Ohnea Maentine DRECTOR Dated: 5th February 1997

THE COMPANIES ACTS 1985 and 1989 COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

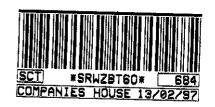
of

RESERVOIR RESEARCH LIMITED



Glasgow Telephone 0141 248 4933 Facsimile 0141 204 1601





THE COMPANIES ACTS 1985 and 1989

COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

of

RESERVOIR RESEARCH LIMITED (Registered No SC102526)

(adopted by Special Resolution passed on 5 February 1997)

PRELIMINARY

- The Articles hereinafter contained and 1. (A) Regulations contained in Table A of The Companies (Tables A to F) Regulations 1985 as amended (hereinafter called "Table A") shall apply to the Company with the exception of Regulations 2, 5, 24, 40, 73-82 inclusive, 84, 87, 101 and 118 of Table A and of any other extent that they are Regulations to the additions with the inconsistent modifications hereinafter set forth.
 - (B) In these Articles the undernoted expressions shall bear the meanings set opposite them below:-

"the Act" the Companies Act 1985 as amended from time to time;

"Admission" the admission for listing on any Recognised Investment Exchange of any shares in the capital of the Company;

"the Auditors" the auditors of the Company from time to time;

"Control" as defined by section 416 of the Income & Corporation Taxes Act 1988;

"GDF"

Glasgow Development Fund, a limited partnership registered in Scotland (Number 2314) and having a place of business at 50 Waterloo Street, Glasgow G2 6HQ;

"Investor"

GDF or any party to whom GDF transfers the whole or any part of its shareholding in the Company in accordance with the Subscription Agreement and these Articles;

"Investor Director"

shall have the meaning given to it in Article 24;

"Investor Group"

an Investor and any holding company or subsidiary of that Investor and any subsidiary of any such holding company;

"Offer to the Public"

an offer to the public or to selected members of the public of any shares in the capital of the Company otherwise than by Admission or by individual members of the Company disposing of all or part of their shares in the capital of the Company without any marketing to the public or to selected members of the public;

"Ordinary Shares"

Ordinary Shares of £1 each;

"Preference Shares"

Cumulative Redeemable Preference Shares of £1 each;

"Preferred Ordinary Shares"

Cumulative Participating Ordinary Preferred Shares of £1 each;

"Recognised Investment

Exchange"

defined in section of the Financial 207 Services Act 1986;

"Sale"

the sale of the whole issued share capital of the Company to a third party by way of private bargain;

"the Subscription Agreement"

the subscription agreement among Company, GDF and another entered into on the date of the adoption of these Articles.

- Anything required or enabled in these Articles (C) to be done by an Investor Group shall be done by that member of the Investor Group which holds shares in the Company or, if more than one such member holds shares in the Company by that member holding shares which is nominated for the purpose by notice in writing to the Company signed on behalf of all members of the shares in the Investor Group which holds Company;
- A reference to any statute or provision of a (D) statute shall include any orders, regulations or other subordinate legislation made under it context otherwise the unless shall, requires, include any statutory modification or re-enactment of it for the time being in force;
- aforesaid, and unless the Save as (E) requires, words or expressions otherwise contained in these Articles shall bear the same meanings as in the Act;
- Where the consent of any party is required in terms of these Articles, that party will not (F) unreasonably withhold or delay that consent.

SHARE CAPITAL

2.

The authorised share capital of the Company as (A)

at the date of adoption of these Articles of Association is £101,494 divided into 50,000 (the "Ordinary Ordinary Shares of £1 each Participating 1,494 Cumulative Shares") Preferred Ordinary Shares of £1 each ("the Shares") 50,000 and Preferred Ordinary Cumulative Redeemable Preference Shares of £1 each ("the Preference Shares");

(B) The rights attached to the Ordinary Shares, the Preferred Ordinary Shares and the Preference Shares are as follows:-

(i) As regards Income

The profits of the Company available for distribution (as defined in Section 263(3) of the Act) ("the Available Profits") in respect of any financial year or accounting reference period (hereinafter in this paragraph referred to as the "Relevant Period") shall be applied:

- first in paying to the holders (if (a) any) of the Preference Shares a fixed cumulative preferential cash dividend per share (the "Fixed Preference Dividend") at the rate associated (exclusive of credit) of 8.00p per Preference Share per annum to be payable half yearly on 31st December and 30th June in every year, the first payment being due on 30th June 1997 and being calculated on a pro rata basis in respect of the period from the date of issue of the relevant Preference Shares to 30th June The Preference Shares do not entitle the holders to any further the Available participation in Profits;
- (b) second and subject thereto in paying to the holders (if any) of the Preferred Ordinary Shares a fixed cumulative preferential cash dividend per share (the "Fixed Preferred Ordinary Dividend") at the rate (exclusive of associated tax credit) of 5% of the amount subscribed by the holder per

Preferred Ordinary Share per annum to be payable half yearly on 31st December and 30th June in every year, the first payment being due on 30th June 1997, and being calculated on a pro rata basis in respect of the period from the date of issue of the relevant Preferred Ordinary Shares to 30th June 1997;

third and subject thereto in paying (C) to the holders (if any) of Ordinary Preferred Shares cash dividend cumulative Ordinary Preferred Participating Dividend") in respect of financial periods beginning on or after 1st 1997 of amount an January (exclusive of associated credit) per Preferred Ordinary Share which equals the product of dividing 8% of the Net Profit (as the defined) for hereinafter £150,000, Relevant Period orlower, by the is the whichever number of Preferred Ordinary Shares in issue at the end of the Relevant Period in question to be payable within seven days after the date of the General Meeting of the Company which the Accounts for Relevant Period are adopted, which shall be held within five months of the end of the Relevant Period in question; provided that in event that the Accounts of Company for any Relevant Period have not been adopted at a General Meeting of the Company on the date (hereinafter called the "Relevant Date") five months after the end of Period then Relevant such Ordinary Participating Preferred Dividend will be paid so far as it lawful to do so within be fourteen days of the Relevant Date and will be calculated on the basis of the Net Profit (as hereinafter defined) for the immediately preceding Relevant Period subject any adjustment which may be required after the adoption of the relevant Accounts;

