Federal Court  Cour fédérale

Date: 20140307

Docket: T-970-08

Citation: 2014 FC 6

Ottawa, Ontario, March 7, 2014

PRESENT: The Honourable Mr. Justice Harrington

ADMIRALTY ACTION *IN REM* AND *IN PERSONAM*

BETWEEN:

OCEANEX INC.

Plaintiff

and

PRAXAIR CANADA INC.
AND THE OWNERS AND ALL OTHERS
INTERESTED IN THE TANKTAINER "C-156"
EX THE SHIP M.V. "CABOT"
AND THE TANKTAINER "C-156"
EX THE SHIP M.V. "CABOT"

Defendants

AND BETWEEN:

PRAXAIR CANADA INC.

Plaintiff by Counterclaim

and

OCEANEX INC.

Defendant by Counterclaim

AMENDED REASONS FOR JUDGMENT AND JUDGMENT

[1] This case is about liquid oxygen which leaked from a cryogenic tank container while on board the m.v. Cabot. As a result, part of the Cabot's deck and shell plating became extremely brittle and fractured. Her owners, Oceanex, have taken action *in rem* and *in personam* for the cost of repairs and for net revenue lost during that downtime. The defendant, Praxair, the bailee in possession of the tank, alleges that the leakage was caused by rough and improper handling by Oceanex or by those for whom it is responsible. It has counterclaimed for the cost of repairs.

[2] The Cabot set sail from Montréal on 11 December 2007 bound for St. John's, NL, with a mixed cargo of rolling stock and containers. All went well until, during cargo operations at St. John's in the early morning of 15 December, a loud unusual bang was heard.

[3] The ship's watchkeeper, who was forward on the weather deck, thought that perhaps a container had been dropped. However, he could see nothing amiss ashore. The officer of the watch, and longshoremen who were working down below in the after part of the main deck, which runs the entire length of the cargo space as the Cabot is a ro-ro ship, heard the noise coming from forward. Upon coming underneath container Bay 2, they observed cracks in the weather deck plating, so much so that the sky could be seen. A snow-like substance was falling down and sizzling when it landed on the main deck. They also saw a crack in the side shell plating which was opening and closing by as much as two inches.

[4] The officer then called the watchman on the weather deck. He proceeded to Bay 2 where he could see a substance falling down through cracks in the deck plating.

[5] The ship was immediately evacuated. No one was hurt. Cargo operations were halted. The ship's crew then stopped the cracks from propagating by drilling holes at their ends. The master adjusted the ballast to minimize the width of the cracks. It turns out that the defendant's 20-foot tank container, filled with liquid oxygen, had just been discharged from Bay 2. It was seen spewing its contents on the dock. It was then removed to an isolated part of the terminal.

[6] An ice-like substance coated the weather deck in the general area where the container had been stowed. As confirmed by a metallurgists' report prepared by Eric Duchene and Gilles L'Espérance, of the École Polytechnique de Montréal, the likely cause of the fracturing of the Cabot's plating was that it had become extremely brittle after coming into contact with liquid oxygen which boils at a temperature of -196 degrees Celsius. I so find.

[7] As she was then unseaworthy, the Cabot underwent immediate repair at St. John's. Her owners, Oceanex, have taken this action *in personam* against Praxair, which held the container under a net lease from Neptune Leasing Inc., and *in rem* against the container itself. The claim is for the cost of repairs, direct expenses related thereto, and for loss of net revenue as the Cabot was unable to trade for some nine days. Although the container was served *in rem*, it was never arrested. It was eventually, on consent, returned to its owners in the United States and is said to be back in trade. Praxair has undertaken to assume such *in rem* liability as there may be, so that for all intents and purposes the action *in rem* is now moot.

[8] As mentioned above, Praxair has denied liability and as bailee in possession has counterclaimed for damage to the container. It is so entitled in accordance with the *The Winkfield*, [1902] P 42, 9 Asp MLC 259, [1900-3] All ER Rep 346.

[9] The Court is called upon to find, if it can, why the container commonly known as C156 leaked, and to determine the legal consequences flowing therefrom.

[10] There are two prime competing theories. Oceanex submits that a valve or valves behind the cabinet doors on one side of the container were not sufficiently tight to withstand the normal rigours of transit by water. They are bolstered in this view by the fact that two valves leaked some two months earlier, but only one was tightened. On the other hand, Praxair's premise is based on the fact that the bottom lengthwise railings of the frame of the container had been set up with a sideways motion to the right. This led to a misalignment of the piping and put undue pressure on various valves, thus leading to the leak. The railings were set up because the container was either dropped or set down heavily while in the custody of Oceanex or its subcontractors.

[11] In the event that the cause of leak cannot be determined on the balance of probabilities, both parties rely on the burden of proof.

[12] I shall first describe the container and then break down its history into three parts: its history before the fateful voyage 48 during which liquid oxygen leaked onto the deck of the Cabot; voyage 48; and the subsequent inspection and testing. Once the cause of the leak is determined, I shall deal in greater detail with the legal relationship between the parties, damages, interest and costs.

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I. Tank Container C156

[13] C156 is a 20-foot cryogenic intermodal portable tank container built in 2005 by Cryogenic Vessel Alternatives, Inc. in Texas. Its customer was Neptune Leasing Inc. The tank itself is a 20-foot cylinder fitted into a standard container frame some 20 feet in length, 8 feet in width and 8 feet

six inches in height. The frame is fitted with eight corner posts which extend slightly beyond the railings, also called angles, which are made of sturdy steel.

[14] Gases in liquid form, such as oxygen, nitrogen and argon, are carried within an interior pressurized vessel. A number of insulators help maintain the extremely cold temperatures required, but the main means of keeping such cold temperatures over a long period of time is a vacuum between the inner vessel and the outer shell. The container was designed to hold liquid nitrogen for up to 66 days and liquid oxygen for up to 97 days.

[15] Behind three cabinet doors, on the bottom half of one side of the outer shell, are an array of pipes and valves which serve various purposes. On the other side are a series of fins through which liquid decanted from the inner vessel may be circulated so as to increase temperature and thus return to its natural gaseous form. On reinsertion into the inner vessel, the gas helps build up pressure, which may facilitate the discharge of the cargo. At the top of one end of the container are relief valves similar to those on a pressure cooker, designed to allow gas from within the inner vessel to escape should the pressure therein exceed 144 psi. There is also a plate which is held in place by suction, which indicates that the space between the inner vessel and the outer shell is under vacuum.

[16] A drip pan is attached to the bottom railings underneath the cabinet doors. Its purpose is to catch any minor leakage from various valves and to prevent road dirt and the like from coming into contact with the valves. It has no structural value.

[17] The container, model number CVA-6K-144-ISO, was designed to the *United Nations Portable Tank Rules* and approved by the United States Department of Transportation. Canadian Department of Transport's approval was only obtained after the incident. However, no legal consequences flow therefrom.

