JUDGMENT HIS HONOUR JUDGE BOWSHER Q.C. High Court, Official Referees Business. 20th January 1997

- 1. By order of the judge, no official shorthand note or tape recording is to be taken of this judgment.
- 2. In these consolidated actions, the plaintiffs claim sums alleged to be due from the defendants pursuant to contract. The defendants admit the contract and admit that nothing has been paid pursuant to the contract. The defendants say that nothing is payable pursuant to the claim because of a set-off and counterclaim. The plaintiffs allege that there has been an assignment from the first plaintiffs to the second plaintiffs. The defendants deny the validity of that assignment. Since both plaintiffs now join in the consolidated actions, there is little point in the denial of the validity of the assignment, except that there is an issue as to the costs of the action brought by Leicestershire County Council (the Council) alone.

BACKGROUND

- 3. This case is concerned with the generation of electricity from methane gas produced as a by-product of the disposal of domestic rubbish at Warren Quarry, Enderby, near Leicester.
- 4. Warren Quarry is a disused granite quarry which has been used since about 1981 for the disposal of waste by landfill. Formerly it was in the ownership of Leicestershire County Council. Since 26 July 1991 it has been in the ownership of Midland Land Reclamation Limited.
- 5. The site is expected to be completely filled in about 22 years time and to continue to produce gas for several decades after closure. When closed the site will be capped and a permanent system of wells and pipes will be installed. Meanwhile the site is constantly changing.
- 6. Every lorry coming onto the site to tip rubbish goes onto a weighbridge and Midland Land Reclamation Limited is paid a fee. Midland Land Reclamation Limited also collects a tax for the central government.
- 7. The decomposition of the waste results in the production of landfill gas, which includes many different gases. A constituent part of that gas is methane. Methane, CH4, is known in other contexts as marsh gas or fire damp. It is explosive and inflammable. When allowed to escape to the atmosphere (as it does from many sources) it contributes to the "greenhouse effect". Steps have to be taken to prevent it "migrating" off any landfill site particularly where, as at Enderby, there are houses on the surrounding land.
- 8. Initially at Enderby, the landfill gas was collected from the site through a system of wells and pipes and burnt from flare stacks producing mainly CO2, CO, and water.
- 9. However, by an agreement dated 4th December 1989 made between Leicestershire County Council and the Defendant ("the Warren Energy Agreement") it was expressly agreed that, for a period of 15 years from 4th December 1989, the Council would supply landfill gas to the defendants and the defendants would purchase the gas which they would use to generate electricity for onward sale to the East Midlands Electricity Board.
- 10. In return, it was agreed that the defendants would make certain "gas purchase payments" to the Council as provided by Clause 7 of the Warren Energy Agreement.
- 11. By a further agreement dated 26th July 1991 and made in writing between the Council and Midland Land Reclamation Limited it was agreed between the Council and Midland Land Reclamation Limited that:-
 - (1) (By Clause 2) The Council would sell and Midland Land Reclamation Limited would buy a number of sites owned by the Council including Enderby Warren Quarry.
 - (2) (By Clause 7.1) Completion of the sale of Enderby Warren Quarry would take place notwithstanding that:-
 - (a) agreement might not have been reached between the Council and Midland Land Reclamation Limited as to revisions to the Warren Energy Agreement; or
 - (b) that the assignment by the Council to Midland Land Reclamation Limited of the Warren Energy Agreement might not have taken place.
- 12. By a written Deed of Assignment dated 8th April 1992 made between the Council and Midland Land Reclamation Limited the Council assigned absolutely to Midland Land Reclamation Limited with effect from the Completion Date (i.e. 26th July 1991) all the benefit of its interest in the Warren Energy Agreement and Midland Land Reclamation Limited accepted absolutely all of the obligations of the Council under the Warren Energy Agreement. It was further agreed by the Deed of Assignment that Midland Land Reclamation Limited would perform all the Council's obligations under the Warren Energy Agreement on and from the Completion Date. The Defendant was given notice of the assignment by letter dated 8th April 1992.
- 13. It is because the validity of that assignment was in dispute that the plaintiffs decided to commence two separate actions, though it is quite unnecessary to have done so. The issues raised in the two actions are almost identical apart from the question of the assignment.
- 14. The plaintiffs are jointly represented.

COVENANT AGAINST ASSIGNMENT

15. The contract between Leicestershire County Council and Warren Energy Limited dated 4 December, 1989 contains the following covenant:

Clause 12:- "Neither party to this Agreement shall assign dispose of or transfer any of its rights or obligations under this Agreement without the prior written consent of the other such agreement not to be unreasonably withheld."

- 16. The parties have been dealing with each other on the basis that the assignment was valid as indeed it was. For example, the defendants asked the second plaintiffs to make improvements and repair pipes. The question of assignment was discussed between the defendants and the Council at least as early as April, 1991. By letter dated 17 February, 1992, the Council sent to the defendants a copy of a draft assignment asking for comments and adding: "Subject to your having no comments I will forward an engrossment for execution by Warren Energy Limited."
- 17. Nearly a month later, on 13 March, 1992, the defendants acknowledged that letter without comments. On 8 April, 1992, having received no further communication from the defendants, the Council gave to the defendants written notice of assignment. Before this litigation, no objection, reasoned or otherwise, has ever been made to the assignment once the final proposal was made.
- 18. The defendants have not given consent in writing to the assignment: instead they unreasonably withheld express consent. There was no reason to withhold consent. The defendants cannot now be heard to object to the assignment in reliance on clause 12.
- 19. For the remainder of this judgment, when I refer to the plaintiffs I shall mean the two plaintiffs indiscriminately. I leave it to the plaintiffs to sort out their entitlements as between each other.

THE DISPUTE

- 20. The defendants admit that they have made no payments for landfill gas supplied to them since 4 December, 1989.
- 21. The defendants have received in revenue from sales of electricity generated by engines driven by the gas ,531,005 up to 30 June, 1993, and if it were not for a counterclaim ,108,606 would have been payable to the plaintiffs up to that date. Subject to counterclaim, more payments have accrued due since that date. In his closing speech, counsel for the plaintiffs said that the plaintiffs would accept a sum up to the date of trial of ,337,442 calculated from a computation attached to the closing speech of counsel for the defendants. I hold that to be an entirely proper figure.
- 22. The defendants claim that because of breaches of contract on the part of the plaintiffs the defendants are not liable to make any payment to the plaintiffs and the defendants are entitled to substantial damages for loss of profits over and above the amount needed to extinguish the plaintiffs' claim.
- 23. The plaintiffs have not had the courage to terminate the agreement. They ask for the comfort of a declaration that they are entitled to terminate the agreement. One of the grounds on which they claim to be entitled to terminate is under a term of the contract, clause 9.3, which entitles them to terminate "by notice forthwith" if the defendants are insolvent. No such notice has been given. For reasons which I shall give later, I hold that the defendants are insolvent if, but only if, they lose this action, subject to any steps which may be taken by their parent company to relieve insolvency.

