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MINING LEGISLATION.

CONNECTED FILES.

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From

Shri G.N. Dutt,
 Superintending Geologist,
 Publication Division,
 Geological Survey of India,
 29, Chowringhee Road,
 Calcutta - 16.

Dated, the 4th May, 1964.

To

His Excellency The Governor of
Falkland Islands, Port Stanley,
FALKLAND ISLANDS,
SOUTH AMERICA.

Your Excellency,

As the undersigned has undertaken to write an account of the Mineral Resources of the British Commonwealth, it will be appreciated if the latest information on the occurrences, production, utilisation and export together with relevant information on the policy, taxation, statistical data and planning of the various Commonwealth countries is supplied so that the compilation is made possible. Unpublished or cyclostyled information may also be supplied along with a list of references on published material. Necessary acknowledgment will be made at the time of publication.

G.N. Dutt
 (G.N. Dutt)

Received

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SAVING TELEGRAM.

From: The Officer Administering the Government of the Falkland Islands.

To: The Secretary of State for the Colonies.

Date: 25th August, 1964.

No. 157 SAVING. COLONY

The Mining (Mineral Oil) Regulations, 1964.

Enclosed herewith are six copies of Regulation No. 3 of 1964.

OFFICER ADMINISTERING THE GOVERNMENT

Mining (Mineral Oil) Regulations 1964

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The Mining Ordinance (Cap. 48)

REGULATIONS

(under section 12 of the Ordinance)

No. 3 of 1964.

W. H. Thompson
Officer Administering the Government.

The Officer Administering the Government in exercise of the powers vested in him by section 12 of the Mining Ordinance, is pleased by and with the advice of the Executive Council to make the following Regulations —

Cap. 48.

PART I.

GENERAL.

1. These Regulations may be cited as the Mining (Mineral Oil) Regulations, 1964. Title.

2. In these Regulations and in every licence and lease issued hereunder the following terms shall respectively have the meaning assigned to them unless inconsistent with the context, or unless expressly varied in such licence or lease. Interpretation.

"LICENSEE" means a person to whom a licence under these Regulations is granted, his successors in title and the persons deriving title under him.

"LESSEE" means a person to whom a lease under these Regulations is granted, his successors in title and the persons deriving title under him.

"ALIENATED LANDS" means lands the oil rights in which are vested in the Crown but the surface of which has been alienated at any time whether such surface has reverted in the Crown or not.

"PETROLEUM" includes any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata, but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.

"CRUDE OIL" means oil in its natural state before the same has been refined or otherwise treated but excluding water and foreign substances.

"NATURAL GAS" means gas obtained from bore-holes and wells and consisting primarily of hydrocarbons.

"CASINGHEAD PETROLEUM SPIRIT" means any liquid hydrocarbons obtained from natural gas (before the crude oil from which it is derived has been measured for royalty) by separation or by any chemical or physical process.

"HER MAJESTY'S DOMINIONS" shall be construed as including a reference to all territories under Her Majesty's protection or in which Her Majesty has for the time being jurisdiction.

"BRITISH SUBJECT" shall be deemed to include a person under Her Majesty's protection.

"PERSON" shall be deemed to include a company.

3. Any person may apply in accordance with these Regulations for

Persons by whom application may be made.

- (a) an oil exploration licence;
- (b) an oil prospecting licence;
- (c) an oil mining lease;

in respect of Crown Lands, or alienated lands.

Manner in which
application may be made.

4. (1) Every application shall be made in writing on the form set out in the First Schedule hereto addressed to the Governor.

(2) The application shall state —

- (a) in the case of an application by an individual, his address nationality and occupation;
- (b) in the case of an application by a company the nature of and the principal place of business of the company (and if the principal place of business is outside the Colony the name and address of a duly authorised agent in the Colony) the names and nationality of the directors thereof, and the names and holdings of the principal shareholders.

(3) An application by an alien or a company incorporated outside Her Majesty's dominions shall contain in addition to the matters specified in paragraph (2) of this Regulation full particulars of any company required to be incorporated in accordance with Regulation 10 in the Colony or in some other part of Her Majesty's dominions for the purpose of receiving the grant of and exploiting any licence or lease which may be granted in pursuance of the application.

(4) With the application there shall be sent the prescribed application fee, that is to say —

For an oil exploration licence £25;

For an oil prospecting licence £50;

For an oil mining lease £100.

(5) To the application there shall be attached two copies of a map upon which shall be delineated the boundaries of the area in respect of which a licence or lease is applied for.

(6) The applicant shall with his application furnish evidence as to his financial and technical qualifications and as to his ability to comply with any terms and conditions contained in the model clauses set out in the Second Schedule hereto relating to the licence or lease for which application is made, and in the case of an application by an alien or a company incorporated outside Her Majesty's dominions the like evidence in relation to any company required to be incorporated in accordance with Regulation 10 in the Colony or in some other part of Her Majesty's dominions for the purpose of receiving the grant of and exploiting any licence or lease which may be granted in pursuance of the application. The applicant shall forthwith upon request by the Governor furnish further evidence relating to such matters and if such further evidence shall not have been furnished to the satisfaction of the Governor within three months of the request therefor the application shall unless the Governor otherwise determines, be deemed void.

