REPUBLIC OF TRINIDAD AND TOBAGO

IN THE HIGH COURT OF JUSTICE
SUB REGISTRY, SAN FERNANDO

Claim No. CV 2007-02206/
HCA S-2108 of 2004

Between

T.O.C. LIMITED

Claimant

And

RANGE RESOURCES TRINIDAD LIMITED

(previously called Trincan Oil Limited)

Defendant

BEFORE THE HONOURABLE MR. JUSTICE ANDRÉ DES VIGNES

Appearances:

Mr. Hendrickson Seunath, S.C. and Mr. Krishtendath Neebar instructed by Mr. Shastri Maharaj for the Claimant

Mr. Simon de la Bastide instructed by Ms. Elena Araujo for the Defendant

JUDGMENT

THE CLAIM

1. By its Amended Statement of Claim, the Claimant claims against the Defendant US$310,825.98 together with interest thereon at the rate of 15% per annum commencing 15 days after the date of presentation of its invoices and costs.

2. The Claimant alleges that this amount is the value of:

    a. Drilling operation services rendered to the Defendant at the Defendant's request and done at Quinam Wells No. 76 and 76X at Quinam, Penal, Trinidad during the period August 2004 to October 2004;

b. Tools and/or equipment and/or items belonging to the Claimant lost during the said drilling operations conducted by the Claimant at the Defendant's request; and

c. Various other services ancillary to the said drilling services.

3. The Claimant alleges that these services were rendered pursuant to an Agreement in writing dated 18th August 2004 and sets out the following particulars of the amount claimed:

	Invoice No.	Date of presentation	Amount (in US$)	VAT (in US$)	Total (in US$)
i.	1005	20/09/04	$ 62,591.80	$ 9,388.77	$ 71,980.57
ii.	1006	18/10/04	$151,441.66	$ 22,716.25	$174,157.91
iii.	T-1003-05	11/02/05	$ 56,250.00	$ 8,437.50	$ 64,687.50
	TOTALS		**$270,283.46**	**$ 40,542.52**	**$310,825.98**

THE DEFENCE AND COUNTERCLAIM

4. In its Defence and Counterclaim, the Defendant admits that it entered into a Daywork Drilling Contract with the Claimant dated 18th August 2004 (hereinafter referred to as "the Drilling Contract") but denies that it is indebted for the amount claimed. By the Drilling Contract, the Claimant was required to perform drilling work on the well situate at Siparia known as Quinam No. 76 in search of oil or gas on a daywork basis.

5. The Defendant avers that in addition to the express terms of the Drilling Contract, the following were implied terms thereof:

a. That at all material times in the course of the discharge of its obligations, the Claimant would furnish proper functioning and maintained equipment suitable for performing the drilling work required on the said Quinam No. 76 Well;

b. That at all material times in the course of the discharge of its obligations the Claimant would furnish competent labour with the required skills and training suitable for performing the drilling work required on the said Quinam No. 76 Well; and

c. That at all material times in the course of the discharge of its obligations the Claimant would carry out the drilling work required on the said Quinam No. 76 Well with due

diligence, reasonable care and skill and in a timely manner having regard to the depth of the Well required to be drilled on the said Quinam No. 76 Well.

6. The Defendant alleges that wrongfully and in breach of contract the Claimant carried out the drilling work on the said Quinam No. 76 Well (a) using defective equipment; and/or (b) using incompetent labour resulting in the drill pipe becoming stuck in the hole; and/or (c) in an incompetent manner and in an untimely fashion.

7. In particular, the Defendant makes the following allegations against the Claimant:

    a. The two drilling mud pumps used by the Claimant were unable to work together to circulate the well. One pump was required to work the mud mixer hopper or the agitation jets in the mud tanks to keep the drilling mud conditioned. When one pump became inoperable the other pump had to be switched between circulating the hole and/or conditioning the mud;
    b. The circulating pump used by the Claimant although required to reach 60 strokes per minute or greater in order to reach the capability of 8-10 barrels a minute failed to reach or maintain 60 strokes per minute for any length of time;
    c. Pump No. 1 had various problems during the drilling of the Quinam No. 76 Well and was only operating for 40% of the time. This pump had mechanical problems and was prone to overheating;
    d. Pump No. 2 did not perform properly and failed to reach an acceptable level of strokes per minute equivalent to 5 barrels per minute and provided inadequate circulation, causing the drill pipe to stick in the hole;
    e. The Claimant failed to provide a functioning third pump dedicated to drilling only;
    f. The two mud tanks provided by the Claimant performed inadequately and due to the high suction outlet (1½ feet above the bottom) reduced the useable mud tank volume to 250 barrels causing the usage of extra barite, water and mud conditioners;
    g. The mud system employed by the Claimant was insufficient as it relied on the use of jets for conditioning and agitating the mud and resulted in waste with consequential wastage of barites;
    h. The Claimant failed to provide a pill tank;
    i. The Claimant utilised a trip tank which did not function properly or at all;

j. The Claimant utilised machinery with bypass lines which were not directed back into the tank and expelled mud on the location;

k. The Claimant used a mud mixing hopper that did not function properly;

l. The Claimant used a desander that worked only intermittently or at all;

m. The Claimant used a desilter that never functioned at all;

n. The Claimant used an inadequate mud system which lacked proper drainage and caused the wastage of mud through spillage on the location;

o. The Claimant used a Martin Decker weight indicator which was not properly calibrated;

p. The Claimant used an improper functioning geolograph with the result that the depths were inaccurate; and

q. The Claimant failed to provide a mouse hole which slowed down the connection time.

8. By reason of the Claimant's breaches, the Defendant had to intervene, *inter alia,* by hiring a specialist company to carry out the drilling work in order to reach the depth required by the Drilling Contract. By reason of the Claimant's breaches, there was a delay in completing the drilling of the hole to the depth required and the Defendant is only liable to the Claimant in the sum of US$67,000.00 representing the amount that would have been due to the Claimant if it had performed the drilling work with proper functioning and maintained equipment and/or with competent labour with the required skills and training and/or with competence and skill and in a timely manner having regard to the depth of the Well required to be drilled.

9. The Defendant also alleges that it will set-off the Claimant's breaches of contract by way of diminution or extinction of the Claimant's claim since it had to employ contractors and service providers to correct the defective work and perform the drilling work to the depth required at a total cost of TT$1,081,386.00.

10. Further or in the alternative, the Defendant alleges that the Claimant, its servants and/or agents were negligent in the performance of the drilling works.

11. By reason of the Claimant's negligence, the Defendant has been put to trouble and expense and has suffered loss and damage and the Defendant claims to be entitled to set off against the Claimant's claim its counterclaim in diminution or extinction of the Claimant's claim.

12. By way of counterclaim, the Defendant claims damages for breach of contract and alternatively, damages for negligence together with interest at the commercial rate of 12%.

THE REPLY AND DEFENCE TO COUNTERCLAIM

13. In its Reply and Defence to Counterclaim, the Claimant responds that the equipment it used was not defective and the staff used were highly competent. Further, the rig was inspected by Petrotrin on 14th September, 2004 and was found to be fit for purpose.

