

**CHEMICAL, COLOR, AND SENSORY ATTRIBUTES OF SORGHUM BRAN-  
ENHANCED BEEF PATTIES IN A HIGH OXYGEN ENVIRONMENT**

A Thesis

by

BLAINE EDWARD JENSCHKE

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

August 2004

Major Subject: Animal Science

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August 2004

Major Subject: Animal Science

## **ABSTRACT**

Chemical, Color, and Sensory Attributes of Sorghum Bran-Enhanced Beef Patties in a  
High Oxygen Environment. (August 2004)

Blaine Edward Jenschke, B.S., Texas A&M University

Chair of Advisory Committee: Dr. Rhonda K. Miller

Bottom rounds were shipped to the Rosenthal Meat Science and Technology Center, ground and enhanced with one of the following predetermined treatments: control; 0.4% sodium phosphates and 0.3% salt; 0.25% sorghum bran; 2.0% sorghum bran; 0.25% sorghum bran, 0.4% sodium phosphates and 0.3% salt; and 2.0% sorghum bran, 0.4% sodium phosphates, and 0.3% salt. The ground beef was formed into 226 g ground beef patties, packaged in an 80% O<sub>2</sub> and 20% CO<sub>2</sub> gaseous environment, and stored under retail display at 4° for 0, 3, 6, or 9d. Measurements to determine rate and extent of oxidation, rate of discoloration, and sensory characteristics were taken to evaluate the effectiveness of sorghum bran.

Patties containing the highest amount of sorghum bran had the lowest TBARS values over 9 days of storage, lower a\* values, greater amounts of discoloration, darker lean color, and less cook loss ( $P<0.05$ ) than control patties. Patties enhanced with the highest level of sorghum bran had lower beefy/brothy and bloody flavor aromatics, higher sorghum flavor, more bitter and burnt aftertaste, and more sandy/gritty textures ( $P<0.05$ ) when compared to control patties. Patties containing the low amount of

sorghum had lower TBARS values ( $P<0.05$ ), but similar amounts of cook loss as the control patties. Patties containing a low sorghum level, 0.4% sodium phosphates (SP) and 0.3% salt (S) had lower ( $P<0.05$ ) amounts of cook loss when compared to control patties. Patties containing low amounts of sorghum were similar to control patties in terms of redness while the addition of low sorghum, SP, and S decreased ( $P<0.05$ ) the degree of redness. Patties containing low amounts of sorghum bran had similar amounts of discoloration compared to control (CONT) patties. Also, these had less bloody flavor aromatics ( $P<0.05$ ), but were similar in sorghum flavor aromatics and bitter taste when compared to control patties.

The addition of sorghum bran at low levels can retard oxidative rancidity in ground beef patties without causing detrimental color changes and negatively affecting sensory attributes, while patties enhanced with 2% sorghum bran have extensive discoloration and undesirable sensory attributes.

## **ACKNOWLEDGMENTS**

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## **CHAPTER I**

### **INTRODUCTION**

In today's fast paced world, modern conveniences have made their way into the meat industry, and new lines of ready-to-eat (RTE) products have revolutionized the food industry. Considering that the American consumer spends less time preparing foods at home and more money on convenience or RTE foods (Dumagan and Hackett, 1995; Hollingsworth, 1994), a consistent and palatable product is desired. One way the industry has tried to accomplish this is with the introduction of enhanced products. Enhancement refers to the addition of salts, phosphates, seasonings, and other non-meat ingredients to increase the palatability, color, shelf-life, safety, and value of a particular product. Although some apprehension exists with the consumption of enhanced products, Robbins et al. (2003a) found that enhancement significantly increased consumer acceptability. Use of non-meat ingredients have been shown to have multiple functions in meat systems. The functionality of non-meat ingredients may include controlling lipid oxidation, stabilizing color or improving color, limiting microbial spoilage, improving food safety, and improving tenderness.

Recent trends in the food industry have pushed for the development and use of natural antioxidants in food products. Awika (2003) demonstrated the antioxidant properties of sorghum bran. The ultimate goal of any natural antioxidant is to provide a

means of slowing lipid oxidation without causing detrimental damage to the sensory profile or characteristics of the product.

Specifically, the objectives of this research were to: 1) evaluate the effectiveness of sorghum bran to retard lipid oxidation in ground beef patties, 2) identify color deviations contributed by the addition of sorghum bran, and 3) determine the sensory profile of ground beef patties with added sorghum bran and packaged in a modified atmosphere.

## CHAPTER II

### LITERATURE REVIEW

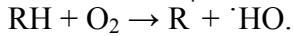
#### **Lipid Oxidation**

Lipid oxidation is a complex but naturally occurring process in food products. In normal physiological conditions, free radical oxygen species are continually stressing animal cells. Although the free radicals can survive independently for a short period of time, having one or more unpaired electrons makes them very unstable. The main radical is the hydroxyl radical. Other radicals include alkoxy, superoxide, hydroxyl, alkyl, and peroxy radicals. These compounds are the result of naturally occurring anaerobic metabolism or phagocytes inactivating invading pathogens (Allen and Hamilton, 1994; Morrissey et al., 1998).

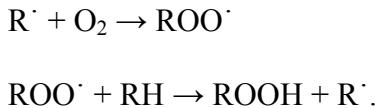
Lipid oxidation can lead to the production of off-flavors and odors, and loss of fat-soluble vitamins and pigments. This can lead to lower consumer acceptability (Morrissey et al., 1994). Due to high levels of prooxidants (myoglobin and hemoglobin) and polyunsaturated fatty acids (PUFAs), muscle tissue is extremely susceptible to lipid oxidation (Kanner, 1994).

The first step in lipid oxidation is commonly referred to as *initiation*. During this step of lipid oxidation, hydrogen is removed from the methylene carbon of a fatty acid. Unsaturated and polyunsaturated fatty acids are more susceptible to this step due to the presence of double bonds. This reaction then leads to the formation of peroxy radicals.

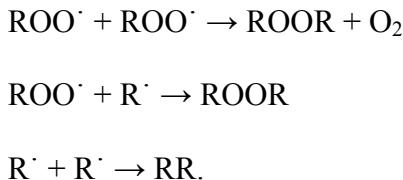
The initiation step is triggered by radicals or other transition metal-oxygen complexes (Cu, Fe). The initiation step is schematically illustrated by (Pearson et al., 1977):



Upon the formation of a peroxy radical, *propagation* of free radical oxidation of fatty acids begins. Once the peroxy radical is formed, a chain reaction occurs because the peroxy radical is more oxidized than the fatty acid or the free radical itself, it will begin to preferentially oxidize other unsaturated and polyunsaturated fatty acids (Buettner, 1993). The propagation of the chain reaction causes the formation of lipid hydroperoxides and further interaction with transition metals occurs forming peroxy and alkoxy radicals (Morrissey et al., 1994). The oxygen present reduces these transition metals thus allowing the ion to be used several times during propagation (Morrissey et al., 1998). The propagation step of lipid oxidation is schematically illustrated as follows (Pearson et al., 1977):



The final step in lipid oxidation is referred to as *termination*. During termination, less reactive aldehydes, alcohols, and hydrocarbons are formed thus stabilizing the system (Fennema, 1996). Termination is schematically illustrated below (Pokorny et al., 2001):



Although alcohols and hydrocarbons are present, aldehyde production is thought to be responsible for the warmed-over flavor (WOF) in beef.

As first described by Tims and Watts (1958), WOF is the term given to the off-flavor that develops in cooked meat products. The WOF is described as off-odors and flavors such as “stale,” “cardboard-like,” “painty,” or “rancid” (Love, 1988; Vega and Brewer, 1994). Numerous studies (Pearson et al., 1977; Igene and Pearson, 1979; and St. Angelo et al., 1987) have attributed WOF to lipid oxidation that occurs in the phospholipid membrane. More specifically, the gas chromatography-olfactometry (GC-O) method has been used to determine the compounds causing WOF. Using the GC-O method, researchers found that hexanal and *trans*-4,5-epoxy-(*E*)-2-decenal are main contributors to WOF. The GC-O method is strictly used to determine compounds that are responsible for the change in aroma (Marsili, 1997; 2002). However, to obtain reliable data on the changes in the aroma profile, quantitative data should be collected.

## **Factors Affecting Lipid Oxidation**

### *Fatty Acid Composition*

The composition of a fatty acid specifically with the positioning and number of double bonds has an effect on the rate of oxidation. Fatty acids in the *cis* arrangement oxidize faster than similar fatty acids in the *trans* arrangement. Most naturally occurring fatty acids are found in the *cis* formation. The number of double bonds and the rate of oxidation have a direct relationship. As the number of double bonds increases, lipid oxidation also increases.

Due to the high concentration of polyunsaturated fatty acids, particularly linoleic (18:1) and arachidonic (20:4), the phospholipid layer of meat tissue is very susceptible to oxidation (Igene and Pearson, 1979). Grinding and chopping of meat is a common practice in today's meat industry. Both of these processes disrupt the tissue layer and expose the phospholipid layer to oxygen and other pro-oxidant ions thus causing an increase in the rate of oxidation (Pearson et al., 1977; Shahidi, 1994).

#### *Oxygen Concentration/Surface Area*

As the name implies, lipid oxidation occurs under aerobic conditions. When oxygen is abundant, the rate of oxidation is independent of oxygen. Under anaerobic conditions, the rate of oxygen is directly proportional to the amount of oxygen. Even when the surface area of food is small, in the presence of an oxidizing agent and a high oxygen concentration, oxidation will begin. Like oxygen, surface area and the rate of oxidation is directly proportional (Shahidi, 1994; Pokorny et al., 2001).

#### *Temperature*

Temperature has a direct relationship with oxidation, and temperature and oxygen concentration are indirectly related. As temperature increases, changes in oxygen are less influential on oxidation due to oxygens's decreased solubility in water and in lipids. Even though solubility is decreased as temperature decreases, a slight increase in temperature (10°C) doubles the rate of reaction of oxygen with lipid layers, thus increasing the rate of oxidation (Allen and Hamilton, 1994; Fennema, 1996). Once heat is introduced to the product, either through cooking or temperature abuse, cell structure is compromised, enzymes are inactivated, and oxygen is released from

oxymyoglobin. The release of oxygen then causes the production of hydrogen peroxide ( $H_2O_2$ ). The production of  $H_2O_2$  then disrupts the porphyrin structure thus releasing free iron (Kanner, 1994).

#### *Presence of Pro-Oxidants*

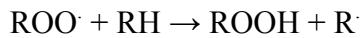
The presence of pro-oxidants (transition metals) increases the rate at which oxidation occurs due to two or more valence shells (needed to bond with oxygen) and a high oxygen-reduction rate, transition metals are naturally occurring elements in meat. The mere presence of 0.02 ppm copper or 0.5-1 ppm iron can significantly increase lipid oxidation (Allen and Hamilton, 1994; Fennema, 1996). Other prooxidants present in meat are myoglobin and non-heme iron. The production of  $H_2O_2$  activates myoglobin thus producing an unstable ferryl or oxo-ferryl radical. The production of these radicals causes protein cross-linking and lipid oxidation (Kanner, 1994).

Although two-thirds of the iron is found in hemoglobin, a small portion is contained by myoglobin. This iron, ferritin, seemed to be chelated to small molecules. Although the exact chemical nature is not fully understood, it is believed that the ions might be attached to phosphate esters, organic acids, and membrane lipids. Ferritin is capable of degrading both  $H_2O_2$  and ROOH to form free radicals, but its main function within muscle tissue is to store free iron. Iron released from ferritin can be synthesized by the mitochondria to form hemoproteins. Kanner and Doll (1991) found that over storage time in turkey meat, ferritin lost its ability to retain iron thus causing the initiation stage of lipid oxidation.

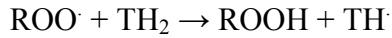
## Antioxidants

Synthesized antioxidants have been used over 50 years to eliminate or delay lipid oxidation (Cuvelier et al., 1994). With the need to extend shelf-life and insure a consistent product, antioxidants are widely used in the meat industry to control the effects of lipid oxidation. A trend within the meat industry is to utilize natural antioxidants such as rosemary as opposed to synthetic compounds such as BHA and BHT.

Typically, antioxidants can be classified into two categories depending on mode of action. Antioxidants such as tocopherols are *mixed free radical acceptors*, while antioxidants such as citric and phosphoric acid are *metal chelating agents*. Tocopherols are the most widely distributed antioxidants in nature. Tocopherols, like other phenolic compounds, have excellent antioxidant properties due to their benzene ring structure. This structure and corresponding phenolic group are responsible for trapping free radicals. The following reaction schematically depicts tocopherol's mode of action:

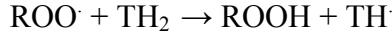


Tocopherol's ( $\text{TH}_2$ ) reaction with peroxy radicals is as follows:

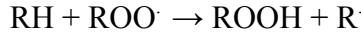


Due to the delocalization of the unpaired electrons, the  $\alpha$ -tocopherol radical ( $\text{TH}^\cdot$ ) is relatively stable as compared to the peroxy radical. Typically, low vitamin E levels is desired in a food system as compared to a high vitamin activity because of possible pro-oxidant characteristics. In such a case where tocopherol levels are significantly lower

than lipid concentration, progressive oxidation depletes tocopherol and leaves an accumulation of ROOH. The accumulation of ROOH reverses the reaction,

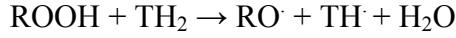


which leads to the propagation reaction



A high concentration of  $\alpha$ -tocopherol can cause the following pro-oxidant reaction

(Fenema, 1996)



Typically, metal chelating agents chelate or tie up metal ion catalysts that are responsible for propagating the lipid oxidation reaction. In most applications, metal chelating agents are used with traditional antioxidants due the synergistic effect that is exhibited. For the most part, these transition metals are reactive due to two or more valence orbitals that are available for free radicals to attach. Phosphates and citric acid are examples of common metal chelating agents (Fenema, 1996).

### **Meat Color**

Meat color is a major issue that is associated consumer acceptability (Cassens et al., 1988). The color of the product is often the primary factor that determines freshness by consumers (Kropf, 1980). In the case of beef, a bright, cherry red color is considered desirable by consumers. Due to the elevated myoglobin content in beef tissue, color stability is more of a problem than that of poultry products (Stubbs, 2002). The bright cherry red color considered desirable by the consumer is called oxymyoglobin. As refrigerated storage progresses, this oxymyoglobin is converted to an oxidized

metmyoglobin state. Metmyoglobin is responsible for the brown color often seen in meat products. Many factors can affect color and therefore consumer acceptability. These factors include muscle pH, age of animal and lipid oxidation.

The shelf-life of a given product is described as that period of time that a consumer finds a product appealing, edible, and wholesome. The goal of any processor or retailer is to extend shelf-life and stabilize color. The most common natural antioxidant used in shelf-life extension has been vitamin E. Dietary vitamin E supplementation improved the color and lipid oxidative stability of fresh, frozen and vacuum packaged beef (Lynch et al., 1999).

Vitamin E has been both supplemented to a live animal and injected into the final product. Zerby et al. (1999) reported that the fresh meat from cattle that had been supplemented with vitamin E maintained their color longer than fresh meat from unsupplemented animals. Sherbeck et al. (1995) found that dietary supplementation slowed the rate of discoloration during retail storage. Robbins et al. (2003b) noted that vitamin E supplementation decreased brown color intensity in three muscle groups from the strip loin, clod, and deep *Semimembranosus* ( $P<0.05$ ), and increased  $a^*$  values (redness) more in the supplemented beef. Moreover, significant differences ( $P<0.05$ ) in  $a^*$  values were reported with all three muscle groups from 0d to 3d. This difference is possibly explained by the addition of salt which is a known prooxidant. Robbins et al. (2003b) recommended that vitamin E supplementation may stabilize color of enhanced steaks during the initial 1d-2d of retail display.

It is accepted that 50% oxymyoglobin is the minimum acceptability threshold at which panelists give acceptability of a certain cuts in terms of color. Using this as a benchmark, Chan et al. (1996) found that *M. Psoas major* (PM), *M. Gluteus medius* (GM), and *M. Longissimus lumborum* (LL) from unsupplemented cattle had a shelf-life of 2d, 4.5d, and 6d, respectively. Vitamin E supplementation extended the acceptable shelf life of the corresponding muscles by 4, 3.3, and 4.6 days. The addition of vitamin E through supplemental feeding and injection into whole muscle cuts has proven to decrease TBARS values and extend shelf-life in beef steaks.

### **Antimicrobial Effects**

Microbial contamination of meat products is an important factor associated with meat quality (Yin and Cheng, 2003; Cutter, 2000; Nissen et al., 2000; and Dorsa et al., 1998). Considering the foodborne implications that *Salmonella typhimurium*, *E. coli O157:H7*, and *Listeria monocytogenes* pose to the meat industry, these microorganisms also increase oxidation of oxymyoglobin which leads to a shorter shelf-life. In most cases, the addition of natural antioxidants is thought to delay lipid oxidation, but few mention possible antimicrobial effects. Chan et al. (1996) did report that vitamin E did not affect microbial populations. It is generally accepted in the cereal science realm that phenolics located in the outer layer of grain kernels provide a natural defense against insects and disease. Considering the insect and disease control provided by these natural phenolics, and the data reported by Yin and Cheng (2003), it is possible that the addition of sorghum extracts to meat products may provide both an antioxidant component as well as an antimicrobial component.

Yin and Cheng (2003) found that two lipophilic organosulfur compounds, diallyl sulfide (DAS) and diallyl disulfide (DADS), and two hydrophilic organosulfur compounds *s*-ethyl cysteine (SEC) and *n*-acetyl cysteine (NAC) in garlic protected against lipid oxidation. Also, DAS and DADS have been reported to have antimicrobial activities against *Helicobacter pylori*, *E. coli*, meticillin-resistant *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Candida* spp., and *Aspergillus* spp. (Yin and Cheng, 2003; Tsao and Yin, 2001a, 2001b; Ross et al. 2001; and O’Gara et al., 2000). The need for a natural food additive is critical in consumer perception and for potential health benefits. Because food safety and lipid oxidation are both major concerns for the meat industry, a natural additive that seems to suppress both lipid oxidation and microbial growth would be beneficial to a host of prepared foods.

### Tenderness

It is generally accepted that beef tenderness is improved postmortem by holding at refrigerated temperatures. This increase in tenderness is thought to involve the degradation of myofibrillar and cytoskeletal proteins. Although antioxidants have been generally accepted as a means to stop or slow lipid oxidation, recent research has shown that lipid oxidation plays a role in postmortem aging by decreasing desmin and troponin-T degradation and slowing calpastatin inactivation thus decreasing tenderness. Calpains ( $\mu$ -calpain and m-calpain) are autolytic, proteolytic enzymes that are housed in the cytosol of the cell. Both  $\mu$ -calpain and m-calpain are responsible for postmortem tenderness changes within the muscle tissue. Rowe et al. (2003b) found that oxidative conditions in meat decreased m-calpain activity and thus decreased tenderness early

postmortem (PM). In order to achieve oxidative conditions, irradiation (6.4 kGy) was applied to a portion of the loins ( $n = 20$ ). At 1, 3, 7, and 14 d post-irradiation, WBS values were higher in irradiated samples as compared to non-irradiated samples. Western blots showed m-calpain from irradiated meat was less autolyzed compared to m-calpain from non-irradiated meat. Maddock et al. (2003) also noted that oxidative conditions in early PM muscle slowed the rate of inactivation of calpastatin. Rowe et al. (2003a) reported carbonyl concentrations in irradiated samples was significantly higher than that of non-irradiated samples ( $P < 0.05$ ). Protein carbonyl concentrations were significantly and positively correlated to Warner-Bratzler shear force values (WBS).

Based on previous studies, it is hypothesized that incorporating strong antioxidants into muscle tissue improves tenderness postmortem indirectly by reducing oxidative conditions within the muscle. This antioxidative state is more favorable for the proteolytic enzymes (calpains) and for calpastatin inactivity thus allowing for desmin and troponin-T degradation.

### **Sorghum Bran**

Recent work by Awika (2003) examined the antioxidant properties of sorghum. Awika (2003) reported that two major antioxidative components (tannins and anthocyanins) are found in sorghum. Considering that both lipophilic and hydrophilic antioxidant compounds exist in sorghum, the combination of both components could act synergistically to inhibit lipid oxidation more than conventional antioxidants. In short, anthocyanins could possibly inhibit autoxidation processes that are water-based such as

myoglobin and tannins could inhibit lipid oxidation of the fat-soluble portion or the phospholipid layer of foods.

Because of their high level of phenolic compounds and the desire to use natural additives, plants and plant compounds have been the subject of more intense research due to their potential benefits as antioxidants. In sorghum, the phenolic compounds are generally located in the outer layers of the kernel (Awika, 2003). Awika (2000) found that the antioxidant properties of sorghum are similar to those of berries and also can provide nutraceutical benefits. Due to its storage stability and high grain yield, sorghum could offer a cost effective source of phenols (Awika, 2003).

The major phenolic components in sorghum are condensed tannins, which are partially soluble in water. Previous research (Hagerman et al., 1998; Bors et al., 2000) has indicated that they have more antioxidant properties when compared to basic phenols. Hagerman et al. (1998) observed tannins to be 15-30 times more powerful than simple phenols in terms of antioxidant properties, while Bors et al. (2000) found that condensed and hydrolysable tannins possessed a high radical scavenging potential. The antioxidative activity of tannins is believed to be two-fold; i) they may chelate transition metals (Bors et al., 1990; Carbonaro et al., 1996) and; ii) they may act as scavenger antioxidants by donating an electron to free radicals and thus suppressing the highly reactive free radical by delocalizing the unpaired electron on the phenolic ring (Husain et al., 1987; Chimi et al., 1991).

Hagerman et al. (1998) reports that tannins, unlike simple phenols, are unable to act as pro-oxidants. Bors et al. (2000) found similar results and attributed this to the fact

that procyanidin and gallate *o*-quinone are capable of producing oligomeric compounds. This coupling reaction allows for the retention of hydroxy groups which in turn increases their anti-oxidative capacity.

Anthocyanins are naturally occurring, water-soluble compounds found in plants. Anthocyanins exist in nature as natural colorants, and their antioxidative ability has been documented (Satue-Gracia et al., 1997; Wang et al., 1997; Lapidot et al., 1999; Saint-Cricq de Gaulejac et al., 1999; Awika 2000, 2003). Anthocyanins are made up of an aglycone base on the the flavylium nucleus, a group of sugars, and often a group of acyl acids (Francis, 1989; Wang et al., 1997). While only six aglycons have been identified as natural colorants, the aglycons luteolinidin and apigenin, that are abundant in sorghum, are not major food colorants (Francis, 1989; Awika, 2003). The common anthocyanins are either 3- or 3,5-glycosylated (Awika, 2003). Fukumoto and Mazza (2000) reported that cyanidin 3-glucoside displayed twice the radical scavenging activity in vitro as that of commercially available antioxidants.

Numerous therapeutic benefits have been associated with anthocyanins such as being vasoprotective and anti-inflammatory (Liotti et al., 1976), anti-carcinogenic and chemoprotective (Karaivanova et al., 1990), and having antineoplastic properties (Kamei et al., 1995)

The actual means of antioxidant activity of anthocyanins and aglycons differ from one author to another. Wang et al. (1997) found that some glucosides have better antioxidant activity than aglycons, while Tsuda et al. (1994) found that aglycons have

better antioxidant activity than glucosides. Since different systems and catalyst were used by different authors, it is possible to have conflicting results.

Anthocyanins levels in plants differ from one author to another due to a difference in standards. Typically, values of 3.9-15.5 mg/g have been reported for blackberries, with cranberries having 3.5 mg/g, raspberries with 0.9-19.5 mg/g (Mazza and Miniati, 1993), red cabbage having 1.6 mg/g (Timberlake and Henry, 1988), blueberries with 1.2-23.6 mg/g (Mazza and Miniati, 1993; Prior et al., 1998), black sorghum containing 4.5-11 mg/g, red sorghum with 3.6 mg/g, and brown sorghum having 1.8-4.3 mg/g (Awika, 2003) as reported on a dry weight basis. An anthocyanin level of 3.7 mg/g for black sorghum has also been reported (Gous, 1989). The differences between black sorghum values can probably be attributed to different extraction methods (Awika, 2003).

Luteolinidin and apigeninidin (Grous, 1989; Awika, 2003) along with their glycosylated forms (Nip and Burns, 1969; 1971; Francis, 1989) have been identified as the major anthocyanidins in black sorghum. Collectively, these anthocyanidins are commonly referred to as 3-deoxyanthocyanidins. Although other antioxidant compounds (catechin, epicatechin, epicatechin gallate, proyandin B1, and naringenin) are present in sorghum, the 3-deoxyanthocyanidins are the major phenolic extract and therefore contribute the greatest in terms of antioxidant activity. Awika (2003) found similar antioxidant activities between the 3-deoxyanthocyanidins and fruit anthocyanins (peonidin, pelarginidin, and cyanidin). The antioxidant activity of cyanidin is considerably greater than that of traditional commercial sources such as ascorbic acid or

$\alpha$ -tocopherol (Fukumoto and Mazza, 2000). Currently there are no published data comparing the antioxidant activity of luteolinidin and apigeninidin with commercial antioxidants.

One concern with the use of anthocyanins as either colorants or antioxidants is the stability of the compound. As compared with other food colorants, anthocyanins are sensitive to light, pH changes, and the presence of sulfur dioxide which is a common food preservative (Harborne, 1988). However, 3-deoxyanthocyanidins have been proven to be relatively stable under acidic conditions (Sweeny and Iacobucci, 1981). The 3-deoxyanthocyanidins are found at low levels in food plants (Clifford, 2000) when compared to the elevated levels in sorghum (Nip and Burns, 1971; Gous, 1989), but in particular in black sorghum (Awika, 2003). The stability of 3-deoxyanthocyanidins and the possible health benefits could provide a means of slowing lipid oxidation.

## **CHAPTER III**

### **MATERIAL AND METHODS**

Vacuum-packaged USDA Select beef bottom or outside round flats (Meat Buyers Guide #171B (*M. Gluteobiceps*) subprimals were purchased from a commercial processor on each of 3 days. The subprimals were aged for 5 days at 2°C at the Texas A&M University Rosenthal Meat Science and Technology Center. Subprimals were processed on three different days and 3 subprimals within a treatment subclass were used within a processing day. Bottom rounds were individually trimmed of all visible external fat, ground (model 4046, Hobart Manufacturing Co., Troy, OH) through a 1.27 cm coarse ground plate and subjected to one of the following predetermined treatments: i) control, ii) 0.4% sodium phosphates and 0.3% salt, iii) 0.25% sorghum bran, iv) 2.0% sorghum bran, v) 0.25% sorghum bran, 0.4% sodium phosphates, and vi) 0.3% salt 2.0% sorghum bran, 0.4% sodium phosphates, and 0.3% salt. A brown (tannin) sorghum (CSC3xR28) grown in College Station in 2001 was decorticated using a PRL dehuller (Nutama Machine Co., Saskatoon, Canada) to yield 12% bran. The bran particle size was reduced through a pin mill to pass through a 100 mesh. Specifically, the bran contained 146.9 mg/g of tannins (catechin equivalents), 2.9 mg/g of anthocyanins, and 54.9 mg/g of phenols (gallic acid equivalents).

Mixing was standardized for all treatments at a predetermined time of 1 min. After mixing, the mixture was ground again through a 0.32 cm fine grind plate. These sorghum levels were predetermined by preliminary studies to represent a low (0.25%) and a very high (2.0%) level of use. The *M. Gluteobiceps* was selected as the

experimental unit as color stability and discoloration are major impediments in the shelf-life of retail cuts from this muscle. The high-oxygen modified packaging system induces the development of lipid oxidation and if differences in rate of lipid oxidation due to treatment level are found, the antioxidant properties of the sorghum bran would be evaluated.

From each bottom round, a total of six, 226 g patties were formed using a standard patty mold (Tupperware™ Hamburger Press). After patty formation, each patty was randomly assigned to a storage day (0, 3, 6, 9). Two patties within treatment and storage time were individually packaged in a modified atmosphere (Ross InPack, Jr., Model S3180, Ross Industires, Inc., Midland, Virginia) by placing the patties in barrier foam trays CS977 (Cryovac-Sealed Air, Duncan, SC, OTR-Max 0.1 cc/tray/24 hrs) and applying peelable lidstock film (Lid 1050 Cryovac-Sealed Air, Duncan, SC, OTR-<25 cc/24hr.,m<sup>2</sup>) as the top film. The atmosphere within a package consisted of 80% oxygen and 20% carbon dioxide. One patty was designated for color and chemical analysis, while the other patty was used for sensory analysis. To avoid positional effects in the retail case, the packages were randomly assigned location across treatment and storage times and stored in a traditional coffin case (Model DM8-8398, Tyler Refrigeration Corporation, Niles, Michigan) at 4°C. At the desired storage day, color, metmyoglobin, pH, headspace measurements, and flavor and texture descriptive attribute sensory evaluation was conducted.

Color was examined both instrumentally and with a trained sensory panel. Objective color was measured using a Minolta Colorimeter (CR-300, Minolta Co.,

Ramsey, NJ) which was calibrated daily to insure consistency among days. Each reading consisted of CIE L\*, a\*, and b\* color space values. Three different readings were randomly taken from each patty along the exterior surface. The average of the three readings was considered representative of a given patty. Color also was measured by a six-member, trained color sensory panel as defined by AMSA (1991, 1995). Each panelist used an eight-point scale for ground meat color (8=light grayish-red; 1=very dark red) and discoloration (8=light grayish-red; 1=very dark red). Panelists were required to attend training sessions to become familiar with and anchor themselves to the scale that would be used in this study. To insure consistency between training and actual testing, the same treatments were applied to training patties. To further insure consistency, panelist scores at the beginning of each session were standardized using a warm-up sample and anchored with visual color cards.

Each morning, panelists would evaluate color outside the package. This was to simulate conditions in which a consumer might buy the patties. After evaluating subjective color inside the package, headspace measurement was evaluated using a gas analyzer (PBI Dansensor, Model-Checkpoint, Ringsted, Denmark). A needle (similar to a hypodermic needle) was inserted approximately 3.5 cm through the top film. The needle was connected to the gas analyzer, and 15ml of gas from the headspace was removed to represent the gas present for that particular package. The measurement was reported as percent oxygen and percent carbon dioxide. Upon the completion of headspace analysis, the film was removed from the tray, and the patties were allowed to “bloom” or oxygentate for approximately 20 min. Objective color measurements were

then taken using a Minolta Colorimeter. Once objective color measurement was completed, the pH of each patty was determined with a penetrating pH probe (pH-Star CPU, SFK Technologies, Denmark) by placing the probe approximately 1 cm deep into the patty at two random locations. The average of the two pH readings represented the pH for that patty. Finally, subjective color was measured with the film peeled back to represent what pattie appearance prior to prepartation.

Patties evaluated for subjective color then were used for TBARS evaluation and metmyoglobin content. One patty per storage time and treatment was used for TBARS evaluation and metmyoglobin content. Two 60g samples were removed from each patty and blended with 90 ml of distilled water and 30 ml of a 0.5% solution of propyl gallate and ethylenediamine tetraacetic acid for 2 min using a Waring® commercial blender. After blending was completed, 30 g of the slurry was weighed into a 250 ml beaker. The slurry then was transferred to a 500 ml Kjeldahl flask, and all contents quantitatively rinsed into the flask using 77.5 ml of 50°C distilled water. Five to six boiling chips were added to the Kjeldahl flask along with 2.5 ml of a 4 N HCl solution. To reduce the incidence of foaming, the neck of the Kjeldahl flask was sprayed with a generous amount of 316 Silicone Release Spray (Dow Corning®, Midland, MI). The Kjeldahl flasks then were placed on the distillation unit and distilled until 50 ml of distillate was collected. Once the distillate was cooled, 5 ml of the distillate along with 5 ml of a 0.02 M TBA solution were added to a test tube and boiled for 35 min to develop the color. After color development was complete, the test tubes were cooled for 10 min and placed in a standard 4.5 ml cuvette (VWR, West Chester, PA.). Absorbance was measured at

530 nm using a DU-7 spectrophotometer (Beckman Instruments Inc., Fulerton, CA).

The mg of malonaldehyde/1000g of sample was determined using procedures described by Tarladgis et al. (1960) as modified by Rhee (1978).

Total metmyoglobin amount was determined using the protocol outlined by Krzywicki (1982) as modified by Armstrong (2002). Exposure to light and elevated temperatures was avoided at all times to reduce further oxidation of the pigment by covering samples with a dark cooler coat, working in a cooler (4°C), and placing samples on ice at 0°C. A 40 mM phosphate buffer solution containing dibasic sodium phosphate and distilled water was used for extraction of metmyoglobin. The pH of the buffer was adjusted to 6.8 using 1 M HCl. A 4.0 g sample was randomly taken from the surface (approximately 3mm deep) of the patty. The meat sample, along with 36 ml of phosphate buffer, were blended in a Waring® Commerical Blender until the slurry was homogenized. The homogenate then was placed in a 50 ml centrifuge tube and placed on ice and covered for a minimum of 1 h to allow for pigment extraction. After extraction, the slurry was centrifuged (Beckman-Coulter, Avanti J-25; Palo Alto, CA) at 30,000 g for 60 min at 5°C. After centrifugation was complete, the supernatant was placed on ice and filtered using filter paper (Fisher Scienctific, P5, Porosity: Medium; Flow Rate: Slow, Pittsburgh, PA). The filtered solution was placed in a 4.5 ml cuvette (VWR, West Chester, PA.) and read at 572, 565, 545, 525 nm in a DU-7 spectrophotometer (Beckman Instruments Inc., Fulerton, CA). The following equation was used to calculate total metmyoglobin concentration:

Metmyoglobin content =  $-2.514 R_1 + 0.777 R_2 + 0.800 R_3 + 1.098$  where  $R_1$ ,  $R_2$ ,  $R_3$  were absorbance ratios  $A^{572}/A^{525}$ ,  $A^{565}/A^{525}$ ,  $A^{545}/A^{525}$ , respectively.

The second patty was used for sensory evaluation. Sensory patties were cooked to an internal temperature of 70°C on an electrical skillet (Westbend Co., West Bend, WI; 176°C cooking temperature). Internal temperature was monitored with a digital thermometer (Omega Engineering, model HH501BT type T, Stamford, CT) with a type T thermocouple (Omega Engineering, model TMQSS, Stamford, CT). Once the internal temperature reached 35°C, the patty was turned until the final temperature was obtained. The patty was then cut into 2.54 cm<sup>2</sup> cubes and served warm to the panelists, preferably 5 minutes post cooking. The panelists for the study were selected and trained according to the guidelines and procedures outlined by Meilgaard et al. (1991). The trained panel consisted of a 5-8 member trained flavor and texture descriptive attribute sensory panelists based on the procedures of the AMSA (1995) and Meilgaard et al. (1991). In order to reduce bias among the panelists, panelists were seated in individual booths equipped with red theater gel lights and partitioned to reduce collaboration between panelists (Meilgaard et al. 1991). Each panelist was served double distilled, deionized water, saltless saltine crackers, and ricotta cheese to cleanse their pallets. Samples were served in a random order and identified using three-digit codes.

Since no other known sensory work has been done on sorghum, ballot development sessions were conducted to determine which attributes would be evaluated. During these sessions, panelists evaluated samples and identified flavors and attributes characteristic to sorghum bran and these were added to the ballot. Since off-flavors and

by-products caused by lipid oxidation would be evaluated, the lexicon outlined by Johnsen and Civille (1986) also was used in ballot development. Specific flavor attributes of beefy/brothy, beef fat, serumy/bloody, cardboardy, painty, fishy, livery, and soured; basic tastes of salt, sweet sour and bitter; aftertastes of astringent, fat mouthfeel, bitter, browned/burnt, sour and sweet; afterfeeling factors of lip burn and metallic; textures of springiness, hardness, and sandy/gritty; and mouthfeels of metallic and astringent were evaluated using the Spectrum Universal scale (0=none and 15=extremely intense).

On each evaluation day, panelists were served 18 samples over a two and one-half hour span. Panelists were given five minutes between samples to cleanse their palettes and to remove any residual flavor from previous samples. After the sixth and twelfth samples, the panelists were given a fifteen minute break for further palate cleansing and to allow for taste bud recovery.

### **Statistical Analysis**

Data were analyzed by analysis of variance (ANOVA) using the general linear model (GLM) procedure of SAS (Version 9.0, Cary, NC, 2002) with a predetermined significance level of  $P \leq 0.05$ . Main effects of treatment and storage time and their two-way interactions were included in the initial model with processing day included as a block. The final models included only main effects and significant interactions ( $P < 0.05$ ). When significance was indicated by ANOVA, mean separations were performed using the PDIF $F$  function of SAS at a predetermined value of  $P < 0.05$ . For color and sensory data, panelist by treatment interactions were generated to evaluate the

effectiveness of each panel. The only significant panelist by treatment interaction was observed for the liver flavor aromatic ( $P=0.0454$ ). The error term for the whole plot was the rep by treatment while the residual error served as the error term the split plot.

## CHAPTER IV

### RESULTS AND DISCUSSION

#### **Chemical Analysis**

##### *Metmyoglobin Content and TBARS Value*

Treatment did not affect the amount of metmyoglobin in modified atmosphere packaged ground beef bottom round patties; however, metmyoglobin increased ( $P=0.009$ ) in ground beef patties with storage (Table 1). Ground beef patties stored for 0 days had the lowest amount of metmyoglobin and subsequent storage time of 3, 6, and 9 days resulted in increased metmyoglobin.

To understand the effects of sorghum bran addition and storage day on lipid oxidation in ground beef patties, TBARS values (mg malonaldehyde/kg) were determined (Table 1). Treatment, storage day and their interaction affected ground beef patty TBARS values ( $P=0.0001$ ,  $0.0001$ , and  $0.0001$ , respectively) (Table 1 and Figure 1). In general, the addition of either sodium phosphate (**SP**) and salt (**S**) or sorghum bran reduced TBARS values. TBARS values increased with storage however, the interaction of treatment by storage day showed that some non-meat ingredient treatments retarded TBARS values with storage. All TBARS values were close to 0 across treatments in bottom round ground beef patties at 0 days of storage. These values were expected as patties were from raw material that had been stored under refrigeration ( $2^{\circ}\text{C}$ ) in vacuum-packaging for only 5 days. After 0 days of storage, ground beef TBARS values increased rapidly in CONT patties, particularly after 6 and 9 days of storage, as

Table 1. Least squares means for main effects for metmyoglobin, TBARS Value, pH, O<sub>2</sub>, CO<sub>2</sub>, cook loss, and cook time.

Effect	Met-myoglobin, mg/g	TBARS Value	pH	O <sub>2</sub>	CO <sub>2</sub>	Cook Loss, %	Cook Time, min
<u>Treatment<sup>b</sup></u>	0.56 <sup>a</sup>	0.0006 <sup>a</sup>	0.07 <sup>a</sup>	0.0176 <sup>a</sup>	0.557 <sup>a</sup>	0.0003 <sup>a</sup>	0.13 <sup>a</sup>
Control	0.25	1.88 <sup>f</sup>	5.74	81.50 <sup>c</sup>	19.89	25.48 <sup>e</sup>	24.77
2	0.26	0.76 <sup>e</sup>	5.81	82.42 <sup>d</sup>	19.79	24.28 <sup>de</sup>	28.28
3	0.38	0.59 <sup>de</sup>	5.74	82.59 <sup>d</sup>	20.09	25.57 <sup>e</sup>	29.61
4	0.39	0.39 <sup>cd</sup>	5.77	82.85 <sup>d</sup>	19.82	22.38 <sup>cd</sup>	26.11
5	0.41	0.50 <sup>cde</sup>	5.78	82.62 <sup>d</sup>	19.78	22.50 <sup>cd</sup>	25.94
6	0.30	0.28 <sup>c</sup>	5.80	82.47 <sup>d</sup>	19.76	21.14 <sup>c</sup>	26.83
<u>Storage Day</u>	0.0004 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.3413 <sup>a</sup>	0.20 <sup>a</sup>
0	0.12 <sup>c</sup>	0.07 <sup>c</sup>	5.74 <sup>c</sup>	81.62 <sup>c</sup>	22.20 <sup>e</sup>	23.23	25.98
3	0.49 <sup>e</sup>	0.46 <sup>d</sup>	5.78 <sup>d</sup>	83.03 <sup>e</sup>	19.18 <sup>d</sup>	----	----
6	0.30 <sup>d</sup>	0.81 <sup>e</sup>	5.77 <sup>d</sup>	82.21 <sup>d</sup>	18.89 <sup>c</sup>	23.88	27.87
9	0.42 <sup>de</sup>	1.59 <sup>f</sup>	5.80 <sup>e</sup>	82.78 <sup>e</sup>	19.15 <sup>d</sup>	----	----
Root Mean Square Error	0.478	0.619	0.036	1.298	0.508	3.516	7.666

<sup>a</sup>P-value from analysis of variance tables.

<sup>b</sup>Treatments: Control= 0 Sorghum Bran, 0 Phosphates, and 0 Salt; Trt 2= 0.4% Phosphates and 0.3% Salt; Trt 3= 0.25% Sorghum Bran; Trt 4= 2.0% Sorghum Bran; Trt 5= 0.25% Sorghum Bran, 0.4% Phosphates, 0.3% Salt; Trt 6= 2.0% Sorghum Bran, 0.4% Phosphates and 0.3% Salt.

<sup>cde</sup>Mean values within a column and followed by the same letter are not significantly different ( $P > 0.05$ ).

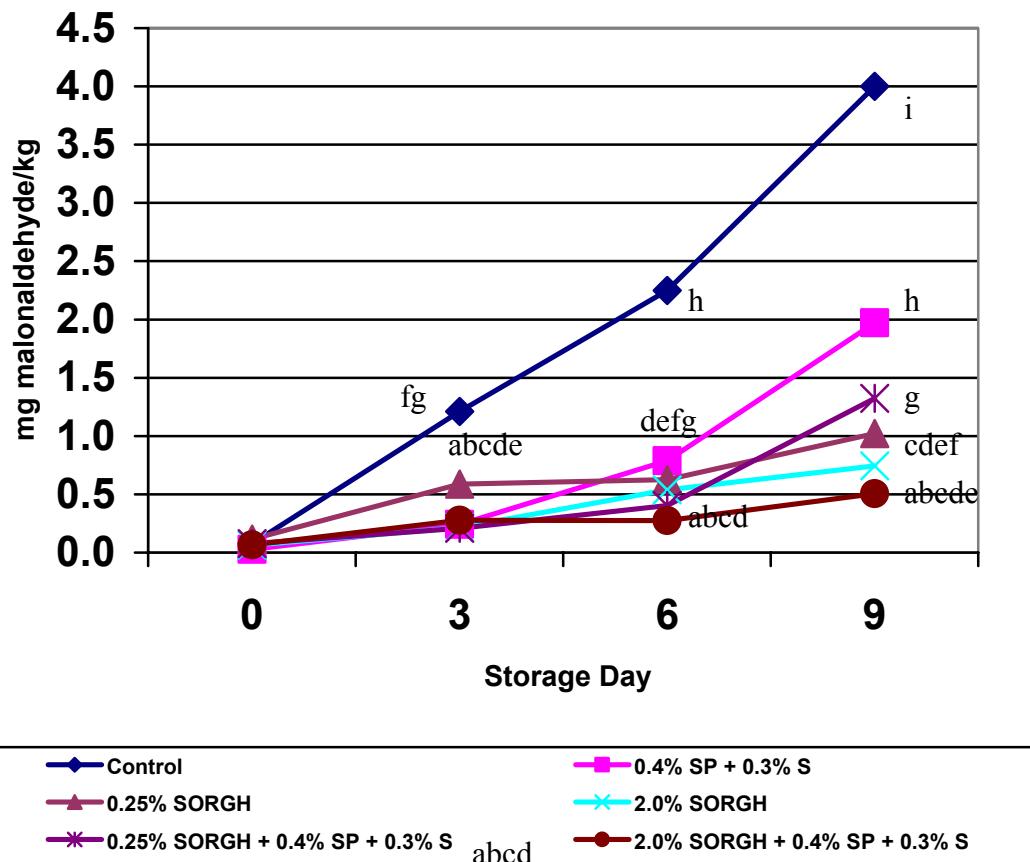


Fig. 1- Least squared means for treatment by storage day interaction for TBARS values (mg malonaldehyde/kg).

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value <0.0001 from Analysis of Variance Table

Residual Mean Square Error = 0.62

expected. Ground beef patties are very susceptible to lipid oxidation. As previously mentioned, factors such as myoglobin content and processing are major issues in preventing lipid oxidation. In this study, the bottom round muscle was chosen as the experimental unit due to its elevated iron content. A higher myoglobin and non-heme iron content contributes to the onset of lipid oxidation which lowers the shelf-life of a beef cut (Kanner, 1994). The higher myoglobin content also leads to inconsistent color within the individual muscle and ultimately to an undesirable product that is unstable during storage. McKenna (2003) found significant differences ( $P<0.05$ ) between the myoglobin content of the *M. Gluteobiceps* (5.41 mg/g; bottom round flat) as compared to the *M. Longissimus lumborum* (4.62 mg/g; strip loin) and the *M. Longissimus thoracis* (4.48 mg/g; ribeye roll). Processing also will increase TBARS values. Researchers have attributed grinding to oxidized flavors associated with lipid oxidation (Greene, 1971). Grinding increases the muscle surface area exposed to oxygen. This exposure to oxygen, at high levels, can trigger the propagation of free radicals which ultimately leads to the formation of off-flavors. Secondly, the lysing of membranes in grinding increases lipid oxidation as the phospholipid bi-layer of the cell membrane has a greater opportunity to be exposed to oxygen. Phospholipids have been shown to be more susceptible to lipid oxidation than triacylglycerols within a cell (Kanner, 1994). These water-soluble compounds contain prooxidants that lead to propagation. Additionally, these patties were stored in a high oxygen environment and high oxygen concentrations have been shown to increase the rate of lipid oxidation (Shahidi, 1994; Pokorny et al., 2001). The CONT patties had the highest TBARS values at 3d, 6d, and 9d. At 3d, the

TBARS values for the CONT patties were greater than 1mg malonaldehyde/kg. A TBARS value of 1 is considered notably oxidized in fresh meat. At 9d, the TBARS value was 4.00 would be considered extremely oxidized.

The addition of SP and S reduced TBARS values in bottom round ground beef patties during 3d of storage as compared to CONT patties. Patties containing SP and S had lower TBARS values than CONT patties and these values were similar to other patties containing non-meat ingredients. However, after 9 days of refrigerated storage in an 80% oxygen environment, TBARS values were approaching 2 mg malonaldehyde/kg in the SP and S patties. These values were higher than patties with other treatments, but these were still two units lower than in the control patties. This indicates that lipid oxidation progressed slowly in ground beef patties containing SP and S from 0 to 6 days but after 6 days of storage, lipid oxidation was progressed more rapidly.

Salt is added to meat systems to improve flavor (Mandigo et al., 1973), but its addition can increase lipid oxidation (Schwartz and Mandigo, 1976; Neer and Mandigo, 1977; Lamkey et al., 1986). One advantage to adding alkaline phosphates to a product are their inherent antioxidant properties (Farr and May, 1970; Schwartz and Mandigo, 1976). Phosphates tie up free metal ions (Fe and Cu) that are inherently present in meat (Fennema, 1996). Since a synergistic effect occurs between salt and phosphates in terms of binding and extraction of salt-soluble muscle proteins, the two are most often used in combination. Phosphates, when ionized, are negatively charged ionic species having an alkaline pH. As a result, the addition of a small amounts of phosphates can substantially increase the pH of the product. Yasosky et al. (1984) attributes the increase

in pH to slowing lipid oxidation by slowing metal catalysis. Our findings show that salt and sodium phosphates reduced the development of lipid oxidation for up to six days and that lipid oxidation proceeded at a slower rate than in CONT patties.

The addition of sorghum bran at 0.25% in ground beef patties resulted in lower TBARS values when compared to controls at storage days 3, 6, and 9. Increased addition of sorghum bran to 2.0% resulted in slightly lower TBARS values during storage, especially after 6 days of storage; although differences were not statistically different. It is evident that sorghum bran provided a means to slow or limit lipid oxidation development.

The addition of sorghum bran in combination with SP and S in ground beef patties did not affect TBARS values when compared to patties containing sorghum alone, except after nine days of storage. After nine days of storage for treated patties, the patties containing S, SP and 0.25% sorghum bran had slightly higher TBARS values than patties containing S, SP and 2% sorghum bran.

Our hypothesis was that sorghum bran that contains natural antioxidants would suppress metmyoglobin formation and reduce lipid oxidation. Hutchins et al. (1967) quantified the relationship between lipid oxidation and metmyoglobin formation and found a fairly high correlation ( $r^2=0.73$ ). The prevention of lipid oxidation helps stabilize myoglobin and allows myoglobin to stay in its reduced  $\text{Fe}^{2+}$  form. Since metmyoglobin is only present in the oxidized form ( $\text{Fe}^{3+}$ ), the delay of oxidation is essential to extending the shelf-life of the product. Although oxidation is inevitable, the delay of 1 or 2 days is considered substantial. Due to its high levels of prooxidants

(myoglobin, hemoglobin, iron) and polyunsaturated fatty acids (**PUFA**) (Kanner, 1994), meat is easily susceptible to lipid oxidation. Grinding and packaging in a modified atmosphere and storing in retail display only increased the likelihood of lipid oxidation and thus metmyoglobin formation as in our study. Greene et al. (1971) found that synthetic antioxidants such as propyl gallate, butylated hydroxyanisole (BHA), and ascorbic acid retarded metmyoglobin formation ( $P<0.05$ ) in ground beef patties stored 8d in a oxygen-permeable film. Djenane et al. (2003) found similar results with steaks that had been packaged in a modified atmosphere. Our findings are different from those of Greene et al. (1971) and Djenane et al. (2003). Although different assays were used in all three experiments, Greene et al. (1971) and Djenane et al. (2003) found a treatment effect in metmyoglobin formation. Our findings could possibly be explained with the interference of the water-soluble component of the sorghum bran. Anthocyanins serve as colorants in plants and have been found to be relatively stable in acidic conditions (Sweeny and Iacobucci, 1981), but are highly unstable when subjected to any pH change (Harborne, 1988). The pH of the hamburger patties in our study ranged from 5.74 to 5.80 (Table 1). The buffer solution used in the metmyoglobin assay was adjusted to a pH of 6.8. The rapid change in pH (acidic to nearly neutral) may have affected the metmyoglobin percentage due to the instability of the anthocyanins. Variability, such as the procedure, might also have affected metmyoglobin percentage. Samples were homogenized in the buffer without the addition of an antioxidant. There is still the potential for metmyoglobin formation. To slow metmyoglobin formation, samples were

kept on ice and in the dark. Although these precautions were taken, metmyoglobin may have continued to form prior to evaluation, thus skewing our results.

Lipid oxidation is a naturally occurring process that is triggered by the presence of oxygen, degree of fatty acid saturation, and presence of prooxidants (Kanner, 1994). We have demonstrated for the first time that sorghum bran can provide an antioxidant effect when used in a ground beef model system. Djenane et al. (2003) found that steaks sprayed with a rosemary and vitamin C mixture significantly reduced TBARS values over time when stored in a modified atmosphere and subjected to different lighting conditions over 25 days of storage. In there study, the combination of a free radical scavenger (rosemary) and a free radical scavenger (vitamin C) provided a synergistic effect to reduce TBARS values. Rosemary extracts have been shown to inhibit hydroperoxide formation, which is partially responsible for off-flavor development in meat systems.

Much research has also looked at dietary supplementation of vitamin E to reduce TBARS values. Sherbeck et al. (1995) found that supplementation of 500 IU/animal/day for 123 days significantly lowered TBARS values over refrigerated storage, while Lynch et al. (1999) found that supplementation of 2000 IU/animal/day for 50 days also significantly reduced TBARS values over storage. Typically, dietary delivery strategies are preferred when using vitamin E because proper physiological placement provides a greater antioxidant effect (Faustman et al., 1998). Although different antioxidants were used, our findings concur with the previous findings (Sherbeck et al. 1995, Lynch et al. 1999). Each study found a significant treatment effect on TBARS values. Both vitamin

E and rosemary have ring structures that allow each of the antioxidants to capture free radicals. Since free radicals propagate the lipid oxidation reaction, control over these free radicals is essential when trying to slow lipid oxidation. Sorghum bran contains tannins which are lipophilic compounds that donate electrons to free radicals and are 15-30 times more powerful than simple phenolics (Hagerman, 1998). Other researchers have attributed tannins's antioxidant capacity to being strong metal chelators in addition to free radical scavengers (Bors et al., 1990; Carbonaro et al., 1996). Anthocyanins are water soluble components that also act as free radical scavengers. Due to elevated iron counts in particular cuts of meat, the trend is to often incorporate a combination of antioxidants to limit oxidation. In processed meats for example, a free radical scavenger such as BHA/BHT is used in combination with sodium phosphates, a metal chelator. Granted, sodium phosphates are added to increase water holding capacity and extract salt soluble proteins for particle binding, but it still has metal chelating properties. Sorghum bran, however, inherently contains both types of antioxidants which are lipophilic or hydrophilic. This combination enables sorghum bran to have powerful antioxidant properties.

### pH

Treatment, storage day, and their two way interaction had an effect on pH ( $P=0.0001$ ,  $0.0001$ , and  $0.0474$ , respectively) (Table 1 and Fig 2). Treatments containing phosphates had the highest pH as documented in previous research (Neer and Manidgo, 1977; Lamkey et al., 1986). Due to its molecular structure and

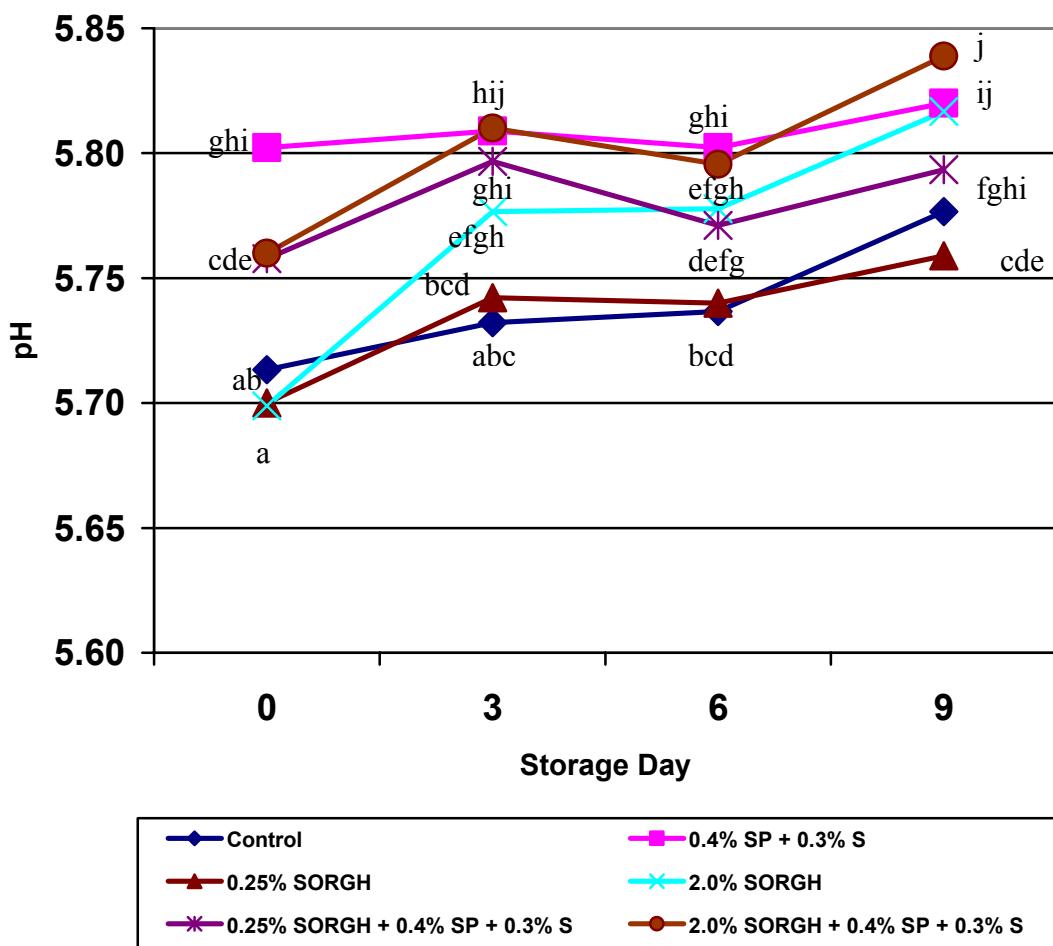


Fig. 2 – Least square means for treatment by day interaction for pH values.

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value 0.0474 from Analysis of Variance table

Residual Mean Square Error = 0.04

alkalinity, the addition of alkaline phosphates results in an increase in pH. Ground beef patties (Figure 2) containing 0.25% sorghum bran had a similar pH to the CONT patties across all storage days. Patties containing 0.25% sorghum and SP and S had a higher ( $P<0.05$ ) pH due to the addition of SP. Additionally, those patties containing 2.0% sorghum bran had the highest pH ( $P<0.05$ ) along with those containing SP and S. Storage day also increased the pH in all treatments as shown by the treatment by day interaction (Fig 2). Within each storage day, treatments containing SP and S had the highest pH. Patties containing 0.25% sorghum bran had a similar pH as the CONT patties over all storage days (0, 3, 6, and 9). Ground beef patties containing 0.25% sorghum and SP and S had a similar pH to the 2.0% sorghum patties and the CONT patties on day 0, but the increase in pH over time (3, 6, and 9) was more pronounced in the 2.0% sorghum treated patties. The addition of sorghum at the 2.0% level and the addition of SP and S resulted in ground beef patties with the highest pH at each storage day.

Lactic acid bacteria dominate the microflora in vacuum packaged meat thus causing the pH of the meat to decline. Ho et al. (2003) found that the predominant microflora of ground beef patties packaged in a modified atmosphere at 8d consisted of *Pseudomonas*, *Acinetobacter*, *Moraxella*, and *Flavobacterium*. These gram-negative, psychotropic bacteria are typically responsible for spoilage in meat. Lactic acid bacteria are present, but in small amounts. Typically, a decrease in pH is expected in all meat due to natural lactic acid production by the meat. Subsequent decreases in pH during storage are usually attributed to the growth of lactic acid bacteria. Ho et al. (2003) also

reported that *Lactobacillus* species were not present under modified atmospheric conditions until day 15 as opposed to day 8 for vacuumed packaged ground beef patties. *Achromobacter*, another lactic acid bacteria, was never detected. Conversely, Jackson et al. (1992) detected a small amount of *Lactobacillus plantarum* at 0d on strip steaks that had been packaged in an 80% oxygen and 20% carbon dioxide atmosphere. Jayasingh et al. (2002) found a slight decrease in pH with storage of ground beef patties packaged in a modified atmosphere while we observed a gradual increase in pH over time. The solubilization of compounds in the sorghum bran over time is the likely cause of the pH increase. Therefore, in this study, while microbial levels and types were not accessed, the increase in pH during storage is most likely a function of ingredient addition and not microbial growth.

#### *O<sub>2</sub> and CO<sub>2</sub> Concentration*

Treatment and storage day had an affect on oxygen concentration ( $P= 0.0176$  and  $0.0001$ ) (Table 1). The oxygen concentration was the same for all treatments except for the CONT, and oxygen concentration increased with storage, especially between days 0 and 3. Carbon dioxide levels were not affected by treatment but there was a treatment by storage day interaction for carbon dioxide levels ( $P= 0.0087$ ; Fig 3). For all treatments, carbon dioxide levels decreased between day 0 and day 3. After days 3 and 6, carbon dioxide levels decreased for all treatments, but patties containing 0.25% sorghum bran and 2.0% sorghum bran with SP and S had the lowest carbon dioxide concentrations. By day 9, all treatments had an increase in carbon dioxide concentration

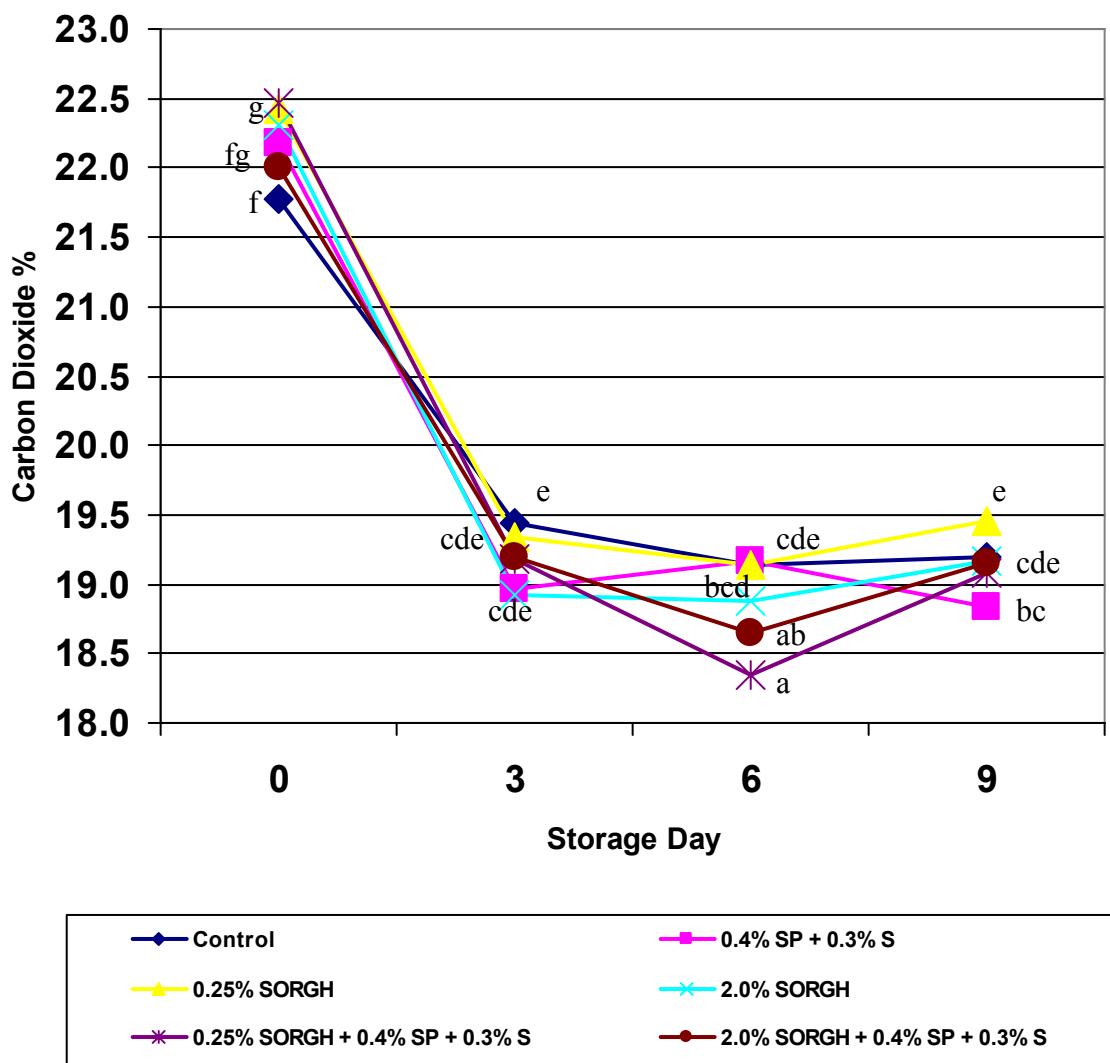


Fig. 3 – Least squared means for treatment by storage day interaction for carbon dioxide percentage values.

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value = 0.0087 from Analysis of Variance table

Residual Mean Square Error = 0.51

except the SP and S treatment. Carbon dioxide is highly soluble in water and lipid material (Gill, 1988; Gill and Penney, 198). Once meat is exposed to carbon dioxide, the gas is absorbed by the meat and fats until equilibrium is attained. The attainment of equilibrium lowers the partial pressure of the gas present in the head space. Although the subprimals in our experiment were initially trimmed free of any subcutaneous adipose tissue, the internal adipose tissue was still present. In addition, product was stored in the form of ground beef patties thus providing more surface area for gas absorption (Gill, 1988; Warren et al., 1992). The initial changes observed in the equilibrium of the package is supported by the initial increase in oxygen levels and decrease in carbon dioxide levels between days 0 and 3 (Enfors, 1984; Gill 1988; Gill and Penney 1988; Warren et al. 1992). This change in concentration is magnified due to the increased surface area of the ground beef patties. Moreover, when the patties were packaged, it is possible that all residual oxygen was not removed from the package. In this situation, once the carbon dioxide is absorbed into the meat, the oxygen is then forced into the headspace thus causing an increase in oxygen concentration. Enfors and Molin (1984) and Warren et al. (1992) also found a slight increase in carbon dioxide after 3 days of storage. A slight increase was reported by Warren et al. (1992) between days 3 and 5 while Enfors and Molin (1984) reported a 5.4% increase in carbon dioxide. Enfors and Molin (1984) attribute this increase to the normal metabolic activity of the meat or microbial metabolic activity. Although microbial analysis was not performed in this study, the natural respiration of the natural microflora could contribute to a drop in oxygen concentration and an increase in carbon dioxide concentration after 3 days. Ho

et al. (2003) reported that the predominant microflora on beef packaged in a modified atmosphere on day 0 were gram-negative, psychrotrophic spoilage bacteria such as *Pseudomonas*, *Acinetobacter*, and *Moraxella*. Additionally, a change in the ratio of oxygen to carbon dioxide was due to loss of gas through the film. Packaging film used with meat systems, although slow, is slightly gas permeable thus allowing for a change in the gas concentration and ratio.

Gill (1988) also reported a direct linear relationship between carbon dioxide and pH. As pH increased, the solubility of carbon dioxide increased (Gill, 1988). Table 1 shows the change in pH over time. There was a significant increase in pH from day 0 (5.74) to day 3 (5.78). The subsequent increase in pH may have allowed for increased solubility of carbon dioxide, allowing more absorption into the meat, and in turn reducing carbon dioxide percentage (Fig 3). From day 6 to day 9, a significant increase in pH was demonstrated. Similar research has also shown an increase in pH over time in steaks packaged in a carbon dioxide atmosphere (Huffman et al., 1975). In conclusion, oxygen and carbon dioxide concentrations were maintained at a high enough levels to maintain oxymyoglobin in the package.

#### *Cook Loss and Cook Time*

Cook loss was affected by treatment ( $P<0.05$ ), but cook loss and cook time were not influenced by storage time ( $P>0.05$ ) (Table 1). Additionally, cook time was not affected by treatment ( $P=0.13$ ) nor storage day ( $P=0.20$ ). The CONT patties had the highest amount of cook loss along with patties containing SP and S only and 0.25% sorghum bran. The addition of sorghum bran at 2.0% lower cooked loss at an equal or

greater level than those patties treated with SP and S. Those patties treated with 2.0% sorghum bran and SP and S had the lowest amount of cook loss. For all sorghum bran treatments, the addition of SP and S significantly decreased cook loss. This is due in most part to the ability of SP to increase water holding capacity, but the sorghum bran, when used at 2.0%, could possibly have a water binding effect. Those patties containing 0.25% sorghum did not show a decrease in cook loss.

It is generally recognized that phosphates increase water holding capacity thus decreasing cook loss. The decrease in cook loss is often associated with a juicer, more palatable product. Sodium phosphates, when ionized, are an extremely negatively charged and attract the positively charged hydrogens of the dipolar on water molecule. This allows for increased water holding capacity and thus a juicer product. Since sodium phosphates are extremely alkaline, they are used at low levels ( $\leq 0.5\%$ ) due to potential off-flavors. A soapy or metallic off-flavor can occur in products that contain sodium phosphates added. To mask these off-flavors, salt is traditionally added in low levels. Salt added alone increases purge loss due to the extraction of salt soluble proteins (Schwartz and Mandigo, 1976), but the principal reason for adding salt is for its ability to extract salt soluble proteins and increase the protein's ability to bind water (Mandigo et al., 1973). In terms of cook loss, our results are similar to previous researchers. Mann et al. (1989) reported a 20% decrease in cook loss in those treatment using alkaline phosphates. Schwartz and Mandigo (1976) reported a decrease in cook loss with the addition of SP at various levels. Similar findings were reported for the addition of salt. Schwartz and Mandigo (1976) and Neer and Mandigo (1977) reported

the sole addition of salt reduced cooking loss. Because of the synergistic and the masking effect of salt, phosphates and salt are generally added together.

We hypothesize that the ability for sorghum to decrease cook loss is due to its increase in pH, but more importantly its possible ability to absorb water. Although no data is currently published, we hypothesize that sorghum might posses some humectant properties.

## Color

### *Minolta Color Space Values and Panel Color*

Treatment affected CIE L\*, a\*and b\* values ( $P= 0.0001, 0.0001$ , and  $0.0001$ , repectively) (Table 2). In general, ground beef patties treated with increasing levels of sorghum bran were darker (lower L\* value), had lower amounts of red (lower a\* value), and were less yellow (lower b\* value) than control patties. The addition of S and SP also resulted in darker, less red and less yellow patties when compared to CONT patties. When sorghum bran plus S and SP were added to patties, patties were darker with less red and yellow color in relation to patties of the same sorghum level, but with no S or SP. Control patties were redder than patties containing non-meat ingredients. Sensory color measurements showed similar trends to the objective color panel.

Panelists found that ground beef patties with 2.0% sorghum bran had lowest raw color score (darkest in color) and the greatest amount of discoloration. The addition of

Table 2. Least square means for main effects for Minolta L\*, a\*, b\*, panel color (inside package), and panel color (outside package).

Effect	CIE Color Space Values			Panel Color (Inside Package <sup>c</sup> )			Panel Color (Outside Package <sup>c</sup> )		
	L*	a*	b*	Color	Amt of Dis-coloration	Color of Dis-coloration	Color	Amt of Dis-coloration	Color of Dis-coloration
<u>Treatment<sup>b</sup></u>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>
Control	49.55 <sup>h</sup>	17.97 <sup>g</sup>	9.93 <sup>h</sup>	6.58 <sup>h</sup>	2.32 <sup>e</sup>	1.67 <sup>f</sup>	6.54 <sup>h</sup>	2.38 <sup>e</sup>	1.82 <sup>f</sup>
2	45.15 <sup>f</sup>	17.01 <sup>f</sup>	7.74 <sup>f</sup>	4.97 <sup>f</sup>	1.79 <sup>d</sup>	0.86 <sup>d</sup>	4.92 <sup>fg</sup>	1.76 <sup>d</sup>	0.81 <sup>d</sup>
3	46.64 <sup>g</sup>	17.40 <sup>fg</sup>	9.00 <sup>g</sup>	5.39 <sup>g</sup>	2.43 <sup>e</sup>	1.53 <sup>f</sup>	5.15 <sup>g</sup>	2.40 <sup>e</sup>	1.56 <sup>e</sup>
4	43.81 <sup>e</sup>	12.34 <sup>d</sup>	7.74 <sup>f</sup>	2.57 <sup>d</sup>	3.83 <sup>f</sup>	0.81 <sup>d</sup>	2.64 <sup>d</sup>	3.85 <sup>f</sup>	0.78 <sup>d</sup>
5	44.71 <sup>f</sup>	15.87 <sup>e</sup>	7.42 <sup>e</sup>	4.58 <sup>f</sup>	1.93 <sup>d</sup>	1.00 <sup>de</sup>	4.71 <sup>f</sup>	1.91 <sup>d</sup>	1.02 <sup>d</sup>
6	42.84 <sup>d</sup>	11.99 <sup>d</sup>	6.25 <sup>d</sup>	3.10 <sup>e</sup>	4.47 <sup>g</sup>	1.12 <sup>e</sup>	3.34 <sup>e</sup>	4.47 <sup>g</sup>	0.98 <sup>d</sup>
<u>Storage Day</u>	0.14 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>
0	45.22	20.41 <sup>g</sup>	9.31 <sup>f</sup>	5.23 <sup>g</sup>	1.27 <sup>d</sup>	0.43 <sup>d</sup>	4.96 <sup>g</sup>	1.19 <sup>d</sup>	0.28 <sup>d</sup>
3	45.32	16.31 <sup>f</sup>	7.93 <sup>e</sup>	4.72 <sup>f</sup>	2.32 <sup>e</sup>	0.89 <sup>e</sup>	4.71 <sup>f</sup>	2.10 <sup>e</sup>	0.78 <sup>e</sup>
6	45.42	13.90 <sup>e</sup>	7.47 <sup>d</sup>	4.35 <sup>e</sup>	2.90 <sup>f</sup>	1.28 <sup>f</sup>	4.40 <sup>e</sup>	3.02 <sup>f</sup>	1.32 <sup>f</sup>
9	45.86	11.09 <sup>d</sup>	7.35 <sup>d</sup>	3.82 <sup>d</sup>	4.70 <sup>g</sup>	2.11 <sup>g</sup>	4.13 <sup>d</sup>	4.86 <sup>g</sup>	2.27 <sup>g</sup>
Root Mean Square Error	1.524	1.439	0.630	0.454	0.843	0.420	0.497	0.613	0.571

<sup>a</sup> P-value from analysis of variance tables.

<sup>b</sup>Treatments: Control= 0 Sorghum Bran, 0 Phosphates, and 0 Salt; Trt 2= 0.4% Phosphates and 0.3% Salt; Trt 3= 0.25% Sorghum Bran; Trt 4= 2.0% Sorghum Bran; Trt 5= 0.25% Sorghum Bran, 0.4% Phosphates, 0.3% Salt; Trt 6= 2.0% Sorghum Bran, 0.4% Phoshpates and 0.3% Salt.

<sup>c</sup> Color: 1=very dark red; 8= light grayish- red ; Amount of Discoloration: 1=no discoloration ; 7= total discoloration ; Discolor: 1=very dark red; 8=light grayish-red.

<sup>defgh</sup> Mean values within a column and followed by the same letter are not significantly different ( $P > 0.05$ ).

SP and S in combination with 2% sorghum bran to ground beef patties improved raw color score ( $P<0.05$ ), but resulted in a greater amount of discoloration when evaluated inside and outside the package. The prooxidant properties of S (Chang and Watts, 1950; Schwartz and Mandigo, 1976; Neer and Mandigo, 1977) were most likely the cause of the discoloration. Patties containing 0.25% sorghum bran had similar raw color scores to those containing SP and S, but the addition of SP and S to patties containing 0.25% sorghum bran lowered raw color scores (darker red color), although the amount of discoloration was similar.

The bright cherry red color associated with a fresh, wholesome product declined with storage and was replaced by a dark, undesirable color. A storage day effect was observed for both CIE a\* and b\* color space values ( $P= 0.0001$  and  $0.0001$ , respectively) (Table 2). However, there was a storage day by treatment interaction for a\* value, amount of discoloration inside and outside of the package, and discoloration score inside and outside the package (Figure 4, 5, 6, 7, and 8, respectively.) In general, as storage day increased, a\* and b\* values decreased, the amount of discoloration increased, and the discoloration was darker. As storage day increased, the oxymyoglobin pigment form was shifted to metmyoglobin as lipid oxidation also increased. The iron in oxymyoglobin is in a reduced stated ( $\text{Fe}^{2+}$ ), but the iron in metmyoglobin is in an oxidized state ( $\text{Fe}^{3+}$ ). The effectiveness of an antioxidant, in terms of color stability, is determined by its ability to keep the iron in a reduced state resulting in a desirable color. Once the iron has been oxidized, it cannot be converted

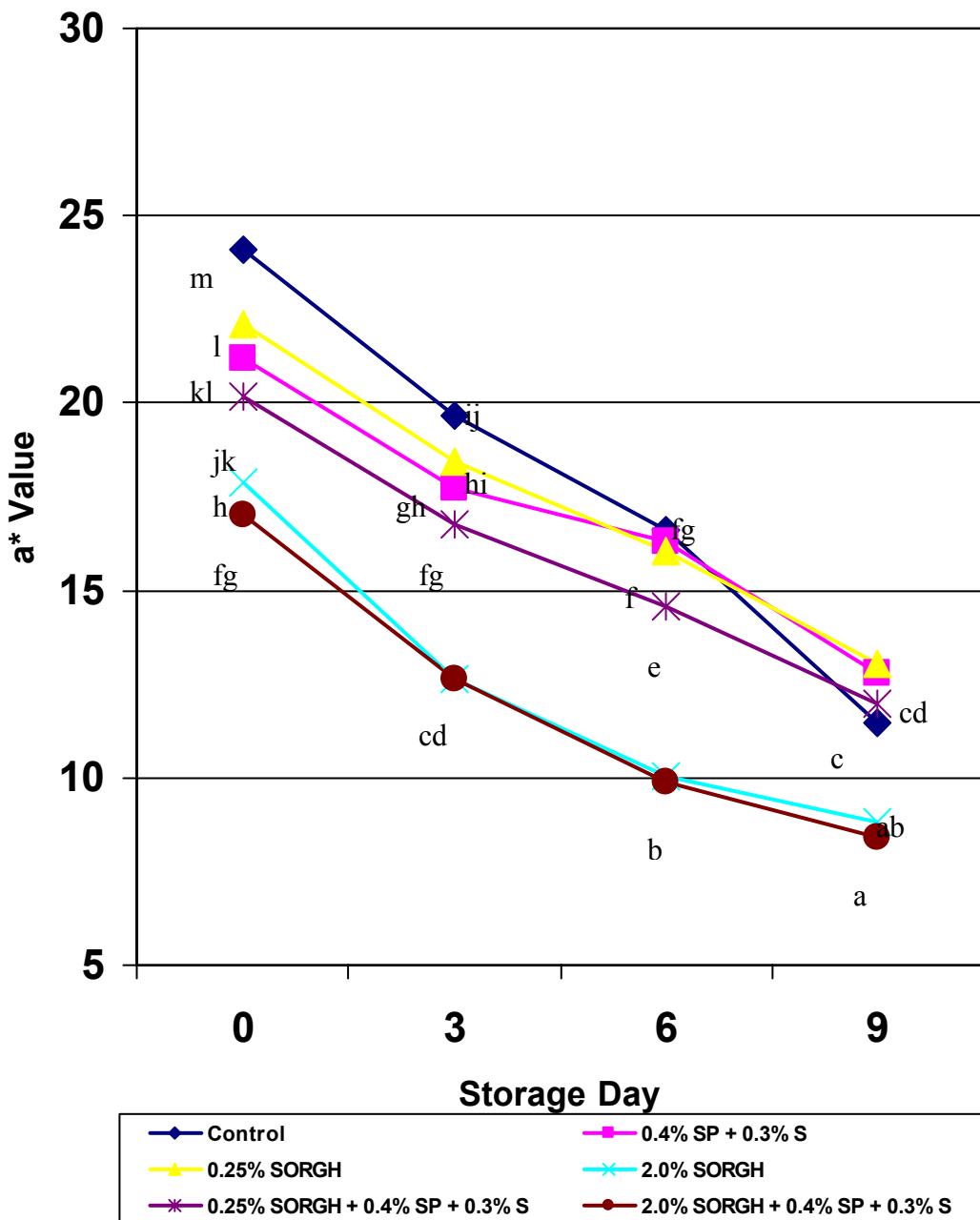


Fig 4 – Least squared means for treatment by storage day interaction for  $a^*$  values.

