Jet Holding Ltd and Others v Cooper Cameron (Singapore) Pte Ltd and Another [2005] SGHC 149

Case Number : Suit 1523/2002

Decision Date : 22 August 2005

Tribunal/Court : High Court

Coram : Belinda Ang Saw Ean J

Counsel Name(s) : Randhir Ram Chandra and Nicole Tan (Haridass Ho and Partners) for the plaintiffs; Prem Gurbani and Bernard Yee (Gurbani and Co) for the first defendant; Tan Teng Muan and Wong Khai Leng (Mallal and Namazie) for the second defendant

Parties : Jet Holding Ltd; Jet Shipping Ltd; Jet Drilling (S) Pte Ltd; Maurel Et Prom — Cooper Cameron (Singapore) Pte Ltd; Stork Technology Services Asia Pte Ltd (formerly known as Eastburn Stork Pte Ltd)

Contract – Breach – Ship manager contracting with defendant on behalf of disclosed principal – Alleged breach of contract by defendant – Whether ship manager and shipowner having title to sue for breach of contract

Contract – Contractual terms – Implied terms – Defendant contracting to undertake refurbishment of slip joint on board drill ship – Refurbished slip joint fracturing due to defect – Whether implied term in contract that defendant to exercise reasonable care and skill in refurbishing of slip joint – Whether such implied term breached – Whether existence of such implied term negativing imposition of duty of care on defendant in tort

Evidence – Documentary evidence – Proof of contents – Whether photocopies of documents tendered as evidence without proving authenticity of documents and statements therein admissible in court – Sections 32, 67 Evidence Act (Cap 97, 1997 Rev Ed)

Tort – Negligence – Breach of duty – Defendant responsible for refurbishing slip joint used on drill ship – Slip joint fracturing due to defect – Whether defendant liable in negligence for loss sustained by plaintiffs – Whether defendant owing duty of care to each plaintiff

22 August 2005

Belinda Ang Saw Ean J:

Introduction

1 This action arose from the failure of a slip joint when it broke into two due to tensile overload in normal operational conditions with consequent loss of other oil-drilling equipment. The incident allegedly occurred on the first occasion the slip joint, which is a piece of oil-drilling equipment from the drill ship the *Energy Searcher*, was put into service on 16 March 2001. It transpired that the material in the area where the slip joint failed was significantly thinner than that specified in the design drawings. That situation was said to be, *inter alia*, the result of a breach of contract on the part of the first defendant and it was also said to amount to a breach of a duty of care, which each defendant respectively owed to the plaintiffs.

2 The first plaintiff, Jet Holding Limited ("JHL"), claims as the owner of the *Energy Searcher.* According to the plaintiffs, JHL became the owner of the *Energy Searcher* in or about July 1999. Prior to that, the second plaintiff, Jet Shipping Limited, ("JSL") was the registered owner. Upon JHL becoming the owner, JSL chartered the *Energy Searcher* purportedly under a bareboat charter entered into between JHL and JSL, and in its capacity as disponent owner sues in this action. The third plaintiff, Jet Drilling (S) Pte Ltd ("JDL"), was at all material times the manager of the *Energy*

Searcher. The fourth plaintiff, Maurel Et Prom ("MEP"), is claiming as assignee of the respective rights, title and interest of the first three plaintiffs.

3 Cooper Cameron (Singapore) Pte Ltd ("Cameron") in these proceedings is looked upon as the Original Equipment Manufacturer ("OEM"). Cameron is the first defendant in this action. The second defendant, Stork Technology Services Asia Pte Ltd ("Stork") formerly known as Eastburn Stork Pte Ltd, is sued as concurrent tortfeasor with Cameron. At all material times, Stork was a Cameron-approved contractor. Cameron has commenced third party proceedings against Stork for an indemnity. Stork has in turn sought a counter-indemnity from Cameron for any damages that may be found against it. This counterclaim was not pressed in Stork's closing submissions.

Background facts

4 The *Energy Searcher* was in the Bay of Bengal, off Chennai, India, on a contract that JDL made on 17 November 2000 with Cairn Energy India Pty Limited ("Cairn"). Under that contract, the *Energy Searcher* was contracted to Cairn, an oil exploration company, and it was said to be in the form of a time charter. The contract sets out the terms under which the *Energy Searcher* was supplied and operated. According to the plaintiffs, JSL as disponent owner of the *Energy Searcher* provided the drill ship, its equipment and crew. JDL acted as agent for JSL throughout its involvement with the drill ship, first as registered owner and subsequently as disponent owner. In the middle of January 2001, the *Energy Searcher* arrived off Chennai, India to drill three wells for Cairn.

5 By way of explanation, the "Cameron Total System" is a subsea well control drilling system used on drilling units designed and manufactured by Cooper Cameron Corporation, a company incorporated in Texas and the parent company of Cameron. Cameron admits that the Cameron Total System forms a continuation of the wellbore to the drilling unit and it comprises (amongst other components) a Blow Out Preventor ("BOP") stack, risers, a slip joint (also known as a telescoping joint) and associated well and safety control systems. At the seabed end is the BOP that sits on the wellhead and permanent guide base ("PGB") and prevents uncontrolled blow-out of gas and oil during drilling operations. The BOP in turn is connected to the riser string, which is a tubular construction that extends upwards to the drill ship. The bottom of the slip joint attaches to the riser string. An RCK box (or "riser box") connects the upper end of the slip joint to the drill ship. A slip joint consists of two barrels, an outer and an inner barrel, constructed so that the inner barrel slides up and down inside the outer barrel like a telescope to adjust for changes in the distance between the drill ship and the stack caused by waves, tides or ship movement.

6 After a decision was made to switch the primary slip joint for the spare slip joint, on 5 March 2001 a pre-installation inspection was carried out on the spare slip joint on board the *Energy Searcher* by personnel from the subsea department. On 16 March 2001, in the course of installation, the spare slip joint fractured and broke into two in the area of the female RCK box end connector, about 19in from the RCK box face. In the result, the upper half of the RCK box remained connected to the drill ship whilst the lower half of the RCK box together with the riser string, the BOP stack, inner barrel of the spare slip joint, pod line wires and pod hoses dropped through the moon pool of the drill ship to the bottom of the ocean. Only the inner barrel of the slip joint and some risers were salvaged later. The rest of the equipment was lost at sea. According to the plaintiffs, the salved slip joint was brought to Singapore.

7 As the dispute centres on the identity of this slip joint (and the defendants have put the plaintiffs to strict proof), for the time being, I shall for convenience refer to it as "the fractured slip joint". The fractured slip joint had an RCK-type riser box and it is that riser box that supports the entire weight of the riser string and BOP during the landing of the BOP and when retrieving the BOP

and riser string. It is common ground that the riser box is a critical load-bearing component of a slip joint. The riser box is manufactured in two halves. The lower half contains an internal thread into which the inner barrel of the slip joint is screwed. The upper half is a connector that connects the slip joint to the drill ship. The two halves of the riser box are welded together.

8 The second plaintiff, JSL, purchased the *Energy Searcher* in Singapore in a Sheriff sale. The sale included one slip joint that was on board the drill ship. There was one other slip joint from the drill ship but it was at that time of the sale ashore in the possession of ABB Vetco Gray (Pte) Ltd ("ABB Vetco"). Separately, JSL purchased this second slip joint from ABB Vetco. The ABB Vetco slip joint was given the subsea number 501. The slip joint that was on board at the *Energy Searcher* at the time of purchase was numbered 502.

9 Between 22 July 1997 and 22 August 1997, a Mobile Offshore Drilling Unit inspection (the "Moduspec Inspection") was carried out on the *Energy Searche*r and its equipment on the instructions of BP Indonesia, an oil exploration company. The Moduspec Inspection revealed that the two slip joints, subsea nos 501 and 502, were unfit for use. They were then sent to Cameron's approved contractor, Van Der Horst Engineering Services Pte Ltd ("VDH"), to be disassembled and refurbished. One operational slip joint was re-assembled by VDH from components cannibalised from both slip joints. By way of explanation, the inner barrel of one slip joint was used to replace the defective inner barrel of the other slip joint. This refurbished slip joint functioned as the primary slip joint on board the *Energy Searcher* and it was given the subsea number 502. The remaining "discarded" components were subsequently used to fabricate a second slip joint, which was intended as a spare slip joint for the *Energy Searcher*. Cameron subcontracted the refurbishment of the second slip joint to Stork. According to the plaintiffs, this second or spare slip joint was returned to the *Energy Searcher* in November 1998 and was given the subsea number 503.

Overview of the issues

10 Both liability and damages have to be decided at this trial.

11 Title to sue is an issue. The defendants have put the plaintiffs to strict proof of their *locus standi* to bring these proceedings. In addition, it is the plaintiffs' case (and the defendants have put the plaintiffs to strict proof) that the second slip joint on board the *Energy Searcher* was never used for the past 28 months (since November 1998) until the day of the incident on 16 March 2001. This fractured slip joint was the very same slip joint refurbished in 1998 by the defendants.

12 It is common ground that the wall of the RCK box was too thin. The wall area was machined down to the thinness discovered after the incident. It was not seriously disputed that the slip joint refurbished in 1998 left Stork's premises in a condition where it was machined down to the very same thinness as discovered later on. The defendants and their respective experts agreed that the reduction in wall thickness was not due to degradation processes (fatigue, corrosion, *etc*).

13 The plaintiffs' case is that Stork had machined the fractured slip joint (thereby seriously reducing wall thickness) at the location where the failure occurred. Stork strenuously denies this allegation. Stork accepts that it had only machined part of the internal surface of the RCK box and the area where it machined was nowhere near the location of the fracture. In response, the plaintiffs contend that even if Stork had not machined at the location of the facture, Stork should have observed or detected the inadequate wall thickness. As against Cameron, the plaintiffs' principal contention is that Cameron failed to properly inspect the RCK box and supervise Stork in and about the refurbishment of the fractured slip joint. The wall of the RCK box was too thin and Cameron should have ensured that this deficiency in a load-bearing component was detected and rectified before the

second refurbished slip joint was returned to the *Energy Searcher* for use as its spare slip joint in November 1998. Cameron denies all allegations of breach of contract, breach of duty of care in and about the refurbishment of the fractured slip joint, negligent misstatement or breach of warranty arising from misstatements in the Certificate of Compliance dated 23 December 1998 issued by Cameron.

14 Inevitably, there will be some duplication in the treatment of related issues even though brought under different causes of action. Most obvious would be questions like: Did the plaintiffs suffer a loss; alternatively, if they did suffer a loss, did the defendants cause the loss sustained by the plaintiffs or did the plaintiffs fail to mitigate their loss?

15 In third party proceedings against Stork, it is Cameron's case that the machined portion was to have been rebuilt first by welding and then machined to Cameron's specifications, but that was not done as Stork had failed to identify the problem in the course of its inspections and refurbishment. As between the defendants, there is a dispute as to the extent of the subcontracted works. Nevertheless, on completion of the refurbishment, Stork issued a "Data Book" to Cameron who then issued its "Quality Assurance Documentation Package" ("the QAP"). The Data Book purportedly certified that the repairs were properly carried out.

16 One very important evidential issue affecting liability and quantum is whether the plaintiffs' documents have been admitted in evidence. One group of documents relates to damages. The other documents included reports/logs generated by the different departments of the drill ship, correspondence between personnel of JDL, manuals and surveys from the offices of JDL and documents relating to the purchase of equipment. The reports and logs were computer printouts in the form of subsea weekly and monthly reports, toolpusher's 0600 hours morning, and 24-hour reports, subsea engineer's afternoon reports, marine riser inventories and marine riser running lists. In addition, the plaintiffs introduced the IADC report ("IADC" stands for "International Association of Drilling Contractors") including documents compiled and signed by the rig superintendent on board the *Energy Searcher*. The IADC report contains details from the 24-hour report and the riser running list. Apart from the IADC report, all other reports are computer records kept on the rig computer. The subsea documents are generated on the subsea department computer.

17 The defendants argue that except for a limited number of documents agreed to by the parties on authenticity and contents of the documents, the rest remained in the pile of inadmissible documentary evidence. The plaintiffs were notified by Cameron pursuant to O 27 r 4(2) of the Rules of Court (Cap 322, R 5, 2004 Rev Ed) that Cameron did not accept the authenticity of the documents in the plaintiffs' list of documents. As regards their second and third supplemental lists of documents, which pertained to the claim for damages, the "deemed to admit" provision in O 27 r 4(1) was not triggered as there was no inspection of the documents from those two lists. There was no agreement to dispense with formal proof of the documents.

18 In these circumstances, the plaintiffs produced an overwhelming quantity of paper assembled together in some 60 red lever arch files, but much of it was never referred to at the trial. Documents do not prove themselves and before they are admitted in evidence, there should be an evidentiary basis for finding that they are what they purport to be. So the plaintiffs, if they wish to rely on the documents, they would have (and they did not do so at the trial) to produce the original documents, prove that they were made, executed and that the documents are what they purport to be. Challenges to the mere tender of the documents remained live issues right through the trial and they have dire consequences on the claims. I shall revisit this topic when I deal with damages.

19 As for computer-generated documents, under s 35(10)(*b*) of the Evidence Act (Cap 97,

1997 Rev Ed) secondary evidence may be used but only if they are in the first place admissible in evidence. Computer-generated documents are admissible by one of the three alternative modes of admissibility under s 35 of the Evidence Act: by way of an express agreement between the parties to the proceedings (s 35(1)(*a*) of the Evidence Act); by way of being output produced through an approved process (s 35(1)(*b*) of the Evidence Act) and by proof of the proper operation and accuracy of the computer printout (s 35(1)(*c*) of the Evidence Act). The plaintiffs have not in my view satisfied any of the three alternative modes. Section 35(1)(*c*) requires compliance with the two conditions stipulated therein to be shown by a certificate. The case of *Lim Mong Hong v PP* [2003] 3 SLR 88 recognises that proof of the two conditions in s 35(1)(*c*) of the Evidence Act by a certificate pursuant to s 35(6) of the Act is not the only mode of proof of proper use and operation of the computer. The plaintiffs submit that they have satisfied s 35(1)(*c*) through the evidence of Sean Roche ("Roche"), the rig superintendent, and Anthony John Sheed ("Sheed"), the subsea engineer. Whilst Roche and Sheed were users of the subsea computers, I am not satisfied on the evidence that they would qualify as someone who is fully familiar with "the operation of the computer in the sense of knowing what the computer is required to do and who can say that it is doing it properly": *per* Lord Griffiths in *Regina v Shepherd* [1993] AC 380 at 387. So how secured were the computers? There was no clear evidence of the operational environment of the computers, both hardware and software, as well as from the standpoint of usage to answer that question which relates to issues concerning the integrity and reliability of the system and the quality of the evidence therein.

