Form 40 (version 3)
UCPR 35.1

# AFFIDAVIT OF MARGARET ALEXANDER,

# JULY 2015

| COURT DETAILS | |
|---|---|
| Court | NSW Land and Environment Court |
| Division | Class 4 |
| Registry | Sydney |
| Case number | 15/80405 |

| TITLE OF PROCEEDINGS | |
|---|---|
| First Plaintiff | **Peter Martin**<br>**Felice Pollicina**<br>**Fesen Pty Ltd**<br>**Ross Alexander**<br>**Kathleen Roche** |
| Defendant | **Hume Coal Pty Ltd** |

| FILING DETAILS | |
|---|---|
| Filed in support of | Plaintiffs' Summons dated 12 May 2015 |
| Filed for | **Plaintiffs** |
| Legal representative | Marylou Potts<br>Marylou Potts Pty Ltd<br>113b Carabella st, Kirribilli 2061 |
| Legal representative reference | Marylou Potts<br>Marylou Potts Pty Ltd |
| Contact name and telephone | Marylou Potts<br>0411340775 |
| Contact email | ml@mlppl.com.au |

[on separate page]

**AFFIDAVIT**

| | |
|---|---|
| Name | Margaret Alexander |
| Address | 'ROSCOE PARK', 90 Carters Lane, Sutton Forest NSW 2577 |
| Occupation | Beef Cattle Farmer |
| Date | July 2015 |

I say on oath:

1 I, Margaret Alexander, landholder, together with my husband, Ross Alexander, live on the 143 hectare property known as 'Roscoe Park' at Lot 10 Carters Lane, Sutton Forest NSW 2577 (**Property**). The property includes title to Carters Lane. There is a dwelling house located on the Property.

**Dwelling house**

2 The dwelling house and approximately 5 acres of surrounding land is owned solely by my husband Ross Alexander. The remainder of the property is owned by myself and Ross.

3 My husband and I consider the dwelling house on the land to be our principal place of residence. My husband owns no other dwelling houses. I own a dwelling house in 74 Throsby St Moss Vale, which I acquired April 2014 and it is rented out. We have never lived in it. We have lived in the current dwelling house on the property since December 2002.

4 **Annexure MA1** contains an aerial photo of the Property taken in about 2009.

5 Annexed and marked **Annexure MA2** are photos of our house, manager's cottage and work shop, other buildings around the house including the garage and gardens that have been constructed since 1999 on the Property.

6 I do the majority of the work needed to be done on the Property with the assistance of my husband and, when necessary, contractors.

**Business run on the Property**

7 From about 1996, my husband and I have run a beef cattle business focusing on production and sale of vealers. We moved that business to the Property shortly after we bought the Property.

8 Since about 2010, we have begun to develop a Limousin stud on the Property. Our plans are to build a Limousin stud herd. We have bought the best bulls we could find. One of our bulls this year won first prize for a bull of his age in the Limousin class at the Sydney Royal Easter Show. In 2014, he also won in the Melbourne, Canberra and Moss Vale shows. We also made a decision to purchase some top quality stud Limousion females in order to produce better quality offspring. Each year we have added to the stud side of the business.

9 We have 4 bulls, which we use for breeding. These must be kept in separate bull paddocks, when not in the breeding season. The breeding season is from August to November and January to April. The calving season is 9 months later, generally from May to end of August; and, October to end of January each year.

10 As at June 2015 we have:

a) 27 cows and their 27 calves and 37 cows due to calve July/August 2015;

b) 10 trade cows and their 10 calves to be split and sold September 2015;

c) 38 heifers;

d) 4 Limousin bulls; and

e) Limousin stud cattle: 6 cows and 5 heifers (for sale September 2015); and 6 heifers we are keeping.

11 We have 2 major herds, a 1 limousin herd and a herd of up coming heifers. Generally each female herd stays together, and the bulls are moved around from herd to herd. For example on 22 June 2015:

a) in paddock 2, I had 15 dry cows [that is cows in calf];

b) in paddock 6, I had 26 cows and 26 calves [these calves to be sold in early August];

c) in paddock 8, I had 22 cows due to calve, [which will be moved on 22 June to the dry cows in paddock 2];

d) in paddock 9, I had 14 cows and 14 calves [calves to be sold 1 July];

e) in paddock 14, I had 1 bull, 6 stud cows [due to calve in July] and 2 stud calves on agistment;

f) in paddock 16, I had 1 bull and 1 cow in calf;

g) in the Drive paddock, I had 1 bull, 5 limousin stud heifers being serviced [for sale in September];

h) in the Bore paddock, I had 2 stud heifers, 3 commercial heifers, [being fed silage and due to calve in July];

i) in the Bull paddock, I had 4 stud heifers; and

j) in the Compound paddock, I had 1 injured bull.

12 At any one time up to 10 of the 23 paddocks are occupied by our cattle. Paddocks are occupied by cattle for approximately 2 weeks, sometimes longer, up to a month, sometimes shorter, only a few days, depending on the pasture in the paddock, and what we are wanting to do to the pasture in that paddock and what we are needing to do with the cattle. For example, if we want to nip the buds to thicken the pasture, the cattle may be in a paddock for a shorter time, but if we want the cattle to eat the pasture down so that we can sow it, the cattle will be in the paddock for longer,

13 The cattle are rotated to a paddock which has better pasture, or is more suitable for mating or for calving, or more suitable due to the weather conditions [too hot, or too windy, or to cold], or the state of the soil [too boggy due to a recent rain event].

14 To move the cattle from one part of the property to the other we use the cattle laneways. We are moving cattle in the laneways every week, if not several times a week. The movement of cattle depends upon any variety of reasons, the state of the pasture, the weather, the season, whether mating or calving, fattening or selling, the vetinary needs, such as vaccinations or when there are injuries, or other health issues. As an example:

a) On 3 June 2015, I had 17 cows, 17 calves and 1 bull in paddock 16. On 3 June 2015, I moved these cattle from paddock 16 to the cattle yards via the laneway. At the cattle yards, I separated the bull and moved him into paddock 14. I then moved the remaining cows and calves, via the laneways, to paddock 6.

b) On 12 June 2015, paddock 5 had in it 10 cows, 9 calves and 1 bull. On 12 June, I moved from paddock 5 to paddock 6, 9 cows and 9 calves and I moved the bull and 1 cow via the laneways to paddock 16.

c) On 22 June 2015, I had 38 heifers in paddock 3. On 23 June 2015, I moved those heifers via the laneways to the Farm Stay paddock. On 23 June 2014, I moved them again to the Goat paddock. They were hand fed overnight. On 24 June 2015, ½ this herd had to have an injection to abort any foetus created by some neighbouring bulls which had trespassed on to our property. Following the injection, on 24 June 2015, these heifers were moved to paddock 8 via the laneways.

d) On 4 April 2015, I had 14 cows and 14 calves and 1 bull in paddock 10. On 9 May I moved these cattle to paddock 8 for 2 weeks. Then they were moved to paddock 7. On 8 June, I moved these cattle up to the cattle yards to separate the bull, which had been injured. I then moved the cows and calves back via the cattle yards to paddock 9. On 22 June, these cows and calves were still in this paddock.

e) Annexure **MA3** contains rough maps of these cattle movements.

15 Cattle are rotated out of paddocks before the pastures are eaten down too far, to allow the pasture to re-grow. The work done on a paddock occurs as soon as possible after the cattle is moved out of the paddock. At this time, the pastures are low enough to be able to harrow, weed, aerate and sow the paddock more easily. When the pasture is thick and high it is difficult to move through it and work on it, however this is when it is seeding, which is important for the self sowing of the next season's pastures. The seeds mature in their seed heads on the plant, those seeds then fall to the ground, and germinate in the next season into new plants. We refer to this as self sowing.

16 When the pasture is fully grown we make hay or silage from it, or slash or mulch it to improve the organic matter in the soil or we graze it. It all depends on what is best for the property, the cattle and the soil at the time.

17 When paddocks have no cattle in them they are harrowed, fertilised, aerated, weeded, and sometimes sown with a crop or another pasture grass depending on

the advice of Noel Brumfield, an experienced cattle man, otherwise we allow them to self sow, as described above.

18 The regrowth period [which we refer to as the resting period] is important for the health of the pasture as it allows for the restoration of pasture fertility and pasture growth.

19 We often allow our pastures to come to seed. The seeds then fall to the ground, germinate and grow new pasture in the next season. Thus naturally resowing the paddock with its existing pastures.

20 Sometimes we top our pasture to thicken it. More evidence on the pastures is set out later in this affidavit.

**Brief history of acquisition and development of the Property**

21 On 6 May 1999, my husband purchased the Property at auction for $1.7m. The Property was part of a subdivision from the property known as Golden Vale owned by Mr WG Keighley. The Transfer includes title to Carters Lane.

22 The Property is a battleaxe block commencing at Golden Vale Road, Sutton Forest. It includes and extends up Carters Lane, which is approximately 1 kilometre, and opens up into a hexagonal block.

23 When we purchased the Property it was vacant land. It had 3 paddocks, 4 dams and an aircraft hanger and Carters Lane had been constructed to road base stage up to the cattle grid. The Property had no power, no water, no house or other sheds or outbuildings besides the aircraft hanger. The fencing was falling down and the pastures were weed infested with serrated tussock, blackberries, pattersons curse, bracken and dandelions, as well as an infestation of gorse in the area adjoining the property known as Wongonbra.

