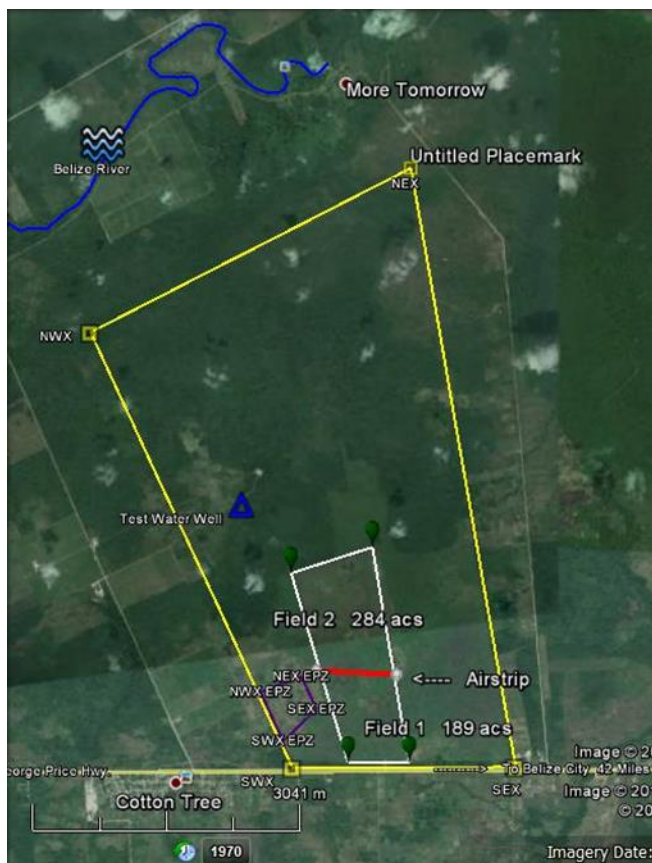


# Belize Sustainable Agriculture, Ltd. Farming Report – August 23, 2016

## General Comments & Weather



This is the ninth fortnightly Farming Report for BSA's 2016 Summer (Wet) Season, whose main objectives are:

- Inform readers as to BSA's farming activities by season, farm, and crop;
- Provide relevant data on climatic conditions and agricultural pests affecting BSA's crops;
- Inform readers on domestic/regional market conditions for BSA's crops.

BSA is only farming at the Cayo One Estate in the Summer 2016 season; it is situated approximately between miles 40 and 42 of the George Price Highway in Belize, near the village of Cotton Tree in Cayo District. Cayo One is some 41 miles west of Belize City, some 9 miles east of Belmopan and some 38 miles east of the Belize-Guatemala border at Melchor.

**August 2016** brought an unseasonal Hurricane Earl to Belize on August 4<sup>th</sup>, but thankfully it was followed by eight straight days of partial to full sunshine, which allowed damaged crops to recover. Subsequently there were three days of rain, which brought the Month to Date total on August 22<sup>nd</sup> to 226 mm, roughly in line with August rainfall patterns. With the most recent rainfall on August 20<sup>th</sup> – 22<sup>nd</sup> the more mature part of the Cayo One crop has sufficient rain to last through to harvest and it won't take much more for the remainder of Cayo One to be set until harvest. So we'll be hoping for a somewhat drier than normal September! For a more detailed discussion of Hurricane Earl, please refer to the August 9<sup>th</sup>, 2016 Farming Report.

Belmopan Precipitation Data (mm per month) – August Data through August 22 <sup>nd</sup>												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	105	282	30	66	71	414	175	226				
2000-2015	141	51	50	30	127	261	261	228	230	269	232	129

You can (normally) follow Belize's weather on: <http://www.hydromet.gov.bz/250-km-radar-loop>

We continue to use the US NOAA Hurricane Center weather radar network which monitors the Caribbean basin, and would also suggest Weather Underground as an additional resource:

<http://www.nhc.noaa.gov/>

<http://www.wunderground.com/q/zmw:00000.2.WMGMM>

# **Belize Sustainable Agriculture, Ltd.**

## **Farming Report – August 23, 2016**

**Cayo One** ~ 473 acres (100% non-irrigated)

### **Farm Operations**

#### Land Preparations

These were timely completed, and a full description is provided in the Lot Records at the end of this document.

