

# Chapter 3

### **3.1 PASEGIANOS:**

PASEGIANOS believes in quality management systems and best practices in manufacturing as core parts of its strategy. The company has achieved ISO 9001:2008 certification (December 2007) and has been running 6 Sigma since 2008.

PASEGIANOS quality department consists of:

#### **3.1.1 Quality assurance section:**

Responsible for the results of Testing and the use of good testing practices for their assigned focus area as well as coordinating the testing effort including scripted and functional testing and managing the setup and assignment of the tests using Testing Management tools.

#### **3.1.2 INTERNATIONAL STANDARDIZATION ORGANIZATION (ISO) section:**

PASEGIANOS Company believes in quality and meeting standards. ISO 9000-9001-14001 is a series of standards, developed and published by the International Organization for Standardization (ISO), that define, establish, and maintain an effective quality assurance system for manufacturing and service industries. The ISO 9000 standard is the most widely known and has perhaps had the most impact of the 13,000 standards published by the ISO. Today, there are approximately 350,000 ISO 9000-certified organizations in over 150 countries.

#### **3.1.3 Six sigma project section:**

Established since 2008 to provide continuing improving of the plant. Now a days they can manage less than three projects per year and every project takes about four to eight months yearly.

### **3.2 Polyethylene tetra phthalate line (PET):**

PET is the latest addition to the family of the thermoplastics which has revolutionized the packaging on the international scene . PET has become the favored material in a number of applications, notably for carbonated and no-carbonated soft drinks, mineral water packaging, vegetable oils, and edible oils. PET Bottles are used to packing of Edible oils, jams and sauces, Butter, syrups, Drinking water .Having the capacity from 500ml to 2 liters.

Fig 3.1 Main Process of PET line

### **3.3 Methodology of 0.5 ml bottles:**

The project methodology “DMAIC” is a logical and structured approach to problem solving and process improvement, which has five phases:

#### **3.3.1 Define phase of 0.5 ml bottles:**

Project is supportive of key business objectives and focused on an going process. It has a measurable “Y”; Training projects should know volume of the processes with available data.

It creates defects. Project is linked to customer satisfaction, 70% reduction in defects, and Process should continue for a long period of time.

Why the project taking 0.5 liter as target?

- a) 47.7% of production is .5 liter bottles.
- b) Most of down time is in .5 liter shifts.

c) Few percentages of waste in .6 liter, liter, and 2 liter.

Fig 3.2 PET Utilization / L (%)

Fig 3.3 pareto chart for waste of machines

Fig 3.4 in Detail pareto chart for waste of machines

### **3.3.1.1 Approval form content:**

1. Project Scope
2. Problem Statement
3. Metric and Defect Top-level metrics identified on SIPOC
4. Stakeholders
5. Quantification of Objectives
6. Financials

Voice of the customer (VOC) is a term used in business and Information Technology refers to a process or program designed to capture customers' preferences and opinions, analyze them to gain new business insights, and then share them to create meaningful change. Voice of customer in this project was the waste of .5 liter is high .

Critical to quality (CTQs) are the key measurable characteristics of a product or process whose performance standers or specification limits must be met in order to satisfy the customer. Critical to

quality and Critical to Process characteristics are variables, and we use them to describe the cause and effect system that exists in any process. Critical to Process characteristics (CTP) are the inputs or independent variables (X's) and Critical to Quality is the dependent variable (Y).

Y=0.5 liters waste of bottles (percentage\ per month).

X1=product1 ( percentage\ per month)

X2=product 2 (percentage\ per month)

X3=product3 (percentage\ per month)

Table 3.1 production and waste per month

good product	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	average
product 1	49773	49773	49773	49773	49773	49773	49773	49773	49773	49773	49773	0	547503
product 2	13803	21209	25858	27112	25044	28145	4967	25027	27867	22835	25455	0	247322
product 3	8177	7934	10222	9030	12414	10840	1893	12823	11346	8618	10162	0	103459
total	71753	78916	85853	85915	87231	88758	56633	87623	88986	81226	85390	0	898284
defect													0
product 1	1742	791	1594	1873	2007	4175	1262	7986	9546	13471	5842	0	4191
product 2	308	206	997	973	214	1456	179	1009	2668	5507	4775	0	1524
product 3	1305	153	589	168	506	823	267	2665	790	1764	723	0	813
total	3355	1150	3180	3014	2727	6454	1708	11660	13004	20742	11340	0	6528

.5 bottles Waste(Y) =(total defect\total good product)\*100%.