THE DECLARATION CLAIMED

- 24. By the Amended Statement of Claim, the plaintiffs claim two declarations:
 - "3. A declaration that the plaintiff is entitled to terminate the Warren Energy Agreement pursuant to clause 9.3 thereof.
 - A declaration that the licence be terminated pursuant to the terms thereof".
 - No submissions have been particularly directed to the second declaration prayed.
- 25. I have been given only very brief submissions regarding the circumstances in which a declaratory judgment should be given. My attention has been invited to a note in the Supreme Court Practice and to the decision of the Court of Appeal *In re Clay. Clay v. Booth* [1919] 1 Ch 66. The facts of that case are by no means on all fours with the facts of the present case.
- 26. In re Clay was a case in which a possible defendant brought an action for a declaration that he was not liable in an action which had not been brought. The facts of that case are so far away from the facts of the present case that the decision is not helpful. In any event, I can envisage situations in which the court might well now in a somewhat changed legal climate make a declaration about future liability when threats of proceedings are maliciously made to the detriment of a business.
- 27. It has been submitted that the declaration prayed relates to a hypothetical situation since the plaintiffs have not served the notice required to terminate the contract and no rights under the contract have arisen from the alleged insolvency.
- 28. In the Amended Statement of Claim it is alleged that by letter dated 6 November, 1996, Midland Land Reclamation Limited gave notice both on its own behalf and on behalf of the Council of the plaintiffs' intention to terminate the Warren Energy Agreement. In fact, the letter of 6 November, 1996 did not even go so far as to express an intention to terminate the agreement in the future. The letter asked the defendants' solicitors for information about the possibility of insolvency of the defendants and gave warning of service of a proposed amended pleading asking for a declaration that the plaintiffs are entitled to terminate the agreement on the ground of the defendants' insolvency.
- 29. The plaintiffs have a real need to know the answer to the question whether they are entitled to terminate on the ground of the defendants' alleged insolvency, and in that sense the question is by no means hypothetical.

However, the plaintiffs are asking for a declaration stating what their rights would be if now they were to serve a notice under the terms of the contract.

- 30. There is a clear distinction between declarations as to hypothetical issues and declarations as to future rights.
- 31. In 1883, RSC Order 25 rule 5 (now Order 15 rule 16) gave the court power to make declarations even if no consequential relief could be claimed. Order 15 rule 16 is in the following terms: "No action or other proceeding shall be open to objection on the ground that a merely declaratory judgment or order is sought thereby, and the court may make binding declarations of right whether or not any consequential relief is or could be claimed."
- 32. In **Re Berens** [1888] W.N. 95, Chitty J. said: "The effect of Order 25 rule 5 of the Rules of the Supreme Court, 1883, is to give the Court power to make declarations regarding future rights, but whether the Court will exercise the discretion depends on the circumstances of the particular case."
- 33. More recently, Wilberforce J. in Eastham v. Newcastle United Football Club Limited [1963] 3 WLR 574 at 594 said: 42. "In my judgment, on the cases and particularly the leading case of Guaranty Trust Co. of New York v. Hannay [1915] 2KB 536, establish that even though there is no cause of action apart from the rule under which declaratory judgments may be given (R.S.C. O. 25 r.5) and even though no consequential relief can be given, the court has ample power to grant a declaratory judgment. Whether such a declaration should be granted is a matter of judicial discretion."
- 34. It was submitted to me on behalf of the defendants that since the defendants could show no accrued cause of action for the declarations for which they ask, there is no jurisdiction to grant the declarations. That decision of Wilberforce J. shows that that submission was plainly wrong. See also Greig v. Insole [1987] 1 WLR 302.
- 35. The power given by the Rules of Court does not extend to all rights which may arise in the future.
- 36. Rights which may arise in the future but which depend on a contingency which may or may not happen are hypothetical and will not be the subject of declaratory relief. But where the right depends on a contingency in the future which is practically certain to occur, then the right is, for the purpose of declaratory relief, regarded as a future right and not hypothetical: **Powell & Thomas v. Evans Jones & Co.** [1905] 1 KB 11.
- 37. Three accountants, Mr. Feld, Mr. Paul Neville, and Mr. Dietz were called as expert witnesses with regard to insolvency. By the end of their evidence, there was not a great deal of difference between them. The defendants' accounts show an excess of liabilities over assets, but only on the basis that the plaintiffs win this action and the Counterclaim is dismissed. Under the deeming provisions of the Insolvency Act, 1986 the defendant company would on that basis be deemed to be insolvent. The defendant company is a wholly owned subsidiary of Combined Energy Products Limited whose primary object is the support of its subsidiaries. The defendants' accounts for the year ending 30 June 1995 contain a note that the parent company has waived loan interest due to the parent company for the year and "has undertaken not to seek repayment of the above amounts until the finances of the company permit and has undertaken to financially support the company for the foreseeable future".
- 38. Those undertakings are not enforceable by third party creditors. History shows a willingness by the parent company to honour those undertakings. Whether they will be able or willing to do so in the future remains to be seen.
- 39. I have briefly reviewed the law regarding declarations concerning future rights and hypothetical issues because those questions were raised in argument. But the short answer to the argument is that the declarations do not relate to future or contingent rights. The declarations asked for depend upon a finding that the plaintiffs are now and were before the commencement of this action, or at least before the beginning of the trial entitled to serve a notice pursuant to clause 9.3 of the Warren Energy Agreement. I regard that as a declaration as to present entitlement. In my judgment, I have jurisdiction to grant the declaration. Should a different approach be taken on appeal, I should make it plain as a matter of fact that there is no certainty or even probability that the plaintiffs will serve such a notice. Beyond the letters to which I have referred, I have no evidence about the intentions of the plaintiffs in that regard. They will no doubt consider this judgment and then decide what is the best course to take commercially.
- 40. Whether a declaratory judgment is to be granted is a matter of discretion.
- 41. I do not exercise my discretion in favour of making either of the declarations prayed. If it were thought that the courts were inclined to make such declarations, the Official Referees and probably the Commercial Court also would be overwhelmed with a flood of applications for declarations to give comfort to a party contemplating termination of a contract. As in this case, the bulk of those applications could only be decided after a trial of the whole of the merits in dispute. There may be some circumstances in which the courts may exercise discretion in favour of granting such a declaration but those circumstances must be extremely rare.
- 42. There is a further reason for not exercising my discretion which is more specific to this case. I do find that at the termination of the trial on 16 December, 1996 the plaintiffs were entitled to terminate the Warren Energy Agreement by service of a notice pursuant to clause 9.3. At that date no such notice had been served. It may well be that by the time I deliver this judgment on 20 January, 1997 the defendants' parent company will have taken steps to provide further finance or otherwise to ensure that by that date the plaintiffs are not entitled to terminate the agreement pursuant to clause 9.3. In that connection, I have marked the advance note of these reasons for judgment, "For counsel only. Not to be disclosed to solicitors or lay clients before 9.30 a.m. on 20 January, 1997".

