

## INDEPENDENT OBSERVER VOYAGE REPORT

**MV:** Ocean Drover

**VOYAGE:** V180

**Livestock Shipping Services (LSS) LNC-11109, 11108,  
11143**

LOAD PORT: Townsville, Australia

LOAD DATES: start 16:30 on 29/10/2019 completed 23:50 on 30/10/2019

Vessel push off 31/10/2019 at 04:40

UNLOAD PORTS: Jakarta and Panjang, Indonesia

UNLOAD DATES: Arrived Jakarta 6/11/2019 discharge started 23:50 completed 17:00 on 10/11/2019

Panjang: Arrived Panjang 11 /11/2019 at 07:00, discharge start 09:00 completed 11/11/2019 at at 23:30

**REPORT PREPARED BY:**

Independent Observer: s. 22(1)(a)(ii)

Department of Agriculture

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## 1 EXECUTIVE SUMMARY

The Croatian purpose-built livestock carrier, Ocean Drover, owned by Wellards, was built in 2002 and currently sails under the Singapore flag. It consists of nine decks, five of which are fully enclosed, and four open. The ship carrying 17,970 feeder cattle was chartered by four exporters (LSS, AUSTREX, Frontier and SEALS). It departed from Townsville port on 30/11/2019 after a 31-hour loading duration. Loading in Australia was completed without issue, though one animal had a broken leg identified and euthanised once on ship. In Jakarta port 15,452 cattle were discharged over 90 hours. Discharge in Panjang, took 15 hours for 2,518 cattle. Discharge in Panjang occurred smoothly, and handlers were never seen to use electric prods. In contrast, some Indonesian handlers in Jakarta, were observed using electric prodding on cattle that paused at the ship exit or on the discharge ramp, which caused them to turn. Consequently, several cattle collided with others, fell over and then got trampled by opposite moving cattle.

There were cattle shipped that should have been rejected under the criteria for export under ASEL guidelines. This included a SEALS cow with lumpy jaw/actinomycosis, an LSS heifer with an infected, swollen hind fetlock on account of a missing claw hoof that resulted in non-weight bearing lameness, and bulls from SEALS with bleeding horn buds due to horns being cut too short.

Areas throughout the ship decks became flooded with heavy effluent during discharge in Jakarta port. This caused challenging conditions for livestock crew during feeding and watering routines. Cattle were also standing in some pens with liquid effluent, fetlock deep, for over 30 hours. Cattle in some pens also showed heat stress while in Indonesian ports.

A wash down on certain decks, improved environmental conditions for cattle on those decks. However, manure pads in some pens not washed, did become heavy and sloppy, particularly along wall pens on lower decks and in corner pens in forward sections of upper decks.

Most cattle had acceptable space, feed, and water in accordance with ASEL throughout the journey. A consignment of Friesian dairy heifers exported by AUSTREX were well managed by the stockmen and successfully discharged in Panjang without issue.

A total of 14 cattle died during the voyage. <sup>s 47G</sup> were appropriately euthanised due to traumatic injuries (<sup>s 47G</sup> LSS and <sup>s 47G</sup> AUSTREX). The <sup>s 47G</sup> cattle died due to suspected stress related illnesses, all of which were SEALS cattle. <sup>s 47G</sup> of 325 older cull cows died (i.e. <sup>s 47G</sup>%) from the same SEALS consignment, suggesting they were not fit to transport. Issues were also identified with the management of sick and injured cattle by one of the SEALS stockmen. This included insufficient supply of saw dust bedding in hospital pens, lack of care to downer cattle, incomplete and inaccurate record keeping on voyage reports, and delayed or insufficient euthanasia of cattle showing signs of pain and suffering and imminent death. Furthermore, no records were made of veterinary



medications used, despite evidence that Flunixin and Trisoprim was used. At least two heifers administered with Schedule 4 veterinary drugs were not identified to show that a withholding period of 28 days should pass before slaughter. This is contrary to section 5.8 and 5.9 of ASEL and relevant to guidelines for responsible use of Schedule 4 veterinary drugs. Despite the heifers also showing clinical symptoms suggesting toxicity from medical dosing, deteriorating health, and signs of pain and discomfort, they were discharged. The captive bolt stunner was also left unattended by the SEALS stockman over several days on deck.

Further concerns for animal welfare include the discharge of two severely lame heifers that had non-weight-bearing hind foot lameness injuries (one LSS and one SEALS), that were infected and had a poor prognosis for recovery.

Further issues included potential environmental contamination due to empty drug containers cast on the ground remaining until deck washing. While in Jakarta port, the medical room containing all veterinary drugs was left unlocked during the discharge. Smoking also occurred throughout the livestock decks by many persons during discharge, where cigarette butts were left in saw dusted areas.

## 2. MV OCEAN DROVER V180

The Ocean Drover owned by Wellards shipping company was built in Croatia as a livestock carrier in 2002 and operates under the Singapore flag. Wellards currently charters the ship to other exporters. Nine single tiered decks hold 1411 livestock pens with a total area of 23372.06 m<sup>2</sup> available for holding livestock. The ship is 180 meters long and 31.2 meters wide. Decks 1 to 5 are fully enclosed with solid outer walls (providing a livestock holding area of 8577.04 m<sup>2</sup>). On deck 5 there is an extra section completely isolated from the rest of deck 5, called Deck 5 special. Each of the other enclosed decks 1 to 5 (net livestock holding area 15098.81m<sup>2</sup>), are separated into two holds (forward and aft) divided by a solid wall (with no access doors). Access between forward and aft areas is only possible via deck 6 at the load ramp. Decks 6 to 9 are fully accessible from forward to aft areas, and the outer ship sides have pens with open fences towards the sea. On decks 6 to 9 access lanes occur between each of the outer aisles of cattle pens on either side of ship, and between a double aisle of cattle pens in the ships centre. Only one centre aisle exists on decks 1 and 2.

The ship produces water for livestock via desalination and reverse osmosis of sea water. The water is delivered into 26cm wide, 78cm long, open water troughs in each pen via an automatic refill float valve system. The ship can produce water to fill 4 tanks to a capacity of 2553.98 m<sup>3</sup> with 7 separate hydrophores pumping at 30 (2 pumps), 40 (4 pumps), and 120 (1 pump) m<sup>3</sup> per hour. Two silos can store 2590.71 m<sup>3</sup> each of pellets (i.e. a total 5181.42 m<sup>3</sup>). Pellet fodder gets delivered via gravity feed through metal pipes into two troughs per pen (79cm long and 26 cm wide). The aluminium water and feed troughs hang outwards of each pen into the access lanes, where a space between

the rails for cattle to fit their head to eat or drink is 48 cm (and little or no space between the trough base and ground). The pen fences are made of aluminium alloy square profile pipes, resistant to rust. All rails were double hinged and fixed with pins, with four rails spaced at 24, 28, and 48 cm from top to bottom rails. These can be flipped upside to securely hold sheep when required.

Power for operation of all livestock ventilation, lighting, feed and water is provided by four main engines of which two deliver 1120kw, and two 1280 kw, and a backup engine with a nominal capacity to provide 960 kw. In total there are 84 mechanical ventilation columns (34 for open decks of which 32 are supply and 2 are exhaust; and 50 for enclosed decks, 26 of which are supply and 24 are exhaust). This provides<sup>s 47G</sup> air changes per hour in the enclosed decks, and<sup>s 47G</sup> in open decks. Pen and ventilation designs are uniform throughout the ship with little variation between decks. An emergency ventilation system can deliver<sup>s 47G</sup> pen air changes per hour throughout the decks on the backup power supply.

Floors in livestock pens are covered with an antiskid synthetic structured surface. Floor surfaces around load/unload areas are covered with welded steel square bars 2cm x 2cm in lattice formations. Stock walking ramps are 80 cm wide, and floors fitted with steel 5cm high and wide cleats, spaced 20cm apart.

### 3. VESSEL CREW NUMBERS

The Captain of the ship was<sup>s. 22(1)(a)(ii)</sup> and the Chief Officer was<sup>s. 47F(1)</sup>  
The Bosun was<sup>s. 47F(1)</sup> The 25 Philippine livestock crew were responsible for four daily feedings (i.e. 06.00 - pellets, 10.30 and 13.00 chaff and 15.30-pellets). Several livestock crew checked cattle overnight and ensured top up chaff was fed as instructed.

