



Reportable:	Yes/No
Circulate to Judges:	Yes/No
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**IN THE HIGH COURT OF SOUTH AFRICA
(NORTHERN CAPE HIGH COURT, KIMBERLEY)**

CASE NO.: 1720/2010
Matter heard: 15-09-2016
Delivered: 15-12-2017

In the matter between:

**GERT JOHANNES VERMEULEN
PIETER JAKOBUS HUGO
THABA LETSELE (PTY) LTD
JACOB STEYN N.O
DE BRAK BOERDERY CC
CHRIS STRAUSS
BOTHAMARKRAM
ALWYN JOHANNES LÜBBE
SAREL FRANCOIS WEIDEMAN
MIETJIE STEENKAMP
ALEXANDER ABRAHAMS
FREDDY MARKRAM N.O.**

**1st Plaintiff
2nd Plaintiff
3rd Plaintiff
4th Plaintiff
5th Plaintiff
6th Plaintiff
7th Plaintiff
8th Plaintiff
9th Plaintiff
10th Plaintiff
11th Plaintiff
12th Plaintiff**

And

MINISTER OF DEFENCE

Defendant

J U D G M E N T

WILLIAMS J:

1. On 6 September 2009 while conducting military exercises with live ammunition at the Lohatla Military Base, a fire broke out which spread to the farms of the plaintiffs. The plaintiffs issued summons against the defendant, the Minister of Defence, for damages suffered as a result of the fire on 4 October 2010. On 6 September 2012 the merits were settled before Olivier J an order by agreement was made in the following relevant terms:

“1. THAT the defendant is liable for the proven or agreed damages of the first to the fifth plaintiffs, and the ninth and twelfth plaintiffs qua owners of the properties described in the particulars of claim.

2. THAT Barend Frederik Lubbe, in his capacity as executor of the estate of the late Alwyn Johannes Lubbe is hereby substituted for the late Alwyn Johannes Lubbe.

3. THAT the defendant is liable for the proven or agreed damages of the executor of the estate of the late Alwyn Johannes Lubbe, the eighth plaintiff, who was the owner of the property described in the particulars of claim.

4. THAT the defendant is liable for the proven or agreed damages of the sixth, seventh, tenth, and eleventh plaintiffs, the possessors of the properties referred to in the particulars of claim.”

2. The trial on quantum was initially set down for hearing on 12, 13 and 14 March 2013. This time was however spent in its entirety on an application for postponement brought by the defendant which inevitably caused the postponement of the trial to December 2013.

3. On 3 December 2013 an inspection *in loco* was held at some of the farms. Due to the fact that Danielskuil, from where the procession started, is some 160 kilometre from Kimberley, not all of the fourteen farms could be visited in one day. The parties however agreed and placed on record that the farms not inspected suffered from the same degradation observed on the farms visited, that some burnt bushes and trees resprout in the normal course while others do not and that the observations made in respect of grasses on the farms inspected apply similarly to those farms not visited.
4. The inspection *in loco* was a most unpleasant experience and set the scene for the rest of the trial. In a matter of this nature where the defendant has admitted negligence and there can hardly be any doubt that a fire which raged over several days would leave destruction in its wake, causing damage to the plaintiffs properties, the defendant chose to put almost all of the various claims in issue. Attempts at settlement were unsuccessful. Attempts at narrowing the issues between the parties proved to be unproductive. Points of agreement reached between the various experts were later disputed and retracted. A meeting of some of the experts had to be arranged in one of the courtrooms on 4 February 2014, under the chairmanship of Adv J Van Niekerk SC, where the discussions and points of agreement could be recorded in order to prevent any unnecessary disputes regarding such agreements. Even this arrangement did not have the desired effect and the trial which was initially set down for 3 days took 113 days spread

over two years and 9 months to complete. Mr Mbenenge SC (as he then was) who initially led the defendant's legal team was indeed wise when he chose to withdraw from this matter on 4 February 2014.

5. The plaintiffs' claims are divided into three main groups. The infrastructure claims relate to fencing, pipes, dams and the like. Production claims which were structured according to a formula which in previous fire cases was accepted by the defendant, were in most instances amended to include in the alternative a production claim based on the formula used by the defendant's expert Prof Dube. Then there are the claims for general damages which include *inter alia* fire fighting costs, transport costs, labourers wages, trees lost and long term grazing lost.
6. The plaintiffs' loss of production claims are premised on a 3 year withdrawal period of the livestock from the areas affected by the fire. The formula used is as follows:
The affected area in hectares divided by the hectares per large livestock unit, which would give the number of cows having been kept on the affected areas. The number of cows are multiplied by the percentage calving rate to give the projected number of calves. The number of calves for a particular year would then be multiplied by the average selling weight of a particular plaintiff multiplied by the average price obtained per kilogram for a particular year.

7. A production loss claim for a particular year would thus for example be expressed as follows:
 $2010 : 729 \div 10.5 \text{ (ha per unit)} = 69.4 \text{ Cows} \times 80\%$
 $= 55.5 \text{ (calves)} \times 250 \text{ kg} \times R17.67$. Thus totalling R245 171.25
 (This is the 2010 production loss claim of the 5th plaintiff)

8. The initial production claims which allowed for 10 hectares per large livestock unit but were amended to conform with an average of 10.5 hectare per unit reached by agreement between the experts. Various other amendments were sought to the claims of the plaintiffs. These amendments were generally granted on the basis that (i) there would be no prejudice to the defendant (in some cases the amendments brought about a decrease in claims), (ii) the defendant was granted time to study and consider the amendments sought and (iii) in the case of the 1st plaintiff Mr GJ Vermeulen, whose production method differed completely from the rest of the plaintiffs, the defendant was granted some months to investigate his amended production claim before his evidence was led.

9. I now turn to deal with the evidence of the plaintiffs. **Mr Migiel Coetzee testified on behalf of the 5th plaintiff, De Brak Boerdery CC.** It was during his evidence that it came to light that points of agreement reached by the parties' experts relating to the infrastructure claims and which would have saved considerable time were now disputed by Mr Memani who appeared for the defendant, as being the maximum allowed by

the defendant, but that each and every infrastructure claim would be expected to be proved by every plaintiff. I will return to the defendant's obstructive attitude in more detail later in this judgment.

10. Coetzee testified that he had farmed in partnership with the 5th plaintiff, De Brak Boerdery CC since January 2009. The 5th plaintiff owned the farm Owendale and provided the property while Coetzee provided the cattle – 73 cows and 4 bulls. The arrangement with the 5th plaintiff, through its only member a certain Mr Du Toit, was that he would share the profits and/or losses of the farming operations with the 5th plaintiff. Du Toit had in the meantime immigrated to Australia and Coetzee was authorised to testify on behalf of the 5th plaintiff.
11. The fire burnt through the whole of the farm of Owendale which measures 729.1949 hectares in extent. 10 Cows died in the fire. Coetzee was left with no grazing for the remaining cattle and was forced to sell the entire herd at a loss.
12. The production claim of the 5th plaintiff is based on having reasonably been able to keep 69.4 cows on the farm with an 80% calving rate as claimed. In their initial claims, the plaintiffs claimed at the going rate for beef prices during 2010 multiplied by 3 years, but at the trial refined their claims to the average beef price for each of the 3 years claimed. The 5th plaintiffs total claim for loss of production thus amounts to R806 553.75.

13. As far as the claim for infrastructure is concerned Coetzee testified that he had obtained a map of the farm from the Department of Agriculture's Technical Services and had in part used this map to determine the extent of the fences damaged in the fire. The map was however an old one, dated 2002, and did not include all the camps which existed at the time of the fire. He therefore in addition to using the map provided, measured out the fences by using a vehicle odometer and a measuring wheel to make sure that the lengths were correct. He measured 4971 m of fence proof which burned, 12 250m of 8 wire inside fence burned and 1400 m of 14 wire inside fence burned, bringing the total claim for infracture to R392758.00. (The price per meter claimed to replace the burnt fences was calculated according to a formula explained later in this judgment.)
14. Under general damages the 5th plaintiff claimed for the 10 cows lost in fire at R8000, 00 each, which Coetzee testified was the value per cow. The 5th plaintiff had to pay a contractor to transport the remainder of the cattle to the purchaser who had a farm in the Kuruman district some 110 km from Owendale at R50.00 per kilometre. Fire fighting costs comprised of R700.00 for petrol for the vehicle used in fighting the fire, R8000, 00 for damage to the clutch and gearbox of the vehicle, occuring while driving over the rocky terrain of the farm and R150, 00 for petrol for the fire-fighter used.

15. Coetzee also testified that wild olive, karee and camelthorn trees were lost in the fire. He testified that he had determined the number of trees lost by taking certain portions of the farm, determining its size and counting the trees within such areas. According to his own calculations more trees were lost. But he accepted the plaintiffs experts determination of 87 trees lost at R5000, 00 per tree and left it for the experts to explain. The final claim under the general damages heading is for long term grazing lost, calculated over 7 years, which Coetzee also left for the experts to explain. The 5th plaintiff's total damages claim amounts to R2627098.75.
16. The next witness to give evidence was **Mr Victor Hugo on behalf of his father the 2nd plaintiff, Mr Peter Hugo**. The 2nd plaintiff had been ill and at the time when the evidence was presented was still recuperating at home. Hugo has personal knowledge of the farming activities on the farm Doornvlei since he had been in charge of the farming on behalf of the 2nd plaintiff since 1999. He also kept some of his own cattle on the farm. Hugo was also personally involved in fighting the fire on Doornvlei from 6 to 8 September 2009.
17. Hugo, who is a mine surveyor by profession, had used an industrial GPS to measure the areas burnt on the farm as well as the fences burnt. The total area burnt amounted to 520 hectares which he conceded, based on the experts reports, would amount to a total affected area of 610 hectares. The fences burnt were jackal proof, measured at 4764.2 meters and

inside fences of 10 wires, measured to be 8777.07 meters. The claim for the burnt fences was formulated as mentioned herein before and totals an amount of R466 445.55.

18. The 2nd plaintiff's production loss claim is formulated in accordance with the formula used by the plaintiffs as described herein above. Hugo however testified that the average weaning weight at which the 2nd plaintiff sold his calves was 225 kg and that he, before the fire, also achieved an 80% calving rate. The price per kilogram was determined by the experts for the plaintiffs at an average over the 3 years withdrawal period as R17,67. The 2nd plaintiff's total loss of production over 3 years is calculated as R554 617.99. Hugo testified that the 2nd plaintiff would be amendable, should the court so decide, to accept a production claim based on the formula of Prof Dube.

19. As far as general damages are concerned Hugo testified that two vehicles (bakkies) were used over 48 hours in fighting the fire on Doornvlei – each carrying one firefighter. The vehicles used 70 litres of diesel per day, which at that stage cost R10,00 per litre. The firefighters used 50 litres of petrol over the two days, which Hugo testified also cost about R10,00 per litre. Driving the vehicles over the rough terrain caused six flat tyres which Hugo had repaired at R45,00 per tyre. Two additional labourers had to be employed over two days to assist with the firefighting and were paid at a rate of R15.00 per hour over 48 hours at a total cost of R1440,00. The two vehicles used

required repairs afterwards, additional to normal maintenance and to the tune of about R5000,00. The total cost incurred in fighting the fire thus amount to R10.010, 00, which was rounded of to R10.000.00.

20. Hugo testified that it was quite difficult to calculate the number of trees lost in the fire. Doornvlei has wild olive, karee, witgat as well as camelthorn trees. He was guided by the experts in claiming for 101 trees at R5000, 00 per tree (although he estimated the trees lost in the fire to be considerably more). The same applies to the claim for long term loss of grazing. The total general damages claim for the 2nd plaintiff amounts to R1162 053.3 - bringing the total claim to R2 183 115, 85.
21. **Botha Markram is the 7th plaintiff in this matter and leases the farm Kolbe from PPC.** According to the lease agreement with PPC the lessee is responsible for any structural damage to the property. PPC as owners of the property had also ceded their right to claim damages from the defendant to Markram.
22. The farm Kolbe measures 1561.9004 hectares in extent. Markram testified that before he could help fight the fire he first chased his cattle from where they were grazing in one camp to a kraal close to the farmhouse. At that stage he had 120 cattle of which 3 were bulls. He fought the fire and kept observation for some 24 hours during which he used his vehicle with a firefigther and one labourer.

23. Markram testified that he measured the burnt area of the farm with measuring instruments used in conducting field surveys – a hundred meter length of rope marked in 1 meter lengths which he then measured between metal poles. Contours could not be measured in this way, so curved areas were excluded, but small areas in between the measuring poles which had not burnt were included to cancel out those areas which could not be measured. With this method of calculation of the burnt area he reached a figure of 375 hectares burnt area. The affected area of 931 hectares is based on the camps which could not be used after the fire as a result of the extent of the burnt areas within these camps.
24. In this respect Markram stated that he had initially continued farming with all his cattle on the remaining camps but by December 2009 he had to start moving some of the cattle to his own farm about 30 kilometres from Kolbe. This in turn caused overgrazing on his farm and he had to sell 12 cattle. After the second rain season following the fire some cattle were moved back to Kolbe but according to Markram the climax grasses had not yet developed properly.
25. Markram also measured the burnt fences on Kolbe by multiplying the distance between the metal droppers. In this respect he testified that it was not feasible to fix new fence to the fire damaged fence since the damaged fence was not pliable and that he in fact required larger lengths of fence than what he had measured. He was however willing to claim only

for the burnt extent of the fences. Fence proof burnt was 2150 meters and inside fences of 6 wires totalled 1500 meters. The price and formula used to calculate this claim was obtained from the experts and the total fence claim amounts to R131 659,79.