14. Further, the Claimant alleges that the problems which arose in the drilling operation were normal problems encountered in the drilling industry but they were handled incompetently by the Defendant's personnel. In particular:

    a. The Defendant failed to provide a properly qualified and/or experienced and/or competent drilling engineer to effectively manage the drilling operations;

    b. Both circulating pumps used by the Claimant were designed for and capable of 60 strokes per minute and were function-tested and approved by the Defendant's servants and/or agents and/or an independent contractor. In fact, Pump No. 2 operated at 90 strokes per minute while attempting to complete Quinam No. 76X Well;

    c. The problems which developed with Pump No. 1 during the drilling of Quinam No. 76 were expected in the course of operations in the oil drilling industry. The Defendant's incompetent drilling engineer ought to have shut down operations to allow the pump to have been fixed. Alternatively, the overheating was caused during high pressure usage and Pump No. 1 ought to have been switched to mix mud leaving Pump No. 2 to circulate the mud in the Well for drilling until the Pump was repaired;

    d. Pump No. 2 performed properly. The sticking of the drill pipe was caused by: (a) the failure of the Defendant, its servants and/or agents to control the mud properties in a proper and competent manner; and (b) the excessive amount of weight material added to the mud system moments before the pipe stuck which had to be used to overcome high pressure from a deeper horizon and extremely high solids in the mud system as a result of the Defendant's personnel not directing the running of the desanders while drilling eventually caused the drill pipe to become differentially stuck across a depleted zone below the surface casing;

e. The Claimant was not required to provide a third pump. Upon the completion of Quinam No. 76, it was orally agreed that, if whilst drilling operations were proceeding at Quinam No. 76X either of the two pumps broke down, a third pump would be introduced. Near the end of drilling Quinam No. 76X, this happened and the Claimant secured a third pump to complete the job;

f. The two mud tanks worked properly and were outfitted with 10" suction hoses connected to the bottom end of the tanks which provided direct suction from the base level of the tanks. As a result, there was no usage of extra barite, water or mud conditioners as alleged or at all;

g. The jets worked properly and efficiently and there was no wastage;

h. A pill tank was provided which had dual functionality as a pill tank/trip tank. The Defendant's drilling supervisor was inexperienced in this type of drilling operation and he admitted that he had no experience in drilling operations. Consequently, the Defendant's servants or agents did not know how to identify or use the equipment and were not familiar with the use of the Claimant's mud tank system. As a result, they failed to properly instruct the rig crew to use the pill tank as a trip tank;

i. The mud flow spillage which occurred was caused by the improper setting of the riser causing the same to overflow during high pump volume periods during work on Quinam No. 76 and by the improper cement plugging of Quinam No. 76X;

j. The mud mixing hopper functioned properly at all times;

k. The desander was brand new and worked when put on. The Defendant's personnel were inexperienced and incompetent and were not aware how and when and in what circumstances to operate, utilise or even turn on the desander. They ignored the signage posted on the rig directing crew to operate the desanders and desliters at all times and instructed the Claimant's personnel to only operate the desander and desilter when asked;

l. The Claimant's personnel were not instructed by the Defendant's personnel to turn on the desilter which was connected to a mission pump which had been function-tested and passed by Detroit Diesel prior to the commencement of Quinam No. 76;

m. The Claimant's mud system was a closed system requiring no drainage. Spillage occurred through the riser on Quinam No. 76 and Quinam No. 76X when the Defendant's servants and/or agents contaminated the mud system with a green cement plug set over a bit cone;

n. The Martin Decker weight indicator was calibrated and duly certified prior to and after Quinam No. 76;

o. The geolograph worked properly and was duly calibrated and certified; and

p. A mouse hole was not one of the items listed to be provided by the Claimant. In any event, the height of the derrick did not provide sufficient room to employ a mouse hole connection.

15. In answer to the allegations concerning the drilling pipe becoming stuck, the Claimant alleges that:

a. The Defendant's personnel failed to heed the advice from the Claimant's personnel and preferred to experiment with techniques against the Claimant's advice. This caused the pipe to be lodged even tighter; and

b. The Defendant's personnel failed to follow advice and standard procedure for the extraction of the drilling pipe and equipment from the well. Instead, the Defendant's personnel directed the Claimant's personnel to cement the Well and abandon further operations thereon. This caused the Claimant to lose equipment in the well for which the Defendant was responsible under the Drilling Contract for which the Claimant submitted Invoice No. T 1003-05.

16. In answer to the allegations of delay on Quinam No. 76, the Claimant alleges that:

a. The Defendant refused to give control of the drilling operations to the Claimant and retained the control and supervision thereof. The Claimant's personnel acted under the direction and control of the Defendant's personnel; and

b. The Defendant's servants and/or agents were incompetent, inexperienced and untrained in the drilling operations and were unable to competently, efficiently and properly manage, direct and supervise the operation and this caused the delays. Further, the Defendant's personnel failed to heed the advice of the Claimant's more experienced

personnel in a timely fashion and this led to the problems which arose. In particular, (a) the Defendant failed to have a qualified drilling engineer on site to supervise the drilling operation; (b) the Defendant's drilling operation supervisor was inexperienced and he was unfamiliar with the use of the drilling equipment, the working conditions and the local colloquialisms. This resulted in further delay; (c) the Defendant's personnel failed to use or direct the use of the rig equipment in a proper and timely manner; (d) the Defendant's personnel were unfamiliar with the format and make-up of the drilling items causing loss and delay; and (e) the Defendant's personnel failed to provide a safely designed and/or properly threaded landing joint to handle the Defendant's surface casing during the cementing procedure.

17. In response to the allegations of delay on Quinam No. 76X, the Claimant alleges that:

    a. The Defendant's supervisor was even less experienced and qualified than the supervisor on Quinam No. 76 in that he had no Well control certification. He was also unfamiliar with drilling operation procedure and equipment;

    b. The Defendant's personnel failed to heed the warnings of the Claimant's personnel to retract the drilling bit which was near to its useful life. Instead, the Defendant's personnel ordered and directed the Claimant's personnel to continue drilling which caused one of the cones on the bit to fall off;

    c. The Defendant's personnel failed to follow standard procedure for the recovery of the cone and, against the advice of the Claimant's personnel, adopted an unusual and unorthodox recovery method thereby causing further delay and expense. Subsequently, the Defendant's personnel followed the advice of the Claimant's personnel and the cone was recovered after considerable delay and expense; and

    d. The Defendant failed to provide a casing crew in sufficient time or at all to run the production crew into the well in accordance with standard industry practice and this caused further delay in the completion.

18. The Claimant alleges that no time frame was set or agreed upon for the completion of the drilling operation and it was never a term of the contract, express or implied, that the operations would last 13 days.

19. In respect of the Defendant's claim regarding Diamond Fluid Systems, the Claimant responds that this was a service provided by the Defendant to work in tandem with the Claimant in the drilling operation during the day-to-day running of the contract. As such, the Defendant did not employ Diamond Fluid Systems as a contractor/service provider to correct any defective work or to perform any drilling work.

20. In respect of the Defendant's claims for Tucker Wireline Service, WOW, Directional Services Ltd and Halliburton, the Claimant denies liability for these claims on the grounds that these services were unwarranted, ill-advised and contrary to industry standard practice and/or were rendered by reason of the Defendant's inexperienced and incompetent personnel.

21. In answer to the Defendant's claim for two (2) drill bits, the Claimant alleges that the Defendant is liable for the loss of the bit lost in the hole and admitted that it was in possession of the other drill bit as a lien for monies due and owing to it.

22. The Claimant denies the allegations of negligence.

23. Further, the Claimant denies that the Defendant is entitled to any or any of the damages claimed and avers that after the completion of Quinam No. 76 and Quinam No. 76X the Defendant expressed satisfaction with the Claimant's performance, entered into negotiations with the Claimant for the drilling of a third well and failed to complain about the matters referred to in its Defence until after the Claimant demanded payment of its invoices. Accordingly, the Defendant is estopped from making such complaints and its claims are without merit.