### 4. LIVECORP ACCREDITED STOCKPEOPLE

There were cattle on the ship from four different export agents. Five accredited stock persons (ASP) worked during the voyage. The ASP for LSS was<sup>s. 22(1)(a)(ii)</sup>  
<sup>s. 22(1)(a)(ii)</sup> (managing 2,833 head),<sup>s. 22(1)(a)(ii)</sup> and<sup>s. 22(1)(a)(ii)</sup> worked for Austrex managing a total of 5,850 head, and<sup>s. 22(1)(a)(ii)</sup> and<sup>s. 22(1)(a)(ii)</sup> worked for SEALS managing a total of 7796 head (split between them).<sup>s. 22(1)(a)(ii)</sup> was also managing a further 1491 head for Frontier (i.e. he was responsible for a total of 5389 head).

### 5. THE CONSIGNMENT

According to the final load plan the total number of cattle on the vessel was 17,970 head. LSS had 2833, Austrex 5850, Frontier 1491 and SEALS 7796 head. LSS and Austrex cattle came from the registered premises<sup>s 47G</sup>  
Charters Towers. Frontier from<sup>s 47G</sup> and SEALS from<sup>s 47G</sup>  
<sup>s 47G</sup> Townsville. LSS had five lines of cattle in three consignments (feeder steers, heifers and bulls -horned and polled) weights<sup>s 47G</sup>



to <sup>s 47G</sup>kg; Austrex, seven lines in five consignments (feeder heifers and steers <sup>s 47G</sup> to <sup>s 47G</sup>kg); Frontier four lines in three consignments (heifers, polled and horned steers <sup>s 47G</sup> to <sup>s 47G</sup>kg); and SEALS ten lines in four consignments (steers, heifers and cows <sup>s 47G</sup> to <sup>s 47G</sup>kg). All cattle were Brahman or pastoral (Brahman crossbreeds). Austrex also had 146 Friesian dairy heifers of <sup>s 47G</sup>kg average liveweight.

Each exporter had their own delivery of pellet mix which ultimately got mixed altogether in the same ship silos. Chaff in plastic wrapped sacks was carried on the top deck of the ship, as was sawdust, with excess fodder left at the voyage end.

## 6. THE VOYAGE

Sea and weather conditions were calm throughout the voyage. Each deck had a fixed thermometer situated in the centre of each deck section (opposite the load ramp). On the daily voyage reports, LSS reported one temperature, Austrex 3 temperatures, Frontier one, and SEALS 12. The warmest temperature conditions recorded on the daily voyage reports were between days 5 and 7 peaking at 31°C dry bulb, 29°C wet bulb, and 86% humidity, recorded on decks 3, 5 and 8. Daily feed and water consumption averaged 37.5 kg fodder, and 24 litres water, per head per day from day 3, increasing to 9.5kg fodder, and 34 litres water, per head per day, by day 10.

Livestock were inspected by the Independent Observer (IO), during morning and afternoon around feeding times, when the accredited stockmen (AS) were also checking cattle. Daily meetings were held at 10.00 attended by the IO, Chief officer, AS representing each exporter, and briefly by the Bosun (who received instructions on feed and watering regimes at the meetings end). There was generally a positive atmosphere between staff during the meetings and throughout the ship journey. The ship captain and chief engaged with the stockmen relevant to the livestock care routines. Each stockman entered information into a daily voyage report relevant to their consignments onto a computer in the chief's office. The final reports were printed and given to the IO daily by lunchtime. Austrex used a different template for recording compared to LSS, Frontier and SEALS, who all used the same. Austrex included specified records of medications used on livestock, identifying from what deck and pen number cattle came from, what line and type they were, the medication and dosage administered, and for what ailment. LSS recorded what medication was used, but not specifically how much. SEALS made no record in the daily reports of medications used.

Deck washing occurred on decks 1,2,3,4 forward and aft and 5 special deck on November 4<sup>th</sup> (day five), and on decks 5, 6 and 7 aft only on November 5<sup>th</sup> (day 6). The forward section on deck 5 was not washed, due to increasing daily cattle mortality and morbidity levels on that deck prior to washing. Wash down did not occur on decks 7, 8, or 9 because they were first to be discharged in Jakarta, and

the manure pad was deemed as acceptable by the stockmen. A decision for deck washing was already decided by day three, so the chief officer could plan the order for emptying water tanks to livestock, and control the ships trim to facilitate effluent drainage during washing. **Table 1** summarises for each exporter from voyage start (day 1) to end (day 10); the number of cattle with health issues (lameness, shy feeder or ill thrift), mortality by day of occurrence and cause, and the final mortality by total number and percent.

**Table 1:** Morbidity and Mortality by Exporter from voyage start to finish

Exporter	Lame		Shy feeder/ill		Mortality (n), when, why	Total mortality per exporter in Number and (%)
	Start	End	Start	End		
s 47G	1	4	0	0	Day 1, broken leg s 47G euthanised	s 47G
	0	2	0	3	Day 4, hip injury, euthanised	
	0	1	0	4	0	
	0	17	0	55	Day 3,4, 5, 6, 8, 9. Suspected pneumonia in s 47 cows from same deck area, s 47C steer and s 47G reifer deck s 47C and s 47G steer euthanised due to lameness on deck s 47G	
<b>Total</b>	24		62		14	14/17970 (0.07%)

The first port of discharge was Jakarta after seven days of sail. The ship arrived 21:00 on 6/11/2019 and discharge commenced at 23:50. It was completed on 10/11 at 17:00. The total discharge time in Jakarta was 90 hours where a total of 15,452 cattle were unloaded. This consisted of all LSS cattle on deck 9; the majority of cattle on deck 8 for AUSTREX s 47G of 3184 head); all SEALS cattle from deck 7, and a further s 47G of 2509 head for AUSTREX; all Frontier and most of SEALS cattle on decks 6, 5, 4, 3 2 and 1. The vessel sailed on for a further 10 hours, arriving to Panjang at 07:00 on 11/11/2019. Discharge commenced at 09:00 and was completed by 23:50 on 11/11/2019. The total discharge time was 15 hours in Panjang. A total of s 47G cattle were discharged for AUSTREX and SEALS from decks 7, 8 and 4. The dairy heifers for AUSTREX on deck 7 were discharged first in Panjang, which was completed within one hour.

Communications were easy going and professional during the voyage and when information was required, both the shipping staff (Captain, chief mate, and chief engineers) and four of the five stockmen were easy to approach, and always helpful to supply information as requested. One of the stockmen from SEALS s. 22(1)(a)(ii) however, was not.



## 7. PHOTOGRAPHS, FILMS AND ATTACHMENTS

Please refer to the supplied hard drive where **77 photo images** and **19 films** are sighted throughout the report in numerical chronological order. This includes a folder with ten selected photos to represent cattle managed by different exporters, on different decks, throughout the voyage. Five attachments include **Attachment 1**- Notices of intent to export for each exporter; **Attachment 2**- A copy of the ships final load plan; **Attachment 3** - An excel file cross-checking livestock numbers per exporter, deck and discharge port; **Attachment 4** - Daily voyage reports compiled for each exporter and **Attachment 5** - A worksheet detailing raw photo and film images from the IOS mobile phone identified within the report, showing the dates and times of when the images were recorded throughout the voyage.

## 8. OBSERVATIONS AND COMMENTS

### a. Documentation

All appropriate documentation was supplied to the IO prior to departure by each exporter. Supplementary documentation was supplied for the care of the Friesian dairy heifers (specifying extra saw dust and space requirements), which Austrex fully adhered to. A copy of sheets detailing notices of intent to export were given to the IO by the government export veterinarian **s. 47F(1)** **Attachment 1**. When tallied for each exporter, the total number of 18,258 head of cattle was authorised for export on the Ocean Drover. This total did not correspond to the final load plan (**Attachment 2**) given to the IO by the ships chief officer, where 17,970 head were recorded as being loaded (i.e. 288 less cattle compared to the tallied number of cattle on the notice of intent to export sheets). The load plan was missing some information about deck identification correlating to total livestock numbers. This caused the IO some confusion as to total numbers of cattle per deck and exporter. The errors are highlighted and identified on the load plan sheets. Due to this, extra calculations were made to cross check livestock numbers per exporter for each deck section, and per discharge per port (**Attachment 3**). The daily voyage reports for each exporter is compiled in **Attachment 4**.

### b. Loading

Handlers in Townsville were never observed using electric prods during truck dispatch and ship loading. Cattle were managed calmly yet efficiently. One animal with a broken leg identified at boarding late in the evening of November 30<sup>th</sup>, was euthanised on ship with a captive bolt by one of the ASP.

A potential hazard for livestock injury was identified where two sections intersected on the load ramp (from the port to ship sections) loosely fastened together with hay twine. Some cattle were hit by the flapping walls as they passed this intersection see **Film 1- Load: Unsecured ramp walls**. After ship loading it was noted that three larger framed cattle had haematomas around the hip and thigh areas - see **photo 1 to 3**. It is conceivable these injuries occurred due to hits from the unsecured load ramp walls.



c. Pen construction

On open decks situated where load/unload areas existed, several cattle pens had floor surfaces covered in metal gridding and other protrusions 2 to 3cm in height (**see photos 4-6**). This was identified as a hazard for cattle. Although it was not known if lame cattle in nearby hospital pens came from these pens, it could be worth noting in future, so that management strategies such as laying sawdust, could mitigate injury risk.