24 Shortly after purchasing the Property, in early 2000, I contracted a fencing contractor, Terry Hore, to remove all the broken down fencing and to build the new boundary and internal fences and the cattle laneways. By the installation of new internal fences we created a number of new smaller paddocks.

25 At this time we also applied for and were granted a bore licence. We engaged a contractor to install the bore and a pump. We engaged another contractor to

connect the power from Golden Vale Road up Carters Lane to the hanger. We then engaged another contractor to install troughs in each of the new paddocks and install water polypiping infrastructure for water reticulation which is pumped from the bore near the house, up to the tanks on the top of the hill and then down the cattle laneways to the troughs in each of the paddocks.

26 I also engaged a contractor to construct the cattle yards located near the aircraft hanger, which is now the hay shed.

27 From 1999 to 2002, while the house was being constructed we lived in a caravan in the aircraft hanger.

28 I estimate that between 1999 and now, approximately $4.5 to $5 million has been spent improving this property.

29 To give an idea of the layout of the Property now, I set out in Annexure **MA3** rough maps which I have drawn with my husband of:

a) the paddocks on the Property as they currently stand;

b) the boundary and internal fencing;

c) the temporary fencing and future woodland lockup of the Southern Highlands Shale Woodlands, an endangered ecological community listed under the Threatened Species Conservation Act NSW on the Property;

d) the driveway and cattle laneways on the Property;

e) the dams, drinking troughs and underground water reticulation system from the bore; and

f) the windbreaks and shade trees in timber quadrangles which we have planted and built on the Property.

**Gardens surrounding the house, bordering the driveway and Carters Lane**

30 From about early 2000 until 2002, Ross and I designed the gardens together with some landscape architects. The first thing we did was build the 2 rock retaining walls. The area behind the walls was filled in to level the ground for the house site and gardens surrounding the house. After the house was completed, organic soil

was put down and lawn was laid around the house. The garden between the house and the southern rock wall was designed around a turning circle.

31 The construction of the garden required the planting of trees, hedges and flower beds. We got a contractor to choose specific trees for specific areas chosen for their autumn colours to be planted around the house. Andrew Lawson planted these trees.

**Carters Lane garden**

32 At the entrance of the Property at Golden Vale Road, we engaged a contractor to plant the pine trees. We also caused to be planted approximately 170 native trees and shrubs up Carters Lane. Attached to this affidavit as **Annexure MA4** is an invoice from Waripendi farm Nursery Pty Ltd for the supply and planting of 170 trees and shrubs. These were planted by Wariapendi along side Carters Lane from the beginning of Carters Lane to the beginning of our driveway. I observed the planting work along Carters Lane being done.

33 Each of these plants was tube stock. Each was protected by 3 bamboo stakes and a plastic surround. Each tube stock had a solid wetting agent underneath it. The ground was ripped prior to planting. For approximately 3 years from planting, I weeded around each tube stock. Wariapendi were responsible for watering each of the plants for the first 6 months and I watered them from then on for the first couple of years.

34 Since then the maintenance of these trees and shrubs has involved regular dead wooding, that is, removing dead wood from the trees as required. I mow the grass either side of Carters Lane on my ride-on mower once a fortnight, sometimes once a week in summer. The grass takes about 1 and a half hours to mow. In winter, it may be mowed once every 5 weeks depending on the weather. My husband organises for the steeper areas to be whippered. In addition, the pines closest to Golden Vale Road are hedged from time to time by a contractor. The areas underneath the pines are regularly mulched and weeded.

35 There is another stretch alongside Carters Lane where I planted agapanthas late in 2012. We laid woodchip 6 months before the planting of the agapanthas to keep the ground wet and stop the weeds. Since the planting initially they needed watering and now they require regular weeding.

36 I consider the areas either side of Carters Lane to form part of our garden.

**Driveway gardens**

37 When you pass through our front gate there is an ornamental dam immediately on the left hand side of the driveway. We built that dam. We caused a contractor to dig the hole, he then put an overflow pipe in it. Then we planted native reeds around the dam. We planted 4 willows around the dam. We regularly mow and whipper around the side of that dam. When we planted the willows they were surrounded by woodchip to keep the ground moist and to protect the willows from weeds.

38 On the right hand side of the driveway, we planted a double row of approximately 80 leighton green trees along the boundary fence to protect this part of the garden with its ornamental trees and the dam from the westerly winds. In this area, we have planted pistachios (ornamental), nissas, and pin oaks. All these areas were regularly mulched, sprayed for weeds and watered when they were originally planted for about the first 2 years. They still get mulched and weeded.

39 Continuing up the driveway, we have woodchipped in a circle beneath all of the eucalypts and underplanted some with grevillias.

40 On the right hand side of the driveway a little further up, we planted approximately 100m of double rowed agapanthas all the way to the aircraft hanger. Opposite the aircraft hanger we planted 3 pin oaks. These areas are watered, mulched and regularly weeded and maintained.

41 I regularly mow the grass either side of the driveway from the gate to the house, with the same frequency that I mow the grass either side of Carters Lane.

42 Further on from the pin oaks at the aircraft hanger, we planted leightons on the left hand side to protect the area around the aircraft hanger from the southerly winds.

43 Further up again, we planted a couple more pin oaks on the right hand side and in circles beneath the gum trees we have also mulched with woodchip.

44 Then there is about another 80m of double planted agapanthas on the right hand side of the driveway which finish at the garage. These areas are regularly watered, mulched and weeded.

45 I consider these areas to be part of our garden.

46 Close to the dwelling house, I have designed and created a vegetable garden and an orchard within the chicken enclosure. I consider these areas to be part of my garden.

47 Attached and marked **Annexure MA5** are some photos of some of the garden along Carters Lane, along our driveway, surounding the house and the vegetable garden and the orchard.

**Carters Lane**

48 Carters Lane forms part of the title of the Property. As I set out above, when we bought the property I observed that Carters Lane had been constructed to road base standard.. There were 3 areas along Carters Lane where head walls with under road piping were located.

49 I believe that Carters Lane was constructed pursuant to approved engineering plans, in connection with a potential subdivision of lot 8 of DP 874965. Attached to this affidavit as **Annexure MA6** is a letter to the previous owner Mr Keighly, which includes with it an invoice for the pegging, staking and surveying in connection with obtaining councils approval for the construction of Carters Lane. I believe that Carters Lane was constructed in accordance with these engineering drawings up to 50m past a property called Eliza Grove.

50 From this point, we engaged Richard Tippet, a road builder, to build a road up to the aircraft hanger. He removed the top soil with a grader and bulldozer. He created 3 drainage culverts using concrete piping. He then laid rock material to form the base of the road. On top of that he laid crushed sandstone. The rock material was laid from tip trucks and leveled with graders, It was watered and then rolled with a roller. Then the crushed sandstone was laid on top using a similar method. I observed these works taking place.

51 Shortly before we started construction of the dwelling house we caused the driveway to be constructed from the aircraft hanger to the dwelling house construction site. It was built by Tippet in a similar manner to the construction of Carters Lane. Once again, I observed the works taking place. When the house construction was finished, crushed sandstone was placed on the surface of the driveway and sunset river pebbles were laid on top of the driveway closer to the house.

52 Carters Lane is the subject of a covenant on our title. Annexure MA1 contains a copy of that title. The Covenant provides:

> *"Full and free right for each of the persons who from time to time is the owner of one of the lots comprising the dominant tenement, and every other person authorised by him, to go and pass and repass at all times and for all purposes with or without animals of vehicles …PROVIDED THAT each of the persons who from time to time is the owner of one of the lots comprising the dominant tenement shall upon demand contribute one-fifth of the cost of such maintenance of the right of way as is necessary to keep it in trafficable condition and state of repair."*

53 From 1999 up until 2006, my husband and I undertook the maintenance of Carters Lane by ourselves. From 2000 onwards a number of dwellings were built with access off Carters Lane. That meant that trucks regularly travelled along Carters Lane carrying construction materials to build these houses. I observed that these trucks caused corrugations and potholes along Carters Lane. We engaged contractors to smooth out those corrugations and to fill in the pot holes. The contractor rips the surface of the road with a ripper attached to a grader. The road is then contoured with the blade on the grader at an angle. The contouring was done to make it easier for water to run off the surface of the road. Then he compacted the road with a roller and water. I observed these works being undertaken. During the construction of the dwellings this work was done approximately once every 12 months.

54 The type of road maintenance undertaken on Carters Lane includes the ripping of the surface, the laying of road base, the grading to shape the surface and shoulders of the roadway, the rolling and grading of the surface and the shaping of its contour, shoulders and gutters. The edges are whippered. This maintenance work has been undertaken every 12-18 months or so depending on the state of repair of the roadway.

55 We keep a store of 5 tonne loads of shale which are delivered to the Property to the concrete bins at the top of the property in the utilities and machinery area. This shale is used to fill potholes and grooves in Carters Lane. My husband, using the tractor with a bucket attached, loads the bucket with the shale, then transports the shale using the tractor to the affected area of Carters Lane. Then using a shovel he

shovels the shale into the affected area to fill the grooves or the pothole to flatten it out to the same level as the rest of the road.

56 Attached as **Annexure MA7** are an example of some of the invoices for maintenance work associated with the maintenance of Carters Lane.

57 Pursuant to a covenant on the titles, each of the owners who access Carters Lane must contribute one fifth of the cost of the maintenance of Carters Lane as is necessary to keep it in trafficable condition and state of repair. Each of the owners has since 2006 contributed to a road account which has been set up for the purpose of ensuring the ongoing maintenance of Carters Lane.