X1=(average defect product1\average good product1).

X2=( average defect product2\average good product2).

$X_3 = (\text{average defect product} / \text{average good product})$ .

Project Financial Benefits:

The project is linked to the cost of waste which is 13056 SDG per month calculated from the 0.5 total waste which is  $6528 * 2$ .

Cost of goods sold (GOGS) per PCS = 2 SDG

The expected reduction is 80% from the total average of waste to be come  $6528 * 0.2 = 1305$  PCS.

The estimated cost of quality and potential project savings  
 $= 13056 * 0.8 = 10444$  SDG.

Table 3.2 approval form of 0.5 ml bottles

6σ SIX SIGMA PROJECT APPROVAL FORM									
Division:	production				Project #:	5/3/2015 - 4			
Project Title:	500ml bottles waste reduction project								
Focus Area:	FILLER		Project Start Date:	02/01/15		Project Stop:	07/30/15		
Location Name and Address:	PET LINE								
Problem Statement:	Starting from Jan 2014 up to Dec 2014 the waste of the 500 ml bottles is very high (6528 bottles )								
Define Unit:	PCS/DAY								
Define Defect:	high waste of .5ml								
Upper Boundary (Start of Process):	Perform feed unit/ compressor/ utilities								
Lower Boundary (End of Process):	shrink								
Define Metric:	pcs/month								
Project Objective:	Reduce the total waste of the bottles 500ml from 6528 per .5% to .1%								
Historical Comments:									
Constraints:									
<b>ADVISORY TEAM MEMBERS</b>				<b>APPROVAL</b>		<b>METRICS</b>			
Name	Role	Phone	E-mail	Initial	Date	Goal	Metric	U/M	
Segement CEO						Current	6825	pcs/month	
AMEIN OSMAN	Champion	123595250				Target	1820	pcs/month	
EEMAD	Finance	123595258				Entitlement			
IBRAHIM	Black Belt	123595256				Stretch			
IBRAHIM	Process O	123595256							
<b>WORKING TEAM MEMBERS</b>				<b>Projected Savings/Benefits *</b>					
Name	Role	Phone	E-mail						
khalid osman	six sigma of	123595282	kke@haggar.com			Sales:		NOP:	
undergraduate student						Material:	10372	ROIC:	
undergraduate student						Labor		Cash Flow :	
RODUCTION SUPERVISOR						Overhead :		Basis Points:	
maintenance engineer						SG&A:		Voice of Customer:	
<b>Other Savings</b>						Working Capital:		Other-1	
						WACC:		Other-2	
						One-time:		Other-3	
						<b>TOTAL SAVINGS</b>		Other-4	
WACC = Weighted Average Cost of Capital				* Attach detailed analysis		rev 3-21-2002			

### 3.1.4 Measure phase of 0.5 ml bottles:

### **3.3.2.1 Data collection plan:**

The process of acquiring subject and gathering information or data needed for study in order to plan and the methods of collecting will depends on planning method.

Collecting data is just one step in greater process of measuring outcomes and the five steps include:

1. Identify outcomes and develop performance measure.
2. Create and implement a data collection plan
3. Analyze the data
4. Communicate the results
5. Reflect, learn and do it again

### **3.3.2.2 Based on:**

1. What to measure.
2. How to define the defect.
3. Type of measure.
4. Data collection form.
5. Selecting sampling plan.

### **3.3.2.3 As-is Detail Process Map:**

1. Discharge bottles from blow mold
2. In feed bottles to filling machine

3. Filling bottles with syrup
4. Closing bottles after filling
5. Rolling the bottle with label
6. Checking the filling level
7. Coding the bottle with production and expiry date
8. Shrinking every 24 bottles

#### **3.3.2.4 The Cause and Effect (C&E) Matrix:**

A Simple project prioritization tool, provide Priority Rating to process input and the impact of the process output. To identify the relationship between the effects in a given situation and all of the possible causes to find problem sources/solutions.