A further hazard for cattle injury was identified in several pens where gates were left on the ground (**photos 7 to 9**). Cattle were observed slipping on the gates **Film 2- Gates on ground**. On deck 5 forward in a nearby hospital pen, a heifer that had been residing in a pen with a gate on the ground, did have a major laceration to the hind coronet band (**photo 10**). Stockman should remove fallen gates to avoid limb or hoof injury to cattle.

d. Ventilation

Ventilation appeared satisfactory throughout most of the ship. However hot areas were identified where cattle did show heat stress at times throughout the voyage. A hand-held kestrel was used to register the climate in these areas. Hot pens were identified in the back-aisle pens on decks 4 aft, on deck 5 forward beside the hospital pen along the short side of the aft section, and in corners pens along the ship sides in the forward sections of the open decks. The hottest area recorded throughout the voyage was on 9<sup>th</sup> November in Jakarta port on deck 6 forward (i.e. 32.1°C dry-bulb, 30.6°C wet-bulb, humidity 94%) and cattle showed elevated respiration rates and oral drooling - see (**Film 3 - Hot areas on ship**). Some dairy heifers on deck 7 showed heat stress (elevated respiration and oral drooling) whilst in Jakarta port on November 7<sup>th</sup>. However, as extra pens became available from cattle discharged in Jakarta, the dairy heifers were given more space by opening gates into vacated pens. This appeared to alleviate heat stress signs in heat-challenged animals, and in Panjang, the heifers were the first to be discharged.

e. Feed/Water/Pen management

Feed regimes appeared normal, with most cattle adapted efficiently to pellet rations, despite that all the pellets from the different exporters got mixed together (**photo 11**). Water refill rates in many troughs was noted as being slow throughout the ship. Water levels were often not more than 5cm full in many troughs, and several malfunctions were observed where troughs were empty or leaked **photo 12 to 14** and **Film 4-Water troughs**.

Hospital pens for LSS, and AUSTREX appeared adequately managed with sawdust (**photos 15, 16**) and livestock given suitable access to chaff. No evidence of sawdust in hospital pens managed by SEALS on decks 2 and 5 forward was evident (**photos 17 to 19**).



f. Cattle management (sick/injured/dead)

An incident occurred on deck 5 forward, on 1<sup>st</sup> November at 16:00, when the IO identified a downer cow. The IO notified a nearby livestock crew member who confirmed he had already informed the accredited stockman **s. 22(1)(a)(ii)** – who was on the same deck at the time of the incident) that the cow was down. The crew member was knocking a metal feed delivery pipe with a hammer to clean it of residual fodder, which caused the cattle to race around the pen, trampling the downer cow. **s. 22(1)(a)(ii)** could be seen two aisles over on other side of the deck, and a high activity level amongst the cattle where he presumably was moving amongst them. Due to concern for the downed cow being further trampled, the IO yelled across that the cow needed immediate assistance. He acknowledged that he was aware of the cow, but he did not come over to assist her for a further 30 minutes (**photo 20**) and (**Film 5 – Trampled downer cow**). During which time the cow got further trampled. Eventually the stockman pulled the cow over to sternal position and isolated her from the other cattle by placing gates around her. By this time, she was in a state of shock, unable to stand, and it was at ten hours before she was moved to the hospital pen. She remained severely tucked up and depressed during the rest of the voyage (**Film 6 – Trampled downer cow during voyage**) and **photo 21**. At 23.25 on the same day (1/11), it was noted that a cow was dead in the pen area where the stockman had been interacting with the cows earlier (**photo 22**). Three more cows died in that same pen on November 2<sup>nd</sup>, 6<sup>th</sup>, and 7<sup>th</sup> from suspected handling stress induced pneumonia. One cow was filmed showing signs of illness in the above-mentioned pen on November 4<sup>th</sup> (**Film 7- Sick cow 1**). She was never placed in a hospital pen and was found dead on November 6<sup>th</sup> - see **Film 8 – Sick cow 1 dead**.

A recumbent cow in the hospital pen was filmed at 18:09 on November 5<sup>th</sup> see **Film 9 – Sick cow 2**. She displayed severe depression, difficulty breathing, and nasal/ocular discharges. During several inspections earlier that day, the cow remained recumbent in the same position, and water was not offered within access to her, considering she was recumbent. By 6<sup>th</sup> of November at 05:03, she was found dead in the same position as she was filmed 12 hours earlier see **Film 10 – Sick cow 2 dead**. Her position indicates a failed attempt to reach water. Her back legs were underneath her body but splayed, and her head and neck outstretched, less than a meter from the water trough see **photos 23, 24**. To gain access to water she needed to place her head between the fence rails.

**s 47G** cow found dead and identified by the IO on the November 7<sup>th</sup> at 16.30, was not removed from the pen until the following morning at 07.00. This was not optimal management as it had died in a position that reduced access of the other cattle to the feed/water troughs and it created an injury risk for the other cattle tripping over it- see **photo 25**. There are also ethical concerns relevant the cohorts in forced proximity to the dead carcass for such duration.

**s 47G** other cows were placed in the hospital pen (on deck 5 forward), where they remained recumbent over several days and developed symptoms indicative that death was imminent. This is shown in films collected on 4<sup>th</sup> November at various times of the day, which show rapid deteriorated health – see **Film 11 – Acutely**

**sick cows** <sup>s.47G</sup> **and** <sup>s.47G</sup> They displayed stagnated respirations (difficulty breathing), severe depression, sunken eyes, and no reactivity to touch stimulation of the face or eyes. Due to the IOS concern for the welfare of these cattle, images were sent to the daily contact via WhatsApp questioning whether they shouldn't be euthanised. By 5/11, <sup>s.47G</sup> cattle had died **photos 26, 27**.

On the same deck (5 forward), two other cattle (heifers) were placed in the hospital pen on account of lameness, according to daily voyage reports **(Attachment 3)**. Over a period it was noticed that they both developed unusual clinical signs i.e. arched back, splayed leg stance, outstretched neck, head down, drooping ears, severe listlessness, respiration rate >100 per minute and difficulty walking - see **Film 12- sick heifers 5 and 6**. When the IO asked what the stockman <sup>s.22(1)(a)(ii)</sup> had treated them with, he indicated both had been treated with Flunixin and Trisoprim (Schedule 4 veterinary drugs). When reading the label directions from the empty bottles left by the pen, it stated that negative reactions can occur due to overdosing or mixing with other medications **(photo 28)**. The heifers did not improve and continued to show signs of pain and discomfort prior to discharge. It was suspected that they may have been overdosed, as the clinical signs suggested toxicity related gut problems. Photos and films of the heifer's conditions were sent to the daily contact person, where concern was expressed that the level of pain and suffering would justify euthanasia. This was especially an issue as the anticipated level of further handling and long transport times in Jakarta, were not considered appropriate to provide an environment conducive for recovery.

Several concerns for the responsible use of Schedule 4 veterinary drugs were identified. There was no record of veterinary meds recorded in the daily voyage reports for SEALS, despite evidence of used medical packages by the hospital pen **(photos 29, 30)**. <sup>s.22(1)(a)(ii)</sup> has also stated to the IO that both Flunixin and Trisoprim had been administered to cattle in the hospital pen on deck 5. Furthermore, a medical room where vet drugs were stored on ship showed a paper pinned to the shelf, with <sup>s.22(1)(a)(ii)</sup> 5 x Flu, 11x Tris, 6 x Dex' handwritten on it see **photo 31**. This presumably indicated that <sup>s.22(1)(a)(ii)</sup> had used Flunixin, Trisoprim, and Dexaprin. As these are considered Schedule 4 drugs, a withholding period before slaughter would have been necessary (of 28 days), yet no cattle in the sick pen were identified with ear tags to indicate they had been medicated.

On November 6<sup>th</sup> another SEALS heifer was noticed in the hospital pen (deck 5 forward) as having a deep gash to her coronet band see **photos 32, 33**. The heifer showed signs of severe pain and discomfort see **photo 34** and **Film 13: Heifer with cut coronet band**. The wound became covered in dirt, and there was no evidence of it being cleaned or treated with topical ointment. The heifer was unable to bear weight on the injured foot, even up to the day of discharge see **photo 35**. Voyage reports also showed no record of entry for this lame heifer, or if she was treated with medication see **Attachment 3 - Daily report SEALS Deck 5 Forward**.