20 Putting aside those documents in the second and third supplementary lists of documents for the moment, the plaintiffs in their closing submissions tried vainly to justify the overwhelming quantity of documents. They say they are not relying on these documents for the truth of the contents but to demonstrate that the plaintiffs had maintained a system of compiling and storing information throughout the period and this information on the operations and activities of the drill ship and its departments which is gathered from the documents was acted on subsequently by others like Helmut Ernst van Roijen ("HR"), the operating manager of JDL, Roche and Sheed. The plaintiffs are engaging in sophistry. The relevance of the arguments on the subject matter of admissibility of the documents is all the more baffling particularly when the failure of the *Energy Searcher* slip joint has nothing to do with the drill ship's safety procedures, practices or reporting. The plaintiffs in their closing submissions assert absence of effective procedures and controls by Cameron and Stork in its respective organisations. On the other hand, the defendants have not said that there was a failure in safety or operational procedure on board the *Energy Searcher* that caused the failure of the slip joint. Notably, it is common ground that the incident was due to equipment failure and the insufficiency of the wall material at the failure point was a result of machining. Specifically, the wall thickness at the fractured location should have been between 14.3mm and 15.9mm (as indicated by Cameron's own drawings) whereas the actual thickness was between 1.37mm and 4.8mm. So the questions are: "who did the machining?" and "are any of the defendants responsible?" The plaintiffs' unintelligible explanation to justify the huge amount of documents left me with the impression the litigation was not as focused as one might have expected; the preferred mode of prosecuting the claims was to throw in everything available with little or no regard for time and costs that were bound to be wasted. Such an approach also makes the court's task in resolving the dispute more difficult.

Identity of the fractured slip joint

21 It is appropriate to first establish whether the fractured slip joint is the same slip joint refurbished by the defendants in 1998. Needless to say, the identity of the fractured slip joint is highly relevant since any legal liability that is incurred on the part of the defendants to any of the plaintiffs will turn on the outcome of this inquiry. If the fractured slip joint is different from the one refurbished in 1998, the action must be dismissed *in limine*. On the other hand, if traced to the defendants in that the fractured slip joint is the same slip joint refurbished in 1998, the question as to

whether the defendants incur any legal liability to any of the plaintiffs will turn on the application of the law relating to contract, negligence and misrepresentation. I shall refer to the slip joint refurbished in 1998 as "the standby slip joint".

22 The defendants submit that the plaintiffs have not established that the fractured slip joint is the standby slip joint refurbished in 1998 by the defendants. Counsel for Stork, Mr T M Tan, submits that the plaintiffs have not been able to identify the exact parts from the two condemned slip joints that were used to refurbish the primary slip joint in 1997 and what were the leftover components that were used to refurbish the standby slip joint in 1998. Mr Tan together with Mr Prem Gurbani representing Cameron, took the position that the plaintiffs have not shown that after refurbishment, the standby slip joint was sent to the *Energy Searcher*. Furthermore, the standby slip joint was in Malaysia in January 1999 contrary to the testimony of some of the plaintiffs' witnesses of fact that the standby slip joint was unused and had been stored under a riser pile on the starboard foredeck of the *Energy Searcher* for the entire duration of 28 months. The defendants also took issue with the identity of the slip joint that was salvaged from the sea and transferred to Singapore where it finally remained in storage at Oil States Industries (Asia) Pte Ltd.

23 I begin with Stork's evidence. Stork admitted to receiving from VDH over two days on or about 8 and 9 December 1997 the components listed in its further and better particulars dated 6 January 2004. It is not disputed that a standby slip joint was refurbished using those components. Kim Heng Marine & Oil Field Pte Ltd ("Kim Heng") on behalf on JDL collected the standby slip joint from Stork's premises on 16 November 1998.

24 The plaintiffs' documentation like the cargo manifest dated 14 November 1998 recorded the shipper of the "Slip Joint-65 feet long" as Eastburn Stork Pte Ltd and the IADC report noted the date of delivery of the standby slip joint to the drill ship by barge as 15 and 16 November 1998. Inconsistencies aside, Mr Tan points out that the aforementioned records have not been admitted in evidence. None of the witnesses of fact who testified in court was on board the drill ship at the material time and they were therefore unable to testify to the receipt of the standby slip joint in November 1998. Kim Heng was also not called upon to testify. Separately, Mr Gurbani focused on the absence of any material transfer records covering a transfer of the standby slip joint from Stork to the *Energy Searcher*.

25 The evidential shortcomings highlighted by counsel in [24] are not detrimental to the plaintiffs' case, for other independent evidence of sufficient probative value point to the standby slip joint being on board the *Energy Searcher* at least in December 1998. Sheed testified that he "pressure tested" the twin packers of the standby slip joint shortly after it arrived on board the *Energy Searcher* and discovered some leakage. Two persons came on board to attend to the leakage. Significantly, Stork admitted to this on-board repair and disclosed documents evidencing the visit to the *Energy Searcher* on 27 December 1998 for repairs to the standby slip joint.

26 This brings me to the next contention that the standby slip joint was not all the time on board the *Energy Searcher* right up to 16 March 2001, a period of 28 months. A marine riser inventory dated 29 January 1999 indicated a slip joint bearing subsea no 503 to be onshore in Malaysia. During that time, the *Energy Searcher* was contracted out to EPMI Malaysia on six shallow wells between 210ft and 226ft water depth in Malaysia. The plaintiffs' witnesses of fact testified to the standby slip joint being stored under the riser pile on the starboard foredeck and being left there at that location until the decision to use it for the first time in March 2001. However, in closing submissions, the plaintiffs retreated from the former position and accepted that the standby slip joint, which was numbered 503, was in Malaysia for storage purposes. Sheed explained that he did not even know that the slip joint with subsea no 503 had gone to Malaysia. From his interpretation of the inventories of

29 January 1999 and 6 February 1999 shown to him, he surmised that the standby slip joint was in Malaysia for purposes of storage. The riser joints were stated on the inventories as having had their "dogs removed" which according to Sheed was indicative of storage. That testimony has to be disregarded as the inventories remain, for the reasons given, inadmissible evidence. Colin Campbell's ("Campbell") expert opinion that the risers and standby slip joint were in Malaysia to leave deck space on board the *Energy Searcher* was plainly speculative. So was Sheed's testimony that the standby slip joint was in Malaysia to reduce weight on the rig.

27 Mr Gurbani illogically postulates that the standby slip joint could have undergone repairs in Malaysia or been used by third parties during the time it was away from the *Energy Searcher*. All parties accepted that the material around the failure point was too thin due to machining and the finger was pointed at only VDH and Stork. Cameron's expert, David Munns ("Munns"), opined that machining was probably done by VDH. Separately, the fact that reduction in wall thickness in a load-bearing section of the RCK box was already significantly thinner than that specified in the design drawings when it left Stork's premises is important for the reason that if indeed the standby slip joint was put into service whilst it was in Malaysia, the standby slip joint would probably have failed then. The RCK box would be supporting the whole weight of the BOP and the riser string. In these circumstances, I find that the standby slip joint was used for the first time after its refurbishment on 16 March 2001.

28 On 5 March 2001, Sheed assisted by Tonny Van Der Most, an assistant subsea engineer, carried out a pre-installation check on the standby slip joint in preparation to switch the primary slip joint for the standby slip joint. Both men were responsible for ensuring that the BOP and associated equipment including the riser and slip joints were prepared for operation. Tonny Van Der Most was not called as a witness. Roche who was at that time in the vicinity confirmed that the pre-installation inspection of the standby slip joint was carried out by Sheed and Tonny Van Der Most although he was not able to tell exactly what checks they did.

29 According to Sheed the inner barrel was stroked out, greased and checked. There was a visual examination of the RCK box and pin ends. The O-rings in the RCK box end were checked to make sure that they were complete and the gooseneck ends in order. The packers were also "pressure tested" for leaks. Sheed testified that he and Tonny Van Der Most concentrated on the locking dogs to make sure they were working properly. At that time, his concerns were for the mechanical components of the standby slip joint.

30 The defendants pointed out that the plaintiffs' own documents contradicted their testimony. The subsea report of 5 March 2001 and again on 11 March 2001 identified the slip joint that was inspected as subsea no 502. This led to the defendants suggesting that Sheed did not inspect the standby slip joint as subsea no 502 was the number given to the primary slip joint. Sheed had no doubts that the slip joint that was hoisted up and inspected on 5 March 2001 was the standby slip joint. He also confirmed that subsea no 503 was the standby slip joint that failed on 16 March 2001 and it was the standby slip joint refurbished by the defendants. Roche did not actually see the number 502 or 503 on the slip joints. However, the afternoon report of 5 March 2001 prepared by him spoke of the "complete inspection of [the] spare slip joint". The afternoon report was prepared by him based on information gathered from the morning meeting with Sheed and whatever updates he received in the course of the day. The activities of Sheed and Tonny Van Der Most were focused on the standby slip joint. Sheed also had no hesitation that although there might have been a mistake in recording the subsea number, the standby slip joint refurbished by the defendants was the one hoisted up and inspected on 5 March 2001. He confirmed that there were only two slip joints on board and it was the standby slip joint that was brought to the rig floor and then hoisted and placed on a rotary table for pre-installation checks. The discrepancy was explained as an input error.

31 Immediately after the incident, Dennis Noordijk, the rig safety officer, took a closer look at the RCK box where the standby slip joint had parted. He noticed the thinness of the wall material at the broken area. The total weight of the equipment in the water that was attached to the standby slip joint was between 430,000 and 450,000 lbs. As to what he meant by "thin", he repeated the same analogy he had given to his wife:

> Just imagine … a thousand taxis from Singapore hanging on one car door because the thickness where it broke was that thin … [note: 1]

32 Stephen Mark Svoboda ("Svoboda") was the technical manager despatched by Cameron to inspect the slip joint after it failed. Svoboda visited the drill ship on 30 March 2001. On board, he inspected and measured the other half that was left attached to the drill ship. He particularly noted and recorded in his tally book the part number of the RCK Box as "SER A26". This part number corresponded to the number in the respective reports of Campbell and Dr Jonathan Sykes ("Dr Sykes"). Campbell and Dr Sykes' respective reports confirmed that the two parts of the RCK box of the fractured slip joint (in Campbell's report "Item no 64 RCK box (half of damaged assembly)" and "Item no 6 Locking assembly (half of damaged assembly)" were from the same RCK box with part number "SER A26". Campbell is from H.O.S.E, an independent auditor of subsea equipment on rigs. He is the plaintiffs' expert and he is put forward as an expert in the running and maintenance of well control equipment (including subsea equipment), in offshore subsea practices and procedures, in the salvage of subsea equipment from the seabed and in third party surveys and inspections of offshore drilling units including the *Energy Searcher*. Dr Sykes is a material engineer specialising in the investigation of failures of engineering components.

33 Sheed identified the slip joint that was salvaged as the standby slip joint as it had subsea no 503 marked on the stainless steel band strapped around the circumference of the choke and kill line. Sheed claimed to have looked for the stainless steel band, located it and recorded down the subsea number as 503. He also took photographs at recovery, which showed the subsea number as 503. Yet none of Sheed's photographs was discovered. I note that even though this omission came to light well before the close of the plaintiffs' case, Sheed's photographs were never produced when it would have been the most natural and reasonable thing to do given their relevance and importance. The plaintiffs' excuse for their omission to disclose the photographs was that it was due to a mistake which is nothing short of preposterous. Mistake was raised in the plaintiffs' closing submissions, there being no evidence to support that claim.

34 There was no sign of the stainless steel band anywhere on the slip joint stored at Oil States Industries (Asia) Pte Ltd. The defendants therefore contend that the plaintiffs have not proved that the fractured slip joint that Sheed salvaged was the same one that eventually found its way to Singapore. Dr Sykes did not find what Sheed claimed he saw – Dr Sykes did not see any stainless steel band let alone metal stamping of the subsea no 503 on the stainless steel band. That was true but Dr Sykes saw the fractured slip joint one year later. It was salvaged in August 2001 and it was then transported from India to Singapore where it arrived in December 2001. Dr Sykes's first inspection was on 8 August 2002 and his second inspection was on 13 March 2003.

35 Counsel for Stork submits that an adverse inference should be drawn against the plaintiffs for not producing Sheed's photographs. Even so, I do not think such an inference will go far enough to derail the plaintiff's case. This is because subsea no 503 was not the only number available to trace the fractured slip joint to the defendants.

36 Stork's pleaded case is that it would "metal stamp" its job number on the large pieces of equipment and mark the same job number on the smaller pieces with a pen. Rajamanickam Prabhuram

("Prabhuram"), Stork's quality assurance manager, testified that Stork would "paint mark" (as opposed to using a pen) the assigned job number on the smaller pieces and for the large pieces like the inner barrel, outer barrel and RCK Box, Stork would "hard stamp" its job number on them. He also stated in the witness box that Stork would stamp or paint mark the job number once there was an order for dismantling and inspection.[note: 2] Munns and Dr Sykes did not find any markings on the RCK Box. But Dr Sykes saw Stork's job number painted on the upper packing wear band, the lower packing wear band, the lower thrust ring and the inner barrel. Stork first inspected the fractured slip joint in February 2003. Prabhuram testified that by then the painted numbers had disappeared.

37 Dr Sykes whose evidence was corroborated by Campbell said that the whole assembly had to be dismantled to get to the numbers he saw, in particular the numbers on the inner barrel. From the arduous effort required to remove some of the components, it was unlikely that the assembly had been stripped down before their inspections.

38 Despite some of the discrepancies in the evidence, I am persuaded that other independent and corroborated pieces of evidence viewed altogether, on a balance of probabilities, identifies the fractured slip joint as the one refurbished by the defendants. I have touched on some of them in [28], [30] to [32]. Discounting the alleged marking on the stainless steel band, Sheed was still able to provide an eyewitness account of what he saw as well as a first hand knowledge of what he did. He was able to verify the salvage from where he was in the recovery vessel *Katun.* Sheed had also seen[note: 3] "VDH job no 9708239 on both upper and lower slip joint housings for packer assemblys [*sic*]". That same VDH job number was seen and noted by the plaintiffs' experts on the upper and lower seal housing during inspection.

39 Both Dr Sykes and Campbell inspected the fractured slip joint at the premises of Oil States Industries (Asia) Pte Ltd. The first inspection was done on 8 August 2002, almost a year after it was salvaged. The second inspection was on 13 March 2003. Dr Sykes identified the fractured slip joint as the standby slip joint. His conclusion was based on several things. But what I found of evidential value and to which I gave much weight is the presence of VDH's job number on some components of the fractured slip joint and this evidence was not challenged by the defendants. Dr Sykes and Campbell saw VDH job number 9708239 painted or stamped on some of the components. Campbell noted in his report VDH job number 9708239 on the lower thrust bearing from the lower packing box; double flange and upper seal housing. Dr Sykes on the other hand reported the same job number hard stamped at the bottom edge of the double flange spool and lower seal housing whereas the same job number was painted on two lower thrust rings. Photographs produced by Cameron also show the same VDH job number on the lower seal housing and spool piece (double flange). Notably, Stork had in further and better particulars provided on 6 January 2004 acknowledged receipt from VDH two pieces thrust rings, two pieces seal housing and one piece double flange seal.