ISSUES

24. The following issues arise for determination in this matter:

    a. Did the Drilling Contract include the implied terms as alleged by the Defendant?

    b. Did the Claimant breach the terms of the Drilling Contract in carrying out the drilling works?

    c. Was the Claimant negligent in the performance of the drilling works?

    d. If the Claimant breached the terms of the Drilling Contract and/or was negligent in the performance of the drilling works, did the Claimant's breaches and/or negligence delay the completion of the drilling works? If so, for what period?

e. What is the liability of the Defendant to the Claimant under the Drilling Contract?

f. If the Claimant was in breach of the terms of the Drilling Contract and/or negligent, what is the liability of the Claimant to the Defendant?

THE EVIDENCE

25. The Claimant filed Witness Statements in the names of Mr. Greg Boyles, Mr. Keith Schnake and Mr. Philip Berkeley but only Mr. Boyles gave evidence at the trial.

26. The Defendant filed Witness Statements in the names of Mr. Walter Cuckavac and Mr. William Chepil and they both gave evidence at the trial. The Defendant also filed a hearsay notice in respect of the Witness Statement of Mr. Albert Balasch. In its closing submissions, however, the Defendant notified the Court that it was no longer seeking to have the Witness Statement of Mr. Balasch admitted into evidence.

UNDISPUTED FACTS

27. The following facts are not in dispute:

a. By the Drilling Contract made between the Claimant and the Defendant, the Claimant agreed, as an independent contractor, to drill an exploration Well in Siparia to a depth of approximately 4,500 feet in search of oil or gas on a daywork basis to commence by 23rd August, 2004. The express terms of the Drilling Contract were set out in the Multi-Well Daywork Drilling Contract signed on 18th August 2004 by James Stinson on behalf of the Claimant and Walter Cuckavac on behalf of the Defendant. There were two documents attached to and forming part of the Drilling Contract, namely Exhibit "A" which set out specifications and special provisions and Exhibit "B" which itemised the Rig Inventory provided by the Claimant;

b. Between 20th August, 2004 and 8th September, 2004, the Claimant drilled and provided drilling services in respect of a Well known as Quinam No. 76 located in an area known as the Morne Diablo Block pursuant to the Drilling Contract;

c. On 1st September, 2004, during the drilling of Quinam No. 76, the Defendant's drill string became stuck in the well bore. Despite attempts to release the drill string, it remained stuck and the Defendant abandoned Quinam No. 76 and gave instructions to the Claimant to drill a side-track Well off of the well bore of Quinam No. 76;

d. During the period 9th September, 2004 and 19th September, 2004, drilling operations under the Drilling Contract were suspended;

e. During the period 20th September, 2004 and 18th October, 2004, the Claimant drilled and provided drilling services in respect of a Well known as Quinam No. 76X pursuant to the Drilling Contract. This Well commenced at an approximate depth of 396 feet;

f. In accordance with the Drilling Contract, the Claimant provided the Rig equipment described in Exhibit "B" for the drilling of Quinam No. 76 and No. 76X and the personnel who operated same;

g. Mr. Albert Balasch acted as the Drilling Engineer and Mr. William Chepil acted as the Drilling Fluid or Mud Engineer for the drilling operations. They were employed by companies which the Defendant engaged to provide such services;

h. The Claimant and the Defendant prepared daily reports during the drilling operations and Mr. Chepil prepared two Summary Reports;

i. The Claimant submitted to the Defendant four invoices for services rendered, namely Invoice No 1003 dated 9th August, 2004 for TT$144,900.00 (which has been paid by the Defendant), Invoice No. 1005 dated 20th September, 2004 for US$71,980.57 or TT$453,477.99, Invoice No. 1006 dated 18th October, 2004 for US$174,157.91 or TT$1,097,194 and Invoice No. T1003-05 dated 11th February 2005 for US$64,687.50 or TT$407,531.25 (which have not been paid by the Defendant).

ISSUE A: DID THE DRILLING CONTRACT INCLUDE THE IMPLIED TERMS AS ALLEGED BY THE DEFENDANT?

28. In **Attorney General of Belize and others v Belize Telecom Ltd and another,**[1] Lord Hoffman, delivering the judgment of the Privy Council, had this to say about the process of implication of terms:

> "*[16] Before discussing in greater detail the reasoning of the Court of Appeal, the Board will make some general observations about the process of implication. The court has no power to improve upon the instrument which it is called upon to construe,*

[1] [2009] UKPC 10

whether it be a contract, a statute or articles of association. It cannot introduce terms to make it fairer or more reasonable. It is concerned only to discover what the instrument means. However, that meaning is not necessarily or always what the authors or parties to the document would have intended. It is the meaning which the instrument would convey to a reasonable person having all the background knowledge which would reasonably be available to the audience to whom the instrument is addressed: see Investors Compensation Scheme Ltd. v. West Bromwich Building Society [1998] 1All ER 98… It is this objective meaning which is conventionally called the intention of the parties, or the intention of Parliament, or the intention of whatever person or body was or is deemed to have been the author of the instrument…

[21] It follows that in every case in which it is said that some provision ought to be implied in an instrument, the question for the court is whether such a provision would spell out in express words what the instrument, read against the relevant background, would reasonably be understood to mean. It will be noticed from Lord Pearson's speech[2] that this question can be reformulated in various ways which a court may find helpful in providing an answer – the implied term must "go without saying", it must be "necessary to give business efficacy to the contract" and so on – but these are not in the Board's opinion to be treated as different or additional tests. There is only one question: is that what the instrument read as a whole against the relevant background, would reasonably be understood to mean?" (emphasis mine)

29. The Defendant alleges that the following were implied terms of the Drilling Contract and the Claimant makes no admission in relation thereto:

    a. That at all material times in the course of the discharge of its obligations, the Claimant would furnish proper functioning and maintained equipment suitable for performing the drilling work required on the said Quinam No. 76 Well;

    b. That at all material times in the course of the discharge of its obligations the Claimant would furnish competent labour with the required skills and training suitable for performing the drilling work required on the said Quinam No. 76 Well; and

[2] In Trollope & Colls Ltd v. North West Metropolitan Regional Hospital Board [1973] 2 All ER 260

c. That at all material times in the course of the discharge of its obligations the Claimant would carry out the drilling work required on the said Quinam No. 76 Well with due diligence, reasonable care and skill and in a timely manner having regard to the depth required to be drilled on the said Quinam No. 76 Well.

30. The question to be answered, therefore, is whether these terms would spell out in express words what the instrument, read against the relevant background, would reasonably be understood to mean? The relevant background was that the Claimant was engaged as an independent contractor to drill the Quinam No. 76 Well to a depth of approximately 4,500 feet. By the express terms of the Drilling Contract, the term "daywork basis" meant that the Claimant should furnish the equipment, labour and perform certain services for a specified sum per day under the direction, supervision and control of the Defendant (inclusive of any employee, agent, consultant, or subcontractor engaged by the Defendant to direct drilling operations). The Claimant supplied the equipment specified in the Inventory attached and marked "Exhibit B" and the labour to perform the drilling services. However, neither the Drilling Contract nor the Inventory contained any express provisions therein which spoke to the functionality or suitability of the equipment, the competence of the labour supplied or the manner in which the Claimant would carry out the drilling operations.

