0.021

0.169

2/5/15 3:20

22

0.042

0.000

0.042

0.000

0.148

0.021

0.106

2/5/15 6:20

23

0.021

0.021

0.042

0.021

0.253

0.042

0.253

2/5/15 9:20

24

0.042

0.021

0.063

0.021

0.296

0.042

0.401

2/5/15 12:20

25

0.042

0.000

0.063

0.000

0.380

0.042

0.465

2/5/15 15:20

26

0.042

0.021

0.021

0.021

0.613

0.063

0.507

2/5/15 18:20

27

0.021

0.021

0.042

0.021

0.591

0.063

0.803

2/5/15 21:20

28

0.021

0.000

0.063

0.000

0.359

0.042

0.824

2/6/15 0:20

29

0.021

0.021

0.042

0.021

0.148

0.042

1.014

2/6/15 3:20

30

0.042

0.021

0.042

0.021

0.338

0.063

0.866

2/6/15 6:20

31

0.042

0.000

0.042

0.000

0.422

0.042

0.422

2/6/15 9:20

32

0.042

0.000

0.021

0.000

0.803

0.084

0.803

2/6/15 12:20

33

0.021

0.000

0.042

0.000

0.528

0.063

0.718

2/6/15 15:20

34

0.042

0.000

0.063

0.000

0.190

0.042

0.211

2/6/15 18:20

35

0.042

0.000

0.063

0.000

0.127

0.021

0.148

2/6/15 21:20

36

0.042

0.000

0.063

0.000

0.042

0.021

0.401

2/7/15 0:20

37

0.021

0.000

0.063

0.000

0.063

0.021

0.507

2/7/15 3:20

38

0.021

0.000

0.042

0.000

0.127

0.021

0.549

2/7/15 6:20

39

0.021

0.000

0.042

0.000

0.169

0.042

0.507

2/7/15 9:20

40

0.042

0.000

0.063

0.000

0.401

0.042

0.570

2/7/15 12:20

41

0.021

0.000

0.063

0.000

Stage 5

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

Co
ng/cm^2

Co_err
ng/cm^2

Ni
ng/cm^2

Ni_err
ng/cm^2

Cu
ng/cm^2

Cu_err
ng/cm^2

Zn
ng/cm^2

0.052

MDL

0.049

MDL

0.344

MDL

0.508

0.062

0.021

0.044

0.021

0.366

0.021

0.458

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/10/15 15:20	66	0.084	0.000	0.063	0.000	0.380	0.042	0.296
2/10/15 18:20	67	0.317	0.021	0.042	0.000	2.134	0.169	1.035
2/10/15 21:20	68	0.359	0.021	0.021	0.000	1.753	0.148	0.824
2/11/15 0:20	69	0.169	0.021	0.042	0.000	0.697	0.063	0.401
2/11/15 3:20	70	0.106	0.000	0.021	0.000	0.317	0.042	0.190
2/11/15 6:20	71	0.042	0.000	0.021	0.000	0.253	0.042	0.169
2/11/15 9:20	72	0.063	0.000	0.042	0.000	0.422	0.042	0.486
2/11/15 12:20	73	0.063	0.000	0.021	0.000	0.380	0.042	0.359
2/11/15 15:20	74	0.063	0.000	0.021	0.000	0.444	0.042	0.359
2/11/15 18:20	75	0.190	0.021	0.021	0.000	0.866	0.084	0.549
2/11/15 21:20	76	0.063	0.000	0.021	0.000	0.317	0.042	0.465
2/12/15 0:20	77	0.042	0.000	0.063	0.000	0.190	0.042	0.275
2/12/15 3:20	78	0.042	0.000	0.021	0.000	0.106	0.021	0.127
2/12/15 6:20	79	0.042	0.000	0.021	0.000	0.148	0.042	0.106
2/12/15 9:20	80	0.042	0.000	0.042	0.000	0.211	0.042	0.190
2/12/15 12:20	81	0.084	0.000	0.063	0.000	0.338	0.042	0.296
2/12/15 15:20	82	0.042	0.000	0.042	0.000	0.253	0.042	0.232
2/12/15 18:20	83	0.127	0.000	0.021	0.000	0.782	0.084	0.444
2/12/15 21:20	84	0.106	0.000	0.021	0.000	0.507	0.063	0.422
2/13/15 0:20	85	0.106	0.000	0.021	0.000	0.338	0.042	0.275
2/13/15 3:20	86	0.063	0.000	0.021	0.000	0.317	0.042	0.275
2/13/15 6:20	87	0.190	0.021	0.042	0.000	0.528	0.063	0.465
2/13/15 9:20	88	0.106	0.000	0.042	0.000	0.845	0.084	0.486
2/13/15 12:20	89	0.063	0.000	0.042	0.000	0.591	0.063	0.591
2/13/15 15:20	90	0.063	0.000	0.042	0.000	0.275	0.042	0.359
2/13/15 18:20	91	0.042	0.000	0.042	0.000	0.211	0.042	0.211
2/13/15 21:20	92	0.021	0.000	0.042	0.000	0.211	0.042	0.190

Stage 5

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err
ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Ave1stwk

AveAll

MDL
0.042

0.177
0.157

MDL
0.021

0.271
0.251

MDL
0.021

	ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
2/3/15 18:20	11	0.063	0.275	0.021	0.465	0.042
2/3/15 21:20	12	0.084	0.275	0.021	0.232	0.021
2/4/15 0:20	13	0.063	0.169	0.021	0.317	0.021
2/4/15 3:20	14	0.042	0.148	0.000	0.000	0.000
2/4/15 6:20	15	0.042	0.190	0.021	0.021	0.000
2/4/15 9:20	16	0.084	0.296	0.084	0.486	0.359
2/4/15 12:20	17	0.106	0.422	0.084	0.507	0.359
2/4/15 15:20	18	0.127	0.465	0.042	0.486	0.042
2/4/15 18:20	19	0.084	0.232	0.021	0.296	0.021
2/4/15 21:20	20	0.063	0.190	0.084	0.000	0.380
2/5/15 0:20	21	0.042	0.084	0.000	0.190	0.021
2/5/15 3:20	22	0.042	0.106	0.000	0.000	0.000
2/5/15 6:20	23	0.063	0.275	0.084	0.000	0.380
2/5/15 9:20	24	0.063	0.296	0.084	0.739	0.401
2/5/15 12:20	25	0.063	0.169	0.021	0.190	0.021
2/5/15 15:20	26	0.084	0.211	0.084	0.613	0.380
2/5/15 18:20	27	0.106	0.380	0.084	0.634	0.359
2/5/15 21:20	28	0.084	0.507	0.042	0.697	0.042
2/6/15 0:20	29	0.106	0.338	0.084	0.000	0.359
2/6/15 3:20	30	0.106	0.359	0.084	0.000	0.359
2/6/15 6:20	31	0.063	0.211	0.021	0.422	0.021
2/6/15 9:20	32	0.084	0.127	0.000	0.422	0.021
2/6/15 12:20	33	0.084	0.063	0.000	0.148	0.021
2/6/15 15:20	34	0.042	0.063	0.000	0.148	0.021
2/6/15 18:20	35	0.042	0.063	0.000	0.317	0.021
2/6/15 21:20	36	0.063	0.127	0.000	0.042	0.000
2/7/15 0:20	37	0.063	0.084	0.000	0.021	0.000
2/7/15 3:20	38	0.063	0.084	0.000	0.000	0.000
2/7/15 6:20	39	0.063	0.042	0.000	0.000	0.000
2/7/15 9:20	40	0.063	0.148	0.000	0.275	0.021
2/7/15 12:20	41	0.063	0.169	0.021	0.190	0.021
2/7/15 15:20	42	0.042	0.127	0.000	0.106	0.000
2/7/15 18:20	43	0.042	0.127	0.000	0.021	0.000
2/7/15 21:20	44	0.063	0.084	0.000	0.275	0.021
2/8/15 0:20	45	0.127	0.148	0.000	0.317	0.021
2/8/15 3:20	46	0.211	0.042	0.000	0.317	0.021
2/8/15 6:20	47	0.190	0.296	0.021	0.591	0.042
2/8/15 9:20	48	0.084	0.190	0.021	0.275	0.021
2/8/15 12:20	49	0.042	0.063	0.000	0.253	0.021
2/8/15 15:20	50	0.042	0.106	0.000	0.190	0.021
2/8/15 18:20	51	0.042	0.106	0.063	0.000	0.338
2/8/15 21:20	52	0.042	0.232	0.084	0.528	0.359
2/9/15 0:20	53	0.042	0.211	0.084	0.000	0.338
2/9/15 3:20	54	0.042	0.127	0.063	0.507	0.338
2/9/15 6:20	55	0.042	0.232	0.084	0.613	0.338
2/9/15 9:20	56	0.042	0.190	0.021	0.528	0.042
2/9/15 12:20	57	0.063	0.253	0.084	0.000	0.338
2/9/15 15:20	58	0.042	0.169	0.084	0.570	0.338
2/9/15 18:20	59	0.042	0.148	0.063	0.739	0.338
2/9/15 21:20	60	0.042	0.127	0.000	0.211	0.021
2/10/15 0:20	61	0.042	0.190	0.021	0.401	0.021
2/10/15 3:20	62	0.042	0.127	0.084	0.422	0.359
2/10/15 6:20	63	0.042	0.063	0.000	0.063	0.000
2/10/15 9:20	64	0.042	0.042	0.000	0.169	0.021
2/10/15 12:20	65	0.042	0.106	0.000	0.211	0.021

Stage 5	7.89 L/m						
	1440 min/day						
Marks	11.3616 m3/day	ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
	4 mm/day						
3	6 mm						
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.177	MDL	0.271	MDL
Marks	0.02112 cm2/m3	AveAll	0.042	0.157	0.021	0.251	0.021

ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
2/10/15 15:20	66	0.042	0.169	0.021	0.021
2/10/15 18:20	67	0.106	0.148	0.000	0.465
2/10/15 21:20	68	0.084	0.063	0.000	0.211
2/11/15 0:20	69	0.063	0.084	0.000	0.000
2/11/15 3:20	70	0.042	0.042	0.000	0.549
2/11/15 6:20	71	0.042	0.127	0.000	0.380
2/11/15 9:20	72	0.063	0.042	0.000	0.000
2/11/15 12:20	73	0.063	0.084	0.000	0.296
2/11/15 15:20	74	0.063	0.106	0.000	0.211
2/11/15 18:20	75	0.063	0.148	0.021	0.190
2/11/15 21:20	76	0.063	0.106	0.000	0.148
2/12/15 0:20	77	0.042	0.127	0.000	0.000
2/12/15 3:20	78	0.042	0.063	0.000	0.359
2/12/15 6:20	79	0.042	0.106	0.000	0.106
2/12/15 9:20	80	0.042	0.106	0.000	0.380
2/12/15 12:20	81	0.042	0.063	0.000	0.275
2/12/15 15:20	82	0.042	0.084	0.000	0.000
2/12/15 18:20	83	0.063	0.106	0.000	0.317
2/12/15 21:20	84	0.063	0.106	0.000	0.211
2/13/15 0:20	85	0.042	0.084	0.000	0.401
2/13/15 3:20	86	0.042	0.148	0.021	0.021
2/13/15 6:20	87	0.063	0.127	0.000	0.549
2/13/15 9:20	88	0.063	0.148	0.000	0.000
2/13/15 12:20	89	0.063	0.084	0.000	0.000
2/13/15 15:20	90	0.063	0.127	0.000	0.063
2/13/15 18:20	91	0.042	0.084	0.000	0.000
2/13/15 21:20	92	0.042	0.084	0.000	0.253

Stage 5	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/3/15 18:20	11	48.542
2/3/15 21:20	12	97.698
2/4/15 0:20	13	64.237
2/4/15 3:20	14	45.712
2/4/15 6:20	15	52.366
2/4/15 9:20	16	106.548
2/4/15 12:20	17	152.662
2/4/15 15:20	18	287.664
2/4/15 18:20	19	163.519
2/4/15 21:20	20	76.193
2/5/15 0:20	21	43.093
2/5/15 3:20	22	45.691
2/5/15 6:20	23	54.626
2/5/15 9:20	24	67.575
2/5/15 12:20	25	67.659
2/5/15 15:20	26	100.507
2/5/15 18:20	27	112.548
2/5/15 21:20	28	126.046
2/6/15 0:20	29	86.481
2/6/15 3:20	30	115.209
2/6/15 6:20	31	67.533
2/6/15 9:20	32	53.295
2/6/15 12:20	33	46.895
2/6/15 15:20	34	42.374
2/6/15 18:20	35	31.115
2/6/15 21:20	36	25.158
2/7/15 0:20	37	29.573
2/7/15 3:20	38	26.193
2/7/15 6:20	39	37.959
2/7/15 9:20	40	34.939
2/7/15 12:20	41	47.529
2/7/15 15:20	42	38.657
2/7/15 18:20	43	41.825
2/7/15 21:20	44	32.193
2/8/15 0:20	45	39.776
2/8/15 3:20	46	61.829
2/8/15 6:20	47	71.208
2/8/15 9:20	48	55.323
2/8/15 12:20	49	39.058
2/8/15 15:20	50	42.733
2/8/15 18:20	51	115.822
2/8/15 21:20	52	230.798
2/9/15 0:20	53	207.267
2/9/15 3:20	54	167.195
2/9/15 6:20	55	175.011
2/9/15 9:20	56	240.938
2/9/15 12:20	57	244.635
2/9/15 15:20	58	199.641
2/9/15 18:20	59	176.574
2/9/15 21:20	60	141.086
2/10/15 0:20	61	70.786
2/10/15 3:20	62	28.855
2/10/15 6:20	63	42.353
2/10/15 9:20	64	67.659
2/10/15 12:20	65	63.942

Stage 5	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/10/15 15:20	66	69.497
2/10/15 18:20	67	112.463
2/10/15 21:20	68	100.739
2/11/15 0:20	69	57.034
2/11/15 3:20	70	37.664
2/11/15 6:20	71	27.736
2/11/15 9:20	72	39.839
2/11/15 12:20	73	59.970
2/11/15 15:20	74	61.343
2/11/15 18:20	75	84.960
2/11/15 21:20	76	56.654
2/12/15 0:20	77	35.699
2/12/15 3:20	78	24.778
2/12/15 6:20	79	21.272
2/12/15 9:20	80	37.051
2/12/15 12:20	81	51.627
2/12/15 15:20	82	47.127
2/12/15 18:20	83	66.836
2/12/15 21:20	84	60.921
2/13/15 0:20	85	48.141
2/13/15 3:20	86	34.115
2/13/15 6:20	87	85.213
2/13/15 9:20	88	50.993
2/13/15 12:20	89	46.198
2/13/15 15:20	90	36.312
2/13/15 18:20	91	30.228
2/13/15 21:20	92	32.847

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

Na Na_err Mg Mg_err Al Al_err Si
 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

20.814 MDL 2.019 MDL 0.501 MDL 1.644
 17.507 0.253 1.791 0.063 0.639 0.021 2.056

	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
2/3/15 18:20	10	10.118	0.739	2.704	0.190	0.190	0.021	1.014
2/3/15 21:20	11	13.097	0.929	0.972	0.084	1.077	0.084	2.324
2/4/15 0:20	12	12.104	6.781	2.345	1.880	0.993	0.591	2.112
2/4/15 3:20	13	10.520	6.210	0.000	1.711	0.718	0.549	1.563
2/4/15 6:20	14	12.104	6.612	2.239	1.838	0.000	0.549	3.211
2/4/15 9:20	15	11.111	6.041	2.471	1.669	0.866	0.507	1.352
2/4/15 12:20	16	10.710	6.591	2.471	1.838	0.782	0.570	1.817
2/4/15 15:20	17	11.681	6.781	0.000	1.922	0.718	0.634	4.964
2/4/15 18:20	18	14.090	1.014	0.908	0.084	1.584	0.106	3.781
2/4/15 21:20	19	6.950	5.999	0.000	1.669	0.000	0.486	1.204
2/5/15 0:20	20	0.000	7.478	2.366	2.155	0.000	0.676	1.204
2/5/15 3:20	21	9.316	6.020	0.000	1.711	0.000	0.507	0.803
2/5/15 6:20	22	15.864	6.464	2.746	1.774	0.000	0.507	1.035
2/5/15 9:20	23	0.000	5.619	0.000	1.669	0.000	0.486	1.056
2/5/15 12:20	24	19.054	1.352	2.007	0.148	0.169	0.021	1.859
2/5/15 15:20	25	9.316	5.661	0.000	1.605	0.549	0.486	0.929
2/5/15 18:20	26	14.871	1.056	0.739	0.084	0.190	0.021	1.605
2/5/15 21:20	27	14.491	5.894	0.000	1.605	0.000	0.486	0.908
2/6/15 0:20	28	9.527	0.697	0.465	0.063	0.718	0.063	1.774
2/6/15 3:20	29	12.886	0.929	0.803	0.084	0.465	0.042	2.134
2/6/15 6:20	30	16.455	1.183	1.141	0.106	0.380	0.021	1.542
2/6/15 9:20	31	7.943	6.210	0.000	1.774	1.289	0.549	3.697
2/6/15 12:20	32	19.434	1.373	0.000	0.063	0.951	0.063	4.183
2/6/15 15:20	33	0.000	5.999	0.000	1.711	1.521	0.549	4.668
2/6/15 18:20	34	13.878	0.993	1.204	0.106	1.479	0.106	3.042
2/6/15 21:20	35	5.365	0.422	1.098	0.084	2.725	0.190	1.289
2/7/15 0:20	36	16.455	1.183	0.507	0.063	0.528	0.042	1.352
2/7/15 3:20	37	12.695	5.872	0.000	1.605	0.000	0.486	0.929
2/7/15 6:20	38	20.427	6.527	0.000	1.711	0.000	0.507	1.098
2/7/15 9:20	39	15.864	1.141	1.669	0.127	0.380	0.021	1.098
2/7/15 12:20	40	16.075	1.141	2.640	0.190	0.887	0.063	1.711
2/7/15 15:20	41	19.054	1.352	1.711	0.127	0.549	0.042	1.267
2/7/15 18:20	42	20.237	6.696	2.746	1.838	0.570	0.528	1.732
2/7/15 21:20	43	17.258	6.105	0.000	1.605	0.000	0.486	0.549
2/8/15 0:20	44	14.871	1.056	2.007	0.148	2.134	0.148	0.507
2/8/15 3:20	45	22.412	1.584	0.169	0.063	0.380	0.021	0.570
2/8/15 6:20	46	22.624	1.605	1.204	0.106	0.528	0.042	1.521
2/8/15 9:20	47	12.505	0.908	0.866	0.084	0.591	0.042	1.605
2/8/15 12:20	48	11.703	0.845	2.239	0.169	0.296	0.021	1.796
2/8/15 15:20	49	10.308	0.739	0.739	0.084	0.359	0.021	0.634
2/8/15 18:20	50	39.480	7.288	5.682	1.859	0.000	0.507	0.634
2/8/15 21:20	51	47.803	7.372	4.816	1.753	0.000	0.486	0.380
2/9/15 0:20	52	64.068	8.745	7.393	2.007	0.000	0.549	0.570
2/9/15 3:20	53	57.731	7.858	6.084	1.774	0.000	0.486	0.486
2/9/15 6:20	54	63.076	8.703	7.288	2.007	0.697	0.549	0.444
2/9/15 9:20	55	63.688	8.407	5.323	1.859	0.000	0.528	0.845
2/9/15 12:20	56	81.327	9.569	10.372	2.112	0.000	0.549	0.528
2/9/15 15:20	57	51.183	3.612	5.619	0.401	0.000	0.021	0.549
2/9/15 18:20	58	40.473	7.478	4.816	1.901	0.000	0.549	0.613
2/9/15 21:20	59	28.559	2.028	2.239	0.169	0.148	0.021	0.908
2/10/15 0:20	60	30.144	2.134	2.915	0.211	0.127	0.021	1.289
2/10/15 3:20	61	18.842	1.331	1.943	0.148	0.042	0.021	0.929
2/10/15 6:20	62	12.104	0.866	2.070	0.148	0.063	0.021	1.183
2/10/15 9:20	63	17.448	1.246	2.704	0.190	0.718	0.063	1.141
2/10/15 12:20	64	17.448	1.246	0.972	0.084	0.211	0.021	2.535

Stage 6	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
	4 mm/day		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	6 mm								
3	0.24 cm2/day	Ave1stwk	20.814	MDL	2.019	MDL	0.501	MDL	1.644
2/3/2015 18:20	0.02112 cm2/m3	AveAll	17.507	0.253	1.791	0.063	0.639	0.021	2.056
Marks									

2/10/15 15:20	65	14.090	5.894	0.000	1.605	0.845	0.507	2.345
2/10/15 18:20	66	12.886	0.929	2.640	0.190	1.289	0.084	5.154
2/10/15 21:20	67	15.082	1.077	0.697	0.063	0.613	0.042	3.401
2/11/15 0:20	68	15.484	1.098	0.739	0.084	0.697	0.042	2.450
2/11/15 3:20	69	9.316	0.676	1.310	0.106	0.908	0.063	1.711
2/11/15 6:20	70	18.251	6.675	0.000	1.774	0.000	0.549	1.415
2/11/15 9:20	71	9.717	0.718	0.634	0.063	0.465	0.042	1.373
2/11/15 12:20	72	7.943	0.591	1.943	0.148	0.148	0.021	1.732
2/11/15 15:20	73	14.491	1.035	1.542	0.127	1.204	0.084	2.408
2/11/15 18:20	74	9.928	0.718	1.711	0.127	1.648	0.127	4.689
2/11/15 21:20	75	9.928	0.718	1.838	0.148	0.275	0.021	1.458
2/12/15 0:20	76	17.659	1.246	1.141	0.106	1.838	0.127	2.662
2/12/15 3:20	77	6.147	0.465	1.542	0.127	0.549	0.042	1.817
2/12/15 6:20	78	11.111	0.803	0.697	0.063	0.296	0.021	1.690
2/12/15 9:20	79	14.491	1.035	1.373	0.106	0.760	0.063	1.225
2/12/15 12:20	80	7.731	6.189	0.000	1.774	0.000	0.528	2.176
2/12/15 15:20	81	8.323	5.450	0.000	1.563	0.613	0.465	1.521
2/12/15 18:20	82	3.169	0.296	0.908	0.084	3.760	0.275	13.118
2/12/15 21:20	83	7.943	5.640	1.943	1.605	1.373	0.528	4.394
2/13/15 0:20	84	14.090	1.014	0.972	0.084	0.718	0.063	3.021
2/13/15 3:20	85	11.301	0.824	1.774	0.127	0.845	0.063	2.155
2/13/15 6:20	86	4.563	0.380	3.549	0.253	3.739	0.253	10.330
2/13/15 9:20	87	6.147	5.809	0.000	1.669	0.000	0.507	2.197
2/13/15 12:20	88	10.520	0.760	1.035	0.084	0.127	0.021	1.436
2/13/15 15:20	89	10.308	0.739	1.943	0.148	0.951	0.063	1.394
2/13/15 18:20	90	9.125	0.676	3.443	0.253	1.267	0.084	4.161
2/13/15 21:20	91	9.125	0.676	0.106	0.063	0.929	0.063	2.725

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Si_err
ng/cm^2

P
ng/cm^2

P_err
ng/cm^2

S
ng/cm^2

S_err
ng/cm^2

Cl
ng/cm^2

Cl_err
ng/cm^2

Ave1stwk
AveAll

MDL
0.021

1.922
1.790

MDL
0.211

44.322
36.017

MDL
0.042

7.632
5.660

MDL
0.021

	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
2/3/15 18:20	10	0.084	2.239	0.338	29.320	2.112	0.655	0.042
2/3/15 21:20	11	0.169	1.690	0.296	49.430	3.528	0.760	0.063
2/4/15 0:20	12	0.296	3.528	0.528	75.391	5.387	0.972	0.106
2/4/15 3:20	13	0.275	3.169	0.486	87.854	6.253	0.803	0.106
2/4/15 6:20	14	0.359	1.774	0.401	49.873	3.591	1.183	0.127
2/4/15 9:20	15	0.232	1.267	0.359	40.917	2.957	0.697	0.084
2/4/15 12:20	16	0.275	2.746	0.465	39.649	2.873	0.697	0.084
2/4/15 15:20	17	0.465	3.274	0.507	275.623	19.455	1.310	0.148
2/4/15 18:20	18	0.275	2.894	0.380	163.392	11.555	1.711	0.127
2/4/15 21:20	19	0.232	1.246	0.359	25.370	1.859	0.211	0.063
2/5/15 0:20	20	0.296	3.760	0.549	277.736	19.603	2.239	0.190
2/5/15 3:20	21	0.232	2.134	0.422	34.009	2.471	0.253	0.063
2/5/15 6:20	22	0.232	2.809	0.465	27.757	2.028	0.211	0.063
2/5/15 9:20	23	0.232	0.824	0.338	22.793	1.690	0.359	0.063
2/5/15 12:20	24	0.127	2.746	0.380	29.763	2.134	0.380	0.021
2/5/15 15:20	25	0.211	1.627	0.380	22.243	1.648	0.507	0.084
2/5/15 18:20	26	0.127	1.880	0.317	24.229	1.753	0.613	0.042
2/5/15 21:20	27	0.211	0.993	0.338	27.355	2.007	0.486	0.084
2/6/15 0:20	28	0.127	3.570	0.422	142.924	10.097	1.436	0.106
2/6/15 3:20	29	0.148	2.134	0.338	76.151	5.408	0.845	0.063
2/6/15 6:20	30	0.106	2.767	0.380	91.804	6.506	0.634	0.042
2/6/15 9:20	31	0.380	1.732	0.401	56.633	4.056	0.613	0.084
2/6/15 12:20	32	0.296	2.873	0.380	45.839	3.274	0.760	0.042
2/6/15 15:20	33	0.422	1.965	0.401	24.440	1.796	0.127	0.063
2/6/15 18:20	34	0.211	2.429	0.359	24.271	1.753	0.084	0.000
2/6/15 21:20	35	0.106	1.225	0.275	25.264	1.817	0.042	0.000
2/7/15 0:20	36	0.106	2.598	0.359	32.510	2.324	0.148	0.021
2/7/15 3:20	37	0.211	1.880	0.380	29.447	2.155	0.148	0.063
2/7/15 6:20	38	0.232	2.134	0.422	35.657	2.577	0.232	0.063
2/7/15 9:20	39	0.084	1.289	0.275	26.193	1.880	0.127	0.000
2/7/15 12:20	40	0.127	2.873	0.380	10.625	0.782	0.084	0.000
2/7/15 15:20	41	0.106	1.732	0.296	8.809	0.655	0.042	0.000
2/7/15 18:20	42	0.275	3.232	0.486	40.346	2.915	0.127	0.063
2/7/15 21:20	43	0.211	1.584	0.380	65.420	4.689	0.359	0.084
2/8/15 0:20	44	0.042	2.577	0.359	62.442	4.436	0.359	0.021
2/8/15 3:20	45	0.042	1.796	0.296	64.935	4.605	0.465	0.042
2/8/15 6:20	46	0.106	2.894	0.380	110.499	7.816	0.444	0.021
2/8/15 9:20	47	0.127	1.373	0.275	34.622	2.471	0.127	0.000
2/8/15 12:20	48	0.127	2.873	0.380	43.642	3.105	0.148	0.021
2/8/15 15:20	49	0.042	1.458	0.275	10.203	0.760	0.528	0.042
2/8/15 18:20	50	0.232	1.690	0.401	11.893	0.929	19.349	1.373
2/8/15 21:20	51	0.211	0.422	0.317	10.076	0.803	43.811	3.105
2/9/15 0:20	52	0.232	1.352	0.401	12.083	0.929	68.842	4.858
2/9/15 3:20	53	0.211	0.866	0.359	8.386	0.676	49.155	3.464
2/9/15 6:20	54	0.232	0.887	0.359	12.548	0.972	54.689	3.866
2/9/15 9:20	55	0.232	0.169	0.317	11.301	0.887	46.895	3.316
2/9/15 12:20	56	0.253	2.007	0.444	14.470	1.098	48.986	3.464
2/9/15 15:20	57	0.042	0.824	0.232	13.160	0.972	31.474	2.218
2/9/15 18:20	58	0.232	1.479	0.401	17.659	1.331	15.716	1.120
2/9/15 21:20	59	0.063	0.401	0.211	10.984	0.824	13.012	0.908
2/10/15 0:20	60	0.106	1.458	0.275	8.259	0.634	8.323	0.591
2/10/15 3:20	61	0.063	1.120	0.253	6.337	0.486	0.782	0.063
2/10/15 6:20	62	0.084	1.584	0.296	8.048	0.613	1.246	0.084
2/10/15 9:20	63	0.084	1.056	0.253	5.492	0.422	1.373	0.106
2/10/15 12:20	64	0.190	1.732	0.296	7.478	0.570	1.394	0.106

Stage 6	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	Si_err ng/cm^2	P ng/cm^2	P_err ng/cm^2	S ng/cm^2	S_err ng/cm^2	Cl ng/cm^2	Cl_err ng/cm^2
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	1.922	MDL	44.322	MDL	7.632	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	1.790	0.211	36.017	0.042	5.660	0.021