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value < 0.0001 from Analysis of Variance table

Residual Mean Square Error = 1.44

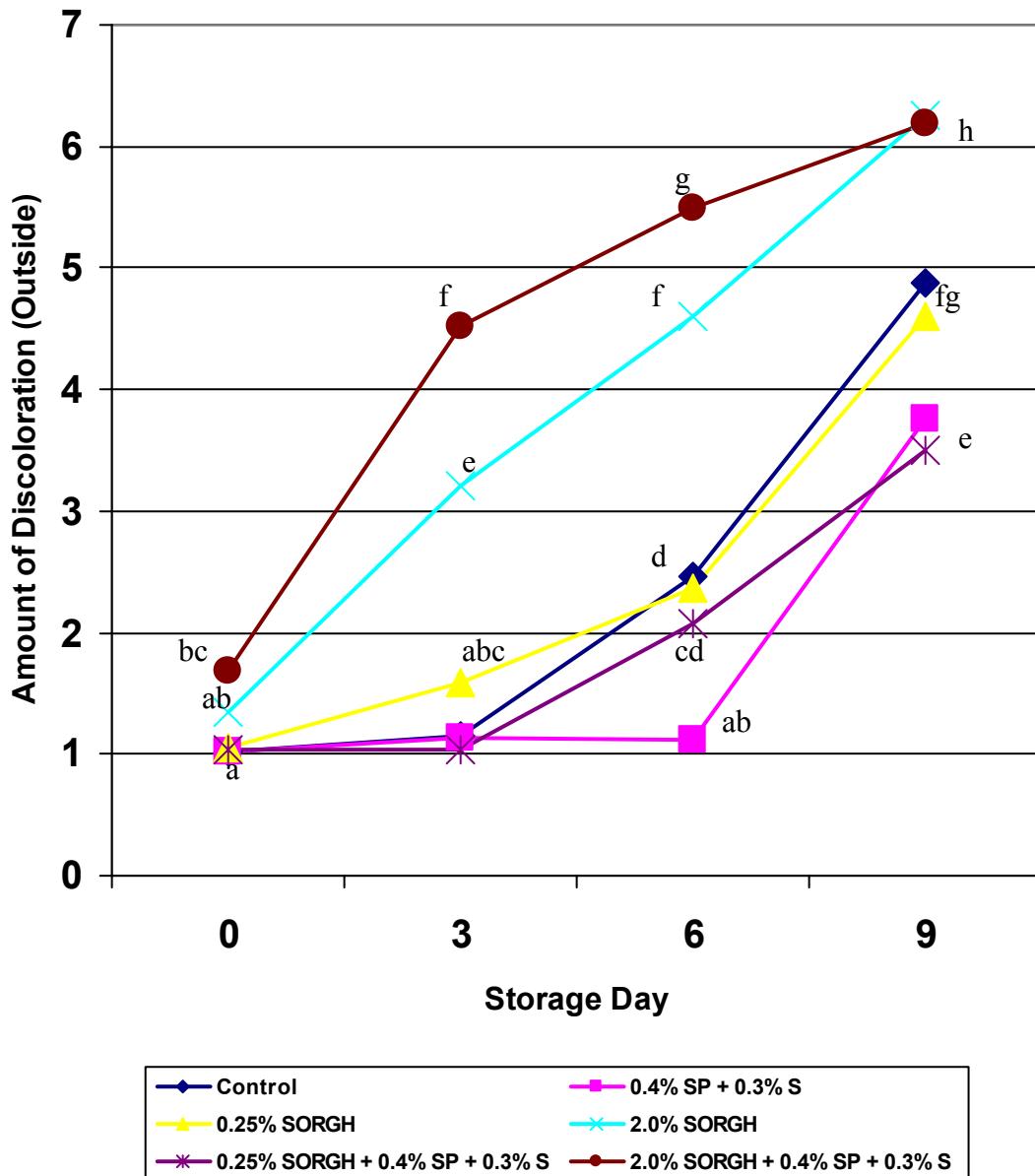


Fig. 5 – Least squared means for treatment by storage day interaction for amount of discoloration outside the package.

Amount of Discoloration: 1=no discoloration ; 7= total discoloration

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value = 0.001 from Analysis of Variance table

Residual Mean Square Error = 0.613

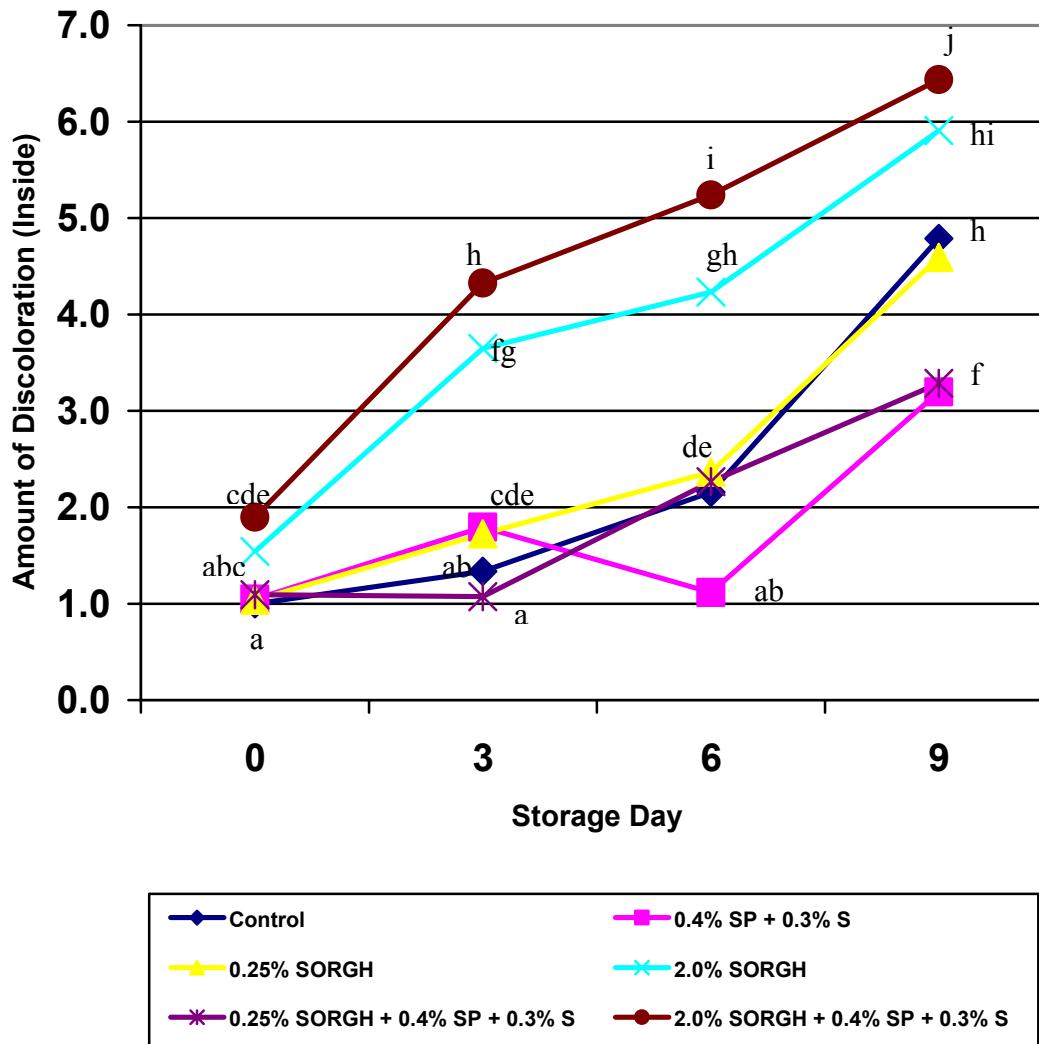


Fig. 6 – Least squared means for treatment by storage day interaction for amount of discoloration inside the package.

Amount of Discoloration: 1=no discoloration ; 7= total discoloration

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value = 0.0001 from Analysis of Variance table

Residual Mean Square Error = 0.843

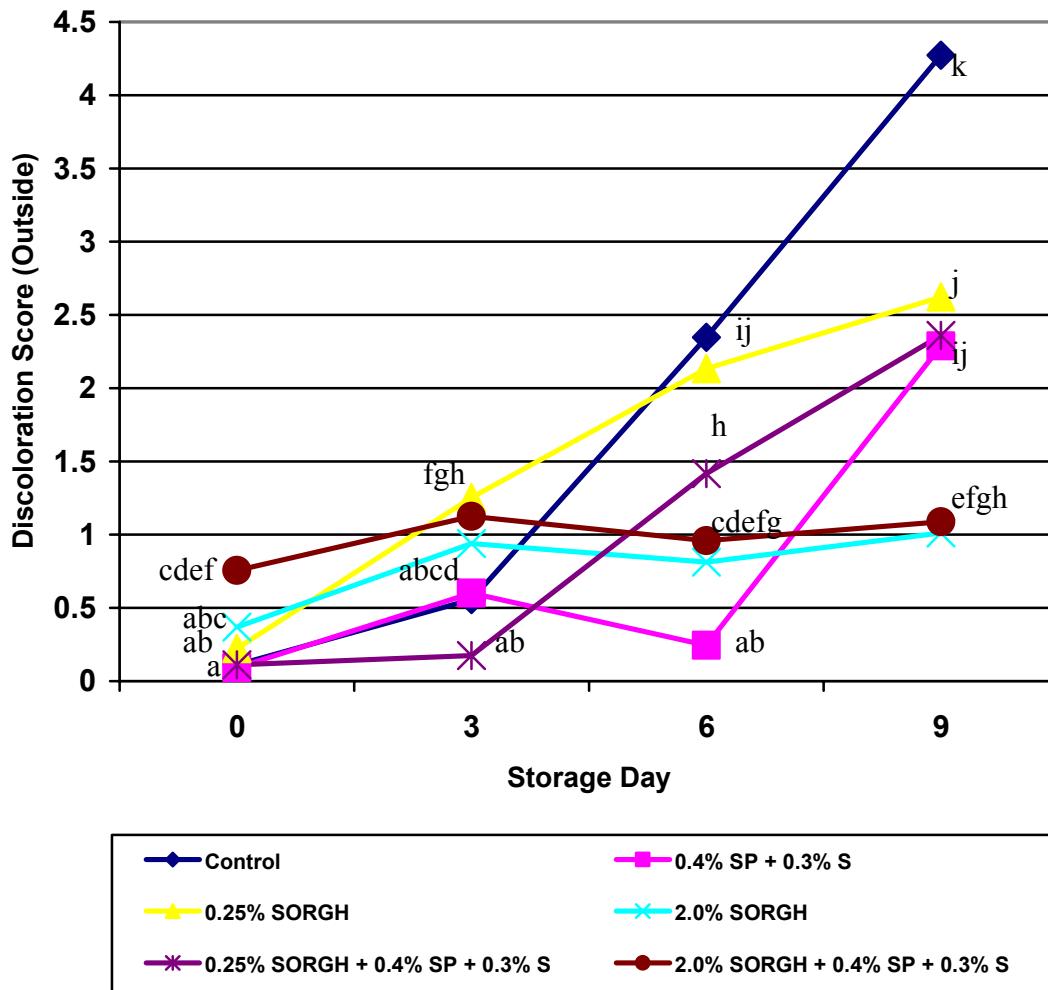


Fig. 7 – Least squared means for treatment by storage day interaction for discoloration score outside the package.

Discoloration: 1=very dark red; 8=light grayish-red

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value = 0.0001 from Analysis of Variance table

Residual Mean Square Error = 0.571

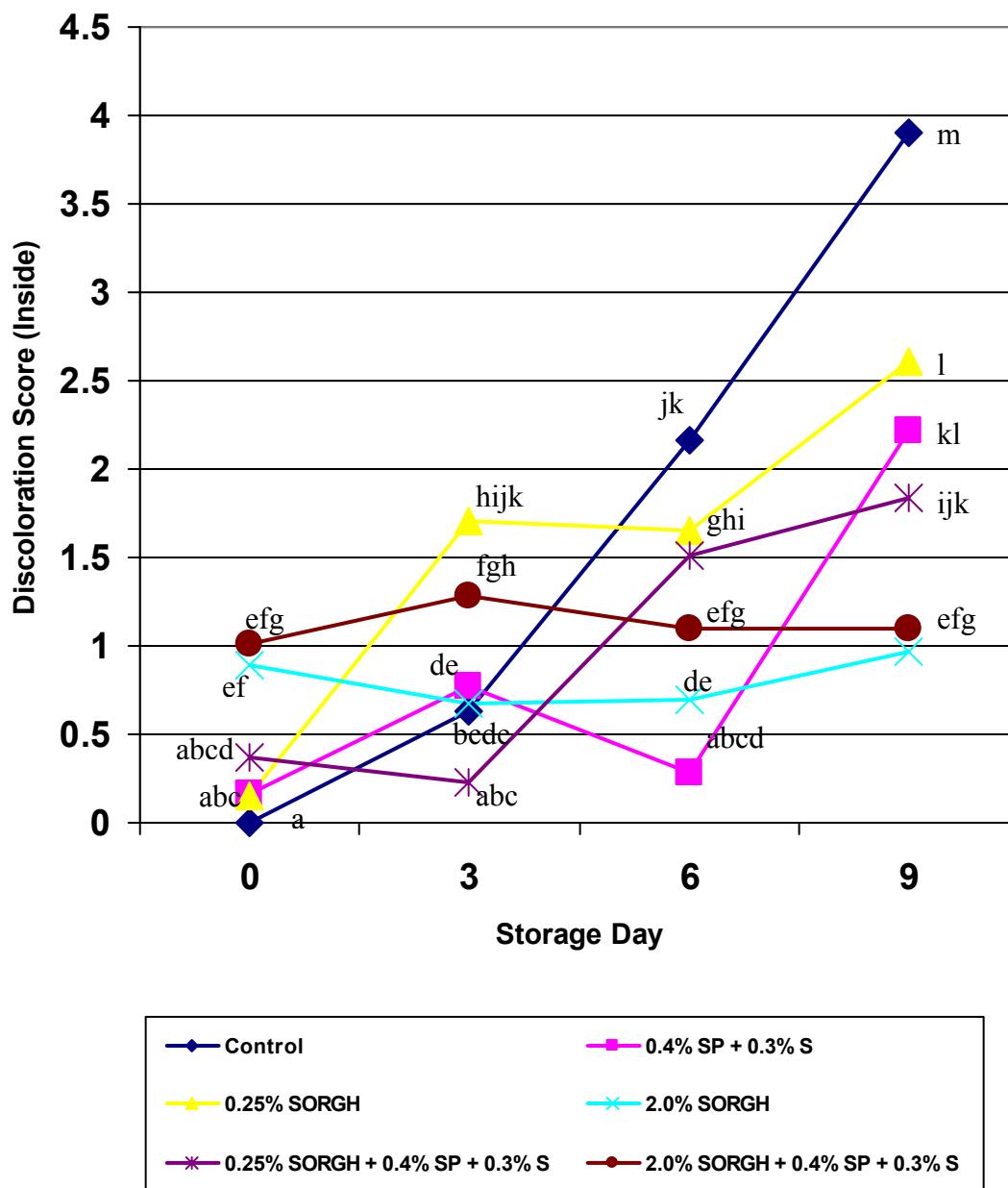


Fig. 8 – Least squared means for treatment by storage day interaction for discoloration score inside the package.

Discoloration: 1=very dark red; 8=light grayish-red

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value = 0.0001 from Analysis of Variance table

Residual Mean Square Error = 0.419

back to its reduced state, thus the shift from oxymyoglobin to metmyoglobin is permanent. On 0d of storage, CONT patties had higher CIE a\* color space values than treated patties. Within treated patties, the addition of either 0.25% sorghum bran or S and SP decreased CIE a\* color space values. The addition of 2% sorghum bran, S and SP resulted in ground patties with the least amount of red color. With increased storage, all patties were less red and after 9d of storage, redness values were similar for the CONT and Trt 2, 3, and 4 patties. The addition of 2% sorghum bran or 2% sorghum bran plus S and SP resulted in ground beef patties with the lowest CIE a\* color space values after 9d of storage.

The addition of sorghum bran at the 2.0% level caused the greatest amount of discoloration outside and inside the package (Fig 5 and Fig 6). The treatment by day interaction showed that ground beef patties treated with 0.25% sorghum bran had similar amounts of discoloration to patties with SP and S when evaluated inside and outside the package. The addition of non-meat ingredients (except 2.0% sorghum) suppressed the amount of discoloration up to day 6. Between day 6 and day 9, a rapid increase in discoloration was observed both inside and outside the package, most likely due to lipid oxidation, metmyoglobin formation, and the color changes caused by the addition of sorghum bran at elevated levels (2.0%).

The color discoloration score is the measurement of discoloration using a raw color scale. For both inside and outside the package, CONT patties had the darkest color of discoloration ( $P<0.05$ ). The treatment by day interaction shows that the CONT patties were consistently darker over time (Fig 7 and Fig 8). Additionally, CONT patties

had the most dramatic increase in color of discoloration score from day 6 to day 9 due to the lack of antioxidant protection and possibly by-products from elevated microbial counts. The addition of SP and S resulted in similar discoloration scores to the CONT patties for days 0 and 3, but the CONT patties were darker on days 6 and 9. As storage time increased, the discoloration of all patties became darker. The addition of sorghum bran at the 0.25% level showed a gradual increase in discoloration score with time as opposed to the drastic increase seen in the CONT patties. The addition of sorghum bran at the 2.0% level showed no increase in discoloration score with storage ( $P<0.05$ ), probably due to the natural brown color of the sorghum bran being masked by the complete discoloration of the patties. During the training sessions, panelists were instructed to mark these patties as having a dark raw color and high discoloration scores. The addition of SP and S only had an effect when added to patties containing 0.25% sorghum bran. Unlike the addition at 2.0%, sorghum bran added at 0.25% was hardly detectable. Color of discoloration scores were extremely low on days 0 and 3, but discoloration scores of patties increased similarly with storage time as scores in CONT patties, although the increase was not as drastic in CONT patties. The addition of SP and S to the 2.0% sorghum bran group did not affect the discoloration score when evaluated outside the package.

Color is a trait that greatly affects the purchasing decisions of the consumer (Kropf, 1980). Oxidation of lipids and myoglobin have a detrimental effect on color leading to the formation of metmyoglobin. Modified atmosphere package is often used to extend shelf-life. Oxygen is used to support and sustain the formation of

oxymyoglobin which is responsible for the bright cherry red color that is often associated with fresh and wholesome meat. Carbon dioxide is added to the package to prevent microbial growth and to help stabilize meat color. Previous studies have shown that atmospheres containing 70-85% oxygen and 15-25% carbon dioxide are the most effective in stabilizing color (Ordonez and Ledward, 1977). Atmospheres containing more than 30% carbon dioxide have been shown to promote the formation of metemyoglobin (Ledward, 1970; Silliker et al., 1977).

The use of phosphates and their positive effect on color is well documented (Schwartz and Mandigo, 1976; Neer and Manidgo, 1977; Lamkey et al., 1986). Not only do phosphates improve color indirectly by serving as an antioxidant, they also improve color by binding water. As previously discussed, phosphates are a group of molecules that are alkaline and extremely negatively charged. Since water is a dipolar molecule, water is easily bound to phosphates. The binding of water by phosphates causes the muscle to reflect less light on the meat surface and thus causes a darker more desirable red color. Our findings show that the addition of sorghum bran had more of an effect (negative or positive) on color than the addition of SP and S did.

The use of sorghum bran at the 2% level (with and without salt and phosphates) had the lowest raw color score and the greatest amount of discoloration. This is further supported by the lower L\* and a\* values. Although the addition of salt and phosphate have been shown to improve color, salt and phosphates treatments (subjectively and objectively) had lower raw color scores, a greater amount of discoloration, and lower a\* values. Although microbial analysis was not conducted, it is possible that as more water

was present due to an increase in water holding capacity, microbial loads may have contributed to the discoloration of the steaks. Also, the prooxidant properties of salt have been documented (Chang and Watts, 1950; Schwartz and Mandigo, 1976; Neer and Mandigo, 1977). It is possible that the addition of salt, coupled with grinding of a muscle cut with a high amount of iron, and packaging in a modified atmosphere containing high amounts of oxygen caused the discoloration. Huffman et al. (1981) attributed the discoloration of restructured meat products to the addition of salt. It is also possible that the color of the sorghum bran masked any color benefits that the addition of SP and S provide.

Antioxidants are traditionally used to improve color by slowing lipid oxidation. Vitamin E was injected and fed to animals to stabilize and sustain the bright cherry red color in meat (Faustman et al., 1998). Injection of vitamin E is not commonly used the best delivery strategy is supplementation. Faustman et al. (1998) contends that the proper physiological placement of the antioxidant provides a more effective means of stabilizing color than typical injection or enhancement techniques. The supplementation of sorghum could be another possible means to improve color as opposed to various enhancement techniques.

### **Sensory Evaluation**

Sensory evaluation is commonly used to evaluate flavor differences among or between treatments and storage days. Tims and Watts (1958) first attributed the flavor changes in meat to lipid oxidation and collectively referred to these changes as “warmed over flavor” (WOF). As sensory evaluation has evolved, Johnsen and Civille (1986)

developed a standard lexicon that would be used for meat that had possible WOF characteristics. Their study was based on flavor in which ground beef patties were cooked by steaming, stored for five days, and reheated in an oven. Control (freshly cooked) and the reheated (representing WOF) beef patties were then evaluated by a trained sensory panel. The panel found that the reheated samples had lower scores for cooked beef lean, cooked beef fat, browned, serumy/bloody, and grainy/cowy aromatics than control patties. Reheated samples also had higher scores for cardboard, rancid, and painty attributes. Johnsen and Civille (1986) noted a great degree of variability in individual panelist's sense for the flavor or the aromatic "cowy," and occasionally for the scoring of the fishy aromatic.

Numerous authors have reported the positive effect of non-meat ingredients on positive flavors and off-flavors. Maca et al. (1997a) found that the addition of sodium lactate to ground beef patties lowered grainy, cowy, cardboard, and soured flavor attributes. Maca et al. (1997b) reported similar results in top rounds injected with sodium lactate. Cooked beef/brothy attributes increased with injection of sodium lactate while injection had no effect on cardboard, soured, and serumy/bloody. The authors attributed this to masking of flavor attributes by the addition of other ingredients.

Differences in myoglobin content between muscles also plays a role in the flavor profile of beef (Miller, 2001). In this study, the *M. Gluteobiceps* was used, in part, because of the elevated iron and myoglobin levels. Both iron and myoglobin are prooxidants, and have been shown to have a detrimental effect on flavor. Miller (2001) states that elevated myoglobin within a cut can lead to higher cowy/grainy and livery

flavor aromatic scores. Moreover, the amount of myoglobin is dependent on the specific physiological task of the muscle (Miller, 2001). The *M. Gluteobiceps* is a locomotive muscle that allows the animal to move its leg. Since myoglobin delivers oxygen to the muscle, the *M. Gluteobiceps* has elevated myoglobin levels when compared to other muscles.

Another factor affecting beef flavor is pH. Miller (2001) reported that beef with a pH between 5.6 and 5.9 had elevated musty, cooked beef flavor, cowy/grainy, and serumy/bloody flavor aromatics. However, altering the pH in a processed product is done for many reasons such as darkening color (Schwartz and Mandigo, 1976; Neer and Manigo, 1977) and increasing water holding capacity (Schwartz and Mandigo, 1976; Neer and Mandigo, 1977).

To date, there has been no documentation of the evaluation of sensory characteristics of sorghum bran in ground beef patties. Flavor aromatic attributes, tastes, aftertastes, feeling factors, after feeling factors, and textures for this study are shown in Tables 3, 4, and 5, respectively. The addition of S and SP decreased serumy/bloody flavor, soured and cardboard flavor, but increased liver flavor attributes, salt and sweet tastes, and springiness and hardness of the patty. The addition of 0.25% sorghum bran reduced serumy/bloody flavor, and increased burnt flavor aromatic, burnt flavor aftertaste, and sandy/gritty textures when compared to the CONT patties. These results indicate that the 0.25% level of sorghum bran had minimal effect of flavor of ground beef patties. The use of 0.25% sorghum bran with S and SP resulted in patties

Table 3. Least squares means for main effects for trained sensory flavor descriptive flavor aromatics attributes.

Effect	Cooked									
	Beef	Serumy	Cowy <sup>c</sup>	Cardboard <sup>c</sup>	Painty <sup>c</sup>	Fishy <sup>c</sup>	Liver <sup>c</sup>	Soured <sup>c</sup>	Burnt <sup>c</sup>	Sorghum <sup>c</sup>
<u>Treatment<sup>b</sup></u>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.009 <sup>a</sup>	0.01 <sup>a</sup>	0.55 <sup>a</sup>	0.52 <sup>a</sup>	0.0001 <sup>a</sup>	0.04 <sup>a</sup>	0.0006 <sup>a</sup> 0.0001 <sup>a</sup>
Control	4.67 <sup>f</sup>	2.38 <sup>ef</sup>	1.02 <sup>g</sup>	0.00 <sup>d</sup>	0.51 <sup>e</sup>	0.01	0.07	0.09 <sup>de</sup>	0.14 <sup>e</sup>	0.54 <sup>d</sup> 0.92 <sup>d</sup>
2	4.87 <sup>f</sup>	2.39 <sup>ef</sup>	0.67 <sup>e</sup>	0.00 <sup>d</sup>	0.34 <sup>d</sup>	0.00	0.04	0.27 <sup>f</sup>	0.04 <sup>d</sup>	0.81 <sup>def</sup> 1.11 <sup>d</sup>
3	4.69 <sup>f</sup>	2.22 <sup>de</sup>	0.74 <sup>f</sup>	0.00 <sup>d</sup>	0.44 <sup>de</sup>	0.00	0.09	0.12 <sup>e</sup>	0.06 <sup>e</sup>	0.94 <sup>efg</sup> 1.17 <sup>d</sup>
4	3.94 <sup>d</sup>	2.07 <sup>d</sup>	0.35 <sup>d</sup>	0.06 <sup>e</sup>	0.56 <sup>e</sup>	0.00	0.13	0.04 <sup>d</sup>	0.06 <sup>e</sup>	1.11 <sup>fg</sup> 2.28 <sup>e</sup>
5	4.73 <sup>f</sup>	2.44 <sup>f</sup>	0.80 <sup>f</sup>	0.00 <sup>d</sup>	0.36 <sup>d</sup>	0.00	0.09	0.30 <sup>f</sup>	0.01 <sup>d</sup>	0.69 <sup>de</sup> 1.05 <sup>d</sup>
6	4.29 <sup>e</sup>	2.17 <sup>d</sup>	0.32 <sup>d</sup>	0.04 <sup>de</sup>	0.45 <sup>de</sup>	0.01	0.06	0.01 <sup>d</sup>	0.00 <sup>d</sup>	1.13 <sup>g</sup> 2.43 <sup>e</sup>
<u>Storage Day</u>	0.03 <sup>a</sup>	0.76 <sup>a</sup>	0.0001 <sup>a</sup>	0.03 <sup>a</sup>	0.04 <sup>a</sup>	0.16 <sup>a</sup>	0.06 <sup>a</sup>	0.52 <sup>a</sup>	0.003 <sup>a</sup>	0.09 <sup>a</sup> 0.48 <sup>a</sup>
0	4.60 <sup>e</sup>	2.28	1.08 <sup>e</sup>	0.03 <sup>e</sup>	0.48 <sup>e</sup>	0.00	0.01	0.13	0.01 <sup>d</sup>	0.76 1.46
6	4.46 <sup>d</sup>	2.27	0.22 <sup>d</sup>	0.00 <sup>d</sup>	0.41 <sup>d</sup>	0.00	0.05	0.14	0.09 <sup>e</sup>	0.95 1.53
Root Mean Square	0.143	0.038	0.087	0.007	0.050	0.0007	0.021	0.034	0.020	0.380 0.211
Error										

<sup>a</sup>P-value from analysis of variance tables.

<sup>b</sup>Treatments: Control= 0 Sorghum Bran, 0 Phosphates, and 0 Salt; Trt 2= 0.4% Phosphates and 0.3% Salt; Trt 3= 0.25% Sorghum Bran; Trt 4= 2.0% Sorghum Bran; Trt 5= 0.25% Sorghum Bran, 0.4% Phosphates, 0.3% Salt; Trt 6= 2.0% Sorghum Bran, 0.4% Phoshpates and 0.3% Salt.

<sup>c</sup>Aromatics: 1=extremely bland; 15=extremely intense

<sup>defg</sup> Mean values within a column and followed by the same letter are not significantly different ( $P > 0.05$ ).

Table 4. Least squares means for main effects for trained sensory flavor descriptive tastes and aftertastes attributes.

Effect	Tastes <sup>c</sup>					Aftertastes <sup>c</sup>				
	Salt	Sour	Bitter	Sweet	Astringent	Fat Mouthfeel	Bitter	Burnt	Sour	Sweet
<u>Treatment<sup>b</sup></u>	0.0001 <sup>a</sup>	0.50 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.89 <sup>a</sup>	0.16 <sup>a</sup>	0.01 <sup>a</sup>	0.0008 <sup>a</sup>	0.88 <sup>a</sup>	0.003 <sup>a</sup>
Control	2.14 <sup>d</sup>	2.65	2.45 <sup>def</sup>	0.20 <sup>de</sup>	2.41	1.60	1.96 <sup>de</sup>	0.32 <sup>d</sup>	1.84	0.16 <sup>de</sup>
2	2.92 <sup>f</sup>	2.75	2.28 <sup>d</sup>	0.46 <sup>g</sup>	2.41	1.54	1.88 <sup>de</sup>	0.54 <sup>def</sup>	1.89	0.25 <sup>e</sup>
3	2.23 <sup>d</sup>	2.74	2.60 <sup>f</sup>	0.11 <sup>d</sup>	2.46	1.45	2.10 <sup>ef</sup>	0.68 <sup>efg</sup>	1.85	0.10 <sup>d</sup>
4	2.13 <sup>d</sup>	2.63	2.84 <sup>g</sup>	0.11 <sup>d</sup>	2.45	1.41	2.21 <sup>f</sup>	0.85 <sup>g</sup>	1.77	0.10 <sup>d</sup>
5	2.81 <sup>ef</sup>	2.70	2.39 <sup>de</sup>	0.36 <sup>fg</sup>	2.36	1.54	1.82 <sup>d</sup>	0.46 <sup>de</sup>	1.84	0.24 <sup>e</sup>
6	2.75 <sup>e</sup>	2.62	2.51 <sup>ef</sup>	0.30 <sup>ef</sup>	2.44	1.52	2.04 <sup>def</sup>	0.71 <sup>fg</sup>	1.88	0.16 <sup>de</sup>
<u>Storage Day</u>	0.97 <sup>a</sup>	0.01 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0066 <sup>a</sup>	0.006 <sup>a</sup>	0.0005 <sup>a</sup>	0.16 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>
0	2.50	2.62 <sup>d</sup>	2.33 <sup>d</sup>	0.37 <sup>e</sup>	2.35 <sup>d</sup>	1.57 <sup>e</sup>	1.90 <sup>d</sup>	0.54	1.71 <sup>d</sup>	0.23 <sup>e</sup>
6	2.50	2.74 <sup>e</sup>	2.69 <sup>e</sup>	0.15 <sup>d</sup>	2.49 <sup>e</sup>	1.45 <sup>d</sup>	2.11 <sup>e</sup>	0.64	1.98 <sup>e</sup>	0.10 <sup>d</sup>
Root Mean Square Error	0.075	0.046	0.047	0.029	0.259	0.029	0.062	0.213	0.081	0.018

<sup>a</sup> P-value from analysis of variance tables.

<sup>b</sup>Treatments: Control= 0 Sorghum Bran, 0 Phosphates, and 0 Salt; Trt 2= 0.4% Phosphates and 0.3% Salt; Trt 3= 0.25% Sorghum Bran; Trt 4= 2.0% Sorghum Bran; Trt 5= 0.25% Sorghum Bran, 0.4% Phosphates, 0.3% Salt; Trt 6= 2.0% Sorghum Bran, 0.4% Phoshpates and 0.3% Salt.

<sup>c</sup>Tastes and Aftertastes: 1=extremely bland; 15=extremely intense

<sup>defg</sup> Mean values within a column and followed by the same letter are not significantly different ( $P > 0.05$ ).

Table 5. Least squares means for main effects for trained sensory flavor descriptive flavor feeling factors, after feeling factors, and texture attributes.

Effect	Feeling Factors		After Feeling Factors		Textures		
	Metallic <sup>c</sup>	Astringent <sup>c</sup>	Lip Burn <sup>c</sup>	Metallic <sup>c</sup>	Springiness <sup>c</sup>	Hardness <sup>c</sup>	Sandy Gritty <sup>c</sup>
Treatment <sup>b</sup>	0.28 <sup>a</sup>	0.63 <sup>a</sup>	0.79 <sup>a</sup>	0.94 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>	0.0001 <sup>a</sup>
Control	2.35	2.69	1.71	2.22	6.39 <sup>d</sup>	5.60 <sup>d</sup>	3.05 <sup>e</sup>
2	2.33	2.73	1.73	2.23	7.09 <sup>e</sup>	6.04 <sup>e</sup>	2.13 <sup>d</sup>
3	2.40	2.78	1.74	2.25	6.42 <sup>d</sup>	5.62 <sup>d</sup>	3.93 <sup>g</sup>
4	2.45	2.77	2.03	2.27	6.32 <sup>d</sup>	5.57 <sup>d</sup>	4.45 <sup>g</sup>
5	2.34	2.70	1.90	2.21	7.23 <sup>e</sup>	6.02 <sup>e</sup>	3.10 <sup>ef</sup>
6	2.38	2.70	1.99	2.22	6.98 <sup>e</sup>	6.00 <sup>e</sup>	3.79 <sup>fg</sup>
Storage Day	0.0001 <sup>a</sup>	0.06 <sup>a</sup>	0.06 <sup>a</sup>	0.03 <sup>a</sup>	0.0001 <sup>a</sup>	0.0002 <sup>a</sup>	0.0001 <sup>a</sup>
0	2.29 <sup>d</sup>	2.70	2.00	2.20 <sup>d</sup>	6.40 <sup>d</sup>	5.66 <sup>d</sup>	2.48 <sup>d</sup>
6	2.45 <sup>e</sup>	2.76	1.69	2.28 <sup>e</sup>	7.08 <sup>e</sup>	5.95 <sup>e</sup>	4.34 <sup>e</sup>
Root Mean Square Error	0.031	0.039	0.171	0.049	0.309	0.128	1.429

<sup>a</sup> P-value from analysis of variance tables.

<sup>b</sup>Treatments: Control= 0 Sorghum Bran, 0 Phosphates, and 0 Salt; Trt 2= 0.4% Phosphates and 0.3% Salt; Trt 3= 0.25% Sorghum Bran; Trt 4= 2.0% Sorghum Bran; Trt 5= 0.25% Sorghum Bran, 0.4% Phosphates, 0.3% Salt; Trt 6= 2.0% Sorghum Bran, 0.4% Phoshpates and 0.3% Salt.

<sup>c</sup>Feeling Factors, After Feeling Factors, and Textures: 1=extremely bland; 15=extremely intense

<sup>defg</sup> Mean values within a column and followed by the same letter are not significantly different ( $P > 0.05$ ).

with slightly higher levels of liver flavor aromatic, a higher salt taste, and a harder and more springy patty when compared to CONT patties. When higher levels of sorghum bran were added to the patties, the patties were lower in cook beef/brothy, cooked beef fat, serumy/bloody, and higher in burnt and sorghum flavor aromatics. The addition at high levels of sorghum bran also caused the patties to have a more cowy/grainy and bitter taste, greater bitter and burnt aftertaste, a lower sweet aftertaste, and more of a sandy/gritty texture. The addition of S and SP to the 2% sorghum bran patties resulted in patties with less cooked/beef brothy, cooked beef fat, serumy/bloody, and soured flavor. Conversely, patties enriched with 2% sorghum bran and SP+S had more cowy/grainy and sorghum flavors aromatics, more salt taste, greater burnt aftertaste, and greater springiness, hardness, and sandy/gritty textures.

With increased storage, ground beef patties declined in cooked beef/brothy, cowy, cardboard, and serumy/bloody flavor aromatics; sweet basic tastes; fat mouthfeel; sweet aftertaste; and lip burn after feeling factor. However, with longer storage soured flavor; sour and bitter basic tastes; astringent, bitter and sour aftertastes; metallic feeling factor; and springiness, hardness, and sandy/gritty texture increased in ground beef patties.

Maca et al. (1997b) and Eckert et al. (1997) found an increase in cooked beef brothy, serumy/bloody, and soured flavor aromatics with time although in these studies these patties were packaged under a vacuum. The soured aromatic is often associated with vacuum-packaged products because of the sour tastes of lactic acid produced by lactic acid spoilage bacteria. Although TBARS values were not reported, the absence of

oxygen caused oxidation to occur later in the aforementioned studies when compared to meat packaged in modified atmosphere.

A treatment by day interaction was observed for cooked beefy/brothy (Fig 9). For all treatments (except low sorghum bran, S ,and SP), as time increased, cooked beef/brothy scores decreased most likely due to lipid oxidation. Numerous investigators have found similar results (Johnsen and Civille, 1986; Eckert et al 1997; Maca et al., 1997b; Miller, 2001) and attributed the decline in cooked beef/brothy to lipid oxidation.

A decrease in serumy/bloody and bitter attributes has been implicated as an indicator of lipid oxidation as reported by Johnsen and Civille (1986) and Miller (2001). The treatment by day interaction for the bloody aromatic shows that the addition of sorghum bran significantly reduced this aromatic (Fig 10). Over time, the bitter attribute increased for all treatments which is consistent with the onset of lipid oxidation and the inherent bitter taste of the sorghum bran (Fig 11) (Miller, 2001).

Cowy/grainy is the flavor aromatic associated with the flavor of cow meat which is sometimes considered grainy. The addition of sorghum bran at the 2% level had significantly higher cowy/grainy levels when compared to other treatments in the study. This is most likely due to the inherent grainy properties of the sorghum bran. Moreover, Miller (2001) reported that an elevated pH also contributes to the formation of a cowy/grainy flavor aromatic. Additionally, our findings suggest a decrease in the cowy/grainy aromatic over time. Eckert et al. (1997) found an increase over time in the cowy/grainy aromatic while Maca et al. (1997b) found no difference between storage days. In the development of the WOF beef lexicon, Johnsen and Civille (1986) note as

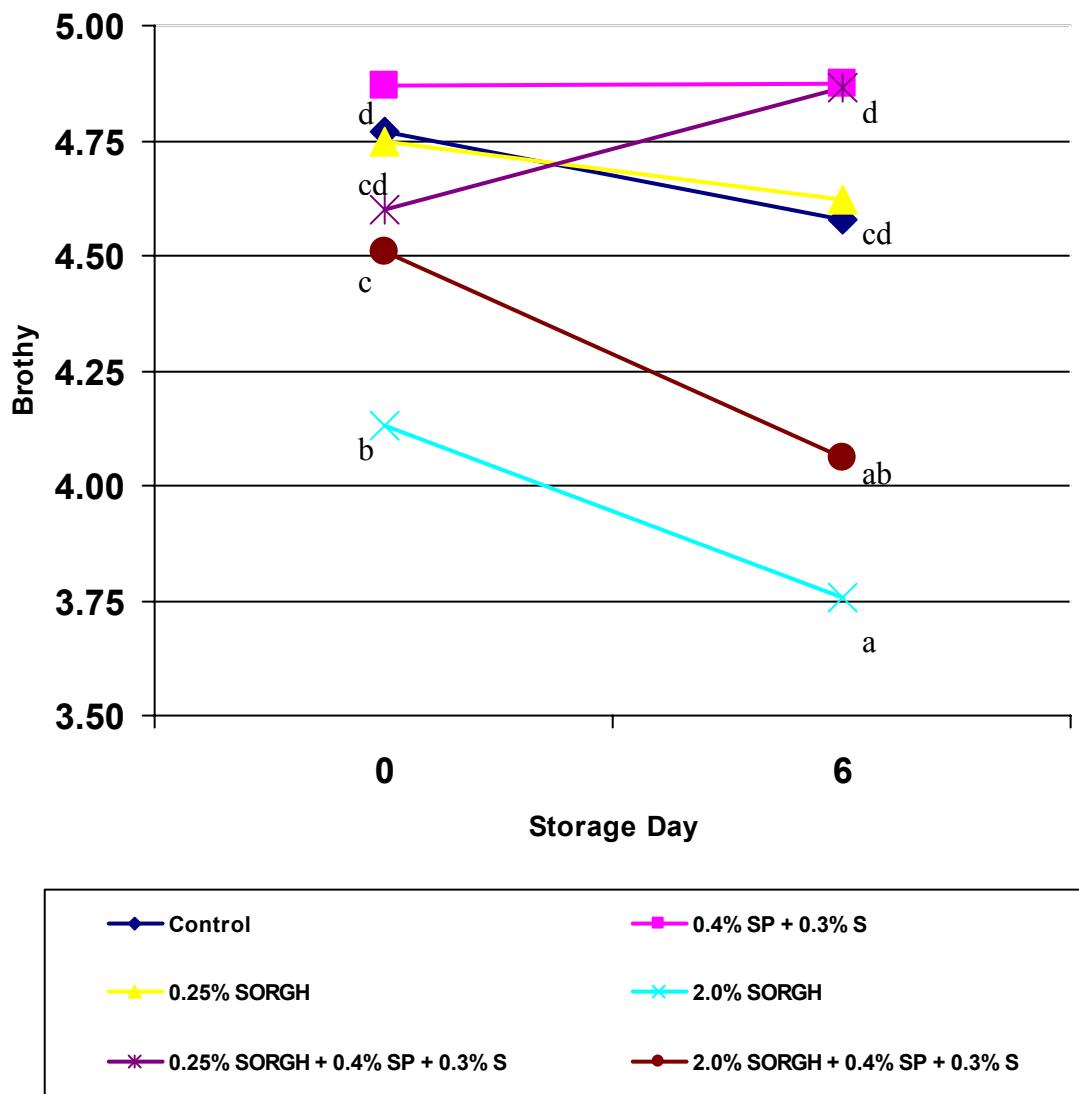


Fig. 9 – Least squared means for treatment by storage day interaction for the sensory aftertaste brothy.

Aromatics 1=Extremely Bland; 15=Extremely Intense  
 SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt  
 P-value = 0.0406 from Analysis of Variance table  
 Residual Mean Square Error = 0.143

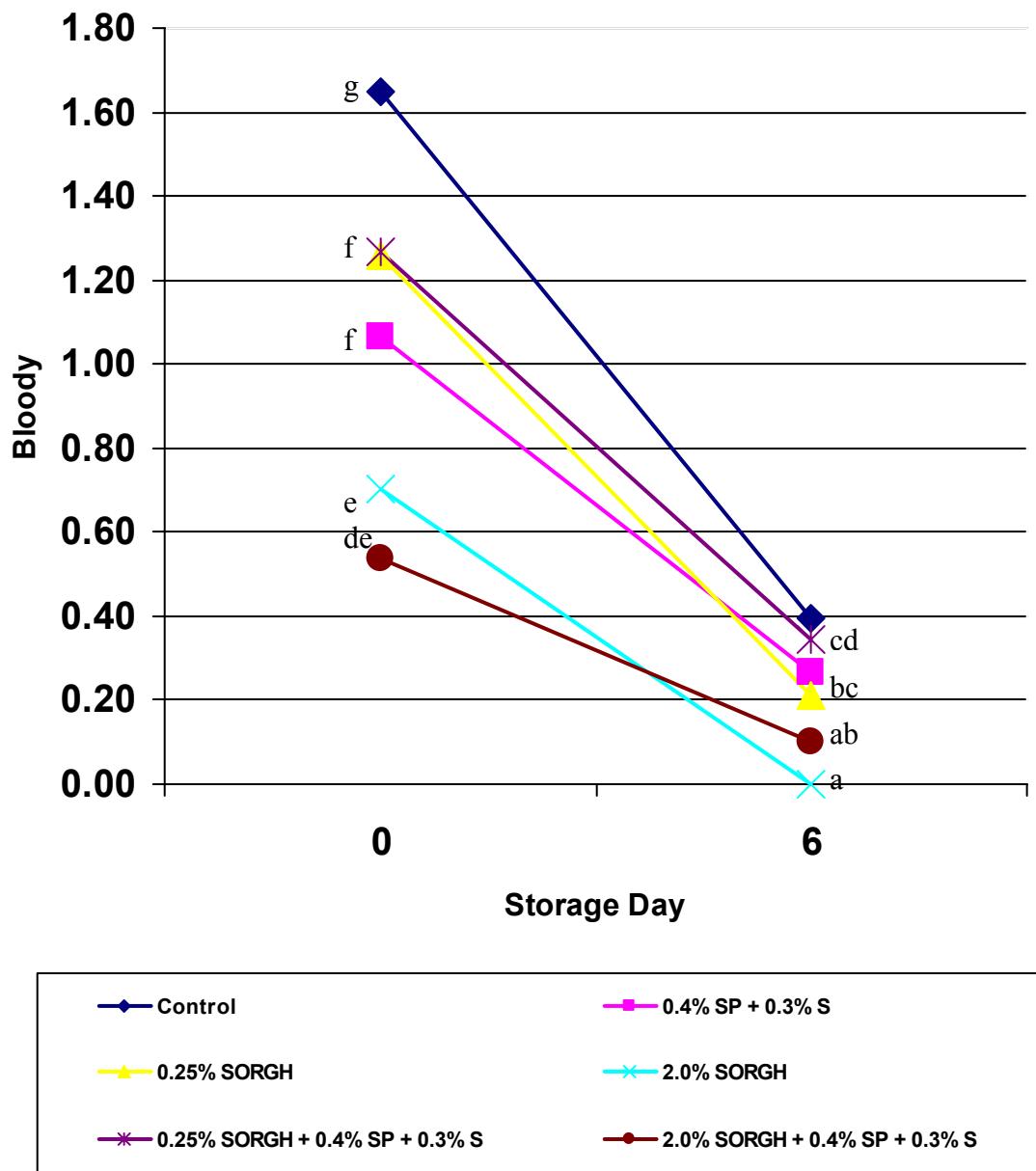


Fig. 10 – Least squared means for treatment by storage day interaction for the sensory attribute bloody.

Aromatics 1=Extremely Bland; 15=Extremely Intense  
 SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt  
 P-value =0.0001 from Analysis of Variance table  
 Residual Mean Square Error = 0.8773

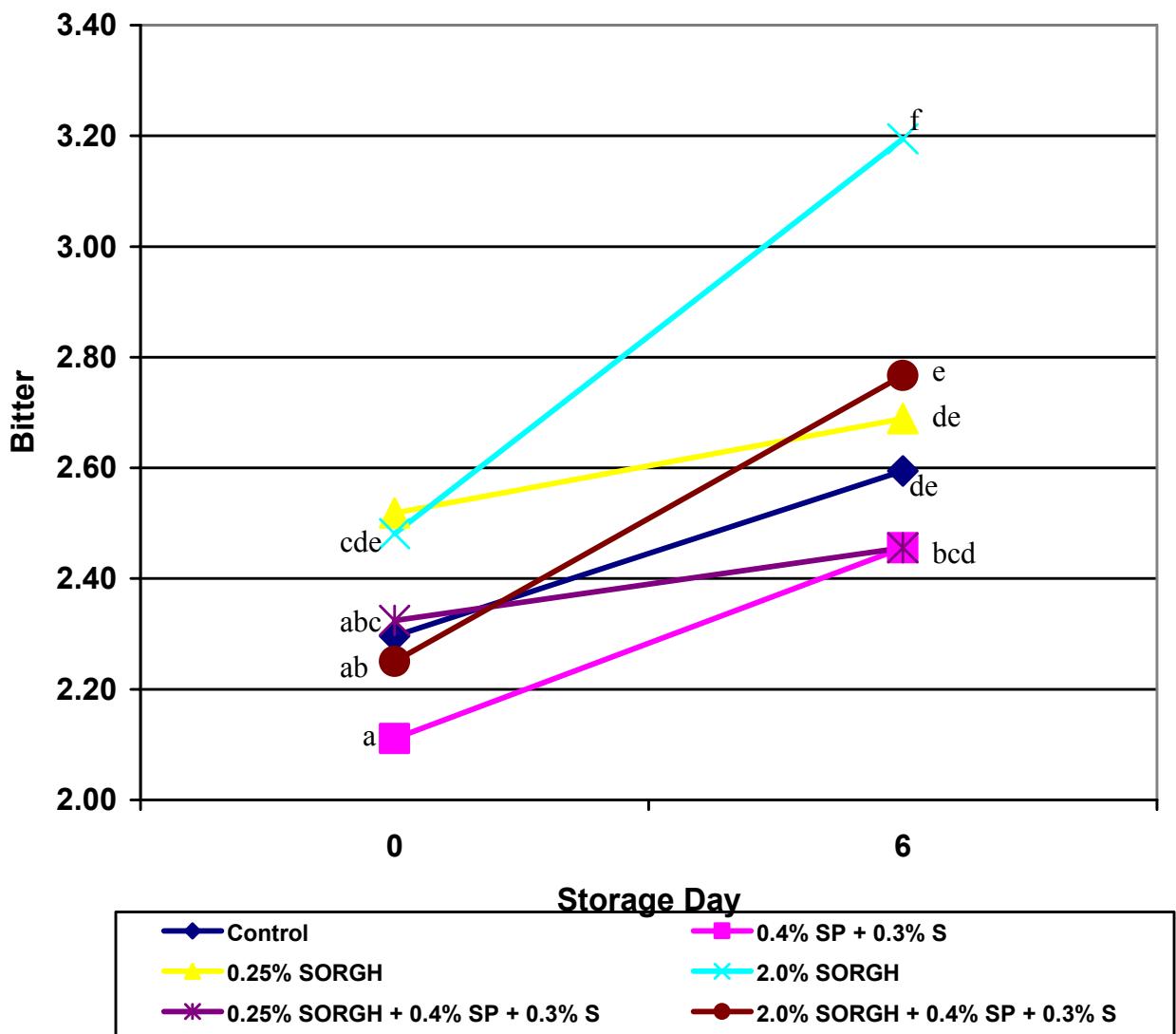


Fig. 11 – Least squared means for treatment by storage day interaction for the sensory attribute bitter.

Tastes and Aftertastes: 1=Extremely Bland; 15=Extremely Intense

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value =0.0203 from Analysis of Variance table

Residual Mean Square Error = 0.047

storage time increased a loss in the grainy/cowy flavor aromatic was observed and this change was associated with increased lipid oxidation

Cardboardy is the flavor aromatic that is associated with lipid oxidation. Numerous investigators have reported an increase over time with the cardboardy flavor aromatic (Johnsen and Civile, 1986; Eckert et al., 1997; Maca et al., 1997b; Miller, 2001). Our findings show a significant decrease over time which is most likely due to the solubilization of compounds in the sorghum bran which could have possibly masked the cardboardy flavor. The patties containing sorghum bran at the 2% level regardless of the addition of SP and S, had similar cardboardy flavor aromatic as the CONT. Other flavor aromatics that are associated with lipid oxidation, such as painty, were not affected by treatment.

Liver flavor aromatic was higher in patties containing SP and S, and patties containing 0.25% sorghum bran with SP and S. The addition of sorghum bran at the 2.0% level (with and without SP and S) suppressed the liver flavor aromatic in patties when compared to CONT patties. Miller (2001) stated that meat products with elevated myoglobin content are typically higher in liver flavor aromatics. The addition of SP and S enhanced patty liver flavor aromatic while patties with 2.0% sorghum bran had suppressed liver flavor aromatic. Compounds in the sorghum bran at elevated levels may have suppressed liver flavor aromatic.

Soured aromatic increased significantly, as expected, due to the expected microflora in the patties. Jackson et al. (1992) reported a  $6.9 \log_{10}/\text{cm}^2$  APC count for strip steaks that had been stored for 7d in a modified atmosphere where the modified

atmosphere was 80% oxygen and 20% carbon dioxide. Of that that 6.9 log count, 63.3% of those bacteria present were *Lactobacillus plantarum*. Although a microbiological analysis was not conducted in this study, lactic acid bacteria were most likely the cause of the soured aromatic attribute.

Civille and Lyon (1996) define the burnt aromatic as the “aromatic associated with blackened/acrid carbohydrates.” The burnt aromatic is usually indicative or dependent on cook time; in other cases, such as these, the addition of non-meat ingredients often can cause an increase in the burnt aromatic due to the addition of compounds that when cooked may impart a burnt flavor. An increase in the burnt aromatic is possibly due to the addition of sorghum bran which is a carbohydrate. The addition of 2.0% sorghum bran had the only significant treatment by day interaction. All other treatments saw no change in burnt aromatic in cooked patties as storage day increased (Fig 12). Since these patties were cooked in an electrical skillet, it is possible that the sorghum was burnt due to the surface contact with the skillet. Eckert et al. (1997) reported similar findings with ground beef patties and attributed the burnt aromatic to variations in cooked time rather than a true treatment by day interaction.

Tastes and aftertastes represent the flavors that are detected in the mouth during and after a sample is tasted. As storage day increased and by-products of lipid oxidation begin to form, sweet flavor decreased and sour increased in ground beef patties (Johnsen and Civille, 1986; Eckert et al., 1997; Maca et al. 1997b) and in cooked top rounds (Maca et al., 1997a). Similar results were noted in this study, despite storage of patties in a modified atmosphere, although the rate of change was faster due to the rapid onset

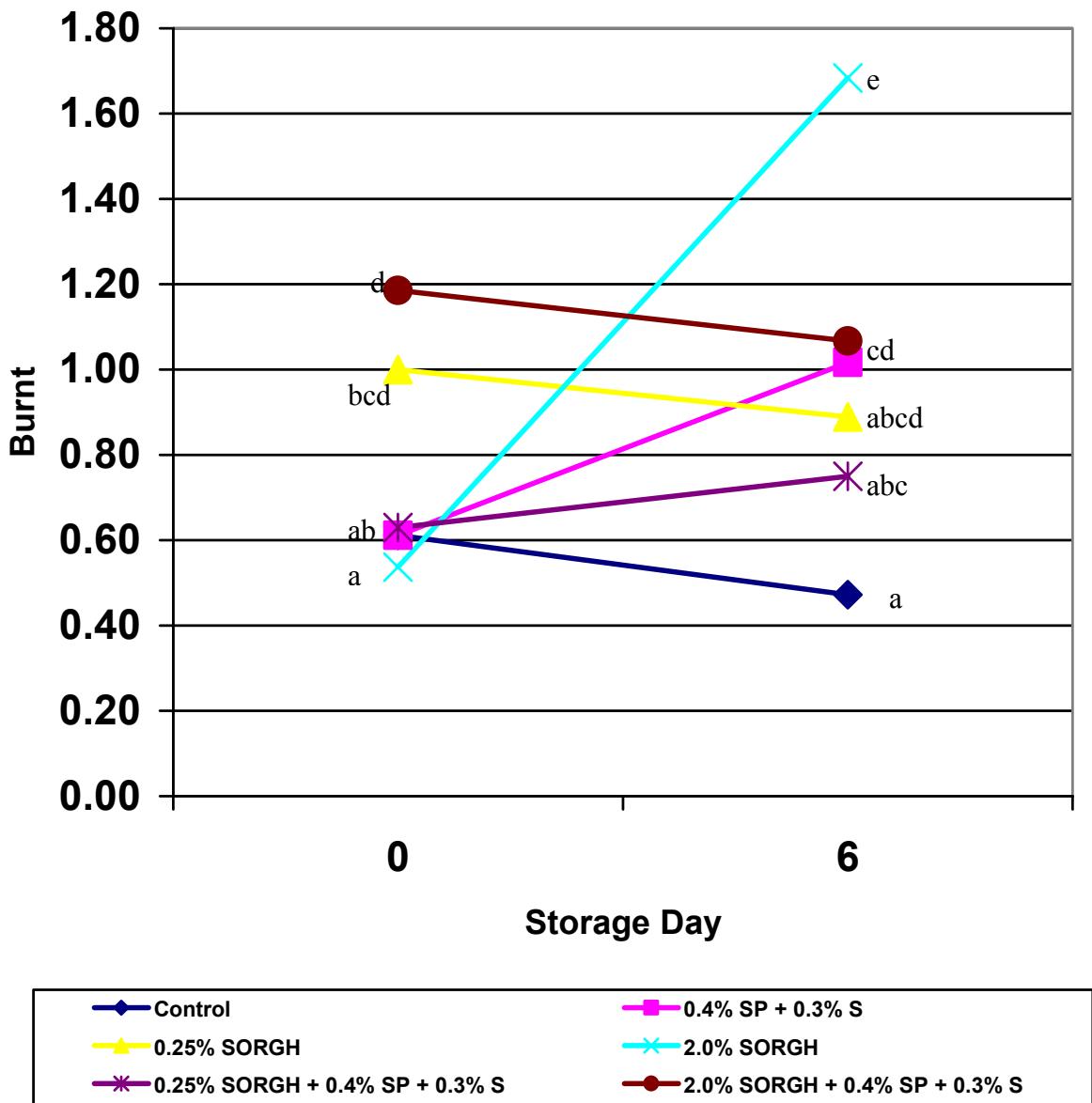


Fig. 12 – Least squared means for treatment by storage day interaction for the sensory attribute burnt.

Aromatics 1=Extremely Bland; 15=Extremely Intense  
 SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt  
 P-value =0.0002from Analysis of Variance table  
 Residual Mean Square Error = 0.38

of lipid oxidation. A treatment by day interaction was observed for bitter mouthfeel (Fig 11). Initially, the amount of sorghum bran had no effect on this attribute, but as storage day increased, the bitter mouthfeel increased. This may be due, in part, to the formation of by-products from sorghum bran solubilization. At the 0.25 % sorghum bran level, the SP and S may have provided a masking effect, but ground beef patties containing 2.0% sorghum did have higher bitter mouthfeel in relation to the CONT patties. Sorghum bran is inherently bitter, although the addition of salts and phosphates to patties containing 0.25% sorghum bran most likely masked that flavor.

As previously discussed, browned/burnt is an attribute that is observed when carbohydrates are burned. This is usually due to method of cooking or temperature during cooking. As expected, aftertaste and flavor aromatic brown/burnt followed similar trends (Fig 13). The aftertaste is the taste left in the mouth after the sample has been evaluated. The CONT patties were lower in the burnt aftertaste while patties from the 2.0% sorghum bran treatment had higher burnt aftertaste with storage time. This is most likely due to longer cooking time on day 6 than on day 0.

No significant treatment effect was observed for the sour taste, although a significant day effect was observed. As storage day increased, sour taste increased. As previously discussed, the increased value in soured and sour is most likely due to the microflora particularly *Lactobacillus* spp. Civille and Lyon (1996) define astringent as the chemical feeling factor on the tongue or other skin cavity described as puckering/dry and associated with tannins and or alum. Neither the aftertaste nor the feeling factor

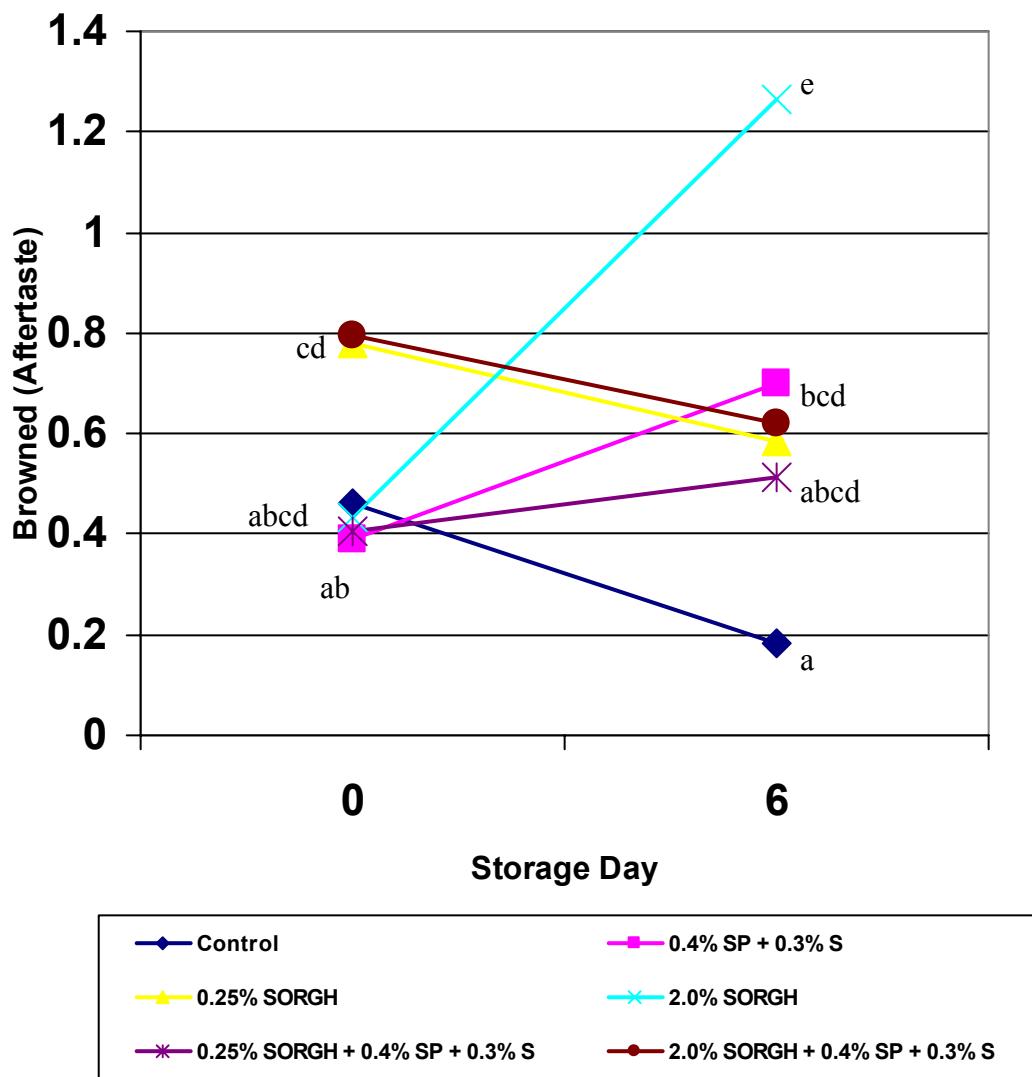


Fig. 13 – Least squared means for treatment by storage day interaction for the sensory aftertaste browned.

Tastes and Aftertastes: 1=Extremely Bland; 15=Extremely Intense

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value =0.0001 from Analysis of Variance table

Residual Mean Square Error = 0.213

astringent different across treatment (Table 5). However, with time, patties were more astringent.

The metallic feeling factor is often described as the mouthfeel associated with oxidized silver or any other metal (Chambers et al., 1992). Metallic mouthfeel is often associated with muscles that are high in myoglobin and with products in which lipid oxidation has occurred. As expected, with increased storage from 0d to 6d, patties increased in metallic mouthfeel (Table 5) most likely due to lipid oxidation. The after-feeling factor is the sensation that remains in the mouth after the sample has been expectorated. No significant treatment or day effect was observed for the metallic after-feeling factor. Lip burn is the after-feeling factor that is described as a burning sensation on the lips. Typically, this attribute is associated with lactates due to a chemical burn mouthfeel. No significant treatment effect was observed, although a day effect was reported. As storage day increased, lip burn decreased. As storage day increased, the off-flavors of lipid oxidation most likely masked lip burn.

Springiness is the ability of a sample to return to its original shape after being compressed. Those sorghum bran patties having sorghum and SP and S (both levels of sorghum bran) were the springiest while those patties containing sorghum bran only (both levels of sorghum bran) had the lowest values for springiness. This was most likely due to the extraction of salt soluble proteins during ingredient mixing when salt was added to the patties. The extraction of the salt soluble proteins allowed for binding with the muscle proteins thus producing more cohesive and springy patties. Patties on day 6 had higher values for springiness than patties on day 0. Figure 14 shows the two-

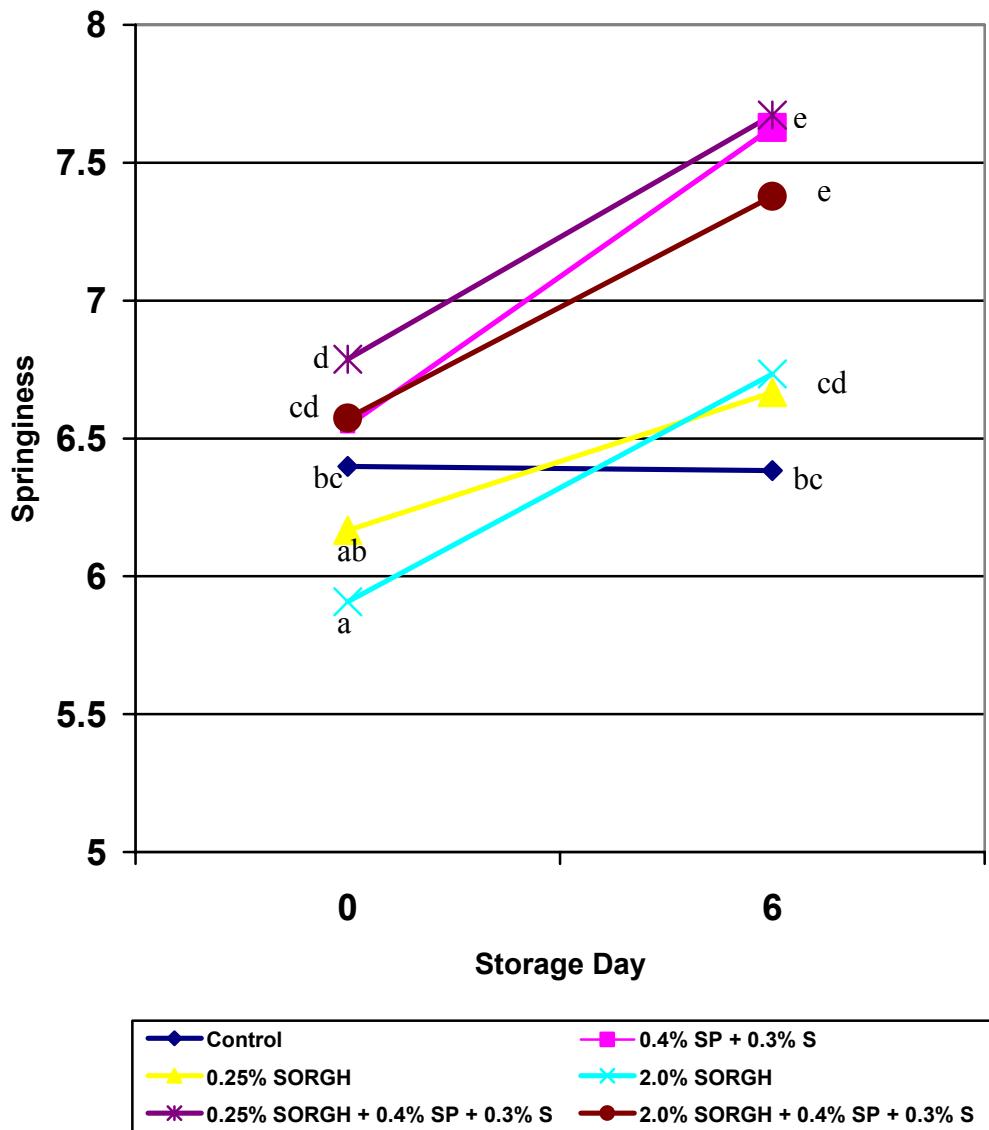


Fig. 14 – Least squared means for treatment by storage day interaction for the sensory texture springiness.

Springiness: 1=Not Springy; 15=Very Springy

SORGH = Sorghum Bran; SP = Sodium Phosphate; S = Salt

P-value = 0.0027 from Analysis of Variance table

Residual Mean Square Error = 0.309

way interaction for springiness. For all non-meat ingredient containing patties, springiness values increased with storage. The CONT patties actually decreased slightly in springiness with storage. Although no interaction was reported, Eckert et al. (1997) reported higher springiness values for patties containing non-meat ingredients and for patties with extended storage time. The addition of non-meat ingredients containing salt has been shown to extract salt-soluble proteins and allow for greater protein binding. This protein binding forms a protein matrix that leads to a springier patty.

Hardness refers to the amount of force required to bite through a processed meat sample. Patties containing SP and salt (regardless of sorghum bran) were harder than those patties without SP and salt. This is due to the protein matrix that is formed by the extraction of salt soluble proteins. Eckert et al. (1997) reported a significant day effect for the hardness attribute in ground beef patties.

Sandy/gritty is the texture that was added during to ballot development session to address the texture of the sorghum. The addition of sorghum bran did increase the sandy/gritty texture in ground beef patties. Patties containing 0.25% sorghum bran and SP and S were similar in sandy/gritty texture to the CONT patties. Additionally, as storage day increased, the sandy/gritty texture became more pronounced.

## CHAPTER V

### SUMMARY

#### Chemical Data

Results from this study show that sorghum bran can be added to reduce TBARS values in ground beef patties packaged in a modified atmosphere and stored under retail display. Metmyoglobin content data was not reliable due in part to the procedure used and the interference with the anthocyanins portion of the sorghum bran. The two-way interaction associated with pH is function of sorghum addition and the solubilization of hydrophobic compounds over time. Oxygen and carbon dioxide levels in the package were affected due to the ground beef patties' ability to rapidly absorb carbon dioxide. Also, the addition of sorghum bran lowered the ability of the ground beef patties to absorb carbon dioxide. The absorption of carbon dioxide in the ground beef patties lowered the carbon dioxide levels, but increased the oxygen levels in the headspace. Patties containing 2.0% sorghum bran (regardless of S and SP) had lower amounts of cook loss when compared to CONT patties while the addition of sorghum bran at the 0.25% level was significantly lower only in patties containing sorghum bran in addition with S and SP. The addition of non-meat ingredients did not have a significant effect on cook time.

#### Color Data

The addition of sorghum bran at the 2.0% level with or without S and SP lowered L\*, a\*, and b\* Minolta CIE color space values when compared to CONT patties. The trained color panel also found these patties to have the lowest raw color score, the

greatest amount of discoloration, and the darkest color of discoloration. Ground beef patties enhanced with 0.25% sorghum bran with or without S and SP had significantly lower L\*, a\* and b\* Minolta CIE color space values when compared to the CONT patties. Panelists also found significantly lower raw color scores, smaller amounts of discoloration, and a lighter color of discoloration when compared to CONT patties. From a color perspective, the 0.25% sorghum bran level is more advantageous in this system when compared to the 2.0% sorghum bran patties.

### **Sensory Data**

Patties containing the highest amount of sorghum bran (2.0%) had lower beefy/brothy, cooked beef fat, and serumy/bloody flavor aromatics; higher sorghum flavor, and bitter and burnt aftertaste; lower fat mouthfeel aftertaste; and more sandy and gritty texture ( $P<0.05$ ) compared to CONT patties. Patties containing low sorghum bran had lower bloody flavor aromatics ( $P<0.05$ ) compared to CONT patties. The lower sorghum bran patties had similar cook loss, redness (a\*), discoloration scores, sorghum flavor aromatics, and bitter taste as CONT patties. Patties enhanced with low amounts of sorghum bran with SP and S had higher liver flavor aromatics ( $P<0.05$ ) compared to CONT patties.

## **CHAPTER VI**

### **CONCLUSIONS**

Data from this study indicate that the addition of sorghum bran at 0.25% and 2.0% can reduce TBARS values over time in ground beef patties stored in a modified atmosphere package. In future studies for determining metmyoglobin content, a different procedure should be used due to the interference with the anthocyanin fraction of the sorghum bran. Although the addition of 2.0% sorghum bran is superior in reducing TBARS values over time when compared to the 0.25% sorghum bran, the addition at the high level causes lower raw color scores, greater amounts of discoloration, darker discoloration, and changes the sensory flavor profile that are undesirable. Moreover, the addition of 0.25% sorghum bran reduces TBARS values over time and does not have near the drastic effect on color and sensory flavor attributes when compared to the 2.0% level. Although sorghum bran can be used at low levels to reduce TBARS values, ways to reduce the effects of color and sensory attributes needs to be addressed. Specifically, further research to isolate and extract the antioxidant components (anthocyanins and tannins) might reduce the effects on color and sensory characteristics by removing unwanted or unnecessary hydrophobic components. Additionally, further research to determine consumer acceptability and microbiological effects should be examined.