58 The last time work was done on Carters Lane was in late 2014. During 2013, Hume Coal used Carters Lane to access the Koltai property. I observed that following the use of Carters Lane by Hume Coal trucks, Carters Lane became damaged with a series of corrugations, deep ruts and potholes. Under the access arrangement between Hume Coal and Robert Koltai, Hume was required to rehabilitate access tracks, which included Carters Lane. Initially Hume did not rehabilitate Carters Lane. The Southern Highlands Coal Action Group made a complaint to the Department of Resources and Energy about the fact that Carters Lane had not been rehabilitated.

59 Subsequently an employee of Hume Coal, Mr Duncan, approached my husband and Matt Burrows, another landholder whose property accesses Carters Lane, and asked how much money it would require to repair Carters Lane. My husband obtained a quote from Tony Moses, Moses Grader and Roller Hire**.** That quote advised that the work that would be required to rehabilitate Carters Lane back to its former standard of condition would cost $12,990. My husband gave that quote to Mr Duncan. Our copy of that quotation is contained in **Annexure MA7.**

60 Subsequently in August 2014, Hume transferred that amount to the Carters Lane Road Account. The maintenance work was undertaken in late 2014. Moses Grader and Roller hire ripped the surface of Carters Lane as previously described. He then laid 400 tonnes of shale on the surface. This was then contour graded, rolled and watered.

**Driveway**

61 Since completion of the house in late 2002, the driveway has been regularly graded, rolled and new sunset pebble and gravel placed on top. This work takes place approximately every 12 months or more depending upon the state of the driveway as a consequence of rain causing potholes and deep grooves on the surface of the driveway.

62 We have a store of crushed sandstone up at the top of the hill in in the storage bins in the utilities and machinery area. When there are potholes or deeper grooves in the driveway, my husband transports the crushed sandstone using a bucket attached to the tractor from the top bins to the location on the driveway which needs attention and he then manually with the shovel spreads the crushed sandstone onto the driveway to level it out with the rest of the driveway.

63 In addition, we keep a store of “sunset pebbles” in the bins on the top of the hill. This is primarily used to fill grooves and potholes in the driveway closer to the house, the turning circle and the access road to the domestic water tank, the LPG tank and the workshop. My husband uses the same method to fix these potholes and grooves, using the tractor and a bucket to transport the pebble to the location and then he shovels the pebble into the pothole or groove and levels it off with the shovel.

64 I attach as **Annexure MA8** an example of invoices of road base, sandstone, sand and pebble which we have ordered as materials for the maintenance of the driveway.

65 I attach as **Annexure MA9** photos of:

a) The beginning of Carters Lane where it meets Golden Vale Road;

b) Carters Lane on its first ascending rise with mown grass on the left and planted shrubs and trees on the right;

c) Carters Lane almost at the top of the first rise with mown grass on the left and planted shrubs and trees on the right;

d) Carters Lane as it passes the Koltai entrance, with mown grass on the left and the woodchip/multch for the agapanthas on the right;

e) Our driveway just inside the gate, with the willows on the left and the pin oaks and nissas on the right with its circle of mulch/woodchip surround underneath and the mown grass along side the driveway and the sunset pebble surface;

f) The driveway further up at the junction with the aircraft hanger, the ornamental trees can be seen on the left, and the shrubs and leightons on the rights and the mulching and woodchip surrounds around the eucalypts and the mown grass;

g) the sunset pebble driveway to the turning circle at the house, with the mown lawn, hedges and agapanthas.

**Cattle laneways and water infrastructure**

66 When we designed the layout of the farm, we created cattle laneways, which are used for the purposes of moving the cattle between the paddocks on the farm. **Annexure MA10** contains

a) a rough map of the driveway and the laneways on the Property;

b) photos of the laneway which extends from the driveway up to the sheds on the top of the hill behind the house; and

c) A photo of the laneway which extends north west.

67 The laneways are grassed and bordered by fences with 3 electrics and 3 earth wires. The laneways are mowed and sprayed to eliminate weeds on a regular basis. Some parts of laneways on steeper slopes require more substantial maintenance by the laying of gravel. For example we put down 180 tonnes of gravel on the laneway which goes up to the sheds in approximately August 2014 and we also put down gravel on the steeper part of the laneway which runs north west.

68 We have installed underneath the main cattle laneways on the Property a water infrastructure sytem. Richard Hollis, a contractor, came with a truck with a ripper and pipelayer which rips the ground about 500mm deep and lays the pipe in the ripped channel. The pipe is then covered over. At various intervals the piping connects to a trough which we installed in each of our paddocks. The area for each trough was leveled with a back hoe and blue metal was placed over the area and the trough placed on top and then connected to the water pipes. Each trough takes

about 1000 litres of water. Some troughs are plastic and some are concrete. We have laid approximately 2 kms of pipe. The purpose of this water infrastructure is to deliver clean drinking water and additives for the cattle, from the bore located near the dwelling house and the tanks on top of the hill to the troughs in each of the paddocks. The trough infrastructure is gravity fed from the tanks on the hill.

69 **Annexure MA11** contains:

a) a rough map of the water infrastructure on the Property;

b) a photo of the bore and pump house with its timber fence to protect it from cattle damage; and

c) the tanks on the top of the hill which collect the water from the bore.

70 In about 1999 we applied for a water bore licence so that we could have a source of clean water for the cattle to drink and to water the garden. When the water licence was granted we had the water bore and pump constructed. The location of the bore and pump is shown marked number 1# on map 4 in **Annexure MA3**.

71 The water bore was drilled to a depth of 116m and has casing of 59m.

72 In order to avoid damage to the water infrastructure under the cattle laneways we do not permit heavy vehicles to access the cattle laneways when it is wet.

73 We placed the water infrastructre under the laneways in order to permit easy and safe access for maintenance and control.

74 The water pipes and tanks require regular maintenace and repair. Sometimes, with the iron content in the water of our bore, there can be a build up of iron in the water pipes and they require flushing. Serious build up requires a pig sponge to be inserted into the pipes. To get into the pipes we have to dig a hole in the ground, cut the pipe and insert the sponge. The sponge is pushed through the pipe with the force of the water. The sponge comes out of the disconnected pipe at the trough. After the flushing we have to repair the pipe and fill in the hole. We then have to bleed the system to release any air which has got trapped within the pipes. Every fortnight my husband bleeds the pipes at the valves. The bleeding helps release this sediment or iron build up as well as any air trapped in the pipe.

75 **Annexure MA12** contains

a) A copy of the cover letter from Land & Water Conservation enclosing our bore licence;

b) A copy of an invoice for the construction of the water bore;

c) Invoices from RJ & J Hollis Pty Ltd, Richard Hollis' company, in 2009 and 2011, for the set up of troughs and associated pipes and for the checking, cleaning of pipes, the delivery and set up of troughs and the associated valves, nipples, elbow for the supply and control of the water to the troughs.

**Fences**

76 All boundary fences on the Property are livestock fences. They are 6+ stranded and ringlocked barbwire fences with electrified outriggers.

77 All the internal fences on the property are livestock fences. They are 6 stranded with 3 strands of electrified wires and 3 earthed. Each system has its own energizer. We use the ringlock structure as it increases the fence strength and it keeps stock in and neighbours stock out.

78 All of the fencing requires regular maintenance and repair. **Annexure MA13** contains:

a) a rough map of the boundary and internal fencing of the Property;

b) a copy of a page from the www.onesteelcyclone.com.au website describing the purpose of the ringlock;

c) copies of photos of the boundary and internal fences in 2013, 2014 and 2015;

d) Examples of invoices rendered for fence repair.

**Pastures**

79 Roscoe Park now has 23 working paddocks each with differing combinations of introduced pastures. The type and quality of the pastures is reflected in the productivity and quality of my herd of cattle. We spend a considerable amount of time ensuring the pastures and the soil and water for them are in the best condition we can make them. I believe the quality of the pastures has considerable bearing on our ability to produce quality cattle, especially vealers.

80 When we purchased the property the paddocks which existed were infested with weeds. Some of the paddocks had no pasture at all. For example, Badgerys paddock was just dirt. Since then we have embarked on a major soil and pasture improvement program.

**Weeding**

81 The first job that I did was to spot spray the weeds across the whole of the Property, area by area, learning from a previous sharefarmer of the Property what were the weeds.

82 The weeds which I began the eradication of were fireweed, serrated tussock, nodding thistle, scotch thistle, patterson curse, mustard weed, blackberries, bracken fern, cape weed and gorse. Some of these weeds had to be sprayed and some removed by hand.

83 I spend several hours every week weeding. Weeding is an ongoing and continuous process of eradication. For example:

a) on Monday 15 June 2015, I spent 3 hours hand weeding the fireweed in paddock 8,

b) on Wednesday 17 June I spent 2 hours hand weeding fireweed in paddock 11, and Thursday I spent another 2 hours hand weeding fireweed in paddock 12.

c) In early June, I spent many hours hand weeding the fireweed in paddock 11.

d) I spent time throughout May of 2015 hand weeding the fireweed in paddocks 8, 12 and 13.

e) In September 2000, I recall that I spent approximately a week with a contractor, Tim Ireland, and a utility with a 600 litre tank of Grazon [which was filled several times] and 2 long hoses spraying the gorse on the boundary to Wongonbra. That gorse was about 2m high and approximately 20m deep and ran for about 500m along that boundary.

f) Since 1999, I have managed to eradicate the bracken fern weed from the Property.