II. Pre-Voyage History

[18] Praxair leased the container, which it designated as C156, from Neptune Leasing in 2005. It was delivered brand new to Praxair's premises in the east end of Montréal that autumn. Praxair had a new customer in Newfoundland who required regular deliveries of liquid nitrogen. Service began in February 2006.

[19] C156 was only used to carry liquid nitrogen, and later liquid oxygen, to St. John's. The only carrier was Oceanex - either on the Cabot or on its other ship which sailed between Montréal and St. John's, the Avalon.

[20] Although Praxair and Oceanex are not in full agreement as to the content of their contract, there is no disagreement as to what happened in fact. Shipments were on a house-to-pier basis, from Praxair's premises in Montréal to Oceanex's terminal in St. John's. Praxair paid freight which covered movement from Montréal and back again. Leaving aside the initial carriage, on which memories are a bit unclear, the arrangement was such that on return of the empty container from St. John's it would be stored without additional charge at a terminal operated by Oceanex's stevedores, Empire Stevedoring. When the container was needed, Praxair would telephone Oceanex who would

dispatch a cab and chassis, at its expense, to Empire's terminal. Empire would use a top lifter to place the container on the chassis. The driver would then proceed to Praxair's premises and stand by while the tank was being filled. Thereafter, he would return to the Empire terminal. Depending on the state of loading, the container would either be taken directly from the chassis and put on board or placed in an area of the terminal designated for dangerous goods. From there, it would be brought to ship's side by a top lifter.

[21] Empire would then load the container by means of a gantry crane and place it upon designated container fittings on board. Regulations required that the container always be stowed on deck.

[22] After a voyage of approximately 65 hours, depending on weather, the ship would arrive at St. John's. The container would be discharged by crane at Oceanex's terminal by Oceanex's in-house longshoremen and either placed directly on a chassis maintained by Praxair's trucking company, Quinnsway Transport, or landed pending Quinnsway's arrival. Quinnsway would then deliver the cargo to Praxair itself, or to Praxair's customers. In the normal course, the empty container would be returned to the Oceanex terminal where longshoremen would offload it and either place it directly on a ship for the return voyage or land it pending the ship's arrival.

III. The October Leak

[23] C156 had been shipped from Montréal to St. John's with a cargo of liquid nitrogen in late August 2007. It remained in the St. John's area, partially filled, for some time. On 12 October 2007,

C156, which had then been in Quinnsway's yard for approximately three weeks, developed a leak from the bottom of the piping compartment. Liquid nitrogen was running out and down to the ground. There was a considerable cloud of fog. Eventually, the cabinet doors were opened and a vent valve was adjusted to blow down the pressure which had been at 144 psi, liquid level 40 inches. Based on the testimony of the two individuals who first dealt with the container, as well as Dave Harbec, Praxair's transportation manager, eastern region, who was constantly taking phone calls and making contemporaneous notes, and upon the photographs taken, I find that the leak emanated from the two-spring operated "fire block valves". Daniel Axworthy, a service technician for Praxair, was sent from Halifax to investigate. He was told that only one fire block had leaked. He simply tightened or "snugged" the nut of that fire valve.

[24] The fire block valves are fitted with a fusible link which melts at a relatively low temperature. Their purpose is to seal the tank should there be a nearby fire. Liquid gases could fuel a fire with disastrous consequences. The larger of the two valves identified as V1 on the piping arrangement plan is a two-inch valve. The smaller one inch valve, known as V2, sits to its right. These two valves are quite distinct in appearance from the other valves as their actuator tops resemble yellow mushrooms. Mr. Axworthy recalls that he only snugged the nut on V1.

[25] Oceanex was not informed of this incident.

IV. The Switch from Nitrogen to Oxygen

[26] C156 was returned to Montréal on 22 October 2007. By then, demand for Praxair's product in Newfoundland had changed so that C156 was converted to carry oxygen, rather than nitrogen.

This required a change of brass fill connections. Oxygen and nitrogen have unique fittings so as to ensure that the wrong product is not delivered, with potentially deadly consequences. The oxygen fittings are bigger.

[27] This conversion was carried out by one of Praxair's mechanics, Pierre Lallemant. Prior to the conversion, he pressured up the inner vessel and found no signs of leakage. He then changed the fittings, which required some manipulation on his part as he did not have all the necessary pieces at hand. In particular, an inverted U-bolt which connected the drip pan, the bottom railing of the frame and the piping, was found to have been cracked. After inserting the larger oxygen fittings, he tried to force it back in place, but it broke in two. The bracket below the larger fill connections comes in two parts in order to accommodate different sizes. It had to be adjusted. Nevertheless, he believed the piping was secure. Part of the work required the use of a three-foot wrench which gave rise to considerable discussion by the experts.

V. Voyage 48

[28] As expert opinions had been exchanged more than two years prior to trial, and given that Oceanex had properly taken Praxair's expert Keith Hall to suggest that C156 had been dropped or set down heavily in connection with voyage 48, that voyage was described in excruciating detail. The truck driver who picked up the empty container at Empire, and brought it to Praxair where it was filled by the same Mr. Lallemant, the various longshoremen involved in the reception of the container back at the terminal, the loading on board and securing, as well as the crew who described the calm voyage, testified in detail, as did the longshoremen at St. John's.

[29] Mr. Lallemant described the loading procedure. The cab and chassis were brought to the filling station. The wheels were chalked. The chassis was simply a frame, so it was possible to inspect the bottom of the container. However, neither the bottom nor the top were examined. He walked around looking for obvious damage and verified that the vacuum plate was in place. He understood he was to ignore any indents of less than two and a half to three inches. He believes there is something in writing to that effect, but no such document was produced by any of Praxair's witnesses.

[30] He sealed the cabinet doors. He and the driver exchanged documents. He inadvertently described the cargo as liquid nitrogen, but the required placard indicated liquid oxygen, and Oceanex was aware it was to carry liquid oxygen. Nothing turns thereon. The interchange receipt is clean. The receipt is not relevant as any damage to the piping system was concealed.

[31] C156, containing liquid oxygen, was shipped out of Montréal on 25 October2007, returning 12 November 2007, then shipped again on 15 November 2007, returning 26 November 2007, both times without incident.

[32] I am satisfied that the setting up of the bottom rails of the container in way of the piping did not occur during or in connection with voyage 48. As shall be seen, the setting up had to have occurred at least two months earlier.

[33] There were two incidents during the voyage which bear mention. The first is that while making rounds before arrival at St. John's, the chief officer noted some smoke coming out of a relief valve at the top end of C156. However, this is an ordinary occurrence. Normal ship movements may well contribute to the build up of pressure within the tank. Nothing was made of it by him, or by me.

[34] The other is that one of the longshoremen, who were unlashing cargo prior to discharge, saw a glassy substance on the weather deck in the vicinity of C156. He thought nothing of it and did not report it. This might have been a few hours before C156 was discharged. However, there is no evidence that earlier discharge would have made any difference.