THE ISSUES

- 43. There has been a proliferation of issues raised in this action.
- 44. The central and most important issue revolves around the agreement of the experts that gas has been delivered to the generating engines at inadequate pressure and as a result less electricity has been generated than might have been generated.
- 45. Who, if anyone, is at fault? I stress the words, "*if anyone*", because the use of methane gas for the generation of electricity is a new art. The drafting of contracts for that industry is also a new skill, and those who drafted the contract in this case clearly did not foresee some of the difficulties which lay ahead: to say that is not a criticism of them: it is easy to be wise after the event. This case will have lessons for draughtsmen of future contracts.
- 46. Have the defendants proved breaches of contract?

THE CONTRACT

47. The contract between Leicestershire County Council and Warren Energy Limited dated 4 December, 1989, began with three recitals, one of which was in the following terms:

"(2) The Council has installed and intends to upgrade a landfill gas extraction system at the Quarry and wishes to dispose of the landfill gas thereby produced ("the gas")."

The defendants stress the words "intends to upgrade".

48. The body of the agreement begins with a definitions clause which includes the following:

"The current gas system' shall mean that extraction network already installed by the Council which is connected to the flare stack located in the existing compound

The upgraded gas extraction system' shall mean the new gas wells being installed at the Quarry by the Council during the summer of 1989 which will be 30 metres deep

'the guaranteed minimum volume and quality of the gas supply' shall mean a supply of gas at a minimum rate of 225 cubic metres per hour of methane gas or such other minimum rate as may have been substituted under clause 5 and with a minimum methane content of 40%'''

- 49. Those definitions indicate that the intention of the Council referred to in the recitals was not an intention to make continual upgrading of the system but was an intention to change from a system whereby gas was simply flared off through a flarestack to a system which would enable some of the gas to be used productively. There was, however reference to development in clause 4.11 to which I shall later refer.
- 50. From the beginning, there were two concerns about methane on this site. First, the problem of "migration". The gas might migrate through surrounding ground, fill a house nearby and be caused to explode. Secondly, release of gas into the atmosphere would compound the "greenhouse effect" and would be a breach of important directives.
- 51. As I have already indicated, the first adopted solution to these problems was the construction of a network connected to a flarestack so that methane was simply burnt off.
- 52. The second solution proposed, which resulted in the agreement of 4 December, 1989, was that the system should produce gas for supply to engines which would generate electricity. The use of gas for production would reduce the amount which had to be flared off.
- 53. Although the agreement envisaged the installation of the new system in the summer of 1989, it was in fact installed in late 1989 and early 1990.
- 54. Later, on the advice of consultants instructed by the defendants, MJ Carter Associates, in reports of March and June 1993, the utilisation system was separated from the migration system. In the centre of the site would be wells to produce gas for utilisation and around the perimeter of the site there would be wells to prevent migration of methane, and those wells would be connected to flarestacks.
- 55. The operation of the dual system requires a fine balance. The defendants' engines require that the gas supplied to them contains at least 40% methane. If the gas supplied is too rich in oxygen the engines may be damaged. The gas flared off from the perimeter of the site tends to be too rich in oxygen to be used by the engines. There was some disputed evidence that some of the wells at the perimeter might be suitable for connection to the production system, but that proposition was inadequately tested and I do not find it proved. If an excessive amount of suction is applied to the wells in the centre of the site, an undesirable amount of oxygen may be drawn in from the perimeter.
- 56. There are at least two further operating problems.
- 57. The landfill gas extracted contains a great deal of water. Because the site is continually changing, the gas is directed through flexible pipes sitting on the surface of somewhat unattractive mud. The fall in temperature of the gas on passage through those pipes is accompanied by condensation of water in the pipes which reduces the space available for gas flow and gas pressure is reduced. The plaintiffs operate a fairly primitive manual system of "dewatering". A workman walks along the pipe lifting it over his shoulder with the intention of causing the water to go to the end of the pipe. That process involves shutting off the engines.
- 58. I mention this balancing procedure in the middle of explaining the contract because it throws some light on the thinking behind the contract.