84 The fireweed has to be hand weeded and bagged. The bag has to be sealed and taken to the tip. Fireweed is toxic to cattle. It causes liver damage. It can take over pastures if it is left unchecked. It grows all year round. Fireweed, serrated tussock and the gorse have been the predominant weeds on the property in these later years.

85 There are certain weeds that are best sprayed at certain times of the year (when they have more foliage), some weeds are better sprayed when there has been a light rain (such as serrated tussock if using Taskforce). Each weed requires a particular type of poison to eradicate it.

**Soil testing**

86 When we first moved onto the Property we undertook approximately 6 soil tests on various parts of the Property. When we got the results back we sought advice on what to do and in accordance with that advice we then spread fertiliser, primarily Pasture 13, over various parts of the property to improve the soil quality. We also spread lime to reduce the soil acidity.

87 In 2007, we did more soil testing as part of a 5 year agreement with the DPI. The results of these tests informed us as to what were the best pastures to sow in the Marsh paddock 6 and the Roberts paddock 16.

**Fertilising**

88 Up to 2008-2009 we fertilised the paddocks with Pasture 13, and sometimes added lime. We initially used Pasture 13 which is a blended pasture top dressing fertiliser containing superphosphate and muriate of potash. We have since been informed that poultry manure is more natural and better for the pastures because it contains litter, being the sawdust from the poultry sheds, providing the paddock with more organic matter or humus.

89 Since 2009, approximately every second year we buy several semi-trailor loads of turkey manure which is spread over the paddocks. Over the years all of the paddocks have been spread with this fertiliser many times.

90 One semi-trailer load of approximately 50m3 of turkey manure covers approximately 5 hectares, so we need approximately [excepting the woodlands and the dams] 20 semi-trailer loads of turkey manure to cover the Property. A single

semi trailer load of turkey manure costs us $1000 (when purchased with other farmers as a bulk purchase] for delivery and spreading. As an example:

a) in October 2014 we had 5 semi-trailor loads of turkey manure delivered, this was spread on paddocks 3, 4, 7, 8, 9 and 16 in March and April 2015.

b) in April 2014, we had 5 semi-trailor loads of turkey manure delivered, this was spread on paddocks 6, 7, 8, 9, 14, 15 in May to September 2014.

c) in Augsut 2013 we had 5 semi-trailor loads of turkey manure delivered, this was spread on paddocks 1, 2, 10, 13 in September to November 2013.

d) in January 2012 we spread 3.2 tonnes of booster blend fertiliser over paddock 9.

e) in December 2011, we spread 1.5 tonnes of super phosphate and potash over paddocks 1 and 2.

f) in October 2011 we spread 3.2 tonnes of booster blend fertiliser over paddock 9.

g) from June 2009 to April 2010 we had 18 semi-trailor loads of turkey manure delivered. Some of this was spread on paddocks 7, 8 and the Drive paddock in May 2010 and some spread on paddocks 1 and 2 in September 2010.

91 Turkey manure is delivered directly to the property by the fertiliser supplier and stored for 6 weeks to get rid of any pathogens. To spread the manure he loads the manure into his truck with a bobcat with the addition of some clover. He then uses his truck to spread the manure across the paddock in the same way that he spreads Pasture 13 and lime.

92 Not all the turkey manure can be put out on the property at once because DPI guidelines require that there is to be no grazing on paddocks upon which turkey manure has been spread for at least 3 weeks.

93 Every time a paddock is spread with turkey manure, at the same time it is also spread with legumes, or clovers. This is a way of putting nitrogen back into the soils on the Property. Nitrogen is a most important mineral for green plant development.

**Aeration**

94 Aeration takes place using a large cylindrical implement with sharp 100mm spikes, which is attached to the rear of a tractor and slowly pulled across the surface of the paddock. We sometimes attach a seed box to the aerator which allows seed to trickle out into the depressions left by the aerator. Generally about a week after a rain event, my husband hooks up the aerator to the tractor and aerates, usually with the harrow also attached, those paddocks which are not overly wet and are being rested.

95 It takes my husband approximately a day to aerate Paddocks 1 and 2. Paddocks 1 and 2 are 33 acres. The other paddocks are differing sizes. Generally it takes him about ½ a day to do 15 acres.

96 Aeration has to be done when the soil has a particular moisture content. It cannot be too dry, as aeration would then be harmful to the soil as it would open up the soil and result in even more loss of moisture from the soil. It also cannot be done when it is too wet, as the ground is too boggy and the tractor can get bogged and more importantly, taking a tractor through a boggy paddock caused deep grooves or ruts in the surface which are then very difficult to remove and result in poor pasture growth in the compacted grooves.

97 The paddocks are aerated when the cattle are not in them. The best time to areate, provided the weather conditions are suitable, is directly after the cattle have been rotated out of the paddock, as it is then that the pastures are lower and the aerator can then penetrate deeper into the soil.

98 Aeration is beneficial to the soils as it allows surface water to penetrate deeper into the soil, allowing moisture for the organisms in the soil, encouraging and improving the organic matter in the soil, which makes for more nutritious pastures.

**Harrowing**

99 We harrow every paddock after the cattle have been rotated out of it with a harrow attached to the back of the tractor or the quad bike. Harrowing breaks and spreads the cow pats. Grass cannot grow beneath the cow pats so harrowing is necessary to ensure the even cover of pasture grasses..

**Sowing**

100 One way of sowing pastures or crops is when we use the aerator. However we use 2 other methods of sowing on the property. These days, the main way we sow pasture is the natural way. We allow the pasture to come to seed and seed out. This means we allow the pasture to form seed heads. The mature seeds then fall to the ground and germinate and will come up in the next season.

101 Sometimes, we top a paddock. Topping is undertaken using a mower attached to the rear of a tractor raised up to a height which takes off about the top 8 inches of the pasture grasses, that is, cuts the pasture just below the seed head. These seed heads fall to the ground. This activity promotes the thickening of the pasture which then again comes to seed, and we allow that seed to drop to the ground. The stalks which remain after the topping, die back and become humus which adds more organic matter back to the soil.

102 The other way we sow pastures is by causing a contractor to come. He uses a tractor and a direct seed drill attached to the back. This creates grooves in the ground. The seed falls down through a pipe into the groove. The tractor also has a harrow attached behind the seeder which then covers over the intrusions made to the soil created by the direct drill. Direct drilling of seed is done at about 5km/hr. It can take the contractor, depending on the size of the paddock, 10-12 hours to direct drill a paddock with seed.

103 When a paddock is sown it cannot be grazed until the seeds have germinated and there is at least 6 weeks of growth of the pastures. We short term graze after this 6 weeks, for a few days only, to encourage the thickening of the pasture. The pasture is then allowed to grow to its natural height. We may then:

a) slash it,

b) mulch it or

c) top it,

to provide more organic matter for the soils;

d) we may graze it;

e) we may [if it is summer, lock it up so it can come to a head and then we will make hay from it [in December January] or silage [January to March] which we then store for winter fodder.

104 I remember we have direct drilled:

a) Paddock 4 with triticale in 2008;

b) Paddock 6 with triticale in 2007, after harvesting the triticale, this paddock was sown with rye and a mixture of other pasture grasses;

c) Paddocks 7 and 8 were sown with a rye and cocksfoot pasture mix in April 2013;

d) Paddock 9 was sown with millet in 2008, we have subsequently sown oats in this paddock;

e) Paddock 10 in the early years was sown with millet;

f) Paddock 11 in the early years has been sown with a crop of triticale and has been regularly redrilled with rye grasses;

g) Paddock 13 prior to 2008 was sown with rye grasses;

h) Paddock 14 was direct drilled with oats and a combination of pasture grasses prior to 2008;

i) Paddock 16 was direct drilled with oats in 2006; and

j) Paddocks 17-23, we have sown the more open paddocks with rye grasses.

This is not the complete history of our sowing of our paddocks. We have done a lot more than this, however I cannot remember exactly what works we did pre 2009. Except to say, we did more sowing in the earlier years than in the later years, as in the earlier years we were actively trying to develop and promote better quality pastures in the paddocks, this necessarily required us to sow pastures, as they were not otherwise there to be able to self sow. I remember in the early years we were more inclined to sow a pasture mix of clovers (white or haifa, red, and sub) and winter and summer cocksfoot because the paddocks were in need of improvement..

**Continuous monitoring**

105 Running a property requires the continuous monitoring not only of the cattle but of the fencing, the weeds, the pasture health, quality and quantity, the water supply (troughs, pump, holding tanks, pipes) on a daily basis. The consequence of that monitoring may result in a decision to undertake some form of work on the pastures, such as: harrowing, aerating, slashing, topping, hay or silage making, sowing, fertilising, grazing short or longer term, or resting a pasture to allow for regrowth, self sowing and regeneration. That monitoring may require repairs to fencing or the water supply system, or the electrics, or time to be set aside for weeding [whether it be hand weeding of fireweed, or spot spraying of serrated tussock, or blackberry or gorse], or removing fallen timber or trees

106 The cattle graze a paddock for a few weeks, sometimes more, sometimes less, until they have eaten down the pasture grasses to about 6 inches above the ground. We then rotate the cattle via the cattle laneways to another paddock which has good pasture growth. When the cattle are not in the paddock, we often allow that paddock's pasture to grow until it comes to head and seeds out. This allows the paddock to self sow its pastures. The mature seeds germinate on the ground and will re-sprout in the next season.