VI. Inspection at St. John's

[35] The incident occurred shortly before 04:00 hrs local time. Larry Gosling, Oceanex's pier superintendent, was called at home at about 04:15 hrs and arrived at the pier half an hour later. He first met with the master who stated that the cargo operations had ceased as he had adjusted the ballast in an effort to close the cracks in the shell plating, and to keep them away, as far as possible, from the water line.

[36] At approximately 07:00 hrs, Quinnsway's driver, Dean Simms, arrived and pried open two of the three compartment doors. It was Mr. Simms, who had received some training from Praxair, who identified a fire block valve which was leaking two steady streams of liquid. As confirmed by a photo taken by Mr. Gosling, the leak was from the larger fire block valve, V1, the one snugged by

Mr. Axworthy two months earlier. However, although not 100% certain, Mr. Gosling believes that the smaller fire block was also leaking. Mr. Simms is not certain if the smaller valve was leaking. On the balance of probabilities, I find that V2 was also leaking. Mr. Simms opened a valve to depressurize the tank. Nevertheless, leaking continued for hours. Subsequent examination showed that there was no fractured piping.

[37] Frost could be seen everywhere within the compartment. As later explained by Oceanex's expert, John Davis, the frost was water vapour, not liquid oxygen. Given the difference between the temperature of liquid oxygen and the ambient temperature, condensation would occur. This is similar to what happens when one takes a bottle of liquid out of a refrigerator on a warm day.

[38] Dave Harbec was quarterbacking Praxair's operations from Montréal. All the appropriate authorities were notified. He was in constant communication with Mr. Axworthy, who lived in the Halifax area, and with Keith Pike who was Praxair's Newfoundland territorial manager. Mr. Pike was asked to go to the site. According to the security log, he arrived at 09:09 hrs. He would take notes about the pressure and liquid levels showing on the gauges and then report to Mr. Harbec. After the leak had stopped, Mr. Axworthy advised what tools would be necessary in order to tighten a packing nut. Mr. Pike believes he tightened V1, the bigger mushroom valve, but is not absolutely sure.

[39] C156 was examined that day and on subsequent days after it had been brought to Praxair's yard. William Maybee, who is a marine surveyor and engineer, was retained on behalf of Oceanex to survey the damage to the ship and to examine C156. He does not purport to have any specialized

knowledge with respect to cryogenic vessels, but has observed damage to ships and cargo over the years. I qualified him to testify as an expert based on his experience as a marine surveyor and his training as an engineer.

[40] Robert Hollings was retained on behalf of Praxair. He is also an experienced marine surveyor but was not called as an expert witness.

[41] Both took a great number of photographs which proved useful in appreciating the structure of the container and the location of various valves. However, given that there had been leaking for several hours before the compartment doors were opened but had stopped before their inspections, these photos, unlike Mr. Gosling's, do not lend themselves to a finding as to the source of the initial leaks.

[42] On 27 December after the tank container had been emptied and defrosted, Mr. Maybee noted that the bottom of the piping compartment cabinet was indented and set up. The deformation to which he referred was to the drip pan and was approximately three feet inboard from the railing of the container frame itself. It was not visible when the tank container was either on the ground or on a flat bed trailer. He thinks that none of the damage noted in way of the valve cabinet, which he considered to be minor, contributed to the leak. He was of the view that the December leakage arose from insufficient or improper tightening of the packing gland nut on one or both of the two fire block valves. This was an inference on his part given that he considered the blemishes on the tank container itself were not causal.

[43] Mr. Hollings, who also has an engineering background, first inspected the container after it had been moved, with Transport Canada authorization, to Praxair's yard at Mount Pearl. Like Mr. Maybee, he is not a specialist in cryogenic vessels, but has been a marine surveyor for many years. He also noted that the bottom of the drip pan was distorted, which he initially attributed to normal wear and tear.

[44] Mr. Harbec arrived on the scene on 27 December. In the presence of Messrs Maybee and Hollings, he read the pressure in the vacuum by means of a Hastings vacuum gauge. The valve between the tank and the thermo couple was not as tight as Mr. Harbec would like, but no one has suggested that this played a role in the leak. The gauge indicated one thor, while the preferred level would be 0.01 to 0.1 thor or 10 to 100 microns of a millimetre of mercury. Mr. Harbec was concerned that the vacuum may have been compromised. In such event, the space between the inner vessel and the outer shell begins to take on the ambient temperature. This leads to heat build up within the vessel, which causes the liquid oxygen to begin to boil, which in turn leads to an increase in pressure.

[45] Praxair decided to bring the tank to its premises in Oakville, Ontario, where it could be properly examined indoors. By this point, Oceanex had decided to no longer carry Praxair's products. The container therefore was moved by road to Port Aux Basques, carried on a Marine Atlantic ferry to North Sydney, and from there trucked to Oakville.

VII. The Inspection at Oakville

[46] The container was removed from its chassis and examined indoors at Praxair's premises in Oakville on 8 and 9 January 2008. There was still some concern that the vacuum of C156 had been compromised, and as Praxair was not licensed to carry out the further work required, it decided to send the container to Bédard Tankers in Montréal. However, the container was closely examined by Praxair's personnel, Keith Hall, a representative of the manufacturer, Mr. Maybee and Glenn Buck on behalf of Oceanex, as well as a representative of Transport Canada, who was concerned that the container did not have Canadian regulatory approval.

[47] The parties assumed that the container suffered no damage on its way from Newfoundland to Oakville. Mr. Lallemant was shown photographs taken at Oakville. He confirms that they reflect the condition of the container at the time it was filled in Montréal in order to be shipped on the Cabot's voyage 48. Based on those photographs, as compared with the photographs taken in St. John's at the time of the October 2007 spill, the parties' assumption that C156 suffered no damage on its way from Newfoundland to Oakville is well founded.

[48] Although this is truly a case where a picture is worth a thousand words, the blemishes, if you will, were behind and below the middle piping compartment door.

[49] The two fire block valves (fill and drain and pressure building inlet) were open. Certainly Mr. Lallemant had not touched them. It is Praxair's position that the fire block valves were kept open at all times, and the nuts only snugged if there was a leak.

[50] The inverted bronze U-bracket that secured the fill and drain connections was broken into two pieces at the top of the inverted U. This break occurred during the conversion of the tank from nitrogen to oxygen, as per Mr. Lallemant.

[51] The two-piece overlapping bolted support to which the U-bracket was secured was severely cocked.

[52] There was at least a half inch drag mark from the green plastic Stauff clamp which secured the piping to the outer shell, indicating a movement of the clamp or the piping. There was a slight compression buckle in the top of the pipe leading from V1.

[53] The bottom of the drip pan beneath the broken fill connection bracket in the piping compartment was bent upwards.