2/10/15 15:20	65	0.296	1.120	0.359	5.556	0.486	0.570	0.084
2/10/15 18:20	66	0.359	2.302	0.338	13.730	1.014	0.634	0.042
2/10/15 21:20	67	0.253	1.479	0.275	17.955	1.310	0.655	0.042
2/11/15 0:20	68	0.169	2.429	0.359	32.383	2.324	0.908	0.063
2/11/15 3:20	69	0.127	1.352	0.275	16.646	1.225	0.697	0.042
2/11/15 6:20	70	0.275	1.796	0.401	19.941	1.479	1.120	0.127
2/11/15 9:20	71	0.106	0.718	0.232	12.611	0.929	0.866	0.063
2/11/15 12:20	72	0.127	1.458	0.275	12.104	0.887	1.225	0.084
2/11/15 15:20	73	0.169	1.014	0.253	18.230	1.331	0.591	0.042
2/11/15 18:20	74	0.338	1.986	0.317	13.202	0.972	1.817	0.127
2/11/15 21:20	75	0.106	0.908	0.232	12.041	0.887	0.528	0.042
2/12/15 0:20	76	0.190	2.556	0.359	19.371	1.415	0.824	0.063
2/12/15 3:20	77	0.127	1.225	0.275	13.097	0.972	0.634	0.042
2/12/15 6:20	78	0.127	2.387	0.338	42.332	3.021	0.401	0.021
2/12/15 9:20	79	0.084	0.803	0.232	7.879	0.591	1.648	0.106
2/12/15 12:20	80	0.296	1.373	0.380	8.703	0.697	2.978	0.232
2/12/15 15:20	81	0.232	1.098	0.338	4.753	0.422	0.760	0.084
2/12/15 18:20	82	0.929	2.324	0.338	19.138	1.394	0.845	0.063
2/12/15 21:20	83	0.422	0.866	0.338	12.104	0.929	2.978	0.232
2/13/15 0:20	84	0.211	1.711	0.296	16.540	1.204	1.774	0.127
2/13/15 3:20	85	0.148	1.246	0.275	12.188	0.908	1.753	0.127
2/13/15 6:20	86	0.739	1.774	0.296	16.075	1.183	1.331	0.084
2/13/15 9:20	87	0.296	0.866	0.359	22.349	1.648	2.852	0.232
2/13/15 12:20	88	0.106	1.584	0.296	21.610	1.563	2.408	0.169
2/13/15 15:20	89	0.106	1.183	0.253	8.492	0.634	3.021	0.211
2/13/15 18:20	90	0.296	1.838	0.317	16.033	1.162	2.028	0.148
2/13/15 21:20	91	0.190	0.718	0.232	14.766	1.077	1.289	0.084

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

K

ng/cm^2

K_err

ng/cm^2

Ca

ng/cm^2

Ca_err

ng/cm^2

Ti

ng/cm^2

Ti_err

ng/cm^2

V

ng/cm^2

2.619

MDL

2.679

0.021

1.156

MDL

1.960

0.021

0.212

MDL

0.261

0.021

0.016

0.019

	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/3/15 18:20	10	2.640	0.190	0.655	0.063	0.253	0.021	0.021
2/3/15 21:20	11	3.845	0.275	1.204	0.106	0.380	0.042	0.021
2/4/15 0:20	12	4.520	0.338	0.739	0.084	0.275	0.042	0.021
2/4/15 3:20	13	5.408	0.401	0.866	0.084	0.169	0.021	0.000
2/4/15 6:20	14	2.366	0.169	0.951	0.106	0.422	0.042	0.000
2/4/15 9:20	15	1.035	0.084	0.465	0.063	0.148	0.021	0.000
2/4/15 12:20	16	1.098	0.084	0.676	0.084	0.190	0.021	0.000
2/4/15 15:20	17	8.978	0.634	1.183	0.106	0.338	0.042	0.042
2/4/15 18:20	18	5.408	0.380	1.458	0.127	0.528	0.042	0.063
2/4/15 21:20	19	0.760	0.063	0.655	0.084	0.169	0.021	0.000
2/5/15 0:20	20	10.689	0.760	1.690	0.148	0.211	0.042	0.063
2/5/15 3:20	21	1.162	0.084	0.697	0.084	0.148	0.021	0.000
2/5/15 6:20	22	0.887	0.084	0.422	0.063	0.169	0.021	0.021
2/5/15 9:20	23	0.866	0.084	0.422	0.063	0.169	0.021	0.021
2/5/15 12:20	24	1.204	0.084	0.803	0.084	0.232	0.021	0.000
2/5/15 15:20	25	0.803	0.063	0.275	0.042	0.127	0.021	0.021
2/5/15 18:20	26	1.014	0.063	0.296	0.042	0.190	0.021	0.021
2/5/15 21:20	27	1.162	0.084	0.084	0.042	0.106	0.021	0.000
2/6/15 0:20	28	6.084	0.422	1.077	0.106	0.317	0.021	0.021
2/6/15 3:20	29	2.936	0.211	0.718	0.063	0.190	0.021	0.000
2/6/15 6:20	30	3.316	0.232	1.014	0.084	0.338	0.042	0.021
2/6/15 9:20	31	3.126	0.232	1.289	0.127	0.232	0.042	0.021
2/6/15 12:20	32	4.373	0.317	2.408	0.190	0.232	0.021	0.021
2/6/15 15:20	33	2.556	0.190	1.415	0.127	0.211	0.021	0.042
2/6/15 18:20	34	1.859	0.127	1.225	0.106	0.127	0.021	0.021
2/6/15 21:20	35	1.458	0.106	0.549	0.063	0.063	0.021	0.021
2/7/15 0:20	36	1.753	0.127	0.634	0.063	0.106	0.021	0.042
2/7/15 3:20	37	1.521	0.127	0.401	0.063	0.042	0.021	0.021
2/7/15 6:20	38	1.796	0.148	0.613	0.063	0.127	0.021	0.000
2/7/15 9:20	39	1.627	0.106	0.507	0.063	0.148	0.021	0.021
2/7/15 12:20	40	1.183	0.084	0.866	0.084	0.169	0.021	0.021
2/7/15 15:20	41	0.929	0.063	0.739	0.084	0.127	0.021	0.000
2/7/15 18:20	42	1.605	0.127	1.035	0.106	0.338	0.042	0.000
2/7/15 21:20	43	3.528	0.253	0.422	0.063	0.169	0.021	0.000
2/8/15 0:20	44	7.478	0.528	0.570	0.063	0.169	0.021	0.021
2/8/15 3:20	45	7.288	0.507	0.148	0.042	0.042	0.021	0.000
2/8/15 6:20	46	8.471	0.591	0.718	0.063	0.127	0.021	0.021
2/8/15 9:20	47	2.408	0.169	0.718	0.063	0.106	0.021	0.021
2/8/15 12:20	48	2.725	0.190	1.838	0.148	0.190	0.021	0.021
2/8/15 15:20	49	1.120	0.084	0.718	0.063	0.127	0.021	0.000
2/8/15 18:20	50	1.331	0.106	1.436	0.127	0.169	0.021	0.000
2/8/15 21:20	51	1.711	0.127	1.458	0.127	0.063	0.021	0.021
2/9/15 0:20	52	2.239	0.169	2.112	0.169	0.084	0.021	0.000
2/9/15 3:20	53	1.500	0.127	1.521	0.127	0.063	0.021	0.000
2/9/15 6:20	54	2.218	0.169	2.091	0.169	0.106	0.021	0.021
2/9/15 9:20	55	2.387	0.190	1.943	0.169	0.084	0.021	0.000
2/9/15 12:20	56	2.598	0.190	2.767	0.232	0.296	0.042	0.000
2/9/15 15:20	57	2.049	0.148	2.091	0.169	0.169	0.021	0.000
2/9/15 18:20	58	2.218	0.169	1.901	0.169	0.190	0.021	0.000
2/9/15 21:20	59	1.774	0.127	1.035	0.084	0.169	0.021	0.000
2/10/15 0:20	60	1.162	0.084	1.098	0.106	0.148	0.021	0.021
2/10/15 3:20	61	0.697	0.042	0.655	0.063	0.127	0.021	0.000
2/10/15 6:20	62	0.887	0.063	0.760	0.084	0.127	0.021	0.021
2/10/15 9:20	63	0.824	0.063	0.655	0.063	0.084	0.021	0.000
2/10/15 12:20	64	1.352	0.084	1.500	0.127	0.169	0.021	0.000

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

K

ng/cm^2

K_err

ng/cm^2

Ca

ng/cm^2

Ca_err

ng/cm^2

Ti

ng/cm^2

Ti_err

ng/cm^2

V

ng/cm^2

2.619

MDL

2.679

0.021

1.156

MDL

1.960

0.021

0.212

MDL

0.261

0.021

0.016

0.019

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V	
	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
2/10/15 15:20	65	0.951	0.084	1.225	0.106	0.253	0.042	0.000
2/10/15 18:20	66	1.922	0.127	4.056	0.317	1.246	0.106	0.084
2/10/15 21:20	67	2.345	0.169	5.133	0.380	1.014	0.084	0.084
2/11/15 0:20	68	3.950	0.275	3.654	0.275	0.739	0.063	0.042
2/11/15 3:20	69	2.450	0.169	1.056	0.106	0.275	0.021	0.021
2/11/15 6:20	70	2.387	0.169	6.992	0.528	0.253	0.042	0.021
2/11/15 9:20	71	1.965	0.148	2.155	0.169	0.296	0.021	0.021
2/11/15 12:20	72	2.028	0.148	1.162	0.106	0.211	0.021	0.021
2/11/15 15:20	73	1.500	0.106	9.125	0.676	0.232	0.021	0.021
2/11/15 18:20	74	3.591	0.253	2.978	0.232	0.591	0.042	0.042
2/11/15 21:20	75	3.464	0.253	0.803	0.084	0.380	0.042	0.042
2/12/15 0:20	76	3.443	0.232	1.098	0.106	0.232	0.021	0.021
2/12/15 3:20	77	2.176	0.148	1.753	0.148	0.084	0.021	0.021
2/12/15 6:20	78	2.408	0.169	32.446	2.302	0.169	0.021	0.000
2/12/15 9:20	79	1.605	0.106	0.803	0.084	0.148	0.021	0.000
2/12/15 12:20	80	1.521	0.127	1.246	0.127	0.211	0.021	0.000
2/12/15 15:20	81	0.993	0.084	0.866	0.084	0.106	0.021	0.000
2/12/15 18:20	82	4.351	0.317	12.146	0.887	1.246	0.106	0.084
2/12/15 21:20	83	3.359	0.253	1.817	0.148	0.591	0.063	0.042
2/13/15 0:20	84	2.408	0.169	3.105	0.232	0.380	0.042	0.021
2/13/15 3:20	85	1.796	0.127	1.120	0.106	0.253	0.021	0.042
2/13/15 6:20	86	3.316	0.232	4.140	0.317	0.824	0.063	0.063
2/13/15 9:20	87	4.330	0.317	1.204	0.106	0.444	0.042	0.021
2/13/15 12:20	88	5.218	0.359	1.014	0.084	0.401	0.042	0.042
2/13/15 15:20	89	2.366	0.169	0.845	0.084	0.169	0.021	0.000
2/13/15 18:20	90	3.084	0.211	1.753	0.148	0.401	0.042	0.042
2/13/15 21:20	91	2.809	0.190	0.803	0.084	0.253	0.021	0.021

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

V_err
ng/cm^2

Cr
ng/cm^2

Cr_err
ng/cm^2

Mn
ng/cm^2

Mn_err
ng/cm^2

Fe
ng/cm^2

Fe_err
ng/cm^2

Ave1stwk
AveAll

MDL
0.021

0.031
0.040
MDL
0.021

0.134
0.172
MDL
0.021

3.912
5.433
MDL
0.021

	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
2/3/15 18:20	10	0.000	0.063	0.000	0.190	0.021	7.393	0.528
2/3/15 21:20	11	0.000	0.084	0.000	0.232	0.021	10.689	0.760
2/4/15 0:20	12	0.021	0.063	0.021	0.232	0.021	9.337	0.655
2/4/15 3:20	13	0.021	0.063	0.021	0.232	0.021	4.309	0.317
2/4/15 6:20	14	0.021	0.127	0.021	0.739	0.063	6.210	0.444
2/4/15 9:20	15	0.021	0.042	0.021	0.232	0.021	2.197	0.169
2/4/15 12:20	16	0.021	0.063	0.021	0.232	0.021	4.711	0.338
2/4/15 15:20	17	0.021	0.063	0.021	0.317	0.021	5.471	0.380
2/4/15 18:20	18	0.000	0.084	0.000	0.359	0.021	9.062	0.634
2/4/15 21:20	19	0.021	0.021	0.000	0.063	0.021	2.746	0.190
2/5/15 0:20	20	0.021	0.063	0.021	0.253	0.021	4.183	0.296
2/5/15 3:20	21	0.021	0.021	0.000	0.084	0.021	2.450	0.169
2/5/15 6:20	22	0.021	0.021	0.021	0.084	0.021	4.161	0.296
2/5/15 9:20	23	0.021	0.021	0.000	0.106	0.021	2.640	0.190
2/5/15 12:20	24	0.000	0.042	0.000	0.190	0.021	4.077	0.296
2/5/15 15:20	25	0.021	0.021	0.000	0.127	0.021	2.387	0.169
2/5/15 18:20	26	0.000	0.021	0.000	0.232	0.021	3.338	0.232
2/5/15 21:20	27	0.021	0.021	0.000	0.148	0.021	2.176	0.148
2/6/15 0:20	28	0.000	0.063	0.000	0.634	0.042	5.387	0.380
2/6/15 3:20	29	0.000	0.042	0.000	0.486	0.042	5.556	0.401
2/6/15 6:20	30	0.000	0.021	0.000	0.211	0.021	4.161	0.296
2/6/15 9:20	31	0.021	0.021	0.021	0.169	0.021	3.950	0.275
2/6/15 12:20	32	0.000	0.021	0.000	0.148	0.021	3.971	0.275
2/6/15 15:20	33	0.021	0.021	0.000	0.106	0.021	2.831	0.211
2/6/15 18:20	34	0.000	0.000	0.000	0.063	0.000	1.753	0.127
2/6/15 21:20	35	0.000	0.021	0.000	0.084	0.000	1.373	0.106
2/7/15 0:20	36	0.000	0.021	0.000	0.063	0.000	1.267	0.084
2/7/15 3:20	37	0.021	0.000	0.000	0.042	0.000	1.627	0.127
2/7/15 6:20	38	0.021	0.021	0.000	0.063	0.021	1.943	0.148
2/7/15 9:20	39	0.000	0.021	0.000	0.063	0.000	1.627	0.106
2/7/15 12:20	40	0.000	0.021	0.000	0.042	0.000	1.817	0.127
2/7/15 15:20	41	0.000	0.000	0.000	0.042	0.000	1.796	0.127
2/7/15 18:20	42	0.021	0.000	0.021	0.084	0.021	3.359	0.232
2/7/15 21:20	43	0.021	0.000	0.000	0.042	0.000	2.134	0.148
2/8/15 0:20	44	0.000	0.000	0.000	0.042	0.000	1.880	0.127
2/8/15 3:20	45	0.000	0.000	0.000	0.021	0.000	0.803	0.063
2/8/15 6:20	46	0.000	0.021	0.000	0.063	0.000	1.648	0.127
2/8/15 9:20	47	0.000	0.000	0.000	0.021	0.000	1.331	0.106
2/8/15 12:20	48	0.000	0.021	0.000	0.042	0.000	1.965	0.148
2/8/15 15:20	49	0.000	0.148	0.021	0.042	0.000	2.134	0.148
2/8/15 18:20	50	0.021	0.021	0.000	0.021	0.000	1.627	0.127
2/8/15 21:20	51	0.021	0.000	0.000	0.021	0.000	0.739	0.063
2/9/15 0:20	52	0.021	0.000	0.021	0.021	0.000	0.760	0.063
2/9/15 3:20	53	0.021	0.000	0.000	0.021	0.000	0.972	0.063
2/9/15 6:20	54	0.021	0.000	0.021	0.042	0.021	2.577	0.190
2/9/15 9:20	55	0.021	0.000	0.000	0.042	0.000	1.605	0.127
2/9/15 12:20	56	0.021	0.000	0.021	0.042	0.021	2.894	0.211
2/9/15 15:20	57	0.000	0.000	0.000	0.063	0.000	2.852	0.211
2/9/15 18:20	58	0.021	0.021	0.021	0.063	0.021	3.781	0.275
2/9/15 21:20	59	0.000	0.021	0.000	0.084	0.000	6.253	0.444
2/10/15 0:20	60	0.000	0.021	0.000	0.021	0.000	1.965	0.148
2/10/15 3:20	61	0.000	0.021	0.000	0.021	0.000	2.281	0.169
2/10/15 6:20	62	0.000	0.021	0.000	0.021	0.000	2.155	0.148
2/10/15 9:20	63	0.000	0.000	0.000	0.042	0.000	1.774	0.127
2/10/15 12:20	64	0.000	0.021	0.000	0.084	0.000	2.493	0.169

Stage 6	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	V_err ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	0.031	MDL	0.134	MDL	3.912	MDL
Marks	0.02112 cm2/m3	AveAll	0.021	0.040	0.021	0.172	0.021	5.433	0.021

2/10/15 15:20	65	0.021	0.084	0.021	0.063	0.021	3.401	0.253
2/10/15 18:20	66	0.000	0.169	0.021	0.296	0.021	30.820	2.176
2/10/15 21:20	67	0.000	0.106	0.000	0.296	0.021	26.362	1.859
2/11/15 0:20	68	0.000	0.127	0.000	0.296	0.021	23.807	1.690
2/11/15 3:20	69	0.000	0.063	0.000	0.232	0.021	13.752	0.972
2/11/15 6:20	70	0.021	0.042	0.021	0.253	0.021	5.429	0.380
2/11/15 9:20	71	0.000	0.021	0.000	0.275	0.021	3.887	0.275
2/11/15 12:20	72	0.000	0.021	0.000	0.359	0.021	4.035	0.296
2/11/15 15:20	73	0.000	0.042	0.000	0.528	0.042	5.091	0.359
2/11/15 18:20	74	0.000	0.106	0.000	0.444	0.021	14.364	1.014
2/11/15 21:20	75	0.000	0.127	0.000	0.190	0.021	7.795	0.549
2/12/15 0:20	76	0.000	0.084	0.000	0.169	0.021	5.619	0.401
2/12/15 3:20	77	0.000	0.042	0.000	0.084	0.000	3.422	0.253
2/12/15 6:20	78	0.000	0.063	0.000	0.063	0.000	4.014	0.296
2/12/15 9:20	79	0.000	0.042	0.000	0.084	0.000	2.429	0.169
2/12/15 12:20	80	0.021	0.042	0.021	0.106	0.021	2.704	0.190
2/12/15 15:20	81	0.021	0.021	0.000	0.190	0.021	3.147	0.232
2/12/15 18:20	82	0.000	0.106	0.000	0.338	0.021	23.997	1.690
2/12/15 21:20	83	0.021	0.021	0.021	0.148	0.021	8.851	0.634
2/13/15 0:20	84	0.000	0.063	0.000	0.190	0.021	14.364	1.014
2/13/15 3:20	85	0.000	0.042	0.000	0.127	0.000	9.147	0.655
2/13/15 6:20	86	0.000	0.127	0.000	0.401	0.021	24.313	1.711
2/13/15 9:20	87	0.021	0.042	0.021	0.359	0.021	6.464	0.465
2/13/15 12:20	88	0.000	0.021	0.000	0.655	0.042	5.450	0.380
2/13/15 15:20	89	0.000	0.021	0.000	0.338	0.021	3.950	0.275
2/13/15 18:20	90	0.000	0.042	0.000	0.275	0.021	7.436	0.528
2/13/15 21:20	91	0.000	0.021	0.000	0.106	0.000	4.858	0.338

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

Co

ng/cm^2

Co_err

ng/cm^2

Ni

ng/cm^2

Ni_err

ng/cm^2

Cu

ng/cm^2

Cu_err

ng/cm^2

Zn

ng/cm^2

0.023

MDL

0.041

MDL

0.240

MDL

1.158

0.029

0.021

0.043

0.021

0.255

0.021

0.945

	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
		ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
2/3/15 18:20	10	0.042	0.000	0.042	0.000	0.253	0.042	0.528
2/3/15 21:20	11	0.063	0.000	0.042	0.000	0.253	0.042	0.591
2/4/15 0:20	12	0.042	0.021	0.084	0.021	0.253	0.042	0.760
2/4/15 3:20	13	0.021	0.021	0.063	0.021	0.148	0.042	0.718
2/4/15 6:20	14	0.021	0.021	0.106	0.021	0.275	0.042	0.570
2/4/15 9:20	15	0.021	0.021	0.063	0.021	0.169	0.042	0.253
2/4/15 12:20	16	0.000	0.021	0.106	0.021	0.211	0.042	0.296
2/4/15 15:20	17	0.042	0.021	0.063	0.021	0.507	0.063	0.444
2/4/15 18:20	18	0.042	0.000	0.042	0.000	0.444	0.042	1.563
2/4/15 21:20	19	0.021	0.021	0.021	0.021	0.084	0.021	0.359
2/5/15 0:20	20	0.042	0.021	0.106	0.021	0.613	0.063	2.302
2/5/15 3:20	21	0.000	0.021	0.042	0.021	0.106	0.042	0.591
2/5/15 6:20	22	0.042	0.021	0.042	0.021	0.127	0.042	0.296
2/5/15 9:20	23	0.021	0.021	0.021	0.021	0.106	0.042	0.275
2/5/15 12:20	24	0.021	0.000	0.042	0.000	0.148	0.021	0.739
2/5/15 15:20	25	0.000	0.021	0.042	0.021	0.106	0.042	0.739
2/5/15 18:20	26	0.021	0.000	0.063	0.000	0.211	0.021	1.669
2/5/15 21:20	27	0.021	0.021	0.042	0.021	0.106	0.042	0.697
2/6/15 0:20	28	0.021	0.000	0.084	0.000	0.317	0.042	1.901
2/6/15 3:20	29	0.021	0.000	0.063	0.000	0.148	0.021	0.972
2/6/15 6:20	30	0.021	0.000	0.063	0.000	0.359	0.042	0.845
2/6/15 9:20	31	0.021	0.021	0.021	0.021	0.866	0.084	1.774
2/6/15 12:20	32	0.000	0.000	0.042	0.000	1.922	0.148	3.063
2/6/15 15:20	33	0.000	0.021	0.042	0.021	0.106	0.042	0.338
2/6/15 18:20	34	0.021	0.000	0.042	0.000	0.084	0.021	0.528
2/6/15 21:20	35	0.021	0.000	0.021	0.000	0.063	0.021	1.056
2/7/15 0:20	36	0.021	0.000	0.063	0.000	0.127	0.021	1.817
2/7/15 3:20	37	0.021	0.021	0.042	0.021	0.084	0.021	1.436
2/7/15 6:20	38	0.021	0.021	0.042	0.021	0.169	0.042	1.500
2/7/15 9:20	39	0.021	0.000	0.021	0.000	0.148	0.021	1.183
2/7/15 12:20	40	0.021	0.000	0.042	0.000	0.148	0.021	0.465
2/7/15 15:20	41	0.021	0.000	0.021	0.000	0.106	0.021	0.296
2/7/15 18:20	42	0.021	0.021	0.042	0.021	0.401	0.042	0.718
2/7/15 21:20	43	0.021	0.021	0.021	0.021	0.169	0.042	1.267
2/8/15 0:20	44	0.021	0.000	0.021	0.000	0.169	0.021	8.217
2/8/15 3:20	45	0.000	0.000	0.021	0.000	0.042	0.021	10.224
2/8/15 6:20	46	0.000	0.000	0.042	0.000	0.127	0.021	7.964
2/8/15 9:20	47	0.021	0.000	0.021	0.000	0.106	0.021	0.845
2/8/15 12:20	48	0.021	0.000	0.063	0.000	0.211	0.021	0.676
2/8/15 15:20	49	0.021	0.000	0.021	0.000	0.169	0.021	0.359
2/8/15 18:20	50	0.021	0.021	0.042	0.021	0.169	0.042	0.169
2/8/15 21:20	51	0.000	0.021	0.021	0.021	0.063	0.021	0.106
2/9/15 0:20	52	0.000	0.021	0.042	0.021	0.127	0.042	0.211
2/9/15 3:20	53	0.042	0.021	0.042	0.021	0.063	0.021	0.106
2/9/15 6:20	54	0.000	0.021	0.021	0.021	0.169	0.042	0.338
2/9/15 9:20	55	0.000	0.021	0.021	0.021	0.042	0.021	0.063
2/9/15 12:20	56	0.000	0.021	0.042	0.021	0.296	0.042	0.380
2/9/15 15:20	57	0.000	0.000	0.021	0.000	0.148	0.021	0.591
2/9/15 18:20	58	0.021	0.021	0.021	0.021	0.211	0.042	0.655
2/9/15 21:20	59	0.042	0.000	0.000	0.000	0.106	0.021	0.106
2/10/15 0:20	60	0.021	0.000	0.042	0.000	0.127	0.021	0.148
2/10/15 3:20	61	0.000	0.000	0.021	0.000	0.063	0.021	0.127
2/10/15 6:20	62	0.021	0.000	0.042	0.000	0.106	0.021	0.486
2/10/15 9:20	63	0.021	0.000	0.021	0.000	0.063	0.021	0.042
2/10/15 12:20	64	0.021	0.000	0.042	0.000	0.106	0.021	0.169

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err
ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Ave1stwk

AveAll

MDL
0.021

0.345
0.295

MDL
0.021

0.378
0.315

MDL
0.021

	ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
2/3/15 18:20	10	0.063	0.338	0.021	0.106	0.000
2/3/15 21:20	11	0.063	0.486	0.042	0.317	0.021
2/4/15 0:20	12	0.084	0.507	0.084	0.866	0.380
2/4/15 3:20	13	0.084	0.591	0.084	0.000	0.317
2/4/15 6:20	14	0.084	0.655	0.084	0.486	0.380
2/4/15 9:20	15	0.063	0.211	0.063	0.444	0.317
2/4/15 12:20	16	0.063	0.317	0.084	0.422	0.359
2/4/15 15:20	17	0.063	1.711	0.148	1.077	0.338
2/4/15 18:20	18	0.127	1.373	0.106	0.422	0.021
2/4/15 21:20	19	0.063	0.190	0.063	0.803	0.338
2/5/15 0:20	20	0.190	1.943	0.169	0.908	0.380
2/5/15 3:20	21	0.084	0.317	0.063	0.549	0.338
2/5/15 6:20	22	0.063	0.275	0.084	0.000	0.359
2/5/15 9:20	23	0.063	0.275	0.063	0.528	0.317
2/5/15 12:20	24	0.084	0.275	0.021	0.444	0.021
2/5/15 15:20	25	0.084	0.296	0.063	0.338	0.317
2/5/15 18:20	26	0.148	0.338	0.021	0.338	0.021
2/5/15 21:20	27	0.084	0.359	0.063	0.444	0.296
2/6/15 0:20	28	0.169	0.951	0.063	0.803	0.063
2/6/15 3:20	29	0.084	0.528	0.042	0.528	0.042
2/6/15 6:20	30	0.084	0.486	0.042	0.275	0.021
2/6/15 9:20	31	0.148	0.465	0.084	0.929	0.317
2/6/15 12:20	32	0.232	0.359	0.021	0.972	0.063
2/6/15 15:20	33	0.063	0.211	0.063	0.401	0.317
2/6/15 18:20	34	0.063	0.127	0.000	0.106	0.000
2/6/15 21:20	35	0.106	0.127	0.000	0.275	0.021
2/7/15 0:20	36	0.148	0.253	0.021	0.634	0.042
2/7/15 3:20	37	0.127	0.190	0.063	0.528	0.296
2/7/15 6:20	38	0.148	0.253	0.084	0.676	0.338
2/7/15 9:20	39	0.106	0.211	0.021	0.275	0.021
2/7/15 12:20	40	0.063	0.127	0.000	0.127	0.021
2/7/15 15:20	41	0.042	0.063	0.000	0.000	0.000
2/7/15 18:20	42	0.084	0.232	0.063	0.000	0.338
2/7/15 21:20	43	0.127	0.296	0.063	0.000	0.296
2/8/15 0:20	44	0.613	0.507	0.042	0.401	0.021
2/8/15 3:20	45	0.739	0.549	0.042	0.190	0.021
2/8/15 6:20	46	0.591	0.634	0.042	0.507	0.042
2/8/15 9:20	47	0.084	0.211	0.021	0.275	0.021
2/8/15 12:20	48	0.063	0.211	0.021	0.591	0.042
2/8/15 15:20	49	0.042	0.148	0.000	0.042	0.000
2/8/15 18:20	50	0.042	0.169	0.063	0.359	0.338
2/8/15 21:20	51	0.042	0.148	0.063	0.380	0.317
2/9/15 0:20	52	0.042	0.190	0.084	0.507	0.338
2/9/15 3:20	53	0.042	0.127	0.063	0.338	0.317
2/9/15 6:20	54	0.063	0.211	0.063	0.000	0.317
2/9/15 9:20	55	0.042	0.106	0.063	0.000	0.296
2/9/15 12:20	56	0.063	0.127	0.063	0.338	0.338
2/9/15 15:20	57	0.063	0.169	0.021	0.444	0.042
2/9/15 18:20	58	0.084	0.169	0.063	0.000	0.338
2/9/15 21:20	59	0.042	0.106	0.000	0.169	0.021
2/10/15 0:20	60	0.042	0.190	0.021	0.528	0.042
2/10/15 3:20	61	0.042	0.106	0.000	0.359	0.021
2/10/15 6:20	62	0.063	0.084	0.000	0.063	0.000
2/10/15 9:20	63	0.021	0.106	0.000	0.000	0.000
2/10/15 12:20	64	0.042	0.127	0.000	0.169	0.021

Stage 6

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err
ng/cm^2

Br
ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Ave1stwk

MDL
0.021

0.345
0.295

MDL
0.021

0.378
0.315

MDL
0.021

ID#	Zn_err ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
2/10/15 15:20	65	0.042	0.127	0.063	0.000
2/10/15 18:20	66	0.063	0.127	0.000	0.359
2/10/15 21:20	67	0.063	0.148	0.000	0.549
2/11/15 0:20	68	0.084	0.253	0.021	0.465
2/11/15 3:20	69	0.042	0.211	0.021	0.317
2/11/15 6:20	70	0.063	0.169	0.063	0.000
2/11/15 9:20	71	0.042	0.106	0.000	0.169
2/11/15 12:20	72	0.042	0.148	0.000	0.211
2/11/15 15:20	73	0.042	0.148	0.021	0.359
2/11/15 18:20	74	0.063	0.106	0.000	0.000
2/11/15 21:20	75	0.063	0.148	0.021	0.042
2/12/15 0:20	76	0.063	0.296	0.021	0.106
2/12/15 3:20	77	0.042	0.106	0.000	0.148
2/12/15 6:20	78	0.042	0.190	0.021	0.296
2/12/15 9:20	79	0.042	0.169	0.021	0.084
2/12/15 12:20	80	0.063	0.106	0.063	0.000
2/12/15 15:20	81	0.042	0.106	0.063	0.000
2/12/15 18:20	82	0.084	0.169	0.021	0.253
2/12/15 21:20	83	0.063	0.169	0.063	0.000
2/13/15 0:20	84	0.063	0.148	0.000	0.127
2/13/15 3:20	85	0.042	0.148	0.021	0.106
2/13/15 6:20	86	0.084	0.148	0.021	0.317
2/13/15 9:20	87	0.063	0.190	0.063	0.486
2/13/15 12:20	88	0.106	0.253	0.021	0.338
2/13/15 15:20	89	0.063	0.106	0.000	0.148
2/13/15 18:20	90	0.190	0.253	0.021	0.127
2/13/15 21:20	91	0.042	0.211	0.021	0.127