40 Munns also noted VDH job number 9708239 painted on the intermediate double flange. The VDH job number 9708239 is significant for the reason that it was the job number assigned to the standby slip joint whilst the VDH job number for the first slip joint was 9708238. Goh Swee Pang ("Goh"), senior project coordinator in the employ of Cameron confirmed that the jobs for both slip joints were handled by VDH at the same time and they were VDH's job numbers for both jobs. Goh also confirmed in cross-examination by Mr Tan that by the time VDH issued its quotation dated 28 August 1997[note: 4] to Cameron, VDH had dismantled and inspected the leftover components with a view to refurbishing a second slip joint. The completion of this part of the work grouped under item "AA" was confirmed by VDH in the quotation with job number 9708239 typed on it. Thereafter, VDH found that more extensive repairs were necessary and it then issued to Cameron another quotation on 25 September 1997[note: 5] with the same job number typed on it. In that quotation, VDH confirmed that it had completed the works under item "AA" as well as item "BB". Item 1 of work

scope under item "BB" states:

Female RCK Box - To machine remove left over inner barrel

- Dismantle, blast & MPI

41 Lee Thye Soon ("Lee"), senior project co-ordinator in the employ of Cameron, confirmed that works described under item "BB" were done by VDH. Goh issued Cameron's quotation on 28 September 1997 to JDL. He further confirmed that in preparing that quotation, he would have noticed from VDH's quotation of 25 September 1997 that work scope under item "BB" had already been completed. It is also noteworthy that VDH's sketch dated 21 September 1997[note: 6] was for the "female RCK box" and it bears VDH job no 9708239 to which VDH recommended "complete rebuild … by welding" of the area indicated. The area marked on the sketch for rebuild, extended from the internal thread of the lower half of the RCK box to just beyond the welded connection to the upper half of the RCK box.[note: 7] According to the experts, VDH's recommendation in the sketch was directed at an area that included the failed area in question. VDH had identified a deficiency in the wall thickness in the area of the RCK box that failed before the components were sent to Stork. Significantly, Stork in its further and better particulars dated 6 January 2004 acknowledged receipt of one piece "female RCK box" from VDH. The overall probabilities point to and I find that Stork received from VDH the same female RCK box covered in VDH's sketch of 21 September 1997, which Stork later used for the standby slip joint.

42 From the foregoing evidence before the court, I am satisfied, on a balance of probabilities, and I so find, that the fractured slip joint is the same standby slip joint refurbished by the defendants in 1998. I also agree with the plaintiffs that there is no indication as to where else the fractured slip joint could have come from if it was not the standby slip joint. In any case, that is not the defendants' pleaded case.

Title to sue

43 Before turning to the position under the various causes of action, it is convenient to first deal in general terms with the principles of law governing the plaintiffs' title to sue in so far as they relate to this case.

Claims against Cameron

44 I shall first deal with the various causes of action brought against Cameron. The plaintiffs' claims against Cameron are put in a number of different ways: as a claim in contract, as a claim in negligence and as a claim for breach of warranty or negligent misstatement. The warranty or representation is allegedly from the statements in the Certificate of Compliance dated 23 December 1998 issued by Cameron after completion of the refurbishment works. The plaintiffs appeared to have abandoned their claim in bailment as it was not pursued in closing submissions.

45 For the reasons given below, I find that that the party with title to sue Cameron in contract is JSL and not JDL. The party with title to sue Cameron in negligence including negligent misstatement is not JDL but JSL and JHL. However, both JSL and JHL are essentially suing for the same damages.

Contract

46 The pleaded case in the Re-re-amended Statement of Claim is that the contract of refurbishment was agreed to on or around 14 July 1998 by JDL as agent for JSL and as principal. The

contract of refurbishment is evidenced by Cameron's repair quotation no 66/SGR/336365-01 dated 1 July 1998 and JDL's purchase order dated 14 July 1998 ("the July 1998 contract"). In further and better particulars served pursuant to Cameron's request dated 24 July 2003 and an order of court dated 20 October 2003, the plaintiffs pleaded that at all material times, JDL was acting under a management agreement as principal or, in the alternative as agent for JSL. The further and better particulars were filed on 28 October 2003. The management agreement referred to was dated 1 September 1997. Yet in closing submissions, counsel for the plaintiffs, Mr Randhir Ram Chandra, still advanced a case of a contract between Cameron and JDL as agent for JSL and as principal.

47 The plaintiffs cannot blow hot and cold and they are bound by their averment in the further and better particulars filed on 28 October 2003. It is also difficult to reconcile the plaintiffs' contention that JDL entered into the contract as agent for JSL and as principal in its own right. Normally, an agent sues on a contract where the principal is undisclosed. In such a case, the agent can both sue and be sued on the contract. But in this case, Mr Chandra's very proposition is that JSL was a disclosed principal and in fact JSL as principal has intervened into the contract and has sued on it in its own name. Where a principal intervenes into the contract, the agent drops out of the picture. There is also nothing in the evidence to show that JDL had separately entered into the contract for its own benefit as principal.

48 Cameron's contention is that it contracted with JDL. The July 1998 contract of refurbishment was between Cameron and JDL.[note: 8] At the material time, JDL had not made known to Cameron that JDL was the agent of JSL or any other party.

49 It is not disputed that HR dealt with Goh and Lee. HR testified that JDL was granted 30 days' credit acting as agent for JSL who had the financial backing of the fourth plaintiff, MEP. Before credit was given Cameron had required proof of creditworthiness. HR had to fill out a standard financial credit form for Cameron in which he detailed the corporate structure of the "Jet companies". He had also explained the corporate arrangement to Goh and Lee. Goh and Lee did not contradict HR's testimony. Neither of them could recall why credit had been extended to JDL and on what basis.

50 Previous quotations dated 17 February 1997 and 5 September 1997 issued by Goh to HR were addressed to "JSL Jet Drilling" and quotations from Lee dated 29 July, 13 August and 1 September 1997 were also addressed to "JSL Jet Drilling". Purchase orders from HR to Cameron were headed in the same manner. Even Stork's documentation like the pre-inspection reports, re-manufacturing routing sheets and QA data book, letter of conformance and Finished Works Reports were prepared in the same manner. They were addressed to "Cooper Cameron (JSL-Jet Drilling)" or "JSL Jet Drilling".

51 The management agreement was valid for one year and there is no evidence of any extension for a further period to cover the date of the incident. In my view, the date of incident is not a relevant date. What is important is that at the time of the refurbishment contract, JDL was the manager. The refurbishment contract in July 1998 was during the first year of the management agreement, which commenced on 1 September 1997.

52 On the evidence before me, I find that the July 1998 contract to refurbish the slip joint was between Cameron and JDL as agent for its disclosed principal, JSL. Accordingly, it is JSL and not JDL who is entitled to sue Cameron in contract.

Negligence

53 The claim here is that the accident on 16 March 2001 was caused by the negligence of Cameron, its servants or agents in and about the refurbishment of the fractured slip joint. As a matter

of law, only a person with either legal ownership or a possessory title to the property at the time when the loss or damage occurred could sue in negligence for damages: *per* Lord Brandon of Oakbrook in *Leigh and Sillavan Ltd v Aliakmon Shipping Co Ltd* [1986] AC 785 at 809.

54 JHL claims as the actual owner of the equipment at the time of the loss. Michel Perret ("Perret") stated in his written testimony that there was a re-financing in 1999 involving the sale of the drill ship and its equipment to JHL in exchange for 100% ownership of the issued shares of JHL. JHL then leased back the drill ship and all its equipment to JSL under a bareboat charter. JDL remained commercial and technical managers for the *Energy Searcher*.

55 It is not disputed that JSL purchased the *Energy Searcher* in 1996. However, Mr Tan submits that the sale of the *Energy Searcher* to JHL was not proven since the documents[note: 9] purportedly covering the sale between JHL and JSL were not admitted in evidence. Some of the documents were in French and the English translations thereof have not been certified. Having not complied with O 92 r 1 of the Rules of Court, they could not be used in court proceedings. Neither HR nor Perret has personal knowledge of the sale. In the result, Mr Tan concludes that JHL's claim as owner of the equipment has not been established and it therefore has no *locus standi* in the present action.

56 In coming to the conclusion that Perret has no personal knowledge of the sale of the drill ship and the charter, Mr Tan referred to Perret's answers to Mr Gurbani's questions.[note: 10]

> Q: … You have a section dealing with change of ownership. This is the change of ownership, the first change of ownership, that is from Jet Shipping to Jet Holding. Were you personally involved in this financing deal?
>
> A: No, the financing deal was generated in Paris, by Mr Henin.
>
> Q: So as far as paragraph 32 and 33 are concerned, you have no personal knowledge of it. It was handled by Paris?
>
> A: No, me I was in charge for the technical part of the deal, not the financial part.

57 Unlike Mr Tan, I read Perret's answer as disagreeing with Mr Gurbani's suggestion that he has no personal knowledge of the transactions. He could testify to the change of ownership and lease back arrangement as he was in charge on the technical part of the deal albeit not the financials. Perret testified that he was involved in the purchase of the *Energy Searcher* from the Sheriff, Supreme Court, Singapore. Perret was the representative of MEP and a director of JSL. From about June 1999, Perret was appointed president of JSL. His role in JSL was predominantly a financial one but he worked closely with HR in respect of commercial and technical aspects of the *Energy Searcher*. JDL managed, operated and contracted out the services of the *Energy Searcher* as agent on behalf of JSL. Perret explained that in July 1999, he was appointed executive vice president of JHL which by then had become the new owner of the *Energy Searcher*. In practical terms, his positions in JSL and JHL carried the same duties and responsibilities so his role, as he pointed out, did not change when ownership of the drill ship passed from JSL to JHL. In my view, Perret's involvement in the two companies and the drill ship was sufficient to place him in a position to testify generally to the change of ownership of the drill ship and the charter to JSL as demise charterer.

58 I noticed that the Certificate of Registry, which forms part of Section II, Appendix 6 of the Cairn contract[note: 11] (the defendants have agreed to admit the Cairn contract), still showed JSL as the registered owner. As to why this Certificate of Registry issued on 9 May 1997 was used in the

Cairn contract, it was a point the defendants did not clarify with Perret. Notwithstanding this apparent discrepancy, I still consider it more probable than not that change of ownership did take place. JHL as owner can sue for essentially the same damages as JSL.

59 JSL's right is as a bailee in possession to recover for loss or damage to its bailor's (*ie* JHL) property even though it would have had a good defence to an action by the bailor: *The Winkfield* [1902] P 42. The principle here as paraphrased by Lord Millet in *Alfred McAlpine Construction Ltd v Panatown Ltd* [2001] 1 AC 518 at 581 is that as between the bailee and stranger, possession gives a complete title and entitles the bailee to damages for the loss or injury to the property itself, whereas as between the bailee and bailor the real interests of each must be ascertained. As the bailee must account to the bailor for the thing bailed, so he must account for its proceeds. What he receives above his own interest he receives to the use of the bailor; the wrongdoer, having paid damages in full to the bailee has a good defence to any action by the bailor.

60 Even though JSL is the contracting party, a separate duty of care in tort could arise. If a separate duty does arise, the question is not whether Cameron failed to carry out its duty under the contract but whether it was in breach of its common law duty of care towards JSL or a third party like JHL. Whilst the contract might be material to the incidence of liability as between those who are in a contractual relationship with each other, it does not always have the effect of negativing a duty of care owed by the defendants to JSL or JHL. A duty of care exists where the threefold test in *Caparo Industries Plc v Dickman* [1990] 2 AC 605 is satisfied. The existence of a duty of care at common law depends on foreseeability that a failure to take reasonable care may cause harm of a particular kind to another person, a sufficient degree of proximity between the wrong doer and that other person, and a recognition that it would be fair, just and reasonable in all the circumstances to impose a duty of care on the wrongdoer.

61 Both Mr Gurbani and Mr Tan submit that no duty of care was owed to JHL as it was not yet incorporated as a legal entity at the time of the fabrication works. There is no merit in their contention. A cause of action in tort as against the first and second defendants accrued at the date JSL or JHL sustained loss as a result of a breach of a duty of care. In considering whether a duty of care may exist, the approach laid down by Lord Keith of Kinkel in *Governors of the Peabody Donation Fund v Sir Lindsay Parkinson & Co Ltd* [1985] AC 210 at 240 is apposite:

> The true question in each case is whether the particular defendant owed to the particular plaintiff a duty of care having the scope which is contended for, and whether he was in breach of that duty with consequent loss to the plaintiff.

Breach of warranty and/or negligent misstatement

62 The plaintiffs alleged that the statements in the Certificate of Compliance dated 23 December 1998 amounted to a warranty or representation that the standby slip joint was refurbished according to Cameron's standard procedures, practices and purchase requirements, American Petroleum Institute ("API") and ISO standards and all Cameron's quality assurances applied to the repair services it gave and the product it produced. HR said he relied on the QAP and the certification to confirm his expectation that the refurbished slip joint had been refurbished to an "as new" A1 first class working condition and that it was fit for purpose.

63 The claim for breach of warranty is founded in contract. In closing submissions, Mr Chandra argued that Cameron's QAP provided warranties that were collateral to the Cairn contract. In addition, prior to providing the 1 July 1998 quotation, Cameron expressly or impliedly warranted that a proper inspection of the components including the riser box had been conducted. Cameron breached

this warranty so much so that the 1 July quotation failed to identify the pre-existing problem with the wall thickness of the riser box and failed to recommend the steps necessary to remedy that defect. I agree with Mr Gurbani that these aspects of the plaintiffs' closing submissions formulated as a collateral warranty or a collateral agreement are not their pleaded case and they are thus precluded from making these points.

64 A different position was taken in the plaintiffs' Additional Submissions. Mr Chandra submitted that the Certificate of Compliance dated 23 December 1998 itself is a warranty that every step of the repair process was conducted correctly, as well as a warranty of the quality of the work undertaken, the fitness for use of the telescoping joint and its first class working order. A contractual warranty is different from an obligation to take reasonable care. In a contractual context, the issue is whether the statements in the Certificate of Compliance have contractual effect. That is to say whether a statement of existing fact gives rise to a contractually enforceable promise that the fact is true. And whether the statement acquires contractual effect is dependent on the representee performing his part of the bargain, by as in this case paying for the Certificate of Compliance. It is clear in Cameron's quotation of 1 July 1998, that a certificate was optional and if required a fee was payable. No request was made in the purchase order for a certificate. The certification was a separate matter and not an integral part of the July 1998 refurbishment contract. The plaintiffs adduced no evidence of payment. According to Cameron, the Certificate of Compliance was issued gratuitously.

65 It seems to me that this case is more like one of duty of care in respect of the accuracy of what was stated in the Certificate of Compliance than a case of a person who made contractually enforceable statements concerning the quality of the refurbishment or standards promised by the terms of the warranty. The plaintiffs have in the alternative alleged that the statements in the Certificate of Compliance amounted to representations, which are inaccurate. The negligent statement(s) were made to HR and the plaintiffs are relying on the duty of care arising under the *Hedley Byrne & Co Ltd v Heller & Partners Ltd* [1964] AC 465 (*"Hedley Byrne")* principle. That case has been widely regarded as concerned with liability in damages in respect of a negligent misstatement and also with liability in negligence for pure economic loss.