26. Markram's production claim, based on an average calving rate of 74%, weaning weight of 224 kg, at a price of R17,67 for 3 years, amounts to R779 068, 80. He also claims in the alternative according to Prof Dube's formula, the amount of R2 967 562.50.

27. Under general damages Markram claims for transport costs of the cattle to his own farm. He stated that he used his own trailer which could accommodate 5 or 6 cows depending on their size and that he made about 15 round trips to his farm (60 km) at R8.00 per kilometre in his estimation – totalling R7 200.00. He incurred costs in fighting the fire in that he drove his vehicle over about 120 kilometres (to and from his own farm and in fighting the fire) at R10.00 per liter petrol. He had to replace two tyres at R700, 00 each. After the fire he had to have the radiator of his vehicle repaired and cleaned at R500.00. He had to pay his labourer an additional amount of R120, 00. The firefighters pipes had to be replaced at an amount of R900, 00. The total of the claim relating to firefighting costs is thus R3 702.00.

28. He also estimated the trees lost in the fire at 96 based on the hectares burnt and was advised by the experts to claim R5000.00 per tree totalling R480 000.00. The long term grazing loss calculated over 7 years is likewise a claim on the advice of the experts and which amounts to R908 913.70. The general damages claim total R1 399 815.70 bringing the total claim to R2 310 544.37 and should Prof Dube's formula be applied, R4 499 037.99.
29. **Mrs Mietjie Steenkamp, the 10th plaintiff**, testified that she and her late husband initially farmed on municipal communal farm land until the state provided them with the farm Darehope 2 in 2000 as part of its emerging farmer initiative. Her husband died during 2002 but she continued farming on Darehope 2. At the time of the fire she had farmed with 50 cows, 30 heifers and 2 bulls.
30. The fire had burned three of her camps completely and two partially. Steenkamp testified that a good deal of the fences had burned in the fire and although she did not measure the burnt fence she could point it out on a map of the farm. Mr Louis de Jager of the Department of Agriculture's Technical Support Services who had been advising Steenkamp before and after the fire on good farming practices, had measured the extent of the burnt fences and would testify thereto.
31. After the fire Steenkamp sold 50 cows and 20 heifers since the remaining grazing land could not accommodate all her cattle.

- She sold the cattle to a farmer in Kuruman and had to pay for the transport of the cattle, which constituted two loads at a price of R6 600,00. She continued farming with the remaining cattle, selling off the calves to the neighbouring farmers to provide an income over the years following on the fire. She sold the calves for cash and did not know the weights at which she sold, although according to Steenkamp they were generally smaller than before the fire as she could not keep the calves on the farm for long because of the weak grazing veld.
32. Steenkamp who has a limited education relied on the evidence of the plaintiffs experts to prove her production loss claim as well as the claim relating to long term loss of grazing.
33. **Mr Christiaan Strauss, the 6th plaintiff**, was in the unfortunate position of having farmed on the farm Barker for only about a week when the fire raged through 1300 hectares of the 1398 hectares farm resulting in the whole farm being affected.
34. Strauss testified that he had during July 2009, entered into an verbal agreement with a certain Mr Balepile, who was leasing the farm from the Department of Agriculture, to sub-lease the farm. Balepile had fallen on difficult financial times and at the time owed the lessor some R39 000, 00 in rental payments. The agreement with Balepile was to pay the outstanding rental, pay the monthly rental and provide Balepile with 8 heifers per year in exchange for the use and occupation of the farm. Strauss also testified that he had the obligation to return the

farm to Balepile in the same condition as he had received it, if and when Balepile chose to return to the farm.

35. Before the fire Strauss had kept his cattle on a farm between Postmasburg and Kuruman. During the week preceding the fire he had already off-loaded on Barker four truck loads of cattle. The fifth truckload was en route to Barker and could not enter the farm because of the fire. All the cattle had to be taken away from Barker. Some to the previous farm and others to the auction lots in Kuruman. The five truckloads were transported over 105 kilometers at R50, 00 per kilometre which brings his claim for transport costs to R26 250,00.
36. Strauss testified that he incurred costs in fighting the fire in the amount of R7 850,00. He used his vehicles and two firefighters. The vehicles used 120 litres of diesel at R10, 00 per liter and the firefighters used 20 liters of petrol at R10, 00 per liter. He employed four people to help fight the fire and paid them a total amount of R850,00. One of the vehicle's gearbox had to be replaced after it was damaged by driving over a rock while fighting the fire, in the amount of R5700,00.
37. The fences on Barker which burnt were measured by Strauss personally using his vehicle and where the vehicle could not reach he paced out the distance – 14430 meters of fence proof and 11 815 meters of inside wires. He repaired the fences himself and paid R18.00 per meter for the fence proof and R11,00 per meter for the inside fences (6 wires). A pipeline

which was laid above ground had also burned and had to be replaced in an amount of R7 200, 00. Strauss' total infrastructure claim amount to R396 905, 00.

38. His production claim is based on 104 calves at a weight of 250 kilogram and a price of R17, 67 per kilogram over 3 years.
39. Long term loss to grazing amount to R160 797,00, which together with the transport costs and fire fighting costs brings the general damages claim to R1 94 897.00. Strauss' total claim amounts to R1970 062.00.
40. **The 9th plaintiff, Mr Sarel Weideman, is the owner of the farm Dunroven** where he farms exclusively with the Santa Gertrudes breed of cattle. The farm is 1861.63 hectares in extent. The fire was confined to two camps totalling 300 hectare, which is also the extent of his affected area. The burnt area had been calculated at about 90 hectares, but Weideman's evidence of the affected area accords with the defendant's expert, Mr Du Toit's, report in this regard, and which he accepted as correct.
41. Weideman measured the burned fence on the farm himself by multiplying the length of fence between the equidistant metal droppers in the fence and arrived at 500 meters. He accepts the price of R11, 78 per meter advised by the plaintiffs experts and claims for inner fence (6 wires) an amount of R5890. 00.

42. After the fire Weideman reduced his herd by selling 30 cows at an auction in Kuruman and withdrew the affected camps from grazing for 3 years. His production claim in accordance with the experts agreement of 1 large stock unit per 10.5 hectare is based on 28.5 cows with a calving rate of 80%, which he stated he consistently achieved, over 3 years. Weideman claims separately for each of the 3 years from 2010 to 2012, based on the average weight he sold his calves at and the average price obtained for a specific year. He presented these figures with reference to invoices of calf sales for the specific years. His total loss of production claim amounts to R2 867 60.20.
43. Under general damages Weideman claims for transport costs relating to the 30 cows that were sold in Kuruman, a distance of 120 kilometres from the farm. He used his own truck to transport the cattle in two loads for which he claims R25.00 per kilometre. This rate according to Weideman, is the standard rate charged by transport contractors in the area, and brings his transport claim to R6000.00.
44. Weideman had also been involved in fighting the fire and employed two labourers over two days at R75,00 per day. He used two vehicles and two fire-fighters and claims for 50 litres of diesel at R7.36 per litre and 5 litres of petrol at R8.16 per liter respectively. He had to repair 3 punctured tyres at R50,00 per tyre. Two of the tyres eventually had to be replaced at R600, 00 per tyre. He also claims for wear and tear of the two vehicles which each covered 200 kilometres, at a rate of

R10.00 per kilometre. The total claim relating to fighting the fire amounts to R6 567.60.

45. Weideman estimates his loss of trees at 36, a figure he arrived at after counting the trees per hectare on certain areas of the farm. His claim for R5000, 00 per tree is made on the advice of the plaintiffs experts.

46. Weidemans' long term loss of grazing is calculated in a different manner from that of the previous plaintiffs. Relying on the advice of the plaintiffs experts, that it would take 10 years for the veld to recover in order to bring production back to full capacity, his calculation is based on bringing back cattle to the affected area gradually from the 4th year after the fire (the first 3 years being the total withdrawal on which the production claim is based) at 30% capacity, the 5th year at 40% and so on with 10% increments annually until the 10th year at 90% capacity. So for instance the 4th years loss determined in relation to calves is as follows: 30% of 28.5 cows at 80% calving rate + 6.8 calves which is 16 fewer that what he would have produced had it not been for the fire. In the 5th year at 40% capacity, the difference would be 13.7 calves. On this basis the total difference in calves from year 4 to year 10 amounts to 63.9. Weideman then uses an average calf selling weight of 240kg at an average of R20.00 price per kilogram which amounts to a total long terms loss of grazing claim of R306 720.00.

47. Weideman's total claim amounts to R792 019.40.

48. **The 8th plaintiff is the executor of the estate of the deceased Mr Alwyn Lubbe. Mr Marthinus Matthee**, the son-in-law of the deceased, gave evidence on behalf of the 8th plaintiff. The deceased had been sickly for some years before his death during January 2010, and Matthee who resides in Kathu, had assisted with the farming operations on Ouplaas over weekends and during the school holidays. Matthee thus has personal knowledge of the farming activities of Ouplaas.
49. In this instance, the parties are in agreement that the burnt area on Ouplaas measures 167.2 hectare (in accordance with the South African Space Agency (SANSA) measurements). Matthee was also willing to accept the defendant's expert Du Toit's calculation of the affected area as 300 hectares.
50. Matthee was not present during the time that the fire raged over the area and did not assist in fighting the fire. Since he had no personal knowledge of the costs incurred in fighting the fire, this portion of the 8th plaintiff's claim was abandoned.
51. Matthee testified that two of the camps on Ouplaas had been partially burned. The result was that cattle had to be removed from those camps to other camps. In the result there was not enough grazing for the cattle and eventually from about January 2010 some 20 to 30 cows were sold. Calves were also sold. The affected camps were only utilized again about 3 years after the fire.

52. Matthee measured the burned fences with a range finder, an instrument used to measure distances when hunting, and which he then compared to the distances as measured with his vehicle. According to Matthee, the measurements accorded. Fence proof burned measured 2 984 meters. Half of this fence bordered a neighbours farm and was fixed by the neighbour. The claim for fence proof was therefore reduced to 1492 meters at R42.30 per meter. Stock proof fence (6 wires) was measured at 483 m at R33.90 per meter.
53. The 8th plaintiffs production claim is based on an 80% calving rate. Matthee states in this regard that the late Lubbe was very meticulous in the selection of his breeding cows. The old cows were replaced with younger cows, if heifers did not calve after being placed with a bull, he would sell the heffer after 2 years. The result was, Matthee testifies, that the calving rate at Ouplaas was more in the region of 95% . Be that as it may, the production claims for 2010, 2011 and 2012 were proven separately at the hand of invoices for calf sales during those years. The average weight calves were sold at during 2010 was 194.29kg at an average price of R15, 68 per kg. During 2011 calves were sold at an average weight of 205.56 kg and at an average price of R17. 48. During 2012 calves were sold at an average weight of 215. 69 kg and at an average price of R16.54 per kg. These figures in relation to the 22.8 calves lost over the 3 year period bring the total production claim to R232 723.43.

54. The alternative production claim based on Professor Dube's formula totals R479 655.00.
55. Under general damages the 8th plaintiff claims for the loss of 41 trees at R5000,00 each as determined by the plaintiff's experts. Long term loss of grazing is calculated on the same basis as that of the 9th plaintiff, Weideman – by gradually, from the fourth year after the fire, returning cattle to the affected areas until the veld is fully recovered in the tenth year. The 8th plaintiff's long terms loss of grazing claim thus amounts to R217 248.30. The total claim for 8th plaintiff is R734 458.03 alternatively R1 186389.60 should Dube's formula be accepted.
56. **The 3rd plaintiff is the close corporation Thaba Letsele CC, represented by its only member Mrs Huibreght Scholtz.** The claim is in respect of the farm Darehope which is registered in the name of the 3rd plaintiff. Darehope measures 2844.4 hectares in extent of which Scholtz claims 2260 hectares burned. The claim is based on a total affected area of 2400 hectare.
57. Scholtz testified that she and her husband, Mr Allen Scholtz, measured the burned area with GPS co-ordinates. De Jager, plaintiff's expert from Agricultural Technical Services (Department of Agriculture) also assisted in measuring the burnt area. Scholtz stated that where half a camp had burned the whole camp was taken into consideration in determining the affected area. Scholtz testified that when the fire started she

- moved all the cattle, some 230, to a kraal close to the homestead. The fire eventually burned all the camps at Darehope with the exception of two and a half camps. There was not enough veld left over for the cattle and there was also not enough water for them since the pipes leading from dams to watering points had melted and she was therefore forced to move all the cattle from the farm a day or two after the fire had been extinguished.
58. The cattle were transported to Scholtz' sister's farm in the Griekwastad area some 120 kilometres from Darehope in seven truckloads for which she was charged R50.00 per kilometre. Scholtz testified that the decision was made afterwards that her sister buys the cattle since there was not enough grazing left at Darehope. The purchase price for the cattle was paid in monthly instalments sufficient to pay the monthly bond instalments on the farm. In any event, the veld at Darehope was left to recover until 2013 when some 160 cattle were purchased to start restocking the farm.
59. The fire had caused substantial damage to the infrastructure on Darehope. Fences were not only burned but Scholtz and her husband testified that military vehicles had also flattened some of the fences in their fire fighting efforts. Scholtz stated that she and her husband had, as with the burned area, measured the burned fences with the help of a GPS. De Jager also assisted. Jackalproof fence was measured at 19 800 m, inside fence (7 wires) at 20 390 meters, game fence at 4 400 meters. The

inside fence (13 wires) claimed for was dealt with in the evidence of Scholtz' husband, who gave the length measured as 10 302 meters.