- subject thereto (d) fourth and the holders of paying to Ordinary Shares a cumulative cash dividend on each share of an amount Participating the to equal Preferred Ordinary Dividend paid on each Preferred Ordinary Share for the same financial year, provided that no dividend shall be declared or paid to the holders of Ordinary Shares in that capacity in respect of any financial year unless and Preference the Fixed until Fixed Preferred Dividend, the and the Dividend Ordinary Participating Preferred Ordinary Dividend (if any) have been paid in full in respect of that financial year and in respect of all previous financial years and provided also that all Preference Shares which have fallen due for redemption have been redeemed;
- thereto fifth and subject (e) the directors to subject recommending the payment of the same the balance of the Available distributed be Profits shall holders of the amongst Preferred Ordinary Shares and the Ordinary Shares (pari passu as if the same constituted one class of shares) rateably according to the amounts paid up or credited as paid up on the said shares held by them respectively.

the of foregoing purpose the provisions the expression "Net Profit" shall mean the net profit of the Company and its subsidiaries calculated on the historical cost accounting basis shown in the audited Profit and Loss its Company and of the Account if (consolidated subsidiaries Relevant Period appropriate) for the but:-

(a) before deducting or providing for any Corporation Tax (or any other tax levied upon or measured by reference to profits or gains) on the profits earned and the gains realised by the Company and its subsidiaries over the period; and

- (b) before any provision is made for any dividend on any shares in the capital of the Company or any of its subsidiaries or for any other distribution or for the transfer of any sum to reserves; and
- after adding back any surplus over (C) the sum of £160,000 (or such higher amount as may be determined and apply for the Relevant Period in of clause 4.1.8 of terms of Subscription Agreement) aggregate of all emoluments and pensions (as defined in Part 1 of Schedule 6 of the Act) of the directors of the Company or any subsidiary of the Company, other Investor the than excluding the aggregate amount of bonus payments made pursuant to the service contracts of For the purposes of directors. this paragraph (c), amounts paid by way of management or consultancy fees or similar payments by Company or any subsidiary of the Company to any company with which a director is associated or of which he has control or to a partnership of which he is a partner shall be deemed to be emoluments of that director;
- (d) before taking into account any exceptional items and extraordinary items as defined in Financial Reporting Standard 3.

All dividends shall be deemed to accrue from day to day. The Fixed Preference Dividend, the Fixed Preferred Ordinary Dividend and the Participating Preferred Ordinary Dividend shall, subject to the Company not thereby being or becoming in breach of the Act, ipso facto and without any resolution of the directors or shareholders of the Company being required, become immediately due and payable to the holders of the Preference Shares and/or the

Preferred Ordinary Shares and regulation 102 of Table A shall be modified accordingly and in the event that any Fixed Preference Dividend, Fixed Preferred Ordinary Dividend or Participating Preferred Ordinary Dividend is not paid on the due date therefor (as specified above), then such sum shall become forthwith a debt due by the Company and interest shall accrue on the amount due on a daily basis at the rate of $2\frac{1}{2}$ % above the Bank of Scotland base rate as adjusted from time to time;

(ii) As regards Capital

On a return of assets on liquidation or otherwise the surplus assets of the Company remaining after payment of its liabilities shall be applied:

- first in paying to the holders (if (a) any) of the Preference Shares a sum equal to the aggregate of (aa) £1 per Preference Share and (bb) amount equal to all arrears and accruals of the Fixed Preference Dividend thereon to be calculated down to the date of the return of in priority capital repayment to any other shareholders and to be payable whether such dividends have been declared earned or not;
- thereto in subject and (b) second t.he paying to the holders of Preferred Ordinary Shares a equal to the aggregate of (aa) the amount per Preferred Ordinary Share paid up on that share (including any premium) and (bb) an amount equal to all arrears and accruals Ordinary Preferred of Fixed Participating Dividend and Preferred Ordinary Dividend thereon to be calculated down to the date of the return of capital and to be payable whether such dividends have been declared or earned or not;
- (c) third and subject thereto in paying to the holders of the Ordinary Shares allotted on the date of adoption of these Articles a sum

equal to the aggregate of (aa) the amount per Ordinary Share paid up or credited as paid up on that share (including any premium) and (bb) an amount equal to all arrears and accruals of dividend thereon to be calculated down to the date of the return of capital and to be payable whether such dividends have been declared or earned or not; and

fourth and subject thereto the
balance of such assets, subject to (d) any special rights which may be attached to any class of shares hereafter issued, shall belong to distributed among be holders of the Preferred Ordinary Shares and the Ordinary Shares same (pari passu if the as constituted one class of shares) rateably according to the amounts paid up or credited as paid (including any premium) on Preferred Ordinary Shares and the held by Ordinary Shares respectively.

(iii) As regards Redemption of the Preference Shares

(a) Subject to the provisions of the Act, the Preference Shares shall be redeemed by reference to their date of issue.

In relation to those Preference Shares issued on the same date, one third will be redeemed no later than the expiry of the 24th month of the date of issue; one third will be redeemed not later than the expiry of the 36th month of the date of issue and one third will be redeemed not later than the expiry of the 48th month of the date of issue.

Redemption shall be effective when all payments due to the holder of the shares (including any arrears and accruals of dividend) have been made in full.

- On an Admission, Sale or Offer to (b) the Public being proposed or upon the Company ceasing to control any subsidiary (in both cases a "Change Control") the Company of to the Admission taking prior effect, the Sale being completed or the Offer to the Public or Change of Control being made, (and subject the provisions of the redeem all of the Preference Shares then in issue.
- (c) For the purposes of these Articles the date of an Admission shall be the date on which the relevant shares are admitted to a Recognised Investment Exchange and the date of a Sale shall be the date when the price or consideration referable thereto has been fully paid or satisfied;
- (d) The Company shall be entitled, on the giving of 30 days' notice (a "Company Redemption Notice") to the holders to redeem all or some of the Preference Shares, and any such redemption shall be effected on the expiry of a Company Redemption Notice.
- redemption of each case (e) the redemption Preference Shares, price for each of the Preference Shares shall be the aggregate of (a) £1 and (b) an amount equal to arrears and accruals of the all Dividend Preference Fixed calculated down to the date of redemption and that whether such dividend has been earned or declared or not plus tax credits relating to such premium over the nominal value of the shares in question and to such arrears and accruals of dividend.
- (f) On any occasion on which less than all of the Preference Shares in issue are redeemed, the Company shall redeem that proportion of the holding of each holder of

Preference Shares corresponding to the proportion which the Preference Shares then being redeemed bear to the number of Preference Shares then in issue.

