



**MONITORING REPORT OF PRODUCTION AND  
HARVESTING YEAR 2018  
second Quarter**

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CREA: MT-024685  
CONFEA 121.050.661-0

**SUMMARY**

1. INTRODUCTION .....	3
2. GENERAL INFORMATION .....	4
2.1. Owner Identification .....	4
2.2. Identification of Applicant.....	4
2.3. Identification of the Technical Responsible .....	4
2.4. Identification of the Executor .....	4
2.5. Property Identification .....	4
2.6. UTM Coordinates of the Evaluated Field .....	6
2.7. Lots Evaluated .....	6
3. METHODOLOGY .....	7
3.1. DATES OF VISITS .....	7
4. PRODUCTIVITY EVALUATION .....	8
4.1. Harvest Data per Diameter Class .....	8
5. EVALUATION OF AUDITED VOLUMES .....	10
5.1. Statistical analysis of data .....	10
6. CONCLUSION.....	12
ATTACHMENT I.....	13

**TABLES LIST**

<b>Table 1</b> – Number of lots and number of logs.....	07
<b>Table 2</b> – Harvesting Data per diameter class (Export).....	08
<b>Table 3</b> – Harvesting Data per diameter class (Domestic market).....	09
<b>Table 4</b> – Comparison of Volumes.....	10
<b>Table 5</b> – Statistical analysis of the blocks by diameter class.....	11

## 1. INTRODUCTION

Currently, the Vale Dourado, Tenda and Cocal projects are in the exploration phase, in which trees are felled and sectioned according to client demands. After, the cubing of logs take place, followed by log plating and classification in relation to their diameter, and lastly, they are grouped according to their destination.

In this context, the objective of this study is to present the results obtained from the second quarter of the year 2018, in the Vale Dourado, Tenda and Cocal project, by presenting volumetrics collected by the company, as well as to determine the accuracy of the surveys carried out in the year.

## 2. GENERAL INFORMATION

### 2.1. Owner Identification

**Company Name:** Floresteca S/A  
**Address:** Rodovia BR-163, Km 510 – Bairro: Bauxi (Fazenda Panflora),  
Rosário Oeste - MT  
**CNPJ:** 74.301.482/0007-41  
**I.E.:** 13.262.092-8  
**Contact:** Cassiano Sasaki  
**E-mail:** cassiano.sasaki@floresteca.com.br

### 2.2. Identification of Applicant

**Company Name:** TRC AGROFLORESTAL LTDA  
**Address:** Av. Castelo Branco, 272, sala 01, Bairro São Miguel, Cáceres  
– MT.  
**CNPJ:** 06.697.090/0001-06  
**I.E.:** 13.271.007-2

### 2.3. Identification of the Technical Responsible

**Name:** Frederico Tupinambá Simões  
**Address:** Rua Batista das Neves, 585 – Centro – Ed. TopGeo – Sala 2 -  
Cuiabá – MT – CEP: 78.005-190  
**ID:** 012.665.256-29  
**Qualification:** Forester  
**Class Council n.º:** 121050661-0  
**Phone:** +55(65)98157-4874  
**E-mail:** fredericotupinamba@hotmail.com

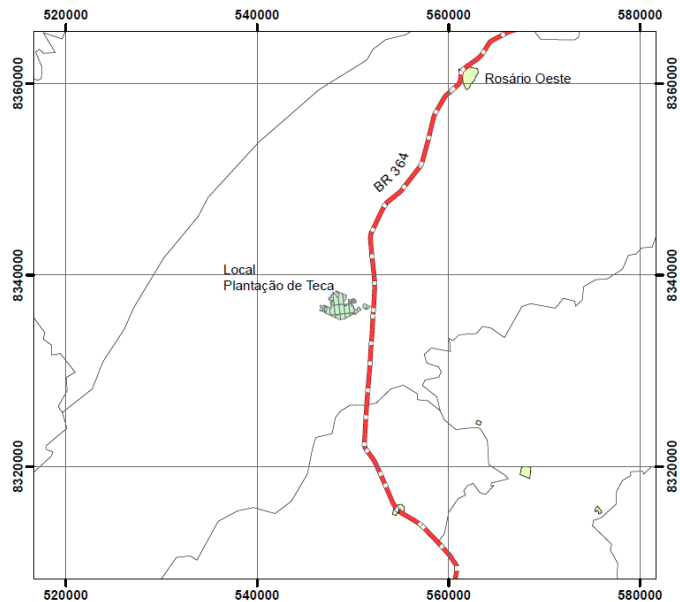
### 2.4. Identification of the Executor

**Name:** Augusto Cesar Braga Louzada  
**Address:** Rua Batista das Neves, 585 – Centro – Ed. TopGeo – Sala 2 –  
Cuiabá – MT – CEP: 78.005-190  
**ID:** 028.067.691-32  
**Qualification:** Forester  
**Class Council n.º:** 121263227-3  
**Phone:** +55(65) 98116-5924  
**E-mail:** gutolouzada@hotmail.com