66 In the case of claims based on negligent statements (as opposed to negligent actions) the plaintiff will have no cause of action at all unless he can show damage and he can only have suffered damage if he has relied on the negligent statement. Reliance by the plaintiffs is an essential ingredient in a case based on negligent misstatement or advice.

Claims against Stork

Negligence and negligent certification of the data book and finished works report

67 For the same reasons given above, the person with title to sue Stork in negligence and for negligent misstatement is JSL and JHL.

Claim of MEP as assignee

68 I now consider the assignment of the rights title and interest of JHL, JSL and JDL in the claims herein to the fourth plaintiff, MEP. In short the assignment of causes of action that JHL, JSL and JDL have against the defendants pursuant to three deeds of assignment, all dated 23 October 2001. Counsel for both defendants challenge the *locus standi* of MEP. They submit that the assignments have not been established.

69 After the incident, MEP sold the issued shares which it owned in JSL, JHL and JDL to

Splendour III Corporation, a subsidiary of Northern Offshore Ltd. The share sale and purchase agreement of 15 June 2001 between MEP and Splendour III Corporation, but not the deeds of assignments of 23 October 2001, was admitted in evidence with the defendants' consent. Authenticity of the deeds of assignment was not admitted nor was there an agreement to dispense with formal proof of the assignments. HR and Perret did not have any personal knowledge of the assignments. The plaintiffs tried but failed in their application to call Yves de Pimodan as a witness. In these circumstances, I accept the defendants' submissions that the assignments have not been proved and MEP has no *locus standi* to bring this action. My comments on documentary evidence under the heading of "Damages" equally apply to proving the assignments.

Responsibility for failure of the standby slip joint

The claims against Cameron

70 The claim for damages for breach of contract pleaded against Cameron is based upon six implied terms. The implied terms pleaded in para 25 of the Re-re-amended Statement of Claim are:

25.1 the first defendant, its servant, agents, employees or subcontractors would exercise appropriate skill and care in and about the refurbishment of the slip joint;

25.2 the first defendant, its servants, agents, employees or subcontractors would exercise appropriate skill and care in and about the certification of any refurbished slip joint;

25.3 any certificate of compliance issued by the first defendant on completion of the refurbishment would be accurate;

25.4 any representations and warranties by the first defendant as to the standard to which it was represented any work were performed were met and adhered to;

25.5 no certificate of compliance would be issued unless the refurbished slip joint had undergone a prior and proper examination to establish whether it was in conformity with the relevant specifications, representations, procedures, practices and requirements;

25.6 the first defendant, its servant, agents, employees or subcontractors would refurbish the slip joint in accordance with the appropriate specifications

71 Particulars of the breach are as follows:

a. in breach of the implied terms set out at paragraph 25, the first defendant, its servants or agents failed to exercise reasonable skill and care in and about the remanufacture, reconditioning, overhaul and repair of the refurbished slip joint in that

(1) the dimension of the pipe wall at the failure point were as set out at paragraph 55 above

(2) the spool showed evidence of machining

b. in breach of the implied terms set out at paragraph 25, the first defendant, its servants or agents failed to exercise reasonable skill and care in and about the certification of the refurbished slip joint in that

(1) the first defendant issued a certificate of compliance when in fact the refurbished

slip joint was not in compliance with the relevant specifications

c. in breach of the implied terms set out at paragraph 25 the first defendant issued a certificate of compliance which was inaccurate;

d. in breach of the implied terms set out at paragraph 25, a certificate of compliance was issued without a prior and proper examination being conducted to establish whether the refurbished slip joint was in conformity with the relevant specifications. The plaintiffs will rely on the first fact that had a prior and proper examination of the refurbished slip joint been carried out, the defect in the wall thickness of the pipe-tube would have been discovered.

e. in breach of the implied terms set out at paragraph 25, the first defendant, its servants or agents failed to refurbish the slip joint in accordance with the relevant specifications.

72 Paragraph 55 states:

Tests revealed that the dimensions of the pipe wall at the failure point were in places as low as 0.0655". It was also apparent that the spool had been machined. The dimensions of the wall were such that it was not fit for its purpose and that an immediate catastrophic operational failure of the refurbished slip joint was inevitable.

73 The issue is whether in this particular contract where Cameron undertook to refurbish a slip joint from components leftover from the primary slip joint there would be implied into the July 1998 contract the implied terms as asserted. The ground upon which it is asserted on behalf of Cameron that the terms for which JSL contended are not to be implied into the contract between the parties is that it is not necessary or appropriate to do so, applying the usual test for the implication of terms in a contract.

74 A formulation of the test to be applied in considering whether it is necessary or appropriate to imply terms in a contract was set out by Lord Pearson in *Trollope & Colls Ltd v North West Metropolitan Regional Hospital Board* [1973] 2 All ER 260 and followed by the Court of Appeal in *Energy Shipping Co Ltd v UDL Shipping (Singapore) Pte Ltd* [1995] 3 SLR 25 at 35. Lord Pearson at 268 said:

The court's function is to interpret and apply the contract which the parties have made for themselves. If the express terms are perfectly clear and free from ambiguity, there is no choice to be made between different possible meanings: the clear terms must be applied even if the court thinks some other terms would have been more suitable. An unexpressed term can be implied if and only if the court finds that the parties must have intended that term to form part of their contract: it is not enough for the court to find that such a term would have been adopted by the parties as reasonable men if it had been suggested to them: it must have been a term which went without saying, a term necessary to give business efficacy to the contract, a term which, although tacit, formed part of the contract which the parties made for themselves.

75 In my judgment, none of the implied terms in paras 25.2 to 25.5 of the Re-re-amended Statement of Claim in fact represented the actual, but unexpressed, intention of both parties or otherwise met the requirements in law for the implication of terms into a contract. As explained in [62] to [64] above, certification of the refurbished slip joint was and did not form an integral part of the contract which JSL and Cameron agreed upon and in that respect could not be viewed as reflecting the intentions of the parties engaged in the arrangements that a certificate as a matter of course would be issued on completion of the refurbishment. In my judgment, Mr Chandra went too far

in submitting that the statements in the QAP amounted to contractual warranties. As for the implied term asserted in para 25.4, it cannot be implied as a matter of law. Representations cannot in law be elevated to terms of contract whether expressed or implied.

76 Before the court will impose obligations as a matter of general law upon parties to a contract there must be some element of necessity present. In the circumstances of the present case, as it seems to me, there is justification to imply into the contract between Cameron and JSL the implied terms asserted in paras 25.1 and 25.6 of the Re-re-amended Statement of Claim. The implication of a need for skill and care is a familiar and ascertainable one in contracts like the present for refurbishment works. JDL on behalf of JSL entrusted the first defendant to refurbish a standby slip joint from components left over from the refurbishment of the primary slip joint and although the refurbishment was subcontracted to Stork, Cameron nonetheless assumed contractual responsibility to JSL for its performance. JSL would have relied on Cameron to use reasonable care and skill in rendering the services which Cameron had contracted to provide whether by itself or by Stork. Correspondingly, Cameron would have appreciated that to refurbish an operational slip joint from leftover components it would have to use reasonable skill and care and in these circumstances the law would necessarily imply to give business efficacy or to reflect the common intention of the parties to the July 1998 contract that Cameron would exercise reasonable care and skill. Glen Chiasson ("Chiasson"), vice president of quality and reliability for the Cameron division of Cooper Cameron Corporation, the parent company of Cameron, agreed in cross-examination that it was reasonable for JSL to expect Cameron to exercise appropriate skill and care in refurbishing the standby slip joint. Eugene Kemp ("Kemp"), who was at the material time the senior design engineer of Cameron, agreed with Mr Chandra that the purpose of the refurbishment was to return a working slip joint to the customer. Chiasson accepted that the intention was to bring the standby slip joint to an operational state such that it should not fail in the way it did the first time it was used. Cameron's obligation under the contract, that is to say, the refurbishment would be carried out with reasonable skill and care remained even if the works or some of it were to be rendered by Stork and even if tortuous liability may exist on the part of Stork. The latter obligation in para 25.6 is in fact a distillation of the implied obligation to exercise reasonable care and skill.

77 Having traced the fractured slip joint to the defendants, it is logical to begin by considering the manner in which the refurbishment works were carried out, including inspection of the various components received by Stork. In the process, the basis of liability, if any, is determinable. Not surprisingly, the failure of the standby slip joint led to differences of opinion between Cameron and Stork. Much in dispute between Cameron and Stork is that of responsibility for the circumstances that caused the failure and for the failure. The former maintains that it had complied with its obligations under the contract with JSL. Stork's position is that its obligation was to recondition the slip joint according to Cameron's instructions, which Stork had duly observed and performed.

78 The complaint was that there was no proper inspection of the components prior to or at the start of the refurbishment process, in the course of it and even at the end, and full dimensions of the RCK box were not taken and checked against dimensional drawings. In the result, it was not detected that the dimensions of the pipe wall at the failure point were under specification and insufficient to bear the loads and bending stresses the standby slip joint would be subjected to thus making failure inevitable. Dr Sykes who had measured the wall thickness of the fractured location stated:[note: 12]

> Adjacent to the fracture surface of the upper half of the Riser Box was a step, where the wall thickness increased to approx 13 mm. The step was sharp and well defined indicating to me that the internal surface had been machined to its present internal diameter before painting.
>
> …

> At the step the wall thickness decreased from 13mm to 3mm ... The actual thickness at the fractured location was between 1.37mm and 4.33 mm.

79 The Cameron drawings indicate that there should be no steps at this location and that the wall thickness at this point and at the fracture location should be between 14.3mm and 15.9mm.

80 One of the various pieces of components that Stork received from VDH was the female RCK box. Goh was aware that VDH had observed deficiencies in the wall thickness of the RCK Box when it was inspected in September 1997. Goh admitted to having sighted the VDH's sketch dated 21 September 1997 where VDH had recommended "complete rebuild … by welding" one section of the female RCK box. The experts have said that this recommendation was directed at an area that included the failed area. There is no record of VDH having rebuilt the area by welding nor did VDH appear to have charged anyone for doing so. Both Goh and Lee confirmed that the VDH documents containing their inspection results and recommendations were not made known or available to either Kemp or Stork. Stork was simply instructed to dismantle and inspect the components. This inspection, which was carried out before a quotation was raised to the customer, is referred to as a "pre-inspection".

81 So the main issue is whether the scope of work set out in the 1 July 1998 quotation was adequate to bring the standby slip joint to an operational state. It is not about whether each individual item of work described in the quotation was properly done or not. I should also add that as Cameron had contracted to perform the refurbishment or some of it (as opposed to a situation where it had only agreed to arrange for the performance of the contract) it could not escape contractual liability by delegating the performance or some of it to another. This is so even if JDL (acting for JSL) knew that Stork would perform the contract or part of it. Cameron is still answerable to JSL in contract or tort unless liability is exempted as alleged. I will come to that later on.

82 In so far as Mr Chandra seeks to rely upon the first type of duty of care which is said to mirror the implied terms in paras 25.1 and 25.6 (and I have found that the relationship between the parties gave rise to a contractual obligation to do the refurbishment with reasonable skill and care), a duty of care to the same effect would be owed as the contract did not negate the imposition of the duty of care in tort. But any duty of care is no more than co-extensive with the contractual obligation. In other words, it is not more onerous. See *Henderson v Merrett Syndicates Ltd* [1995] 2 AC 145. Chao Hick Tin JA in *The Jian He* [2000] 1 SLR 8 at [26] endorsed the view that "where concurrent liability in tort and contract exists the plaintiff has the right to assert the cause of action that appears to be the most advantageous to him in respect of any particular legal consequence".

83 It seems to me indisputable on the evidence (and I shall discuss this in some detail below) that from the outset the pre-inspection was deficient and the inadequate wall thickness remained undiscovered from start to the end of the refurbishment process. I find that Cameron was negligent and in breach of the implied terms in paras 25.1 and 25.6 in not providing Stork with the necessary drawings and in allowing Stork to perform the refurbishment without the proper drawings. The exercise of reasonable skill and care would have required Cameron to properly refurbish from the leftover components an operational standby slip joint that was reasonably fit for its intended purpose or function as a load-bearing component. Cameron failed to properly refurbish the standby slip joint in that the wall thickness of the RCK box was so insufficient that its integrity as load-bearing component was seriously compromised so much so that it failed the first time it was put into service.

84 Goh's instructions to Stork were to dismantle and inspect the components. The whole intention was to see if another working slip joint could be fashioned out of the leftover components.

As Mr Tan put it, they were "balance scrap pieces" left over after the primary slip joint was fabricated by VDH. It was an important pre-inspection. The pre-inspection by Stork was to set out the recommended scope of work for the refurbishment. Kemp's evidence is that Stork's pre-inspection should have included the following:

(a) visual inspection of all components;

(b) dimensional inspection and measuring of critical dimensions – this would include measuring the RCK box which was a critical load bearing component and checking the bore size for wear (which Cameron has identified as where the "step" was) and the O-rings and sealing mechanisms;

(c) non-destructive testing of welds;

(d) wall thickness checks.

85 Stork stated in further and better particulars filed on 6 January 2004 that:

> The 2nd Defendant was initially verbally requested by the 1st Defendant to conduct a pre-inspection of the slip joint and to recondition the same in or around December 1997... Over a series of meetings and conversations from then until in or around May 1998, the 1st Defendant confirmed the scope of works to be done by the 2nd Defendant. Due to the passage of time, the 2nd Defendant is unable to recall the exact persons involved, the exact words spoken or the exact contents of the discussions/conversations between the 1st and 2nd Defendants, save that they usually involved the 1st Defendant's Mr Michael Lee, Mr Alfred Goh and/or Mr Eugene Kemp and Stork's Mr Jasbeer Singh.

I should pause here to mention that Lee, Goh and Kemp testified on behalf of Cameron. Stork did not call Jasbeer Singh as its witness.

86 Both the pre-inspection and the pre-inspection report pre-dated Stork's first quotation of 18 May 1998[note: 13] and revised quotation of 25 August 1998.[note: 14] Item 1 of both quotations was similarly worded and it encapsulates Stork's own understanding of Cameron's instructions. Item 1 provided for "complete dismantle unit, clean out and carry out *visual and dimensional inspection*, MPI, hardness check wall thickness checks and submit inspection report" [emphasis added].

87 Prabhuram carried out a preliminary inspection of the components. He is now the quality assurance manager. At the material time, he was Stork's quality control inspector. Prabhuram has a diploma in mechanical engineer which he obtained in India. As the quality control inspector, it was his responsibility as he put it to go through the work done by Stork's workmen and to ensure that the work or work process was properly done and in accordance with the specification or requirement of the customer and Stork as well as to the standards which Stork had been certified. He admitted to having no previous experience in the refurbishment of slip joints before Stork received the *Nanhai* and the *Energy Searcher* slip joints. He admitted to being unfamiliar with the function and operation of a slip joint.