107 Depending on the soil moisture content and temperatures, we intend to sow a rye cockfoot pasture mix in several of the paddocks in August of this year.

108 Since we purchased the Property, the paddocks have been harrowed, slashed, weeded, fertilised, topped, harvested for [hay and silage making], aerated and sown many times. The Bore, Horse and Bull paddocks close to the house are in the woodlands, they get weeded and harrowed,

109 Depending on the aspect of the paddock, the season and the time of year, different pastures or crops have been sown, such as oats, millet, triticale, rye grasses, cocksfoot and legumes. The oats are usually grazed as a winter feed. The millet that is sown in January is grazed or may be baled if it is a good growing season.

110 I get advice from a local dairy farmer, Noel Brumfield, in making the decisions as to what pasture to sow, and where, and when, to sow it. When we sow a paddock, Granulock, a fertiliser, is sown with the pasture seed. The seed is usually inoculated.

111 All of our paddocks are used, and have been used, for the purpose of growing pasture and feeding cattle.

112 Set out below is a non-comprehensive history of some of the work done on each of the paddocks. We only keep tax invoices for 7 years. We do not keep records of the actual rotation of the cattle between the paddocks, or the work we do on each of the paddocks. Without the records it is difficult to remember exactly what we did. However, I know that I worked hard 7 days a week in the early years from 1999 sometimes with contractors, sometimes by myself or with my husband eradicating the weeds, spreading fertiliser, aerating the soil, sowing crops and pastures, mowing, harrowing, removing dead wood and stones, planting trees, shrubs, flowers, hedges, spreading mulch.

**Paddocks 1 and 2 (**Double dam, now paddocks 1 and 2 split in 2012)

113 Paddock 1 was approximately 33 acres. It was originally one large paddock which was cut in 2 in 2012. It was cut in 2 to assist with the rotation of cattle and to protect the pasture in the lower half. This paddock has had Pasture 13 and super phosphate spread across it up until 2010. Pasture 13 is usually brought to the property directly by the contractor. The contractor uses his own specially modified truck which spreads the fertiliser over the paddock.

114 Since 2010 it has been spread with turkey manure.

115 In September 2013, we spread turkey manure over paddock 1 and in October 2013 we spread turkey manure over paddock 2.

116 In early 2015, paddock 1 was fertilised and paddock 2 was topped.

117 This paddock has been regularly aerated by my husband. It takes my husband a day to aerate the paddocks 1 and 2. We have had regular hay crops from these paddocks over the years.

118 The top paddock, or paddock 1, is regularly used as a holding paddock for cows when their calves go to market. Otherwise this paddock goes back into the rotation system. We do not however use this paddock for the cows and bull in the mating season as it is too steep and may result in injury, from slipping, when the bull is mounting the cows.

**Paddock 3 (Original dam)**

119 Paddock 3 is approximately 35 acres.

120 Pasture 13 was spread across this paddock prior to 2008.

121 A contractor, Geoff Griffith, sowed this paddock with rye grasses and legumes in 2009.

122 In May 2009, lime was spread on this paddock.

123 In August 2012, turkey manure was spread over this paddock.

124 On 3 April 2014, this paddock was direct drilled with oats. It was then put into the rotation system until August 2014. From August 2014 to March 2015 this paddock was rested to allow for regrowth of the pastures, which we allowed to seed out. This paddock is 90% perennial pastures.

125 On 3 April 2015, we spread turkey manure over this paddock and then rested it for at least 3 weeks. It was then put back into the rotation system. See **Annexure MA30** for some rotation in and out of this paddock in May and June 2015.

126 About 10 May, 15 cows and 15 calves [due to be sold 3 June] were put into this paddock. On 1 June, they were moved via the laneways to the cattle yards. On 2 June the calves were then separated from their mothers, or drafted and sent on a truck to the Moss Vale sale yards, and the cows were moved into paddocks 1 and 2.

127 This paddock is one of our most productive pastures used by the cattle.

128 This paddock has a shelter and is good for calving because it is close to the crush which is used to assist in calving.

**Paddock 4 (Pollicina)**

129 This paddock 4 is 22.5 acres. This paddock was full of rocks. We have spent weeks over the years removing rocks from this paddockin preparation for the cattle to use it. The rocks continuously come to the surface along a ridge through the centre of this paddock.

130 Prior to 2008, this paddock has had Pasture 13 spread across it.

131 In 2008, we aerated and sowed Triticale crop in this paddock. We could not harvest the triticale as it was too dry, so we allowed it to seed out and self sow and then we grazed it.

132 This paddock has been the subject of intensive weeding, especially of fireweed and serrated tussock. The wind blows the seeds in from neighbouring properties and as a consequence we are continually struggling to keep these weeds down.

133 In March 2015, we caused this paddock to be topped [explained in paragraph 101] by Will Coghlin. We then left this paddock to thicken and regrow. It has since been out of the rotation system to allow the pasture to grow.

134 On 3 April 2015, we spread turkey manure over this paddock and then rested it for at least 3 weeks. Since then the pasture was allowed to grow until mid June. In mid June I moved into this paddock 27 cows and 25 calves as part of the rotation. They will remain in this paddock for approximately 2 weeks, simply to thicken the pasture by nipping the tops. The cows and calves will then be rotated out to allow the pasture to thicken and regrow in preparation for the next rotation.

135 We often use this paddock in connection with paddocks 3, 5 or 6 by opening the gates between the paddocks. We do this particularly when we know it is going to be very hot, or windy, or cold because this paddock has in it 2 very good shelter belts which the cattle can stand under in the shade, or as shelter from the wind and be protected from these more extreme weather events. I often observe cattle standing under or close to the trees (on the opposite site from the direction of the wind).

**Paddock 5 (Pine Marsh)**

136 Paddock 5 is 30 acres. This paddock had Pasture 13 spread across it prior to 2008 and was sown with triticale in 2008.

137 In 2009, it was limed, areated.

138 In 2010, it was aerated and sown with rye. Rye is in my experience high quality milk making grass as are legumes. The cattle are allowed onto the paddock for a few weeks until they have eaten down the rye grass, then they are rotated to another paddock and the rye grasses are allowed come to head and to seed out. This means the paddock is self sown with its own paasture grasses. There are annual

and biannual rye grasses, and summer and winter rye grasses. This paddock has in it a variety of rye grasses

139 On 18 June we had 42ml of rain. The Pine Marsh paddock 5 has since then been out of rotation until it drys out sufficiently to allow us to get into it to aerate it and harrow it. We are thinking that possibily in August we will aerate it again with the trickle seeder, seeding it with rye pasture grasses and clover. We will then allow the seed in this paddock to germinate and grow a little, at which point we shall put the cattle on it for a short time, say 4-5 days, to lightly graze it. This results in a thickening of the pastures. We shall then allow the pasture to grow until summer when it goes to seed. This seed then falls to the ground and self germinates 12 months later. In the interim, from January to August the paddock is in the cattle rotation system, and when the cattle are out of the paddock, we weed it, we harrow it and when the soil is at the right moisture content, we aerate it and if necessary we sow more seed, either a crop or a pasture grass.

140 We generaly use this paddock for cows with calves at foot.

**Paddock 6 (Marsh)**

141 Paddock 6 is 25 acres. This was spread with Pasture 13 prior to 2008 and spread with lime in 2007. In 2007 a crop of triticale was sown and baled. The baling is done with a tractor with a cutter,. The pasture is then raked into rows and a machine then bales it into round bales. The round bales are then moved with a special “soft handed” machine onto a truck, to be transported to the aircraft hanger and stored.

142 Following that harvest of the triticale, this paddock was subsequently sprayed with Roundup. It was then, in conjunction with the Department of Primary Industries, and under their guidance, sown with rye and other pastures.

143 In April 2007, we entered into a 5 year agreement with the Department of Primary Industries (DPI) for sustainable grazing management following completion of a Prograze course I undertook with the DPI. Pursuant to this agreement, they provided us with 50% of the cost of the weed control and a contractor to direct drill perenial pastures in this paddock and in paddock 11.

144 Part of this paddock has been fenced off to protect Wells creek from cattle damage.

145 Attached and marked **Annexure MA14** is a copy of the Department of Primary Industries (DPI) agreement with us for sustainable grazing management.

146 In 2007 we did soil testing of this paddock and the Roberts Paddock. **Annexure MA15** are the results of that Landscan Soil testing of those 2 paddocks.

147 About the same time we entered into another agreement with the Hawkesbury Nepean Catchment Management Authority (**HNCMA**) to help rehabilitate some of our property being the wells creek area, through tree planting and direct seeding. The HNCMA provided funds to revegetate the area with 250 tubestock and 6km of direct seeding and for the purchase of herbicide for ongoing control of serated tussock and for erosion control of damage caused by the cattle and to improve stock crossings.

148 Attached and marked **Annexure MA16** is a copy of the Hawkesbury Nepean Catchment Management Authority Management Agreement with us dated 18/6/2007 for a term of 10 years. Pursuant to this agreement the HNCMA was to make contributions to us for undertaking the rehabilitation of 5ha of degraded land on our property through tree planting and direct seeding. This area is along Wells Creek on one of our boundaries. The purpose of this rehabilitation is to provide a buffer to help prevent the spread of serrated tussock and protect the health of Wells Creek on the werstern border of the Property. Funds were provided to:

a) revegetate the project site with 250 tubstock and 6km of direct seeding;

b) ground preparation;

c) weed control by application of herbicide;

d) tree guarding;

e) erosion control; and

f) improvement of stock crossings.