Stage 6	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

	ID#	Sum of Elements
2/3/15 18:20	10	58.766
2/3/15 21:20	11	87.558
2/4/15 0:20	12	115.146
2/4/15 3:20	13	117.216
2/4/15 6:20	14	83.312
2/4/15 9:20	15	63.963
2/4/15 12:20	16	67.195
2/4/15 15:20	17	317.807
2/4/15 18:20	18	209.210
2/4/15 21:20	19	40.875
2/5/15 0:20	20	310.372
2/5/15 3:20	21	52.683
2/5/15 6:20	22	56.971
2/5/15 9:20	23	30.503
2/5/15 12:20	24	64.195
2/5/15 15:20	25	40.452
2/5/15 18:20	26	51.880
2/5/15 21:20	27	49.599
2/6/15 0:20	28	178.074
2/6/15 3:20	29	107.605
2/6/15 6:20	30	125.856
2/6/15 9:20	31	84.791
2/6/15 12:20	32	91.572
2/6/15 15:20	33	41.001
2/6/15 18:20	34	52.345
2/6/15 21:20	35	42.142
2/7/15 0:20	36	60.900
2/7/15 3:20	37	51.056
2/7/15 6:20	38	66.772
2/7/15 9:20	39	52.493
2/7/15 12:20	40	39.945
2/7/15 15:20	41	37.305
2/7/15 18:20	42	76.827
2/7/15 21:20	43	93.240
2/8/15 0:20	44	104.394
2/8/15 3:20	45	110.055
2/8/15 6:20	46	160.055
2/8/15 9:20	47	57.774
2/8/15 12:20	48	71.272
2/8/15 15:20	49	29.278
2/8/15 18:20	50	84.263
2/8/15 21:20	51	112.041
2/9/15 0:20	52	160.604
2/9/15 3:20	53	127.503
2/9/15 6:20	54	147.423
2/9/15 9:20	55	134.516
2/9/15 12:20	56	167.469
2/9/15 15:20	57	111.407
2/9/15 18:20	58	90.008
2/9/15 21:20	59	66.117
2/10/15 0:20	60	58.006
2/10/15 3:20	61	34.474
2/10/15 6:20	62	31.094
2/10/15 9:20	63	33.566
2/10/15 12:20	64	38.023

Stage 6	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/10/15 15:20	65	30.904
2/10/15 18:20	66	79.658
2/10/15 21:20	67	77.482
2/11/15 0:20	68	89.797
2/11/15 3:20	69	50.993
2/11/15 6:20	70	58.787
2/11/15 9:20	71	35.805
2/11/15 12:20	72	35.403
2/11/15 15:20	73	56.971
2/11/15 18:20	74	58.196
2/11/15 21:20	75	40.748
2/12/15 0:20	76	57.837
2/12/15 3:20	77	33.101
2/12/15 6:20	78	99.071
2/12/15 9:20	79	33.861
2/12/15 12:20	80	29.447
2/12/15 15:20	81	22.793
2/12/15 18:20	82	87.812
2/12/15 21:20	83	47.317
2/13/15 0:20	84	60.541
2/13/15 3:20	85	44.571
2/13/15 6:20	86	76.341
2/13/15 9:20	87	48.880
2/13/15 12:20	88	53.633
2/13/15 15:20	89	35.910
2/13/15 18:20	90	54.035
2/13/15 21:20	91	39.417

Stage 7

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

Na Na_err Mg Mg_err Al Al_err Si
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

16.048	MDL	1.503	MDL	0.488	MDL	0.775
15.729	0.507	1.638	0.063	0.550	0.021	0.947

ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
2/3/15 18:20	15	20.469	6.696	2.640	1.838	0.000	0.275
2/3/15 21:20	16	7.689	7.140	2.535	2.049	0.000	0.908
2/4/15 0:20	17	29.890	2.176	0.951	0.127	0.000	0.951
2/4/15 3:20	18	17.744	7.414	0.000	2.028	0.000	0.993
2/4/15 6:20	19	14.301	7.182	0.000	1.986	0.000	0.613
2/4/15 9:20	20	20.279	6.696	2.028	1.838	0.000	0.634
2/4/15 12:20	21	9.949	6.401	0.000	1.817	0.000	1.098
2/4/15 15:20	22	17.554	6.675	0.000	1.817	0.000	1.373
2/4/15 18:20	23	10.330	6.781	2.704	1.880	1.584	1.056
2/4/15 21:20	24	15.019	6.633	0.000	1.817	0.824	0.549
2/5/15 0:20	25	16.181	6.464	0.000	1.774	0.000	1.352
2/5/15 3:20	26	15.801	6.464	0.000	1.774	0.000	0.549
2/5/15 6:20	27	8.386	6.401	0.000	1.817	1.394	0.465
2/5/15 9:20	28	17.554	1.246	1.690	0.127	0.000	0.549
2/5/15 12:20	29	12.864	6.612	0.000	1.817	0.507	0.042
2/5/15 15:20	30	13.266	6.802	0.000	1.922	0.000	1.098
2/5/15 18:20	31	0.000	6.738	0.000	1.922	0.000	0.803
2/5/15 21:20	32	14.428	6.823	0.000	1.880	0.000	0.549
2/6/15 0:20	33	0.000	6.358	0.000	1.880	0.000	0.570
2/6/15 3:20	34	14.047	6.992	0.000	1.922	0.000	0.422
2/6/15 6:20	35	17.554	6.844	0.000	1.880	0.000	0.676
2/6/15 9:20	36	11.512	6.422	2.535	1.838	0.000	0.570
2/6/15 12:20	37	10.921	0.782	0.845	0.084	0.000	0.528
2/6/15 15:20	38	16.962	6.654	3.042	1.838	0.275	0.021
2/6/15 18:20	39	9.548	0.697	3.105	0.232	0.000	0.528
2/6/15 21:20	40	20.469	1.458	1.859	0.148	1.394	0.106
2/7/15 0:20	41	17.153	6.485	0.000	1.774	0.380	0.021
2/7/15 3:20	42	10.139	0.739	3.105	0.232	0.697	0.528
2/7/15 6:20	43	11.703	0.845	1.289	0.106	0.317	0.021
2/7/15 9:20	44	15.991	1.141	1.965	0.148	0.845	0.063
2/7/15 12:20	45	15.019	6.443	0.000	1.774	0.486	0.042
2/7/15 15:20	46	17.934	1.267	4.119	0.296	0.591	0.528
2/7/15 18:20	47	15.019	1.077	1.415	0.106	0.021	0.021
2/7/15 21:20	48	11.703	6.422	0.000	1.774	0.190	0.591
2/8/15 0:20	49	17.554	1.246	2.366	0.169	0.613	0.528
2/8/15 3:20	50	15.019	1.077	0.613	0.063	0.591	0.042
2/8/15 6:20	51	23.405	1.648	1.014	0.084	0.106	0.021
2/8/15 9:20	52	14.428	1.035	0.908	0.084	0.676	0.042
2/8/15 12:20	53	18.906	1.331	2.197	0.169	0.528	0.042
2/8/15 15:20	54	14.047	0.993	2.704	0.190	0.570	0.042
2/8/15 18:20	55	21.441	1.521	3.443	0.253	0.634	0.042
2/8/15 21:20	56	19.899	1.415	3.105	0.232	0.782	0.063
2/9/15 0:20	57	20.680	1.458	1.183	0.106	0.338	0.021
2/9/15 3:20	58	15.209	6.443	0.000	1.774	0.401	0.042
2/9/15 6:20	59	26.320	1.859	2.091	0.148	0.613	0.000
2/9/15 9:20	60	19.899	1.415	2.809	0.211	0.655	0.042
2/9/15 12:20	61	25.349	1.796	4.330	0.317	0.127	0.021
2/9/15 15:20	62	23.004	1.627	1.521	0.127	0.465	0.042
2/9/15 18:20	63	22.814	1.605	4.901	0.338	0.211	0.021
2/9/15 21:20	64	21.251	1.500	3.316	0.232	0.591	0.042
2/10/15 0:20	65	19.307	1.373	3.211	0.232	0.275	0.021
2/10/15 3:20	66	21.842	1.542	4.119	0.296	0.655	0.042
2/10/15 6:20	67	14.047	0.993	1.753	0.127	0.824	0.063
2/10/15 9:20	68	12.083	0.866	0.739	0.084	0.824	0.063

Stage 7	7.89 L/m
	1440 min/day
Marks	11.3616 m3/day
	4 mm/day
3	6 mm
2/3/2015 18:20	0.24 cm2/day
Marks	0.02112 cm2/m3

ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	16.048	MDL	1.503	MDL	0.488	MDL	0.775
AveAll	15.729	0.507	1.638	0.063	0.550	0.021	0.947

2/10/15 12:20	69	19.899	1.415	2.302	0.169	0.634	0.042	0.782
2/10/15 15:20	70	17.153	1.225	1.120	0.106	0.866	0.063	1.267
2/10/15 18:20	71	18.145	1.289	1.753	0.127	0.887	0.063	1.711
2/10/15 21:20	72	7.795	0.570	2.028	0.148	1.774	0.127	1.859
2/11/15 0:20	73	16.962	1.204	2.302	0.169	0.929	0.063	1.310
2/11/15 3:20	74	11.893	0.845	1.521	0.127	0.000	0.021	0.782
2/11/15 6:20	75	14.428	6.253	2.260	1.774	0.000	0.507	0.803
2/11/15 9:20	76	15.399	1.098	0.338	0.063	0.993	0.063	1.479
2/11/15 12:20	77	20.089	1.415	0.570	0.063	1.056	0.084	1.753
2/11/15 15:20	78	17.744	1.267	0.507	0.063	0.613	0.042	1.331
2/11/15 18:20	79	13.456	0.972	3.443	0.253	0.760	0.063	1.183
2/11/15 21:20	80	14.047	0.993	1.415	0.106	1.352	0.106	1.373
2/12/15 0:20	81	14.618	1.035	0.676	0.063	0.824	0.063	1.014
2/12/15 3:20	82	16.371	1.162	2.535	0.190	0.570	0.042	1.077
2/12/15 6:20	83	7.013	0.528	4.119	0.296	0.655	0.042	1.077
2/12/15 9:20	84	8.978	0.655	1.521	0.127	1.120	0.084	2.408
2/12/15 12:20	85	14.047	0.993	1.753	0.127	0.739	0.063	1.436
2/12/15 15:20	86	14.618	1.035	1.922	0.148	0.824	0.063	0.993
2/12/15 18:20	87	15.610	6.274	0.000	1.711	0.655	0.507	2.049
2/12/15 21:20	88	19.117	1.352	1.796	0.148	1.732	0.127	3.021
2/13/15 0:20	89	16.371	1.162	2.936	0.211	0.824	0.063	1.542
2/13/15 3:20	90	18.906	1.331	1.352	0.106	0.422	0.042	1.331
2/13/15 6:20	91	15.399	1.098	3.443	0.253	0.127	0.021	1.310
2/13/15 9:20	92	19.899	1.415	2.302	0.169	0.887	0.063	1.436
2/13/15 12:20	93	6.823	0.507	1.922	0.148	0.021	0.021	0.845
2/13/15 15:20	94	18.716	1.331	0.908	0.084	0.824	0.063	1.500
2/13/15 18:20	95	15.801	1.120	1.458	0.106	0.570	0.042	0.908
2/13/15 21:20	96	16.582	1.183	3.950	0.275	1.246	0.084	1.120

Stage 7

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3
2/3/2015 18:20

Marks

ID#

Si_err P P_err S S_err Cl Cl_err
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk
AveAll

MDL	3.244	MDL	30.446	MDL	0.845
0.021	3.415	0.275	25.109	0.063	0.639

	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
2/3/15 18:20	15	0.232	2.894	0.528	35.340	2.577	0.359	0.084
2/3/15 21:20	16	0.275	4.647	0.655	182.129	12.928	1.035	0.127
2/4/15 0:20	17	2.514	0.000	0.232	105.049	7.393	6.443	0.444
2/4/15 3:20	18	0.275	5.851	0.718	44.318	3.211	0.338	0.084
2/4/15 6:20	19	0.275	4.373	0.634	198.606	14.068	0.634	0.106
2/4/15 9:20	20	0.275	3.633	0.570	48.817	3.528	0.444	0.084
2/4/15 12:20	21	0.253	3.126	0.528	32.172	2.366	0.275	0.063
2/4/15 15:20	22	0.296	3.718	0.570	37.241	2.704	0.317	0.084
2/4/15 18:20	23	0.317	3.591	0.570	78.771	5.640	0.380	0.084
2/4/15 21:20	24	0.275	3.316	0.549	85.889	6.147	0.444	0.084
2/5/15 0:20	25	0.232	3.464	0.549	36.840	2.683	0.106	0.063
2/5/15 3:20	26	0.232	3.887	0.570	44.022	3.190	0.127	0.063
2/5/15 6:20	27	0.232	3.507	0.549	38.530	2.809	0.106	0.063
2/5/15 9:20	28	0.106	3.274	0.465	45.036	3.232	0.169	0.021
2/5/15 12:20	29	0.253	3.464	0.549	64.744	4.647	0.317	0.084
2/5/15 15:20	30	0.275	4.056	0.591	95.268	6.802	0.528	0.084
2/5/15 18:20	31	0.253	3.570	0.570	84.770	6.063	0.591	0.106
2/5/15 21:20	32	0.253	3.633	0.570	73.447	5.260	0.634	0.084
2/6/15 0:20	33	0.253	3.654	0.570	65.315	4.689	0.444	0.084
2/6/15 3:20	34	0.253	4.161	0.613	70.997	5.091	0.613	0.084
2/6/15 6:20	35	0.253	2.978	0.528	53.697	3.866	0.317	0.084
2/6/15 9:20	36	0.232	3.422	0.549	37.241	2.704	0.190	0.063
2/6/15 12:20	37	0.106	2.598	0.401	25.095	1.817	0.549	0.042
2/6/15 15:20	38	0.253	3.760	0.570	21.166	1.584	0.084	0.063
2/6/15 18:20	39	0.084	2.619	0.422	14.090	1.056	0.042	0.000
2/6/15 21:20	40	0.084	2.788	0.422	13.836	1.035	0.042	0.000
2/7/15 0:20	41	0.232	3.549	0.549	12.379	0.972	0.000	0.063
2/7/15 3:20	42	0.063	2.936	0.444	11.174	0.845	0.084	0.000
2/7/15 6:20	43	0.084	2.831	0.422	11.681	0.887	0.444	0.021
2/7/15 9:20	44	0.063	3.126	0.444	14.280	1.056	0.021	0.000
2/7/15 12:20	45	0.232	3.507	0.549	14.681	1.120	0.063	0.063
2/7/15 15:20	46	0.063	3.147	0.444	9.590	0.739	0.042	0.000
2/7/15 18:20	47	0.063	2.978	0.444	12.780	0.951	0.084	0.000
2/7/15 21:20	48	0.232	3.190	0.528	30.566	2.239	0.000	0.063
2/8/15 0:20	49	0.106	3.338	0.465	31.601	2.281	0.148	0.021
2/8/15 3:20	50	0.063	3.654	0.486	27.123	1.965	0.190	0.021
2/8/15 6:20	51	0.063	2.366	0.401	25.581	1.859	0.127	0.000
2/8/15 9:20	52	0.042	2.640	0.422	15.188	1.120	0.570	0.042
2/8/15 12:20	53	0.084	3.971	0.507	9.062	0.697	0.084	0.000
2/8/15 15:20	54	0.063	3.507	0.465	3.654	0.317	0.127	0.000
2/8/15 18:20	55	0.063	2.725	0.422	2.915	0.253	0.190	0.021
2/8/15 21:20	56	0.042	2.577	0.401	3.021	0.275	2.155	0.148
2/9/15 0:20	57	0.042	2.493	0.401	2.471	0.232	4.351	0.296
2/9/15 3:20	58	0.211	2.366	0.486	2.535	0.296	3.528	0.275
2/9/15 6:20	59	0.042	2.577	0.401	1.605	0.169	2.767	0.190
2/9/15 9:20	60	0.021	2.619	0.422	2.788	0.253	3.169	0.232
2/9/15 12:20	61	0.042	3.042	0.444	4.077	0.338	2.070	0.148
2/9/15 15:20	62	0.042	2.852	0.422	2.978	0.275	5.619	0.401
2/9/15 18:20	63	0.042	2.134	0.380	2.894	0.253	4.880	0.338
2/9/15 21:20	64	0.063	3.042	0.444	3.105	0.275	0.634	0.042
2/10/15 0:20	65	0.063	3.887	0.507	3.274	0.296	0.127	0.000
2/10/15 3:20	66	0.063	3.802	0.486	2.640	0.232	0.084	0.000
2/10/15 6:20	67	0.084	2.894	0.422	2.978	0.275	0.000	0.000
2/10/15 9:20	68	0.084	3.591	0.486	4.204	0.359	0.296	0.021

Stage 7	7.89 L/m	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
Marks	1440 min/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	11.3616 m3/day								
	4 mm/day								
	6 mm								
3	0.24 cm2/day	Ave1stwk	MDL	3.244	MDL	30.446	MDL	0.845	MDL
2/3/2015 18:20	0.02112 cm2/m3	AveAll	0.021	3.415	0.275	25.109	0.063	0.639	0.021
Marks									

2/10/15 12:20	69	0.084	4.035	0.507	4.309	0.359	0.718	0.042
2/10/15 15:20	70	0.106	3.274	0.465	4.246	0.359	0.296	0.021
2/10/15 18:20	71	0.148	3.021	0.444	4.077	0.338	0.148	0.000
2/10/15 21:20	72	0.148	3.549	0.486	6.548	0.507	0.148	0.021
2/11/15 0:20	73	0.106	4.056	0.507	6.654	0.528	0.106	0.000
2/11/15 3:20	74	0.084	2.197	0.380	4.246	0.359	1.753	0.127
2/11/15 6:20	75	0.232	2.936	0.507	3.570	0.359	0.211	0.063
2/11/15 9:20	76	0.127	4.351	0.528	6.506	0.507	0.127	0.000
2/11/15 12:20	77	0.148	4.415	0.528	9.442	0.718	0.042	0.000
2/11/15 15:20	78	0.127	3.992	0.507	5.239	0.422	0.021	0.000
2/11/15 18:20	79	0.106	2.831	0.422	4.077	0.338	0.021	0.000
2/11/15 21:20	80	0.127	4.014	0.507	6.844	0.528	0.169	0.021
2/12/15 0:20	81	0.084	4.563	0.549	6.020	0.486	0.084	0.000
2/12/15 3:20	82	0.106	3.464	0.465	4.098	0.338	0.042	0.000
2/12/15 6:20	83	0.106	3.232	0.444	3.316	0.296	0.063	0.000
2/12/15 9:20	84	0.190	3.401	0.465	5.492	0.444	0.359	0.021
2/12/15 12:20	85	0.127	4.183	0.528	6.210	0.486	0.021	0.000
2/12/15 15:20	86	0.084	3.570	0.486	2.725	0.253	0.084	0.000
2/12/15 18:20	87	0.296	3.380	0.549	3.401	0.338	0.000	0.063
2/12/15 21:20	88	0.232	4.415	0.528	6.717	0.528	0.084	0.000
2/13/15 0:20	89	0.127	4.647	0.549	6.379	0.507	0.063	0.000
2/13/15 3:20	90	0.127	4.119	0.507	4.288	0.359	0.021	0.000
2/13/15 6:20	91	0.127	3.507	0.465	3.654	0.317	0.000	0.000
2/13/15 9:20	92	0.127	4.077	0.507	8.661	0.655	0.063	0.000
2/13/15 12:20	93	0.084	4.288	0.528	12.062	0.908	0.190	0.021
2/13/15 15:20	94	0.127	4.035	0.507	6.422	0.507	0.084	0.000
2/13/15 18:20	95	0.084	3.042	0.444	3.591	0.317	0.042	0.000
2/13/15 21:20	96	0.106	4.098	0.507	6.886	0.549	0.021	0.000

Stage 7

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

K	K_err	Ca	Ca_err	Ti	Ti_err	V
0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
1.979	MDL	0.376	MDL	0.220	MDL	0.015
1.975	0.021	0.451	0.042	0.185	0.021	0.012

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V	
2/3/15 18:20	15	2.493	0.190	0.190	0.063	0.063	0.021	0.000
2/3/15 21:20	16	11.407	0.824	0.972	0.106	0.106	0.021	0.000
2/4/15 0:20	17	17.997	1.267	0.824	38.804	7.731	0.549	0.296
2/4/15 3:20	18	4.309	0.317	0.676	0.084	0.084	0.021	0.000
2/4/15 6:20	19	8.154	0.591	1.077	0.127	0.106	0.021	0.000
2/4/15 9:20	20	1.922	0.148	0.253	0.063	0.106	0.021	0.000
2/4/15 12:20	21	0.739	0.063	0.211	0.063	0.106	0.021	0.000
2/4/15 15:20	22	0.866	0.084	0.591	0.084	0.127	0.021	0.021
2/4/15 18:20	23	2.598	0.190	0.338	0.063	0.253	0.042	0.021
2/4/15 21:20	24	2.281	0.169	0.401	0.063	0.190	0.042	0.042
2/5/15 0:20	25	1.267	0.106	0.127	0.042	0.042	0.021	0.000
2/5/15 3:20	26	1.479	0.127	0.106	0.042	0.021	0.021	0.042
2/5/15 6:20	27	1.183	0.106	0.127	0.042	0.063	0.021	0.021
2/5/15 9:20	28	1.563	0.106	0.169	0.042	0.063	0.021	0.021
2/5/15 12:20	29	2.028	0.148	0.275	0.063	0.063	0.021	0.021
2/5/15 15:20	30	2.957	0.211	0.338	0.063	0.106	0.021	0.021
2/5/15 18:20	31	4.267	0.317	0.253	0.063	0.127	0.021	0.021
2/5/15 21:20	32	4.520	0.338	0.169	0.063	0.084	0.021	0.021
2/6/15 0:20	33	4.457	0.317	0.232	0.063	0.084	0.021	0.021
2/6/15 3:20	34	5.302	0.380	0.444	0.063	0.084	0.021	0.021
2/6/15 6:20	35	3.147	0.232	0.401	0.063	0.063	0.021	0.021
2/6/15 9:20	36	1.563	0.127	0.275	0.063	0.106	0.021	0.021
2/6/15 12:20	37	1.859	0.127	0.380	0.063	0.063	0.021	0.021
2/6/15 15:20	38	1.732	0.127	0.422	0.063	0.042	0.021	0.042
2/6/15 18:20	39	0.929	0.063	0.317	0.063	0.063	0.021	0.021
2/6/15 21:20	40	0.824	0.063	0.444	0.063	0.042	0.021	0.021
2/7/15 0:20	41	0.739	0.063	0.253	0.063	0.000	0.021	0.000
2/7/15 3:20	42	0.634	0.042	0.084	0.042	0.000	0.000	0.000
2/7/15 6:20	43	3.401	0.232	1.331	0.127	0.148	0.021	0.021
2/7/15 9:20	44	0.824	0.063	0.127	0.042	0.063	0.021	0.000
2/7/15 12:20	45	0.866	0.084	0.253	0.063	0.042	0.021	0.000
2/7/15 15:20	46	0.486	0.042	0.444	0.063	0.042	0.021	0.000
2/7/15 18:20	47	0.444	0.021	0.275	0.042	0.063	0.021	0.000
2/7/15 21:20	48	0.866	0.084	0.232	0.063	0.127	0.021	0.000
2/8/15 0:20	49	2.345	0.169	0.169	0.042	0.042	0.021	0.000
2/8/15 3:20	50	5.281	0.380	0.063	0.042	0.042	0.021	0.000
2/8/15 6:20	51	5.302	0.380	0.084	0.042	0.063	0.021	0.021
2/8/15 9:20	52	2.704	0.190	0.211	0.042	0.042	0.021	0.000
2/8/15 12:20	53	0.697	0.042	0.232	0.042	0.021	0.021	0.021
2/8/15 15:20	54	0.296	0.021	0.338	0.063	0.042	0.021	0.000
2/8/15 18:20	55	0.190	0.021	0.296	0.063	0.127	0.021	0.000
2/8/15 21:20	56	0.253	0.021	0.296	0.063	0.042	0.021	0.000
2/9/15 0:20	57	0.486	0.042	0.549	0.063	0.021	0.000	0.000
2/9/15 3:20	58	0.317	0.042	0.380	0.063	0.063	0.021	0.000
2/9/15 6:20	59	0.232	0.021	0.190	0.042	0.084	0.021	0.000
2/9/15 9:20	60	0.380	0.021	0.317	0.063	0.084	0.021	0.000
2/9/15 12:20	61	0.338	0.021	0.444	0.063	0.042	0.021	0.000
2/9/15 15:20	62	0.380	0.021	0.549	0.063	0.063	0.021	0.000
2/9/15 18:20	63	0.549	0.042	0.422	0.063	0.084	0.021	0.000
2/9/15 21:20	64	0.613	0.042	0.296	0.063	0.084	0.021	0.000
2/10/15 0:20	65	0.528	0.042	0.296	0.063	0.021	0.021	0.000
2/10/15 3:20	66	0.359	0.021	0.253	0.042	0.063	0.021	0.000
2/10/15 6:20	67	0.317	0.021	0.613	0.084	0.106	0.021	0.000
2/10/15 9:20	68	0.465	0.042	0.422	0.063	0.084	0.021	0.000

Stage 7	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
	4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	6 mm								
3	0.24 cm2/day	Ave1stwk	1.979	MDL	0.376	MDL	0.220	MDL	0.015
2/3/2015 18:20	0.02112 cm2/m3	AveAll	1.975	0.021	0.451	0.042	0.185	0.021	0.012
Marks									
	2/10/15 12:20	69	0.465	0.042	0.549	0.063	0.042	0.021	0.000
	2/10/15 15:20	70	0.486	0.042	0.528	0.063	0.063	0.021	0.000
	2/10/15 18:20	71	0.655	0.042	0.613	0.084	0.275	0.021	0.021
	2/10/15 21:20	72	0.993	0.063	1.098	0.106	0.380	0.042	0.021
	2/11/15 0:20	73	1.352	0.084	0.866	0.084	0.275	0.021	0.021
	2/11/15 3:20	74	3.274	0.232	0.549	0.063	0.106	0.021	0.000
	2/11/15 6:20	75	0.993	0.084	0.317	0.063	0.106	0.021	0.000
	2/11/15 9:20	76	1.289	0.084	0.507	0.063	0.127	0.021	0.000
	2/11/15 12:20	77	1.669	0.127	0.507	0.063	0.127	0.021	0.000
	2/11/15 15:20	78	0.887	0.063	0.338	0.063	0.063	0.021	0.000
	2/11/15 18:20	79	0.845	0.063	0.444	0.063	0.106	0.021	0.000
	2/11/15 21:20	80	2.218	0.148	0.993	0.106	0.084	0.021	0.021
	2/12/15 0:20	81	2.070	0.148	0.359	0.063	0.063	0.021	0.000
	2/12/15 3:20	82	1.183	0.084	0.275	0.042	0.063	0.021	0.000
	2/12/15 6:20	83	0.866	0.063	0.422	0.063	0.063	0.021	0.000
	2/12/15 9:20	84	2.662	0.190	2.767	0.232	0.190	0.021	0.000
	2/12/15 12:20	85	1.141	0.084	0.613	0.084	0.063	0.021	0.000
	2/12/15 15:20	86	0.634	0.042	0.359	0.063	0.063	0.021	0.000
	2/12/15 18:20	87	0.908	0.084	0.697	0.084	0.084	0.021	0.000
	2/12/15 21:20	88	2.387	0.169	1.183	0.106	0.359	0.042	0.042
	2/13/15 0:20	89	1.373	0.106	0.444	0.063	0.127	0.021	0.021
	2/13/15 3:20	90	0.866	0.063	0.296	0.063	0.042	0.021	0.000
	2/13/15 6:20	91	0.866	0.063	0.422	0.063	0.084	0.021	0.021
	2/13/15 9:20	92	2.007	0.148	0.697	0.084	0.148	0.021	0.000
	2/13/15 12:20	93	3.211	0.232	0.760	0.084	0.106	0.021	0.021
	2/13/15 15:20	94	1.859	0.127	0.296	0.063	0.063	0.021	0.000
	2/13/15 18:20	95	1.035	0.063	0.275	0.042	0.084	0.021	0.000
	2/13/15 21:20	96	1.648	0.106	0.359	0.063	0.084	0.021	0.000

Stage 7

	7.89 L/m								
	1440 min/day								
Marks	11.3616 m3/day	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
	4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
	6 mm								
3	0.24 cm2/day	Ave1stwk	MDL	0.016	MDL	0.068	MDL	1.880	MDL
2/3/2015 18:20	0.02112 cm2/m3	AveAll	0.021	0.019	0.021	0.074	0.021	2.179	0.021