### 2.5. Property Identification

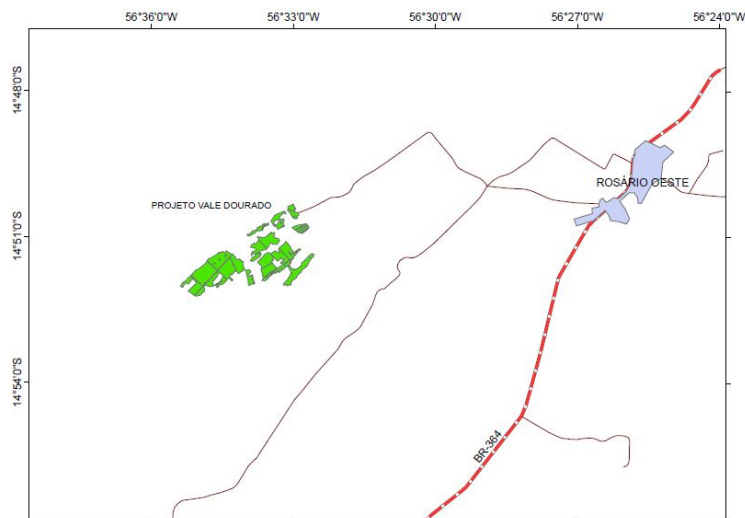
**Name:** PANFLORA FARM and FARM ALIANÇA  
**City:** Rosário Oeste - MT

**Locality:** The Project area is located in the city of Rosário Oeste, on the right side of Federal Highway – BR-364, 26.8 km from Rosário Oeste in the direction of the capital Cuiabá. according to the access sketch shown in Figure 1.



**Figure 1.** Location of the farm PanFlora, municipality of Rosário Oeste MT.

**Locality:** The Vale Dourado Project area is located in the municipality of Rosário Oeste, on the right bank of BR 364, 14 km from the municipal headquarters in the direction Jangada MT. according to the access sketch shown in Figure 2.



**Figure 2.** Location of the farm Vale Dourado, municipality of Rosário Oeste MT.

## 2.6. UTM Coordinates of the Evaluated Field

**Chart 1** – Central Coordinates of Evaluated Fields.

Project	Field	East (x)	North (y)	Zone
Vale Dourado	02	545899	8357014 UTM	21
Vale Dourado	05	545687	8357383 UTM	21
Vale Dourado	12A	547377	8358641 UTM	21
Vale Dourado	14	547386	8357325 UTM	21
Tenda	03	550661	8328906 UTM	21
Tenda	04	549759	8328258 UTM	21
Tenda	05	550102	8327985 UTM	21
COCAL	1,2B,3,4,5,6,7,8,9, 10A, 10B, 11A, 11C, 12A, 12B, 13,14,15, 16A e 16B	547087	8334323 UTM	21

## 2.7. Lots Evaluated

**Chart 2** - Lots evaluated in the second quarter of 2018.

Project	Field	Area	Number of lots evaluated
Vale Dourado	02	30.8	491, 492, 493, 494 e 507.
Vale Dourado	05	33.1	823, 824, 828 e 832.
Vale Dourado	12A	1.22	-
Vale Dourado	14	35.7	573, 578, 580, 582, 838, 839, 840, 841, 842, 851 e 858.
Tenda	03	28.2	940 e 941.
Tenda	04	50.2	959 e 962.
Tenda	05	25.6	942 e 955.
COCAL	1,2B,3,4,5,6,7,8,9,10A, 10B, 11A, 11C, 12A, 12B, 13,14,15, 16A e 16B	356.7	-

### 3. METHODOLOGY

#### COLLECTION OF DATA

The process for collecting the information was based on the following steps:

##### **Planning:**

In the second quarter of 2018, 27 lots were audited, 4 of the Vale Dourado project, 3 of the Tenda Project and 20 of the Cocal project.

##### **Number of parcel:**

20 lots were randomly selected to represent the fields of the Vale Dourado project, and 6 lots of the Tenda.

For lumber destined for sawmills that did not form lots, we measured the wood stacks of the above-mentioned fields on the terraces and on some trucks together with the Floresteca team, on the days when our team was in the Vale Dourado, Tenda project and Cocal.

##### **Measurements:**

A total of 26 lots were measured for the project, with a total of 2,123.00 wood logs. (Photos Annex I).

**Table 1 - Number of lots and number of logs.**

Class	N° of Lots	N° of Logs
20-30(Semi-long)	5	609
20-25(long)	2	152
25-30(long)	14	684
25-30	3	501
35-40	2	177
<b>TOTAL</b>	<b>26</b>	<b>2,123.00</b>

#### 3.1. DATES OF VISITS

Dates for indicative technical visits to reports delivered in the second quarter of 2018.