1. List key outputs (Y's).
2. Rank Y's with respect to customer importance
3. List key of process step.
4. List key inputs (X's).
5. Relate X's to Y's.
6. Cross-multiply and add (TOTAL).
7. Avoid confusion and inconsistency by establishing scoring criteria:  
0 = no correlation.

1 = the process effect only remotely affects the customer requirement.

4 = the input variable has a moderate effect on the customer requirement,

9 = the input variable has a direct and strong effect on the customer requirements.

**Note:** Not recommended to use more than 5 different criteria.

Table 3.3 Ranking of causes:

<b>DAIPHRAM</b>	<b>45</b>
<b>spreaders</b>	<b>30</b>
<b>valve</b>	<b>30</b>
<b>syrup level</b>	<b>15</b>
<b>syrup sensor</b>	<b>15</b>
<b>temperature</b>	<b>15</b>
<b>Rubber seal</b>	<b>6</b>
<b>vacuum</b>	<b>6</b>
<b>glue</b>	<b>6</b>
<b>Cutter</b>	<b>6</b>
<b>cutting sensor</b>	<b>6</b>
<b>base cooling</b>	<b>5</b>
<b>filler infeed clamps</b>	<b>5</b>
<b>vent tubes</b>	<b>5</b>
<b>snifits</b>	<b>5</b>
<b>clamps</b>	<b>5</b>

<b>cap belt V</b>	3
<b>sensors</b>	3
<b>Closure</b>	3
<b>pressure</b>	1
<b>strectching</b>	1
<b>bottle cooling</b>	1
<b>mould locking</b>	1
<b>cap belt H</b>	1
<b>DISK BLOCK</b>	1
<b>parameter setting</b>	1
<b>sensors</b>	1

### **3.3.2.4 Production and Waste of 0.5 ml bottles:**

Production and waste measured by subtracting the output of the process from the input that will make the output of any process is the input of the next one.

Production report depends on the output of process data which is Come from the machine (usually the date taken from machine).

Display screen). The total of production daily report led to production and waste (per -month).

Fig 3.5 Waste of Production of 0.5 ml bottles Line in 2014

### **3.3.2.5 Filler data collection of 0.5 ml bottles:**

Filler pressure, temperature and level data is collected directly from machine display screen through a special form (check sheet) mostly every 10 mints.

This data provides correlation between (pre, temp, level and waste) in product 1, 2, 3 for measurement system analysis.

1: PASSEGIANOS 2: FORATORANG 3: ASEEL

Table 3.4 explains the relation between machine and production  
for PASEGIANOS:

presture	temp	level	production	waste	lab	clouser	unfill
2.52	8	87	90803	38	9	0	29
2.5	7	85	92030	39	9	0	30
2.51	8	86	94870	42	9	2	31
2.52	8	84	96032	43	9	2	32
2.51	8	85	98302	44	9	2	33
2.51	8	86	100180	44	9	2	33
2.5	7	85	102509	45	9	2	34
2.52	8	83	104640	49	9	2	38
2.52	8	88	106640	49	9	2	38
2.51	7	86	111220	54	9	2	43
2.52	8	86	113578	56	9	2	45
2.51	9	92	114654	61	9	2	50
2.51	9	85	117600	65	9	2	54
2.52	9	85	119940	69	9	2	58
2.51	8	86	122230	70	9	2	59
2.5	7	86	123673	72	9	2	61
2.51	8	85	125083	74	9	2	63
2.51	8	86	127427	79	14	2	63
2.51	8	84	129165	81	14	2	65
2.52	8	85	131655	84	14	2	67
2.5	7	87	133472	86	14	2	68
2.53	9	83	135615	86	14	2	69
2.52	9	83	137340	87	14	2	69
2.51	8	85	140195	91	19	2	70
2.51	8	86	142054	92	19	2	71
2.51	7	85	144207	94	19	2	73
2.5	8	85	146511	95	19	2	74
2.52	8	84	148627	98	19	2	77
2.51	9	86	151012	99	19	2	78
2.51	8	86	153119	102	19	2	81