	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
2/3/15 18:20	15	0.021	0.042	0.021	0.084	0.021	1.225	0.084
2/3/15 21:20	16	0.021	0.084	0.021	0.190	0.021	5.471	0.401
2/4/15 0:20	17	0.021	0.021	0.000	0.549	0.042	25.982	1.838
2/4/15 3:20	18	0.021	0.000	0.021	0.084	0.021	1.669	0.127
2/4/15 6:20	19	0.021	0.042	0.021	0.190	0.021	2.471	0.169
2/4/15 9:20	20	0.021	0.084	0.021	0.275	0.021	2.112	0.148
2/4/15 12:20	21	0.021	0.042	0.021	0.190	0.021	2.218	0.169
2/4/15 15:20	22	0.021	0.042	0.021	0.190	0.021	2.514	0.190
2/4/15 18:20	23	0.021	0.042	0.021	0.148	0.021	5.619	0.401
2/4/15 21:20	24	0.021	0.021	0.021	0.084	0.021	2.366	0.169
2/5/15 0:20	25	0.021	0.021	0.021	0.042	0.021	0.613	0.042
2/5/15 3:20	26	0.021	0.021	0.021	0.021	0.021	0.634	0.042
2/5/15 6:20	27	0.021	0.000	0.021	0.042	0.021	0.803	0.063
2/5/15 9:20	28	0.000	0.021	0.000	0.042	0.000	1.796	0.127
2/5/15 12:20	29	0.021	0.021	0.021	0.084	0.021	1.458	0.106
2/5/15 15:20	30	0.021	0.021	0.021	0.106	0.021	1.732	0.127
2/5/15 18:20	31	0.021	0.021	0.021	0.084	0.021	1.796	0.127
2/5/15 21:20	32	0.021	0.021	0.021	0.084	0.021	1.732	0.127
2/6/15 0:20	33	0.021	0.042	0.021	0.127	0.021	1.711	0.127
2/6/15 3:20	34	0.021	0.021	0.021	0.275	0.021	2.302	0.169
2/6/15 6:20	35	0.021	0.021	0.021	0.148	0.021	1.880	0.127
2/6/15 9:20	36	0.021	0.021	0.021	0.084	0.021	1.310	0.106
2/6/15 12:20	37	0.000	0.021	0.000	0.084	0.000	1.436	0.106
2/6/15 15:20	38	0.021	0.000	0.021	0.063	0.021	0.845	0.063
2/6/15 18:20	39	0.000	0.000	0.000	0.021	0.000	0.697	0.042
2/6/15 21:20	40	0.000	0.000	0.000	0.042	0.000	0.634	0.042
2/7/15 0:20	41	0.021	0.000	0.021	0.021	0.021	0.401	0.042
2/7/15 3:20	42	0.000	0.021	0.000	0.000	0.000	0.613	0.042
2/7/15 6:20	43	0.000	0.000	0.000	0.021	0.000	0.845	0.063
2/7/15 9:20	44	0.000	0.000	0.000	0.042	0.000	0.570	0.042
2/7/15 12:20	45	0.021	0.021	0.021	0.042	0.021	0.676	0.042
2/7/15 15:20	46	0.000	0.000	0.000	0.021	0.000	0.549	0.042
2/7/15 18:20	47	0.000	0.021	0.000	0.021	0.000	0.676	0.042
2/7/15 21:20	48	0.021	0.021	0.021	0.042	0.021	0.887	0.063
2/8/15 0:20	49	0.000	0.000	0.000	0.021	0.000	0.676	0.042
2/8/15 3:20	50	0.000	0.000	0.000	0.021	0.000	0.528	0.042
2/8/15 6:20	51	0.000	0.000	0.000	0.000	0.000	0.422	0.021
2/8/15 9:20	52	0.000	0.000	0.000	0.000	0.000	0.486	0.042
2/8/15 12:20	53	0.000	0.000	0.000	0.000	0.000	0.528	0.042
2/8/15 15:20	54	0.000	0.000	0.000	0.000	0.000	0.613	0.042
2/8/15 18:20	55	0.000	0.000	0.000	0.021	0.000	0.887	0.063
2/8/15 21:20	56	0.000	0.000	0.000	0.021	0.000	0.782	0.063
2/9/15 0:20	57	0.000	0.000	0.000	0.000	0.000	0.380	0.021
2/9/15 3:20	58	0.021	0.021	0.021	0.000	0.021	0.528	0.042
2/9/15 6:20	59	0.000	0.000	0.000	0.021	0.000	0.887	0.063
2/9/15 9:20	60	0.000	0.021	0.000	0.021	0.000	0.549	0.042
2/9/15 12:20	61	0.000	0.000	0.000	0.021	0.000	0.845	0.063
2/9/15 15:20	62	0.000	0.021	0.000	0.021	0.000	1.225	0.084
2/9/15 18:20	63	0.000	0.000	0.000	0.021	0.000	1.669	0.127
2/9/15 21:20	64	0.000	0.000	0.000	0.021	0.000	1.965	0.148
2/10/15 0:20	65	0.000	0.021	0.000	0.042	0.000	1.098	0.084
2/10/15 3:20	66	0.000	0.021	0.000	0.021	0.000	0.824	0.063
2/10/15 6:20	67	0.000	0.000	0.000	0.021	0.000	0.845	0.063
2/10/15 9:20	68	0.000	0.000	0.000	0.021	0.000	1.289	0.084

Stage 7

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

V_err 0 ng/cm^2
 Cr ng/cm^2
 Cr_err ng/cm^2
 Mn ng/cm^2
 Mn_err ng/cm^2
 Fe ng/cm^2
 Fe_err ng/cm^2

Ave1stwk

AveAll

MDL
0.021

0.016	MDL
0.019	0.021

0.068	MDL
0.074	0.021

1.880	MDL
2.179	0.021

ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
69	0.000	0.000	0.000	0.021	0.000	1.162	0.084
70	0.000	0.021	0.000	0.021	0.000	1.246	0.084
71	0.000	0.042	0.000	0.063	0.000	4.605	0.317
72	0.000	0.084	0.000	0.106	0.000	9.717	0.697
73	0.000	0.021	0.000	0.106	0.000	9.654	0.676
74	0.000	0.021	0.000	0.042	0.000	2.767	0.190
75	0.021	0.021	0.021	0.042	0.021	2.493	0.190
76	0.000	0.021	0.000	0.084	0.000	2.155	0.148
77	0.000	0.042	0.000	0.169	0.021	2.007	0.148
78	0.000	0.021	0.000	0.127	0.000	1.542	0.106
79	0.000	0.021	0.000	0.127	0.000	3.084	0.211
80	0.000	0.021	0.000	0.106	0.000	2.577	0.190
81	0.000	0.042	0.000	0.063	0.000	2.429	0.169
82	0.000	0.021	0.000	0.063	0.000	1.584	0.106
83	0.000	0.000	0.000	0.021	0.000	1.204	0.084
84	0.000	0.063	0.000	0.063	0.000	2.134	0.148
85	0.000	0.021	0.000	0.042	0.000	1.352	0.106
86	0.000	0.000	0.000	0.084	0.000	1.141	0.084
87	0.021	0.042	0.021	0.042	0.021	2.957	0.211
88	0.000	0.021	0.000	0.084	0.000	5.556	0.401
89	0.000	0.021	0.000	0.042	0.000	3.338	0.232
90	0.000	0.021	0.000	0.042	0.000	3.190	0.232
91	0.000	0.021	0.000	0.042	0.000	4.140	0.296
92	0.000	0.021	0.000	0.127	0.000	3.845	0.275
93	0.000	0.021	0.000	0.190	0.021	2.281	0.169
94	0.000	0.021	0.000	0.127	0.000	1.986	0.148
95	0.000	0.000	0.000	0.084	0.000	1.500	0.106
96	0.000	0.000	0.000	0.042	0.000	1.753	0.127

Stage 7

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
0.023	MDL	0.038	MDL	0.147	MDL	0.527
0.025	0.021	0.035	0.021	0.136	0.021	0.442

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	
2/3/15 18:20	15	0.042	0.021	0.000	0.021	0.127	0.042	0.486
2/3/15 21:20	16	0.063	0.021	0.021	0.021	0.190	0.042	0.782
2/4/15 0:20	17	0.042	0.000	0.275	0.021	1.753	0.148	0.739
2/4/15 3:20	18	0.042	0.021	0.042	0.021	0.253	0.042	0.760
2/4/15 6:20	19	0.063	0.021	0.021	0.021	0.169	0.042	1.373
2/4/15 9:20	20	0.021	0.021	0.084	0.021	0.106	0.042	0.317
2/4/15 12:20	21	0.000	0.021	0.042	0.021	0.042	0.042	0.253
2/4/15 15:20	22	0.021	0.021	0.021	0.021	0.106	0.042	0.232
2/4/15 18:20	23	0.042	0.021	0.000	0.021	0.359	0.063	0.359
2/4/15 21:20	24	0.042	0.021	0.042	0.021	0.127	0.042	0.486
2/5/15 0:20	25	0.021	0.021	0.063	0.021	0.084	0.042	0.275
2/5/15 3:20	26	0.021	0.021	0.042	0.021	0.063	0.042	0.275
2/5/15 6:20	27	0.021	0.021	0.021	0.021	0.106	0.042	0.232
2/5/15 9:20	28	0.021	0.000	0.021	0.000	0.084	0.021	0.275
2/5/15 12:20	29	0.021	0.021	0.063	0.021	0.106	0.042	0.338
2/5/15 15:20	30	0.021	0.021	0.042	0.021	0.211	0.042	0.549
2/5/15 18:20	31	0.021	0.021	0.042	0.021	0.296	0.042	0.845
2/5/15 21:20	32	0.021	0.021	0.042	0.021	0.169	0.042	1.479
2/6/15 0:20	33	0.021	0.021	0.084	0.021	0.084	0.042	0.824
2/6/15 3:20	34	0.021	0.021	0.021	0.021	0.169	0.042	1.500
2/6/15 6:20	35	0.021	0.021	0.021	0.021	0.148	0.042	0.760
2/6/15 9:20	36	0.021	0.021	0.063	0.021	0.106	0.042	0.317
2/6/15 12:20	37	0.000	0.000	0.000	0.000	0.866	0.084	1.753
2/6/15 15:20	38	0.000	0.021	0.042	0.021	0.232	0.042	0.507
2/6/15 18:20	39	0.021	0.000	0.021	0.000	0.084	0.021	0.169
2/6/15 21:20	40	0.021	0.000	0.021	0.000	0.063	0.021	0.338
2/7/15 0:20	41	0.021	0.021	0.063	0.021	0.042	0.042	0.486
2/7/15 3:20	42	0.021	0.000	0.042	0.000	0.063	0.021	0.570
2/7/15 6:20	43	0.021	0.000	0.021	0.000	0.148	0.042	1.120
2/7/15 9:20	44	0.021	0.000	0.042	0.000	0.084	0.021	0.591
2/7/15 12:20	45	0.021	0.021	0.021	0.021	0.021	0.042	0.591
2/7/15 15:20	46	0.021	0.000	0.042	0.000	0.084	0.021	0.338
2/7/15 18:20	47	0.021	0.000	0.021	0.000	0.148	0.042	0.253
2/7/15 21:20	48	0.000	0.021	0.000	0.021	0.127	0.042	0.359
2/8/15 0:20	49	0.000	0.000	0.063	0.000	0.063	0.021	0.972
2/8/15 3:20	50	0.021	0.000	0.042	0.000	0.063	0.021	3.126
2/8/15 6:20	51	0.000	0.000	0.000	0.000	0.042	0.021	2.852
2/8/15 9:20	52	0.021	0.000	0.021	0.000	0.042	0.021	0.951
2/8/15 12:20	53	0.000	0.000	0.042	0.000	0.021	0.021	0.211
2/8/15 15:20	54	0.000	0.000	0.042	0.000	0.106	0.021	0.084
2/8/15 18:20	55	0.042	0.000	0.000	0.000	0.084	0.021	0.063
2/8/15 21:20	56	0.021	0.000	0.000	0.000	0.063	0.021	0.084
2/9/15 0:20	57	0.000	0.000	0.042	0.000	0.042	0.021	0.127
2/9/15 3:20	58	0.021	0.021	0.063	0.021	0.084	0.042	0.106
2/9/15 6:20	59	0.021	0.000	0.021	0.000	0.084	0.021	0.063
2/9/15 9:20	60	0.021	0.000	0.042	0.000	0.084	0.021	0.127
2/9/15 12:20	61	0.021	0.000	0.021	0.000	0.000	0.021	0.106
2/9/15 15:20	62	0.042	0.000	0.021	0.000	0.063	0.021	0.148
2/9/15 18:20	63	0.021	0.000	0.021	0.000	0.063	0.021	0.084
2/9/15 21:20	64	0.021	0.000	0.021	0.000	0.063	0.021	0.063
2/10/15 0:20	65	0.021	0.000	0.063	0.000	0.021	0.021	0.084
2/10/15 3:20	66	0.021	0.000	0.021	0.000	0.042	0.021	0.042
2/10/15 6:20	67	0.021	0.000	0.000	0.000	0.084	0.021	0.042
2/10/15 9:20	68	0.021	0.000	0.042	0.000	0.042	0.021	0.106

Stage 7	7.89 L/m									
	1440 min/day									
Marks	11.3616 m3/day	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	
	4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
	6 mm									
3	0.24 cm2/day	Ave1stwk	0.023	MDL	0.038	MDL	0.147	MDL	0.527	
2/3/2015 18:20	0.02112 cm2/m3	AveAll	0.025	0.021	0.035	0.021	0.136	0.021	0.442	
Marks										
	2/10/15 12:20	69	0.021	0.000	0.021	0.000	0.000	0.021	0.169	
	2/10/15 15:20	70	0.021	0.000	0.042	0.000	0.063	0.021	0.169	
	2/10/15 18:20	71	0.063	0.000	0.021	0.000	0.169	0.042	0.127	
	2/10/15 21:20	72	0.084	0.000	0.042	0.000	0.359	0.042	0.317	
	2/11/15 0:20	73	0.084	0.000	0.042	0.000	0.232	0.042	0.296	
	2/11/15 3:20	74	0.021	0.000	0.021	0.000	0.084	0.021	0.253	
	2/11/15 6:20	75	0.021	0.021	0.021	0.021	0.106	0.042	0.106	
	2/11/15 9:20	76	0.021	0.000	0.042	0.000	0.296	0.042	0.253	
	2/11/15 12:20	77	0.042	0.000	0.063	0.000	0.063	0.021	0.253	
	2/11/15 15:20	78	0.021	0.000	0.021	0.000	0.063	0.021	0.169	
	2/11/15 18:20	79	0.021	0.000	0.021	0.000	0.084	0.021	0.084	
	2/11/15 21:20	80	0.042	0.000	0.042	0.000	0.169	0.042	0.296	
	2/12/15 0:20	81	0.021	0.000	0.042	0.000	0.042	0.021	0.275	
	2/12/15 3:20	82	0.021	0.000	0.021	0.000	0.063	0.021	0.148	
	2/12/15 6:20	83	0.021	0.000	0.000	0.000	0.021	0.021	0.042	
	2/12/15 9:20	84	0.021	0.000	0.021	0.000	0.084	0.021	0.444	
	2/12/15 12:20	85	0.021	0.000	0.042	0.000	0.021	0.021	0.211	
	2/12/15 15:20	86	0.021	0.000	0.021	0.000	0.063	0.021	0.106	
	2/12/15 18:20	87	0.042	0.021	0.000	0.021	0.063	0.042	0.148	
	2/12/15 21:20	88	0.063	0.000	0.021	0.000	0.232	0.042	0.338	
	2/13/15 0:20	89	0.021	0.000	0.063	0.000	0.063	0.021	0.211	
	2/13/15 3:20	90	0.021	0.000	0.021	0.000	0.084	0.021	0.190	
	2/13/15 6:20	91	0.021	0.000	0.021	0.000	0.063	0.021	0.148	
	2/13/15 9:20	92	0.042	0.000	0.021	0.000	0.190	0.042	0.338	
	2/13/15 12:20	93	0.021	0.000	0.084	0.000	0.148	0.042	0.444	
	2/13/15 15:20	94	0.000	0.000	0.021	0.000	0.127	0.021	0.359	
	2/13/15 18:20	95	0.021	0.000	0.021	0.000	0.084	0.021	0.148	
	2/13/15 21:20	96	0.042	0.000	0.021	0.000	0.106	0.021	0.232	

Stage 7

Marks

3

2/3/2015 18:20

Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

ID#

Ave1stwk

AveAll

Zn_err
0 ng/cm^2

Br_err
ng/cm^2

Pb
ng/cm^2

Pb_err
ng/cm^2

Sum of Elei

MDL	MDL	0.382	MDL
0.042	0.021	0.297	0.021

ID#	Zn_err	Br_err	Pb	Pb_err	Sum of Elei	
2/3/15 18:20	15	0.084	0.084	0.570	0.359	67.744
2/3/15 21:20	16	0.106	0.127	0.486	0.380	219.751
2/4/15 0:20	17	6.992	0.042	0.000	0.000	200.000
2/4/15 3:20	18	0.106	0.106	0.739	0.422	78.411
2/4/15 6:20	19	0.148	0.106	0.782	0.380	234.199
2/4/15 9:20	20	0.063	0.084	0.697	0.359	82.826
2/4/15 12:20	21	0.063	0.084	0.000	0.359	50.782
2/4/15 15:20	22	0.063	0.084	0.570	0.380	68.124
2/4/15 18:20	23	0.084	0.084	0.000	0.359	108.872
2/4/15 21:20	24	0.084	0.084	0.380	0.359	112.886
2/5/15 0:20	25	0.063	0.084	0.887	0.380	60.794
2/5/15 3:20	26	0.063	0.084	0.655	0.380	69.392
2/5/15 6:20	27	0.063	0.084	0.613	0.359	54.520
2/5/15 9:20	28	0.063	0.042	0.486	0.042	74.398
2/5/15 12:20	29	0.063	0.084	0.845	0.359	88.086
2/5/15 15:20	30	0.084	0.084	0.929	0.359	121.821
2/5/15 18:20	31	0.106	0.084	0.803	0.359	98.669
2/5/15 21:20	32	0.148	0.084	0.718	0.211	102.091
2/6/15 0:20	33	0.106	0.084	0.676	0.359	78.940
2/6/15 3:20	34	0.148	0.084	0.697	0.359	101.479
2/6/15 6:20	35	0.106	0.084	0.380	0.359	82.488
2/6/15 9:20	36	0.063	0.084	0.549	0.359	60.520
2/6/15 12:20	37	0.169	0.021	0.866	0.063	49.134
2/6/15 15:20	38	0.084	0.084	0.000	0.359	50.253
2/6/15 18:20	39	0.042	0.021	0.380	0.021	34.643
2/6/15 21:20	40	0.063	0.000	0.275	0.021	43.029
2/7/15 0:20	41	0.084	0.084	0.000	0.359	36.291
2/7/15 3:20	42	0.084	0.021	0.486	0.042	30.946
2/7/15 6:20	43	0.127	0.000	0.380	0.021	37.157
2/7/15 9:20	44	0.084	0.021	0.866	0.063	39.713
2/7/15 12:20	45	0.084	0.084	0.000	0.359	37.347
2/7/15 15:20	46	0.063	0.000	0.782	0.063	38.297
2/7/15 18:20	47	0.063	0.000	0.169	0.021	35.277
2/7/15 21:20	48	0.063	0.084	0.528	0.359	50.084
2/8/15 0:20	49	0.106	0.000	0.275	0.021	61.407
2/8/15 3:20	50	0.253	0.000	0.634	0.042	57.140
2/8/15 6:20	51	0.232	0.000	0.401	0.021	63.033
2/8/15 9:20	52	0.106	0.000	0.634	0.042	39.797
2/8/15 12:20	53	0.042	0.021	0.211	0.021	37.790
2/8/15 15:20	54	0.042	0.000	0.528	0.042	27.207
2/8/15 18:20	55	0.042	0.000	0.042	0.000	33.946
2/8/15 21:20	56	0.042	0.000	0.000	0.000	32.890
2/9/15 0:20	57	0.042	0.000	0.232	0.021	33.861
2/9/15 3:20	58	0.063	0.084	0.634	0.380	29.066
2/9/15 6:20	59	0.042	0.000	0.000	0.000	38.065
2/9/15 9:20	60	0.042	0.000	0.528	0.042	33.692
2/9/15 12:20	61	0.042	0.000	0.000	0.000	41.466
2/9/15 15:20	62	0.042	0.000	0.169	0.021	39.206
2/9/15 18:20	63	0.042	0.000	0.148	0.021	41.846
2/9/15 21:20	64	0.042	0.000	0.000	0.000	35.509
2/10/15 0:20	65	0.042	0.000	0.000	0.000	33.481
2/10/15 3:20	66	0.042	0.000	0.190	0.021	35.741
2/10/15 6:20	67	0.042	0.000	0.211	0.021	25.771
2/10/15 9:20	68	0.042	0.000	0.338	0.021	25.306

Stage 7	7.89 L/m						
	1440 min/day						
Marks	11.3616 m3/day	ID#	Zn_err	Br_err	Pb	Pb_err	Sum of Elei
	4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
3	6 mm						
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	MDL	MDL	0.382	MDL	
Marks	0.02112 cm2/m3	AveAll	0.042	0.021	0.297	0.021	

ID#	Zn_err	Br_err	Pb	Pb_err	Sum of Elei
69	0.042	0.021	0.021	0.000	35.298
70	0.042	0.000	0.063	0.000	31.031
71	0.042	0.000	0.000	0.000	36.439
72	0.063	0.000	0.000	0.000	37.009
73	0.063	0.000	0.739	0.042	46.113
74	0.063	0.000	0.169	0.021	29.742
75	0.063	0.063	0.000	0.380	28.517
76	0.063	0.000	0.000	0.000	34.052
77	0.063	0.000	0.021	0.000	42.459
78	0.042	0.000	0.000	0.000	32.805
79	0.042	0.021	0.000	0.000	30.777
80	0.063	0.021	0.000	0.000	35.953
81	0.063	0.000	0.127	0.000	33.460
82	0.042	0.000	0.000	0.000	31.643
83	0.042	0.000	0.000	0.000	22.180
84	0.063	0.000	0.232	0.021	32.087
85	0.042	0.000	0.042	0.000	32.087
86	0.042	0.000	0.000	0.000	27.334
87	0.063	0.063	0.000	0.359	30.080
88	0.063	0.000	0.084	0.000	47.381
89	0.042	0.000	0.000	0.000	38.593
90	0.042	0.000	0.000	0.000	35.340
91	0.042	0.000	0.127	0.021	33.460
92	0.063	0.021	0.275	0.021	45.226
93	0.063	0.021	0.021	0.000	33.650
94	0.063	0.000	0.000	0.000	37.474
95	0.042	0.021	0.000	0.000	28.855
96	0.063	0.021	0.021	0.000	38.382

Stage 7	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	ments
	4 mm/day		0
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/3/15 18:20	15
2/3/15 21:20	16
2/4/15 0:20	17
2/4/15 3:20	18
2/4/15 6:20	19
2/4/15 9:20	20
2/4/15 12:20	21
2/4/15 15:20	22
2/4/15 18:20	23
2/4/15 21:20	24
2/5/15 0:20	25
2/5/15 3:20	26
2/5/15 6:20	27
2/5/15 9:20	28
2/5/15 12:20	29
2/5/15 15:20	30
2/5/15 18:20	31
2/5/15 21:20	32
2/6/15 0:20	33
2/6/15 3:20	34
2/6/15 6:20	35
2/6/15 9:20	36
2/6/15 12:20	37
2/6/15 15:20	38
2/6/15 18:20	39
2/6/15 21:20	40
2/7/15 0:20	41
2/7/15 3:20	42
2/7/15 6:20	43
2/7/15 9:20	44
2/7/15 12:20	45
2/7/15 15:20	46
2/7/15 18:20	47
2/7/15 21:20	48
2/8/15 0:20	49
2/8/15 3:20	50
2/8/15 6:20	51
2/8/15 9:20	52
2/8/15 12:20	53
2/8/15 15:20	54
2/8/15 18:20	55
2/8/15 21:20	56
2/9/15 0:20	57
2/9/15 3:20	58
2/9/15 6:20	59
2/9/15 9:20	60
2/9/15 12:20	61
2/9/15 15:20	62
2/9/15 18:20	63
2/9/15 21:20	64
2/10/15 0:20	65
2/10/15 3:20	66
2/10/15 6:20	67
2/10/15 9:20	68

Stage 7	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	ments
	4 mm/day		0
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/10/15 12:20	69
2/10/15 15:20	70
2/10/15 18:20	71
2/10/15 21:20	72
2/11/15 0:20	73
2/11/15 3:20	74
2/11/15 6:20	75
2/11/15 9:20	76
2/11/15 12:20	77
2/11/15 15:20	78
2/11/15 18:20	79
2/11/15 21:20	80
2/12/15 0:20	81
2/12/15 3:20	82
2/12/15 6:20	83
2/12/15 9:20	84
2/12/15 12:20	85
2/12/15 15:20	86
2/12/15 18:20	87
2/12/15 21:20	88
2/13/15 0:20	89
2/13/15 3:20	90
2/13/15 6:20	91
2/13/15 9:20	92
2/13/15 12:20	93
2/13/15 15:20	94
2/13/15 18:20	95
2/13/15 21:20	96

Stage 8
2/13/2015 6:56
Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

3
2/3/2015 18:20
Marks

ID#	Na 0 ng/cm^2	Na_err ng/cm^2	Mg ng/cm^2	Mg_err ng/cm^2	Al ng/cm^2	Al_err ng/cm^2	Si ng/cm^2
Ave1stwk	10.991	MDL	1.838	MDL	0.367	MDL	0.476
AveAll	10.242	0.465	1.857	0.063	0.388	0.021	0.539

2/3/15 18:20	12	11.555	6.295	0.000	1.711	0.000	0.507	0.359
2/3/15 21:20	13	2.366	0.591	0.211	0.063	0.613	0.042	1.542
2/4/15 0:20	14	12.717	1.289	0.380	0.063	0.908	0.063	0.338
2/4/15 3:20	15	10.984	1.162	0.338	0.063	0.655	0.042	0.591
2/4/15 6:20	16	10.984	1.162	2.239	0.169	0.401	0.042	0.486
2/4/15 9:20	17	12.336	1.267	0.993	0.084	0.253	0.021	1.014
2/4/15 12:20	18	10.604	6.274	2.239	1.732	0.000	0.486	0.824
2/4/15 15:20	19	11.745	6.295	0.000	1.711	0.000	0.507	0.655
2/4/15 18:20	20	3.971	6.591	0.000	1.880	0.000	0.549	0.676
2/4/15 21:20	21	3.697	6.210	0.000	1.711	0.000	0.507	0.444
2/5/15 0:20	22	13.857	1.373	1.986	0.148	0.401	0.042	0.296
2/5/15 3:20	23	14.449	6.147	2.746	1.732	0.000	0.486	0.359
2/5/15 6:20	24	10.794	6.105	0.000	1.669	0.000	0.486	0.444
2/5/15 9:20	25	2.176	6.189	0.000	1.774	0.549	0.528	0.866
2/5/15 12:20	26	3.316	6.210	0.000	1.774	0.000	0.528	0.570
2/5/15 15:20	27	4.288	6.210	0.000	1.774	0.000	0.507	0.465
2/5/15 18:20	28	7.161	6.422	0.000	1.774	0.000	0.528	0.317
2/5/15 21:20	29	10.604	1.141	2.746	0.190	0.444	0.042	0.359
2/6/15 0:20	30	13.857	6.316	0.000	1.711	0.000	0.507	0.486
2/6/15 3:20	31	7.921	6.253	1.817	1.774	0.000	0.528	0.486
2/6/15 6:20	32	6.379	6.232	2.239	1.774	0.000	0.486	0.507
2/6/15 9:20	33	6.781	6.041	0.000	1.669	0.000	0.486	0.634
2/6/15 12:20	34	15.399	1.479	2.852	0.211	0.296	0.021	0.380
2/6/15 15:20	35	7.351	5.872	2.514	1.669	0.549	0.486	0.887
2/6/15 18:20	36	9.062	1.035	1.753	0.127	0.401	0.042	0.718
2/6/15 21:20	37	9.273	6.084	1.859	1.711	0.591	0.507	0.718
2/7/15 0:20	38	15.589	6.168	0.000	1.605	0.718	0.486	0.507
2/7/15 3:20	39	15.970	6.168	2.471	1.669	0.887	0.486	0.000
2/7/15 6:20	40	11.555	1.204	4.119	0.296	0.275	0.021	0.444
2/7/15 9:20	41	13.857	6.147	2.514	1.669	0.697	0.486	0.359
2/7/15 12:20	42	6.971	0.887	3.021	0.211	0.613	0.042	0.296
2/7/15 15:20	43	15.779	1.500	2.683	0.190	0.359	0.021	0.444
2/7/15 18:20	44	8.682	1.014	0.993	0.084	0.655	0.042	0.444
2/7/15 21:20	45	5.049	6.041	0.000	1.669	0.000	0.486	0.000
2/8/15 0:20	46	10.604	6.084	0.000	1.669	0.000	0.486	0.317
2/8/15 3:20	47	18.082	1.669	1.817	0.148	0.613	0.042	0.338
2/8/15 6:20	48	17.131	1.605	2.091	0.148	0.549	0.042	0.486
2/8/15 9:20	49	14.829	1.436	3.021	0.211	0.972	0.063	0.422
2/8/15 12:20	50	7.541	5.872	2.852	1.627	0.528	0.465	0.845
2/8/15 15:20	51	14.639	1.415	5.703	0.401	0.845	0.063	0.845
2/8/15 18:20	52	12.526	1.267	2.366	0.169	0.211	0.021	0.359
2/8/15 21:20	53	14.639	1.415	2.091	0.148	0.106	0.021	0.042
2/9/15 0:20	54	19.033	1.732	4.563	0.317	0.887	0.063	0.444
2/9/15 3:20	55	15.589	1.500	3.338	0.232	0.444	0.042	0.232
2/9/15 6:20	56	15.209	5.809	4.119	1.584	0.528	0.444	0.486
2/9/15 9:20	57	9.463	1.056	1.436	0.106	0.021	0.021	0.148
2/9/15 12:20	58	9.463	1.056	1.373	0.106	0.401	0.042	0.106
2/9/15 15:20	59	12.146	1.246	1.922	0.148	0.528	0.042	0.211
2/9/15 18:20	60	7.351	0.929	2.514	0.190	0.296	0.021	0.275
2/9/15 21:20	61	9.844	1.098	3.232	0.232	0.317	0.021	0.613
2/10/15 0:20	62	14.237	1.394	2.471	0.190	0.549	0.042	0.380
2/10/15 3:20	63	6.971	0.887	2.514	0.190	0.296	0.021	0.465
2/10/15 6:20	64	14.829	1.436	2.239	0.169	0.380	0.021	0.444
2/10/15 9:20	65	14.047	1.394	3.021	0.211	0.422	0.042	0.676
2/10/15 12:20	66	14.829	1.436	2.302	0.169	0.422	0.042	0.676
2/10/15 15:20	67	14.639	1.415	1.817	0.148	0.444	0.042	0.465