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**APPENDIX A****AOV TABLES**

**Table A-1. ANOVA table for metmyoglobin content, mg/g.**

Source	DF	Sum of Squares		Mean Square	
Model	25	5.78319636		0.23132785	
Error	186	28.83382126		0.15502054	
Corrected Total	211	34.61701763			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.39310108	0.19655054	1.27	0.2838
TRT	5	1.10121758	0.22024352	1.42	0.2186
DAY	3	2.67913957	0.89304652	5.76	0.0009
TRT*DAY	15	1.54815358	0.10321024	0.67	0.8157

**Table A-2. ANOVA table for TBARS values, mg malonaldehyde/g.**

Source	DF	Sum of Squares		Mean Square	
Model	35	185.48131609		5.29946617	
Error	180	69.17470367		0.38430391	
Corrected Total	215	254.65601977			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	1.95476885	0.97738442	2.54	0.0814
TRT	5	61.99657060	12.39931412	32.26	0.0001
DAY	3	68.19333873	22.73111291	59.15	0.0001
TRT*DAY	15	42.96714693	2.86447646	7.45	0.0001
TRT*REP	10	10.36949099	1.03694910	2.70	0.0042

**Table A-3. ANOVA table for pH values.**

Source	DF	Sum of Squares		Mean Square	
Model	35	0.45315556		0.01294730	
Error	180	0.24622778		0.00136793	
Corrected Total	215	0.69938333			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.02597500	0.01298750	9.49	0.0001
TRT	5	0.16696111	0.03339222	24.41	0.0001
DAY	3	0.10638704	0.03546235	25.92	0.0001
TRT*DAY	15	0.03563519	0.00237568	1.74	0.0474
TRT*REP	10	0.11819722	0.01181972	8.64	0.0001

**Table A-4. ANOVA table for oxygen content, %.**

Source	DF	Sum of Squares		Mean Square	
Model	35	192.4538778		5.4986822	
Error	170	286.4272873		1.6848664	
Corrected Total	205	478.8811650			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	49.20340938	24.60170469	14.60	0.0001
TRT	5	38.32805795	7.66561159	4.55	0.0006
DAY	3	60.93561315	20.31187105	12.06	0.0001
TRT*DAY	15	30.54159115	2.03610608	1.21	0.2695
TRT*REP	10	16.17096762	1.61709676	0.96	0.4804

**Table A-5. ANOVA table for carbon dioxide content, %.**

Source	DF	Sum of Squares		Mean Square	
Model	35	416.4657114		11.8990203	
Error	170	44.0368615		0.2590404	
Corrected Total	205	460.5025728			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	21.9407225	10.9703612	42.35	0.0001
TRT	5	2.6770672	0.5354134	2.07	0.0719
DAY	3	373.6942662	124.5647554	480.87	0.0001
TRT*DAY	15	8.4718148	0.5647877	2.18	0.0087
TRT*REP	10	6.4658312	0.6465831	2.50	0.0081

**Table A-6. ANOVA table for cook loss, %.**

Source	DF	Sum of Squares		Mean Square	
Model	23	451.441492		19.627891	
Error	84	1038.725795		12.365783	
Corrected Total	107	1490.167288			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	92.1453246	46.0726623	10.62	0.0034
TRT	5	298.6423245	59.7284649	13.76	0.0003
DAY	1	11.3273766	11.3273766	0.92	0.3413
TRT*DAY	5	5.9252130	1.1850426	0.10	0.9926
TRT*REP	10	43.4012536	4.3401254	0.35	0.9636

**Table A-7. ANOVA table for cook time, min.**

Source	DF	Sum of Squares		Mean Square	
Model	23	1342.962963		58.389694	
Error	180	4936.444444		58.767196	
Corrected Total	215	6279.407407			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	141.1296296	70.5648148	2.80	0.1086
TRT	5	275.1851852	55.0370370	2.18	0.1377
DAY	1	96.3333333	96.3333333	1.64	0.2040
TRT*DAY	5	577.8888889	115.5777778	1.97	0.0920
TRT*REP	10	252.4259259	25.2425926	0.43	0.9283

**Table A-8. ANOVA table for L\* values.**

Source	DF	Sum of Squares		Mean Square	
Model	35	1395.838937		39.881112	
Error	180	418.605906		2.325588	
Corrected Total	215	1814.444843			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	196.845379	98.422689	42.32	0.0001
TRT	5	1020.398954	204.079791	87.75	0.0001
DAY	1	12.823306	4.274435	1.84	0.1419
TRT*DAY	5	49.607339	3.307156	1.42	0.1409
TRT*REP	10	116.163960	11.616396	5.00	0.0001

**Table A-9. ANOVA table for a\* values.**

Source	DF	Sum of Squares		Mean Square	
Model	35	3958.14694246		113.08991264	
Error	180	373.18980063		2.07327667	
Corrected Total	215	4331.33674309			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	19.11377078	9.55688539	4.61	0.0112
TRT	5	1241.01428607	248.20285721	119.72	0.0001
DAY	3	2525.97270913	841.99090304	406.12	0.0001
TRT*DAY	15	106.79215036	7.11947669	3.43	0.0001
TRT*REP	10	65.25402612	6.52540261	3.15	0.0010

**Table A-10.** ANOVA table for b\* values.

Source	DF	Sum of Squares		Mean Square	
Model	35	456.25973719		13.03599249	
Error	180	71.51209196		0.39728940	
Corrected Total	215	527.77182914			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	10.12607068	5.06303534	12.74	0.0001
TRT	5	297.49758566	59.49951713	149.76	0.0001
DAY	3	130.66323388	43.55441129	109.63	0.0001
TRT*DAY	15	2.06556765	0.13770451	0.35	0.9892
TRT*REP	10	15.90727933	1.59072793	4.00	0.0001

**Table A-11.** ANOVA table for raw color observed inside the package.

Source	DF	Sum of Squares		Mean Square	
Model	35	442.67306293		12.64780180	
Error	168	54.76413580		0.32597700	
Corrected Total	203	497.43719873			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	1.64381113	0.82190557	2.52	0.0834
TRT	5	370.43597381	74.08719476	227.28	0.0001
DAY	3	49.20998665	16.40332888	50.32	0.0001
TRT*DAY	15	3.71826275	0.24788418	0.76	0.7196
TRT*REP	10	14.94488744	1.49448874	4.58	0.0001

**Table A-12.** ANOVA table for amount of discoloration when inside the package.

Source	DF	Sum of Squares		Mean Square	
Model	35	594.55029843		16.98715138	
Error	168	104.10201775		0.61965487	
Corrected Total	203	698.65231618			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	3.14984390	1.57492195	2.54	0.0818
TRT	5	206.61328454	41.32265691	66.69	0.0001
DAY	3	314.98228247	104.99409416	169.44	0.0001
TRT*DAY	15	44.39177446	2.95945163	4.78	0.0001
TRT*REP	10	20.51883215	2.05188322	3.31	0.0006

**Table A-13.** ANOVA table for color of discoloration when inside the package.

Source	DF	Sum of Squares	Mean Square	
Model	35	162.31934414	4.63769555	
Error	168	62.15262346	0.36995609	
Corrected Total	203	224.47196759		
Source	DF	Type III SS	Mean Square	F Value
REP	2	5.27909604	2.63954802	7.13
TRT	5	22.33015046	4.46603009	12.07
DAY	3	82.38741334	27.46247111	74.23
TRT*DAY	15	60.99600331	4.06640022	10.99
TRT*REP	10	3.46916190	0.34691619	0.94
				0.5002

**Table A-14.** ANOVA for raw color when observed outside the package.

Source	DF	Sum of Squares	Mean Square	
Model	35	366.33989615	10.46685418	
Error	167	59.21080993	0.35455575	
Corrected Total	202	425.55070608		
Source	DF	Type III SS	Mean Square	F Value
REP	2	2.30615732	1.15307866	3.25
TRT	5	325.01438544	65.00287709	183.34
DAY	3	17.89456631	5.96485544	16.82
TRT*DAY	15	3.04969595	0.20331306	0.57
TRT*REP	10	18.66885346	1.86688535	5.2
				0.0001

**Table A-15.** ANOVA table for amount of discoloration when outside the package.

Source	DF	Sum of Squares	Mean Square	
Model	35	667.31440133	19.06612575	
Error	168	77.98067901	0.46417071	
Corrected Total	203	745.29508034		
Source	DF	Type III SS	Mean Square	F Value
REP	2	11.89795109	5.94897555	12.82
TRT	5	208.85876089	41.77175218	89.99
DAY	3	372.80475902	124.26825301	267.72
TRT*DAY	15	56.31841957	3.75456130	8.09
TRT*REP	10	9.61400054	0.96140005	2.07
				0.0294

**Table A-16. ANOVA table for color of discoloration when outside the package.**

Source	DF	Sum of Squares		Mean Square	
Model	35	222.32607003		6.35217343	
Error	168	78.53770448		0.46748634	
Corrected Total	203	300.86377451			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	16.49914945	8.24957473	17.65	0.0001
TRT	5	27.94173747	5.58834749	11.95	0.0001
DAY	3	123.85963319	41.28654440	88.32	0.0001
TRT*DAY	15	68.24239288	4.54949286	9.73	0.0001
TRT*REP	10	1.91934504	0.19193450	0.4	0.9402

**Table A-17. ANOVA table for the sensory aromatic brothy.**

Source	DF	Sum of Squares		Mean Square	
Model	23	16.66867798		0.72472513	
Error	84	12.24837963		0.14581404	
Corrected Total	107	28.91705761			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	2.84983827	1.42491914	9.77	0.0002
TRT	5	10.59603909	2.11920782	14.53	0.0001
DAY	1	0.63719506	0.63719506	4.37	0.0396
TRT*DAY	5	1.50977366	0.30195473	2.07	0.0771
TRT*REP	10	1.10434671	0.11043467	0.76	0.6688

**Table A-18. ANOVA table for the sensory aromatic cooked beef fat.**

Source	DF	Sum of Squares		Mean Square	
Model	23	3.04978138		0.13259919	
Error	84	3.58740741		0.04270723	
Corrected Total	107	6.63718879			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.03215926	0.01607963	0.38	0.6874
TRT	5	1.95184156	0.39036831	9.14	0.0001
DAY	1	0.00845000	0.00845000	0.20	0.6576
TRT*DAY	5	0.42591564	0.08518313	1.99	0.0877
TRT*REP	10	0.62013374	0.06201337	1.4	0.1723

**Table A-19.** ANOVA table for the sensory aromatic serumy/bloody.

Source	DF	Sum of Squares	Mean Square	
Model	23	28.78362397	1.25146191	
Error	84	7.20831790	0.08581331	
Corrected Total	107	35.99194187		
Source	DF	Type III SS	Mean Square	F Value
REP	2	0.19802438	0.09901219	1.15
TRT	5	5.99467721	1.19893544	13.97
DAY	1	19.86950756	19.86950756	231.54
TRT*DAY	5	1.48125129	0.29625026	3.45
TRT*REP	10	1.09268776	0.10926878	1.2
				0.2587

**Table A-20.** ANOVA table for the sensory aromatic cowy.

Source	DF	Sum of Squares	Mean Square	
Model	23	0.18650206	0.00810879	
Error	84	0.59901235	0.00713110	
Corrected Total	107	0.78551440		
Source	DF	Type III SS	Mean Square	F Value
REP	2	0.01572346	0.00786173	1.10
TRT	5	0.07242798	0.01448560	2.03
DAY	1	0.01912099	0.01912099	2.68
TRT*DAY	5	0.04032922	0.00806584	1.13
TRT*REP	10	0.03744856	0.00374486	0.5
				0.8679

**Table A-21.** ANOVA table for the sensory aromatic cardboard.

Source	DF	Sum of Squares	Mean Square	
Model	23	2.35947274	0.10258577	
Error	84	4.37283951	0.05205761	
Corrected Total	107	6.73231224		
Source	DF	Type III SS	Mean Square	F Value
REP	2	1.36139846	0.68069923	13.08
TRT	5	0.35510931	0.07102186	1.36
DAY	1	0.13318534	0.13318534	2.56
TRT*DAY	5	0.06992413	0.01398483	0.27
TRT*REP	10	0.54551183	0.05455118	1.0
				0.4116

**Table A-22. ANOVA table for the sensory aromatic painty.**

Source	DF	Sum of Squares		Mean Square	
Model	23	0.02074074		0.00090177	
Error	84	0.05777778		0.00068783	
Corrected Total	107	0.07851852			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.00444444	0.00222222	3.23	0.0445
TRT	5	0.00407407	0.00081481	1.18	0.3237
DAY	1	0.00222222	0.00222222	3.23	0.0759
TRT*DAY	5	0.00407407	0.00081481	1.18	0.3237
TRT*REP	10	0.00814815	0.00081481	1.1	0.3129

**Table A-23. ANOVA table for the sensory aromatic fishy.**

Source	DF	Sum of Squares		Mean Square	
Model	23	0.61428755		0.02670815	
Error	84	1.91696759		0.02282104	
Corrected Total	107	2.53125514			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.11870278	0.05935139	2.60	0.0802
TRT	5	0.08843107	0.01768621	0.77	0.5704
DAY	1	0.06008889	0.06008889	2.63	0.1084
TRT*DAY	5	0.09992798	0.01998560	0.88	0.5010
TRT*REP	10	0.19574331	0.01957433	0.86	0.5754

**Table A-24. ANOVA table for the sensory aromatic liver.**

Source	DF	Sum of Squares		Mean Square	
Model	23	2.64311471		0.11491803	
Error	84	2.30450617		0.02743460	
Corrected Total	107	4.94762088			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.74400370	0.37200185	13.56	0.0001
TRT	5	1.12862397	0.22572479	8.23	0.0001
DAY	1	0.00642222	0.00642222	0.23	0.6298
TRT*DAY	5	0.07152521	0.01430504	0.52	0.7594
TRT*REP	10	0.61428498	0.06142850	2.24	0.0228

**Table A-25.** ANOVA table for the sensory aromatic soured.

Source	DF	Sum of Squares	Mean Square	
Model	23	0.78520576	0.03413938	
Error	84	1.67747685	0.01996996	
Corrected Total	107	2.46268261		
Source	DF	Type III SS	Mean Square	F Value
REP	2	0.05745278	0.02872639	1.44
TRT	5	0.15041409	0.03008282	1.51
DAY	1	0.18200556	0.18200556	9.11
TRT*DAY	5	0.09107767	0.01821553	0.91
TRT*REP	10	0.33210134	0.03321013	1.66

**Table A-26.** ANOVA table for the sensory aromatic burnt.

Source	DF	Sum of Squares	Mean Square	
Model	23	18.10136317	0.78701579	
Error	84	26.54884259	0.31605765	
Corrected Total	107	44.65020576		
Source	DF	Type III SS	Mean Square	F Value
REP	2	1.43357809	0.71678904	2.27
TRT	5	4.94162937	0.98832587	3.13
DAY	1	0.92404460	0.92404460	2.92
TRT*DAY	5	5.50752443	1.10150489	3.49
TRT*REP	10	5.03140689	0.50314069	1.59

**Table A-27.** ANOVA table for the sensory aromatic sorghum.

Source	DF	Sum of Squares	Mean Square	
Model	23	47.29384774	2.05625425	
Error	84	18.15704475	0.21615529	
Corrected Total	107	65.45089249		
Source	DF	Type III SS	Mean Square	F Value
REP	2	0.81467068	0.40733534	1.88
TRT	5	40.54748200	8.10949640	37.52
DAY	1	0.06763025	0.06763025	0.31
TRT*DAY	5	1.90218879	0.38043776	1.76
TRT*REP	10	3.62416924	0.36241692	1.68

**Table A-28. ANOVA table for the feeling factor metallic.**

Source	DF	Sum of Squares		Mean Square	
Model	23	1.42941101		0.06214830	
Error	84	2.74641204		0.03269538	
Corrected Total	107	4.17582305			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.12571759	0.06285880	1.92	0.1526
TRT	5	0.21489712	0.04297942	1.31	0.2657
DAY	1	0.66125000	0.66125000	20.22	0.0001
TRT*DAY	5	0.16713477	0.03342695	1.02	0.4098
TRT*REP	10	0.22705504	0.02270550	0.69	0.7269

**Table A-29. ANOVA table for the feeling factor astringent.**

Source	DF	Sum of Squares		Mean Square	
Model	23	0.83633230		0.03636227	
Error	84	3.33652778		0.03972057	
Corrected Total	107	4.17286008			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.23112438	0.11556219	2.91	0.0600
TRT	5	0.12428369	0.02485674	0.63	0.6805
DAY	1	0.13548904	0.13548904	3.41	0.0683
TRT*DAY	5	0.04203061	0.00840612	0.21	0.9567
TRT*REP	10	0.31662294	0.03166229	0.80	0.6317

**Table A-30. ANOVA table for the sensory taste salt.**

Source	DF	Sum of Squares		Mean Square	
Model	23	9.93439043		0.43193002	
Error	84	8.89401235		0.10588110	
Corrected Total	107	18.82840278			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.11607994	0.05803997	0.55	0.5801
TRT	5	8.83160108	1.76632022	16.68	0.0001
DAY	1	0.00122238	0.00122238	0.01	0.9147
TRT*DAY	5	0.52326775	0.10465355	0.99	0.4298
TRT*REP	10	0.47352623	0.04735262	0.45	0.9185

**Table A-31.** ANOVA table for the sensory taste sour.

Source	DF	Sum of Squares		Mean Square	
Model	23	1.89105453		0.08221976	
Error	84	4.46273148		0.05312776	
Corrected Total	107	6.35378601			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.09368549	0.04684275	0.88	0.4179
TRT	5	0.28199203	0.05639841	1.06	0.3876
DAY	1	0.53446312	0.53446312	10.06	0.0021
TRT*DAY	5	0.52180684	0.10436137	1.96	0.0923
TRT*REP	10	0.57830504	0.05783050	1.09	0.3804

**Table A-32.** ANOVA table for the sensory taste bitter.

Source	DF	Sum of Squares		Mean Square	
Model	23	8.26897119		0.35952049	
Error	84	4.98694444		0.05936839	
Corrected Total	107	13.25591564			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.00550216	0.00275108	0.05	0.9547
TRT	5	3.24967721	0.64993544	10.95	0.0001
DAY	1	3.52746312	3.52746312	59.42	0.0001
TRT*DAY	5	1.10909079	0.22181816	3.74	0.0042
TRT*REP	10	0.35375257	0.03537526	0.60	0.8131

**Table A-33.** ANOVA table for the sensory taste sweet.

Source	DF	Sum of Squares		Mean Square	
Model	23	3.35663323		0.14594058	
Error	84	2.79432099		0.03326573	
Corrected Total	107	6.15095422			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.07990093	0.03995046	1.20	0.3060
TRT	5	1.42618184	0.28523637	8.57	0.0001
DAY	1	1.19866806	1.19866806	36.03	0.0001
TRT*DAY	5	0.17541024	0.03508205	1.05	0.3915
TRT*REP	10	0.34759516	0.03475952	1.04	0.4139

**Table A-34. ANOVA table for the sensory aftertaste astringent.**

Source	DF	Sum of Squares	Mean Square	
Model	23	1.58026235	0.06870706	
Error	84	5.64381173	0.06718823	
Corrected Total	107	7.22407407		
Source	DF	Type III SS	Mean Square	F Value
REP	2	0.29207315	0.14603657	2.17
TRT	5	0.11110725	0.02222145	0.33
DAY	1	0.52190139	0.52190139	7.77
TRT*DAY	5	0.25740355	0.05148071	0.77
TRT*REP	10	0.33994599	0.03399460	0.51

**Table A-35. ANOVA table for the sensory aftertaste fat mouthfeel.**

Source	DF	Sum of Squares	Mean Square	
Model	23	2.10640432	0.09158280	
Error	84	2.80239198	0.03336181	
Corrected Total	107	4.90879630		
Source	DF	Type III SS	Mean Square	F Value
REP	2	0.59357438	0.29678719	8.90
TRT	5	0.56954090	0.11390818	3.41
DAY	1	0.43919275	0.43919275	13.16
TRT*DAY	5	0.08296682	0.01659336	0.50
TRT*REP	10	0.42022377	0.04202238	1.26

**Table A-36. ANOVA table for the sensory aftertaste bitter.**

Source	DF	Sum of Squares	Mean Square	
Model	23	4.20510545	0.18283067	
Error	84	7.02220679	0.08359770	
Corrected Total	107	11.22731224		
Source	DF	Type III SS	Mean Square	F Value
REP	2	0.23523333	0.11761667	1.41
TRT	5	1.86649434	0.37329887	4.47
DAY	1	1.09520000	1.09520000	13.10
TRT*DAY	5	0.34967335	0.06993467	0.84
TRT*REP	10	0.47007202	0.04700720	0.56

**Table A-37. ANOVA table for the sensory aftertaste browned/burnt.**

Source	DF	Sum of Squares		Mean Square	
Model	23	9.63036780		0.41871164	
Error	84	16.68731481		0.19865851	
Corrected Total	107	26.31768261			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.48501111	0.24250556	1.22	0.3002
TRT	5	3.00992798	0.60198560	3.03	0.0145
DAY	1	0.12667222	0.12667222	0.64	0.4268
TRT*DAY	5	3.77474280	0.75494856	3.80	0.0038
TRT*REP	10	2.04272634	0.20427263	1.03	0.4272

**Table A-38. ANOVA table for the sensory aftertaste sour.**

Source	DF	Sum of Squares		Mean Square	
Model	23	3.42325360		0.14883711	
Error	84	7.56405864		0.09004832	
Corrected Total	107	10.98731224			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.05763549	0.02881775	0.32	0.7270
TRT	5	0.22476980	0.04495396	0.50	0.7760
DAY	1	2.03235201	2.03235201	22.57	0.0001
TRT*DAY	5	0.51597351	0.10319470	1.15	0.3428
TRT*REP	10	0.53018776	0.05301878	0.59	0.8189

**Table A-39. ANOVA table for the sensory aftertaste sweet.**

Source	DF	Sum of Squares		Mean Square	
Model	23	1.03390947		0.04495259	
Error	84	1.65037037		0.01964727	
Corrected Total	107	2.68427984			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.03929012	0.01964506	1.00	0.3723
TRT	5	0.32247428	0.06449486	3.28	0.0093
DAY	1	0.43038580	0.43038580	21.91	0.0001
TRT*DAY	5	0.00904835	0.00180967	0.09	0.9933
TRT*REP	10	0.18051955	0.01805195	0.92	0.5202

**Table A-40.** ANOVA table for the sensory after feeling factor lip burn.

Source	DF	Sum of Squares		Mean Square	
Model	23	9.40904064		0.40908872	
Error	84	27.16524691		0.32339580	
Corrected Total	107	36.57428755			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.14266759	0.07133380	0.22	0.8025
TRT	5	1.87516332	0.37503266	1.16	0.3359
DAY	1	2.51253472	2.51253472	7.77	0.0066
TRT*DAY	5	1.20355838	0.24071168	0.74	0.5925
TRT*REP	10	3.35398405	0.33539841	1.04	0.4201

**Table A-41.** ANOVA table for the sensory after feeling factor metallic.

Source	DF	Sum of Squares		Mean Square	
Model	23	1.20069959		0.05220433	
Error	84	3.91324074		0.04658620	
Corrected Total	107	5.1139403			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	0.09213457	0.04606728	0.99	0.3763
TRT	5	0.07498200	0.01499640	0.32	0.8985
DAY	1	0.14103951	0.14103951	3.03	0.0855
TRT*DAY	5	0.38377829	0.07675566	1.65	0.1564
TRT*REP	10	0.44396091	0.04439609	0.95	0.4902

**Table A-42.** ANOVA table for the sensory texture springiness.

Source	DF	Sum of Squares		Mean Square	
Model	23	34.67926440		1.50779410	
Error	84	26.94726852		0.32080082	
Corrected Total	107	61.62653292			
Source	DF	Type III SS	Mean Square	F Value	Pr > F
REP	2	4.94007068	2.47003534	7.70	0.0009
TRT	5	11.28999357	2.25799871	7.04	0.0001
DAY	1	10.54680386	10.54680386	32.88	0.0001
TRT*DAY	5	1.85635159	0.37127032	1.16	0.3371
TRT*REP	10	3.81787294	0.38178729	1.19	0.3093

**Table A-43. ANOVA table for the sensory texture hardness.**

Source	DF	Sum of Squares		Mean Square		
Model	23	12.55730453		0.54596976		
Error	84	11.21398148		0.13349978		
Corrected Total	107	23.77128601				
Source	DF	Type III SS	Mean Square	F Value	Pr > F	
REP	2	4.57130031	2.28565015	17.12	0.0001	
TRT	5	3.88252443	0.77650489	5.82	0.0001	
DAY	1	1.96130015	1.96130015	14.69	0.0002	
TRT*DAY	5	0.42743184	0.08548637	0.64	0.6695	
TRT*REP	10	1.07393776	0.10739378	0.80	0.6248	

**Table A-44. ANOVA table for the sensory texture sandy/gritty.**

Source	DF	Sum of Squares		Mean Square		
Model	23	227.15474537		9.87629328		
Error	84	122.06182870		1.45311701		
Corrected Total	107	349.21657407				
Source	DF	Type III SS	Mean Square	F Value	Pr > F	
REP	2	53.81208920	26.90604460	18.52	0.0001	
TRT	5	58.70421296	11.74084259	8.08	0.0001	
DAY	1	87.17867654	87.17867654	59.99	0.0001	
TRT*DAY	5	7.51787037	1.50357407	1.03	0.4027	
TRT*REP	10	7.55928241	0.75592824	0.52	0.8714	

**APPENDIX B****RAW DATA**

Date	Rep	Day	Trt	Sorgh	STTP	Salt	Time Off	Time On	Cook time	Temp Off	Temp On	Raw Weight	Cooked Weight	Cook Loss
3-Dec	1	0	1A	0	0	0	9:32	9:13	0:19	70.2	12.3	229.9	164.7	65.2
3-Dec	1	0	1B	0	0	0	9:44	9:25	0:19	71.0	13.8	227.2	172.5	54.7
3-Dec	1	0	1C	0	0	0	10:14	9:49	0:25	70.0	17.1	226.0	171.7	54.3
3-Dec	1	0	2A	0	0.4	0.3	9:46	9:22	0:24	71.9	16.1	226.1	179.9	46.2
3-Dec	1	0	2B	0	0.4	0.3	10:17	9:42	0:35	70.1	15.8	226.8	171.4	55.4
3-Dec	1	0	2C	0	0.4	0.3	10:19	9:51	0:28	72.5	17.2	226.6	161.8	64.8
3-Dec	1	0	3A	0.25	0	0	9:34	9:10	0:24	70.0	13.3	229.4	172.3	57.1
3-Dec	1	0	3B	0.25	0	0	9:50	9:25	0:25	70.1	14.4	227.5	171.4	56.1
3-Dec	1	0	3C	0.25	0	0	10:18	9:52	0:26	70.3	17.3	228.6	168.6	60.0
3-Dec	1	0	4A	2	0	0	9:43	9:11	0:32	70.4	13.3	225.2	166.5	58.7
3-Dec	1	0	4B	2	0	0	9:48	9:24	0:24	71.1	14.0	224.8	171.8	53.0
3-Dec	1	0	4C	2	0	0	10:09	9:53	0:16	71.8	17.4	226.6	188.2	38.4
3-Dec	1	0	5A	0.25	0.4	0.3	9:36	9:15	0:21	70.3	13.6	230.4	169.0	61.4
3-Dec	1	0	5B	0.25	0.4	0.3	9:45	9:21	0:24	73.1	14.2	226.5	175.4	51.1
3-Dec	1	0	5C	0.25	0.4	0.3	10:00	9:41	0:19	70.1	16.2	228.7	180.5	48.2
3-Dec	1	0	6A	2	0.4	0.3	9:37	9:16	0:21	73.4	13.3	226.3	168.9	57.4
3-Dec	1	0	6B	2	0.4	0.3	9:39	9:21	0:18	75.0	14.5	227.6	183.2	44.4
3-Dec	1	0	6C	2	0.4	0.3	10:02	9:40	0:22	70.6	16.2	229.3	179.6	49.7
4-Dec	2	0	1A	0	0	0	9:49	9:25	0:24	70.8	13.9	228.2	176.4	51.8
4-Dec	2	0	1B	0	0	0	9:34	9:07	0:27	71.3	11.9	228.4	168.8	59.6
4-Dec	2	0	1C	0	0	0	10:08	9:41	0:27	71.6	15.2	225.4	165.3	60.1
4-Dec	2	0	2A	0	0.4	0.3	9:44	9:08	0:36	70.0	10.8	230.1	173.7	56.4
4-Dec	2	0	2B	0	0.4	0.3	9:35	9:08	0:27	70.0	10.5	227.9	174.9	53.0
4-Dec	2	0	2C	0	0.4	0.3	10:29	9:40	0:49	70.3	15.0	228.1	162.7	65.4
4-Dec	2	0	3A	0.25	0	0	9:50	9:11	0:39	72.5	11.4	228.6	176.4	52.2
4-Dec	2	0	3B	0.25	0	0	10:00	9:11	0:49	70.3	10.9	225.5	156.6	68.9
4-Dec	2	0	3C	0.25	0	0	10:30	9:53	0:37	70.7	17.5	224.7	155.8	68.9
4-Dec	2	0	4A	2	0	0	9:57	9:14	0:43	72.5	11.4	228.6	171.0	57.6
4-Dec	2	0	4B	2	0	0	9:45	9:14	0:31	70.5	12.8	225.0	173.4	51.6
4-Dec	2	0	4C	2	0	0	10:19	9:55	0:24	70.0	15.9	226.0	178.7	47.3
4-Dec	2	0	5A	0.25	0.4	0.3	9:21	9:05	0:16	70.1	11.1	226.0	187.5	38.5
4-Dec	2	0	5B	0.25	0.4	0.3	9:18	9:06	0:12	70.2	11.9	227.1	176.5	50.6
4-Dec	2	0	5C	0.25	0.4	0.3	10:06	9:26	0:40	70.2	14.6	228.3	165.9	62.4
4-Dec	2	0	6A	2	0.4	0.3	9:33	9:04	0:29	70.3	10.1	228.3	182.0	46.3
4-Dec	2	0	6B	2	0.4	0.3	9:42	9:04	0:38	70.4	11.1	231.6	173.3	58.3
4-Dec	2	0	6C	2	0.4	0.3	9:55	9:39	0:16	70.0	16.2	227.3	188.5	38.8
5-Dec	3	0	1A	0	0	0	9:18	9:00	0:18	71.1	10.5	226.2	178.4	47.8
5-Dec	3	0	1B	0	0	0	9:27	9:02	0:25	71.3	11.1	228.4	165.9	62.5
5-Dec	3	0	1C	0	0	0	9:55	9:34	0:21	70.4	10.5	226.1	167.9	58.2
5-Dec	3	0	2A	0	0.4	0.3	9:24	8:59	0:25	70.5	12.2	223.4	174.0	49.4
5-Dec	3	0	2B	0	0.4	0.3	9:23	9:03	0:20	70.7	11.0	227.5	185.5	42.0
5-Dec	3	0	2C	0	0.4	0.3	10:01	9:33	0:28	70.4	11.2	227.7	177.5	50.2
5-Dec	3	0	3A	0.25	0	0	9:11	9:01	0:10	71.3	12.8	226.5	188.0	38.5
5-Dec	3	0	3B	0.25	0	0	9:36	9:02	0:34	71.0	11.4	228.3	164.5	63.8
5-Dec	3	0	3C	0.25	0	0	10:04	9:35	0:29	70.9	10.5	226.1	167.9	58.2
5-Dec	3	0	4A	2	0	0	9:28	9:00	0:28	70.9	10.6	227.1	167.4	59.7

5-Dec	3	0	4B	2	0	0	9:20	9:02	0:18	70.6	10.6	226.0	184.6	41.4
5-Dec	3	0	4C	2	0	0	9:58	9:32	0:26	70.2	11.1	227.5	190.5	37.0
5-Dec	3	0	5A	0.25	0.4	0.3	9:21	9:01	0:20	71.3	12.8	226.5	188.0	38.5
5-Dec	3	0	5B	0.25	0.4	0.3	9:46	9:03	0:43	70.1	11.1	229.0	165.9	63.1
5-Dec	3	0	5C	0.25	0.4	0.3	9:53	9:35	0:18	71.8	10.9	225.1	182.1	43.0
5-Dec	3	0	6A	2	0.4	0.3	9:16	9:01	0:15	71.3	12.8	226.5	188.0	38.5
5-Dec	3	0	6B	2	0.4	0.3	9:26	9:04	0:22	70.5	12.5	224.7	167.2	57.5
5-Dec	3	0	6C	2	0.4	0.3	9:50	9:33	0:17	70.1	10.6	225.7	188.0	37.7
9-Dec	1	6	1A	0	0	0	9:30	9:03	0:27	70.0	3.9	223.1	157.1	66.0
9-Dec	1	6	1B	0	0	0	9:43	9:04	0:39	71.4	3.7	228.1	155.7	72.4
9-Dec	1	6	1C	0	0	0	10:09	9:40	0:29	70.8	10.4	228.5	165.8	62.7
9-Dec	1	6	2A	0	0.4	0.3	9:31	9:05	0:26	70.4	4.6	224.0	171.0	53.0
9-Dec	1	6	2B	0	0.4	0.3	10:08	9:39	0:29	70.5	10.2	227.3	160.8	66.5
9-Dec	1	6	2C	0	0.4	0.3	9:57	9:39	0:18	71.9	11.0	226.2	162.2	64.0
9-Dec	1	6	3A	0.25	0	0	9:45	9:06	0:39	71.9	4.4	224.7	157.4	67.3
9-Dec	1	6	3B	0.25	0	0	9:46	9:07	0:39	71.3	5.1	226.0	166.8	59.2
9-Dec	1	6	3C	0.25	0	0	10:16	9:51	0:25	72.1	13.6	223.4	168.3	55.1
9-Dec	1	6	4A	2	0	0	9:32	9:07	0:25	70.1	4.5	226.3	180.0	46.3
9-Dec	1	6	4B	2	0	0	9:47	9:08	0:39	71.5	5.1	223.3	161.0	62.3
9-Dec	1	6	4C	2	0	0	9:59	9:40	0:19	70.0	10.8	225.5	185.3	40.2
9-Dec	1	6	5A	0.25	0.4	0.3	9:48	9:09	0:39	71.7	4.9	228.1	161.0	67.1
9-Dec	1	6	5B	0.25	0.4	0.3	9:35	9:10	0:25	70.0	5.0	228.3	188.3	40.0
9-Dec	1	6	5C	0.25	0.4	0.3	10:13	9:41	0:32	71.9	10.8	229.5	166.0	63.5
9-Dec	1	6	6A	2	0.4	0.3	9:37	9:07	0:30	70.5	4.6	226.0	175.0	51.0
9-Dec	1	6	6B	2	0.4	0.3	9:49	9:11	0:38	70.3	6.1	226.4	167.4	59.0
9-Dec	1	6	6C	2	0.4	0.3	10:04	9:42	0:22	71.5	10.9	224.9	188.1	36.8
10-Dec	2	6	1A	0	0	0	9:30	9:03	0:27	71.5	4.1	226.4	169.0	57.4
10-Dec	2	6	1B	0	0	0	9:26	9:04	0:22	70.8	5.1	227.4	173.1	54.3
10-Dec	2	6	1C	0	0	0	10:01	9:44	0:17	70.0	12.2	221.9	171.4	50.5
10-Dec	2	6	2A	0	0.4	0.3	9:38	9:06	0:32	70.0	4.6	218.8	156.1	62.7
10-Dec	2	6	2B	0	0.4	0.3	9:31	9:07	0:24	70.4	5.7	226.3	174.8	51.5
10-Dec	2	6	2C	0	0.4	0.3	10:05	9:45	0:20	70.9	12.4	226.4	182.9	43.5
10-Dec	2	6	3A	0.25	0	0	9:32	9:08	0:24	70.1	5.1	228.2	173.1	55.1
10-Dec	2	6	3B	0.25	0	0	9:37	9:09	0:28	70.4	5.6	223.8	166.7	57.1
10-Dec	2	6	3C	0.25	0	0	10:04	9:45	0:19	71.9	11.8	224.4	170.0	54.4
10-Dec	2	6	4A	2	0	0	9:40	9:09	0:31	71.5	4.6	230.4	170.9	59.5
10-Dec	2	6	4B	2	0	0	9:35	9:10	0:25	70.3	6.5	225.4	175.4	50.0
10-Dec	2	6	4C	2	0	0	10:02	9:47	0:15	70.4	12.5	224.6	181.8	42.8
10-Dec	2	6	5A	0.25	0.4	0.3	9:41	9:12	0:29	72.0	7.2	228.1	170.8	57.3
10-Dec	2	6	5B	0.25	0.4	0.3	9:43	9:14	0:29	70.1	7.7	223.9	166.5	57.4
10-Dec	2	6	5C	0.25	0.4	0.3	10:06	9:47	0:19	70.4	12.5	224.6	181.8	42.8
10-Dec	2	6	6A	2	0.4	0.3	9:48	9:12	0:36	70.7	4.8	225.0	173.0	52.0
10-Dec	2	6	6B	2	0.4	0.3	9:49	9:13	0:36	70.0	5.9	227.1	174.2	52.9
10-Dec	2	6	6C	2	0.4	0.3	10:16	9:50	0:26	71.3	11.7	227.3	182.3	45.0
11-Dec	3	6	1A	0	0	0	9:23	8:58	0:25	70.0	4.8	224.6	170.2	54.4
11-Dec	3	6	1B	0	0	0	9:24	8:59	0:25	70.1	4.3	224.9	172.1	52.8
11-Dec	3	6	1C	0	0	0	10:07	9:37	0:30	70.4	11.0	226.5	172.1	54.4
11-Dec	3	6	2A	0	0.4	0.3	9:25	9:00	0:25	70.6	4.6	227.4	173.6	53.8
11-Dec	3	6	2B	0	0.4	0.3	9:30	9:00	0:30	70.9	5.2	221.6	166.8	54.8
11-Dec	3	6	2C	0	0.4	0.3	10:10	9:37	0:33	70.4	11.2	225.5	170.8	54.7
11-Dec	3	6	3A	0.25	0	0	9:29	9:02	0:27	70.3	4.5	227.6	173.4	54.2
11-Dec	3	6	3B	0.25	0	0	9:36	9:02	0:34	70.0	5.1	224.9	161.2	63.7
11-Dec	3	6	3C	0.25	0	0	10:03	9:38	0:25	70.6	11.7	225.2	173.8	51.4

11-Dec	3	6	4A	2	0	0	9:26	9:03	0:23	70.0	4.6	226.0	167.6	58.4
11-Dec	3	6	4B	2	0	0	9:33	9:03	0:30	72.5	5.0	225.2	164.9	60.3
11-Dec	3	6	4C	2	0	0	9:59	9:38	0:21	71.4	11.6	227.3	180.7	46.6
11-Dec	3	6	5A	0.25	0.4	0.3	9:28	9:04	0:24	70.0	4.4	226.5	181.2	45.3
11-Dec	3	6	5B	0.25	0.4	0.3	9:33	9:05	0:28	70.1	5.4	227.8	184.5	43.3
11-Dec	3	6	5C	0.25	0.4	0.3	10:08	9:39	0:29	70.3	11.0	225.3	177.7	47.6
11-Dec	3	6	6A	2	0.4	0.3	9:40	9:05	0:35	70.2	4.5	228.3	182.0	46.3
11-Dec	3	6	6B	2	0.4	0.3	9:34	9:06	0:28	71.2	5.2	224.8	182.4	42.4
11-Dec	3	6	6C	2	0.4	0.3	10:13	9:39	0:34	70.0	10.8	228.3	178.6	49.7

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	PANELIST	C	DC	COD	CO	DCO	CDO
3-Dec	1	0	1A	0	0	0	Behrends	8	1	.	8	1	.
3-Dec	1	0	1B	0	0	0	Behrends	8	1	.	7	1	.
3-Dec	1	0	1C	0	0	0	Behrends	7	1	.	7	1	.
3-Dec	1	0	2A	0	0.4	0.3	Behrends	8	1	.	7	1	.
3-Dec	1	0	2B	0	0.4	0.3	Behrends	5	1	.	5	1	.
3-Dec	1	0	2C	0	0.4	0.3	Behrends	6	1	.	5	1	.
3-Dec	1	0	3A	0.25	0	0	Behrends	6	1	.	6	1	.
3-Dec	1	0	3B	0.25	0	0	Behrends	5	1	.	5	1	.
3-Dec	1	0	3C	0.25	0	0	Behrends	4	1	.	4	1	.
3-Dec	1	0	4A	2	0	0	Behrends	3	1	.	3	1	.
3-Dec	1	0	4B	2	0	0	Behrends	3	1	.	2	1	.
3-Dec	1	0	4C	2	0	0	Behrends	3	1	.	2	1	.
3-Dec	1	0	5A	0.25	0.4	0.3	Behrends	7	1	.	8	1	.
3-Dec	1	0	5B	0.25	0.4	0.3	Behrends	6	1	.	5	1	.
3-Dec	1	0	5C	0.25	0.4	0.3	Behrends	5	1	0	4	1	.
3-Dec	1	0	6A	2	0.4	0.3	Behrends	4	1	0	2	1	.
3-Dec	1	0	6B	2	0.4	0.3	Behrends	4	1	0	2	1	.
3-Dec	1	0	6C	2	0.4	0.3	Behrends	3	1	0	2	1	.
3-Dec	1	0	1A	0	0	0	Booren	8	1	0	8	1	.
3-Dec	1	0	1B	0	0	0	Booren	8	1	0	8	1	.
3-Dec	1	0	1C	0	0	0	Booren	8	1	0	8	1	.
3-Dec	1	0	2A	0	0.4	0.3	Booren	8	1	0	8	1	.
3-Dec	1	0	2B	0	0.4	0.3	Booren	4	1	0	5	1	.
3-Dec	1	0	2C	0	0.4	0.3	Booren	5	1	0	4	1	.
3-Dec	1	0	3A	0.25	0	0	Booren	8	1	0	8	1	0
3-Dec	1	0	3B	0.25	0	0	Booren	7	1	0	7	1	0
3-Dec	1	0	3C	0.25	0	0	Booren	6	1	0	6	1	0
3-Dec	1	0	4A	2	0	0	Booren	4	1	0	3	1	0
3-Dec	1	0	4B	2	0	0	Booren	3	1	0	2	1	0
3-Dec	1	0	4C	2	0	0	Booren	4	1	0	2	1	0
3-Dec	1	0	5A	0.25	0.4	0.3	Booren	6	1	0	8	1	0
3-Dec	1	0	5B	0.25	0.4	0.3	Booren	5	1	0	7	1	0
3-Dec	1	0	5C	0.25	0.4	0.3	Booren	4	1	0	6	1	0
3-Dec	1	0	6A	2	0.4	0.3	Booren	4	1	0	4	1	0
3-Dec	1	0	6B	2	0.4	0.3	Booren	4	1	0	4	1	0
3-Dec	1	0	6C	2	0.4	0.3	Booren	4	1	0	4	1	0
3-Dec	1	0	1A	0	0	0	Eddy	8	1	0	8	1	0
3-Dec	1	0	1B	0	0	0	Eddy	8	1	0	8	1	0
3-Dec	1	0	1C	0	0	0	Eddy	7	1	0	8	1	0
3-Dec	1	0	2A	0	0.4	0.3	Eddy	8	1	0	7	1	0
3-Dec	1	0	2B	0	0.4	0.3	Eddy	6	1	0	6	1	0
3-Dec	1	0	2C	0	0.4	0.3	Eddy	7	1	0	6	1	0
3-Dec	1	0	3A	0.25	0	0	Eddy	7	1	0	7	1	0
3-Dec	1	0	3B	0.25	0	0	Eddy	6	1	0	7	1	0
3-Dec	1	0	3C	0.25	0	0	Eddy	4	1	0	5	1	0
3-Dec	1	0	4A	2	0	0	Eddy	3	1	0	4	1	0
3-Dec	1	0	4B	2	0	0	Eddy	3	1	0	4	1	0
3-Dec	1	0	4C	2	0	0	Eddy	3	2	0	3	2	0
3-Dec	1	0	5A	0.25	0.4	0.3	Eddy	6	1	0	7	1	0

3-Dec	1	0	5B	0.25	0.4	0.3	Eddy	6	1	0	6	1	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Eddy	6	2	0	6	1	1	0
3-Dec	1	0	6A	2	0.4	0.3	Eddy	5	1	0	5	1	1	0
3-Dec	1	0	6B	2	0.4	0.3	Eddy	5	1	0	5	1	0	0
3-Dec	1	0	6C	2	0.4	0.3	Eddy	5	1	0	5	1	0	0
3-Dec	1	0	1A	0	0	0	Hively	8	1	0	.	.	.	.
3-Dec	1	0	1B	0	0	0	Hively	8	1	0	.	.	.	.
3-Dec	1	0	1C	0	0	0	Hively	8	1	0	.	.	.	.
3-Dec	1	0	2A	0	0.4	0.3	Hively	8	1	0	.	.	.	.
3-Dec	1	0	2B	0	0.4	0.3	Hively	6	1	0	.	.	.	.
3-Dec	1	0	2C	0	0.4	0.3	Hively	6	1	0	.	.	.	.
3-Dec	1	0	3A	0.25	0	0	Hively	8	1	0	.	.	.	.
3-Dec	1	0	3B	0.25	0	0	Hively	7	1	0	.	.	.	.
3-Dec	1	0	3C	0.25	0	0	Hively	5	3	4	.	.	.	.
3-Dec	1	0	4A	2	0	0	Hively	5	3	4	.	.	.	.
3-Dec	1	0	4B	2	0	0	Hively	5	3	4	.	.	.	.
3-Dec	1	0	4C	2	0	0	Hively	5	1	0	.	.	.	.
3-Dec	1	0	5A	0.25	0.4	0.3	Hively	7	1	0	.	.	.	.
3-Dec	1	0	5B	0.25	0.4	0.3	Hively	6	1	0	.	.	.	.
3-Dec	1	0	5C	0.25	0.4	0.3	Hively	5	1	0	.	.	.	.
3-Dec	1	0	6A	2	0.4	0.3	Hively	3	3	4	.	.	.	.
3-Dec	1	0	6B	2	0.4	0.3	Hively	3	3	4	.	.	.	.
3-Dec	1	0	6C	2	0.4	0.3	Hively	3	3	4	.	.	.	.
3-Dec	1	0	1A	0	0	0	Jenschke	8	1	0	8	1	0	0
3-Dec	1	0	1B	0	0	0	Jenschke	8	1	0	8	1	0	0
3-Dec	1	0	1C	0	0	0	Jenschke	8	1	0	8	1	0	0
3-Dec	1	0	2A	0	0.4	0.3	Jenschke	8	1	0	8	1	0	0
3-Dec	1	0	2B	0	0.4	0.3	Jenschke	7	1	0	6	1	0	0
3-Dec	1	0	2C	0	0.4	0.3	Jenschke	6	1	0	5	1	0	0
3-Dec	1	0	3A	0.25	0	0	Jenschke	5	1	0	6	1	0	0
3-Dec	1	0	3B	0.25	0	0	Jenschke	6	1	0	6	1	0	0
3-Dec	1	0	3C	0.25	0	0	Jenschke	6	1	0	5	1	0	0
3-Dec	1	0	4A	2	0	0	Jenschke	4	1	0	4	1	0	0
3-Dec	1	0	4B	2	0	0	Jenschke	4	2	5	4	1	0	0
3-Dec	1	0	4C	2	0	0	Jenschke	3	1	0	3	1	0	0
3-Dec	1	0	5A	0.25	0.4	0.3	Jenschke	6	1	0	6	1	0	0
3-Dec	1	0	5B	0.25	0.4	0.3	Jenschke	7	1	0	4	1	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Jenschke	6	1	0	4	1	0	0
3-Dec	1	0	6A	2	0.4	0.3	Jenschke	4	1	0	3	1	0	0
3-Dec	1	0	6B	2	0.4	0.3	Jenschke	4	1	0	3	1	0	0
3-Dec	1	0	6C	2	0.4	0.3	Jenschke	3	1	0	3	1	0	0
3-Dec	1	0	1A	0	0	0	Rhoades	8	1	0	.	.	.	.
3-Dec	1	0	1B	0	0	0	Rhoades	8	1	0	.	.	.	.
3-Dec	1	0	1C	0	0	0	Rhoades	8	1	0	.	.	.	.
3-Dec	1	0	2A	0	0.4	0.3	Rhoades	8	1	0	.	.	.	.
3-Dec	1	0	2B	0	0.4	0.3	Rhoades	5	1	0	.	.	.	.
3-Dec	1	0	2C	0	0.4	0.3	Rhoades	6	1	0	.	.	.	.
3-Dec	1	0	3A	0.25	0	0	Rhoades	8	1	0	.	.	.	.
3-Dec	1	0	3B	0.25	0	0	Rhoades	8	1	0	.	.	.	.
3-Dec	1	0	3C	0.25	0	0	Rhoades	6	1	0	.	.	.	.
3-Dec	1	0	4A	2	0	0	Rhoades	4	1	0	.	.	.	.
3-Dec	1	0	4B	2	0	0	Rhoades	4	1	0	.	.	.	.
3-Dec	1	0	4C	2	0	0	Rhoades	3	1	0	.	.	.	.

3-Dec	1	0	5A	0.25	0.4	0.3	Rhoades	7	1	0	.	.	.
3-Dec	1	0	5B	0.25	0.4	0.3	Rhoades	6	1	0	.	.	.
3-Dec	1	0	5C	0.25	0.4	0.3	Rhoades	5	1	0	.	.	.
3-Dec	1	0	6A	2	0.4	0.3	Rhoades	6	6	4	.	.	.
3-Dec	1	0	6B	2	0.4	0.3	Rhoades	6	6	4	.	.	.
3-Dec	1	0	6C	2	0.4	0.3	Rhoades	5	5	4	.	.	.
4-Dec	2	0	1A	0	0	0	Behrends	8	1	0	7	1	0
4-Dec	2	0	1B	0	0	0	Behrends	7	1	0	7	1	0
4-Dec	2	0	1C	0	0	0	Behrends	8	1	0	8	1	0
4-Dec	2	0	2A	0	0.4	0.3	Behrends	4	1	0	4	1	0
4-Dec	2	0	2B	0	0.4	0.3	Behrends	6	1	0	6	1	0
4-Dec	2	0	2C	0	0.4	0.3	Behrends	4	1	0	4	1	0
4-Dec	2	0	3A	0.25	0	0	Behrends	6	1	0	5	1	0
4-Dec	2	0	3B	0.25	0	0	Behrends	6	1	0	5	1	0
4-Dec	2	0	3C	0.25	0	0	Behrends	5	1	0	5	2	4
4-Dec	2	0	4A	2	0	0	Behrends	2	1	0	2	1	0
4-Dec	2	0	4B	2	0	0	Behrends	2	1	0	3	1	0
4-Dec	2	0	4C	2	0	0	Behrends	2	1	0	2	1	0
4-Dec	2	0	5A	0.25	0.4	0.3	Behrends	5	1	0	5	1	0
4-Dec	2	0	5B	0.25	0.4	0.3	Behrends	5	1	0	4	1	0
4-Dec	2	0	5C	0.25	0.4	0.3	Behrends	5	1	0	4	1	0
4-Dec	2	0	6A	2	0.4	0.3	Behrends	2	1	0	2	1	0
4-Dec	2	0	6B	2	0.4	0.3	Behrends	3	1	0	2	1	0
4-Dec	2	0	6C	2	0.4	0.3	Behrends	3	1	0	3	1	0
4-Dec	2	0	1A	0	0	0	Booren	7	1	0	7	1	0
4-Dec	2	0	1B	0	0	0	Booren	7	1	0	6.5	1	0
4-Dec	2	0	1C	0	0	0	Booren	7	1	0	7	1	0
4-Dec	2	0	2A	0	0.4	0.3	Booren	4	1	0	4	1	0
4-Dec	2	0	2B	0	0.4	0.3	Booren	6	1	0	6	1	0
4-Dec	2	0	2C	0	0.4	0.3	Booren	5	1	0	4	1	0
4-Dec	2	0	3A	0.25	0	0	Booren	6	1	0	6	1	0
4-Dec	2	0	3B	0.25	0	0	Booren	6	1	0	6.5	1	0
4-Dec	2	0	3C	0.25	0	0	Booren	6.5	1	0	6	1	0
4-Dec	2	0	4A	2	0	0	Booren	1	1	0	1	1	0
4-Dec	2	0	4B	2	0	0	Booren	2	1	0	2	1	0
4-Dec	2	0	4C	2	0	0	Booren	2	1	0	1	1	0
4-Dec	2	0	5A	0.25	0.4	0.3	Booren	5	1	0	5	1	0
4-Dec	2	0	5B	0.25	0.4	0.3	Booren	5	1	0	4	1	0
4-Dec	2	0	5C	0.25	0.4	0.3	Booren	5.5	1	0	4	1	0
4-Dec	2	0	6A	2	0.4	0.3	Booren	3	1	0	2	1	0
4-Dec	2	0	6B	2	0.4	0.3	Booren	4	1	0	3	1	0
4-Dec	2	0	6C	2	0.4	0.3	Booren	4	1	0	3	1	0
4-Dec	2	0	1A	0	0	0	Eddy	7	1	0	7	1	0
4-Dec	2	0	1B	0	0	0	Eddy	7	1	0	7	2	6
4-Dec	2	0	1C	0	0	0	Eddy	7	1	0	7	1	0
4-Dec	2	0	2A	0	0.4	0.3	Eddy	4	2	3	4	1	0
4-Dec	2	0	2B	0	0.4	0.3	Eddy	7	1	0	6	1	0
4-Dec	2	0	2C	0	0.4	0.3	Eddy	5	1	0	5	1	0
4-Dec	2	0	3A	0.25	0	0	Eddy	6	1	0	6	1	0
4-Dec	2	0	3B	0.25	0	0	Eddy	6	1	0	6	1	0
4-Dec	2	0	3C	0.25	0	0	Eddy	6	1	3	7	2	5
4-Dec	2	0	4A	2	0	0	Eddy	4	5	3	4	5	2
4-Dec	2	0	4B	2	0	0	Eddy	5	5	3	4	5	3

4-Dec	2	0	4C	2	0	0	Eddy	5	5	3	4	5	5	2
4-Dec	2	0	5A	0.25	0.4	0.3	Eddy	5	1	0	5	5	1	.
4-Dec	2	0	5B	0.25	0.4	0.3	Eddy	5	1	0	5	5	1	.
4-Dec	2	0	5C	0.25	0.4	0.3	Eddy	5	1	0	5	5	1	.
4-Dec	2	0	6A	2	0.4	0.3	Eddy	5	5	3	4	5	1	.
4-Dec	2	0	6B	2	0.4	0.3	Eddy	5	4	3	5	5	3	.
4-Dec	2	0	6C	2	0.4	0.3	Eddy	5	4	3	5	5	3	.
4-Dec	2	0	1A	0	0	0	Hively	7	1	0	7	1	0	0
4-Dec	2	0	1B	0	0	0	Hively	7	1	0	7	1	0	0
4-Dec	2	0	1C	0	0	0	Hively	7	1	0	7	1	0	0
4-Dec	2	0	2A	0	0.4	0.3	Hively	4	1	0	4	1	0	0
4-Dec	2	0	2B	0	0.4	0.3	Hively	7	1	0	6	1	0	0
4-Dec	2	0	2C	0	0.4	0.3	Hively	5	1	0	5	1	0	0
4-Dec	2	0	3A	0.25	0	0	Hively	6	1	0	6	1	0	0
4-Dec	2	0	3B	0.25	0	0	Hively	7	1	0	6	1	0	0
4-Dec	2	0	3C	0.25	0	0	Hively	7	1	0	6	1	0	0
4-Dec	2	0	4A	2	0	0	Hively	4	1	0	4	1	0	0
4-Dec	2	0	4B	2	0	0	Hively	5	3	4	4	2	1	0
4-Dec	2	0	4C	2	0	0	Hively	5	3	4	4	1	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Hively	6	1	0	5	1	0	0
4-Dec	2	0	5B	0.25	0.4	0.3	Hively	5	1	0	5	1	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Hively	5	1	0	5	1	0	0
4-Dec	2	0	6A	2	0.4	0.3	Hively	4	1	0	5	3	4	.
4-Dec	2	0	6B	2	0.4	0.3	Hively	5	3	4	5	2	4	.
4-Dec	2	0	6C	2	0.4	0.3	Hively	4	1	0	5	3	4	.
4-Dec	2	0	1A	0	0	0	Jenschke	7	1	0	7	1	0	0
4-Dec	2	0	1B	0	0	0	Jenschke	7	1	0	7	1	0	0
4-Dec	2	0	1C	0	0	0	Jenschke	7	1	0	7	1	0	0
4-Dec	2	0	2A	0	0.4	0.3	Jenschke	4	1	0	4	1	0	0
4-Dec	2	0	2B	0	0.4	0.3	Jenschke	7	1	0	6	1	0	0
4-Dec	2	0	2C	0	0.4	0.3	Jenschke	4	1	0	4	1	0	0
4-Dec	2	0	3A	0.25	0	0	Jenschke	7	1	0	6	1	0	0
4-Dec	2	0	3B	0.25	0	0	Jenschke	7	1	0	6	1	0	0
4-Dec	2	0	3C	0.25	0	0	Jenschke	7	1	0	6	1	0	0
4-Dec	2	0	4A	2	0	0	Jenschke	2	1	0	3	1	0	0
4-Dec	2	0	4B	2	0	0	Jenschke	3	1	0	3	1	0	0
4-Dec	2	0	4C	2	0	0	Jenschke	3	1	0	3	1	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Jenschke	5	1	0	4	1	0	0
4-Dec	2	0	5B	0.25	0.4	0.3	Jenschke	5	1	0	4	1	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Jenschke	5	1	0	4	1	0	0
4-Dec	2	0	6A	2	0.4	0.3	Jenschke	3	1	0	3	1	0	0
4-Dec	2	0	6B	2	0.4	0.3	Jenschke	3	1	0	3	1	0	0
4-Dec	2	0	6C	2	0.4	0.3	Jenschke	3	1	0	3	1	0	0
4-Dec	2	0	1A	0	0	0	Rhoades	.	.	.	7	1	0	0
4-Dec	2	0	1B	0	0	0	Rhoades	.	.	.	7	1	0	0
4-Dec	2	0	1C	0	0	0	Rhoades	.	.	.	7	1	0	0
4-Dec	2	0	2A	0	0.4	0.3	Rhoades	.	.	.	5	1	0	0
4-Dec	2	0	2B	0	0.4	0.3	Rhoades	.	.	.	6	1	0	0
4-Dec	2	0	2C	0	0.4	0.3	Rhoades	.	.	.	5	1	0	0
4-Dec	2	0	3A	0.25	0	0	Rhoades	.	.	.	7	1	0	0
4-Dec	2	0	3B	0.25	0	0	Rhoades	.	.	.	7	1	0	0
4-Dec	2	0	3C	0.25	0	0	Rhoades	.	.	.	7	1	0	0
4-Dec	2	0	4A	2	0	0	Rhoades	.	.	.	3	1	0	0

4-Dec	2	0	4B	2	0	0	Rhoades	.	.	.	.	4	1	0
4-Dec	2	0	4C	2	0	0	Rhoades	.	.	.	.	3	1	0
4-Dec	2	0	5A	0.25	0.4	0.3	Rhoades	.	.	.	.	5	1	0
4-Dec	2	0	5B	0.25	0.4	0.3	Rhoades	.	.	.	.	5	1	0
4-Dec	2	0	5C	0.25	0.4	0.3	Rhoades	.	.	.	.	5	1	0
4-Dec	2	0	6A	2	0.4	0.3	Rhoades	.	.	.	.	4	1	0
4-Dec	2	0	6B	2	0.4	0.3	Rhoades	.	.	.	.	4	1	0
4-Dec	2	0	6C	2	0.4	0.3	Rhoades	.	.	.	.	4	1	0
5-Dec	3	0	1A	0	0	0	Behrends	7	1	0	7	1	0	0
5-Dec	3	0	1B	0	0	0	Behrends	6	1	0	6	1	0	0
5-Dec	3	0	1C	0	0	0	Behrends	6	1	0	6	1	0	0
5-Dec	3	0	2A	0	0.4	0.3	Behrends	7	1	0	5	1	0	0
5-Dec	3	0	2B	0	0.4	0.3	Behrends	5	1	0	4	1	0	0
5-Dec	3	0	2C	0	0.4	0.3	Behrends	4	1	0	4	1	0	0
5-Dec	3	0	3A	0.25	0	0	Behrends	5	1	0	4	1	0	0
5-Dec	3	0	3B	0.25	0	0	Behrends	6	1	0	4	1	0	0
5-Dec	3	0	3C	0.25	0	0	Behrends	5	1	0	4	1	0	0
5-Dec	3	0	4A	2	0	0	Behrends	2	1	0	2	1	0	0
5-Dec	3	0	4B	2	0	0	Behrends	2	1	0	2	1	0	0
5-Dec	3	0	4C	2	0	0	Behrends	2	1	0	2	1	0	0
5-Dec	3	0	5A	0.25	0.4	0.3	Behrends	3	1	0	4	1	0	0
5-Dec	3	0	5B	0.25	0.4	0.3	Behrends	4	1	0	4	1	0	0
5-Dec	3	0	5C	0.25	0.4	0.3	Behrends	5	2	3	5	2	3	0
5-Dec	3	0	6A	2	0.4	0.3	Behrends	2	1	0	2	1	0	0
5-Dec	3	0	6B	2	0.4	0.3	Behrends	2	1	0	2	1	0	0
5-Dec	3	0	6C	2	0.4	0.3	Behrends	2	1	0	2	1	0	0
5-Dec	3	0	1A	0	0	0	Booren	7	1	0	7	1	0	0
5-Dec	3	0	1B	0	0	0	Booren	6.5	1	0	6.5	1	0	0
5-Dec	3	0	1C	0	0	0	Booren	7	1	0	7	1	0	0
5-Dec	3	0	2A	0	0.4	0.3	Booren	6	1	0	6	1	0	0
5-Dec	3	0	2B	0	0.4	0.3	Booren	5	1	0	5	1	0	0
5-Dec	3	0	2C	0	0.4	0.3	Booren	6	1	0	5	1	0	0
5-Dec	3	0	3A	0.25	0	0	Booren	6.5	1	0	6	1	0	0
5-Dec	3	0	3B	0.25	0	0	Booren	6.5	1	0	6	1	0	0
5-Dec	3	0	3C	0.25	0	0	Booren	6	1	0	6	1	0	0
5-Dec	3	0	4A	2	0	0	Booren	4	1	0	3	1	0	0
5-Dec	3	0	4B	2	0	0	Booren	4.5	1	0	3	1	0	0
5-Dec	3	0	4C	2	0	0	Booren	4.5	1	0	3	1	0	0
5-Dec	3	0	5A	0.25	0.4	0.3	Booren	5.5	1	0	3	1	0	0
5-Dec	3	0	5B	0.25	0.4	0.3	Booren	5	1	0	4.5	1	0	0
5-Dec	3	0	5C	0.25	0.4	0.3	Booren	5	1	0	4	1	0	0
5-Dec	3	0	6A	2	0.4	0.3	Booren	4.5	1	0	3	1	0	0
5-Dec	3	0	6B	2	0.4	0.3	Booren	4.5	1	0	3	1	0	0
5-Dec	3	0	6C	2	0.4	0.3	Booren	4.5	1	0	3	1	0	0
5-Dec	3	0	1A	0	0	0	Eddy	7	1	0	7	1	0	0
5-Dec	3	0	1B	0	0	0	Eddy	7	1	0	6	1	0	0
5-Dec	3	0	1C	0	0	0	Eddy	7	1	0	7	1	0	0
5-Dec	3	0	2A	0	0.4	0.3	Eddy	6	1	0	6	1	0	0
5-Dec	3	0	2B	0	0.4	0.3	Eddy	6	1	0	5	1	0	0
5-Dec	3	0	2C	0	0.4	0.3	Eddy	5	1	0	5	1	0	0
5-Dec	3	0	3A	0.25	0	0	Eddy	4	1	0	5	1	0	0
5-Dec	3	0	3B	0.25	0	0	Eddy	4	1	0	5	1	0	0
5-Dec	3	0	3C	0.25	0	0	Eddy	4	1	0	5	2	3	0

5-Dec	3	0	4A	2	0	0	Eddy	2	1	0	3	1	0
5-Dec	3	0	4B	2	0	0	Eddy	2	1	0	3	1	0
5-Dec	3	0	4C	2	0	0	Eddy	2	1	0	3	1	0
5-Dec	3	0	5A	0.25	0.4	0.3	Eddy	4	1	0	4	2	3
5-Dec	3	0	5B	0.25	0.4	0.3	Eddy	4	1	0	4	1	0
5-Dec	3	0	5C	0.25	0.4	0.3	Eddy	4	1	0	5	1	0
5-Dec	3	0	6A	2	0.4	0.3	Eddy	3	1	0	2	1	0
5-Dec	3	0	6B	2	0.4	0.3	Eddy	3	1	0	2	2	1
5-Dec	3	0	6C	2	0.4	0.3	Eddy	3	1	0	2	1	0
5-Dec	3	0	1A	0	0	0	Hively	7	1	0	7	1	0
5-Dec	3	0	1B	0	0	0	Hively	7	1	0	7	1	0
5-Dec	3	0	1C	0	0	0	Hively	7	1	0	7	1	0
5-Dec	3	0	2A	0	0.4	0.3	Hively	7	1	0	6	1	0
5-Dec	3	0	2B	0	0.4	0.3	Hively	6	2	5	6	2	5
5-Dec	3	0	2C	0	0.4	0.3	Hively	7	1	0	6	1	0
5-Dec	3	0	3A	0.25	0	0	Hively	7	1	0	6	1	0
5-Dec	3	0	3B	0.25	0	0	Hively	7	1	0	6	1	0
5-Dec	3	0	3C	0.25	0	0	Hively	6	1	0	5	1	0
5-Dec	3	0	4A	2	0	0	Hively	5	3	4	5	3	4
5-Dec	3	0	4B	2	0	0	Hively	5	2	4	5	2	4
5-Dec	3	0	4C	2	0	0	Hively	5	2	4	5	2	4
5-Dec	3	0	5A	0.25	0.4	0.3	Hively	5	2	4	5	1	0
5-Dec	3	0	5B	0.25	0.4	0.3	Hively	5	2	4	5	1	0
5-Dec	3	0	5C	0.25	0.4	0.3	Hively	5	2	4	5	1	0
5-Dec	3	0	6A	2	0.4	0.3	Hively	5	4	4	5	4	4
5-Dec	3	0	6B	2	0.4	0.3	Hively	5	4	4	5	4	4
5-Dec	3	0	6C	2	0.4	0.3	Hively	5	4	4	5	3	4
5-Dec	3	0	1A	0	0	0	Jenschke	7	1	0	7	1	0
5-Dec	3	0	1B	0	0	0	Jenschke	6	1	0	6	1	0
5-Dec	3	0	1C	0	0	0	Jenschke	6	1	0	6	1	0
5-Dec	3	0	2A	0	0.4	0.3	Jenschke	6	1	0	5	1	0
5-Dec	3	0	2B	0	0.4	0.3	Jenschke	5	1	0	5	1	0
5-Dec	3	0	2C	0	0.4	0.3	Jenschke	5	1	0	4	1	0
5-Dec	3	0	3A	0.25	0	0	Jenschke	6	1	0	4	1	0
5-Dec	3	0	3B	0.25	0	0	Jenschke	6	1	0	4	1	0
5-Dec	3	0	3C	0.25	0	0	Jenschke	6	1	0	4	1	0
5-Dec	3	0	4A	2	0	0	Jenschke	3	1	0	3	1	0
5-Dec	3	0	4B	2	0	0	Jenschke	3	1	0	3	1	0
5-Dec	3	0	4C	2	0	0	Jenschke	3	1	0	3	1	0
5-Dec	3	0	5A	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0
5-Dec	3	0	5B	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0
5-Dec	3	0	5C	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0
5-Dec	3	0	6A	2	0.4	0.3	Jenschke	6	6	3	6	6	3
5-Dec	3	0	6B	2	0.4	0.3	Jenschke	3	1	0	6	6	3
5-Dec	3	0	6C	2	0.4	0.3	Jenschke	3	1	0	6	6	3
5-Dec	3	0	1A	0	0	0	Rhoades	7	1	0	7	1	0
5-Dec	3	0	1B	0	0	0	Rhoades	7	1	0	7	1	0
5-Dec	3	0	1C	0	0	0	Rhoades	7	1	0	7	1	0
5-Dec	3	0	2A	0	0.4	0.3	Rhoades	6	1	0	6	1	0
5-Dec	3	0	2B	0	0.4	0.3	Rhoades	5	1	0	5	1	0
5-Dec	3	0	2C	0	0.4	0.3	Rhoades	5	1	0	5	1	0
5-Dec	3	0	3A	0.25	0	0	Rhoades	6	1	0	4	1	0
5-Dec	3	0	3B	0.25	0	0	Rhoades	6	1	0	4	1	0

5-Dec	3	0	3C	0.25	0	0	Rhoades	5	1	0	4	1	0
5-Dec	3	0	4A	2	0	0	Rhoades	3	1	0	3	1	0
5-Dec	3	0	4B	2	0	0	Rhoades	3	1	0	3	1	0
5-Dec	3	0	4C	2	0	0	Rhoades	3	1	0	3	1	0
5-Dec	3	0	5A	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0
5-Dec	3	0	5B	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0
5-Dec	3	0	5C	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0
5-Dec	3	0	6A	2	0.4	0.3	Rhoades	3	1	0	4	1	0
5-Dec	3	0	6B	2	0.4	0.3	Rhoades	3	1	0	4	1	0
5-Dec	3	0	6C	2	0.4	0.3	Rhoades	3	1	0	4	1	0
6-Dec	1	3	1A	0	0	0	Behrends	6	1	0	6	1	0
6-Dec	1	3	1B	0	0	0	Behrends	6	1	0	6	1	0
6-Dec	1	3	1C	0	0	0	Behrends	6	1	0	5	1	0
6-Dec	1	3	2A	0	0.4	0.3	Behrends	6	1	0	5	1	0
6-Dec	1	3	2B	0	0.4	0.3	Behrends	.	.	.	.	.	.
6-Dec	1	3	2C	0	0.4	0.3	Behrends	5	1	0	4	1	0
6-Dec	1	3	3A	0.25	0	0	Behrends	5	1	0	5	1	0
6-Dec	1	3	3B	0.25	0	0	Behrends	4	1	0	5	1	0
6-Dec	1	3	3C	0.25	0	0	Behrends	3	1	0	4	1	0
6-Dec	1	3	4A	2	0	0	Behrends	1	1	0	1	1	0
6-Dec	1	3	4B	2	0	0	Behrends	2	1	0	1	1	0
6-Dec	1	3	4C	2	0	0	Behrends	1	1	0	1	1	0
6-Dec	1	3	5A	0.25	0.4	0.3	Behrends	6	1	0	6	1	0
6-Dec	1	3	5B	0.25	0.4	0.3	Behrends	5	1	0	4	1	0
6-Dec	1	3	5C	0.25	0.4	0.3	Behrends	4	1	0	3	1	0
6-Dec	1	3	6A	2	0.4	0.3	Behrends	1	1	0	1	1	0
6-Dec	1	3	6B	2	0.4	0.3	Behrends	1	1	0	1	1	0
6-Dec	1	3	6C	2	0.4	0.3	Behrends	1	1	0	1	1	0
6-Dec	1	3	1A	0	0	0	Booren	6	2	0	6	1	0
6-Dec	1	3	1B	0	0	0	Booren	6	3	0	6	1	0
6-Dec	1	3	1C	0	0	0	Booren	6	4	0	6	1	0
6-Dec	1	3	2A	0	0.4	0.3	Booren	6.5	5	0	5.5	1	0
6-Dec	1	3	2B	0	0.4	0.3	Booren	5	6	2	.	.	.
6-Dec	1	3	2C	0	0.4	0.3	Booren	4	1	0	5	1	0
6-Dec	1	3	3A	0.25	0	0	Booren	6	1	0	4.5	1	0
6-Dec	1	3	3B	0.25	0	0	Booren	6.5	1	0	5.5	2	0
6-Dec	1	3	3C	0.25	0	0	Booren	3.5	2	3	4	1	0
6-Dec	1	3	4A	2	0	0	Booren	3	2	2.5	2	1	0
6-Dec	1	3	4B	2	0	0	Booren	3	1	0	2	1	0
6-Dec	1	3	4C	2	0	0	Booren	3	1	0	2	1	0
6-Dec	1	3	5A	0.25	0.4	0.3	Booren	6	1	0	5.5	1	0
6-Dec	1	3	5B	0.25	0.4	0.3	Booren	5.5	1	0	5	1	0
6-Dec	1	3	5C	0.25	0.4	0.3	Booren	5.5	1	0	4	1	0
6-Dec	1	3	6A	2	0.4	0.3	Booren	3.5	3	3	3	2	0
6-Dec	1	3	6B	2	0.4	0.3	Booren	3.5	5	5	3	3	0
6-Dec	1	3	6C	2	0.4	0.3	Booren	3.5	5	5	3	3	0
6-Dec	1	3	1A	0	0	0	Eddy	6	1	0	6	1	0
6-Dec	1	3	1B	0	0	0	Eddy	6	1	1	6	1	0
6-Dec	1	3	1C	0	0	0	Eddy	6	1	1	6	1	0
6-Dec	1	3	2A	0	0.4	0.3	Eddy	6	1	1	6	1	0
6-Dec	1	3	2B	0	0.4	0.3	Eddy	5	1	1	5	1	0
6-Dec	1	3	2C	0	0.4	0.3	Eddy	6	5	4	6	1	0
6-Dec	1	3	3A	0.25	0	0	Eddy	6	5	4	6	1	0

6-Dec	1	3	3B	0.25	0	0	Eddy	6	4	4	5	5	4
6-Dec	1	3	3C	0.25	0	0	Eddy	5	4	4	5	5	3
6-Dec	1	3	4A	2	0	0	Eddy	4	5	1	3	6	2
6-Dec	1	3	4B	2	0	0	Eddy	4	6	1	3	6	2
6-Dec	1	3	4C	2	0	0	Eddy	1	7	1	2	7	2
6-Dec	1	3	5A	0.25	0.4	0.3	Eddy	5	1	0	7	1	0
6-Dec	1	3	5B	0.25	0.4	0.3	Eddy	5	1	0	5	1	0
6-Dec	1	3	5C	0.25	0.4	0.3	Eddy	5	1	0	5	1	0
6-Dec	1	3	6A	2	0.4	0.3	Eddy	2	7	1	3	6	1
6-Dec	1	3	6B	2	0.4	0.3	Eddy	2	7	1	2	6	1
6-Dec	1	3	6C	2	0.4	0.3	Eddy	2	7	1	2	6	1
6-Dec	1	3	1A	0	0	0	Jenschke	6	1	0	6	1	0
6-Dec	1	3	1B	0	0	0	Jenschke	6	1	0	6	1	0
6-Dec	1	3	1C	0	0	0	Jenschke	6	1	0	6	1	0
6-Dec	1	3	2A	0	0.4	0.3	Jenschke	5	1	0	5	1	0
6-Dec	1	3	2B	0	0.4	0.3	Jenschke	4	.	.	.	1	.
6-Dec	1	3	2C	0	0.4	0.3	Jenschke	4	1	0	4	1	0
6-Dec	1	3	3A	0.25	0	0	Jenschke	5	1	0	5	1	0
6-Dec	1	3	3B	0.25	0	0	Jenschke	5	1	0	5	1	0
6-Dec	1	3	3C	0.25	0	0	Jenschke	4	1	0	5	1	0
6-Dec	1	3	4A	2	0	0	Jenschke	2	1	0	3	1	0
6-Dec	1	3	4B	2	0	0	Jenschke	5	5	1	3	1	0
6-Dec	1	3	4C	2	0	0	Jenschke	2	1	0	2	1	0
6-Dec	1	3	5A	0.25	0.4	0.3	Jenschke	5	1	0	6	1	0
6-Dec	1	3	5B	0.25	0.4	0.3	Jenschke	4	1	0	5	1	0
6-Dec	1	3	5C	0.25	0.4	0.3	Jenschke	4	1	0	5	1	0
6-Dec	1	3	6A	2	0.4	0.3	Jenschke	5	6	1	5	6	2
6-Dec	1	3	6B	2	0.4	0.3	Jenschke	4	6	1	5	6	2
6-Dec	1	3	6C	2	0.4	0.3	Jenschke	4	6	1	4	6	2
6-Dec	1	3	1A	0	0	0	Rhoades	6	1	0	6	1	0
6-Dec	1	3	1B	0	0	0	Rhoades	6	1	0	6	1	0
6-Dec	1	3	1C	0	0	0	Rhoades	6	1	0	6	1	0
6-Dec	1	3	2A	0	0.4	0.3	Rhoades	5	1	0	5	1	0
6-Dec	1	3	2B	0	0.4	0.3	Rhoades	.	.	.	.	.	.
6-Dec	1	3	2C	0	0.4	0.3	Rhoades	5	1	0	5	1	0
6-Dec	1	3	3A	0.25	0	0	Rhoades	6	1	0	6	1	0
6-Dec	1	3	3B	0.25	0	0	Rhoades	5	1	0	5	1	0
6-Dec	1	3	3C	0.25	0	0	Rhoades	4	1	0	3	1	0
6-Dec	1	3	4A	2	0	0	Rhoades	2	1	0	2	1	0
6-Dec	1	3	4B	2	0	0	Rhoades	2	1	0	2	1	0
6-Dec	1	3	4C	2	0	0	Rhoades	2	1	0	1	1	0
6-Dec	1	3	5A	0.25	0.4	0.3	Rhoades	6	1	0	6	1	0
6-Dec	1	3	5B	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0
6-Dec	1	3	5C	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0
6-Dec	1	3	6A	2	0.4	0.3	Rhoades	2	1	0	3	1	0
6-Dec	1	3	6B	2	0.4	0.3	Rhoades	2	1	0	2	1	0
6-Dec	1	3	6C	2	0.4	0.3	Rhoades	2	1	0	2	1	0
7-Dec	2	3	1A	0	0	0	Behrends	7	1	0	7	1	0
7-Dec	2	3	1B	0	0	0	Behrends	7	1	0	7	1	0
7-Dec	2	3	1C	0	0	0	Behrends	7	1	0	7	1	0
7-Dec	2	3	2A	0	0.4	0.3	Behrends	4	1	0	4	1	0
7-Dec	2	3	2B	0	0.4	0.3	Behrends	6	1	0	6	1	0
7-Dec	2	3	2C	0	0.4	0.3	Behrends	5	1	0	4	1	0

7-Dec	2	3	3A	0.25	0	0	Behrends	6	1	5	1	0	
7-Dec	2	3	3B	0.25	0	0	Behrends	6	1	6	1	0	100
7-Dec	2	3	3C	0.25	0	0	Behrends	5	1	5	1	0	
7-Dec	2	3	4A	2	0	0	Behrends	3	1	3	1	0	
7-Dec	2	3	4B	2	0	0	Behrends	3	1	1	1	0	
7-Dec	2	3	4C	2	0	0	Behrends	1	1	0	1	0	
7-Dec	2	3	5A	0.25	0.4	0.3	Behrends	5	1	0	4	0	
7-Dec	2	3	5B	0.25	0.4	0.3	Behrends	4	1	0	4	1	
7-Dec	2	3	5C	0.25	0.4	0.3	Behrends	5	1	0	4	1	
7-Dec	2	3	6A	2	0.4	0.3	Behrends	3	6	1	3	7	00000
7-Dec	2	3	6B	2	0.4	0.3	Behrends	3	6	1	3	7	00000
7-Dec	2	3	6C	2	0.4	0.3	Behrends	2	1	0	1	1	00000
7-Dec	2	3	1A	0	0	0	Booren	8	2	6	8	1	
7-Dec	2	3	1B	0	0	0	Booren	8	1	0	8	1	
7-Dec	2	3	1C	0	0	0	Booren	8	1	0	8	1	00000
7-Dec	2	3	2A	0	0.4	0.3	Booren	5	3	4.5	5	2	4.5
7-Dec	2	3	2B	0	0.4	0.3	Booren	6	2	5	7	2	6
7-Dec	2	3	2C	0	0.4	0.3	Booren	5	1	0	5	2	4
7-Dec	2	3	3A	0.25	0	0	Booren	7	1	0	7	1	00000
7-Dec	2	3	3B	0.25	0	0	Booren	7	3	6	7	2	6
7-Dec	2	3	3C	0.25	0	0	Booren	6	2	5.5	6	2	5.5
7-Dec	2	3	4A	2	0	0	Booren	2	1	0	2	1	1
7-Dec	2	3	4B	2	0	0	Booren	3	2	2.5	3	2	2.5
7-Dec	2	3	4C	2	0	0	Booren	3	1	0	3	2	2.5
7-Dec	2	3	5A	0.25	0.4	0.3	Booren	5.5	1	0	5.5	1	0
7-Dec	2	3	5B	0.25	0.4	0.3	Booren	5.5	1	0	5.5	2	5
7-Dec	2	3	5C	0.25	0.4	0.3	Booren	5.5	2	4.5	5	2	4.5
7-Dec	2	3	6A	2	0.4	0.3	Booren	2	1	0	2	2	0
7-Dec	2	3	6B	2	0.4	0.3	Booren	2	5	1	2	3	1.5
7-Dec	2	3	6C	2	0.4	0.3	Booren	2	3	1	2	2	1.5
7-Dec	2	3	1A	0	0	0	Eddy	8	1	10	8	1	
7-Dec	2	3	1B	0	0	0	Eddy	7	1	0	7	1	
7-Dec	2	3	1C	0	0	0	Eddy	7	1	0	7	1	
7-Dec	2	3	2A	0	0.4	0.3	Eddy	5	1	0	4	1	
7-Dec	2	3	2B	0	0.4	0.3	Eddy	6	1	0	6	1	
7-Dec	2	3	2C	0	0.4	0.3	Eddy	5	1	0	5	1	
7-Dec	2	3	3A	0.25	0	0	Eddy	7	1	0	6	1	
7-Dec	2	3	3B	0.25	0	0	Eddy	6	2	5	6	1	
7-Dec	2	3	3C	0.25	0	0	Eddy	6	1	0	5	1	
7-Dec	2	3	4A	2	0	0	Eddy	2	5	1	2	6	1
7-Dec	2	3	4B	2	0	0	Eddy	2	5	1	3	6	1
7-Dec	2	3	4C	2	0	0	Eddy	2	6	1	3	6	1
7-Dec	2	3	5A	0.25	0.4	0.3	Eddy	5	1	0	5	1	
7-Dec	2	3	5B	0.25	0.4	0.3	Eddy	4	1	0	4	1	
7-Dec	2	3	5C	0.25	0.4	0.3	Eddy	5	1	0	4	1	
7-Dec	2	3	6A	2	0.4	0.3	Eddy	2	6	1	2	6	1
7-Dec	2	3	6B	2	0.4	0.3	Eddy	2	5	1	3	6	1
7-Dec	2	3	6C	2	0.4	0.3	Eddy	2	7	1	1	2	6
7-Dec	2	3	1A	0	0	0	Hively	8	1	0	8	1	
7-Dec	2	3	1B	0	0	0	Hively	8	1	0	8	1	
7-Dec	2	3	1C	0	0	0	Hively	8	1	0	8	1	
7-Dec	2	3	2A	0	0.4	0.3	Hively	6	1	0	6	1	
7-Dec	2	3	2B	0	0.4	0.3	Hively	7	1	0	8	1	