Table 3.5 explains the relation between machine and production for FORAT Orange:

presure	temp	level	production	waste
2.52	10	85	17881	36
2.51	9	86	18860	36
2.5	9	85	20710	36
2.5	9	84	21280	37
2.53	8	85	22499	38
2.51	9	85	22700	39
2.51	10	83	23480	39
2.51	10	83	23837	39
2.49	10	84	24644	40
2.51	9	87	25545	41
2.51	8	85	26811	41
2.51	9	88	27300	41
2.51	10	86	28249	41
2.51	9	84	29423	41
2.51	10	88	29763	41
2.51	9	88	30488	41
2.52	10	86	31850	41
2.51	10	84	33217	46
2.52	9	85	34344	53
2.51	9	85	35672	56
2.51	11	86	36107	56
2.51	10	85	37533	57
2.51	10	85	38560	61
2.51	9	84	39631	65
2.52	9	86	40255	68
2.5	9	85	41393	69
2.5	9	85	42250	69
2.51	8	87	43702	70
2.52	9	85	44502	70
2.51	9	86	45460	71

Table 3.6 explains the relation between machine and production for ASEEL:

pre	temp	level	pro	waste
2.52	12	86	938	23
2.51	10	89	1910	36
2.51	10	89	3630	65
2.52	9	88	6354	75
2.52	9	84	7073	80
2.51	9	88	8654	90
2.51	9	86	10217	98
2.51	8	84	11622	106
2.51	7	84	12762	118
2.53	9	83	14166	123
2.51	9	87	15753	130
2.51	7	87	17750	136
2.52	8	85	20020	146
2.52	8	86	24488	147
2.52	7	87	24692	150
2.51	7	85	26839	153
2.51	7	84	29061	160
2.53	7	85	31477	166
2.51	7	84	33588	170
2.51	7	85	35771	173
3.49	8	84	37450	173
3.5	7	85	38936	173
3.53	9	85	40121	174
3.53	10	84	42050	174
3.52	10	7	44628	178

### 3.3.3 Analyze phase of 0.5 ml bottles:

#### 3.3.3.1 Fish bone diagram:

A tool used to analyze possible causes of a specific problem or condition.

Fishbone diagram is also known as a Cause and Effect Diagram or Ishikawa Diagram.

Decide the major categories of causes:

- A. Brainstorming

B. Use standard categories such as 5M+E (Machines, Materials, Methods, Manpower, Measurement and Environment).

C. Use major steps in the process if the effect is resulted from a recognizable process.

D. See examples.

Identify possible causes through Brainstorming:

Identify specific causes within each major category that may be affecting the problem.

Constructing a Fishbone Diagram:

Stat + Quality Tools + Cause-and-Effect

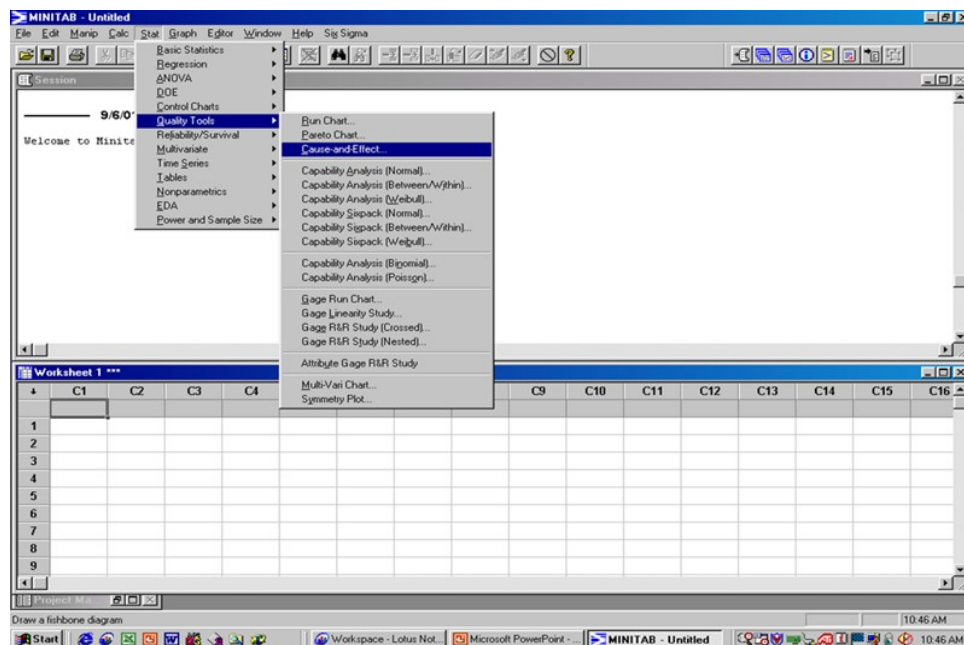


Fig 3.6 Constructing a Fishbone Diagram of measure phase

Table 3.7 explains the five whys of analysis techniques of project:

		<b>2.why</b>	<b>3.why</b>	<b>4.why</b>	<b>5.why</b>
1. Why is 0.5ml waste high?		Under fill	air Leaking in rubber seal	Defect in rubber seal	Pressure of elevator slender is high
		Labeler	cooling system	Foaming syrup	Spring life time
		closure	DIAPHRAM	Spring stuck	Syrup High temperature
			Air leaking	Spreaders	
			Bottles defect	Blow mold sensor	
			spreaders	Sensor error	
			Wrong color	Operator not check the box	
			Clamp stuck	Life time	
			Sensors not working		

### **3.3.4 Improve phase of 0.5 ml bottles:**

#### **3.3.4.1 QUALITY:**

The “Quality” portion of the equation measures the number of good parts produced compared to the total number of parts made. A comparison of the raw materials (or occurrences) put in to the process and the number of products/services that meet the customer’s specifications. The amount of the production that has to be discharged or scrapped.

(Quality rate = Good Pieces /Total Pieces), (Waste rate =1-quality rate)

Table 3.8 Action plane of improve phase:

<b>IMPROVEMENT PLAN</b>	<b>PRIORITY</b>
<b>OVER HAULL FOR ALL VALVE(O RING, SPRING,DIAPHRAM)</b>	HIGH
<b>OVER HAULL RUBBER FOR ALL VALVES</b>	HIGH
<b>REPLACE ALL TTIMING BELT WITH PULLY</b>	LOW
<b>REPLACING BEARING GEAR</b>	LOW

### **3.3.5 Control phase of 0.5 ml bottles:**

#### **3.3.5.1 Control base line:**

It is a way of standardize the waste by having a target base line and a basic base line.

Table 3.9 control base line per week

PEFOR MAINTINANCE								AFTER MAINTINANCE					
MAY				JUN				JULE				AUG	
WEEK1	WEEK2	WEEK3	WEEK4	WEEK5	WEEK6	WEEK7	WEEK8	WEEK9	WEEK10	WEEK11	WEEK12	WEEK13	WEEK14
0.6	0.6	0.7	0.5	0.6	0.6	0.7	0.4	0.3	0.28	0.38	0.26	0.3	0.3