Stage 8	7.89 L/m
2/13/2015 6:56	1440 min/day
Marks	11.3616 m3/day
	4 mm/day
3	6 mm
2/3/2015 18:20	0.24 cm2/day
Marks	0.02112 cm2/m3

ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	10.991	MDL	1.838	MDL	0.367	MDL	0.476
AveAll	10.242	0.465	1.857	0.063	0.388	0.021	0.539

2/10/15 18:20	68	5.809	0.824	1.035	0.084	0.401	0.042	0.549
2/10/15 21:20	69	8.872	1.035	2.577	0.190	0.718	0.063	0.845
2/11/15 0:20	70	7.921	0.951	0.887	0.084	0.549	0.042	0.422
2/11/15 3:20	71	11.365	1.204	0.887	0.084	0.359	0.021	0.591
2/11/15 6:20	72	5.049	0.760	1.986	0.148	0.634	0.042	0.549
2/11/15 9:20	73	6.971	0.887	2.683	0.190	0.106	0.021	0.528
2/11/15 12:20	74	9.654	1.077	2.577	0.190	0.486	0.042	0.655
2/11/15 15:20	75	11.956	1.246	3.676	0.253	0.380	0.021	0.803
2/11/15 18:20	76	7.921	0.951	2.746	0.190	0.465	0.042	0.655
2/11/15 21:20	77	3.126	0.634	1.479	0.127	0.444	0.042	0.507
2/12/15 0:20	78	8.302	0.993	1.542	0.127	0.359	0.021	0.549
2/12/15 3:20	79	9.062	1.035	2.915	0.211	0.613	0.042	0.528
2/12/15 6:20	80	2.176	0.570	2.640	0.190	0.507	0.042	0.718
2/12/15 9:20	81	7.921	0.951	2.957	0.211	0.317	0.021	0.613
2/12/15 12:20	82	8.682	1.014	2.197	0.169	0.444	0.042	0.528
2/12/15 15:20	83	10.224	1.120	1.986	0.148	0.275	0.021	0.444
2/12/15 18:20	84	6.591	0.866	1.648	0.127	0.422	0.042	0.951
2/12/15 21:20	85	8.682	1.014	1.859	0.148	0.275	0.021	0.845
2/13/15 0:20	86	3.908	0.676	0.887	0.084	0.275	0.021	0.570
2/13/15 3:20	87	7.731	0.951	1.542	0.127	0.317	0.021	0.444
2/13/15 6:20	88	13.287	1.331	2.302	0.169	0.739	0.063	0.993
2/13/15 9:20	89	9.273	1.056	1.584	0.127	0.866	0.063	0.507
2/13/15 12:20	90	12.717	1.289	2.640	0.190	0.106	0.021	0.549
2/13/15 15:20	91	17.512	1.627	0.824	0.084	0.972	0.063	0.739
2/13/15 18:20	92	9.463	1.056	2.640	0.190	0.570	0.042	1.141
2/13/15 21:20	93	10.984	1.162	2.028	0.148	0.190	0.021	0.803

Stage 8
2/13/2015 6:56
Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

3
2/3/2015 18:20
Marks

ID#	Si_err 0 ng/cm^2	P ng/cm^2	P_err ng/cm^2	S ng/cm^2	S_err ng/cm^2	Cl ng/cm^2	Cl_err ng/cm^2
Ave1stwk	MDL	1.115	MDL	23.614	MDL	0.434	MDL
AveAll	0.021	0.983	0.232	19.231	0.042	0.357	0.021

2/3/15 18:20	12	0.211	1.415	0.401	39.966	2.873	0.634	0.084
2/3/15 21:20	13	0.106	2.155	0.380	58.492	4.140	0.929	0.063
2/4/15 0:20	14	0.021	2.028	0.359	30.651	2.176	0.296	0.021
2/4/15 3:20	15	0.042	1.500	0.317	20.891	1.500	0.296	0.021
2/4/15 6:20	16	0.042	1.436	0.317	19.328	1.394	0.275	0.021
2/4/15 9:20	17	0.063	1.753	0.338	31.770	2.260	0.338	0.021
2/4/15 12:20	18	0.211	1.521	0.422	43.029	3.084	0.359	0.084
2/4/15 15:20	19	0.211	1.521	0.422	42.966	3.084	0.253	0.063
2/4/15 18:20	20	0.232	2.345	0.486	145.120	10.224	0.549	0.084
2/4/15 21:20	21	0.211	1.901	0.444	51.943	3.718	0.211	0.063
2/5/15 0:20	22	0.021	1.669	0.338	29.594	2.112	0.190	0.021
2/5/15 3:20	23	0.190	0.993	0.380	30.376	2.197	0.063	0.063
2/5/15 6:20	24	0.211	1.246	0.401	31.010	2.239	0.127	0.063
2/5/15 9:20	25	0.232	1.986	0.444	46.493	3.316	0.148	0.063
2/5/15 12:20	26	0.211	1.901	0.444	44.761	3.211	0.253	0.063
2/5/15 15:20	27	0.211	1.289	0.401	48.585	3.464	0.275	0.063
2/5/15 18:20	28	0.211	1.141	0.401	48.690	3.485	0.465	0.084
2/5/15 21:20	29	0.021	1.986	0.359	54.605	3.866	0.380	0.021
2/6/15 0:20	30	0.211	1.310	0.401	42.649	3.063	0.401	0.084
2/6/15 3:20	31	0.211	0.951	0.380	40.452	2.894	0.338	0.084
2/6/15 6:20	32	0.211	0.951	0.380	40.325	2.894	0.296	0.063
2/6/15 9:20	33	0.211	1.521	0.422	35.699	2.577	0.148	0.063
2/6/15 12:20	34	0.021	1.014	0.296	22.307	1.605	0.359	0.021
2/6/15 15:20	35	0.211	0.380	0.338	19.687	1.458	0.570	0.084
2/6/15 18:20	36	0.042	1.077	0.296	17.237	1.246	0.084	0.000
2/6/15 21:20	37	0.211	1.542	0.422	22.264	1.627	0.106	0.063
2/7/15 0:20	38	0.190	1.162	0.380	15.948	1.183	0.000	0.063
2/7/15 3:20	39	0.190	0.887	0.359	12.569	0.951	0.063	0.063
2/7/15 6:20	40	0.042	0.782	0.275	15.970	1.162	0.021	0.000
2/7/15 9:20	41	0.190	1.521	0.422	20.046	1.479	0.253	0.063
2/7/15 12:20	42	0.021	0.845	0.275	15.441	1.120	0.063	0.000
2/7/15 15:20	43	0.021	0.824	0.275	14.850	1.077	0.063	0.000
2/7/15 18:20	44	0.021	1.141	0.296	28.369	2.028	0.084	0.000
2/7/15 21:20	45	0.190	1.690	0.422	50.190	3.591	0.084	0.063
2/8/15 0:20	46	0.190	1.331	0.401	24.588	1.796	0.106	0.063
2/8/15 3:20	47	0.021	0.676	0.275	25.306	1.817	0.106	0.000
2/8/15 6:20	48	0.042	0.908	0.296	26.426	1.880	0.148	0.000
2/8/15 9:20	49	0.021	1.204	0.317	20.828	1.500	0.021	0.000
2/8/15 12:20	50	0.211	1.035	0.380	10.351	0.803	0.063	0.042
2/8/15 15:20	51	0.063	0.655	0.275	4.056	0.317	0.084	0.000
2/8/15 18:20	52	0.021	0.739	0.275	4.753	0.359	0.253	0.021
2/8/15 21:20	53	0.000	0.591	0.253	4.837	0.380	2.429	0.169
2/9/15 0:20	54	0.042	1.014	0.296	2.493	0.211	2.831	0.190
2/9/15 3:20	55	0.021	0.211	0.232	1.796	0.169	2.429	0.169
2/9/15 6:20	56	0.190	0.697	0.359	2.894	0.296	3.021	0.232
2/9/15 9:20	57	0.021	0.401	0.253	5.894	0.444	1.838	0.127
2/9/15 12:20	58	0.000	0.444	0.253	4.351	0.338	0.507	0.042
2/9/15 15:20	59	0.021	0.190	0.232	1.690	0.148	1.204	0.084
2/9/15 18:20	60	0.021	0.232	0.232	3.190	0.253	0.380	0.021
2/9/15 21:20	61	0.042	1.542	0.338	5.365	0.401	0.211	0.021
2/10/15 0:20	62	0.021	1.204	0.317	3.929	0.317	0.190	0.021
2/10/15 3:20	63	0.042	0.275	0.232	3.612	0.296	0.084	0.000
2/10/15 6:20	64	0.021	0.782	0.275	5.492	0.422	0.084	0.000
2/10/15 9:20	65	0.042	0.993	0.296	5.999	0.465	0.486	0.042
2/10/15 12:20	66	0.042	1.098	0.296	3.464	0.275	0.084	0.000
2/10/15 15:20	67	0.042	0.591	0.253	2.324	0.190	0.000	0.000

Stage 8	7.89 L/m
2/13/2015 6:56	1440 min/day
Marks	11.3616 m3/day
	4 mm/day
3	6 mm
2/3/2015 18:20	0.24 cm2/day
Marks	0.02112 cm2/m3

ID#	Si_err 0 ng/cm^2	P ng/cm^2	P_err ng/cm^2	S ng/cm^2	S_err ng/cm^2	Cl ng/cm^2	Cl_err ng/cm^2
Ave1stwk	MDL	1.115	MDL	23.614	MDL	0.434	MDL
AveAll	0.021	0.983	0.232	19.231	0.042	0.357	0.021

2/10/15 18:20	68	0.042	0.507	0.253	6.358	0.486	0.106	0.000
2/10/15 21:20	69	0.063	1.289	0.317	8.576	0.634	0.211	0.021
2/11/15 0:20	70	0.021	0.824	0.275	6.591	0.507	0.063	0.000
2/11/15 3:20	71	0.042	0.275	0.232	23.173	1.669	1.796	0.127
2/11/15 6:20	72	0.042	0.232	0.232	4.288	0.338	0.106	0.000
2/11/15 9:20	73	0.042	0.866	0.275	8.787	0.655	0.106	0.000
2/11/15 12:20	74	0.042	0.866	0.275	5.577	0.422	0.127	0.000
2/11/15 15:20	75	0.063	0.739	0.275	4.077	0.317	0.021	0.000
2/11/15 18:20	76	0.042	0.211	0.232	5.450	0.422	0.084	0.000
2/11/15 21:20	77	0.042	0.972	0.296	6.612	0.507	0.084	0.000
2/12/15 0:20	78	0.042	0.718	0.275	5.006	0.380	0.042	0.000
2/12/15 3:20	79	0.042	0.169	0.232	4.267	0.338	0.021	0.000
2/12/15 6:20	80	0.042	0.718	0.275	4.351	0.338	0.106	0.000
2/12/15 9:20	81	0.042	0.824	0.275	5.070	0.380	0.063	0.000
2/12/15 12:20	82	0.042	0.613	0.275	3.760	0.296	0.021	0.000
2/12/15 15:20	83	0.042	0.718	0.275	2.852	0.232	0.021	0.000
2/12/15 18:20	84	0.063	0.549	0.253	4.499	0.359	0.084	0.000
2/12/15 21:20	85	0.063	0.824	0.275	6.168	0.465	0.042	0.000
2/13/15 0:20	86	0.042	0.655	0.275	6.675	0.507	0.148	0.000
2/13/15 3:20	87	0.021	0.063	0.232	3.823	0.296	0.021	0.000
2/13/15 6:20	88	0.063	0.465	0.253	5.239	0.401	0.042	0.000
2/13/15 9:20	89	0.042	0.570	0.253	12.019	0.887	0.084	0.000
2/13/15 12:20	90	0.042	0.570	0.253	7.288	0.549	0.106	0.000
2/13/15 15:20	91	0.042	0.507	0.253	5.070	0.380	0.021	0.000
2/13/15 18:20	92	0.084	0.549	0.253	7.605	0.570	0.084	0.000
2/13/15 21:20	93	0.063	1.098	0.296	7.858	0.591	0.084	0.000

Stage 8
2/13/2015 6:56
Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

3
2/3/2015 18:20
Marks

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	1.770	MDL	0.201	MDL	0.043	MDL	0.008
AveAll	1.924	0.021	0.222	0.021	0.046	0.021	0.008

2/3/15 18:20	12	7.034	0.507	0.507	0.063	0.042	0.021	0.021
2/3/15 21:20	13	10.139	0.718	0.951	0.084	0.106	0.021	0.000
2/4/15 0:20	14	4.309	0.296	0.211	0.042	0.021	0.000	0.021
2/4/15 3:20	15	2.852	0.190	0.106	0.021	0.021	0.000	0.021
2/4/15 6:20	16	3.485	0.253	0.127	0.021	0.042	0.021	0.000
2/4/15 9:20	17	2.535	0.169	0.232	0.042	0.063	0.021	0.000
2/4/15 12:20	18	1.373	0.106	0.211	0.042	0.042	0.021	0.000
2/4/15 15:20	19	1.352	0.106	0.211	0.042	0.084	0.021	0.021
2/4/15 18:20	20	5.070	0.359	0.232	0.042	0.106	0.021	0.000
2/4/15 21:20	21	1.711	0.127	0.211	0.042	0.021	0.021	0.021
2/5/15 0:20	22	1.120	0.084	0.127	0.021	0.021	0.000	0.021
2/5/15 3:20	23	1.204	0.106	0.042	0.021	0.021	0.021	0.000
2/5/15 6:20	24	1.500	0.106	0.106	0.042	0.063	0.021	0.021
2/5/15 9:20	25	2.577	0.190	0.317	0.042	0.063	0.021	0.042
2/5/15 12:20	26	1.880	0.148	0.169	0.042	0.042	0.021	0.021
2/5/15 15:20	27	2.535	0.190	0.169	0.042	0.042	0.021	0.021
2/5/15 18:20	28	4.457	0.317	0.148	0.042	0.063	0.021	0.000
2/5/15 21:20	29	5.365	0.380	0.211	0.042	0.106	0.021	0.021
2/6/15 0:20	30	4.499	0.317	0.169	0.042	0.042	0.021	0.000
2/6/15 3:20	31	4.711	0.338	0.444	0.063	0.042	0.021	0.000
2/6/15 6:20	32	2.852	0.211	0.169	0.042	0.042	0.021	0.021
2/6/15 9:20	33	1.880	0.148	0.232	0.042	0.042	0.021	0.021
2/6/15 12:20	34	2.324	0.169	0.190	0.042	0.021	0.000	0.021
2/6/15 15:20	35	1.817	0.148	0.676	0.063	0.084	0.021	0.042
2/6/15 18:20	36	0.782	0.063	0.127	0.021	0.042	0.000	0.021
2/6/15 21:20	37	1.162	0.084	0.232	0.042	0.042	0.021	0.021
2/7/15 0:20	38	0.782	0.063	0.211	0.042	0.042	0.021	0.000
2/7/15 3:20	39	0.676	0.063	0.084	0.042	0.000	0.021	0.021
2/7/15 6:20	40	0.718	0.042	0.106	0.021	0.042	0.000	0.021
2/7/15 9:20	41	1.183	0.106	0.317	0.042	0.021	0.021	0.000
2/7/15 12:20	42	1.014	0.063	0.211	0.042	0.021	0.000	0.000
2/7/15 15:20	43	1.098	0.084	0.148	0.021	0.042	0.000	0.021
2/7/15 18:20	44	1.373	0.106	0.169	0.021	0.021	0.000	0.000
2/7/15 21:20	45	2.345	0.169	0.211	0.042	0.042	0.021	0.000
2/8/15 0:20	46	3.274	0.232	0.063	0.042	0.021	0.021	0.000
2/8/15 3:20	47	5.767	0.401	0.042	0.021	0.021	0.000	0.000
2/8/15 6:20	48	6.168	0.422	0.021	0.021	0.063	0.021	0.000
2/8/15 9:20	49	2.429	0.169	0.127	0.021	0.021	0.000	0.000
2/8/15 12:20	50	0.845	0.063	0.232	0.042	0.021	0.021	0.000
2/8/15 15:20	51	0.359	0.021	0.106	0.021	0.042	0.000	0.000
2/8/15 18:20	52	0.275	0.021	0.148	0.021	0.042	0.000	0.000
2/8/15 21:20	53	0.338	0.021	0.253	0.042	0.021	0.000	0.000
2/9/15 0:20	54	0.169	0.021	0.380	0.042	0.021	0.000	0.000
2/9/15 3:20	55	0.148	0.000	0.169	0.021	0.021	0.000	0.000
2/9/15 6:20	56	0.338	0.042	0.275	0.042	0.042	0.021	0.000
2/9/15 9:20	57	0.317	0.021	0.296	0.042	0.042	0.000	0.000
2/9/15 12:20	58	0.275	0.021	0.232	0.042	0.021	0.000	0.000
2/9/15 15:20	59	0.211	0.021	0.127	0.021	0.021	0.000	0.000
2/9/15 18:20	60	0.338	0.021	0.169	0.021	0.063	0.021	0.000
2/9/15 21:20	61	0.845	0.063	0.253	0.042	0.042	0.000	0.000
2/10/15 0:20	62	0.380	0.021	0.211	0.042	0.021	0.000	0.000
2/10/15 3:20	63	0.253	0.021	0.127	0.021	0.063	0.021	0.000
2/10/15 6:20	64	0.380	0.021	0.169	0.021	0.021	0.000	0.000
2/10/15 9:20	65	0.486	0.042	0.296	0.042	0.042	0.000	0.000
2/10/15 12:20	66	0.359	0.021	0.169	0.021	0.042	0.000	0.000
2/10/15 15:20	67	0.317	0.021	0.148	0.021	0.021	0.000	0.000

Stage 8	7.89 L/m	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/13/2015 6:56	1440 min/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Marks	11.3616 m3/day								
	4 mm/day								
3	6 mm								
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	1.770	MDL	0.201	MDL	0.043	MDL	0.008
Marks	0.02112 cm2/m3	AveAll	1.924	0.021	0.222	0.021	0.046	0.021	0.008
2/10/15 18:20	68	0.908	0.063	0.296	0.042	0.084	0.021	0.000	
2/10/15 21:20	69	1.415	0.106	0.422	0.042	0.148	0.021	0.021	
2/11/15 0:20	70	1.246	0.084	0.232	0.042	0.084	0.021	0.021	
2/11/15 3:20	71	4.351	0.296	0.549	0.063	0.084	0.021	0.000	
2/11/15 6:20	72	0.993	0.063	0.127	0.021	0.042	0.021	0.000	
2/11/15 9:20	73	1.817	0.127	0.253	0.042	0.042	0.021	0.021	
2/11/15 12:20	74	1.289	0.084	0.232	0.042	0.021	0.000	0.000	
2/11/15 15:20	75	1.014	0.063	0.169	0.021	0.042	0.021	0.000	
2/11/15 18:20	76	1.605	0.106	0.275	0.042	0.063	0.021	0.021	
2/11/15 21:20	77	2.345	0.169	0.169	0.021	0.042	0.000	0.021	
2/12/15 0:20	78	1.648	0.106	0.169	0.021	0.021	0.000	0.000	
2/12/15 3:20	79	1.246	0.084	0.106	0.021	0.042	0.000	0.000	
2/12/15 6:20	80	1.458	0.106	0.169	0.021	0.042	0.000	0.000	
2/12/15 9:20	81	1.690	0.127	0.190	0.021	0.021	0.000	0.000	
2/12/15 12:20	82	0.993	0.063	0.127	0.021	0.021	0.000	0.000	
2/12/15 15:20	83	0.887	0.063	0.106	0.021	0.063	0.021	0.000	
2/12/15 18:20	84	1.669	0.127	0.338	0.042	0.063	0.021	0.021	
2/12/15 21:20	85	2.007	0.148	0.338	0.042	0.127	0.021	0.000	
2/13/15 0:20	86	1.669	0.127	0.232	0.042	0.042	0.000	0.000	
2/13/15 3:20	87	1.056	0.063	0.106	0.021	0.042	0.000	0.000	
2/13/15 6:20	88	1.436	0.106	0.401	0.042	0.084	0.021	0.000	
2/13/15 9:20	89	3.316	0.232	0.232	0.042	0.042	0.000	0.021	
2/13/15 12:20	90	2.218	0.148	0.127	0.021	0.021	0.000	0.021	
2/13/15 15:20	91	1.458	0.106	0.211	0.042	0.063	0.021	0.000	
2/13/15 18:20	92	1.986	0.148	0.338	0.042	0.106	0.021	0.000	
2/13/15 21:20	93	2.070	0.148	0.275	0.042	0.042	0.000	0.000	

Stage 8
2/13/2015 6:56
Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

3
2/3/2015 18:20
Marks

ID#	V_err 0 ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2
Ave1stwk	MDL	0.013	MDL	0.039	MDL	0.722	MDL
AveAll	0.021	0.014	0.021	0.045	0.021	0.921	0.021

2/3/15 18:20	12	0.021	0.021	0.000	0.063	0.021	1.162	0.084
2/3/15 21:20	13	0.000	0.063	0.000	0.148	0.000	2.746	0.190
2/4/15 0:20	14	0.000	0.021	0.000	0.063	0.000	1.310	0.084
2/4/15 3:20	15	0.000	0.021	0.000	0.063	0.000	0.697	0.042
2/4/15 6:20	16	0.000	0.042	0.000	0.063	0.000	0.887	0.063
2/4/15 9:20	17	0.000	0.063	0.000	0.211	0.021	1.204	0.084
2/4/15 12:20	18	0.021	0.021	0.000	0.127	0.021	1.225	0.084
2/4/15 15:20	19	0.021	0.042	0.021	0.084	0.021	1.141	0.084
2/4/15 18:20	20	0.021	0.042	0.021	0.127	0.021	2.324	0.169
2/4/15 21:20	21	0.021	0.042	0.021	0.042	0.000	0.760	0.063
2/5/15 0:20	22	0.000	0.021	0.000	0.042	0.000	0.591	0.042
2/5/15 3:20	23	0.021	0.021	0.000	0.042	0.000	0.549	0.042
2/5/15 6:20	24	0.021	0.000	0.000	0.042	0.000	0.739	0.063
2/5/15 9:20	25	0.021	0.021	0.021	0.042	0.021	1.267	0.084
2/5/15 12:20	26	0.021	0.021	0.000	0.063	0.021	1.120	0.084
2/5/15 15:20	27	0.021	0.021	0.000	0.042	0.021	0.887	0.063
2/5/15 18:20	28	0.021	0.021	0.000	0.063	0.021	0.951	0.063
2/5/15 21:20	29	0.000	0.021	0.000	0.063	0.000	1.162	0.084
2/6/15 0:20	30	0.021	0.021	0.021	0.106	0.021	0.972	0.063
2/6/15 3:20	31	0.021	0.042	0.021	0.127	0.021	1.162	0.084
2/6/15 6:20	32	0.021	0.021	0.000	0.084	0.021	0.782	0.063
2/6/15 9:20	33	0.021	0.021	0.000	0.042	0.021	0.697	0.063
2/6/15 12:20	34	0.000	0.021	0.000	0.042	0.000	0.782	0.063
2/6/15 15:20	35	0.021	0.000	0.000	0.042	0.021	0.486	0.042
2/6/15 18:20	36	0.000	0.021	0.000	0.021	0.000	0.317	0.021
2/6/15 21:20	37	0.021	0.021	0.000	0.021	0.000	0.317	0.021
2/7/15 0:20	38	0.021	0.000	0.000	0.021	0.000	0.275	0.021
2/7/15 3:20	39	0.021	0.000	0.000	0.021	0.000	0.211	0.021
2/7/15 6:20	40	0.000	0.000	0.000	0.021	0.000	0.338	0.021
2/7/15 9:20	41	0.021	0.000	0.000	0.021	0.000	0.317	0.021
2/7/15 12:20	42	0.000	0.000	0.000	0.021	0.000	0.296	0.021
2/7/15 15:20	43	0.000	0.000	0.000	0.021	0.000	0.317	0.021
2/7/15 18:20	44	0.000	0.021	0.000	0.021	0.000	0.253	0.021
2/7/15 21:20	45	0.000	0.021	0.000	0.021	0.000	0.359	0.021
2/8/15 0:20	46	0.000	0.000	0.000	0.021	0.000	0.253	0.021
2/8/15 3:20	47	0.000	0.000	0.000	0.000	0.000	0.106	0.000
2/8/15 6:20	48	0.000	0.000	0.000	0.021	0.000	0.232	0.021
2/8/15 9:20	49	0.000	0.000	0.000	0.021	0.000	0.190	0.021
2/8/15 12:20	50	0.021	0.000	0.000	0.021	0.000	0.148	0.021
2/8/15 15:20	51	0.000	0.000	0.000	0.000	0.000	0.253	0.021
2/8/15 18:20	52	0.000	0.000	0.000	0.000	0.000	0.422	0.021
2/8/15 21:20	53	0.000	0.000	0.000	0.000	0.000	0.253	0.021
2/9/15 0:20	54	0.000	0.000	0.000	0.000	0.000	0.401	0.021
2/9/15 3:20	55	0.000	0.000	0.000	0.021	0.000	0.169	0.021
2/9/15 6:20	56	0.021	0.000	0.000	0.000	0.000	0.338	0.021
2/9/15 9:20	57	0.000	0.000	0.000	0.021	0.000	0.613	0.042
2/9/15 12:20	58	0.000	0.000	0.000	0.021	0.000	0.422	0.021
2/9/15 15:20	59	0.000	0.000	0.000	0.000	0.000	0.338	0.021
2/9/15 18:20	60	0.000	0.000	0.000	0.021	0.000	1.331	0.084
2/9/15 21:20	61	0.000	0.000	0.000	0.000	0.000	0.760	0.063
2/10/15 0:20	62	0.000	0.000	0.000	0.021	0.000	0.486	0.042
2/10/15 3:20	63	0.000	0.000	0.000	0.021	0.000	0.465	0.042
2/10/15 6:20	64	0.000	0.000	0.000	0.000	0.000	0.591	0.042
2/10/15 9:20	65	0.000	0.000	0.000	0.021	0.000	0.929	0.063
2/10/15 12:20	66	0.000	0.000	0.000	0.021	0.000	0.634	0.042
2/10/15 15:20	67	0.000	0.021	0.000	0.021	0.000	0.634	0.042

Stage 8
 2/13/2015 6:56
 Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

3
 2/3/2015 18:20
 Marks

ID#	V_err 0 ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2
Ave1stwk	MDL	0.013	MDL	0.039	MDL	0.722	MDL
AveAll	0.021	0.014	0.021	0.045	0.021	0.921	0.021

2/10/15 18:20	68	0.000	0.042	0.000	0.042	0.000	2.197	0.148
2/10/15 21:20	69	0.000	0.021	0.000	0.042	0.000	3.591	0.253
2/11/15 0:20	70	0.000	0.021	0.000	0.063	0.000	2.070	0.148
2/11/15 3:20	71	0.000	0.021	0.000	0.084	0.000	2.683	0.190
2/11/15 6:20	72	0.000	0.021	0.000	0.042	0.000	0.908	0.063
2/11/15 9:20	73	0.000	0.021	0.000	0.063	0.000	1.289	0.084
2/11/15 12:20	74	0.000	0.021	0.000	0.042	0.000	0.845	0.063
2/11/15 15:20	75	0.000	0.021	0.000	0.063	0.000	1.056	0.084
2/11/15 18:20	76	0.000	0.021	0.000	0.084	0.000	1.774	0.127
2/11/15 21:20	77	0.000	0.000	0.000	0.042	0.000	0.993	0.063
2/12/15 0:20	78	0.000	0.021	0.000	0.042	0.000	0.782	0.063
2/12/15 3:20	79	0.000	0.000	0.000	0.021	0.000	0.845	0.063
2/12/15 6:20	80	0.000	0.021	0.000	0.021	0.000	0.782	0.063
2/12/15 9:20	81	0.000	0.000	0.000	0.042	0.000	0.803	0.063
2/12/15 12:20	82	0.000	0.000	0.000	0.021	0.000	0.697	0.042
2/12/15 15:20	83	0.000	0.000	0.000	0.063	0.000	0.718	0.042
2/12/15 18:20	84	0.000	0.021	0.000	0.063	0.000	2.683	0.190
2/12/15 21:20	85	0.000	0.000	0.000	0.042	0.000	1.246	0.084
2/13/15 0:20	86	0.000	0.021	0.000	0.063	0.000	1.796	0.127
2/13/15 3:20	87	0.000	0.000	0.000	0.021	0.000	0.908	0.063
2/13/15 6:20	88	0.000	0.021	0.000	0.063	0.000	2.831	0.190
2/13/15 9:20	89	0.000	0.021	0.000	0.084	0.000	1.098	0.084
2/13/15 12:20	90	0.000	0.000	0.000	0.084	0.000	0.760	0.063
2/13/15 15:20	91	0.000	0.021	0.000	0.084	0.000	1.141	0.084
2/13/15 18:20	92	0.000	0.000	0.000	0.042	0.000	1.521	0.106
2/13/15 21:20	93	0.000	0.000	0.000	0.021	0.000	0.929	0.063

Stage 8
2/13/2015 6:56
Marks

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
6 mm
0.24 cm2/day
0.02112 cm2/m3

3
2/3/2015 18:20
Marks

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	0.018	MDL	0.049	MDL	0.110	MDL	0.532
AveAll	0.019	0.021	0.044	0.021	0.104	0.021	0.434