- 59. As I have indicated, there was a guaranteed minimum provision for quality and quantity of gas. It has not been alleged that there was a breach of the undertaking to supply that guaranteed minimum. The plaintiffs have consistently supplied more than that contractual minimum. The flow rate of gas to the generators has consistently exceeded the contractual minimum of 225m3 per hour of methane (450m3 per hour LFG) and was approximately 1,000m3 during a monitoring exercise. It has been frequently alleged during the course of this trial that the plaintiffs have regarded the achievement of that minimum as the most that they need to achieve to comply with the contract. If the plaintiffs have held that view (and I do not believe that they have) they were wrong.
- 60. With regard to the "best endeavours" clauses, it has to be remembered that perfection could not be achieved on this site in the condition in which it has necessarily been to date. It is a large hole in the ground filling with mud and rotting material which both grows through tipping and subsides through decay with each passing day. The advice of consultants has been taken from time to time and largely followed
- 61. To cope with the balancing process, the parties included in the contract "best endeavours" clauses. The contract included the following further terms:
 - "4. COUNCIL'S OBLIGATIONS
 - 4.1 The Council will supply the Gas to Warren Energy during the contract period at the existing outlet point from the current extraction system which ends in the Flare Stack Compound and title and risk in the Gas shall pass to Warren Energy at that point and the Council will ensure that the gas will conform to the guaranteed minimum volume and quantity.
 - 4.6 the Council hereby grant Warren Energy sole rights to the commercial exploitation of the Gas for the Contract Period and shall not take or permit any action or works at the quarry which may prejudice Warren Energy's commercial interest in respect of the gas during the Contract Period. PROVIDED THAT this sub-clause shall not prejudice or limit the proper exercise by the Council of any statutory duty or obligation.
 - 4.9 The Council shall at the Warren Energy's request, adjust the volume of gas being drawn from individual boreholes or from the current extraction system **provided that these adjustments do not in the reasonable opinion of the Council have an adverse effect on the safety of the extraction grid or the landfill site.**
 - 4.10 The Council shall be responsible for ensuring that its extraction system and boreholes are **repaired and** maintained during the contract period to ensure that optimum volumes and qualities of the Gas are available to Warren Energy.
 - 4.11 The Council will use its best endeavours during the Contract Period to maintain, develop and operate at its own cost the gas extraction and leachate pumping systems at the Quarry to ensure extraction of the optimum volumes and qualities of the Gas and to meet the reasonable requests of Warren Energy provided that in the reasonable opinion of the Council the action is consistent with maintaining safety at the Quarry and does not conflict with the reasonable conduct of the Council's waste disposal operations at the Quarry.
- 62. The obligations imposed on the defendants are contained in Clause 6. In particular the defendants are under obligations under clause 6:
 - 6.2 Warren Energy shall contract with BLS [a fellow subsidiary of Combined Energy Products Limited]
 - 6.2.1 to supply and install the equipment that will utilise landfill gas containing at least 225 cubic metres of methane gas per hour and with a minimum methane content of 40%.
 - 4.4 Warren Energy shall use its best endeavours during the Contract Period to maximise the use of the Gas available from the Quarry."
- 63. Clause 7 contains the mechanism for payment and Clause 9 the mechanism for early termination. (The latter is relevant because the plaintiffs allege an entitlement to terminate the Agreement on the grounds of the defendants' insolvency).
- 64. No implied terms are alleged. That is important in view of the fact that counsel in his closing speech urged that I should find an implied term in the contract. I would not have made that implication even if it had been just in the circumstances to consider doing so.
- 65. It is a most important feature of this contract that there is no specification or requirement that the plaintiffs should supply gas at any specific supply pressure. When one thinks of the supply of water to one's house, one assumes that the supplier is under a duty to supply the water under sufficient pressure to force it to the tank in the roof. If there is such a duty, it probably arises under a statutory requirement. Similarly, one assumes that gas supplied to the house will be supplied under sufficient pressure to operate the central heating boiler, but in the absence of a contractual or statutory duty, one should not assume that the utility operator has any duty other than to supply gas at nominally more than negative pressure at the entry to the premises leaving it to the householder to raise the pressure to whatever pressure is required for his particular purposes. That is the position in the present case.
- 66. There is no express or implied term requiring the plaintiffs to supply gas at more than a nominal pressure above negative pressure. In this connection, clause 4.11 of the agreement is particularly significant. That clause makes specific mention of "optimum volumes and quantities of gas" but says nothing about pressure of gas. It is for the defendants, having received the gas, to put it under whatever pressure is required to operate their engines, provided there was no breach by the plaintiffs of the best endeavours clause bearing upon them.

- 67. It is clear that a "best endeavours" provision is sufficiently certain to be enforceable: Walford v Miles [1992] 2 AC 128 @ 138C. "Best endeavours" imposes a duty to do what can reasonably be done in the circumstances and the standard of reasonableness is that of a reasonable and prudent board of directors acting properly in the interests of their company: Terrell v Mabie Todd & Co. [1952] WN 434 @ 435; Pips (Leisure Productions) Ltd v Walton [1982] 43 P&CR 415 @ 420/1. "Best endeavours means what it says it does not mean second best endeavours": Sheffield District Railway v Great Central Railway 27 TLR 451.
- 68. I reject the submission made on behalf of the defendants that a "best endeavours" obligation is the next best thing to an absolute obligation or a guarantee. I would not go so far as to agree with counsel for the plaintiffs that "best endeavours" must be construed in the light of the art at the time of the contract, but it must at least be construed in the light of the art as it developed from time to time during the life of the contract. It would be quite wrong to say that in the light of all the expert evidence produced at the trial one should use hindsight to judge the "best endeavours" during the course of the contract. The use of methane gas in the way envisaged by this contract is a very recent development. But clause 11 does, amongst other things, require the plaintiffs to use their best endeavours to "develop" the system.
- 69. To be satisfied of a breach of a "best endeavours" clause by one party or the other, I would wish to hear evidence that in the light of the knowledge available at the time of the alleged default the party alleged to be in default was culpable. In assessing culpability, I also take into account the unfriendly nature of the environment, which I have visited.

ALLEGED BREACHES BY THE PLAINTIFFS

- 70. I have heard much technical evidence showing that either party, the plaintiffs or the defendants could have improved the pressure by engineering changes at moderately small cost on one side or the other of the point at which the gas went from the plaintiffs' side to the defendants' side. In particular, Dr. Eden, in an answer (to a question from me) relied on by the defendants said that either party could provide additional pressure. It was suggested by counsel for the defendants in his closing speech that when Dr. Eden said in evidence, "I would install a system to pull harder on the gas field" that he was suggesting that that should be done by the plaintiffs. That is not at all how I understood his evidence, but if that had been what he meant, it would have been irrelevant to the question of construction of the contract. Equally it is irrelevant to the construction of the contract that Dr. Manley thought that it was the duty of the plaintiffs to provide sufficient pressure to help run the defendants' engines. I have found that on the true construction of the contract, the responsibility for improving the pressure rested on the defendants, not on the plaintiffs. On the central point in issue, the question resolves itself into one of construction of the contract rather than technical evidence because the technical experts are largely in agreement that pressure to the engines had to be raised.
- 71. It has also been alleged that the plaintiffs for their part could also have increased the flow rate if not the pressure to the engines by connecting more wells to the production system. Mr. Keeling, the defendants' plant operator, gave forceful evidence that not enough wells were connected to the production system. However, he was not allowed onto the tipping area of the quarry, and his information of the number of wells was not always reliable. Mr. Keeling's demands for more wells was based on his misdiagnosis of the problem. Mr. Keeling is an ex Naval Petty Officer Engineer. He was not qualified to make the diagnosis that the problem was not lack of available gas but lack of pressure applied to the gas.
- 72. Mr. Keeling also complained of extremely high oxygen concentrations at times: these he put down at one time to lack of repair to flanges to the plaintiffs' gas pumps. But it is plain that there were also considerable problems throughout in balancing the system to ensure both that the methane content of the gas to the engines was sufficiently rich and that methane was not allowed to migrate to surrounding property. Over enthusiastic extraction of gas might prevent migration but would draw excessive oxygen into the system and damage the engines.
- 73. Graphs were put in evidence with a view to showing that there was a correlation between the number of wells connected and the amount of electricity exported. I am unconvinced by those graphs. In particular, in one important respect they do not even agree with each other.
- 74. It is also alleged that the plaintiffs could also improve the flow rate of gas to the defendants by a more sophisticated dewatering system.
- 75. Having heard the technical evidence, I have little doubt that in the future the parties will be able, with the assistance of advice expensively obtained in this action, to improve production. Both plaintiffs and defendants have a strong incentive to improve production (within limits imposed by safety considerations) to increase their income.
- 76. I do not believe that it is necessary to go into the minute detail of all of the evidence which I have heard.
- 77. The question is, does the room for improvement which has been demonstrated by the evidence show that the plaintiffs have been in breach of contract by failing to use the best endeavours required by the contract? The answer to that question is, No. There is much evidence that the parties on both sides could now in their present state of knowledge make improvements to their respective systems, to their mutual benefit. There is a lack of convincing evidence that the plaintiffs failed in the past to use best endeavours.