[54] The bottom lengthwise railing of the container frame, under the compartment centre door, was bowed upward, as was the lengthwise railing on the other side. This set-up was about five eights of an inch and also bowed inward slightly. The frame may have been deformed more than that but sprang partly back to the condition observed. However, the position of the corner posts were still within ISO standards, meaning that there would be no difficulty placing the container onto the fittings on a ship or chassis.

VIII. Testing and Examination at Bédard Tankers

[55] C156 arrived at Bédard Tankers in Montréal on 13 March 2008. Various tests were conducted over the next few months. It was filled with liquid nitrogen by means of a special device which did not require the fittings to be changed and was left in Bédard's yard. All and all, the tank was considered sound. On 15 October 2008, the pressure was noted at 148 psi and the container was venting. On 27 October 2008, no nitrogen was left and the vacuum was completely lost. No one has made anything out of this given that the container was only designed to hold liquid nitrogen up to 66 days. The point is that it was observed to be venting, not leaking.

[56] Later, C156 was moved back to Praxair's yard in Montréal. On 6 and 7 April 2009, a chemist with experience in piping systems, Jean-René Dumont, was hired by Oceanex. In the presence of representatives of Praxair and a surveyor, he removed the smaller fire block valve, V2, and the broken inverted U-bracket. He tried to disassemble valve V1 but was unable to do so. By agreement, these parts were kept by the surveyors, Hayes Stuart, for safekeeping.

IX. Testing and Examination at CVA

[57] By this point in time, arrangements had been made by Praxair to return the container to its owner. It shipped C156 to the manufacturer, Cryogenic Vessel Alternatives, in Mont Belvieu, Texas, for refurbishment. It was inspected on 8 June 2009 and on subsequent days by Keith Hall, and others, including Tracy MacDonald, Praxair's distribution engineer, and a surveyor, Eric Turpin of Silver Clims, who represented Oceanex. Mr. Turpin did not testify and his report was not

produced. However, a number of witnesses referred to photographs he had taken. Further parts of the container where cut away and sent back to Montréal. These included the fire block valve V1, parts of the drip pan, and parts of the front and back bottom horizontal railings of the container frame.

[58] Some rust spots were noted underneath the piping compartment on the bottom frame supports. Mr. Hall is of the view that the rust had nothing to do with the damage but may have been the result of the container sitting on a trailer frame, with the rust coming from one of the cross-member supports on the trailer. This rust does not appear to have been observed at Oakville. In any event, it may possibly have occurred during the movement by truck to Oakville, the subsequent movement to Montréal or the final movement to Texas, with respect to which no details have been provided.

[59] The two-inch pipe leading from fire block valve V1 had a small compression kink or buckle on the top, just to the left of the green plastic Stauff mounting clamp. Combined with the green plastic scuff marks which had been noted earlier, Mr. Hall was of the view that the pipe had been forced to slide through the clamp. This conclusion was challenged by John Davis, Oceanex's expert. Given that no expert has suggested that this compression buckle was in any way causative, and given the subsequent work in the area by Mr. Dumont, I do not need to consider whether this buckle was caused by Mr. Lallemant when he changed the brass fittings, or otherwise.

[60] A small leak was identified at the epoxy joint of the vacuum valve, the only valve behind the left compartment door. Two of the four bolts that hold the valve in place were loose. Mr. Hall

suggests that the loose valves might have been the result of vacuum work performed after the incident. The cracked epoxy on the evacuation valve inlet threads could have resulted from the extremely cold environment in the piping compartment caused by the leak. Certainly, there has been no suggestion by anyone that the cracked epoxy came first, thereby compromising the vacuum, heating up the oxygen to its boiling point so that the pressure greatly increased.

X. Testing and Examination at Groupe Laganière

[61] On 31 May 2011, almost two years later, John Davis, a mechanical engineer, who testified as an expert on behalf of Oceanex, carried out a visual inspection at Empire Stevedoring of the components which had been taken from C156 in Texas and returned to Montréal.

[62] On the following day, he carried out a visual inspection and an air pressure testing of fire block V1 at Groupe Laganière's garage in Montréal. This was done in the presence of Mr. Dumont and Ms. MacDonald of Praxair, as well as counsel for both Oceanex and Praxair. The inspection suggested that the valve was in good condition. He noted that it did not take much pressure to loosen the nut to bring on a leak.

[63] Fire block valve V2 was pressure tested by Mr. Dumont on 16 June 2011. Again, there was nothing untoward.

XI. Challenges of Expert Witnesses

[64] Oceanex had submitted that I not even hear the evidence of Keith Hall, an expert called by Praxair. It did not challenge his qualifications but rather alleged that he could not be relied upon to give objective evidence because he was the engineering manager of Cryogenic Vessel Alternatives which had built C156 and because he still had an ongoing business relationship with Praxair, even now after he had changed companies.

[65] John Davis, a mechanical engineer, was the prime expert witness called by Oceanex. Praxair did not challenge his expertise as such, but cautioned that it had to be kept in mind that he was not an expert in cryogenic vessels. He testified after Mr. Hall. In oral argument at the conclusion of the hearing, Praxair submitted that Mr. Davis' evidence could only be considered in relation to Praxair's counterclaim, and not to Oceanex's claim.

[66] With respect to Mr. Hall, I gave a written order that I would hear his testimony.

[67] A number of cases were cited, particularly the dissenting decision of Chief Justice MacDonald of the Nova Scotia Court of Appeal in *Abbott and Haliburton Co. Ltd. v. White Burgess Langille Inman (c.o.b. WBLI Chartered Accountants)*, 2013 NSCA 66, 361 DLR (4th) 659, [2013] NSJ No 259 (QL). However, I was of the view that the decision of the majority was more in keeping with the jurisprudence which is to the effect that the evidence of an otherwise qualified expert usually should be heard before a decision is made as to what weight, if any, it should be given. Incidentally, that case is on its way to the Supreme Court.

[68] Mr. Hall proved to be an excellent objective witness. It is evident that his first opinion issued 15 January 2008, following his inspection at Oakville, was premature. He had not been made aware that C156 had leaked from its two fire block valves for several hours in October 2007. He was of the view, and remained of the view, that the container had been dropped or set down heavily on something raised. This had forced the piping up and to the right. However, more telling is this passage:

> The occasional packing leak is completely normal for most cryogenic valves. I have never heard of a catastrophic packing leak happening quickly under normal circumstances. A packing may leak a little, and the next time the operator sees the unit and sees that a packing is leaking, he or she will use a wrench and "snug" down the packing nut just a little. Over-tightening of a packing nut will render the valve inoperable (the stem won't be able to rotate within the overly compressed packing). As the container was not damaged when shipped, and as the damaged area on the container is directly under the piping circuit, of which the Fire Block valve is a part of, it is obvious that the impact to the container (probably dropped onto something) was the cause of the gross packing leak on the Fire Block Valve.
>
> [My Emphasis]

[69] Upon being shown photographs taken just after the October 2007 spill, and having taken measurements thereon, Mr. Hall was firmly of the opinion that the set up of the container frame existed at that time and was visible on very close inspection. I agree, and so find.