2/3/15 18:20	12	0.021	0.021	0.042	0.021	0.084	0.042	0.507
2/3/15 21:20	13	0.021	0.000	0.063	0.000	0.169	0.021	0.866
2/4/15 0:20	14	0.000	0.000	0.063	0.000	0.084	0.021	0.507
2/4/15 3:20	15	0.021	0.000	0.042	0.000	0.084	0.021	0.359
2/4/15 6:20	16	0.021	0.000	0.042	0.000	0.084	0.021	0.296
2/4/15 9:20	17	0.000	0.000	0.084	0.000	0.084	0.021	0.549
2/4/15 12:20	18	0.021	0.021	0.063	0.021	0.106	0.042	0.591
2/4/15 15:20	19	0.021	0.021	0.042	0.021	0.106	0.042	0.444
2/4/15 18:20	20	0.042	0.021	0.063	0.021	0.148	0.042	0.676
2/4/15 21:20	21	0.000	0.021	0.063	0.021	0.084	0.042	0.380
2/5/15 0:20	22	0.021	0.000	0.063	0.000	0.063	0.021	0.211
2/5/15 3:20	23	0.021	0.021	0.042	0.021	0.084	0.042	0.253
2/5/15 6:20	24	0.021	0.021	0.063	0.021	0.127	0.042	0.296
2/5/15 9:20	25	0.021	0.021	0.084	0.021	0.106	0.042	0.507
2/5/15 12:20	26	0.021	0.021	0.084	0.021	0.106	0.042	0.465
2/5/15 15:20	27	0.021	0.021	0.063	0.021	0.148	0.042	0.444
2/5/15 18:20	28	0.021	0.021	0.063	0.021	0.190	0.042	1.162
2/5/15 21:20	29	0.000	0.000	0.084	0.000	0.127	0.021	1.605
2/6/15 0:20	30	0.021	0.021	0.063	0.021	0.127	0.042	0.739
2/6/15 3:20	31	0.000	0.021	0.042	0.021	0.169	0.042	1.415
2/6/15 6:20	32	0.021	0.021	0.063	0.021	0.106	0.042	0.634
2/6/15 9:20	33	0.021	0.021	0.084	0.021	0.127	0.042	0.549
2/6/15 12:20	34	0.000	0.000	0.042	0.000	0.634	0.063	1.415
2/6/15 15:20	35	0.021	0.021	0.042	0.021	0.127	0.042	0.232
2/6/15 18:20	36	0.000	0.000	0.042	0.000	0.063	0.021	0.317
2/6/15 21:20	37	0.021	0.021	0.063	0.021	0.148	0.042	0.613
2/7/15 0:20	38	0.021	0.021	0.063	0.021	0.106	0.042	0.486
2/7/15 3:20	39	0.021	0.021	0.042	0.021	0.084	0.042	0.486
2/7/15 6:20	40	0.021	0.000	0.063	0.000	0.084	0.021	0.549
2/7/15 9:20	41	0.021	0.021	0.063	0.021	0.084	0.042	0.782
2/7/15 12:20	42	0.000	0.000	0.063	0.000	0.063	0.021	0.528
2/7/15 15:20	43	0.021	0.000	0.042	0.000	0.106	0.021	0.444
2/7/15 18:20	44	0.021	0.000	0.042	0.000	0.106	0.021	0.613
2/7/15 21:20	45	0.021	0.021	0.084	0.021	0.106	0.042	0.760
2/8/15 0:20	46	0.021	0.021	0.042	0.021	0.084	0.042	1.500
2/8/15 3:20	47	0.021	0.000	0.042	0.000	0.106	0.021	3.147
2/8/15 6:20	48	0.021	0.000	0.021	0.000	0.084	0.021	3.169
2/8/15 9:20	49	0.021	0.000	0.063	0.000	0.063	0.021	0.951
2/8/15 12:20	50	0.021	0.021	0.042	0.021	0.063	0.042	0.232
2/8/15 15:20	51	0.021	0.000	0.021	0.000	0.084	0.021	0.084
2/8/15 18:20	52	0.021	0.000	0.042	0.000	0.106	0.021	0.084
2/8/15 21:20	53	0.000	0.000	0.042	0.000	0.063	0.021	0.127
2/9/15 0:20	54	0.021	0.000	0.042	0.000	0.063	0.021	0.084
2/9/15 3:20	55	0.021	0.000	0.021	0.000	0.063	0.021	0.042
2/9/15 6:20	56	0.021	0.021	0.021	0.021	0.084	0.042	0.106
2/9/15 9:20	57	0.021	0.000	0.042	0.000	0.063	0.021	0.106
2/9/15 12:20	58	0.021	0.000	0.042	0.000	0.106	0.021	0.084
2/9/15 15:20	59	0.021	0.000	0.021	0.000	0.106	0.021	0.063
2/9/15 18:20	60	0.021	0.000	0.042	0.000	0.063	0.021	0.042
2/9/15 21:20	61	0.021	0.000	0.042	0.000	0.084	0.021	0.063
2/10/15 0:20	62	0.021	0.000	0.042	0.000	0.084	0.021	0.042
2/10/15 3:20	63	0.021	0.000	0.042	0.000	0.106	0.021	0.021
2/10/15 6:20	64	0.000	0.000	0.021	0.000	0.063	0.021	0.042
2/10/15 9:20	65	0.021	0.000	0.021	0.000	0.063	0.021	0.084
2/10/15 12:20	66	0.021	0.000	0.021	0.000	0.106	0.021	0.042
2/10/15 15:20	67	0.042	0.000	0.042	0.000	0.127	0.021	0.042

Stage 8	7.89 L/m
2/13/2015 6:56	1440 min/day
Marks	11.3616 m3/day
	4 mm/day
3	6 mm
2/3/2015 18:20	0.24 cm2/day
Marks	0.02112 cm2/m3

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	0.018	MDL	0.049	MDL	0.110	MDL	0.532
AveAll	0.019	0.021	0.044	0.021	0.104	0.021	0.434

2/10/15 18:20	68	0.000	0.000	0.021	0.000	0.148	0.021	0.127
2/10/15 21:20	69	0.042	0.000	0.042	0.000	0.211	0.042	0.211
2/11/15 0:20	70	0.021	0.000	0.021	0.000	0.169	0.021	0.148
2/11/15 3:20	71	0.021	0.000	0.042	0.000	0.127	0.021	0.951
2/11/15 6:20	72	0.042	0.000	0.063	0.000	0.106	0.021	0.106
2/11/15 9:20	73	0.021	0.000	0.042	0.000	0.084	0.021	0.169
2/11/15 12:20	74	0.000	0.000	0.042	0.000	0.084	0.021	0.106
2/11/15 15:20	75	0.021	0.000	0.021	0.000	0.084	0.021	0.063
2/11/15 18:20	76	0.021	0.000	0.021	0.000	0.106	0.021	0.084
2/11/15 21:20	77	0.021	0.000	0.042	0.000	0.063	0.021	0.190
2/12/15 0:20	78	0.021	0.000	0.021	0.000	0.084	0.021	0.106
2/12/15 3:20	79	0.000	0.000	0.021	0.000	0.063	0.021	0.000
2/12/15 6:20	80	0.021	0.000	0.042	0.000	0.084	0.021	0.084
2/12/15 9:20	81	0.021	0.000	0.042	0.000	0.063	0.021	0.127
2/12/15 12:20	82	0.021	0.000	0.021	0.000	0.063	0.021	0.042
2/12/15 15:20	83	0.000	0.000	0.021	0.000	0.042	0.021	0.570
2/12/15 18:20	84	0.021	0.000	0.021	0.000	0.084	0.021	0.127
2/12/15 21:20	85	0.021	0.000	0.021	0.000	0.063	0.021	0.148
2/13/15 0:20	86	0.021	0.000	0.021	0.000	0.084	0.021	0.169
2/13/15 3:20	87	0.021	0.000	0.021	0.000	0.042	0.021	0.021
2/13/15 6:20	88	0.042	0.000	0.042	0.000	0.127	0.021	0.253
2/13/15 9:20	89	0.021	0.000	0.042	0.000	0.106	0.021	0.253
2/13/15 12:20	90	0.021	0.000	0.021	0.000	0.084	0.021	0.253
2/13/15 15:20	91	0.021	0.000	0.021	0.000	0.084	0.021	0.084
2/13/15 18:20	92	0.021	0.000	0.021	0.000	0.106	0.021	0.169
2/13/15 21:20	93	0.021	0.000	0.042	0.000	0.084	0.021	0.169

Stage 8	7.89 L/m
2/13/2015 6:56	1440 min/day
Marks	11.3616 m3/day
	4 mm/day
3	6 mm
2/3/2015 18:20	0.24 cm2/day
Marks	0.02112 cm2/m3

ID#	Zn_err 0 ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
Ave1stwk	MDL	0.177	MDL	0.328	MDL
AveAll	0.021	0.170	0.021	0.282	0.021

ID#	Zn_err	Br	Br_err	Pb	Pb_err
2/3/15 18:20	12	0.063	0.655	0.084	0.782
2/3/15 21:20	13	0.084	0.929	0.063	0.676
2/4/15 0:20	14	0.063	0.401	0.021	0.507
2/4/15 3:20	15	0.042	0.317	0.021	0.296
2/4/15 6:20	16	0.042	0.190	0.021	0.190
2/4/15 9:20	17	0.063	0.253	0.021	0.359
2/4/15 12:20	18	0.063	0.380	0.084	0.739
2/4/15 15:20	19	0.063	0.380	0.084	0.570
2/4/15 18:20	20	0.084	0.486	0.084	0.359
2/4/15 21:20	21	0.063	0.296	0.084	0.507
2/5/15 0:20	22	0.042	0.253	0.021	0.275
2/5/15 3:20	23	0.042	0.190	0.084	0.845
2/5/15 6:20	24	0.063	0.211	0.084	0.000
2/5/15 9:20	25	0.063	0.528	0.084	0.486
2/5/15 12:20	26	0.063	0.275	0.084	0.000
2/5/15 15:20	27	0.063	0.275	0.084	0.760
2/5/15 18:20	28	0.106	0.444	0.084	0.634
2/5/15 21:20	29	0.127	0.296	0.021	0.929
2/6/15 0:20	30	0.084	0.296	0.084	0.486
2/6/15 3:20	31	0.127	0.338	0.084	0.507
2/6/15 6:20	32	0.084	0.232	0.063	0.380
2/6/15 9:20	33	0.063	0.211	0.084	0.634
2/6/15 12:20	34	0.127	0.253	0.021	0.697
2/6/15 15:20	35	0.042	0.211	0.084	0.634
2/6/15 18:20	36	0.042	0.211	0.021	0.275
2/6/15 21:20	37	0.084	0.169	0.084	0.000
2/7/15 0:20	38	0.063	0.106	0.063	0.000
2/7/15 3:20	39	0.063	0.148	0.063	0.634
2/7/15 6:20	40	0.063	0.190	0.021	0.380
2/7/15 9:20	41	0.084	0.169	0.084	0.570
2/7/15 12:20	42	0.063	0.084	0.000	0.317
2/7/15 15:20	43	0.063	0.063	0.000	0.507
2/7/15 18:20	44	0.063	0.106	0.000	0.444
2/7/15 21:20	45	0.084	0.275	0.084	0.634
2/8/15 0:20	46	0.127	0.211	0.084	0.380
2/8/15 3:20	47	0.253	0.084	0.000	0.380
2/8/15 6:20	48	0.253	0.106	0.000	0.401
2/8/15 9:20	49	0.084	0.127	0.000	0.359
2/8/15 12:20	50	0.042	0.084	0.063	0.380
2/8/15 15:20	51	0.021	0.021	0.000	0.127
2/8/15 18:20	52	0.021	0.000	0.000	0.084
2/8/15 21:20	53	0.042	0.084	0.000	0.338
2/9/15 0:20	54	0.021	0.127	0.000	0.084
2/9/15 3:20	55	0.021	0.042	0.000	0.127
2/9/15 6:20	56	0.042	0.000	0.063	0.000
2/9/15 9:20	57	0.021	0.084	0.000	0.169
2/9/15 12:20	58	0.021	0.021	0.000	0.232
2/9/15 15:20	59	0.021	0.021	0.000	0.000
2/9/15 18:20	60	0.021	0.042	0.000	0.000
2/9/15 21:20	61	0.021	0.042	0.000	0.232
2/10/15 0:20	62	0.021	0.063	0.000	0.042
2/10/15 3:20	63	0.021	0.042	0.000	0.000
2/10/15 6:20	64	0.021	0.042	0.000	0.106
2/10/15 9:20	65	0.021	0.042	0.000	0.084
2/10/15 12:20	66	0.021	0.063	0.000	0.000
2/10/15 15:20	67	0.021	0.042	0.000	0.000

Stage 8	7.89 L/m
2/13/2015 6:56	1440 min/day
Marks	11.3616 m3/day
	4 mm/day
3	6 mm
2/3/2015 18:20	0.24 cm2/day
Marks	0.02112 cm2/m3

ID#	Zn_err 0 ng/cm^2	Br ng/cm^2	Br_err ng/cm^2	Pb ng/cm^2	Pb_err ng/cm^2
Ave1stwk	MDL	0.177	MDL	0.328	MDL
AveAll	0.021	0.170	0.021	0.282	0.021

ID#	Zn_err	Br	Br_err	Pb	Pb_err	
2/10/15 18:20	68	0.042	0.148	0.000	0.275	0.021
2/10/15 21:20	69	0.042	0.127	0.000	0.000	0.000
2/11/15 0:20	70	0.042	0.127	0.000	0.232	0.021
2/11/15 3:20	71	0.084	0.253	0.021	0.169	0.021
2/11/15 6:20	72	0.021	0.021	0.000	0.000	0.000
2/11/15 9:20	73	0.042	0.127	0.000	0.106	0.000
2/11/15 12:20	74	0.021	0.127	0.000	0.127	0.000
2/11/15 15:20	75	0.021	0.042	0.000	0.000	0.000
2/11/15 18:20	76	0.021	0.042	0.000	0.000	0.000
2/11/15 21:20	77	0.042	0.148	0.000	0.253	0.021
2/12/15 0:20	78	0.021	0.021	0.000	0.084	0.000
2/12/15 3:20	79	0.021	0.000	0.000	0.148	0.021
2/12/15 6:20	80	0.021	0.042	0.000	0.359	0.021
2/12/15 9:20	81	0.042	0.042	0.000	0.275	0.021
2/12/15 12:20	82	0.021	0.084	0.000	0.021	0.000
2/12/15 15:20	83	0.063	0.042	0.000	0.000	0.000
2/12/15 18:20	84	0.042	0.169	0.021	0.000	0.000
2/12/15 21:20	85	0.042	0.106	0.000	0.000	0.000
2/13/15 0:20	86	0.042	0.127	0.000	0.275	0.021
2/13/15 3:20	87	0.021	0.000	0.000	0.000	0.000
2/13/15 6:20	88	0.042	0.190	0.021	0.000	0.000
2/13/15 9:20	89	0.042	0.148	0.000	0.317	0.021
2/13/15 12:20	90	0.042	0.169	0.021	0.401	0.021
2/13/15 15:20	91	0.021	0.169	0.021	0.148	0.021
2/13/15 18:20	92	0.042	0.106	0.000	0.253	0.021
2/13/15 21:20	93	0.042	0.106	0.000	0.169	0.021

Stage 8	7.89 L/m		
2/13/2015 6:56	1440 min/day	ID#	Sum of Elements
Marks	11.3616 m3/day		0
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/3/15 18:20	12	64.871
2/3/15 21:20	13	83.185
2/4/15 0:20	14	54.837
2/4/15 3:20	15	40.156
2/4/15 6:20	16	40.621
2/4/15 9:20	17	54.098
2/4/15 12:20	18	63.477
2/4/15 15:20	19	61.639
2/4/15 18:20	20	162.336
2/4/15 21:20	21	62.336
2/5/15 0:20	22	50.824
2/5/15 3:20	23	52.302
2/5/15 6:20	24	46.810
2/5/15 9:20	25	58.281
2/5/15 12:20	26	55.070
2/5/15 15:20	27	60.330
2/5/15 18:20	28	65.991
2/5/15 21:20	29	81.115
2/6/15 0:20	30	66.244
2/6/15 3:20	31	60.963
2/6/15 6:20	32	56.105
2/6/15 9:20	33	49.345
2/6/15 12:20	34	49.049
2/6/15 15:20	35	36.354
2/6/15 18:20	36	32.573
2/6/15 21:20	37	39.185
2/7/15 0:20	38	36.037
2/7/15 3:20	39	35.277
2/7/15 6:20	40	35.699
2/7/15 9:20	41	42.797
2/7/15 12:20	42	29.869
2/7/15 15:20	43	37.833
2/7/15 18:20	44	43.557
2/7/15 21:20	45	61.893
2/8/15 0:20	46	42.818
2/8/15 3:20	47	56.654
2/8/15 6:20	48	58.048
2/8/15 9:20	49	45.670
2/8/15 12:20	50	25.306
2/8/15 15:20	51	27.947
2/8/15 18:20	52	22.433
2/8/15 21:20	53	26.257
2/9/15 0:20	54	32.657
2/9/15 3:20	55	24.884
2/9/15 6:20	56	28.179
2/9/15 9:20	57	20.976
2/9/15 12:20	58	18.124
2/9/15 15:20	59	18.821
2/9/15 18:20	60	16.371
2/9/15 21:20	61	23.511
2/10/15 0:20	62	24.377
2/10/15 3:20	63	15.378
2/10/15 6:20	64	25.687
2/10/15 9:20	65	27.736
2/10/15 12:20	66	24.356
2/10/15 15:20	67	21.736

Stage 8	7.89 L/m		
2/13/2015 6:56	1440 min/day	ID#	Sum of Elements
Marks	11.3616 m3/day		0
	4 mm/day		
3	6 mm		
2/3/2015 18:20	0.24 cm2/day	Ave1stwk	
Marks	0.02112 cm2/m3	AveAll	

2/10/15 18:20	68	19.054
2/10/15 21:20	69	29.383
2/11/15 0:20	70	21.715
2/11/15 3:20	71	47.782
2/11/15 6:20	72	15.315
2/11/15 9:20	73	24.102
2/11/15 12:20	74	22.877
2/11/15 15:20	75	24.250
2/11/15 18:20	76	21.652
2/11/15 21:20	77	17.554
2/12/15 0:20	78	19.540
2/12/15 3:20	79	20.068
2/12/15 6:20	80	14.343
2/12/15 9:20	81	21.082
2/12/15 12:20	82	18.357
2/12/15 15:20	83	19.033
2/12/15 18:20	84	20.025
2/12/15 21:20	85	22.814
2/13/15 0:20	86	17.638
2/13/15 3:20	87	16.181
2/13/15 6:20	88	28.559
2/13/15 9:20	89	30.608
2/13/15 12:20	90	28.158
2/13/15 15:20	91	29.151
2/13/15 18:20	92	26.722
2/13/15 21:20	93	26.975

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Na Na_err Mg Mg_err Al Al_err Si
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk

AveAll

20.183

MDL

1.331

MDL

0.484

MDL

0.533

17.991

0.321

1.466

0.080

0.450

0.027

0.462

	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
2/3/15 18:20	15	6.796	0.535	0.428	0.080	0.696	0.054	2.007
2/3/15 21:20	16	17.472	1.258	1.177	0.107	1.900	0.134	1.498
2/4/15 0:20	17	12.148	7.626	0.000	2.114	0.696	0.696	0.963
2/4/15 3:20	18	19.666	1.391	0.829	0.080	1.445	0.107	1.231
2/4/15 6:20	19	17.472	1.258	0.829	0.080	1.284	0.080	2.836
2/4/15 9:20	20	11.158	0.829	0.482	0.080	0.375	0.027	1.712
2/4/15 12:20	21	21.352	1.525	1.311	0.107	0.856	0.054	0.615
2/4/15 15:20	22	18.195	7.465	0.000	2.034	0.749	0.642	1.365
2/4/15 18:20	23	14.074	1.017	1.873	0.161	0.000	0.027	1.044
2/4/15 21:20	24	15.546	1.124	0.268	0.080	0.294	0.027	0.669
2/5/15 0:20	25	18.435	1.311	0.482	0.080	0.749	0.054	1.097
2/5/15 3:20	26	10.435	0.776	2.355	0.187	0.562	0.054	1.097
2/5/15 6:20	27	9.472	0.696	0.910	0.080	0.803	0.054	0.401
2/5/15 9:20	28	15.305	1.097	1.472	0.134	0.642	0.054	0.749
2/5/15 12:20	29	16.509	1.177	2.515	0.187	0.401	0.027	0.910
2/5/15 15:20	30	20.389	1.445	0.963	0.107	0.696	0.054	0.241
2/5/15 18:20	31	29.138	2.060	1.177	0.107	0.883	0.054	0.508
2/5/15 21:20	32	13.111	0.936	2.702	0.214	0.589	0.054	0.482
2/6/15 0:20	33	16.027	1.151	1.659	0.134	0.134	0.027	0.535
2/6/15 3:20	34	22.342	1.579	3.184	0.241	0.080	0.027	0.455
2/6/15 6:20	35	29.379	2.087	0.348	0.080	0.508	0.054	0.054
2/6/15 9:20	36	25.740	1.819	2.007	0.161	0.241	0.027	0.134
2/6/15 12:20	37	21.593	1.525	2.221	0.161	0.375	0.027	0.241
2/6/15 15:20	38	34.944	2.462	0.829	0.080	0.589	0.054	0.321
2/6/15 18:20	39	22.342	1.579	1.391	0.107	0.000	0.027	0.027
2/6/15 21:20	40	56.992	3.987	1.739	0.134	0.054	0.027	0.829
2/7/15 0:20	41	40.296	2.836	0.348	0.080	0.562	0.054	0.161
2/7/15 3:20	42	69.006	4.816	0.000	0.080	0.000	0.027	0.268
2/7/15 6:20	43	23.305	1.659	0.963	0.107	0.241	0.027	0.294
2/7/15 9:20	44	20.870	1.472	1.873	0.161	0.000	0.027	0.401
2/7/15 12:20	45	36.416	2.569	0.482	0.080	0.000	0.027	0.241
2/7/15 15:20	46	35.934	2.542	0.562	0.080	0.268	0.027	0.080
2/7/15 18:20	47	18.703	1.338	1.177	0.107	0.589	0.054	0.401
2/7/15 21:20	48	17.954	1.284	0.615	0.080	0.321	0.027	0.508
2/8/15 0:20	49	16.509	1.177	1.659	0.134	0.589	0.054	0.268
2/8/15 3:20	50	16.509	1.177	1.311	0.107	0.054	0.027	0.321
2/8/15 6:20	51	12.870	0.936	0.776	0.080	0.054	0.027	0.348
2/8/15 9:20	52	20.389	1.445	0.615	0.080	0.187	0.027	0.268
2/8/15 12:20	53	21.352	1.525	1.472	0.134	0.401	0.027	0.134
2/8/15 15:20	54	15.305	1.097	1.739	0.134	0.615	0.054	0.000
2/8/15 18:20	55	14.797	1.070	1.873	0.161	0.589	0.054	0.107
2/8/15 21:20	56	10.917	0.803	1.605	0.134	0.027	0.027	0.027
2/9/15 0:20	57	18.195	1.311	2.007	0.161	0.535	0.054	0.214
2/9/15 3:20	58	18.435	1.311	3.131	0.241	0.776	0.054	0.214
2/9/15 6:20	59	21.111	1.498	0.428	0.080	0.161	0.027	0.187
2/9/15 9:20	60	16.509	1.177	2.087	0.161	0.696	0.054	0.054
2/9/15 12:20	61	12.388	0.910	1.659	0.134	0.883	0.054	0.375
2/9/15 15:20	62	18.435	1.311	0.829	0.080	0.214	0.027	0.482
2/9/15 18:20	63	15.305	1.097	2.221	0.161	0.482	0.027	0.268
2/9/15 21:20	64	14.556	1.044	2.649	0.187	0.696	0.054	0.321
2/10/15 0:20	65	11.907	0.856	2.007	0.161	0.722	0.054	0.161
2/10/15 3:20	66	6.555	0.508	0.268	0.080	0.562	0.054	0.294
2/10/15 6:20	67	8.749	0.669	1.739	0.134	0.829	0.054	0.241
2/10/15 9:20	68	13.111	0.936	1.472	0.134	0.401	0.027	0.936
2/10/15 12:20	69	13.833	0.990	1.605	0.134	0.963	0.080	1.070

Stage 9	7.89 L/m									
	1440 min/day									
Marks	11.3616 m3/day	ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si	
	4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
3	7.6 mm									
2/3/2015 18:20	0.304 cm2/day	Ave1stwk	20.183	MDL	1.331	MDL	0.484	MDL	0.533	
Marks	0.02676 cm2/m3	AveAll	17.991	0.321	1.466	0.080	0.450	0.027	0.462	

ID#	Na	Na_err	Mg	Mg_err	Al	Al_err	Si
70	13.352	0.963	1.472	0.134	0.214	0.027	0.963
71	25.740	1.819	1.391	0.107	1.070	0.080	0.749
72	19.185	1.365	0.963	0.107	0.375	0.027	0.963
73	16.509	1.177	1.819	0.134	0.829	0.054	1.258
74	14.315	1.044	1.472	0.134	0.776	0.054	0.455
75	17.231	1.231	0.963	0.107	0.482	0.027	0.401
76	13.111	0.936	1.177	0.107	0.054	0.027	0.214
77	14.556	1.044	2.435	0.187	0.936	0.080	0.401
78	12.629	0.910	0.134	0.080	0.134	0.027	0.161
79	18.195	1.311	5.004	0.348	0.963	0.080	0.241
80	15.546	1.124	2.087	0.161	0.161	0.027	0.134
81	16.268	1.177	2.221	0.161	0.241	0.027	0.000
82	6.555	0.508	1.124	0.107	0.268	0.027	0.134
83	16.509	1.177	0.696	0.080	0.214	0.027	0.482
84	5.351	0.455	1.873	0.161	0.669	0.054	0.375
85	8.000	0.615	2.916	0.214	0.000	0.027	0.214
86	11.639	0.856	1.953	0.161	0.321	0.027	0.482
87	14.074	1.017	1.311	0.107	0.428	0.027	0.321
88	11.158	0.829	1.659	0.134	0.803	0.054	0.482
89	11.639	0.856	0.428	0.080	0.375	0.027	0.375
90	6.796	0.535	0.696	0.080	0.401	0.027	0.642
91	11.398	0.829	2.301	0.187	0.883	0.054	0.829
92	11.398	0.829	2.087	0.161	0.428	0.027	0.776
93	9.231	0.696	1.659	0.134	0.321	0.027	0.508
94	13.352	0.963	0.963	0.107	0.589	0.054	0.856
95	16.268	1.177	1.873	0.161	0.562	0.054	0.669
96	12.629	0.910	1.124	0.107	0.161	0.027	0.375

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	MDL	2.917	MDL	9.721	MDL	13.314	MDL
AveAll	0.027	2.902	0.161	7.887	0.054	9.922	0.027

	ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
2/3/15 18:20	15	0.161	3.746	0.401	3.264	0.268	5.726	0.428
2/3/15 21:20	16	0.134	2.943	0.348	6.422	0.482	2.274	0.187
2/4/15 0:20	17	0.321	2.970	0.482	4.388	0.428	6.422	0.508
2/4/15 3:20	18	0.107	2.649	0.321	8.723	0.642	1.365	0.107
2/4/15 6:20	19	0.214	3.211	0.375	8.589	0.642	6.850	0.508
2/4/15 9:20	20	0.134	2.756	0.321	4.896	0.375	4.442	0.321
2/4/15 12:20	21	0.054	1.445	0.241	6.208	0.482	2.595	0.214
2/4/15 15:20	22	0.321	3.425	0.508	9.285	0.749	2.194	0.214
2/4/15 18:20	23	0.080	2.355	0.294	23.840	1.712	1.766	0.134
2/4/15 21:20	24	0.054	1.552	0.241	27.586	1.980	0.829	0.080
2/5/15 0:20	25	0.107	1.311	0.241	15.385	1.124	0.776	0.080
2/5/15 3:20	26	0.107	3.104	0.348	11.987	0.883	1.204	0.107
2/5/15 6:20	27	0.054	2.301	0.294	12.174	0.883	0.963	0.080
2/5/15 9:20	28	0.080	2.194	0.294	9.472	0.696	0.642	0.054
2/5/15 12:20	29	0.080	1.980	0.268	12.067	0.883	0.696	0.080
2/5/15 15:20	30	0.027	2.194	0.294	10.569	0.776	0.856	0.080
2/5/15 18:20	31	0.054	4.736	0.482	8.883	0.669	1.712	0.134
2/5/15 21:20	32	0.054	2.809	0.348	22.235	1.605	0.883	0.080
2/6/15 0:20	33	0.054	1.766	0.268	21.512	1.552	1.070	0.107
2/6/15 3:20	34	0.054	2.916	0.348	15.225	1.097	1.418	0.107
2/6/15 6:20	35	0.027	3.157	0.348	16.429	1.204	2.141	0.161
2/6/15 9:20	36	0.027	3.933	0.401	16.188	1.177	5.806	0.428
2/6/15 12:20	37	0.027	1.338	0.241	16.803	1.231	1.579	0.134
2/6/15 15:20	38	0.027	3.024	0.348	10.703	0.803	24.108	1.712
2/6/15 18:20	39	0.027	3.211	0.375	10.489	0.776	16.108	1.151
2/6/15 21:20	40	0.080	2.863	0.348	12.228	0.910	147.376	10.355
2/7/15 0:20	41	0.027	2.087	0.294	11.827	0.856	55.387	3.906
2/7/15 3:20	42	0.027	3.505	0.375	11.372	0.829	201.077	14.101
2/7/15 6:20	43	0.027	2.943	0.348	11.265	0.829	45.620	3.211
2/7/15 9:20	44	0.054	3.104	0.348	10.542	0.776	43.694	3.077
2/7/15 12:20	45	0.027	3.264	0.375	11.479	0.856	44.363	3.131
2/7/15 15:20	46	0.027	2.943	0.348	8.910	0.669	44.737	3.157
2/7/15 18:20	47	0.054	4.201	0.428	7.224	0.535	10.328	0.749
2/7/15 21:20	48	0.054	4.094	0.428	8.509	0.642	3.746	0.294
2/8/15 0:20	49	0.027	3.157	0.348	7.626	0.562	2.488	0.187
2/8/15 3:20	50	0.027	3.131	0.348	12.308	0.910	10.061	0.722
2/8/15 6:20	51	0.054	2.515	0.321	11.425	0.829	1.953	0.161
2/8/15 9:20	52	0.027	2.408	0.294	12.817	0.936	1.017	0.080
2/8/15 12:20	53	0.027	3.452	0.375	6.876	0.508	1.525	0.134
2/8/15 15:20	54	0.027	2.649	0.321	12.388	0.910	1.177	0.107
2/8/15 18:20	55	0.027	3.746	0.401	11.532	0.856	1.445	0.134
2/8/15 21:20	56	0.027	2.034	0.268	10.355	0.776	0.669	0.080
2/9/15 0:20	57	0.027	1.819	0.268	7.572	0.562	2.355	0.187
2/9/15 3:20	58	0.027	2.060	0.294	3.853	0.321	1.445	0.134
2/9/15 6:20	59	0.027	3.559	0.375	4.040	0.321	1.632	0.134
2/9/15 9:20	60	0.027	2.515	0.321	4.201	0.348	1.070	0.107
2/9/15 12:20	61	0.054	3.291	0.375	2.809	0.241	2.007	0.161
2/9/15 15:20	62	0.054	2.702	0.321	3.050	0.268	1.365	0.107
2/9/15 18:20	63	0.027	3.746	0.401	4.281	0.348	4.816	0.348
2/9/15 21:20	64	0.027	2.649	0.321	4.896	0.375	2.462	0.187
2/10/15 0:20	65	0.027	3.264	0.375	5.699	0.428	2.007	0.161
2/10/15 3:20	66	0.027	3.559	0.375	4.094	0.321	1.605	0.134
2/10/15 6:20	67	0.027	4.361	0.455	3.211	0.268	1.926	0.161
2/10/15 9:20	68	0.080	4.281	0.428	3.559	0.294	3.880	0.294
2/10/15 12:20	69	0.080	2.488	0.321	2.515	0.214	2.194	0.187