On the 8<sup>th</sup> of November at 16.30 a SEALS steer on deck 4 forward (also under management of s22(1)(a)(ii), was identified with extremely swollen knee and fetlock joints see **photos 36 to 38**. The animal showed behavioural signs of being in acute pain, see **photo 39** and **Film 14 - Steer with swollen joints**. He was not placed in a hospital pen during several days of observations and there were no records in daily voyage records of this steer being lame, until on 10/11 when it was apparently euthanised.

s47G of 325 SEALS cows from the same consignment located in proximity on deck 5 forward, died by the voyage end, and a further three showed continued signs of illness at discharge. This s47G% mortality and 3.4% morbidity within this cattle consignment was an animal welfare concern. Given that the cows were s47G s47G according to brand marks), and had a nervous disposition, indicating a possible lack of exposure to previous handling conditions pre-shipment, their tolerance for coping with the ship stresses was low (i.e. forced proximity to handlers, pen confinement, loud noises, reduced air quality, etc). This perhaps compromised their immune system, causing many to succumb to pneumonia. This indicates a deficiency by the exporter in appropriately selection of cattle fit for export.

All cattle that died in port areas were removed and stored in a refrigeration container on the upper ship deck 10 (**photo 40, 41**), where they were later disposed out to sea.

g. Deck conditions

The washdown on day 5 and 6, improved the air quality and manure pad conditions for cattle on the decks. Deck 5 forward was not washed based on a decision from the SEALS stockman that cows on that deck would be too stressed as a result. Pens along the wall on port and starboard sides did consequently develop heavy sloppy manure pads by day 7. However, the cattle did not show signs of heat stress.

During discharge in Jakarta port, many alley ways between cattle pens, especially on the port side, filled with cattle effluent. Aisle pens with cattle at the aft area on decks 6 and 7 became completely water logged, see **photos 42 to 44**. The effluent caused challenging conditions for livestock crew to work during feeding routines, especially as it was up to 20 cm deep in places. On deck 6 in the aft section on the 9<sup>th</sup> of November in Jakarta port, **Film 15 - Water leaks** shows water leaking out of a major scupper pipe and from several troughs. The IO bought up concerns of the effluent build up on decks in port with the chief officer and asked if there wasn't a tank system to capture the overflow to later discharge out to sea. The chief explained that there was, but that it was full. The IO asked if another tank could be constructed to alleviate this problem, but the chief said it would not be feasible.

According to sections 6.2 of the Maritime Orders, fluids should be kept clear of pens and associated work and access spaces. Section 6.5 states also that strainer plates should be placed over drains in passageways to avoid causing injury. In

Jakarta port, during discharge, several drain openings were left uncovered (**photos 45**). In some places these open drainage holes became submerged with effluent and were obscured (**photo 46**). Also, during a period of 12 hours, a plastic grid covering was placed over one of the 2-meter square access hatches between decks, without any rigid under support (**photo 47**). This posed a risk for any persons that stepped on it (not realising it was unsupported), as they would have fallen through to the below deck (**photo 48**). Despite signs stating no smoking was permitted throughout the decks, Indonesian port crew were observed frequently smoking throughout decks, and butting cigarettes in sawdust (posing an obvious fire risk) see **photos 49,50**.

#### h. Discharge

Handlers in Panjang port, were observed working patiently with cattle at discharge. Even if cattle balked and refused to move, the handlers patiently used flapper sticks which worked effectively. In contrast, in Jakarta Indonesian handlers were frequently observed using electric prods indiscriminately on both face and body. **Film 16 - Jakarta cattle discharge** shows cases where electric prodding was used, as well as cattle that went down on the ships unload ramp and were trampled or collided with cattle moving the opposite direction (**photos 51 to 55**).

Several hazards for causing injury to cattle were identified at discharge, and this included a piece of wood loosely fixed at the bottom of the load ramp, where cattle hit their hip, and a piece of wire across the path of cattle just before entering trucks **photos 56, 57**. There were also up to 15 people at any one time, standing on the ramp and platform roof near the truck entrances. This frequently caused discharging cattle to stop, and consequently receive electric prodding to force them forward - **see photo 58**.

In Panjang in the early morning of discharge, the sun cast a shadow at the ramp end (**photo 59**), and a plastic green sack that may have been placed in the cattle lane to stabilise it, caused cattle to balk, then jump over it, where many slipped heavily afterwards (**Film 17 - Panjang discharge**). The IO suggested to the port crew to lay more sawdust over the ramp, and this improved the general flow of cattle. Cattle were also observed slipping over heavily on an unstructured metal platform floor surface where they turned 90-degrees to enter the trucks. The floor was so slick that sawdust had little effect in adding traction.

Once cattle were loaded into trucks, many were observed getting their head or horns stuck in nets that were fixed over the truck (presumably to avoid cattle jumping out) In several cases began to choke (**photo 60**). Some trucks were fitted with rods positioned down the middle of the truck to lift the nets which reduced this risk (**photo 61**).

The incidents observed at discharge, indicated that ESCAS inspectors were not present, or that discharge was being ineffectively monitored.



## 9. SUMMARISED ANIMAL WELFARE ISSUES

- Several cattle were considered as reject criteria for export according to ASEL (a SEALS cow with lumpy jaw/actinomycosis (**photo 62**), an LSS heifer with a severe foot injury (**photo 63**), and bulls (SEALS) with open bleeding horn buds (**photo 64 and 65**))
- Two heifers with severe hind foot injuries (managed by LSS and SEALS stockmen), showed no signs of improvement despite treatment over many days during the voyage. The wounds showed signs of infection (**photo 66, 67**) and the animals showed behaviour indicating pain and discomfort, where they were unable to bear-weight and walk on the affected limbs (**Film 18 – Lamé heifers discharged**). Considering the further challenging transport and handling conditions faced after discharge, their fitness for transport under ASEL and OIE regulations must be questioned
- Acutely sick and lame cattle were inadequately cared by a certain SEALS stock person (no sawdust bedding, water not easily accessible)
- Despite cattle showing signs of imminent death and no prognosis for recovery, they were not promptly euthanised in consideration for their welfare by the SEALS stockmen (**Film 19**)

## 10. CONCLUSIONS

Most cattle during the voyage were quick to adapt to pellet feed and the ship environment. The livestock crew worked effectively to maintain as best as possible conditions as they could for the livestock. The shipping pens were generally well structured, and ventilation systems worked effectively to minimise heat stress in cattle. A build-up of effluent in Jakarta port, created challenging conditions for the livestock crew. Cattle in some pens were also standing in liquid effluent for over 30 hours, a situation not conducive to acceptable animal welfare. Some cattle in these areas also showed elevated panting scores indicative of heat stress.

A total of five accredited stockmen accompanied the livestock. One stockman managed the 2833 head for LSS, two managed 5850 head for AUSTREX, one managed 3899 head for SEALS, and one managed 5389 for SEALS and Frontier. LSS and AUSTREX stockmen, maintained good daily voyage reports. AUSTREX recorded excellent records for veterinary medications used (dosages, on what animals, on what decks and for what reason). They also maintained the hospital pens in good order, ensuring cattle had good space, access to feed and water, and an adequate level of saw dust bedding, which was frequently replenished. They also responsibly euthanised an injured animal mid voyage, to ensure proper animal welfare standards. The cattle were also fit for transport, calm in temperament and easy to load and discharge. The stockmen managed the

consignment of Friesian dairy heifers well, ensuring the animals had spacious pens, and were provided with replenished saw dust bedding.

It was a concern for animal welfare however that two heifers (one with LSS and one with SEALS), with severe hindlimb injuries unable to bear weight, were discharged. Considering the further challenging transport and handling conditions faced after discharge, their fitness for transport under ASEL and OIE regulations is questionable.

Despite overall ship mortality at a level not considered as unacceptable according to ASEL requirements, several issues were identified as potential non-compliances for one of the four exporters (i.e. SEALS). Sick cattle in hospital pens lacked saw dust bedding despite it being abundantly available, recumbent animals were not given adequate access to water, and 10 acutely sick cattle, despite showing poor prognosis for recovery and imminent death, were not promptly euthanised in consideration for their welfare. No records in the Daily Voyage Reports were made for the Schedule 4 Veterinary medications used on sick or injured cattle. Furthermore, <sup>s47G</sup> cull cows that died due to stress related illnesses, suggested they were not fit to transport. Furthermore, the captive bolt stunner was left unattended by the SEALS stockman over several days on deck.

Poor effluent drainage capabilities of the ship while in port, caused challenging conditions for livestock crew to work during feeding routines. It also contributed to sloppy manure pads and cases where cattle showed visible signs of heat stress.