(7) All information comprised in, or furnished to the Governor in pursuance of an application made in accordance with these Regulations shall be treated as confidential.

Separate application to be
made for each area.

5. Where an applicant requires a licence or lease for two or more separate areas a separate application shall be made in respect of each such area.

Grant of more than one
licence or lease to the
same person.

6. Subject to the provisions of Regulations 18 and 24 nothing in these Regulations shall prevent more than one licence or lease being granted to the same person.

Licence or lease not
assignable without
consent.

7. A licence or lease shall not be assigned without the previous consent in writing of the Governor.

Method of making
application for assign-
ment.

8. An application by a licensee or lessee for the assignment of a licence or lease shall be made in writing addressed to the Colonial Secretary and shall be accompanied by a fee as prescribed in Regulation 4 (4). With the application the applicant shall furnish

the like particulars in respect of the proposed assignee as are required to be furnished in the case of applicants for licences and leases under Regulation 4.

9. A licence or lease shall not be granted to or held by any person who is or becomes controlled directly or indirectly by a national of or by a company incorporated in any country the laws and customs of which do not permit British subjects or companies incorporated in Her Majesty's dominions or companies incorporated in that country controlled directly or indirectly by British subjects or companies incorporated in Her Majesty's dominions to acquire hold and operate petroleum concessions on conditions which in the opinion of Her Majesty's principal Secretary of State for the Colonies are reasonably comparable with the conditions upon which such rights are granted to nationals of that country with the addition of conditions corresponding to those imposed by Clause 12 (Control by an Alien) and Clause 13 (Reciprocity) of Part I of the Second Schedule hereto.

Reciprocity.

10. In the case of an application for a licence or a lease by an alien or a company incorporated outside Her Majesty's dominions or in the case of an application by a licensee or lessee for the Governor's consent to the assignment of a licence or lease to an alien or a company incorporated outside Her Majesty's dominions such licence or lease shall only be granted or assigned to a company incorporated in the Colony or in some other part of Her Majesty's dominions for the purpose of receiving and exploiting any such licence or lease unless in the case of a company incorporated in the United States of America the applicant can show to the satisfaction of the Governor that he would thereby suffer substantial financial loss in respect of taxation.

Applications by an alien or a company incorporated outside Her Majesty's dominions.

11. If a licence or lease is not executed within six months after approval of the application by the Governor the right of the applicant to such licence or lease shall be deemed to have lapsed unless the Governor considers that the delay is not attributable to the fault of the applicant.

Lapse of right to licence or lease.

12. The Governor shall, as soon as may be after the grant surrender determination or assignment of the whole or any part of any licence or lease under these Regulations, publish notice of the fact in the Gazette stating the name of the licensee or lessee or assignee and the situation of the area concerned.

Publication.

13. Every oil exploration licence and oil prospecting licence and oil mining lease shall incorporate such of the model clauses respectively set out in Parts I, II and III of the Second Schedule hereto as shall be appropriate subject to such modifications and exclusions as the Governor thinks fit and such additional clauses covering ancillary matters as the Governor thinks necessary.

Model clauses.

14. Unless the Governor shall in any particular case otherwise provide no such licence or lease shall be granted until a Bond has been executed in the form appropriate to such licence or lease and set out in the Second Schedule hereto.

Bond.

PART II.

OIL EXPLORATION LICENCES.

15. The Governor may at his discretion grant an oil exploration licence or licences over the lands specified therein subject to the payment by the licensee of a fee of 2/6d. for every square mile comprised in the licensed area, provided that the total fees payable shall not be less than £100.

Grant of oil exploration licence.

16. The initial term of an oil exploration licence shall not exceed two years.

Period.

Renewal.

17. The Governor may at his discretion on application made by the licensee on three months' notice in writing and on payment of an annual fee which shall be one-half of that provided in Regulation 15 grant a renewal of an oil exploration licence in respect of the whole of the licensed area or any part thereof for three further terms of twelve months.

Maximum area.

18. The area of an oil exploration licence and the maximum area which may be held by any one licensee under oil exploration licences shall be determined by the Governor at his discretion.

Expenditure obligation.

19. During the period of the licence and of any renewal thereof the licensee shall spend an average of not less than £25 per annum on his operations for each square mile in the licensed area. If the expenditure in the licensed area by the licensee falls short of such amount, the licensee shall on the expiration of the licence or of any renewal thereof pay to the Colonial Treasurer an additional sum representing the difference between his liability under this Regulation and his actual expenditure:

Provided that in the event of the determination of the licence or the surrender of any part or parts of the area by the licensee the expenditure obligation shall be reduced proportionately.

Right to oil prospecting licence.

20. The right of the licensee to an oil prospecting licence or licences within the area in respect of which an oil exploration licence or licences have been granted shall be limited to 50 per centum of the area of that licence or of the aggregate area of those licences.

PART III.

OIL PROSPECTING LICENCES.

Grant of oil prospecting licence.

21. The Governor may grant an oil prospecting licence over the lands specified therein whether or not the applicant has been the holder of an oil exploration licence under these Regulations. Subject to the rights of an applicant who is the holder of a valid oil exploration licence, the grant of an oil prospecting licence shall be at the discretion of the Governor.