Table 3.10 Quality and Waste rate before maintenance

WEEK	DAY	DATE	TOTAL FILLER	GOOD PRODUCT	GOOD PRODUCT PER PC	WASTE	waste rate	QUALITY RATE	WASTE RATE PER WEEK		
4TH QUARTER	SAT	2-May	91114	3778	90672	442	0.005	0.995	0.006		
	SAT	2-May	91050	3769	90456	594	0.007	0.993			
	SUN	3-May	104434	4327	103848	586	0.006	0.994			
	SUN	3-May	50906	2113	50712	194	0.004	0.996			
	MON	4-May	130078	5383	129192	886	0.007	0.993			
	TUE	5-May	144325	5977	143448	877	0.006	0.994			
	THU	7-May	99042	4100	98400	642	0.006	0.994			
	FRI	8-May	117663	4870	116880	783	0.007	0.993			
1ST QUARTER	SAT	9-May	105194	4352	104448	746	0.007	0.993	0.006		
	SAT	9-May	143634	5946	142704	930	0.006	0.994			
	SUN	10-May	124711	5162	123888	823	0.007	0.993			
	SUN	10-May	120771	5000	120000	771	0.006	0.994			
	MON	11-May	144907	5997	143928	979	0.007	0.993			
	TUE	12-May	126739	5245	125880	859	0.007	0.993			
	WED	13-May	123588	5112	122688	900	0.007	0.993			
	WED	13-May	127143	5264	126336	807	0.006	0.994			
	THU	14-May	84908	3515	84360	548	0.006	0.994			
	THU	14-May	141162	5841	140184	978	0.007	0.993			
	THU	14-May	20507	851	20424	83	0.004	0.996			
	FRI	15-May	117056	4845	116280	776	0.007	0.993			
	2nd QUARTER	SUN	17-May	109975	4552	109248	727	0.007		0.993	0.007
		SUN	17-May	69163	2863	68712	451	0.007		0.993	
		MON	18-May	131497	5445	130680	817	0.006		0.994	
MON		18-May	118784	4918	118032	752	0.006	0.994			
WED		20-May	47542	1968	47232	310	0.007	0.993			
WED		20-May	39474	1631	39144	330	0.008	0.992			
THU		21-May	84469	3499	83976	493	0.006	0.994			
THU		21-May	212699	8804	211296	1403	0.007	0.993			
TUE		26-May	120948	5005	120120	828	0.007	0.993			
WED		27-May	106023	4390	105360	663	0.006	0.994			
THU		28-May	87985	3643	87432	553	0.006	0.994			
SAT		30-May	112987	4680	112320	667	0.006	0.994			
SAT		30-May	67451	2795	67080	371	0.006	0.994			
SUN		31-May	84484	3499	83976	508	0.006	0.994			
3rd QUARTER	MON	31-May	125964	5218	125232	732	0.006	0.994	0.005		
	TUE	1-Jun	128565	5329	127896	669	0.005	0.995			
	TUE	1-Jun	144288	5978	143472	816	0.006	0.994			
	FRI	4-Jun	55122	2291	54984	138	0.003	0.997			
4th QUARTER	SAT	5-Jun	81237	3363	80712	525	0.006	0.994	0.006		
	SUN	6-Jun	215764	8933	214392	1372	0.006	0.994			
	MON	7-Jun	46546	1925	46200	346	0.007	0.993			
	TUE	8-Jun	41140	1705	40920	220	0.005	0.995			
	TUE	8-Jun	127870	5295	127080	790	0.006	0.994			
	WED	9-Jun	88182	3652	87648	534	0.006	0.994			
THU	10-Jun	121601	5036	120864	737	0.006	0.994				
1st QUARTER	SAT	12-Jun	122010	5053	121272	738	0.006	0.994	0.006		
	SUN	13-Jun	45497	1888	45312	185	0.004	0.996			
	SUN	13-Jun	124638	5156	123744	894	0.007	0.993			
	MON	14-Jun	138624	5737	137688	936	0.007	0.993			
	TUE	15-Jun	71864	2974	71376	488	0.007	0.993			
	WED	16-Jun	89763	3716	89184	579	0.006	0.994			
	THU	17-Jun	86041	3562	85488	553	0.006	0.994			
2nd QUARTER	SAT	19-Jun	115562	4748	113952	1610	0.014	0.986	0.007		
	MON	20-Jun	13829	573	13752	77	0.006	0.994			
	MON	20-Jun	121348	5023	120552	796	0.007	0.993			
	TUE	21-Jun	141487	5858	140592	895	0.006	0.994			
	TUE	21-Jun	110480	4576	109824	656	0.006	0.994			
	WED	22-Jun	123760	5123	122952	808	0.007	0.993			
	WED	22-Jun	83713	3466	83184	529	0.006	0.994			
	FRI	24-Jun	48031	1989	47736	295	0.006	0.994			
FRI	24-Jun	120352	4987	119688	664	0.006	0.994				
3rd QUARTER	SAT	25-Jun	120355	4988	119712	643	0.005	0.995	0.004		
	SAT	25-Jun	120356	4982	119568	788	0.007	0.993			
	SUN	26-Jun	119378	4963	119112	266	0.002	0.998			
	SUN	26-Jun	79300	3293	79032	268	0.003	0.997			
	SUN	26-Jun	31491	1308	31392	99	0.003	0.997			
	MON	27-Jun	83713	3477	83448	265	0.003	0.997			
	MON	27-Jun	42460	1758	42192	268	0.006	0.994			
	TUE	28-Jun	62209	2579	61896	313	0.005	0.995			