#### Weather Analysis

The weather during the last fortnight has been practically ideal for our crop. We have adequate rainfall to allow grain fill and long periods of intense sunlight. This is especially important since the majority of the leaves were stripped from the plants due to Earl's powerful winds. The small remaining leaf surface is hypothetically working overtime converting sunlight and nitrogen from the air into nutrients the plant can use for sustenance. We are seeing some negative side effects from the lack of photosynthesis, which are discussed in greater detail under the General Plant Development section.

The weather outlook for the coming weeks appears to be for more of the same weather, which would be most welcome. Although we likely have sufficient soil moisture to complete grain fill, rain helps the plants resist desiccating, especially with the limited leaf surface area; rain also helps plants to resist pests such as aphids and mites. These will typically feed on leaf tissue and are most unwelcome, especially this year!

Temperatures have averaged a slightly higher than seasonal 93°F (34°C).

#### Seed Selection, Planting, and Crop Development

Planting began on Saturday May 28<sup>th</sup> and finished on June 1<sup>st</sup>. Final acreages planted were:

- **DeKalb 7088 - 425 acres (Part of Field 1 and all of Field 2) @ 27,656 seeds/acre**
- **Dow 3383 - 24 acres (Part of Field 1) @ 27,656 seeds/acre**
- **American Seed & Genetics R9000 - 24 acres (Part of Field 1) @ 27,656 seeds/acre**

#### General Plant Development

Much of the crop has recovered remarkably well from Hurricane Earl's effects. However, as mentioned earlier there are some deleterious and unforeseen effects from Earl. The plants that were kinked from the wind are experiencing a wide range of kernel fill. This is mostly due to insufficient photosynthate reaching the ear and causing the cob to "short-fill." This means that despite the good pollination that took place pre-hurricane only the lower portion of the cob will actually finish filling. The range of fill is dependent on how much of the phloem has been damaged and is limiting the amount of "juices" to travel to the cob. The best news, if there is any, is that the kernels that are finishing appear slightly larger than usual. Plants have a remarkable ability to adapt quickly and ensure their survival. This is evidence of just such a phenomenon. Instead of jeopardizing the complete growth to a full ear of unviable seed, the plant quickly adapts to produce a lesser quantity of equally or better seed than normal in order to optimize its survival.

There is a large variation in terms of plant maturity throughout the crop. This is almost certainly due to the uneven vigor and germination of the original seed, owing to the faulty lots of DK-7088 we received from Monsanto. The smaller, less vigorous plants will produce a smaller, later ear. This can and usually does play havoc with harvest simply because the

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more mature plants will have the heavier ear and be ready sooner for harvest than the less mature, and more moist plants. A decision will be taken closer to harvest that will hopefully still allow both to be harvested without unduly jeopardizing either plant.

**We have now completed our detailed field survey, which is available upon request.**

We did a random sample of 15 104" sections of the DK 7088 plants in each of Fields 1 & 2, harvesting the ears from each section. We also did two similar samples from each of the Dow and ASG varieties. We believe that these samples allowed us to acquire a statistically significant amount of information in terms of ears per acre and kernels per ear for each of the fields/varieties.

The data breakdown is provided in the section for each of the three varieties. However, speaking generally we were quite surprised to see that the main impact of Earl seems to be not on total ears per acre, which was our original assumption, but rather in 40-50% of ears being only partially filled due to a combination of damaged corn stalks/leaf loss and unhealthy plants due to poor seed (the latter only applies to the DK-7088).

We are still using an assumption of 100,000 kernels per bushel, which we would normally consider to be conservative but given the weather issues in 2016 may be quite close to the final outcome. We do not expect to have more definitive data about kernel weight until the second half of September.

As far as our three corn varieties are concerned, there are some stark differences between the various trial areas.