- Upon each date on which Preference (q) Shares are to be redeemed, each of the holders of Preference Shares to be redeemed shall deliver to the the certificate Company Preference certificates for the Shares held by them to be redeemed Ιf occasion. that on certificate so delivered includes any Preference Shares not to redeemed on that occasion, a fresh certificate for such shares shall be issued to the holder delivering such certificate to the Company.
- If the Company shall be unable, in (h) compliance with the provisions the Act, to redeem all or any of the Preference Shares falling to be redeemed on any date, the Company shall redeem on the due date as many of the Preference Shares then falling to be redeemed as it is then able to redeem in compliance with the Act and shall redeem the issue remaining in shares should then have been redeemed as Company the thereafter as soon so do to be able shall compliance with such provisions. The Company shall not be obliged in any circumstances to carry out a fresh issue of shares in order to the Preference redeem any of Shares, nor to redeem any of the Preference Shares out of capital.
- be to Shares Preference (i) The the redeemed in accordance with provisions of this foregoing paragraph (iv) shall be redeemed by Registered Company at the Office of the Company.

(v) As regards Voting

Subject to any rights or restrictions

for the time being attached to any class shares, at General classes of Meetings on a show of hands every member holding Preferred Ordinary Shares Ordinary Shares who is present in person by proxy (or in the case corporation by a duly authorised representative not being himself member entitled to vote) shall have one vote and on a poll every member shall one vote for each Preferred have Ordinary Share or Ordinary Share of which he is the holder. The Preference Shares shall entitle the holder thereof to receive notice of and to attend all General Meetings and to receive copies of all circulars sent to holders shares or debentures in the Company and of all resolutions of the Company in General Meeting but shall not entitle thereof to vote at any holders the Fixed Meeting, unless the General Preference Dividend shall at the date of relevant general meeting be arrears for six months, or unless at the date of the relevant general meeting redemption of any of the Preference Shares shall not have taken place within 30 days of any due date for redemption and be outstanding where the holders of Preference Shares shall have one vote on a show of hands or on a poll for each such share held.

VARIATION OF RIGHTS

Whenever the capital of the Company is divided into 3. different classes of shares the special rights attached to any class may be varied or abrogated, either whilst the Company is a going concern or during or in contemplation of a winding up, (i) in relation to any class of shares in which the Investor or bare nominee of the Investor holds shares with the consent in writing of the Investor; or (ii) in any other case with the consent in writing of the holders of three-fourths of the issued shares of that class or with the sanction of an Extraordinary Resolution passed at a separate meeting of the holders of the shares of that class but not otherwise. To every such separate meeting all the provisions of these Articles relating to General Meetings of the Company or the proceedings thereat shall mutatis mutandis apply except that the

necessary quorum shall be two persons at least holding or representing by proxy one-third in nominal amount of the issued shares of the class (so that if at any adjourned meeting of such holders a quorum as above defined is not present those members who are present shall be a quorum) and that the holders of shares of the class shall, on a poll, have one vote in respect of every share of the class held by them respectively. Without prejudice to the generality of this Article, the special rights attached to the Preferred Ordinary Shares and the Preference Shares shall be deemed to be varied:-

- (a) by any alteration, increase, reduction or redemption (other than of Preference Shares pursuant to Article 2) of the authorised or issued share capital of the Company or of any of its subsidiaries or by any variation of any of the rights attached to any of the shares for the time being in the capital of the Company or any of its subsidiaries;
- (b) by any alteration of the restrictions on the powers of the Company and its subsidiaries or of the directors of the Company or its subsidiaries to borrow monies, give guarantees or create securities or charges;
- (c) by the disposal of the undertaking of the Company or of any of its subsidiaries or any substantial part thereof or by a person other than the Company or its nominee acquiring any share in a company which is for the time being a wholly owned subsidiary of the Company;
- (d) by the calling of a meeting of the Company for the purpose of considering a resolution to wind up the Company;
- (e) by the calling of a meeting of the Company for the purpose of considering a resolution to amend the Memorandum or Articles of Association of the Company;
- (f) by the calling of a meeting of the Company for the purpose of considering a resolution to approve a contract by the Company to purchase or the redemption of any of its own shares (excluding the redemption of the Preference Shares in accordance with these Articles) or a reduction or cancellation of any of the share capital or share premium account of the Company;

- (g) by any change in the Company's accounting reference date;
- (h) by the acquisition of any interest in any share in the capital of any company by the Company or any of its subsidiaries; and
- (i) by any alteration of the Company's Memorandum or Articles of Association.

ISSUE OF NEW EQUITY SHARE CAPITAL

4.

Subject only to paragraph (B) and (C) of this (A) Article and without prejudice to any other provisions of these Articles, any shares in the equity share capital of the Company from time to time proposed to be issued shall before issue be offered to the existing holders of the Company's equity share capital (including any member of an Investor Group which is such a holder at the relevant date) for subscription in proportion (as nearly as may be without involving fractions) to their existing holdings of equity share capital. Any such offer ("the first offer") shall specify that it may be accepted within a period of twenty one days ("the first offer period") and in default of Any shares so such acceptance will lapse. offered remaining unaccepted at the expiry of shall forthwith offer period first thereafter be offered for subscription on the same terms to those holders who have accepted the first offer in full, for acceptance by them offer ("the second within fourteen days the case period") on that in terms competition the shares so offered shall allotted to the applicants (as nearly as may be without involving fractions or increasing the number allotted to any applicant beyond that applied for by him) in proportion to their existing holdings of equity share capital. The directors shall be entitled to allot any shares remaining unaccepted at the expiry of second offer period to such persons as they may select provided that no such allotment shall be favourable than made on terms more originally offered to the existing holders of the Company's equity share capital and provided not the directors shall further that entitled to make any such allotment at any date later than the date two months after the expiry of the second offer period.