88 Admittedly, Prabhuram only carried out visual inspection on the bore of the RCK box and did not take measurements or perform any dimensional inspection of the RCK box or conduct wall thickness checks. From this visual inspection, Prabhuram saw no sign of wear and tear and that was his stated reason for not taking measurements of the RCK box. Besides, he did not consider it a

standard or common practice to conduct wall thickness tests on the RCK box. Prabhuram agreed with Mr Gurbani that at the pre-inspection stage, he already knew that the section of the inner barrel seized in RCK box had been removed but he did not know how it was removed. He could not remember seeing any machining marks during pre-inspection. He was only looking for abnormalities such as deep pitting, scoring marks, damage and corrosion, concentrating on the condition of the threads and the O-rings. Prabhuram could not remember seeing a step at pre-inspection and after the refurbishment work. He admitted that even if he had seen a step or a shoulder, he would not have realised that it was not part of the original profile of the equipment.[note: 15]

89 By the time routing sheets were generated, he had seen Stork's quotation and knew what was required by Stork's quotation, namely visual and dimensional inspection as well as wall thickness checks on every component in the slip joint.[note: 16] However, he still did not carry out a dimensional inspection on the RCK box. He felt that it was unnecessary and it was not a standard or common practice to do so.

90 Prabhuram proceeded with the pre-inspection making use of whatever drawings Stork had from an earlier job on a slip joint from the *Nanhai* and information gathered from Cameron's manuals for riser pipes and slip joints. The copies of the Cameron manuals from which he had extracted the work scope for the preliminary inspection were exhibited in his affidavits. Prabhuram's attitude was that if Cameron wanted additional repairs done after the latter's review and verification, Stork would be told.

91 According to Prabhuram, he did not at any time receive any drawings from Cameron. He claimed to have requested drawings and documents but his answers on this aspect were somewhat inconsistent. Having regard to his testimony that it was not a standard or common practice to undertake a dimensional inspection of the RCK box, he would not in my view have asked for dimensional drawings of the RCK box. To buttress Stork's contention that Cameron did not send any drawings to Stork for the *Energy Searcher* slip joint, Mr Tan relied on the list of drawings in a file maintained by Stork's engineering department which sets out the various drawings that were returned to Cameron at the end of Stork's appointment as authorised vendor, a term used to describe the relationship between the defendants. As there was no dimensional drawings of the RCK box on that list, Mr Tan submits that this list represents the best evidence on the issue since Cameron kept no record of the documents it furnished. I did not think that this evidence assisted Stork in the light of Prabhuram's declaration at the very outset in his Affidavit of Evidence-in-Chief that Stork's documents are incomplete as over the years some documents were found missing or lost.

92 Goh and Lee maintained that proper drawings were furnished to Stork. Kemp explained that it was the responsibility of Goh to decide on what drawings should be given. Cameron's computerised engineering system would break down a part number into further component part numbers. Each of those components could be broken down into a bill of material, which would quote the dimensional drawings. In this way, Goh or Lee would be able to obtain information to complete the inspection. There are different types of drawings – dimensional drawings, weldment drawings and assembly drawings. Kemp confirmed that Stork would have needed two of the drawings disclosed by Cameron in discovery[note: 17] to carry out the physical dimensioning of the RCK box. His evidence is that even with his own expertise he could not inspect or work on the slip joint without drawings to verify the design requirements. Dr Sykes also explained the importance of dimensional drawings:[note: 18]

> A: It is difficult to know what the wall thickness is just from looking at the inside and outside. The only way you would know if the thickness had been reduced is if the actual profile had changed. In my opinion the only way you would know if the profile had changed is by comparing what you see when you are looking at the profile against a drawing showing what it should look like. In the manual there is no such drawing schedule of what the profile should look like and you

are visually looking at what the actual profile is.

…

Somebody not having a drawing would not know that there shouldn't be a shoulder there.

93 Cameron has relied on Kemp's work practice to establish that drawings were supplied. He claimed that although he could not recall what documents he was shown at the review, he was quite certain that, as with other repairs, he would have reviewed drawings provided by Cameron to Stork. It was his work style not to proceed and make comments on the pre-inspection reports without sighting drawings. He would have been very concerned if Stork did not show him the relevant drawings, as that would suggest that the inspection was not properly carried out. As he had proceeded with the review of the pre-inspection report, he would have been shown the relevant drawings by Stork. He candidly accepted that he had no definite recollection of events of 1998 and of most of the matters upon which he had been invited to comment, independent of contemporaneous documents like Prabhuram's pre-inspection report where he sees his handwritten comments and of other contemporaneous documents of which he had been shown copies for the purpose of preparing his Affidavit of Evidence-in-Chief.

94 After completion of the refurbishment works, Stork prepared and issued to Cameron a Data Book which contained the scope of works. The Data Book also contained a "letter of conformance" (signed by Prabhuram) which described the customer as Cooper Cameron (JSL-Jet Drilling) and states:

> This is to certify that the above mentioned equipment has been inspected repaired remanufactured and/or tested in accordance with the requirements of Eastburn Stork Pte Ltd Quality System, API 6A and 16A and Cameron specs

95 The Data Book also contained a "Finished Works Report" (also signed by Prabhuram) from the second defendant dated 20 November 1998 which says in relation to the riser box: "all rebuilt areas final machined to Cameron drawing specs" but does not make any reference to wall thickness tests being done for the riser box. The Data Book includes "Dimensional reports" for various components but does not include any dimensional report for the riser box.

96 Cameron in turn issued in December 1998 the QAP which included Stork's Data Book to JDL. The package included a "Certificate of Compliance" dated 23 December 1998 stating

> This is to certify that the Cooper Cameron produce(s)/purchase items(s) described above have been purchased/manufactured/
> repaired/remanufacture in accordance with the Cooper Cameron Standard Procedures and Practices/Cooper Cameron Purchase Requirements".

Cameron did not have sight of the refurbished standby slip joint before issuing the QAP.

97 As stated, it is not disputed that wall thickness was reduced by machining. The deficiency was not noticed as Prabhuram did only a visual inspection and he admitted that the extent of this pre-inspection was determined by the documents and drawings he had in his possession (*ie* Cameron manual extracts and documents for the refurbishment of the *Nanhai* slip joint) and from his own experience gained from the inspection of the *Nanhai* slip joint. Chiasson went through the extracts from Cameron's manual which Prabhuram said he used for the preliminary inspection. He testified that out of the 55 extracts, some 26 extracts were not part of the rig book of the *Energy Searcher*. Besides, as Kemp explained drawings from the rig book are not dimensional drawings but schematics.

Stork's case is that Prabhuram did not have the relevant dimensional drawings.

98 I am not persuaded and I so find that Cameron had not provided Stork with dimensional drawings of the RCK box identified by Kemp as necessary for a dimensional inspection. Goh and Lee could not recall the drawings that were supposedly furnished and there was no record of the drawings supplied. Kemp had no memory of what actually transpired and resorted to his work practice as proof that relevant drawings must have been showed to him at the time of the review. On the other hand, Prabhuram said that no drawings were in hand during the review of the pre-inspection report against the components. When he met Kemp, he was not given dimensional drawings or any bill of material.

99 Kemp maintained that his review was of the pre-inspection report submitted with non-conformances already identified and noted by Prabhuram and was not a review of the sufficiency or extent of the pre-inspection and pre-inspection report itself. It follows and I agree as a matter of logic that if Stork missed a non-conformance in its pre-inspection inspection, so too would Kemp.

100 Although Kemp was not expected or required to duplicate in its entirety the work of Prabhuram, he was obliged to analyse Stork's pre-inspection reports and recommendations with sufficient care to enable Kemp to satisfy himself independently that the pre-inspection reports and recommendations fell within an acceptable range of information of that kind. Stork's communication to Cameron were in these terms: "Cameron to review, verify and advise" at the end of Stork's pre-inspection report on 4 January 1998 (and Kemp agreed that the message there would have been for him to respond) and "prepared in compliance with Cooper Cameron review verification and advice" at the end of Stork's pre-inspection report of 5 February 1998. Kemp did review the pre-inspection report and make recommendations. Separately, there was no evidence that Kemp knew or did not know that Stork had assigned an inexperienced and unqualified person to conduct the inspection of the components. The fact of the matter was that Prabhuram did not detect the insufficiency of the material thickness. No mention of the RCK box in the pre-inspection report would mean, for Kemp, that Prabhuram had inspected it and found it to be within specification. Kemp had simply assumed a dimensional check had been performed on the RCK box.

101 VDH had identified a deficiency in the wall thickness in the area of the RCK box that failed before the components were sent to Stork. In my view, Goh's wrongdoing was in not making known VDH's findings and recommendations to Kemp. I find that Goh together with Lee were aware of the deficiency in the wall thickness as identified by VDH and being in the know ought to have provided dimensional drawings of the RCK box to Stork so that the extent of the deficiency identified by VDH in the location of the failure could be investigated.

102 I pause here to explain the basis of my finding that Goh and Lee were aware of the deficiency in RCK box. Goh and Lee worked closely as a pair. Goh admitted to seeing VDH's recommendations on or about 21 September 1997. Lee accepted that VDH had removed the section of the inner barrel seized in the RCK box by machining. He was also told of the machining by VDH.[note: 19] It was clear to me that Goh knew what VDH did as did Lee. Goh was deliberately evasive when questioned on this area. After the machining, VDH recommended a "complete rebuild this area by welding.[note: 20]" The experts have said that this comment indicated an area that included the failed area.

103 The outcome of this case against Cameron would be the same whether it was VDH or Stork who did the machining. Stork's case is that the machining which reduced the wall thickness in the RCK box where the failure occurred was done by VDH and hence was a pre-existing condition at the time the components were received by Stork from VDH. Cameron's expert, Munns agreed with Stork that the machining near and at the failed area was done by VDH. Mr Chandra's contention, which I accept, is that even if the RCK box was not machined by Stork, the reduction in wall thickness was

undoubtedly noted at the location when it carried out the refurbishment and Stork should have noticed the deficiency in wall thickness. In my judgment, the conditions were such that the wall thickness was not detected and identified and that led to the omission being perpetuated. The responsibility for the failure must be attributed to both defendants. Cameron and Stork are concurrently liable for the failure. I shall deal with Stork's liability in detail below. Suffice it to say that a dimensional inspection or taking measurements of the RCK box before and in the course of refurbishment would have detected the condition. I have already dealt with Prabhuram's inspection. A dimensional inspection before it left Stork's premises would also have detected presence of the non-conforming step. An inexperienced and unqualified man was put on the job taking charge of the refurbishment. Prabhuram said that he would not have appreciated the significance of a "step" if he saw one.

104 The second type of duty of care upon which JSL and JHL sought to rely arose under the principle in *Hedley Byrne* ([65] *supra*). Mr Chandra submits that in reliance on the QAP and the Certificate of Compliance, HR entered into the Cairn contract dated 17 November 2000 and it was made by JDL as sole and exclusive managers of the *Energy Searcher* for and on behalf of JSL. In that Certificate of Compliance, Cameron represented or warranted in respect of the refurbished slip joint that it was in first class working order (cl 3.1 of Cairn contract) and capable of performing the services required under the contract (cl 3.2 of Cairn contract). It is said that HR understood Cameron's certificate to be an express warranty and representation of quality from Cameron that the refurbishment had been performed to at least the minimum international standards of API and Lloyd's Register Quality Assurance ISO 9001 and that the refurbished slip joint was now in first class working order and fit for operational use. Such certification was critical in representing to potential clients such as Cairn that the drill ship and her equipment met international standards. HR stated:[note: 21]

> An operating contract was then agreed between Jet Drilling and Cairn Energy on 17 November 2000. In reliance on the Quality Assurance Documentation Package and the Certificate, I represented that all the equipment on board the "Energy Searcher" was in good working order and capable of performing the services required under the contract with Cairn Energy.

105 HR's claim as aforementioned is however not the plaintiffs' pleaded case on reliance. In para 41 of the Re-re-amended Statement of Claim, the plaintiffs averred that they did so rely on the warranties and/or representation made by Cameron and Stork as contained in the QAP. There was a request for further and better particulars of the alleged reliance. The relevant requests and responses filed on 28 October 2003 were these:

> i) State when did each alleged warranty and/or representation in the Quality Assurance Documentation Package come to the knowledge of each of the Plaintiffs and to which individual in each of the Plaintiffs did the warranty/representation come to knowledge of.
>
> ii) Please state the facts and circumstances where each of the Plaintiffs had relied on the warranties and representations in the Quality Assurance Documentation Package.

106 The plaintiffs provided the following particulars:

> i) The warranties and/or representations came to the knowledge of each of the plaintiffs during the course of their business relationship and/or as set out in the first defendant's certificate of compliance upon delivery of the Quality Assurance Documentation Package.
>
> ii) See (i) above.

107 The particulars provided are imprecise and vague and a far cry from the testimony of HR who claimed specifically that he entered into the Cairn contract in reliance upon the QAP. The further and better particulars are a dead giveaway as to the veracity of HR's testimony on reliance. HR's testimony strikes me as distinctly unreliable since the evidence is probably coloured by hindsight and is likely to be the product of *ex post facto* reasoning. It would have been easy for the plaintiffs to have referred to the Cairn contract in para 41 of the Re-re-amended Statement of Claim and in the particulars filed on 28 October 2003. Neither could the response in the further and better particulars cover the assertion made by Campbell and repeated in the plaintiffs' closing submissions that the Certificate of Compliance was relied on by owners, charterers, managers and operators of drill ships including oil exploration companies and this is known and understood by the industry and is common practice. The operator insists on OEM certification because the OEM is the one who technically designed it and therefore can be entrusted to represent that the equipment meets international standards. Campbell admitted in cross-examination to Mr Gurbani that as an expert he was not able to say that the plaintiffs relied on the Certificate of Compliance as a matter of fact. He was when repeatedly pressed by Mr Gurbani unable to tell the court exactly which standard procedure and practice of Cameron the first defendant had violated.

108 There is one other point. The defendants agreed to admit into evidence a fax from Richard Gross to Ric Achterberg. That fax talked about switching the primary slip joint that was in use for the standby slip joint. Richard Gross stated that the standby slip joint no 503 was overhauled by Cameron in December 1998 and the only paperwork "we have for this overhaul" was the quotation. So he asked Ric Achterberg to get the Certificate of Compliance. He said:

> Before using it we would like the supporting documentation for the overhaul.

The pleaded case is different. HR's testimony is different from what was stated in the fax. Neither Ric Achterberg nor Richard Gross testified at the trial. The fax was curiously dated 20 April 2004.

109 In the result, in my judgment, I find that there was no proven reliance on the Certificate of Compliance. Accordingly, the second type of duty of care is not established against Cameron.

110 To summarise, I have earlier ruled that Cameron is in breach of the implied terms at paras 25.1 and 25.6 of the Re-re-amended Statement of Claim as well as in breach of the first type of duty of care. The facts as I have found them on the breach of implied terms equally apply to the cause of action founded on the first type of duty of care. There is no breach of the second type of duty of care.