***DeKalb DK-7088 Comments***

We have been quite impressed to see how well the DK-7088 has weathered Hurricane Earl's effects. Its strong brace root system kept over half the plants upright, and almost all of the others have recovered from a 45° angle to being upright. Even the small areas that were flattened have mostly recovered. While they survived Earl's winds remarkably well, we are disappointed to have to conclude that a substantial portion of our below target yield is due to the bad seed we received from Monsanto. They have offered us free seed in compensation, but we hardly consider that this is adequate given the very real and measurable yield loss we will suffer from the bad DK 7088 seed. From our perspective the matter is not settled. That being said, we have been impressed with a number of the DK-7088's genetic qualities and we hope that Monsanto make the wise long term choice to encourage us to replant this variety in the future.

**Average Ears/Acre: 23,624: 13% lower than the target of 27,000 (Bad seed lots primary factor)**

**Average Kernels/Ear: 413: 25% lower than target of 550 (partially due to Earl, partially due to bad seed)**

***Dow DAS-3383 Comments***

The Dow DAS3383 has begun to markedly disappoint despite vigorous plant emergence and growth. The tendency of the variety to tiller and produce many ears due to stress is not welcome. There are many plants with multiple ears (we have seen as many as seven!) among which there is not a single good performer. So ear development and fill for the DAS 3383 is not living up to the variety's early growth promise. Again, we will wait until after harvest to determine if the DAS-3383 will perform sufficiently well to be selected, but the likelihood of it being in next year's line-up for is not high.

**Average Ears/Acre: 24,092: 11% lower than the target of 27,000 (Reasons under review)**

**Average Kernels/Ear: 325: 41% lower than target of 550 (partially due to Earl, partially due to weak genetics)**

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### **ASG RY-9000 Comments**

After struggling under June's very wet conditions, as well as Earl's impact, and despite three generous nitrogen applications at the same level as other varieties, the ASG RY9000 has continued to underperform. It will mature close to a full month behind the DK-7088. It has just finished pollinating and the results are not impressive. The amount of tassel destroyed by the high winds is causing pollination to suffer and yields to suffer as well. Of course we will wait for our final yield results before making a decision on growing this variety again. We will report these results in due course.

**Average Ears/Acre: 22,085: 18% lower than the target of 27,000 (Reasons under review)**

**Average Kernels/Ear: 359: 35% lower than target of 550 (partially due to Earl, partially due to weak genetics)**

### Fertilizer Program

The BSA fertilizer program has been completed and there are no further applications planned for nutrients; details of fertilizer applications can be found in the Lot Records at the end of this document. However, we feel it is worth repeating BSA's fertilizer strategy for Cayo One, which is based on multiple goals:

1. Test the impact of higher fertilization rates on yields
2. Ensure that fertilization is at least 110% of theoretical "maintenance rates"
3. Test one section for even higher Nitrogen Applications
4. Initiate long term trial of organic worm based soil enrichment

For a detailed discussion of BSA's fertilizer strategy, see the May 31<sup>st</sup> report and the field matrices later in this report.

### Pests, weeds, and funguses

There are some minor worm outbreaks throughout Cayo One. These are comprised mostly of earworms and are largely uncontrollable at this stage of the crop: this is due to the worm being inside the ear and out of danger from any spray that can be applied. There is no systemic spray application registered in Belize for earworm control. We have been petitioning DuPont to register Coragen for this use but so far have not had any luck in procuring and using this product. Although earworms are a pest, and certainly worth mentioning, they are not presently a material concern as the majority of our corn plants, with the exception of the ASG trial, are well past the stage where the worm can cause any real damage. There is plenty of evidence of earworms that have burrowed into the tassel, did not like what they tasted, and backed out having caused no damage to the kernels. Earworms prefer kernels in the early/mid milk stage and the crop has progressed beyond this point. The possibility of aphid and/or mites remains and we remain vigilant!.

Fungus has not been an issue despite the ample availability of raw leaf surface for entry. We credit some of this to an earlier application of Amistar Top which gave some systemic fungus control earlier in the plant cycle. At BSA we are firm believers that good plant nutrition helps in many ways; better fungus control is one of them. The healthier the plant, the better the plant is able to resist and fight off any insect or fungus attack.