149 Annexure **MA16** also contains:

a) Purchase orders of the ground preparation works; and

b) the River Restoration Project final report showing the completion of the works.

150 We employed 2 contractors to spray the herbicide and to rip and direct drill the seeds in this paddock. In addition we built a wooden bridge across Wells Creek so that we could spray the previously inaccessible areas.

151 This paddock has a boundary fence along Wells Creek. We have fenced off Wells Creek to keep the cattle from injuring themselves in the creek. This paddock also has a natural drainage channel from the Pine Marsh Paddock through it to Wells Creek. As a consequence this paddock can become very wet.

152 In June 2014, we spread turkey manure over this paddock and then rested it for 3 weeks. The paddock was then left for the pastures to grow and then put back into the cattle rotation system.

153 In June 2015, I moved cattle out of this paddock into the Pollicina Paddock. The pasture has since been left to grow. On 18 June we had 42ml of rain. The lower 50m or so of this paddock currently is so wet it smells rank. We will not put cattle back into this paddock until it has dried out sufficiently and smells normal. When it has drid out, I will be going back into the paddock to do some weeding, as I can see some fireweed, tussock and thistle which need to go. I cannot spray the blackberry until December.

**Paddock 7 and 8 (Hay)**

154 Paddocks 7 and 8 are 30 acres. We have spread Pasture 13 over these paddocks prior to 2008. We aerated this paddock in 2009, and spread turkey manure in 2010. In December 2011 we spread 1.5 tonnes of super phosphate and potash over these paddocks.

155 In August 2012, we spread turkey manure over these paddocks.

156 In April 2013, the paddock was sown with rye and cocksfoot pasture mix. In August 2013, paddock 7 was aerated and spread with turkey manure.

157 In September 2014, we spread turkey manure over these paddocks.

158 On 17 March 2015, we spread turkey manure over this paddock and then rested it for at least 3 weeks.

159 This is a good paddock with a wind break which I generally use for cows with calves at foot in winter.

**Paddock 9 (Millet)**

160 This paddock is 27 acres. Prior to 2008 we spread Pasture 13 on this paddock.

161 In November 2008, this paddock was ploughed and sown with millet and we spread on it Pasture 13. Since 2008 we have not ploughed any paddocks becase we lose too much top soil in the prevailing westerly winds. We have adopted a no til program whereby we direct drill our pasture seeds, using a direct drilling machine which is attached to the back of our tracter.

162 In December 2010 we cut and baled hay from this paddock. The paddock was aerated in June 2011. In October 2011 a booster blend fertiliser of 3.2 tonnnes was spread over the paddock.

163 In December 2011, we caused a contractor to cut, rake, bale and wrap silage from this paddock. This paddock produced amazing pasture this year. There were 4 tractors undertaking this work. Silage has an approximately 85% moisture content and is fed to the cattle. It is good for milk making.

164 In January 2012, booster blend was spread again. Following that this paddock was put back into cattle rotation.

165 On 3 April 2014, we contracted Brook Pastoral Pty Ltd to direct drill Seeding Oats into this paddock to top up the winter feed. This took Will Coghlin of Brook Pastoral, approximately 5.3 hours. This crop was then allowed to germinate and grow.

166 In May 2014, we spread turkey manure over the crop in this paddock, it was then rested for at least another 3 weeks until the crop had sufficient growth for grazing for a few days (when it was about 1 foot high) to stop it going to seed and thicken it up. It was then locked up for approximately 6 weeks to allow it to come to seed, and self sow. These seeds germinated and sprouted in the next season, April 2015.

167 In January 2015, we took the paddock out of rotation in order to allow the pasture to grow for the purpose of making silage.

168 In early March 2015, we cut, baled and wrapped 172 bales of silage from this paddock.

169 On 17 March 2015, we spread turkey manure over this paddock it was then rested until about the first week of June 2015, at which point we put in 14 cows with their

14 calves to freshen up the calves for sale. In other words, the fresh green pasture gives the calves a glow to their coat, making them look good for the sales in the first week of July 2015.

170 This paddock is the best fodder making paddock because I have spent a lot of time eradicating the weeds on it.

**Paddock 10 (Bottom Badgeries)**

171 Paddock 10 is 22.5 acres. Like the other paddocks this paddock has had Pasture 13 and lime spread over it. It is regularly aerated and fertilised and is used by the cattle as part of the rotation.

172 In the early years this paddock was sown with millet.

173 In October 2013, we spread turkey manure over this paddock.

174 This paddock's use ranges from dry cows (cows in calf and due to calve shortly); to heifers (have not yet been put in calf) as long as there are no bulls in the neighbouring paddocks. It is also a good paddock for mating because it is flat. It is also a good paddock for cows and calves in spring and autumn because it has relatively little shelter and in these seasons the weather is less extreme.

**Paddock 11 (Dead Cow)**

175 Paddock 11 is 12.5 acres. This paddock has been cleared of trees. There were a large number of fallen trees on this paddock which needed to be cleared prior to any cattle being placed on it. This was done using chain saws and tractors to remove the cut up trees. Once that had been done, the paddock was spread with Pasture 13 and lime.

176 This paddock has been sown in the past with a crop of triticale. This crop was round baled and stored in the paddock and an electric fence installed to protect it from the cattle. We stored it in this paddock because the hay shed was full and because provided it was properly stored [rows laid end to end in a north south orientation with gaps between rows to allow the sun to dry the eastern side in the morning and the western side in the afternoon] we could more easily get to it to feed the cattle in that paddock and its neighbouring paddocks.

177 This paddock was also the subject of the agreement with the DPI.

178 This paddock is regularly redrilled with rye grasses.

179 This paddock is mainly used as a heifer paddock because it is land locked within our property, with no boundary with our neighbour who runs bulls.

**Paddock 12 (Badgeries)**

180 Paddock 12 is 33 acres. This paddock is used mainly in conjunction with the woodland restoration. It is regularly aerated and spread with turkey manure.

181 It is a good summer paddock for the cattle because of all the trees, which provide them with shade.

**Paddock 13 (Moss's)**

182 Paddock 13 is 15 acres. This has 5 acres of woodland fenced off. The woodland is the Southern Highlands Shale Woodland which is protected.

183 Prior to 2007 we spread Pasture 13 and lime over this paddock. Prior to 2008 it was sown with rye grasses with Pasture 13, and used by the cattle.

184 Late in 2008 we cut, raked and baled hay from this paddock. Hay has a moisture content of about 15%. We do not wrap hay. If stored well, hay can last up to 11 years. Hay is fed to the cattle.

185 Subsequently we have aerated and spread turkey manure over the paddock. Like the other paddocks, this paddock is used as part of the cattle rotation.

186 This paddock is especially good in winter.

187 On 19 Novermber 2013, we spread turkey manure over this paddock.

**Paddock 14 (Sutton Downs South)**

188 Paddock 14 is 10 acres. This is a good flat paddock for mating. Flat paddocks are safest for mating, as there are less injuries with the bull or the cows slipping when jumping.

189 We applied Pasture 13 to this paddock prior to 2008. During this period Gordon Cole a contractor direct drilled this paddock with oats and pasture grasses.

190 In November 2008, we spread Pasture 13 on this paddock.

191 This paddock has since been biannually aerated and spread with turkey manure.

192 In May 2014, we spread turkey manure over this paddock and then rested it for at least 3 weeks.

**Paddock 15 (Sutton Downs North)**

193 Paddock 15 is 7.5 acres. This is also a safe mating paddock because it is flat.

194 This paddock has had the same work done to it as Paddock 14 and it is used for the same purposes, that is, mating.

195 In May 2014, we spread turkey manure over this paddock and then rested it for at least 3 weeks. The pasture is then allowed to regrow, until the mating season when these paddocks come back into rotation.

**Paddock 16 (Roberts)**

196 This paddock is 20 acres.

197 In 2006 a contractor drilled oats into this paddock.

198 We spread Pasture 13 on this paddock prior to 2008. After 2008 we aerated and spread turkey manure biannually on this paddock.

199 On 17 March 2015, we spread turkey manure over this paddock and then rested it for at least 3 weeks.

**Paddocks 13, 14, 15, 16**

200 Paddock 16, along with paddocks 13, 14 and 15, are safe paddocks for mating and are predominantly used in the breeding seasons Aug to Oct, and Jan to May.

201 These 4 paddocks have their own little internal rotation.

202 Paddocks 13, 14, 15 and 16 are protected from the cold westerly winds in Autumn and September. We move cattle, especially cows with calves, into these paddocks at this time of year to protect them from these winds.

203 These paddocks are also good for calving in July and August also because they are protected from the cold westerly winds.

**Paddocks 17-23**

204 Paddocks 17 to 23 are the smaller paddocks closer to the house.

205 These paddocks are used for calving, weaning, sheltering the cattle and we use these paddocks as the hospital and nursery paddocks.

206 Most of these paddocks are in the Southern Highlands Shale Woodlands area. We have sown the more open paddocks (being Farm stay, Compound and Drive paddocks ) usually with rye grasses. We also aerate and spread turkey manure on these paddocks approximately biannually.