60. The plastic pipeline damaged in the fire are two different sizes – 50 mm at 6 bar and 40 mm at 3 bar. The pipeline was measured in the same way as the fences and Mr Scholtz testified that the damaged 50mm pipe measured 1710 meters and the 40mm pipe was also 1710 meters. The prices of R18.08 per meter and R6.95 per meter respectively were obtained from the local Co-Operative. Mr Scholtz testified that the price and formula for the fence claim was determined by the plaintiffs' experts, which he reckoned was reasonable.
61. The 3rd plaintiff also claims for two zinc dams with cement bases which were damaged in the fire. Scholtz testified that the cement bases had cracked due to the heat of the fire and could not hold water anymore. To replace these dams R40 416.00 is claimed.
62. A 5000 litre water tank for domestic use had also melted in the fire. This tank had been replaced at a cost of R3 761, 00. Scholtz also testified that a few wood corrals, where the vaccination of the cattle was done, also burned down and that the replacement value of the wooden poles used to construct the corrals was R15000, 00 – which the 3rd plaintiff also claims. The total infrastructure claim amounts to R2 075 641.00.

63. The production claim of the 3rd plaintiff is calculated taken into consideration a calving rate of 80% and a selling weight of 250kg. Scholtz testified that she had helped her now deceased father on the farm since she left school in 1988. The calving rate of 80% is an average of what was achieved over the years. The calves were marketed at 250 kg and the price obtained averaged R17.67 per kilo. The production claim over 3 years amounts to R2 423 314.28.
64. Under the general damages claim I have already dealt with the transport costs. There is also a claim for 43 Springbok which Scholtz states she bought during the winter of 2008 at R750, 00 per animal. The buck which had been on the farm before the fire were nowhere to be found after the fire, with the exception of one burnt carcass. Scholtz can only assume that the springbok had either fled the farm due to the fire or had died in the fire.
65. As far as trees lost in the fire are concerned, Scholtz testified that the farm had wild olive, karee and camelthorn trees and that the plaintiffs' experts had determined that 271 trees had been lost at R5000. 00 each.
66. With regard to the long term loss of grazing claim Scholtz testified that the grazing on Darehope had not returned to normal yet (she testified during March 2015) since the grasses seem to have recovered but not the shrubs and bushveld which the cattle consume over the winter months. The long term

grazing loss calculated from after the 3 year withdrawal period until the 10th year after the fire amount to R2 826 316. 50. The 3rd plaintiff's total claim amounts to R8 754 521.78.

67. **Mr Jacob Steyn represents the 4th plaintiff, the Steyn Farming Trust, in his capacity as a trustee.** He is also the father-in-law of Coetzee who represents the 5th plaintiff, De Brak Farming CC. De Brak Farming CC sold the farm Owendale portion 5 to Scarlet Sun 25 (Pty) Ltd on 1 December 2010. Steyn who is the sole director of Scarlet Sun 25 (Pty) Ltd confirmed that he, on behalf of the company verbally ceded its rights to claim damages on 1 December 2010 to De Brak Farming CC. Confirmation of the cession was later reduced to writing and forms part of the papers before court.
68. Owendale portion 4 which belongs to the Steyn Farming Trust is adjacent to Owendale portion 5. Steyn testified that he on behalf of the Trust, and Coetzee on behalf of De Brak Farming CC agreed that the Trust would repair the boundary fences between the two farms and claim damages in respect thereof. These fences together with the fences that burnt on Owendale portion 4 were measured by a land surveyor, a certain Mr S Burger. Burger who was to testify to this effect at the last minute refused to attend court, according to Steyn. Steyn testified that he then himself measured the fences during a break in the court proceedings and arrived at measurements somewhat longer than that of Burger, most probably due to the ridges and gullies on the farm. He stated however that he was

prepared to accept Burger's measurements as reflected in the charts before court. The prices of fences were determined by the experts, De Jager and Swanepoel.

69. Owendale portion 4 in extent measures 1591 hectare of which 1200 hectare was burned in the fire. Only two camps did not burn. Steyn calculated the affected area as the total area less the two camps, which brings the affected area to 1297 hectare.
70. Steyn testified that the calving rate achieved on the farm was 80% and that the average weight at which calves were sold was 257.17kg. The auction invoices from which this weight was determined are exhibits before court. The price per kilogram was likewise determined to average R14, 37.
71. According to Steyn the Trust had farmed with 159 cattle on the farm. After the fire the cattle grazed on the two camps which did not burn for about a month whereafter there was no grazing left. The cattle were then transported to a relative's farm some 80 kilometers away. Steyn took care of the transportation himself and testified to 4 loads of cattle at R50, 00 per kilometre. According to Steyn the transport costs were in line with what contractors charged at the time.
72. Three years after the fire the cattle were brought back to the farm bit by bit. At the time of his evidence Steyn stated that only 40 adult cattle had been brought back.

73. Pipes on the farm had also been damaged in the fire. It was replaced with spare pipe which had been kept in storage on the farm. Steyn measured the lengths of the burned pipes himself at 100 meters for 50 mm 6 bar pipe and 800 m for 40 mm 3 bar pipe. The prices he obtained from the local Co-Operative, as R18, 08 per meter and R6, 95 per meter respectively.
74. The 4th plaintiff also claims for 7 cows which died during the fire, at R8000, 00 per cow, which according to Steyn was the going rate at the time. There is also a claim for 151 trees lost in the fire at R5000, 00 per tree. Steyn states that the number of trees lost was determined according to a formula used by the experts. He is of the opinion however that the actual number of trees lost should be much higher. The price per tree was also determined by the experts. The 4th plaintiff also has a long terms loss of grazing claim calculated on the same basis as the other plaintiffs
75. An unusual claim is that for the value of a Nissan 1400 LDV at R25 000, 00. This vehicle was, according to Steyn, bought at that price just a month before the fire to be utilized by a young farm worker. This vehicle was written off during the fire when a truck collided with it in the smoke engulfed surroundings. The young farmworker unfortunately lost his life in the accident. The 4th plaintiff also claims for the tow truck costs relating to the wreck at R2 211, 60.

76. The 4th plaintiff's infrastructure claim amounts to R73 5973. 20, the production loss claim is for R1 090 921.31 and the general damages claim is for R2 126 953. 13. The total claim amounts to R3 953 847. 64.
77. **Mr Freddie Markram is a trustee of the Freddie Markram Family trust, the 12th plaintiff**, regarding the farm Fhoresby, which is an asset of the Trust. This claim by the 12th plaintiff is rather controversial in that whereas the fire had raged over the rest of the plaintiffs' farms from 6 to 8 September 2009, the fire affecting Fhorsby took place on 13 September 2009. I will revert to this aspect later.
78. Fhorsby in extent measures 832.233 hectares. Markram testified that 152.67 hectares burned in the fire. He personally measured the circumference of the burnt area with a measuring wheel at 4386 meters and by using a mathematical formula arrived at the burnt extent. The affected area he calculated at 298 hectares, being the total area of the various camps affected in the fire, with the exception of one camp of which only a small area burned. Markram however does not rely on the affected area to calculate the 12th plaintiff's production claim, but rather the burnt area and in accordance with the Dube formula.
79. The Dube formula which has been adopted by some of the plaintiffs as the basis for an alternative production loss claim is

contained in Prof Dube's expert report and is expressed as follows:

Burnt area x 2.5 ton production per hectare x R850. 00 per ton x 0.2 (20% utilisation level)

80. The plaintiffs have adjusted this formula to reflect a 45% utilisation level over a 3 year withdrawal period. Applying the adjusted Dube formula to the 12th plaintiffs claim for production loss, the claim is formulated as follows:

152.67 hectares @2.5 ton feed per hectare@ R850.00 per ton x 45% grazing utilisation x 3 years, totalling R437 972.06.

81. Markram testified that fences burnt during the fire, the measurements of which he had taken personally also by means of the measuring wheel. The fence proof fences measured 298 meters and he accepted the plaintiffs expert, Swanepoel's price of R42. 30 per meter. Cattle proof fence measured 3432 meters, which had to be replaced completely. He likewise accepted the plaintiffs expert's pricing of R33, 90 per meter. The total infrastructure claim is thus R12 8950, 20.

82. Under general damages the 12th plaintiff claims for the transport costs of 2 loads of cattle over 60 kilometres at R30, 00 per kilometre. Markram states that the Trust had to sell 30 cows at the Kuruman auction since there was not enough grazing left on the farm after the fire. Fhoresby is situated about 30 kilometers from Kuruman. The R30. 00 per kilometre was the

rate charged at the time. Transport costs thus amount to R3600.00.

83. Markram testified that when the fire entered the 12th plaintiffs farm on 13 September he had employed six labourers to help fight the fire and keep watch until the fire was completely extinguished at R75, 00 per labourer (R450, 00). Food and overtime pay for the labourers amounted to R600, 00. Two vehicles and two firefighters were used to extinguish the fire. The diesel for the vehicles he calculated at R368. 00 (R7.26 per liter). The firefighters used 10 liters of petrol for which the claim is also R7. 36 per litre. The tyre of one of the vehicles was irreparably damaged when it went over a tree trunk and had to be replaced at R1500. 00. Two tyres got punctured and had to be fixed at R50. 00 each. The total costs claimed for fighting the fire is thus R3 091.60.
84. Markram states that Fhoresby had camelthorn trees which burned in the fire. 21 of these trees had died in the fire for which the 12th plaintiff claims R5000. 00 per tree as advised by the plaintiffs experts.
85. The 12th plaintiff abandoned its original claim for long terms loss of grazing. The general damages claim thus amounts to R111 691. 60 and the total claim for the 12th plaintiff is R678613.98.

86. **Mr Alexander Abrahams, the 11th plaintiff leases the farm Carterblock 458 (also known as Warrendale)** from the Department of Agriculture and this had also been the position at the time of the fire. In terms of a written agreement of lease entered into between Abrahams and the Department of Agriculture for the period 1 August 2011 to 31 July 2014, which agreement forms part of the record:

The Lessee shall keep all buildings and improvements (movable and immovable) on the property in a good state of repair, fair wear and tear excepted ... (clause 10);

No claim for compensation in respect of care for and maintenance of such improvements or of services or any materials used in maintaining such improvements shall be paid by the lessor. (clause 11);

The lessee shall maintain all boundary and camp fencing in a good state of repair and shall hand them over in the same condition as at the commencement of this agreement... (clause 20); and

The Lessee shall be liable for any damages on the property or elsewhere caused by fire, which occurs on the property and shall be liable to compensate the Lessor for such damages and indemnifies the Lessor against claims for damages resulting from such fire (clause 39).

87. Abrahams testified that the terms of the written lease agreement existing at the time of the fire were exactly the same. He had also after the expiry of the agreement mentioned above, on 31 July 2014 entered into a similar lease

agreement for a further 3 years. Abrahams states that the Department of Agriculture had not assisted him in repairing the damaged infrastructure after the fire. He had also not instituted any claims against the Department for damages suffered as a result of the fire.

88. The extent of the farm is 1724 hectares. At least three of the camps on the farm had burned more than 10% according to Abrahams. Abrahams testified that he had to move his cattle, of which he had about 60 cows, from the burned camps to unaffected camps in hilly areas on the farm. The grazing in those areas could not sustain his herd and he eventually, over a period of 4 months after the fire had to sell 47 cattle comprising of cows and heifers – animals he would not have sold had the fire not occurred.
89. Abrahams testified that he brought some of his cattle back to the burned areas after about seven months but that the veld had not recovered fully yet, which was the situation even after 3 years. He only started buying replacement heifers during 2014 – some 20 heifers, and another 5 heifers during 2016.
90. The original loss of production claim relating to Warrendale was based on the affected area and on concomitant production losses. This claim was amended during the course of Abrahams' testimony to a loss of production claim based on the 47 cows which Abrahams was forced to sell – apparently due

to the fact that Abrahams did not know the extent of the area burnt or affected.