- (B) No allotment of any shares or any interest in any shares in the capital of the Company shall be made which would have the result referred to in Article 9(A) without the previous written consent of the Investor unless, before such allotment is made:-
 - (i) the Company shall have given to the Investor thirty days' notice of such proposed allotment (including details of the terms thereof);
 - either (a) all of the Preference Shares (ii)shall have been redeemed by the Company in accordance with these Articles or (b) the proposed allottee or allottees or has or their nominees his or to purchase such Preference offered Shares at a cash price equal to the paid, otherwise due to be amount unpaid accumulated but including dividends calculated down to the date of earned disposal whether declared, not, if the Preference Shares had been redeemed by the Company and such offer shall have remained open for acceptance for a period of not less than seven days ending on the date of the proposed allotment;
 - (iii) the proposed allottee or allottees or his or their nominees has or have offered to purchase at the Specified Price (as hereinafter defined) all the Preferred Ordinary Shares and such offer shall have remained open for acceptance for a period of not less than seven days ending on the date of the proposed allotment; and
 - (iv) any contract between any shareholder and such offeror constituted on acceptance of an offer under paragraph (ii) and/or (iii) of this Article shall have been completed immediately prior to the allotment in question being made.

For the purpose of this Article 4(B):-

"the Specified Price" shall have the meaning ascribed to it in Article 9(B).

BORROWING LIMITS

5. (A) The directors shall restrict the Borrowings (as hereinafter defined) of the Company and exercise all voting and other rights or powers of control exercisable by the Company in relation to its subsidiaries so as to secure that the principal amount outstanding in respect of Borrowings (as hereinafter defined) (whether secured or not) by the Company and its subsidiaries ("the Group") and for the time being owing to persons outside the Group shall not without the consent of the Investor at any time exceed the sum of £200,000.

paragraph, the the purposes of this For expression "Borrowings" shall be deemed to include (except in so far as otherwise taken into account) (a) all monies borrowed by the Company or any subsidiary of the Company and not repaid (but excluding, for the avoidance of doubt, all sums represented by the Preference Shares), (b) the principal amount owing by the Company or any subsidiary of the Company to any person outside the Group in respect of any debenture whether issued for cash or otherwise together with any fixed or minimum premium payable thereon on final repayment and (c) the principal amount of any debts or obligations (together in each case with any premium payable on final repayment) of any person or body, the repayment whereof is guaranteed by the Company or a subsidiary of the Company, (excluding any such debts or obligations which are for the time being owing to or by, the Company or a subsidiary of the Company) but shall not include:-

- a proportion of the Borrowings of any partly owned subsidiary of the Company, such proportion being that which the issued equity share capital which is not for the time being beneficially owned directly or indirectly by the Company bears to the whole of the issued equity share capital of such partly owned subsidiary; or
- (b) amounts borrowed for the purpose of repaying the whole or any part of any

Borrowings of the Company or a subsidiary of the Company for the time being outstanding (including any fixed or minimum premium payable on final repayment) pending their application for such purpose; or

the capital amount payable by virtue of the acquisition of assets by hire purchase, credit sale or equivalent finance leasing of any assets in accordance with the Company's annual financial projections.

For the purpose of this paragraph any company which it is proposed shall become or cease to be a subsidiary of the Company contemporaneously in connection with any relevant transaction shall be treated as if it had already become or ceased to be such a subsidiary.

TRANSFER OF SHARES

- 6. For the purpose of these Articles the renunciation of any temporary document of title to any share shall constitute a transfer.
- 7. (a) The directors shall refuse to register the transfer of any share in the capital of the Company ("a share") unless such transfer is made pursuant to and in accordance with this Article or is permitted by Article 8.
 - (b) Subject to paragraph (g) of this Article, the directors shall not be entitled to decline to register the transfer of any share which is made pursuant to and in accordance with this Article or is permitted by Article 8.
 - (c) Any member wishing to transfer or otherwise dispose of any share or any interest therein (including for this purpose the assignation of the beneficial interest in, or the creation of any mortgage, charge or other security interest over, such share) ("the Proposing Transferor") shall give the directors notice in writing ("a Transfer Notice") of such desire stating the number and class of shares which he wishes to transfer ("the Transfer Shares") and shall at the same time deposit with the directors the share certificates in respect of the Transfer Shares. The Transfer Notice (which shall be

irrevocable, save as provided in this Article) shall constitute the directors as the agents of the Proposing Transferor for the sale of the Transfer Shares, but not for the purposes of agreeing the fair value of the Transfer Shares, in accordance with but subject to the provisions of this Article. The directors shall incur no liability to the Proposing Transferor while acting as its agents in accordance with this Article.

- (d) A Transfer Notice may stipulate that unless all of the Transfer Shares are applied for pursuant to paragraph (e) of this Article, none shall be sold (a "Transfer Condition").
- (e) The following provisions shall apply to every Transfer Notice:
 - the price at which the Transfer Shares are to be sold ("the Transfer Price") shall be fixed by agreement between the directors and the Proposing Transferor or, failing such agreement within fifteen business days of the date of receipt by the directors of the Transfer Notice, at the fair value determined in accordance with paragraph (h) of this Article;
 - upon the price being fixed or determined (ii) as aforesaid the directors shall, within five business days thereafter, by notice in writing inform each holder of the shares of that class in the capital of the Company and the Investor Shareholders") (other than the Proposing Transferor) of the number and class of the Transfer Shares and the Transfer invite each Shareholder to Price and apply in writing to the Company within the period of fifteen business days from such notice ("the First date of Offer Period") for such maximum number of the Transfer Shares (being all or any thereof) as he shall specify in such application (which shall be irrevocable);
 - (iii) if the Shareholders apply for all the Transfer Shares, the directors shall, within five business days of the expiry of the First Offer Period, allocate them to and amongst the applicants in

accordance (as nearly as possible) with applications but in case their competition pro rata (as nearly possible) according to the number shares of that class held by them provided that no applicant shall be obliged to purchase more the than maximum number of shares applied for by him; and the directors shall, within the aforesaid period, give notice in writing of such allocations to the Proposing Transferor and to the applicants;