31. Counsel for the Claimant submits that the Inventory suggests that the Defendant would have accepted that the equipment supplied by the Claimant was adequate for the drilling of the Wells or that the Defendant must have deemed same to be acceptable. He also submits that if the terms suggested by the Defendant are implied into the contract a further term should be implied to the effect that timely notice of any breach must be conveyed by the Defendant to the Claimant.

32. I respectfully disagree with these submissions of Counsel for the Claimant. Firstly, neither the Drilling Contract nor the Inventory contain any express provision to the effect that the Defendant accepted that the equipment supplied by the Claimant was adequate or should be deemed to have found same acceptable. Secondly, the argument about the implication of a term as to timely notice of a breach is not an argument against the implication of the terms suggested by the Defendant. In my opinion, it is a belated attempt by Counsel for the Claimant

to propose for the first time the implication of such a term when there was no pleading in the Statement of Case or the Reply and Defence to Counterclaim of any such implied term.

33. In my opinion, when read against the relevant background, the implied terms suggested by the Defendant spell out in express terms what the contract would reasonably be understood to mean.

ISSUE B: DID THE CLAIMANT BREACH THE TERMS OF THE DRILLING CONTRACT IN CARRYING OUT THE DRILLING WORKS?

34. The Defendant submits that the Claimant breached the terms of the Drilling Contract by (a) using defective equipment; and/or (b) using incompetent labour and executing the drilling in an incompetent manner and in an untimely fashion.

35. The Claimant submits that once it supplied the rig machinery, equipment and personnel, its obligations were fulfilled and payment became due since it was not contracted to carry out any drilling works.

36. The Claimant's submission is contradicted by the express terms of the Drilling Contract which provided that the Defendant engaged the Claimant as an independent contractor to drill the designated wells in search of oil and gas on a daywork basis. Further, although the said contract provided that the Claimant would furnish the equipment, labour and perform certain services for a specified sum per day "*under the direction, supervision and control*" of the Defendant, this does not mean that the Claimant was not contracted to carry out any drilling works or that the Defendant was in exclusive control of, and carried out the drilling operations or that the Claimant discharged its obligations once it supplied the rig equipment and labour.

Using Defective Equipment

Pumps

37. The Defendant alleges that:

    a. The two drilling mud pumps used by the Claimant were unable to work together to circulate the well as one pump was required to work the mud mixer hopper or the agitation jets in the mud tanks to keep the drilling mud conditioned. When one pump

became inoperable the other pump had to be switched between circulating the hole and/or conditioning the mud;

b. Although the circulating pump was required to reach 60 strokes per minute or greater in order to reach the capability of 8-10 barrels a minute, it failed to do so for any length of time;

c. Pump No. 1 encountered mechanical problems and was prone to overheating during the drilling of Quinam No. 76. This pump only operated for 40% of the time;

d. Pump No. 2 did not perform properly and failed to reach an acceptable level of strokes per minute equivalent to 5 barrels per minute and provided inadequate circulation causing the drill pipe to stick in the hole; and

e. The Claimant failed to provide a functioning third pump dedicated to drilling only.

38. Having reviewed the oral and documentary evidence and the written submissions of the parties, I have made the following findings and come to the following conclusions:

a. The Claimant's pumps broke down on the following days:

- On 20th August 2004, Pump No. 1 broke down and repairs took 7½ hours. This caused drilling operations to be suspended during that period;
- On 21st August 2004 Pump No. 2 broke down at 10.30 p.m. When that occurred, the performance of Pump No. 1 was poor causing drilling operations to be suspended until 24th August 2004 at 9.00 a.m. Therefore, drilling was suspended for 58½ hours;
- On 1st September 2004, Pump No. 1 broke down at 9.15 a.m. Pump No. 2 was operating at 42 SPM. Repairs to Pump No. 1 were completed on 2nd September 2004. The drill string became stuck at 10.45 p.m. on 1st September 2004 and drilling operations did not resume until 20th September 2004 as a result of the unsuccessful efforts to free the drill string between 1st September, 2004 and 8th September, 2004. On 20th September 2004, drilling of a side track well (which was referred to as Quinam No. 76X) commenced.
- On 21st September 2004, Pump No. 1 broke down again at 9.00 a.m. This resulted in the suspension of drilling operations. Repairs to this pump were

completed at 8.30 p.m. but shortly thereafter further repairs became necessary due to a leak in the pump. The leak was repaired at 11.30 p.m. This resulted in a suspension of drilling for 14 ½ hours;

- On 7th October 2004, Pump No. 2 broke down at 8.00 p.m. with Pump No. 1 operating at 46 SPM. Drilling operations were suspended. Pump No. 2 was replaced by the Claimant with a Halliburton pump on the 10th October 2004 at 7.00 p.m. but this pump broke down on 11th October 2004 and had to be replaced by the Claimant with another Halliburton pump. Drilling restarted on the 11th October 2004 at 11.00 a.m. Drilling was therefore suspended for 87 hours;
- On the 13th October 2004, the replacement Halliburton pump broke down at 7.00 p.m. Pump No. 1 continued to circulate the well.

b. The requisite performance for one pump being used to circulate the well was supposed to be 60 SPM. This was admitted by Mr. Boyles under cross examination. The Claimant only used one pump to circulate the well during the First Drilling Period.

c. I accept the submission of the Defendant that, based on the entries in the Claimant's Daily Drilling Reports and the Chepil Daily Drilling Reports, the Claimant failed to achieve the requisite performance level of 60 SPM for one pump during the First Drilling Period for most of the days of drilling operations. This supports the Defendant's submission that the Claimant's pumps were defective and/or not functioning properly during the First Drilling Period;

d. With respect to the Second Drilling Period, when the Claimant operated two pumps to circulate the well, I accept the evidence of Mr. Chepil that the requisite performance level was supposed to be 80 SPM for both pumps used in combination. Mr. Boyles did not give any evidence as to the requisite performance level when 2 pumps were used in combination and Mr. Chepil's evidence was not challenged in cross examination by Counsel for the Claimant;

e. I accept the submission of the Defendant that, based on the entries in the Claimant's Daily Drilling Reports and the Chepil Daily Drilling Reports, the Claimant failed to achieve the requisite performance level of 80 SPM for two pumps during the Second

Drilling Period for 50% of the days when the performance of the two pumps were recorded in the Chepil Daily Drilling Reports. Since the Claimant failed to record the performance of the two pumps on most of the days of the Second Drilling Period, the Daily Drilling Reports of the Claimant were not helpful in this regard. This also supports the Defendant's submission that the Claimant's pumps were defective and/or not functioning properly during the Second Drilling Period; and

f. The Defendant has failed to prove that under the terms of the Drilling Contract the Claimant was contractually bound to provide a functioning third pump dedicated to drilling only. In any event, it is not in dispute that when Pump No. 2 broke down on 7th October 2004, the Claimant replaced same with a Halliburton pump on the 10th October 2004 and when this pump broke down on 11th October 2004 the Claimant replaced same with another Halliburton pump.