Weeds and grasses continue to grow at an alarming rate. And why shouldn't they? We are feeding them well with lots of nitrogen, water and sunshine! Under normal growing conditions the weeds and grasses would be mostly sheltered from sunlight and limit their growth until the corn begins to senesce. However, after Hurricane Earl, growing conditions are anything but normal! Sunlight penetration into the crop, and indeed also the weeds, is allowing them to grow unabated. Before harvest we will most likely need to do an application of a selective desiccant/burndown so that the weeds will dry down quickly while leaving the corn to finish drying without any undue stress.



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**Cayo One fields looking remarkably good—Aug 23, 2016**



**DK 7088 Upright, but harvest will be slow! – Aug 4, 2016**



**Spanish Lookout fields drowned/devastated: Aug 18 '16**



**Sp. Lookout losses due to drainage overflows Aug 18 '16**



**Banana Bank cane fields badly damaged Aug 18, 2016**



**Penner fields showing heavy losses Aug 18, 2016**



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DK-7088 Healthy but with varying fill levels Aug 18 '16



DK-7088 Slight worm damage - August 23, 2016



DK-7088 16 Healthy rows: 18 would be better! Aug 23 '16



DK 7088 Partial fill 16x28; Full fill would be 16x40! 8/23/16



DAS-3383: Partial fills 16x28 max only 16x36 Aug 18 '16



ASG RY-9000 Still very immature/average 16x28 Aug 18 '16

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### Market Conditions and Conclusion

#### Corn

Despite reports of major corn crop losses throughout the entire Cayo District of Belize, the corn price has remained remarkably stable, and has in fact weakened a touch to the BZD 27.00–BZD 29.00/cwt range (BZD 28.00/cwt; USD 7.84/Bu; USD 309/mt). In fact, current market talk is that corn prices may drop a bit more during harvest to the BZD 26.00/cwt zone.

However, we believe that this is typical dealer talk used every year to nudge prices down at harvest time. While market talk cites hopes that a large percentage of Cayo District's downed corn will eventually be harvestable, our aerial observations indicate that much of the this crop is in fact in quite poor condition. Moreover, given how much of Cayo's crop was flattened by Earl, whatever plants managed to "bounce bank" will likely yield significantly smaller than normal ears. Lastly, we also consider it likely that much of the Cayo District's corn will be negatively affected by aflatoxin and therefore be of a substandard grade, and definitely not of "food grade" quality. However, it should be noted that for most animal feed (except horses) aflatoxin will not negatively affect marketability or price.

As the reality of the prospective harvest sets in, and given the relatively limited amount of corn currently in silos, we believe that local Belize corn prices will return to levels not seen for several years, and will trade above \$30/cwt (BZD 31.00/cwt; USD 8.68/Bu; USD 342/mt). This is because if Belize has to import corn to make up production shortfalls, the logistics of getting corn from Guatemala or Mexico to Belize will prove expensive and technically daunting...

CSA continues to discuss a prospective multi-year corn supply agreement with a US Fortune 100 company. However, we have no real sense as to the timing of this prospective agreement, and are making arrangements to commit our corn to the local market, especially in light of materially higher prices the local market would offer in 2016.

#### Soybeans

Soybeans continue to be very quiet with limited reported trades. There are very few plantings that might have been affected by Earl. #1 Grade Soybeans continue to be bid at 50.00/cwt (USD 550/mt), and lower grade #2 soybeans remain steeply discounted, with bids difficult to secure even below \$40.00/cwt. (USD 440/mt).

#### Edible Beans

Edible beans continue to be inactive as they are sold out in Belize. There has been no recent price talk but we continue to believe beans would trade in the USD 40-\$50/cwt.