7-Dec	2	3	2C	0	0.4	0.3	Hively	6	1	0	6	1	0	0	0	0
7-Dec	2	3	3A	0.25	0	0	Hively	7	1	0	7	1	1	1	1	1
7-Dec	2	3	3B	0.25	0	0	Hively	7	1	0	7	1	1	1	1	1
7-Dec	2	3	3C	0.25	0	0	Hively	7	1	0	7	1	1	1	1	1
7-Dec	2	3	4A	2	0	0	Hively	4	7	1	5	5	6	6	6	1
7-Dec	2	3	4B	2	0	0	Hively	4	7	1	5	5	6	6	6	1
7-Dec	2	3	4C	2	0	0	Hively	4	7	1	5	5	6	6	6	1
7-Dec	2	3	5A	0.25	0.4	0.3	Hively	4	1	0	6	1	0	0	0	0
7-Dec	2	3	5B	0.25	0.4	0.3	Hively	4	1	0	6	1	1	1	1	0
7-Dec	2	3	5C	0.25	0.4	0.3	Hively	4	1	0	6	1	1	1	1	0
7-Dec	2	3	6A	2	0.4	0.3	Hively	4	6	1	5	5	7	7	7	1
7-Dec	2	3	6B	2	0.4	0.3	Hively	4	5	1	5	5	6	6	6	1
7-Dec	2	3	6C	2	0.4	0.3	Hively	4	6	1	5	5	6	6	6	1
7-Dec	2	3	1A	0	0	0	Jenschke	8	1	0	8	1	1	1	1	0
7-Dec	2	3	1B	0	0	0	Jenschke	8	1	0	8	1	0	0	0	0
7-Dec	2	3	1C	0	0	0	Jenschke	8	1	0	8	1	1	1	1	0
7-Dec	2	3	2A	0	0.4	0.3	Jenschke	5	1	0	4	1	1	1	1	0
7-Dec	2	3	2B	0	0.4	0.3	Jenschke	8	1	0	8	1	1	1	1	0
7-Dec	2	3	2C	0	0.4	0.3	Jenschke	5	1	0	4	1	1	1	1	0
7-Dec	2	3	3A	0.25	0	0	Jenschke	8	1	0	6	1	0	0	0	0
7-Dec	2	3	3B	0.25	0	0	Jenschke	8	1	0	6	1	1	1	1	0
7-Dec	2	3	3C	0.25	0	0	Jenschke	7	1	0	6	1	1	1	1	0
7-Dec	2	3	4A	2	0	0	Jenschke	2	1	0	2	1	1	1	1	0
7-Dec	2	3	4B	2	0	0	Jenschke	7	6	2	7	6	1	1	1	1
7-Dec	2	3	4C	2	0	0	Jenschke	7	6	2	7	6	1	1	1	1
7-Dec	2	3	5A	0.25	0.4	0.3	Jenschke	5	1	0	4	1	0	0	0	0
7-Dec	2	3	5B	0.25	0.4	0.3	Jenschke	4	1	0	4	1	1	1	1	0
7-Dec	2	3	5C	0.25	0.4	0.3	Jenschke	5	1	0	4	1	1	1	1	0
7-Dec	2	3	6A	2	0.4	0.3	Jenschke	7	6	2	7	6	1	1	1	1
7-Dec	2	3	6B	2	0.4	0.3	Jenschke	7	6	2	7	6	1	1	1	1
7-Dec	2	3	6C	2	0.4	0.3	Jenschke	7	6	2	7	6	1	1	1	1
7-Dec	2	3	1A	0	0	0	Rhoades	8	1	0	8	1	1	1	1	0
7-Dec	2	3	1B	0	0	0	Rhoades	8	1	0	8	1	1	1	1	0
7-Dec	2	3	1C	0	0	0	Rhoades	8	1	0	8	1	1	1	1	0
7-Dec	2	3	2A	0	0.4	0.3	Rhoades	5	1	0	5	1	1	1	1	0
7-Dec	2	3	2B	0	0.4	0.3	Rhoades	6	1	0	7	1	1	1	1	0
7-Dec	2	3	2C	0	0.4	0.3	Rhoades	5	1	0	5	1	1	1	1	0
7-Dec	2	3	3A	0.25	0	0	Rhoades	6	1	0	6	1	1	1	1	0
7-Dec	2	3	3B	0.25	0	0	Rhoades	6	1	0	6	1	1	1	1	0
7-Dec	2	3	3C	0.25	0	0	Rhoades	6	1	0	6	1	1	1	1	0
7-Dec	2	3	4A	2	0	0	Rhoades	1	1	0	1	1	0	0	0	0
7-Dec	2	3	4B	2	0	0	Rhoades	3	1	0	2	1	1	1	1	0
7-Dec	2	3	4C	2	0	0	Rhoades	3	1	0	2	1	1	1	1	0
7-Dec	2	3	5A	0.25	0.4	0.3	Rhoades	5	1	0	5	1	1	1	1	0
7-Dec	2	3	5B	0.25	0.4	0.3	Rhoades	5	1	0	5	1	1	1	1	0
7-Dec	2	3	5C	0.25	0.4	0.3	Rhoades	5	1	0	5	1	1	1	1	0
7-Dec	2	3	6A	2	0.4	0.3	Rhoades	2	1	0	2	1	1	1	1	0
7-Dec	2	3	6B	2	0.4	0.3	Rhoades	2	1	0	2	1	1	1	1	0
7-Dec	2	3	6C	2	0.4	0.3	Rhoades	2	1	0	2	1	1	1	1	0
8-Dec	3	3	1A	0	0	0	Behrends	7	1	0	7	1	1	1	1	0
8-Dec	3	3	1B	0	0	0	Behrends	5	1	0	6	2	2	2	2	0
8-Dec	3	3	1C	0	0	0	Behrends	7	3	5	6	3	4	5	5	4
8-Dec	3	3	2A	0	0.4	0.3	Behrends	5	1	0	5	1	2	3	3	4

8-Dec	3	3	2B	0	0.4	0.3	Behrends	4	1	0	4	1	0	0
8-Dec	3	3	2C	0	0.4	0.3	Behrends	6	1	0	4	1	0	0
8-Dec	3	3	3A	0.25	0	0	Behrends	6	2	5	5	2	4	4
8-Dec	3	3	3B	0.25	0	0	Behrends	6	2	5	5	2	4	0
8-Dec	3	3	3C	0.25	0	0	Behrends	5	1	.	5	1	0	0
8-Dec	3	3	4A	2	0	0	Behrends	3	6	2	2	1	0	0
8-Dec	3	3	4B	2	0	0	Behrends	2	1	0	2	1	0	0
8-Dec	3	3	4C	2	0	0	Behrends	2	1	0	2	1	0	0
8-Dec	3	3	5A	0.25	0.4	0.3	Behrends	4	1	0	4	1	0	0
8-Dec	3	3	5B	0.25	0.4	0.3	Behrends	4	1	0	4	1	0	0
8-Dec	3	3	5C	0.25	0.4	0.3	Behrends	4	1	0	4	1	0	0
8-Dec	3	3	6A	2	0.4	0.3	Behrends	3	7	2	3	7	2	2
8-Dec	3	3	6B	2	0.4	0.3	Behrends	3	7	2	3	6	2	2
8-Dec	3	3	6C	2	0.4	0.3	Behrends	4	6	2	3	6	1	1
8-Dec	3	3	1A	0	0	0	Booren	7	2	6	7	1	0	0
8-Dec	3	3	1B	0	0	0	Booren	6	1	0	7	2	6.5	6.5
8-Dec	3	3	1C	0	0	0	Booren	7	2	6.5	7	2	2	6.5
8-Dec	3	3	2A	0	0.4	0.3	Booren	5.5	2	4.5	5.5	2	5	5
8-Dec	3	3	2B	0	0.4	0.3	Booren	5	2	4	5	1	0	0
8-Dec	3	3	2C	0	0.4	0.3	Booren	5.5	2	5	6	2	5	5
8-Dec	3	3	3A	0.25	0	0	Booren	4	3	3.5	5.5	1	0	0
8-Dec	3	3	3B	0.25	0	0	Booren	4.5	2	4	5.5	2	5	5
8-Dec	3	3	3C	0.25	0	0	Booren	4.5	2	4	5	2	4.5	4.5
8-Dec	3	3	4A	2	0	0	Booren	2	6	0	3	2	2.5	2.5
8-Dec	3	3	4B	2	0	0	Booren	2	6	0	3	2	2.5	2.5
8-Dec	3	3	4C	2	0	0	Booren	2	6	0	3	2	2.5	2.5
8-Dec	3	3	5A	0.25	0.4	0.3	Booren	4	2	3.5	5	1	0	0
8-Dec	3	3	5B	0.25	0.4	0.3	Booren	4	2	3.5	5	1	0	0
8-Dec	3	3	5C	0.25	0.4	0.3	Booren	4	2	3.5	5	1	0	0
8-Dec	3	3	6A	2	0.4	0.3	Booren	3	3	2	3	6	2	2
8-Dec	3	3	6B	2	0.4	0.3	Booren	3	3	2	3	6	2	2
8-Dec	3	3	6C	2	0.4	0.3	Booren	4	5	2.5	3	6	2	2
8-Dec	3	3	1A	0	0	0	Eddy	7	1	0	7	1	0	0
8-Dec	3	3	1B	0	0	0	Eddy	6	1	0	6	1	0	0
8-Dec	3	3	1C	0	0	0	Eddy	6	5	5	6	4	4	4
8-Dec	3	3	2A	0	0.4	0.3	Eddy	6	3	4	5	1	0	0
8-Dec	3	3	2B	0	0.4	0.3	Eddy	5	1	0	4	1	0	0
8-Dec	3	3	2C	0	0.4	0.3	Eddy	5	1	0	5	1	0	0
8-Dec	3	3	3A	0.25	0	0	Eddy	6	5	4	4	1	0	0
8-Dec	3	3	3B	0.25	0	0	Eddy	5	1	0	4	1	0	0
8-Dec	3	3	3C	0.25	0	0	Eddy	5	5	4	3	1	0	0
8-Dec	3	3	4A	2	0	0	Eddy	2	6	1	2	6	1	1
8-Dec	3	3	4B	2	0	0	Eddy	2	6	1	2	6	1	1
8-Dec	3	3	4C	2	0	0	Eddy	2	6	1	2	6	1	1
8-Dec	3	3	5A	0.25	0.4	0.3	Eddy	4	1	0	3	1	0	0
8-Dec	3	3	5B	0.25	0.4	0.3	Eddy	4	1	0	3	1	0	0
8-Dec	3	3	5C	0.25	0.4	0.3	Eddy	4	1	0	3	1	0	0
8-Dec	3	3	6A	2	0.4	0.3	Eddy	2	6	1	2	6	1	1
8-Dec	3	3	6B	2	0.4	0.3	Eddy	2	6	1	2	6	1	1
8-Dec	3	3	6C	2	0.4	0.3	Eddy	2	5	1	3	5	1	1
8-Dec	3	3	1A	0	0	0	Hively	7	1	0	7	1	0	0
8-Dec	3	3	1B	0	0	0	Hively	6	1	0	6	1	1	0
8-Dec	3	3	1C	0	0	0	Hively	7	1	0	7	1	1	.

8-Dec	3	3	2A	0	0.4	0.3	Hively	6	1	0	7	1	0	0
8-Dec	3	3	2B	0	0.4	0.3	Hively	5	1	0	6	1	0	0
8-Dec	3	3	2C	0	0.4	0.3	Hively	6	1	0	6	1	0	5
8-Dec	3	3	3A	0.25	0	0	Hively	6	1	0	6	2	0	5
8-Dec	3	3	3B	0.25	0	0	Hively	6	1	0	6	1	0	4
8-Dec	3	3	3C	0.25	0	0	Hively	5	2	4	5	2	0	4
8-Dec	3	3	4A	2	0	0	Hively	4	6	1	4	6	3	3
8-Dec	3	3	4B	2	0	0	Hively	4	7	1	4	6	3	3
8-Dec	3	3	4C	2	0	0	Hively	4	7	1	4	6	3	3
8-Dec	3	3	5A	0.25	0.4	0.3	Hively	5	1	0	5	1	0	0
8-Dec	3	3	5B	0.25	0.4	0.3	Hively	5	1	0	5	1	0	0
8-Dec	3	3	5C	0.25	0.4	0.3	Hively	5	1	0	5	1	0	0
8-Dec	3	3	6A	2	0.4	0.3	Hively	4	6	3	5	6	3	3
8-Dec	3	3	6B	2	0.4	0.3	Hively	4	6	3	5	6	3	3
8-Dec	3	3	6C	2	0.4	0.3	Hively	4	6	3	5	6	3	3
8-Dec	3	3	1A	0	0	0	Jenschke	7	1	0	7	1	0	0
8-Dec	3	3	1B	0	0	0	Jenschke	5	1	0	6	1	0	0
8-Dec	3	3	1C	0	0	0	Jenschke	6	3	3	6	1	0	0
8-Dec	3	3	2A	0	0.4	0.3	Jenschke	5	1	0	5	1	0	0
8-Dec	3	3	2B	0	0.4	0.3	Jenschke	4	1	0	4	1	0	0
8-Dec	3	3	2C	0	0.4	0.3	Jenschke	4	1	0	4	1	0	0
8-Dec	3	3	3A	0.25	0	0	Jenschke	5	3	3	6	4	3	3
8-Dec	3	3	3B	0.25	0	0	Jenschke	5	4	3	6	4	3	3
8-Dec	3	3	3C	0.25	0	0	Jenschke	5	1	0	6	3	4	4
8-Dec	3	3	4A	2	0	0	Jenschke	6	6	2	6	6	2	2
8-Dec	3	3	4B	2	0	0	Jenschke	6	6	2	6	6	2	2
8-Dec	3	3	4C	2	0	0	Jenschke	6	6	2	6	6	2	2
8-Dec	3	3	5A	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0	0
8-Dec	3	3	5B	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0	0
8-Dec	3	3	5C	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0	0
8-Dec	3	3	6A	2	0.4	0.3	Jenschke	6	6	2	6	6	2	2
8-Dec	3	3	6B	2	0.4	0.3	Jenschke	6	6	2	6	6	2	2
8-Dec	3	3	6C	2	0.4	0.3	Jenschke	6	5	2	6	6	2	2
8-Dec	3	3	1A	0	0	0	Rhoades	7	1	0	7	1	0	0
8-Dec	3	3	1B	0	0	0	Rhoades	7	1	0	6	1	0	0
8-Dec	3	3	1C	0	0	0	Rhoades	7	1	0	7	1	0	0
8-Dec	3	3	2A	0	0.4	0.3	Rhoades	6	1	0	5	2	0	4
8-Dec	3	3	2B	0	0.4	0.3	Rhoades	5	1	0	5	1	0	0
8-Dec	3	3	2C	0	0.4	0.3	Rhoades	6	1	0	5	1	0	0
8-Dec	3	3	3A	0.25	0	0	Rhoades	6	1	0	4	2	0	3
8-Dec	3	3	3B	0.25	0	0	Rhoades	6	1	0	4	2	0	3
8-Dec	3	3	3C	0.25	0	0	Rhoades	5	1	0	4	1	0	0
8-Dec	3	3	4A	2	0	0	Rhoades	2	1	0	2	1	0	0
8-Dec	3	3	4B	2	0	0	Rhoades	2	1	0	3	1	0	0
8-Dec	3	3	4C	2	0	0	Rhoades	2	1	0	4	6	3	3
8-Dec	3	3	5A	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0	0
8-Dec	3	3	5B	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0	0
8-Dec	3	3	5C	0.25	0.4	0.3	Rhoades	5	1	0	5	1	0	0
8-Dec	3	3	6A	2	0.4	0.3	Rhoades	2	1	0	6	5	3	3
8-Dec	3	3	6B	2	0.4	0.3	Rhoades	2	1	0	6	5	3	3
8-Dec	3	3	6C	2	0.4	0.3	Rhoades	2	1	0	6	4	3	3
9-Dec	1	6	1A	0	0	0	Behrends	6	1	0	7	1	0	0
9-Dec	1	6	1B	0	0	0	Behrends	6	1	0	5	1	0	0

9-Dec	1	6	1C	0	0	Behrends	6	1	0	5	1	0	
9-Dec	1	6	2A	0	0.4	Behrends	5	1	0	6	1	0	
9-Dec	1	6	2B	0	0.4	Behrends	4	1	0	4	1	0	
9-Dec	1	6	2C	0	0.4	Behrends	4	1	0	4	1	0	
9-Dec	1	6	3A	0.25	0	Behrends	6	1	0	5	1	0	
9-Dec	1	6	3B	0.25	0	Behrends	5	5	4	4	1	0	
9-Dec	1	6	3C	0.25	0	Behrends	3	1	0	2	1	0	
9-Dec	1	6	4A	2	0	Behrends	1	1	0	1	1	0	
9-Dec	1	6	4B	2	0	Behrends	1	1	0	1	1	0	
9-Dec	1	6	4C	2	0	Behrends	1	1	0	1	1	0	
9-Dec	1	6	5A	0.25	0.4	0.3	Behrends	6	1	0	5	1	0
9-Dec	1	6	5B	0.25	0.4	0.3	Behrends	4	1	0	4	1	0
9-Dec	1	6	5C	0.25	0.4	0.3	Behrends	4	1	0	4	1	0
9-Dec	1	6	6A	2	0.4	0.3	Behrends	1	1	0	1	1	0
9-Dec	1	6	6B	2	0.4	0.3	Behrends	1	1	0	1	1	0
9-Dec	1	6	6C	2	0.4	0.3	Behrends	1	1	0	1	1	0
9-Dec	1	6	1A	0	0	Booren	6	1	0	7	1	0	
9-Dec	1	6	1B	0	0	Booren	6	1	0	6	1	0	
9-Dec	1	6	1C	0	0	Booren	6	2	5.5	6	2	5	
9-Dec	1	6	2A	0	0.4	0.3	Booren	5	2	4	5.5	1	0
9-Dec	1	6	2B	0	0.4	0.3	Booren	4	1	0	4	4	3
9-Dec	1	6	2C	0	0.4	0.3	Booren	4.5	1	0	5	3	4.5
9-Dec	1	6	3A	0.25	0	0	Booren	7	1	0	6	2	5
9-Dec	1	6	3B	0.25	0	0	Booren	6	5	5	5.5	2	5
9-Dec	1	6	3C	0.25	0	0	Booren	5	5	4	3.5	3	3
9-Dec	1	6	4A	2	0	0	Booren	2	6	1	2	4	0
9-Dec	1	6	4B	2	0	0	Booren	2	6	1	2	6	0
9-Dec	1	6	4C	2	0	0	Booren	1.5	7	1	2.5	5	2
9-Dec	1	6	5A	0.25	0.4	0.3	Booren	6	2	5.5	6	2	5
9-Dec	1	6	5B	0.25	0.4	0.3	Booren	5	2	4	5	3	4.5
9-Dec	1	6	5C	0.25	0.4	0.3	Booren	5	3	4	4.5	3	4
9-Dec	1	6	6A	2	0.4	0.3	Booren	2	5	1	2	6	0
9-Dec	1	6	6B	2	0.4	0.3	Booren	2	5	1	2	6	0
9-Dec	1	6	6C	2	0.4	0.3	Booren	2	5	1	2	6	0
9-Dec	1	6	1A	0	0	Eddy	6	1	0	6	1	0	
9-Dec	1	6	1B	0	0	Eddy	6	1	0	6	1	0	
9-Dec	1	6	1C	0	0	Eddy	6	1	0	5	1	0	
9-Dec	1	6	2A	0	0.4	0.3	Eddy	5	1	0	6	1	0
9-Dec	1	6	2B	0	0.4	0.3	Eddy	4	1	0	3	1	0
9-Dec	1	6	2C	0	0.4	0.3	Eddy	5	1	0	5	1	0
9-Dec	1	6	3A	0.25	0	0	Eddy	4	4	3	5	4	4
9-Dec	1	6	3B	0.25	0	0	Eddy	4	5	3	5	4	3
9-Dec	1	6	3C	0.25	0	0	Eddy	3	1	0	4	4	2
9-Dec	1	6	4A	2	0	0	Eddy	2	1	0	1	7	1
9-Dec	1	6	4B	2	0	0	Eddy	2	6	1	2	6	1
9-Dec	1	6	4C	2	0	0	Eddy	2	7	2	2	7	2
9-Dec	1	6	5A	0.25	0.4	0.3	Eddy	6	1	0	6	1	0
9-Dec	1	6	5B	0.25	0.4	0.3	Eddy	5	1	0	5	1	0
9-Dec	1	6	5C	0.25	0.4	0.3	Eddy	5	1	0	5	1	0
9-Dec	1	6	6A	2	0.4	0.3	Eddy	2	6	1	2	6	1
9-Dec	1	6	6B	2	0.4	0.3	Eddy	2	6	1	2	6	1
9-Dec	1	6	6C	2	0.4	0.3	Eddy	3	6	1	3	6	1
9-Dec	1	6	1A	0	0	Hively	6	1	0	6	1	0	

9-Dec	1	6	1B	0	0	Hively	6	1	0	6	1	0
9-Dec	1	6	1C	0	0	Hively	6	1	0	6	1	0
9-Dec	1	6	2A	0	0.4	Hively	5	1	0	5	1	.
9-Dec	1	6	2B	0	0.4	Hively	5	1	0	5	1	0
9-Dec	1	6	2C	0	0.4	Hively	5	1	0	5	1	1
9-Dec	1	6	3A	0.25	0	Hively	6	1	0	6	2	1
9-Dec	1	6	3B	0.25	0	Hively	5	6	4	6	2	5
9-Dec	1	6	3C	0.25	0	Hively	5	6	4	6	4	5
9-Dec	1	6	4A	2	0	Hively	3	7	1	4	7	1
9-Dec	1	6	4B	2	0	Hively	3	6	1	4	7	1
9-Dec	1	6	4C	2	0	Hively	3	7	1	4	7	1
9-Dec	1	6	5A	0.25	0.4	Hively	6	1	1	6	1	0
9-Dec	1	6	5B	0.25	0.4	Hively	5	6	4	5	1	0
9-Dec	1	6	5C	0.25	0.4	Hively	5	6	4	5	1	0
9-Dec	1	6	6A	2	0.4	Hively	3	6	1	4	7	1
9-Dec	1	6	6B	2	0.4	Hively	3	7	1	4	7	1
9-Dec	1	6	6C	2	0.4	Hively	3	7	1	4	7	1
9-Dec	1	6	1A	0	0	Jenschke	6	1	0	6	1	0
9-Dec	1	6	1B	0	0	Jenschke	6	1	0	6	1	0
9-Dec	1	6	1C	0	0	Jenschke	6	1	0	5	1	0
9-Dec	1	6	2A	0	0.4	Jenschke	5	1	0	5	1	0
9-Dec	1	6	2B	0	0.4	Jenschke	4	1	0	4	1	0
9-Dec	1	6	2C	0	0.4	Jenschke	4	1	0	4	1	0
9-Dec	1	6	3A	0.25	0	Jenschke	6	2	3	6	1	0
9-Dec	1	6	3B	0.25	0	Jenschke	6	4	3	5	2	3
9-Dec	1	6	3C	0.25	0	Jenschke	5	5	3	5	3	3
9-Dec	1	6	4A	2	0	Jenschke	2	1	0	5	6	1
9-Dec	1	6	4B	2	0	Jenschke	6	6	2	6	6	1
9-Dec	1	6	4C	2	0	Jenschke	1	7	0	1	7	0
9-Dec	1	6	5A	0.25	0.4	Jenschke	5	1	0	5	1	0
9-Dec	1	6	5B	0.25	0.4	Jenschke	4	1	0	4	1	0
9-Dec	1	6	5C	0.25	0.4	Jenschke	4	1	0	4	1	0
9-Dec	1	6	6A	2	0.4	Jenschke	6	6	1	6	6	1
9-Dec	1	6	6B	2	0.4	Jenschke	5	6	1	6	6	1
9-Dec	1	6	6C	2	0.4	Jenschke	5	6	1	6	6	1
9-Dec	1	6	1A	0	0	Rhoades	6	1	0	6	1	0
9-Dec	1	6	1B	0	0	Rhoades	6	1	0	6	1	0
9-Dec	1	6	1C	0	0	Rhoades	5	1	0	6	1	0
9-Dec	1	6	2A	0	0.4	Rhoades	5	1	0	6	1	0
9-Dec	1	6	2B	0	0.4	Rhoades	2	1	0	5	1	0
9-Dec	1	6	2C	0	0.4	Rhoades	4	1	0	5	1	0
9-Dec	1	6	3A	0.25	0	Rhoades	6	1	0	6	1	0
9-Dec	1	6	3B	0.25	0	Rhoades	4	1	0	5	1	0
9-Dec	1	6	3C	0.25	0	Rhoades	3	1	0	4	1	0
9-Dec	1	6	4A	2	0	Rhoades	1	1	0	2	1	0
9-Dec	1	6	4B	2	0	Rhoades	1	1	0	3	2	0
9-Dec	1	6	4C	2	0	Rhoades	1	1	0	3	1	0
9-Dec	1	6	5A	0.25	0.4	Rhoades	6	1	0	6	1	0
9-Dec	1	6	5B	0.25	0.4	Rhoades	5	1	0	5	1	0
9-Dec	1	6	5C	0.25	0.4	Rhoades	4	1	0	5	1	0
9-Dec	1	6	6A	2	0.4	Rhoades	1	1	0	5	6	1
9-Dec	1	6	6B	2	0.4	Rhoades	1	1	0	2	1	0
9-Dec	1	6	6C	2	0.4	Rhoades	1	1	0	5	6	1

10-Dec 2	6	1A	0	0	0	Behrends	7	2	6	7	2	5
10-Dec 2	6	1B	0	0	0	Behrends	6	5	4	5	6	4
10-Dec 2	6	1C	0	0	0	Behrends	6	1	0	7	3	6
10-Dec 2	6	2A	0	0.4	0.3	Behrends	3	1	0	4	1	0
10-Dec 2	6	2B	0	0.4	0.3	Behrends	5	1	0	5	1	0
10-Dec 2	6	2C	0	0.4	0.3	Behrends	3	1	0	3	1	0
10-Dec 2	6	3A	0.25	0	0	Behrends	5	1	0	4	1	0
10-Dec 2	6	3B	0.25	0	0	Behrends	5	1	0	4	2	3
10-Dec 2	6	3C	0.25	0	0	Behrends	5	1	0	5	2	4
10-Dec 2	6	4A	2	0	0	Behrends	1	1	0	1	1	0
10-Dec 2	6	4B	2	0	0	Behrends	1	1	0	1	1	0
10-Dec 2	6	4C	2	0	0	Behrends	1	1	0	1	1	0
10-Dec 2	6	5A	0.25	0.4	0.3	Behrends	3	1	0	5	6	4
10-Dec 2	6	5B	0.25	0.4	0.3	Behrends	3	1	0	4	2	3
10-Dec 2	6	5C	0.25	0.4	0.3	Behrends	3	1	0	4	2	3
10-Dec 2	6	6A	2	0.4	0.3	Behrends	3	6	1	2	6	1
10-Dec 2	6	6B	2	0.4	0.3	Behrends	3	6	1	2	6	1
10-Dec 2	6	6C	2	0.4	0.3	Behrends	2	6	1	2	6	1
10-Dec 2	6	1A	0	0	0	Booren	8	2	6	.	.	.
10-Dec 2	6	1B	0	0	0	Booren	6	6	6	.	.	.
10-Dec 2	6	1C	0	0	0	Booren	7	3	6	.	.	.
10-Dec 2	6	2A	0	0.4	0.3	Booren	4	1	0	.	.	.
10-Dec 2	6	2B	0	0.4	0.3	Booren	5.5	2	5	.	.	.
10-Dec 2	6	2C	0	0.4	0.3	Booren	4	1	0	.	.	.
10-Dec 2	6	3A	0.25	0	0	Booren	5	3	4	.	.	.
10-Dec 2	6	3B	0.25	0	0	Booren	5.5	2	5	.	.	.
10-Dec 2	6	3C	0.25	0	0	Booren	6	1	0	.	.	.
10-Dec 2	6	4A	2	0	0	Booren	2	1	0	.	.	.
10-Dec 2	6	4B	2	0	0	Booren	2	1	0	.	.	.
10-Dec 2	6	4C	2	0	0	Booren	2	1	0	.	.	.
10-Dec 2	6	5A	0.25	0.4	0.3	Booren	5	2	4	.	.	.
10-Dec 2	6	5B	0.25	0.4	0.3	Booren	5	3	4	.	.	.
10-Dec 2	6	5C	0.25	0.4	0.3	Booren	5	3	4	.	.	.
10-Dec 2	6	6A	2	0.4	0.3	Booren	4	6	2	.	.	.
10-Dec 2	6	6B	2	0.4	0.3	Booren	4	6	2	.	.	.
10-Dec 2	6	6C	2	0.4	0.3	Booren	4	6	2	.	.	.
10-Dec 2	6	1A	0	0	0	Eddy	8	2	3	8	2	3
10-Dec 2	6	1B	0	0	0	Eddy	5	6	3	6	5	3
10-Dec 2	6	1C	0	0	0	Eddy	7	4	4	7	1	0
10-Dec 2	6	2A	0	0.4	0.3	Eddy	4	1	0	4	1	0
10-Dec 2	6	2B	0	0.4	0.3	Eddy	5	1	0	5	1	0
10-Dec 2	6	2C	0	0.4	0.3	Eddy	4	1	0	4	1	0
10-Dec 2	6	3A	0.25	0	0	Eddy	4	6	0	5	1	0
10-Dec 2	6	3B	0.25	0	0	Eddy	4	6	3	5	6	4
10-Dec 2	6	3C	0.25	0	0	Eddy	3	1	0	4	6	3
10-Dec 2	6	4A	2	0	0	Eddy	1	7	1	1	7	1
10-Dec 2	6	4B	2	0	0	Eddy	1	7	1	2	7	2
10-Dec 2	6	4C	2	0	0	Eddy	1	7	1	2	7	2
10-Dec 2	6	5A	0.25	0.4	0.3	Eddy	4	6	3	3	6	2
10-Dec 2	6	5B	0.25	0.4	0.3	Eddy	4	1	0	3	1	0
10-Dec 2	6	5C	0.25	0.4	0.3	Eddy	4	2	2	3	3	2
10-Dec 2	6	6A	2	0.4	0.3	Eddy	1	7	1	1	7	1
10-Dec 2	6	6B	2	0.4	0.3	Eddy	2	6	1	2	6	1

10-Dec 2	6	6C	2	0.4	0.3	Eddy	2	6	1	2	6	1
10-Dec 2	6	1A	0	0	0	Hively	8	2	3	8	2	3
10-Dec 2	6	1B	0	0	0	Hively	8	5	1	8	7	1
10-Dec 2	6	1C	0	0	0	Hively	8	1	0	8	1	0
10-Dec 2	6	2A	0	0.4	0.3	Hively	5	1	0	6	1	0
10-Dec 2	6	2B	0	0.4	0.3	Hively	6	1	0	7	1	0
10-Dec 2	6	2C	0	0.4	0.3	Hively	5	1	0	6	1	0
10-Dec 2	6	3A	0.25	0	0	Hively	7	1	0	7	1	0
10-Dec 2	6	3B	0.25	0	0	Hively	7	1	0	7	1	0
10-Dec 2	6	3C	0.25	0	0	Hively	7	1	0	7	1	0
10-Dec 2	6	4A	2	0	0	Hively	3	7	1	3	7	1
10-Dec 2	6	4B	2	0	0	Hively	3	7	1	3	7	1
10-Dec 2	6	4C	2	0	0	Hively	3	7	1	3	7	1
10-Dec 2	6	5A	0.25	0.4	0.3	Hively	5	1	0	6	1	0
10-Dec 2	6	5B	0.25	0.4	0.3	Hively	5	1	0	6	1	0
10-Dec 2	6	5C	0.25	0.4	0.3	Hively	5	1	0	6	1	0
10-Dec 2	6	6A	2	0.4	0.3	Hively	3	6	1	3	7	1
10-Dec 2	6	6B	2	0.4	0.3	Hively	3	6	0	3	7	1
10-Dec 2	6	6C	2	0.4	0.3	Hively	3	6	0	3	7	1
10-Dec 2	6	1A	0	0	0	Jenschke	8	2	3	8	2	3
10-Dec 2	6	1B	0	0	0	Jenschke	8	5	3	5	6	3
10-Dec 2	6	1C	0	0	0	Jenschke	8	1	0	8	2	3
10-Dec 2	6	2A	0	0.4	0.3	Jenschke	4	1	0	4	1	0
10-Dec 2	6	2B	0	0.4	0.3	Jenschke	5	1	0	5	1	0
10-Dec 2	6	2C	0	0.4	0.3	Jenschke	4	1	0	4	1	0
10-Dec 2	6	3A	0.25	0	0	Jenschke	6	2	3	5	1	0
10-Dec 2	6	3B	0.25	0	0	Jenschke	6	3	3	5	1	0
10-Dec 2	6	3C	0.25	0	0	Jenschke	6	4	3	5	1	0
10-Dec 2	6	4A	2	0	0	Jenschke	1	7	1	1	7	1
10-Dec 2	6	4B	2	0	0	Jenschke	7	6	1	5	6	1
10-Dec 2	6	4C	2	0	0	Jenschke	1	7	1	1	7	1
10-Dec 2	6	5A	0.25	0.4	0.3	Jenschke	5	1	0	5	2	3
10-Dec 2	6	5B	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0
10-Dec 2	6	5C	0.25	0.4	0.3	Jenschke	4	2	2	4	1	0
10-Dec 2	6	6A	2	0.4	0.3	Jenschke	5	6	1	5	6	1
10-Dec 2	6	6B	2	0.4	0.3	Jenschke	5	6	1	5	6	1
10-Dec 2	6	6C	2	0.4	0.3	Jenschke	5	5	1	5	6	1
11-Dec 3	6	1A	0	0	0	Behrends	6	2	5	6	2	5
11-Dec 3	6	1B	0	0	0	Behrends	5	2	4	5	2	4
11-Dec 3	6	1C	0	0	0	Behrends	6	3	5	6	3	5
11-Dec 3	6	2A	0	0.4	0.3	Behrends	5	1	0	5	2	4
11-Dec 3	6	2B	0	0.4	0.3	Behrends	4	1	0	5	1	0
11-Dec 3	6	2C	0	0.4	0.3	Behrends	4	1	0	5	1	0
11-Dec 3	6	3A	0.25	0	0	Behrends	4	1	0	5	3	4
11-Dec 3	6	3B	0.25	0	0	Behrends	4	3	3	5	3	4
11-Dec 3	6	3C	0.25	0	0	Behrends	4	2	3	5	2	4
11-Dec 3	6	4A	2	0	0	Behrends	1	1	0	2	6	1
11-Dec 3	6	4B	2	0	0	Behrends	1	1	0	1	1	0
11-Dec 3	6	4C	2	0	0	Behrends	1	1	0	1	1	0
11-Dec 3	6	5A	0.25	0.4	0.3	Behrends	3	1	0	4	1	0
11-Dec 3	6	5B	0.25	0.4	0.3	Behrends	4	3	3	4	2	3
11-Dec 3	6	5C	0.25	0.4	0.3	Behrends	4	1	0	4	2	3
11-Dec 3	6	6A	2	0.4	0.3	Behrends	1	1	0	1	1	0

11-Dec 3	6	6B	2	0.4	0.3	Behrends	1	1	1	1	1	1	0
11-Dec 3	6	6C	2	0.4	0.3	Behrends	3	6	6	6	6	6	1
11-Dec 3	6	1A	0	0	0	Booren	6	2	2	5	5	5	1
11-Dec 3	6	1B	0	0	0	Booren	6	3	1	0	5	5	1
11-Dec 3	6	1C	0	0	0	Booren	6	1	0	0	5	5	1
11-Dec 3	6	2A	0	0.4	0.3	Booren	5	5	5	5	5	5	1
11-Dec 3	6	2B	0	0.4	0.3	Booren	5	1	0	0	5	5	1
11-Dec 3	6	2C	0	0.4	0.3	Booren	5	1	0	0	5	5	1
11-Dec 3	6	3A	0.25	0	0	Booren	5	2	2	4	6	6	2
11-Dec 3	6	3B	0.25	0	0	Booren	5.5	2	2	5	4.5	4.5	2
11-Dec 3	6	3C	0.25	0	0	Booren	5.5	2	2	5	5	5	3
11-Dec 3	6	4A	2	0	0	Booren	3	2	2	2	3	3	2
11-Dec 3	6	4B	2	0	0	Booren	3	2	2	2	3	3	2
11-Dec 3	6	4C	2	0	0	Booren	4	6	2	2	3	3	2
11-Dec 3	6	5A	0.25	0.4	0.3	Booren	5	3	4	5	5	5	4
11-Dec 3	6	5B	0.25	0.4	0.3	Booren	5	3	4	4	4	4	3
11-Dec 3	6	5C	0.25	0.4	0.3	Booren	5	3	4	5	5	5	4
11-Dec 3	6	6A	2	0.4	0.3	Booren	4	6	2	2	3	3	2
11-Dec 3	6	6B	2	0.4	0.3	Booren	4	6	2	2	3	3	2
11-Dec 3	6	6C	2	0.4	0.3	Booren	4	6	2	2	3	3	2
11-Dec 3	6	1A	0	0	0	Eddy	6	1	0	0	.	.	.
11-Dec 3	6	1B	0	0	0	Eddy	5	1	0	0	.	.	.
11-Dec 3	6	1C	0	0	0	Eddy	6	5	0	0	.	.	.
11-Dec 3	6	2A	0	0.4	0.3	Eddy	4	1	0	0	.	.	.
11-Dec 3	6	2B	0	0.4	0.3	Eddy	4	1	0	0	.	.	.
11-Dec 3	6	2C	0	0.4	0.3	Eddy	4	1	0	0	.	.	.
11-Dec 3	6	3A	0.25	0	0	Eddy	5	1	0	0	.	.	.
11-Dec 3	6	3B	0.25	0	0	Eddy	4	1	0	0	.	.	.
11-Dec 3	6	3C	0.25	0	0	Eddy	5	5	4	4	.	.	.
11-Dec 3	6	4A	2	0	0	Eddy	1	7	1	1	.	.	.
11-Dec 3	6	4B	2	0	0	Eddy	1	7	1	1	.	.	.
11-Dec 3	6	4C	2	0	0	Eddy	2	6	1	1	.	.	.
11-Dec 3	6	5A	0.25	0.4	0.3	Eddy	4	5	3	2	.	.	.
11-Dec 3	6	5B	0.25	0.4	0.3	Eddy	4	6	2	0	.	.	.
11-Dec 3	6	5C	0.25	0.4	0.3	Eddy	4	1	1	1	.	.	.
11-Dec 3	6	6A	2	0.4	0.3	Eddy	2	6	6	1	.	.	.
11-Dec 3	6	6B	2	0.4	0.3	Eddy	2	6	6	1	.	.	.
11-Dec 3	6	6C	2	0.4	0.3	Eddy	2	6	6	1	.	.	.
11-Dec 3	6	1A	0	0	0	Hively	6	2	2	5	5	5	2
11-Dec 3	6	1B	0	0	0	Hively	6	4	4	5	5	5	6
11-Dec 3	6	1C	0	0	0	Hively	6	3	1	5	5	5	4
11-Dec 3	6	2A	0	0.4	0.3	Hively	5	5	1	0	0	0	1
11-Dec 3	6	2B	0	0.4	0.3	Hively	5	5	1	0	0	0	1
11-Dec 3	6	2C	0	0.4	0.3	Hively	5	1	0	0	0	0	1
11-Dec 3	6	3A	0.25	0	0	Hively	6	1	1	1	1	1	6
11-Dec 3	6	3B	0.25	0	0	Hively	6	1	1	1	1	1	6
11-Dec 3	6	3C	0.25	0	0	Hively	6	1	1	1	1	1	6
11-Dec 3	6	4A	2	0	0	Hively	4	7	1	1	1	1	7
11-Dec 3	6	4B	2	0	0	Hively	4	7	1	1	1	1	7
11-Dec 3	6	4C	2	0	0	Hively	4	7	1	1	1	1	7
11-Dec 3	6	5A	0.25	0.4	0.3	Hively	5	1	1	1	1	1	3
11-Dec 3	6	5B	0.25	0.4	0.3	Hively	5	6	1	1	1	1	1
11-Dec 3	6	5C	0.25	0.4	0.3	Hively	5	1	1	1	1	1	0

11-Dec 3	6	6A	2	0.4	0.3	Hively	4	6	3	4	6	1
11-Dec 3	6	6B	2	0.4	0.3	Hively	4	6	3	4	6	1
11-Dec 3	6	6C	2	0.4	0.3	Hively	4	6	3	4	6	1
11-Dec 3	6	1A	0	0	0	Jenschke	6	1	0	6	2	5
11-Dec 3	6	1B	0	0	0	Jenschke	6	1	0	6	6	5
11-Dec 3	6	1C	0	0	0	Jenschke	6	1	0	6	6	0
11-Dec 3	6	2A	0	0.4	0.3	Jenschke	5	1	0	4	1	0
11-Dec 3	6	2B	0	0.4	0.3	Jenschke	5	1	0	4	1	0
11-Dec 3	6	2C	0	0.4	0.3	Jenschke	4	1	0	4	1	0
11-Dec 3	6	3A	0.25	0	0	Jenschke	6	1	0	3	1	0
11-Dec 3	6	3B	0.25	0	0	Jenschke	5	1	0	3	1	0
11-Dec 3	6	3C	0.25	0	0	Jenschke	5	1	0	3	1	0
11-Dec 3	6	4A	2	0	0	Jenschke	3	1	0	2	1	0
11-Dec 3	6	4B	2	0	0	Jenschke	5	6	1	5	6	1
11-Dec 3	6	4C	2	0	0	Jenschke	5	6	1	6	6	1
11-Dec 3	6	5A	0.25	0.4	0.3	Jenschke	4	1	0	4	2	3
11-Dec 3	6	5B	0.25	0.4	0.3	Jenschke	5	5	0	4	3	3
11-Dec 3	6	5C	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0
11-Dec 3	6	6A	2	0.4	0.3	Jenschke	5	6	1	6	6	1
11-Dec 3	6	6B	2	0.4	0.3	Jenschke	5	6	1	6	6	1
11-Dec 3	6	6C	2	0.4	0.3	Jenschke	5	6	1	6	6	1
11-Dec 3	6	1A	0	0	0	Rhoades	6	2	5	6	2	5
11-Dec 3	6	1B	0	0	0	Rhoades	5	6	4	6	6	6
11-Dec 3	6	1C	0	0	0	Rhoades	6	1	0	6	2	2
11-Dec 3	6	2A	0	0.4	0.3	Rhoades	5	1	0	5	1	0
11-Dec 3	6	2B	0	0.4	0.3	Rhoades	5	1	0	5	1	0
11-Dec 3	6	2C	0	0.4	0.3	Rhoades	5	1	0	5	1	0
11-Dec 3	6	3A	0.25	0	0	Rhoades	6	5	4	4	5	3
11-Dec 3	6	3B	0.25	0	0	Rhoades	6	1	0	4	2	3
11-Dec 3	6	3C	0.25	0	0	Rhoades	6	1	0	4	1	0
11-Dec 3	6	4A	2	0	0	Rhoades	4	5	0	2	1	1
11-Dec 3	6	4B	2	0	0	Rhoades	3	1	0	2	2	1
11-Dec 3	6	4C	2	0	0	Rhoades	2	1	0	1	6	1
11-Dec 3	6	5A	0.25	0.4	0.3	Rhoades	5	5	4	6	6	4
11-Dec 3	6	5B	0.25	0.4	0.3	Rhoades	6	6	4	5	6	4
11-Dec 3	6	5C	0.25	0.4	0.3	Rhoades	6	6	5	5	1	0
11-Dec 3	6	6A	2	0.4	0.3	Rhoades	4	6	2	4	5	4
11-Dec 3	6	6B	2	0.4	0.3	Rhoades	6	6	2	4	4	3
11-Dec 3	6	6C	2	0.4	0.3	Rhoades	6	6	2	4	5	3
12-Dec 1	9	1A	0	0	0	Behrends	7	2	6	7	2	6
12-Dec 1	9	1B	0	0	0	Behrends	2	7	2	5	6	4
12-Dec 1	9	1C	0	0	0	Behrends	6	3	5	5	4	0
12-Dec 1	9	2A	0	0.4	0.3	Behrends	5	1	0	5	1	1
12-Dec 1	9	2B	0	0.4	0.3	Behrends	1	7	1	1	7	1
12-Dec 1	9	2C	0	0.4	0.3	Behrends	2	1	0	3	3	3
12-Dec 1	9	3A	0.25	0	0	Behrends	5	3	4	6	3	3
12-Dec 1	9	3B	0.25	0	0	Behrends	3	1	0	4	5	3
12-Dec 1	9	3C	0.25	0	0	Behrends	3	2	0	4	5	3
12-Dec 1	9	4A	2	0	0	Behrends	1	1	0	1	7	1
12-Dec 1	9	4B	2	0	0	Behrends	1	1	0	2	6	1
12-Dec 1	9	4C	2	0	0	Behrends	1	1	0	1	7	1
12-Dec 1	9	5A	0.25	0.4	0.3	Behrends	5	1	0	6	1	0
12-Dec 1	9	5B	0.25	0.4	0.3	Behrends	4	2	3	5	3	4

12-Dec 1	9	5C	0.25	0.4	0.3	Behrends	4	1	0	5	3	4
12-Dec 1	9	6A	2	0.4	0.3	Behrends	1	7	1	1	7	1
12-Dec 1	9	6B	2	0.4	0.3	Behrends	1	7	1	1	7	1
12-Dec 1	9	6C	2	0.4	0.3	Behrends	1	7	1	1	7	1
12-Dec 1	9	1A	0	0	0	Booren	6.5	6	6	7	6	6
12-Dec 1	9	1B	0	0	0	Booren	8	7	8	7	7	8
12-Dec 1	9	1C	0	0	0	Booren	6	6	5	5.5	6	5
12-Dec 1	9	2A	0	0.4	0.3	Booren	5.5	5	5	5	3	4.5
12-Dec 1	9	2B	0	0.4	0.3	Booren	8	7	8	4	7	1
12-Dec 1	9	2C	0	0.4	0.3	Booren	4	7	3.5	3	7	1
12-Dec 1	9	3A	0.25	0	0	Booren	5.5	6	5	5	5	4
12-Dec 1	9	3B	0.25	0	0	Booren	5.5	6	5	4	5	3
12-Dec 1	9	3C	0.25	0	0	Booren	5.5	6	5	4	5	3
12-Dec 1	9	4A	2	0	0	Booren	2	5	1.5	3	7	1
12-Dec 1	9	4B	2	0	0	Booren	2	6	1.5	3	7	1
12-Dec 1	9	4C	2	0	0	Booren	2	6	1.5	2	7	1
12-Dec 1	9	5A	0.25	0.4	0.3	Booren	6	5	5	5	2	4.5
12-Dec 1	9	5B	0.25	0.4	0.3	Booren	5	6	4	5	4	4
12-Dec 1	9	5C	0.25	0.4	0.3	Booren	4.5	6	4	5	2	4.5
12-Dec 1	9	6A	2	0.4	0.3	Booren	3	6	1.5	2	6	1
12-Dec 1	9	6B	2	0.4	0.3	Booren	3	6	1.5	2	6	1
12-Dec 1	9	6C	2	0.4	0.3	Booren	2	7	1	2	6	1
12-Dec 1	9	1A	0	0	0	Eddy	7	2	4	.	.	.
12-Dec 1	9	1B	0	0	0	Eddy	3	6	2	.	.	.
12-Dec 1	9	1C	0	0	0	Eddy	5	5	3	.	.	.
12-Dec 1	9	2A	0	0.4	0.3	Eddy	5	1	0	.	.	.
12-Dec 1	9	2B	0	0.4	0.3	Eddy	1	7	1	.	.	.
12-Dec 1	9	2C	0	0.4	0.3	Eddy	1	7	1	.	.	.
12-Dec 1	9	3A	0.25	0	0	Eddy	4	5	3	.	.	.
12-Dec 1	9	3B	0.25	0	0	Eddy	3	6	2	.	.	.
12-Dec 1	9	3C	0.25	0	0	Eddy	1	7	1	.	.	.
12-Dec 1	9	4A	2	0	0	Eddy	1	7	1	.	.	.
12-Dec 1	9	4B	2	0	0	Eddy	1	7	1	.	.	.
12-Dec 1	9	4C	2	0	0	Eddy	1	7	1	.	.	.
12-Dec 1	9	5A	0.25	0.4	0.3	Eddy	3	5	2	.	.	.
12-Dec 1	9	5B	0.25	0.4	0.3	Eddy	3	6	2	.	.	.
12-Dec 1	9	5C	0.25	0.4	0.3	Eddy	4	6	3	.	.	.
12-Dec 1	9	6A	2	0.4	0.3	Eddy	1	7	1	.	.	.
12-Dec 1	9	6B	2	0.4	0.3	Eddy	1	7	1	.	.	.
12-Dec 1	9	6C	2	0.4	0.3	Eddy	1	7	1	.	.	.
12-Dec 1	9	1A	0	0	0	Hively	7	2	6	8	2	6
12-Dec 1	9	1B	0	0	0	Hively	7	7	1	8	7	1
12-Dec 1	9	1C	0	0	0	Hively	7	3	6	7	3	6
12-Dec 1	9	2A	0	0.4	0.3	Hively	6	1	0	6	1	0
12-Dec 1	9	2B	0	0.4	0.3	Hively	6	7	1	4	7	1
12-Dec 1	9	2C	0	0.4	0.3	Hively	6	6	1	4	7	3
12-Dec 1	9	3A	0.25	0	0	Hively	6	7	5	6	1	0
12-Dec 1	9	3B	0.25	0	0	Hively	5	7	1	4	7	1
12-Dec 1	9	3C	0.25	0	0	Hively	5	7	1	4	7	1
12-Dec 1	9	4A	2	0	0	Hively	4	7	1	4	7	1
12-Dec 1	9	4B	2	0	0	Hively	4	7	1	4	7	1
12-Dec 1	9	4C	2	0	0	Hively	4	7	1	4	7	1
12-Dec 1	9	5A	0.25	0.4	0.3	Hively	4	1	0	6	1	0

12-Dec 1	9	5B	0.25	0.4	0.3	Hively	4	1	1	0	0	1	1	1	1	1	5	0	0
12-Dec 1	9	5C	0.25	0.4	0.3	Hively	4	1	7	1	1	4	4	4	4	4	7	7	1
12-Dec 1	9	6A	2	0.4	0.3	Hively	4	4	7	1	1	4	4	4	4	4	7	7	1
12-Dec 1	9	6B	2	0.4	0.3	Hively	4	4	7	1	1	4	4	4	4	4	7	7	1
12-Dec 1	9	6C	2	0.4	0.3	Hively	4	4	7	1	1	4	4	4	4	4	7	7	1
12-Dec 1	9	1A	0	0	0	Jenschke	7	2	6	3	3	5	5	5	5	5	6	6	3
12-Dec 1	9	1B	0	0	0	Jenschke	5	6	3	3	3	5	5	5	5	5	6	6	3
12-Dec 1	9	1C	0	0	0	Jenschke	5	2	3	3	3	5	5	5	5	5	6	6	3
12-Dec 1	9	2A	0	0.4	0.3	Jenschke	5	1	0	0	0	5	5	5	5	5	6	6	1
12-Dec 1	9	2B	0	0.4	0.3	Jenschke	3	1	0	0	0	2	2	2	2	2	6	6	1
12-Dec 1	9	2C	0	0.4	0.3	Jenschke	3	1	0	0	0	4	4	4	4	4	6	6	1
12-Dec 1	9	3A	0.25	0	0	Jenschke	6	4	4	1	1	1	1	1	1	1	4	4	4
12-Dec 1	9	3B	0.25	0	0	Jenschke	4	5	5	1	1	4	4	4	4	4	5	5	5
12-Dec 1	9	3C	0.25	0	0	Jenschke	4	6	6	1	1	4	4	4	4	4	5	5	5
12-Dec 1	9	4A	2	0	0	Jenschke	4	6	6	1	1	2	0	1	0	5	0	1	1
12-Dec 1	9	4B	2	0	0	Jenschke	2	1	1	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	4C	2	0	0	Jenschke	1	7	7	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	5A	0.25	0.4	0.3	Jenschke	6	1	1	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	5B	0.25	0.4	0.3	Jenschke	6	4	4	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	5C	0.25	0.4	0.3	Jenschke	4	1	1	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	6A	2	0.4	0.3	Jenschke	1	7	7	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	6B	2	0.4	0.3	Jenschke	1	7	7	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	6C	2	0.4	0.3	Jenschke	1	7	7	1	1	1	1	1	1	1	1	1	1
12-Dec 1	9	1A	0	0	0	Rhoades	6	2	4	4	4	6	6	6	6	6	6	6	6
12-Dec 1	9	1B	0	0	0	Rhoades	7	6	4	4	4	5	5	5	5	5	6	6	6
12-Dec 1	9	1C	0	0	0	Rhoades	6	3	4	4	4	5	5	5	5	5	6	6	6
12-Dec 1	9	2A	0	0.4	0.3	Rhoades	5	1	0	0	0	2	2	2	2	2	1	1	1
12-Dec 1	9	2B	0	0.4	0.3	Rhoades	2	1	0	0	0	2	2	2	2	2	1	1	1
12-Dec 1	9	2C	0	0.4	0.3	Rhoades	2	1	0	0	0	4	4	4	4	4	5	5	5
12-Dec 1	9	3A	0.25	0	0	Rhoades	5	5	5	0	0	4	4	4	4	4	5	5	5
12-Dec 1	9	3B	0.25	0	0	Rhoades	3	6	6	0	0	4	4	4	4	4	5	5	5
12-Dec 1	9	3C	0.25	0	0	Rhoades	3	6	6	0	0	4	4	4	4	4	5	5	5
12-Dec 1	9	4A	2	0	0	Rhoades	2	1	1	0	0	0	0	0	0	0	1	1	1
12-Dec 1	9	4B	2	0	0	Rhoades	2	1	1	0	0	0	0	0	0	0	1	1	1
12-Dec 1	9	4C	2	0	0	Rhoades	2	1	1	0	0	0	0	0	0	0	1	1	1
12-Dec 1	9	5A	0.25	0.4	0.3	Rhoades	5	1	1	0	0	0	0	0	0	0	1	1	1
12-Dec 1	9	5B	0.25	0.4	0.3	Rhoades	5	4	4	0	0	3	3	3	3	3	4	4	4
12-Dec 1	9	5C	0.25	0.4	0.3	Rhoades	5	1	1	0	0	0	0	0	0	0	1	1	1
12-Dec 1	9	6A	2	0.4	0.3	Rhoades	3	6	6	0	0	1	1	1	1	1	2	2	2
12-Dec 1	9	6B	2	0.4	0.3	Rhoades	3	6	6	0	0	1	1	1	1	1	2	2	2
12-Dec 1	9	6C	2	0.4	0.3	Rhoades	2	6	6	0	0	1	1	1	1	1	2	2	2
12-Dec 1	9	1A	0	0	0	Booren	8	4	4	3	3	8	8	8	8	8	7	7	7
13-Dec 2	9	1B	0	0	0	Booren	8	7	7	8	8	7	7	7	7	7	6	6	6
13-Dec 2	9	1C	0	0	0	Booren	6	6	6	8	8	7	7	7	7	7	6	6	6
13-Dec 2	9	2A	0	0.4	0.3	Booren	4	3	3	3	3	4	4	4	4	4	6	6	6
13-Dec 2	9	2B	0	0.4	0.3	Booren	5	3	3	3	3	4	4	4	4	4	6	6	6
13-Dec 2	9	2C	0	0.4	0.3	Booren	3	3	3	3	3	4	4	4	4	4	6	6	6
13-Dec 2	9	3A	0.25	0	0	Booren	5	3	3	3	3	4	4	4	4	4	6	6	6
13-Dec 2	9	3B	0.25	0	0	Booren	5	3	3	3	3	4	4	4	4	4	6	6	6
13-Dec 2	9	3C	0.25	0	0	Booren	6	6	6	8	8	7	7	7	7	7	6	6	6
13-Dec 2	9	4A	2	0	0	Booren	2	7	7	1	1	2	2	2	2	2	6	6	6
13-Dec 2	9	4B	2	0	0	Booren	1.5	7	7	1	1	1	1	1	1	1	5	5	5
13-Dec 2	9	4C	2	0	0	Booren	2	7	7	1	1	1	1	1	1	1	5	5	5

13-Dec 2	9	5A	0.25	0.4	0.3	Booren	2	6	1	6	6	4
13-Dec 2	9	5B	0.25	0.4	0.3	Booren	4	3	3	5	5	4
13-Dec 2	9	5C	0.25	0.4	0.3	Booren	3	6	2	4	6	2
13-Dec 2	9	6A	2	0.4	0.3	Booren	2	6	1	3	6	2
13-Dec 2	9	6B	2	0.4	0.3	Booren	2	6	1	3	6	2
13-Dec 2	9	6C	2	0.4	0.3	Booren	2	6	1	3	6	2
13-Dec 2	9	1A	0	0	0	Eddy	7	5	3	8	5	3
13-Dec 2	9	1B	0	0	0	Eddy	3	7	3	3	7	3
13-Dec 2	9	1C	0	0	0	Eddy	6	6	3	7	6	3
13-Dec 2	9	2A	0	0.4	0.3	Eddy	4	3	2	4	4	2
13-Dec 2	9	2B	0	0.4	0.3	Eddy	5	5	3	5	5	3
13-Dec 2	9	2C	0	0.4	0.3	Eddy	4	6	2	4	6	2
13-Dec 2	9	3A	0.25	0	0	Eddy	5	6	3	4	5	3
13-Dec 2	9	3B	0.25	0	0	Eddy	4	5	3	4	6	2
13-Dec 2	9	3C	0.25	0	0	Eddy	3	6	2	4	6	2
13-Dec 2	9	4A	2	0	0	Eddy	1	7	1	1	7	1
13-Dec 2	9	4B	2	0	0	Eddy	1	7	1	1	7	1
13-Dec 2	9	4C	2	0	0	Eddy	1	7	1	1	7	1
13-Dec 2	9	5A	0.25	0.4	0.3	Eddy	2	6	1	2	6	1
13-Dec 2	9	5B	0.25	0.4	0.3	Eddy	2	4	1	4	5	3
13-Dec 2	9	5C	0.25	0.4	0.3	Eddy	2	7	2	3	6	2
13-Dec 2	9	6A	2	0.4	0.3	Eddy	1	7	1	2	6	1
13-Dec 2	9	6B	2	0.4	0.3	Eddy	1	7	1	2	6	1
13-Dec 2	9	6C	2	0.4	0.3	Eddy	1	7	1	2	6	1
13-Dec 2	9	1A	0	0	0	Jenschke	8	4	3	8	4	6
13-Dec 2	9	1B	0	0	0	Jenschke	3	1	0	2	7	1
13-Dec 2	9	1C	0	0	0	Jenschke	8	5	3	7	4	6
13-Dec 2	9	2A	0	0.4	0.3	Jenschke	4	4	2	4	3	2
13-Dec 2	9	2B	0	0.4	0.3	Jenschke	6	4	3	6	4	5
13-Dec 2	9	2C	0	0.4	0.3	Jenschke	4	3	2	4	4	2
13-Dec 2	9	3A	0.25	0	0	Jenschke	6	1	0	6	1	0
13-Dec 2	9	3B	0.25	0	0	Jenschke	6	1	0	6	1	0
13-Dec 2	9	3C	0.25	0	0	Jenschke	3	1	0	7	6	3
13-Dec 2	9	4A	2	0	0	Jenschke	1	7	1	1	7	1
13-Dec 2	9	4B	2	0	0	Jenschke	1	7	1	1	7	1
13-Dec 2	9	4C	2	0	0	Jenschke	1	7	1	1	7	1
13-Dec 2	9	5A	0.25	0.4	0.3	Jenschke	1	7	1	5	6	2
13-Dec 2	9	5B	0.25	0.4	0.3	Jenschke	4	2	3	4	1	0
13-Dec 2	9	5C	0.25	0.4	0.3	Jenschke	3	7	1	1	7	1
13-Dec 2	9	6A	2	0.4	0.3	Jenschke	6	6	1	6	6	1
13-Dec 2	9	6B	2	0.4	0.3	Jenschke	6	6	1	6	6	1
13-Dec 2	9	6C	2	0.4	0.3	Jenschke	6	6	1	6	6	1
13-Dec 2	9	1A	0	0	0	Rhoades	7	5	3	7	5	6
13-Dec 2	9	1B	0	0	0	Rhoades	3	1	0	3	1	0
13-Dec 2	9	1C	0	0	0	Rhoades	7	6	4	7	3	3
13-Dec 2	9	2A	0	0.4	0.3	Rhoades	5	3	2	5	4	4
13-Dec 2	9	2B	0	0.4	0.3	Rhoades	5	4	4	6	2	2
13-Dec 2	9	2C	0	0.4	0.3	Rhoades	4	2	3	5	3	3
13-Dec 2	9	3A	0.25	0	0	Rhoades	5	5	5	6	1	0
13-Dec 2	9	3B	0.25	0	0	Rhoades	5	3	4	6	3	3
13-Dec 2	9	3C	0.25	0	0	Rhoades	6	6	3	4	6	3
13-Dec 2	9	4A	2	0	0	Rhoades	1	1	0	1	1	0
13-Dec 2	9	4B	2	0	0	Rhoades	2	6	1	3	6	2

13-Dec 2	9	4C	2	0	0	Rhoades	2	3	5	5	2	1	3	0	3	2	1	1	7	5	5
13-Dec 2	9	5A	0.25	0.4	0.3	Rhoades	3	2	5	5	1	3	4	5	5	1	5	6	6	6	6
13-Dec 2	9	5B	0.25	0.4	0.3	Rhoades	2	2	4	4	1	3	3	5	5	1	5	6	6	6	6
13-Dec 2	9	5C	0.25	0.4	0.3	Rhoades	2	2	4	4	1	3	3	4	4	4	5	6	6	6	6
13-Dec 2	9	6A	2	0.4	0.3	Rhoades	6	6	6	6	8	7	6	6	6	6	6	6	6	6	6
13-Dec 2	9	6B	2	0.4	0.3	Rhoades	6	6	6	6	7	7	6	6	6	6	6	6	6	6	6
13-Dec 2	9	6C	2	0.4	0.3	Rhoades	6	6	6	6	7	7	6	6	6	6	6	6	6	6	6
14-Dec 3	9	1A	0	0	0	Booren	6	6	6	6	8	7	6	6	6	6	6	6	6	6	6
14-Dec 3	9	1B	0	0	0	Booren	6	6	6	6	7	7	6	6	6	6	6	6	6	6	6
14-Dec 3	9	1C	0	0	0	Booren	5	4	4	4	4	4	5	5	5	5	5	5	6	6	6
14-Dec 3	9	2A	0	0.4	0.3	Booren	4	4	4	4	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	2B	0	0.4	0.3	Booren	4	4	4	4	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	2C	0	0.4	0.3	Booren	4	4	4	4	3.5	3.5	4	5	5	5	5	5	6	6	6
14-Dec 3	9	3A	0.25	0	0	Booren	4	4	4	4	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	3B	0.25	0	0	Booren	5	6	6	6	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	3C	0.25	0	0	Booren	5	6	6	6	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	4A	2	0	0	Booren	2	7	7	7	2	2	2	2	2	2	2	2	7	7	7
14-Dec 3	9	4B	2	0	0	Booren	2	7	7	7	2	2	2	2	2	2	2	2	6	6	6
14-Dec 3	9	4C	2	0	0	Booren	2	7	7	7	2	2	2	2	2	2	2	2	6	6	6
14-Dec 3	9	5A	0.25	0.4	0.3	Booren	4	2	2	2	3.5	3.5	4	4	4	4	4	4	3	3	3
14-Dec 3	9	5B	0.25	0.4	0.3	Booren	4	3	3	3	3.5	3.5	4	4	4	4	4	4	3	3	3
14-Dec 3	9	5C	0.25	0.4	0.3	Booren	4	2	2	2	3.5	3.5	4	4	4	4	4	4	3	3	3
14-Dec 3	9	6A	2	0.4	0.3	Booren	4	6	6	6	2	2	2	2	2	2	2	2	6	6	6
14-Dec 3	9	6B	2	0.4	0.3	Booren	4	6	6	6	2	2	2	2	2	2	2	2	6	6	6
14-Dec 3	9	6C	2	0.4	0.3	Booren	4	6	6	6	2	2	2	2	2	2	2	2	6	6	6
14-Dec 3	9	1A	0	0	0	Eddy	6	5	5	5	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	1B	0	0	0	Eddy	4	5	5	5	2	2	2	2	2	2	2	2	4	4	4
14-Dec 3	9	1C	0	0	0	Eddy	6	6	6	6	2	2	2	2	2	2	2	2	6	6	6
14-Dec 3	9	2A	0	0.4	0.3	Eddy	5	3	3	3	3	3	4	5	5	5	5	5	4	4	4
14-Dec 3	9	2B	0	0.4	0.3	Eddy	5	2	2	2	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	2C	0	0.4	0.3	Eddy	5	5	5	5	2	2	2	2	2	2	2	2	6	6	6
14-Dec 3	9	3A	0.25	0	0	Eddy	5	5	5	5	6	6	4	4	4	4	4	4	6	6	6
14-Dec 3	9	3B	0.25	0	0	Eddy	5	5	5	5	6	6	4	4	4	4	4	4	6	6	6
14-Dec 3	9	3C	0.25	0	0	Eddy	5	5	5	5	6	6	4	4	4	4	4	4	7	7	7
14-Dec 3	9	4A	2	0	0	Eddy	1	7	7	7	1	1	1	1	1	1	1	1	7	7	7
14-Dec 3	9	4B	2	0	0	Eddy	1	7	7	7	1	1	1	1	1	1	1	1	7	7	7
14-Dec 3	9	4C	2	0	0	Eddy	1	7	7	7	1	1	1	1	1	1	1	1	7	7	7
14-Dec 3	9	5A	0.25	0.4	0.3	Eddy	5	4	4	4	4	4	5	5	5	5	5	5	6	6	6
14-Dec 3	9	5B	0.25	0.4	0.3	Eddy	5	3	3	3	4	4	4	4	4	4	4	4	5	5	5
14-Dec 3	9	5C	0.25	0.4	0.3	Eddy	5	2	2	2	4	4	4	4	4	4	4	4	5	5	5
14-Dec 3	9	6A	2	0.4	0.3	Eddy	1	7	7	7	1	1	1	1	1	1	1	1	7	7	7
14-Dec 3	9	6B	2	0.4	0.3	Eddy	1	7	7	7	1	1	1	1	1	1	1	1	7	7	7
14-Dec 3	9	6C	2	0.4	0.3	Eddy	1	7	7	7	1	1	1	1	1	1	1	1	7	7	7
14-Dec 3	9	1A	0	0	0	Hively	6	5	5	5	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	1B	0	0	0	Hively	6	6	6	6	3	3	4	5	5	5	5	5	6	6	6
14-Dec 3	9	1C	0	0	0	Hively	6	6	6	6	4	4	4	4	4	4	4	4	6	6	6
14-Dec 3	9	2A	0	0.4	0.3	Hively	5	2	2	2	4	4	4	4	4	4	4	4	5	5	5
14-Dec 3	9	2B	0	0.4	0.3	Hively	5	2	2	2	4	4	4	4	4	4	4	4	5	5	5
14-Dec 3	9	2C	0	0.4	0.3	Hively	5	4	4	4	3	3	4	4	4	4	4	4	5	5	5
14-Dec 3	9	3A	0.25	0	0	Hively	5	3	3	3	4	4	4	4	4	4	4	4	5	5	5
14-Dec 3	9	3B	0.25	0	0	Hively	4	6	6	6	3	3	4	4	4	4	4	4	5	5	5
14-Dec 3	9	3C	0.25	0	0	Hively	4	6	6	6	3	3	4	4	4	4	4	4	5	5	5
14-Dec 3	9	4A	2	0	0	Hively	4	7	7	7	1	1	1	1	1	1	1	1	7	7	7

14-Dec 3	9	4B	2	0	0	Hively	4	7	1	4	7	1
14-Dec 3	9	4C	2	0	0	Hively	4	7	1	4	7	1
14-Dec 3	9	5A	0.25	0.4	0.3	Hively	3	1	0	5	4	4
14-Dec 3	9	5B	0.25	0.4	0.3	Hively	3	1	0	5	6	4
14-Dec 3	9	5C	0.25	0.4	0.3	Hively	3	1	0	5	6	4
14-Dec 3	9	6A	2	0.4	0.3	Hively	3	7	1	4	7	1
14-Dec 3	9	6B	2	0.4	0.3	Hively	3	7	1	4	7	1
14-Dec 3	9	6C	2	0.4	0.3	Hively	3	7	1	4	7	1
14-Dec 3	9	1A	0	0	0	Jenschke	6	5	3	6	4	3
14-Dec 3	9	1B	0	0	0	Jenschke	6	5	2	3	3	1
14-Dec 3	9	1C	0	0	0	Jenschke	6	5	2	6	4	2
14-Dec 3	9	2A	0	0.4	0.3	Jenschke	4	2	3	5	1	0
14-Dec 3	9	2B	0	0.4	0.3	Jenschke	4	2	1	4	2	1
14-Dec 3	9	2C	0	0.4	0.3	Jenschke	4	1	0	4	1	0
14-Dec 3	9	3A	0.25	0	0	Jenschke	5	1	0	4	1	0
14-Dec 3	9	3B	0.25	0	0	Jenschke	6	6	1	5	6	1
14-Dec 3	9	3C	0.25	0	0	Jenschke	6	4	1	5	5	1
14-Dec 3	9	4A	2	0	0	Jenschke	1	7	1	1	7	1
14-Dec 3	9	4B	2	0	0	Jenschke	1	7	1	1	7	1
14-Dec 3	9	4C	2	0	0	Jenschke	1	7	1	1	7	1
14-Dec 3	9	5A	0.25	0.4	0.3	Jenschke	4	2	1	4	2	2
14-Dec 3	9	5B	0.25	0.4	0.3	Jenschke	4	1	0	4	4	3
14-Dec 3	9	5C	0.25	0.4	0.3	Jenschke	4	1	0	4	1	0
14-Dec 3	9	6A	2	0.4	0.3	Jenschke	1	7	1	4	6	1
14-Dec 3	9	6B	2	0.4	0.3	Jenschke	1	7	1	4	6	1
14-Dec 3	9	6C	2	0.4	0.3	Jenschke	1	7	1	4	6	1

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	Abs 1	Abs 2	ABS 3	ABS 4	Abs Avg	TBAR	MET	pH
3-Dec	1	0	1A	0	0	0	0.0135	-0.0016	.	.	0.0060	0.0464	0.2561	5.79
3-Dec	1	0	1B	0	0	0	0.0260	0.0102	.	.	0.0181	0.1412	0.2035	5.72
3-Dec	1	0	1C	0	0	0	0.0059	0.0107	.	.	0.0083	0.0647	0.1910	5.75
3-Dec	1	0	2A	0	0.4	0.3	0.0077	-0.0004	.	.	0.0037	0.0285	0.1415	5.79
3-Dec	1	0	2B	0	0.4	0.3	-0.0024	0.0024	.	.	0.0000	0.0000	0.2279	5.81
3-Dec	1	0	2C	0	0.4	0.3	0.0044	0.0068	.	.	0.0056	0.0437	0.1646	5.83
3-Dec	1	0	3A	0.25	0	0	0.0050	0.0131	.	.	0.0091	0.0706	0.1745	5.76
3-Dec	1	0	3B	0.25	0	0	0.0181	0.0146	.	.	0.0164	0.1275	0.2770	5.73
3-Dec	1	0	3C	0.25	0	0	0.0088	0.0129	.	.	0.0109	0.0846	0.4343	5.72
3-Dec	1	0	4A	2	0	0	0.0111	0.0145	.	.	0.0128	0.0998	0.2771	5.77
3-Dec	1	0	4B	2	0	0	0.0088	0.0110	.	.	0.0099	0.0772	0.2060	5.76
3-Dec	1	0	4C	2	0	0	0.0024	0.0139	.	.	0.0082	0.0636	0.9111	5.77
3-Dec	1	0	5A	0.25	0.4	0.3	0.0001	-0.0117	.	.	-0.0058	-0.0452	0.2258	5.85
3-Dec	1	0	5B	0.25	0.4	0.3	0.0033	0.0057	.	.	0.0045	0.0351	0.1824	5.81
3-Dec	1	0	5C	0.25	0.4	0.3	0.0125	0.0045	.	.	0.0085	0.0663	0.2183	5.82
3-Dec	1	0	6A	2	0.4	0.3	0.0174	0.0152	.	.	0.0163	0.1271	0.2228	5.83
3-Dec	1	0	6B	2	0.4	0.3	0.0056	0.0152	.	.	0.0104	0.0811	0.1361	5.83
3-Dec	1	0	6C	2	0.4	0.3	0.0161	0.0131	.	.	0.0146	0.1139	0.2848	5.80
4-Dec	2	0	1A	0	0	0	0.0169	0.0064	0.0185	.	0.0139	0.1087	0.1537	5.67
4-Dec	2	0	1B	0	0	0	0.0071	0.0068	-0.0006	0.0091	0.0056	0.0437	0.1969	5.70
4-Dec	2	0	1C	0	0	0	-0.0022	0.0012	-0.0016	0.0036	0.0003	0.0020	0.2095	5.67
4-Dec	2	0	2A	0	0.4	0.3	-0.0191	0.0111	0.0074	0.0053	0.0012	0.0092	0.0309	5.85
4-Dec	2	0	2B	0	0.4	0.3	-0.0027	0.0125	0.0088	0.0034	0.0055	0.0429	0.0906	5.77
4-Dec	2	0	2C	0	0.4	0.3	0.0094	-0.0011	-0.0024	0.0028	0.0022	0.0170	0.0549	5.92
4-Dec	2	0	3A	0.25	0	0	0.0359	0.0384	0.0112	0.0041	0.0224	0.1747	0.1185	5.68
4-Dec	2	0	3B	0.25	0	0	0.0164	0.0090	0.0122	0.0116	0.0123	0.0959	0.0979	5.68
4-Dec	2	0	3C	0.25	0	0	0.0136	0.0060	0.0116	0.0014	0.0082	0.0636	0.0605	5.71
4-Dec	2	0	4A	2	0	0	0.0158	0.0140	0.0054	0.0055	0.0102	0.0794	0.1653	5.67
4-Dec	2	0	4B	2	0	0	0.0026	-0.0203	0.0076	-0.0205	-0.0077	-0.0597	-0.0425	5.65
4-Dec	2	0	4C	2	0	0	-0.0020	0.0094	0.0015	0.0031	0.0030	0.0234	0.2444	5.65
4-Dec	2	0	5A	0.25	0.4	0.3	0.0079	0.0078	0.0032	-0.0092	0.0024	0.0189	-0.0778	5.74
4-Dec	2	0	5B	0.25	0.4	0.3	0.0042	0.0034	0.0702	0.1002	0.0445	0.3471	-0.0388	5.72
4-Dec	2	0	5C	0.25	0.4	0.3	0.0090	0.0063	0.0198	-0.0045	0.0077	0.0597	-0.3622	5.70
4-Dec	2	0	6A	2	0.4	0.3	0.0011	-0.0059	0.0099	-0.0179	-0.0032	-0.0250	0.0257	5.73
4-Dec	2	0	6B	2	0.4	0.3	0.0108	0.0031	0.0099	-0.0054	0.0046	0.0359	0.0208	5.72
4-Dec	2	0	6C	2	0.4	0.3	0.0100	0.0039	0.0096	-0.0039	0.0049	0.0382	0.0455	5.79
5-Dec	3	0	1A	0	0	0	0.0118	0.0161	0.0012	0.0111	0.0101	0.0784	-0.0676	5.72
5-Dec	3	0	1B	0	0	0	0.0097	0.0078	0.0183	0.0336	0.0174	0.1353	0.0398	5.71
5-Dec	3	0	1C	0	0	0	-0.0092	0.0506	-0.0145	0.0082	0.0088	0.0684	0.0449	5.69
5-Dec	3	0	2A	0	0.4	0.3	0.0064	0.0008	0.0086	0.0047	0.0051	0.0400	-0.0712	5.76
5-Dec	3	0	2B	0	0.4	0.3	0.0026	0.0024	0.0072	0.0046	0.0042	0.0328	-0.0411	5.74
5-Dec	3	0	2C	0	0.4	0.3	0.0078	0.0045	0.0048	.	0.0057	0.0445	-0.0462	5.75
5-Dec	3	0	3A	0.25	0	0	0.0086	0.0135	0.0244	0.0207	0.0168	0.1310	0.2215	5.68
5-Dec	3	0	3B	0.25	0	0	0.0023	0.0055	0.0383	0.0426	0.0222	0.1730	0.1099	5.67