- 78. The failure of the defendants to prove their case was most convincingly shown by the request of their counsel at the end of his closing speech that there should be an enquiry into the amount of the alleged loss of profit: that enquiry, it was said, would have to include matters of causation.
- 79. Counsel for the defendants submitted:
 - "56. Dr Spensley (i/c 3/12/96 11.40 a.m.) confirmed that the generating costs for WEL are relatively constant regardless of output. This means that the figures at **B pp. 65/67** do show a genuine loss of profit.
 - 57. Revised figures showing the difference between the actual revenue received by WEL compared with the revenue which would have been generated by a constant output of 1425kw (1500kw for 95% of the time) are attached hereto.
 - 58. It is recognised that the Court may be persuaded that a lower output than 1425kw may have been achieved throughout the life of the Agreement. It is submitted that the figure should not be less than 1400kw, perhaps discounted for a period of downtime: see Dr Manley's evidence mentioned in paragraph 36 above.
 - 59. It is also recognised that there may have been periods when the engines were "down" for reasons for which the plaintiffs are not to blame (eg. servicing, parts failure). WEL submits that the Court should make a ruling as to what output was attainable by WEL with the gas which could reasonably have been provided by the plaintiffs, and direct an inquiry as to the reasons why that output was not achieved at a particular time (should the parties fail to agree). Such an inquiry may involve fairly precise issues of causation.
 - 60. Without such an inquiry having been taken, it is submitted that WEL is not indebted to either LCC or MLR. The evidence has shown that both plaintiffs were wrong to deny "that [they] were under any contractual obligation to provide gas to the Defendant at the rate of 1500m" (A p. 125D (para. 15)), certainly to the extent that they could have supplied 1400m;. WEL therefore has a genuine set-off."
- 80. It is indeed clear that the defendants' engines or one of them were sometimes "down" (on at least one occasion for many months) for reasons which were not the fault of the plaintiffs. Moreover, as counsel for the plaintiffs has pointed out, the defendants have failed to link any alleged breach on the part of the plaintiffs with any particular damage allegedly suffered by the defendants. To submit now at the end of the trial that the plaintiffs should not be given judgment until there has been an enquiry into the defendants' counterclaim is to put the burden of proof on the wrong foot. The defendants have had the opportunity to prove their counterclaim and they have not succeeded in making that proof. There is no reason why they should be given another opportunity.
- 81. There is no prayer for an enquiry in the Counterclaim nor in the Rejoinder and there has been no order for a split trial. We have had a lengthy trial of the action, and if the defendants have not proved their case, as they clearly have not, they lose the action.

THE TECHNICAL CASES

- 82. By and large, the parties are agreed that there was for much of the time not enough gas pressure being supplied to the engines.
- 83. The defendants say that the reason for that was that the defendants:
 - 1. Did not construct or connect enough utilisation wells (as opposed to gas migration wells);
 - 2. Did not supply gas under sufficient pressure to the physical point where risk and property in the gas passed, referred to as the interface point; (this allegation included complaints about dewatering to which I have already referred).
- 84. The plaintiffs respond:
 - 1. Enough utilisation wells were supplied within the requirements of safety;
 - 2. There was no duty on the plaintiffs to supply gas to the defendants at more than a modest amount above negative pressure, which they achieved all the time apart from some minimal failures;
 - 3. The real fault was the defendants' failure to supply blowers adequate to increase suction from the field and raise the pressure on their side of the line to overcome pressure losses in their own system;
 - 4. The defendants' engines did not operate at adequate efficiency;
 - 5. The plaintiffs acted in accordance with the advice of competent consultants and accordingly it cannot be said that they failed to use their best endeavours.
- 85. There were other more detailed points made to which I shall refer later, but it is enough to decide the technical part of this case to say (with reasons which I shall give) that I reject the two points made on behalf of the defendants and I accept the five points made on behalf of the plaintiffs.
- 86. I have already considered the contractual duty as to the pressure at which gas should be provided. While I do not believe that it has any bearing as a matter of law on the construction of the agreement, some evidence of two witnesses in relation to the part of the contract dealing, or not dealing, with pressure is worth recording. Dr. Robert Spensley, B.Sc., Ph.D. (biochemical engineering) is the chairman of the defendant company. He said that if renegotiating this contract today he would be asking for a defined pressure at the interface point with a minimum of zero and probably a small positive pressure of maybe 15 to 30 millibars. He added that he may also have chosen to add other details in the specification also, "but this was one of the earlier landfill gas utilisation schemes and I think we have all learnt a lot in the last six years". It is also worth recording that Dr. Spensley a short while later in his evidence accepted that the defendants had installed in their system what were called "Secomak boosters" to compensate pressure losses in the defendants' system. Dr. Manley, the expert for the defendants and

Dr. Eden, the expert for the plaintiffs had different approaches between each other, and Dr. Manley particularly made the point that approaches have changed over the last 10 years. As I read and heard their evidence, they were both in agreement with Dr. Spensley that the pressure to be applied to the engines needs to be determined before contract and that the responsibility for providing that pressure should be apportioned between the parties by the contract.

- 87. The defendants commissioned their own surveys and reports to determine the likely yield of gas from the site and they designed or commissioned the design of their own plant. It was for them to determine what pressure of gas would be required for their plant and either to negotiate for that pressure to be supplied to them or to arrange to supply it themselves. It is worth repeating that there are no implied terms alleged by the defendants.
- 88. Having dealt with the case in terms which are general by comparison with the detail put before me, I should now turn to some greater detail though not to all the detail.