February	06 and 21
March	02, 13, 16, 19 and 28
April	03, 16 and 18
May	15, 24 and 25

## 4. PRODUCTIVITY EVALUATION

### 4.1. Harvest Data per Diameter Class

In Table 2 shows the results of loaded values by diameter class from the audit stands in the second quarter of 2018 can be observed. The diameter class of 25 to 30 centimeters obtained a higher loaded value, followed by the classes 20 to 30, 35 to 40, 20 to 25, greater than 40 and 30 to 35 centimeters in diameter, totaling a volume of **8,466.36** cubic meters of exported wood.

**Table 2** – Harvesting Data per diameter class (Export).

EXPORT				
Project	Year	Area (ha)	Diameter class	Volume (m <sup>3</sup> )
VDO/TENDA/COCAL	1995	561.52	20-30	2,614.66
			20-25	830.69
			25-30	3,120.89
			30-35	462.22
			35-40	902.00
			> 40	535.91
<b>TOTAL</b>				<b>8,466.36</b>



For sawmills, nine diameters classes were obtained, totaling the volume of **6,464.28** cubic meters.

**Table 3** - Harvesting Data per diameter class (Domestic market).

<b>SAWMILLS</b>				
<b>Project</b>	<b>Year</b>	<b>Area (ha)</b>	<b>Diameter Class</b>	<b>Volume (m<sup>3</sup>)</b>
			15-20	80.05
			16-18	268.09
			16-20	52.62
			18-20	2,713.84
<b>VDO/TENDA/COCAL</b>	<b>1995</b>	<b>561.52</b>	20-23	628.14
			15-25	890.16
			20-25	766.81
			25-30	459.66
			30-35	604.91
<b>TOTAL</b>				<b>6,464.28</b>

## 5. EVALUATION OF AUDITED VOLUMES

A total of 26 lots were compared relating the length and circumference. Table 4 shows the results of the volumes obtained by the company and the volumes obtained by the audit.

**Table 4** – Comparison of Volumes.

Project	Year	Area (ha)	Class of Diameter	Volume (m <sup>3</sup> )	
				Company	Audit
			20-25 (long)	48.706	48.695
			25-30 (long)	341.674	344.923
<b>VDO/TENDA/COCAL</b>	<b>1995</b>	<b>561.52</b>	20-30	121.587	121.466
			25-30	72.931	72.788
			35-40	48.755	48.771
<b>TOTAL</b>				<b>633.653</b>	<b>636.643</b>

### 5.1. Statistical analysis of data

To compare and measure the lengths and circumferences of the wood logs, 26 lots were selected to verify that they are being correctly calibrated.

The Analysis of Variance and the Tukey Test were applied by class of diameter in the comparison of the volumes supplied by the company with the one audited.

**Table 5** - Statistical analysis of the blocks by diameter class.

STATISTICAL ANALYSIS								
Project	Year	Field	Area (ha)	Class of Diameter	F tabled	F calculated		Coefficient of variation (%)
VDO	1995	2	30.8	Long (20-25)	3.87	0.3147	ns	18.77
				35-40	3.89	0.0064	ns	18.41
VDO	1995	5	33.1	Long (20-25)	3.87	0.6778	ns	22.23
				Semi long (20-30)	3.86	0.0300	ns	18.31
VDO	1995	14	35.7	Comprida (25-30)	3.85	0.5561	ns	18.71
				35-40	3.9	0.0190	ns	17.15
Tenda	1997	3	28.2	Semi long (20-30)	3.87	0.0203	ns	9.22
				25-30	3.87	0.164	ns	18.25
Tenda	1997	4	50.2	Semi long (20-30)	3.87	0.1837	ns	9.51
				25-30	3.87	0.0678	ns	17.70
Tenda	1997	5	25.6	Semi long (20-30)	3.87	0.0394	ns	8.34
				25-30	3.87	0.0010	ns	21.33

As can be seen, the F value Calculated in all classes is less than the Tabulated F. Therefore, the numerical differences observed between the means of the volumes in the treatments are not statistically significant. Thus, the average of the volumes obtained by the company in the lots do not have significant differences compared to the audited one.

## 6. CONCLUSION

According to the items verified during the audit, it can be seen that the company TRC Agroflorestal LTDA is a company well-structured to control its clearcutting and harvesting processes.

After the standardization work in the lots during the second quarter of 2018 of the Vale Dourado, Tenda and Cocal project, it was verified that the numerical differences between the averages of the volumes in the treatments are not significant. Thus, it is observed that the employees of the company have been doing a good job in terms of precision in terms of measures of length, circumference and formation of lots for export.

In the classes destined to sawing, all the waybill for validation of the total volume were analyzed and checked.

With the data obtained from the audit, in comparison with the data provided by the company, all timber collected and loaded on the second quarter of 2018 from the stands analyzed were correctly measured in volume and quality, as this audit could verify.

Cuiabá, August 15<sup>th</sup> 2018.



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**ATTACHMENT I – PHOTOGRAPHIC REPORT**