91. Be that as it may, Abrahams stated that his pre-fire calving rate was 80% and that he usually sold his calves when they were between 220 kg and 250 kg. He also proffered an average price per kilogram of R17. 67. His loss of production claim over 3 years a selling weight of 250kg, amounts to R498 294. 00.
92. Abrahams also testified to fences which have burned in the fire – the measurements of which he had personally undertaken by using a measuring wheel. In total he measured burnt fence proof at 4 500 meters and burned inside wires (6 wires) at 1393 meters. The pricing of the fences was calculated according to the formula suggested by the plaintiffs' experts. Abrahams' total infrastructure claim amounts to R228 161. 00.
93. Abrahams also claims for 61 trees lost in the fire. He states that he counted the trees personally – and was advised by the experts to claim R5000. 00 per tree thus totalling R305 000. 00.

Long terms loss of grazing for 7 years after the 3 year loss of production claim was likewise advised by the experts and is based on the 47 cows sold after the fire. This claim amounts to R5 81 343. 00.

94. Abraham testified that he did not incur any cost in fighting the fire or the transporting of animals after the fire.

The total claim of Abrahams amount to R1 612 798. 00.

- 95. The first plaintiff, Mr Gert Johannes Vermeulen has three farms which were affected by the fire Gladwyn, Lemoenkloof and Doornvlei (Erfdeel).**
96. Vermeulen testified that he had initially calculated the burnt areas on the farms based on maps obtained from the Department of Agriculture. He later commissioned the services of a land surveyor, Mr Liebenberg, to measure the farms and draw up a new map. On the basis of the new map handed up as exhibit "AA", Vermeulen transposed the burnt areas from the old maps onto AA and recalculated the burnt areas. The result is that the burnt area of Gladwyn previously calculated at 1500 hectare is now recalculated to be 1501 hectare, that of Lemoenkloof, previously 1673 hectare is now 1482 hectare and that of Doornvlei, previously 702 hectare is now 550 hectare. The total burned area is therefore calculated at 3533 hectares.
97. As far as the affected areas are concerned, Vermeulen testified that the plaintiffs' experts had advised that where more than 10% of a camp had burned, the whole camp should be withdrawn. In applying this advice he determined that 1605 hectare was affected at Gladwyn, 1813 hectare at Lemoenkloof and 757 hectare at Doornvlei. The total affected area is therefore 4175 hectares.

98. Vermeulen measured the lengths of the fences damaged on the farms with reference to the measurements on "AA". On Gladwyn the fence proof burnt totalled 4765 meters, the inside fences (6 wires) totalled 16 134 meters and the game fence 9 632 meters. On Lemoenkloof the fence proof burnt totalled 4 326 meters, the inside fences (6 wires) totalled 17999 meters, and the game fence 6076 meters. On Doornvlei the fence proof burnt totalled 2713 meters, the inside fences (6 wires) 1582 meters and the game fence 7665 meters.
99. The prices of the various types of fencing were determined by Agri Assessors the (the expert Swanepoel's business) at R42, 30 per meter for fence proof, R33, 90 per meter for inside fences and R61,77 per meter for game fence. The total amount claimed for the fences burnt is R3 153 797.00
100. Vermeulen testified that he had repaired and replaced the inner fences in the meantime as well as the game fencing. He is the only farmer in the area who farms extensively with game (kudu) and as a result had to repair/replace the game fencing bordering other farms also affected by the fire, out of his own pocket. The fence proof or jackal proof fencing has also been repaired and replaced at points where it was most damaged.
101. On a rocky area at Lemoenkloof, pipes which were laid above ground against the fences, also burned. The length hereof was measured at 1400 meters for 40 mm, 3 bar pipes at R6, 99 per meter, thus totalling R9730, 00.

The total claim for infrastructure is therefore R3 163 527, 90.

102. Vermeulen testified that he had farmed with 584 cattle on the three affected farms. After the fire there was not enough grazing for all the cattle and he had to remove 404 head of cattle from the farms. He transported the cattle with his own truck over 58 kilometres to another of his farms, Kranskloof, where he kept them temporarily in a game camp. Under general damages he claims for 12 loads of cattle over 58 kilometres at R25, 00 per kilometre. Vermeulen stated that the transportation costs claimed were what contractors, including himself, charged at the relevant time. The total for transportation costs is thus R17 400, 00.
103. Vermeulen was also instrumental in fighting the fire over two days – not only on his own farms but assisting with the neighbouring farms as well. He made use of a Buffel firetruck and two bakkies. These vehicles all had firefighters on them which consumed fuel but Vermeulen testified that he could not keep track of the fuel consumption of the vehicles and firefighters in all of the confusion. He therefore bases his claims for the use of these vehicles in fighting the fire on the basis of vehicle rental prices which he himself would charge when renting out vehicles to the mines in the area – which is apparently a sideline of his. For the Buffel he claims R600, 00 per day and for the bakkies each R700, 00 per day.

104. Vermeulen also claims for food and wages of 15 labourers employed in fighting the fire. The claim for labourers is calculated at R15, 00 per hour for a period of 48 hours, totalling R10 800, 00. According to Vermeulen some of these labourers were in fact contractors, including a mechanic, who earned much more than what he claims for, but for practical purposes he only claims R15.00 per hour. As far as the claim for the labourers food, I disallowed evidence hereon, since it boiled down to hearsay in that Vermeulen's wife bought and provided the food and was not going to be called as a witness.
105. Vermeulen also testified as to trees lost in the fire. In this respect his evidence was that he had personally traversed the various camps on the three farms with a quad bike and had counted 10 301 trees completely burned down on Lemoenkloof, 626 on Gladwyn and 42 on Doornvlei. In total 1969 trees (wild olive, karee and bessiebos) were lost on the farms. He claims R5000, 00 per tree as advised by the experts, thus totalling R9 845 000, 00.
106. Vermeulen also claims for long term loss of grazing, calculated for 7 years after the initial 3 years recommended by the plaintiffs' experts for withdrawal from the affected areas. This claim is premised on his production loss claim (which I deal with hereafter) and is calculated on the withdrawal of 398 cows with an 80% calving rate sold at 250 kg at an average price of R16, 93 per kilogram. The claim for long term grazing loss amounts to R4 710 772, 50. The total claim for general

damages (exclusive of food for labourers) thus amounts to R14 586 572, 50.

107. Unlike the other plaintiffs Vermeulen does not sell his weaned calves to auction lots or feeding lots. He has his own feeding lots on one of his farms. His farming operation in short work as follows. He takes his own weaned calves as well as other weaned calves which he buys in from other farmers and first put them in separate camps for about 5 months where they gain an average of 30 kilograms in weight. Thereafter the animals are placed in the feeding lots for about 75 days where they are fed full time and gain an average of about 2.5 kilograms per day until they average about 513 kilograms per animal. They are then taken to abattoirs where they are slaughtered and distributed to meat markets and butcheries. Vermeulen then gets paid the slaughtered prices by the retailers.
108. The upshot of this method of farming is that Vermeulen could not provide precise weaning weights of his calves or prices obtained for calves sold at that stage as the other plaintiffs did. In order to prove a weaning weight of 250 kg he then proceeded to make a reverse calculation taking into account the average weight at which his cattle were slaughtered and the average weight gains in the separate camps and feeding lots, he came to an average weaning weight for his own calves of more than 250kg. He also testified that his calving rate fluctuated between 70% and 94% and that he used an average

of 80%. As far as prices per kilogram obtained for weaned calves were concerned and since he did not sell weaned calves, he used the average prices obtained by the plaintiffs Hugo, B Markram, Lubbe and Freddie Markram NO - deducted a small amount from their average prices obtained since his weaners were generally heavier in weight, which would command a lower price - in order to present a claim according to the formula used by the plaintiffs.

109. Vermeulen's main production claim – a somewhat artificial claim, is based on an affected area of 4175 hectares which at 10.5 ha per large stock unit equals 398 cows with an 80% calving rate, therefore totalling 318 calves.

His claim for 2010 is made up of the 318 calves at 250kg and a selling price of R15,60 per kilogram which equals R1 240 200.00.

During 2011 he uses an average selling price of R19, 20 p/kg and obtains a figure of R1 526 400.00.

During 2012 the average selling price he uses is R16, 00 p/kg and calculates a loss of R1 272 000.00.

Vermeulens total main claim for loss of production thus amounts to R4 038 600,00.

110. As a first alternative production claim Vermeulen applies Prof Dubes formula to his burnt area of 3533 hectares and obtains an amount of R9 196 065,00.

111. Vermeulen's second alternative claim is related more specifically to his actual experience after the fire, though still based on the average prices per kilogram obtained by the other plaintiffs mentioned above.

As mentioned in paragraph 102 above Vermeulen was compelled to move 404 head of cattle to his farm Kranskloof after the fire as a temporary measure.

Kranskloof could not accommodate all the cattle. Vermeulen was forced to sell 216 head of cattle. He retained 168 head of cattle on Kranskloof and the remaining 20 cattle (heifers) were divided into his other camps.

112. The 168 head of cattle retained at Kranskloof were kept in a game camp and when the grazing there was exhausted Vermeulen rented the farm Taaibos some 92 kilometres away from Kranskloof for 2½ years where he then moved the cattle to in 6 loads. In this second alternative production loss claim Vermeulen claims damages in the total amount of R3 044 300, 00 calculated as follows:

-Loss of production in respect of the 216 cows he had to sell, at a 80% calving rate, at 250 kg per calf at the average prices as explained above which relates to amount of R674 700.00 for 2010, R830 400.00 for 2011 and R692 000.00 for 2012. He claims for transportation of the 168 cows to Taaibos at R25 per kilometre over 92 kilometres and 6 loads at R13 800.00. He also claims for the cost of grazing at Kranskloof for the 168 cattle for 3 months at R100.00 per month per head equalling R50 400.00. The rental at Taaibos amounted to R120.00 per

hectare per year for 2060 hectares for 2½ years totalling R618 000.00. And finally the costs of two additional labourers at Taaibos calculated at R2500.00 per month per labourer for 33 months equalling R165 000.00.

113. Vermeulen's claim totals R21 789 400.00 if the production loss claim is based on the plaintiffs formula, R26 946 865. 40 if the production loss is based on the Dube formula and R20 795 100.40 based on the second alternative claim.
114. I now turn to the expert witnesses. The plaintiffs called four experts, Prof HA Snyman, Mr L De Jager, Mr J Swanepoel and Mr A Emery. The defendant called Prof Dube, the counterpart to Prof Snyman.
115. Prof Snyman is an expert in grazing science, attached to the University of the Free State where he specialises in research on the sustainable utilization of the grazing ecosystem in the more arid areas. He has also done extensive research on the impact of fire on plants and soil. His evidence relates more specifically to the main bone of contention between the parties – the period of withdrawal from grazing after a fire.
116. Prof Snyman's research and trials have been conducted in the central grassland area of Bloemfontein and Zastron which averages rainfall of 530 mm to 600 mm per year. His research has shown that in these areas animals should be withdrawn for two growing seasons after a fire to ensure sustainable

- production. He is not aware of any scientifically based information regarding the necessary withdrawal period in the Danielskuil area where the fire raged, but gave his opinion based on extrapolations from *inter alia* his central grasslands scientific data.
117. With his research in the central grassland area as a guideline, Prof Snyman is of the opinion that a withdrawal period of at least three full growing seasons applies to the veld *in casu* – depending on the rainfall which follows the fire. Should the rainfall be low and erratic in the seasons following the fire a longer withdrawal period may apply.
 118. Prof Snyman explains that in contradiction to the grasslands and higher rainfall experienced in his research area, the Danielskuil area experiences much lower rainfall per year and the composition of the veld can also be distinguished. The grass land has a shorter withdrawal period because of the quicker recovery of the grasses and rainfall is not a limiting factor which influences plant production. The sweet veld (categorised as such because of an average annual rainfall of less than 500 mm) is more fire sensitive and requires a longer resting period.
 119. The plant composition of the Danielskuil area specifically is made up of grasses, bushes, shrubs and trees, each with its own ecological requirements and recovery abilities. The bushes, shrubs and trees would need a longer recovery period

than the grasses and although the grasses contribute towards 60% of the intake of cattle and the bushes 20%, with the remaining 20% made up of shrubs and trees – it is necessary for the recovery of the whole ecosystem to allow a period of withdrawal of at least three growing seasons. Three growing seasons according to Prof Snyman means three years.

120. Should the veld be grazed too soon after a fire the recovery period will be prolonged.
121. Based on his research in the Free State, burnt grass veld generates only half of unburnt veld's production within the first year after a fire and it takes two full growing seasons to make up production after a fire. According to Prof Snyman the grass production in the Danielskuil area would be lower as a result of the lower rainfall but the added utilization of bushes, shrubs and trees would increase the total utilization value up to 50% as opposed to factoring in only grass production.
122. Prof Snyman is also of the opinion that if more than 10% of a camp has burnt the whole camp should be withdrawn from grazing since the animals tend to concentrate on the tasty new growth on the burnt area which leads to over grazing and veld degeneration.
123. Prof Snyman visited the affected farms once, with the inspection *in loco*, and is of the opinion that it would be senseless and unscientific to determine the impact the fire had

on the vegetation 4 years and 3 months after the fact when, as in the present case, there is no scientific record of what the veld looked like before the fire.