1. <u>The principal differences between Dr. Manley and Dr. Eden:</u>

- 89. The principal differences between the two experts are as follows:
- 90. A. Dr Manley is of the opinion that the problem lies with the inadequacies in the gas collection system (for which he holds the plaintiffs responsible). Specifically, he says:
 - 1. Some of the gas which is flared off is of good quality and could be made available to the defendants.
 - 2. Since the generators were commissioned in November 1990 the electrical output has been restricted by insufficient gas provided by the plaintiffs.
 - 3. The lack of gas has been caused by unreasonably high pressure losses in the gas extraction system.
 - 4. The pressure loss in the gas extraction system varies over a 24 hour period and is related directly to manual drainage of the gas collection pipes (the dewatering exercise).
 - 5. The unreasonably high pressure losses have been caused primarily by the Plaintiffs' failure to operate a proper system of dewatering and a proper system of dewatering using siphoning should be introduced.
 - 6. The problem is exacerbated by the fact that insufficient wells are connected to the utilisation system and more wells should be connected.
 - B. Dr Eden, whilst he accepts that there are minor improvements that could be made in the gas collection system, is of the view that the real reason why the engines do not generate more power is because the pressure raising equipment installed by the defendants is inadequate to generate sufficient pressure to overcome the pressure losses in the engine supply train and therefore to supply sufficient gas to the engines.

2. Inadequate Pressure

- 91. I have already indicated that Dr. Eden in his evidence indicated that either party could install a system to overcome pressure losses.
- 92. Dr. Eden said that one possible solution would be to install on the plaintiffs' side fans used by Dr. Eden's brother at Rowley, having a head of 300 millibars, that is twice the capacity of the equipment currently on the plaintiffs' side. The cost of that solution would be about ,10,000, the most expensive of the possible solutions.
- 93. Dr. Eden rejected that solution, not on the ground of cost, but because it was technically unsatisfactory. In short, he said that the plaintiffs' equipment was subsidising the defendants' equipment and the best technical solution was to raise the power of the defendants' equipment. It is also, in my view, what the contract requires.
- 94. Dr. Eden was unable to say what would be usual in a situation like that which exists at Enderby because it is an unusual situation to have split responsibility. However, he was in no doubt that in that situation what was required was that the defendants should upgrade their equipment.
- 95. The plaintiffs' equipment is known as two Donkin blowers. The defendants' equipment in the pumping of gas was known as Secomak boosters. There was also a gas filter known as a Premaberg filter.
- 96. I illustrate my summary of Dr. Eden's evidence on this topic with a short extract from his cross-examination:

"... As an engineer, if I was in charge of that power station, as I said on Friday, I would replace that Secomak booster with a booster that is significantly larger. I would remove the Premaberg filter if it has a problem with negative pressures and I would make sure I got my gas to my engine. The gas is there, it is just not coming out, and the real problem is that the Secomak booster is too small.

- Q. So your cures are all relevant to Warren Energy's side of the fence?
- A. That's the simplest and most immediate point of application.
- Q. What would be wrong with upgrading the Donkin blowers? You agree with me that the first three of the four restrictions are matters presently for the Donkin blowers. Why do you not include the Donkin blower in your cure?
- A. Because the Secomak booster is too small. We use that booster when we make equipment. We use that booster for flare stacks rated at 250 cubic metres an hour. We are trying to put 750 cubic metres an hour into the power station. We would never use a booster of that size for that flow rate so that it really has, in my view, no place in the system at all and I think that was the view that Andrew Leach came to as well when he saw it. So the Donkin is appropriate, the Secomak is inappropriate.
- Q. Inappropriate presumably only for the last duty you specify on your page 96, namely overcoming the pressure loss that will be incurred in the pipework and valves leading into the engines.

A. Yes.

Q. That must follow.

A. That is right.

- Q. If there is an inadequacy in relation to the ability or inability to overcome the first three restrictions, that must be for the Donkin?
- A. That's correct, yes. "
- 97. The last question and answer were not qualifications of what had gone before because Dr. Eden had made it plain that there was no inability on the part of the Donkins to overcome what counsel called "the first three restrictions" which related to problems on the plaintiffs' side of the fence.
- 98. Dr. Manley put forward the view that, "If the Donkins did not have to overcome restrictions prior to the inlet then there would be 120 millibars, but that is not the case". The fact is that the Donkins are there to overcome certain restrictions on the plaintiffs' side and they do it successfully. If those "restrictions" did not exist, then there might be little need for the Donkins, but they are bound to exist in some degree and the Donkins cope with them. Throughout Dr. Manley's evidence there seemed to run the assumption that the plaintiffs should be supplying unrestricted gas at such pressure as would run the defendants' engines. That assumption is wrong.
- 99. Dr. Eden's evidence was informed and impressive and I accept it. The prime technical requirement in the system is the upgrading of the Secomaks.

3. Number of Utilisation Wells

- 100. Following the recommendations of consultants, who have not been criticised, in November, 1993, the plaintiffs split the gas utilisation system and the gas migration control system. It has been said that since then too few wells, about 10 to 13, have been connected to the gas utilisation system. The defendants rely on a statement of Dr. Eden that if the number of wells were to fall below about 8 or 9 then it might be difficult to draw enough gas: but that situation never arose. It also has to be said that that answer was given in response to a question from me when I pressed him to give an approximate answer to a question he had not researched.
- 101. As I have said, the number and siting of wells involves a question of balance. It is not too difficult, as Dr. Manley does, to criticise the decisions and their implementation in detail with the benefit of hindsight.

After the splitting of the system, in 1994, the defendants produced a substantial amount of electricity; in 1995, their results were less good, but they had only one engine running for 6 months and there is no evidence that that downtime was due to the default of the plaintiffs, indeed on the evidence the likelihood seems to have been that the plaintiffs were in no way at fault for a mechanical failure in the defendants' equipment which took a very long time to put right; in 1996, the results have not been as good as they might have been, but I find it difficult to see any correlation between the defendants' results and any alleged defaults on the part of the plaintiffs.