Table 3.11 Quality and Waste rate after maintenance

1ST QUARTER	MON	13-Jul	76761	3187	76488	273	0.0036	0.9964	0.003
	TUE	14-Jul	191526	7956	190944	582	0.0030	0.9970	
	TUE	14-Jul	87867	3654	87696	171	0.0019	0.9981	
	WED	15-Jul	45380	1888	45312	68	0.0015	0.9985	
2nd QUARTER	SUN	19-Jul	72356	3008	72192	164	0.0023	0.9977	0.0028
	SUN	19-Jul	143634	5975	143400	234	0.0016	0.9984	
	MON	20-Jul	124711	5189	124536	175	0.0014	0.9986	
	MON	20-Jul	129771	5389	129336	435	0.0034	0.9966	
	TUE	21-Jul	34530	1436	34464	66	0.0019	0.9981	
	TUE	21-Jul	212609	8848	212352	257	0.0012	0.9988	
	WED	22-Jul	118945	4949	118776	169	0.0014	0.9986	
	WED	22-Jul	82894	3443	82632	262	0.0032	0.9968	
	THU	23-Jul	35765	1480	35520	245	0.0069	0.9931	
	FRI	24-Jul	103145	4277	102648	497	0.0048	0.9952	
3rd QUARTER	SAT	25-Jul	123608	5126	123024	584	0.0047	0.9953	0.0038
	SAT	25-Jul	122497	5088	122112	385	0.0031	0.9969	
	SUN	26-Jul	244120	10146	243504	616	0.0025	0.9975	
	MON	27-Jul	16889	700	16800	89	0.0053	0.9947	
	MON	27-Jul	50043	2076	49824	219	0.0044	0.9956	
	TUE	28-Jul	120493	5010	120240	253	0.0021	0.9979	
	WED	29-Jul	145106	6030	144720	386	0.0027	0.9973	
	WED	29-Jul	77706	3222	77328	378	0.0049	0.9951	
	THU	30-Jul	172488	7149	171576	912	0.0053	0.9947	
	FRI	31-Jul	177782	7382	177168	614	0.0035	0.9965	
4th QUARTER	SAT	1-Aug	84337	3500	84000	337	0.0040	0.9960	0.0026
	SAT	1-Aug	116196	4824	115776	420	0.0036	0.9964	
	SUN	2-Aug	186070	7724	185376	694	0.0037	0.9963	
	SUN	2-Aug	47580	1978	47472	108	0.0023	0.9977	
	MON	3-Aug	145105	6039	144936	169	0.0012	0.9988	
	MON	3-Aug	121238	5044	121056	182	0.0015	0.9985	
	TUE	4-Aug	13787	573	13752	35	0.0025	0.9975	
	TUE	4-Aug	232715	9679	232296	419	0.0018	0.9982	
	WED	5-Aug	38819	1612	38688	131	0.0034	0.9966	
	WED	5-Aug	125723	5232	125568	155	0.0012	0.9988	
FRI	7-Aug	99586	4136	99264	322	0.0032	0.9968		
1st QUARTER	SAT	8-Aug	253477	10541	252984	493	0.0019	0.9981	0.0030
	SUN	9-Aug	30374	1263	30312	62	0.0020	0.9980	
	SUN	9-Aug	66443	2748	65952	491	0.0074	0.9926	
	WED	12-Aug	100102	4163	99912	190	0.0019	0.9981	
	WED	12-Aug	99974	4159	99816	158	0.0016	0.9984	
	THU	13-Aug	18192	754	18096	96	0.0053	0.9947	
FRI	14-Aug	204579	8515	204360	219	0.0011	0.9989		
2nd QUARTER	SUN	16-Aug	200605	8340	200160	445	0.0022	0.9978	0.0030
	MON	17-Aug	297260	12370	296880	380	0.0013	0.9987	
	TUE	18-Aug	71798	2980	71520	278	0.0039	0.9961	
	TUE	18-Aug	100015	4156	99744	271	0.0027	0.9973	
	WED	19-Aug	211509	8773	210552	957	0.0045	0.9955	
	WED	19-Aug	199096	8278	198672	424	0.0021	0.9979	
	SUN	23-Aug	51442	2135	51240	202	0.0039	0.9961	
	MON	24-Aug	104781	4351	104424	357	0.0034	0.9966	
MON	24-Aug	153607	6380	153120	487	0.0032	0.9968		