124. I now turn to the evidence of the dependant's expert in this regard. Prof Dube is a Professor of ecology – all ecologies inclusive of rangeland ecology and ecological science. He compiled an expert report jointly with Dr Mashimbye who was not called upon to give evidence. Prof Dube however confirmed the correctness of the report.
125. Prof Dube and Prof Snyman are well acquainted – they attend the same conferences, sit on advisory boards together, recognize and acknowledge each others research but as these things go, have divergent opinions on various aspects of this matter.
126. Whereas Prof Snyman was loathe to comment on the state of degradation of the farms based on mere sight during the inspection *in loco* and without comparable data pre and post the fire or reliable input on climatic and other external factors after the fire, Prof Dube was of the opinion that degradation was obvious and could clearly be seen on parts of the farms he visited based on the poor quality of the soil and the presence of invasive plants. Such degradation according to Prof Dube was a result of poor farm management over a long period of time as well as climate. The farm of the 2nd plaintiff was singled out as being particularly degraded due to sheep farming operations of

the previous owners. The farm of the 3rd plaintiff which stood ungrazed for years after the fire was at the opposite/positive side of the scale. The issue of degeneration became relevant in the utilisation calculation of Prof Dube which I deal with later herein.

127. Prof Dube is of the view that fire is a handy tool in the management of grazeland even in the semi-arid sweetveld areas as it encourages new and healthy growth of the grass layer. Prof Snyman on the other hand does not deem fire necessary in the management of grazeland in this area with its low rainfall and where the quantity of the vegetation rather than the quality can be problematic.
128. With regard to the withdrawal period after the fire Prof Dube is of the view that one growing season in this specific instance would establish sufficient growth for the animals to be returned to grazing. The explanation is as follows. The growing season would normally be from September/October to February/March – a period of about 175 days. Since the fire took place early September, the growth points of the grasses which occur just below the surface will be largely unaffected and regrow normally until the grasses have reached peak biomass, formed seeds and start going dormant. Once this cycle has been completed, there is no reason why the cattle could not be returned to grazing.

129. Prof Dube's evidence in this regard differs from the view he held during the meeting of the experts under chairmanship of Adv Van Niekerk, where he was of the opinion that two growing seasons would be sufficient for recovery of the veld.
130. Prof Dube is also of the opinion that where up to 30% of a farm has burned, the remaining extent can be reworked and adapted for purposes of grazing and that where a small portion of a camp has burned, the burned portion can be excluded from grazing by *inter alia* fencing off the area, placing branches over the burned area or herding animals, which would avoid withdrawing an entire camp from grazing.
131. With regard to the value of trees in the grazing system, Prof Dube is of the opinion that cattle spend 15% of their time browsing on trees. The plaintiffs experts on the other hand estimate the intake of trees (leaves, fruit, berries) to be about 15% of the total intake of cattle. The difference in these views relating to the amount of actual intake is unclear to me.
132. But be that as it may, Prof Dube is further of the opinion that the leaves of evergreen trees and with particular reference to the wild olive (one of the species claimed by the plaintiffs) contain high levels of tannin which not only make the leaves unpalatable (sharp, bitter tasting) but also cause bloating in the animals. These factors reduce the utilization of the leaves by the animals since animals will not frequent vegetation which has a negative effect on them. The tannins in the wild olive

leaves have the further disadvantage in that, although the leaves are high in protein, the tannin binds with the protein in the guts of the cattle causing the protein to become indigestible and the leaves to be of little nutritional value to the animals.

133. At this stage I pause to mention that the grazing/nutritional value of the wild olive tree is not mentioned at all in Prof Dube's report. This issue first came to light during cross-examination of Mr Swanepoel for the plaintiffs who based his calculation of the value of trees on a comparison with lucerne which apparently does not have very high levels of tannin. A large amount of time was spent on this subject during cross-examination of Mr Swanepoel but not canvassed at all with Prof Snyman, the plaintiffs grazing expert.

134. What was commonly referred to as Prof Dube's formula for loss of production during the trial is in fact a standard formula devised by a Prof Nico Smit who on all accounts is an expert in this particular field. Prof Snyman in his report also recognizes this formula as long as the correct input data is used.

135. As already mentioned herein above the formula is the following:

Burnt area x production per hectare x value of a ton of grass x percentage utilization.

In his report Prof Dube explains the values he attach to the formula as follows:

“As already alluded to in the introduction and under the discussion of vegetation survey the estimation of loss of available forage will be done for the period October 2009 to February 2010, approximately 175 days of feed requirement. This will be based on the estimated value of natural grass and not high value Lucerne or Eragrostis hay. Utilizable material is about 30% of what is produced and by September the end of the dry season this can be down to 15%. A 20% utilization level will be used on the standing DM estimate for September. Where less than 30% of the farm is burnt then no loss will be assumed as animals could be moved to other portions of the farm while recovery occurs in the burnt area.

The total actual loss of grazing is shown in table 8. The total of grazing loss is about ZAR 2.4 million. It is our educated opinion that those farms with less than 30% loss to grazing will not have been adversely affected by the fire. Animals could have been moved to other parts of farm. A recent visit to the farm revealed that most of the farms have animals grazing in the previously burnt areas. Further negating the argument that it would take about 5 years for grasses to recover unsupported by evidence and science.

Based on standing crop estimates in the unburnt area and non-grazed within Lohatla one can estimate production in the area to be 2.5 tonnes per ha at pristine areas. If, therefore, compensation is to be made for the period October to February, one will have to assume this loss per ha for that whole period. Revising the figures upwards to total compensatory loss of ZAR 3,829, 547.50 calculated as follows

9010.7 ha burnt X 2.5ton.ha⁻¹ X0.2 (20% utilization level)”

136. During his evidence on the subject Prof Dube distanced himself somewhat from the values given to the formula as contained in his report.

137. The assertion in his report that he estimated the production in the area based on the standing crop estimates in the unburnt area and non-grazed areas within Lohatla now according to Prof Dube was not based on the unburnt farmland since it was not pristine and as such the 2.5 ton per hectare was solely based on the non-grazed areas within Lohatla, and therefore that the total compensatory loss as calculated in his report is the maximum possible loss that the plaintiffs will have suffered, on condition that their land was pristine.
138. The R850 per ton which is the value put in the report on natural grass, was during his evidence considered to be too high a value since it was wild grass with no exact commercial value and which could be bought on the roadside for R450 per ton or even less.
139. When it comes to the utilisation factor of 20% Prof Dube explains that utilisation is the extent to which grown material can be harvested and used by animals to ensure the continuation or sustainability of the ecosystem. That a 50% utilisation level as advanced by the experts for the plaintiffs is not applicable in this particular area where the vegetation consist not only of grass but also shrubs and other woody vegetation. Considering the composition of the vegetation and the fact that a fire went through the area, which necessitated light grazing, the utilization level should, according to Prof Dube, be in the region of 20% to 25% with a maximum of 35%.

Later on during his evidence Prof Dube also attributed the low utilisation level to the inaccessibility of vegetation.

140. I now turn to the evidence of Mr J Swanepoel, an agricultural loss assessor who has established the business Agri Assessors since 1994. He has an M.SC in Agriculture and has during the course of this trial, in July 2015, registered as a professional natural scientist in the field of animal science with the SA Counsel for Natural Scientific Professions. Mr Swanepoel has been involved in hundreds of agricultural claims including about 500 veld fire claims. Interestingly enough Mr Swanepoel was initially appointed by the defendant as an expert on the merits of this matter until his services were terminated, or as he states, he was “*fired*” since the defendant did not agree with his views on the merits.
141. Be that as it may Mr Swanepoel has been involved in about 10 veld fire claims in this specific area (Danielskuil, Olifantshoek, Kuruman) and is well acquainted and experienced with the specific conditions endemic to this area.
142. He agrees with Prof Snyman that the recovery period after a fire is longer in the Danielskuil area than in the central grasslands because of the lower rainfall, the difference in topography, soil type and the composition of the habitat. Mr Swanepoel advocates a withdrawal period of 5 years but with allowance for light grazing from after the first frost in the third

year following the fire. All factored in, his withdrawal period amounts to 3.8 years.

143. As to Prof Dube's opinion that the farms with less than 30% loss of grazing due to the fire will not be adversely affected, Mr Swanepoel gives the reasons for his difference of opinion at the hand of a simple analogy. If one assumes that the carrying capacity of a farm is 1 large stock unit per 10 hectares, a 100 hectare farm would carry 10 cattle. If 30% of that farm is burned then the 10 cattle will only have 70 hectares on which to graze which would lead to overgrazing of the remaining area and all 10 cattle being underfed with its concomitant problems. The other factor which cannot be ignored is that the plaintiffs farms are divided into camps for specific reasons *inter alia* access to water, topography, to keep weaners separated from their mothers, for breeding purposes etc. An unplanned veld fire disrupts the farms plan and it is not merely a simple matter of redistributing cattle to the unburned areas.
144. The plaintiffs have placed a value of R5000, 00 per tree on the trees lost in the fire. Mr Swanepoel explains this claim with reference to trees contributing 15% of the intake of cattle and converting the 15% to kilograms of tree product consumed by the animals. The weight of the tree product is compared to the price of lucerne, which he states is a good quality rough feed with energy and protein levels in accordance with the needs of a large stock unit. He then multiplies this value by 10 to make provision for a period of 10 years that the trees will be lost to

the animals as feed. The value he attains in doing so is in fact higher than R5000, 00 per tree. It is this evidence of Mr Swanepoel which resulted in the protracted cross-examination on the nutritional value of the wild olive tree.

145. Mr Swanepoel had visited the plaintiffs farms on four occasions during 2013 and although he did not measure the extent of the fences burned in the fire, he testified that he clearly observed the damage to the fences which had not yet been replaced in that lines were sagging and wooden droppers showed fire damage. The plaintiffs claims relating to the fences (price per meter) were calculated on the basis that the fences were not new when damaged and in Mr Swanepoel's opinion these claims were market related and reasonable.
146. Mr Swanepoel also testified that the further claims relating to infrastructure were market-related and reasonable. Claims relating to firefighting and transportation of animals were reasonable as were the replacement values of dead animals. Mr Swanepoel also testified that the selling prices claimed by the plaintiffs for their cattle were reasonable as well as Mr Vermeulen's slaughtered cattle prices. Mr Swanepoel confirmed the reasonableness of Mr Vermeulens' 2nd alternative claim as well.
147. Mr L De Jager also testified for the plaintiffs. He is the holder of an Honours degree BSC (Agri) and has majored in Agricultural Economics and Business Economics. At the time that his

expert notice and report were filed during 2013 he had been employed at the Department of Agriculture: Northern Cape since 1983. His position was that of Assistant Director: Extension Services and his duties included farmer support services and the training of all farmers, especially the historically disadvantaged emerging farmers. He has over the years presented numerous lectures to the farmers on subjects such as financial planning, farm management, grazing systems, cattle management etc. He retired at the end of 2014 and gave his evidence during March 2016.

148. Mr De Jager was based in the Postmasburg area and has experienced many veld fires in the area. His evidence is that he over the years regularly visited farms after veld fires and that he knows how the veld reacts to a fire. He testified that veld in the sweet veld region recovered very slowly after a fire and that it was Departmental policy, and also his advice to the farmers, to withdraw the veld from grazing for a long period to allow for sustainable recovery. He states that he prescribes to the farmers to rest the veld completely for the first rainy season, thereafter and after the first frost, the veld can be grazed lightly for a very short period, mainly to soften the soil to allow seeds to infiltrate the soil. Thereafter the cattle must be removed from the veld until the following winter where the same procedure must be followed. He also recommends that the cattle be withdrawn for a third season, whereafter it can be introduced back into the system after the first frost of the winter.

149. Mr De Jager also testified on the value of trees in the grazing system, especially during winter when the grasses have died and provide little nutritional value. The withdrawal period recommended by Mr De Jager to the farmer is 3 years or 3 rainy seasons with light grazing after the first frost.
150. Mr De Jager also testified that it was a Departmental recommendation that a whole camp be withdrawn from grazing even if a small portion of the camp had burned in order to avoid the overtrampling of the burned area and overgrazing of the unburned area. He disagrees with Prof Dubes contention that if less than 30% of a farm burned the cattle could be moved to the remainder of the farm, since this would lead to overgrazing.
151. Mr De Jager had assisted the 10th plaintiff, Mrs Steenkamp (and her husband when he was still alive) with advice and more since they started farming on Darehope 2. He had also taken the measurements of Mrs Steenkamp's fire damaged fences and transmitted the information to the plaintiffs attorney of record. Mr De Jager's evidence is that he visited Mrs Steenkamp's farm (and other plaintiff's) shortly after the fire and thereafter did regular follow-up visits and he could clearly observe where the fire went through the fences – at places wooden droppers had burnt out completely, and at other places the fences had snapped off. Further damage was also caused where fire fighting vehicles flattened the fences.