Mud Tanks and other drilling fluid equipment

39. The Defendant submits that:

a. The Claimant's mud tanks performed inadequately and the improper placement of the suction outlet reduced the useable mud tank volume causing wastage of barite and mud conditioners;

b. During the First Drilling Period, the Claimant utilised jets to condition and agitate the drilling fluid and this method was an unacceptable substitute for a motor fan agitator. In any event, the centrifugal pump used by the Claimant to power the jets failed to function for significant periods of time. During the Second Drilling Period, the motor used to power the fan agitator installed by the Claimant repeatedly broke down for extended periods of time. As a result, there was a tremendous wastage of additives;

c. The mud mix hopper did not function properly; and

d. The mud system lacked proper drainage and this caused wastage of drilling fluid through spillage on the drilling site

40. Having considered the evidence and the submissions herein, I make the following findings and come to the following conclusions:

a. The Claimant's mud tanks failed to perform adequately and the improper placement of the suction outlet resulted in the reduction of the useable volume of the drilling fluid. Firstly, I accept the unchallenged evidence of Mr. Chepil that the mud tanks were badly designed because the suction outlet was located at the other end of the tank from which freshly mixed drilling fluid entered the tanks and that this afforded the greatest opportunity and time for additives in the drilling fluid to settle out at the bottom of the mud tanks prior to the drilling fluid being pumped down the well. Secondly, Mr. Boyles failed to give evidence in support of the allegation in the Reply and Defence to Counterclaim that the suction hoses were connected to the bottom of the tanks but stated under cross-examination that the suction hoses were connected to the mud tanks about 8 to 10 inches above the bottom of the tanks. Therefore, on a balance of probabilities, I accept the unchallenged evidence of Mr. Chepil that the suction outlets were placed 1.5 feet above the bottom of the tanks and this reduced the useable mud tank volume thereby causing wastage of barite and mud conditioners;

b. The jets installed in the mud tanks which were utilised by the Claimant to condition the drilling fluid in the tanks during the First Drilling Period did not perform adequately. Further, the agitator fan installed by the Claimant for use during the Second Drilling Period also failed to perform adequately. Mr. Boyles failed to give evidence in support of the allegation in the Claimant's Reply and Defence to Counterclaim that the jets performed properly and efficiently. Further, Mr. Chepil was not challenged in cross-examination on his evidence that: (a) the jets were an unacceptable substitute for a motor fan agitator; (b) during the First Drilling Period, the centrifugal pump used by the Claimant to power the jets failed to function for significant periods of time; and (c) during the Second Drilling Period, the motor used to power the fan agitator installed by the Claimant repeatedly broke down for extended periods of time. Accordingly, I accept the Defendant's submission that as a result of the Claimant's failure to agitate the drilling fluid adequately during the drilling of Quinam No. 76 and Quinam No. 76X, a tremendous amount of additives in the drilling fluid settled to the bottom of the mud tanks and was therefore wasted;

c. Mr. Boyles failed to give evidence that the mud mix hopper functioned properly or efficiently. Mr. Chepil gave evidence that the centrifugal pump which powered the mud

mix hopper broke down repeatedly and only worked for a few hours at a time. As a result, the Claimant had to resort to primitive and inefficient methods of mixing the additives into the fluid and this caused the additives to settle out to the bottom of the fluid more quickly than if they had been mixed into the drilling fluid by a properly functioning mud mix hopper. This resulted in a greater wastage of additives. Mr. Chepil's evidence in this regard was not challenged in cross-examination by Counsel for the Claimant. Accordingly, I accept the evidence of Mr. Chepil and find that the mud mix hopper failed to perform efficiently and that the centrifugal pump which powered this piece of equipment broke down repeatedly; and

d. Mr. Chepil gave evidence that the Claimant failed to ensure that the gradient of the flow line from the surface of the well to the mud tanks was sufficiently steep so as to facilitate the flow of drilling fluid from the well to the mud tanks at a rate that avoided the same backing up into the well. According to him, this problem was compounded by the fact that the flow line used by the Claimant was an open "half-pipe" and not a fully enclosed pipe. This resulted in a loss of drilling fluid onto the rig floor and surrounding areas in an amount of approximately 1,812 barrels. This evidence was not challenged in cross-examination and Mr. Boyles failed to give any evidence to contradict same. Accordingly, I accept the evidence of Mr. Chepil and find that the mud system utilised by the Claimant lacked proper drainage and this caused wastage of drilling fluid through spillage on the drilling site.

Using incompetent labour and/or executing the drilling in an incompetent manner and in an untimely fashion

41. Mr. Chepil gave the following evidence that was not challenged in cross-examination or contradicted by Mr. Boyles in his evidence:

    a. On 1st September 2004, Mr. Harper, the Claimant's rig superintendent ignored a direct instruction of Mr. Balasch to cease drilling due to the poor performance of the Claimant's pumps in order to prevent the drill string from becoming stuck in the well bore and continued to drill. Shortly thereafter, it was discovered that the drill string could not be raised above a certain depth but could be lowered and raised below that depth;

b. After this discovery, contrary to the instructions of Mr. Balasch to Mr. Harper to continue circulating the well with drilling fluid and to work the drill string by repeatedly lowering it and lifting it up to the sticking point, the Claimant's personnel abandoned the drill string and it remained stationary in the well bore. This increased the chances of the drill string becoming completely stuck. Further, the Claimant raised the entire Kelly and disengaged same from the rotary table. Later that day the drill string became completely stuck in the well bore;

c. The Claimant applied an excessive upward force of 90,000 lbs to the drilling string which was more than 50% in excess of the weight of the drill string when the upward force should not have exceeded 33% of the weight of approximately 58,000 lbs; and

d. In an attempt to hide from the Defendant the fact that the pumps were unable to perform as required, the Claimant's personnel adjusted the pumps to operate at significantly lower levels than 60 SPM set by Mr. Balasch. They also increased the performance of the pumps just prior to Mr. Chepil recording their performance and adjusted them downwards after he done so.

42. Counsel for the Claimant submitted that there were several factors which contributed to the drill string becoming completely stuck on 1st September 2004 and the Defendant is solely responsible for any losses or delays consequent thereon, namely:

a. Loss of mud volume into a depleted zone/formation;

b. Increase in mud weights prior to the drill string becoming stuck;

c. Use of high mud weights and solids contributed to drilling problems in the wells, increased mud costs and high wear and tear on the Claimant's pumps, thereby contributing to the pumps breaking down;

d. Improper drilling management practices such as failing to provide drilling plans, programs and geological data and failing to provide 24 hour supervision; and

e. Failure to run the desander and desilter.

43. However, upon my review of the Claimant's pleadings, the evidence of Mr. Boyles and the evidence of the Defendant's witnesses under cross-examination, I am of the opinion that the Claimant's submissions in this regard are without merit since the Claimant has failed to

include these allegations in its pleading and/or to lead any evidence in support thereof and/or to put such a case to the Defendant's witnesses under cross-examination.

44. In the circumstances, I accept the evidence of Mr. Chepil and find that the Claimant carried out the drilling works using incompetent labour and/or in an incompetent manner and that this resulted in the drill string becoming completely stuck in the well bore on the 1st September 2004.

ISSUE C: WAS THE CLAIMANT NEGLIGENT IN THE PERFORMANCE OF THE DRILLING WORKS?

45. As an alternative plea, the Defendant alleges that the matters complained of in paragraph 5 of the Defence were caused by the negligence of the Claimant, its servants and/or agents in the following respects:

    a. Causing and/or permitting the drill pipe to become stuck in the Quinam No. 76 well;

    b. Failing to provide proper or proper functioning and maintained equipment in order to carry out the drilling work on the Quinam No. 76 well;

    c. Failing to perform the drilling work on the Quinam No. 76 well in a professional or good workmanlike manner;

    d. Failing to ensure that the drilling work on the Quinam No. 76 well was done in a professional or good workmanlike manner;

    e. Failing to take any or any adequate steps to correct the defective drilling work on the Quinam No. 76 well; and

    f. Causing and/or permitting a delay in the completion of the drilling work on the Quinam No. 76 well.