- if the Shareholders do not apply for all (iv) directors the Transfer Shares, the shall, within five business days of the expiry of the First Offer Period, by notice in writing inform each holder of Proposing the than other shares Transferor and the Shareholders ("the Remaining Shareholders") of the number and class of the Transfer Shares not applied for by the Shareholders ("the Remaining Transfer Shares") and Transfer Price and invite each Remaining Shareholder to apply in writing to the Company within the period of fifteen business days from the date of such notice ("the Second Offer Period") for such maximum number of the Remaining (being all Transfer Shares as he shall specify in such thereof) application (which shall be irrevocable);
- if the Remaining Shareholders apply for (V) all the Remaining Transfer Shares, the directors shall, within five business days of the expiry of the Second Offer Period, allocate the Transfer Shares to and amongst the applicants in accordance as possible) with their nearly applications but in case of competition among the Remaining Shareholders for the Remaining Transfer Shares pro rata (as nearly as possible) according to the number of shares held by them provided that no applicant shall be obliged to purchase more than the maximum number of shares applied for by him; and directors shall, within the aforesaid period, give notice in writing of such allocations to the Proposing Transferor and the applicants;

- (vi) if the Remaining Shareholders do not apply for all the Remaining Transfer Shares, the directors may, within twenty business days of the expiry of the Second Offer Period ("the Third Offer Period"), procure a purchaser or purchasers ("the Purchasers") for any Transfer Shares not applied for by members in accordance with this Article ("the Residue Transfer Shares") provided that the price per share payable in respect of such transfer shall not be less than the price per share fixed or determined in accordance with sub-paragraph (i) of this paragraph;
- if the Purchasers agree to purchase all (vii) the Residue Transfer Shares then the directors shall, within five business days of expiry of the Third Offer Period, allocate the Residue Transfer Shares to the Purchasers, in such proportions as may have been agreed directors and the between the Purchasers, and allocate the other Transfer Shares to and amongst the applicants in accordance (as nearly as possible) with their applications; and shall, within the directors aforesaid period, give notice in writing of such allocations to the Proposing the Purchasers and Transferor, applicants;
- (viii) if the directors are unable to find purchasers for all the Residue Transfer Shares within the Third Offer Period:-
 - (1) if the Transfer Notice contains a Transfer Condition the directors shall, within five business days of the expiry of the Third Offer Period, return the share certificates in respect of the Transfer Shares to the Proposing Transferor and notify the members who have made application for the Transfer Shares; or
 - (2) if the Transfer Notice does not contain a Transfer Condition, the directors shall, within five business days of the expiry of the

Third Offer Period, allocate to and amongst the applicants for number the Transfer Shares Transfer Shares applied for by them respectively and allocate to and amongst the Purchasers such number of the Transfer Shares agreed to be them; and by purchased within the shall, directors aforesaid period, give notice in writing of such allocations to the Transferor, Proposing applicants and the Purchasers and shall return the share certificates in respect of the Transfer Shares which have not been applied for or agreed to be purchased to Proposing Transferor;

- if none of the Transfer Shares are applied for, and the directors are unable to procure purchasers for any of the Transfer Shares, the directors shall, within five business days of the expiry of the Third Offer Period, notify the Proposing Transferor and shall return the share certificates in respect of the Transfer Shares to the Proposing Transferor;
- completion of the sale and purchase of (x) the Transfer Shares allocated to members accordance purchasers in (vii) sub-paragraphs (iii), (v), (viii) of this paragraph shall take place at the registered office of the Company, or such other place as may be agreed, within ten business days of the date of notice of allocation of the Proposing Shares when the Transfer the shall deliver to Transferor applicant or applicants or purchaser or purchasers a duly executed transfer or of the Transfer Shares transfers payment of the consideration;
- if any shares comprised in a Transfer Notice do not fall to be allocated in accordance with sub-paragraphs (iii), (v), (vii) or (viii) of this paragraph such shares may, within three months of the expiration of the Third Offer Period, be transferred by the Proposing

Transferor for cash to any person or persons provided that:-

- (1) the price per share payable in respect of such transfer shall not be less than the price per share fixed or determined in accordance with sub-paragraph (i) of this paragraph; and
- (2) if the Transfer Notice contained a Transfer Condition, the Proposing Transferor shall only be entitled to transfer under this sub-paragraph all, but not some only, of the Transfer Shares.
- If a Proposing Transferor, having become bound (f) to transfer any Transfer Shares pursuant to this Article, makes default in transferring the same, the directors shall appoint some person (who shall be deemed to be the attorney of the Proposing Transferor for this purpose) to execute any necessary instruments of transfer of such Transfer Shares and to deliver any such instruments on his behalf and the Company may receive the purchase money and shall thereupon instruments being (subject to such stamped) cause the transferee to be registered as the holder of such Transfer Shares and shall hold such purchase money on trust for the Proposing Transferor. The Company shall not be bound to earn or pay interest on any money so The receipt of the Company for such held. purchase money shall be a good discharge to the transferee who shall not be bound to see to the application thereof, and after the name of the transferee has been entered in the register of members in purported exercise of the aforesaid power the validity of the proceedings shall not be questioned by any person.
- (g) The directors may require to be satisfied that any shares being transferred by the Proposing Transferor pursuant to paragraph (e) (xi) of this Article are being transferred in pursuance of a bona fide sale for the consideration stated in the transfer and if (acting reasonably) they are not so satisfied, they may refuse to register the instrument of transfer.
- (h) (i) In this Article, the fair value of the Transfer Shares shall be the price

certified in writing by the Auditor (as hereinafter defined) as being in his opinion the fair value of such shares as between a willing seller and a willing buyer at the date of the certificate provided that the Auditor in determining the fair value of such shares shall:-