152. The 10th plaintiffs' main production loss claim is based on a 75% calving rate to which Mr De Jager having knowledge of her herd, expressed the opinion that 75% would be too low since he impresses upon the farmers that their businesses will not make economic sense if they achieve calving rates of less than 85%.
153. The last witness I intend to deal briefly with is Mr Emery, an environmental GIS (Geographic Information System) specialist. His evidence relates primarily to the determination of the burned areas and the purely mathematical calculation thereafter, based on the plaintiffs contention that if more that 10% of a camp is burned the whole camp should be withdrawn, of the affected areas of the various farms. Mr Emery's counterpart is Dr Z Mashimbye who compiled a joint report with Prof Dube. Dr Mashimbye however did not testify neither did the defendants' Mr J Du Toit a professional valuer, who is not an expert in this field but who had used the South African National Space Agency (SANSA) reports of the fire in his report relating to the determination of the quantum.
154. One of the main disputes between the parties relating to the determination of the fire scar was the fact that Dr Mashimbye indicated in his report that several fires had burned on several of the plaintiffs' farms during the period 4 to 6 September 2009, before the Lohatla fire started. Mr Emery attributed this finding of Dr Mashimbye to be incorrect due to the data being used incorrectly and beyond its capability. I do not intend to go into

detail regarding the methodology employed by Mr Emery in his determination of the burned area or the dates on which the fire occurred since (i) the defendant eventually conceded that there were no other fires in the area prior to the Lohatla fire and (ii) Mr Emery after having travelled from White River on three occasions to give evidence, to the surprise of one and all conceded that the SANSA fire scar determination is scientifically sound and can be accepted as reliable.

155. What is useful about Mr Emery's evidence is that he had calculated the affected areas on the farms not only in terms of his own determination of the fire scar but also according to the SANSA fire scar. The differences between Mr Emery's fire scar and that of SANSA and the concomitant affected areas are not substantial. The Emery total burned area is 9306.1 hectares and that of SANSA 8955.1 hectares, while the Emery affected area amounts to 12460.6 hectares and that based on the SANSA fire scar to 12654.9 hectares, should one accept that if more than 10% of a camp had burned, the whole camp is affected.
156. There are however in some instances vast differences between the plaintiffs' measurements of burned areas and that of Mr Emery and SANSA. For instance the 11th and 12th plaintiffs claim to have a burned areas of 600 hectares and 130 hectares respectively while their SANSA determined burned areas amount to 2.1 hectares and 4 hectares respectively, with nil affected area.

157. Mr Emery testified in this regard, that a plaintiff who physically walked the boundaries of a fire scar with a GPS and calculated the burned area accordingly could get a more accurate measurement than using satellite images which may or may not be able to pick up small areas (up to 6 hectares) or certain areas where for instance the vegetation is sparse or the area is mountainous.
158. Mr Knoetze has accordingly argued that where plaintiffs have measured their burned areas physically and have obtained a larger extent than SANSA, I accept the physical measurement. I will revert to this aspect.
159. Before dealing with the specific claims there are preliminary issues which need to be addressed.
- 159.1 The claim of the 12th plaintiff, the Freddie Markram Family Trust, originates from a fire which burned on the farm Thorensby on 13 September 2009. The other plaintiffs' claim damages based on the fire of 6 to 8/9 September 2009. The fire of 13 September originated on Lohatla as a result of the same military exercises which also started the fire on 6 September 2009. There is no cloak and dagger about this. The plaintiffs' attorney Mr Reitz wrote a letter to the defendant concerning the 12th plaintiff's claim on 30 October 2009 already, wherein he states:

“Ons sluit hierby in as Eis 12, die eis van Markram Familie Trust welke eis ontstaan uit ‘n brand veroorsaak deur die skietoefening op 13 September 2009. Dit is ‘n kleinerige eis en dien dit geen doel om dit alleenig as ‘n ekstra verdere brandeis op sy eie in te dien nie. Ons vertrou dat u dit so kan akkomodeer en verneem graag indien daar enige probleem, in die verband bestaan.”

159.2 No response was forthcoming and on 4 October 2010 the summons in these proceedings was issued, to which was attached the aforesaid letter as annexure “B”.

159.1.2 The defendant never took the point, in whatever way, that whatever damages suffered by the 12th plaintiff was not caused by the fire of 6 to 9 September 2009. In fact paragraph 1 of the order obtained by agreement upon settlement of the merits on 6 September 2012, and may I add after an inspection *in loco* and negotiations between the parties, reads as follows:

“That the defendant is liable for the proven or agreed damages of the first to the fifth plaintiffs, and the ninth and twelfth plaintiffs

qua owners of the properties described in the particulars of claim.”

- 159.1.3 On 30 September 2013, a bit more than a year after the order on the merits, the defendant launched an application seeking to rescind the order of 6 September 2012 in so far as it relates to the 12th plaintiff. This application was never proceeded with and as such the order still stands.
- 159.1.4 Mr Memani now argues that the 12th plaintiff's claim should be dismissed with costs since the order could not have been intended to apply to any damages a plaintiff might be able to prove *“irrespective of the identity of the perpetrator, the cause and the date on which the perilous event occurred.”*
- 159.1.5 This contention by Mr Memani is obviously not correct in the light of the letter annexure “B” which formed part of the summons and which I would like to assume the defendant and her legal representatives read and were fully aware of when the order of 6 September 2012 was obtained. No explanation was provided as to why the application for rescission was abandoned and I see no reason why the order

should be interpreted to the prejudice of the 12th plaintiff.

159.2 Another issue which was raised by Mr Memani is the contention that in the instances where the plaintiffs were leasing land from the government, they have no claim against the government for damaging its own property. That those plaintiffs cannot claim that their contractual duty to return the property in a good state of repair also covered instances where the owner's own conduct caused the state of disrepair.

159.2.1 *In casu* there are three different scenarios relating to government owned property. Firstly there is Ms Mietjie Steenkamp, the 10th plaintiff who has been allowed the right to occupy and farm for her exclusive benefit the farm Darehope 2, which as far as I can glean from the evidence, was bought by the Department of Agriculture and allocated to the Tsantsabane Municipality. Secondly there is Mr Alexander Abrahams, the 11th plaintiff, who leases the property Warrendale from the Department of Agriculture. Thirdly there is Mr Chris Strauss, the 6th plaintiff who subleases from a Mr Balapile who has a lease

agreement with the Department of Agriculture similar to that of Mr Abrahams.

- 159.2.2 Ms Steenkamp had been farming on the specific property (initially with her husband) since 2000. She presented to court a letter signed by the Director: Community Services of the Tsantsabane Municipality dated 14 Augustus 2012 which reads as follows:

“This letter serves as confirmation that Me Steenkamp from 2000 until now is the rightful claimant and occupant of the farm Klein Darehope (Darehope 2). She is entitled to farm on the abovementioned farm for her exclusive benefit. It is also her obligation to keep all the improvements on the farm in a neat and good order and to pay for all damages whatsoever, that occur on the farm or to the improvements.”

- 159.2.3 I have already in paragraph 86 above referred to the clauses in Mr Abrahams’ lease agreement with the Department of Agriculture, which confer on him as lessee the responsibility to keep the improvements on the property, including boundaries and fencing in a state of good repair and that he is liable

for all damages on the property caused by fire.

159.2.4 Both Ms Steenkamp and Mr Abrahams, as possessors and lawful occupiers of the respective properties bear the risk of damage to the property and clearly have an interest in the property. As such they may claim damages from the defendant to the extent of her or his loss. See *Smit vs Saipem* 1974(4) SA 918(A)

159.2.5 Their claims are in any event not just for damage to the property (infrastructure and improvements) but also for damages as a result of loss of income, by not being able to utilize the property for the purpose it is occupied i.e. to make an income. Mr Memanis contention that these parties cannot claim damages from Government for damaging its own property, unsupported as it is by any authority, in my view holds no water and these plaintiffs should be allowed their proven damages.

159.2.6 The position of Mr Strauss is a different kettle of fish. In this instance it is the absent Mr Balepile who entered into a lease similar to

that of Mr Abrahams, with the Department of Agriculture and to whom the risk of damage passed. The evidence of Mr Strauss was that he had a verbal agreement with Mr Balepile that he would return the property to him in the same state of repair as he had received it whenever Mr Balepile decides to take possession of the property again. The evidence relating to the verbal agreement of sublease is rather vague, with Mr Strauses being unable to remember the date on which the agreement was entered into, there also appears to be no terms attached to the sublease. Mr Balepile did not testify to confirm the agreement entered into with Mr Strauss – in fact Mr Straus testified that he could not trace him.

- 159.2.7 But be that as it may even if Mr Balepile had confirmed the agreement with Mr Strauss in terms of which the risk had passed *inter se* to Mr Strauss, the lease agreement that Mr Balepile entered into with the Department of Agriculture which was handed into court as an exhibit, contains a prohibition against subleasing without the prior written consent of the lessor. Needless to say, no such written consent was entered into evidence. Mr

Strauss therefore finds himself in the position of the unlawful occupier/possessor. As such one of the prerequisites referred to by Jansen JA in *Smith v Saipem* for the extension of the Aquilian remedy to a claimant who is not the owner of the property, that of “*regmatige houer*” or lawful occupier (possessor), is absent. That being the case, Mr Strauss is not entitled to claim for damages to the infrastructure and improvements. There is in my view however no reason why he should not be entitled to claim for the other damages suffered.

160. The plaintiffs or witnesses on their behalf testified to the fact that their fences were damaged in the fire and that it needed to be replaced. Despite it having been put to certain plaintiffs that fire in fact enhances fences (which was denied), no expert evidence to this effect was presented by the defendant. In my view it makes sense reasonably and logically that fire would damage fences.
161. The plaintiffs presented evidence of the lengths of the fences damaged in the fire and the methods used to measure the lengths. The defendant's expert in this regard, Mr Du Toit, had apparently undertaken this exercise himself (whether it be physically or at the hand of charts) and had provided a written opinion on the replacement costs of the plaintiffs' fences.

Despite being present in court for most of the proceedings and the plaintiffs and/or their witnesses being subjected to lengthy cross-examination on the lengths of these damaged fences, based on Mr Du Toits report, Mr du Toit was not called as a witness. As such I am satisfied that the plaintiffs have succeeded in proving on a balance of probabilities the lengths of the various fences to be replaced.

162. As far as the replacement costs of the fences go, the basis on which this claim was initially calculated was explained by the plaintiffs' attorney in the letter annexed as "*B*" to the particulars of claim and also by Mr Swanepoel in his evidence. It was calculated, taking into account the price of fencing accepted by the defendant in previous fire claims during 2003, 2005 and 2008, that the prices of fencing had escalated from 2003 to 2008 by 188%. Since the plaintiffs fences were not new when burned a discounting of 20% was included in the formula. The formula for the various types of fences therefore reads as follows – length of fence x the price per meter (in 2003) x 80% + 188%.
163. With the exception of the 1st, 8th and 12th plaintiffs who relied on fence replacement prices for 2009 as established and testified to by Mr Swanepoel, and the 9th plaintiff who used the old 2003 price without adapting it for his inside wired claimed, the rest of the plaintiffs based their fence claims on the above-mentioned formula.

164. In this regard Mr Swanepoel testified as to the fact that both the formula based claims and those of the 1st, 8th and 12th plaintiffs were reasonable and market related. It stands to reason that the 9th plaintiffs claim for his fence is much lower since it has not been adapted and should also be considered to be reasonable.
165. In my view the plaintiffs should succeed with their claims relating to the fences damaged in the fire.
166. The 1st and 3rd plaintiffs also claimed for pipe lines damaged in the fire. Mr Vermeulen and Mrs and Mr Scholtz testified with regard to the sizes and measurements of the damaged pipelines. In this regard Mr Swanepoel who, as in the case of fences, has years of experience and knowledge of the prices of such pipes testified that the 1st and 3rd plaintiffs claims relating to their pipelines were reasonable and market related. The same applies with regard to the 3rd plaintiffs claims relating to the two sink dams and cement and the 5000 litre water tank damaged in the fire, which Mr Swanepoel confirmed as reasonable and market related.
167. The 3rd plaintiff also claimed for the loss of wood coralls burnt in the fire. This claim has not been dealt with by Mr Swanepoel and having no measure by which to determine whether this claim is at all reasonable, it should in my view be disallowed.