DECK	AFT	AFT	AFT	AFT	AFT	AFT	AFT TOTAL	FORE	FORE	FORE	FORE	FORE TOTAL	TOTAL
1	446						446	113	294			407	853
2	493	166					659	538				538	1197
3	228	430					658	550	66			616	1274
4	655						655	302	403			705	1360
5	170	383	116				669	135	325	125		585	1254
5 SPEC	491						491					0	491
6	467	155	362	16	73		1073	627	200	144	259	1230	2303
7	53	502	146	289	169	204	1363	989	349	212		1550	2913
8	529	660	231	156			1576	300	680	628		1608	3184
9	381	139	299	658	146		1623	308	166	799	245	1518	3141
													17970

		SEALS	FRONTIER	AUSTREX	LSS	TOTAL	Dk
FD	1	407					
AFT	1	446					
TOTAL	1	853				853	1
FD	2	538					
AFT	2	659					
TOTAL	2	1197				1197	2
FD	3	616					
AFT	3	658					
TOTAL	3	1274				1274	3
FD	4	705					
AFT	4	655					
TOTAL	4	1360				1360	4
5 SPEC	5		491			491	5spec
FD	5	585					
AFT	5	669					
TOTAL	5	1254				1254	5
FD	6	1230					
AFT	6	73	1000				
TOTAL	6	1303	1000			2303	6
FD	7			1550			
AFT	7	555		808			
TOTAL	7	555		2358		2913	7
FD	8			1608			
AFT	8			1576			
TOTAL	8			3184		3184	8
FD	9			308	1210		
AFT	9				1623		
TOTAL	9			308	2833	3141	9
					<b>TOTAL</b>	<b>17970</b>	
TOTAL		<b>7796</b>	<b>1491</b>	<b>5850</b>	<b>2833</b>	<b>17970</b>	

s47G

DECK 1	853
DECK 2	1197
DECK 3	1274
DECK 4	1360
DECK 5	491
DECK 5 SPEC	1254
DECK 6	2303
DECK 7	2913
DECK 8	3184
DECK 9	3141
<b>TOTAL</b>	<b>17970</b>



## INDEPENDENT OBSERVER VOYAGE REPORT

**MV:** Ocean Drover

**VOYAGE:** V180

**Livestock Shipping Services (LSS)  
Frontier International Northern Pty Ltd  
Australian Rural Exports Pty Ltd  
South East Asian Livestock Services Pty Ltd  
LNC-11109, 11108, 11143, 11164**

LOAD PORT: Townsville, Australia

LOAD DATES: start 16:30 on 29/10/2019 completed 23:50 on 30/10/2019

Vessel push off 31/10/2019 at 04:40

UNLOAD PORTS: Jakarta and Panjang, Indonesia

UNLOAD DATES: Arrived Jakarta 6/11/2019 discharge started 23:50 completed 17:00 on 10/11/2019

Panjang: Arrived Panjang 11 /11/2019 at 07:00, discharge start 09:00 completed 11/11/2019 at at 23:30

**REPORT PREPARED BY:**

Independent Observer: [s. 22\(1\)\(a\)\(ii\)](#)

Department of Agriculture



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ATTACHMENT 1 - Compilation of notices of intent to export

ATTACHMENT 2 - Final load plan

ATTACHMENT 3 - Excel calculations to cross check final load plan data

ATTACHMENT 4 - Compilation of daily voyage reports for each exporter

ATTACHMENT 5 - Worksheet to identify raw photo/film images collected by IOS mobile phone sighted within report and submitted on supplied relevant hard-drive

## 1 EXECUTIVE SUMMARY

The Croatian purpose-built livestock carrier, Ocean Drover, owned by Wellards, was built in 2002 and currently sails under the Singapore flag. It consists of nine decks, five of which are fully enclosed, and four open. The ship carrying 17,970 feeder cattle was chartered by four exporters (LSS, AUSTREX, Frontier and SEALS). It departed from Townsville port on 30/11/2019 after a 31-hour loading duration. Loading in Australia was completed without issue, though one animal had a broken leg identified and euthanised once on ship. In Jakarta port 15,452 cattle were discharged over 90 hours.

Discharge in Panjang, took 15 hours for 2,518 cattle. Discharge in Panjang occurred smoothly, and handlers were never seen to use electric prods. In contrast, some Indonesian handlers in Jakarta, were observed using electric prodding on cattle that paused at the ship exit or on the discharge ramp, which caused them to turn. Consequently, several cattle collided with others, fell over and then got trampled by opposite moving cattle.

Areas throughout the ship decks became flooded with heavy effluent during discharge in Jakarta port. This caused challenging conditions for livestock crew during feeding and watering routines. Cattle were also standing in some pens with liquid effluent, fetlock deep, for over 30 hours. Some cattle in these pens also showed heat stress while in Indonesian ports which may have been a result of excess moisture from the effluent.

A wash down on certain decks, improved environmental conditions for cattle on those decks. However, manure pads in some pens not washed, did become heavy and sloppy, particularly along wall pens on lower decks and in corner pens in forward sections of upper decks. These conditions did not appear to cause heat stress.

A general observation was that cattle had acceptable space, feed, and water in accordance with ASEL throughout the journey. A consignment of Friesian dairy heifers exported by AUSTREX were well managed by the stockmen and successfully discharged in Panjang without issue.

A total of 14 cattle died during the voyage. <sup>s 47G</sup>were euthanised due to traumatic injuries <sup>s 47G</sup>LSS and <sup>s 47G</sup>AUSTREX). The <sup>s 47G</sup> cattle died due to what the stockman suspected as being respiratory related illnesses, all of which were SEALS cattle <sup>s 47G</sup> of 325 older cull cows died (i.e. <sup>s 47G</sup>%) from the same SEALS consignment. There was a discussion between stockpersons and chief regarding the suitability of these head for travel. This included insufficient supply of saw dust bedding in hospital pens, lack of care to downer cattle, incomplete and inaccurate record keeping on voyage reports, and delayed or insufficient euthanasia of cattle showing signs of pain and suffering and imminent death. Furthermore, no records were made of veterinary medications used, despite evidence that Flunixinil and Trisoprim was used. At least two heifers



administered with Schedule 4 veterinary drugs were not identified to show that a withholding period of 28 days should pass before slaughter. This is contrary to section 5.8 and 5.9 of ASEL and relevant to guidelines for responsible use of Schedule 4 veterinary drugs. Despite the heifers also showing clinical symptoms suggesting toxicity from medical dosing, deteriorating health, and signs of pain and discomfort, they were discharged. The captive bolt stunner was also left unattended by the SEALS stockman over several days on deck.

Further concerns for animal welfare include the discharge of two severely lame heifers that had non-weight-bearing hind foot lameness injuries (one LSS and one SEALS), that were infected and had a poor prognosis for recovery.

Further issues included potential environmental contamination due to empty drug containers cast on the ground remaining until deck washing. While in Jakarta port, the medical room containing all veterinary drugs was left unlocked during the discharge. Smoking also occurred throughout the livestock decks by many persons during discharge, where cigarette butts were left in saw dusted areas.

## 2. MV OCEAN DROVER V180

The Ocean Drover owned by Wellards shipping company was built in Croatia as a livestock carrier in 2002 and operates under the Singapore flag. Wellards currently charters the ship to other exporters. Nine single tiered decks hold 1411 livestock pens with a total area of 23372.06 m<sup>2</sup> available for holding livestock. The ship is 180 meters long and 31.2 meters wide. Decks 1 to 5 are fully enclosed with solid outer walls (providing a livestock holding area of 8577.04 m<sup>2</sup>). On deck 5 there is an extra section completely isolated from the rest of deck 5, called Deck 5 special. Each of the other enclosed decks 1 to 5 (net livestock holding area 15098.81m<sup>2</sup>), are separated into two holds (forward and aft) divided by a solid wall (with no access doors). Access between forward and aft areas is only possible via deck 6 at the load ramp. Decks 6 to 9 are fully accessible from forward to aft areas, and the outer ship sides have pens with open fences towards the sea. On decks 6 to 9 access lanes occur between each of the outer aisles of cattle pens on either side of ship, and between a double aisle of cattle pens in the ships centre. Only one centre aisle exists on decks 1 and 2.

The ship produces water for livestock via desalination and reverse osmosis of sea water. The water is delivered into 26cm wide, 78cm long, open water troughs in each pen via an automatic refill float valve system. The ship can produce water to fill 4 tanks to a capacity of 2553.98 m<sup>3</sup> with 7 separate hydrophores pumping at 30 (2 pumps), 40 (4 pumps), and 120 (1 pump) m<sup>3</sup> per hour. Two silos can store 2590.71 m<sup>3</sup> each of pellets (i.e. a total 5181.42 m<sup>3</sup>). Pellet fodder gets delivered via gravity feed through metal pipes into two troughs per pen (79cm long and 26 cm wide). The aluminium water and feed troughs hang outwards of each pen into the access lanes, where a space between the rails for cattle to fit their head to eat or drink is 48 cm (and little or no space between the trough base and ground). The pen fences are made of aluminium alloy square profile pipes, resistant to rust. All rails were double hinged and fixed

with pins, with four rails spaced at 24, 28, and 48 cm from top to bottom rails. These can be flipped upside to securely hold sheep when required.