46. However, in his submissions, Counsel for the Defendant focused his attention on the evidence in support of the allegations of breach of contract and did not address the issue of negligence separately. I have already considered the allegations made at sub-paragraphs 45(a) to 45(e) above and found that the Claimant breached the Drilling Contract in those respects. Further, the issue of delay is a separate issue which I propose to address hereunder. In the

circumstances, I do not consider it necessary to examine the issue of negligence as a separate issue and make no finding in that regard.

ISSUE D: IF THE CLAIMANT BREACHED THE TERMS OF THE DRILLING CONTRACT IN THE PERFORMANCE OF THE DRILLING WORKS, DID THE CLAIMANT'S BREACHES AND/OR NEGLIGENCE DELAY THE COMPLETION OF THE DRILLING WORKS? IF SO, FOR WHAT PERIOD?

47. I have already found that the Claimant supplied defective equipment to perform the drilling works and that its personnel were incompetent and/or performed the drilling operation in an incompetent manner. I am also of the opinion that the Defendant has proved that these breaches resulted in substantial delays in the completion of the drilling of the Quinam No. 76 and Quinam No. 76X wells as a consequence of (a) the suspension of drilling operations due to pump breakdowns and poor performance of the Claimant's pumps and other equipment; (b) delays resulting from repeated balling of the drill bit; and (c) delays resulting from the drill string becoming stuck in the well bore.

Pump breakdowns and poor performance of pumps and other equipment

48. As earlier set out at paragraph 38 hereof, the Claimant's pumps broke down on 20th August, 21st August, 1st and 21st September and 7th October 2004 and these breakdowns resulted in delays in drilling operations.

49. The periods of delay were as follows:

    a. On 20th August, 2004, Pump No. 1 broke down and had to be repaired. and drilling operations were suspended for **7.5 hours**;

    b. On 21st August, 2004, Pump No. 2 broke down at 10.30 p.m. and drilling operations were suspended until 24th August, 2004 at 9.00 a.m. Therefore, drilling was suspended for **58.5 hours**;

    c. On 21st September, 2004, Pump No. 1 broke down again at 9.00 a.m. and repairs were completed at 8.30 p.m. but shortly thereafter further repairs became necessary due to a leak in the pump. The leak was repaired at 11.30 p.m. This resulted in a delay of **14.5 hours;**

d. On 7th October, 2004, Pump No. 2 broke down at 8.00 p.m. with Pump No. 1 operating at 46 SPM. Pump No. 2 was replaced by the Claimant with a Halliburton pump on the 10th October 2004 at 7.00 p.m. but this pump broke down on 11th October, 2004 and drilling restarted on 11th October 2004 at 11.00 a.m. Therefore, drilling operations were suspended for **87 hours**.

50. Therefore, the total number of hours for which drilling was delayed as a result of pump breakdowns was **167.5 hours or approximately 7 days.**

Balling of Drill bit

51. Mr. Chepil gave evidence on behalf of the Defendant with respect to the 'balling' of the drill bit on 8 out of the 11 days that comprised the First Drilling Period. These dates were 21st, 22nd, 24th, 26th, 27th, 28th, 30th and 31st August 2004, as confirmed by the Claimant's and Chepil's Daily Drilling Reports. During the Second Drilling Period, on 7th October 2004, Pump No. 2 broke down and, on the following day, there was lots of clay deposits on the tool joints and the drill string became stuck resulting in the suspension of drilling until 12th October 2004. According to Mr. Chepil, there was a correlation between poor pump performance and the repeated 'balling' of the bit and drill string.

52. Mr. Boyles denied that the 'balling' of the bit and deposits of clay on the drill string were caused by poor pump performance but did not provide an explanation for the 'balling' of the drill bit. Under cross-examination, Mr. Boyles agreed that if the annular velocity was not at the required level to bring the cuttings to the surface, the cuttings would remain in the well bore and may form a plug around the drill string causing same to become stuck. He also confirmed that resistance in the upward movement of the drill pipe and 'swabbing' were indicators of a plug forming around the drill pipe and that when the drill bit became 'balled' up, it became less effective as a drilling tool and the rate of penetration was reduced.

53. The Defendant submits that the repeated 'balling' of the bit contributed to the delay in the completion of the drilling operations since every time the drill bit became balled up, it had to be raised up out of the well to be cleaned and then lowered to the bottom of the well to resume drilling. This process necessarily took time and drilling would be suspended for that period of time but the Defendant concedes that the evidence before the Court did not allow for a precise assessment of the delay caused by the 'balling' of the bit.

54. The Claimant submits that the primary reason the bit became balled up was drilling at too high a penetration rate for the type of formations being drilled, for example gummy shales and high clay content. In addition, the type of drilling mud could cause the shales to swell. In support of this submission, the Claimant quotes from and relies on an article from Drillers Club.

55. However, this submission is not supported by the evidence of Mr. Boyles and the Claimant did not call any expert evidence to support the opinion expressed in the article.

56. Given the fact that the documentary evidence proves that there was 'balling' of the bit on 8 occasions, I accept that the drilling operations must have been delayed as a consequence of the 'balling' of the bit and I am prepared to find that the drilling operations were delayed for at least 24 hours or 1 day as a consequence thereof.

Sticking of Drill String

57. On 1st September, 2004, Pump No. 1 broke down at 9.15 a.m. Pump No. 2 was operating at 42 SPM. The drill string became stuck at 10.45 p.m. on 1st September, 2004. The Defendant made unsuccessful attempts to free the drill string but eventually the Defendant left a portion of the drill string in the well bore and plugged the well bore with 2 cement plugs on 8th September, 2004 (8 days). Between 9th September and 19th September 2004, drilling operations were suspended and were resumed on 20th September 2004 at 396 feet, just above the upper cement plug. It took from 20th September to 26th September 2004 (6 days) to drill to 2,571 feet. The period of delay attributable to the sticking of the drill string was therefore 14 days.

Overall Delay

58. The Defendant submits that the overall delay to the drilling works may be assessed by a comparison of the period which it took the Claimant to drill Quinam No. 76 with the time taken to drill other wells of a similar depth in the Morne Diablo block using equipment and personnel that functioned satisfactorily. In his evidence, Mr. Cuckavac stated that in his opinion the drilling works should have taken no more than 12 days to complete. He supported his opinion by reference to 4 wells drilled in the Morne Diablo Block to a depth of approximately 4,000 feet by Well Services Marine Limited on behalf of the Defendant. Those

wells took between 11 and 14 days to be completed. This evidence was not challenged in cross-examination.

59. Mr. Chepil gave evidence that the drilling operations on Quinam No. 76 should have taken no more than 10 days to complete. His evidence was not challenged under cross-examination.

60. The Defendant submits that the drilling works for Quinam No. 76 took 48 days to complete, that is, from 20th August 2004 to 8th September 2004 and from 20th September to 18th October, 2004. This was 36 days more than the 12 day period suggested by Mr. Cuckavac. After deducting for the 7 day delay caused by the cone breaking off of the bit, the Defendant submits that there was a 29 day delay caused by the Claimant's breaches of the Drilling Contract.