Comprehensive oil prospecting licence.

22. Subject to the provisions of Regulation 5 the Governor may grant a comprehensive oil prospecting licence in respect of two or more separate areas provided they are situated reasonably close together.

Shape of area.

23. Each separate area in respect of which an oil prospecting licence is granted shall be so far as possible, compact and shall either be limited by well marked permanent physical boundaries or be bounded by straight lines.

Maximum area.

24. Subject to the provisions of Regulation 20 the area of an oil prospecting licence and the maximum area which may be held by any one licensee under oil prospecting licences shall be determined by the Governor at his discretion.

Period.

25. The initial term of an oil prospecting licence shall not exceed four years.

Renewal.

26. The Governor may at his discretion on application made by the licensee on three months' notice in writing grant a renewal of an oil prospecting licence in respect of the whole of the licensed area or any part or parts thereof for three further terms of twelve months.

Working obligations.

27. (1) The licensee shall in respect of the area or areas covered by each licence carry out with due diligence such scheme of prospecting including any geological and geophysical surveys and programme of test drilling as shall be approved by the Colonial Secretary.

(2) During the period of the licence including the period of any renewal of the licence the licensee shall spend on his operations in the licensed area not less than —

£25 a square mile during the first year of the licence.

£50 a square mile during each of the next three years of the licence.

£75 a square mile during each year thereafter.

If the expenditure in the licensed area by the licensee falls short of that stated above, the licensee shall on the expiration of the licence or any renewal thereof, as the case may be, pay to the Colonial Treasurer an additional sum representing the difference between his liability under this Regulation and his actual expenditure:

Provided that in the event of the determination of the licence or the surrender of any part or parts of the area by the licensee the expenditure obligation shall be reduced proportionately.

(3) As soon as practicable and in any case not later than one year from the date of the issue of the oil prospecting licence, the licensee shall commence drilling with a medium or deep depth drilling string upon a site selected by him within the licensed area and shall therewith with due diligence continue drilling until the geological objective is reached or geological conditions are discovered which preclude the possibility of the presence of petroleum in commercial quantity at greater depth. If petroleum in commercial quantity is not found, the licensee shall undertake further similar drilling operations upon other selected sites in rotation until commercial oil is found, the selection of these sites and the movement of the drilling equipment to them to be carried out without delay.

(4) Where a licensee holds concurrently more than one oil prospecting licence the obligation in the immediately preceding paragraph shall not apply to more than one such licence out of every five licences so held, or such greater number of licences so held as the Governor may determine.

28. The licensee shall pay to the Colonial Treasurer annually in advance a certain yearly rent for each square mile at the following rates :

Certain yearly rent.

	£	s.	d.
1st year of initial term	10	0	
2nd year of initial term	1	0	0
3rd year of initial term	1	10	0
4th year of initial term	1	15	0
1st year renewal	2	0	0
2nd year renewal	2	5	0
3rd year renewal	2	10	0

Provided that the certain yearly rent payable for each year of the initial term shall not be less than £100 and for the renewal of the term shall not be less than £200.

29. The licensee shall pay a royalty of $12\frac{1}{2}$ per centum of the value of all crude oil produced and casinghead petroleum spirit recovered and 5 per centum of the value of all natural gas sold from the licensed area. From the amount of royalty payable in respect of any one year of the term of an oil prospecting licence there shall be deducted the amount of the certain yearly rent actually paid in respect of that year for that licensed area.

Royalty.

30. At the end of the fourth year of the initial term of the prospecting licence, the licensee shall surrender 25 per centum of the area in respect of which the licence has been granted.

Surrender of area.

Right to oil mining lease.

31. The right of the licensee to an oil mining lease within the area of the oil prospecting licence shall be limited to 50 per centum of the area originally granted under that oil prospecting licence save in cases where special exemption is granted by the Governor.

PART IV.

OIL MINING LEASES.

Governor may grant oil mining lease.

32. The Governor may grant an oil mining lease over the lands specified therein. An oil mining lease shall be granted only in respect of an area which has previously been either in an oil prospecting licence granted under these Regulations to the applicant or in an oil mining lease granted to a former lessee.

Comprehensive oil mining lease.

33. Subject to the provisions of Regulations 5 and 31 the Governor may grant a comprehensive oil mining lease in respect of two or more separate areas provided they are situated on the same geological structure or cover a group of geologically similar and related structures.

Shape of area.

34. Each separate area in respect of which an oil mining lease is granted shall either be limited by well marked permanent physical boundaries or be laid out in a block or blocks bounded by straight lines between well defined points.

Period.

35. The initial term of an oil mining lease shall not exceed thirty years but the lease shall contain a clause permitting renewal for a further period not exceeding thirty years.

Certain yearly rent.

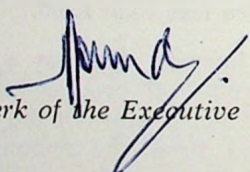
36. The lessee shall pay annually in advance a certain yearly rent at rates not less than the following rates for each acre or part of an acre comprised in the leased area —

	Per acre per annum		
	£	s.	d.
In respect of the 1st year of the said term		2	6
In respect of the 2nd year of the said term		3	6
In respect of the 3rd year of the said term		4	6
In respect of the 4th year of the said term		6	0
In respect of the 5th year of the said term		8	0
In respect of the 6th year and each subsequent year of the said term		10	0

Royalty.