Exemption clauses

111 It is convenient to now look at the exemption clauses relied upon by Cameron. The quotation of 1 July 1998 like in other previous quotations addressed to JDL expressly states under the notes to the quotation the following:

> Cooper Cameron's terms and conditions of sale form a part of this sales quotation and shall apply to any contract of sale.

112 Cameron contends that the provision had the effect of incorporating the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale" into the July 1998 contract. Hence, it could rely on cll 8 and 18B of the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale". Goh testified that the same provision was found in previous quotations issued to JDL and JDL continued business with Cameron after having had notice many times of the terms and conditions. As there had

been a course of dealings with JDL, the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale" were incorporated into the July 1998 contract. The concern here is not about whether or not HR read the notes to quotation which referred to "Cooper Cameron's terms and conditions of sale" and knew through past dealings that there were terms and conditions. As I see it, Cameron's difficulty is in establishing what exactly were the "Cooper Cameron's terms and conditions of sale [that] form a part of this sales quotation and shall apply to any contract of sale". Goh in his Affidavit of Evidence-in-Chief states that "Cooper Cameron's terms and conditions of sale" referred to in the notes to the quotation are the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale". Clause 19 is a proper law and jurisdiction clause and it reads:

> … The rights and duties of the parties and construction and effect of all provisions hereof shall be governed by and construed according to the internal laws of the State of Texas. Any disputes which arise under this agreement shall be venued in the District Court of Harris County, Texas or in the Southern District of Texas.

113 The standard terms and conditions under review appears to be designed for products manufactured in the United States as is evident from cl 13 on labour standards. Clause 13 certifies that products of the "Seller" are produced in accordance with all applicable requirements of ss 6, 7 and 12 of the Fair Labour Standards Act as amended and of regulations and orders of the US Department of Labour issued under s 14 thereof.

114 The existence of cll 13 and 19 immediately casts serious doubt on the veracity of Goh's testimony that "Cooper Cameron's terms and conditions of sale" are none other than the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale". At the bottom left hand corner of the page is the reference "CAM/T&C/US/96". Clause 13 is at odds with a transaction that was to be completely undertaken in Singapore by domestic labour. Furthermore, Cameron and JSL have proceeded on the basis that the July 1998 contract was governed by and construed according to Singapore law and with the courts in Singapore having jurisdiction over the dispute. Another provision which appears incongruous to this transaction is that part of cl 19 on waiver of the standard terms. It provides that a waiver must be in writing and signed by an authorised employee of the Seller at its office in Houston, Texas. Plainly, the first defendant, a Singapore company, has no staff and office in Houston. In these circumstances, if Goh is to be believed that the intention was to contract on the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale", read as a whole and in context, it behoves Cameron to do more than just state in the notes to the quotation "Cooper Cameron's terms and conditions of sale". In my judgment, no adequate notice was given in that the standard form involved should have been brought fairly and reasonably to the attention of JDL (acting for JSL) by pointing them out, more so when the terms and conditions were not printed on the reverse of the quotation. Accordingly, I find that the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale" were not incorporated by reference to the July 1998 contract.

115 Separately, I should add that the word "Seller" in the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale" is defined in cl 1 as "Cooper Cameron Corporation", "Cameron Division" and "Cooper Cameron Valves". Cameron seeks to read "Cameron Division" as if Cameron's name appeared wherever the word "Seller", namely "Cooper Cameron Corporation", "Cameron Division" and "Cooper Cameron Valves", appeared. Neither Goh nor Lee explained how the rights and obligations of "Cooper Cameron Corporation", "Cameron Division" and "Cooper Cameron Valves" were intended to apply to or include Cameron as cl 1 is quite specific. There are no general words there to give the word "Seller" a wider and unrestricted meaning. The entire set of standard terms and conditions make reference to the rights, obligations and liabilities including exclusion and limitation of liability of the Seller as defined in cl 1. To illustrate, the part of cl 8 which the first defendant seeks to rely on states that "[a]ny repair work performed by the Seller [as defined in cl 1] is warranted for one year

from completion of such repairs and applies only to work performed". Again cl 18B makes reference to the "Seller's [as defined in cl 1] total responsibility for any claims damages losses or liabilities arising out of or related to its performance of this contract or the products or services covered hereunder shall not exceed the purchase price".

116 Chiasson in cross-examination explained that Cooper Cameron Corporation is the parent company and "Cameron" is a division of Cooper Cameron Corporation. The first defendant, Cooper Cameron Singapore Ltd, is a wholly owned subsidiary of the Cooper Cameron Corporation. Besides Cameron Division, there are other divisions in Cooper Cameron Corporation like Cooper Cameron Valves and Cooper Energy Services. Cameron Division specialises in subsea equipment. There is no justification for modification by alteration and substitution of the language to adapt it to the July 1998 contract in the absence of some form of implication which was only possible if it could be said that the implication represented the actual but unexpressed agreement of the parities. Reference to the name "Cameron Division" itself does not point by any form of implication to the first defendant and cl 19, which states that the standard provisions may only be waived in writing and signed by an authorised employee of the "Seller" at its office in Houston, Texas puts that position beyond doubt. To hold otherwise would be to strain the construction of cl 1 and to rewrite the standard terms which the court would not do. On this analysis alone, I have no hesitation in concluding that the "Cameron and Cooper Cameron Valves Terms and Conditions of Sale" are inapplicable to the July 1998 contract.

Novus actus interveniens or contributory negligence of the plaintiffs

117 Cameron argues that JSL and JHL through the conduct of their servants or agents caused or contributed to the loss and damage. The particulars of negligence are set out in para 41 of Cameron's Re-re-amended Defence. In particulars (d) Cameron alleged that

> [T]he Plaintiffs failed to regularly and/or competently perform the inspections and/or failed to follow the maintenance regime specified in the Rig Book and/or API recommended Practice 16Q or at all. The 1st Defendant further avers that if such inspections had been regularly and/or competently carried out, and/or the maintenance regime strictly followed, the Plaintiffs would have discovered the alleged non-conformance in the [telescoping] joint before the said [telescoping] joint was used and could have averted the failure of the said [telescoping] joint entirely.

118 Relying on the doctrine of *novus actus intereveniens*, Cameron seeks to exculpate itself from liability. To succeed, Cameron has to satisfy the court that the act of JSL and JHL, their servants or agents was such as to exculpate Cameron from liability. The correct approach is to be found at para 2-41 of *Clerk & Lindsell On Torts*, (Sweet & Maxwell, 18th Ed, 2000) where reference is made to the decision in *Hogan v Bentinck West Hartley Collieries (Owners) Ltd* [1949] 1 All ER 588 at 593 in which it was held that the question of whether a later act broke the chain of causation could only be answered on a consideration of all the circumstances and, in particular, of the quality of that later act or event.

119 The defence of contributory negligence was raised in the alternative. The Court of Appeal in *Fong Maun Yee v Yoong Weng Ho Robert* [1997] 2 SLR 297 followed *Forsikringsaktieselskapet Vesta v Butcher* [1989] AC 852 and held that where a defendant's liability in contract was concurrent with an identical duty in tort, the defence of contributory negligence was available to the defendant.

120 In the present case, Cameron's breach is of the implied term that it would carry out the refurbishment of a slip joint from leftover components with skill and care of a reasonably competent OEM is the same as liability in the tort of negligence independently of any contract. Accordingly it is

the same category of case as *Fong Maun Yee v Yoong Weng Ho Robert* to which the defence of contributory negligence is available to Cameron. I had earlier found that the existence of the contract did not negative the duty of care at common law.

121 The defence of contributory negligence applies where the evidence establishes that the cause of the damage suffered by the plaintiff is the combination of the fault on his part and the wrongdoing of the defendant: see *Fong Maun Yee v Yoong Weng Ho Robert* at [54]. Karthigesu JA then referred in [55] to *Clerk & Lindsell on Torts* at para 3-13 [now para 3.26 of 18th ed] which states:

> Authorities subsequent to the [Law Reform (Contributory Negligence) Act 1945] seek to establish the following principles. (1) The principles applicable to determine whether the plaintiff's own fault contributed to his injury should be the same as those governing whether the defendant caused those injuries. The basic rules of factual causation should not differ. (2) It matters not whether the operative fault of the plaintiff is prior, or subsequent, to the wrongdoing of the defendant. (3) Broad common sense should be used to judge cause and effect on the facts of each particular case. (4) Foreseeability of the manner of injury is not relevant.

122 Essentially, there are two complaints. The first is that JSL and JHL did not properly inspect or maintain the standby slip joint which was left amongst a pile of risers for 28 months until JSL decided to use it. The inspection and maintenance referred to relate to ss 6 and 7 of the Rig Book as well as API Recommended Practice 16Q ("API 16Q"). Second, JSL was negligent in failing to properly inspect the standby slip joint prior to using it on 16 March 2001. There was a failure to follow the API 16Q inspection practice for riser inspection prior to running of the standby slip joint.

123 Cameron criticised Sheed for not being familiar with API 16Q which Mr Gurbani maintains is most relevant to the maintenance and operation of the slip joint. Sheed was the person in charge of overseeing the running of the standby slip joint and he ought to be well-acquainted with the objective standard that is applicable to the inspection of a slip joint. JSL and JHL were negligent for failing to ensure that Sheed was familiar with the relevant specification setting out the requirements and procedures for the inspection of the standby slip joint. As a result of Sheed's ignorance of the proper inspection procedures as set out in API 16Q he had failed to inspect the standby slip joint properly in that he missed the step in the bore of the RCK box of the standby slip joint. He ought to have detected the existence of the step or shoulder which was 28in inside the RCK box created by machining. All that, Cameron argues, constitutes a *novus actus interveniens* or contributed to JSL's own loss.

124 Svoboda testified that there should be no step or shoulder in the bore (*ie* the bore should be smooth). He said that visually by looking into the inner barrel, the step or shoulder could be seen. The presence of the step or shoulder should have alerted the observer to carry out a dimensional inspection to find out if there was a dimensional deviation before running the slip joint. Mr Gurbani submits that the step would have been clearly visible to anyone inspecting the bore of the standby slip joint as it could have been seen from the exposed surface end of the inner barrel. Cameron relies on para 4.3.2 of API 16Q which recommends prior to running the riser to inspect the bore of the RCK box as well as the inner barrel to check for obstructions, wear or "key-seating". Paragraph 4.3.2(e) states: "remove the box and/or pin protector and inspect the bore of the riser and auxiliary for obstruction and wear" and para 4.3.2(h) states "check inner barrel shoe of telescopic joint for key seating".

125 I have found that the standby slip joint failed the first time it was used on 16 March 2001. The condition of the material in the section of the RCK box that failed was the same when the

standby slip joint left Stork's premises. More importantly, the incontrovertible evidence is that without the OEM's dimensional drawing it would be difficult to establish the correct internal profile of the RCK box. There are no such drawings in the Cameron manual; the diagrams in the manual are schematics and not to scale. One difficulty facing Cameron is that it would have to at least rebut JSL's *prima facie* entitlement to assume that the first defendant as a reputable OEM has fulfilled properly its duty and is not bound before use to make an examination for defects of the type in question: see para 14-79 *Charlesworth & Percy on Negligence* (Sweet & Maxwell, 20th Ed, 2001). The standby slip joint supplied was meant to be installed as delivered and the component put to the use for which it was intended without the plaintiffs having to examine or check for material deficiency.

126 Sheed said he looked through the borehole once when it was sitting on the rotary floor. He agreed with Mr Gurbani that if he saw a step or shoulder he would not run the slip joint. He would check it out. However, he pointed out that he was not looking generally for a "step". That was why it was overlooked or missed. The pre-installation checks carried out on 5 March 2001 were concentrated on a functional test as he was concerned with the mechanical parts, corrosion, impact marks and making sure that any grease or lubricants had not dried out. The check was to make sure that it was still serviceable. I accept Dr Sykes' view which is fair and reasonable that:[note: 22]

> If a slip joint has been refurbished and has only been stored, I don't understand how a step or shoulder could be introduced during storage. Obstructions may be in terms of maybe foreign matter getting introduced into the slip joint, yes and visual inspection to look for signs of wastage or degradation but not for steps or shoulders.

127 In my judgment, Cameron has not established that the alleged intervening cause was of so powerful a nature that its own conduct was not a cause at all but merely part of the surrounding circumstances. In my judgment, the level of maintenance of the standby slip joint or the lack of it, or Sheed's failure to notice the step on 5 March 2001 may only be regarded as a combination of circumstances that fell short of what may be constituted a *novus actus interveniens*. Bearing in mind that the fracture was due to insufficient wall material and the insufficiency had nothing to do with degradation of material by corrosion or wear and tear, the relevant factor is that Cameron and Stork created, for the reasons given, the situation leading to the fracture. Accordingly, I find that Cameron has not demonstrated that the alleged intervention turned the original negligent act into part of the surrounding circumstances. Equally, the defence of contributory negligence also fails. Cameron, as it was required to do, had not established that the loss or damage suffered by JSL and JHL was causally linked to the contributory negligence of JSL and JHL.

Claims against the second defendant

128 Mr Tan took the position that Stork did not owe any of the plaintiffs a duty of care in law and, JSL having contracted with Cameron is barred from suing Stork in tort, citing the case of *Man B&W Diesel S E Asia Pte Ltd v PT Bumi International Tankers* [2004] 2 SLR 300 ("*Bumi International*") in support of his contention. *Bumi International* is distinguishable on the facts of this case. In that case, the contract was between the shipyard, Malaysian Shipyard and Engineering Sdn Bhd ("MSE"), and the owners, PT Bumi International. Under the contract, MSE was sourcing the engine for the vessel from a third party. Man B&W Diesel S E Asia Pte Ltd and its UK parent company, Mirrlees Blackstone Ltd supplied the engine. The obligations contracted by the shipyard were such that the shipyard was wholly answerable and responsible for its subcontractors' acts and omissions. In this way, PT Bumi International committed itself to only looking to MSE for redress. The contracting parties had expressly provided for the remedies which would be available in the event that the vessel and engine did not perform up to specifications. The Court of Appeal held that in the light of the special circumstances of the case to infer a duty of care on Man B&W Diesel S E Asia Pte Ltd and

Mirrlees Blackstone Ltd would be to run counter to the specific arrangement that PT Bumi International had chosen to make with MSE. The plaintiff there was not entitled to claim in tort against the subcontractor. The Court of Appeal in *Bumi International* was also concerned with a claim for economic loss and was not prepared to extend the duty of care to the facts of that case. In the present case, the contractual relationship between JSL and Cameron was not so confined. Besides, the claim here is for direct physical damage to property and there is no attempt to extend the principle in *Donoghue v Stevenson* [1932] AC 562.