Power for operation of all livestock ventilation, lighting, feed and water is provided by four main engines of which two deliver 1120kw, and two 1280 kw, and a backup engine with a nominal capacity to provide 960 kw. In total there are 84 mechanical ventilation columns (34 for open decks of which 32 are supply and 2 are exhaust; and 50 for enclosed decks, 26 of which are supply and 24 are exhaust). This provides <sup>s 47G</sup>air changes per hour in the enclosed decks, and <sup>s 47G</sup>in open decks. Pen and ventilation designs are uniform throughout the ship with little variation between decks. An emergency ventilation system can deliver <sup>s 47G</sup>pen air changes per hour throughout the decks on the backup power supply.

Floors in livestock pens are covered with an antiskid synthetic structured surface. Floor surfaces around load/unload areas are covered with welded steel square bars 2cm x 2cm in lattice formations. Stock walking ramps are 80 cm wide, and floors fitted with steel 5cm high and wide cleats, spaced 20cm apart.

### 3. VESSEL CREW NUMBERS

The Captain of the ship was <sup>s. 22(1)(a)(ii)</sup> and the Chief Officer was <sup>s. 47F(1)</sup>. The Bosun was <sup>s. 47F(1)</sup>. The 25 Philippine livestock crew were responsible for four daily feedings (i.e. 06.00 - pellets, 10.30 and 13.00 chaff and 15.30-pellets). Several livestock crew checked cattle overnight and ensured top up chaff was fed as instructed.

### 4. LIVECORP ACCREDITED STOCKPEOPLE

There were cattle on the ship from four different export agents. Five accredited stock persons (ASP) worked during the voyage. The ASP for LSS was <sup>s. 22(1)(a)(ii)</sup> <sup>s. 22(1)(a)(ii)</sup> (managing 2,833 head), <sup>s. 22(1)(a)(ii)</sup> and <sup>s. 22(1)(a)(ii)</sup> worked for Austrex managing a total of 5,850 head, and <sup>s. 22(1)(a)(ii)</sup> and <sup>s. 22(1)(a)(ii)</sup> worked for SEALS managing a total of 7796 head (split between them) <sup>s. 22(1)(a)(ii)</sup> was also managing a further 1491 head for Frontier (i.e. he was responsible for a total of 5389 head).

### 5. THE CONSIGNMENT

According to the final load plan the total number of cattle on the vessel was 17,970 head. LSS had 2833, Austrex 5850, Frontier 1491 and SEALS 7796 head. LSS and Austrex cattle came from the registered premises <sup>s 47G</sup> Charters Towers, Frontier from <sup>s 47G</sup> and SEALS from <sup>s 47G</sup> <sup>s 47G</sup> Townsville. LSS had five lines of cattle in three consignments (feeder steers, heifers and bulls -horned and polled) weights <sup>s 47G</sup> to <sup>s 47G</sup> kg; Austrex, seven lines in five consignments (feeder heifers and steers <sup>s 47G</sup> kg); Frontier four lines in three consignments (heifers, polled and



horned steers <sup>s 47G to s 47G</sup>kg); and SEALS ten lines in four consignments (steers, heifers and cows <sup>s 47G to s 47G</sup>kg). All cattle were Brahman or pastoral (Brahman crossbreeds). Austrex also had 146 Friesian dairy heifers of <sup>s 47G</sup>kg average live weight.

Each exporter had their own delivery of pellet mix which ultimately got mixed altogether in the same ship silos. Chaff in plastic wrapped sacks was carried on the top deck of the ship, as was sawdust, with excess fodder left at the voyage end.

## 6. THE VOYAGE

Sea and weather conditions were calm throughout the voyage. Each deck had a fixed thermometer situated in the centre of each deck section (opposite the load ramp). On the daily voyage reports, LSS reported one temperature, Austrex 3 temperatures, Frontier one, and SEALS 12. The warmest temperature conditions recorded on the daily voyage reports were between days 5 and 7 peaking at 31°C dry bulb, 29°C wet bulb, and 86% humidity, recorded on decks 3, 5 and 8. Daily feed and water consumption averaged 37.5 kg fodder, and 24 litres water, per head per day from day 3, increasing to 9.5kg fodder, and 34 litres water, per head per day, by day 10.

Livestock were inspected by the Independent Observer (IO), during morning and afternoon around feeding times, when the accredited stockmen (AS) were also checking cattle. Daily meetings were held at 10.00 attended by the IO, Chief Officer, AS representing each exporter, and briefly by the Bosun (who received instructions on feed and watering regimes at the meetings end). There was generally a positive atmosphere between staff during the meetings and throughout the ship journey. The ship captain and chief engaged with the stockmen relevant to the livestock care routines. Each stockman entered information into a daily voyage report relevant to their consignments onto a computer in the chief's office. The final reports were printed and given to the IO daily by lunchtime. Austrex used a different template for recording compared to LSS, Frontier and SEALS, who all used the same. Austrex included specified records of medications used on livestock, identifying from what deck and pen number cattle came from, what line and type they were, the medication and dosage administered, and for what ailment. LSS recorded what medication was used, but not specifically how much. SEALS made no record in the daily reports of medications used.

Deck washing occurred on decks 1,2,3,4 forward and aft and 5 special deck on November 4<sup>th</sup> (day five), and on decks 5, 6 and 7 aft only on November 5<sup>th</sup> (day 6). The forward section on deck 5 was not washed, due to increasing daily cattle mortality and morbidity levels on that deck prior to washing. Wash down did not occur on decks 7, 8, or 9 because they were first to be discharged in Jakarta, and the manure pad was deemed as acceptable by the stockmen. A decision for deck washing was already decided by day three, so the chief officer could plan the order for emptying water tanks to livestock, and control the ships trim to

facilitate effluent drainage during washing. **Table 1** summarises for each exporter from voyage start (day 1) to end (day 10); the number of cattle with health issues (lameness, shy feeder or ill thrift), mortality by day of occurrence and cause, and the final mortality by total number and percent.

**Table 1:** Morbidity and Mortality by Exporter from voyage start to finish

Exporter	Lame		Shy feeder/ill		Mortality (n), when, why	Total mortality per exporter in Number and (%)
	Start	End	Start	End		
s 47G	1	4	0	0	Day 1, broken leg at load, euthanised	s 47G
	0	2	0	3	Day 4, hip injury, euthanised	
	0	1	0	4	s 47G	
	0	17	0	55	Day 3,4, 5, 6, 8, 9. Suspected pneumonia in cows from same deck area, s 47G steer and s 47G heifer dec s 47G and s 47G steer euthanised due to lameness on deck s 47G	
<b>Total</b>	24		62		14	14/17970 (0.07%)

The Observer did not witness any post mortems, however one recorded in the daily report.

The first port of discharge was Jakarta after seven days of sail. The ship arrived 21:00 on 6/11/2019 and discharge commenced at 23:50. It was completed on 10/11 at 17:00. The total discharge time in Jakarta was 90 hours where a total of 15,452 cattle were unloaded. This consisted of all LSS cattle on deck 9; the majority of cattle on deck 8 for AUSTREX (s 47G of 3184 head); all SEALS cattle from deck 7, and a further s 47G of 2509 head for AUSTREX; all Frontier and most of SEALS cattle on decks 6, 5, 4, 3 2 and 1. The vessel sailed on for a further 10 hours, arriving to Panjang at 07:00 on 11/11/2019. Discharge commenced at 09:00 and was completed by 23:50 on 11/11/2019. The total discharge time was 15 hours in Panjang. A total of s 47G cattle were discharged for AUSTREX and SEALS from decks 7, 8 and 4. The dairy heifers for AUSTREX on deck 7 were discharged first in Panjang, which was completed within one hour.

Communications were easy going and professional during the voyage and when information was required, both the shipping staff (Captain, chief mate, and chief engineers) and most of the stockmen were easy to approach, and always helpful to supply information as requested.