37. The licensee shall pay a royalty of 12½ per centum of the value of all crude oil produced and casinghead petroleum spirit recovered and 5 per centum of the value of all natural gas sold from the licensed area. From the amount of royalty payable in respect of any one year of the term of an oil mining lease there shall be deducted the amount of the certain yearly rent actually paid in respect of that year for that lease.

Promulgated by the Officer Administering the Government on the 27th day of August, 1964.


Clerk of the Executive Council.

FIRST SCHEDULE

FALKLAND ISLANDS

Application for an Oil Exploration Licence, an Oil Prospecting Licence
or an Oil Mining Lease

1. Name(s) of Applicant(s) in full.....
.....
.....
2. If application is by an individual or individuals
 - (a) Address
 - (b) Nationality
 - (c) Occupation
3. If application is by a company
 - (a) Principal place of business
 - (b) If principal place of business is outside the Colony name and address of duly authorised agent in the Colony
.....
 - (c) Nature of business
 - (d) Names of directors Nationality
.....
 - (e) Names of principal shareholders Amount of shareholding
.....
4. State whether an Oil Exploration Licence, an Oil Prospecting Licence or an Oil Mining Lease is required and whether the application is in respect of Crown, or alienated lands
5. Period for which Licence or Lease is required
6. Situation and approximate size of the area for which application is made
.....
7. Brief particulars of previous experience in oil prospecting or oilfield development work
8. Names and qualifications of technical experts or advisers.....
.....
9. State amount of capital for operations under the Licence or Lease applied for
 - (a) At present available.....
 - (b) Which applicant can make available and the source.....
.....
10. If the applicant is an alien, or a company incorporated outside Her Majesty's dominions state full particulars of the company to be incorporated by the applicant in the Colony or in some other part of Her Majesty's dominions for the purpose of receiving the grant of and exploiting any Licence or Lease which may be granted, including particulars similar to those specified in (3) (d) and (8) above and the amount of the capital proposed

I/We hereby declare that all the foregoing particulars are correct.

Date Signature(s) of Applicant(s).....
.....

(If the applicant is a Company state capacity in which form is signed).

SECOND SCHEDULE: PART I

FALKLAND ISLANDS
OIL EXPLORATION LICENCE

THIS DEED made the day of 19.....
between

Governor and Commander-in-Chief in and over the Colony of the Falkland Islands and its Dependencies (hereinafter referred to as the "Governor" which expression includes the officer for the time being administering the Government of the said Colony) of the one part and (hereinafter referred to as "the Licensee") of the other part.

WHEREAS the Licensee in accordance with the conditions laid down in the Regulations for the time being in force for the granting of oil exploration licences has applied to the Governor for an oil exploration licence in respect of the lands specified in the Schedule marked "A" hereunder written (hereinafter referred to as "the licensed area") and has entered into a Bond in the form set out in the Schedule marked "B" hereunder written with the Colonial Treasurer in the sum of.....conditioned for the due and faithful carrying out of the provisions contained in this Deed:

NOW THIS DEED WITNESSETH AS FOLLOWS —

Fee.

1. In consideration of the sum of £ which represents a fee of 2/6d. for each square mile of the licensed area and which has before the execution hereof been paid by the Licensee to the Colonial Treasurer on behalf of the Governor the sole right and licence is hereby granted by the Governor to the Licensee for the term of two years from the date hereof subject to the rights of private owners of the surface and subject to the restrictions conditions and provisions hereinafter contained to explore and search the surface of the lands described in the Schedule marked "A" hereunder written for petroleum and for that purpose the right and licence to make geological geophysical and topographic examinations and to dig and turn up the surface of the land and drill geological information bore-holes. Reserving nevertheless to the Governor full power and liberty at all times to enter into and upon and to grant or demise to any persons whomsoever liberty to enter into and upon such Crown lands as may be included in the said lands for all and every purpose other than that for which this licence is granted but subject to the rights of the Licensee under this licence.

Right to erect and dismantle huts, etc.

2. Subject to the rights of private owners of the surface the Licensee may erect and bring upon the licensed area such temporary buildings and structures engines machinery equipment chattels and effects as shall be proper and necessary for effectually carrying on the operations hereby licensed and subject as aforesaid the Licensee shall be entitled at any time to dismantle and remove the same.

Local Resident Manager.

3. The Licensee shall before commencing any operations in the said lands furnish to the Colonial Secretary the name and address of the Manager resident in the locality of the licensed area under whose supervision such operations are to be carried on. Any notice which the Governor or any person authorised by him is in accordance with the terms of this licence required or entitled to serve upon the Licensee shall be sufficiently served if the same shall be delivered or sent by post to such Manager at such address.

Working obligations.

4. (1) The Licensee shall with all reasonable despatch commence to examine geologically and by geophysical methods the licensed area and shall during the subsistence of this licence continue with due diligence to carry out such geological and geophysical work as may be necessary to determine the structure of the licensed area.