168. This case has been fraught with difficulties. The fire, it is common cause, had spread fast and wide. The plaintiffs had to act fast and almost instinctively in protecting their property. It is entirely natural, in my view, that little or no record was kept of exactly how much fuel was used in fighting the fire or the kilometres traversed with the fire fighting vehicles. In these circumstances, the fact that the plaintiffs did not have invoices relating to their claims for food for labourers for instance or the wages paid to labourers can hardly be held to be fatal for such claims. The situation relating to the lack of documentary proof (invoices etc.) in support of the claims relating to *inter alia* the infrastructure, sales of cattle, transportation costs – is not ideal, but should be seen against the background of previous fire claims against the defendant being settled on the basis of an accepted formula and agreed prices relating to infrastructure and the like. I do not want to be perceived as condoning the plaintiffs attorney's lack of foresight in not preparing the plaintiffs properly in the event their claims become opposed, as has happened, however it would be unjust to the plaintiffs where expenses have obviously been incurred and damages suffered as a result of the defendant's wrongdoing, not to attempt to quantify such damages with the evidence available.

169. In *Esso Standard SA (Pty) Ltd vd Katz 1981(1) SA 964 AD at 969 J tp 970 H*, the court held as follows:

"It has long been accepted that in some types of cases damages are difficult to estimate and the fact that they cannot be assessed with certainty or precision will not relieve the wrongdoer of the necessity of

paying damages for his breach of duty. Among the authorities cited in the Lazarus case is *Hall v Ross* 111 English Law Reports 672 which was decided as long ago as 1813. Not only is the principle not a novel one but the English precedents which have given some guidance on the problem have gone so far as to hold that the Court doing the best it can with insufficient material may have to form conclusions on matters on which there is no evidence and to make allowance for contingencies even to the extent of making a pure guess. See, for example, *Chaplin v Hicks* (1911) 2 KB 786 (CA) at 792. In the case of *Arendse v Maher* 1936 TPD 162 GREENBERG J was faced with the problem of assessing damages claimed by a wife arising out of the death of her husband owing to the defendant's negligence. As there was no actuarial or other expert evidence before the Court, it was argued that absolution from the instance should be granted. Having refused absolution the learned Judge went on to say at 165:

"It remains, therefore, for the Court, with the very scanty material at hand, to try and assess the damage. We are asked to make bricks without straw, and if the result is inadequate then it is a disadvantage which the person who should have put proper material before the Court should suffer."

In the present case it might be said with some justification that the plaintiff should have sought the assistance of an accountant. He failed to do so, but it does not follow that he should be non-suited. Whether or not a plaintiff should be non-suited depends on whether he has adduced all the evidence reasonably available to him at the trial and is a problem which has engaged the attention of the Courts from time to time. Thus in *Hersman v Shapiro & Co* 1926 TPD 367 at 379 STRATFORD J is reported as stating:

"Monetary damage having been suffered, it is necessary for the Court to assess the amount and make the best use it can of the evidence before it. There are cases where the assessment by the Court is very little more than an estimate; but even so, if it is certain that pecuniary damage has been suffered, the Court is bound to award damages. It is not so bound in the case where evidence is available to the plaintiff which he has not produced; in those circumstances the Court is justified in giving, and does give, absolution from the instance. But where the best evidence available has been produced, though it is not entirely of a conclusive character and does not permit of a mathematical calculation of the damages suffered, still, if it is the best evidence available, the Court must use it and arrive at a conclusion based upon it."

See, too, a more recent decision given in this Court in *Mkwanazi v Van der Merwe and Another* 1970 (1) SA 609 (A) where VAN WINSSEN AJA sets out in detail at 632 the reasons for granting absolution when the plaintiff has failed to place before the Court evidence he is in a position to lead.

The critical question then is whether the plaintiff, having successfully proved that he has suffered damage through loss of petrol and that that damage was caused by the defendant, has produced all the evidence that

he could reasonably have produced to enable the Court to assess the quantum of damage.”

170. Fortunately, I am not in such a dire position with the evidence before me that I have to make bricks without straw. The plaintiffs have all impressed as credible and honest witnesses and despite being accused my Mr Memani of fabricating claims (to the point of tears in some instances), they have all withstood cross-examination valiantly. There is no reason for me to doubt the veracity of their versions. As already mentioned though, there are some instances, especially relating to the firefighting and transportation claims, where the plaintiffs have not been able to produce documentary proof of expenditure. In these instances I have regard to the expertise of Mr Swanepoel with respect to the reasonableness thereof.
171. As far as the transportation of cattle after the fire is concerned, the various claims range from R8, 00 per kilometre to R50, 00 per kilometre. According to Mr Swanepoel the rate of R50, 00 per kilometre is reasonable in the circumstances and that of R8, 00 per kilometre more than reasonable. Mr Swanepoel has given cogent reasons for his opinion on the transportation costs and I therefore accept these costs as claimed as reasonable.
172. The fuel usage claimed by the plaintiffs for their vehicles and firefighters have likewise been confirmed by Mr Swanepoel as being reasonable. I accept that this is so. So too the claims relating to the wages of labourers who helped with fighting the fire. Mr Swanepoel has also confirmed the reasonableness of

the plaintiff claims regarding the cattle which have died in the fire. Mr Vermeulen, the 1st plaintiff's, claim for the use of his two vehicles in fighting the fire has also been confirmed as reasonable by Mr Swanepoel. The above claims are therefore all allowed.

173. There are claims which Mr Swanepoel could not give an opinion on (the lost springbok of the 3rd plaintiff) and those he was not asked to give an opinion on such as repairs to vehicles and tyres, replacement of tyres and firefighter equipment, replacement of engine parts, the wear and tear of vehicles, the Nissan bakkie which was wrecked and the tow truck charges thereof. These claims I will not allow as it has not been proven on a balance of probabilities. I may just mention that even though in certain instances like the claims relating to the Nissan bakkie, gearbox and towing charges, invoices have been presented, such is not sufficient to determine whether the claims are reasonable in the absence of expert evidence thereon. See *Heath v Le Grange* 1974(2) SA 262 (CPD). The further problem with the claim regarding the bakkie is that no evidence regarding the circumstances of the accident was tendered.

174. I now turn to the loss of production claims. In simplistic terms the plaintiffs hold forth a formula for calculating the production losses based on the affected areas over a withdrawal period of 3 years. The defendant's Prof Dube used a formula which basically establishes the value of replacement feed in respect

of the burnt areas for 1 growing season. Some of the plaintiffs have amended their particulars of claim to include as an alternative a production claim based on the formula espoused by Prof Dube, but with certain adaptations.

175. Neither of these formulae seem to be objectionable on the basis that it is unscientific. The disputes between the parties arise out of, for want of a better description, the input data, used in these formulae. In the case of the plaintiffs' formula these disputes are the affected areas, the calving rates, the weights at which calves were sold, the price obtained per kilogram and the withdrawal period. In the case of the defendant's formula the disputes which have arisen during the course of the trial are the amount of feed per hectare and its price per ton, the utilization level and also the withdrawal period.

176. In coming to a conclusion with regards the disputes relating to the production claims, the evidence of the expert witnesses is germane. In this regard it is worthwhile to note the exposition given by Davis J as to the role of an expert in *Schneider NO v AA* 2010 (5) 203 (WCC) at 211E to 212 B, where he states the following:

"In Zeffertt and Paizes The South African Law of Evidence National Justice Compania Navierasa v Prudential Assurance Co Limited , (Second Edition), at 330 the learned authors, citing an English judgment of 1993(2) Lloyd's Reports 68 at 81, set out the duties of an expert witness thus:

"1. Expert evidence presented to the Court should be, and should be seen, to be the independent product of the

expert uninfluenced as to form or content by the exigencies of litigation;

2. *An expert witness should provide independent assistance to the Court by way of objective, unbiased opinion in relation to matters within his expertise... An expert witness should never assume the role of an advocate;*
3. *An expert witness should state the facts or assumptions upon which his opinion is based. He should not omit to consider material facts which could detract from his concluded opinion;*
4. *An expert witness should make it clear when a particular question or issue falls outside his expertise;*
5. *If an expert opinion is not properly researched because he considers that insufficient data is available, then this must be stated with an indication that the opinion is no more than a provisional one. In cases where an expert witness who has prepared a report could not assert that the report contained the truth, the whole truth and nothing but the truth without some qualification, that qualification should be stated in the report."*

In short, an expert comes to Court to give the Court the benefit of his or her expertise. Agreed, an expert is called by a particular party, presumably because the conclusion of the expert, using his or her expertise, is in favour of the line of argument of the particular party. But that does not absolve the expert from providing the Court with as objective and unbiased opinion, based on his or her expertise, as is possible. An expert is not a hired gun who dispenses his or her expertise for the purposes of a particular case. An expert does not assume the role of an advocate, nor give evidence which goes beyond the logic which is dictated by the scientific, knowledge which that expert claims to possesses."

177. In *Menday v Protea Assurance Co Ltd* 1976(1) SA 565 (E) at 569B, Addleson J stated the following with regard to the function of an expert:

"In essence the function of an expert is to assist the court to reach a conclusion on matters on which the Court itself does not have the necessary knowledge to decide. It is not the mere opinion of the witness which is decisive but his ability to satisfy the Court that, because of his

special skill, training or experience, the reasons for the opinion which he expresses are acceptable. (Cf. Phipson, Evidence 11th ed., paras. 1280 et seq.; Hoffmann, Evidence, 2nd ed., pp. 78 et seq.; R. v. Nksatlala, 1960(3) S.A. 543 (A.D) at p. 546).

Phipson and Hoffmann, op. cit., both point out the dangers inherent in expert testimony. For example, the inability of the Court to verify the expert's conclusions and the tendency of experts to be partisan and over ready to find and multiply confirmation of their theories from harmless facts (Phipson, para. 1286). Nonetheless the Court, while exercising due caution, must be guided by the views of an expert when it is satisfied of his qualification to speak with authority and with the reasons given for his opinion."

178. Based on the above authorities I intend to make short shrift of the weights at which calves were sold and the prices obtained therefore. As already mentioned not all of the plaintiffs provided invoices of their calf sales from which it would be able to determine average weights and prices for each individual plaintiff. The 1st plaintiff for instance made use of the invoices of other plaintiffs with certain adjustments in an attempt to formulate his claims which are based on weights and prices. The 3rd, 6th, 7th, 10th, and 11th plaintiffs left the determination of average calf weights and prices to be proven by Mr Swanepoel. The last mentioned group of Plaintiffs' production claims were based on average selling weights of 250kg and an average price of R17. 67 per kilogram. Mr Swanepoel who gave evidence in this regard stated that the weight was acceptable and reasonable and so also the price obtained per kilogram – regard being had to the fact of fluctuating prices offered by the

auction lots and feeding lots. The prices provided by 1st plaintiff were deemed acceptable for the same reason. This evidence of Mr Swanepoel stands uncontroverted and I have no reason not to accept it. Following logically upon my acceptance of Mr Swanepoels opinion of the reasonableness of the weights and prices of calves for these plaintiffs, the claims of plaintiffs calculated at lower weights and prices should also be regarded as being reasonable.

179. The plaintiffs have all testified to their calving rates. I have no reason to doubt their evidence to this effect and such evidence is supported by Mr Swanepoel who reckons an 80% calving rate (the highest claimed) to be achievable and reasonable in this region. Mr De Jager in fact testified that the 10th plaintiff's calving rate of 75% is bordering on the low side. I therefore also accept the calving rates provided by the plaintiffs as being reasonable.
180. The only aspects left to deal with is relation to the plaintiffs' formula are those of the affected areas and the withdrawal period.
181. The evidence of Mr Emery and his acceptance of the SANSA fire scar has had the effect at least that the disputes relating to the plaintiffs burnt areas (and affected areas in so far as their calculation thereof can be accepted) has been settled with the exception of the 1st, 7th, 9th, 11th and 12th plaintiffs.

182. The 1st plaintiff, Mr Vermeulen claims a total affected area of 4175 hectares, while his affected area calculated from the SANSA fire scar is 4119.08 hectares – a difference of 55.9 hectares. Mr Vermeulen had calculated his affected area at the hand of the map “AA” drawn up by Mr Liebenberg and which was later accepted by the defendant as correct.
183. The 7th Plaintiff Mr B Markram had calculated his affected area as 931 hectares while the SANSA scar determines it to be 497.8 hectares. See paragraph 23 above.
184. The 9th plaintiff Mr Weideman testified that two of his camps burned. These camps totalled 300 hectares which he accepted as his affected area which also accorded with Mr Du Toit’s report in this regard. He withdrew the cattle from these camps and ended up having to sell 30 cattle. The SANSA fire scar relates to an affected area of 269.3 hectares.
185. The 11th plaintiff Mr Abrahams, according to the SANSA scar, has a burnt area of 2.1 hectares with no affected area. Abrahams gave evidence of the fences which had burned on his farm and that his farm had burnt to such an extent that he had to remove 47 animals from the burned camps, which he then eventually had to sell. He also counted 61 burnt trees on his property.
186. The 12th plaintiff based its claim on the Dube formula in terms whereof the burnt area is used in the calculation. The SANSA

fire scar reflects that only 4 hectares of the farm Thoresby had burned with no affected area. Mr F Makram's evidence is however that he personally measured the burned area of 298 hectares. He testified in addition of the fences which burned and that he had counted 21 burned trees. This evidence of Mr Markram was not countered during cross-examination at all.