- (1) if the Company is then carrying on business as a going concern, take account of the Petrofacies Well database developed by the Company and assume that it will continue to carry on business as a going concern;
- (2) take account of the rights attached to the Transfer Shares; and
- (3) subject to (2) above, value the Transfer Shares as a rateable proportion of the total value of all of the issued shares of the Company which value shall not be discounted or enhanced by reference to the number of Transfer Shares.
- On any occasion on which the fair value (ii) shares falls to be determined in of Article, with this accordance directors shall, within fifteen business of the date of receipt by the days Notice, Transfer of the directors request the Auditor to certify the fair value of those shares as aforesaid, and within two business days of receipt of certificate, the directors deliver a certified copy thereof to the The directors Transferor. Proposing shall procure that the Auditor prepares such certificate as soon as reasonably The certificate of the practicable. Auditor shall be final and binding on the Proposing Transferor. The cost of obtaining a certificate from the Auditor shall be borne by the Company.
- (iii) In this Article, "the Auditor" shall be the Auditors provided that either party may elect otherwise, in which case the Auditor shall be:
 - (1) an independent person agreed between the parties; or
 - (2) failing such agreement, an

independent Chartered Accountant nominated by the President for the time being of the Institute of Chartered Accountants of Scotland.

- (i) (i) In this paragraph a "Relevant Occurrence" means:
 - (1) in relation to a member being an individual:
 - (aa) such member becoming
 bankrupt; or
 - (bb) such member dying; or
 - (cc) in the case of a holder of Ordinary Shares, such member ceasing to be an employee of the Company or any of its subsidiaries; or
 - (dd) the happening of any such event as is referred to in paragraph (b) of Article 16.
 - (2) a member making any arrangement or composition with his creditors generally; or
 - in relation to a member being a (3) body corporate such member having a liquidator, receiver, administrative receiver, administrator or any in another analogous officer jurisdiction appointed in respect of the whole or any part of its undertaking other than for of reconstruction or purposes amalgamation.

Upon the happening of any Relevant Occurrence the member in question (or his personal representatives or trustees or a liquidator, receiver, administrative receiver or administrator, as the case may be) shall forthwith give notice of the happening of such event to the directors and such member (or his personal representatives or others as aforesaid) shall be deemed to have given a Transfer Notice in respect of all the shares as shall then be held by such member to the directors

the date on which such notice is given to the directors hereunder or (if earlier) on the date on which happening of such event becomes known to Subject thereto, any the directors. member (or his personal representatives) deemed to have given a Transfer Notice as aforesaid shall be deemed a Proposing Transferor, the shares held by him (or on his behalf) shall be deemed to be Transfer Shares, the Transfer Price shall be:

- (aa) in the case of death of the member, such price as may be agreed between the executors of the member's estate and the Directors, provided that if no such agreement is reached within nine months of death of the member, the fair value of such shares determined by the Auditor; or
- (bb) in any other case, the fair value
 of such shares determined by the
 Auditor;

and, save as aforesaid, the provisions of this Article shall apply to such Transfer Notice.

- If the Relevant Occurrence shall be as (ii) stated in sub-paragraph (i)(i)(1)(aa) (bankruptcy) or (bb) (death) of this Article 7 and if any shares ("the unsold shares") which are offered to members pursuant to the deemed Transfer Notice shall not be sold to the members (or any of them) and if the directors are unable to procure a purchaser for such shares in accordance with this Article then, after the expiration of the Third Offer person has who Period, the shares the unsold entitled to consequence of the death or bankruptcy of the member shall be entitled to elect at any time to be registered himself as the holder of the unsold shares.
- (j) An obligation to transfer a share under the provisions of this Article shall be deemed to be an obligation to transfer the entire legal and beneficial interest in such share free of any lien, charge or other encumbrance.

- If a member at any time attempts to transfer or (k) otherwise dispose of any shares or any interest therein otherwise than in accordance with this Article or Article 8 then such member shall be deemed, immediately prior to such attempt, to have given a Transfer Notice in respect of all of the shares then held by him. Any member who shall be deemed to have given a Transfer Notice shall be deemed a Proposing aforesaid Transferor, the shares held by him shall deemed to be Transfer Shares, the Transfer Price shall be the fair value of such shares Auditor and, the determined by aforesaid, the provisions of this Article shall apply to such deemed Transfer Notice.
- (1) Where a Transfer Notice in respect of any share is deemed to have been given under paragraph (k) of this Article and the directors are unaware of the facts giving rise to the same, such Transfer Notice shall be deemed to have been received by the directors on the date on which the directors actually become aware of such facts.
- (m) The provisions of this Article may be waived in whole or in part in any particular case with the prior written consent of all the members.
- (n) In this Article, "business day" shall mean a day on which the clearing banks are open for business in Glasgow.
- (o) A member of the Company may elect that his nominee (who must be a person approved in writing by the directors) be allocated any Transfer Shares applied for by that member in accordance with this Article in place of such member in which case such member shall notify the directors in the application of the name of the nominee to whom any such shares are to be allocated in accordance with this Article. For the purposes of this Article and, in particular for determining any pro rata entitlement to the Transfer Shares, the nominee shall be deemed to be the relevant member which nominated him.
- (p) The directors may dispense with or reduce the length of an offer period under paragraph (e) of this Article if there are no other holders of the shares of a particular class or if the result of an offer becomes apparent prior to the expiry of that offer period.

- 8. (A) The restrictions on the transfer of shares contained in Article 7 shall not apply to:-
 - (a) a transfer of any shares by any member of the Investor Group to another member of the Investor Group, provided that prior to leaving the Investor Group any member of that Investor Group holding any shares shall procure that such shares are transferred to another member of the Investor Group; or
 - (b) any transfer of shares to which the Investor has consented; or
 - (c) any transfer(s) of shares of the nature referred to in clause 7.3 of the Subscription Agreement; or
 - a transfer of Ordinary Shares from Mr D (d) MacIntyre to a Family Trust, or from the trustees of any such Family Trust, on a change of trustee, to the new trustees of that Family Trust. If and whenever any such Ordinary Shares cease to be held upon a Family Trust (otherwise than in consequence of a transfer to Mr D MacIntyre or to another Family Trust of Mr D MacIntyre) or upon the death of Mr D MacIntyre while Ordinary Shares are held in a Family Trust for his benefit, Transfer Notice shall be deemed to given in respect of been relevant Ordinary Shares by the holders not such shares may and thereof otherwise be transferred.
 - (B) For the purposes of this Article:

"Family Trust" in relation to any person means a trust which does not permit any of the settled property or the income therefrom to be applied otherwise than for the benefit of that person and under which no power of control is capable of being exercised over the votes of any shares which are the subject of the trust by any person other than the trustees or such person.