[70] As regards Mr. Davis, I must say he had a first class knowledge of valves and piping systems in general. He worked his way through the piping arrangement plan without difficulty. His opinion was very helpful.

[71] Praxair's position that his evidence cannot be heard as part of Oceanex's case against it is based on a number of decisions, including that of Mr. Justice Pelletier, as he then was, in *Halford v Seedhawk Inc*, 2003 FCT 141, [2003] FCJ No 237 (QL). These cases deal with the tendering of expert evidence in reply. Mr. Justice Pelletier referred to a number of cases which state that the plaintiff must exhaust its evidence in first instance and not split its case by relying on *prima facie* proof, and then after hearing the defendant, attempt to adduce further evidence.

[72] That principle has to be considered in context. In this case, we have a claim and counterclaim. They are both based on common evidence. Although there was some manoeuvring with respect to the order in which witnesses would be heard, the schedule was altered to suit Mr. Hall's availability. Furthermore, the last proposed order of witnesses prepared by Oceanex at a trial management conference indicated that while Mr. Hall would precede Mr. Davis, the final schedule was left to the Court's discretion.

[73] As mentioned earlier, expert reports had been filed more than two years prior to trial. Oceanex was not splitting its case. What was new is that Mr. Davis testified after hearing Mr. Lallemant while Mr. Hall was called beforehand. This led Mr. Davis to testify with respect to the compression buckle on the pipe near fire block valve V1, which I find, in any event, irrelevant.

[74] Furthermore, in order to suit his schedule, the expert accountant called by Praxair, Arthur Lavigne, was heard before Oceanex's accounting expert, Lynda Boisvert. The fact that Ms. Boisvert simply stood on her expert report as filed, and did not comment upon the testimony of Mr. Lavigne

is irrelevant. In fact, her report was not a rebuttal report, which could well have led to a submission that Oceanex was splitting its case.

[75] Praxair could point to no prejudice because Mr. Hall was heard before Mr. Davis and, in any event, Mr. Hall was recalled to comment upon Mr. Davis' testimony. Throughout the trial, I mentioned on several occasions that each side would be given every opportunity to say all that it thought needed to be said, and perhaps more.

[76] In my opinion, the decision most on point is that of Chief Justice Richard in *Elders Grain Co Ltd v Ralph Misener (Ship)*, 2005 FCA 139, [2005] 3 FCR 367, [2005] AMC 1241, [2005] FCJ No 612 (QL), where he said:

> [64] The trial judge considered and rejected the arguments of counsel for the appellants that their claim and the respondents' counter-claim should be treated as two separate proceedings within the same hearing. After weighing submissions from both parties, the trial judge also decided against granting leave to the appellants to submit their expert report in rebuttal.
>
> [65] It was within the trial judge's discretion to determine the order of evidence and to refuse to grant leave for the submission of rebuttal expert evidence at trial. Furthermore, it was in the interests of judicial economy to hear both the claim and the counterclaim at the same time, since there was a common body of evidence. It was always open to the appellants to apply for severance if they felt it was necessary to their case.
>
> [66] Based on the record, the trial judge judicially exercised his discretion. Therefore, there are no grounds on which to disturb his decision.

XII. The Cause of the Leak

[77] To understand why the fire block valves leaked, one must take into account their construction. There is a stem within a bonnet. The space between the two is sealed at the top, under the yellow mushroom actuators by a series of teflon type rings which are compressed by tightening or snugging the packing nut. Both bonnet and stem lead down to a ball valve which easily rotates - 90 degrees one way the valve is open, 90 degrees the other it is closed.

[78] If the bonnet is pushed to one side, so too is the stem. The integrity of the packing should not be affected according to Mr. Davis. Although Mr. Hall is in general agreement, he says the stem will not move quite as much as the bonnet, so that the packing between the two can become distorted, leading to a leak between the stem and bonnet. In ambient temperatures, without leakage, the packing reverts to its original shape.

[79] If the packing nut is not tight enough, liquid will fill the space between the bonnet and stem. When exposed to a liquid gas, the packing shrinks faster than the bonnet so that there is the accumulation of a small amount of liquid oxygen that cannot immediately evaporate, and therefore leaks. Furthermore, if the fire valves were left open, which they were, contrary to the manufacturer's manual, the whole tank is subject to leakage, as the line runs past fire valve V1 on the way to the filling valve C1.

[80] In my opinion, fire block valves V1 and V2 leaked in December 2007 because they were not sufficiently tight. Indeed, the evidence, including that of Mr. Davis, is to the effect that it is difficult

to put a wrench on the packing nuts under the mushroom shaped actuators. Any distortion of the piping system did not lead to the leak and, in any event, was easily preventable.

[81] There are two other disturbing facts not attributable to Oceanex. One of the two relief valves was set at 200 psi rather than 144. No explanation was given. Presumably, the inner vessel could not be vented as effectively. The other is that the fins on the other side of C156 were covered with frost, suggesting the pressure was being increased in the tank which Praxair was trying to depressurize. Again, no explanation was given.

XIII. The Contract Between Oceanex And Praxair

[82] The dispute between the parties was limited to the freight rate. Oceanex's other terms and conditions were accepted. Furthermore, Praxair paid Oceanex's invoices. The contract is to be found in the rate quotation which incorporated the Oceanex tariff and non-negotiable receipt. The rate quotation specifically provided that the shipment is not subject to the *Hague-Visby Rules* or the *Hamburg Rules*. No bill of lading was issued.

[83] The non-negotiable receipt stipulates that the contract is governed by Canadian Maritime Law. Clause 11 deals with dangerous goods. It reads:

> No goods (including radio-active material) which are or which may become dangerous, inflammable, contaminating, polluting, dusty, frozen or damaging, or which are or may become susceptible to damage by other goods or property whatsoever, shall be tendered to the Carrier for carriage without its express consent in writing. The Merchant shall insure that the nature of such goods is distinctly marked on the outside of all packages and containers containing the same. If any such goods are so tendered without such consent, the same may at any time be destroyed, disposed of, abandoned or

> rendered harmless without compensation to the Merchant and without prejudice to the Carrier's right to freight. The Merchant acknowledges that the Carrier has no actual knowledge of the characteristics of the goods, and stipulates that no enquiries need be made with respect thereto. Whether or not the Merchant was aware of the nature, or content of the goods, it shall indemnify the Carrier against all claims, losses, delays, damages or expenses arising in consequence of the reception of, or the carriage of such goods, and pay to the Carrier all expenses, costs, claims, losses and damages resulting therefrom.
>
> [My Emphasis]

[84] Clause 11 has no direct application. Liquid oxygen is inherently dangerous as known by both Praxair and Oceanex, who expressly consented in writing to its carriage.