5-Dec	3	0	3C	0.25	0	0	0.0080	0.0129	0.0208	0.0178	0.0149	0.1160	0.0739	5.67
5-Dec	3	0	4A	2	0	0	0.0236	0.0109	0.0200	0.0116	0.0165	0.1289	0.0768	5.69
5-Dec	3	0	4B	2	0	0	0.0121	0.0076	0.0175	0.0107	0.0120	0.0934	0.0945	5.68
5-Dec	3	0	4C	2	0	0	0.0118	0.0110	0.0003	0.0033	0.0066	0.0515	0.1210	5.65
5-Dec	3	0	5A	0.25	0.4	0.3	0.0110	0.0140	0.0090	0.0100	0.0110	0.0858	-0.0514	5.73
5-Dec	3	0	5B	0.25	0.4	0.3	0.0093	0.0078	0.0120	0.0117	0.0102	0.0796	0.0501	5.73
5-Dec	3	0	5C	0.25	0.4	0.3	0.0078	0.0062	-0.0021	0.0073	0.0048	0.0374	-0.0528	5.72
5-Dec	3	0	6A	2	0.4	0.3	0.0018	0.0111	0.0076	0.0126	0.0083	0.0645	-0.0572	5.68
5-Dec	3	0	6B	2	0.4	0.3	0.0057	0.0032	0.0136	0.0122	0.0087	0.0677	0.0807	5.69
5-Dec	3	0	6C	2	0.4	0.3	0.0138	0.0205	0.0062	0.0059	0.0116	0.0905	0.0089	5.77
6-Dec	1	3	1A	0	0	0	0.1431	0.1382	0.3980	0.2511	0.2326	1.8143	0.0682	5.73
6-Dec	1	3	1B	0	0	0	0.2338	0.2231	0.3225	0.3396	0.2798	2.1821	0.0176	5.69
6-Dec	1	3	1C	0	0	0	0.0467	0.0589	0.0586	0.0579	0.0555	0.4331	0.0214	5.78
6-Dec	1	3	2A	0	0.4	0.3	0.0894	0.0143	0.2758	0.1538	0.1333	1.0399	-0.0349	5.74
6-Dec	1	3	2B	0	0.4	0.3	0.0487	0.0261	0.0206	0.0204	0.0290	0.2258	0.1823	5.74
6-Dec	1	3	2C	0	0.4	0.3	0.0159	0.0151	0.0160	-0.0111	0.0090	0.0700	0.0174	5.84
6-Dec	1	3	3A	0.25	0	0	0.0403	0.0754	0.2188	0.2590	0.1484	1.1573	0.1313	5.71
6-Dec	1	3	3B	0.25	0	0	0.0260	0.0689	0.0804	0.0292	0.0511	0.3988	0.0640	5.73
6-Dec	1	3	3C	0.25	0	0	0.0917	0.0886	0.1598	0.1230	0.1158	0.9030	0.2074	5.69
6-Dec	1	3	4A	2	0	0	0.0167	0.0184	0.0194	0.0193	0.0185	0.1439	0.2306	5.84
6-Dec	1	3	4B	2	0	0	0.0189	0.0108	0.0199	0.0322	0.0205	0.1595	0.1946	5.74
6-Dec	1	3	4C	2	0	0	0.0574	0.0245	0.0178	-0.0076	0.0230	0.1796	0.2177	5.79
6-Dec	1	3	5A	0.25	0.4	0.3	0.0179	0.0167	0.1042	0.0473	0.0465	0.3629	-0.0089	5.84
6-Dec	1	3	5B	0.25	0.4	0.3	0.0102	-0.0001	0.0936	0.0084	0.0280	0.2186	-0.0147	5.84
6-Dec	1	3	5C	0.25	0.4	0.3	0.0123	0.0127	0.0002	0.0050	0.0076	0.0589	-0.0048	5.80
6-Dec	1	3	6A	2	0.4	0.3	0.0121	0.0133	0.0134	0.0014	0.0101	0.0784	0.0866	5.84
6-Dec	1	3	6B	2	0.4	0.3	0.0101	0.0076	0.1078	0.0635	0.0473	0.3686	0.0566	5.81
6-Dec	1	3	6C	2	0.4	0.3	0.0382	0.0163	0.2369	0.2154	0.1267	0.9883	0.0925	5.79
7-Dec	2	3	1A	0	0	0	0.0938	0.0821	0.1101	0.1187	0.1012	0.7892	0.7814	5.72
7-Dec	2	3	1B	0	0	0	0.1627	0.1580	0.1756	0.1772	0.1684	1.3133	0.2872	5.72
7-Dec	2	3	1C	0	0	0	0.2602	0.3000	0.2020	0.2107	0.2432	1.8972	-0.1035	5.70
7-Dec	2	3	2A	0	0.4	0.3	0.0138	0.0119	-0.0072	0.0095	0.0070	0.0546	0.3934	5.92
7-Dec	2	3	2B	0	0.4	0.3	.	.	0.0088	0.0230	0.0159	0.1240	1.8650	5.76
7-Dec	2	3	2C	0	0.4	0.3	0.0323	0.0307	0.0404	0.0304	0.0335	0.2609	.	5.90
7-Dec	2	3	3A	0.25	0	0	0.0326	0.0408	0.0622	0.0668	0.0506	0.3947	-1.0901	5.73
7-Dec	2	3	3B	0.25	0	0	0.0573	0.0498	0.0344	0.0308	0.0431	0.3360	4.8889	5.73
7-Dec	2	3	3C	0.25	0	0	0.0626	0.0677	0.0794	.	0.0699	0.5452	0.9061	5.76
7-Dec	2	3	4A	2	0	0	0.0185	0.0278	0.0228	0.0089	0.0195	0.1521	0.4714	5.75
7-Dec	2	3	4B	2	0	0	0.0134	0.0266	0.0613	0.0302	0.0329	0.2564	0.2464	5.70
7-Dec	2	3	4C	2	0	0	0.0071	0.0919	0.0340	0.0373	0.0426	0.3321	0.4123	5.77
7-Dec	2	3	5A	0.25	0.4	0.3	0.0227	0.0221	0.0029	0.0095	0.0143	0.1115	3.3338	5.76
7-Dec	2	3	5B	0.25	0.4	0.3	0.0238	0.0292	0.0245	0.0308	0.0271	0.2112	2.1457	5.78
7-Dec	2	3	5C	0.25	0.4	0.3	0.0479	0.0451	0.0404	0.0393	0.0432	0.3368	3.2133	5.74
7-Dec	2	3	6A	2	0.4	0.3	0.0318	0.0137	0.0167	0.0080	0.0176	0.1369	0.0487	5.80
7-Dec	2	3	6B	2	0.4	0.3	0.0058	0.0108	0.0183	0.0384	0.0183	0.1429	0.8843	5.79
7-Dec	2	3	6C	2	0.4	0.3	0.0781	0.0898	0.0093	0.0142	0.0479	0.3732	-0.3362	5.83
8-Dec	3	3	1A	0	0	0	0.1363	0.1323	0.1174	0.1186	0.1262	0.9840	0.2977	5.76

8-Dec	3	3	1B	0	0	0	0.1060	0.0854	0.1180	0.1154	0.1062	0.8284	0.3344	5.77
8-Dec	3	3	1C	0	0	0	0.0879	0.0829	0.0748	0.0903	0.0840	0.6550	0.3897	5.72
8-Dec	3	3	2A	0	0.4	0.3	0.0107	0.0139	0.0143	0.0244	0.0158	0.1234	0.3326	5.82
8-Dec	3	3	2B	0	0.4	0.3	0.0201	0.0168	0.0111	0.0127	0.0152	0.1184	0.2860	5.77
8-Dec	3	3	2C	0	0.4	0.3	0.0101	0.0199	.	0.0315	0.0205	0.1599	0.3394	5.79
8-Dec	3	3	3A	0.25	0	0	0.0247	0.1020	0.0302	0.0315	0.0471	0.3674	0.3065	5.79
8-Dec	3	3	3B	0.25	0	0	0.0344	0.0193	0.0263	0.0382	0.0296	0.2305	0.3095	5.77
8-Dec	3	3	3C	0.25	0	0	0.0607	0.0633	0.2052	0.1612	0.1226	0.9563	0.3321	5.77
8-Dec	3	3	4A	2	0	0	0.0270	0.0690	0.0146	0.0447	0.0388	0.3028	0.3313	5.82
8-Dec	3	3	4B	2	0	0	0.0341	0.0491	0.0302	0.0332	0.0367	0.2859	0.4319	5.80
8-Dec	3	3	4C	2	0	0	0.0149	0.0131	0.0195	0.0158	0.0158	0.1234	0.3909	5.78
8-Dec	3	3	5A	0.25	0.4	0.3	-0.0003	0.1139	0.0271	0.0219	0.0407	0.3171	0.3109	5.81
8-Dec	3	3	5B	0.25	0.4	0.3	0.0441	0.0035	0.0122	0.0137	0.0184	0.1433	0.2977	5.81
8-Dec	3	3	5C	0.25	0.4	0.3	0.0175	0.0196	0.0148	0.0112	0.0158	0.1230	0.3422	5.79
8-Dec	3	3	6A	2	0.4	0.3	0.0175	0.0196	0.0148	0.0112	0.0158	0.1230	0.4122	5.79
8-Dec	3	3	6B	2	0.4	0.3	0.0156	0.0186	0.0048	0.0066	0.0114	0.0889	0.3886	5.83
8-Dec	3	3	6C	2	0.4	0.3	0.0208	0.0184	0.0235	0.0352	0.0245	0.1909	0.1958	5.81
9-Dec	1	6	1A	0	0	0	0.2722	0.3198	.	.	0.2960	2.3088	0.2393	5.80
9-Dec	1	6	1B	0	0	0	0.4945	0.4723	0.4852	0.4841	0.4840	3.7754	0.3415	5.69
9-Dec	1	6	1C	0	0	0	0.1344	0.1349	0.1300	0.1308	0.1325	1.0337	0.1662	5.72
9-Dec	1	6	2A	0	0.4	0.3	0.0668	0.0651	0.0832	0.0829	0.0745	0.5811	0.3536	5.74
9-Dec	1	6	2B	0	0.4	0.3	0.1410	0.1431	0.1539	0.1928	0.1577	1.2301	0.3192	5.74
9-Dec	1	6	2C	0	0.4	0.3	0.2337	0.2399	0.1438	0.1462	0.1909	1.4890	0.4049	5.76
9-Dec	1	6	3A	0.25	0	0	0.0508	0.0551	0.0495	0.0559	0.0528	0.4120	0.2681	5.74
9-Dec	1	6	3B	0.25	0	0	0.0917	.	0.0726	0.0777	0.0807	0.6292	0.3675	5.80
9-Dec	1	6	3C	0.25	0	0	0.1024	0.1029	0.1336	0.1497	0.1222	0.9528	0.4078	5.73
9-Dec	1	6	4A	2	0	0	0.0362	0.0382	0.0954	0.0418	0.0529	0.4126	0.4842	5.84
9-Dec	1	6	4B	2	0	0	0.0391	0.0398	0.0670	.	0.0486	0.3793	0.4645	5.76
9-Dec	1	6	4C	2	0	0	0.0587	0.0815	0.2765	0.2828	0.1749	1.3640	0.4850	5.79
9-Dec	1	6	5A	0.25	0.4	0.3	0.0207	.	0.0133	0.0269	0.0203	0.1583	0.3344	5.81
9-Dec	1	6	5B	0.25	0.4	0.3	0.0092	0.0136	0.0166	0.0184	0.0145	0.1127	0.1803	5.80
9-Dec	1	6	5C	0.25	0.4	0.3	0.0280	0.0278	0.0257	0.0311	0.0282	0.2196	0.3699	5.71
9-Dec	1	6	6A	2	0.4	0.3	0.0346	0.0225	0.0204	0.0289	0.0266	0.2075	0.4751	5.81
9-Dec	1	6	6B	2	0.4	0.3	0.0161	0.0293	0.0305	0.0863	0.0406	0.3163	0.4163	5.80
9-Dec	1	6	6C	2	0.4	0.3	0.0104	0.0209	0.0124	0.0279	0.0179	0.1396	0.4402	5.76
10-Dec	2	6	1A	0	0	0	0.2414	0.2441	0.2321	0.2351	0.2382	1.8578	0.2218	5.78
10-Dec	2	6	1B	0	0	0	0.3864	0.3729	0.4914	0.4962	0.4367	3.4065	0.4371	5.75
10-Dec	2	6	1C	0	0	0	0.2983	0.3021	0.4583	0.4547	0.3784	2.9511	0.2867	5.75
10-Dec	2	6	2A	0	0.4	0.3	0.0681	0.0545	0.0548	0.0717	0.0623	0.4857	0.0999	5.93
10-Dec	2	6	2B	0	0.4	0.3	0.0478	0.0458	0.0560	0.0557	0.0513	0.4003	0.1294	5.84
10-Dec	2	6	2C	0	0.4	0.3	0.0898	0.0991	0.0891	0.0925	0.0926	0.7225	0.1327	5.94
10-Dec	2	6	3A	0.25	0	0	0.0624	0.0666	0.0979	0.1515	0.0946	0.7379	0.2604	5.72
10-Dec	2	6	3B	0.25	0	0	0.0294	0.0283	0.0301	0.0299	0.0294	0.2295	0.2044	5.74
10-Dec	2	6	3C	0.25	0	0	0.1168	0.1157	0.1233	0.1194	0.1188	0.9266	0.2552	5.77
10-Dec	2	6	4A	2	0	0	0.0486	0.0457	0.0387	0.0429	0.0440	0.3430	0.2487	5.79
10-Dec	2	6	4B	2	0	0	0.0431	0.0447	0.0556	0.0520	0.0489	0.3810	0.4339	5.74
10-Dec	2	6	4C	2	0	0	0.0120	0.0197	0.0507	0.0512	0.0334	0.2605	0.6267	5.82

10-Dec	2	6	5A	0.25	0.4	0.3	0.1264	0.1201	0.0899	0.0931	0.1074	0.8375	0.2261	5.78
10-Dec	2	6	5B	0.25	0.4	0.3	0.0308	0.0413	0.0551	0.0582	0.0464	0.3615	0.1623	5.78
10-Dec	2	6	5C	0.25	0.4	0.3	0.1322	0.1384	0.1564	0.1561	0.1458	1.1370	0.1402	5.75
10-Dec	2	6	6A	2	0.4	0.3	0.0278	0.0211	0.0402	0.0154	0.0261	0.2038	0.3477	5.80
10-Dec	2	6	6B	2	0.4	0.3	0.0302	0.0281	0.0311	0.0287	0.0295	0.2303	0.3732	5.80
10-Dec	2	6	6C	2	0.4	0.3	0.0192	0.0230	0.0216	0.0219	0.0214	0.1671	0.2598	5.84
11-Dec	3	6	1A	0	0	0	0.2219	0.2368	0.2823	0.3118	0.2632	2.0530	0.2015	5.76
11-Dec	3	6	1B	0	0	0	0.1834	0.1948	0.2015	0.2098	0.1974	1.5395	0.2375	5.73
11-Dec	3	6	1C	0	0	0	0.1486	0.1456	0.1966	0.1783	0.1673	1.3047	0.2391	5.65
11-Dec	3	6	2A	0	0.4	0.3	0.1040	0.1197	0.0961	0.0974	0.1043	0.8135	0.0986	5.80
11-Dec	3	6	2B	0	0.4	0.3	0.0891	0.0932	0.0618	0.0626	0.0767	0.5981	0.1339	5.74
11-Dec	3	6	2C	0	0.4	0.3	0.0504	0.0468	0.1593	0.1374	0.0985	0.7681	0.0515	5.73
11-Dec	3	6	3A	0.25	0	0	0.0364	.	0.0573	0.0361	0.0433	0.3375	0.2184	5.73
11-Dec	3	6	3B	0.25	0	0	0.0240	0.0282	0.0324	0.0362	0.0302	0.2356	0.4291	5.72
11-Dec	3	6	3C	0.25	0	0	0.1534	0.1626	0.1364	.	0.1508	1.1762	0.2540	5.71
11-Dec	3	6	4A	2	0	0	0.0683	0.0678	0.1207	0.1024	0.0898	0.7004	0.4895	5.78
11-Dec	3	6	4B	2	0	0	0.0641	0.0771	0.0736	0.0795	0.0736	0.5739	0.3931	5.75
11-Dec	3	6	4C	2	0	0	0.0473	0.0533	0.0457	0.0707	0.0543	0.4232	0.4218	5.73
11-Dec	3	6	5A	0.25	0.4	0.3	0.0258	0.0636	0.0262	0.0210	0.0342	0.2664	0.0842	5.76
11-Dec	3	6	5B	0.25	0.4	0.3	0.0487	.	0.0160	0.0177	0.0275	0.2142	0.4016	5.78
11-Dec	3	6	5C	0.25	0.4	0.3	0.0577	0.0444	0.0351	0.0356	0.0432	0.3370	0.1907	5.77
11-Dec	3	6	6A	2	0.4	0.3	0.0459	.	0.0700	.	0.0580	0.4520	0.3446	5.77
11-Dec	3	6	6B	2	0.4	0.3	0.0363	0.0372	0.0783	0.0385	0.0476	0.3711	0.3837	5.80
11-Dec	3	6	6C	2	0.4	0.3	0.0366	0.0391	0.0709	0.0513	0.0495	0.3859	0.3884	5.78
12-Dec	1	9	1A	0	0	0	0.3980	0.3886	0.5844	0.5326	0.4759	3.7120	0.1114	5.80
12-Dec	1	9	1B	0	0	0	0.9666	0.6434	1.1479	1.1439	0.9755	7.6085	0.3433	5.76
12-Dec	1	9	1C	0	0	0	0.2275	0.2190	0.1940	0.2075	0.2120	1.6536	0.2834	5.75
12-Dec	1	9	2A	0	0.4	0.3	0.1809	0.1915	0.1815	0.1791	0.1833	1.4294	0.3584	5.77
12-Dec	1	9	2B	0	0.4	0.3	0.4715	0.4492	0.4956	0.5729	0.4973	3.8789	0.6768	5.76
12-Dec	1	9	2C	0	0.4	0.3	0.5094	0.4843	0.4907	0.4840	0.4921	3.8384	0.3655	5.80
12-Dec	1	9	3A	0.25	0	0	0.0378	0.0151	0.1040	0.0404	0.0493	0.3847	0.3579	5.76
12-Dec	1	9	3B	0.25	0	0	0.1276	0.1331	0.1357	0.1390	0.1339	1.0440	0.2827	5.73
12-Dec	1	9	3C	0.25	0	0	0.1603	0.1512	0.2058	0.2052	0.1806	1.4089	0.4427	5.73
12-Dec	1	9	4A	2	0	0	0.0597	0.0805	0.0535	0.0604	0.0635	0.4955	0.3231	5.86
12-Dec	1	9	4B	2	0	0	0.0735	0.0886	0.0637	0.0808	0.0767	0.5979	0.4122	5.81
12-Dec	1	9	4C	2	0	0	0.0641	0.0601	0.0851	0.0718	0.0703	0.5481	0.3152	5.85
12-Dec	1	9	5A	0.25	0.4	0.3	0.0201	0.0291	0.0779	0.0776	0.0512	0.3992	0.3238	5.84
12-Dec	1	9	5B	0.25	0.4	0.3	0.0433	0.0460	0.0534	0.0353	0.0445	0.3471	0.3015	5.82
12-Dec	1	9	5C	0.25	0.4	0.3	0.0282	0.0287	0.0354	0.0353	0.0319	0.2488	0.2255	5.75
12-Dec	1	9	6A	2	0.4	0.3	0.0477	0.0504	0.0638	0.0685	0.0576	0.4493	0.6047	5.92
12-Dec	1	9	6B	2	0.4	0.3	0.0800	0.0928	0.0565	0.0529	0.0706	0.5503	0.5296	5.86
12-Dec	1	9	6C	2	0.4	0.3	0.0925	0.0915	0.0449	0.0431	0.0680	0.5304	0.3325	5.79
13-Dec	2	9	1A	0	0	0	0.4025	0.4041	0.3621	0.3463	0.3788	2.9543	0.3593	5.83
13-Dec	2	9	1B	0	0	0	0.6620	0.6532	0.6895	0.7216	0.6816	5.3163	0.7549	5.85
13-Dec	2	9	1C	0	0	0	0.6971	0.6903	0.4957	0.4951	0.5946	4.6375	0.3002	5.76
13-Dec	2	9	2A	0	0.4	0.3	0.1756	0.1798	0.1948	0.1942	0.1861	1.4516	0.3276	5.95
13-Dec	2	9	2B	0	0.4	0.3	0.0974	0.1023	0.1191	0.1172	0.1090	0.8502	0.3900	5.89

13-Dec	2	9	2C	0	0.4	0.3	0.2471	0.2701	0.3580	0.3125	0.2969	2.3160	0.3920	5.91
13-Dec	2	9	3A	0.25	0	0	0.1467	0.1421	0.1005	0.0966	0.1215	0.9475	0.3505	5.78
13-Dec	2	9	3B	0.25	0	0	0.0818	0.0840	0.0478	0.0461	0.0649	0.5064	0.3269	5.77
13-Dec	2	9	3C	0.25	0	0	0.1955	0.1834	0.2788	0.2756	0.2333	1.8199	0.5564	5.80
13-Dec	2	9	4A	2	0	0	0.0675	0.1027	0.0807	0.0849	0.0840	0.6548	0.7007	5.81
13-Dec	2	9	4B	2	0	0	0.1131	0.1106	0.0886	0.0881	0.1001	0.7808	0.7000	5.78
13-Dec	2	9	4C	2	0	0	0.0981	0.0885	0.0933	0.0922	0.0930	0.7256	0.7921	5.79
13-Dec	2	9	5A	0.25	0.4	0.3	0.6159	0.6090	0.3839	.	0.5363	4.1829	0.5004	5.78
13-Dec	2	9	5B	0.25	0.4	0.3	0.1360	0.1305	0.2225	0.0898	0.1447	1.1287	0.3971	5.81
13-Dec	2	9	5C	0.25	0.4	0.3	0.5710	0.5671	0.5575	0.5654	0.5653	4.4090	0.3461	5.77
13-Dec	2	9	6A	2	0.4	0.3	0.0544	0.0406	0.0411	0.0434	0.0449	0.3500	0.6018	5.85
13-Dec	2	9	6B	2	0.4	0.3	0.0702	0.0787	0.0620	0.0597	0.0677	0.5277	0.6995	5.83
13-Dec	2	9	6C	2	0.4	0.3	0.0616	0.0468	0.0483	0.0506	0.0518	0.4042	0.4524	5.87
14-Dec	3	9	1A	0	0	0	0.4453	0.4450	0.4738	0.4794	0.4609	3.5948	0.2313	5.74
14-Dec	3	9	1B	0	0	0	0.6419	0.6378	0.4692	0.4869	0.5590	4.3598	0.3840	5.77
14-Dec	3	9	1C	0	0	0	0.2416	0.2368	0.3172	0.3195	0.2788	2.1744	0.4819	5.73
14-Dec	3	9	2A	0	0.4	0.3	0.2104	0.2183	0.2011	0.2567	0.2216	1.7287	.	5.82
14-Dec	3	9	2B	0	0.4	0.3	0.2306	0.2304	0.1451	0.1436	0.1874	1.4619	0.2296	5.72
14-Dec	3	9	2C	0	0.4	0.3	0.1168	0.1132	0.0834	0.0926	0.1015	0.7917	0.2112	5.76
14-Dec	3	9	3A	0.25	0	0	0.0581	0.0490	0.0615	0.0608	0.0574	0.4473	0.3104	5.76
14-Dec	3	9	3B	0.25	0	0	0.0521	0.0489	0.0374	0.0028	0.0353	0.2753	0.5107	5.76
14-Dec	3	9	3C	0.25	0	0	0.3035	0.3168	0.2926	0.2947	0.3019	2.3548	0.4115	5.74
14-Dec	3	9	4A	2	0	0	0.1168	0.1552	0.1155	0.1148	0.1256	0.9795	0.7459	5.84
14-Dec	3	9	4B	2	0	0	0.1547	0.1621	0.1881	0.1919	0.1742	1.3588	0.6211	5.82
14-Dec	3	9	4C	2	0	0	0.0690	0.0692	0.0900	0.0528	0.0703	0.5480	0.4887	5.79
14-Dec	3	9	5A	0.25	0.4	0.3	0.0408	0.0394	0.0270	0.0077	0.0287	0.2241	0.3572	5.79
14-Dec	3	9	5B	0.25	0.4	0.3	0.0608	0.0766	0.0998	0.0968	0.0835	0.6513	0.3464	5.78
14-Dec	3	9	5C	0.25	0.4	0.3	0.0265	0.0590	0.0268	0.0464	0.0397	0.3095	0.3033	5.80
14-Dec	3	9	6A	2	0.4	0.3	0.0477	0.0193	0.0512	0.0355	0.0384	0.2997	0.3650	5.81
14-Dec	3	9	6B	2	0.4	0.3	0.0532	0.0536	0.0656	0.0696	0.0605	0.4719	0.5986	5.82
14-Dec	3	9	6C	2	0.4	0.3	0.0766	0.0875	0.1475	0.1833	0.1237	0.9651	0.5409	5.80

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	O2	CO2	L*	a*	b*
3-Dec	1	0	1A	0	0	0	82.4	20.6	48.10	24.00	11.02
3-Dec	1	0	1B	0	0	0	82.8	21.9	47.87	22.60	10.34
3-Dec	1	0	1C	0	0	0	83.0	21.9	46.24	26.58	11.75
3-Dec	1	0	2A	0	0.4	0.3	83.1	22.0	46.16	22.67	10.12
3-Dec	1	0	2B	0	0.4	0.3	82.1	21.7	43.40	21.18	8.56
3-Dec	1	0	2C	0	0.4	0.3	83.1	21.7	42.00	19.10	7.40
3-Dec	1	0	3A	0.25	0	0	82.8	21.9	47.78	23.83	11.12
3-Dec	1	0	3B	0.25	0	0	82.9	21.9	44.43	24.46	10.67
3-Dec	1	0	3C	0.25	0	0	82.9	21.9	46.26	19.72	8.75
3-Dec	1	0	4A	2	0	0	82.6	21.9	41.74	18.60	9.61
3-Dec	1	0	4B	2	0	0	82.8	21.8	43.10	15.61	8.29
3-Dec	1	0	4C	2	0	0	82.3	21.7	45.66	16.95	10.25
3-Dec	1	0	5A	0.25	0.4	0.3	82.2	21.9	45.52	19.80	9.34
3-Dec	1	0	5B	0.25	0.4	0.3	82.1	22.0	45.78	19.65	8.58
3-Dec	1	0	5C	0.25	0.4	0.3	82.0	22.0	42.45	18.58	8.12
3-Dec	1	0	6A	2	0.4	0.3	82.0	21.8	43.08	16.76	7.02
3-Dec	1	0	6B	2	0.4	0.3	82.0	21.7	41.21	14.81	6.32
3-Dec	1	0	6C	2	0.4	0.3	75.5	20.4	40.79	16.57	7.18
4-Dec	2	0	1A	0	0	0	77.3	21.9	51.61	21.90	10.40
4-Dec	2	0	1B	0	0	0	.	.	50.08	22.69	11.59
4-Dec	2	0	1C	0	0	0	82.2	22.0	52.40	24.05	12.40
4-Dec	2	0	2A	0	0.4	0.3	81.9	22.8	44.00	19.66	8.46
4-Dec	2	0	2B	0	0.4	0.3	81.9	22.8	48.17	21.42	10.10
4-Dec	2	0	2C	0	0.4	0.3	81.9	23.0	42.86	19.78	8.08
4-Dec	2	0	3A	0.25	0	0	81.8	22.8	48.04	22.79	11.07
4-Dec	2	0	3B	0.25	0	0	81.9	22.8	47.77	22.38	10.69
4-Dec	2	0	3C	0.25	0	0	81.9	22.9	49.44	19.93	10.04
4-Dec	2	0	4A	2	0	0	81.7	22.5	44.75	16.82	7.92
4-Dec	2	0	4B	2	0	0	81.9	22.9	44.37	18.01	9.50
4-Dec	2	0	4C	2	0	0	81.8	22.7	44.91	19.12	9.77
4-Dec	2	0	5A	0.25	0.4	0.3	82.1	22.5	45.85	21.39	9.37
4-Dec	2	0	5B	0.25	0.4	0.3	81.8	22.7	44.83	21.69	9.48
4-Dec	2	0	5C	0.25	0.4	0.3	81.8	22.9	45.17	20.67	8.91
4-Dec	2	0	6A	2	0.4	0.3	.	.	41.49	16.70	7.43
4-Dec	2	0	6B	2	0.4	0.3	80.5	22.6	46.05	16.61	8.47
4-Dec	2	0	6C	2	0.4	0.3	81.5	22.5	46.17	17.81	9.48
5-Dec	3	0	1A	0	0	0	78.4	21.5	48.41	26.35	12.16
5-Dec	3	0	1B	0	0	0	81.4	22.4	45.25	24.90	10.77
5-Dec	3	0	1C	0	0	0	81.5	22.4	46.69	23.77	10.61
5-Dec	3	0	2A	0	0.4	0.3	81.9	20.7	47.22	23.39	10.29
5-Dec	3	0	2B	0	0.4	0.3	81.4	22.3	43.27	21.07	8.46
5-Dec	3	0	2C	0	0.4	0.3	81.7	22.7	42.72	22.60	8.95
5-Dec	3	0	3A	0.25	0	0	81.7	22.6	46.01	22.75	10.06

5-Dec	3	0	3B	0.25	0	0	81.6	22.5	46.16	20.06	8.81
5-Dec	3	0	3C	0.25	0	0	81.6	22.5	44.74	22.93	10.20
5-Dec	3	0	4A	2	0	0	81.7	22.5	44.34	18.86	8.99
5-Dec	3	0	4B	2	0	0	81.7	22.3	45.23	18.55	9.12
5-Dec	3	0	4C	2	0	0	81.6	22.5	43.89	18.60	8.58
5-Dec	3	0	5A	0.25	0.4	0.3	81.6	22.5	42.54	19.96	8.13
5-Dec	3	0	5B	0.25	0.4	0.3	.	.	43.64	19.72	7.98
5-Dec	3	0	5C	0.25	0.4	0.3	80.7	22.7	41.52	19.94	8.17
5-Dec	3	0	6A	2	0.4	0.3	81.6	22.1	44.16	18.09	7.86
5-Dec	3	0	6B	2	0.4	0.3	81.5	22.4	43.38	18.02	8.01
5-Dec	3	0	6C	2	0.4	0.3	81.5	22.4	43.01	17.85	7.82
6-Dec	1	3	1A	0	0	0	81.8	19.2	49.67	20.69	10.69
6-Dec	1	3	1B	0	0	0	83.5	19.3	47.00	20.07	10.08
6-Dec	1	3	1C	0	0	0	83.9	19.2	45.14	21.72	10.20
6-Dec	1	3	2A	0	0.4	0.3	84.2	19.0	46.06	18.28	8.82
6-Dec	1	3	2B	0	0.4	0.3	80.8	17.4	42.20	15.06	6.69
6-Dec	1	3	2C	0	0.4	0.3	80.3	17.4	41.33	19.32	8.42
6-Dec	1	3	3A	0.25	0	0	84.0	19.1	46.25	19.57	10.05
6-Dec	1	3	3B	0.25	0	0	83.9	18.3	43.91	18.60	8.61
6-Dec	1	3	3C	0.25	0	0	84.2	19.4	43.60	18.43	9.03
6-Dec	1	3	4A	2	0	0	85.1	18.7	42.77	13.45	8.48
6-Dec	1	3	4B	2	0	0	82.4	18.0	42.73	13.83	8.95
6-Dec	1	3	4C	2	0	0	85.1	18.5	44.16	12.67	9.06
6-Dec	1	3	5A	0.25	0.4	0.3	84.2	18.9	47.25	16.39	8.59
6-Dec	1	3	5B	0.25	0.4	0.3	83.7	18.3	45.00	18.12	8.26
6-Dec	1	3	5C	0.25	0.4	0.3	83.8	19.2	43.77	16.52	7.41
6-Dec	1	3	6A	2	0.4	0.3	85.3	18.7	40.60	13.68	6.68
6-Dec	1	3	6B	2	0.4	0.3	85.6	18.7	41.46	11.23	5.47
6-Dec	1	3	6C	2	0.4	0.3	85.5	19.3	40.94	12.20	5.72
7-Dec	2	3	1A	0	0	0	81.0	19.1	51.66	19.36	10.08
7-Dec	2	3	1B	0	0	0	81.9	19.2	50.69	18.04	9.64
7-Dec	2	3	1C	0	0	0	82.5	19.2	52.78	19.78	10.50
7-Dec	2	3	2A	0	0.4	0.3	82.3	19.3	44.21	16.75	7.08
7-Dec	2	3	2B	0	0.4	0.3	82.3	19.3	52.58	16.76	8.38
7-Dec	2	3	2C	0	0.4	0.3	82.1	19.6	45.09	17.50	7.46
7-Dec	2	3	3A	0.25	0	0	82.4	19.0	48.63	18.50	9.20
7-Dec	2	3	3B	0.25	0	0	82.5	19.2	47.09	17.85	8.57
7-Dec	2	3	3C	0.25	0	0	82.5	19.2	48.73	17.39	9.27
7-Dec	2	3	4A	2	0	0	82.1	19.1	43.46	12.90	7.37
7-Dec	2	3	4B	2	0	0	82.7	18.9	45.64	11.90	6.89
7-Dec	2	3	4C	2	0	0	.	.	44.63	11.53	7.63
7-Dec	2	3	5A	0.25	0.4	0.3	82.1	18.9	46.62	17.71	7.80
7-Dec	2	3	5B	0.25	0.4	0.3	82.7	19.4	44.11	17.36	7.36
7-Dec	2	3	5C	0.25	0.4	0.3	83.1	19.2	45.82	17.95	7.86
7-Dec	2	3	6A	2	0.4	0.3	.	.	43.04	12.22	5.98
7-Dec	2	3	6B	2	0.4	0.3	81.3	19.4	46.01	12.63	7.11
7-Dec	2	3	6C	2	0.4	0.3	82.8	19.1	44.77	12.58	6.44

8-Dec	3	3	1A	0	0	0	80.4	20.1	49.93	18.10	8.74
8-Dec	3	3	1B	0	0	0	82.0	19.8	45.31	20.37	9.17
8-Dec	3	3	1C	0	0	0	82.2	19.9	49.27	19.03	9.45
8-Dec	3	3	2A	0	0.4	0.3	82.9	19.4	47.33	19.37	8.17
8-Dec	3	3	2B	0	0.4	0.3	82.7	19.5	46.11	18.41	7.73
8-Dec	3	3	2C	0	0.4	0.3	82.9	19.7	45.87	18.13	7.11
8-Dec	3	3	3A	0.25	0	0	82.7	19.7	45.72	18.84	8.71
8-Dec	3	3	3B	0.25	0	0	83.0	19.5	47.28	17.74	8.42
8-Dec	3	3	3C	0.25	0	0	82.7	20.7	43.53	19.07	8.68
8-Dec	3	3	4A	2	0	0	83.0	19.6	43.30	12.69	6.73
8-Dec	3	3	4B	2	0	0	83.7	18.7	44.02	12.07	6.88
8-Dec	3	3	4C	2	0	0	83.2	19.7	41.73	12.48	5.95
8-Dec	3	3	5A	0.25	0.4	0.3	83.5	19.5	43.31	14.69	5.96
8-Dec	3	3	5B	0.25	0.4	0.3	84.0	19.2	42.83	16.12	6.14
8-Dec	3	3	5C	0.25	0.4	0.3	83.6	20.1	43.34	16.18	6.68
8-Dec	3	3	6A	2	0.4	0.3	84.0	19.0	42.64	13.89	6.61
8-Dec	3	3	6B	2	0.4	0.3	83.4	20.0	42.69	12.81	5.49
8-Dec	3	3	6C	2	0.4	0.3	84.2	19.3	43.41	12.43	5.95
9-Dec	1	6	1A	0	0	0	81.2	18.7	49.87	19.19	10.18
9-Dec	1	6	1B	0	0	0	82.9	19.9	46.77	18.10	9.88
9-Dec	1	6	1C	0	0	0	82.3	18.7	45.38	19.13	9.73
9-Dec	1	6	2A	0	0.4	0.3	82.9	18.6	45.69	16.78	8.03
9-Dec	1	6	2B	0	0.4	0.3	84.4	18.9	43.14	15.17	7.20
9-Dec	1	6	2C	0	0.4	0.3	84.2	19.1	42.26	15.90	6.67
9-Dec	1	6	3A	0.25	0	0	81.5	18.3	46.40	17.82	9.41
9-Dec	1	6	3B	0.25	0	0	82.1	18.7	44.91	17.39	9.15
9-Dec	1	6	3C	0.25	0	0	81.5	18.1	44.38	15.05	8.39
9-Dec	1	6	4A	2	0	0	81.6	17.5	43.53	10.27	6.80
9-Dec	1	6	4B	2	0	0	82.7	18.6	43.33	10.45	7.12
9-Dec	1	6	4C	2	0	0	83.3	18.5	44.37	9.65	7.69
9-Dec	1	6	5A	0.25	0.4	0.3	84.0	17.9	47.63	14.76	7.60
9-Dec	1	6	5B	0.25	0.4	0.3	83.9	16.5	43.87	16.07	7.26
9-Dec	1	6	5C	0.25	0.4	0.3	79.5	16.1	43.92	14.61	6.80
9-Dec	1	6	6A	2	0.4	0.3	84.4	18.5	40.47	9.14	4.90
9-Dec	1	6	6B	2	0.4	0.3	80.0	17.4	42.03	10.03	5.27
9-Dec	1	6	6C	2	0.4	0.3	.	.	41.43	9.27	4.94
10-Dec	2	6	1A	0	0	0	81.5	19.2	52.39	16.27	9.52
10-Dec	2	6	1B	0	0	0	81.8	18.8	52.03	11.87	9.50
10-Dec	2	6	1C	0	0	0	77.9	18.2	54.03	15.26	9.46
10-Dec	2	6	2A	0	0.4	0.3	82.4	19.7	42.60	16.62	7.01
10-Dec	2	6	2B	0	0.4	0.3	82.4	19.7	49.80	15.65	7.91
10-Dec	2	6	2C	0	0.4	0.3	80.4	18.8	46.30	16.14	7.53
10-Dec	2	6	3A	0.25	0	0	82.0	19.4	49.30	15.43	8.64
10-Dec	2	6	3B	0.25	0	0	83.2	19.3	48.92	16.06	8.94
10-Dec	2	6	3C	0.25	0	0	83.6	19.3	49.96	14.64	8.43
10-Dec	2	6	4A	2	0	0	83.2	19.4	42.85	10.16	6.27
10-Dec	2	6	4B	2	0	0	83.0	19.1	46.82	10.55	7.98

10-Dec	2	6	4C	2	0	0	.	.	44.40	8.85	6.78
10-Dec	2	6	5A	0.25	0.4	0.3	82.0	18.7	43.71	13.64	6.42
10-Dec	2	6	5B	0.25	0.4	0.3	83.4	19.1	44.79	16.13	7.19
10-Dec	2	6	5C	0.25	0.4	0.3	82.1	18.4	44.98	15.22	6.93
10-Dec	2	6	6A	2	0.4	0.3	75.6	17.5	43.68	9.78	5.61
10-Dec	2	6	6B	2	0.4	0.3	83.3	19.4	43.71	9.74	5.70
10-Dec	2	6	6C	2	0.4	0.3	82.3	18.8	44.40	11.09	6.54
11-Dec	3	6	1A	0	0	0	80.8	19.5	50.05	17.43	9.58
11-Dec	3	6	1B	0	0	0	80.5	19.7	47.82	16.14	8.58
11-Dec	3	6	1C	0	0	0	82.2	19.6	47.18	16.21	8.78
11-Dec	3	6	2A	0	0.4	0.3	82.9	19.1	47.81	16.76	7.69
11-Dec	3	6	2B	0	0.4	0.3	82.8	19.2	43.94	16.87	7.09
11-Dec	3	6	2C	0	0.4	0.3	82.7	19.5	43.84	16.98	6.89
11-Dec	3	6	3A	0.25	0	0	82.7	19.6	46.02	16.22	7.84
11-Dec	3	6	3B	0.25	0	0	.	.	45.49	15.63	8.22
11-Dec	3	6	3C	0.25	0	0	81.1	20.0	44.53	15.99	7.94
11-Dec	3	6	4A	2	0	0	82.5	19.3	46.09	10.30	7.41
11-Dec	3	6	4B	2	0	0	83.2	18.8	43.36	10.06	7.36
11-Dec	3	6	4C	2	0	0	82.5	19.7	41.94	9.93	6.48
11-Dec	3	6	5A	0.25	0.4	0.3	83.2	19.3	44.26	13.96	6.74
11-Dec	3	6	5B	0.25	0.4	0.3	81.5	19.6	43.22	11.93	5.69
11-Dec	3	6	5C	0.25	0.4	0.3	81.5	19.6	44.73	14.78	6.68
11-Dec	3	6	6A	2	0.4	0.3	83.3	19.2	42.57	9.47	4.99
11-Dec	3	6	6B	2	0.4	0.3	83.1	19.7	42.18	10.34	5.70
11-Dec	3	6	6C	2	0.4	0.3	83.5	19.2	43.71	9.91	6.08
12-Dec	1	9	1A	0	0	0	81.7	19.0	51.16	15.76	8.59
12-Dec	1	9	1B	0	0	0	82.5	20.1	51.09	8.67	8.77
12-Dec	1	9	1C	0	0	0	83.9	18.7	47.49	15.38	9.27
12-Dec	1	9	2A	0	0.4	0.3	84.2	18.5	46.81	16.46	7.89
12-Dec	1	9	2B	0	0.4	0.3	84.0	18.5	46.68	7.97	7.30
12-Dec	1	9	2C	0	0.4	0.3	83.4	19.2	43.86	10.22	6.07
12-Dec	1	9	3A	0.25	0	0	83.8	19.0	47.81	16.39	8.96
12-Dec	1	9	3B	0.25	0	0	83.6	19.9	47.45	12.20	7.86
12-Dec	1	9	3C	0.25	0	0	83.7	19.2	46.90	11.06	7.91
12-Dec	1	9	4A	2	0	0	84.3	18.9	45.24	9.45	7.16
12-Dec	1	9	4B	2	0	0	83.9	19.2	42.81	10.49	8.11
12-Dec	1	9	4C	2	0	0	84.2	18.6	43.94	9.42	8.01
12-Dec	1	9	5A	0.25	0.4	0.3	84.5	18.8	46.86	15.26	8.28
12-Dec	1	9	5B	0.25	0.4	0.3	84.2	19.2	45.14	13.98	6.48
12-Dec	1	9	5C	0.25	0.4	0.3	84.2	19.0	45.45	13.03	5.93
12-Dec	1	9	6A	2	0.4	0.3	84.3	19.2	42.68	9.18	5.67
12-Dec	1	9	6B	2	0.4	0.3	84.7	18.8	42.40	8.94	5.33
12-Dec	1	9	6C	2	0.4	0.3	84.6	19.0	41.11	7.54	4.66
13-Dec	2	9	1A	0	0	0	80.9	19.0	52.08	12.88	9.60
13-Dec	2	9	1B	0	0	0	77.3	18.1	54.06	7.00	10.11
13-Dec	2	9	1C	0	0	0	84.2	18.6	55.61	10.29	10.03
13-Dec	2	9	2A	0	0.4	0.3	78.5	18.7	43.15	12.76	6.27

13-Dec	2	9	2B	0	0.4	0.3	82.0	18.6	48.09	12.46	7.66
13-Dec	2	9	2C	0	0.4	0.3	82.5	19.9	45.41	11.03	6.40
13-Dec	2	9	3A	0.25	0	0	83.3	19.0	48.09	14.57	8.54
13-Dec	2	9	3B	0.25	0	0	83.2	19.2	47.60	15.85	9.07
13-Dec	2	9	3C	0.25	0	0	83.1	19.4	50.29	10.02	9.06
13-Dec	2	9	4A	2	0	0	83.2	18.9	41.92	8.17	6.19
13-Dec	2	9	4B	2	0	0	83.1	19.2	44.19	8.27	7.45
13-Dec	2	9	4C	2	0	0	83.1	19.4	44.15	8.35	6.96
13-Dec	2	9	5A	0.25	0.4	0.3	82.8	19.2	46.57	8.24	7.74
13-Dec	2	9	5B	0.25	0.4	0.3	83.4	19.3	44.77	13.51	7.15
13-Dec	2	9	5C	0.25	0.4	0.3	77.3	18.1	46.69	8.02	7.32
13-Dec	2	9	6A	2	0.4	0.3	.	.	42.48	8.89	5.74
13-Dec	2	9	6B	2	0.4	0.3	82.9	19.5	43.12	7.32	5.68
13-Dec	2	9	6C	2	0.4	0.3	83.5	19.2	43.18	8.56	5.79
14-Dec	3	9	1A	0	0	0	80.4	19.5	50.42	12.62	9.03
14-Dec	3	9	1B	0	0	0	81.8	20.3	48.25	8.85	7.87
14-Dec	3	9	1C	0	0	0	81.7	19.5	50.01	11.91	9.26
14-Dec	3	9	2A	0	0.4	0.3	82.3	18.9	46.65	14.69	7.84
14-Dec	3	9	2B	0	0.4	0.3	82.7	18.1	44.07	15.13	6.73
14-Dec	3	9	2C	0	0.4	0.3	82.9	19.1	44.81	14.36	6.38
14-Dec	3	9	3A	0.25	0	0	82.5	19.6	44.26	15.74	8.86
14-Dec	3	9	3B	0.25	0	0	.	.	46.47	9.36	7.20
14-Dec	3	9	3C	0.25	0	0	81.2	20.0	45.02	12.30	7.83
14-Dec	3	9	4A	2	0	0	83.0	19.9	42.63	8.70	7.62
14-Dec	3	9	4B	2	0	0	81.9	18.6	43.74	8.00	7.39
14-Dec	3	9	4C	2	0	0	83.0	19.8	41.49	8.43	6.02
14-Dec	3	9	5A	0.25	0.4	0.3	83.4	19.5	43.23	12.07	6.20
14-Dec	3	9	5B	0.25	0.4	0.3	83.6	19.1	44.95	11.22	6.01
14-Dec	3	9	5C	0.25	0.4	0.3	83.2	19.6	45.56	12.47	6.52
14-Dec	3	9	6A	2	0.4	0.3	80.7	18.0	43.06	8.50	5.64
14-Dec	3	9	6B	2	0.4	0.3	83.1	19.9	41.99	9.25	5.70
14-Dec	3	9	6C	2	0.4	0.3	83.6	19.5	43.24	7.68	5.87

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	O2	CO2	L*	a*	b*
3-Dec	1	0	1A	0	0	0	82.4	20.6	48.10	24.00	11.02
3-Dec	1	0	1B	0	0	0	82.8	21.9	47.87	22.60	10.34
3-Dec	1	0	1C	0	0	0	83.0	21.9	46.24	26.58	11.75
3-Dec	1	0	2A	0	0.4	0.3	83.1	22.0	46.16	22.67	10.12
3-Dec	1	0	2B	0	0.4	0.3	82.1	21.7	43.40	21.18	8.56
3-Dec	1	0	2C	0	0.4	0.3	83.1	21.7	42.00	19.10	7.40
3-Dec	1	0	3A	0.25	0	0	82.8	21.9	47.78	23.83	11.12
3-Dec	1	0	3B	0.25	0	0	82.9	21.9	44.43	24.46	10.67
3-Dec	1	0	3C	0.25	0	0	82.9	21.9	46.26	19.72	8.75
3-Dec	1	0	4A	2	0	0	82.6	21.9	41.74	18.60	9.61
3-Dec	1	0	4B	2	0	0	82.8	21.8	43.10	15.61	8.29
3-Dec	1	0	4C	2	0	0	82.3	21.7	45.66	16.95	10.25
3-Dec	1	0	5A	0.25	0.4	0.3	82.2	21.9	45.52	19.80	9.34
3-Dec	1	0	5B	0.25	0.4	0.3	82.1	22.0	45.78	19.65	8.58
3-Dec	1	0	5C	0.25	0.4	0.3	82.0	22.0	42.45	18.58	8.12
3-Dec	1	0	6A	2	0.4	0.3	82.0	21.8	43.08	16.76	7.02
3-Dec	1	0	6B	2	0.4	0.3	82.0	21.7	41.21	14.81	6.32
3-Dec	1	0	6C	2	0.4	0.3	75.5	20.4	40.79	16.57	7.18
4-Dec	2	0	1A	0	0	0	77.3	21.9	51.61	21.90	10.40
4-Dec	2	0	1B	0	0	0	.	.	50.08	22.69	11.59
4-Dec	2	0	1C	0	0	0	82.2	22.0	52.40	24.05	12.40
4-Dec	2	0	2A	0	0.4	0.3	81.9	22.8	44.00	19.66	8.46
4-Dec	2	0	2B	0	0.4	0.3	81.9	22.8	48.17	21.42	10.10
4-Dec	2	0	2C	0	0.4	0.3	81.9	23.0	42.86	19.78	8.08
4-Dec	2	0	3A	0.25	0	0	81.8	22.8	48.04	22.79	11.07
4-Dec	2	0	3B	0.25	0	0	81.9	22.8	47.77	22.38	10.69
4-Dec	2	0	3C	0.25	0	0	81.9	22.9	49.44	19.93	10.04
4-Dec	2	0	4A	2	0	0	81.7	22.5	44.75	16.82	7.92
4-Dec	2	0	4B	2	0	0	81.9	22.9	44.37	18.01	9.50
4-Dec	2	0	4C	2	0	0	81.8	22.7	44.91	19.12	9.77
4-Dec	2	0	5A	0.25	0.4	0.3	82.1	22.5	45.85	21.39	9.37
4-Dec	2	0	5B	0.25	0.4	0.3	81.8	22.7	44.83	21.69	9.48
4-Dec	2	0	5C	0.25	0.4	0.3	81.8	22.9	45.17	20.67	8.91
4-Dec	2	0	6A	2	0.4	0.3	.	.	41.49	16.70	7.43
4-Dec	2	0	6B	2	0.4	0.3	80.5	22.6	46.05	16.61	8.47
4-Dec	2	0	6C	2	0.4	0.3	81.5	22.5	46.17	17.81	9.48
5-Dec	3	0	1A	0	0	0	78.4	21.5	48.41	26.35	12.16
5-Dec	3	0	1B	0	0	0	81.4	22.4	45.25	24.90	10.77
5-Dec	3	0	1C	0	0	0	81.5	22.4	46.69	23.77	10.61
5-Dec	3	0	2A	0	0.4	0.3	81.9	20.7	47.22	23.39	10.29
5-Dec	3	0	2B	0	0.4	0.3	81.4	22.3	43.27	21.07	8.46
5-Dec	3	0	2C	0	0.4	0.3	81.7	22.7	42.72	22.60	8.95
5-Dec	3	0	3A	0.25	0	0	81.7	22.6	46.01	22.75	10.06

5-Dec	3	0	3B	0.25	0	0	81.6	22.5	46.16	20.06	8.81
5-Dec	3	0	3C	0.25	0	0	81.6	22.5	44.74	22.93	10.20
5-Dec	3	0	4A	2	0	0	81.7	22.5	44.34	18.86	8.99
5-Dec	3	0	4B	2	0	0	81.7	22.3	45.23	18.55	9.12
5-Dec	3	0	4C	2	0	0	81.6	22.5	43.89	18.60	8.58
5-Dec	3	0	5A	0.25	0.4	0.3	81.6	22.5	42.54	19.96	8.13
5-Dec	3	0	5B	0.25	0.4	0.3	.	.	43.64	19.72	7.98
5-Dec	3	0	5C	0.25	0.4	0.3	80.7	22.7	41.52	19.94	8.17
5-Dec	3	0	6A	2	0.4	0.3	81.6	22.1	44.16	18.09	7.86
5-Dec	3	0	6B	2	0.4	0.3	81.5	22.4	43.38	18.02	8.01
5-Dec	3	0	6C	2	0.4	0.3	81.5	22.4	43.01	17.85	7.82
6-Dec	1	3	1A	0	0	0	81.8	19.2	49.67	20.69	10.69
6-Dec	1	3	1B	0	0	0	83.5	19.3	47.00	20.07	10.08
6-Dec	1	3	1C	0	0	0	83.9	19.2	45.14	21.72	10.20
6-Dec	1	3	2A	0	0.4	0.3	84.2	19.0	46.06	18.28	8.82
6-Dec	1	3	2B	0	0.4	0.3	80.8	17.4	42.20	15.06	6.69
6-Dec	1	3	2C	0	0.4	0.3	80.3	17.4	41.33	19.32	8.42
6-Dec	1	3	3A	0.25	0	0	84.0	19.1	46.25	19.57	10.05
6-Dec	1	3	3B	0.25	0	0	83.9	18.3	43.91	18.60	8.61
6-Dec	1	3	3C	0.25	0	0	84.2	19.4	43.60	18.43	9.03
6-Dec	1	3	4A	2	0	0	85.1	18.7	42.77	13.45	8.48
6-Dec	1	3	4B	2	0	0	82.4	18.0	42.73	13.83	8.95
6-Dec	1	3	4C	2	0	0	85.1	18.5	44.16	12.67	9.06
6-Dec	1	3	5A	0.25	0.4	0.3	84.2	18.9	47.25	16.39	8.59
6-Dec	1	3	5B	0.25	0.4	0.3	83.7	18.3	45.00	18.12	8.26
6-Dec	1	3	5C	0.25	0.4	0.3	83.8	19.2	43.77	16.52	7.41
6-Dec	1	3	6A	2	0.4	0.3	85.3	18.7	40.60	13.68	6.68
6-Dec	1	3	6B	2	0.4	0.3	85.6	18.7	41.46	11.23	5.47
6-Dec	1	3	6C	2	0.4	0.3	85.5	19.3	40.94	12.20	5.72
7-Dec	2	3	1A	0	0	0	81.0	19.1	51.66	19.36	10.08
7-Dec	2	3	1B	0	0	0	81.9	19.2	50.69	18.04	9.64
7-Dec	2	3	1C	0	0	0	82.5	19.2	52.78	19.78	10.50
7-Dec	2	3	2A	0	0.4	0.3	82.3	19.3	44.21	16.75	7.08
7-Dec	2	3	2B	0	0.4	0.3	82.3	19.3	52.58	16.76	8.38
7-Dec	2	3	2C	0	0.4	0.3	82.1	19.6	45.09	17.50	7.46
7-Dec	2	3	3A	0.25	0	0	82.4	19.0	48.63	18.50	9.20
7-Dec	2	3	3B	0.25	0	0	82.5	19.2	47.09	17.85	8.57
7-Dec	2	3	3C	0.25	0	0	82.5	19.2	48.73	17.39	9.27
7-Dec	2	3	4A	2	0	0	82.1	19.1	43.46	12.90	7.37
7-Dec	2	3	4B	2	0	0	82.7	18.9	45.64	11.90	6.89
7-Dec	2	3	4C	2	0	0	.	.	44.63	11.53	7.63
7-Dec	2	3	5A	0.25	0.4	0.3	82.1	18.9	46.62	17.71	7.80
7-Dec	2	3	5B	0.25	0.4	0.3	82.7	19.4	44.11	17.36	7.36
7-Dec	2	3	5C	0.25	0.4	0.3	83.1	19.2	45.82	17.95	7.86
7-Dec	2	3	6A	2	0.4	0.3	.	.	43.04	12.22	5.98
7-Dec	2	3	6B	2	0.4	0.3	81.3	19.4	46.01	12.63	7.11
7-Dec	2	3	6C	2	0.4	0.3	82.8	19.1	44.77	12.58	6.44

8-Dec	3	3	1A	0	0	0	80.4	20.1	49.93	18.10	8.74
8-Dec	3	3	1B	0	0	0	82.0	19.8	45.31	20.37	9.17
8-Dec	3	3	1C	0	0	0	82.2	19.9	49.27	19.03	9.45
8-Dec	3	3	2A	0	0.4	0.3	82.9	19.4	47.33	19.37	8.17
8-Dec	3	3	2B	0	0.4	0.3	82.7	19.5	46.11	18.41	7.73
8-Dec	3	3	2C	0	0.4	0.3	82.9	19.7	45.87	18.13	7.11
8-Dec	3	3	3A	0.25	0	0	82.7	19.7	45.72	18.84	8.71
8-Dec	3	3	3B	0.25	0	0	83.0	19.5	47.28	17.74	8.42
8-Dec	3	3	3C	0.25	0	0	82.7	20.7	43.53	19.07	8.68
8-Dec	3	3	4A	2	0	0	83.0	19.6	43.30	12.69	6.73
8-Dec	3	3	4B	2	0	0	83.7	18.7	44.02	12.07	6.88
8-Dec	3	3	4C	2	0	0	83.2	19.7	41.73	12.48	5.95
8-Dec	3	3	5A	0.25	0.4	0.3	83.5	19.5	43.31	14.69	5.96
8-Dec	3	3	5B	0.25	0.4	0.3	84.0	19.2	42.83	16.12	6.14
8-Dec	3	3	5C	0.25	0.4	0.3	83.6	20.1	43.34	16.18	6.68
8-Dec	3	3	6A	2	0.4	0.3	84.0	19.0	42.64	13.89	6.61
8-Dec	3	3	6B	2	0.4	0.3	83.4	20.0	42.69	12.81	5.49
8-Dec	3	3	6C	2	0.4	0.3	84.2	19.3	43.41	12.43	5.95
9-Dec	1	6	1A	0	0	0	81.2	18.7	49.87	19.19	10.18
9-Dec	1	6	1B	0	0	0	82.9	19.9	46.77	18.10	9.88
9-Dec	1	6	1C	0	0	0	82.3	18.7	45.38	19.13	9.73
9-Dec	1	6	2A	0	0.4	0.3	82.9	18.6	45.69	16.78	8.03
9-Dec	1	6	2B	0	0.4	0.3	84.4	18.9	43.14	15.17	7.20
9-Dec	1	6	2C	0	0.4	0.3	84.2	19.1	42.26	15.90	6.67
9-Dec	1	6	3A	0.25	0	0	81.5	18.3	46.40	17.82	9.41
9-Dec	1	6	3B	0.25	0	0	82.1	18.7	44.91	17.39	9.15
9-Dec	1	6	3C	0.25	0	0	81.5	18.1	44.38	15.05	8.39
9-Dec	1	6	4A	2	0	0	81.6	17.5	43.53	10.27	6.80
9-Dec	1	6	4B	2	0	0	82.7	18.6	43.33	10.45	7.12
9-Dec	1	6	4C	2	0	0	83.3	18.5	44.37	9.65	7.69
9-Dec	1	6	5A	0.25	0.4	0.3	84.0	17.9	47.63	14.76	7.60
9-Dec	1	6	5B	0.25	0.4	0.3	83.9	16.5	43.87	16.07	7.26
9-Dec	1	6	5C	0.25	0.4	0.3	79.5	16.1	43.92	14.61	6.80
9-Dec	1	6	6A	2	0.4	0.3	84.4	18.5	40.47	9.14	4.90
9-Dec	1	6	6B	2	0.4	0.3	80.0	17.4	42.03	10.03	5.27
9-Dec	1	6	6C	2	0.4	0.3	.	.	41.43	9.27	4.94
10-Dec	2	6	1A	0	0	0	81.5	19.2	52.39	16.27	9.52
10-Dec	2	6	1B	0	0	0	81.8	18.8	52.03	11.87	9.50
10-Dec	2	6	1C	0	0	0	77.9	18.2	54.03	15.26	9.46
10-Dec	2	6	2A	0	0.4	0.3	82.4	19.7	42.60	16.62	7.01
10-Dec	2	6	2B	0	0.4	0.3	82.4	19.7	49.80	15.65	7.91
10-Dec	2	6	2C	0	0.4	0.3	80.4	18.8	46.30	16.14	7.53
10-Dec	2	6	3A	0.25	0	0	82.0	19.4	49.30	15.43	8.64
10-Dec	2	6	3B	0.25	0	0	83.2	19.3	48.92	16.06	8.94
10-Dec	2	6	3C	0.25	0	0	83.6	19.3	49.96	14.64	8.43
10-Dec	2	6	4A	2	0	0	83.2	19.4	42.85	10.16	6.27
10-Dec	2	6	4B	2	0	0	83.0	19.1	46.82	10.55	7.98

10-Dec	2	6	4C	2	0	0	.	.	44.40	8.85	6.78
10-Dec	2	6	5A	0.25	0.4	0.3	82.0	18.7	43.71	13.64	6.42
10-Dec	2	6	5B	0.25	0.4	0.3	83.4	19.1	44.79	16.13	7.19
10-Dec	2	6	5C	0.25	0.4	0.3	82.1	18.4	44.98	15.22	6.93
10-Dec	2	6	6A	2	0.4	0.3	75.6	17.5	43.68	9.78	5.61
10-Dec	2	6	6B	2	0.4	0.3	83.3	19.4	43.71	9.74	5.70
10-Dec	2	6	6C	2	0.4	0.3	82.3	18.8	44.40	11.09	6.54
11-Dec	3	6	1A	0	0	0	80.8	19.5	50.05	17.43	9.58
11-Dec	3	6	1B	0	0	0	80.5	19.7	47.82	16.14	8.58
11-Dec	3	6	1C	0	0	0	82.2	19.6	47.18	16.21	8.78
11-Dec	3	6	2A	0	0.4	0.3	82.9	19.1	47.81	16.76	7.69
11-Dec	3	6	2B	0	0.4	0.3	82.8	19.2	43.94	16.87	7.09
11-Dec	3	6	2C	0	0.4	0.3	82.7	19.5	43.84	16.98	6.89
11-Dec	3	6	3A	0.25	0	0	82.7	19.6	46.02	16.22	7.84
11-Dec	3	6	3B	0.25	0	0	.	.	45.49	15.63	8.22
11-Dec	3	6	3C	0.25	0	0	81.1	20.0	44.53	15.99	7.94
11-Dec	3	6	4A	2	0	0	82.5	19.3	46.09	10.30	7.41
11-Dec	3	6	4B	2	0	0	83.2	18.8	43.36	10.06	7.36
11-Dec	3	6	4C	2	0	0	82.5	19.7	41.94	9.93	6.48
11-Dec	3	6	5A	0.25	0.4	0.3	83.2	19.3	44.26	13.96	6.74
11-Dec	3	6	5B	0.25	0.4	0.3	81.5	19.6	43.22	11.93	5.69
11-Dec	3	6	5C	0.25	0.4	0.3	81.5	19.6	44.73	14.78	6.68
11-Dec	3	6	6A	2	0.4	0.3	83.3	19.2	42.57	9.47	4.99
11-Dec	3	6	6B	2	0.4	0.3	83.1	19.7	42.18	10.34	5.70
11-Dec	3	6	6C	2	0.4	0.3	83.5	19.2	43.71	9.91	6.08
12-Dec	1	9	1A	0	0	0	81.7	19.0	51.16	15.76	8.59
12-Dec	1	9	1B	0	0	0	82.5	20.1	51.09	8.67	8.77
12-Dec	1	9	1C	0	0	0	83.9	18.7	47.49	15.38	9.27
12-Dec	1	9	2A	0	0.4	0.3	84.2	18.5	46.81	16.46	7.89
12-Dec	1	9	2B	0	0.4	0.3	84.0	18.5	46.68	7.97	7.30
12-Dec	1	9	2C	0	0.4	0.3	83.4	19.2	43.86	10.22	6.07
12-Dec	1	9	3A	0.25	0	0	83.8	19.0	47.81	16.39	8.96
12-Dec	1	9	3B	0.25	0	0	83.6	19.9	47.45	12.20	7.86
12-Dec	1	9	3C	0.25	0	0	83.7	19.2	46.90	11.06	7.91
12-Dec	1	9	4A	2	0	0	84.3	18.9	45.24	9.45	7.16
12-Dec	1	9	4B	2	0	0	83.9	19.2	42.81	10.49	8.11
12-Dec	1	9	4C	2	0	0	84.2	18.6	43.94	9.42	8.01
12-Dec	1	9	5A	0.25	0.4	0.3	84.5	18.8	46.86	15.26	8.28
12-Dec	1	9	5B	0.25	0.4	0.3	84.2	19.2	45.14	13.98	6.48
12-Dec	1	9	5C	0.25	0.4	0.3	84.2	19.0	45.45	13.03	5.93
12-Dec	1	9	6A	2	0.4	0.3	84.3	19.2	42.68	9.18	5.67
12-Dec	1	9	6B	2	0.4	0.3	84.7	18.8	42.40	8.94	5.33
12-Dec	1	9	6C	2	0.4	0.3	84.6	19.0	41.11	7.54	4.66
13-Dec	2	9	1A	0	0	0	80.9	19.0	52.08	12.88	9.60
13-Dec	2	9	1B	0	0	0	77.3	18.1	54.06	7.00	10.11
13-Dec	2	9	1C	0	0	0	84.2	18.6	55.61	10.29	10.03
13-Dec	2	9	2A	0	0.4	0.3	78.5	18.7	43.15	12.76	6.27

13-Dec	2	9	2B	0	0.4	0.3	82.0	18.6	48.09	12.46	7.66
13-Dec	2	9	2C	0	0.4	0.3	82.5	19.9	45.41	11.03	6.40
13-Dec	2	9	3A	0.25	0	0	83.3	19.0	48.09	14.57	8.54
13-Dec	2	9	3B	0.25	0	0	83.2	19.2	47.60	15.85	9.07
13-Dec	2	9	3C	0.25	0	0	83.1	19.4	50.29	10.02	9.06
13-Dec	2	9	4A	2	0	0	83.2	18.9	41.92	8.17	6.19
13-Dec	2	9	4B	2	0	0	83.1	19.2	44.19	8.27	7.45
13-Dec	2	9	4C	2	0	0	83.1	19.4	44.15	8.35	6.96
13-Dec	2	9	5A	0.25	0.4	0.3	82.8	19.2	46.57	8.24	7.74
13-Dec	2	9	5B	0.25	0.4	0.3	83.4	19.3	44.77	13.51	7.15
13-Dec	2	9	5C	0.25	0.4	0.3	77.3	18.1	46.69	8.02	7.32
13-Dec	2	9	6A	2	0.4	0.3	.	.	42.48	8.89	5.74
13-Dec	2	9	6B	2	0.4	0.3	82.9	19.5	43.12	7.32	5.68
13-Dec	2	9	6C	2	0.4	0.3	83.5	19.2	43.18	8.56	5.79
14-Dec	3	9	1A	0	0	0	80.4	19.5	50.42	12.62	9.03
14-Dec	3	9	1B	0	0	0	81.8	20.3	48.25	8.85	7.87
14-Dec	3	9	1C	0	0	0	81.7	19.5	50.01	11.91	9.26
14-Dec	3	9	2A	0	0.4	0.3	82.3	18.9	46.65	14.69	7.84
14-Dec	3	9	2B	0	0.4	0.3	82.7	18.1	44.07	15.13	6.73
14-Dec	3	9	2C	0	0.4	0.3	82.9	19.1	44.81	14.36	6.38
14-Dec	3	9	3A	0.25	0	0	82.5	19.6	44.26	15.74	8.86
14-Dec	3	9	3B	0.25	0	0	.	.	46.47	9.36	7.20
14-Dec	3	9	3C	0.25	0	0	81.2	20.0	45.02	12.30	7.83
14-Dec	3	9	4A	2	0	0	83.0	19.9	42.63	8.70	7.62
14-Dec	3	9	4B	2	0	0	81.9	18.6	43.74	8.00	7.39
14-Dec	3	9	4C	2	0	0	83.0	19.8	41.49	8.43	6.02
14-Dec	3	9	5A	0.25	0.4	0.3	83.4	19.5	43.23	12.07	6.20
14-Dec	3	9	5B	0.25	0.4	0.3	83.6	19.1	44.95	11.22	6.01
14-Dec	3	9	5C	0.25	0.4	0.3	83.2	19.6	45.56	12.47	6.52
14-Dec	3	9	6A	2	0.4	0.3	80.7	18.0	43.06	8.50	5.64
14-Dec	3	9	6B	2	0.4	0.3	83.1	19.9	41.99	9.25	5.70
14-Dec	3	9	6C	2	0.4	0.3	83.6	19.5	43.24	7.68	5.87

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	Panelist	Brothy	Fatty	Bloody	Cowy	Cardboard	Painty	Fish
3-Dec	1	0	1A	0	0	0	Capps	5	2	1	0	0	0	0
3-Dec	1	0	1A	0	0	0	Gray	5	3	2	0	0	0	0
3-Dec	1	0	1A	0	0	0	Higgins	6	3	0	0	2	0	0
3-Dec	1	0	1A	0	0	0	Inglis	4	3	2	0	0	0	0
3-Dec	1	0	1A	0	0	0	Mason	5	2	1	0	2	0	0
3-Dec	1	0	1A	0	0	0	Runyon	4	2	2	0	0	0	0
3-Dec	1	0	1B	0	0	0	Capps	4	2	2	0	0	0	0
3-Dec	1	0	1B	0	0	0	Gray	4	2	2	0	0	0	0
3-Dec	1	0	1B	0	0	0	Higgins	6	3	1	0	0	0	0
3-Dec	1	0	1B	0	0	0	Inglis	3	3	4	0	0	0	0
3-Dec	1	0	1B	0	0	0	Mason	5	2	2	0	2	0	0
3-Dec	1	0	1B	0	0	0	Runyon	4	2	2	0	2	0	0
3-Dec	1	0	1C	0	0	0	Capps	4	2	2	0	0	0	0
3-Dec	1	0	1C	0	0	0	Gray	5	3	2	0	0	0	0
3-Dec	1	0	1C	0	0	0	Higgins	7	3	1	0	0	0	0
3-Dec	1	0	1C	0	0	0	Inglis	4	3	2	0	0	0	0
3-Dec	1	0	1C	0	0	0	Mason	4	2	2	0	1	0	0
3-Dec	1	0	1C	0	0	0	Runyon	4	2	2	0	0	0	0
3-Dec	1	0	2A	0	0.4	0.3	Capps	4	3	1	0	0	0	0
3-Dec	1	0	2A	0	0.4	0.3	Gray	4	4	2	0	0	0	0
3-Dec	1	0	2A	0	0.4	0.3	Higgins	6	3	1	0	1	0	0
3-Dec	1	0	2A	0	0.4	0.3	Inglis	4	3	2	0	0	0	0
3-Dec	1	0	2A	0	0.4	0.3	Mason	3	2	1	0	0	0	0
3-Dec	1	0	2A	0	0.4	0.3	Runyon	3	1	0	0	0	0	0
3-Dec	1	0	2B	0	0.4	0.3	Capps	5	2	1	0	0	0	0
3-Dec	1	0	2B	0	0.4	0.3	Gray	4	3	2	0	3	0	2
3-Dec	1	0	2B	0	0.4	0.3	Higgins	6	2	1	0	0	0	0
3-Dec	1	0	2B	0	0.4	0.3	Inglis	5	3	2	0	0	0	0
3-Dec	1	0	2B	0	0.4	0.3	Mason	5	2	1	0	0	0	0
3-Dec	1	0	2B	0	0.4	0.3	Runyon	5	2	0	0	0	0	0
3-Dec	1	0	2C	0	0.4	0.3	Capps	4	2	1	0	0	0	0
3-Dec	1	0	2C	0	0.4	0.3	Gray	5	3	2	0	3	0	0
3-Dec	1	0	2C	0	0.4	0.3	Higgins	7	3	0	0	0	0	0
3-Dec	1	0	2C	0	0.4	0.3	Inglis	5	3	2	0	0	0	0
3-Dec	1	0	2C	0	0.4	0.3	Mason	5	2	0	0	2	0	0
3-Dec	1	0	2C	0	0.4	0.3	Runyon	6	2	0	0	0	0	0
3-Dec	1	0	3A	0.25	0	0	Capps	4	2	1	0	0	0	0
3-Dec	1	0	3A	0.25	0	0	Gray	5	3	2	0	0	0	0
3-Dec	1	0	3A	0.25	0	0	Higgins	5	2	0	0	1	0	0
3-Dec	1	0	3A	0.25	0	0	Inglis	4	3	2	0	0	0	0
3-Dec	1	0	3A	0.25	0	0	Mason	4	2	1	0	1	0	0
3-Dec	1	0	3A	0.25	0	0	Runyon	4	1	0	0	2	0	0
3-Dec	1	0	3B	0.25	0	0	Capps	4	2	0	0	0	0	0

3-Dec	1	0	3B	0.25	0	0	Gray	3	2	0	0	0	0	0	2
3-Dec	1	0	3B	0.25	0	0	Higgins	7	3	0	0	1	0	0	0
3-Dec	1	0	3B	0.25	0	0	Inglis	4	2	2	0	0	0	0	0
3-Dec	1	0	3B	0.25	0	0	Mason	5	2	1	0	1	0	0	0
3-Dec	1	0	3B	0.25	0	0	Runyon	4	1	0	0	0	0	0	0
3-Dec	1	0	3C	0.25	0	0	Capps	5	1	0	0	0	0	0	0
3-Dec	1	0	3C	0.25	0	0	Gray	3	3	2	0	0	0	0	0
3-Dec	1	0	3C	0.25	0	0	Higgins	7	3	1	0	1	0	0	0
3-Dec	1	0	3C	0.25	0	0	Inglis	5	3	2	0	0	0	0	0
3-Dec	1	0	3C	0.25	0	0	Mason	4	2	2	0	1	0	0	0
3-Dec	1	0	3C	0.25	0	0	Runyon	5	2	1	0	0	0	0	0
3-Dec	1	0	4A	2	0	0	Capps	5	2	1	0	0	0	0	0
3-Dec	1	0	4A	2	0	0	Gray	4	2	1	0	0	0	0	0
3-Dec	1	0	4A	2	0	0	Higgins	6	3	1	0	0	0	0	0
3-Dec	1	0	4A	2	0	0	Inglis	4	3	2	0	0	0	0	0
3-Dec	1	0	4A	2	0	0	Mason	4	2	0	0	1	0	0	0
3-Dec	1	0	4A	2	0	0	Runyon	3	1	0	0	0	0	0	0
3-Dec	1	0	4A	2	0	0	Capps	4	2	0	0	0	0	0	0
3-Dec	1	0	4B	2	0	0	Gray	3	2	0	0	0	0	0	0
3-Dec	1	0	4B	2	0	0	Higgins	7	3	1	0	0	0	0	0
3-Dec	1	0	4B	2	0	0	Inglis	4	2	2	0	0	0	0	0
3-Dec	1	0	4B	2	0	0	Mason	4	2	1	0	0	0	0	0
3-Dec	1	0	4B	2	0	0	Runyon	4	2	0	0	0	0	0	0
3-Dec	1	0	4C	2	0	0	Capps	3	2	1	0	0	0	0	0
3-Dec	1	0	4C	2	0	0	Gray	3	2	0	0	2	0	0	0
3-Dec	1	0	4C	2	0	0	Higgins	6	3	1	0	1	0	0	0
3-Dec	1	0	4C	2	0	0	Inglis	4	3	2	0	0	0	0	0
3-Dec	1	0	4C	2	0	0	Mason	3	2	0	2	2	0	0	0
3-Dec	1	0	4C	2	0	0	Runyon	3	1	0	2	0	0	0	2
3-Dec	1	0	5A	0.25	0.4	0.3	Capps	4	2	1	0	0	0	0	0
3-Dec	1	0	5A	0.25	0.4	0.3	Gray	4	3	1	0	0	0	0	0
3-Dec	1	0	5A	0.25	0.4	0.3	Higgins	6	3	0	0	1	0	0	0
3-Dec	1	0	5A	0.25	0.4	0.3	Inglis	4	3	2	0	0	0	0	0
3-Dec	1	0	5A	0.25	0.4	0.3	Mason	4	2	1	0	1	0	0	0
3-Dec	1	0	5A	0.25	0.4	0.3	Runyon	4	2	0	0	2	0	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Capps	4	1	1	0	0	0	0	0
3-Dec	1	0	5B	0.25	0.4	0.3	Gray	5	2	2	0	0	0	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Higgins	7	3	0	0	1	0	0	0
3-Dec	1	0	5B	0.25	0.4	0.3	Inglis	5	3	2	0	0	0	0	0
3-Dec	1	0	5B	0.25	0.4	0.3	Mason	4	2	1	0	1	0	0	0
3-Dec	1	0	5B	0.25	0.4	0.3	Runyon	4	1	1	0	0	0	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Capps	4	2	1	0	0	0	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Gray	4	3	2	0	0	0	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Higgins	7	3	0	0	1	0	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Inglis	5	3	2	0	0	0	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Mason	4	2	2	0	1	0	0	0
3-Dec	1	0	5C	0.25	0.4	0.3	Runyon	4	1	2	0	0	0	0	0