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Ave1stwk

AveAll

Si_err

0 ng/cm^2

MDL

0.027

P

ng/cm^2

2.917

2.902

P_err

ng/cm^2

MDL

0.161

S

ng/cm^2

9.721

7.887

S_err

ng/cm^2

MDL

0.054

Cl

ng/cm^2

13.314

9.922

Cl_err

ng/cm^2

MDL

0.027

ID#	Si_err	P	P_err	S	S_err	Cl	Cl_err
70	0.080	2.622	0.321	1.980	0.187	1.365	0.107
71	0.080	4.040	0.428	2.809	0.241	10.275	0.749
72	0.080	3.960	0.401	3.478	0.294	2.114	0.161
73	0.107	1.445	0.241	2.836	0.241	5.860	0.428
74	0.054	2.702	0.321	3.024	0.241	0.990	0.080
75	0.054	2.997	0.348	3.612	0.294	1.017	0.080
76	0.027	2.783	0.321	2.943	0.241	0.856	0.080
77	0.054	2.274	0.294	3.960	0.321	0.856	0.080
78	0.027	2.221	0.294	3.238	0.268	0.829	0.080
79	0.027	4.201	0.428	3.746	0.294	1.418	0.134
80	0.027	2.916	0.348	3.371	0.268	1.151	0.107
81	0.027	2.836	0.348	3.050	0.241	1.258	0.107
82	0.027	2.622	0.321	2.916	0.241	1.258	0.107
83	0.054	3.398	0.375	6.020	0.455	1.472	0.134
84	0.054	3.371	0.375	2.141	0.187	1.498	0.134
85	0.027	1.579	0.241	2.381	0.214	0.776	0.080
86	0.054	3.345	0.375	2.488	0.214	1.151	0.107
87	0.027	2.783	0.321	2.756	0.241	1.070	0.107
88	0.054	3.050	0.348	3.425	0.268	1.258	0.107
89	0.054	2.007	0.268	2.595	0.214	0.776	0.080
90	0.054	1.712	0.268	4.174	0.321	0.963	0.080
91	0.080	3.291	0.375	4.335	0.348	1.445	0.134
92	0.080	3.773	0.401	5.405	0.428	1.284	0.107
93	0.054	4.121	0.428	3.933	0.321	1.605	0.134
94	0.080	2.488	0.321	3.987	0.321	1.044	0.080
95	0.054	4.067	0.428	2.943	0.241	1.686	0.134
96	0.054	2.916	0.348	5.378	0.428	1.472	0.134

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	4.610	MDL	3.767	MDL	0.431	MDL	0.003
AveAll	3.633	0.027	3.595	0.107	0.354	0.027	0.002

	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
2/3/15 18:20	15	8.856	0.615	5.244	0.428	0.749	0.080	0.027
2/3/15 21:20	16	5.325	0.375	4.682	0.401	0.696	0.054	0.000
2/4/15 0:20	17	6.903	0.508	5.164	0.428	0.535	0.054	0.000
2/4/15 3:20	18	8.937	0.642	3.050	0.268	0.348	0.054	0.000
2/4/15 6:20	19	9.151	0.642	4.254	0.375	3.799	0.294	0.027
2/4/15 9:20	20	4.201	0.294	3.264	0.294	0.321	0.027	0.000
2/4/15 12:20	21	3.773	0.268	2.542	0.241	0.268	0.027	0.000
2/4/15 15:20	22	3.478	0.268	3.425	0.321	0.375	0.054	0.000
2/4/15 18:20	23	3.933	0.268	4.094	0.348	0.241	0.027	0.000
2/4/15 21:20	24	2.435	0.161	1.846	0.187	0.134	0.027	0.000
2/5/15 0:20	25	1.552	0.107	1.980	0.214	0.187	0.027	0.027
2/5/15 3:20	26	1.258	0.080	3.906	0.348	0.375	0.054	0.000
2/5/15 6:20	27	1.124	0.080	3.291	0.294	0.268	0.027	0.000
2/5/15 9:20	28	0.535	0.027	1.953	0.214	0.161	0.027	0.000
2/5/15 12:20	29	1.124	0.080	2.087	0.214	0.268	0.027	0.000
2/5/15 15:20	30	0.963	0.080	2.007	0.214	0.214	0.027	0.000
2/5/15 18:20	31	1.177	0.080	5.218	0.428	0.508	0.054	0.027
2/5/15 21:20	32	5.298	0.375	2.060	0.214	0.161	0.027	0.027
2/6/15 0:20	33	9.285	0.642	3.157	0.294	0.161	0.027	0.000
2/6/15 3:20	34	7.866	0.562	3.880	0.348	0.401	0.054	0.000
2/6/15 6:20	35	8.749	0.615	4.228	0.375	0.375	0.054	0.000
2/6/15 9:20	36	8.964	0.642	4.656	0.401	0.455	0.054	0.000
2/6/15 12:20	37	7.091	0.508	1.552	0.187	0.134	0.027	0.027
2/6/15 15:20	38	5.994	0.428	4.040	0.348	0.375	0.054	0.000
2/6/15 18:20	39	6.448	0.455	4.067	0.348	0.401	0.054	0.000
2/6/15 21:20	40	21.432	1.498	7.064	0.562	0.615	0.054	0.000
2/7/15 0:20	41	17.231	1.204	4.629	0.401	0.482	0.054	0.000
2/7/15 3:20	42	14.475	1.017	6.127	0.508	0.615	0.054	0.027
2/7/15 6:20	43	9.713	0.696	5.137	0.428	0.508	0.054	0.000
2/7/15 9:20	44	10.515	0.749	5.057	0.428	0.535	0.054	0.000
2/7/15 12:20	45	9.900	0.696	4.174	0.348	0.535	0.054	0.000
2/7/15 15:20	46	9.071	0.642	4.656	0.401	0.428	0.054	0.000
2/7/15 18:20	47	3.799	0.268	6.422	0.508	0.696	0.054	0.000
2/7/15 21:20	48	2.569	0.187	4.281	0.375	0.428	0.054	0.000
2/8/15 0:20	49	1.605	0.107	3.880	0.348	0.375	0.054	0.000
2/8/15 3:20	50	3.719	0.268	3.612	0.321	0.375	0.054	0.000
2/8/15 6:20	51	3.077	0.214	2.916	0.268	0.241	0.027	0.000
2/8/15 9:20	52	5.699	0.401	2.729	0.268	0.241	0.027	0.000
2/8/15 12:20	53	4.522	0.321	5.378	0.455	0.508	0.054	0.000
2/8/15 15:20	54	7.759	0.535	3.211	0.294	0.375	0.054	0.000
2/8/15 18:20	55	7.198	0.508	4.174	0.348	0.428	0.054	0.000
2/8/15 21:20	56	3.371	0.241	1.793	0.187	0.161	0.027	0.000
2/9/15 0:20	57	1.258	0.080	1.953	0.214	0.241	0.027	0.000
2/9/15 3:20	58	0.401	0.027	2.355	0.241	0.241	0.027	0.000
2/9/15 6:20	59	0.535	0.027	4.522	0.375	0.401	0.054	0.000
2/9/15 9:20	60	0.455	0.027	2.462	0.241	0.241	0.027	0.000
2/9/15 12:20	61	0.482	0.027	3.425	0.294	0.428	0.054	0.000
2/9/15 15:20	62	0.321	0.027	2.649	0.241	0.214	0.027	0.000
2/9/15 18:20	63	0.829	0.054	5.432	0.455	0.508	0.054	0.000
2/9/15 21:20	64	0.615	0.054	2.328	0.241	0.348	0.054	0.000
2/10/15 0:20	65	0.321	0.027	2.943	0.268	0.321	0.027	0.000
2/10/15 3:20	66	0.294	0.027	4.281	0.375	0.375	0.054	0.000
2/10/15 6:20	67	0.535	0.027	4.816	0.401	0.455	0.054	0.000
2/10/15 9:20	68	1.365	0.107	6.448	0.508	0.535	0.054	0.000
2/10/15 12:20	69	1.846	0.134	2.970	0.268	0.348	0.054	0.000

Stage 9	7.89 L/m									
	1440 min/day									
Marks	11.3616 m3/day	ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V	
	4 mm/day		0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	
3	7.6 mm									
2/3/2015 18:20	0.304 cm2/day	Ave1stwk	4.610	MDL	3.767	MDL	0.431	MDL	0.003	
Marks	0.02676 cm2/m3	AveAll	3.633	0.027	3.595	0.107	0.354	0.027	0.002	

ID#	K	K_err	Ca	Ca_err	Ti	Ti_err	V
70	0.856	0.054	3.505	0.321	0.428	0.054	0.000
71	1.204	0.080	4.870	0.401	0.642	0.054	0.000
72	0.936	0.080	5.030	0.428	0.401	0.054	0.000
73	1.284	0.080	2.863	0.268	0.161	0.027	0.000
74	0.428	0.027	2.863	0.268	0.321	0.027	0.000
75	0.776	0.054	2.756	0.268	0.294	0.027	0.000
76	0.883	0.054	2.408	0.241	0.294	0.027	0.000
77	1.525	0.107	2.355	0.241	0.214	0.027	0.000
78	1.498	0.107	2.408	0.241	0.268	0.027	0.000
79	1.605	0.107	4.014	0.348	0.482	0.054	0.000
80	1.819	0.134	3.131	0.294	0.321	0.027	0.000
81	1.445	0.107	3.157	0.294	0.348	0.054	0.000
82	1.124	0.080	3.291	0.294	0.375	0.054	0.000
83	2.381	0.161	3.719	0.321	0.348	0.054	0.027
84	1.498	0.107	4.201	0.348	0.455	0.054	0.027
85	3.371	0.241	2.221	0.214	0.241	0.027	0.000
86	2.997	0.214	2.890	0.268	0.348	0.054	0.000
87	3.024	0.214	2.836	0.268	0.294	0.027	0.000
88	1.766	0.134	4.254	0.375	0.321	0.027	0.000
89	2.167	0.161	2.114	0.214	0.241	0.027	0.000
90	2.595	0.187	2.034	0.214	0.161	0.027	0.000
91	2.194	0.161	3.532	0.321	0.348	0.054	0.000
92	2.970	0.214	3.853	0.348	0.321	0.027	0.000
93	2.916	0.214	4.709	0.401	0.401	0.054	0.000
94	2.970	0.214	2.622	0.241	0.268	0.027	0.000
95	1.177	0.080	4.923	0.401	0.535	0.054	0.000
96	2.141	0.161	5.164	0.428	0.455	0.054	0.000

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

V_err Cr Cr_err Mn Mn_err Fe Fe_err
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk AveAll

MDL	0.069	MDL	0.012	MDL	0.503	MDL
0.054	0.060	0.027	0.010	0.027	0.439	0.027

	ID#	V_err	Cr	Cr_err	Mn	Mn_err	Fe	Fe_err
2/3/15 18:20	15	0.000	0.134	0.000	0.134	0.000	9.472	0.669
2/3/15 21:20	16	0.000	0.187	0.027	0.080	0.000	1.579	0.107
2/4/15 0:20	17	0.027	0.214	0.027	0.000	0.027	1.044	0.080
2/4/15 3:20	18	0.000	0.214	0.027	0.054	0.000	1.739	0.134
2/4/15 6:20	19	0.000	0.134	0.000	0.027	0.000	2.408	0.161
2/4/15 9:20	20	0.000	0.054	0.000	0.000	0.000	0.615	0.054
2/4/15 12:20	21	0.000	0.080	0.000	0.027	0.000	0.990	0.080
2/4/15 15:20	22	0.027	0.080	0.027	0.054	0.027	1.151	0.080
2/4/15 18:20	23	0.000	0.080	0.000	0.054	0.000	1.284	0.080
2/4/15 21:20	24	0.000	0.080	0.000	0.080	0.000	1.124	0.080
2/5/15 0:20	25	0.000	0.080	0.000	0.000	0.000	0.669	0.054
2/5/15 3:20	26	0.000	0.107	0.000	0.000	0.000	0.348	0.027
2/5/15 6:20	27	0.000	0.027	0.000	0.000	0.000	0.241	0.027
2/5/15 9:20	28	0.000	0.027	0.000	0.000	0.000	0.294	0.027
2/5/15 12:20	29	0.000	0.080	0.000	0.027	0.000	1.659	0.107
2/5/15 15:20	30	0.000	0.080	0.000	0.027	0.000	1.338	0.107
2/5/15 18:20	31	0.000	0.107	0.000	0.000	0.000	0.722	0.054
2/5/15 21:20	32	0.000	0.080	0.000	0.027	0.000	0.589	0.054
2/6/15 0:20	33	0.000	0.054	0.000	0.027	0.000	0.669	0.054
2/6/15 3:20	34	0.000	0.080	0.000	0.000	0.000	0.562	0.054
2/6/15 6:20	35	0.000	0.107	0.000	0.000	0.000	0.722	0.054
2/6/15 9:20	36	0.000	0.107	0.000	0.000	0.000	0.936	0.054
2/6/15 12:20	37	0.000	0.080	0.000	0.054	0.000	0.990	0.080
2/6/15 15:20	38	0.000	0.054	0.000	0.000	0.000	0.428	0.027
2/6/15 18:20	39	0.000	0.027	0.000	0.000	0.000	0.401	0.027
2/6/15 21:20	40	0.000	0.080	0.000	0.054	0.000	1.070	0.080
2/7/15 0:20	41	0.000	0.054	0.000	0.027	0.000	0.508	0.027
2/7/15 3:20	42	0.000	0.054	0.000	0.107	0.000	0.482	0.027
2/7/15 6:20	43	0.000	0.054	0.000	0.000	0.000	0.375	0.027
2/7/15 9:20	44	0.000	0.054	0.000	0.000	0.000	0.321	0.027
2/7/15 12:20	45	0.000	0.080	0.000	0.000	0.000	0.455	0.027
2/7/15 15:20	46	0.000	0.054	0.000	0.027	0.000	0.401	0.027
2/7/15 18:20	47	0.000	0.027	0.000	0.000	0.000	0.161	0.027
2/7/15 21:20	48	0.000	0.054	0.000	0.000	0.000	0.134	0.000
2/8/15 0:20	49	0.000	0.027	0.000	0.000	0.000	0.080	0.000
2/8/15 3:20	50	0.000	0.027	0.000	0.000	0.000	0.161	0.000
2/8/15 6:20	51	0.000	0.027	0.000	0.000	0.000	0.749	0.054
2/8/15 9:20	52	0.000	0.027	0.000	0.000	0.000	0.134	0.000
2/8/15 12:20	53	0.000	0.134	0.000	0.000	0.000	0.107	0.000
2/8/15 15:20	54	0.000	0.027	0.000	0.000	0.000	0.107	0.000
2/8/15 18:20	55	0.000	0.027	0.000	0.000	0.000	0.107	0.000
2/8/15 21:20	56	0.000	0.027	0.000	0.000	0.000	0.107	0.000
2/9/15 0:20	57	0.000	0.054	0.000	0.000	0.000	0.080	0.000
2/9/15 3:20	58	0.000	0.054	0.000	0.000	0.000	0.107	0.000
2/9/15 6:20	59	0.000	0.054	0.000	0.000	0.000	0.054	0.000
2/9/15 9:20	60	0.000	0.054	0.000	0.000	0.000	0.054	0.000
2/9/15 12:20	61	0.000	0.080	0.000	0.000	0.000	0.054	0.000
2/9/15 15:20	62	0.000	0.054	0.000	0.000	0.000	0.000	0.000
2/9/15 18:20	63	0.000	0.107	0.000	0.000	0.000	0.000	0.000
2/9/15 21:20	64	0.000	0.027	0.000	0.000	0.000	0.161	0.027
2/10/15 0:20	65	0.000	0.054	0.000	0.000	0.000	0.161	0.027
2/10/15 3:20	66	0.000	0.080	0.000	0.000	0.000	0.107	0.000
2/10/15 6:20	67	0.000	0.107	0.000	0.000	0.000	0.187	0.027
2/10/15 9:20	68	0.000	0.080	0.000	0.000	0.000	0.107	0.000
2/10/15 12:20	69	0.000	0.054	0.000	0.000	0.000	0.214	0.027

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#	V_err 0 ng/cm^2	Cr ng/cm^2	Cr_err ng/cm^2	Mn ng/cm^2	Mn_err ng/cm^2	Fe ng/cm^2	Fe_err ng/cm^2
Ave1stwk	MDL	0.069	MDL	0.012	MDL	0.503	MDL
AveAll	0.054	0.060	0.027	0.010	0.027	0.439	0.027

2/10/15 15:20	70	0.000	0.027	0.000	0.000	0.000	0.187	0.027
2/10/15 18:20	71	0.000	0.027	0.000	0.000	0.000	0.134	0.000
2/10/15 21:20	72	0.000	0.080	0.000	0.000	0.000	0.161	0.027
2/11/15 0:20	73	0.000	0.054	0.000	0.000	0.000	0.268	0.027
2/11/15 3:20	74	0.000	0.054	0.000	0.000	0.000	0.268	0.027
2/11/15 6:20	75	0.000	0.080	0.000	0.027	0.000	0.482	0.027
2/11/15 9:20	76	0.000	0.080	0.000	0.054	0.000	0.749	0.054
2/11/15 12:20	77	0.000	0.054	0.000	0.000	0.000	0.803	0.054
2/11/15 15:20	78	0.000	0.054	0.000	0.000	0.000	0.428	0.027
2/11/15 18:20	79	0.000	0.027	0.000	0.000	0.000	0.321	0.027
2/11/15 21:20	80	0.000	0.054	0.000	0.000	0.000	0.294	0.027
2/12/15 0:20	81	0.000	0.080	0.000	0.000	0.000	0.455	0.027
2/12/15 3:20	82	0.000	0.080	0.000	0.000	0.000	0.401	0.027
2/12/15 6:20	83	0.000	0.054	0.000	0.000	0.000	0.696	0.054
2/12/15 9:20	84	0.000	0.054	0.000	0.027	0.000	0.455	0.027
2/12/15 12:20	85	0.000	0.000	0.000	0.000	0.000	0.294	0.027
2/12/15 15:20	86	0.000	0.054	0.000	0.000	0.000	0.187	0.027
2/12/15 18:20	87	0.000	0.027	0.000	0.000	0.000	0.161	0.000
2/12/15 21:20	88	0.000	0.054	0.000	0.000	0.000	0.134	0.000
2/13/15 0:20	89	0.000	0.054	0.000	0.000	0.000	0.241	0.027
2/13/15 3:20	90	0.000	0.054	0.000	0.000	0.000	0.508	0.027
2/13/15 6:20	91	0.000	0.027	0.000	0.000	0.000	0.428	0.027
2/13/15 9:20	92	0.000	0.054	0.000	0.054	0.000	0.963	0.080
2/13/15 12:20	93	0.000	0.080	0.000	0.000	0.000	0.749	0.054
2/13/15 15:20	94	0.000	0.027	0.000	0.000	0.000	0.482	0.027
2/13/15 18:20	95	0.000	0.054	0.000	0.000	0.000	0.455	0.027
2/13/15 21:20	96	0.000	0.107	0.000	0.000	0.000	0.589	0.054

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Co

Co_err

Ni

Ni_err

Cu

Cu_err

Zn

0 ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

ng/cm^2

Ave1stwk

AveAll

0.142

MDL

0.329

MDL

0.315

MDL

0.798

0.134

0.027

0.263

0.027

0.259

0.027

0.626

	ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
2/3/15 18:20	15	0.241	0.027	0.642	0.054	0.722	0.080	2.943
2/3/15 21:20	16	0.107	0.000	2.274	0.161	1.097	0.107	1.284
2/4/15 0:20	17	0.080	0.054	0.936	0.080	1.044	0.134	1.177
2/4/15 3:20	18	0.054	0.000	0.936	0.054	1.231	0.107	1.659
2/4/15 6:20	19	0.134	0.000	0.696	0.054	0.482	0.054	0.803
2/4/15 9:20	20	0.054	0.000	0.321	0.027	0.375	0.054	0.562
2/4/15 12:20	21	0.054	0.000	0.348	0.027	0.268	0.054	0.428
2/4/15 15:20	22	0.080	0.027	0.401	0.054	0.375	0.080	0.455
2/4/15 18:20	23	0.161	0.000	0.294	0.027	0.241	0.027	0.482
2/4/15 21:20	24	0.134	0.000	0.348	0.027	0.268	0.054	0.508
2/5/15 0:20	25	0.107	0.000	0.321	0.027	0.268	0.054	0.375
2/5/15 3:20	26	0.107	0.000	0.294	0.027	0.241	0.027	0.348
2/5/15 6:20	27	0.161	0.000	0.268	0.027	0.241	0.027	0.268
2/5/15 9:20	28	0.134	0.000	0.214	0.027	0.161	0.027	0.134
2/5/15 12:20	29	0.187	0.000	0.375	0.027	0.241	0.027	0.187
2/5/15 15:20	30	0.161	0.000	0.321	0.027	0.241	0.027	0.161
2/5/15 18:20	31	0.241	0.027	0.268	0.027	0.348	0.054	0.375
2/5/15 21:20	32	0.107	0.000	0.294	0.027	0.214	0.027	1.124
2/6/15 0:20	33	0.107	0.000	0.294	0.027	0.268	0.054	1.926
2/6/15 3:20	34	0.080	0.000	0.401	0.027	0.268	0.054	1.900
2/6/15 6:20	35	0.107	0.000	0.455	0.027	0.294	0.054	2.007
2/6/15 9:20	36	0.080	0.000	0.428	0.027	0.321	0.054	1.284
2/6/15 12:20	37	0.054	0.000	0.268	0.027	0.214	0.027	1.552
2/6/15 15:20	38	0.134	0.000	0.455	0.027	0.321	0.054	0.696
2/6/15 18:20	39	0.107	0.000	0.401	0.027	0.375	0.054	0.749
2/6/15 21:20	40	0.214	0.027	0.508	0.027	0.562	0.054	1.498
2/7/15 0:20	41	0.187	0.027	0.535	0.027	0.401	0.054	0.722
2/7/15 3:20	42	0.214	0.027	0.669	0.054	0.428	0.054	0.749
2/7/15 6:20	43	0.241	0.027	0.535	0.027	0.535	0.054	1.151
2/7/15 9:20	44	0.268	0.027	0.535	0.027	0.401	0.054	1.044
2/7/15 12:20	45	0.214	0.027	0.508	0.027	0.375	0.054	0.936
2/7/15 15:20	46	0.241	0.027	0.535	0.027	0.401	0.054	0.749
2/7/15 18:20	47	0.268	0.027	0.428	0.027	0.455	0.054	0.615
2/7/15 21:20	48	0.187	0.027	0.294	0.027	0.294	0.054	0.589
2/8/15 0:20	49	0.107	0.000	0.187	0.027	0.241	0.027	0.348
2/8/15 3:20	50	0.107	0.000	0.401	0.027	0.268	0.054	0.375
2/8/15 6:20	51	0.107	0.000	0.294	0.027	0.187	0.027	0.615
2/8/15 9:20	52	0.080	0.000	0.241	0.027	0.161	0.027	1.980
2/8/15 12:20	53	0.080	0.000	0.321	0.027	0.268	0.054	2.034
2/8/15 15:20	54	0.080	0.000	0.401	0.027	0.268	0.054	3.799
2/8/15 18:20	55	0.107	0.000	0.401	0.027	0.268	0.054	3.264
2/8/15 21:20	56	0.054	0.000	0.241	0.027	0.161	0.027	1.311
2/9/15 0:20	57	0.080	0.000	0.241	0.027	0.161	0.027	0.348
2/9/15 3:20	58	0.107	0.000	0.107	0.000	0.241	0.027	0.187
2/9/15 6:20	59	0.187	0.027	0.000	0.000	0.214	0.027	0.161
2/9/15 9:20	60	0.161	0.000	0.054	0.000	0.161	0.027	0.134
2/9/15 12:20	61	0.214	0.027	0.080	0.000	0.187	0.027	0.214
2/9/15 15:20	62	0.134	0.000	0.080	0.000	0.214	0.027	0.161
2/9/15 18:20	63	0.187	0.027	0.134	0.000	0.294	0.054	0.268
2/9/15 21:20	64	0.107	0.000	0.134	0.000	0.134	0.027	0.161
2/10/15 0:20	65	0.161	0.000	0.214	0.027	0.214	0.027	0.134
2/10/15 3:20	66	0.187	0.000	0.080	0.000	0.214	0.027	0.241
2/10/15 6:20	67	0.214	0.027	0.027	0.000	0.294	0.054	0.268
2/10/15 9:20	68	0.241	0.027	0.107	0.000	0.401	0.054	0.294
2/10/15 12:20	69	0.054	0.000	0.214	0.027	0.187	0.027	0.348

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn
	0 ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2	ng/cm^2
Ave1stwk	0.142	MDL	0.329	MDL	0.315	MDL	0.798
AveAll	0.134	0.027	0.263	0.027	0.259	0.027	0.626

2/10/15 15:20	70	0.134	0.000	0.134	0.000	0.241	0.027	0.214
2/10/15 18:20	71	0.268	0.027	0.321	0.027	0.294	0.054	0.321
2/10/15 21:20	72	0.161	0.000	0.134	0.000	0.241	0.027	0.321
2/11/15 0:20	73	0.107	0.000	0.107	0.000	0.214	0.027	0.241
2/11/15 3:20	74	0.161	0.000	0.054	0.000	0.134	0.027	0.134
2/11/15 6:20	75	0.161	0.000	0.161	0.000	0.214	0.027	0.134
2/11/15 9:20	76	0.134	0.000	0.241	0.027	0.214	0.027	0.214
2/11/15 12:20	77	0.134	0.000	0.241	0.027	0.161	0.027	0.268
2/11/15 15:20	78	0.054	0.000	0.187	0.027	0.161	0.027	0.268
2/11/15 18:20	79	0.161	0.000	0.187	0.000	0.214	0.027	0.321
2/11/15 21:20	80	0.107	0.000	0.161	0.000	0.214	0.027	0.294
2/12/15 0:20	81	0.107	0.000	0.268	0.027	0.134	0.027	0.321
2/12/15 3:20	82	0.107	0.000	0.214	0.027	0.187	0.027	0.294
2/12/15 6:20	83	0.134	0.000	0.187	0.027	0.187	0.027	0.294
2/12/15 9:20	84	0.214	0.027	0.214	0.027	0.321	0.054	0.294
2/12/15 12:20	85	0.000	0.000	0.187	0.000	0.161	0.027	0.348
2/12/15 15:20	86	0.000	0.000	0.214	0.027	0.134	0.027	0.294
2/12/15 18:20	87	0.027	0.000	0.187	0.000	0.161	0.027	0.294
2/12/15 21:20	88	0.134	0.000	0.080	0.000	0.268	0.054	0.321
2/13/15 0:20	89	0.000	0.000	0.107	0.000	0.107	0.027	0.214
2/13/15 3:20	90	0.027	0.000	0.187	0.027	0.161	0.027	0.294
2/13/15 6:20	91	0.187	0.000	0.187	0.027	0.268	0.054	0.321
2/13/15 9:20	92	0.107	0.000	0.294	0.027	0.268	0.054	0.428
2/13/15 12:20	93	0.134	0.000	0.187	0.027	0.268	0.054	0.348
2/13/15 15:20	94	0.000	0.000	0.187	0.027	0.294	0.054	0.348
2/13/15 18:20	95	0.241	0.027	0.080	0.000	0.268	0.054	0.375
2/13/15 21:20	96	0.214	0.027	0.241	0.027	0.321	0.054	0.482

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err Br Br_err Pb Pb_err
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk AveAll