[85] Notwithstanding the contractual ouster of the *Hague-Visby Rules*, Oceanex submits that as a matter of public policy they still apply. It referred to *Wells Fargo Equipment Finance Company v MLT3 (The)*, 2013 FCA 96, 359 DLR (4h) 561, [2013] FCJ No 380 (QL). The reason for the submission is that article IV, r 6 of the Rules, which are to be found at Schedule 3 to the *Marine Liability Act*, provides that if goods of a dangerous nature are shipped without the carrier's knowledge of their nature, the shipper is liable "for all damages and expenses directly or indirectly arising…" (my emphasis).

[86] The *Wells Fargo* decision does not stand for the proposition advanced by Oceanex. It dealt with a contract which resembled a charter party. Section 43(2) of the *Marine Liability Act* makes it perfectly clear that although the *Hague-Visby Rules* apply to cabotage, they do not do so if, as in this case, no bill of lading was issued and the contract stipulated that the Rules do not apply.

[87] As shall be seen, in any event we do not have to consider indirect damages.

XIV. Praxair's Liability

[88] The cases cited with respect to dangerous goods are not exactly on point. They deal with cargo which one would not think of as being inherently dangerous. The issue in those cases was whether the shipper, be it under the *Hague-Visby Rules*, or under common law, is liable even if it did not know the goods were dangerous.

[89] In the *Giannis NK (Effort Shipping Co Ltd) v Linden Management SA et al*, [1998] 1 Lloyd's Rep 337, the House of Lords was dealing with a cargo of ground nuts which were infested with Khapra beetles. As a result, another cargo was contaminated and had to be destroyed. Consequently, the ship was delayed because of fumigation.

[90] The House of Lords held that dangerous goods within the meaning of the *Hague Rules* were not confined to goods of inflammable or explosive nature or their like. In the absence of the carrier's informed consent, the shippers were *prima facie* liable for all damages and expenses directly or indirectly arising out of the said shipment.

[91] Lord Lloyd added in *obiter* that the liability of a shipper did not depend on his knowledge or means of knowledge and liability would be the same whether it arose by virtue of an implied term at common law or by Article IV r. 6 of the *Hague Rules*. Liability is strict.

[92] In *Elders Grain Co v Ralph Misener (The)*, 2003 FC 837, [2003] FCJ No 073 (QL), aff'd 2005 FCA 139, [2005] FCJ No 612 (QL), above, the shipment was of alfalfa pellets which caught fire during discharge. The probable cause of loss was spontaneous combustion. Alfalfa pellets are dangerous as they can ignite if not properly stored.

[93] The comment most on point is that of Mr. Justice Nadon, as he then was, in *Industries Perlite Inc v Marina Di Alimuri (The)*, [1996] 2 FC 426, [1995] FCJ No 1650 (QL). This was a shipment of peat moss. Peat moss could become dangerous if loaded wet and therefore be too heavy. He said at paragraph 98:

> The liability for the damage caused by casualty flowing from the shipment of dangerous cargo is varied where the carrier, members of the crew, or ship owner(s), know or ought to reasonably have known of the dangerous nature of the cargo. As will be seen from the jurisprudence, this exception is based on the assumption that a carrier who is aware of the dangerous nature of the cargo accepted for carriage, consents or accepts to assume some of the risks associated with that shipment. Put another way, where there is an indication that the carrier was made aware of the dangers involved in a shipment, or where the dangers are self-evident, and the carrier proceeds in the face of that knowledge, the general principle stated above is trumped. Therefore, whatever warranty exists (absolute or qualified) on the part of the shipper as to the suitability of goods for carriage, the liability for the damage arising out of "dangerous cargo" is judged on a sliding scale wholly dependent on the knowledge, or deemed knowledge of the carrier.

[94] Liquid oxygen and liquid nitrogen are covered by the *Transportation of Dangerous Goods Act, 1992* and Regulations thereunder. Among other things, the shipment must be properly placarded, which it was. Refrigerated gases fall within Class 2 of the Act. Under section 5.4 of the *Consolidated Transportation of Dangerous Goods Regulations*, the shipper must "load and secure

dangerous goods in a means of containment... in such a way as to prevent, under normal conditions of transport, damage to the means of containment or the means of transport..."

[95] In addition, be it under common law or the non-negotiable receipt, the carrier is not responsible for damage caused by insufficiency of packing. "No person is entitled to claim compensation from others for damage occasioned by his neglect to do something which it was his duty to do." (*Barbour v South Eastern Railway Co* (1876), 34 LT 67 per Baron Cleasby as quoted in *Carver*, *Carriage by Sea*, 13th Edition, Volume 1, para 17) Furthermore, the insufficiency of packing, *i.e.* the insufficiently tightened packing nuts, could not be detected by Oceanex. The fire block valves were behind sealed cabinet doors. Indeed, "who knows what goes on behind closed doors." In any event, it was never expected that Oceanex would do anything with the container other than carry it. Oceanex did not accept the risk that Praxair would not do the right thing by it.

[96] Consequently, Praxair is liable.

[97] Praxair makes the case that the bowing or setting up of the bottom rails of the container frame had to have occurred when the container was in Oceanex's custody, because neither Praxair nor its trucker in St. John's, Quinnsway Transport, ever had occasion to take the container off its chassis. However, no evidence has been led as to how the tank container was moved from its place of manufacture in Texas to Praxair's premises in Montréal. Mr. Lallemant seems to recall that a crane had been hired to lift the tank container off a truck. It was placed on the ground where it remained for several months. Given that all the interchange receipts are clean, and given that Mr. Hollings, retained by Praxair, did not spot anything untoward after the December spill, it cannot be

said on the balance of probabilities that the setting up of the bottom rails occurred while in Oceanex's custody, or that of its stevedores or truckers.

[98] Presumptions arising from the burden of proof have limited application. No one has put it better than Mr. Justice Devlin, as he then was, in *Waddle v Wallsend Shipping Ltd*, [1952] 2 Lloyd's Rep 105, at page 139:

> In a case where substantially all the facts have been brought to light, it is no doubt legitimate to argue that some cause must be found, and therefore the one that has most to be said for it should be selected. Where it can fairly be said that all possible causes have been canvassed, the strongest must be the winner. But in a case where all direct evidence is missing, there is no ground for saying that the most plausible conjecture must perforce be the true explanation. The answer that may well have to be given is that not enough is known about the circumstances of the loss to enable the inquirer to say how it happened. All that he can say is that no theory advanced has been able to collect enough support from the facts to make it more likely than not that it happened in that way and not in any other...

This is not a case to be decided on the burden of proof.

[99] Even if the setting up of the railings would have been causal, and attributable to Oceanex, Praxair had been on notice for two months that it had a serious problem. All Praxair did was snug up the nut on one of the two leaking fire block valves. It did not even write up the incident. This brings to mind *The "Princess Victoria"*, [1953] 2 Lloyd's Rep 619, a decision from the Northern Ireland Ulster High Court.