61. The Claimant alleges that the delays in completing the drilling of Quinam No. 76 Well were caused by the incompetence and inexperience of the Defendant's personnel. In support of this allegation, Mr. Boyles gave evidence that Mr. Balasch and Mr. Chepil were from Canada and Mr. Neil Mohammed was a trainee and they all did not have previous drilling experience in Trinidad to the depths they were put in charge of. However, in his Report dated 9th September, 2004, Mr. Boyles expressed the opinion that the Defendant had a good team on site which just needed to pull together and that he came to realize that every person at the job site knows "*his or her stuff*." Further, under cross-examination, Mr. Boyles's evidence contradicted this allegation when he stated that he did not think that Mr. Balasch and/or Mr. Chepil were incompetent and that they were very experienced but not in Trinidad. Further, Mr. Boyles also contradicted his evidence that the desander/desilter were not used by the Defendant after 900 feet when he admitted under cross examination that these pieces of equipment were used after 900 feet.

62. The Claimant also alleged that the lack of experience, training and qualifications of the Defendant's personnel caused the drilling supervisor to incorrectly describe the thread design for the casing program causing the incorrect machining and preparation of the well head. Also, the Claimant alleged that the threading of the landing joint and that of the surface casing were mismatched. However, at paragraph 6 of his witness statement, Mr. Boyles stated that the problem was that the stove pipe which the Defendant provided for use by the Claimant had no threads at all and had holes in it. He also gave evidence that the problem with the landing joint was resolved by fabricating another landing joint which took 2.5 hours.

63. Both Mr. Chepil and Mr. Cuckavac gave evidence that Mr. Balasch had considerable drilling experience and he was very familiar with drilling equipment. He also had experience with local conditions. Mr. Chepil also gave evidence of his vast international experience as a drilling fluid engineer. The Defendant did not dispute that Mr. Mohammed was a trainee engineer but submitted that there was no evidence that he played any significant role in the drilling operations.

64. I find that the Claimant has failed to prove that the delays were caused by the incompetence and inexperience of the Defendant's personnel. I accept the evidence of the Defendant's witnesses and find that there were substantial delays in the completion of the drilling of the Quinam No. 76 and Quinam No. 76X wells as a consequence of (a) the suspension of drilling operations due to pump breakdowns and poor performance of the Claimant's pumps and other equipment; (b) delays resulting from repeated balling of the drill bit; and (c) delays resulting from the drill string becoming stuck in the well bore.

65. In my opinion, the Defendant has proved that the drilling operations were delayed by 22 days as a consequence of these breaches.

ISSUE E: WHAT IS THE LIABILITY OF THE DEFENDANT TO THE CLAIMANT UNDER THE DRILLING CONTRACT?

66. The Claimant's claim is for the aggregate sum due on three unpaid invoices.

67. Invoice Nos. 1005 and 1006 set out charges for rig time, mud motor use, rig crew running casing, two drill bits and a 9 5/8 Well Head.

68. In respect of the claim for rig time, the Claimant charged US$235,213.48 (VAT inclusive) for 43 days use of the Rig on Quinam No. 76 which amounts to a daily rate of US$5,470.08 (VAT inclusive). Bearing in mind my earlier finding that there was a delay of 22 days caused by the Claimant's breaches of its obligations under the Drilling Contract, I find that the Claimant is entitled to payment for 21 rig days at the said average daily rate of US$5,470.08. This amounts to US$114,871.68.

69. In respect of the claim for US$2,500.00 for mud motor use, Mr. Boyles failed to give any evidence as to the use of the mud motor such as the circumstances in which it was used and for what period of time. Mr. Cuckavac gave evidence that the mud motor was used on the 26th

August 2004 at a depth of 500 feet. However, as a consequence of the drill string becoming completely stuck on 1st September 2004, the Defendant placed a plug in the well at 396 feet after unsuccessful attempts to retrieve the drill string. This evidence was not challenged in cross-examination.

70. I accept the Defendant's submission that the expenses incurred in drilling Quinam No. 76 below a depth of 396 feet were wasted and the Defendant received no benefit from the use of the mud motor on 26th August, 2004. Accordingly, I find that the Claimant is not entitled to recover the amount of US$2,500.00 for mud motor use.

71. In respect of the Claimant's claim for US$1,500 for rig crew running casing, once again Mr. Boyles failed to give any evidence that the Claimant's personnel provided surface casing services or to explain the basis of this charge. In the absence of such evidence, I find that the Claimant has failed to prove its entitlement to payment of this charge.

72. In respect of the Claimant's claim for US$4,000 for two drill bits, Mr. Boyles failed to give evidence in support of this claim.

73. On the other hand, Mr. Cuckavac gave evidence that the drill bit that became stuck in the well on 1st September 2004 and the drill bit that replaced same were purchased by the Defendant. This evidence was supported by the invoice issued by Drilling International Service and Supply Limited annexed to the witness statement of Mr. Cuckavac and tendered into evidence as 'W.C. 12'. Accordingly, I find that the Claimant has failed to prove its claim for US$4,000 for two drill bits.

74. In respect of the claim for US$1,500 for the 9 5/8 Well Head, Mr. Boyles failed to give any evidence that the Claimant provided this Well Head or to explain the basis for the charge. Accordingly, the Claimant has failed to prove this claim.

75. Invoice No. T1003-05 claims a demobilisation fee of US$20,000, a mud motor rental fee of US$12,500 and US$13,750 for items "lost in hole".

76. In respect of the demobilisation fee, under the terms of the Drilling Contract, Counsel for the Claimant accepted that the Defendant was wrongly billed a demobilisation fee of US$20,000. Accordingly, the Claimant is not entitled to be paid this amount.

77. In respect of the claim for mud motor rental fees, Mr. Boyles failed to give any evidence as to the use of a mud motor during the period 28th September 2004 to 2nd October 2004 or to refer to the Daily Drilling Reports to explain the basis for this claim. However, based on the Defendant's acceptance that the mud motor was used on the 30th September and on 1st and 2nd October 2004, I am prepared to find that the Claimant is entitled to be paid US$7,500 for the rental of the mud motor on those three days.

78. In respect of the claim for items lost in hole, this claim arises out of the drill string becoming completely stuck on 1st September 2004 and the Defendant's inability to retrieve the drill string. Counsel for the Claimant submits that by the terms of the Drilling Contract the Defendant is fully liable for this loss.

79. However, Clause 13 of the Drilling Contract provides as follows:

> *"Except when the loss or damage or claim has been caused by the contractor or persons under its control, during daywork operations and after reaching surface casing point, Operator shall assume all liability for loss or damage, irrespective of ownership, including, but not limited to, damage to, or destruction of Contractor's in-hole equipment…." (emphasis mine)*

80. Since I have already found that the drill string became stuck as a result of the Claimant's breach of its obligations under the Drilling Contract, I find that since the loss of the in-hole equipment was caused by the Claimant, the Claimant is not entitled to be reimbursed for the cost of these lost items.

Summary

81. In the circumstances, I find that the Defendant is liable to the Claimant under the Drilling Contract for US$114,871.68.for 21 rig days and US$7,500.00 for the rental of the mud motor for 3 days amounting to a total of US$122,371.68. Using an exchange rate of 6.76 (the exchange rate applicable as at 29th March, 2017), the equivalent of this amount is TT$827,232.56.

ISSUE F: IF THE CLAIMANT WAS IN BREACH OF THE TERMS OF THE DRILLING CONTRACT, WHAT IS THE LIABILITY OF THE CLAIMANT TO THE DEFENDANT?