3-Dec	1	0	6A	2	0.4	0.3	Capps	4	2	0	0	0	0	0
3-Dec	1	0	6A	2	0.4	0.3	Gray	4	3	2	0	0	0	0
3-Dec	1	0	6A	2	0.4	0.3	Higgins	6	3	0	0	1	0	0
3-Dec	1	0	6A	2	0.4	0.3	Inglis	5	3	0	0	0	0	0
3-Dec	1	0	6A	2	0.4	0.3	Mason	4	2	0	0	2	0	1
3-Dec	1	0	6A	2	0.4	0.3	Runyon	5	2	0	0	0	0	0
3-Dec	1	0	6B	2	0.4	0.3	Capps	5	2	0	0	0	0	0
3-Dec	1	0	6B	2	0.4	0.3	Gray	4	2	0	0	0	0	0
3-Dec	1	0	6B	2	0.4	0.3	Higgins	6	2	0	0	0	0	0
3-Dec	1	0	6B	2	0.4	0.3	Inglis	4	3	2	0	0	0	0
3-Dec	1	0	6B	2	0.4	0.3	Mason	4	2	0	0	2	0	0
3-Dec	1	0	6B	2	0.4	0.3	Runyon	4	1	0	0	0	0	0
3-Dec	1	0	6C	2	0.4	0.3	Capps	4	1	0	0	0	0	0
3-Dec	1	0	6C	2	0.4	0.3	Gray	4	3	0	0	0	0	0
3-Dec	1	0	6C	2	0.4	0.3	Higgins	6	2	0	0	0	0	0
3-Dec	1	0	6C	2	0.4	0.3	Inglis	5	3	2	0	0	0	0
3-Dec	1	0	6C	2	0.4	0.3	Mason	3	2	0	2	2	0	0
3-Dec	1	0	6C	2	0.4	0.3	Runyon	5	1	0	0	0	0	0
9-Dec	1	6	1A	0	0	0	Gray	4	3	0	0	0	0	0
9-Dec	1	6	1A	0	0	0	Higgins	6	3	1	0	0	0	0
9-Dec	1	6	1A	0	0	0	Inglis	6	3	0	0	0	0	0
9-Dec	1	6	1A	0	0	0	Runyon	5	2	0	0	0	0	0
9-Dec	1	6	1B	0	0	0	Gray	4	2	0	0	0	0	0
9-Dec	1	6	1B	0	0	0	Higgins	6	3	0	0	1	0	0
9-Dec	1	6	1B	0	0	0	Inglis	5	2	2	0	2	0	1
9-Dec	1	6	1B	0	0	0	Runyon	4	1	0	0	0	0	0
9-Dec	1	6	1C	0	0	0	Gray	4	2	1	0	0	0	0
9-Dec	1	6	1C	0	0	0	Higgins	7	3	1	0	0	0	0
9-Dec	1	6	1C	0	0	0	Inglis	5	2	2	0	0	0	0
9-Dec	1	6	1C	0	0	0	Runyon	4	2	0	0	0	0	0
9-Dec	1	6	2A	0	0.4	0.3	Gray	4	3	0	0	0	0	0
9-Dec	1	6	2A	0	0.4	0.3	Higgins	7	3	1	0	0	0	0
9-Dec	1	6	2A	0	0.4	0.3	Inglis	5	2	0	0	1	0	0
9-Dec	1	6	2A	0	0.4	0.3	Runyon	5	1	0	0	0	0	0
9-Dec	1	6	2B	0	0.4	0.3	Gray	5	3	2	0	0	0	0
9-Dec	1	6	2B	0	0.4	0.3	Higgins	7	3	1	0	0	0	0
9-Dec	1	6	2B	0	0.4	0.3	Inglis	5	2	0	0	0	0	0
9-Dec	1	6	2B	0	0.4	0.3	Runyon	5	2	0	0	0	0	0
9-Dec	1	6	2B	0	0.4	0.3	Gray	4	2	0	0	0	0	0
9-Dec	1	6	2B	0	0.4	0.3	Higgins	7	3	0	0	0	0	0
9-Dec	1	6	2C	0	0.4	0.3	Gray	4	2	0	0	0	0	0
9-Dec	1	6	2C	0	0.4	0.3	Higgins	7	3	0	0	0	0	0
9-Dec	1	6	2C	0	0.4	0.3	Inglis	6	2	0	0	0	0	0
9-Dec	1	6	2C	0	0.4	0.3	Runyon	5	2	0	0	0	0	0
9-Dec	1	6	3A	0.25	0	0	Gray	4	3	0	0	0	0	0
9-Dec	1	6	3A	0.25	0	0	Higgins	5	3	1	0	0	0	0
9-Dec	1	6	3A	0.25	0	0	Inglis	5	2	0	0	1	0	0
9-Dec	1	6	3A	0.25	0	0	Runyon	4	2	0	0	0	0	0
9-Dec	1	6	3B	0.25	0	0	Gray	3	2	0	0	0	0	0

9-Dec	1	6	3B	0.25	0	0	Higgins	6	3	1	0	0	0	0	0
9-Dec	1	6	3B	0.25	0	0	Inglis	5	2	0	0	0	0	0	2
9-Dec	1	6	3B	0.25	0	0	Runyon	5	1	0	0	0	0	0	0
9-Dec	1	6	3C	0.25	0	0	Gray	3	2	0	0	0	0	0	0
9-Dec	1	6	3C	0.25	0	0	Higgins	6	3	0	0	0	1	0	0
9-Dec	1	6	3C	0.25	0	0	Inglis	6	2	0	0	0	0	0	1
9-Dec	1	6	3C	0.25	0	0	Runyon	4	2	0	0	0	0	0	0
9-Dec	1	6	4A	2	0	0	Gray	3	3	0	0	0	0	0	0
9-Dec	1	6	4A	2	0	0	Higgins	6	2	0	0	0	1	0	0
9-Dec	1	6	4A	2	0	0	Inglis	6	3	0	0	0	0	0	0
9-Dec	1	6	4A	2	0	0	Runyon	3	1	0	0	0	0	0	0
9-Dec	1	6	4B	2	0	0	Gray	3	2	0	0	0	0	0	0
9-Dec	1	6	4B	2	0	0	Higgins	6	2	0	0	0	1	0	0
9-Dec	1	6	4B	2	0	0	Inglis	5	2	0	0	0	0	0	0
9-Dec	1	6	4B	2	0	0	Runyon	3	1	0	0	0	0	0	0
9-Dec	1	6	4C	2	0	0	Gray	3	2	0	0	0	0	0	0
9-Dec	1	6	4C	2	0	0	Higgins	7	3	0	0	0	0	0	0
9-Dec	1	6	4C	2	0	0	Inglis	5	2	0	0	0	0	0	0
9-Dec	1	6	4C	2	0	0	Runyon	2	0	0	0	0	0	0	1
9-Dec	1	6	4C	2	0	0	Gray	4	3	2	0	0	0	0	0
9-Dec	1	6	5A	0.25	0.4	0.3	Higgins	6	2	0	0	0	1	0	0
9-Dec	1	6	5A	0.25	0.4	0.3	Inglis	6	3	0	0	0	0	0	0
9-Dec	1	6	5A	0.25	0.4	0.3	Runyon	4	2	0	0	0	0	0	0
9-Dec	1	6	5A	0.25	0.4	0.3	Gray	4	3	2	0	0	0	0	0
9-Dec	1	6	5B	0.25	0.4	0.3	Higgins	7	3	1	0	0	0	0	0
9-Dec	1	6	5B	0.25	0.4	0.3	Inglis	5	2	0	0	0	0	0	0
9-Dec	1	6	5B	0.25	0.4	0.3	Runyon	4	2	0	0	0	0	0	0
9-Dec	1	6	5B	0.25	0.4	0.3	Gray	4	3	2	0	0	0	0	0
9-Dec	1	6	5B	0.25	0.4	0.3	Higgins	7	3	1	0	0	0	0	0
9-Dec	1	6	5B	0.25	0.4	0.3	Inglis	5	2	0	0	0	0	0	0
9-Dec	1	6	5B	0.25	0.4	0.3	Runyon	4	2	0	0	0	0	0	0
9-Dec	1	6	5C	0.25	0.4	0.3	Gray	5	2	1	0	0	0	0	0
9-Dec	1	6	5C	0.25	0.4	0.3	Higgins	6	3	0	0	0	0	0	0
9-Dec	1	6	5C	0.25	0.4	0.3	Inglis	5	2	0	0	0	0	0	1
9-Dec	1	6	5C	0.25	0.4	0.3	Runyon	4	1	0	0	0	0	0	0
9-Dec	1	6	6A	2	0.4	0.3	Gray	4	3	0	0	0	0	0	0
9-Dec	1	6	6A	2	0.4	0.3	Higgins	7	3	1	0	0	0	0	0
9-Dec	1	6	6A	2	0.4	0.3	Inglis	6	3	0	0	0	0	0	0
9-Dec	1	6	6A	2	0.4	0.3	Runyon	3	1	0	0	0	0	0	0
9-Dec	1	6	6B	2	0.4	0.3	Gray	3	2	0	0	0	0	0	0
9-Dec	1	6	6B	2	0.4	0.3	Higgins	7	3	1	0	0	0	0	0
9-Dec	1	6	6B	2	0.4	0.3	Inglis	5	2	0	0	0	0	0	0
9-Dec	1	6	6B	2	0.4	0.3	Runyon	3	1	0	0	0	0	0	0
9-Dec	1	6	6C	2	0.4	0.3	Gray	3	2	0	0	0	0	0	0
9-Dec	1	6	6C	2	0.4	0.3	Higgins	6	2	0	0	0	1	0	0
9-Dec	1	6	6C	2	0.4	0.3	Inglis	5	2	0	0	0	0	0	0
9-Dec	1	6	6C	2	0.4	0.3	Runyon	3	1	0	0	0	0	0	0
4-Dec	2	0	1A	0	0	0	Capps	5	2	2	0	0	0	0	0
4-Dec	2	0	1A	0	0	0	Gray	5	3	3	0	0	0	0	0
4-Dec	2	0	1A	0	0	0	Higgins	6	3	0	0	0	1	0	0
4-Dec	2	0	1A	0	0	0	Inglis	4	3	2	0	0	0	0	0

4-Dec	2	0	1A	0	0	0	Mason	5	2	2	0	1	0	0
4-Dec	2	0	1A	0	0	0	Runyon	4	2	2	0	0	0	0
4-Dec	2	0	1B	0	0	0	Capps	4	1	2	0	0	0	0
4-Dec	2	0	1B	0	0	0	Gray	4	3	3	0	0	0	0
4-Dec	2	0	1B	0	0	0	Higgins	6	3	0	0	0	0	0
4-Dec	2	0	1B	0	0	0	Inglis	6	3	2	0	0	0	0
4-Dec	2	0	1B	0	0	0	Mason	4	2	2	0	2	0	0
4-Dec	2	0	1B	0	0	0	Runyon	4	2	0	0	0	0	0
4-Dec	2	0	1C	0	0	0	Capps	3	3	2	0	0	0	0
4-Dec	2	0	1C	0	0	0	Gray	5	3	2	0	2	0	0
4-Dec	2	0	1C	0	0	0	Higgins	5	3	0	0	0	0	0
4-Dec	2	0	1C	0	0	0	Inglis	4	3	2	0	2	0	0
4-Dec	2	0	1C	0	0	0	Mason	5	3	1	0	0	0	0
4-Dec	2	0	1C	0	0	0	Runyon	4	1	0	0	0	0	0
4-Dec	2	0	2A	0	0.4	0.3	Capps	5	2	2	0	0	0	0
4-Dec	2	0	2A	0	0.4	0.3	Gray	4	3	2	0	0	0	0
4-Dec	2	0	2A	0	0.4	0.3	Higgins	5	3	0	0	0	0	0
4-Dec	2	0	2A	0	0.4	0.3	Inglis	6	3	3	0	0	0	0
4-Dec	2	0	2A	0	0.4	0.3	Mason	3	2	0	0	1	0	0
4-Dec	2	0	2A	0	0.4	0.3	Runyon	5	2	0	0	0	0	0
4-Dec	2	0	2B	0	0.4	0.3	Capps	5	2	1	0	0	0	0
4-Dec	2	0	2B	0	0.4	0.3	Gray	4	2	2	0	0	0	0
4-Dec	2	0	2B	0	0.4	0.3	Higgins	7	3	1	0	0	0	0
4-Dec	2	0	2B	0	0.4	0.3	Inglis	6	3	2	0	0	0	0
4-Dec	2	0	2B	0	0.4	0.3	Mason	4	2	0	0	1	0	0
4-Dec	2	0	2B	0	0.4	0.3	Runyon	4	2	0	0	0	0	0
4-Dec	2	0	2C	0	0.4	0.3	Capps	5	1	0	0	0	0	0
4-Dec	2	0	2C	0	0.4	0.3	Gray	5	3	0	0	0	0	0
4-Dec	2	0	2C	0	0.4	0.3	Higgins	6	3	1	0	0	0	0
4-Dec	2	0	2C	0	0.4	0.3	Inglis	6	3	2	0	0	0	0
4-Dec	2	0	2C	0	0.4	0.3	Mason	3	2	0	0	2	0	0
4-Dec	2	0	2C	0	0.4	0.3	Runyon	4	1	0	0	0	0	0
4-Dec	2	0	3A	0.25	0	0	Capps	4	2	2	0	0	0	0
4-Dec	2	0	3A	0.25	0	0	Gray	5	3	3	0	0	0	0
4-Dec	2	0	3A	0.25	0	0	Higgins	5	3	0	0	1	0	0
4-Dec	2	0	3A	0.25	0	0	Inglis	4	3	2	0	0	0	0
4-Dec	2	0	3A	0.25	0	0	Mason	4	2	1	0	2	0	0
4-Dec	2	0	3A	0.25	0	0	Runyon	4	2	2	0	0	0	0
4-Dec	2	0	3B	0.25	0	0	Capps	5	1	2	0	0	0	0
4-Dec	2	0	3B	0.25	0	0	Gray	5	3	1	0	0	0	0
4-Dec	2	0	3B	0.25	0	0	Higgins	5	2	0	0	0	0	0
4-Dec	2	0	3B	0.25	0	0	Inglis	5	2	2	0	0	0	0
4-Dec	2	0	3B	0.25	0	0	Mason	4	2	1	0	2	0	1
4-Dec	2	0	3B	0.25	0	0	Runyon	5	1	0	0	0	0	0
4-Dec	2	0	3C	0.25	0	0	Capps	4	2	0	0	0	0	0
4-Dec	2	0	3C	0.25	0	0	Gray	5	2	1	0	0	0	2

4-Dec	2	0	3C	0.25	0	0	Higgins	6	3	0	0	1	0	0
4-Dec	2	0	3C	0.25	0	0	Inglis	5	3	2	0	0	0	0
4-Dec	2	0	3C	0.25	0	0	Mason	4	2	2	0	2	0	0
4-Dec	2	0	3C	0.25	0	0	Runyon	4	1	0	0	0	0	0
4-Dec	2	0	4A	2	0	0	Capps	3	1	1	0	0	0	0
4-Dec	2	0	4A	2	0	0	Gray	3	3	2	0	0	0	2
4-Dec	2	0	4A	2	0	0	Higgins	5	2	0	0	2	0	0
4-Dec	2	0	4A	2	0	0	Inglis	4	2	2	0	0	0	0
4-Dec	2	0	4A	2	0	0	Mason	3	2	0	2	2	0	0
4-Dec	2	0	4A	2	0	0	Runyon	3	1	0	0	0	0	0
4-Dec	2	0	4B	2	0	0	Capps	3	1	0	0	0	0	0
4-Dec	2	0	4B	2	0	0	Gray	3	3	2	0	0	0	2
4-Dec	2	0	4B	2	0	0	Higgins	5	2	0	0	2	0	0
4-Dec	2	0	4B	2	0	0	Inglis	4	2	2	0	0	0	0
4-Dec	2	0	4B	2	0	0	Mason	3	2	0	0	2	0	0
4-Dec	2	0	4B	2	0	0	Runyon	3	1	0	0	0	0	0
4-Dec	2	0	4C	2	0	0	Capps	4	1	0	0	0	0	0
4-Dec	2	0	4C	2	0	0	Gray	3	3	0	0	0	0	2
4-Dec	2	0	4C	2	0	0	Higgins	7	3	1	0	0	0	0
4-Dec	2	0	4C	2	0	0	Inglis	6	3	2	0	0	0	0
4-Dec	2	0	4C	2	0	0	Mason	3	2	1	0	2	0	0
4-Dec	2	0	4C	2	0	0	Runyon	3	2	0	0	0	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Capps	4	2	1	0	0	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Gray	4	3	2	0	0	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Higgins	6	3	1	0	0	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Inglis	4	3	0	0	0	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Mason	3	2	0	0	1	0	0
4-Dec	2	0	5A	0.25	0.4	0.3	Runyon	3	2	0	0	0	0	0
4-Dec	2	0	5B	0.25	0.4	0.3	Capps	4	2	2	0	0	0	0
4-Dec	2	0	5B	0.25	0.4	0.3	Gray	3	3	2	0	0	0	2
4-Dec	2	0	5B	0.25	0.4	0.3	Higgins	7	3	1	0	0	0	0
4-Dec	2	0	5B	0.25	0.4	0.3	Inglis	5	3	2	0	0	0	0
4-Dec	2	0	5B	0.25	0.4	0.3	Mason	3	2	0	0	2	0	0
4-Dec	2	0	5B	0.25	0.4	0.3	Runyon	4	2	2	0	0	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Capps	4	1	1	0	0	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Gray	4	3	2	0	0	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Higgins	6	3	1	0	0	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Inglis	5	3	2	0	0	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Mason	4	2	0	0	2	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Runyon	4	1	0	0	0	0	0
4-Dec	2	0	6A	2	0.4	0.3	Capps	4	2	0	0	0	0	0
4-Dec	2	0	6A	2	0.4	0.3	Gray	4	3	0	0	0	0	0
4-Dec	2	0	6A	2	0.4	0.3	Higgins	5	3	0	0	1	0	0
4-Dec	2	0	6A	2	0.4	0.3	Inglis	6	3	3	0	0	0	0
4-Dec	2	0	6A	2	0.4	0.3	Mason	3	2	0	2	2	0	0
4-Dec	2	0	6A	2	0.4	0.3	Runyon	3	2	0	0	0	0	0

4-Dec	2	0	6B	2	0.4	0.3	Capps	5	1	0	0	0	0	0
4-Dec	2	0	6B	2	0.4	0.3	Gray	4	3	3	0	0	0	2
4-Dec	2	0	6B	2	0.4	0.3	Higgins	6	3	0	0	1	0	0
4-Dec	2	0	6B	2	0.4	0.3	Inglis	6	3	2	0	0	0	0
4-Dec	2	0	6B	2	0.4	0.3	Mason	3	2	0	0	2	0	0
4-Dec	2	0	6B	2	0.4	0.3	Runyon	3	2	0	0	0	0	0
4-Dec	2	0	6C	2	0.4	0.3	Capps	4	1	2	0	0	0	0
4-Dec	2	0	6C	2	0.4	0.3	Gray	3	3	2	0	0	0	3
4-Dec	2	0	6C	2	0.4	0.3	Higgins	6	3	0	0	0	0	0
4-Dec	2	0	6C	2	0.4	0.3	Inglis	5	3	2	0	0	0	0
4-Dec	2	0	6C	2	0.4	0.3	Mason	3	2	0	0	2	0	0
4-Dec	2	0	6C	2	0.4	0.3	Runyon	3	1	0	0	0	0	0
10-Dec	2	6	1A	0	0	0	Gray	4	3	2	0	0	0	0
10-Dec	2	6	1A	0	0	0	Higgins	5	3	0	0	0	0	0
10-Dec	2	6	1A	0	0	0	Inglis	5	3	0	0	0	0	0
10-Dec	2	6	1A	0	0	0	Mason	4	1	0	0	2	0	0
10-Dec	2	6	1A	0	0	0	Runyon	5	2	1	0	1	0	0
10-Dec	2	6	1B	0	0	0	Gray	3	2	1	0	0	0	0
10-Dec	2	6	1B	0	0	0	Higgins	7	3	0	0	0	0	0
10-Dec	2	6	1B	0	0	0	Inglis	5	3	0	0	2	0	0
10-Dec	2	6	1B	0	0	0	Mason	3	1	0	0	2	0	0
10-Dec	2	6	1B	0	0	0	Runyon	3	3	0	0	0	0	2
10-Dec	2	6	1C	0	0	0	Gray	4	2	0	0	0	0	0
10-Dec	2	6	1C	0	0	0	Higgins	7	3	0	0	0	0	0
10-Dec	2	6	1C	0	0	0	Inglis	5	3	0	0	2	0	0
10-Dec	2	6	1C	0	0	0	Mason	4	2	0	0	2	0	0
10-Dec	2	6	1C	0	0	0	Runyon	2	2	0	0	0	1	0
10-Dec	2	6	2A	0	0.4	0.3	Gray	4	3	1	0	0	0	0
10-Dec	2	6	2A	0	0.4	0.3	Higgins	4	2	0	0	1	0	0
10-Dec	2	6	2A	0	0.4	0.3	Inglis	6	3	0	0	0	0	0
10-Dec	2	6	2A	0	0.4	0.3	Mason	3	1	0	0	2	0	0
10-Dec	2	6	2A	0	0.4	0.3	Runyon	3	2	0	0	0	0	0
10-Dec	2	6	2B	0	0.4	0.3	Gray	4	2	0	0	0	0	0
10-Dec	2	6	2B	0	0.4	0.3	Higgins	7	3	0	0	0	0	0
10-Dec	2	6	2B	0	0.4	0.3	Inglis	5	3	0	0	0	0	0
10-Dec	2	6	2B	0	0.4	0.3	Mason	3	1	0	0	2	0	0
10-Dec	2	6	2B	0	0.4	0.3	Runyon	3	2	0	0	0	0	0
10-Dec	2	6	2B	0	0.4	0.3	Gray	4	2	0	0	0	0	0
10-Dec	2	6	2C	0	0.4	0.3	Higgins	7	3	0	0	0	0	0
10-Dec	2	6	2C	0	0.4	0.3	Inglis	6	3	2	0	0	0	0
10-Dec	2	6	2C	0	0.4	0.3	Mason	3	1	1	0	2	0	0
10-Dec	2	6	2C	0	0.4	0.3	Runyon	4	2	0	0	0	0	0
10-Dec	2	6	3A	0.25	0	0	Gray	3	3	0	0	0	0	0
10-Dec	2	6	3A	0.25	0	0	Higgins	6	2	0	0	0	0	0
10-Dec	2	6	3A	0.25	0	0	Inglis	6	3	0	0	0	0	0
10-Dec	2	6	3A	0.25	0	0	Mason	4	2	0	0	1	0	0
10-Dec	2	6	3A	0.25	0	0	Runyon	4	2	0	0	0	0	0

10-Dec	2	6	3B	0.25	0	0	Gray	4	3	0	0	0	0	0
10-Dec	2	6	3B	0.25	0	0	Higgins	7	3	0	0	0	0	0
10-Dec	2	6	3B	0.25	0	0	Inglis	6	3	0	0	0	0	0
10-Dec	2	6	3B	0.25	0	0	Mason	3	1	0	0	2	0	0
10-Dec	2	6	3B	0.25	0	0	Runyon	4	3	0	0	0	0	0
10-Dec	2	6	3C	0.25	0	0	Gray	3	2	0	0	0	0	0
10-Dec	2	6	3C	0.25	0	0	Higgins	6	3	1	0	0	0	0
10-Dec	2	6	3C	0.25	0	0	Inglis	5	3	2	0	2	0	0
10-Dec	2	6	3C	0.25	0	0	Mason	4	2	0	0	2	0	0
10-Dec	2	6	3C	0.25	0	0	Runyon	4	2	0	0	0	0	0
10-Dec	2	6	4A	2	0	0	Gray	2	2	0	0	0	0	0
10-Dec	2	6	4A	2	0	0	Higgins	4	2	0	0	1	0	0
10-Dec	2	6	4A	2	0	0	Inglis	6	3	0	0	0	0	0
10-Dec	2	6	4A	2	0	0	Mason	3	1	0	0	2	0	0
10-Dec	2	6	4A	2	0	0	Runyon	2	1	0	0	0	0	0
10-Dec	2	6	4B	2	0	0	Gray	2	2	0	0	0	0	0
10-Dec	2	6	4B	2	0	0	Higgins	5	2	0	0	1	0	0
10-Dec	2	6	4B	2	0	0	Inglis	5	3	0	0	0	0	0
10-Dec	2	6	4B	2	0	0	Mason	2	1	0	0	2	0	0
10-Dec	2	6	4B	2	0	0	Runyon	2	1	0	0	0	0	0
10-Dec	2	6	4C	2	0	0	Gray	2	2	0	0	0	0	0
10-Dec	2	6	4C	2	0	0	Higgins	6	2	0	0	1	0	0
10-Dec	2	6	4C	2	0	0	Inglis	5	3	0	0	0	0	0
10-Dec	2	6	4C	2	0	0	Mason	2	1	0	0	2	0	0
10-Dec	2	6	4C	2	0	0	Runyon	2	1	0	0	0	0	0
10-Dec	2	6	4C	2	0	0	Gray	4	3	0	0	0	0	0
10-Dec	2	6	5A	0.25	0.4	0.3	Higgins	6	3	0	0	0	0	0
10-Dec	2	6	5A	0.25	0.4	0.3	Inglis	6	3	0	0	0	0	0
10-Dec	2	6	5A	0.25	0.4	0.3	Mason	3	2	0	0	2	0	0
10-Dec	2	6	5A	0.25	0.4	0.3	Runyon	5	2	0	0	0	0	0
10-Dec	2	6	5B	0.25	0.4	0.3	Gray	5	3	0	0	0	0	0
10-Dec	2	6	5B	0.25	0.4	0.3	Higgins	6	3	0	0	0	0	0
10-Dec	2	6	5B	0.25	0.4	0.3	Inglis	5	3	0	0	2	0	0
10-Dec	2	6	5B	0.25	0.4	0.3	Mason	4	2	0	0	2	0	0
10-Dec	2	6	5B	0.25	0.4	0.3	Runyon	5	3	0	0	0	0	0
10-Dec	2	6	5C	0.25	0.4	0.3	Gray	4	3	0	0	0	0	0
10-Dec	2	6	5C	0.25	0.4	0.3	Higgins	7	3	1	0	0	0	0
10-Dec	2	6	5C	0.25	0.4	0.3	Inglis	5	3	0	0	0	0	0
10-Dec	2	6	5C	0.25	0.4	0.3	Mason	3	2	2	0	2	0	0
10-Dec	2	6	5C	0.25	0.4	0.3	Runyon	3	2	0	0	0	0	0
10-Dec	2	6	6A	2	0.4	0.3	Gray	3	3	0	0	0	0	0
10-Dec	2	6	6A	2	0.4	0.3	Higgins	5	2	0	0	1	0	0
10-Dec	2	6	6A	2	0.4	0.3	Inglis	5	3	0	0	0	0	0
10-Dec	2	6	6A	2	0.4	0.3	Mason	2	1	0	0	2	0	0
10-Dec	2	6	6A	2	0.4	0.3	Runyon	3	1	0	0	0	0	0
10-Dec	2	6	6B	2	0.4	0.3	Gray	2	2	0	0	0	0	0
10-Dec	2	6	6B	2	0.4	0.3	Higgins	7	3	1	0	0	0	0

10-Dec	2	6	6B	2	0.4	0.3	Inglis	5	3	0	0	2	0	0
10-Dec	2	6	6B	2	0.4	0.3	Mason	3	1	0	0	2	1	0
10-Dec	2	6	6B	2	0.4	0.3	Runyon	2	0	0	0	0	0	0
10-Dec	2	6	6C	2	0.4	0.3	Gray	3	3	0	0	0	0	0
10-Dec	2	6	6C	2	0.4	0.3	Higgins	6	3	1	0	0	0	0
10-Dec	2	6	6C	2	0.4	0.3	Inglis	5	3	0	0	2	0	0
10-Dec	2	6	6C	2	0.4	0.3	Mason	3	1	0	0	2	0	0
10-Dec	2	6	6C	2	0.4	0.3	Runyon	3	1	0	0	0	0	0
5-Dec	3	0	1A	0	0	0	Capps	5	2	2	0	0	0	0
5-Dec	3	0	1A	0	0	0	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	1A	0	0	0	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	1A	0	0	0	Mason	4	2	2	0	1	0	0
5-Dec	3	0	1B	0	0	0	Capps	4	2	2	0	0	0	0
5-Dec	3	0	1B	0	0	0	Higgins	5	2	0	0	0	0	0
5-Dec	3	0	1B	0	0	0	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	1B	0	0	0	Mason	3	2	2	0	2	0	1
5-Dec	3	0	1C	0	0	0	Capps	4	1	2	0	0	0	0
5-Dec	3	0	1C	0	0	0	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	1C	0	0	0	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	1C	0	0	0	Mason	4	2	2	0	2	0	0
5-Dec	3	0	2A	0	0.4	0.3	Capps	4	2	1	0	0	0	0
5-Dec	3	0	2A	0	0.4	0.3	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	2A	0	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	2A	0	0.4	0.3	Mason	3	2	1	0	2	0	0
5-Dec	3	0	2B	0	0.4	0.3	Capps	5	2	2	0	0	0	0
5-Dec	3	0	2B	0	0.4	0.3	Higgins	6	2	0	0	1	0	0
5-Dec	3	0	2B	0	0.4	0.3	Inglis	4	3	0	0	0	0	0
5-Dec	3	0	2B	0	0.4	0.3	Mason	3	2	1	0	2	0	0
5-Dec	3	0	2B	0	0.4	0.3	Capps	5	2	2	0	0	0	0
5-Dec	3	0	2B	0	0.4	0.3	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	2B	0	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	2B	0	0.4	0.3	Mason	4	2	2	0	2	0	0
5-Dec	3	0	2C	0	0.4	0.3	Capps	4	1	2	0	0	0	0
5-Dec	3	0	2C	0	0.4	0.3	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	2C	0	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	2C	0	0.4	0.3	Mason	4	2	2	0	2	0	0
5-Dec	3	0	3A	0.25	0	0	Capps	4	1	2	0	0	0	0
5-Dec	3	0	3A	0.25	0	0	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	3A	0.25	0	0	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	3A	0.25	0	0	Mason	4	2	2	0	2	0	0
5-Dec	3	0	3B	0.25	0	0	Capps	4	1	2	0	0	0	0
5-Dec	3	0	3B	0.25	0	0	Higgins	6	2	1	0	0	0	0
5-Dec	3	0	3B	0.25	0	0	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	3B	0.25	0	0	Mason	4	2	2	0	2	0	0
5-Dec	3	0	3C	0.25	0	0	Capps	5	1	2	0	0	0	0
5-Dec	3	0	3C	0.25	0	0	Higgins	6	2	0	0	1	0	0
5-Dec	3	0	3C	0.25	0	0	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	3C	0.25	0	0	Mason	3	2	2	0	2	0	0
5-Dec	3	0	4A	2	0	0	Capps	5	2	0	0	0	0	0
5-Dec	3	0	4A	2	0	0	Higgins	6	2	0	0	1	0	0
5-Dec	3	0	4A	2	0	0	Inglis	5	3	2	0	0	0	0

5-Dec	3	0	4A	2	0	0	Mason	3	2	0	0	2	0	0
5-Dec	3	0	4B	2	0	0	Capps	4	2	1	0	0	0	0
5-Dec	3	0	4B	2	0	0	Higgins	7	2	0	0	1	0	0
5-Dec	3	0	4B	2	0	0	Inglis	5	3	1	0	0	0	0
5-Dec	3	0	4B	2	0	0	Mason	2	1	0	0	2	0	0
5-Dec	3	0	4C	2	0	0	Capps	3	3	2	0	0	0	0
5-Dec	3	0	4C	2	0	0	Higgins	6	2	0	0	1	0	0
5-Dec	3	0	4C	2	0	0	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	4C	2	0	0	Mason	2	2	0	0	3	0	1
5-Dec	3	0	5A	0.25	0.4	0.3	Capps	5	2	2	0	0	0	0
5-Dec	3	0	5A	0.25	0.4	0.3	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	5A	0.25	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	5A	0.25	0.4	0.3	Mason	3	2	0	0	2	0	0
5-Dec	3	0	5B	0.25	0.4	0.3	Capps	4	2	2	0	0	0	0
5-Dec	3	0	5B	0.25	0.4	0.3	Higgins	5	2	0	0	1	0	0
5-Dec	3	0	5B	0.25	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	5B	0.25	0.4	0.3	Mason	3	2	2	0	2	0	0
5-Dec	3	0	5C	0.25	0.4	0.3	Capps	4	2	2	0	0	0	0
5-Dec	3	0	5C	0.25	0.4	0.3	Higgins	7	3	1	0	0	0	0
5-Dec	3	0	5C	0.25	0.4	0.3	Inglis	6	3	3	0	0	0	0
5-Dec	3	0	5C	0.25	0.4	0.3	Mason	3	2	2	0	2	0	0
5-Dec	3	0	6A	2	0.4	0.3	Capps	4	2	0	0	0	0	0
5-Dec	3	0	6A	2	0.4	0.3	Higgins	6	2	0	0	1	0	0
5-Dec	3	0	6A	2	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	6A	2	0.4	0.3	Mason	3	2	0	0	2	0	0
5-Dec	3	0	6B	2	0.4	0.3	Capps	4	2	0	0	0	0	0
5-Dec	3	0	6B	2	0.4	0.3	Higgins	6	2	0	0	0	0	0
5-Dec	3	0	6B	2	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	6B	2	0.4	0.3	Mason	3	2	0	0	2	0	0
5-Dec	3	0	6B	2	0.4	0.3	Capps	4	2	0	0	0	0	0
5-Dec	3	0	6B	2	0.4	0.3	Higgins	6	2	0	0	0	0	0
5-Dec	3	0	6B	2	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	6B	2	0.4	0.3	Mason	4	2	0	0	2	0	0
5-Dec	3	0	6C	2	0.4	0.3	Capps	3	1	0	0	0	0	0
5-Dec	3	0	6C	2	0.4	0.3	Higgins	6	2	0	0	0	0	0
5-Dec	3	0	6C	2	0.4	0.3	Inglis	6	3	2	0	0	0	0
5-Dec	3	0	6C	2	0.4	0.3	Mason	3	2	0	0	2	0	0
11-Dec	3	6	1A	0	0	0	Gray	4	2	1	0	0	0	0
11-Dec	3	6	1A	0	0	0	Higgins	5	3	0	0	1	0	0
11-Dec	3	6	1A	0	0	0	Inglis	4	3	0	0	2	0	0
11-Dec	3	6	1A	0	0	0	Mason	4	2	0	0	2	0	0
11-Dec	3	6	1A	0	0	0	Runyon	4	1	0	0	0	0	0
11-Dec	3	6	1B	0	0	0	Gray	4	2	0	0	0	0	0
11-Dec	3	6	1B	0	0	0	Higgins	6	3	0	0	0	0	0
11-Dec	3	6	1B	0	0	0	Inglis	5	3	0	0	2	0	0
11-Dec	3	6	1B	0	0	0	Mason	3	2	2	0	2	0	0
11-Dec	3	6	1B	0	0	0	Runyon	3	2	0	0	0	0	0
11-Dec	3	6	1C	0	0	0	Gray	4	3	0	0	0	0	0
11-Dec	3	6	1C	0	0	0	Higgins	6	3	1	0	0	0	0
11-Dec	3	6	1C	0	0	0	Inglis	6	3	0	0	0	0	0
11-Dec	3	6	1C	0	0	0	Mason	4	2	1	0	2	0	0

11-Dec	3	6	1C	0	0	Runyon	3	0	0	0	0	0	0	2
11-Dec	3	6	2A	0	0.4	Gray	4	2	0	0	0	0	0	0
11-Dec	3	6	2A	0	0.4	Higgins	6	3	1	0	0	0	0	0
11-Dec	3	6	2A	0	0.4	Inglis	5	3	0	0	0	0	0	0
11-Dec	3	6	2A	0	0.4	Mason	4	2	0	0	0	2	0	0
11-Dec	3	6	2A	0	0.4	Runyon	5	2	0	0	0	0	0	0
11-Dec	3	6	2B	0	0.4	Gray	4	3	0	0	0	0	0	0
11-Dec	3	6	2B	0	0.4	Higgins	6	3	1	0	0	0	0	0
11-Dec	3	6	2B	0	0.4	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	2B	0	0.4	Mason	4	2	0	0	0	0	0	0
11-Dec	3	6	2B	0	0.4	Runyon	3	1	0	0	0	0	0	0
11-Dec	3	6	2C	0	0.4	Gray	4	2	0	0	0	0	0	0
11-Dec	3	6	2C	0	0.4	Higgins	6	3	1	0	0	1	0	0
11-Dec	3	6	2C	0	0.4	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	2C	0	0.4	Mason	4	2	0	0	0	0	0	0
11-Dec	3	6	2C	0	0.4	Runyon	4	2	0	0	0	0	0	0
11-Dec	3	6	3A	0.25	0	Gray	4	3	0	0	0	0	0	0
11-Dec	3	6	3A	0.25	0	Higgins	5	2	0	0	0	1	0	0
11-Dec	3	6	3A	0.25	0	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	3A	0.25	0	Mason	4	2	1	0	0	2	0	0
11-Dec	3	6	3A	0.25	0	Runyon	5	2	0	0	0	0	0	0
11-Dec	3	6	3B	0.25	0	Gray	3	3	0	0	0	0	0	0
11-Dec	3	6	3B	0.25	0	Higgins	6	2	0	0	0	0	0	0
11-Dec	3	6	3B	0.25	0	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	3B	0.25	0	Mason	3	2	1	0	0	2	0	0
11-Dec	3	6	3B	0.25	0	Runyon	5	1	0	0	0	0	0	0
11-Dec	3	6	3C	0.25	0	Gray	3	3	0	0	0	0	0	0
11-Dec	3	6	3C	0.25	0	Higgins	5	2	0	0	0	1	0	0
11-Dec	3	6	3C	0.25	0	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	3C	0.25	0	Mason	4	1	2	0	0	2	0	0
11-Dec	3	6	3C	0.25	0	Runyon	4	1	0	0	0	0	0	0
11-Dec	3	6	4A	2	0	Gray	5	3	0	0	0	0	0	0
11-Dec	3	6	4A	2	0	Higgins	5	3	0	0	0	1	0	0
11-Dec	3	6	4A	2	0	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	4A	2	0	Mason	3	2	0	0	0	2	0	0
11-Dec	3	6	4A	2	0	Runyon	4	3	0	0	0	0	0	0
11-Dec	3	6	4B	2	0	Gray	2	3	0	0	0	0	0	0
11-Dec	3	6	4B	2	0	Higgins	4	2	0	0	0	2	0	0
11-Dec	3	6	4B	2	0	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	4B	2	0	Mason	2	1	0	0	0	2	0	0
11-Dec	3	6	4B	2	0	Runyon	1	1	0	0	0	0	0	0
11-Dec	3	6	4C	2	0	Gray	2	2	0	0	0	0	0	0
11-Dec	3	6	4C	2	0	Higgins	5	2	0	0	0	1	0	0
11-Dec	3	6	4C	2	0	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	4C	2	0	Mason	2	1	0	0	0	3	0	0
11-Dec	3	6	4C	2	0	Runyon	1	1	0	0	0	0	0	0
11-Dec	3	6	5A	0.25	0.4	Gray	6	3	0	0	0	0	0	0

11-Dec	3	6	5A	0.25	0.4	0.3	Higgins	6	3	1	0	0	0	0	0
11-Dec	3	6	5A	0.25	0.4	0.3	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	5A	0.25	0.4	0.3	Mason	3	2	0	0	2	0	0	0
11-Dec	3	6	5A	0.25	0.4	0.3	Runyon	4	2	0	0	0	0	0	0
11-Dec	3	6	5B	0.25	0.4	0.3	Gray	5	3	2	0	0	0	0	0
11-Dec	3	6	5B	0.25	0.4	0.3	Higgins	5	2	0	0	0	0	0	0
11-Dec	3	6	5B	0.25	0.4	0.3	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	5B	0.25	0.4	0.3	Mason	4	2	1	0	1	0	0	0
11-Dec	3	6	5B	0.25	0.4	0.3	Runyon	5	2	0	0	0	0	0	0
11-Dec	3	6	5C	0.25	0.4	0.3	Gray	4	3	0	0	0	0	0	0
11-Dec	3	6	5C	0.25	0.4	0.3	Higgins	6	3	1	0	0	0	0	0
11-Dec	3	6	5C	0.25	0.4	0.3	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	5C	0.25	0.4	0.3	Mason	4	2	0	0	1	0	0	0
11-Dec	3	6	5C	0.25	0.4	0.3	Runyon	3	2	0	0	0	0	0	0
11-Dec	3	6	6A	2	0.4	0.3	Gray	3	3	0	0	0	0	0	0
11-Dec	3	6	6A	2	0.4	0.3	Higgins	6	2	0	0	0	0	0	0
11-Dec	3	6	6A	2	0.4	0.3	Inglis	5	3	0	0	0	0	0	0
11-Dec	3	6	6A	2	0.4	0.3	Mason	3	2	0	0	2	0	0	0
11-Dec	3	6	6A	2	0.4	0.3	Runyon	2	1	0	0	0	0	0	0
11-Dec	3	6	6B	2	0.4	0.3	Gray	3	3	0	0	0	0	0	0
11-Dec	3	6	6B	2	0.4	0.3	Higgins	6	2	0	0	0	0	0	0
11-Dec	3	6	6B	2	0.4	0.3	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	6B	2	0.4	0.3	Mason	3	2	0	0	2	0	0	0
11-Dec	3	6	6B	2	0.4	0.3	Runyon	3	2	0	0	0	0	0	0
11-Dec	3	6	6B	2	0.4	0.3	Gray	2	3	0	0	0	0	0	0
11-Dec	3	6	6C	2	0.4	0.3	Higgins	4	2	0	0	1	0	0	0
11-Dec	3	6	6C	2	0.4	0.3	Inglis	6	3	0	0	0	0	0	0
11-Dec	3	6	6C	2	0.4	0.3	Mason	3	2	0	0	2	0	0	0
11-Dec	3	6	6C	2	0.4	0.3	Runyon	2	1	0	0	0	0	0	0

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	Panelist	Liver	Soured	Burnt	Sorghum	Metal
3-Dec	1	0	1A	0	0	0	Capps	0	0	1	2	2
3-Dec	1	0	1A	0	0	0	Gray	0	0	0	0	2
3-Dec	1	0	1A	0	0	0	Higgins	0	0	0	2	2
3-Dec	1	0	1A	0	0	0	Inglis	0	0	0	0	3
3-Dec	1	0	1A	0	0	0	Mason	0	0	1	2	2
3-Dec	1	0	1A	0	0	0	Runyon	0	0	0	2	2
3-Dec	1	0	1B	0	0	0	Capps	0	0	0	0	2
3-Dec	1	0	1B	0	0	0	Gray	0	0	0	0	3
3-Dec	1	0	1B	0	0	0	Higgins	0	0	0	1	2
3-Dec	1	0	1B	0	0	0	Inglis	0	0	0	0	2
3-Dec	1	0	1B	0	0	0	Mason	0	0	0	0	3
3-Dec	1	0	1B	0	0	0	Runyon	0	0	0	0	3
3-Dec	1	0	1C	0	0	0	Capps	0	0	2	0	2
3-Dec	1	0	1C	0	0	0	Gray	0	0	1	0	3
3-Dec	1	0	1C	0	0	0	Higgins	0	0	0	2	2
3-Dec	1	0	1C	0	0	0	Inglis	0	0	1	2	3
3-Dec	1	0	1C	0	0	0	Mason	0	0	1	1	3
3-Dec	1	0	1C	0	0	0	Runyon	0	0	0	0	3
3-Dec	1	0	2A	0	0.4	0.3	Capps	0	0	2	2	2
3-Dec	1	0	2A	0	0.4	0.3	Gray	0	0	1	1	2
3-Dec	1	0	2A	0	0.4	0.3	Higgins	0	0	0	1	2
3-Dec	1	0	2A	0	0.4	0.3	Inglis	0	0	0	0	3
3-Dec	1	0	2A	0	0.4	0.3	Mason	0	0	1	0	2
3-Dec	1	0	2A	0	0.4	0.3	Runyon	0	0	0	0	2
3-Dec	1	0	2B	0	0.4	0.3	Capps	0	0	0	1	2
3-Dec	1	0	2B	0	0.4	0.3	Gray	2	0	0	0	2
3-Dec	1	0	2B	0	0.4	0.3	Higgins	0	0	2	2	2
3-Dec	1	0	2B	0	0.4	0.3	Inglis	0	0	0	2	2
3-Dec	1	0	2B	0	0.4	0.3	Mason	0	0	2	1	2
3-Dec	1	0	2B	0	0.4	0.3	Runyon	0	0	0	0	2
3-Dec	1	0	2C	0	0.4	0.3	Capps	0	0	0	0	2
3-Dec	1	0	2C	0	0.4	0.3	Gray	0	0	0	0	3
3-Dec	1	0	2C	0	0.4	0.3	Higgins	0	0	0	1	2
3-Dec	1	0	2C	0	0.4	0.3	Inglis	0	0	1	3	3
3-Dec	1	0	2C	0	0.4	0.3	Mason	0	0	0	1	3
3-Dec	1	0	2C	0	0.4	0.3	Runyon	0	0	0	0	2
3-Dec	1	0	3A	0.25	0	0	Capps	0	0	1	0	2
3-Dec	1	0	3A	0.25	0	0	Gray	0	0	2	1	3
3-Dec	1	0	3A	0.25	0	0	Higgins	0	0	0	2	2
3-Dec	1	0	3A	0.25	0	0	Inglis	0	0	0	0	3
3-Dec	1	0	3A	0.25	0	0	Mason	1	0	2	0	2
3-Dec	1	0	3A	0.25	0	0	Runyon	0	0	0	0	2
3-Dec	1	0	3B	0.25	0	0	Capps	0	0	2	2	2

3-Dec	1	0	3B	0.25	0	0	Gray	0	0	0	1	2
3-Dec	1	0	3B	0.25	0	0	Higgins	0	0	0	1	2
3-Dec	1	0	3B	0.25	0	0	Inglis	0	0	0	3	3
3-Dec	1	0	3B	0.25	0	0	Mason	0	0	0	2	2
3-Dec	1	0	3B	0.25	0	0	Runyon	0	0	0	1	3
3-Dec	1	0	3C	0.25	0	0	Capps	0	0	2	1	3
3-Dec	1	0	3C	0.25	0	0	Gray	0	0	1	2	3
3-Dec	1	0	3C	0.25	0	0	Higgins	0	0	0	2	3
3-Dec	1	0	3C	0.25	0	0	Inglis	0	0	2	3	3
3-Dec	1	0	3C	0.25	0	0	Mason	0	0	0	1	3
3-Dec	1	0	3C	0.25	0	0	Runyon	0	0	0	0	2
3-Dec	1	0	4A	2	0	0	Capps	0	0	1	2	2
3-Dec	1	0	4A	2	0	0	Gray	0	0	2	2	3
3-Dec	1	0	4A	2	0	0	Higgins	0	0	2	1	2
3-Dec	1	0	4A	2	0	0	Inglis	0	0	0	0	3
3-Dec	1	0	4A	2	0	0	Mason	0	0	1	2	2
3-Dec	1	0	4A	2	0	0	Runyon	0	0	0	4	2
3-Dec	1	0	4B	2	0	0	Capps	0	0	2	2	2
3-Dec	1	0	4B	2	0	0	Gray	0	0	0	2	3
3-Dec	1	0	4B	2	0	0	Higgins	0	0	2	0	2
3-Dec	1	0	4B	2	0	0	Inglis	0	0	0	2	3
3-Dec	1	0	4B	2	0	0	Mason	0	0	0	3	2
3-Dec	1	0	4B	2	0	0	Runyon	0	0	0	3	2
3-Dec	1	0	4C	2	0	0	Capps	0	0	0	2	3
3-Dec	1	0	4C	2	0	0	Gray	0	0	0	1	2
3-Dec	1	0	4C	2	0	0	Higgins	0	0	0	1	2
3-Dec	1	0	4C	2	0	0	Inglis	0	0	2	3	3
3-Dec	1	0	4C	2	0	0	Mason	0	0	0	3	2
3-Dec	1	0	4C	2	0	0	Runyon	0	0	0	3	2
3-Dec	1	0	4C	2	0	0	Capps	0	0	0	2	2
3-Dec	1	0	5A	0.25	0.4	0.3	Gray	0	0	0	2	3
3-Dec	1	0	5A	0.25	0.4	0.3	Higgins	0	0	0	0	2
3-Dec	1	0	5A	0.25	0.4	0.3	Inglis	0	0	0	0	3
3-Dec	1	0	5A	0.25	0.4	0.3	Mason	0	0	0	0	2
3-Dec	1	0	5A	0.25	0.4	0.3	Runyon	0	0	0	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Capps	0	0	0	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Gray	0	0	0	1	3
3-Dec	1	0	5B	0.25	0.4	0.3	Higgins	0	0	0	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Inglis	0	0	2	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Mason	1	0	0	0	3
3-Dec	1	0	5B	0.25	0.4	0.3	Runyon	0	0	0	1	2
3-Dec	1	0	5C	0.25	0.4	0.3	Capps	0	0	0	1	2
3-Dec	1	0	5C	0.25	0.4	0.3	Gray	0	0	0	3	3
3-Dec	1	0	5C	0.25	0.4	0.3	Higgins	0	0	0	2	2
3-Dec	1	0	5C	0.25	0.4	0.3	Inglis	0	0	0	2	3
3-Dec	1	0	5C	0.25	0.4	0.3	Mason	0	0	0	0	3
3-Dec	1	0	5C	0.25	0.4	0.3	Runyon	0	0	0	1	2

3-Dec	1	0	6A	2	0.4	0.3	Capps	0	0	3	2	2
3-Dec	1	0	6A	2	0.4	0.3	Gray	0	0	2	2	2
3-Dec	1	0	6A	2	0.4	0.3	Higgins	0	0	2	2	2
3-Dec	1	0	6A	2	0.4	0.3	Inglis	0	0	3	2	3
3-Dec	1	0	6A	2	0.4	0.3	Mason	0	0	2	1	2
3-Dec	1	0	6A	2	0.4	0.3	Runyon	0	0	2	4	2
3-Dec	1	0	6B	2	0.4	0.3	Capps	0	0	0	0	2
3-Dec	1	0	6B	2	0.4	0.3	Gray	0	0	0	1	2
3-Dec	1	0	6B	2	0.4	0.3	Higgins	0	0	0	2	2
3-Dec	1	0	6B	2	0.4	0.3	Inglis	0	0	0	2	3
3-Dec	1	0	6B	2	0.4	0.3	Mason	0	0	0	3	2
3-Dec	1	0	6B	2	0.4	0.3	Runyon	0	0	0	2	2
3-Dec	1	0	6C	2	0.4	0.3	Capps	0	0	0	2	2
3-Dec	1	0	6C	2	0.4	0.3	Gray	0	0	0	3	2
3-Dec	1	0	6C	2	0.4	0.3	Higgins	0	0	0	0	2
3-Dec	1	0	6C	2	0.4	0.3	Inglis	0	0	2	3	3
3-Dec	1	0	6C	2	0.4	0.3	Mason	0	0	2	3	3
3-Dec	1	0	6C	2	0.4	0.3	Runyon	0	0	0	3	2
9-Dec	1	6	1A	0	0	0	Gray	0	0	2	1	3
9-Dec	1	6	1A	0	0	0	Higgins	0	0	0	2	2
9-Dec	1	6	1A	0	0	0	Inglis	0	0	2	0	3
9-Dec	1	6	1A	0	0	0	Runyon	0	0	0	0	2
9-Dec	1	6	1B	0	0	0	Gray	0	0	0	0	2
9-Dec	1	6	1B	0	0	0	Higgins	0	0	2	1	2
9-Dec	1	6	1B	0	0	0	Inglis	0	3	2	0	3
9-Dec	1	6	1B	0	0	0	Runyon	0	0	0	0	2
9-Dec	1	6	1C	0	0	0	Gray	0	0	1	0	3
9-Dec	1	6	1C	0	0	0	Higgins	0	0	0	2	2
9-Dec	1	6	1C	0	0	0	Inglis	0	0	0	0	3
9-Dec	1	6	1C	0	0	0	Runyon	0	0	0	0	2
9-Dec	1	6	2A	0	0.4	0.3	Gray	0	0	2	1	3
9-Dec	1	6	2A	0	0.4	0.3	Higgins	0	0	0	2	2
9-Dec	1	6	2A	0	0.4	0.3	Inglis	0	0	2	2	2
9-Dec	1	6	2A	0	0.4	0.3	Runyon	0	0	0	0	2
9-Dec	1	6	2B	0	0.4	0.3	Gray	0	0	2	0	3
9-Dec	1	6	2B	0	0.4	0.3	Higgins	0	0	1	2	2
9-Dec	1	6	2B	0	0.4	0.3	Inglis	0	0	2	0	2
9-Dec	1	6	2B	0	0.4	0.3	Runyon	0	0	2	0	2
9-Dec	1	6	2B	0	0.4	0.3	Gray	0	0	2	0	2
9-Dec	1	6	2B	0	0.4	0.3	Higgins	0	0	2	0	2
9-Dec	1	6	2B	0	0.4	0.3	Inglis	0	0	2	0	2
9-Dec	1	6	2B	0	0.4	0.3	Runyon	0	0	2	0	2
9-Dec	1	6	2C	0	0.4	0.3	Gray	0	0	2	1	3
9-Dec	1	6	2C	0	0.4	0.3	Higgins	0	0	0	2	2
9-Dec	1	6	2C	0	0.4	0.3	Inglis	0	0	2	2	3
9-Dec	1	6	2C	0	0.4	0.3	Runyon	0	0	0	0	2
9-Dec	1	6	3A	0.25	0	0	Gray	0	0	2	1	3
9-Dec	1	6	3A	0.25	0	0	Higgins	0	0	0	0	2
9-Dec	1	6	3A	0.25	0	0	Inglis	0	0	2	2	2
9-Dec	1	6	3A	0.25	0	0	Runyon	0	0	0	0	2
9-Dec	1	6	3B	0.25	0	0	Gray	0	0	0	0	3

9-Dec	1	6	3B	0.25	0	0	Higgins	0	0	0	0	2
9-Dec	1	6	3B	0.25	0	0	Inglis	0	0	0	0	2
9-Dec	1	6	3B	0.25	0	0	Runyon	0	2	0	1	2
9-Dec	1	6	3C	0.25	0	0	Gray	0	0	0	1	3
9-Dec	1	6	3C	0.25	0	0	Higgins	0	0	2	0	2
9-Dec	1	6	3C	0.25	0	0	Inglis	0	0	2	3	3
9-Dec	1	6	3C	0.25	0	0	Runyon	0	0	0	1	2
9-Dec	1	6	4A	2	0	0	Gray	0	0	0	4	3
9-Dec	1	6	4A	2	0	0	Higgins	0	0	0	1	2
9-Dec	1	6	4A	2	0	0	Inglis	0	0	2	0	3
9-Dec	1	6	4A	2	0	0	Runyon	0	0	2	4	3
9-Dec	1	6	4B	2	0	0	Gray	0	0	2	4	3
9-Dec	1	6	4B	2	0	0	Higgins	0	0	1	1	2
9-Dec	1	6	4B	2	0	0	Inglis	0	0	2	2	2
9-Dec	1	6	4B	2	0	0	Runyon	0	0	0	4	2
9-Dec	1	6	4C	2	0	0	Gray	0	0	0	4	3
9-Dec	1	6	4C	2	0	0	Higgins	0	0	0	2	2
9-Dec	1	6	4C	2	0	0	Inglis	0	0	2	2	4
9-Dec	1	6	4C	2	0	0	Runyon	0	0	0	4	2
9-Dec	1	6	5A	0.25	0.4	0.3	Gray	2	0	1	1	3
9-Dec	1	6	5A	0.25	0.4	0.3	Higgins	0	0	0	2	2
9-Dec	1	6	5A	0.25	0.4	0.3	Inglis	0	0	2	0	3
9-Dec	1	6	5A	0.25	0.4	0.3	Runyon	0	0	0	1	2
9-Dec	1	6	5B	0.25	0.4	0.3	Gray	0	0	0	3	3
9-Dec	1	6	5B	0.25	0.4	0.3	Higgins	0	0	0	2	2
9-Dec	1	6	5B	0.25	0.4	0.3	Inglis	0	0	0	0	2
9-Dec	1	6	5B	0.25	0.4	0.3	Runyon	0	0	0	0	2
9-Dec	1	6	5C	0.25	0.4	0.3	Gray	0	0	2	0	3
9-Dec	1	6	5C	0.25	0.4	0.3	Higgins	0	0	2	1	2
9-Dec	1	6	5C	0.25	0.4	0.3	Inglis	0	0	2	2	3
9-Dec	1	6	5C	0.25	0.4	0.3	Runyon	0	0	2	0	2
9-Dec	1	6	6A	2	0.4	0.3	Gray	0	0	2	3	3
9-Dec	1	6	6A	2	0.4	0.3	Higgins	0	0	0	1	2
9-Dec	1	6	6A	2	0.4	0.3	Inglis	0	0	2	2	3
9-Dec	1	6	6A	2	0.4	0.3	Runyon	0	0	2	4	3
9-Dec	1	6	6B	2	0.4	0.3	Gray	0	0	2	4	3
9-Dec	1	6	6B	2	0.4	0.3	Higgins	0	0	1	2	2
9-Dec	1	6	6B	2	0.4	0.3	Inglis	0	0	2	0	2
9-Dec	1	6	6B	2	0.4	0.3	Runyon	0	0	2	4	2
9-Dec	1	6	6C	2	0.4	0.3	Gray	0	0	1	4	3
9-Dec	1	6	6C	2	0.4	0.3	Higgins	0	0	0	2	2
9-Dec	1	6	6C	2	0.4	0.3	Inglis	0	0	2	2	3
9-Dec	1	6	6C	2	0.4	0.3	Runyon	0	0	0	4	2
4-Dec	2	0	1A	0	0	0	Capps	0	0	0	2	2
4-Dec	2	0	1A	0	0	0	Gray	0	0	2	1	3
4-Dec	2	0	1A	0	0	0	Higgins	0	0	0	2	2
4-Dec	2	0	1A	0	0	0	Inglis	0	0	1	0	3

4-Dec	2	0	1A	0	0	0	Mason	0	0	0	1	2
4-Dec	2	0	1A	0	0	0	Runyon	0	0	0	0	2
4-Dec	2	0	1B	0	0	0	Capps	0	0	0	0	2
4-Dec	2	0	1B	0	0	0	Gray	0	0	1	1	4
4-Dec	2	0	1B	0	0	0	Higgins	0	0	0	3	3
4-Dec	2	0	1B	0	0	0	Inglis	0	0	2	0	3
4-Dec	2	0	1B	0	0	0	Mason	0	0	0	1	0
4-Dec	2	0	1B	0	0	0	Runyon	0	0	0	0	2
4-Dec	2	0	1C	0	0	0	Capps	0	0	1	0	2
4-Dec	2	0	1C	0	0	0	Gray	0	0	0	0	3
4-Dec	2	0	1C	0	0	0	Higgins	0	0	0	2	2
4-Dec	2	0	1C	0	0	0	Inglis	0	0	0	0	2
4-Dec	2	0	1C	0	0	0	Mason	0	0	1	0	2
4-Dec	2	0	1C	0	0	0	Runyon	0	1	0	0	2
4-Dec	2	0	2A	0	0.4	0.3	Capps	0	0	0	1	2
4-Dec	2	0	2A	0	0.4	0.3	Gray	0	0	1	2	3
4-Dec	2	0	2A	0	0.4	0.3	Higgins	0	0	0	2	3
4-Dec	2	0	2A	0	0.4	0.3	Inglis	0	0	0	2	3
4-Dec	2	0	2A	0	0.4	0.3	Mason	2	0	1	0	2
4-Dec	2	0	2A	0	0.4	0.3	Runyon	0	0	0	0	2
4-Dec	2	0	2B	0	0.4	0.3	Capps	0	0	0	2	2
4-Dec	2	0	2B	0	0.4	0.3	Gray	0	0	0	2	3
4-Dec	2	0	2B	0	0.4	0.3	Higgins	0	0	0	2	2
4-Dec	2	0	2B	0	0.4	0.3	Inglis	0	0	2	2	3
4-Dec	2	0	2B	0	0.4	0.3	Mason	1	0	0	0	2
4-Dec	2	0	2B	0	0.4	0.3	Runyon	0	0	0	0	2
4-Dec	2	0	2C	0	0.4	0.3	Capps	0	0	2	2	2
4-Dec	2	0	2C	0	0.4	0.3	Gray	0	0	2	0	2
4-Dec	2	0	2C	0	0.4	0.3	Higgins	0	0	1	1	3
4-Dec	2	0	2C	0	0.4	0.3	Inglis	0	0	2	3	3
4-Dec	2	0	2C	0	0.4	0.3	Mason	2	0	2	0	2
4-Dec	2	0	2C	0	0.4	0.3	Runyon	0	0	2	1	0
4-Dec	2	0	3A	0.25	0	0	Capps	0	0	2	2	2
4-Dec	2	0	3A	0.25	0	0	Gray	0	0	2	1	3
4-Dec	2	0	3A	0.25	0	0	Higgins	0	0	0	1	3
4-Dec	2	0	3A	0.25	0	0	Inglis	0	0	0	0	2
4-Dec	2	0	3A	0.25	0	0	Mason	0	0	1	1	2
4-Dec	2	0	3A	0.25	0	0	Runyon	0	0	2	0	3
4-Dec	2	0	3B	0.25	0	0	Capps	0	0	2	1	2
4-Dec	2	0	3B	0.25	0	0	Gray	0	0	2	0	3
4-Dec	2	0	3B	0.25	0	0	Higgins	0	0	0	2	2
4-Dec	2	0	3B	0.25	0	0	Inglis	0	0	2	2	3
4-Dec	2	0	3B	0.25	0	0	Mason	0	0	2	1	2
4-Dec	2	0	3B	0.25	0	0	Runyon	0	0	0	1	0
4-Dec	2	0	3C	0.25	0	0	Capps	0	0	3	2	2
4-Dec	2	0	3C	0.25	0	0	Gray	0	0	2	0	3
4-Dec	2	0	3C	0.25	0	0	Higgins	0	0	1	2	3

4-Dec	2	0	3C	0.25	0	0	Inglis	0	0	2	2	3
4-Dec	2	0	3C	0.25	0	0	Mason	2	0	2	0	2
4-Dec	2	0	3C	0.25	0	0	Runyon	0	0	2	0	3
4-Dec	2	0	4A	2	0	0	Capps	0	0	0	1	2
4-Dec	2	0	4A	2	0	0	Gray	0	0	2	3	3
4-Dec	2	0	4A	2	0	0	Higgins	0	0	0	1	2
4-Dec	2	0	4A	2	0	0	Inglis	0	0	0	0	3
4-Dec	2	0	4A	2	0	0	Mason	0	0	0	3	2
4-Dec	2	0	4A	2	0	0	Runyon	0	0	0	4	3
4-Dec	2	0	4B	2	0	0	Capps	0	0	0	3	2
4-Dec	2	0	4B	2	0	0	Gray	0	0	1	3	3
4-Dec	2	0	4B	2	0	0	Higgins	0	0	0	1	2
4-Dec	2	0	4B	2	0	0	Inglis	0	0	2	0	2
4-Dec	2	0	4B	2	0	0	Mason	0	0	0	3	2
4-Dec	2	0	4B	2	0	0	Runyon	0	0	0	4	3
4-Dec	2	0	4C	2	0	0	Capps	0	0	0	3	2
4-Dec	2	0	4C	2	0	0	Gray	0	0	1	3	4
4-Dec	2	0	4C	2	0	0	Higgins	0	0	0	2	3
4-Dec	2	0	4C	2	0	0	Inglis	0	0	2	2	3
4-Dec	2	0	4C	2	0	0	Mason	0	0	0	3	2
4-Dec	2	0	4C	2	0	0	Runyon	0	0	0	4	2
4-Dec	2	0	5A	0.25	0.4	0.3	Capps	0	0	0	1	2
4-Dec	2	0	5A	0.25	0.4	0.3	Gray	0	0	0	1	4
4-Dec	2	0	5A	0.25	0.4	0.3	Higgins	0	0	0	1	2
4-Dec	2	0	5A	0.25	0.4	0.3	Inglis	0	0	0	2	3
4-Dec	2	0	5A	0.25	0.4	0.3	Mason	1	0	0	2	2
4-Dec	2	0	5A	0.25	0.4	0.3	Runyon	0	0	0	4	2
4-Dec	2	0	5B	0.25	0.4	0.3	Capps	0	0	0	2	2
4-Dec	2	0	5B	0.25	0.4	0.3	Gray	0	0	0	1	3
4-Dec	2	0	5B	0.25	0.4	0.3	Higgins	0	0	0	2	2
4-Dec	2	0	5B	0.25	0.4	0.3	Inglis	0	0	0	0	3
4-Dec	2	0	5B	0.25	0.4	0.3	Mason	0	0	0	2	0
4-Dec	2	0	5B	0.25	0.4	0.3	Runyon	0	0	0	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Capps	0	0	0	3	3
4-Dec	2	0	5C	0.25	0.4	0.3	Gray	0	0	0	1	3
4-Dec	2	0	5C	0.25	0.4	0.3	Higgins	1	0	0	1	2
4-Dec	2	0	5C	0.25	0.4	0.3	Inglis	0	0	2	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Mason	2	0	0	1	2
4-Dec	2	0	5C	0.25	0.4	0.3	Runyon	0	0	0	1	0
4-Dec	2	0	6A	2	0.4	0.3	Capps	0	0	2	2	2
4-Dec	2	0	6A	2	0.4	0.3	Gray	0	0	1	2	3
4-Dec	2	0	6A	2	0.4	0.3	Higgins	0	0	0	2	2
4-Dec	2	0	6A	2	0.4	0.3	Inglis	0	0	0	0	3
4-Dec	2	0	6A	2	0.4	0.3	Mason	0	0	0	3	2
4-Dec	2	0	6A	2	0.4	0.3	Runyon	0	0	0	4	2
4-Dec	2	0	6B	2	0.4	0.3	Capps	0	0	2	2	2
4-Dec	2	0	6B	2	0.4	0.3	Gray	0	0	2	3	3

4-Dec	2	0	6B	2	0.4	0.3	Higgins	0	0	2	0	2
4-Dec	2	0	6B	2	0.4	0.3	Inglis	0	0	2	2	3
4-Dec	2	0	6B	2	0.4	0.3	Mason	0	0	0	3	2
4-Dec	2	0	6B	2	0.4	0.3	Runyon	0	0	2	4	2
4-Dec	2	0	6C	2	0.4	0.3	Capps	0	0	0	3	2
4-Dec	2	0	6C	2	0.4	0.3	Gray	0	0	0	3	4
4-Dec	2	0	6C	2	0.4	0.3	Higgins	0	0	0	2	2
4-Dec	2	0	6C	2	0.4	0.3	Inglis	0	0	2	0	2
4-Dec	2	0	6C	2	0.4	0.3	Mason	1	0	1	3	2
4-Dec	2	0	6C	2	0.4	0.3	Runyon	0	0	0	4	2
10-Dec	2	6	1A	0	0	0	Gray	0	0	1	0	3
10-Dec	2	6	1A	0	0	0	Higgins	0	0	0	2	2
10-Dec	2	6	1A	0	0	0	Inglis	0	0	0	0	2
10-Dec	2	6	1A	0	0	0	Mason	2	0	0	0	2
10-Dec	2	6	1A	0	0	0	Runyon	0	0	0	0	2
10-Dec	2	6	1B	0	0	0	Gray	0	0	0	0	2
10-Dec	2	6	1B	0	0	0	Higgins	0	0	0	2	2
10-Dec	2	6	1B	0	0	0	Inglis	0	0	2	2	3
10-Dec	2	6	1B	0	0	0	Mason	1	1	2	2	3
10-Dec	2	6	1B	0	0	0	Runyon	0	0	0	2	2
10-Dec	2	6	1C	0	0	0	Gray	0	3	0	0	3
10-Dec	2	6	1C	0	0	0	Higgins	0	0	0	2	2
10-Dec	2	6	1C	0	0	0	Inglis	0	0	0	1	3
10-Dec	2	6	1C	0	0	0	Mason	0	1	0	0	3
10-Dec	2	6	1C	0	0	0	Runyon	0	1	0	0	2
10-Dec	2	6	2A	0	0.4	0.3	Gray	0	0	1	1	3
10-Dec	2	6	2A	0	0.4	0.3	Higgins	0	0	2	0	2
10-Dec	2	6	2A	0	0.4	0.3	Inglis	0	0	2	3	2
10-Dec	2	6	2A	0	0.4	0.3	Mason	2	1	0	0	2
10-Dec	2	6	2A	0	0.4	0.3	Runyon	0	0	2	2	3
10-Dec	2	6	2B	0	0.4	0.3	Gray	0	0	2	1	3
10-Dec	2	6	2B	0	0.4	0.3	Higgins	0	0	0	2	2
10-Dec	2	6	2B	0	0.4	0.3	Inglis	0	0	2	2	3
10-Dec	2	6	2B	0	0.4	0.3	Mason	1	2	0	1	3
10-Dec	2	6	2B	0	0.4	0.3	Runyon	0	0	0	0	2
10-Dec	2	6	2C	0	0.4	0.3	Gray	0	0	2	1	3
10-Dec	2	6	2C	0	0.4	0.3	Higgins	0	0	0	3	2
10-Dec	2	6	2C	0	0.4	0.3	Inglis	0	0	2	2	3
10-Dec	2	6	2C	0	0.4	0.3	Mason	3	1	1	1	2
10-Dec	2	6	2C	0	0.4	0.3	Runyon	0	0	0	0	2
10-Dec	2	6	3A	0.25	0	0	Gray	0	0	1	2	3
10-Dec	2	6	3A	0.25	0	0	Higgins	0	0	2	1	2
10-Dec	2	6	3A	0.25	0	0	Inglis	0	0	2	2	3
10-Dec	2	6	3A	0.25	0	0	Mason	1	0	0	0	2
10-Dec	2	6	3A	0.25	0	0	Runyon	0	0	2	2	2
10-Dec	2	6	3B	0.25	0	0	Gray	0	0	0	2	3
10-Dec	2	6	3B	0.25	0	0	Higgins	0	0	0	1	2

10-Dec	2	6	3B	0.25	0	0	Inglis	0	0	2	2	3
10-Dec	2	6	3B	0.25	0	0	Mason	1	1	2	2	2
10-Dec	2	6	3B	0.25	0	0	Runyon	0	1	2	0	2
10-Dec	2	6	3C	0.25	0	0	Gray	0	0	0	0	3
10-Dec	2	6	3C	0.25	0	0	Higgins	0	0	0	1	2
10-Dec	2	6	3C	0.25	0	0	Inglis	0	0	2	2	3
10-Dec	2	6	3C	0.25	0	0	Mason	0	0	1	3	2
10-Dec	2	6	3C	0.25	0	0	Runyon	0	0	0	0	2
10-Dec	2	6	4A	2	0	0	Gray	0	0	2	4	3
10-Dec	2	6	4A	2	0	0	Higgins	0	0	2	0	2
10-Dec	2	6	4A	2	0	0	Inglis	0	0	2	1	3
10-Dec	2	6	4A	2	0	0	Mason	0	0	2	2	2
10-Dec	2	6	4A	2	0	0	Runyon	0	0	2	4	3
10-Dec	2	6	4B	2	0	0	Gray	0	0	2	4	3
10-Dec	2	6	4B	2	0	0	Higgins	0	0	2	1	2
10-Dec	2	6	4B	2	0	0	Inglis	0	0	2	2	3
10-Dec	2	6	4B	2	0	0	Mason	0	0	2	3	2
10-Dec	2	6	4B	2	0	0	Runyon	0	0	3	3	3
10-Dec	2	6	4C	2	0	0	Gray	0	0	2	4	3
10-Dec	2	6	4C	2	0	0	Higgins	0	0	0	2	2
10-Dec	2	6	4C	2	0	0	Inglis	0	0	0	2	3
10-Dec	2	6	4C	2	0	0	Mason	0	0	0	4	3
10-Dec	2	6	4C	2	0	0	Runyon	0	0	0	4	3
10-Dec	2	6	5A	0.25	0.4	0.3	Gray	0	0	2	1	3
10-Dec	2	6	5A	0.25	0.4	0.3	Higgins	0	0	0	2	2
10-Dec	2	6	5A	0.25	0.4	0.3	Inglis	0	0	2	2	3
10-Dec	2	6	5A	0.25	0.4	0.3	Mason	0	0	0	1	2
10-Dec	2	6	5A	0.25	0.4	0.3	Runyon	0	0	0	0	2
10-Dec	2	6	5B	0.25	0.4	0.3	Gray	0	0	1	0	3
10-Dec	2	6	5B	0.25	0.4	0.3	Higgins	0	0	0	2	2
10-Dec	2	6	5B	0.25	0.4	0.3	Inglis	0	0	0	2	3
10-Dec	2	6	5B	0.25	0.4	0.3	Mason	0	0	2	1	2
10-Dec	2	6	5B	0.25	0.4	0.3	Runyon	0	0	0	0	2
10-Dec	2	6	5C	0.25	0.4	0.3	Gray	0	0	1	1	3
10-Dec	2	6	5C	0.25	0.4	0.3	Higgins	0	0	0	3	2
10-Dec	2	6	5C	0.25	0.4	0.3	Inglis	0	0	0	1	3
10-Dec	2	6	5C	0.25	0.4	0.3	Mason	0	0	0	3	3
10-Dec	2	6	5C	0.25	0.4	0.3	Runyon	0	0	0	0	2
10-Dec	2	6	6A	2	0.4	0.3	Gray	0	0	1	3	3
10-Dec	2	6	6A	2	0.4	0.3	Higgins	0	0	2	1	2
10-Dec	2	6	6A	2	0.4	0.3	Inglis	0	0	0	0	2
10-Dec	2	6	6A	2	0.4	0.3	Mason	0	0	0	3	2
10-Dec	2	6	6A	2	0.4	0.3	Runyon	0	0	0	4	3
10-Dec	2	6	6B	2	0.4	0.3	Gray	0	0	2	4	3
10-Dec	2	6	6B	2	0.4	0.3	Higgins	0	0	1	2	2
10-Dec	2	6	6B	2	0.4	0.3	Inglis	0	0	2	2	3
10-Dec	2	6	6B	2	0.4	0.3	Mason	0	0	2	4	3

10-Dec	2	6	6B	2	0.4	0.3	Runyon	0	0	2	4	2
10-Dec	2	6	6C	2	0.4	0.3	Gray	0	0	2	3	3
10-Dec	2	6	6C	2	0.4	0.3	Higgins	0	0	0	2	2
10-Dec	2	6	6C	2	0.4	0.3	Inglis	0	0	2	2	3
10-Dec	2	6	6C	2	0.4	0.3	Mason	0	0	1	3	2
10-Dec	2	6	6C	2	0.4	0.3	Runyon	0	0	0	3	3
5-Dec	3	0	1A	0	0	0	Capps	0	0	1	2	2
5-Dec	3	0	1A	0	0	0	Higgins	0	0	1	1	2
5-Dec	3	0	1A	0	0	0	Inglis	0	0	2	3	3
5-Dec	3	0	1A	0	0	0	Mason	0	0	0	0	2
5-Dec	3	0	1B	0	0	0	Capps	0	0	2	1	2
5-Dec	3	0	1B	0	0	0	Higgins	0	0	0	2	2
5-Dec	3	0	1B	0	0	0	Inglis	0	0	2	3	2
5-Dec	3	0	1B	0	0	0	Mason	1	1	2	1	2
5-Dec	3	0	1C	0	0	0	Capps	0	0	0	0	2
5-Dec	3	0	1C	0	0	0	Higgins	0	0	0	2	2
5-Dec	3	0	1C	0	0	0	Inglis	0	0	2	3	3
5-Dec	3	0	1C	0	0	0	Mason	2	0	0	2	2
5-Dec	3	0	2A	0	0.4	0.3	Capps	0	0	0	1	2
5-Dec	3	0	2A	0	0.4	0.3	Higgins	0	0	0	2	2
5-Dec	3	0	2A	0	0.4	0.3	Inglis	0	0	2	0	3
5-Dec	3	0	2A	0	0.4	0.3	Mason	2	0	0	1	2
5-Dec	3	0	2B	0	0.4	0.3	Capps	0	0	0	2	2
5-Dec	3	0	2B	0	0.4	0.3	Higgins	0	0	0	2	2
5-Dec	3	0	2B	0	0.4	0.3	Inglis	0	0	0	0	3
5-Dec	3	0	2B	0	0.4	0.3	Mason	0	0	0	1	2
5-Dec	3	0	2C	0	0.4	0.3	Capps	0	0	1	1	2
5-Dec	3	0	2C	0	0.4	0.3	Higgins	0	0	0	2	2
5-Dec	3	0	2C	0	0.4	0.3	Inglis	0	0	2	1	3
5-Dec	3	0	2C	0	0.4	0.3	Mason	3	0	1	1	2
5-Dec	3	0	3A	0.25	0	0	Capps	0	0	0	0	2
5-Dec	3	0	3A	0.25	0	0	Higgins	0	0	0	2	2
5-Dec	3	0	3A	0.25	0	0	Inglis	0	0	2	3	3
5-Dec	3	0	3A	0.25	0	0	Mason	0	0	2	2	2
5-Dec	3	0	3B	0.25	0	0	Capps	0	0	0	1	2
5-Dec	3	0	3B	0.25	0	0	Higgins	0	0	0	0	2
5-Dec	3	0	3B	0.25	0	0	Inglis	0	0	2	2	3
5-Dec	3	0	3B	0.25	0	0	Mason	0	0	1	2	2
5-Dec	3	0	3C	0.25	0	0	Capps	0	0	2	0	2
5-Dec	3	0	3C	0.25	0	0	Higgins	0	0	0	1	2
5-Dec	3	0	3C	0.25	0	0	Inglis	0	0	0	1	3
5-Dec	3	0	3C	0.25	0	0	Mason	0	0	1	2	2
5-Dec	3	0	4A	2	0	0	Capps	1	0	0	0	2
5-Dec	3	0	4A	2	0	0	Higgins	0	0	0	2	2
5-Dec	3	0	4A	2	0	0	Inglis	0	0	1	0	2
5-Dec	3	0	4A	2	0	0	Mason	0	0	0	3	2
5-Dec	3	0	4B	2	0	0	Capps	0	0	0	2	2