## 7. PHOTOGRAPHS, FILMS AND ATTACHMENTS

Please refer to the supplied hard drive where **77 photo images** and **19 films** are sighted throughout the report in numerical chronological order. This includes a folder with ten selected photos to represent cattle managed by different exporters, on different decks, throughout the voyage. Five attachments include **Attachment 1**- Notices of intent to export for each exporter; **Attachment 2**- A copy of the ships final load plan; **Attachment 3** - An excel file cross-checking livestock numbers per exporter, deck and discharge port; **Attachment 4** - Daily voyage reports compiled for each exporter and **Attachment 5** - A worksheet detailing raw photo and film images from the IOS mobile phone identified within the report, showing the dates and times of when the images were recorded throughout the voyage.

## 8. OBSERVATIONS AND COMMENTS

### a. Documentation

All appropriate documentation was supplied to the IO prior to departure by each exporter. Supplementary documentation was supplied for the care of the Friesian dairy heifers (specifying extra saw dust and space requirements), which Austrex fully adhered to. A copy of sheets detailing notices of intent to export were given to the IO by the government export veterinarian <sup>s. 47F(1)</sup>

**Attachment 1**. When tallied for each exporter, the total number of 18,258 head of cattle was authorised for export on the Ocean Drover. This total did not correspond to the final load plan (**Attachment 2**) given to the IO by the ships chief officer, where 17,970 head were recorded as being loaded (i.e. 288 less cattle compared to the tallied number of cattle on the notice of intent to export sheets). The load plan was missing some information about deck identification correlating to total livestock numbers. The errors are highlighted and identified on the load plan sheets. Due to this, extra calculations were made to cross check livestock numbers per exporter for each deck section, and per discharge per port. It was identified that the calculations were correct. (**Attachment 3**). The daily voyage reports for each exporter is compiled in **Attachment 4**.

### b. Loading

Handlers in Townsville were never observed using electric prods during truck dispatch and ship loading. Cattle were managed calmly yet efficiently. One animal with a broken leg identified at boarding late in the evening of November 30<sup>th</sup>, was euthanised on ship with a captive bolt by one of the ASP.

A potential hazard for livestock injury was identified where two sections intersected on the load ramp (from the port to ship sections) loosely fastened together with hay twine. Some cattle were hit by the flapping walls as they passed this intersection see **Film 1- Load: Unsecured ramp walls**. After ship loading it was noted that three larger framed cattle had haematomas around the hip and thigh areas - see **photo 1 to 3**. It is conceivable these injuries occurred due to hits from the unsecured load ramp walls. This was an observation made retrospectively after reviewing the footage and photos. No discussion took place at the time.



c. Pen construction

On open decks situated where load/unload areas existed, several cattle pens had floor surfaces covered in metal gridding and other protrusions 2 to 3cm in height (**see photos 4-6**). This was identified as a hazard for cattle. Although it was not known if lame cattle in nearby hospital pens came from these pens, it could be worth noting in future, so that management strategies such as laying sawdust, could mitigate injury risk. The Chief was advised of the floor surfaces.

A further hazard for cattle injury was identified in several pens where gates were left on the ground (**photos 7 to 9**). Cattle were observed slipping on the gates **Film 2- Gates on ground**. On deck 5 forward in a nearby hospital pen, a heifer that had been residing in a pen with a gate on the ground, did have a major laceration to the hind coronet band (**photo 10 & Film 19**). A crew member was advised of the gates however there was no change to the conditions of the pen.

d. Ventilation

Ventilation was satisfactory throughout most of the ship. However hot areas were identified where cattle did show heat stress at times throughout the voyage. A hand-held kestrel was used to register the climate in these areas. Hot pens were identified in the back-aisle pens on decks 4 aft, on deck 5 forward beside the hospital pen along the short side of the aft section, and in corners pens along the ship sides in the forward sections of the open decks. The hottest area recorded throughout the voyage was on 9<sup>th</sup> November in Jakarta port on deck 6 forward (i.e. 32.1°C dry-bulb, 30.6°C wet-bulb, humidity 94%) and cattle showed elevated respiration rates and oral drooling - see (**Film 3 – Hot areas on ship**). Some dairy heifers on deck 7 showed heat stress score of 2 whilst in Jakarta port on November 7<sup>th</sup>. However, as extra pens became available from cattle discharged in Jakarta, the dairy heifers were given more space by the Stockpersons opening gates into vacated pens. This appeared to alleviate heat stress signs in heat-challenged animals, and in Panjang, the heifers were the first to be discharged. This was coordinated by the Stockpersons.

e. Feed/Water/Pen management

Feed regimes were normal, with most cattle adapting efficiently to pellet rations, despite that all the pellets from the different exporters got mixed together (**photo 11**). Water refill rates in many automatic troughs was noted as being slow throughout the ship. Water levels were often not more than 5cm full in many automatic troughs. Several malfunctions were observed where automatic troughs were empty or leaked **photo 12 to 14** and **Film 4-Water troughs**. There was no identifiable significant welfare concerns as a result.

Hospital pens for LSS, and AUSTREX appeared adequately managed with sawdust (**photos 15, 16**) and livestock given suitable access to chaff. There was no sawdust in hospital pens managed by SEALS on decks 2 and 5 forward which contained lame cattle, (**photos 17 to 19**).



f. Cattle management (sick/injured/dead)

There were cattle loaded which included a SEALS cow with lumpy jaw/actinomycosis (photo 62), an LSS heifer with an infected, swollen hind fetlock on account of a missing claw hoof that resulted in non-weight bearing lameness (photo 63), and bulls from SEALS with bleeding horn buds due to horns being cut too short. See Film 19 and photos 64 & 65

Two heifers with severe hind foot injuries (managed by LSS and SEALS stockmen), showed no signs of improvement despite treatment over many days during the voyage. The wounds showed signs of infection (**photo 66, 67**) and the animals showed behaviour indicating pain and discomfort, where they were unable to bear-weight and walk on the affected limbs (**Film 18 - Lamé heifers discharged**).

An incident occurred on deck 5 forward, on 1<sup>st</sup> November at 16:00, when the IO identified a downer cow. The IO notified a nearby livestock crew member who confirmed he had already informed the accredited stockman s. 22(1)(a)(ii) – who was on the same deck at the time of the incident) that the cow was down. The crew member was knocking a metal feed delivery pipe with a hammer to clean it of residual fodder, which caused the cattle to race around the pen, trampling the downer cow. s. 22(1)(a)(ii) could be seen two aisles over on other side of the deck, and a high activity level amongst the cattle where he presumably was moving amongst them. Due to concern for the downed cow being further trampled, the IO yelled across that the cow needed immediate assistance. He acknowledged that he was aware of the cow, but he did not come over to assist her for a further 30 minutes (**photo 20**) and (**Film 5 - Trampled downer cow**). During which time the cow got further trampled. Eventually the stockman pulled the cow over to sternal position and isolated her from the other cattle by placing gates around her. By this time, she was in a state of shock, unable to stand, and it was at ten hours before she was moved to the hospital pen. She remained severely tucked up and depressed during the rest of the voyage (**Film 6 - Trampled downer cow during voyage**) and **photo 21**. At 23.25 on the same day (1/11), it was noted that a cow was dead in the pen area where the stockman had been interacting with the cows earlier (**photo 22**). s. 47G cows died in that same pen on November 2<sup>nd</sup>, 6<sup>th</sup>, and 7<sup>th</sup>. s. 47G cow was filmed displaying a low level of responsiveness when signs in the above-mentioned pen on November 4<sup>th</sup> (**Film 7- Sick cow 1**). She was never placed in a hospital pen and was found dead on November 6<sup>th</sup> - see **Film 8 - Sick cow 1 dead**.

A recumbent cow (SEALS) in the hospital pen was filmed at 18:09 on November 5<sup>th</sup> see **Film 9 - Sick cow 2**. She displayed severe depression, difficulty breathing, and nasal/ocular discharges. During several inspections earlier that day, the cow remained recumbent in the same position, and water was not offered within access to her, considering she was recumbent. By 6<sup>th</sup> of November at 05:03, she was found dead in the same position as she was filmed 12 hours earlier see **Film 10 - Sick cow 2 dead**. Her position indicates a failed attempt to

reach water. Her back legs were underneath her body but splayed, and her head and neck outstretched, less than a meter from the water trough see **photos 23, 24**. To gain access to water she needed to place her head between the fence rails. This pen only had one water trough and cattle were required to place their head between the railings to reach this trough. There was up to 10 head in this pen.

**s 47G** cow found dead and identified by the IO on the November 7th at 16.30, was not removed from the pen until the following morning at 07.00. It had died in a position that reduced access of the other cattle to the feed/water troughs and it created an injury risk for the other cattle tripping over it- see **photo 25**.