- 102. It has been suggested that a cautious approach on the part of the defendants' operator, Mr. Keeling, may have had something to do with a restriction in production: the fact of ongoing litigation in relation to a contract which required co-operation from both sides cannot have helped.
- 103. Mr. Eden made a comparison between results of monitoring tests carried out in June and October, 1996 which convincingly demonstrated that, certainly in 1996, the provision of more wells would not have aided production. In June, 1996, there was undertaken an exercise referred to as the "witnessed monitoring exercise". The results then obtained were compared with the results of monitoring of the generation in October, 1996 when due to mechanical failure only one of the two power generation engines was operating.
- 104. Based on an impressive array of statistics, Dr. Eden drew the following conclusions, which I accept:
 - "3.1 The equivalent power generation per engine was considerably higher during the October trial with only one engine operational than during the witnessed monitoring trial in June with two engines running. There is no apparent reason for this disparity.
 - 3.2 During the October trial, the available quantity of gas from the extraction wells was not fully utilised. Indeed records show that the maximum flow rate during this period was less than 42% of that recorded in June 1996 ... with a comparative number of wells available. This appears to challenge [the defendants'] claims that more wells would allow more gas to be used by the generation plant.
 - 3.3 [I paraphrase: With two engines running the output of electricity was only one third greater than the quantity of electricity generated with one engine running].
 - 3.4 This clearly demonstrates that:
 - (i) [The defendants] have had sufficient gas available to produce a far greater output than that achieved.
 - (ii) [The defendants] do not appear to have the capability of increasing the power output from their engines because of the limitations inherent in their generation plant."
- 105. On the basis of the information on which those conclusions were based, it is at the very least doubtful and certainly not proved that the provision of more wells would have materially helped the defendants in the operation of their generation plant. Dr. Manley has not carried out any study which might refute those conclusions of Dr. Eden by demonstrating that an increase in the number of wells would lead to an increase in the amount of gas which would either be made available to the engines or (a different consideration) be used by the engines.

There is evidence that when further wells were connected, there was little and sometimes no improvement in the plaintiffs' output.

- 106. Mr. Winterton, B.Sc and a Chartered Engineer amongst other qualifications, the plaintiffs' Operations Director, made the point that even when 30 wells were connected, the defendants were still unable to generate what they held to be their maximum capacity.
- 107. Counsel for the plaintiffs criticised Dr. Manley's evidence as being based on inadequate and uncertain information. He made the following points:
 - 1. If any serious attempt was going to be made to prove a correlation between the number of wells and the electrical output of the plant it is extraordinary that Dr Manley had not carried out any proper investigation into the number of wells connected at any one time.
 - 2. It is also extraordinary that Dr Manley had not been shown the daily site reports (relied on for some evidence of the number of wells connected) until only shortly before he gave his evidence. Those documents should have been disclosed months ago. There was an adjournment during the trial to enable the plaintiffs and their advisers to examine the late disclosed documents.
 - 3. Dr Manley has given no consideration to the question whether there might not have been other factors which impacted upon electrical output. Plainly, the fact that one or other or both engines are down will have significant impact. (See, for example, the latter half of 1995 (from 22.7.95 onwards) when one engine was down due to no conceivable fault on the part of the plaintiffs).
 - 4. There are no daily site reports referring to the period before March 1994. The only record of the number of wells connected are (i) very occasional records of wells being added or taken off in the daily site logs and (ii) references in Consultants' reports. When the site reports mention wells being added or taken off, it is rarely if ever clear what is the base figure so affected.
 - 5. The daily site reports for 1994 only provide occasional reports of the number of wells and are probably not very reliable.
 - 6. The various charts put in evidence by Dr. Manley are inconclusive. For example:-
 - (a) It is apparent from the charts produced by Dr Manley at Exhibit D3 that:-
 - (i) 6 wells "produced" more power than 10 (or even 11). On other occasions they "produced" the same amount of power. 11 wells "produced" more power than 13. [The word "produced is placed in inverted commas because the plaintiffs do not accept that there is a direct correlation between the number of wells and power output].
 - (ii) The two engines fluctuated wildly between 800 and 1000kW even though the number of wells connected remained constant.
 - Figure 3.6b [B/182] shows that with 23 wells connected in late 1991 power production was generally not significantly higher (and often lower) than power production in 1994/1995 when approximately only half as many wells were connected.
- 108. Moreover, documents in the documents bundles show that:
 - CII/187 13 wells produced "not quite the highest output ever" on 27.6.91
 - CII/246 13 good wells and 3 marginal wells produced 1200kW on 20.7.93.

Table 3.3a

The table demonstrates that there is no direct or obvious correlation between the number of wells in use and the extraction flow rate. For example, the flow rate from 28 wells in September 1993 was the same as is provided now by only 12.

I reject the submissions made on behalf of the defendants and I accept the submissions made on behalf of the plaintiffs. In particular, figure 3.6b simply does not show what the defendants allege.

- 109. As to the contention that some of the migration wells could be connected to the production system neither Dr. Spensley, Mr. Bull, Mr. Keeling nor Dr. Manley know whether there are other good wells which could be connected. Mr.Bull conceded in his oral evidence that he never had any way of knowing whether the migration wells were producing good quality gas, and Dr. Manley couched his answers in terms of "suspecting" and "thinking". He does not know. Mr. Keeling is not allowed onto the site, and would not be qualified to test the quality of gas from any particular well. For all those reasons, the plaintiffs contend that the volume of gas extracted seems to have more to do with the way in which the engines are operated than the number of wells connected. I agree with that contention on the balance of probabilities on the basis of what I have heard.
- 110. I accept the evidence of Dr. Eden that there is enough gas obtainable from the site to supply all the wants of the defendants with regard to their engines. I reject the evidence of Dr. Spensley that the defendants "have never had the gas to prove the point or otherwise". I do not accept that the provision of more wells would solve the problem. In fact, more wells might increase the problem by making it more difficult to balance the system as a whole. What is most required is more suction from the site and the responsibility for providing that rests with the defendants. The extraction system provided by the plaintiffs is (with some very small exceptions) doing its job and supplying gas at a positive pressure. On the other hand, the pressure drop over the supply feed train on the

defendants' side of the interface is frequently more than can be compensated for by the defendants' Secomak machines.