***2016 will go down as a year that has challenged many a farmer's soul in Belize. However, we remain upbeat in light of being able to look forward to harvesting a reasonable crop, Mother Nature permitting (Extreme weather conditions leading up to harvest could still do serious damage to our crop). Proof once again that Belize offers excellent prospects for those who are prepared to make the necessary structural investments and pursue sound farming practices!***

Thanks! - Abram Dyck, John Peters, and the Farming Report Editorial Team

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<b>Grower</b>	<b>Location</b>	<b>Field #</b>	<b>Acres</b>	<b>Irr ?</b>	<b>Soil Type</b>	<b>Crop</b>	<b>Seed Variety (count/acre)</b>	<b>Plant Date</b>	<b>Stand Date</b>	<b>Fertilizer Program (For full details of applications, refer to Lot Records)</b>	<b>Comments</b>
BSA	Cayo One	1a	14	N	Black	Corn (Yellow)	DeKalb 7088 27,656	June 1	June 7	Base 13.3-30.3-13.2-1.8S <u>330lbs/acre</u> Liquid Aporte-M <u>2L/Acre</u> TRIAL Vermiplex <u>4L/Acre</u> 46-0-0 <u>100 lbs./acre</u> 38.5-0-0-7.2S <u>136lbs/acre</u> 46-0-0 <u>110 lbs./acre</u>	Land Preparation underway May 1, 2016; continues May 17, 2016 under good conditions; finished May 23. Planting June 1. Vigorous emergence June 5-10. Above average June 25 plant count for DK-7088 at 24,000/acre. Clear signs of water stress after very wet June; starting to dry out July 11. Major improvement by late July; Early tasseling. Very healthy plants, mostly pollinated. moderate hurricane damage, still a promising crop. Aug 9. Encouraging field survey that shows large quantity of ears that will be smaller than average. Aug 23.
BSA	Cayo One	1b	24	N	Black	Corn (Yellow)	Dow 3383 27,656	May 31	June 7	Base 13.3-30.3-13.2-1.8S <u>330lbs/acre</u> Liquid Aporte-M <u>2L/Acre</u> 46-0-0 <u>100 lbs./acre</u> 38.5-0-0-7.2S	Land Preparation underway May 1, 2016; continues May 17, 2016 under good conditions; finished May 23. Planting June 1. Vigorous emergence June 5-10. Above average June 25 plant count for DK-7088 at 24,000/acre. Clear signs of water stress after very wet June; starting



# Belize Sustainable Agriculture, Ltd. Farming Report – August 23, 2016

										<u>136lbs/acre</u> 46-0-0 <u>110 lbs./acre</u>	to dry out July 11. Major improvement by late July; Early tasseling. Very healthy plants, mostly pollinated. moderate hurricane damage, still a promising crop. Aug 9. Disappointing field survey shows insufficient ears that will be small. Aug 23
BSA	Cayo One	1c	24	N	Black	Corn (Yellow)	ASG R9000 27,656	May 31	June 7	Base 13.3-30.3-13.2-1.8S <u>330lbs/acre</u> Liquid Aporte-M <u>2L/Acre</u> 46-0-0 <u>100 lbs./acre</u> 38.5-0-0-7.2S <u>136lbs/acre</u> 46-0-0 <u>110 lbs./acre</u>	Land Preparation underway May 1, 2016; continues May 17, 2016 under good conditions; finished May 23. Planting June 1. Vigorous emergence June 5-10. Above average June 25 plant count for DK-7088 at 24,000/acre. Clear signs of water stress after very wet June; starting to dry out July 11. Major improvement by late July; Early tasseling. Very healthy plants, mostly pollinated. moderate hurricane damage, still a promising crop. Aug 9. Disappointing field survey shows insufficient ears that will be small. Aug 23.
BSA	Cayo One	2	284	N	Black	Corn (Yellow)	Dekalb 7088 27,656	May 28-31	June 7	Base 13.3-30.3-13.2-1.8S <u>330lbs/acre</u> Liquid Aporte-M <u>2L/Acre</u> 46-0-0	Land Preparation underway May 4, 2016; continues May 17, 2016 under good conditions; finished May 27. Planted May 28-31. Vigorous germination but irregular emergence June 5-10

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										<u>100 lbs./acre</u> 38.5-0-0-7.2S <u>136lbs/acre</u> 46-0-0 <u>110 lbs./acre</u>	<p>followed by disappointing June 25 plant count at 22,500/acre. After June's heavy rainfalls Field 2 also showed the highest amount of ponding as of July 11. Major improvement by late July; Early tasseling, even in areas with bad seed. Mostly healthy plants, mostly pollinated. July 25. Moderate hurricane damage, still a promising crop. Aug 9. Encouraging field survey that shows large quantity of ears that will be smaller than average. Aug 23.</p>
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# Belize Sustainable Agriculture, Ltd. Farming Report – August 23, 2016