**s 47G** other cows were placed in the hospital pen (on deck 5 forward), where they remained recumbent over several days. . t. This is shown in films collected on 4<sup>th</sup> November at various times of the day, which show rapid deteriorated health – see **Film 11 – Acutely sick cows** <sup>s 47G</sup> and <sup>s 47G</sup> They displayed stagnated respirations (difficulty breathing), severe depression, sunken eyes, and no reactivity to touch stimulation of the face or eyes. Due to the Observers concern for the welfare of these cattle, images were sent to the daily contact via WhatsApp questioning whether they shouldn't be euthanised. A phone discussion took place with Departmental vets **s 22(1)(a)(ii)** seeking further opinion around Euthanasia. By 5/11, **s 47G** cattle had died **photos 26, 27**.

On the same deck (5 forward - SEALS), two other cattle (heifers) were placed in the hospital pen on account of lameness, according to daily voyage reports (**Attachment 3**). Over a period it was noticed that they both developed unusual clinical signs i.e. arched back, splayed leg stance, outstretched neck, head down, drooping ears, severe listlessness, respiration rate >100 per minute and difficulty walking - see **Film 12- sick heifers 5 and 6**. When the IO asked what the stockman <sup>s 22(1)(a)(ii)</sup> had treated them with, he indicated both had been treated with Flunixin and Trisoprim (Schedule 4 veterinary drugs). When reading the label directions from the empty bottles left by the pen, it stated that negative reactions can occur due to overdosing or mixing with other medications (**photo 28**). The heifers did not improve and continued to show signs of pain and discomfort prior to discharge. The clinical signs (as above) suggested toxicity related gut problems. This was a concern for the Observer due to the anticipated level of further handling and long transport times in Jakarta.

On November 6<sup>th</sup> another SEALS heifer was noticed in the hospital pen (deck 5 forward) as having a deep gash to her coronet band see **photos 32, 33**. The heifer showed signs of severe pain and discomfort see **photo 34** and **Film 13: Heifer with cut coronet band**. The wound became covered in dirt, and there was no evidence of it being cleaned or treated with topical ointment. The heifer was unable to bear weight on the injured foot, even up to the day of discharge see **photo 35**. Daily reports also showed no record of entry for this lame heifer, or if she was treated with medication see **Attachment 3 - Daily report SEALS Deck 5 Forward**.



On the 8<sup>th</sup> of November at 16.30 a SEALS steer on deck 4 forward, was identified with extremely swollen knee and fetlock joints see **photos 36 to 38**. The animal showed symptoms of being in acute pain, these were vocalisations, eyes rolled back, head tilted backwards and lying down. See **photo 39** and **Film 14 - Steer with swollen joints**. He was not placed in a hospital pen during several days of observations and there were no records in daily report of this steer being lame, until on 10/11 when it was euthanised.

s 47G (above mentioned) of 325 SEALS cows from the same consignment located in proximity on deck 5 forward, died by the voyage end, and s 47G 47G showed continued signs of illness at discharge. This s 47G % mortality and 3.4% morbidity within this cattle consignment was an animal welfare concern. Given that the cows were s 47G according to brand marks), and had a nervous disposition, indicating a possible lack of exposure to previous handling conditions pre-shipment. .

All cattle that died in port areas were removed and stored in a refrigeration container on the upper ship deck 10 (**photo 40, 41**), where they were later disposed out to sea.

g. Deck conditions

The wash down on day 5 and 6, improved the air quality and manure pad conditions for cattle on the decks. Deck 5 forward was not washed based on a decision from the SEALS stockpersons that cows on that deck would be too stressed as a result. Pens along the wall on port and starboard sides did consequently develop heavy sloppy manure pads by day 7. However, the cattle did not show signs of heat stress. See photos in mics section of media supplied.

During discharge in Jakarta port, many alley ways between cattle pens, especially on the port side, filled with cattle effluent. Aisle pens with cattle at the aft area on decks 6 and 7 became completely water logged, see **photos 42 to 44**. The effluent caused challenging conditions for livestock crew to work during feeding routines, especially as it was up to 20 cm deep in places. The Observer could not attain a specific reason for this effluent build up.

On deck 6 in the aft section approximately 24 hours later **Film 15 - Water leaks** shows water leaking out of a major scupper pipe and from several troughs. The IO brought up concerns of the effluent build up on decks in port with the chief officer and asked if there wasn't a tank system to capture the overflow to later discharge out to sea. The chief explained that there was, but that it was full.

According to sections 6.2 of the Maritime Orders, fluids should be kept clear of pens and associated work and access spaces. Section 6.5 states also that strainer plates should be placed over drains in passageways to avoid causing injury. In Jakarta port, during discharge, several drain openings were left uncovered (**photos 45**). In some places these open drainage holes became submerged with effluent and were obscured (**photo 46**).

Also, during a period of 12 hours, a plastic grid covering was placed over one of the 2-meter square access hatches between decks, without any rigid under support (**photo 47**). This posed a risk for any persons that stepped on it (not realising it was unsupported), as they would have fallen through to the below deck (**photo 48**).

Despite signs stating no smoking was permitted throughout the decks, Indonesian port crew were observed frequently smoking throughout decks, and butting cigarettes in sawdust (posing an obvious fire risk) see **photos 49, 50**.

#### h. Discharge

Handlers in Panjang port, were observed working patiently with cattle at discharge. Even if cattle balked and refused to move, the handlers patiently used flapper sticks which worked effectively. In contrast, in Jakarta Indonesian handlers were frequently observed using electric prods indiscriminately on both face and body inside the ship and on the ramp. **Film 16 – Jakarta cattle discharge** shows cases where electric prodding was used, as well as cattle that went down on the ships unload ramp and were trampled or collided with cattle moving the opposite direction photos **51 to 55**.

Several hazards for causing injury to cattle were identified at discharge, and this included a piece of wood loosely fixed at the bottom of the load ramp, where cattle hit their hip, and a piece of wire across the path of cattle just before entering trucks **photos 56, 57**. There were also up to 15 people at any one time, standing on the ramp and platform roof near the truck entrances. This frequently caused discharging cattle to stop, and consequently receive electric prodding to force them forward – **see photo 58**.

In Panjang in the early morning of discharge, the sun cast a shadow at the ramp end (**photo 59**). A plastic green sack, potentially filled with sand and used as a weight, was placed to stabilise part of the ramp. This combined with the effect of the shadow, caused cattle to balk, then jump over the sack resulting in cattle slipping heavily afterwards as they departed the ramp (**Film 17 – Panjang discharge**).

## 10. CONCLUSIONS

Most cattle during the voyage were quick to adapt to pellet feed and the ship environment. The livestock crew worked effectively to maintain as best as possible conditions as they could for the livestock. The shipping pens were generally well structured, and ventilation systems worked effectively to minimise heat stress in cattle. A build-up of effluent in Jakarta port, created challenging conditions for the livestock crew. Cattle in some pens were also standing in liquid effluent for over 30 hours. Some cattle in these areas also showed elevated panting scores indicative of heat stress.



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A total of five accredited stockmen accompanied the livestock. One stockman managed the 2833 head for LSS, two managed 5850 head for AUSTREX, one managed 3899 head for SEALS, and one managed 5389 for SEALS and Frontier.

LSS and AUSTREX stockmen, maintained good daily voyage reports. AUSTREX recorded excellent records for veterinary medications used (dosages, on what animals, on what decks and for what reason). They also maintained the hospital pens in good order, ensuring cattle had good space, access to feed and water, and an adequate level of saw dust bedding, which was frequently replenished. They also responsibly euthanised an injured animal mid voyage, to ensure proper animal welfare standards. The cattle were also fit for transport, calm in temperament and easy to load and discharge. The stockmen managed the consignment of Friesian dairy heifers well, ensuring the animals had spacious pens, and were provided with replenished saw dust bedding.

It was a concern for animal welfare however that two heifers (one with LSS and one with SEALS), with severe hind limb injuries unable to bear weight, were discharged. Considering the further challenging transport and handling conditions faced after discharge, their fitness for transport under ASEL and OIE regulations is questionable.

Despite overall ship mortality at a level not considered as unacceptable according to ASEL requirements, several issues were identified as potential non compliances for one of the four exporters (i.e. SEALS). Sick cattle in hospital pens lacked saw dust bedding despite it being abundantly available, recumbent animals were not given adequate access to water, and 10 acutely sick cattle, despite showing poor prognosis for recovery and imminent death, were not promptly euthanised in consideration for their welfare. No records in the Daily Voyage Reports were made for the Schedule 4 Veterinary medications used on sick or injured cattle. Furthermore, [s 47G](#) cull cows that died due to stress related illnesses, suggested they were not fit to transport. Furthermore, the captive bolt stunner was left unattended over several days on deck.

Poor effluent drainage capabilities of the ship while in port, caused challenging conditions for livestock crew to work during feeding routines. It also contributed to sloppy manure pads and cases where cattle showed visible signs of heat stress.