5-Dec	3	0	4B	2	0	0	Higgins	0	0	0	2	2
5-Dec	3	0	4B	2	0	0	Inglis	0	0	2	4	3
5-Dec	3	0	4B	2	0	0	Mason	0	0	0	4	2
5-Dec	3	0	4C	2	0	0	Capps	0	0	2	3	2
5-Dec	3	0	4C	2	0	0	Higgins	0	0	0	2	2
5-Dec	3	0	4C	2	0	0	Inglis	0	0	0	4	3
5-Dec	3	0	4C	2	0	0	Mason	0	1	1	4	2
5-Dec	3	0	5A	0.25	0.4	0.3	Capps	0	0	0	2	2
5-Dec	3	0	5A	0.25	0.4	0.3	Higgins	0	0	1	1	2
5-Dec	3	0	5A	0.25	0.4	0.3	Inglis	0	0	2	0	3
5-Dec	3	0	5A	0.25	0.4	0.3	Mason	3	0	2	1	2
5-Dec	3	0	5B	0.25	0.4	0.3	Capps	0	0	3	1	2
5-Dec	3	0	5B	0.25	0.4	0.3	Higgins	0	0	2	0	2
5-Dec	3	0	5B	0.25	0.4	0.3	Inglis	0	0	3	0	3
5-Dec	3	0	5B	0.25	0.4	0.3	Mason	2	0	3	1	2
5-Dec	3	0	5C	0.25	0.4	0.3	Capps	0	0	1	1	2
5-Dec	3	0	5C	0.25	0.4	0.3	Higgins	0	0	0	2	2
5-Dec	3	0	5C	0.25	0.4	0.3	Inglis	0	0	2	0	3
5-Dec	3	0	5C	0.25	0.4	0.3	Mason	3	0	1	1	2
5-Dec	3	0	6A	2	0.4	0.3	Capps	0	0	2	1	2
5-Dec	3	0	6A	2	0.4	0.3	Higgins	0	0	0	2	2
5-Dec	3	0	6A	2	0.4	0.3	Inglis	0	0	2	0	3
5-Dec	3	0	6A	2	0.4	0.3	Mason	0	0	2	3	2
5-Dec	3	0	6B	2	0.4	0.3	Capps	0	0	2	3	2
5-Dec	3	0	6B	2	0.4	0.3	Higgins	0	0	2	1	2
5-Dec	3	0	6B	2	0.4	0.3	Inglis	0	0	2	2	2
5-Dec	3	0	6B	2	0.4	0.3	Mason	0	0	2	3	2
5-Dec	3	0	6C	2	0.4	0.3	Capps	0	0	2	2	2
5-Dec	3	0	6C	2	0.4	0.3	Higgins	0	0	0	1	2
5-Dec	3	0	6C	2	0.4	0.3	Inglis	0	0	2	3	3
5-Dec	3	0	6C	2	0.4	0.3	Mason	0	0	2	3	2
11-Dec	3	6	1A	0	0	0	Gray	0	0	1	0	3
11-Dec	3	6	1A	0	0	0	Higgins	0	0	0	2	2
11-Dec	3	6	1A	0	0	0	Inglis	0	0	0	0	2
11-Dec	3	6	1A	0	0	0	Mason	0	0	0	1	2
11-Dec	3	6	1A	0	0	0	Runyon	0	0	0	1	2
11-Dec	3	6	1B	0	0	0	Gray	0	0	1	0	3
11-Dec	3	6	1B	0	0	0	Higgins	0	0	0	2	2
11-Dec	3	6	1B	0	0	0	Inglis	0	0	0	0	2
11-Dec	3	6	1B	0	0	0	Mason	0	0	0	1	3
11-Dec	3	6	1B	0	0	0	Runyon	0	0	0	0	2
11-Dec	3	6	1C	0	0	0	Gray	0	0	1	1	3
11-Dec	3	6	1C	0	0	0	Higgins	0	0	0	2	2
11-Dec	3	6	1C	0	0	0	Inglis	0	0	2	2	3
11-Dec	3	6	1C	0	0	0	Mason	1	1	0	1	3
11-Dec	3	6	1C	0	0	0	Runyon	0	0	0	2	2
11-Dec	3	6	2A	0	0.4	0.3	Gray	0	0	1	2	3

11-Dec	3	6	2A	0	0.4	0.3	Higgins	0	0	0	2	2
11-Dec	3	6	2A	0	0.4	0.3	Inglis	0	0	2	2	3
11-Dec	3	6	2A	0	0.4	0.3	Mason	1	0	0	0	2
11-Dec	3	6	2A	0	0.4	0.3	Runyon	0	0	0	0	2
11-Dec	3	6	2B	0	0.4	0.3	Gray	2	0	1	0	3
11-Dec	3	6	2B	0	0.4	0.3	Higgins	0	0	0	2	2
11-Dec	3	6	2B	0	0.4	0.3	Inglis	0	0	2	2	3
11-Dec	3	6	2B	0	0.4	0.3	Mason	1	0	1	1	2
11-Dec	3	6	2B	0	0.4	0.3	Runyon	0	0	0	0	2
11-Dec	3	6	2C	0	0.4	0.3	Gray	0	0	1	0	3
11-Dec	3	6	2C	0	0.4	0.3	Higgins	0	0	0	2	2
11-Dec	3	6	2C	0	0.4	0.3	Inglis	0	0	2	3	3
11-Dec	3	6	2C	0	0.4	0.3	Mason	2	0	1	2	2
11-Dec	3	6	2C	0	0.4	0.3	Runyon	0	0	0	0	2
11-Dec	3	6	3A	0.25	0	0	Gray	2	0	1	1	3
11-Dec	3	6	3A	0.25	0	0	Higgins	0	0	1	1	2
11-Dec	3	6	3A	0.25	0	0	Inglis	0	0	2	3	3
11-Dec	3	6	3A	0.25	0	0	Mason	1	0	0	1	2
11-Dec	3	6	3A	0.25	0	0	Runyon	0	0	0	0	2
11-Dec	3	6	3B	0.25	0	0	Gray	0	0	1	2	3
11-Dec	3	6	3B	0.25	0	0	Higgins	0	0	0	1	2
11-Dec	3	6	3B	0.25	0	0	Inglis	0	0	2	3	3
11-Dec	3	6	3B	0.25	0	0	Mason	0	0	0	1	2
11-Dec	3	6	3B	0.25	0	0	Runyon	0	0	2	0	2
11-Dec	3	6	3C	0.25	0	0	Gray	2	0	0	1	3
11-Dec	3	6	3C	0.25	0	0	Higgins	0	0	0	2	2
11-Dec	3	6	3C	0.25	0	0	Inglis	0	0	2	2	3
11-Dec	3	6	3C	0.25	0	0	Mason	1	1	1	1	3
11-Dec	3	6	3C	0.25	0	0	Runyon	0	0	2	2	3
11-Dec	3	6	4A	2	0	0	Gray	0	0	1	0	2
11-Dec	3	6	4A	2	0	0	Higgins	0	0	2	0	2
11-Dec	3	6	4A	2	0	0	Inglis	0	0	2	0	2
11-Dec	3	6	4A	2	0	0	Mason	1	1	3	0	2
11-Dec	3	6	4A	2	0	0	Runyon	0	0	3	0	2
11-Dec	3	6	4B	2	0	0	Gray	0	0	3	4	4
11-Dec	3	6	4B	2	0	0	Higgins	0	0	1	0	2
11-Dec	3	6	4B	2	0	0	Inglis	0	0	3	0	3
11-Dec	3	6	4B	2	0	0	Mason	0	1	4	3	2
11-Dec	3	6	4B	2	0	0	Runyon	0	0	3	4	3
11-Dec	3	6	4C	2	0	0	Gray	0	0	3	4	3
11-Dec	3	6	4C	2	0	0	Higgins	1	0	2	0	2
11-Dec	3	6	4C	2	0	0	Inglis	0	0	3	0	3
11-Dec	3	6	4C	2	0	0	Mason	0	2	3	3	2
11-Dec	3	6	4C	2	0	0	Runyon	0	0	3	4	3
11-Dec	3	6	5A	0.25	0.4	0.3	Gray	0	0	3	0	3
11-Dec	3	6	5A	0.25	0.4	0.3	Higgins	0	0	0	2	2

11-Dec	3	6	5A	0.25	0.4	0.3	Inglis	0	0	2	2	3
11-Dec	3	6	5A	0.25	0.4	0.3	Mason	2	0	0	1	2
11-Dec	3	6	5A	0.25	0.4	0.3	Runyon	0	0	0	0	2
11-Dec	3	6	5B	0.25	0.4	0.3	Gray	0	0	2	2	3
11-Dec	3	6	5B	0.25	0.4	0.3	Higgins	0	0	0	2	2
11-Dec	3	6	5B	0.25	0.4	0.3	Inglis	0	0	2	2	3
11-Dec	3	6	5B	0.25	0.4	0.3	Mason	2	0	0	1	2
11-Dec	3	6	5B	0.25	0.4	0.3	Runyon	0	0	0	0	2
11-Dec	3	6	5C	0.25	0.4	0.3	Gray	2	0	0	0	2
11-Dec	3	6	5C	0.25	0.4	0.3	Higgins	0	0	0	2	2
11-Dec	3	6	5C	0.25	0.4	0.3	Inglis	0	0	2	0	3
11-Dec	3	6	5C	0.25	0.4	0.3	Mason	2	0	1	1	2
11-Dec	3	6	5C	0.25	0.4	0.3	Runyon	0	0	0	0	2
11-Dec	3	6	6A	2	0.4	0.3	Gray	0	0	2	3	3
11-Dec	3	6	6A	2	0.4	0.3	Higgins	0	0	1	2	3
11-Dec	3	6	6A	2	0.4	0.3	Inglis	0	0	2	3	3
11-Dec	3	6	6A	2	0.4	0.3	Mason	0	0	0	3	2
11-Dec	3	6	6A	2	0.4	0.3	Runyon	0	0	0	4	2
11-Dec	3	6	6B	2	0.4	0.3	Gray	0	0	1	2	3
11-Dec	3	6	6B	2	0.4	0.3	Higgins	0	0	0	1	2
11-Dec	3	6	6B	2	0.4	0.3	Inglis	0	0	2	3	3
11-Dec	3	6	6B	2	0.4	0.3	Mason	0	0	1	3	2
11-Dec	3	6	6B	2	0.4	0.3	Runyon	0	0	0	4	2
11-Dec	3	6	6C	2	0.4	0.3	Gray	0	0	1	4	4
11-Dec	3	6	6C	2	0.4	0.3	Higgins	0	0	0	1	2
11-Dec	3	6	6C	2	0.4	0.3	Inglis	0	0	0	3	3
11-Dec	3	6	6C	2	0.4	0.3	Mason	0	0	1	3	2
11-Dec	3	6	6C	2	0.4	0.3	Runyon	0	0	0	4	2

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	Panelist	Astringent	Salt	Sour	Bitter	Sweet	Astring
3-Dec	1	0	1A	0	0	0	Capps	2	3	3	2	1	2
3-Dec	1	0	1A	0	0	0	Gray	2	2	2	2	0	2
3-Dec	1	0	1A	0	0	0	Higgins	2	2	1	2	1	2
3-Dec	1	0	1A	0	0	0	Inglis	3	2	3	2	0	2
3-Dec	1	0	1A	0	0	0	Mason	2	2	2	3	1	2
3-Dec	1	0	1A	0	0	0	Runyon	3	2	2	3	0	3
3-Dec	1	0	1B	0	0	0	Capps	3	2	3	2	1	2
3-Dec	1	0	1B	0	0	0	Gray	3	2	4	3	0	3
3-Dec	1	0	1B	0	0	0	Higgins	2	2	1	2	1	2
3-Dec	1	0	1B	0	0	0	Inglis	2	2	2	2	0	1
3-Dec	1	0	1B	0	0	0	Mason	2	2	2	3	0	2
3-Dec	1	0	1B	0	0	0	Runyon	3	1	2	3	0	2
3-Dec	1	0	1C	0	0	0	Capps	3	2	3	2	1	2
3-Dec	1	0	1C	0	0	0	Gray	3	3	3	2	0	3
3-Dec	1	0	1C	0	0	0	Higgins	3	2	2	2	0	2
3-Dec	1	0	1C	0	0	0	Inglis	3	2	3	3	0	2
3-Dec	1	0	1C	0	0	0	Mason	3	2	3	2	0	2
3-Dec	1	0	1C	0	0	0	Runyon	2	2	2	3	0	2
3-Dec	1	0	2A	0	0.4	0.3	Capps	2	3	3	2	0	2
3-Dec	1	0	2A	0	0.4	0.3	Gray	3	3	3	2	0	2
3-Dec	1	0	2A	0	0.4	0.3	Higgins	3	2	2	2	0	2
3-Dec	1	0	2A	0	0.4	0.3	Inglis	3	2	4	2	0	3
3-Dec	1	0	2A	0	0.4	0.3	Mason	3	2	4	2	0	3
3-Dec	1	0	2A	0	0.4	0.3	Runyon	2	2	3	2	2	2
3-Dec	1	0	2A	0	0.4	0.3	Capps	2	3	2	1	2	2
3-Dec	1	0	2B	0	0.4	0.3	Gray	3	3	3	2	0	2
3-Dec	1	0	2B	0	0.4	0.3	Higgins	3	2	2	2	1	2
3-Dec	1	0	2B	0	0.4	0.3	Inglis	2	2	3	2	0	3
3-Dec	1	0	2B	0	0.4	0.3	Mason	3	2	3	2	0	3
3-Dec	1	0	2B	0	0.4	0.3	Runyon	2	2	3	2	2	2
3-Dec	1	0	2B	0	0.4	0.3	Capps	2	3	3	2	1	2
3-Dec	1	0	2B	0	0.4	0.3	Gray	3	6	3	2	0	2
3-Dec	1	0	2C	0	0.4	0.3	Higgins	3	4	2	2	1	2
3-Dec	1	0	2C	0	0.4	0.3	Inglis	3	4	3	3	0	3
3-Dec	1	0	2C	0	0.4	0.3	Mason	3	4	3	3	0	3
3-Dec	1	0	2C	0	0.4	0.3	Runyon	3	2	3	2	1	2
3-Dec	1	0	2C	0	0.4	0.3	Capps	2	3	2	2	1	2
3-Dec	1	0	3A	0.25	0	0	Capps	2	3	2	2	1	2
3-Dec	1	0	3A	0.25	0	0	Gray	3	2	2	2	0	2
3-Dec	1	0	3A	0.25	0	0	Higgins	2	2	2	2	0	2
3-Dec	1	0	3A	0.25	0	0	Inglis	3	2	3	2	0	3
3-Dec	1	0	3A	0.25	0	0	Mason	3	2	2	3	0	2
3-Dec	1	0	3A	0.25	0	0	Runyon	3	2	3	2	2	2
3-Dec	1	0	3A	0.25	0	0	Capps	3	2	3	2	0	2
3-Dec	1	0	3B	0.25	0	0	Capps	3	2	3	2	0	2

3-Dec	1	0	3B	0.25	0	0	Gray	3	3	3	2	0	2
3-Dec	1	0	3B	0.25	0	0	Higgins	2	2	1	2	1	2
3-Dec	1	0	3B	0.25	0	0	Inglis	3	3	3	3	2	3
3-Dec	1	0	3B	0.25	0	0	Mason	3	2	3	3	0	2
3-Dec	1	0	3B	0.25	0	0	Runyon	3	1	2	2	0	2
3-Dec	1	0	3C	0.25	0	0	Capps	2	2	3	2	1	2
3-Dec	1	0	3C	0.25	0	0	Gray	3	3	3	3	0	3
3-Dec	1	0	3C	0.25	0	0	Higgins	3	2	2	2	0	3
3-Dec	1	0	3C	0.25	0	0	Inglis	3	2	3	4	0	3
3-Dec	1	0	3C	0.25	0	0	Mason	2	2	3	3	0	2
3-Dec	1	0	3C	0.25	0	0	Runyon	2	2	2	2	0	2
3-Dec	1	0	4A	2	0	0	Capps	2	2	3	3	0	1
3-Dec	1	0	4A	2	0	0	Gray	3	3	2	3	0	3
3-Dec	1	0	4A	2	0	0	Higgins	3	2	2	2	0	2
3-Dec	1	0	4A	2	0	0	Inglis	3	2	3	2	0	3
3-Dec	1	0	4A	2	0	0	Mason	2	2	2	3	1	2
3-Dec	1	0	4A	2	0	0	Runyon	3	1	1	3	0	3
3-Dec	1	0	4B	2	0	0	Capps	3	2	3	2	0	2
3-Dec	1	0	4B	2	0	0	Gray	3	3	3	2	0	2
3-Dec	1	0	4B	2	0	0	Higgins	3	2	2	2	0	2
3-Dec	1	0	4B	2	0	0	Inglis	3	2	3	3	0	3
3-Dec	1	0	4B	2	0	0	Mason	3	2	3	3	0	2
3-Dec	1	0	4B	2	0	0	Runyon	2	2	2	3	0	2
3-Dec	1	0	4C	2	0	0	Capps	3	2	3	3	0	2
3-Dec	1	0	4C	2	0	0	Gray	3	3	3	2	0	3
3-Dec	1	0	4C	2	0	0	Higgins	3	2	2	3	1	2
3-Dec	1	0	4C	2	0	0	Inglis	3	2	4	3	0	3
3-Dec	1	0	4C	2	0	0	Mason	3	2	3	2	0	3
3-Dec	1	0	4C	2	0	0	Runyon	3	1	2	2	0	2
3-Dec	1	0	5A	0.25	0.4	0.3	Capps	3	3	3	2	1	2
3-Dec	1	0	5A	0.25	0.4	0.3	Gray	3	4	3	3	0	3
3-Dec	1	0	5A	0.25	0.4	0.3	Higgins	3	4	2	2	0	3
3-Dec	1	0	5A	0.25	0.4	0.3	Inglis	3	4	3	2	0	2
3-Dec	1	0	5A	0.25	0.4	0.3	Mason	3	4	3	2	0	3
3-Dec	1	0	5A	0.25	0.4	0.3	Runyon	3	2	4	2	2	2
3-Dec	1	0	5B	0.25	0.4	0.3	Capps	3	3	3	2	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Gray	3	4	3	2	0	3
3-Dec	1	0	5B	0.25	0.4	0.3	Higgins	2	3	2	2	1	2
3-Dec	1	0	5B	0.25	0.4	0.3	Inglis	3	3	3	2	2	2
3-Dec	1	0	5B	0.25	0.4	0.3	Mason	3	3	3	2	0	3
3-Dec	1	0	5B	0.25	0.4	0.3	Runyon	3	3	3	2	2	2
3-Dec	1	0	5C	0.25	0.4	0.3	Capps	2	3	3	3	0	2
3-Dec	1	0	5C	0.25	0.4	0.3	Gray	3	5	3	2	1	3
3-Dec	1	0	5C	0.25	0.4	0.3	Higgins	2	2	2	2	1	2
3-Dec	1	0	5C	0.25	0.4	0.3	Inglis	3	3	3	2	0	3
3-Dec	1	0	5C	0.25	0.4	0.3	Mason	3	4	3	2	0	3
3-Dec	1	0	5C	0.25	0.4	0.3	Runyon	3	3	3	3	1	2

3-Dec	1	0	6A	2	0.4	0.3	Capps	2	3	2	2	2	2
3-Dec	1	0	6A	2	0.4	0.3	Gray	3	3	3	2	1	2
3-Dec	1	0	6A	2	0.4	0.3	Higgins	3	3	2	2	0	3
3-Dec	1	0	6A	2	0.4	0.3	Inglis	3	3	3	0	0	2
3-Dec	1	0	6A	2	0.4	0.3	Mason	3	3	3	3	0	3
3-Dec	1	0	6A	2	0.4	0.3	Runyon	2	2	2	3	1	2
3-Dec	1	0	6B	2	0.4	0.3	Capps	3	3	3	2	1	2
3-Dec	1	0	6B	2	0.4	0.3	Gray	2	3	3	2	1	2
3-Dec	1	0	6B	2	0.4	0.3	Higgins	3	3	2	2	1	2
3-Dec	1	0	6B	2	0.4	0.3	Inglis	3	2	3	3	0	3
3-Dec	1	0	6B	2	0.4	0.3	Mason	3	3	3	3	0	3
3-Dec	1	0	6B	2	0.4	0.3	Runyon	3	3	3	2	1	2
3-Dec	1	0	6C	2	0.4	0.3	Capps	2	3	2	3	0	2
3-Dec	1	0	6C	2	0.4	0.3	Gray	3	4	3	3	0	3
3-Dec	1	0	6C	2	0.4	0.3	Higgins	2	3	2	2	0	2
3-Dec	1	0	6C	2	0.4	0.3	Inglis	3	4	3	2	0	3
3-Dec	1	0	6C	2	0.4	0.3	Mason	3	4	3	2	0	3
3-Dec	1	0	6C	2	0.4	0.3	Runyon	0	3	3	3	1	2
9-Dec	1	6	1A	0	0	0	Gray	3	3	4	3	0	3
9-Dec	1	6	1A	0	0	0	Higgins	2	2	2	2	1	2
9-Dec	1	6	1A	0	0	0	Inglis	3	2	3	3	0	3
9-Dec	1	6	1A	0	0	0	Runyon	2	2	2	2	0	2
9-Dec	1	6	1B	0	0	0	Gray	3	2	3	2	0	2
9-Dec	1	6	1B	0	0	0	Higgins	3	2	2	2	0	2
9-Dec	1	6	1B	0	0	0	Inglis	3	2	4	3	0	3
9-Dec	1	6	1B	0	0	0	Runyon	2	2	3	2	0	2
9-Dec	1	6	1C	0	0	0	Gray	3	3	4	3	0	3
9-Dec	1	6	1C	0	0	0	Higgins	2	2	2	2	1	2
9-Dec	1	6	1C	0	0	0	Inglis	3	2	2	4	0	3
9-Dec	1	6	1C	0	0	0	Runyon	3	2	3	3	0	3
9-Dec	1	6	2A	0	0.4	0.3	Gray	3	3	4	3	0	3
9-Dec	1	6	2A	0	0.4	0.3	Higgins	2	2	2	2	1	2
9-Dec	1	6	2A	0	0.4	0.3	Inglis	2	2	4	3	0	3
9-Dec	1	6	2A	0	0.4	0.3	Runyon	2	3	3	2	0	3
9-Dec	1	6	2B	0	0.4	0.3	Gray	3	4	3	3	0	3
9-Dec	1	6	2B	0	0.4	0.3	Higgins	3	2	2	3	1	3
9-Dec	1	6	2B	0	0.4	0.3	Inglis	2	2	2	2	0	3
9-Dec	1	6	2B	0	0.4	0.3	Runyon	3	3	3	2	1	3
9-Dec	1	6	2B	0	0.4	0.3	Gray	3	4	3	3	1	3
9-Dec	1	6	2C	0	0.4	0.3	Higgins	2	2	2	2	1	2
9-Dec	1	6	2C	0	0.4	0.3	Inglis	3	2	3	3	0	3
9-Dec	1	6	2C	0	0.4	0.3	Runyon	3	3	2	2	1	3
9-Dec	1	6	3A	0.25	0	0	Gray	3	3	3	2	0	3
9-Dec	1	6	3A	0.25	0	0	Higgins	2	2	2	2	0	2
9-Dec	1	6	3A	0.25	0	0	Inglis	2	2	4	3	0	2
9-Dec	1	6	3A	0.25	0	0	Runyon	2	2	3	2	0	2
9-Dec	1	6	3B	0.25	0	0	Gray	3	3	4	3	0	3

9-Dec	1	6	3B	0.25	0	0	Higgins	2	2	2	2	0	2
9-Dec	1	6	3B	0.25	0	0	Inglis	3	2	3	2	0	3
9-Dec	1	6	3B	0.25	0	0	Runyon	3	2	3	3	0	3
9-Dec	1	6	3C	0.25	0	0	Gray	3	3	4	4	0	3
9-Dec	1	6	3C	0.25	0	0	Higgins	3	2	2	3	0	2
9-Dec	1	6	3C	0.25	0	0	Inglis	3	2	3	3	0	3
9-Dec	1	6	3C	0.25	0	0	Runyon	3	2	2	3	0	3
9-Dec	1	6	4A	2	0	0	Gray	3	3	3	4	0	3
9-Dec	1	6	4A	2	0	0	Higgins	2	2	2	2	0	2
9-Dec	1	6	4A	2	0	0	Inglis	3	2	4	3	0	3
9-Dec	1	6	4A	2	0	0	Runyon	3	2	2	3	0	3
9-Dec	1	6	4B	2	0	0	Gray	3	3	3	4	0	3
9-Dec	1	6	4B	2	0	0	Higgins	2	2	2	2	0	2
9-Dec	1	6	4B	2	0	0	Inglis	2	2	3	4	0	3
9-Dec	1	6	4B	2	0	0	Runyon	3	2	3	3	0	3
9-Dec	1	6	4C	2	0	0	Gray	3	3	4	5	0	3
9-Dec	1	6	4C	2	0	0	Higgins	2	2	1	2	0	2
9-Dec	1	6	4C	2	0	0	Inglis	4	2	4	4	0	3
9-Dec	1	6	4C	2	0	0	Runyon	3	1	2	3	0	3
9-Dec	1	6	5A	0.25	0.4	0.3	Gray	3	4	2	2	0	2
9-Dec	1	6	5A	0.25	0.4	0.3	Higgins	3	2	2	2	0	2
9-Dec	1	6	5A	0.25	0.4	0.3	Inglis	3	2	3	3	0	3
9-Dec	1	6	5A	0.25	0.4	0.3	Runyon	2	2	3	2	0	3
9-Dec	1	6	5B	0.25	0.4	0.3	Gray	3	4	3	3	0	3
9-Dec	1	6	5B	0.25	0.4	0.3	Higgins	3	2	2	2	1	2
9-Dec	1	6	5B	0.25	0.4	0.3	Inglis	2	2	2	2	0	3
9-Dec	1	6	5B	0.25	0.4	0.3	Runyon	2	3	3	2	1	2
9-Dec	1	6	5C	0.25	0.4	0.3	Gray	3	3	3	3	0	3
9-Dec	1	6	5C	0.25	0.4	0.3	Higgins	2	2	2	2	1	2
9-Dec	1	6	5C	0.25	0.4	0.3	Inglis	3	2	4	4	0	3
9-Dec	1	6	5C	0.25	0.4	0.3	Runyon	3	3	3	3	0	3
9-Dec	1	6	6A	2	0.4	0.3	Gray	3	2	3	3	0	2
9-Dec	1	6	6A	2	0.4	0.3	Higgins	2	2	1	2	1	2
9-Dec	1	6	6A	2	0.4	0.3	Inglis	3	2	3	3	0	3
9-Dec	1	6	6A	2	0.4	0.3	Runyon	3	2	2	3	0	3
9-Dec	1	6	6B	2	0.4	0.3	Gray	3	3	3	3	0	2
9-Dec	1	6	6B	2	0.4	0.3	Higgins	2	2	2	2	1	2
9-Dec	1	6	6B	2	0.4	0.3	Inglis	2	2	2	2	0	2
9-Dec	1	6	6B	2	0.4	0.3	Runyon	3	3	2	3	0	3
9-Dec	1	6	6B	2	0.4	0.3	Gray	3	4	3	4	0	3
9-Dec	1	6	6C	2	0.4	0.3	Higgins	2	2	1	2	0	2
9-Dec	1	6	6C	2	0.4	0.3	Inglis	3	2	4	4	0	3
9-Dec	1	6	6C	2	0.4	0.3	Runyon	3	4	3	3	0	3
4-Dec	2	0	1A	0	0	0	Capps	2	2	2	1	2	2
4-Dec	2	0	1A	0	0	0	Gray	3	3	3	3	0	3
4-Dec	2	0	1A	0	0	0	Higgins	3	2	2	2	0	2
4-Dec	2	0	1A	0	0	0	Inglis	3	2	3	2	0	3

4-Dec	2	0	1A	0	0	0	Mason	3	2	2	2	0	2
4-Dec	2	0	1A	0	0	0	Runyon	2	2	2	2	0	2
4-Dec	2	0	1B	0	0	0	Capps	2	2	2	1	2	2
4-Dec	2	0	1B	0	0	0	Gray	3	3	3	3	0	3
4-Dec	2	0	1B	0	0	0	Higgins	3	2	2	2	0	3
4-Dec	2	0	1B	0	0	0	Inglis	3	2	3	2	0	3
4-Dec	2	0	1B	0	0	0	Mason	3	2	3	3	0	2
4-Dec	2	0	1B	0	0	0	Runyon	2	2	3	2	0	2
4-Dec	2	0	1C	0	0	0	Capps	2	2	3	2	1	2
4-Dec	2	0	1C	0	0	0	Gray	3	2	3	3	0	3
4-Dec	2	0	1C	0	0	0	Higgins	2	2	2	2	1	2
4-Dec	2	0	1C	0	0	0	Inglis	2	2	2	2	0	2
4-Dec	2	0	1C	0	0	0	Mason	3	2	3	3	0	2
4-Dec	2	0	1C	0	0	0	Runyon	2	2	2	2	0	2
4-Dec	2	0	2A	0	0.4	0.3	Capps	2	3	2	1	2	2
4-Dec	2	0	2A	0	0.4	0.3	Gray	3	4	3	3	0	3
4-Dec	2	0	2A	0	0.4	0.3	Higgins	3	2	2	2	0	2
4-Dec	2	0	2A	0	0.4	0.3	Inglis	3	4	3	2	0	3
4-Dec	2	0	2A	0	0.4	0.3	Mason	3	3	3	2	0	2
4-Dec	2	0	2A	0	0.4	0.3	Runyon	2	3	2	2	1	2
4-Dec	2	0	2B	0	0.4	0.3	Capps	3	3	3	2	1	2
4-Dec	2	0	2B	0	0.4	0.3	Gray	3	4	3	3	0	3
4-Dec	2	0	2B	0	0.4	0.3	Higgins	3	2	2	2	1	2
4-Dec	2	0	2B	0	0.4	0.3	Inglis	3	4	3	2	0	3
4-Dec	2	0	2B	0	0.4	0.3	Mason	3	3	3	3	0	2
4-Dec	2	0	2B	0	0.4	0.3	Runyon	3	3	3	2	0	2
4-Dec	2	0	2C	0	0.4	0.3	Capps	2	3	2	2	1	1
4-Dec	2	0	2C	0	0.4	0.3	Gray	2	2	2	3	1	2
4-Dec	2	0	2C	0	0.4	0.3	Higgins	3	3	2	2	1	3
4-Dec	2	0	2C	0	0.4	0.3	Inglis	2	2	2	0	0	2
4-Dec	2	0	2C	0	0.4	0.3	Mason	3	3	3	3	0	2
4-Dec	2	0	2C	0	0.4	0.3	Runyon	2	2	3	2	0	0
4-Dec	2	0	3A	0.25	0	0	Capps	3	2	3	2	1	2
4-Dec	2	0	3A	0.25	0	0	Gray	3	3	3	3	0	3
4-Dec	2	0	3A	0.25	0	0	Higgins	3	2	2	2	0	2
4-Dec	2	0	3A	0.25	0	0	Inglis	2	2	2	2	0	3
4-Dec	2	0	3A	0.25	0	0	Mason	2	2	3	3	0	2
4-Dec	2	0	3A	0.25	0	0	Runyon	3	2	2	3	0	2
4-Dec	2	0	3B	0.25	0	0	Capps	3	2	2	2	0	2
4-Dec	2	0	3B	0.25	0	0	Gray	3	3	4	4	0	3
4-Dec	2	0	3B	0.25	0	0	Higgins	2	2	2	2	0	2
4-Dec	2	0	3B	0.25	0	0	Inglis	3	2	3	4	0	3
4-Dec	2	0	3B	0.25	0	0	Mason	3	2	3	3	0	2
4-Dec	2	0	3B	0.25	0	0	Runyon	2	2	3	2	0	3
4-Dec	2	0	3C	0.25	0	0	Capps	2	2	3	2	1	2
4-Dec	2	0	3C	0.25	0	0	Gray	3	3	3	3	0	3
4-Dec	2	0	3C	0.25	0	0	Higgins	3	3	2	2	0	3

4-Dec	2	0	3C	0.25	0	0	Inglis	3	2	3	3	0	3
4-Dec	2	0	3C	0.25	0	0	Mason	3	2	3	3	0	2
4-Dec	2	0	3C	0.25	0	0	Runyon	3	2	3	3	0	2
4-Dec	2	0	4A	2	0	0	Capps	3	2	3	2	1	2
4-Dec	2	0	4A	2	0	0	Gray	3	3	4	3	0	3
4-Dec	2	0	4A	2	0	0	Higgins	2	2	2	2	0	1
4-Dec	2	0	4A	2	0	0	Inglis	3	2	2	3	0	2
4-Dec	2	0	4A	2	0	0	Mason	3	2	3	3	0	2
4-Dec	2	0	4A	2	0	0	Runyon	3	2	2	3	0	2
4-Dec	2	0	4B	2	0	0	Capps	3	2	3	2	0	2
4-Dec	2	0	4B	2	0	0	Gray	3	3	2	3	0	3
4-Dec	2	0	4B	2	0	0	Higgins	2	2	1	2	0	2
4-Dec	2	0	4B	2	0	0	Inglis	2	2	3	2	0	3
4-Dec	2	0	4B	2	0	0	Mason	3	2	3	3	0	2
4-Dec	2	0	4B	2	0	0	Runyon	3	1	3	3	0	3
4-Dec	2	0	4C	2	0	0	Capps	3	2	3	3	0	2
4-Dec	2	0	4C	2	0	0	Gray	3	3	3	4	0	3
4-Dec	2	0	4C	2	0	0	Higgins	3	2	2	2	1	2
4-Dec	2	0	4C	2	0	0	Inglis	3	2	2	2	0	3
4-Dec	2	0	4C	2	0	0	Mason	3	2	3	3	0	2
4-Dec	2	0	4C	2	0	0	Runyon	3	2	2	3	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Capps	2	2	3	2	1	2
4-Dec	2	0	5A	0.25	0.4	0.3	Gray	3	3	3	3	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Higgins	3	2	2	2	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Inglis	3	2	4	2	0	3
4-Dec	2	0	5A	0.25	0.4	0.3	Mason	3	3	4	2	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Runyon	2	2	3	2	0	2
4-Dec	2	0	5B	0.25	0.4	0.3	Capps	2	2	2	2	2	2
4-Dec	2	0	5B	0.25	0.4	0.3	Gray	3	3	4	3	0	3
4-Dec	2	0	5B	0.25	0.4	0.3	Higgins	2	3	2	2	1	2
4-Dec	2	0	5B	0.25	0.4	0.3	Inglis	3	3	2	2	0	3
4-Dec	2	0	5B	0.25	0.4	0.3	Mason	2	3	3	3	0	2
4-Dec	2	0	5B	0.25	0.4	0.3	Runyon	2	2	3	2	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Capps	3	2	0	2	2	1
4-Dec	2	0	5C	0.25	0.4	0.3	Gray	3	4	3	3	0	3
4-Dec	2	0	5C	0.25	0.4	0.3	Higgins	2	2	2	2	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Inglis	2	2	2	2	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Mason	3	2	3	3	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Runyon	2	3	3	3	2	0
4-Dec	2	0	6A	2	0.4	0.3	Capps	3	2	3	2	1	2
4-Dec	2	0	6A	2	0.4	0.3	Gray	3	3	3	3	0	2
4-Dec	2	0	6A	2	0.4	0.3	Higgins	2	2	2	2	1	1
4-Dec	2	0	6A	2	0.4	0.3	Inglis	3	4	3	2	0	3
4-Dec	2	0	6A	2	0.4	0.3	Mason	3	3	3	2	0	2
4-Dec	2	0	6A	2	0.4	0.3	Runyon	2	2	3	2	0	2
4-Dec	2	0	6B	2	0.4	0.3	Capps	3	3	2	2	2	2
4-Dec	2	0	6B	2	0.4	0.3	Gray	3	2	3	0	3	3

4-Dec	2	0	6B	2	0.4	0.3	Higgins	3	2	2	2	0	2
4-Dec	2	0	6B	2	0.4	0.3	Inglis	3	4	3	2	0	3
4-Dec	2	0	6B	2	0.4	0.3	Mason	3	4	3	3	0	2
4-Dec	2	0	6B	2	0.4	0.3	Runyon	3	2	3	3	1	2
4-Dec	2	0	6C	2	0.4	0.3	Capps	2	3	2	2	2	2
4-Dec	2	0	6C	2	0.4	0.3	Gray	3	4	3	3	0	3
4-Dec	2	0	6C	2	0.4	0.3	Higgins	2	2	2	2	1	2
4-Dec	2	0	6C	2	0.4	0.3	Inglis	2	2	2	0	0	3
4-Dec	2	0	6C	2	0.4	0.3	Mason	3	3	3	0	2	
4-Dec	2	0	6C	2	0.4	0.3	Runyon	3	3	3	0	0	3
10-Dec	2	6	1A	0	0	0	Gray	3	3	4	3	0	2
10-Dec	2	6	1A	0	0	0	Higgins	3	2	2	3	0	3
10-Dec	2	6	1A	0	0	0	Inglis	2	2	2	3	0	3
10-Dec	2	6	1A	0	0	0	Mason	3	2	3	3	0	2
10-Dec	2	6	1A	0	0	0	Runyon	2	2	3	2	0	2
10-Dec	2	6	1B	0	0	0	Gray	3	3	3	3	0	3
10-Dec	2	6	1B	0	0	0	Higgins	2	2	2	2	0	2
10-Dec	2	6	1B	0	0	0	Inglis	3	2	3	3	0	2
10-Dec	2	6	1B	0	0	0	Mason	3	2	3	3	0	3
10-Dec	2	6	1B	0	0	0	Runyon	3	1	3	3	0	3
10-Dec	2	6	1C	0	0	0	Gray	3	3	4	3	0	3
10-Dec	2	6	1C	0	0	0	Higgins	3	2	2	2	1	2
10-Dec	2	6	1C	0	0	0	Inglis	3	2	3	2	0	2
10-Dec	2	6	1C	0	0	0	Mason	3	2	3	3	0	2
10-Dec	2	6	1C	0	0	0	Runyon	3	1	3	2	0	3
10-Dec	2	6	2A	0	0.4	0.3	Gray	3	4	3	4	0	2
10-Dec	2	6	2A	0	0.4	0.3	Higgins	2	2	2	2	0	2
10-Dec	2	6	2A	0	0.4	0.3	Inglis	2	2	2	3	0	3
10-Dec	2	6	2A	0	0.4	0.3	Mason	3	3	3	2	0	2
10-Dec	2	6	2A	0	0.4	0.3	Runyon	3	2	2	2	0	2
10-Dec	2	6	2B	0	0.4	0.3	Gray	3	5	3	3	0	3
10-Dec	2	6	2B	0	0.4	0.3	Higgins	2	2	2	2	1	2
10-Dec	2	6	2B	0	0.4	0.3	Inglis	3	3	3	3	0	3
10-Dec	2	6	2B	0	0.4	0.3	Mason	3	3	3	3	0	3
10-Dec	2	6	2B	0	0.4	0.3	Runyon	3	3	3	3	0	3
10-Dec	2	6	2C	0	0.4	0.3	Gray	3	5	3	2	0	3
10-Dec	2	6	2C	0	0.4	0.3	Higgins	2	2	1	2	1	1
10-Dec	2	6	2C	0	0.4	0.3	Inglis	3	2	3	3	0	3
10-Dec	2	6	2C	0	0.4	0.3	Mason	3	3	3	3	0	2
10-Dec	2	6	2C	0	0.4	0.3	Runyon	3	3	3	3	0	3
10-Dec	2	6	3A	0.25	0	0	Gray	3	3	4	3	0	2
10-Dec	2	6	3A	0.25	0	0	Higgins	3	2	2	2	0	2
10-Dec	2	6	3A	0.25	0	0	Inglis	3	2	3	3	0	3
10-Dec	2	6	3A	0.25	0	0	Mason	3	2	3	3	0	2
10-Dec	2	6	3A	0.25	0	0	Runyon	3	2	3	3	0	2
10-Dec	2	6	3B	0.25	0	0	Gray	3	3	4	3	0	3
10-Dec	2	6	3B	0.25	0	0	Higgins	2	2	2	2	0	2

10-Dec	2	6	3B	0.25	0	0	Inglis	3	2	3	3	0	3
10-Dec	2	6	3B	0.25	0	0	Mason	3	2	3	3	0	2
10-Dec	2	6	3B	0.25	0	0	Runyon	3	2	3	2	0	2
10-Dec	2	6	3C	0.25	0	0	Gray	3	3	3	3	0	3
10-Dec	2	6	3C	0.25	0	0	Higgins	2	2	2	2	1	2
10-Dec	2	6	3C	0.25	0	0	Inglis	3	2	3	3	0	3
10-Dec	2	6	3C	0.25	0	0	Mason	3	2	3	3	0	2
10-Dec	2	6	3C	0.25	0	0	Runyon	3	2	3	3	0	3
10-Dec	2	6	4A	2	0	0	Gray	3	3	4	4	0	3
10-Dec	2	6	4A	2	0	0	Higgins	2	2	2	2	0	2
10-Dec	2	6	4A	2	0	0	Inglis	3	2	3	3	0	3
10-Dec	2	6	4A	2	0	0	Mason	3	2	3	3	0	2
10-Dec	2	6	4A	2	0	0	Runyon	3	2	3	4	0	3
10-Dec	2	6	4B	2	0	0	Gray	3	3	4	4	0	2
10-Dec	2	6	4B	2	0	0	Higgins	2	2	2	2	0	2
10-Dec	2	6	4B	2	0	0	Inglis	3	2	3	3	0	3
10-Dec	2	6	4B	2	0	0	Mason	3	2	3	3	0	2
10-Dec	2	6	4B	2	0	0	Runyon	3	2	3	4	0	3
10-Dec	2	6	4C	2	0	0	Gray	3	3	4	4	0	3
10-Dec	2	6	4C	2	0	0	Higgins	2	2	1	1	1	1
10-Dec	2	6	4C	2	0	0	Inglis	3	2	3	3	0	3
10-Dec	2	6	4C	2	0	0	Mason	3	2	3	3	0	3
10-Dec	2	6	4C	2	0	0	Runyon	3	2	3	4	0	3
10-Dec	2	6	5A	0.25	0.4	0.3	Gray	3	4	3	3	0	2
10-Dec	2	6	5A	0.25	0.4	0.3	Higgins	3	2	2	2	0	2
10-Dec	2	6	5A	0.25	0.4	0.3	Inglis	3	2	3	3	0	3
10-Dec	2	6	5A	0.25	0.4	0.3	Mason	3	3	3	2	0	2
10-Dec	2	6	5A	0.25	0.4	0.3	Runyon	2	3	2	2	1	1
10-Dec	2	6	5B	0.25	0.4	0.3	Gray	3	4	3	3	0	2
10-Dec	2	6	5B	0.25	0.4	0.3	Higgins	2	2	2	2	1	2
10-Dec	2	6	5B	0.25	0.4	0.3	Inglis	3	2	3	3	0	3
10-Dec	2	6	5B	0.25	0.4	0.3	Mason	3	3	3	2	0	2
10-Dec	2	6	5B	0.25	0.4	0.3	Runyon	3	2	3	4	0	3
10-Dec	2	6	5B	0.25	0.4	0.3	Gray	3	4	3	3	0	3
10-Dec	2	6	5C	0.25	0.4	0.3	Higgins	3	2	2	2	1	2
10-Dec	2	6	5C	0.25	0.4	0.3	Inglis	3	2	3	3	0	3
10-Dec	2	6	5C	0.25	0.4	0.3	Mason	3	3	3	2	0	2
10-Dec	2	6	5C	0.25	0.4	0.3	Runyon	3	2	3	2	0	3
10-Dec	2	6	6A	2	0.4	0.3	Gray	3	4	3	3	0	2
10-Dec	2	6	6A	2	0.4	0.3	Higgins	2	2	2	2	0	2
10-Dec	2	6	6A	2	0.4	0.3	Inglis	2	2	3	2	0	2
10-Dec	2	6	6A	2	0.4	0.3	Mason	3	3	3	2	0	2
10-Dec	2	6	6A	2	0.4	0.3	Runyon	3	2	2	3	0	2
10-Dec	2	6	6B	2	0.4	0.3	Gray	3	5	3	3	0	3
10-Dec	2	6	6B	2	0.4	0.3	Higgins	2	2	2	2	1	2
10-Dec	2	6	6B	2	0.4	0.3	Inglis	3	2	3	3	0	3
10-Dec	2	6	6B	2	0.4	0.3	Mason	3	3	3	3	0	3

10-Dec	2	6	6B	2	0.4	0.3	Runyon	3	3	3	3	0	3
10-Dec	2	6	6C	2	0.4	0.3	Gray	3	3	3	2	0	3
10-Dec	2	6	6C	2	0.4	0.3	Higgins	3	2	2	2	1	2
10-Dec	2	6	6C	2	0.4	0.3	Inglis	3	2	3	3	0	3
10-Dec	2	6	6C	2	0.4	0.3	Mason	3	3	3	3	0	3
10-Dec	2	6	6C	2	0.4	0.3	Runyon	3	2	3	3	0	3
5-Dec	3	0	1A	0	0	0	Capps	2	2	2	2	2	2
5-Dec	3	0	1A	0	0	0	Higgins	2	2	2	0	0	2
5-Dec	3	0	1A	0	0	0	Inglis	3	2	3	2	0	3
5-Dec	3	0	1A	0	0	0	Mason	3	2	3	2	0	3
5-Dec	3	0	1B	0	0	0	Capps	3	2	2	2	1	3
5-Dec	3	0	1B	0	0	0	Higgins	3	2	2	3	0	3
5-Dec	3	0	1B	0	0	0	Inglis	3	2	3	2	0	3
5-Dec	3	0	1B	0	0	0	Mason	3	3	3	3	0	3
5-Dec	3	0	1C	0	0	0	Capps	3	2	2	2	0	2
5-Dec	3	0	1C	0	0	0	Higgins	3	2	2	2	0	2
5-Dec	3	0	1C	0	0	0	Inglis	3	3	3	3	0	4
5-Dec	3	0	1C	0	0	0	Mason	3	2	3	3	0	3
5-Dec	3	0	2A	0	0.4	0.3	Capps	2	3	3	2	2	2
5-Dec	3	0	2A	0	0.4	0.3	Higgins	2	2	2	2	1	1
5-Dec	3	0	2A	0	0.4	0.3	Inglis	3	3	4	2	0	3
5-Dec	3	0	2A	0	0.4	0.3	Mason	3	3	3	2	0	3
5-Dec	3	0	2B	0	0.4	0.3	Capps	3	3	3	2	2	2
5-Dec	3	0	2B	0	0.4	0.3	Higgins	2	2	2	2	1	1
5-Dec	3	0	2B	0	0.4	0.3	Inglis	3	3	3	2	0	3
5-Dec	3	0	2B	0	0.4	0.3	Mason	3	3	3	3	0	3
5-Dec	3	0	2C	0	0.4	0.3	Capps	4	3	3	2	2	2
5-Dec	3	0	2C	0	0.4	0.3	Higgins	2	2	2	2	0	2
5-Dec	3	0	2C	0	0.4	0.3	Inglis	3	3	3	2	0	3
5-Dec	3	0	2C	0	0.4	0.3	Mason	3	4	3	3	0	3
5-Dec	3	0	3A	0.25	0	0	Capps	3	2	2	2	1	3
5-Dec	3	0	3A	0.25	0	0	Higgins	3	2	2	3	0	2
5-Dec	3	0	3A	0.25	0	0	Inglis	3	2	3	2	0	3
5-Dec	3	0	3A	0.25	0	0	Mason	3	2	3	3	0	2
5-Dec	3	0	3B	0.25	0	0	Capps	3	2	3	2	0	2
5-Dec	3	0	3B	0.25	0	0	Higgins	2	2	2	2	0	2
5-Dec	3	0	3B	0.25	0	0	Inglis	3	2	3	3	0	3
5-Dec	3	0	3B	0.25	0	0	Mason	3	2	3	3	0	3
5-Dec	3	0	3C	0.25	0	0	Capps	3	2	2	2	0	2
5-Dec	3	0	3C	0.25	0	0	Higgins	2	2	2	2	0	2
5-Dec	3	0	3C	0.25	0	0	Inglis	3	3	3	3	0	4
5-Dec	3	0	3C	0.25	0	0	Mason	3	2	3	3	0	3
5-Dec	3	0	4A	2	0	0	Capps	2	2	1	1	1	2
5-Dec	3	0	4A	2	0	0	Higgins	2	2	2	2	0	1
5-Dec	3	0	4A	2	0	0	Inglis	3	2	3	2	0	3
5-Dec	3	0	4A	2	0	0	Mason	3	2	3	2	0	2
5-Dec	3	0	4B	2	0	0	Capps	3	2	3	2	1	2

5-Dec	3	0	4B	2	0	0	Higgins	2	2	2	2	1	1
5-Dec	3	0	4B	2	0	0	Inglis	3	2	3	3	0	3
5-Dec	3	0	4B	2	0	0	Mason	3	2	3	3	0	3
5-Dec	3	0	4C	2	0	0	Capps	3	2	3	3	1	2
5-Dec	3	0	4C	2	0	0	Higgins	2	2	1	2	0	2
5-Dec	3	0	4C	2	0	0	Inglis	3	2	3	3	0	3
5-Dec	3	0	4C	2	0	0	Mason	3	2	3	3	0	3
5-Dec	3	0	5A	0.25	0.4	0.3	Capps	2	3	3	2	1	2
5-Dec	3	0	5A	0.25	0.4	0.3	Higgins	2	2	2	2	0	1
5-Dec	3	0	5A	0.25	0.4	0.3	Inglis	3	3	4	2	0	3
5-Dec	3	0	5A	0.25	0.4	0.3	Mason	3	3	3	3	0	3
5-Dec	3	0	5B	0.25	0.4	0.3	Capps	2	3	1	2	1	2
5-Dec	3	0	5B	0.25	0.4	0.3	Higgins	3	2	2	3	0	2
5-Dec	3	0	5B	0.25	0.4	0.3	Inglis	3	2	3	3	0	3
5-Dec	3	0	5B	0.25	0.4	0.3	Mason	3	3	3	3	0	3
5-Dec	3	0	5C	0.25	0.4	0.3	Capps	3	3	2	2	1	2
5-Dec	3	0	5C	0.25	0.4	0.3	Higgins	2	2	1	2	1	2
5-Dec	3	0	5C	0.25	0.4	0.3	Inglis	3	3	3	2	0	3
5-Dec	3	0	5C	0.25	0.4	0.3	Mason	3	4	3	3	0	3
5-Dec	3	0	6A	2	0.4	0.3	Capps	2	3	2	2	1	2
5-Dec	3	0	6A	2	0.4	0.3	Higgins	3	2	2	2	0	2
5-Dec	3	0	6A	2	0.4	0.3	Inglis	3	3	4	2	0	3
5-Dec	3	0	6A	2	0.4	0.3	Mason	3	4	3	2	0	3
5-Dec	3	0	6B	2	0.4	0.3	Capps	3	3	2	2	1	3
5-Dec	3	0	6B	2	0.4	0.3	Higgins	3	2	2	2	0	3
5-Dec	3	0	6B	2	0.4	0.3	Inglis	2	3	2	2	0	2
5-Dec	3	0	6B	2	0.4	0.3	Mason	3	3	3	3	0	3
5-Dec	3	0	6C	2	0.4	0.3	Capps	3	3	3	2	2	2
5-Dec	3	0	6C	2	0.4	0.3	Higgins	2	2	2	2	0	2
5-Dec	3	0	6C	2	0.4	0.3	Inglis	3	2	3	3	0	3
5-Dec	3	0	6C	2	0.4	0.3	Mason	3	3	3	3	0	3
11-Dec	3	6	1A	0	0	0	Gray	3	3	3	3	0	2
11-Dec	3	6	1A	0	0	0	Higgins	3	2	2	3	0	2
11-Dec	3	6	1A	0	0	0	Inglis	3	2	3	2	0	3
11-Dec	3	6	1A	0	0	0	Mason	3	2	3	3	0	2
11-Dec	3	6	1A	0	0	0	Runyon	3	2	2	2	0	2
11-Dec	3	6	1B	0	0	0	Gray	3	3	4	3	0	3
11-Dec	3	6	1B	0	0	0	Higgins	2	2	2	2	0	2
11-Dec	3	6	1B	0	0	0	Inglis	2	2	2	2	0	3
11-Dec	3	6	1B	0	0	0	Mason	3	2	3	3	0	2
11-Dec	3	6	1B	0	0	0	Runyon	2	2	3	2	0	2
11-Dec	3	6	1C	0	0	0	Gray	3	4	4	3	0	3
11-Dec	3	6	1C	0	0	0	Higgins	2	2	2	2	1	2
11-Dec	3	6	1C	0	0	0	Inglis	3	2	3	3	0	3
11-Dec	3	6	1C	0	0	0	Mason	3	2	3	3	0	2
11-Dec	3	6	1C	0	0	0	Runyon	3	2	3	2	0	3
11-Dec	3	6	2A	0	0.4	0.3	Gray	3	4	3	3	0	3

11-Dec	3	6	2A	0	0.4	0.3	Higgins	3	2	2	2	1	2
11-Dec	3	6	2A	0	0.4	0.3	Inglis	3	2	3	2	0	1
11-Dec	3	6	2A	0	0.4	0.3	Mason	3	3	3	3	0	2
11-Dec	3	6	2A	0	0.4	0.3	Runyon	3	3	3	2	0	2
11-Dec	3	6	2B	0	0.4	0.3	Gray	3	5	4	3	0	3
11-Dec	3	6	2B	0	0.4	0.3	Higgins	3	3	2	2	1	2
11-Dec	3	6	2B	0	0.4	0.3	Inglis	3	2	3	2	0	3
11-Dec	3	6	2B	0	0.4	0.3	Mason	4	4	4	3	0	3
11-Dec	3	6	2B	0	0.4	0.3	Runyon	3	2	3	2	1	3
11-Dec	3	6	2C	0	0.4	0.3	Gray	3	5	3	2	0	2
11-Dec	3	6	2C	0	0.4	0.3	Higgins	2	2	2	2	0	2
11-Dec	3	6	2C	0	0.4	0.3	Inglis	3	2	3	3	0	3
11-Dec	3	6	2C	0	0.4	0.3	Mason	4	4	3	3	0	3
11-Dec	3	6	2C	0	0.4	0.3	Runyon	2	4	2	0	2	1
11-Dec	3	6	3A	0.25	0	0	Gray	3	4	4	3	0	2
11-Dec	3	6	3A	0.25	0	0	Higgins	3	3	2	3	0	2
11-Dec	3	6	3A	0.25	0	0	Inglis	3	2	3	2	0	3
11-Dec	3	6	3A	0.25	0	0	Mason	3	2	3	2	0	2
11-Dec	3	6	3A	0.25	0	0	Runyon	3	2	3	2	0	2
11-Dec	3	6	3B	0.25	0	0	Gray	3	4	3	3	0	3
11-Dec	3	6	3B	0.25	0	0	Higgins	3	2	2	3	0	2
11-Dec	3	6	3B	0.25	0	0	Inglis	3	2	3	2	0	3
11-Dec	3	6	3B	0.25	0	0	Mason	3	2	3	3	0	2
11-Dec	3	6	3B	0.25	0	0	Runyon	2	2	2	3	0	2
11-Dec	3	6	3C	0.25	0	0	Gray	3	3	4	3	0	3
11-Dec	3	6	3C	0.25	0	0	Higgins	2	3	2	2	0	2
11-Dec	3	6	3C	0.25	0	0	Inglis	3	2	3	3	0	3
11-Dec	3	6	3C	0.25	0	0	Mason	4	2	3	3	0	3
11-Dec	3	6	3C	0.25	0	0	Runyon	3	2	2	3	0	3
11-Dec	3	6	4A	2	0	0	Gray	2	3	2	2	1	1
11-Dec	3	6	4A	2	0	0	Higgins	3	3	2	2	0	2
11-Dec	3	6	4A	2	0	0	Inglis	2	2	2	2	0	2
11-Dec	3	6	4A	2	0	0	Mason	3	2	3	4	0	2
11-Dec	3	6	4A	2	0	0	Runyon	3	2	2	4	0	3
11-Dec	3	6	4B	2	0	0	Gray	3	3	3	4	0	3
11-Dec	3	6	4B	2	0	0	Higgins	2	2	2	2	0	2
11-Dec	3	6	4B	2	0	0	Inglis	3	2	2	3	0	3
11-Dec	3	6	4B	2	0	0	Mason	4	2	4	4	0	3
11-Dec	3	6	4B	2	0	0	Runyon	3	1	2	4	0	3
11-Dec	3	6	4C	2	0	0	Gray	3	4	3	4	0	3
11-Dec	3	6	4C	2	0	0	Higgins	2	2	2	2	0	2
11-Dec	3	6	4C	2	0	0	Inglis	3	2	3	3	0	3
11-Dec	3	6	4C	2	0	0	Mason	3	2	3	4	0	3
11-Dec	3	6	4C	2	0	0	Runyon	3	2	2	4	0	3
11-Dec	3	6	5A	0.25	0.4	0.3	Gray	3	3	3	4	0	2
11-Dec	3	6	5A	0.25	0.4	0.3	Higgins	3	2	2	2	1	2
11-Dec	3	6	5A	0.25	0.4	0.3	Inglis	3	2	3	2	0	3

11-Dec	3	6	5A	0.25	0.4	0.3	Mason	3	3	3	2	0	2
11-Dec	3	6	5A	0.25	0.4	0.3	Runyon	2	3	2	2	1	2
11-Dec	3	6	5B	0.25	0.4	0.3	Gray	3	5	3	3	0	3
11-Dec	3	6	5B	0.25	0.4	0.3	Higgins	2	2	2	2	1	2
11-Dec	3	6	5B	0.25	0.4	0.3	Inglis	3	2	3	2	0	3
11-Dec	3	6	5B	0.25	0.4	0.3	Mason	3	3	3	3	0	2
11-Dec	3	6	5B	0.25	0.4	0.3	Runyon	2	3	3	2	0	2
11-Dec	3	6	5C	0.25	0.4	0.3	Gray	3	5	3	3	0	3
11-Dec	3	6	5C	0.25	0.4	0.3	Higgins	3	2	2	2	1	2
11-Dec	3	6	5C	0.25	0.4	0.3	Inglis	3	2	3	3	0	3
11-Dec	3	6	5C	0.25	0.4	0.3	Mason	3	4	3	3	0	3
11-Dec	3	6	5C	0.25	0.4	0.3	Runyon	2	3	2	2	0	2
11-Dec	3	6	6A	2	0.4	0.3	Gray	3	5	3	3	0	3
11-Dec	3	6	6A	2	0.4	0.3	Higgins	3	2	2	3	1	2
11-Dec	3	6	6A	2	0.4	0.3	Inglis	3	2	3	2	0	3
11-Dec	3	6	6A	2	0.4	0.3	Mason	3	3	3	3	0	2
11-Dec	3	6	6A	2	0.4	0.3	Runyon	2	3	2	3	0	2
11-Dec	3	6	6B	2	0.4	0.3	Gray	3	4	3	3	0	2
11-Dec	3	6	6B	2	0.4	0.3	Higgins	2	2	2	2	0	2
11-Dec	3	6	6B	2	0.4	0.3	Inglis	3	2	3	3	0	3
11-Dec	3	6	6B	2	0.4	0.3	Mason	3	3	3	3	0	2
11-Dec	3	6	6B	2	0.4	0.3	Runyon	2	2	2	3	0	2
11-Dec	3	6	6C	2	0.4	0.3	Gray	3	4	3	4	0	3
11-Dec	3	6	6C	2	0.4	0.3	Higgins	2	2	2	2	0	2
11-Dec	3	6	6C	2	0.4	0.3	Inglis	3	2	3	3	0	3
11-Dec	3	6	6C	2	0.4	0.3	Mason	3	3	3	3	0	2
11-Dec	3	6	6C	2	0.4	0.3	Runyon	3	2	3	3	0	2

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	Panelist	Fat	Bit	Browned	Sour (A)	Sweet (A)	Lip	Burn
3-Dec	1	0	1A	0	0	0	Capps	2	1	1	2	1	2	
3-Dec	1	0	1A	0	0	0	Gray	2	2	0	2	0	1	
3-Dec	1	0	1A	0	0	0	Higgins	2	1	0	1	1	2	
3-Dec	1	0	1A	0	0	0	Inglis	2	1	0	2	0	2	
3-Dec	1	0	1A	0	0	0	Mason	1	1	1	0	0	0	
3-Dec	1	0	1A	0	0	0	Runyon	1	3	0	1	0	2	
3-Dec	1	0	1B	0	0	0	Capps	2	2	0	2	0	3	
3-Dec	1	0	1B	0	0	0	Gray	2	3	0	3	0	0	
3-Dec	1	0	1B	0	0	0	Higgins	2	2	0	1	0	3	
3-Dec	1	0	1B	0	0	0	Inglis	1	1	0	1	0	2	
3-Dec	1	0	1B	0	0	0	Mason	1	2	0	1	0	3	
3-Dec	1	0	1B	0	0	0	Runyon	1	2	0	2	0	0	
3-Dec	1	0	1C	0	0	0	Capps	2	2	1	2	1	3	
3-Dec	1	0	1C	0	0	0	Gray	3	2	0	3	0	2	
3-Dec	1	0	1C	0	0	0	Higgins	3	2	0	2	0	3	
3-Dec	1	0	1C	0	0	0	Inglis	2	3	1	3	0	2	
3-Dec	1	0	1C	0	0	0	Mason	1	2	0	1	0	3	
3-Dec	1	0	1C	0	0	0	Runyon	2	2	2	1	0	0	
3-Dec	1	0	2A	0	0.4	0.3	Capps	2	1	1	2	0	1	
3-Dec	1	0	2A	0	0.4	0.3	Gray	2	2	1	2	0	0	
3-Dec	1	0	2A	0	0.4	0.3	Higgins	2	1	0	1	0	0	
3-Dec	1	0	2A	0	0.4	0.3	Inglis	2	0	0	0	0	0	
3-Dec	1	0	2A	0	0.4	0.3	Mason	0	1	1	3	0	0	
3-Dec	1	0	2A	0	0.4	0.3	Runyon	1	2	0	1	0	0	
3-Dec	1	0	2B	0	0.4	0.3	Capps	2	1	0	2	1	3	
3-Dec	1	0	2B	0	0.4	0.3	Gray	2	2	0	2	0	1	
3-Dec	1	0	2B	0	0.4	0.3	Higgins	2	2	1	1	0	2	
3-Dec	1	0	2B	0	0.4	0.3	Inglis	2	2	1	2	0	2	
3-Dec	1	0	2B	0	0.4	0.3	Mason	1	2	1	1	0	2	
3-Dec	1	0	2B	0	0.4	0.3	Runyon	1	2	0	2	0	1	
3-Dec	1	0	2C	0	0.4	0.3	Capps	2	2	0	2	1	3	
3-Dec	1	0	2C	0	0.4	0.3	Gray	2	2	0	3	0	2	
3-Dec	1	0	2C	0	0.4	0.3	Higgins	3	2	0	1	1	3	
3-Dec	1	0	2C	0	0.4	0.3	Inglis	2	3	1	2	0	3	
3-Dec	1	0	2C	0	0.4	0.3	Mason	1	2	0	2	0	3	
3-Dec	1	0	2C	0	0.4	0.3	Runyon	2	2	0	2	0	0	
3-Dec	1	0	3A	0.25	0	0	Capps	1	2	1	1	1	1	
3-Dec	1	0	3A	0.25	0	0	Gray	2	2	1	2	0	1	
3-Dec	1	0	3A	0.25	0	0	Higgins	2	1	0	1	0	1	
3-Dec	1	0	3A	0.25	0	0	Inglis	0	0	0	0	0	2	
3-Dec	1	0	3A	0.25	0	0	Mason	1	2	1	0	0	1	
3-Dec	1	0	3A	0.25	0	0	Runyon	1	2	0	1	0	0	
3-Dec	1	0	3B	0.25	0	0	Capps	1	2	1	2	0	3	

3-Dec	1	0	3B	0.25	0	0	Gray	2	2	0	3	0	2
3-Dec	1	0	3B	0.25	0	0	Higgins	2	1	0	0	1	3
3-Dec	1	0	3B	0.25	0	0	Inglis	1	2	0	2	0	2
3-Dec	1	0	3B	0.25	0	0	Mason	1	2	0	0	0	2
3-Dec	1	0	3B	0.25	0	0	Runyon	0	2	0	1	0	2
3-Dec	1	0	3C	0.25	0	0	Capps	2	2	1	2	0	3
3-Dec	1	0	3C	0.25	0	0	Gray	3	3	0	3	0	2
3-Dec	1	0	3C	0.25	0	0	Higgins	3	2	1	2	0	3
3-Dec	1	0	3C	0.25	0	0	Inglis	2	3	2	2	0	3
3-Dec	1	0	3C	0.25	0	0	Mason	1	2	0	1	0	2
3-Dec	1	0	3C	0.25	0	0	Runyon	1	2	0	2	0	1
3-Dec	1	0	4A	2	0	0	Capps	1	1	1	2	1	2
3-Dec	1	0	4A	2	0	0	Gray	2	3	1	2	0	2
3-Dec	1	0	4A	2	0	0	Higgins	2	2	1	1	0	2
3-Dec	1	0	4A	2	0	0	Inglis	2	2	1	2	0	2
3-Dec	1	0	4A	2	0	0	Mason	1	1	1	0	0	1
3-Dec	1	0	4A	2	0	0	Runyon	1	3	0	1	0	2
3-Dec	1	0	4B	2	0	0	Capps	1	2	1	2	0	3
3-Dec	1	0	4B	2	0	0	Gray	2	2	0	2	0	2
3-Dec	1	0	4B	2	0	0	Higgins	2	2	1	1	0	2
3-Dec	1	0	4B	2	0	0	Inglis	1	2	0	2	0	2
3-Dec	1	0	4B	2	0	0	Mason	1	2	1	0	0	2
3-Dec	1	0	4B	2	0	0	Runyon	2	2	0	1	0	1
3-Dec	1	0	4C	2	0	0	Capps	1	2	0	2	0	2
3-Dec	1	0	4C	2	0	0	Gray	2	2	0	2	0	2
3-Dec	1	0	4C	2	0	0	Higgins	2	2	0	1	0	2
3-Dec	1	0	4C	2	0	0	Inglis	2	3	1	2	0	2
3-Dec	1	0	4C	2	0	0	Mason	1	2	0	1	0	1
3-Dec	1	0	4C	2	0	0	Runyon	0	2	0	1	0	1
3-Dec	1	0	5A	0.25	0.4	0.3	Capps	2	1	0	2	1	2
3-Dec	1	0	5A	0.25	0.4	0.3	Gray	2	2	0	2	0	2
3-Dec	1	0	5A	0.25	0.4	0.3	Higgins	2	2	0	2	0	3
3-Dec	1	0	5A	0.25	0.4	0.3	Inglis	2	1	0	0	0	2
3-Dec	1	0	5A	0.25	0.4	0.3	Mason	1	1	0	2	0	1
3-Dec	1	0	5A	0.25	0.4	0.3	Runyon	1	2	0	3	1	2
3-Dec	1	0	5B	0.25	0.4	0.3	Capps	2	1	0	1	1	3
3-Dec	1	0	5B	0.25	0.4	0.3	Gray	2	2	0	3	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Higgins	3	2	0	1	1	3
3-Dec	1	0	5B	0.25	0.4	0.3	Inglis	2	2	0	2	0	2
3-Dec	1	0	5B	0.25	0.4	0.3	Mason	1	2	0	2	0	3
3-Dec	1	0	5B	0.25	0.4	0.3	Runyon	0	2	0	2	0	1
3-Dec	1	0	5C	0.25	0.4	0.3	Capps	2	2	0	2	0	3
3-Dec	1	0	5C	0.25	0.4	0.3	Gray	2	2	0	3	1	2
3-Dec	1	0	5C	0.25	0.4	0.3	Higgins	3	2	0	1	1	3
3-Dec	1	0	5C	0.25	0.4	0.3	Inglis	2	2	0	2	0	3
3-Dec	1	0	5C	0.25	0.4	0.3	Mason	1	2	0	3	0	3

3-Dec	1	0	5C	0.25	0.4	0.3	Runyon	0	2	0	2	0	2
3-Dec	1	0	6A	2	0.4	0.3	Capps	2	2	2	1	1	2
3-Dec	1	0	6A	2	0.4	0.3	Gray	2	2	1	2	0	2
3-Dec	1	0	6A	2	0.4	0.3	Higgins	2	2	2	1	0	2
3-Dec	1	0	6A	2	0.4	0.3	Inglis	2	1	1	2	0	2
3-Dec	1	0	6A	2	0.4	0.3	Mason	1	3	2	2	0	2
3-Dec	1	0	6A	2	0.4	0.3	Runyon	2	2	1	2	0	2
3-Dec	1	0	6B	2	0.4	0.3	Capps	1	1	0	2	1	3
3-Dec	1	0	6B	2	0.4	0.3	Gray	2	2	0	2	1	1
3-Dec	1	0	6B	2	0.4	0.3	Higgins	2	2	0	1	1	2
3-Dec	1	0	6B	2	0.4	0.3	Inglis	2	2	0	2	0	2
3-Dec	1	0	6B	2	0.4	0.3	Mason	1	1	0	2	0	2
3-Dec	1	0	6B	2	0.4	0.3	Runyon	1	2	0	2	0	2
3-Dec	1	0	6C	2	0.4	0.3	Capps	2	2	0	2	0	3
3-Dec	1	0	6C	2	0.4	0.3	Gray	2	3	0	3	0	2
3-Dec	1	0	6C	2	0.4	0.3	Higgins	3	2	0	1	0	3
3-Dec	1	0	6C	2	0.4	0.3	Inglis	2	2	2	2	0	3
3-Dec	1	0	6C	2	0.4	0.3	Mason	1	2	2	2	0	3
3-Dec	1	0	6C	2	0.4	0.3	Runyon	1	2	0	2	0	1
9-Dec	1	6	1A	0	0	0	Gray	2	2	1	3	0	2
9-Dec	1	6	1A	0	0	0	Higgins	2	2	0	1	1	0
9-Dec	1	6	1A	0	0	0	Inglis	2	2	2	2	0	2
9-Dec	1	6	1A	0	0	0	Runyon	1	2	0	1	0	1
9-Dec	1	6	1B	0	0	0	Gray	1	2	0	3	0	2
9-Dec	1	6	1B	0	0	0	Higgins	3	2	1	2	0	0
9-Dec	1	6	1B	0	0	0	Inglis	1	2	1	3	0	2
9-Dec	1	6	1B	0	0	0	Runyon	1	2	0	2	0	2
9-Dec	1	6	1C	0	0	0	Gray	2	3	0	3	0	2
9-Dec	1	6	1C	0	0	0	Higgins	3	2	0	1	1	1
9-Dec	1	6	1C	0	0	0	Inglis	1	2	0	2	0	3
9-Dec	1	6	1C	0	0	0	Runyon	1	2	0	2	0	2
9-Dec	1	6	2A	0	0.4	0.3	Gray	2	2	1	3	0	2
9-Dec	1	6	2A	0	0.4	0.3	Higgins	3	2	0	1	0	0
9-Dec	1	6	2A	0	0.4	0.3	Inglis	1	2	2	2	0	0
9-Dec	1	6	2A	0	0.4	0.3	Runyon	0	3	0	1	0	1
9-Dec	1	6	2B	0	0.4	0.3	Gray	2	2	1	3	0	3
9-Dec	1	6	2B	0	0.4	0.3	Higgins	3	2	1	1	1	2
9-Dec	1	6	2B	0	0.4	0.3	Inglis	1	2	1	2	0	2
9-Dec	1	6	2B	0	0.4	0.3	Runyon	1	3	2	3	0	1
9-Dec	1	6	2C	0	0.4	0.3	Gray	2	3	1	3	0	2
9-Dec	1	6	2C	0	0.4	0.3	Higgins	3	1	0	1	1	1
9-Dec	1	6	2C	0	0.4	0.3	Inglis	1	2	1	2	0	2
9-Dec	1	6	2C	0	0.4	0.3	Runyon	1	2	0	2	0	1
9-Dec	1	6	3A	0.25	0	0	Gray	2	2	1	3	0	1
9-Dec	1	6	3A	0.25	0	0	Higgins	2	2	0	1	0	0
9-Dec	1	6	3A	0.25	0	0	Inglis	1	2	2	2	0	0
9-Dec	1	6	3A	0.25	0	0	Runyon	1	2	0	1	0	0

9-Dec	1	6	3B	0.25	0	0	Gray	1	3	0	3	0	2
9-Dec	1	6	3B	0.25	0	0	Higgins	3	2	0	1	0	2
9-Dec	1	6	3B	0.25	0	0	Inglis	1	2	0	2	0	0
9-Dec	1	6	3B	0.25	0	0	Runyon	0	3	0	3	0	2
9-Dec	1	6	3C	0.25	0	0	Gray	2	3	0	3	0	2
9-Dec	1	6	3C	0.25	0	0	Higgins	3	2	1	1	0	2
9-Dec	1	6	3C	0.25	0	0	Inglis	1	3	1	2	0	3
9-Dec	1	6	3C	0.25	0	0	Runyon	1	2	0	2	0	1
9-Dec	1	6	4A	2	0	0	Gray	1	3	0	3	0	2
9-Dec	1	6	4A	2	0	0	Higgins	3	1	0	1	0	1
9-Dec	1	6	4A	2	0	0	Inglis	2	2	2	2	0	2
9-Dec	1	6	4A	2	0	0	Runyon	1	3	2	2	0	2
9-Dec	1	6	4B	2	0	0	Gray	1	3	1	3	0	3
9-Dec	1	6	4B	2	0	0	Higgins	2	2	1	1	0	2
9-Dec	1	6	4B	2	0	0	Inglis	1	2	1	2	0	2
9-Dec	1	6	4B	2	0	0	Runyon	1	3	0	3	0	2
9-Dec	1	6	4C	2	0	0	Gray	2	4	0	3	0	2
9-Dec	1	6	4C	2	0	0	Higgins	3	2	0	1	0	2
9-Dec	1	6	4C	2	0	0	Inglis	1	3	1	2	0	3
9-Dec	1	6	4C	2	0	0	Runyon	0	3	0	3	0	3
9-Dec	1	6	5A	0.25	0.4	0.3	Gray	2	2	0	2	0	2
9-Dec	1	6	5A	0.25	0.4	0.3	Higgins	2	2	0	1	0	1
9-Dec	1	6	5A	0.25	0.4	0.3	Inglis	2	2	2	2	0	2
9-Dec	1	6	5A	0.25	0.4	0.3	Runyon	1	2	0	2	0	1
9-Dec	1	6	5B	0.25	0.4	0.3	Gray	2	3	0	3	0	3
9-Dec	1	6	5B	0.25	0.4	0.3	Higgins	2	2	0	1	1	2
9-Dec	1	6	5B	0.25	0.4	0.3	Inglis	1	1	1	0	0	2
9-Dec	1	6	5B	0.25	0.4	0.3	Runyon	0	2	0	2	0	0
9-Dec	1	6	5C	0.25	0.4	0.3	Gray	2	2	1	3	0	2
9-Dec	1	6	5C	0.25	0.4	0.3	Higgins	3	2	1	1	1	3
9-Dec	1	6	5C	0.25	0.4	0.3	Inglis	1	3	1	3	0	3
9-Dec	1	6	5C	0.25	0.4	0.3	Runyon	0	3	2	3	0	2
9-Dec	1	6	6A	2	0.4	0.3	Gray	2	3	1	3	0	2
9-Dec	1	6	6A	2	0.4	0.3	Higgins	3	1	0	1	0	1
9-Dec	1	6	6A	2	0.4	0.3	Inglis	2	2	1	2	0	3
9-Dec	1	6	6A	2	0.4	0.3	Runyon	1	3	2	2	0	2
9-Dec	1	6	6B	2	0.4	0.3	Gray	1	3	1	3	0	2
9-Dec	1	6	6B	2	0.4	0.3	Higgins	3	1	1	1	1	1
9-Dec	1	6	6B	2	0.4	0.3	Inglis	1	1	1	1	0	0
9-Dec	1	6	6B	2	0.4	0.3	Runyon	1	2	0	2	0	3
9-Dec	1	6	6C	2	0.4	0.3	Gray	2	4	0	3	0	2
9-Dec	1	6	6C	2	0.4	0.3	Higgins	3	1	0	1	0	3
9-Dec	1	6	6C	2	0.4	0.3	Inglis	1	3	1	3	0	3
9-Dec	1	6	6C	2	0.4	0.3	Runyon	0	3	0	2	0	3
4-Dec	2	0	1A	0	0	0	Capps	1	0	1	1	1	2
4-Dec	2	0	1A	0	0	0	Gray	3	3	1	3	0	3
4-Dec	2	0	1A	0	0	0	Higgins	2	1	0	1	0	2