A person to whom shares may be transferred without restriction under this Article shall be called a "Permitted Transferee".

- 9. (A) Notwithstanding any other provisions contained in these Articles no sale or transfer of the legal or beneficial interest in any shares in the Company may be made and, the directors shall not register the transfer of any such shares (hereinafter called the "Specified Shares") in the capital of the Company without the previous written consent of the Investor if as a result of such sale or transfer and registration thereof a controlling interest (as hereinafter defined) would be obtained in the Company:-
 - (a) by a company (other than a company to whom the immediately following paragraph (b) applies) or by a person or persons (other than a company) who are not original members (as hereinafter defined) unless before such transfer is registered:-
 - (i) the Company shall have given to the holders of the Preference Shares and Preferred Ordinary Shares thirty days' notice of such proposed transfer (including details of the terms thereof);
 - either (a) all of the Preference Shares (ii) shall have been redeemed by the Company in accordance with these Articles or (b) the proposed transferee or transferees or his or their nominees has or have such Preference to purchase offered Shares at a cash price equal to the due to be paid, amount otherwise unpaid accumulated but including dividends whether declared or earned or not down to the date of disposal, if the Preference Shares had been redeemed by the Company and such offer shall have remained open for acceptance for a period of not less than seven days ending on the date of the proposed transfer;
 - (iii) the proposed transferee or transferees or his or their nominees has or have offered to purchase at the Specified Price (as hereinafter defined) all the Preferred Ordinary Shares and such offer shall have remained open for acceptance for a period of not less than seven days ending on the date of the proposed transfer; and

- (iv) any contract between any shareholder and such offeror constituted on acceptance of an offer under Articles 9(A)(a)(ii) and/or (iii) shall have been completed immediately prior to the transfer being registered; or
- (b) by a company in which one or more of the members of the company or persons acting in concert (which expression shall have the meaning ascribed to it in the July 1993 edition of the City Code on Takeovers and Mergers) with any member of the company has or as a result of such sale or transfer will have a controlling interest.
- (B) For the purpose of this Article the expressions:-

"transfer", and "transferee" shall include respectively the renunciation of a renounceable letter of allotment and the renouncee under any such letter of allotment; and

"the Specified Price" shall mean in the case of Preferred Ordinary Shares a price per share at least equal to that offered or paid or payable by the proposed transferee or transferees or his or their nominees for each of the Specified Shares to the holders thereof plus an amount equal to the relevant proportion of any other consideration (in cash or otherwise) received or receivable by the holders of the Specified Shares which having regard to the substance of the transaction as a whole can reasonably be regarded as an addition to the price paid or payable for the Specified Shares together in each case with additional consideration equal to the amount of all arrears and accruals of dividend, whether earned or declared or not, on in question (the Participating shares Preferred Ordinary Dividend being calculated on the assumption that the Net Profit for the Period during which such purchase Relevant occurs is equal to the Net Profit in the immediately preceding Relevant Period). In the event of disagreement, the calculation of the be referred Specified Price shall independent person (acting as expert and not as arbiter) nominated by the parties concerned or, a disagreement event of in the nomination, appointed on the application of any such party by the President for the time being of the Institute of Chartered Accountants of Scotland or any successor to that body whose decision shall be final and binding;

"controlling interest" shall mean an interest in shares in a company conferring in the aggregate Fifty per cent (50%) or more of the total voting rights conferred by all of the shares for the time being in issue in the capital of that company normally conferring the right to vote at general meetings;

"original members" shall mean GDF and the other persons who were members of the Company on the date of adoption of these Articles.

LISTING ETC.

No application shall be made by the Company for Admission and no Offer to the Public shall be made 10. by the Company unless the Investor shall have been application of such notice prior arrangement (including full details of the proposed terms thereof) and unless, if any such member of the Investor Group so requires, such Listing extends pro rata to the shares in the capital of the Company held by such member and/or each such member is afforded the opportunity to participate pro rata in any offer for sale or placing under such listing, dealing or marketing.

GENERAL MEETINGS

- 11. (A) No business shall be transacted at any General Meeting unless a quorum of members is present at the time when the meeting proceeds to business. Save as herein otherwise provided, two members present in person or by proxy, or, if a corporation, by a duly authorised representative and entitled to vote shall be a quorum.
 - (B) No resolution not previously approved by the directors shall be proposed by any member other than a director at a General Meeting unless the member intending to propose the same shall have left a copy thereof with his name and address at the Registered Office of the Company three clear days prior to such meeting.
- 12. Subject to the provisions of the Act, a resolution in writing signed by all the members of the Company who would be entitled to receive notice of and to

attend and vote at a General Meeting at which such resolution was to be proposed, or by their duly appointed proxies or authorised representatives, shall be as valid and effectual as if it had been passed at a General Meeting of the Company duly convened and held. Any such resolution may consist of several documents in the like form each signed by one or more of the members or their duly appointed attorneys or representatives and the signature in the case of a corporate body which is a member shall be sufficient if made by a director or the secretary thereof or by its duly authorised representative.

13. A poll may be demanded at any General Meeting by the Chairman or by any member who is present in person or by proxy or if a corporation is present by a duly authorised representative and entitled to vote. Regulations 46 to 48 inclusive of Table A shall be construed accordingly.