207 **Annexure MA17** contains:

a) a map of the paddocks with their numbers and names;

b) a summary of the pastures in each of the paddocks as at 2013;

c) a table prepared by Pasture Agronomy Services in October 2013 setting out the nature of pastures in those paddocks;

d) a paddock timeline from 2007 to 2011 summarising for each paddock when fertiliser was added, when sown, limed, harvested, aerated or rested;

e) the Department of Primary industry brochure on poultry litter and its use, the DPI description of fertilisers which includes what we use which is called Pasture 13;

f) photos of our cattle;

g) newspaper articles of our cattle sales and acquisitions;

h) photos of our pastures and our hand weeding;

i) photo of the truck which delivers the fertiliser, which is then spread across the the paddocks; and

j) photos of silage and hay making on the Property.

208 **Annexure MA18** contains:

a. A ledger and some of the invoices for supplying, hauling and spreading fertiliser from 2001 to 2013 (at 12/8/13 it took approximately 7 semi trailer loads of turkey manure to cover 35 hectares of the Property).

b) examples of some invoices:

i. for hay and silage in Jan and Nov 2011;

ii. sowing in 2013; and

iii. purchase of pasture seed in Sept 2007, and Mar and April 2013.

209 In 2013 and 2014 we engaged Mark Lucas of Pasture Agronomy Services to assess the property and to let us know what would be the consequences for our pastures if Hume were to create access paths and drill sites across and within the paddocks. **Annexure MA19** contains a copy of

a) a report commissioned in 2013 from Pasture Agrononmy Services on the pasture agronomy of the Property; and

b) a report commissioned in 2014 from Pasture Agrononmy Services on the shelter belts, livestock protection, water provision and soil conservation at Roscoe Park and the impact on the pasture quality and productivity of Hume's proposed drilling program on the property.

**Shelter belts or wind breaks**

210 Over the years we have planted a large number of trees across the Property which act as wind breaks, shelter belts and shade trees for the cattle.

211 The digging of each hole, and the planting and the tons and tons of woodchip spread around each young tree involved a considerable amount of work. Each tree is pruned annually for its initial growing years to encourage densely packed foliage. Densely packed foliage creates a better wind break, which provides better shelter which results in better pasture and fatter cattle.

212 From 2004 to 2008, I completed the NSW Department of Primary Industries Prograze and Lanscan courses. I have used the information that I learned to position new fencing, shelter and windbreaks and the planning of a more holistic program for the production of fodder. I have used this information to advise me as

to the best places to locate and plant shelter belts and wind breaks and shade trees.

213 In 2009 and 2010, we engaged contractors to prepare and plant 550 leighton green trees as windbreaks and 30 shade trees with protective wooden guards, to protect the trees from cattle damage, around the property. These have been strategically planted to protect the pastures and provide shelter for the pastures and the cattle from the wind and rain. In the early years, we engaged a contractor to clip and prune these trees to encourage the desired shape and density of wind break.

214 Most of our paddocks have wind breaks and shade trees. **Annexure MA20** contains:

a) a rough map of the position of the shelter belts and shade trees;

b) photos of some of the newly planted leighton greens, as well as those that had been planted in earlier years; and

c) some Invoices from Andreasons for the leighton greens.

215 This program of planting of windbreaks, shelter belts and shade trees is in accordance with the DPI's Landscan and Prograze programs.

**Drainage channels and dams**

216 When we purchased the property it had 4 dams. Since then we have constructed a further 4 dams. Three of the new dams were constructed to help with water management and erosion control. We obtained a grant from the NSW Government in order to construct these dams, and they constructed the dams. The contractors created drainage channels in order to direct the water between the dams. These drainage channels were constructed at the same time as they built the dams. They dug out the drainage channels using machinery in the Double Dam paddock, and the drainage channels in the Bottom Badgeries paddock. I recall observing the construction of the dams and the channels. **Annexure MA21** contains:

a) a rough map of the drainage channels and dams on the property; and

b) photos of some of the dams on the Property.

**Sheds, buildings, structures**

217 In 2000 we caused the machinery shed to be built on the top of the hill to house the farm machinery. Each of the footings has been dug, the steel posts inserted and cemented into place. It has colorbond cladding and a tin roof. It had to have council approval before construction.

218 In 2000, we caused a calf shelter to be constructed from timber which is used for the bottle feeding of poddy calves which then become breeding stock.

219 In 2005, we caused to be constructed the cattle shelter in the open area at the bottom of the main laneway. This also has timber posts sunk and cemented into the ground. It has colorbond sides and roof. This is connected to the cattle crush with a holding yard. This provides shelter for the cattle from the rain and the wind.

220 In 2006, we caused a second workshop and machinery shed to be built. This also has timber posts dug and cemented into the ground. It has metal trusses across the roof. We also engaged a contractor to bulid the second vet crush in the cattle shelter constructed in 2005.

221 In March 2009, we engaged a contractor to build a large shed for the tractor and its implements. That has steel posts with concrete footings, and colorbond sides and roof. We park the tractor with its implements in this shed. We also use this shed to store overflow of fodder that we cannot fit in the existing hay shed.

222 All but one of the sheds has a water tank attached which collects water from the roof.

223 In October 2009, we engaged a contractor to install the cattle grid at the front gate, and another contractor to build another machinery shed which has a concrete floor and paving outside for further garaging of farm utilities.

224 The aircraft hanger, which we use as the hay shed, is insured for $63,000 as its replacement value. It has ¾ concrete floor. It is approximately 10m x 20m. We have stored silage in the aircraft hanger to double its life. We then have a store of fodder (winter feed) where we know which paddock it was harvested from, what the pasture content is and its age. This cycle also helps us to manage and continuously reduce weed infestations on the property [by not introducing foreign winter fodder with its own weed seed from outside the property]. Reduction of the weed content increases pasture productivity.

225 The aircraft hanger is part of the cattle yard area. We have planted leighton greens in 4 rows in order to protect the cattle yards. Gum trees have been planted for shelter in the cattle yards. We installed a roof on the crush. There is a water tank connected to the hanger which collects rain water to provide drinking water to the Goat and Drive paddocks, this water runs through a pipe under the driveway to the Drive paddock.

226 Annexure **MA22** contains:

a) a rough map of the location of sheds and buildings on the property;

b) photos of some of those sheds;

c) photos of the cattle yards;

d) photos of the cattle loading ramp;

e) photos of the tree guards;

f) photos of the bore house; and

g) copies of some invoices for the construciton of these sheds, buildings and structures.

**Cattle**

227 This is a working beef cattle property which focuses on vealer production.

228 On average we send off 80 calves to market each year, together with a number of other cull cows. These calves are sold at an average age of 8.5 months weighing 320-350kgs.

229 In parralel with our vealer business we are developing a limousin show stud.

**I do not give my consent to Hume to access my improvements**

230 I do not and will not give my consent to Hume to access my improvements on the Property, or within 200m of the dwelling house or within 50m of my garden.

231 Without being ordered to do so by the Land and Environment Court (LEC), I will not give my consent to Hume to:

(i) use Carters Lane;

(ii) use my driveway or the cattle laneways;

(iii) go through my gardens to access any drill site;

(iv) construct roads thorugh my pastures;

(v) undertake drilling activities in my paddocks with crops or with improved pastures; or

(iv) cut my fences.

**Anticipated damage should Hume gain access and drill on my property**

232 Hume currently proposes 6 drill sites on our Property. **Annexure MA23** contains an aerial photos of the locations of Humes proposed drill sites on the Property.

233 Each of the drill sites is located within a paddock. There are no existing tracks in any of the paddocks on my property. There are cattle laneways leading to the paddocks. These laneways contain the water reticulation system.

234 If Hume were to be allowed onto the Property it would result in a very significant loss of our privacy and amenity. The trucks and 4WD's would be driving past my bedroom from 7 am to dusk, 5 days a week several times a day, with any number of strangers. I would find this confronting and disturbing. I would have to lock up my 5 dogs to ensure they did not chase the trucks or be injured in any way. This would be for the minimum of 6 months that Hume would be on the property.

235 If Hume were to be allowed onto the Property they and their many contractors would result in significant interuption of our ability to operate this property as a beef cattle business. We would have great difficulty rotating our cattle around the property and maintaining our pastures to the current carrying capacity.

236 We believe Hume would have great difficulty accessing its proposed drill sites without constructing road. We heard Hume's evidence in the SHCAG Pty Ltd v Hume 14/40998 that it would simply dump blue metal or road base on the surface of the land where it intended to run its trucks. This would destroy the productivity of that surface. Taking up the blue metal in rehabilitation would then take up the top soil. New top soil would have to be put down. That would introduce new weeds as it

would be foreign top soil. These areas would have to be fenced off while the pasture was re-established, otherwise the cattle would get into it and eat it, as new pasture is tastier than older pasture. This interuption would be for at least 6 months for the drilling but we have no good idea how long it will take to prepare any road surface or to rehabilitate the road surface areas to the drill sites or the drill site areas to their current productivity or carrying capacity. We have measured the approximate amount of access track to the drill sites and it is more than 3 kilometers. Pasture Agronomy Services advised us in 2014 that it would take up to 3 years to re-establish the property's current carrying capacity in the affected areas.

237 I have observed the damage done to property when Hume is constructing a road. **Annexure MA24** contains photos of Humes construction of the road on the Koltai property. It is not 3 metres wide it is more like 7 metres wide. The surface area is mangled by the multitude of trucks and 4WD's coming in and out on a daily basis which turns it into a mud bath.

238 **Annexure MA25** contains photos of Hume's drill site on the Wongonbra property next door. I saw the trucks drive down the hill side where ever they chose, chewing up the pasture on the hill side. Three years later we can still see the effects on the pasture of the access road to the drill site.