## Lot Records for Fields 1 & 2

GROWER: <b>BSA</b>					Date Planted: <b>5/31/2016 - 6/01/2016</b>				
FARM LOCATION: <b>Cayo One Estates I</b>					SECTION #: <b>1a, 1b, 1c</b>		SOIL TYPE: <b>Black Loam</b>		
CROP: <b>Corn</b>					BLOCK #: <b>DK 7088;</b>		# OF ACRES: <b>141+24+24</b>		
VARIETY: <b>Dow 3383; ASG R9000</b>									

LAND PREPARATION					FERTILIZERS		PLANTING	
Discing	Harrowing	Leveling or Land Plane	Raking	Other	PREPLANT	AT PLANTING	Seed-Rate	Condition
5/1/2016					See Below	Aporte Pre-M See Below	27,656	Dry & Hot
5/16/2016	23-May-16	5/9/2016	4-May-16					
5/20/2016								

FERTILIZERS						Rain inches		PESTICIDES					
Date	Analysis	Rate/Ac	Ground	Air	#	Date	Quantity	Date	Description	Rate/Ac	Ground	Air	#
26-May-16	13.3-30.3-13.2-1.8S	330lb	X		1	6/3/2016	0.6	3-Jun-16	Atrazine	1lb	X		3
31-May-16	Aporté Pre-M	2L	X		2	6/5/2016	1.5	3-Jun-16	Prowl	1L	x		3
31-May-16	vermiplex (111 acres)	4L	X		2	6/8/2016	0.5	13-Jun-16	Certero (perimeter only)	161 cc		x	4
22-Jun-16	46-0-0	100lb		x	6	6/9/2016	0.8	13-Jun-16	Aporté Pre-M	250 cc		x	4
8-Jul-16	38.5-0-0-7.2S	136lb		x	8	6/12/2016	0.7	13-Jun-16	Damoi	250 cc		x	4
15-Jul-16	Aporté Pre-M	630 cc		x	9	6/17/2016	1.9	18-Jun-16	Primero	18 cc		x	5
8-Aug-16	46-0-0	110lb		x	10	6/18/2016	1.3	18-Jun-16	Tordon	150 cc		x	5
						6/19/2016	3.8	18-Jun-16	Aporté Pre-M	122 cc		x	5
						6/22/2016	1.0	18-Jun-16	Surf-Ac	3 cc		x	5
						6/23/2016	0.8	26-Jun-16	Certero	161 cc		x	7
						6/24/2016	0.7	26-Jun-16	Surf-Ac	2 cc		x	7
						6/25/2016	0.7	26-Jun-16	Aporté Pre-M	80 cc		x	7
						6/26/2016	0.8	15-Jul-16	Amistar Top	200 cc		x	9
						6/27/2016	1.9						
						7/3/2016	0.2						
						7/4/2016	0.07						
						7/6/2016	0.2						
						7/9/2016	0.1						
						7/10/2016	0.25						
						7/6/2016	0.2						
						7/9/2016	0.1						
						7/10/2016	0.25						
						7/12/2016	0.46						
						7/13/2016	0.4						
						7/14/2016	0.08						
						7/15/2016	0.08						
						7/16/2016	0.02						
						7/17/2016	0.08						
						7/18/2016	0.18						
						7/19/2016	0.9						
						7/20/2016	0.38						
						7/23/2016	0.11						
						7/24/2016	1.02						
						7/27/2016	0.03						
						7/28/2016	0.06						
						7/29/2016	0.68						
						7/30/2016	0.07						
						8/1/2016	0.42						
						8/3/2016	1.54						
						8/4/2016	2.4						
						8/13/2016	0.04						
						8/14/2016	1.4						
						8/15/2016	0.03						
						8/16/2016	0.01						
						8/17/2016	0.04						
						8/19/2016	5.9						
						8/20/2016	3.0						
						8/21/2016	6.4						
						8/22/2016	61.5						