(2) During the period of the licence and any renewal thereof the Licensee shall spend an average of not less than £25 per annum on his operations for each square mile of the licensed area. If the expenditure of the Licensee on the operations for the period of the licence or the period of the renewal as the case may be falls short of the said amount, he shall on the expiration of the period of the licence or the period of the renewal as the case may be pay the difference between his liability under this clause and his actual expenditure to the Colonial Treasurer.

(3) In the event of the determination of this licence by the Licensee under the provisions of Clause 18 or the surrender of any part or parts of the area, under the provisions of Clause 19 the expenditure obligations in this clause shall be reduced proportionately.

5. All excavations or borings which may have been made on the licensed area during the subsistence of this licence shall unless the Colonial Secretary otherwise determines be filled up, and so far as possible the surface of the land shall be restored to its condition prior to such excavations or borings, and the Licensee shall indemnify the Governor against all claims and demands which may be made by any other person for damage shown to result from the exercise of the powers hereby conferred.

Restoration and indemnity.

6. The Licensee shall furnish in triplicate to the Colonial Secretary a quarterly report (which he hereby undertakes to have prepared) indicating the progress of his operations under this licence in and upon the licensed area and containing a map, on a scale to be agreed between the Colonial Secretary and the Licensee, which shall show the true topographic position of any land geologically or geophysically surveyed examined or mapped. The quarterly report and map shall include full particulars of any discovery or indication of petroleum bearing strata and of any mineral other than petroleum. Any officer authorised by the Colonial Secretary may at all reasonable times inspect and make abstracts or copies of any logs records plans or maps prepared by the Licensee in the course of his operations under this licence. All such information so supplied by the Licensee shall (except with the consent in writing of the Licensee which shall not be unreasonably withheld) be treated by the Colonial Secretary as confidential but the Colonial Secretary shall nevertheless be entitled at any time to make use of any information received from the Licensee for the purpose of preparing and publishing aggregated returns and general reports on the extent of oil prospecting or oil mining operations in the Colony and for the purposes of any arbitration or litigation between the Governor and the Licensee.

Reports.

7. The Licensee may remove any specimens or samples of petroleum found by him in or upon the licensed area in the course of his operations under this licence but shall furnish the Colonial Secretary as soon as possible with full information of all such specimens and samples so removed and shall upon demand made within 28 days of the receipt by the Colonial Secretary of such information provide the Colonial Secretary with such representative specimens and samples as may be required, not exceeding one half of any individual specimen or sample so removed by the Licensee and the Colonial Secretary shall be entitled to retain any specimen or sample so delivered.

Samples of petroleum.

8. The Licensee shall not form or endeavour to form or procure or permit to be formed any company syndicate or association incorporated or not incorporated nor appeal publicly by means of a prospectus or otherwise for money for the purpose of exploiting the licensed area or any portion thereof without the permission in writing of the Governor to be obtained on his being satisfied that such lands or portion thereof have been thoroughly and efficiently examined geologically or by geophysical methods.

Formation of Company, etc., by Licensee.

Consent to assignment.

9. The Licensee shall not grant or assign any interest under this licence nor part with the possession of any of the rights hereby granted to any person or persons whomsoever without the previous consent in writing of the Governor, which shall not be unreasonably withheld. The Governor may (without prejudice to his right to make such consent subject to any conditions he may think fit) require as a condition of giving such consent the assignor or assignees at his or their expense to execute a deed of covenant to observe and perform the covenants and conditions on the part of the Licensee in these presents contained and to enter into a Bond in the form set out in the Schedule marked "B" hereunder.

Assignment of licence.

10. The Licensee shall not assign or attempt to assign the rights granted by this licence to any person other than a British subject or a company incorporated in the Colony or in some other part of Her Majesty's dominions:

Provided that if in the case of a proposal to assign the rights to a company incorporated in the United States of America the Licensee can show to the satisfaction of the Governor that the foregoing provisions of this clause would result in the Licensee suffering substantial financial loss in respect of taxation the Governor may by writing under his hand absolve the Licensee from complying with the provisions of this clause.

Licensee ceasing to be a British subject.

11. If the Licensee shall cease to be a British subject or a company incorporated in the Colony or in some other part of Her Majesty's dominions he shall forthwith inform the Governor and apply to him for his consent to an assignment of the rights granted by this licence in accordance with Clause 9 (Consent to assignment) and Clause 10 (Assignment of licence) hereof and in the event of the Licensee failing to obtain such consent within such time as the Governor may in his discretion appoint the Governor may revoke this licence. The revocation of this licence in pursuance of the foregoing provisions of this clause shall be subject and without prejudice to any obligation or liability imposed by or incurred under the terms and conditions hereof.

Control by an alien.

12. If the Licensee being a company shall be or become controlled directly or indirectly by an alien or a company incorporated outside Her Majesty's dominions or if the Licensee shall with the consent in writing of the Governor assign the rights granted by this licence in respect of the licensed area or any part thereof to a company controlled directly or indirectly by an alien or by a company incorporated outside Her Majesty's dominions then and in any such case —

- (a)of the Directors and the Chief Local Representative shall be British subjects;
- (b) at all times during the term hereby granted or any renewal thereof a reasonable number of the persons employed by the Licensee in or about the licensed area in connection with the exercise of the rights granted by this licence shall be British subjects.

Reciprocity.