DIRECTORS

- 14. A director shall not be required to hold shares of the Company in order to qualify for office as a director, but he shall in any event be entitled to receive notice of and attend and speak at all General Meetings of the Company or of any class of members of the Company.
- 15. The directors may dispense with the keeping of attendance books for meetings of the directors or committees of the directors. Regulation 100 of Table A shall be modified accordingly.
- 16. The office of director shall automatically and without the requirement for further notice be vacated:-
 - (a) if his circumstances are such as to amount to his apparent insolvency for the purposes of the Bankruptcy (Scotland) Act 1985 or its equivalent in any other jurisdiction or enters into any arrangement with his creditors generally;
 - (b) if he becomes of unsound mind or a patient for the purpose of any statute relating to mental health or otherwise incapacitated;
 - (c) if by notice in writing to the Company he resigns his office;

- (d) if he is prohibited by law from being a director or ceases to be a director by virtue of any provision of the Act or any statutory modification or re-enactment thereof;
- (e) if he shall for more than six months have been absent without permission of the directors from meetings of the directors held during that period and the directors resolve that his office be vacated;
- (f) at the conclusion of the annual general meeting commencing next after he attains the age of 70 years; but acts done by a person as a director are valid notwithstanding that it is subsequently discovered that his appointment had terminated pursuant to this paragraph.
- 17. The directors shall have power at any time, and from time to time, to appoint any person to be a director of the Company either to fill a casual vacancy or as an addition to the existing directors.
- The directors may from time to time appoint one or 18. number to an executive of their more (including that of Managing director, Deputy Assistant Managing director, Manager or any other salaried office) for such period and on such terms as they shall think fit and, subject to the terms of any agreement entered into in any particular case, may revoke such appointment. Subject to the terms such agreement, any conditions of appointment of any director as aforesaid shall ipso facto be determined if he ceases from any cause to a director. Regulation 72 of Table A shall extend to the posts of Deputy or Assistant Managing director or Manager aforesaid.
- The directors on behalf of the Company and without the approval of any resolution of the Company may 19. establish and maintain or concur or join in the any form and maintenance of establishment life benevolent orsuperannuation, pension, fund or scheme which the Company is assurance authorised to enter into and may grant or procure the grant of any donations, gratuities, pensions, retirement, superannuation, death or disability or other benefits, allowances or emoluments which the Company is authorised to make.
- 20. The quorum for a meeting of directors shall be two including the Investor Director (if any) provided, however, that at any time during which no Investor

Director has been appointed pursuant to that Article or at any time during which any appointment has been replacement Investor and no by the revoked appointment has been made the attendance of that director shall not be required in order to form a valid quorum. If a meeting of directors is convened but is unable to be held due to it being inquorate by reason of the Investor Director (if any) being in attendance, it shall be adjourned to such and place as the director or directors time reasonably determine attendance may consultation with the Investor Director. Investor Director (if any) does not attend such adjourned meeting, the director or directors present at such adjourned meeting shall, notwithstanding, constitute a quorum.

- 21. The directors shall not be subject to retirement by rotation and accordingly all references in Table A to retirement by rotation shall not apply to the Company.
- A resolution in writing signed by all the directors 22. for the time being in the United Kingdom shall be as effective as a resolution passed at a meeting of the directors duly convened and held and may consist of several documents in the like form, each signed by one or more of the directors. The directors (or a directors) may hold meetings of committee telephone conference either by telephone of telephone by a series or connection(s) facsimile of by exchange conversations orChairman. addressed to the transmissions resolution passed at any meeting held in this manner and signed by the Chairman shall be as valid and effective as if it had been passed at a meeting of the directors (or, as the case may be, a committee directors) duly convened and held. meeting shall be deemed to take place where the largest group of those participating is assembled or, if there is no such group, where the Chairman is then present.
- Regulation 94 of Table A is hereby modified by the insertion after the end of paragraph (d) thereof of the words "or unless he has disclosed to the directors the nature and extent of any material interest or duty of his as aforesaid in accordance with the provisions of Section 317 of the Act".

INVESTOR DIRECTOR

- The Investor shall be entitled but not obliged (A) 24. to appoint and maintain one person approved by the directors of the Company (such approval not to be unreasonably withheld) (the "Investor Director") as a director of the Company and to remove and replace such person as a director of Any person appointed as Company. director in terms of this Article shall not be required to hold shares of the Company qualify for such office and shall not required to retire by rotation. The Company shall procure, if so required by the Investor, that any director appointed be also appointed a director of any subsidiary of the Company for Investor remuneration. The additional Director shall be paid by the Company a fee to be agreed between him and the Company at the time of appointment.
 - (B) In addition to such fee, the Investor Director shall be reimbursed by the Company in respect of all travelling and other expenses reasonably and properly incurred in the performance of his duties as a director of the Company or any subsidiary of the Company on production of satisfactory receipts or vouchers.

INDEMNITY

Every director or officer of the Company shall be entitled to be indemnified out of the assets of the 25. Company against all losses or liabilities which he may sustain or incur in or about the execution or discharge of the duties of his office or otherwise liability any including relation thereto, incurred by him in defending any proceedings whether civil or criminal in which judgment is given in his favour or in which he is acquitted or in which the charge is found not proven or in connection with any application under Section 727 of the Act (or any statutory modification or re-enactment thereof) which relief is granted to him by the Court, and no director or other officer shall be liable for any loss, damage or misfortune which may happen to be execution in the the Company bу incurred discharge of the duties of his office or in relation thereto; but this Article shall only have effect in so far as its provisions are not avoided by Section 310 of the Act.

PURCHASE OF OWN SHARES

26. In accordance with and subject to the Act and the

provisions of Article 3 (but without prejudice to sub-paragraph (B)(iv)(a) of Article 2), the Company may:-

- (1) redeem or purchase its own shares; and
- (2) make payments in respect of the redemption or purchase of any of its own shares otherwise than out of its distributable profits or the proceeds of a fresh issue of shares.

DISAPPLICATION OF STATUTORY PRE-EMPTION REQUIREMENTS

27. In accordance with Section 91(1) of the Act, Sections 89(1) and 90(1) to (6) inclusive of the Act shall not apply to the Company.

ARTICLES OF ASSOCIATION

of

RESERVOIR RESEARCH LIMITED

1997

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