4-Dec	2	0	1A	0	0	0	Inglis	2	2	1	3	0	2
4-Dec	2	0	1A	0	0	0	Mason	2	1	1	2	1	1
4-Dec	2	0	1A	0	0	0	Runyon	1	2	0	1	0	0
4-Dec	2	0	1B	0	0	0	Capps	1	1	0	2	2	3
4-Dec	2	0	1B	0	0	0	Gray	2	2	1	3	0	2
4-Dec	2	0	1B	0	0	0	Higgins	2	2	0	1	0	3
4-Dec	2	0	1B	0	0	0	Inglis	2	2	0	2	0	2
4-Dec	2	0	1B	0	0	0	Mason	1	2	0	1	0	2
4-Dec	2	0	1B	0	0	0	Runyon	1	2	0	2	0	1
4-Dec	2	0	1C	0	0	0	Capps	2	2	1	2	1	4
4-Dec	2	0	1C	0	0	0	Gray	2	3	0	2	0	0
4-Dec	2	0	1C	0	0	0	Higgins	3	2	0	1	1	3
4-Dec	2	0	1C	0	0	0	Inglis	2	1	0	1	0	0
4-Dec	2	0	1C	0	0	0	Mason	2	2	1	1	0	3
4-Dec	2	0	1C	0	0	0	Runyon	0	2	0	1	0	1
4-Dec	2	0	2A	0	0.4	0.3	Capps	1	1	0	1	1	2
4-Dec	2	0	2A	0	0.4	0.3	Gray	3	3	0	3	0	3
4-Dec	2	0	2A	0	0.4	0.3	Higgins	2	1	0	1	0	2
4-Dec	2	0	2A	0	0.4	0.3	Inglis	2	2	0	2	0	2
4-Dec	2	0	2A	0	0.4	0.3	Mason	1	2	0	2	0	2
4-Dec	2	0	2A	0	0.4	0.3	Runyon	1	2	0	2	0	1
4-Dec	2	0	2B	0	0.4	0.3	Capps	2	3	0	2	0	3
4-Dec	2	0	2B	0	0.4	0.3	Gray	2	2	0	3	0	2
4-Dec	2	0	2B	0	0.4	0.3	Higgins	1	1	0	1	1	1
4-Dec	2	0	2B	0	0.4	0.3	Inglis	2	2	0	2	0	2
4-Dec	2	0	2B	0	0.4	0.3	Mason	1	1	0	2	0	2
4-Dec	2	0	2B	0	0.4	0.3	Runyon	1	2	0	2	0	2
4-Dec	2	0	2C	0	0.4	0.3	Capps	1	2	1	2	1	4
4-Dec	2	0	2C	0	0.4	0.3	Gray	1	3	1	2	1	1
4-Dec	2	0	2C	0	0.4	0.3	Higgins	2	1	0	1	0	2
4-Dec	2	0	2C	0	0.4	0.3	Inglis	2	1	1	1	0	2
4-Dec	2	0	2C	0	0.4	0.3	Mason	1	2	0	2	0	3
4-Dec	2	0	2C	0	0.4	0.3	Runyon	2	0	2	2	2	2
4-Dec	2	0	3A	0.25	0	0	Capps	1	2	1	2	1	2
4-Dec	2	0	3A	0.25	0	0	Gray	2	3	1	3	0	2
4-Dec	2	0	3A	0.25	0	0	Higgins	2	2	0	1	0	1
4-Dec	2	0	3A	0.25	0	0	Inglis	2	1	0	2	0	0
4-Dec	2	0	3A	0.25	0	0	Mason	1	1	1	2	0	2
4-Dec	2	0	3A	0.25	0	0	Runyon	1	2	2	1	0	0
4-Dec	2	0	3B	0.25	0	0	Capps	1	2	2	2	0	3
4-Dec	2	0	3B	0.25	0	0	Gray	2	3	2	3	0	0
4-Dec	2	0	3B	0.25	0	0	Higgins	2	2	0	1	0	2
4-Dec	2	0	3B	0.25	0	0	Inglis	2	3	2	2	0	2
4-Dec	2	0	3B	0.25	0	0	Mason	1	2	2	1	0	3
4-Dec	2	0	3B	0.25	0	0	Runyon	0	2	0	2	0	2
4-Dec	2	0	3C	0.25	0	0	Capps	2	2	2	3	1	4
4-Dec	2	0	3C	0.25	0	0	Gray	2	3	2	3	0	1

4-Dec	2	0	3C	0.25	0	0	Higgins	2	2	1	1	0	3
4-Dec	2	0	3C	0.25	0	0	Inglis	2	2	2	2	0	3
4-Dec	2	0	3C	0.25	0	0	Mason	1	2	2	1	0	3
4-Dec	2	0	3C	0.25	0	0	Runyon	0	3	0	1	0	2
4-Dec	2	0	4A	2	0	0	Capps	1	2	0	2	0	2
4-Dec	2	0	4A	2	0	0	Gray	2	3	2	3	0	2
4-Dec	2	0	4A	2	0	0	Higgins	2	1	0	1	0	2
4-Dec	2	0	4A	2	0	0	Inglis	1	0	0	0	0	0
4-Dec	2	0	4A	2	0	0	Mason	1	2	1	1	0	2
4-Dec	2	0	4A	2	0	0	Runyon	0	2	0	1	0	2
4-Dec	2	0	4B	2	0	0	Capps	1	2	0	3	0	3
4-Dec	2	0	4B	2	0	0	Gray	2	3	1	2	0	3
4-Dec	2	0	4B	2	0	0	Higgins	2	1	0	0	0	3
4-Dec	2	0	4B	2	0	0	Inglis	2	2	2	2	0	3
4-Dec	2	0	4B	2	0	0	Mason	1	2	0	1	0	2
4-Dec	2	0	4B	2	0	0	Runyon	0	3	0	2	0	3
4-Dec	2	0	4C	2	0	0	Capps	1	2	0	2	0	4
4-Dec	2	0	4C	2	0	0	Gray	2	4	0	3	0	3
4-Dec	2	0	4C	2	0	0	Higgins	2	2	0	1	1	2
4-Dec	2	0	4C	2	0	0	Inglis	2	1	1	1	0	3
4-Dec	2	0	4C	2	0	0	Mason	1	2	0	1	0	3
4-Dec	2	0	4C	2	0	0	Runyon	0	3	0	1	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Capps	1	2	0	2	1	2
4-Dec	2	0	5A	0.25	0.4	0.3	Gray	2	2	0	3	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Higgins	2	1	0	1	0	1
4-Dec	2	0	5A	0.25	0.4	0.3	Inglis	2	2	0	3	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Mason	1	1	0	2	0	2
4-Dec	2	0	5A	0.25	0.4	0.3	Runyon	0	2	0	2	0	2
4-Dec	2	0	5B	0.25	0.4	0.3	Capps	1	2	0	1	1	3
4-Dec	2	0	5B	0.25	0.4	0.3	Gray	2	2	0	3	0	2
4-Dec	2	0	5B	0.25	0.4	0.3	Higgins	2	1	0	1	1	1
4-Dec	2	0	5B	0.25	0.4	0.3	Inglis	2	1	0	0	0	2
4-Dec	2	0	5B	0.25	0.4	0.3	Mason	1	1	0	2	0	2
4-Dec	2	0	5B	0.25	0.4	0.3	Runyon	1	2	0	2	0	0
4-Dec	2	0	5C	0.25	0.4	0.3	Capps	0	2	0	2	0	4
4-Dec	2	0	5C	0.25	0.4	0.3	Gray	2	3	0	2	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Higgins	2	2	0	1	0	3
4-Dec	2	0	5C	0.25	0.4	0.3	Inglis	2	1	1	1	0	2
4-Dec	2	0	5C	0.25	0.4	0.3	Mason	2	2	1	1	0	3
4-Dec	2	0	5C	0.25	0.4	0.3	Runyon	3	0	2	0	2	2
4-Dec	2	0	6A	2	0.4	0.3	Capps	1	1	0	2	1	1
4-Dec	2	0	6A	2	0.4	0.3	Gray	2	2	1	2	0	2
4-Dec	2	0	6A	2	0.4	0.3	Higgins	2	1	0	1	1	0
4-Dec	2	0	6A	2	0.4	0.3	Inglis	2	2	0	2	0	2
4-Dec	2	0	6A	2	0.4	0.3	Mason	1	2	0	2	0	1
4-Dec	2	0	6A	2	0.4	0.3	Runyon	0	2	0	2	0	2
4-Dec	2	0	6B	2	0.4	0.3	Capps	1	2	2	2	1	3

4-Dec	2	0	6B	2	0.4	0.3	Gray	3	2	2	0	0	3
4-Dec	2	0	6B	2	0.4	0.3	Higgins	2	1	1	1	0	2
4-Dec	2	0	6B	2	0.4	0.3	Inglis	2	2	2	3	0	2
4-Dec	2	0	6B	2	0.4	0.3	Mason	1	2	0	2	0	2
4-Dec	2	0	6B	2	0.4	0.3	Runyon	1	2	2	2	0	2
4-Dec	2	0	6C	2	0.4	0.3	Capps	2	2	0	2	1	4
4-Dec	2	0	6C	2	0.4	0.3	Gray	2	3	0	3	0	3
4-Dec	2	0	6C	2	0.4	0.3	Higgins	2	1	0	1	1	3
4-Dec	2	0	6C	2	0.4	0.3	Inglis	2	1	1	1	0	3
4-Dec	2	0	6C	2	0.4	0.3	Mason	1	2	1	2	0	3
4-Dec	2	0	6C	2	0.4	0.3	Runyon	0	3	0	1	0	1
10-Dec	2	6	1A	0	0	0	Gray	2	3	0	3	0	2
10-Dec	2	6	1A	0	0	0	Higgins	2	2	0	1	0	1
10-Dec	2	6	1A	0	0	0	Inglis	2	2	0	2	0	2
10-Dec	2	6	1A	0	0	0	Mason	0	2	0	2	0	0
10-Dec	2	6	1A	0	0	0	Runyon	1	2	0	3	0	0
10-Dec	2	6	1B	0	0	0	Gray	2	3	0	3	0	2
10-Dec	2	6	1B	0	0	0	Higgins	2	2	0	1	0	2
10-Dec	2	6	1B	0	0	0	Inglis	2	1	1	1	0	2
10-Dec	2	6	1B	0	0	0	Mason	0	2	0	2	0	2
10-Dec	2	6	1B	0	0	0	Runyon	1	2	0	3	0	2
10-Dec	2	6	1C	0	0	0	Gray	2	2	0	3	0	2
10-Dec	2	6	1C	0	0	0	Higgins	2	2	0	1	1	2
10-Dec	2	6	1C	0	0	0	Inglis	2	1	0	1	0	2
10-Dec	2	6	1C	0	0	0	Mason	0	1	0	1	0	3
10-Dec	2	6	1C	0	0	0	Runyon	1	2	0	3	0	0
10-Dec	2	6	2A	0	0.4	0.3	Gray	2	4	1	2	0	1
10-Dec	2	6	2A	0	0.4	0.3	Higgins	2	2	1	1	0	1
10-Dec	2	6	2A	0	0.4	0.3	Inglis	2	2	2	2	0	2
10-Dec	2	6	2A	0	0.4	0.3	Mason	0	2	2	2	0	2
10-Dec	2	6	2A	0	0.4	0.3	Runyon	1	2	0	2	0	1
10-Dec	2	6	2B	0	0.4	0.3	Gray	2	3	1	3	0	3
10-Dec	2	6	2B	0	0.4	0.3	Higgins	2	2	0	1	1	2
10-Dec	2	6	2B	0	0.4	0.3	Inglis	2	2	2	2	0	2
10-Dec	2	6	2B	0	0.4	0.3	Mason	0	2	0	2	0	2
10-Dec	2	6	2B	0	0.4	0.3	Runyon	0	3	2	3	0	3
10-Dec	2	6	2C	0	0.4	0.3	Gray	2	2	1	3	0	3
10-Dec	2	6	2C	0	0.4	0.3	Higgins	2	1	0	0	1	0
10-Dec	2	6	2C	0	0.4	0.3	Inglis	2	2	1	2	0	2
10-Dec	2	6	2C	0	0.4	0.3	Mason	0	2	0	2	0	3
10-Dec	2	6	2C	0	0.4	0.3	Runyon	0	3	0	2	0	2
10-Dec	2	6	3A	0.25	0	0	Gray	2	3	0	3	0	2
10-Dec	2	6	3A	0.25	0	0	Higgins	2	2	1	2	0	1
10-Dec	2	6	3A	0.25	0	0	Inglis	2	3	2	3	0	2
10-Dec	2	6	3A	0.25	0	0	Mason	0	2	0	2	0	0
10-Dec	2	6	3A	0.25	0	0	Runyon	0	2	2	2	0	2
10-Dec	2	6	3B	0.25	0	0	Gray	2	3	0	3	0	2

10-Dec	2	6	3B	0.25	0	0	Higgins	2	2	0	1	0	1
10-Dec	2	6	3B	0.25	0	0	Inglis	2	2	2	2	0	2
10-Dec	2	6	3B	0.25	0	0	Mason	0	2	1	2	0	1
10-Dec	2	6	3B	0.25	0	0	Runyon	1	2	1	2	0	0
10-Dec	2	6	3C	0.25	0	0	Gray	2	2	0	3	0	1
10-Dec	2	6	3C	0.25	0	0	Higgins	2	1	0	1	1	0
10-Dec	2	6	3C	0.25	0	0	Inglis	2	1	1	2	0	2
10-Dec	2	6	3C	0.25	0	0	Mason	0	2	0	2	1	3
10-Dec	2	6	3C	0.25	0	0	Runyon	2	2	0	2	0	1
10-Dec	2	6	4A	2	0	0	Gray	2	3	2	3	0	2
10-Dec	2	6	4A	2	0	0	Higgins	2	2	2	2	0	2
10-Dec	2	6	4A	2	0	0	Inglis	2	2	2	2	0	2
10-Dec	2	6	4A	2	0	0	Mason	0	2	2	2	0	2
10-Dec	2	6	4A	2	0	0	Runyon	0	3	2	2	0	2
10-Dec	2	6	4B	2	0	0	Gray	1	3	0	3	0	2
10-Dec	2	6	4B	2	0	0	Higgins	2	2	2	2	0	1
10-Dec	2	6	4B	2	0	0	Inglis	2	2	2	2	0	2
10-Dec	2	6	4B	2	0	0	Mason	0	2	2	2	0	2
10-Dec	2	6	4B	2	0	0	Runyon	1	3	2	3	0	3
10-Dec	2	6	4C	2	0	0	Gray	2	4	1	3	0	3
10-Dec	2	6	4C	2	0	0	Higgins	2	1	0	1	1	2
10-Dec	2	6	4C	2	0	0	Inglis	2	2	1	2	0	2
10-Dec	2	6	4C	2	0	0	Mason	0	2	0	2	0	3
10-Dec	2	6	4C	2	0	0	Runyon	0	3	0	2	0	3
10-Dec	2	6	5A	0.25	0.4	0.3	Gray	2	2	1	2	0	1
10-Dec	2	6	5A	0.25	0.4	0.3	Higgins	2	2	0	1	0	0
10-Dec	2	6	5A	0.25	0.4	0.3	Inglis	2	2	2	2	0	2
10-Dec	2	6	5A	0.25	0.4	0.3	Mason	0	1	1	2	0	2
10-Dec	2	6	5A	0.25	0.4	0.3	Runyon	1	2	0	1	0	0
10-Dec	2	6	5B	0.25	0.4	0.3	Gray	2	3	0	3	0	2
10-Dec	2	6	5B	0.25	0.4	0.3	Higgins	2	1	0	1	1	0
10-Dec	2	6	5B	0.25	0.4	0.3	Inglis	2	2	0	2	0	2
10-Dec	2	6	5B	0.25	0.4	0.3	Mason	0	1	1	2	0	0
10-Dec	2	6	5B	0.25	0.4	0.3	Runyon	2	2	0	2	0	2
10-Dec	2	6	5C	0.25	0.4	0.3	Gray	2	3	0	3	0	3
10-Dec	2	6	5C	0.25	0.4	0.3	Higgins	2	2	0	1	1	2
10-Dec	2	6	5C	0.25	0.4	0.3	Inglis	2	1	0	1	0	2
10-Dec	2	6	5C	0.25	0.4	0.3	Mason	1	1	0	2	0	3
10-Dec	2	6	5C	0.25	0.4	0.3	Runyon	1	2	0	3	0	1
10-Dec	2	6	6A	2	0.4	0.3	Gray	2	3	1	2	0	1
10-Dec	2	6	6A	2	0.4	0.3	Higgins	2	2	1	1	0	0
10-Dec	2	6	6A	2	0.4	0.3	Inglis	2	2	2	3	0	2
10-Dec	2	6	6A	2	0.4	0.3	Mason	0	1	0	2	0	1
10-Dec	2	6	6A	2	0.4	0.3	Runyon	0	2	0	2	0	1
10-Dec	2	6	6B	2	0.4	0.3	Gray	2	3	1	3	0	3
10-Dec	2	6	6B	2	0.4	0.3	Higgins	2	1	0	1	1	2
10-Dec	2	6	6B	2	0.4	0.3	Inglis	2	2	1	2	0	2

10-Dec	2	6	6B	2	0.4	0.3	Mason	0	2	2	3	0	2
10-Dec	2	6	6B	2	0.4	0.3	Runyon	0	3	2	3	0	3
10-Dec	2	6	6C	2	0.4	0.3	Gray	2	2	1	3	0	3
10-Dec	2	6	6C	2	0.4	0.3	Higgins	2	2	0	1	1	1
10-Dec	2	6	6C	2	0.4	0.3	Inglis	2	2	1	2	0	2
10-Dec	2	6	6C	2	0.4	0.3	Mason	0	2	0	2	0	3
10-Dec	2	6	6C	2	0.4	0.3	Runyon	0	3	0	3	0	2
5-Dec	3	0	1A	0	0	0	Capps	1	2	0	2	1	0
5-Dec	3	0	1A	0	0	0	Higgins	2	1	0	1	0	0
5-Dec	3	0	1A	0	0	0	Inglis	2	3	0	2	0	2
5-Dec	3	0	1A	0	0	0	Mason	1	2	0	2	0	1
5-Dec	3	0	1B	0	0	0	Capps	1	2	1	2	0	2
5-Dec	3	0	1B	0	0	0	Higgins	2	2	0	1	0	1
5-Dec	3	0	1B	0	0	0	Inglis	2	2	1	2	0	2
5-Dec	3	0	1B	0	0	0	Mason	1	2	2	2	0	2
5-Dec	3	0	1C	0	0	0	Capps	1	2	2	2	1	3
5-Dec	3	0	1C	0	0	0	Higgins	3	2	0	1	0	2
5-Dec	3	0	1C	0	0	0	Inglis	2	3	2	2	0	3
5-Dec	3	0	1C	0	0	0	Mason	1	2	0	2	0	2
5-Dec	3	0	2A	0	0.4	0.3	Capps	1	2	0	2	1	1
5-Dec	3	0	2A	0	0.4	0.3	Higgins	2	1	0	1	1	1
5-Dec	3	0	2A	0	0.4	0.3	Inglis	2	2	1	2	0	2
5-Dec	3	0	2A	0	0.4	0.3	Mason	1	2	1	3	0	2
5-Dec	3	0	2B	0	0.4	0.3	Capps	2	2	0	3	1	2
5-Dec	3	0	2B	0	0.4	0.3	Higgins	2	1	0	0	1	1
5-Dec	3	0	2B	0	0.4	0.3	Inglis	2	2	0	2	0	2
5-Dec	3	0	2B	0	0.4	0.3	Mason	1	2	1	2	0	2
5-Dec	3	0	2B	0	0.4	0.3	Capps	1	1	1	2	2	3
5-Dec	3	0	2C	0	0.4	0.3	Higgins	2	1	0	1	0	2
5-Dec	3	0	2C	0	0.4	0.3	Inglis	2	1	1	2	0	2
5-Dec	3	0	2C	0	0.4	0.3	Mason	1	3	1	2	0	3
5-Dec	3	0	3A	0.25	0	0	Capps	1	1	0	2	1	1
5-Dec	3	0	3A	0.25	0	0	Higgins	2	2	0	1	0	2
5-Dec	3	0	3A	0.25	0	0	Inglis	2	3	0	2	0	3
5-Dec	3	0	3A	0.25	0	0	Mason	1	2	1	2	0	2
5-Dec	3	0	3B	0.25	0	0	Capps	1	2	0	2	0	2
5-Dec	3	0	3B	0.25	0	0	Higgins	2	2	0	0	0	2
5-Dec	3	0	3B	0.25	0	0	Inglis	2	3	2	2	0	3
5-Dec	3	0	3B	0.25	0	0	Mason	1	2	1	2	0	3
5-Dec	3	0	3C	0.25	0	0	Capps	1	2	1	2	1	3
5-Dec	3	0	3C	0.25	0	0	Higgins	3	2	0	1	0	2
5-Dec	3	0	3C	0.25	0	0	Inglis	2	3	2	2	0	3
5-Dec	3	0	3C	0.25	0	0	Mason	1	2	1	2	1	3
5-Dec	3	0	4A	2	0	0	Capps	1	1	0	1	1	0
5-Dec	3	0	4A	2	0	0	Higgins	2	1	0	1	0	1
5-Dec	3	0	4A	2	0	0	Inglis	2	2	0	2	0	2
5-Dec	3	0	4A	2	0	0	Mason	1	2	2	2	0	1

5-Dec	3	0	4B	2	0	0	Capps	1	2	0	3	1	2
5-Dec	3	0	4B	2	0	0	Higgins	2	1	0	0	1	2
5-Dec	3	0	4B	2	0	0	Inglis	2	2	0	2	0	3
5-Dec	3	0	4B	2	0	0	Mason	1	2	0	2	0	3
5-Dec	3	0	4C	2	0	0	Capps	1	2	2	2	1	3
5-Dec	3	0	4C	2	0	0	Higgins	3	2	0	1	0	3
5-Dec	3	0	4C	2	0	0	Inglis	2	3	0	3	0	3
5-Dec	3	0	4C	2	0	0	Mason	1	3	1	2	0	2
5-Dec	3	0	5A	0.25	0.4	0.3	Capps	1	2	0	2	1	1
5-Dec	3	0	5A	0.25	0.4	0.3	Higgins	2	1	1	1	0	2
5-Dec	3	0	5A	0.25	0.4	0.3	Inglis	2	2	1	2	0	2
5-Dec	3	0	5A	0.25	0.4	0.3	Mason	1	2	1	2	0	2
5-Dec	3	0	5B	0.25	0.4	0.3	Capps	1	2	2	2	1	2
5-Dec	3	0	5B	0.25	0.4	0.3	Higgins	2	2	1	1	0	2
5-Dec	3	0	5B	0.25	0.4	0.3	Inglis	2	2	2	2	0	0
5-Dec	3	0	5B	0.25	0.4	0.3	Mason	1	2	2	3	0	3
5-Dec	3	0	5C	0.25	0.4	0.3	Capps	1	1	1	2	1	3
5-Dec	3	0	5C	0.25	0.4	0.3	Higgins	3	1	0	1	1	3
5-Dec	3	0	5C	0.25	0.4	0.3	Inglis	2	2	0	2	0	2
5-Dec	3	0	5C	0.25	0.4	0.3	Mason	1	3	1	3	0	3
5-Dec	3	0	6A	2	0.4	0.3	Capps	1	2	1	2	1	1
5-Dec	3	0	6A	2	0.4	0.3	Higgins	2	2	1	1	0	1
5-Dec	3	0	6A	2	0.4	0.3	Inglis	2	2	2	2	0	2
5-Dec	3	0	6A	2	0.4	0.3	Mason	1	2	1	2	0	2
5-Dec	3	0	6B	2	0.4	0.3	Capps	2	2	1	2	0	2
5-Dec	3	0	6B	2	0.4	0.3	Higgins	2	2	2	1	0	1
5-Dec	3	0	6B	2	0.4	0.3	Inglis	2	1	1	1	0	2
5-Dec	3	0	6B	2	0.4	0.3	Mason	1	2	2	2	0	1
5-Dec	3	0	6B	2	0.4	0.3	Capps	1	2	1	2	0	1
5-Dec	3	0	6C	2	0.4	0.3	Higgins	2	1	0	0	1	3
5-Dec	3	0	6C	2	0.4	0.3	Inglis	2	3	0	3	0	3
5-Dec	3	0	6C	2	0.4	0.3	Mason	1	3	0	2	0	2
11-Dec	3	6	1A	0	0	0	Gray	2	3	0	3	0	2
11-Dec	3	6	1A	0	0	0	Higgins	3	2	0	1	0	2
11-Dec	3	6	1A	0	0	0	Inglis	2	3	0	2	0	2
11-Dec	3	6	1A	0	0	0	Mason	0	1	0	1	0	1
11-Dec	3	6	1A	0	0	0	Runyon	1	2	0	2	0	1
11-Dec	3	6	1B	0	0	0	Gray	2	3	0	3	0	2
11-Dec	3	6	1B	0	0	0	Higgins	2	2	0	1	0	2
11-Dec	3	6	1B	0	0	0	Inglis	2	1	0	1	0	0
11-Dec	3	6	1B	0	0	0	Mason	0	2	0	2	0	1
11-Dec	3	6	1B	0	0	0	Runyon	1	2	0	2	0	2
11-Dec	3	6	1C	0	0	0	Gray	2	3	0	3	0	3
11-Dec	3	6	1C	0	0	0	Higgins	3	1	0	1	1	2
11-Dec	3	6	1C	0	0	0	Inglis	2	1	1	1	0	2
11-Dec	3	6	1C	0	0	0	Mason	0	2	0	2	0	2
11-Dec	3	6	1C	0	0	0	Runyon	0	2	0	3	0	1

11-Dec	3	6	2A	0	0.4	0.3	Gray	2	3	0	3	0	2
11-Dec	3	6	2A	0	0.4	0.3	Higgins	3	2	0	1	1	0
11-Dec	3	6	2A	0	0.4	0.3	Inglis	2	1	1	2	0	2
11-Dec	3	6	2A	0	0.4	0.3	Mason	0	1	0	2	0	1
11-Dec	3	6	2A	0	0.4	0.3	Runyon	1	2	0	2	0	1
11-Dec	3	6	2B	0	0.4	0.3	Gray	2	2	0	3	0	3
11-Dec	3	6	2B	0	0.4	0.3	Higgins	2	2	0	1	1	1
11-Dec	3	6	2B	0	0.4	0.3	Inglis	2	1	1	2	0	2
11-Dec	3	6	2B	0	0.4	0.3	Mason	0	2	0	3	0	2
11-Dec	3	6	2B	0	0.4	0.3	Runyon	0	2	0	3	0	0
11-Dec	3	6	2C	0	0.4	0.3	Gray	2	2	1	3	0	2
11-Dec	3	6	2C	0	0.4	0.3	Higgins	2	2	0	1	0	0
11-Dec	3	6	2C	0	0.4	0.3	Inglis	2	2	1	2	0	2
11-Dec	3	6	2C	0	0.4	0.3	Mason	0	2	0	2	0	3
11-Dec	3	6	2C	0	0.4	0.3	Runyon	2	0	2	0	1	2
11-Dec	3	6	3A	0.25	0	0	Gray	2	3	0	3	0	2
11-Dec	3	6	3A	0.25	0	0	Higgins	2	2	1	1	0	1
11-Dec	3	6	3A	0.25	0	0	Inglis	2	2	2	2	0	2
11-Dec	3	6	3A	0.25	0	0	Mason	0	1	1	2	0	1
11-Dec	3	6	3A	0.25	0	0	Runyon	1	2	0	2	0	0
11-Dec	3	6	3B	0.25	0	0	Gray	2	2	0	3	0	3
11-Dec	3	6	3B	0.25	0	0	Higgins	2	2	0	2	0	1
11-Dec	3	6	3B	0.25	0	0	Inglis	2	1	1	2	0	2
11-Dec	3	6	3B	0.25	0	0	Mason	0	2	0	2	0	1
11-Dec	3	6	3B	0.25	0	0	Runyon	0	2	2	1	0	0
11-Dec	3	6	3C	0.25	0	0	Gray	2	3	0	3	0	3
11-Dec	3	6	3C	0.25	0	0	Higgins	3	2	0	2	0	2
11-Dec	3	6	3C	0.25	0	0	Inglis	2	2	2	2	0	2
11-Dec	3	6	3C	0.25	0	0	Mason	0	2	0	2	0	2
11-Dec	3	6	3C	0.25	0	0	Runyon	0	2	1	2	0	2
11-Dec	3	6	4A	2	0	0	Gray	2	1	0	1	1	0
11-Dec	3	6	4A	2	0	0	Higgins	2	2	2	1	0	0
11-Dec	3	6	4A	2	0	0	Inglis	2	0	0	0	0	0
11-Dec	3	6	4A	2	0	0	Mason	1	3	3	0	0	0
11-Dec	3	6	4A	2	0	0	Runyon	2	2	2	1	0	0
11-Dec	3	6	4B	2	0	0	Gray	2	3	2	3	0	3
11-Dec	3	6	4B	2	0	0	Higgins	2	2	1	2	0	2
11-Dec	3	6	4B	2	0	0	Inglis	2	2	2	2	0	2
11-Dec	3	6	4B	2	0	0	Mason	0	3	3	3	0	2
11-Dec	3	6	4B	2	0	0	Runyon	0	3	2	2	0	2
11-Dec	3	6	4C	2	0	0	Gray	2	4	2	2	0	3
11-Dec	3	6	4C	2	0	0	Higgins	3	1	1	1	0	2
11-Dec	3	6	4C	2	0	0	Inglis	2	2	2	2	0	2
11-Dec	3	6	4C	2	0	0	Mason	0	3	3	2	0	2
11-Dec	3	6	4C	2	0	0	Runyon	0	3	2	2	0	2
11-Dec	3	6	5A	0.25	0.4	0.3	Gray	2	3	2	2	0	2

11-Dec	3	6	5A	0.25	0.4	0.3	Higgins	3	2	0	1	1	0
11-Dec	3	6	5A	0.25	0.4	0.3	Inglis	2	1	1	1	0	2
11-Dec	3	6	5A	0.25	0.4	0.3	Mason	0	0	0	2	0	1
11-Dec	3	6	5A	0.25	0.4	0.3	Runyon	1	1	0	1	0	0
11-Dec	3	6	5B	0.25	0.4	0.3	Gray	2	3	1	3	0	3
11-Dec	3	6	5B	0.25	0.4	0.3	Higgins	2	1	0	1	1	1
11-Dec	3	6	5B	0.25	0.4	0.3	Inglis	2	1	1	2	0	2
11-Dec	3	6	5B	0.25	0.4	0.3	Mason	0	2	1	2	0	2
11-Dec	3	6	5B	0.25	0.4	0.3	Runyon	1	2	0	2	0	0
11-Dec	3	6	5C	0.25	0.4	0.3	Gray	2	2	0	3	0	3
11-Dec	3	6	5C	0.25	0.4	0.3	Higgins	2	2	0	1	1	1
11-Dec	3	6	5C	0.25	0.4	0.3	Inglis	2	2	1	2	0	2
11-Dec	3	6	5C	0.25	0.4	0.3	Mason	0	2	1	2	0	3
11-Dec	3	6	5C	0.25	0.4	0.3	Runyon	0	2	0	2	0	1
11-Dec	3	6	6A	2	0.4	0.3	Gray	2	3	1	3	0	2
11-Dec	3	6	6A	2	0.4	0.3	Higgins	3	2	1	1	1	1
11-Dec	3	6	6A	2	0.4	0.3	Inglis	2	1	1	2	0	2
11-Dec	3	6	6A	2	0.4	0.3	Mason	0	1	0	2	0	1
11-Dec	3	6	6A	2	0.4	0.3	Runyon	1	2	0	2	0	2
11-Dec	3	6	6B	2	0.4	0.3	Gray	2	3	0	3	0	2
11-Dec	3	6	6B	2	0.4	0.3	Higgins	2	2	0	1	0	0
11-Dec	3	6	6B	2	0.4	0.3	Inglis	2	2	1	2	0	2
11-Dec	3	6	6B	2	0.4	0.3	Mason	0	2	0	2	0	2
11-Dec	3	6	6B	2	0.4	0.3	Runyon	1	2	0	1	0	2
11-Dec	3	6	6C	2	0.4	0.3	Gray	2	3	1	2	0	3
11-Dec	3	6	6C	2	0.4	0.3	Higgins	2	2	0	1	0	1
11-Dec	3	6	6C	2	0.4	0.3	Inglis	2	2	1	2	0	2
11-Dec	3	6	6C	2	0.4	0.3	Mason	0	2	0	2	0	3
11-Dec	3	6	6C	2	0.4	0.3	Runyon	1	2	0	2	0	2

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Date	Rep	Day	Trt	Sorgh	STTP	Salt	Panelist	Metallic	Spring	Hard	Gritty
3-Dec	1	0	1A	0	0	0	Capps	2	5	7	7
3-Dec	1	0	1A	0	0	0	Gray	2	7	5	6
3-Dec	1	0	1A	0	0	0	Higgins	2	6	6	0
3-Dec	1	0	1A	0	0	0	Inglis	2	6	5	5
3-Dec	1	0	1A	0	0	0	Mason	2	6	6	3
3-Dec	1	0	1A	0	0	0	Runyon	2	5	4	0
3-Dec	1	0	1B	0	0	0	Capps	2	6	6	0
3-Dec	1	0	1B	0	0	0	Gray	0	6	4	7
3-Dec	1	0	1B	0	0	0	Higgins	3	6	6	0
3-Dec	1	0	1B	0	0	0	Inglis	1	3	4	0
3-Dec	1	0	1B	0	0	0	Mason	3	7	6	0
3-Dec	1	0	1B	0	0	0	Runyon	2	4	5	0
3-Dec	1	0	1C	0	0	0	Capps	2	7	6	0
3-Dec	1	0	1C	0	0	0	Gray	2	7	6	7
3-Dec	1	0	1C	0	0	0	Higgins	2	7	6	0
3-Dec	1	0	1C	0	0	0	Inglis	2	5	4	7
3-Dec	1	0	1C	0	0	0	Mason	2	7	6	0
3-Dec	1	0	1C	0	0	0	Runyon	2	4	4	0
3-Dec	1	0	2A	0	0.4	0.3	Capps	1	6	5	7
3-Dec	1	0	2A	0	0.4	0.3	Gray	2	6	4	2
3-Dec	1	0	2A	0	0.4	0.3	Higgins	2	7	6	0
3-Dec	1	0	2A	0	0.4	0.3	Inglis	2	4	4	0
3-Dec	1	0	2A	0	0.4	0.3	Mason	1	4	6	0
3-Dec	1	0	2A	0	0.4	0.3	Runyon	2	4	4	0
3-Dec	1	0	2B	0	0.4	0.3	Capps	2	8	7	0
3-Dec	1	0	2B	0	0.4	0.3	Gray	2	6	5	0
3-Dec	1	0	2B	0	0.4	0.3	Higgins	2	7	6	0
3-Dec	1	0	2B	0	0.4	0.3	Inglis	3	5	5	0
3-Dec	1	0	2B	0	0.4	0.3	Mason	2	7	6	0
3-Dec	1	0	2B	0	0.4	0.3	Runyon	2	6	5	0
3-Dec	1	0	2C	0	0.4	0.3	Capps	2	6	5	0
3-Dec	1	0	2C	0	0.4	0.3	Gray	2	6	5	7
3-Dec	1	0	2C	0	0.4	0.3	Higgins	2	6	5	0
3-Dec	1	0	2C	0	0.4	0.3	Inglis	3	7	6	10
3-Dec	1	0	2C	0	0.4	0.3	Mason	2	4	5	2
3-Dec	1	0	2C	0	0.4	0.3	Runyon	2	4	5	0
3-Dec	1	0	3A	0.25	0	0	Capps	1	4	5	7
3-Dec	1	0	3A	0.25	0	0	Gray	3	6	5	0
3-Dec	1	0	3A	0.25	0	0	Higgins	2	5	5	1
3-Dec	1	0	3A	0.25	0	0	Inglis	2	4	4	0
3-Dec	1	0	3A	0.25	0	0	Mason	2	5	5	6
3-Dec	1	0	3A	0.25	0	0	Runyon	2	6	4	0
3-Dec	1	0	3B	0.25	0	0	Capps	2	3	6	6

3-Dec	1	0	3B	0.25	0	0	Gray	2	7	6	10
3-Dec	1	0	3B	0.25	0	0	Higgins	2	6	5	1
3-Dec	1	0	3B	0.25	0	0	Inglis	3	4	4	3
3-Dec	1	0	3B	0.25	0	0	Mason	2	7	6	5
3-Dec	1	0	3B	0.25	0	0	Runyon	2	3	4	8
3-Dec	1	0	3C	0.25	0	0	Capps	2	6	6	7
3-Dec	1	0	3C	0.25	0	0	Gray	2	5	4	15
3-Dec	1	0	3C	0.25	0	0	Higgins	3	6	6	0
3-Dec	1	0	3C	0.25	0	0	Inglis	3	5	5	10
3-Dec	1	0	3C	0.25	0	0	Mason	2	5	5	3
3-Dec	1	0	3C	0.25	0	0	Runyon	2	6	5	0
3-Dec	1	0	4A	2	0	0	Capps	2	4	3	6
3-Dec	1	0	4A	2	0	0	Gray	3	7	5	7
3-Dec	1	0	4A	2	0	0	Higgins	2	7	6	1
3-Dec	1	0	4A	2	0	0	Inglis	2	5	5	3
3-Dec	1	0	4A	2	0	0	Mason	2	7	5	6
3-Dec	1	0	4A	2	0	0	Runyon	2	6	5	0
3-Dec	1	0	4B	2	0	0	Capps	2	3	6	6
3-Dec	1	0	4B	2	0	0	Gray	3	6	4	10
3-Dec	1	0	4B	2	0	0	Higgins	2	7	6	8
3-Dec	1	0	4B	2	0	0	Inglis	3	4	4	0
3-Dec	1	0	4B	2	0	0	Mason	2	4	6	4
3-Dec	1	0	4B	2	0	0	Runyon	1	6	5	0
3-Dec	1	0	4C	2	0	0	Capps	2	5	5	7
3-Dec	1	0	4C	2	0	0	Gray	2	6	5	15
3-Dec	1	0	4C	2	0	0	Higgins	2	6	5	0
3-Dec	1	0	4C	2	0	0	Inglis	2	4	4	7
3-Dec	1	0	4C	2	0	0	Mason	2	4	4	6
3-Dec	1	0	4C	2	0	0	Runyon	2	4	4	10
3-Dec	1	0	5A	0.25	0.4	0.3	Capps	2	7	7	5
3-Dec	1	0	5A	0.25	0.4	0.3	Gray	2	8	6	7
3-Dec	1	0	5A	0.25	0.4	0.3	Higgins	3	7	6	0
3-Dec	1	0	5A	0.25	0.4	0.3	Inglis	2	6	5	5
3-Dec	1	0	5A	0.25	0.4	0.3	Mason	2	7	6	0
3-Dec	1	0	5A	0.25	0.4	0.3	Runyon	2	6	6	0
3-Dec	1	0	5B	0.25	0.4	0.3	Capps	2	6	5	0
3-Dec	1	0	5B	0.25	0.4	0.3	Gray	3	8	6	6
3-Dec	1	0	5B	0.25	0.4	0.3	Higgins	3	7	6	0
3-Dec	1	0	5B	0.25	0.4	0.3	Inglis	2	4	4	3
3-Dec	1	0	5B	0.25	0.4	0.3	Mason	2	7	6	0
3-Dec	1	0	5B	0.25	0.4	0.3	Runyon	2	6	5	2
3-Dec	1	0	5C	0.25	0.4	0.3	Capps	2	7	5	6
3-Dec	1	0	5C	0.25	0.4	0.3	Gray	2	8	6	7
3-Dec	1	0	5C	0.25	0.4	0.3	Higgins	2	7	6	0
3-Dec	1	0	5C	0.25	0.4	0.3	Inglis	3	5	5	4
3-Dec	1	0	5C	0.25	0.4	0.3	Mason	2	7	6	0
3-Dec	1	0	5C	0.25	0.4	0.3	Runyon	2	6	6	0

3-Dec	1	0	6A	2	0.4	0.3	Capps	2	7	6	7
3-Dec	1	0	6A	2	0.4	0.3	Gray	2	7	6	0
3-Dec	1	0	6A	2	0.4	0.3	Higgins	2	7	6	0
3-Dec	1	0	6A	2	0.4	0.3	Inglis	3	7	6	7
3-Dec	1	0	6A	2	0.4	0.3	Mason	2	7	6	2
3-Dec	1	0	6A	2	0.4	0.3	Runyon	2	5	6	1
3-Dec	1	0	6B	2	0.4	0.3	Capps	1	6	6	7
3-Dec	1	0	6B	2	0.4	0.3	Gray	2	7	5	0
3-Dec	1	0	6B	2	0.4	0.3	Higgins	2	6	5	0
3-Dec	1	0	6B	2	0.4	0.3	Inglis	3	5	4	0
3-Dec	1	0	6B	2	0.4	0.3	Mason	2	5	5	4
3-Dec	1	0	6B	2	0.4	0.3	Runyon	2	5	5	0
3-Dec	1	0	6C	2	0.4	0.3	Capps	2	7	7	6
3-Dec	1	0	6C	2	0.4	0.3	Gray	2	7	6	15
3-Dec	1	0	6C	2	0.4	0.3	Higgins	2	7	6	0
3-Dec	1	0	6C	2	0.4	0.3	Inglis	3	6	5	10
3-Dec	1	0	6C	2	0.4	0.3	Mason	2	8	6	2
3-Dec	1	0	6C	2	0.4	0.3	Runyon	2	6	5	0
9-Dec	1	6	1A	0	0	0	Gray	2	7	6	10
9-Dec	1	6	1A	0	0	0	Higgins	2	6	5	0
9-Dec	1	6	1A	0	0	0	Inglis	3	7	5	0
9-Dec	1	6	1A	0	0	0	Runyon	2	5	5	5
9-Dec	1	6	1B	0	0	0	Gray	2	6	5	15
9-Dec	1	6	1B	0	0	0	Higgins	2	6	6	0
9-Dec	1	6	1B	0	0	0	Inglis	3	6	5	0
9-Dec	1	6	1B	0	0	0	Runyon	2	4	5	0
9-Dec	1	6	1C	0	0	0	Gray	3	7	6	15
9-Dec	1	6	1C	0	0	0	Higgins	2	7	6	0
9-Dec	1	6	1C	0	0	0	Inglis	3	6	4	0
9-Dec	1	6	1C	0	0	0	Runyon	2	6	5	7
9-Dec	1	6	2A	0	0.4	0.3	Gray	2	8	6	13
9-Dec	1	6	2A	0	0.4	0.3	Higgins	2	8	7	0
9-Dec	1	6	2A	0	0.4	0.3	Inglis	2	8	6	0
9-Dec	1	6	2A	0	0.4	0.3	Runyon	2	6	6	8
9-Dec	1	6	2B	0	0.4	0.3	Gray	3	8	6	13
9-Dec	1	6	2B	0	0.4	0.3	Higgins	2	8	7	0
9-Dec	1	6	2B	0	0.4	0.3	Inglis	2	8	6	0
9-Dec	1	6	2B	0	0.4	0.3	Runyon	2	7	5	6
9-Dec	1	6	2C	0	0.4	0.3	Gray	3	8	6	15
9-Dec	1	6	2C	0	0.4	0.3	Higgins	2	8	7	0
9-Dec	1	6	2C	0	0.4	0.3	Inglis	3	8	6	0
9-Dec	1	6	2C	0	0.4	0.3	Runyon	2	8	6	7
9-Dec	1	6	3A	0.25	0	0	Gray	2	7	5	7
9-Dec	1	6	3A	0.25	0	0	Higgins	2	6	5	0
9-Dec	1	6	3A	0.25	0	0	Inglis	2	8	6	0
9-Dec	1	6	3A	0.25	0	0	Runyon	2	3	4	5
9-Dec	1	6	3B	0.25	0	0	Gray	3	8	6	15

9-Dec	1	6	3B	0.25	0	0	Higgins	2	7	6	0
9-Dec	1	6	3B	0.25	0	0	Inglis	2	7	5	0
9-Dec	1	6	3B	0.25	0	0	Runyon	2	6	5	9
9-Dec	1	6	3C	0.25	0	0	Gray	3	8	6	15
9-Dec	1	6	3C	0.25	0	0	Higgins	2	7	6	0
9-Dec	1	6	3C	0.25	0	0	Inglis	3	7	5	0
9-Dec	1	6	3C	0.25	0	0	Runyon	2	6	5	9
9-Dec	1	6	4A	2	0	0	Gray	2	5	5	10
9-Dec	1	6	4A	2	0	0	Higgins	2	7	6	0
9-Dec	1	6	4A	2	0	0	Inglis	3	7	5	0
9-Dec	1	6	4A	2	0	0	Runyon	2	6	5	7
9-Dec	1	6	4B	2	0	0	Gray	3	8	6	15
9-Dec	1	6	4B	2	0	0	Higgins	2	7	6	0
9-Dec	1	6	4B	2	0	0	Inglis	2	8	6	0
9-Dec	1	6	4B	2	0	0	Runyon	2	6	6	11
9-Dec	1	6	4C	2	0	0	Gray	3	8	6	15
9-Dec	1	6	4C	2	0	0	Higgins	2	7	5	0
9-Dec	1	6	4C	2	0	0	Inglis	3	7	6	0
9-Dec	1	6	4C	2	0	0	Runyon	2	4	4	11
9-Dec	1	6	5A	0.25	0.4	0.3	Gray	2	8	6	13
9-Dec	1	6	5A	0.25	0.4	0.3	Higgins	2	8	7	0
9-Dec	1	6	5A	0.25	0.4	0.3	Inglis	3	8	6	0
9-Dec	1	6	5A	0.25	0.4	0.3	Runyon	2	8	6	8
9-Dec	1	6	5B	0.25	0.4	0.3	Gray	3	8	6	12
9-Dec	1	6	5B	0.25	0.4	0.3	Higgins	2	8	6	0
9-Dec	1	6	5B	0.25	0.4	0.3	Inglis	2	8	6	0
9-Dec	1	6	5B	0.25	0.4	0.3	Runyon	2	6	5	6
9-Dec	1	6	5C	0.25	0.4	0.3	Gray	3	8	6	15
9-Dec	1	6	5C	0.25	0.4	0.3	Higgins	2	8	7	0
9-Dec	1	6	5C	0.25	0.4	0.3	Inglis	3	8	6	0
9-Dec	1	6	5C	0.25	0.4	0.3	Runyon	2	7	6	8
9-Dec	1	6	6A	2	0.4	0.3	Gray	2	8	6	13
9-Dec	1	6	6A	2	0.4	0.3	Higgins	2	7	6	0
9-Dec	1	6	6A	2	0.4	0.3	Inglis	3	8	6	0
9-Dec	1	6	6A	2	0.4	0.3	Runyon	2	7	6	8
9-Dec	1	6	6B	2	0.4	0.3	Gray	2	8	6	15
9-Dec	1	6	6B	2	0.4	0.3	Higgins	2	8	7	0
9-Dec	1	6	6B	2	0.4	0.3	Inglis	2	8	6	0
9-Dec	1	6	6B	2	0.4	0.3	Runyon	2	5	6	9
9-Dec	1	6	6C	2	0.4	0.3	Gray	3	8	6	15
9-Dec	1	6	6C	2	0.4	0.3	Higgins	2	7	6	0
9-Dec	1	6	6C	2	0.4	0.3	Inglis	3	8	6	0
9-Dec	1	6	6C	2	0.4	0.3	Runyon	2	6	6	10
4-Dec	2	0	1A	0	0	0	Capps	2	7	5	0
4-Dec	2	0	1A	0	0	0	Gray	2	6	5	10
4-Dec	2	0	1A	0	0	0	Higgins	2	5	5	1
4-Dec	2	0	1A	0	0	0	Inglis	3	7	6	0

4-Dec	2	0	1A	0	0	0	Mason	2	7	6	0
4-Dec	2	0	1A	0	0	0	Runyon	2	5	4	0
4-Dec	2	0	1B	0	0	0	Capps	2	7	5	0
4-Dec	2	0	1B	0	0	0	Gray	4	7	6	12
4-Dec	2	0	1B	0	0	0	Higgins	3	7	5	1
4-Dec	2	0	1B	0	0	0	Inglis	3	6	5	0
4-Dec	2	0	1B	0	0	0	Mason	2	7	6	3
4-Dec	2	0	1B	0	0	0	Runyon	2	5	5	10
4-Dec	2	0	1C	0	0	0	Capps	2	8	6	0
4-Dec	2	0	1C	0	0	0	Gray	2	6	5	7
4-Dec	2	0	1C	0	0	0	Higgins	2	7	6	1
4-Dec	2	0	1C	0	0	0	Inglis	2	7	6	0
4-Dec	2	0	1C	0	0	0	Mason	2	8	7	3
4-Dec	2	0	1C	0	0	0	Runyon	2	5	5	8
4-Dec	2	0	2A	0	0.4	0.3	Capps	2	7	6	0
4-Dec	2	0	2A	0	0.4	0.3	Gray	3	8	6	7
4-Dec	2	0	2A	0	0.4	0.3	Higgins	2	7	7	0
4-Dec	2	0	2A	0	0.4	0.3	Inglis	3	8	6	0
4-Dec	2	0	2A	0	0.4	0.3	Mason	2	8	6	0
4-Dec	2	0	2A	0	0.4	0.3	Runyon	2	5	5	0
4-Dec	2	0	2B	0	0.4	0.3	Capps	2	8	6	0
4-Dec	2	0	2B	0	0.4	0.3	Gray	2	6	6	7
4-Dec	2	0	2B	0	0.4	0.3	Higgins	2	7	6	0
4-Dec	2	0	2B	0	0.4	0.3	Inglis	3	8	7	0
4-Dec	2	0	2B	0	0.4	0.3	Mason	2	7	6	0
4-Dec	2	0	2B	0	0.4	0.3	Runyon	2	5	5	0
4-Dec	2	0	2C	0	0.4	0.3	Capps	2	8	6	0
4-Dec	2	0	2C	0	0.4	0.3	Gray	2	8	6	0
4-Dec	2	0	2C	0	0.4	0.3	Higgins	2	8	7	0
4-Dec	2	0	2C	0	0.4	0.3	Inglis	2	8	7	0
4-Dec	2	0	2C	0	0.4	0.3	Mason	2	8	7	0
4-Dec	2	0	2C	0	0.4	0.3	Runyon	2	5	6	0
4-Dec	2	0	3A	0.25	0	0	Capps	2	7	5	5
4-Dec	2	0	3A	0.25	0	0	Gray	3	7	5	13
4-Dec	2	0	3A	0.25	0	0	Higgins	2	7	7	0
4-Dec	2	0	3A	0.25	0	0	Inglis	3	7	6	0
4-Dec	2	0	3A	0.25	0	0	Mason	2	8	6	1
4-Dec	2	0	3A	0.25	0	0	Runyon	3	5	5	0
4-Dec	2	0	3B	0.25	0	0	Capps	2	8	6	5
4-Dec	2	0	3B	0.25	0	0	Gray	3	8	6	7
4-Dec	2	0	3B	0.25	0	0	Higgins	2	6	6	0
4-Dec	2	0	3B	0.25	0	0	Inglis	3	7	6	0
4-Dec	2	0	3B	0.25	0	0	Mason	2	7	7	2
4-Dec	2	0	3B	0.25	0	0	Runyon	2	6	6	6
4-Dec	2	0	3C	0.25	0	0	Capps	2	7	6	0
4-Dec	2	0	3C	0.25	0	0	Gray	3	8	6	13

4-Dec	2	0	3C	0.25	0	0	Higgins	3	7	6	1
4-Dec	2	0	3C	0.25	0	0	Inglis	3	8	7	0
4-Dec	2	0	3C	0.25	0	0	Mason	2	8	7	2
4-Dec	2	0	3C	0.25	0	0	Runyon	2	5	4	5
4-Dec	2	0	4A	2	0	0	Capps	2	7	6	6
4-Dec	2	0	4A	2	0	0	Gray	3	6	5	15
4-Dec	2	0	4A	2	0	0	Higgins	1	6	5	2
4-Dec	2	0	4A	2	0	0	Inglis	2	6	5	0
4-Dec	2	0	4A	2	0	0	Mason	2	6	6	4
4-Dec	2	0	4A	2	0	0	Runyon	3	5	6	8
4-Dec	2	0	4B	2	0	0	Capps	2	6	6	0
4-Dec	2	0	4B	2	0	0	Gray	3	6	5	15
4-Dec	2	0	4B	2	0	0	Higgins	2	6	5	1
4-Dec	2	0	4B	2	0	0	Inglis	3	6	5	0
4-Dec	2	0	4B	2	0	0	Mason	2	6	6	3
4-Dec	2	0	4B	2	0	0	Runyon	2	5	6	10
4-Dec	2	0	4C	2	0	0	Capps	2	6	5	0
4-Dec	2	0	4C	2	0	0	Gray	3	5	5	12
4-Dec	2	0	4C	2	0	0	Higgins	2	7	6	1
4-Dec	2	0	4C	2	0	0	Inglis	3	8	7	0
4-Dec	2	0	4C	2	0	0	Mason	2	8	7	0
4-Dec	2	0	4C	2	0	0	Runyon	2	5	4	5
4-Dec	2	0	5A	0.25	0.4	0.3	Capps	2	6	5	0
4-Dec	2	0	5A	0.25	0.4	0.3	Gray	3	7	6	12
4-Dec	2	0	5A	0.25	0.4	0.3	Higgins	2	7	6	0
4-Dec	2	0	5A	0.25	0.4	0.3	Inglis	3	7	6	0
4-Dec	2	0	5A	0.25	0.4	0.3	Mason	2	8	6	1
4-Dec	2	0	5A	0.25	0.4	0.3	Runyon	2	4	5	0
4-Dec	2	0	5B	0.25	0.4	0.3	Capps	2	5	5	5
4-Dec	2	0	5B	0.25	0.4	0.3	Gray	3	6	5	12
4-Dec	2	0	5B	0.25	0.4	0.3	Higgins	2	6	5	2
4-Dec	2	0	5B	0.25	0.4	0.3	Inglis	3	7	6	0
4-Dec	2	0	5B	0.25	0.4	0.3	Mason	2	4	6	2
4-Dec	2	0	5B	0.25	0.4	0.3	Runyon	2	5	6	0
4-Dec	2	0	5C	0.25	0.4	0.3	Capps	2	8	6	0
4-Dec	2	0	5C	0.25	0.4	0.3	Gray	3	7	6	13
4-Dec	2	0	5C	0.25	0.4	0.3	Higgins	2	8	6	1
4-Dec	2	0	5C	0.25	0.4	0.3	Inglis	2	8	7	0
4-Dec	2	0	5C	0.25	0.4	0.3	Mason	2	8	7	3
4-Dec	2	0	5C	0.25	0.4	0.3	Runyon	2	6	5	5
4-Dec	2	0	6A	2	0.4	0.3	Capps	2	6	5	0
4-Dec	2	0	6A	2	0.4	0.3	Gray	2	6	5	10
4-Dec	2	0	6A	2	0.4	0.3	Higgins	2	7	7	0
4-Dec	2	0	6A	2	0.4	0.3	Inglis	3	7	6	0
4-Dec	2	0	6A	2	0.4	0.3	Mason	2	6	6	3
4-Dec	2	0	6A	2	0.4	0.3	Runyon	2	4	5	0
4-Dec	2	0	6B	2	0.4	0.3	Capps	2	8	6	6

4-Dec	2	0	6B	2	0.4	0.3	Gray	3	6	6	15
4-Dec	2	0	6B	2	0.4	0.3	Higgins	2	7	7	0
4-Dec	2	0	6B	2	0.4	0.3	Inglis	3	8	7	0
4-Dec	2	0	6B	2	0.4	0.3	Mason	2	7	6	2
4-Dec	2	0	6B	2	0.4	0.3	Runyon	2	5	6	8
4-Dec	2	0	6C	2	0.4	0.3	Capps	2	8	6	5
4-Dec	2	0	6C	2	0.4	0.3	Gray	3	6	6	15
4-Dec	2	0	6C	2	0.4	0.3	Higgins	2	7	6	1
4-Dec	2	0	6C	2	0.4	0.3	Inglis	3	8	7	0
4-Dec	2	0	6C	2	0.4	0.3	Mason	2	7	6	3
4-Dec	2	0	6C	2	0.4	0.3	Runyon	2	4	6	0
10-Dec	2	6	1A	0	0	0	Gray	2	8	6	0
10-Dec	2	6	1A	0	0	0	Higgins	2	6	6	0
10-Dec	2	6	1A	0	0	0	Inglis	2	8	7	0
10-Dec	2	6	1A	0	0	0	Mason	3	5	6	0
10-Dec	2	6	1A	0	0	0	Runyon	2	7	5	8
10-Dec	2	6	1B	0	0	0	Gray	2	7	6	15
10-Dec	2	6	1B	0	0	0	Higgins	2	6	6	0
10-Dec	2	6	1B	0	0	0	Inglis	2	7	6	0
10-Dec	2	6	1B	0	0	0	Mason	2	4	5	0
10-Dec	2	6	1B	0	0	0	Runyon	2	5	6	7
10-Dec	2	6	1C	0	0	0	Gray	3	7	5	15
10-Dec	2	6	1C	0	0	0	Higgins	2	7	6	1
10-Dec	2	6	1C	0	0	0	Inglis	2	6	5	0
10-Dec	2	6	1C	0	0	0	Mason	2	5	6	0
10-Dec	2	6	1C	0	0	0	Runyon	2	6	6	8
10-Dec	2	6	2A	0	0.4	0.3	Gray	2	8	6	0
10-Dec	2	6	2A	0	0.4	0.3	Higgins	2	7	6	1
10-Dec	2	6	2A	0	0.4	0.3	Inglis	3	8	7	0
10-Dec	2	6	2A	0	0.4	0.3	Mason	2	8	7	0
10-Dec	2	6	2A	0	0.4	0.3	Runyon	2	8	6	6
10-Dec	2	6	2B	0	0.4	0.3	Gray	3	8	6	10
10-Dec	2	6	2B	0	0.4	0.3	Higgins	2	7	6	0
10-Dec	2	6	2B	0	0.4	0.3	Inglis	3	8	7	0
10-Dec	2	6	2B	0	0.4	0.3	Mason	2	8	6	0
10-Dec	2	6	2B	0	0.4	0.3	Runyon	3	8	7	5
10-Dec	2	6	2C	0	0.4	0.3	Gray	3	8	6	15
10-Dec	2	6	2C	0	0.4	0.3	Higgins	1	7	6	0
10-Dec	2	6	2C	0	0.4	0.3	Inglis	3	9	7	0
10-Dec	2	6	2C	0	0.4	0.3	Mason	2	8	6	0
10-Dec	2	6	2C	0	0.4	0.3	Runyon	2	8	6	2
10-Dec	2	6	3A	0.25	0	0	Gray	2	8	6	10
10-Dec	2	6	3A	0.25	0	0	Higgins	2	8	7	1
10-Dec	2	6	3A	0.25	0	0	Inglis	3	6	5	0
10-Dec	2	6	3A	0.25	0	0	Mason	3	7	6	1
10-Dec	2	6	3A	0.25	0	0	Runyon	2	5	5	8
10-Dec	2	6	3B	0.25	0	0	Gray	3	8	6	15

10-Dec	2	6	3B	0.25	0	0	Higgins	1	6	5	0
10-Dec	2	6	3B	0.25	0	0	Inglis	2	7	6	0
10-Dec	2	6	3B	0.25	0	0	Mason	2	7	7	2
10-Dec	2	6	3B	0.25	0	0	Runyon	2	6	6	9
10-Dec	2	6	3C	0.25	0	0	Gray	2	8	6	12
10-Dec	2	6	3C	0.25	0	0	Higgins	2	8	6	0
10-Dec	2	6	3C	0.25	0	0	Inglis	2	7	6	0
10-Dec	2	6	3C	0.25	0	0	Mason	2	5	6	1
10-Dec	2	6	3C	0.25	0	0	Runyon	2	4	5	6
10-Dec	2	6	4A	2	0	0	Gray	3	8	6	15
10-Dec	2	6	4A	2	0	0	Higgins	2	7	6	1
10-Dec	2	6	4A	2	0	0	Inglis	3	7	6	0
10-Dec	2	6	4A	2	0	0	Mason	3	7	7	0
10-Dec	2	6	4A	2	0	0	Runyon	2	5	6	11
10-Dec	2	6	4B	2	0	0	Gray	3	7	6	15
10-Dec	2	6	4B	2	0	0	Higgins	2	7	6	0
10-Dec	2	6	4B	2	0	0	Inglis	2	7	6	0
10-Dec	2	6	4B	2	0	0	Mason	2	6	6	3
10-Dec	2	6	4B	2	0	0	Runyon	3	5	6	8
10-Dec	2	6	4C	2	0	0	Gray	3	6	5	15
10-Dec	2	6	4C	2	0	0	Higgins	2	5	5	2
10-Dec	2	6	4C	2	0	0	Inglis	3	7	5	0
10-Dec	2	6	4C	2	0	0	Mason	2	4	6	1
10-Dec	2	6	4C	2	0	0	Runyon	3	6	5	9
10-Dec	2	6	5A	0.25	0.4	0.3	Gray	2	8	6	7
10-Dec	2	6	5A	0.25	0.4	0.3	Higgins	2	7	6	0
10-Dec	2	6	5A	0.25	0.4	0.3	Inglis	3	8	7	0
10-Dec	2	6	5A	0.25	0.4	0.3	Mason	2	7	7	0
10-Dec	2	6	5A	0.25	0.4	0.3	Runyon	2	7	6	6
10-Dec	2	6	5B	0.25	0.4	0.3	Gray	2	8	6	12
10-Dec	2	6	5B	0.25	0.4	0.3	Higgins	1	8	7	0
10-Dec	2	6	5B	0.25	0.4	0.3	Inglis	3	8	7	0
10-Dec	2	6	5B	0.25	0.4	0.3	Mason	2	7	6	0
10-Dec	2	6	5B	0.25	0.4	0.3	Runyon	2	8	6	7
10-Dec	2	6	5C	0.25	0.4	0.3	Gray	3	8	6	15
10-Dec	2	6	5C	0.25	0.4	0.3	Higgins	2	8	6	1
10-Dec	2	6	5C	0.25	0.4	0.3	Inglis	2	7	6	0
10-Dec	2	6	5C	0.25	0.4	0.3	Mason	2	8	7	1
10-Dec	2	6	5C	0.25	0.4	0.3	Runyon	2	6	5	8
10-Dec	2	6	6A	2	0.4	0.3	Gray	2	8	6	7
10-Dec	2	6	6A	2	0.4	0.3	Higgins	2	7	6	0
10-Dec	2	6	6A	2	0.4	0.3	Inglis	2	7	6	0
10-Dec	2	6	6A	2	0.4	0.3	Mason	2	7	6	2
10-Dec	2	6	6A	2	0.4	0.3	Runyon	2	6	6	8
10-Dec	2	6	6B	2	0.4	0.3	Gray	3	8	6	12
10-Dec	2	6	6B	2	0.4	0.3	Higgins	2	8	7	1
10-Dec	2	6	6B	2	0.4	0.3	Inglis	3	8	7	0

10-Dec	2	6	6B	2	0.4	0.3	Mason	2	8	6	3
10-Dec	2	6	6B	2	0.4	0.3	Runyon	3	8	7	5
10-Dec	2	6	6C	2	0.4	0.3	Gray	3	8	6	15
10-Dec	2	6	6C	2	0.4	0.3	Higgins	2	8	6	0
10-Dec	2	6	6C	2	0.4	0.3	Inglis	3	9	7	0
10-Dec	2	6	6C	2	0.4	0.3	Mason	2	7	6	1
10-Dec	2	6	6C	2	0.4	0.3	Runyon	2	7	6	9
5-Dec	3	0	1A	0	0	0	Capps	2	6	5	0
5-Dec	3	0	1A	0	0	0	Higgins	2	7	6	0
5-Dec	3	0	1A	0	0	0	Inglis	3	8	7	0
5-Dec	3	0	1A	0	0	0	Mason	2	7	5	2
5-Dec	3	0	1B	0	0	0	Capps	2	7	6	0
5-Dec	3	0	1B	0	0	0	Higgins	2	7	6	0
5-Dec	3	0	1B	0	0	0	Inglis	2	6	5	0
5-Dec	3	0	1B	0	0	0	Mason	2	7	6	1
5-Dec	3	0	1C	0	0	0	Capps	2	8	6	6
5-Dec	3	0	1C	0	0	0	Higgins	2	7	6	0
5-Dec	3	0	1C	0	0	0	Inglis	3	8	7	0
5-Dec	3	0	1C	0	0	0	Mason	2	5	5	3
5-Dec	3	0	2A	0	0.4	0.3	Capps	2	8	6	0
5-Dec	3	0	2A	0	0.4	0.3	Higgins	2	7	6	0
5-Dec	3	0	2A	0	0.4	0.3	Inglis	3	8	7	0
5-Dec	3	0	2A	0	0.4	0.3	Mason	2	6	6	0
5-Dec	3	0	2B	0	0.4	0.3	Capps	2	7	6	0
5-Dec	3	0	2B	0	0.4	0.3	Higgins	1	6	5	0
5-Dec	3	0	2B	0	0.4	0.3	Inglis	3	6	5	0
5-Dec	3	0	2B	0	0.4	0.3	Mason	2	5	6	1
5-Dec	3	0	2C	0	0.4	0.3	Capps	2	6	6	0
5-Dec	3	0	2C	0	0.4	0.3	Higgins	2	7	7	0
5-Dec	3	0	2C	0	0.4	0.3	Inglis	3	8	7	0
5-Dec	3	0	2C	0	0.4	0.3	Mason	2	7	6	1
5-Dec	3	0	3A	0.25	0	0	Capps	2	7	5	6
5-Dec	3	0	3A	0.25	0	0	Higgins	2	6	5	1
5-Dec	3	0	3A	0.25	0	0	Inglis	3	7	6	0
5-Dec	3	0	3A	0.25	0	0	Mason	2	4	6	3
5-Dec	3	0	3B	0.25	0	0	Capps	2	7	6	0
5-Dec	3	0	3B	0.25	0	0	Higgins	2	7	6	0
5-Dec	3	0	3B	0.25	0	0	Inglis	3	6	5	0
5-Dec	3	0	3B	0.25	0	0	Mason	2	4	6	3
5-Dec	3	0	3C	0.25	0	0	Capps	2	8	6	6
5-Dec	3	0	3C	0.25	0	0	Higgins	2	6	5	0
5-Dec	3	0	3C	0.25	0	0	Inglis	3	8	7	0
5-Dec	3	0	3C	0.25	0	0	Mason	2	6	5	3
5-Dec	3	0	4A	2	0	0	Capps	2	6	5	5
5-Dec	3	0	4A	2	0	0	Higgins	2	6	5	0
5-Dec	3	0	4A	2	0	0	Inglis	3	5	4	0

5-Dec	3	0	4A	2	0	0	Mason	2	7	5	2
5-Dec	3	0	4B	2	0	0	Capps	2	8	6	6
5-Dec	3	0	4B	2	0	0	Higgins	2	7	6	1
5-Dec	3	0	4B	2	0	0	Inglis	3	8	7	0
5-Dec	3	0	4B	2	0	0	Mason	2	5	5	4
5-Dec	3	0	4C	2	0	0	Capps	2	6	5	0
5-Dec	3	0	4C	2	0	0	Higgins	2	7	7	1
5-Dec	3	0	4C	2	0	0	Inglis	3	7	6	0
5-Dec	3	0	4C	2	0	0	Mason	2	4	6	5
5-Dec	3	0	5A	0.25	0.4	0.3	Capps	2	8	6	0
5-Dec	3	0	5A	0.25	0.4	0.3	Higgins	2	7	6	0
5-Dec	3	0	5A	0.25	0.4	0.3	Inglis	3	8	7	0
5-Dec	3	0	5A	0.25	0.4	0.3	Mason	2	7	5	0
5-Dec	3	0	5B	0.25	0.4	0.3	Capps	2	7	7	0
5-Dec	3	0	5B	0.25	0.4	0.3	Higgins	2	7	7	1
5-Dec	3	0	5B	0.25	0.4	0.3	Inglis	3	8	7	0
5-Dec	3	0	5B	0.25	0.4	0.3	Mason	2	7	7	0
5-Dec	3	0	5C	0.25	0.4	0.3	Capps	2	8	5	0
5-Dec	3	0	5C	0.25	0.4	0.3	Higgins	2	7	6	1
5-Dec	3	0	5C	0.25	0.4	0.3	Inglis	3	7	6	0
5-Dec	3	0	5C	0.25	0.4	0.3	Mason	2	6	5	1
5-Dec	3	0	6A	2	0.4	0.3	Capps	2	7	6	5
5-Dec	3	0	6A	2	0.4	0.3	Higgins	2	6	5	0
5-Dec	3	0	6A	2	0.4	0.3	Inglis	3	8	7	0
5-Dec	3	0	6A	2	0.4	0.3	Mason	2	6	6	4
5-Dec	3	0	6B	2	0.4	0.3	Capps	2	7	6	0
5-Dec	3	0	6B	2	0.4	0.3	Higgins	2	7	6	0
5-Dec	3	0	6B	2	0.4	0.3	Inglis	2	7	5	0
5-Dec	3	0	6B	2	0.4	0.3	Mason	2	7	6	1
5-Dec	3	0	6C	2	0.4	0.3	Capps	2	7	6	0
5-Dec	3	0	6C	2	0.4	0.3	Higgins	2	7	6	0
5-Dec	3	0	6C	2	0.4	0.3	Inglis	3	7	6	0
5-Dec	3	0	6C	2	0.4	0.3	Mason	2	6	6	2
11-Dec	3	6	1A	0	0	0	Gray	2	8	6	12
11-Dec	3	6	1A	0	0	0	Higgins	2	7	6	0
11-Dec	3	6	1A	0	0	0	Inglis	3	7	6	0
11-Dec	3	6	1A	0	0	0	Mason	2	7	6	2
11-Dec	3	6	1A	0	0	0	Runyon	2	6	6	4
11-Dec	3	6	1B	0	0	0	Gray	3	7	6	7
11-Dec	3	6	1B	0	0	0	Higgins	2	8	6	1
11-Dec	3	6	1B	0	0	0	Inglis	3	8	6	0
11-Dec	3	6	1B	0	0	0	Mason	2	7	7	2
11-Dec	3	6	1B	0	0	0	Runyon	5	5	5	5
11-Dec	3	6	1C	0	0	0	Gray	3	7	6	15
11-Dec	3	6	1C	0	0	0	Higgins	1	7	6	0
11-Dec	3	6	1C	0	0	0	Inglis	3	7	6	0
11-Dec	3	6	1C	0	0	0	Mason	2	5	6	1

11-Dec	3	6	1C	0	0	Runyon	2	6	5	10
11-Dec	3	6	2A	0	0.4	Gray	2	8	6	10
11-Dec	3	6	2A	0	0.4	0.3	Higgins	1	8	6
11-Dec	3	6	2A	0	0.4	0.3	Inglis	3	8	6
11-Dec	3	6	2A	0	0.4	0.3	Mason	2	6	6
11-Dec	3	6	2A	0	0.4	0.3	Runyon	2	6	6
11-Dec	3	6	2B	0	0.4	0.3	Gray	2	8	7
11-Dec	3	6	2B	0	0.4	0.3	Higgins	2	7	6
11-Dec	3	6	2B	0	0.4	0.3	Inglis	3	9	6
11-Dec	3	6	2B	0	0.4	0.3	Mason	2	6	6
11-Dec	3	6	2B	0	0.4	0.3	Runyon	2	5	6
11-Dec	3	6	2C	0	0.4	0.3	Gray	2	8	6
11-Dec	3	6	2C	0	0.4	0.3	Higgins	2	8	7
11-Dec	3	6	2C	0	0.4	0.3	Inglis	3	8	6
11-Dec	3	6	2C	0	0.4	0.3	Mason	2	8	0
11-Dec	3	6	2C	0	0.4	0.3	Runyon	7	6	0
11-Dec	3	6	3A	0.25	0	0	Gray	2	6	7
11-Dec	3	6	3A	0.25	0	0	Higgins	1	7	6
11-Dec	3	6	3A	0.25	0	0	Inglis	3	8	6
11-Dec	3	6	3A	0.25	0	0	Mason	2	7	6
11-Dec	3	6	3A	0.25	0	0	Runyon	2	5	9
11-Dec	3	6	3B	0.25	0	0	Gray	3	8	6
11-Dec	3	6	3B	0.25	0	0	Higgins	2	8	7
11-Dec	3	6	3B	0.25	0	0	Inglis	3	8	6
11-Dec	3	6	3B	0.25	0	0	Mason	2	7	1
11-Dec	3	6	3B	0.25	0	0	Runyon	2	5	3
11-Dec	3	6	3C	0.25	0	0	Gray	3	7	15
11-Dec	3	6	3C	0.25	0	0	Higgins	2	7	1
11-Dec	3	6	3C	0.25	0	0	Inglis	3	8	0
11-Dec	3	6	3C	0.25	0	0	Mason	2	5	3
11-Dec	3	6	3C	0.25	0	0	Runyon	2	4	12
11-Dec	3	6	4A	2	0	0	Gray	1	8	6
11-Dec	3	6	4A	2	0	0	Higgins	2	7	6
11-Dec	3	6	4A	2	0	0	Inglis	2	7	5
11-Dec	3	6	4A	2	0	0	Mason	2	6	2
11-Dec	3	6	4A	2	0	0	Runyon	2	7	11
11-Dec	3	6	4B	2	0	0	Gray	3	8	13
11-Dec	3	6	4B	2	0	0	Higgins	2	7	1
11-Dec	3	6	4B	2	0	0	Inglis	3	9	0
11-Dec	3	6	4B	2	0	0	Mason	2	8	3
11-Dec	3	6	4B	2	0	0	Runyon	2	6	4
11-Dec	3	6	4C	2	0	0	Gray	3	8	15
11-Dec	3	6	4C	2	0	0	Higgins	1	8	0
11-Dec	3	6	4C	2	0	0	Inglis	3	9	0
11-Dec	3	6	4C	2	0	0	Mason	2	6	3
11-Dec	3	6	4C	2	0	0	Runyon	2	5	4
11-Dec	3	6	5A	0.25	0.4	0.3	Gray	2	8	6

11-Dec	3	6	5A	0.25	0.4	0.3	Higgins	1	8	6	0
11-Dec	3	6	5A	0.25	0.4	0.3	Inglis	3	8	6	0
11-Dec	3	6	5A	0.25	0.4	0.3	Mason	2	8	6	0
11-Dec	3	6	5A	0.25	0.4	0.3	Runyon	2	6	5	8
11-Dec	3	6	5B	0.25	0.4	0.3	Gray	3	8	6	15
11-Dec	3	6	5B	0.25	0.4	0.3	Higgins	1	8	7	0
11-Dec	3	6	5B	0.25	0.4	0.3	Inglis	3	9	6	0
11-Dec	3	6	5B	0.25	0.4	0.3	Mason	2	7	7	1
11-Dec	3	6	5B	0.25	0.4	0.3	Runyon	2	7	6	4
11-Dec	3	6	5C	0.25	0.4	0.3	Gray	2	8	6	15
11-Dec	3	6	5C	0.25	0.4	0.3	Higgins	1	8	7	0
11-Dec	3	6	5C	0.25	0.4	0.3	Inglis	3	8	6	0
11-Dec	3	6	5C	0.25	0.4	0.3	Mason	2	9	7	0
11-Dec	3	6	5C	0.25	0.4	0.3	Runyon	2	6	5	7
11-Dec	3	6	6A	2	0.4	0.3	Gray	2	8	6	15
11-Dec	3	6	6A	2	0.4	0.3	Higgins	2	8	7	0
11-Dec	3	6	6A	2	0.4	0.3	Inglis	3	9	6	0
11-Dec	3	6	6A	2	0.4	0.3	Mason	2	7	6	1
11-Dec	3	6	6A	2	0.4	0.3	Runyon	2	5	6	9
11-Dec	3	6	6B	2	0.4	0.3	Gray	2	7	6	10
11-Dec	3	6	6B	2	0.4	0.3	Higgins	1	7	6	0
11-Dec	3	6	6B	2	0.4	0.3	Inglis	3	8	6	0
11-Dec	3	6	6B	2	0.4	0.3	Mason	2	7	6	1
11-Dec	3	6	6B	2	0.4	0.3	Runyon	2	6	5	8
11-Dec	3	6	6C	2	0.4	0.3	Gray	3	8	7	15
11-Dec	3	6	6C	2	0.4	0.3	Higgins	2	7	6	0
11-Dec	3	6	6C	2	0.4	0.3	Inglis	3	8	6	0
11-Dec	3	6	6C	2	0.4	0.3	Mason	2	8	7	1
11-Dec	3	6	6C	2	0.4	0.3	Runyon	2	5	5	8

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**VITA**

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Blaine Jenschke was born on September 22, 1978 in San Antonio, Texas to Mr. and Mrs. James Jenschke. He attended Jourdanton High School and graduated with honors in 1997. In August 1997, he entered Texas A&M University, College Station, Texas, majored in animal science and received a Bachelor of Science degree in December 2001. Following graduation, Blaine entered graduate school at Texas A&M University to obtain his Master of Science degree in animal science under the direction of Dr. Rhonda K. Miller. Following the completion of his Master of Science, Blaine will attend the University of Nebraska-Lincoln to pursue a Ph.D. under the direction of Dr. Chris Calkins. The author is a member of the American Meat Science Association and Gamma Sigma Delta Honor Society.