[100] *The "Princess Victoria"* was an inquiry under the *(UK) Merchant Shipping Acts* as to whether her sinking was caused by "wrongful act or default" of her owners and managers. The loss

of the ship was due to her unseaworthiness arising from the inadequacy of the stern doors on the car deck. There had been an earlier incident in which a large volume of water had accumulated on the car deck. As Lord MacDermott, Chief Justice, said at pages 632-633:

> The incident of 1951 does not seem to have excited any concern in the minds of the owners. Their annual passenger certificate for Larne-Stranraer was renewed with the ship as she was and nothing about her seaworthiness appears to have been learnt from what had happened. The importance of the experience of 1951 lay mainly in the fact that a very large volume of water had been trapped on the car deck. In the opinion of this Court that circumstance should have put the owners on inquiry. They should have ascertained the facts as closely as possible; they should have realized then that the shipping of a heavy sea through the stern opening could no longer be regarded as beyond the bounds of possibility; and they should have been at pains to see what could be done to counter the defect in design which was thus revealed.

[101] It is not necessary to determine whether or not the design of C156 was defective. To paraphrase Lord MacDermott, the incident of October 2007 does not seem to have excited any concern in the minds of Praxair. The importance of the experience lay mainly in the fact that an exceptional leak lasting several hours occurred. In my opinion, that circumstance should have put Praxair on inquiry. It should have ascertained the facts as closely as possible; it should have realized that severe leakage through valves hidden behind the cabinet doors could no longer be regarded as beyond the bounds of possibility; and it should have been at pains to see what could be done to counter the problem which was thus revealed.

[102] Ms. MacDonald acknowledged that Praxair was aware that liquid oxygen was capable of causing certain types of steel to fracture. Indeed, it was most fortunate that the incident occurred while the Cabot was safely alongside. Had it occurred at sea in heavy weather, the likelihood is that

she would have broken in two. One could only hope that the crew would have been able to get to the lifeboats in time.

XV. Oceanex's Damages

[103] Oceanex's damages in breach of contract are governed by Canadian Maritime Law. That law is based on the English law of contract as may be modified by Canadian statute and incrementally changed by the courts (*ITO-International Terminal Operators Ltd v Miida Electronics Inc*, [1986] 1 SCR 752, [1986] SCJ No 38 (QL) (the *Buenos Aires Maru)* and *Fraser River Pile & Dredge Ltd v Can-Dive Services Ltd*, [1999] 3 SCR 108, [1999] SCJ No 48 (QL)).

[104] The purpose of damages is to put the plaintiff in the position it would have been in had the loss not occurred, to the extent the law allows. The leading case for over 150 years has been *Hadley v Baxendale* (1854), 9 ExCh341, 156 ER 145. The test as to whether damages are too remote in law is whether the parties at the time of contracting could reasonably have contemplated the type of loss given their knowledge of each other's affairs. A more modern authority is *RBC Dominion Securities Inc v Merrill Lynch Canada Inc*, 2008 SCC 54, [2008] 3 SCR 79, [2008] SCJ No 56 (QL).

[105] As stated by Associate Chief Justice Thurlow in *Bentsen Line A/S v F.F. Soucy Inc*, [1978] FCJ 815 (QL), the leading case on the measure of damages when a ship is unable to trade is *Smith v McGuire* (1858), 3 H&N 554, where Martin B. stated:

> […] The real damage is the loss arising from the breach of contract? That is to be ascertained by calculation of the freight to be earned, and deduction of the expenses which the shipowner would be put to in earning it; and what the ship earned (if anything) during the period

> which would have been occupied in performing the voyage, ought also to be deducted.

[106] If the Cabot were a tramp ship, a bulk carrier or a tanker, which could be voyage or time-chartered in international trade, expert evidence would have been led by ship brokers familiar with the market. However, the Cabot was on a liner service in domestic trade, which for all intents and purposes is limited to Canadian flag ships. Not all cargos were carried at the same freight rate.

[107] The claim was first calculated by Daniel Turcotte, Oceanex's comptroller. His initial calculation showed a loss of $961,615. However, the statement of claim is for $946,382. On discovery, it was back up to $979,878. In final argument, after the expert accountants did some "hot-tubbing", the claim was reduced to $832,125.63, but that is subject to some revision as regards overhead.

[108] There are two components to Oceanex's claim. The first, the cost of repairs and attendant expenses, poses no difficulty and has been admitted by Praxair. The difficulty lies in the second component, business interruption. This is where the parties stand, subject to a reconsideration of overhead:

HEAD OF DAMAGES	**AS PER OCEANEX**	**AS PER PRAXAIR**
Repair costs	$137,581.00	$137,581.00
Extra stevedoring	$8,428.08	$8,428.08
Fuel burning during repairs	$29,264.00	$29,264.00
Extra port costs	$7,522.00	$7,522.00
Crew overtime	$966.97	$966.97
Sub-total	**$183,762.05**	**$183,762.05**

[109] Oceanex states its profit and loss in terms of TEUs (20-foot equivalents), the length of a standard container. Many containers are now 40 feet, 48 feet and 53 feet in length, so that, for example, the freight on a 40-foot container would be expressed as two TEUs.

[110] The figures are then conveniently expressed as contribution per TEU. This contribution (*i.e.* net profit) obviously varies with the amount of cargo carried per voyage. Considering fixed costs, the more cargo, the greater the contribution or profit.

[111] Mr. Turcotte's calculations were sent to Deloitte's for an independent analysis. Their Denis Hamel filed an expert affidavit, which was testified to by another Deloitte accountant, Lynda Boisvert. All Mr. Hamel did was tinker slightly with Mr. Turcotte's calculations. Praxair called another well qualified accountant, Arthur Lavigne. Neither expert had any difficulty working with the concept of TEUs. However, a good part of their respective opinions is not based upon accounting principles.

[112] The three remaining heads of claim are: a) expenses incurred in rerouting 76 containers/trailers or 187 TEUs to Newfoundland via Nova Scotia; b) loss of profit on containers which were not shipped on the Cabot's intended sailing of 19 December; and c) overhead, general damages, detention of containers in St. John's, Class Survey and loss of westbound shipments.

HEAD OF DAMAGES	**AS PER OCEANEX**	**AS PER PRAXAIR**
Rerouting 187 TEUs	$184,190.58	Nil
Loss of profit	$389,173.00	Range from $118,912 to $297,517
Overhead	$75,000	Range from $13,560 to $31,716.50

[113] The expenses incurred in rerouting 76 containers/trailers or 187 TEUs from Montréal to Newfoundland by truck to Nova Scotia and then by ferry to Newfoundland creates considerable difficulty. Praxair submits that this head of damage did not flow from the spill. It submits that Oceanex incurred these expenses for commercial reasons, so as to satisfy its major customer, Wal-Mart, and a few other customers. It could have invoked a force majeure clause in those contracts because it was unable to perform the voyage originally scheduled for 19 December. I first tended to the view that Praxair was right, that Oceanex had failed to mitigate its damages. On further thought, however, I have come to the opposite conclusion.