4. <u>Migration Control</u>

- 111. It has been alleged by the defendants that the separation of the migration control system from the utilisation system was a breach of clause 4.6 in that it prejudiced the commercial interests of the defendants. It is also said to constitute breaches of clauses 4.10 and 4.11.
- 112. It is conceded on behalf of the defendants by Dr. Manley and others that the control of migration has to be paramount. In view of the serious safety implications, such a concession was inevitable. In the light of that concession, the proviso to the proviso to clause 4.6 referring to "any statutory duty or obligation" becomes particularly relevant.
- 113. The separation of the two systems also could hardly be criticised since it was done by the plaintiffs following the recommendations of the defendants' consultants. In the end, Dr. Manley's criticism came down to one of detail. He said that the migration system would be better if there were a flarestack in the migration system which was under the control of the operator of the engines so that in the event of a failure of the engines, the engine operator could himself instantly divert gas from the engines to the flarestack. That may be a good idea, though I can see that there might be disadvantages from a division of control of the migration system. But even if Dr. Manley's suggestion on this point is a good one, it does not come near showing that the plaintiffs have failed to use their best endeavours. It is one of those points brought out at the trial which might or might not be adopted with profit after the trial.
- 114. Dr. Eden conceded that it might be possible to connect some wells from the migration control system to the utilisation system but objected that that would introduce another level of attendance and control to ensure that low level gas did not enter the utilisation system.
- 115. Dr. Manley conceded that it was more important for the engines to have gas with a high methane content than to have a higher flow of lower quality gas. In that connection, it is important that Mr. Baker, the first plaintiffs Environment Manager (now employed by the second plaintiffs) said that as a result of the separation of the two systems the quality of the gas had improved and was now consistently good. The separation of the systems has not damaged the defendants' commercial interest, it has enhanced it by giving the defendants the higher methane quality gas which they require in their commercial interest.
- 116. There has been an attempt on the part of the defendants to suggest that the separation of the systems is depriving them of gas to which they are entitled under the agreement. But that is inconsistent with their own case that there is more gas to be had. The defendants rely on the evidence of Mr. Winterton, the plaintiffs' Operations Director who said, for example, "We have no restriction in providing 50% more gas. The limiting thing is the engines not being able to take it."
- 117. They also relied on the evidence of the plaintiffs' expert Mr. Eden, who said: "Gas collection from the centre of the site, for use in the power station, is not, however, stressing the gas reserves."
- 118. The migration control system is not starving the engines of gas. There is more than sufficient gas in the utilisation wells to supply far more than the defendants are using. The migration control wells are improving the quality of gas obtained from the utilisation wells. The gas has to go somewhere, it cannot be left in the ground until it is convenient to use it. If more gas were pulled in to the centre of the site through the utilisation wells there would be less worry about migration, but if too much is pulled into the centre the quality of gas to the engines might be endangered there will be no problem of that until the defendants markedly improve their gas suction/driving machines.
- 119. The problem is not lack of volume of flow of gas, it is one of lack of pressure of gas to the engines. The plaintiffs deliver the gas to the defendants at an adequate pressure. At the heart of this case is the defendants' misunderstanding of the parties' respective duties in the matter of pressure.
- 120. None of the evidence regarding migration control came near to showing breach of contract on the part of the plaintiffs.

5. <u>Dewatering</u>

- 121. Dr. Manley criticised the rather primitive manual method of dewatering from the flexible pipes which I have described. He said that siphons should be installed to drain away water automatically into the spoil from the pipes.
- 122. The defendants contend that the use of siphons is impractical on an active, difficult and open site such as Enderby Quarry, though it will be sensible to use them for dewatering when the site is capped and the piping system becomes permanent. They are supported in that view by their expert, Dr Eden who expressed the following opinions. At the present time, siphons would need to be sited in every dip. They would be vulnerable to settlement. They would need constant re-siting (once every 2 3 weeks), not just because of settlement but also because the pipes also need to be moved on a regular basis to enable access to the site. Mr. Baker said each move of a siphon would take 2 day. He knows because the plaintiffs have undertaken trials with dewatering pots: those trials have been unsuccessful due to the need for continual moves. Each needs a soakaway. The top then needs sealing and the pipes must then be laid to falls. MLR have been quoted and have been paying ,400 per siphon. Dr Manley suggested that siphons could be obtained for ,100. In the last 12 months much more expensive

dewatering tanks have been installed in the 6 inch pipeline at the last stage between the manifold and the engines. Those tanks cost ,2,500 each. Mr. Baker's evidence shows positive steps to use best endeavours.

- 123. Dr. Manley pointed to one of the flare stacks in the migration system: that stack is served by pipes with a more permanent dewatering system. The reason the 1500 flare stack can have a better system is because it is largely permanent and it is ideally sited at the quarry edge to provide natural falls.
- 124. At the trial, Dr. Manley expressed the view that despite what has been said about the difficulties of using siphons, which he accepted with regard to past years, there was now room for improvement "in the recent past or the near future" by installing a "semi-permanent system". Even Dr. Manley goes only so far as to suggest a semi-permanent system on part of the site, and his reference to "recent past or near future" indicates no failure in exercising best endeavours at the date of issue of the writ.
- 125. Even using the present system, there is some scope for more dewatering, but that has to be balanced against the necessity to stop at least one engine at a time during dewatering (and hence loss of production).
- 126. Dr. Eden expressed the view that increased pressure is once again the solution to the problem.

6. Slotted wells.

7. Aquapipes.

8. Baffles.

127. These subjects are of such small importance that I need say no more about them save that I find that no breach of contract is proved on the part of the plaintiffs in relation to them.

9. <u>Efficiency of the defendants' engines</u>.

- 128. This is another subject which requires no comment. It is not alleged by the plaintiffs in the Statement of Claim that the defendants are in breach of the obligation under clause 6.4 to use their best endeavours to maximise the use of gas from the site, though at times the case has been presented as though there were such an allegation. In this connection, (though it is irrelevant to the decision of this case) I should comment that I do not accept the oral submission of counsel for the defendants that the "best endeavours" required of the defendants by clause 6.4 relate to the 1989 situation and to the capacity required by clause 6.2.1. The capacity required by clause 6.2.1. was qualified by the words "at least". As I commented in relation to the "best endeavours" clause bearing on the plaintiffs, the best endeavours must relate to the situation and knowledge at any given time. In a 15 year contract, it cannot be right that there shall be no progress related to new techniques and knowledge throughout the contract. Best endeavours must be best endeavours related to what is known at the time combined with an element of reasonableness in deciding what should be done to update an existing system, but without the use of hindsight.
- 129. The plaintiffs say that lack of efficiency of the plaintiffs' engines is an additional reason, over and above the lack of capacity of the defendants' pumping equipment, why there was no demand for further flow from the site. If the defendants were to set their minds to increasing the pressure on their side, they would probably also be under a duty to consider increasing the efficiency of the engines, either by upgrading the two engines or by adding a third engine. Dr. Spensley said that the engines are 1990 models and slightly less efficient than those obtainable in 1996. But the question of the efficiency of the engines does not arise for consideration on the issues before me. In view of my findings about the lack of suction by the defendants from the site, I need say nothing more about the efficiency of their generating engines.

CONCLUSION

130. I therefore dismiss the counterclaim and give judgment for the plaintiffs for ,337,442.

David Sears instructed by Taylor Joynson Garrett Jonathan Russen instructed by Bray Walker