187. Given the credibility of these witnesses, with even Mr Memani praising the honesty of Mr Abrahams, and the fallabilities of the satellite imagery as explained by Mr Emery (see paragraph 157 herein) I have no hesitation in acceding to the request by Mr Knoetze that in these instances the physical measurements of the burned and/or affected areas be accepted. I pause to mention that since Mr Abrahams was not sure of the extent of his burnt area his claim is based purely on the loss of production relating to the cows he had to sell and is not determined by a burnt or affected area.
188. The next question to be answered is whether the plaintiffs' reliance on an affected area based on the withdrawal of an entire camp, should more than 10% of it had burned, is justified.
189. In this regard Prof Snyman held the view that if it is not practical or economically possible to isolate a burnt area of 10% or more within a camp the whole camp should be withdrawn. This is also the opinion of Mr Swanepoel. Their reasons herefor are persuasive. Mr De Jager has even testified that it was the Department of Agriculture's recommendation that a whole camp

be withdrawn if a small portion had burned and that he had advised the farmers accordingly.

190. The plaintiffs who were cross-examined on this aspect (at length) all denied that it was possible, reasonably and practically to isolate the burnt areas of their camps so that the unburnt areas could be utilised. No evidence was presented by the defendant as to how each of the individual plaintiffs could have put measures in place on their particular farms to mitigate the impact of the fire on the grazing veld. The onus is on a defendant to prove that the plaintiff should have restricted his or her damage or that the plaintiff should have used a better or alternative method. See *Everett v Marion Heights* 1970(1) SA 198(C) at 201.
191. Prof Dube's opinion that a farm that has burnt up to 30% can be reconfigured to accommodate all the cattle seamlessly, does not take into account that the plaintiffs one and all use a camp system. The difficulties pertaining hereto were convincingly explained by Mr Swanepoel.
192. In my view the plaintiffs succeeded in proving their affected areas.
193. The reasons for the withdrawal period of 3 years relied on by the plaintiffs was fully, reasonable and logically explained by the plaintiffs' experts as well as the plaintiffs. With decades of experience of fires in the area under discussion, Messrs

Swanepoel and De Jager's expertise in this field cannot be doubted. Prof Snyman also has decades of experience of the effect of fires on grazing land and the management of the veld thereafter. From his experience of the central grasslands he gave a cogent opinion on why the withdrawal period should be more than the two years recommended after fires in the central grasslands. He was consistent in his opinion.

194. Prof Dube on the other hand see-sawed from an opinion of the withdrawal of two growing seasons in the meeting of the experts under chairmanship of Adv Van Niekerk, to a mere 175 days during the evidence. This despite the fact that he had in fire claims in the Free State, where he and Mr Swanepoel were counterparts, reached agreements relating to grassland fires and where the rainfall is higher, of withdrawals of 2 years to 2½ years. When confronted during cross-examination with this anomaly he merely shrugged it off, saying that the time of year those fires took place guided the agreements. This explanation may hold some water for a fire which took place during November when the growing season was midway but not for a fire which occurred during June when the grasses are dormant.
195. He also co-authored a paper on the long-term effects of different burning frequencies on the dry savannah grassland in South Africa, which was accepted in January 2008. This paper which was referred to by Mr Memani during his cross-examination of Prof Snyman, was included in a list of scientific papers on the effects of fires, in order to discredit Prof Snyman

by attempting to show that he is not the only expert on the effects of fire on grazing. Instead of discrediting Prof Snyman, the above mentioned paper had the opposite effect in that the conclusion reached by Prof Dube and his co-authors was that the study showed that the recovery period for optimum productivity of vegetation and soil variables after a fire is three years. This study was done in the Eastern Cape where the mean annual rainfall is recorded as 500 mm.

196. When confronted during cross-examination with this paper Prof Dube once again shrugged it off explaining that the research sought to establish the effect of fires on the vegetation in areas where fires were frequently used as a management tool and cannot be compared to a once off fire as *in casu*. A reading of the paper does not bear out this response however. The experiment was to establish the effect of different burning frequencies (annual, biennial, triennial, quadrennial and sexennial) and which led to the conclusion reached.
197. Prof Dube has unfortunately created the impression of the hired gun expert referred to by Davis J in the Schneider case *supra* and I cannot place any reliance on his evidence with regard to the necessary withdrawal period after the fire.
198. The same applies to the disputes relating to the interpretation of the formula he once espoused and the values to be reckoned into the formula. I suspect that once it was realised that the plaintiffs would use the formula, with the values as advised by

their experts resulting in much higher production loss claims than the original claims, he had to back-track from his original opinion. The resultant absurdity was that the price for natural grass used by Prof Dube in the formula which was never before an issue in dispute and which was in fact stated by Mr Memani to be common cause, had during Prof Dube's evidence become completely incomparable to the "*wild grass*" of the plaintiffs which according to him had little commercial value.

199. The same can be said of Prof Dube's estimate of biomass production, which according to his report is estimated at 2.5 ton per hectare based on "*crop estimates in the unburnt area and non-grazed areas within Lohatla.*" During his evidence Prof Dube turned around and stated that the estimation was based solely on the pristine areas within Lohatla and that none of the farms were pristine since they were working farms and generally suffered from degradation. I assume this difficulty arose because the estimate was made for the growing season of October to February where peak biomass is achieved. However if it is so, it could easily have been explained by Prof Dube. But be that as it may, Prof Dube has not proffered any other reasonable estimate for consideration.
200. As far as the utilisation factor is concerned I have already referred to Prof Dube's explanation of the low level of utilisation he attaches to this area. It make no sense to me that an estimate of utilisation levels to be used in the calculation of the replacement value of lost grazing can be made based on the

utilisation of recently burned veld. In this regard the utilisation value of 45% which the plaintiffs' experts have accepted in an attempt to reach agreement with the defendant, is more acceptable.

201. With regard to the long term loss of grazing claims of the plaintiffs I am of the view that the plaintiffs have not succeeded in proving these claims on a balance of probabilities. None of the plaintiffs experts committed to the reasonableness of this claim. The fact that the plaintiffs have testified that the veld had not fully recovered after 4 years is too vague an assertion to place me in any position to make a determination on the extent of nonrecovery in order to make a justifiable award. This claim cannot succeed.
202. I am of the view however that the claims relating to the trees lost in the fire have been sufficiently proved. Mr Memanis contention that the plaintiffs cannot claim for wild trees which grow naturally in the veld flies in the face of the defendant's own expert placing a value on natural grass. The value of the trees lost have been adequately explained by Mr Swanepoel, Prof Snyman, Mr De Jager and the plaintiffs, especially Mr Vermeulen. The controversy about the tannins found in the wild olive tree has in my view been nothing but smoke and mirrors, since Prof Dube himself stated that there are very few species of evergreen trees on the farms and it is in any event not denied that the cattle do browse on the olive trees.

201. That being the case I am of the view that the plaintiffs have all succeeded in proving damages suffered as a result of the fire to the extent that I have dealt with regarding the infrastructure and general damages claims. The only question remaining is on what basis the production loss claims should be awarded. Mr Knoetze has argued in this regard that I consider awarding all the plaintiffs their production loss claims on the formula of Prof Dube as adjusted, since it is a much more practical way of dealing with these claims and which does not involve the issues relating to affected areas, calving rates, weaning weights and the like.

204. I have however made a point of dealing with all the issues since; (i) not all the plaintiffs have amended their particulars of claim to include as an alternative a production loss claim based on the Dube formula and I am bound by the pleadings and; (ii) the Dube formula as adapted by the plaintiffs results in loss of production claims in most instances double the amount of the main and original claims, which leads me to believe that the values attached to the formula in some way need further adjustment to accommodate reasonably and economically sound, a three year withdrawal period.

205. In the circumstances I intend to award damages for loss of production based on the plaintiffs' main claims.

The exceptions are the 1st plaintiff who will be awarded damages based on his 2nd alternative production loss claim, which is a more realistic reflection of his actual loss. The 12th

plaintiff has only pleaded production loss based on the Dube formula and although I have indicated my reservations about the adaptation of this formula, the difference between the 12th plaintiffs original (before amendments) claim and the present is not such that it can be considered unreasonable.

206. There is one aspect I need to deal with before I go over to the issue of costs. During the course of the trial I made an order that the defendant (the Minister) send a representative, preferably a senior member of her staff, to attend the trial. At that stage the attitude of Mr Memani had become almost unbearable and the idea was that his behaviour be brought to the attention of the Minister and that possibly the presence of the Minister's representative in court would have a positive effect on the further proceedings. This was not the case however. Mr Memani continued to badger the witnesses with his disrespectful attitude and endless cross-examination on mostly irrelevant matters – Mr Vermeulen for instance was cross-examined for more than 20 days with no discernable positive outcome for the defendant. Mr Swanepoel especially was treated with the utmost disrespect. The plaintiffs were unfairly accused of being liars, so too Mr Knoetze. Even I have been accused of being dishonest in open court by Mr Memani. Rulings made by me were disregarded. This is conduct totally unbefitting of counsel.

207. This is a matter which should have been settled between the parties, at the very least in part, but I got the distinct impression

from Mr Memani's attitude, that he was the driving force behind the continued proceedings. Unfortunately the tax payer will have to bear the costly brunt of these proceedings.

208. Consequently Mr Knoetze has asked that I consider making a punitive cost order against the defendant. I have given this issue due consideration but am of the view that enough tax payers money have been wasted. Mr Memani, I intend to deal with by instructing the Registrar to forward a copy of this judgment to the Johannesburg Bar Council.

209. In this instance then, the plaintiffs being successful in proving damages, the normal order as to costs should follow.

210. I am further of the view considering all the circumstance of this case, that the plaintiffs be awarded interest on their claims a *tempore morae* at the prescribed statutory rate from date of service of summons.

The following orders are made;

Damages are awarded to the plaintiffs as follows:

1) 1st Plaintiff is awarded damages in the amounts of:

a) R3 163 527, 90 for his infrastructure claim;

b) R3 044 300,00 for loss of production;

c) R9 875 800,00 for general damages.

1.1 Interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.

2. 2nd Plaintiff is awarded damages in the following amounts:

- a) R466 445.55 for infrastructure;**
- b) R5 54 617,00 for his production claim;**
- c) R510 270,00 for general damages**

2.1 The defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.

3. 3rd Plaintiff is awarded damages as follows.

- a) R2 060 641,00 for infrastructure;**
- b) R2 423 314,00 for production loss;**
- c) R1 397 000,00 for general damages;**

3.1 The defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.

4. The 4th Plaintiff is awarded damages as follows:

- a) R735 973,20 for infrastructure;**
- b) R1090 921,31 for loss of production;**
- c) R827 000,00 for general damages;**

- 4.1 Defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.**
- 5. 5th Plaintiff is awarded damages as follows:**
- a) R382 758,00 for infrastructure;**
 - b) R806 553,75 for loss of production;**
 - c) R526 850,00 for general damages;**
- 5.1 Defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.**
- 6. 6th Plaintiff is awarded damages as follows:**
- a) R1 378 260,00 for loss of production;**
 - b) R28 400,00 for general damages;**
- 6.1 Defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.**
- 7. The 7th Plaintiff is awarded damages as follows:**
- a) R131 659,79 for infrastructure;**
 - b) R779 068,80 for production loss**
 - c) R488 102,00 for general damages**

- 7.1 Defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.**
- 8. 8th Plaintiff is awarded damages as follows:**
- a) R79 485,30 for infrastructure;**
 - b) R232 723,54 for production loss;**
 - c) R205 000,00 for general damages;**
- 8.1 Defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.**
- 9. 9th Plaintiff is awarded damages as follows.**
- a) R5890,00 for infrastructure;**
 - b) R286760,20 for production loss;**
 - c) R187 217,60 for general damages;**
- 9.1 The defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.**
- 10. 10th plaintiff is awarded damages as follows:**
- a) R285 184,00 for infrastructure;**
 - b) R662 625,00 for loss of production;**
 - c) R6 600,00 for general damages;**

10.1 The defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.

11. 11th Plaintiff is awarded damages as follows;

- a) R228 161,00 for infrastructure;**
- b) R498 294,00 for loss of production;**
- c) R305 000,00 for general damages;**

11.1 The defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.

12. 12th Plaintiff is awarded damages as follows:

- a) R128 950,20 for infrastructure;**
- b) R437 972,06 for production loss;**
- c) R110 091,60 for general damages;**

12.1 The defendant is to pay interest on the above amounts at the prescribed legal rate from 13 October 2010 to date of payment.

13. Defendant is to pay the costs of this action, which includes the qualifying costs (inclusive of preparation, attending trial and reasonable travelling expenses) of the following experts:

Prof H Snyman

Mr JP Swanepoel

Mr L De Jager

Mr C Liebenberg

Mr A Rossouw

Mr E Emery.

C C WILLIAMS

JUDGE

For Plaintiff:

Adv. B Knoetze (SC)

Oosthuizen Sweetnam & Reitz

c/o Elliott Maris Wilamans & Hay

For Defendent:

Adv FR Memani

State Attorneys