13. This licence shall be determined if the Licensee shall be or become controlled directly or indirectly by a national of or by a company incorporated in any country the laws and customs of which do not permit British subjects or companies incorporated in Her Majesty's dominions or companies incorporated in that country controlled directly or indirectly by British subjects or companies incorporated in Her Majesty's dominions to acquire hold and operate petroleum concessions on conditions which in the opinion of Her Majesty's Principal Secretary of State for the Colonies are reasonably comparable with the conditions upon which such rights are granted to nationals of that country with the addition of conditions corresponding to those imposed by this clause and the immediately preceding clause hereof.

14. In the event of the inclusion by inadvertence in the said Schedule marked "A" of lands or areas over which it may subsequently be proved that the Government are not entitled to the oil rights or of lands or areas in respect of which the oil rights have already been granted to other individuals or companies, the Licensee shall immediately release to the Governor any such lands or areas when required to do so by the Colonial Secretary.

Release of lands included by inadvertence.

15. Notwithstanding the rights conferred on the Licensee under this licence the Governor shall have power at any time to require that such part or parts of the licensed area as may from time to time be required for any public purpose whatsoever may be so used provided that during the subsistence of this licence the area or areas so used shall not exceed in all of the licensed area and provided further that if the Licensee shall satisfy the Governor that the use of such area or areas will interfere with his proposed operations he shall have the right to indicate other areas which can be selected with the least interference to his operations.

Use of lands for public purposes.

16. If the Licensee shall at any time refuse or neglect to observe or perform any of the terms and conditions of this licence the Governor may by notice in writing signed by him and served upon the Licensee summarily declare that the licence hereby granted shall henceforth determine and the licence and all rights and liberties conferred hereby or enjoyed hereby or hereunder shall forthwith determine without prejudice to the rights and remedies of the Governor in respect of any prior breach or non-performance of any or all of the terms and conditions hereof on the part of the Licensee:

Power of revocation.

Provided always that the aforesaid power shall not be exercisable unless and until notice has been given to the Licensee specifying the particular breach complained of and if the breach is capable of remedy, requiring the Licensee to remedy the breach and, in any case, requiring the Licensee to make compensation in money for the breach, and the Licensee fails within a reasonable time thereafter, to remedy the breach if it is capable of remedy and to make reasonable compensation in money to the satisfaction of the Governor for the breach.

17. The Governor may if he is satisfied that the Licensee has performed the conditions imposed on him by this licence at his discretion on an application made in that behalf by the Licensee on three months' notice in writing grant a renewal of this licence in respect of the whole of the licensed area or any part thereof for a further term of twelve months and thereafter for two further terms of twelve months respectively subject to the payment by the Licensee of an annual fee of 1/3d. for each square mile of the area retained.

Renewal.

18. Without prejudice to any obligation or liability imposed by or incurred under the terms and conditions hereof the Licensee may at any time during the term hereby granted or any renewal thereof determine this licence by giving to the Governor not less than six months' previous notice in writing to that effect.

Right of Licensee to determine licence.

19. Without prejudice to any obligation or liability imposed by or incurred under the terms and conditions hereof the Licensee shall be entitled at any time during the term hereby granted or any renewal thereof by giving three months' notice in writing to the Governor to surrender the rights granted by this licence in respect of any part or parts of the licensed area:

Right of Licensee to abandon portions of licensed area.

Provided that the part of the licensed area in respect of which the said rights are retained shall comply with the Regulations for the time being in force as to the shape and size of areas in respect of which an Oil Exploration Licence may be granted.

20. On or before the expiration of this licence or any renewal thereof the Licensee observing and performing the terms and conditions herein contained shall have a right (subject to the provisions

Right of Licensee to oil prospecting licence.

prescribed in the Regulations then in force for granting oil prospecting licences) to an oil prospecting licence or licences in respect of 50 per centum of the licensed area and in respect of such further part of the licensed area as the Licensee may select in lieu of an equivalent area or areas in respect of which the Licensee has the right to the grant of an oil prospecting licence or licences by virtue of another exploration licence or licences held by the Licensee.

Force majeure.

21. (1) Failure on the part of the Licensee to fulfil any of the terms and conditions of this licence shall not give the Governor any claim against the Licensee or be deemed a breach of this licence in so far as such failure arises from *force majeure* and if through *force majeure* the fulfilment by the Licensee of any of the terms and conditions of this licence be delayed the period of such delay shall be added to the periods fixed by this licence.

(2) In this Clause the expression "*force majeure*" includes the act of God, war, insurrection, riot, civil commotion, tide, storm, tidal wave, flood, lightning, explosion, fire, earthquake and any other happening which the Licensee could not reasonably prevent or control.

Arbitration.

22. If at any time during the continuance of this licence or after the determination thereof any question or dispute shall arise regarding this licence or any matter or thing connected herewith or the powers duties or liabilities of the Licensee hereunder then and in all such cases the matter in difference shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1950 or any Ordinance or law amending or replacing the same for the time being in force:

Provided that any reference to arbitration arising out of an agreement between the parties, shall be to two arbitrators, one to be appointed by each party, unless a contrary intention is expressed in the agreement.

Marginal notes.

23. The marginal notes are for convenience only and do not form part of this licence.

Interpretation.