82. In its Defence and Counterclaim, the Defendant pleaded that it was entitled to set-off against the Claimant's claim the damages which it suffered as a consequence of the Claimant's breaches of contract. The Defendant alleged that it sustained damages in respect of (a) the expenses caused by the delay in the completion of the drilling operations; (b) the expenses caused by the drill string becoming stuck in the well; and (c) expenses caused by the wastage of drilling fluid additives.

Expenses caused by the delay in the completion of the drilling works

83. Mr. Chepil gave evidence that in or around July 2004, the Defendant engaged Diamond Fluids Systems Limited to provide mud engineering services on the Quinam No. 76 Well and to supply all additives to be mixed into the drilling fluid used on that well. These services and additives were provided through Mr. Chepil during the drilling operations. He also gave evidence that during the First Drilling Period he spent between 16 to 20 hours at the well site each day and that when he was not there he was either at the Defendant's offices approximately 1.5 miles away from the well site or at his trailer approximately .5 of a kilometre from the well site. Mr. Chepil was not challenged on this evidence during cross-examination.

84. Mr. Chepil and Mr. Cuckavac both gave evidence that Diamond Fluids Systems Limited charged the Defendant a daily rate of TT$3,780.00 for the services it provided and a daily rental fee of TT$630.00 for the trailer which was occupied by Mr. Chepil. This amounts to TT$4,410 per day.

85. Based on my earlier finding that the Claimant's breaches resulted in the drilling operations being delayed by 22 days, I am of the opinion and so find that the costs and expenses incurred by the Defendant in engaging the services of Diamond Fluids Systems for those 22 days are recoverable from the Claimant. Therefore, the Claimant is liable to the Defendant for TT$97,020.00 ($4,410.00 X 22 days).

Expenses caused by the drill string becoming stuck

86. I have already found that the Claimant's breaches of contract were responsible for the drill string becoming stuck in the well bore. The Defendant alleged that it incurred the following costs, expenses and losses amounting to TT$243,183.00 as a consequence of its unsuccessful attempts to free the drill string:

    a. Water and Oil Well Services Company Limited for the supply and operation of a hydraulic jack –TT$41,000.00;

    b. Tucker Energy Services Limited for separating and removing the free portion of the drill string from the portion that was stuck in the well –TT$29,863.00;

    c. Directional Services Limited for the supply of directional services for Quinam No. 76 during the First Drilling Period, which said services were wasted due to the subsequent abandonment of the drilling operation –TT$38,400.00;

    d. Directional Services Limited for equipment owned/supplied which had to be abandoned when the drill string became stuck –TT$35,720.00; and

    e. Drilling International Service and Supply Limited for two drill bits, one of which was abandoned in the well and the other was retained by the Claimant after the completion of the drilling works – TT$98,200.00.

87. The Claimant denied liability for these costs and expenses on the grounds that the services of Water and Oil Well Services Company Limited, Tucker Energy Services Limited and Directional Services Limited were unwarranted, ill-advised and contrary to industry standard practice. However, although Mr. Boyles gave evidence as to the method of freeing the drill string that he recommended, the Claimant did not adduce any evidence (from an expert or otherwise) as to what was the standard practice in the oil exploration industry. Further, the Claimant did not adduce any evidence (from an expert or otherwise) that the methods adopted by the Defendant were unwarranted, ill-advised, unreasonable or wrong. In any event, given my earlier findings with respect to the failure of the Claimant's pumps to achieve the requisite annular velocity on a regular and consistent basis prior the drill string becoming stuck, I accept the evidence of Mr. Chepil and Mr. Cuckavac that the method recommended by Mr. Boyles involved a significant risk that the wash over pipe would also have become stuck in the well.

88. In the circumstances, I am of the opinion that the Claimant has failed to prove that the method employed by the Defendant to free the drill string and its subsequent decision to plug and abandon Quinam No. 76 were unwarranted, ill-advised or contrary to standard industry practice.

89. Accordingly, based on the evidence of Mr. Cuckavac in support of the costs, expenses and losses incurred by the Defendant and the documentary evidence produced in support thereof, I find that the Defendant is entitled to succeed in its claim for damages against the Claimant in the amount of TT$243,183.00.

Expenses caused by wastage of drilling fluid additives

90. Mr. Chepil gave evidence that the Defendant incurred an excess cost of US$48,951.30 for drilling fluids as a consequence of (a) drilling fluid lost over the riser and out of the flowline; (b) additives that settled out at the bottom of the mud tanks; and (c) the increased amount of additives consumed as a result of the delay in the completion of the drilling works. This was computed as follows:

Cost of drilling fluid used in the drilling operations	US$60,951.30
Cost of drilling fluid if drilling equipment and personnel performed satisfactorily	US$12,000.00
Excess cost	**US$48,951.30**

91. This evidence was not challenged under cross-examination and was not contradicted by the evidence of Mr. Boyles.

92. Having regard to my earlier findings with respect to the Claimant's breaches of the Drilling Contract, I accept the evidence of Mr. Chepil and find that the Defendant is entitled to recover from the Claimant US$48,951.30 as damages for the excess cost incurred by the Defendant for drilling fluids and additives.

Summary of damages to which Defendant is entitled

93. Based on the matters set out above, the Defendant is entitled to recover damages from the Claimant in the following amounts:

- Expenses caused by delay TT$ 97,020.00

- Expenses caused by stuck drill string TT$243,183.00
- Expenses caused by wastage US$ 48,951.30

94. Using an exchange rate of 6.76 (the exchange rate applicable as at 29th March 2017), the expense caused by wastage is equivalent to TT$330,910.79. Therefore, the total amount of damages to which the Defendant is entitled is TT$671,113.79.

Set off and Counterclaim

95. The Defendant pleads that it is entitled to set-off its liability to the Claimant against the liability of the Claimant to the Defendant. I have found that the Defendant is liable to the Claimant in the amount of US$122,371.68 or TT$827,232.56 and the Claimant is liable in damages to the Defendant in the amount of TT$671,113.79. This means that after taking into account the set-off claimed by the Defendant, the Defendant remains liable to the Claimant in the amount of TT$156,118.77.

INTEREST

96. The Claimant claims interest on the amount claimed at the rate of 15% per annum commencing from 15 days from the date of presentation of the invoices. Clause 5 of the Drilling Contract provides that all applicable charges shall be due upon presentation of invoices and "*Any sums not paid within 15 days after the date herein above specified shall bear interest at the rate of 15 % per annum.*"

97. I have found that the Claimant is not entitled to succeed in its claim in respect of Invoice No. T1003-05. Therefore, the amount due from the Defendant to the Claimant is in respect of Invoice Nos. 1005 and 1006. The date of presentation pleaded by the Claimant in respect of Invoice No. 1006 is 18th October 2004 and these proceedings were instituted on 22nd November 2004. In the circumstances, I will award interest on the amount of TT$156,118.77 at the rate of 15% per annum from 2nd November 2004 to the date of payment.

COSTS

98. In my opinion, having regard to the Claim and the Defence and Counterclaim herein, this is a matter in which prescribed costs pursuant to **Rule 67.5 of the CPR** should be paid. It is evident from my findings herein that the Claimant has been partially successful in its claim and the

Defendant has been partially successful in its Defence and Counterclaim. In the circumstances, I hereby order that the costs of the Claim and the Counterclaim be assessed by the Registrar pursuant to **Rule 67.5 of the CPR**, in default of agreement.

Dated this 31st day of March, 2017

……..
André des Vignes
Judge