[114] Carver, above, Volume 2, at para 2144, refers to the case of *James Finlay & Co, Ltd v NV Kwik Hoo Tong Handel Maatschappij*, [1929] 1 KB 400, 32 Ll. L. Rep 245, [1928] All ER Rep 110, a decision of the English Court of Appeal. In that case, there was a discrepancy between the date of the bills of lading and the date of shipment. The plaintiff's buyers refused to take delivery on the grounds that they had bought September shipment goods, and the goods were not shipped that month. Rather than attempt to enforce its contract, the plaintiff sued the defendant carrier. In upholding the judge of first instance, Mr. Justice Wright, as he then was, Lord Justice Scrutton, said at page 250:

> I personally cannot think that a man who has broken his contract can compel his buyer who has not broken his contract to take action to minimize the damages of a person who has broken his contract, by claiming money to which he knows he is not entitled, and to take action which will ruin his credit in the business world.

[115] Praxair knew full well that Oceanex was operating a scheduled liner service. Had it thought about it, it would have known that the timing of shipments just before Christmas and boxing week

sales were crucial. It would have been foolhardy for Oceanex to put its relationship with Wal-Mart into jeopardy. The expenses claimed are not too remote.

[116] Oceanex claims $184,190.58 for net expenses incurred in rerouting 76 containers/trailers or 187 TEUs to Newfoundland via Nova Scotia. This figure was arrived at by deducting from the expenses actually incurred, the normal freight it charged Wal-Mart and other customers. That freight had been paid. Although Praxair submits that this head of damage does not flow from the spill, for the reasons above I am allowing it. However, as will be explained with respect to loss of profit I am deducting $63 per TEU or $11,781. Consequently, I am allowing $172,409.58.

[117] The next item claimed is the loss of profit on TEUs which were not shipped on the Cabot's intended voyage of 19 December. As the Cabot maintained a weekly schedule between Montréal and St. John's, as did the Avalon, many bookings were only made at the last minute. Consequently, based on other voyages, I am of the view that the Cabot would have carried more than the bookings which were actually cancelled. Oceanex calculates that on a normal voyage the Cabot would have carried 450 TEUs, a figure not contested. Of those 450 TEUs, 187 were trucked, which leaves 263. However, on her next sailing of 28 December, she carried 504. There was also a little trading between the Cabot and the Avalon, but I take that point to be neutral. Consequently, after deducting the additional 54 TEUs which were carried on 28 December, I calculate that Oceanex lost net revenue on 209 TEUs (450 minus 187 minus 54).

[118] The accountants calculate the net contribution per TEU differently. Mr. Lavigne, called by Praxair, based himself on December 2007 figures, while Ms. Boisvert based herself on the entire

2007 year. I base myself on the December 2007 figures, as cargo volumes can change dramatically over the course of a year.

[119] Oceanex calculates a contribution per TEU of $1,228. However, Mr. Lavigne's study of the December 2007 revenue reduces that estimated amount by $63 per TEU. I accept Mr. Lavigne's calculations on this point. Consequently, the loss contribution per TEU is $1,165. Therefore, the loss under this heading is $243,485.

[120] To go into more protracted calculations would be intolerable. I ascribe to the view expressed by Winn, LJ of the English Court of Appeal in *Doyle v Olby (Ironmongers) Ltd and others,* [1969] All ER 119, at page 124:

> I think myself with confidence that there is already sufficient evidentiary material available to enable this court to make a jury assessment in round figures. It would be wrong and indeed an intolerable expenditure of judicial time and money of the parties to embark on any detailed consideration of isolated items in the account on which a balance must be struck.

[121] The last item is somewhat of a catchall. During argument, counsel for Oceanex put the figure at $75,000 representing overhead, general damages, detention of containers in St. John's, a Classification Society Survey for which it cannot find the invoice, and loss of westbound shipments. The parties had agreed to an overhead of 10% on respective damages, the 10% with respect to Oceanex being limited to its business interruption claim.

[122] Oceanex calculated a loss of westbound freight of $50,000. However, this is not borne out by the figures. I find it suffered no loss. That being said, a 10% overhead on the business

interruption claim, based on general accounting principles, Oceanex's testimony as to the scrambling it had to do with equipment detained in St. John's and *Société Telus Communications v Peracomo Inc.*, 2011 FC 494, [2011] FCJ No 602 (QL), aff'd by the Federal Court of Appeal, 2012 FCA 199, [2012] FCJ No 855 (QL) (decision of the Supreme Court of Canada pending), is fair and reasonable. Consequently, I fix the overhead at $41,589.46 being 10% of $415,894.58 (rerouting of $172,409.58 and lost profit of $243,485).

[123] Adding it all up, Oceanex is entitled to damages in the amount of $641,246.09:

a. Repair costs *et al*: $183,762.05;

b. Rerouting: $172,409.58;

c. Lost profit: $243,485; and

d. Overhead: $41,589.46.

XVI. Interest

[124] The parties have reasonably agreed to simple interest running at the annual rate of 5%, in Oceanex's case from 18 January, 2008.

XVII. Costs

[125] Both parties ask that costs be reserved so that they may make representations post-judgment.

JUDGMENT

FOR REASONS GIVEN;

THIS COURT'S JUDGMENT is that:

1. The action of Oceanex Inc. is maintained against Praxair Canada Inc. in the principal amount of $641,246.09, plus simple interest to the date of judgment calculated at the rate of 5% per annum commencing 18 January 2008. Interest thereafter shall run on the judgment debt (principal and interest) at the same rate.

2. The action *in rem* against the Owners and All Others Interested in the Tanktainer "C 156" Ex the Ship M.V. "Cabot" and the Tanktainer "C 156" Ex The Ship M.V. "Cabot" is dismissed on the grounds of mootness.

3. The counterclaim of Praxair Canada Inc. is dismissed.

4. Costs are reserved.

"Sean Harrington"
Judge

FEDERAL COURT

SOLICITORS OF RECORD

DOCKET	T-970-08
STYLE OF CAUSE:	OCEANEX INC v PRAXAIR CANADA INC ET AL
PLACE OF HEARING:	MONTRÉAL, QUEBEC AND ST. JOHN'S, NEWFOUNDLAND AND LABRADOR
DATES OF HEARING:	OCTOBER 21 TO 25, 2013 (MONTRÉAL), OCTOBER 29 TO NOVEMBER 1, 2013 (ST. JOHN'S), NOVEMBER 4 TO 8, 2013 (MONTRÉAL) AND NOVEMBER 12-13, 2013 (MONTRÉAL)
REASONS FOR JUDGMENT AND JUDGMENT:	HARRINGTON J.
DATED:	JANUARY 7, 2014
AMENDED:	MARCH 7, 2014

APPEARANCES:

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