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GROWER: <u>BSA</u>					Date Planted: <u>5/28-31/2016</u>				
FARM LOCATION: <u>Cayo One Estates I</u>					SECTION #: <u>2, 2a, 2b</u> BLOCK #: _____				
CROP: <u>Corn</u>					VARIETY: <u>DeKalb 7088</u>				
# OF ACRES: <u>253.16+15.1+15.7</u>									

LAND PREPARATION					FERTILIZERS			PLANTING	
Discing	Harrowing	Leveling or Land Plane	Raking	Other	PREPLANT	AT PLANTING		Seed-Rate	Condition
5/5/2016 5/10/2016 5/16/2016	23-May-16	5/12/2016 5/17/2016	6-May-16		See Below		Aporte Pre-M See Below	27,656	Dry & Hot

FERTILIZERS						Rain Inches		PESTICIDES					
Date	Analysis	Rate/Ac	Ground	Air	#	Date	Quantity	Date	Description	Rate/Ac	Ground	Air	#
Section 2						6/3/2016	0.6	2-Jun-16	Atrazine	1lb	x		3
20-May-16	13.3-30.3-13.2-1.85	330lb	X		1	6/5/2016	1.5	2-Jun-16	Prowl	1lb	x		3
28-May-16	Aporte Pre-M	2L	X		2	6/8/2016	0.5	13-Jun-16	ertero (perimeter only)	161 cc		x	4
22-Jun-16	46-0-0	102lb		x	6	6/9/2016	0.8	13-Jun-16	Aporte Pre-M	250 cc		x	4
8-Jul-16	38.5-0-0-7.2S	142.9lb		x	8	6/12/2016	0.7	13-Jun-16	Damoiil	250 cc		x	4
15-Jul-16	Aporte Pre-M	630 cc		x	9	6/17/2016	1.9	18-Jun-16	Primero	18 cc		x	5
8-Aug-16	46-0-0	112.3lb		x	10	6/18/2016	1.3	18-Jun-16	Tordon	150 cc		x	5
						6/19/2016	3.8	18-Jun-16	Aporte Pre-M	122 cc		x	5
						6/22/2016	1.0	18-Jun-16	Surf-Ac	3 cc		x	5
Section 2a,2b						6/23/2016	0.8	26-Jun-16	Certero	161 cc		x	7
20-May-16	13.3-30.3-13.2-1.85	330lb	X		1	6/24/2016	0.7	26-Jun-16	Surf-Ac	2 cc		x	7
28-May-16	Aporte Pre-M	2L	X		2	6/25/2016	0.7	26-Jun-16	Aporte Pre-M	80 cc		x	7
22-Jun-16	46-0-0	157lb		x	6	6/26/2016	0.8	15-Jul-16	Amistar Top	200 cc		x	9
8-Jul-16	38.5-0-0-7.2S	150lb		x	8	6/27/2016	1.9						
15-Jul-16	Aporte Pre-M	630 cc		x	9	7/3/2016	0.2						
8-Aug-16	46-0-0	167lb		x	10	7/4/2016	0.07						
						7/6/2016	0.2						
						7/9/2016	0.1						
						7/10/2016	0.25						
						7/12/2016	0.46						
						7/13/2016	0.4						
						7/14/2016	0.08						
						7/15/2016	0.08						
						7/16/2016	0.02						
						7/17/2016	0.08						
						7/18/2016	0.18						
						7/19/2016	0.9						
						7/20/2016	0.38						
						7/23/2016	0.11						
						7/24/2016	1.02						
						7/27/2016	0.03						
						7/28/2016	0.06						
						7/29/2016	0.68						
						7/30/2016	0.07						
						8/1/2016	0.42						
						8/3/2016	1.54						
						8/4/2016	2.4						
						8/13/2016	0.04						
						8/14/2016	1.4						
						8/15/2016	0.03						
						8/16/2016	0.01						
						8/17/2016	0.04						
						8/19/2016	5.9						
						8/20/2016	3.0						
						8/21/2016	6.4						
						8/22/2016	61.5						