129 Whether a duty of care was owed to JSL is a question of law. Whether Stork was negligent and thereby breached such a duty of care as it owed is a question of fact. I have no doubt that Stork owed JSL and JHL a duty of care in tort. The parties were in a relationship of close proximity. At the material time, JDL occupied shared premises with Stork and were aware that the latter were Cameron's authorised contractor. It is not disputed that it was JDL who had wanted Stork to undertake the refurbishment of the standby slip joint. At that time both jobs – the primary slip joint and standby slip joint – was handled by VDH. JSL initiated and consented to the switch and the appointment of Stork and consequently the components left over from the primary slip joint were sent from VDH to Stork. Chao Hick Tin JA in *Bumi International* said in [48] that the concept of proximity must always involve, at least in most cases, some degree of reliance. JSL were clearly relying on Stork to exercise appropriate skill and care in and about refurbishing a working slip joint out of the leftover components. Stork assumed responsibility to JSL by accepting the leftover components for the purpose of inspection and refurbishment albeit the contract was with Cameron. The harm was in my view foreesable. It is in all the circumstances fair, just and reasonable to impose a duty of care upon them in respect of work designed to fashion out of the leftover components a standby slip joint.

130 This was a case in which Prabhuram had chosen to act in a way in which a reasonable man would not act and so brought about the damage claimed. The fact that drawings were not provided for the use of Stork did not mean that Stork could make do without drawings or as the case may be improvise by making use of the drawings from the *Nanhai* slip joint. Any damage, which arises thereafter does not only arise from the failure of Cameron to provide drawings but also from Stork's deliberate choice to proceed using the wrong and insufficient drawings. I find that without the dimensional drawings for the lower and upper ends of the RCK box Prahbhuram should not have gone ahead with the pre-inspection which he did. Even when he learned that Stork had quoted for dimensional inspection, he dismissed that as unnecessary for two reasons. He saw nothing wrong with the bore of the RCK box as there was no wear and tear. It was also not standard practice to carry out dimensional inspection. He admitted that he would not have appreciated the significance of the step in the bore of the RCK box even if he had seen the step during and after completion of refurbishment. All the more he would need dimensional drawings to assist in identifying a change in the profile. The deficiency in the wall thickness as indicated by VDH was undoubtedly there at the location when Stork carried out the pre-inspection. It is not disputed that the cause of the failure was insufficient wall thickness.

131 Stork's position is that as the machining was done by VDH, Stork cannot be blamed for the failure of the standby slip joint. In my view, there can be no doubt that even if VDH had reduced wall thickness by over-machining, Stork can hardly rely on VDH's over-machining as the sole cause of the damage suffered by JSL and JHL to exonerate itself from liability. It is not unusual to find that certain consequences have more than one cause. To be recognised as a cause in law, the causative circumstance does not have to be *the* cause. VDH on 21 September 1997 had indicated there was a deficiency in the wall thickness in this location although VDH did not indicate the extent of the deficiency.[note: 23] Prabhuram's fault from the point of view of causation is a cause of the failure of the standby slip joint. It would be unrealistic to take the view that it was not *a* substantial and material cause of that damage.

132 In light of my decision that Stork cannot exonerate itself from liability even if over-machining was introduced into the RCK box at VDH, it is strictly not necessary to rule on the question whether Stork had machined at the areas that failed. However, I should say something on the evidence, which in my view is far from conclusive.

133 Although there was no record of the precise extent of the machining work in the finished works report, Dr Sykes opined that Stork had done substantial machining in the riser box. Dr Sykes concluded that the two most likely explanations for the machining by Stork that caused the thinning of the riser box were:

(a) Stork went further than required when machining out the old profile of the O-ring groove; or

(b) there was heavy corrosion inside the box and machining was done to remove the corrosion in order to dress up the surface.

134 Dr Sykes pointed out the presence of heavy corrosion or pitting of the internal surfaces of the riser box as confirmed by VDH documents. Deep machining of the internal surface would have been likely in order to remove the deep pitting corrosion inside the riser box. Dr Sykes confirmed he had seen very deep pitting on 12mm (the difference between the normal thickness of 15mm and the deficient wall of 3mm) on the internals of drilling equipment.

135 The linchpin of Dr Sykes' opinion was, as told to him by Ng Dick Soan alias Dixon Ng (the expert appointed by Stork), Stork had machined in the area marked "X" as shown in Dr Sykes' diagram. Machining found above and below the step had been done at the same time although Dr Sykes could not tell when. But taking what Dixon Ng told him into account, entirely from logical deduction, he was able to conclude that machining was done by Stork – the area marked "X" was machined by Stork and since the area marked "Y" was machined at the same time, the machining at Y was done by Stock as well.[note: 24] He continued:[note: 25]

> I have said repeatedly that from the physical evidence you can't tell who did it. But I have been told that Stork did do machining on that area and I have said that in all probability it was machined by them, I would stand by that; in all probability it was. I can't say for certain it was them but in my opinion it was most likely them.

136 The very conversation Dr Sykes relied upon in his opinion was denied by Dixon Ng who was not cross-examined on this by Mr Chandra. Dixon Ng had only said to Dr Sykes that if this was the piece that was done by Stork, machining would have been in the O-ring groove area which is below the step. On the testimony that the same paint was used on the riser box as well as on the rest of the slip joint, all that suggests is that the same paint was used and applied in the same method. Dr Sykes accepts that that evidence does not prove that the same person painted at the same time the riser box and the rest of the slip joint. That to him just adds more weight to his opinion that it was the slip joint that was worked on by Stork.

137 It is Stork's case that machining in the O-ring groove area did not and should not have resulted in a loss of material in the area where the riser box actually failed. Stork's expert Dixon Ng and Dr Kurnia Wira supported Stork's position that the machining was done by VDH. Munns operated an oil drill machine outfit for over 30 years and his expertise is in the inspection business relating to drilling equipment. He agreed that the area machined off was eight inches in length and said:[note: 26]

> On review of the repair documents from Van der Horst, it would appear that they had machined out the inner barrel to relieve the threaded portion and it appears that the machining went well beyond the threaded area, thus changing the internal profile of the component. The Van de Horst repair scope clearly stated that the threads and sealed areas were to be rebuilt up with welding and re-machined back to Cameron's specifications.

138 Lee had testified that he was aware the section of the inner barrel that was left inside the RCK box was removed by machining. Lee and Goh worked closely as a pair. If Lee knew of the machining so would Goh. Goh was less forthright and was patently evasive[note: 27] when questioned by Mr Tan about this. I find that Goh was aware that the section of the inner barrel that was left inside the RCK box was removed by machining. VDH's quotation of 25 September 1997 showed that the exposed length of the inner barrel was cut off leaving a section still seized in the RCK Box. Under work scope item "BB", the leftover section was to be removed by machining. Cameron's quotation dated 28 September 1997 which Goh prepared stated "upper housing (RCK Box) Machine remove left over Inner Barrel". It seems to me a reasonable deduction to cross-refer the recommendation to rebuild by welding to the note in VDH's sketch of 21 September 1997 which reads:

> Inner barrel Acme threaded pin end was seized up on receipt of female RCK Box. Seized up threaded pin end was removed by machining.

Dr Wira, a metallurgist, opined[note: 28] that the machining which VDH would have done to remove the inner barrel would probably be rough machining axially along the housing axis. This type of machining according to Dr Wira is consistent with the type of machining which had thinned the housing wall of the riser box. That seems plausible. After all VDH was working with what was termed "balance scraps" or "leftover" components and "rebuilding" was expected.

139 Since I have not been persuaded that the reduction in wall thickness by machining was introduced at Stork's premises, the only plausible source, there being no other suggestion, where over machining was probably introduced was at VDH.

140 On negligent certification, I agree with Mr Tan that Stork's finished works report were not issued to JSL and reliance which is essential for this cause of action was not on the evidence established.

Damages

141 JSL and JHL are seeking damages from the defendants and they have to bear the onus of proof both as to the loss sustained by reason of the breach and the damages for the loss. In so doing, they have to show that the loss in respect of which they claim damages is caused by the defendants' wrong and also that the damages are not too remote to be recoverable. The defendants have contended that the burden has not been discharged as no evidence was led. Alternatively, evidence that was purportedly led was inadmissible.

142 There is s 12 of the Evidence Act, which provides that

> In suits in which damages are claimed, any fact which will enable the court to determine the amount of damages which ought to be awarded is relevant.

143 The claims here are for general damages estimated at US$21m. They are for: replacement cost of equipment lost or damaged beyond repair; repairs to damaged equipment; hiring of substitute BOP; cost of inspection and refurbishment of hired equipment; cost of recovering, transporting and

storing the refurbished slip joint and associated surveyor's costs; loss of future income and loss representing the difference between what was owed to JDL and what was received from the Cairn Energy settlement and associated legal costs.

144 HR's supplementary affidavit was filed on 5 November 2004, the third day of the trial. In there he exhibited an index marked "HEVR-1" which according to Mr Tan attempts to cross-refer certain paragraphs in his Affidavit of Evidence-in-Chief with documents in six volumes of documents originally labelled "HEVR-3" as well as the six red lever arch files marked "Damages Schedules" vols 1 to 6. The supplementary affidavit was apparently served without documents. Mr Tan's belief is that the intention was for the defendants to use the 12 volumes which were originally marked "HEVR-3" and "Damages Schedules" and provided to the defendants on 4 November 2004. In closing submissions on the subject of damages, Mr Chandra referred to documents assembled in the red lever arch files labelled "HEVR-1 Damages Bundle" vols 1, 3, 4, 5 and 6 and in the Additional Submissions dated 10 June 2005, he referred to documents found in "HEVR-2 Damages Bundle" vol 2.

145 The plaintiffs filed four lists of documents. Mr Gurbani pointed out that some documents from the first list of documents have been included in the Damages Bundle. The second and third supplementary list of documents both dated 6 October 2004 pertained to quantum and the notice to inspect therein was not subject to any time limit. The respective notices provided for inspection at the offices of the solicitors for the plaintiffs at the address stated on any working day during office hours by prior appointment. There was "no time limit" for inspection which is normally within seven days of service under O 24 r 9 of the Rules of Court. As it transpired, there was no inspection of the documents in the two supplementary lists. There were no agreed bundles of documents. The documents were produced at the trial as plaintiffs' documents and objections were taken on the documents in the course of the trial. I agree with counsel for both the defendants that authenticity of the documents forming the "Damages Bundle" was not deemed admitted under O 27 r 4(1) as the time limit stipulated in r 4(2) to which r 4(1) is subject was not triggered. There was also no agreement to dispense with formal proof of the claims for damages. If O 27 r 4(1) applied or if an agreed bundle had been produced at trial, there would have been no need to produce the originals nor prove the existence or execution of the documents in question. However, it should be noted that O 27 r 4(1) is not concerned with admissibility. It is expressly stated in r 4(1) that the sub-rule does not affect the right of a party to object to the admissibility of any document. Admissibility of the plaintiffs' documents was an issue before me. I should add that in the course of the trial, certain documents in the plaintiffs' bundle of documents were marked for identification. Marking a document for identification at a stage of a trial was a means of avoiding a debate then about authenticity and/or admissibility, objections having been taken to the tender of the documents.

146 I begin with the best evidence rule, which is that the contents of documents must under s 66 of the Evidence Act be proved by primary evidence (*ie* the originals themselves) except in situations falling within s 67. The original documents are to be produced to the court for inspection: s 64 of the Act. Secondary evidence (*eg* photocopy) is, however, allowed only upon satisfaction of the existence of the circumstances mentioned in s 67. Section 67 lists the cases in which secondary evidence relating to documents may be given. A document produced as primary evidence or secondary evidence will have to be proved in the manner laid down in ss 69–75. The making, execution or existence of a document has, for instance, to be proven by the evidence of the person who made it or one of the persons who made it, or a person who was present when it was made. In *Deutz Far East (Pte) Ltd v Pacific Navigation Co Pte Ltd* [1989] SLR 926, the original log book was tendered to court for identification. The court held the log book inadmissible as the person responsible for the log book who was the master of the vessel was not called as a witness to establish that the log book was the vessel's log, that the signatures in the log were his and that he kept the log according to the statutory regulations. This decision demonstrates that a mere tender of even the original document is

not enough. Documents are not ordinarily taken to prove themselves or accepted as what they purport to be. There has to be an evidentiary basis for finding that a document is what it purports to be.

147 As a document does not by itself prove the matter expressed therein, the burden is on the party who asserts its accuracy or truth to prove the facts stated therein like any other fact in the absence of any specific admission or agreement on the facts therein contained: see *KPM Khidmat Sdn Bhd v Tey Kim Suie* [1994] 2 MLJ 627 and the observations made in a case cited there on the evidential value of a medical certificate (at 631). I agree with the observation that the mere tender of the medical certificate from a doctor that the person named was ill on a particular date is not accepted as evidence to show that the person was ill. The correctness of the statement made in the medicate certificate has to be proved by an affidavit or oral testimony in court of the doctor concerned or by some other evidence. The chief engineer in *Deutz Far East (Pte) Ltd v Pacific Navigation Co Pte Ltd* having no first-hand knowledge could not attest to the truth or accuracy of the contents of the log book. A witness can be allowed to depose to the receipt of a letter from another or that he took certain action on it but his evidence is no proof of the contents of the letter: see *Sarkar on Evidence* vol 1 (Wadhwa Nagpur, 15th Ed, 1999) at 1057. In the present case, HR and Perret have no first-hand knowledge of the documents in the "Damages Bundle". The contents of the documents would have had to be proved by someone having personal knowledge of the transactions reflected in the documents.

148 In *Popular Industries Limited v Eastern Garment Manufacturing Sdn Bhd* [1989] 3 MLJ 360, the claimants there tried to prove their claim for damages for loss of profits by calling as a witness their auditors. The accountant who testified produced a sheet of calculations which was meant to show the estimated losses suffered by the claimants as a consequence of the defendant's non-delivery of the goods. It was contended by the claimants that the oral testimony of the accountant and his calculations as tendered to court were based on the results of his examination of the account books of the claimants for the relevant period. The account books themselves were never produced and the defendants never dispensed with formal proof of the loss of profits alleged or at all. The non-production of the books of accounts was fatal to the claim for loss of profits. The High Court of Penang held that as the relevant account books of the claimants were never produced, the oral evidence of the accountant and the sheet of calculations were inadmissible. It did not make any difference that the defendants never called for production of accounts books since the defendants never agreed to dispense with formal and proper proof of the loss of profits. Edgar Joseph Jr J went on to observe at 369:

> [E]ven had the books of accounts been in evidence they could not by themselves have been sufficient to charge the defendants with liability having regard to the provisions of s 34 of the Evidence Act [which is pari materia to our s 34] so that the entries themselves would have had to be proved by someone having personal knowledge of the transactions reflected in such entries. The accountant and auditor Mr So, despite what he might say, was not such a person as he, like any accountant, would of necessity have to rely upon information derived from documentary sources and explanations provided by his clients when preparing the accounts.

The reasoning is that a person cannot be allowed to make evidence for himself by what he chooses to write in his own books. There must be independent evidence of the transaction to which the entries relate.