239 Our property becomes particularly wet in rain events particularly in the ares near Wells Creek and in the south eastern and south western boundaries. **Annexure MA26** contains photos of Wells Creek along the Western boundary and the natural drainage channels on the south eastern boundaries. Hume is proposing to drill 4 of its 6 holes very close to these particularly wet and boggy areas.

240 Set out below a description of the potential impact of Humes activities on each of our paddocks.

**Hole proposed in paddock 15 – South eastern hole**

241 The hole in paddock 15 is in the Southern Highlands Shale Woodland (**SHSW**), which is listed as an ecologically endangered community and protected.

242 Hume proposes to access paddock 15 by using Carters Lane, my driveway and through SHSW. Paddock 15 is quite steep where the SHSW is located. I do not give my consent to Hume accessing that hole across those lands. The only other

potential means of access to paddock 15 would involve the cutting of fences either with the Kotlai on the eastern boundary and travelling through paddock 16, or from the McKenzies on the southern boundary and travelling through paddocks 13 and 14.

243 There is no gate providing access between these properties. I will not consent to the cutting of my fences to allow Hume access to my property from these neighbouring properties.

**Hole proposed in paddock 9 - Western hole**

244 The Western Hole is proposed in paddock 9 which to date has always been our cropping and hay and silage paddock. We have sown millet and oats crops in this paddock. I do not consent to Hume undertaking any activity on my land which contains my crops.

245 This hole is very close to Wells Creek. The ground where the hole is currently proposed to be located is very boggy. In the past, I have tried to drive a 4WD through that area, at a time when it was not that wet, I was nearly bogged. Since then I do not drive any vehicles close to that fence line. As outlined below, further along that same fence line a bridge across Wells Creek was washed away in 2007, we were not able to collect that bridge (which was caught in the fence in the billabong boundary with the Pollicina property) with a tractor until 2014 because the ground had been too boggy and soft for our tractor to get across.

246 The western boundary fence of the property is sitting just on the eastern side of Wells Creek. That fence has no gate it in to Hume's property, Wongonbra.

247 I will not consent to the cutting of that fence to give Hume access to my Property.

**Hole proposed in paddock 6 – North western hole**

248 The north western hole is in paddock 6 which we call the Marsh paddock. We call it the Marsh paddock because with rain it becomes wet. It is a very wet paddock even in the dryer months. It was in this paddock 6 that in 2007 our bridge across Wells Creek had been washed away in 2007 and became caught in the boundary fence with the Pollicina property. That bridge we were unable to retrieve until after an extended dryer period in 2014 because the ground was too soft and boggy for our tractor before then.

249 We have fenced off the lower part of that paddock because Wells Creek runs into the lower half. It is generally too wet to access it even in a four wheel drive. Having once gotten bogged in the 4WD in abourt 2001 higher up from this paddock we no longer drive the 4WD in that area of the paddock unless we are in drought.

**Hole proposed in paddock 4 – Northern hole**

250 The most northern hole is in paddock 4 next to 2 shelter belts. This is where the cattle get their shelter. We would require that this hole be moved as the cattle must have shelter from the sun and wind. Moving this hole will push it either up a slope or into the middle of the paddock. Hume in its REF stated it would not drill in the middle of a paddock or excavate land on a slope.

251 Hume has assumed that it will access this paddock via Carters Lane and existing tracks. I will not give my consent to access Carters Lane. The only other access to this hole would be through the Pollicina land. Mr Pollicina has told us he will not allow Hume to access his land.

252 I will not consent to the cutting of the fences between our property and the Pollicina property.

**Hole proposed in paddock 2 –Northern hole**

253 Paddock 2 has 2 dams and a drainage channel to a third and fourth dam running between these dams down a steepish slope.

254 The hole is proposed very close to this drainage channel and dam and is on a slope.

**Issues with an access track and each drill site on a slope**

255 If Hume can get onto the property in some fashion, which we dispute, Hume would need to construct a length of track between the proposed holes because there is no existing track between those locations in the paddocks. Using the scale on Hume's maps I have estimated that length of track to be approximately 5 -6 kilometres. I have drawn the location of the proposed track on the map of the hole locations provided by Hume. This map with the proposed length of track drawn is set out in the annexure marked **MA27**.

256 The track will go through at least 13 of my 16 working paddocks on the Property [that does not include how Hume will get onto the Property].

257 I built the deck at the front of the house in order to look across the valley. Currently there is an uninterrupted, and to my mind, beautiful, view of rolling hills. If Hume drills on my property this view will be interrupted by drill rigs, drill sites and an access track. I will have to look at that until it is fully rehabilitated.

258 Our experience with this property, is that vehicles even as heavy as a 4 wheel drive cannot drive in the lower lying areas of the paddocks, and no vehicle can after a rain event without damaging the pastures. Hume intends to drill its holes in these lower lying areas. As examples:

(i) In around 2001, our land cruiser became bogged on the northern boundary of paddock 2 on the lower side of the dam on the Pollicina boundary. We have never again tried to drive a 4WD vehicle on that lower side of the dam.

(ii) In or around 2002 to 2003, we had to use a row boat to put up the fence between the millet paddock 9 and Badgeries paddock 10.

(iii) in about 2007 a wooden bridge built to cross Wells Creek in paddock 6 was washed about 200m away onto the boundary fence with the Pollicina property. We were not able to recover it from the fence until 2014 because the ground has been too soft to get the tractor down there to pick it up. We do not use a 4WD along that entire western boundary which is bordered by Wells Creek for the same reason.

259 I commissioned an expert agronomist to report on the improved pastures on the Property and the impact on those in relation to Hume's proposed unsuccessful 22 hole REF application. The Report says that the improved pastures will be impacted for at least 2 years from Hume's proposed access tracks and drill sites due to the compaction of the soils. The report states that the impact will affect the productivity of those pastures. Annexed and marked **MA28** are copies of that report.

260 I am very fearful that should Hume get onto my property it will have to construct roads like it had to construct on the Koltai property. I believe that will result in long term damage to at least 13 of the 16 working paddocks on the Property. Annexed and marked **MA27** are photos of the road and the construction of the road on the

Koltai property in or about mid 2013 and the resultant constructed road used by Hume to access a drill site on the Koltai property. I have drawn the location of the proposed track/road on the map of our property with the hole locations provided by Hume. The map with the proposed length of track/road drawn is set out in the annexure marked **MA27**.

261 I do not believe that Hume can construct this 5-6 kilometres of access road and the drill site, and drill and rehabilitate the drill site and the access road in 4 weeks per hole, which is what it says in its Review of Environmental Factors for these holes. Yet, even at 4 weeks per hole the property will be impacted for 24 weeks, or 6 months.

**Impact on the herd and trying to manage the property**

262 Should Hume be able to drill the 6 holes it proposes on the Property, the property will be carved with the fencing of access tracks and drill sites. This will make managing the herd very difficult. Currently each paddock has access to the cattle laneways, and we move the cattle around via the laneways. We would not be able to move the cattle around via the laneways if there are trucks and 4WD's continuously moving up and down the laneways from drill sites. If we have a say in it we will not allow Hume to use the laneways at all. That will mean, if Hume is allowed on, it will need to construct access ways through our paddocks. We will require that Hume construct those access ways along fence lines so as not to destroy the paddock pastures. Most of the boundary fence lines are in lower lying land which is often boggy which will mean Hume will have to construct roads, which allow them access. The road making activity will need to be fenced off from the cattle, particularly the calves to ensure no injury. These roads will have to cross many paddocks. We will have to avoid putting cows and calves in the paddocks which have the heavy traffic in them as it will disturb the calves, however we will run out of paddocks and pastures if too many are taken out by Hume's activities.

263 Without being ordered to do so by the Land and Environment Court, I will not give my consent to Hume to:

(i) use Carters Lane;

(ii) use my driveway or the cattle laneways on the Property;

(iii) go through my gardens to access any hole;

(iv) undertake activities in my paddocks with crops or with improved pastures;

(v) cut my fences internal or boundary;

(vi) access with 200m of my home;

(vii) use Carters Lane to access the Pollicina or Fesen Pty Ltd properties;

(viii) access within 50m of my gardens;

(ix) use my dam water;

(x) take water from Wells creek in my Property;

(xi) spray any produced water on my paddocks; or

(xii) cut of any of my trees.

#SWORN #AFFIRMED at

Signature of deponent _____

Name of witness

Address of witness

Capacity of witness

And as a witness, I certify the following matters concerning the person who made this affidavit (the **deponent**):

1 #I saw the face of the deponent. [OR, delete whichever option is inapplicable]
~~#I did not see the face of the deponent because the deponent was wearing a face covering, but I am satisfied that the deponent had a special justification for not removing the covering.*~~

2 #I have known the deponent for at least 12 months. [OR, delete whichever option is inapplicable]
~~#I have confirmed the deponent's identity using the following identification document:~~

_____
Identification document relied on (may be original or certified copy)†

Signature of witness _____

Justice of the Peace in and for the State of New South Wales

Registration No 128586

Note: The deponent and witness must sign each page of the affidavit. See UCPR

[* The only "special justification" for not removing a face covering is a legitimate medical reason (at April 2012).]

[† "Identification documents" include current driver licence, proof of age card, Medicare card, credit card, Centrelink pension card, Veterans Affairs entitlement card, student identity card, citizenship certificate, birth certificate, passport or see Oaths Regulation 2011 or JP Ruling 003 - Confirming identity for NSW statutory declarations and affidavits, footnote 3.]