MDL	0.226	MDL	0.435	MDL
0.027	0.167	0.027	0.333	0.027

2/3/15 18:20	ID#	Zn_err	Br	Br_err	Pb	Pb_err
15	15	0.214	0.268	0.027	0.000	0.027
2/3/15 21:20	16	0.080	0.161	0.000	0.455	0.027
2/4/15 0:20	17	0.107	0.348	0.214	0.000	0.776
2/4/15 3:20	18	0.107	0.187	0.000	0.321	0.027
2/4/15 6:20	19	0.054	0.776	0.054	0.000	0.027
2/4/15 9:20	20	0.054	0.080	0.000	0.241	0.027
2/4/15 12:20	21	0.027	0.187	0.027	0.107	0.027
2/4/15 15:20	22	0.080	0.401	0.187	0.000	0.722
2/4/15 18:20	23	0.027	0.482	0.027	0.722	0.054
2/4/15 21:20	24	0.027	0.401	0.027	0.642	0.054
2/5/15 0:20	25	0.027	0.455	0.027	0.829	0.054
2/5/15 3:20	26	0.027	0.214	0.027	0.749	0.054
2/5/15 6:20	27	0.027	0.080	0.000	0.000	0.027
2/5/15 9:20	28	0.000	0.027	0.000	0.080	0.027
2/5/15 12:20	29	0.027	0.401	0.027	0.161	0.027
2/5/15 15:20	30	0.027	0.375	0.027	0.000	0.027
2/5/15 18:20	31	0.027	0.268	0.027	0.749	0.054
2/5/15 21:20	32	0.080	0.321	0.027	0.696	0.054
2/6/15 0:20	33	0.134	0.348	0.027	0.375	0.027
2/6/15 3:20	34	0.134	0.027	0.000	0.000	0.027
2/6/15 6:20	35	0.134	0.080	0.000	0.321	0.027
2/6/15 9:20	36	0.080	0.375	0.027	0.936	0.080
2/6/15 12:20	37	0.107	0.187	0.027	0.696	0.054
2/6/15 15:20	38	0.054	0.401	0.027	1.070	0.080
2/6/15 18:20	39	0.054	0.669	0.054	1.124	0.080
2/6/15 21:20	40	0.107	0.990	0.080	0.856	0.054
2/7/15 0:20	41	0.054	0.722	0.054	1.258	0.080
2/7/15 3:20	42	0.054	0.722	0.054	1.044	0.080
2/7/15 6:20	43	0.080	0.589	0.054	1.204	0.080
2/7/15 9:20	44	0.080	0.722	0.054	1.151	0.080
2/7/15 12:20	45	0.080	0.375	0.027	0.615	0.054
2/7/15 15:20	46	0.054	0.535	0.027	0.722	0.054
2/7/15 18:20	47	0.054	0.294	0.027	0.000	0.027
2/7/15 21:20	48	0.054	0.000	0.000	0.214	0.027
2/8/15 0:20	49	0.027	0.080	0.000	0.910	0.054
2/8/15 3:20	50	0.027	0.134	0.000	0.428	0.027
2/8/15 6:20	51	0.054	0.161	0.000	0.803	0.054
2/8/15 9:20	52	0.134	0.000	0.000	0.187	0.027
2/8/15 12:20	53	0.134	0.000	0.000	0.000	0.027
2/8/15 15:20	54	0.268	0.000	0.000	0.107	0.027
2/8/15 18:20	55	0.241	0.000	0.000	0.000	0.027
2/8/15 21:20	56	0.107	0.000	0.000	0.161	0.027
2/9/15 0:20	57	0.027	0.000	0.000	0.401	0.027
2/9/15 3:20	58	0.027	0.000	0.000	0.187	0.027
2/9/15 6:20	59	0.027	0.000	0.000	0.107	0.027
2/9/15 9:20	60	0.027	0.000	0.000	0.375	0.027
2/9/15 12:20	61	0.027	0.000	0.000	0.080	0.027
2/9/15 15:20	62	0.027	0.000	0.000	0.187	0.027
2/9/15 18:20	63	0.027	0.000	0.000	0.134	0.027
2/9/15 21:20	64	0.027	0.000	0.000	0.562	0.054
2/10/15 0:20	65	0.027	0.000	0.000	0.562	0.054
2/10/15 3:20	66	0.027	0.000	0.000	0.562	0.054
2/10/15 6:20	67	0.027	0.000	0.000	0.000	0.027
2/10/15 9:20	68	0.027	0.000	0.000	0.375	0.027
2/10/15 12:20	69	0.027	0.000	0.000	0.615	0.054

Stage 9

7.89 L/m
1440 min/day
11.3616 m3/day
4 mm/day
7.6 mm
0.304 cm2/day
0.02676 cm2/m3

Marks

3

2/3/2015 18:20

Marks

ID#

Zn_err Br Br_err Pb Pb_err
 0 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2 ng/cm^2

Ave1stwk

AveAll

MDL	0.226	MDL	0.435	MDL
0.027	0.167	0.027	0.333	0.027

Date/Time	ID#	Zn_err	Br	Br_err	Pb	Pb_err
2/10/15 15:20	70	0.027	0.000	0.000	0.054	0.027
2/10/15 18:20	71	0.027	0.214	0.027	0.669	0.054
2/10/15 21:20	72	0.027	0.000	0.000	0.000	0.027
2/11/15 0:20	73	0.027	0.054	0.000	0.000	0.027
2/11/15 3:20	74	0.000	0.000	0.000	0.054	0.027
2/11/15 6:20	75	0.000	0.000	0.000	0.000	0.027
2/11/15 9:20	76	0.027	0.027	0.000	0.027	0.027
2/11/15 12:20	77	0.027	0.054	0.000	0.000	0.027
2/11/15 15:20	78	0.027	0.161	0.000	0.027	0.027
2/11/15 18:20	79	0.027	0.134	0.000	0.000	0.027
2/11/15 21:20	80	0.027	0.000	0.000	0.000	0.027
2/12/15 0:20	81	0.027	0.027	0.000	0.054	0.027
2/12/15 3:20	82	0.027	0.000	0.000	0.000	0.027
2/12/15 6:20	83	0.027	0.268	0.027	0.000	0.027
2/12/15 9:20	84	0.027	0.000	0.000	0.000	0.027
2/12/15 12:20	85	0.027	0.000	0.000	0.000	0.027
2/12/15 15:20	86	0.027	0.000	0.000	0.080	0.027
2/12/15 18:20	87	0.027	0.000	0.000	0.000	0.027
2/12/15 21:20	88	0.027	0.000	0.000	0.161	0.027
2/13/15 0:20	89	0.027	0.000	0.000	0.268	0.027
2/13/15 3:20	90	0.027	0.054	0.000	0.375	0.027
2/13/15 6:20	91	0.027	0.000	0.000	0.000	0.027
2/13/15 9:20	92	0.027	0.375	0.027	0.000	0.027
2/13/15 12:20	93	0.027	0.027	0.000	0.000	0.027
2/13/15 15:20	94	0.027	0.161	0.000	0.187	0.027
2/13/15 18:20	95	0.027	0.214	0.027	0.134	0.027
2/13/15 21:20	96	0.027	0.000	0.000	0.268	0.027

Stage 9	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		0
3	7.6 mm		
2/3/2015 18:20	0.304 cm2/day	Ave1stwk	
Marks	0.02676 cm2/m3	AveAll	

2/3/15 18:20	15	52.095
2/3/15 21:20	16	51.614
2/4/15 0:20	17	45.032
2/4/15 3:20	18	54.637
2/4/15 6:20	19	63.761
2/4/15 9:20	20	35.908
2/4/15 12:20	21	43.453
2/4/15 15:20	22	45.487
2/4/15 18:20	23	57.019
2/4/15 21:20	24	54.744
2/5/15 0:20	25	45.085
2/5/15 3:20	26	38.690
2/5/15 6:20	27	32.991
2/5/15 9:20	28	34.195
2/5/15 12:20	29	41.874
2/5/15 15:20	30	41.794
2/5/15 18:20	31	57.045
2/5/15 21:20	32	53.808
2/6/15 0:20	33	59.373
2/6/15 3:20	34	61.086
2/6/15 6:20	35	69.461
2/6/15 9:20	36	72.591
2/6/15 12:20	37	57.045
2/6/15 15:20	38	88.485
2/6/15 18:20	39	68.337
2/6/15 21:20	40	257.026
2/7/15 0:20	41	137.423
2/7/15 3:20	42	310.941
2/7/15 6:20	43	104.673
2/7/15 9:20	44	101.087
2/7/15 12:20	45	114.412
2/7/15 15:20	46	111.255
2/7/15 18:20	47	55.788
2/7/15 21:20	48	44.791
2/8/15 0:20	49	40.135
2/8/15 3:20	50	53.300
2/8/15 6:20	51	39.118
2/8/15 9:20	52	49.179
2/8/15 12:20	53	48.564
2/8/15 15:20	54	50.008
2/8/15 18:20	55	50.062
2/8/15 21:20	56	33.018
2/9/15 0:20	57	37.513
2/9/15 3:20	58	33.901
2/9/15 6:20	59	37.352
2/9/15 9:20	60	31.279
2/9/15 12:20	61	28.657
2/9/15 15:20	62	31.091
2/9/15 18:20	63	39.011
2/9/15 21:20	64	32.804
2/10/15 0:20	65	30.851
2/10/15 3:20	66	23.359
2/10/15 6:20	67	27.961
2/10/15 9:20	68	37.593
2/10/15 12:20	69	31.520

Stage 9	7.89 L/m		
	1440 min/day		
Marks	11.3616 m3/day	ID#	Sum of Elements
	4 mm/day		0
3	7.6 mm		
2/3/2015 18:20	0.304 cm2/day	Ave1stwk	
Marks	0.02676 cm2/m3	AveAll	

2/10/15 15:20	70	27.747
2/10/15 18:20	71	55.039
2/10/15 21:20	72	38.503
2/11/15 0:20	73	35.908
2/11/15 3:20	74	28.202
2/11/15 6:20	75	31.787
2/11/15 9:20	76	26.462
2/11/15 12:20	77	31.225
2/11/15 15:20	78	24.857
2/11/15 18:20	79	41.232
2/11/15 21:20	80	31.760
2/12/15 0:20	81	32.269
2/12/15 3:20	82	20.951
2/12/15 6:20	83	37.085
2/12/15 9:20	84	23.038
2/12/15 12:20	85	22.690
2/12/15 15:20	86	28.576
2/12/15 18:20	87	29.754
2/12/15 21:20	88	29.325
2/13/15 0:20	89	23.707
2/13/15 3:20	90	21.834
2/13/15 6:20	91	31.974
2/13/15 9:20	92	34.837
2/13/15 12:20	93	31.198
2/13/15 15:20	94	30.824
2/13/15 18:20	95	36.523
2/13/15 21:20	96	34.035

All concentrations (ng/m³)

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9 ultra-fine	1 - 9 PM10	3 - 9 PM2.5	%(UF/PM10)	%(UF/PM2.5)	Stage 1 0.0 - 5.0 um
2/3/15 18:20	293.8	641.3	121.5	57.5	48.5	58.8	67.7	64.9	52.1	1406.1	471.0	3.70	11.06	Stage 2 5.0 - 2.5 um
2/3/15 21:20	336.6	1357.3	459.4	296.0	97.7	87.6	219.8	83.2	51.6	2989.1	1295.2	1.73	3.98	Stage 3 2.5 - 1.15 um
2/4/15 0:20	460.1	1693.0	598.5	194.0	64.2	115.1	200.0	54.8	45.0	3424.8	1271.7	1.31	3.54	Stage 4 .15 - 0.75 um
2/4/15 3:20	618.7	1881.9	497.9	95.1	45.7	117.2	78.4	40.2	54.6	3429.7	929.2	1.59	5.88	Stage 5 .75 - 0.56 um
2/4/15 6:20	683.3	1833.6	376.7	100.5	52.4	83.3	234.2	40.6	63.8	3468.3	951.4	1.84	6.70	Stage 6 .56 - 0.34 um
2/4/15 9:20	868.1	1617.7	322.5	148.8	106.5	64.0	82.8	54.1	35.9	3300.4	814.6	1.09	4.41	Stage 7 .34 - 0.26 um
2/4/15 12:20	840.1	1422.8	372.9	252.7	152.7	67.2	50.8	63.5	43.5	3266.1	1003.2	1.33	4.33	Stage 8 .26 - 0.09 um
2/4/15 15:20	1001.9	1655.6	502.8	258.8	287.7	317.8	68.1	61.6	45.5	4199.9	1542.3	1.08	2.95	Ultra-fine .09 - 0.00 um
2/4/15 18:20	978.9	1699.9	815.8	492.4	163.5	209.2	108.9	162.3	57.0	4688.0	2009.2	1.22	2.84	
2/4/15 21:20	859.1	1559.1	746.1	253.8	76.2	40.9	112.9	62.3	54.7	3765.3	1347.0	1.45	4.06	
2/5/15 0:20	844.4	1295.0	328.6	80.3	43.1	310.4	60.8	50.8	45.1	3058.5	919.1	1.47	4.91	
2/5/15 3:20	829.7	1306.4	219.2	66.9	45.7	52.7	69.4	52.3	38.7	2680.9	544.8	1.44	7.10	
2/5/15 6:20	780.8	1155.9	203.0	75.7	54.6	57.0	54.5	46.8	33.0	2461.3	524.6	1.34	6.29	
2/5/15 9:20	700.8	1125.3	227.0	101.4	67.6	30.5	74.4	58.3	34.2	2419.4	593.4	1.41	5.76	
2/5/15 12:20	590.5	1192.9	264.6	115.6	67.7	64.2	88.1	55.1	41.9	2480.4	697.0	1.69	6.01	
2/5/15 15:20	641.4	1505.2	333.2	121.4	100.5	40.5	121.8	60.3	41.8	2966.2	819.6	1.41	5.10	
2/5/15 18:20	505.3	1728.4	520.2	127.4	112.5	51.9	98.7	66.0	57.0	3267.4	1033.7	1.75	5.52	
2/5/15 21:20	596.2	1861.9	389.9	177.2	126.0	49.6	102.1	81.1	53.8	3437.8	979.7	1.57	5.49	
2/6/15 0:20	638.4	1554.8	343.5	148.4	86.5	178.1	78.9	66.2	59.4	3154.2	961.0	1.88	6.18	
2/6/15 3:20	523.4	1609.7	357.4	168.1	115.2	107.6	101.5	61.0	61.1	3105.0	971.9	1.97	6.29	
2/6/15 6:20	507.6	1619.5	412.6	133.4	67.5	125.9	82.5	56.1	69.5	3074.6	947.4	2.26	7.33	
2/6/15 9:20	496.9	1562.0	440.6	149.6	53.3	84.8	60.5	49.3	72.6	2969.7	910.7	2.44	7.97	
2/6/15 12:20	475.1	1196.4	449.9	149.1	46.9	91.6	49.1	49.0	57.0	2564.2	892.7	2.22	6.39	
2/6/15 15:20	369.4	1099.2	589.4	171.5	42.4	41.0	50.3	36.4	88.5	2488.0	1019.4	3.56	8.68	
2/6/15 18:20	321.8	950.4	663.1	118.3	31.1	52.3	34.6	32.6	68.3	2272.6	1000.4	3.01	6.83	
2/6/15 21:20	232.6	650.8	412.8	83.1	25.2	42.1	43.0	39.2	257.0	1785.8	902.4	14.39	28.48	
2/7/15 0:20	195.4	456.7	267.1	67.1	29.6	60.9	36.3	36.0	137.4	1286.5	634.4	10.68	21.66	
2/7/15 3:20	121.8	482.9	276.2	68.5	26.2	51.1	30.9	35.3	310.9	1403.7	799.0	22.15	38.91	
2/7/15 6:20	107.2	417.8	260.6	58.3	38.0	66.8	37.2	35.7	104.7	1126.2	601.2	9.29	17.41	
2/7/15 9:20	81.0	439.8	298.6	83.3	34.9	52.5	39.7	42.8	101.1	1173.6	652.9	8.61	15.48	
2/7/15 12:20	89.4	382.9	363.5	190.3	47.5	39.9	37.3	29.9	114.4	1295.1	822.8	8.83	13.90	
2/7/15 15:20	99.6	411.9	523.6	380.7	38.7	37.3	38.3	37.8	111.3	1679.1	1167.6	6.63	9.53	
2/7/15 18:20	91.5	316.6	363.2	124.0	41.8	76.8	35.3	43.6	55.8	1148.5	740.5	4.86	7.53	
2/7/15 21:20	139.8	251.1	298.8	62.8	32.2	93.2	50.1	61.9	44.8	1034.7	643.8	4.33	6.96	
2/8/15 0:20	184.0	150.1	117.1	55.0	39.8	104.4	61.4	42.8	40.1	794.7	460.6	5.05	8.71	
2/8/15 3:20	96.7	153.6	77.9	71.9	61.8	110.1	57.1	56.7	53.3	739.1	488.7	7.21	10.91	
2/8/15 6:20	94.3	164.8	79.6	67.3	71.2	160.1	63.0	58.0	39.1	797.5	538.4	4.90	7.27	
2/8/15 9:20	130.5	209.5	139.2	71.1	55.3	57.8	39.8	45.7	49.2	798.1	458.0	6.16	10.74	
2/8/15 12:20	124.3	298.3	136.7	70.7	39.1	71.3	37.8	25.3	48.6	852.1	429.4	5.70	11.31	
2/8/15 15:20	137.1	561.0	246.2	134.0	42.7	29.3	27.2	27.9	50.0	1255.4	557.3	3.98	8.97	
2/8/15 18:20	102.2	709.3	282.5	319.6	115.8	84.3	33.9	22.4	50.1	1720.1	908.6	2.91	5.51	
2/8/15 21:20	149.0	468.7	643.9	754.1	230.8	112.0	32.9	26.3	33.0	2450.7	1833.0	1.35	1.80	
2/9/15 0:20	188.4	792.0	599.6	292.7	207.3	160.6	33.9	32.7	37.5	2344.6	1364.3	1.60	2.75	
2/9/15 3:20	220.2	1124.6	513.8	692.5	167.2	127.5	29.1	24.9	33.9	2933.5	1588.8	1.16	2.13	

All concentrations (ng/m3)

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9 ultra-fine	1 - 9 PM10	3 - 9 PM2.5	%(UF/PM10)	%(UF/PM2.5)	Stage 1 0.0 - 5.0 un
2/9/15 6:20	311.7	508.7	284.5	1086.5	175.0	147.4	38.1	28.2	37.4	2617.4	1797.0	1.43	2.08	
2/9/15 9:20	300.9	623.9	433.5	659.3	240.9	134.5	33.7	21.0	31.3	2479.0	1554.2	1.26	2.01	
2/9/15 12:20	285.4	2012.0	427.6	949.9	244.6	167.5	41.5	18.1	28.7	4175.2	1877.8	0.69	1.53	
2/9/15 15:20	383.4	876.3	344.0	1058.9	199.6	111.4	39.2	18.8	31.1	3062.8	1803.1	1.02	1.72	
2/9/15 18:20	480.7	2625.6	956.7	517.8	176.6	90.0	41.8	16.4	39.0	4944.7	1838.4	0.79	2.12	
2/9/15 21:20	551.8	1332.6	686.4	566.5	141.1	66.1	35.5	23.5	32.8	3436.4	1552.0	0.95	2.11	
2/10/15 0:20	582.7	2245.6	552.7	393.9	70.8	58.0	33.5	24.4	30.9	3992.4	1164.1	0.77	2.65	
2/10/15 3:20	566.7	2847.9	803.7	233.1	28.9	34.5	35.7	15.4	23.4	4589.2	1174.6	0.51	1.99	
2/10/15 6:20	279.5	1182.5	626.8	183.0	42.4	31.1	25.8	25.7	28.0	2424.7	962.7	1.15	2.90	
2/10/15 9:20	349.0	820.2	323.1	231.9	67.7	33.6	25.3	27.7	37.6	1916.0	746.8	1.96	5.03	
2/10/15 12:20	374.3	566.5	312.0	209.1	63.9	38.0	35.3	24.4	31.5	1655.1	714.3	1.90	4.41	
2/10/15 15:20	449.5	657.2	387.3	158.1	69.5	30.9	31.0	21.7	27.7	1833.0	726.3	1.51	3.82	
2/10/15 18:20	342.2	791.4	396.6	213.5	112.5	79.7	36.4	19.1	55.0	2046.4	912.8	2.69	6.03	
2/10/15 21:20	542.5	1009.4	612.4	286.5	100.7	77.5	37.0	29.4	38.5	2733.9	1182.0	1.41	3.26	
2/11/15 0:20	564.0	897.6	617.6	261.3	57.0	89.8	46.1	21.7	35.9	2591.0	1129.5	1.39	3.18	
2/11/15 3:20	673.4	1005.9	458.0	138.4	37.7	51.0	29.7	47.8	28.2	2470.1	790.8	1.14	3.57	
2/11/15 6:20	711.7	890.7	408.5	87.1	27.7	58.8	28.5	15.3	31.8	2260.1	657.7	1.41	4.83	
2/11/15 9:20	598.0	681.8	295.3	94.1	39.8	35.8	34.1	24.1	26.5	1829.4	549.6	1.45	4.81	
2/11/15 12:20	664.6	526.1	294.1	118.4	60.0	35.4	42.5	22.9	31.2	1795.3	604.5	1.74	5.17	
2/11/15 15:20	647.0	732.0	317.6	112.8	61.3	57.0	32.8	24.3	24.9	2009.6	630.6	1.24	3.94	
2/11/15 18:20	571.6	891.8	408.7	179.3	85.0	58.2	30.8	21.7	41.2	2288.3	824.8	1.80	5.00	
2/11/15 21:20	397.2	973.9	465.6	171.1	56.7	40.7	36.0	17.6	31.8	2190.5	819.3	1.45	3.88	
2/12/15 0:20	703.9	794.2	360.6	116.7	35.7	57.8	33.5	19.5	32.3	2154.1	656.1	1.50	4.92	
2/12/15 3:20	442.2	827.5	260.5	93.7	24.8	33.1	31.6	20.1	21.0	1754.5	484.7	1.19	4.32	
2/12/15 6:20	373.9	670.2	216.8	66.2	21.3	99.1	22.2	14.3	37.1	1521.0	476.9	2.44	7.78	
2/12/15 9:20	524.0	499.8	212.0	67.0	37.1	33.9	32.1	21.1	23.0	1449.8	426.1	1.59	5.41	
2/12/15 12:20	626.3	360.2	190.4	67.5	51.6	29.4	32.1	18.4	22.7	1398.6	412.1	1.62	5.51	
2/12/15 15:20	421.7	506.7	181.1	41.4	47.1	22.8	27.3	19.0	28.6	1295.7	367.4	2.21	7.78	
2/12/15 18:20	446.5	581.8	244.0	64.5	66.8	87.8	30.1	20.0	29.8	1571.3	543.1	1.89	5.48	
2/12/15 21:20	464.4	748.1	360.1	139.5	60.9	47.3	47.4	22.8	29.3	1919.9	707.4	1.53	4.15	
2/13/15 0:20	515.9	702.7	338.3	148.0	48.1	60.5	38.6	17.6	23.7	1893.6	675.0	1.25	3.51	
2/13/15 3:20	629.0	863.5	310.5	154.8	34.1	44.6	35.3	16.2	21.8	2109.9	617.4	1.03	3.54	
2/13/15 6:20	525.8	985.7	414.1	171.9	85.2	76.3	33.5	28.6	32.0	2353.1	841.5	1.36	3.80	
2/13/15 9:20	558.3	899.5	504.8	163.0	51.0	48.9	45.2	30.6	34.8	2336.1	878.3	1.49	3.97	
2/13/15 12:20	669.4	539.8	243.2	152.5	46.2	53.6	33.7	28.2	31.2	1797.7	588.5	1.74	5.30	
2/13/15 15:20	550.3	581.9	232.7	133.1	36.3	35.9	37.5	29.2	30.8	1667.7	535.5	1.85	5.76	
2/13/15 18:20	556.6	542.6	292.8	133.9	30.2	54.0	28.9	26.7	36.5	1702.2	603.0	2.15	6.06	
2/13/15 21:20	511.1	597.3	337.0	178.1	32.8	39.4	38.4	27.0	34.0	1795.1	686.7	1.90	4.96	

Err column is MDL in the size mode, not propogated err for this calculation.

		Na	Na_err	Mg	Mg_err	Al	Al_err	Si	Si_err	P	P_err	
		Na	Na_err	Mg	Mg_err	Al	Al_err	Si	Si_err	P	P_err	
		ng/m ³	ng/m ³	ng/m ³	ng/m ³	ng/m ³	ng/m ³	ng/m ³	ng/m ³	ng/m ³	ng/m ³	
Slot	7.6 0.00 to 0.09	17.991	0.321	1.466	0.080	0.450	0.027	0.462	0.027	2.902	0.161	
Slot	6 0.09 to 0.26	10.242	0.465	1.857	0.063	0.388	0.021	0.539	0.021	0.983	0.232	
Slot	6 0.26 to 0.34	15.729	0.507	1.638	0.063	0.550	0.021	0.947	0.021	3.415	0.275	
Slot	6 0.34 to 0.56	17.507	0.253	1.791	0.063	0.639	0.021	2.056	0.021	1.790	0.211	
Slot	6 0.56 to 0.75	17.954	0.401	2.160	0.063	1.685	0.021	5.631	0.021	1.782	0.253	
Slot	6 0.75 to 1.15	39.456	0.190	6.552	0.063	7.305	0.021	22.734	0.021	2.352	0.190	
Slot	6 1.15 to 2.5	40.018	0.211	16.934	0.063	28.282	0.021	81.404	0.021	3.434	0.148	
Slot	6 2.5 to 5.0	78.574	0.190	43.543	0.127	100.955	0.084	276.890	0.021	7.075	0.380	
Slot	6 5.0 to 10	28.889	0.401	14.785	0.106	59.560	0.042	175.549	0.021	3.570	0.528	
		PM10	266.36	2.94	90.73	0.69	199.81	0.28	566.21	0.20	27.30	2.38
		PM2.5	158.90	2.35	32.40	0.46	39.30	0.15	113.77	0.15	16.66	1.47
		Ufine	17.99	0.32	1.47	0.08	0.45	0.03	0.46	0.03	2.90	0.16

S	S_err	Cl	Cl_err	K	K_err	Ca	Ca_err	Ti	Ti_err	V	V_err	Cr	Cr_err	Mn	Mn_err
S ng/m ³	S_err ng/m ³	Cl ng/m ³	Cl_err ng/m ³	K ng/m ³	K_err ng/m ³	Ca ng/m ³	Ca_err ng/m ³	Ti ng/m ³	Ti_err ng/m ³	V ng/m ³	V_err ng/m ³	Cr ng/m ³	Cr_err ng/m ³	Mn ng/m ³	Mn_err ng/m ³
7.887	0.054	9.922	0.027	3.633	0.027	3.595	0.107	0.354	0.027	0.002	0.054	0.060	0.027	0.010	0.027
19.231	0.042	0.357	0.021	1.924	0.021	0.222	0.021	0.046	0.021	0.008	0.021	0.014	0.021	0.045	0.021
25.109	0.063	0.639	0.021	1.975	0.021	0.451	0.042	0.185	0.021	0.012	0.021	0.019	0.021	0.074	0.021
36.017	0.042	5.660	0.021	2.679	0.021	1.960	0.021	0.261	0.021	0.019	0.021	0.040	0.021	0.172	0.021
20.608	0.042	11.610	0.021	1.989	0.021	2.434	0.021	0.549	0.021	0.030	0.021	0.051	0.021	0.150	0.021
25.183	0.042	57.678	0.021	6.345	0.021	9.939	0.021	1.825	0.021	0.118	0.021	0.131	0.021	0.394	0.021
23.083	0.042	64.911	0.021	16.689	0.021	26.918	0.021	4.707	0.021	0.307	0.021	0.290	0.021	0.950	0.021
36.775	0.021	176.842	0.021	38.132	0.021	69.779	0.021	9.915	0.021	0.538	0.021	0.596	0.021	2.114	0.021
12.079	0.063	42.172	0.021	16.772	0.021	35.494	0.021	5.669	0.021	0.216	0.021	0.222	0.021	1.007	0.021
205.97	0.41	369.79	0.20	90.14	0.20	150.79	0.30	23.51	0.20	1.25	0.22	1.42	0.20	4.92	0.20
157.12	0.33	150.78	0.15	35.23	0.15	45.52	0.25	7.93	0.15	0.50	0.18	0.60	0.15	1.79	0.15
7.89	0.05	9.92	0.03	3.63	0.03	3.59	0.11	0.35	0.03	0.00	0.05	0.06	0.03	0.01	0.03

Fe	Fe_err	Co	Co_err	Ni	Ni_err	Cu	Cu_err	Zn	Zn_err	Br	Br_err	Pb	Pb_err
Fe ng/m ³	Fe_err ng/m ³	Co ng/m ³	Co_err ng/m ³	Ni ng/m ³	Ni_err ng/m ³	Cu ng/m ³	Cu_err ng/m ³	Zn ng/m ³	Zn_err ng/m ³	Br ng/m ³	Br_err ng/m ³	Pb ng/m ³	Pb_err ng/m ³
0.439	0.027	0.134	0.027	0.263	0.027	0.259	0.027	0.626	0.027	0.167	0.027	0.333	0.027
0.921	0.021	0.019	0.021	0.044	0.021	0.104	0.021	0.434	0.021	0.170	0.021	0.282	0.021
2.179	0.021	0.025	0.021	0.035	0.021	0.136	0.021	0.442	0.042	0.021	0.021	0.297	0.021
5.433	0.021	0.029	0.021	0.043	0.021	0.255	0.021	0.945	0.021	0.295	0.021	0.315	0.021
9.707	0.021	0.062	0.021	0.044	0.021	0.366	0.021	0.458	0.042	0.157	0.021	0.251	0.021
30.822	0.021	0.154	0.021	0.042	0.021	1.123	0.021	0.782	0.021	0.187	0.021	0.331	0.021
72.095	0.021	0.344	0.021	0.045	0.021	2.467	0.021	1.228	0.210	0.212	0.021	0.664	0.021
125.776	0.021	0.530	0.021	0.098	0.021	2.594	0.021	2.897	0.021	0.427	0.021	1.171	0.021
56.814	0.021	0.281	0.021	0.113	0.021	0.712	0.021	2.658	0.042	0.187	0.021	0.501	0.021
304.19	0.20	1.58	0.20	0.73	0.20	8.01	0.20	10.47	0.45	1.82	0.20	4.14	0.20
121.59	0.15	0.77	0.15	0.52	0.15	4.71	0.15	4.92	0.38	1.21	0.15	2.47	0.15
0.44	0.03	0.13	0.03	0.26	0.03	0.26	0.03	0.63	0.03	0.17	0.03	0.33	0.03