149 In the context of the present case, no original documents were produced at all to the court for inspection. Nothing was said about the whereabouts of the original documents. There was no explanation as to why they were not tendered. What JSL did was to rely on photocopies (*ie*

secondary evidence of the contents of documents) without first bringing themselves within any of the exceptions in s 67 of the Evidence Act. As stated a plaintiff, who seeks to adduce secondary evidence of the contents of a document, must discharge the burden of proving the existence of any circumstances bringing the case within any of the exceptions in s 67. In fact, the plaintiffs here did not address s 67 at all which means that there is nothing before the court to warrant the admission of secondary evidence of the contents of the documents identified as "HEVR-1 Damages Bundle" Vols 1 to 6 and "HEVR-2" vol 2 to prove damages. On top of that, authenticity of the documents was not proven. The correctness of the statements in the documents has also to be proven.

1 5 0 Mr Chandra bypasses the omissions mentioned and launches straight into s 32(*b*) of the Evidence Act. He contends that JSL and JHL need not call the maker of the documents under s 32(*b*) and the documents are to be accepted on their face value. Section 32(*b*) does not assist JSL and JHL. First, there is a distinction in concepts between authenticity of documents, relevance and the procedure for proving contents of documents and admissibility under the exception to the hearsay rule. Second, evidence of authenticity is lacking. Authentication of documents is to be distinguished from and has to be resolved before relevance and admissibility under the exception to the hearsay rule. The matters stated in the documents (whether originals or photocopies) must be proved as explained in [147]. That was not done. Third, the requirements of s 32 must also be satisfied. Mr Chandra in closing submissions simply alleged that the attendance of witnesses could not be procured without an amount of delay or expense which under the circumstances of the case appears to the court to be unreasonable. A bald allegation in closing submissions is not evidence and will not suffice. There must at least be some evidence to establish the conditions in s 32: see *Central Bank of India v Hemant Govindprasad Bansal* [2002] 3 SLR 190; *Sim & Associates v Tan Alfred* [1994] 3 SLR 169 at 187, [63].

151 For these reasons, secondary evidence of contents of documents relied upon by JSL and JHL has in my judgment clearly not been admitted. I am obliged to and do reject the documents tendered as the "Damages Bundle".

152 I hasten to add that it is the duty of counsel engaged in a case to see that the documentary evidence upon which he relies is properly tendered in court and proved: *per* Shankar J in *Chong Khee Sang v Pang Ah Chee* [1984] 1 MLJ 377 at 381. During the course of the trial, the tender of the documents was objected to on the grounds of non-observance of the rules of evidence. Both counsel for the defendants had complained often enough and their position was made clear early enough for JSL and JHL to respond. JSL and JHL have had their chance to redress the deficiencies in the case. One such occasion was when it was decided after a weekend not to proceed with the plaintiffs' intended application to recall HR to testify on damages. Evidently, it was thought unnecessary to do anything as a different view from the defendants was taken on the matter.

153 Separately, there are other evidential difficulties in the way of JSL and JHL. First as regards the claim for the equipment lost or damaged beyond repair, namely BOP stack (US$6.5m), riser joints (US$5m), slip joint (US$750,000), buoyancy modules (US$1.5m), air winches (US$85,000), beacon positioning (US$25,000), hose clamps (US$400,000) and wires (US$25,000), the argument is that JSL and JHL are entitled to recover the replacement cost of the equipment. The figures shown here are for brand new equipment. In my judgment, it is not reasonable on the facts of this case for the loss to be measured on the basis of replacement cost. Damages should be based on the market or resale value of the equipment lost or damaged. But there is no evidence of the condition, age and value (in terms of market or resale) of the equipment lost or damaged.

154 The English Court of Appeal in *The Maersk Colombo* [2001] 2 Lloyd's Rep 275 encapsulated the present state of the English law on the subject:

(a) on proof of tortuous destruction (including loss) of a chattel, the owner is *prima facie* entitled to damages reflecting the market value of the chattel "as is";

(b) he is so entitled whether or not he intends to obtain a replacement;

(c) the market or resale value is to be assessed on the evidence, there being no standard measure applicable to all circumstances.

The Maersk Colombo was a case on replacement value but it also assists on market value.

155 In that case the claimants operated the container terminal in Southampton. One of their cranes was struck and damaged beyond repair by the defendant's vessel. The crane was not replaced because before the casualty the claimants had ordered two new cranes. Loss of use of the damaged crane before the new cranes were delivered had caused some inconvenience but no measurable financial loss. Nevertheless the claimants asked for the replacement cost of the damaged crane. The English Court of Appeal upheld the judge's award based on the agreed resale value of the crane in Southampton on the basis that the cost of reinstatement by reference to transportation and modification costs which had not and would never be incurred and which it would be unreasonable to incur could not be fairly be regarded as caused by the defendant's tort. The English Court of Appeal in *The Maersk Colombo* held that where reinstatement was the appropriate basis for assessment for damages it had to be reasonable to reinstate and the amount awarded had to be objectively fair between the claimant and defendant. Accordingly the test was one of reasonableness. If the claimant intended to replace the chattel, and if the market or sale value was assessed as inadequate for that purpose, then the higher replacement value might have in the event been the appropriate measure of damages. When and if replacement value was claimed the claimant could only succeed to the extent that the claim was reasonable, in other words that it reflected reasonable mitigation of his loss. The claim would ordinarily be unreasonable if it was unreasonable to replace the chattel and the cost of replacement was unreasonable.

156 In this case the *Energy Searcher* was sold shortly after the incident. That being the case, the measure of damages should rightly be the market value of the equipment lost or damaged beyond repair. What was the evidence upon which this assessment had to be made? Market value had to be assessed at the time and place where the equipment was destroyed or lost: see *Ali Reza-Delta Transport Co Ltd v United Arab Shipping Co* [2003] 2 Lloyd's Rep 450. In that case, the claimants led evidence of the market value of the equipment destroyed (in Saudi Arabia) through an expert of what was fair and reasonable in the circumstances including what was the lowest cost. In the present case, no expert evidence was led as to the market or resale value of the equipment lost or damaged beyond repair in India at the time of the incident. There was no evidence as to the age and condition of the pieces of equipment lost or damaged beyond repair. On top of that, without evidence of comparability in terms of age and condition and reference to transportation and modification costs, the replacement cost of the various equipment purchased by Northern Offshore Ltd for the new registered owners of the *Energy Searcher,* Splendour III Corporation, could not be taken as representing the market value of the pieces of equipment lost or destroyed in India at the time. Moreover, having sold the drill ship, there could hardly be any intention to actually replace the equipment. Thus, there is no basis for insisting on replacement cost assuming replacement cost is higher than the market value. Definitely any replacement cost based on the price of brand new items is unreasonable since these prices are logically higher than the pieces of second hand equipment that were lost or damaged beyond repair. The court was told that the BOP is at least 20 years old.

157 *Voaden v Champion* [2002] 1 Lloyd's Rep 623 is a case where there is no market and one is dealing with second hand chattels. In that case, the issue on appeal was whether the judge had

erred in not giving the replacement value for the lost pontoon. The judge there correctly saw that what had been lost was not the cost of replacing a substantially more valuable brand new pontoon but the value of the old pontoon and that the notional value of the latter would, in the absence of a relevant market have to be arrived at by inference and extrapolation. His approach was held to be correct in principle. Save for the age of the BOP, there is no evidence of the age, condition and life span of the various pieces of equipment. It is not possible to assess the notional value of the second hand equipment that was lost.

158 Second, HR's affidavit referred to the recovery of the slip joint but said nothing about the costs that were allegedly incurred for the same, that they were reasonably incurred and what the actual costs claimed were. HR also did not mention any quantum for the costs of transporting the fractured slip joint from India to Singapore. Rental of the BOP was mentioned but nothing was said in his written statement about rental having been paid. His oral testimony on "internal transfers" was useless.[note: 29]

159 The third point concerns the claims for loss of income (US$2.8m) which was due to suspension of drilling operations under the Cairn contract and on prospective future contracts (US$4m) arising from the loss of opportunity to upgrade the drill ship. The drill ship was put back in operation on 26 April 2001. Loss of income on prospective future contracts is too remote. The test is whether the damages which were actually sustained were reasonably foreseeable at the time the contract was entered into as likely to result from its breach. Perret talked about loss of future income based on some negotiations with Shell whereas HR referred to BP. All that seemed tentative and they took place well after the July 1998 contract and under new owners (JHL). In my view, the loss of future income, if established, was due to the sale of the drill ship. According to the plaintiffs' closing submissions, JDL had claimed US$2.4m from Cairn as rental hire under the Cairn contract. MEP paid the outstanding hire of US$2.23m to JDL and took an assignment of JDL's right to claim those sums from Cairn under the Cairn contract. MEP paid the outstanding hire because it had to under the terms of the sale of shares. On the plaintiffs' own submissions, MEP's payment (which has nothing to do with JSL or JHL) is not causative and is also too remote. I have already ruled that MEP and JDL have no title to sue in this action.

160 The defendants contend that the actual loss is not the loss of equipment. The *Energy Searcher* was sold shortly after the incident without the BOP and the pieces of second hand equipment that were lost or destroyed in the incident. The claim ought to be for the loss in the value of the *Energy Searcher* without the equipment. However, JSL and JHL have not formulated the claim based on the loss in the value of the *Energy Searcher.* Suffice it to say, a claim formulated on a basis of loss in value of the *Energy Searcher* must surmount issues of causation and remoteness of damage given lack of finances that was cited as the reason for the sale of the drill ship.

161 These are thus far my views on the evidence of JSL and JHL in terms of proving their pleaded loss. But independent of that, upon Cameron's evidence there is Chiasson who was aware that the BOP stack that was lost was at least 20 years old and opined that if it was properly maintained over the 20-year period, it would probably be worth about US$1m.[note: 30] He explained that the BOP stack is made of components and went on to testify on the ready availability of second hand components for a BOP stack and then assembling the components to make a BOP stack at a total cost of US$1m.[note: 31] Cameron or several of its competitors could easily undertake the assembling. Mr Chandra contends that Chiasson is not an expert and cannot give expert opinion on the value of BOP at the time of the loss. Whilst Chiasson is not an expert, he is in the business and his testimony is of some assistance to put a monetary figure as representing the market value of what was lost and to which I am entitled to take on board. Where there is no precise evidence, I have to do the best I can with the little or limited evidence in order to do justice. Separately, there is

no merit in Cameron's accusation that there has been failure to recover the BOP by way of mitigation. Accordingly, I award US$1m for the lost BOP. By awarding US$1m for the BOP, I see no internal inconsistencies there and my views on the state of the plaintiffs' evidence. As JSL and JHL have not proved the other various claims enumerated in [143] above and I so hold, I must disallow an award of compensatory damages. For those claims, JSL and JHL have succeeded to the extent of liability and they are entitled to recover nominal damages for infraction of their legal rights.

Third party proceedings for an indemnity

162 Cameron's claim for an indemnity against Stork is brought in contract and in negligence. Stork contends that Cameron is not entitled to an indemnity as the loss was either solely due to or was contributed by Cameron. An issue between Cameron against Stork in third party proceedings is the contractual obligations between them and the effect of the clause excluding liability including the loss recoverable from Stork. The contract between Cameron and Stork was evidenced by Stork's quotation no QT2279-GA.R1 dated 25 August 1998 and Cameron's purchase order no 45028553 dated 19 November 1998. Apart from these documents, Stork identified its invoice (ref IV7168) dated 23 November 1998 as evidencing the terms of its engagement by Cameron.

163 I accept Mr Gurbani's submissions that Stork has not proven that their contract was subject to Stork's standard terms and conditions. According to Mr Tan, the general conditions of sale are supposed to be found on the reverse side of Stork's invoice dated 23 November 1998 but none of Stork's witnesses testified on the matter. The invoice was issued well after the standby slip joint was refurbished and released on 16 November 1998. On the facts, if the terms and conditions were printed on the reverse side of the invoice, notice of the same came too late. Stork's quotation mentioned Stork's "General Terms & Conditions of Sale". As Mr Gurbani pointed out, none of Stork's witnesses testified on what those terms were or matched the terms referred there to the "General Conditions of sale" allegedly printed on the reverse side of the invoice. I should add that none of the clauses relied upon by Stork from the language used covered the situation in hand given my findings and conclusions.

164 In my judgment, the present case is one in which Cameron and Stork each had a duty to perform, and neither did so. Each of them could and should have acted differently. This was not the case that one party's responsibility only arose in consequence of the other's failure to properly discharge its function. Cameron and Stork, by their separate and independent acts, caused one and the same damage to JSL and JHL. They were, accordingly, concurrent tortfeasors and each became severally liable for the whole of the damage caused to JSL and JHL. In other words, Cameron is liable to JSL and JHL for the same damage as that for which Stork is liable and *vice versa*. As between Cameron and Stork, Cameron was as much to blame as Stork and I hold that they share equal responsibility for the casualty. Cameron is entitled to a declaration that it be indemnified against what Cameron has to pay JSL and JHL to the extent of Stork's share of the responsibility assessed at 50%.

Result

165 JSL and JHL succeed against the defendants on liability and there be judgment for JSL and JHL against the defendants in the sum of US$1m for the loss of the BOP and the further sum of $10 as nominal damages in respect of the other pleaded claims for damages. Cameron is entitled to a declaration that Stork is to indemnify Cameron to the extent of Stork's share of the damage assessed at 50%. I shall hear parties on costs.

[note: 1]Transcript 9.11.05 at 17:2

[note: 2]Transcript 29.11.04 at 17:15

[note: 3]Sheed's daily progress report at AJS-1 2028

[note: 4]Goh's aeic p20

[note: 5]Goh's aeic p22

[note: 6]IDB1662

[note: 7]Dr Sykes' report 2.3.5

[note: 8]Cameron's Re-Re-Amended Defence, para 24

[note: 9]Plaintiffs bundle vol 6 page 257 -262

[note: 10]Transcript 2.11.05 at 49:20 to 50:4

[note: 11]HEVR-3 vol 5 pp 1615 – 1900 at p1895

[note: 12]Dr Sykes' aeic p 34 & 35 paras 3.1.1.10 & 3.1.1.13 of report

[note: 13]Stork's bundle of core documents p26

[note: 14]Stork's bundle of core documents p31

[note: 15]Transcript 29.11.04 at 126:25

[note: 16]Transcript 29.11.04 at 117:19

[note: 17]Cameron's bundle of documents pp 165 and 185

[note: 18]Transcript 18.11.04 at 129:9 to 130:1

[note: 19]Transcript 23.11.04 at 7:5 to 9:22;14:5;15:19;16:7;17:13

[note: 20]1DB1662

[note: 21]Helmet van Roijen's aeic para 123

[note: 22]Transcript 18.11.04 at 124:10

[note: 23]Transcript 18.11. at 105:15 to 106:16

[note: 24]Transcript 18.11.04 at 147:20

[note: 25]Transcript 18.11.04 at 160:25

[note: 26]Transcript 26.6.04 at 69:16

[note: 27]Transcript 22.11.04 at 87:6 to 90:25

[note: 28]Dr Wira's aeic p 278 para 19 of his report

[note: 29]Transcript 5.11.05 at 130:8 to 130:21

[note: 30]Transcript 25.11.04 at 100:22

[note: 31]Transcript 26:11:04 at 11:5 to 13:21