24. For the purpose of this licence —

- (1) "LICENSEE" means a person to whom an oil exploration licence is granted his successors in title and the persons deriving title under him.
- (2) "PETROLEUM" includes any mineral oil or relative hydrocarbon and natural gas existing in its natural conditions in strata but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.
- (3) "HER MAJESTY'S DOMINIONS" shall be construed as including a reference to all territories under Her Majesty's protection or in which Her Majesty has for the time being jurisdiction.
- (4) "BRITISH SUBJECT" shall be deemed to include a person under Her Majesty's protection.
- (5) "COLONY" means the Colony of the Falkland Islands.

(In witness whereof the Governor and the Licensee have hereunto set their hands and seals the day and year first herein above written.)

(In witness whereof the Governor has hereunto set his hand and seal and the Licensee has caused its Common Seal to be hereunto affixed the day and year first herein above written.)

SCHEDULE A.

Description of licensed area.

All those lands indicated on the attached plan situate in.....
.....and having a total area of.....
or thereabouts.

SCHEDULE B.

BOND IN RESPECT OF OIL EXPLORATION LICENCE

KNOW ALL MEN BY THESE PRESENTS THAT WE

of
and
of

are held and firmly bound to the Colonial Treasurer of the Colony of the Falkland Islands and his Successors in Office in the sum of to be paid to the said Colonial Treasurer and his Successors in Office for which payment to be well and truly made we bind ourselves and each of us our heirs executors and administrators jointly and severally by these presents.

Dated this day of 19.....

WHEREAS by deed of even date herewith and made between of the one part and the said of the other part the sole right and licence was granted to the said to explore and search the surface of that parcel of land situate and having an area of more or less and delineated in the plan attached to the said Deed for petroleum and for that purpose to make geological, geophysical and topographic examinations and to dig and turn up the surface of the land and drill geological information bore-holes, subject to the terms conditions and covenants therein contained.

AND WHEREAS the said hath agreed to become surety for the due performance by the said of all and several the covenants matters and things under the said Deed to be by him performed and done.

Now the condition of the above-written bond or obligation is such that if the said shall well and truly observe and perform all and every the covenants and agreements by him to be observed and performed as hereinbefore mentioned and shall in a proper and workmanlike manner do all and every the acts matters and things by him to be done under the said Deed to the satisfaction of the Governor for the time being of the said Colony.

THEN the above-written bond or obligation shall be void otherwise the same shall remain in full force and effect.

SECOND SCHEDULE: PART II

FALKLAND ISLANDS OIL PROSPECTING LICENCE

THIS DEED made the day of 19..... between Governor and Commander-in-Chief in and over the Colony of the Falkland Islands and its Dependencies (hereinafter referred to as "the Governor" which expression includes the Officer for the time being administering the Government of the said Colony) of the one part and (hereinafter referred to as "the Licensee") of the other part.

WHEREAS the Licensee in accordance with the conditions laid down in the Regulations for the time being in force for the granting of oil prospecting licences has applied to the Governor for an oil prospecting licence in respect of certain lands specified in the Schedule marked "A" hereunder written (hereinafter referred to as "the licensed area").

AND WHEREAS the Licensee has entered into a bond in the form set out in the Schedule marked "B" hereunder written with the Colonial Treasurer in the sum of conditioned for the due and faithful carrying out of the provisions contained in this Deed;

AND WHEREAS the Governor has found that there is no objection to granting the said licence;

NOW THIS DEED WITNESSETH AS FOLLOWS —

Grant of rights and
licence.

1. In pursuance of the aforesaid arrangements and in consideration of the rents royalties covenants and agreements herein-after reserved and contained on the one part of the Licensee to be paid and observed the Governor doth hereby grant unto the Licensee the rights and licence specified in the following sub-clauses of this clause (but subject to the restrictions provisions and conditions hereinafter contained) to hold and enjoy the said rights and licence for a term of four years from the date hereof (hereinafter referred to as the "initial term"):

- (1) the sole right and licence to enter upon the licensed area for the purpose of searching for boring for winning and working all or any petroleum lying or being within under or throughout the licensed area without any interruption claim or disturbance from or by the Governor or any other person or persons whomsoever save as may be provided by regulation;
- (2) the sole right and licence to carry away and dispose of petroleum from the licensed area for the use and benefit of the Licensee;
- (3) subject to the prior approval of the Governor in writing and to such conditions as he may at his discretion impose, the right to make any roads on the licensed area for the purpose of carrying on the prospecting operations hereby licensed;
- (4) subject to the approval of the Governor and to such conditions as he may impose the right to appropriate and use for the purposes aforesaid the water upon or within any of the licensed area and to collect and impound the same for such purposes but so that in the exercise of this privilege the Licensee shall not deprive any lands, settlements, shepherds' houses, or watering places for horses, cattle or sheep of a reasonable supply of water as heretofore accustomed;
- (5) the right to erect and bring upon the licensed area all such temporary buildings, structures, engines, machinery, equipment, chattels and effects as shall be proper and necessary for effectually carrying on the prospecting operations hereby licensed and subject to the approval of the Governor to install telephone and wireless apparatus and to construct airstrips and to enclose with a fence the lands occupied by the aforesaid constructions:

Reserving nevertheless to the Governor or any other person authorised by him in that behalf full liberty and power at all times —

- (a) to enter into and upon the licensed area for all or every purpose other than those for which this licence is issued but subject to the rights hereby conferred and particularly (and without hereby in any way qualifying such general power and liberty)
 - (i) to make on over or through the licensed area such roads railways telegraph and telephone lines, pipelines and other public works as he may consider necessary;
 - (ii) to obtain from and out of any Crown Lands in the licensed area such stone earth timber or other

material as may be necessary or requisite for any purpose;

- (iii) to pass and repass at all times over and along any Crown Lands in the licensed area and such roads railways and pipelines for all purposes as occasion shall require;

- (b) to search for, dig, work, and get any minerals or substances other than petroleum upon or under the licensed area:

Provided always that the said reserved liberties and powers in respect of the licensed area or any part thereof shall be exercised and enjoyed in such a manner as not to hinder or interfere with the rights and privileges of the Licensee under these presents, and provided also that fair and proper compensation shall be paid by the Governor for all loss damage or injury which the Licensee may sustain or be put to by reason or in consequence of the exercise of the said reserved liberties and powers, the amount of such compensation to be settled in case of difference by reference to arbitration as provided in Clause 47 (Arbitration) hereof.

2. The Licensee shall not exercise any of the rights and licence conferred under the preceding clause over any alienated lands within the licensed area unless and until permission in writing so to do shall first have been obtained by the Licensee from the Governor who shall grant such permission upon proof to his satisfaction by the Licensee that —

Restriction for alienated lands.

- (a) the Licensee has entered into an agreement with the owner or occupier or both as the case may be of the surface of that land for payment of compensation to such owner or occupier for and in respect of any loss or damage which may be caused or done to the surface of that land or to any cultivation or buildings thereon by reason of the exercise by the Licensee of all or any rights and licence hereby granted; or
- (b) the Licensee has made reasonable efforts to arrive at such an agreement but has failed to do so through no fault attributable to him; or
- (c) the Licensee is unable to enter into such an agreement by reason of the fact that such owner or occupier cannot be found or is out of the Colony or is incapacitated through infancy or other legal disability.

3. (1) The Licensee shall pay to the Colonial Treasurer on behalf of the Governor during the term hereby granted or any renewal thereof a certain yearly rent for each square mile of the licensed area as hereunder specified —

Certain yearly rent.

	£	s.	d.
1st year of initial term	10	0	
2nd year of initial term	1	0	0
3rd year of initial term	1	10	0
4th year of initial term	1	15	0
1st year of renewal	2	0	0
2nd year of renewal	2	5	0
3rd year of renewal	2	10	0

Provided that the certain yearly rent payable for each year of the said term shall not be less than £100, and that the certain yearly rent payable for the renewal of the said term shall not be less than £200.

(2) Payment of the certain yearly rent reserved by this licence shall be made annually in advance and the first payment of the sum of in respect of the first year of the term hereby granted (the receipt whereof is hereby acknowledged) shall be made on the execution of this licence.

4. (1) Upon the determination by the Licensee of the term hereby granted or any renewal thereof or upon the surrender by him of the rights granted by this licence in respect of any part or parts of the licensed area or upon the grant of an oil mining lease in respect of any part or parts of the licensed area the Governor will refund to the Licensee an apportioned part of any certain yearly rent paid by the Licensee in advance in respect of the licensed area or any such part or parts thereof for a period the whole of which has not expired at the date of such determination or surrender of grant.

(2) Upon the release by the Licensee of any lands or areas under the provisions of Clause 13 (Release of lands included by inadvertance) hereof the Governor will refund to the Licensee an apportioned part of any certain yearly rent paid by the Licensee during the term hereby granted in respect of the licensed area provided that in respect of any year the amount remaining of the certain yearly rent after the said refund shall not be less than the amount of royalties payable in respect of any such year under the provisions of sub-clauses (1) and (2) of Clause 5 (Royalty) hereof.

Royalty.

5. The Licensee shall pay to the Colonial Treasurer on behalf of the Governor within two months after the end of each year of the term hereby granted or any renewal thereof the royalties hereunder specified —

- (1) A royalty of $12\frac{1}{2}$ per centum of the value of all crude oil won and saved and of all casinghead petroleum spirit recovered by the Licensee from the licensed area within each such year ascertained in the manner provided by Clause 6 (Measurement of Petroleum). From the quantity so ascertained the Licensee shall be entitled to deduct the quantity ascertained according to a method approved by the Colonial Secretary of any crude oil (or products thereof) or casinghead petroleum spirit produced from the licensed area and used during the year by the Licensee for the purpose of carrying on drilling and production operations and pumping to field storage and refineries. The value of crude oil for the purpose of royalty shall be the value on the field of production at field storage tanks. The value of casinghead petroleum spirit for the purpose of royalty shall be the value on the field of production after the deduction of due allowance for the cost to the Licensee of extracting such casinghead petroleum spirit. Both the value of crude oil and that of casinghead petroleum spirit shall be calculated in such manner as may be determined from time to time by agreement with the Governor and the Licensee or in default of such agreement, by arbitration in accordance with Clause 47 (Arbitration) hereof:

Provided that if there is any dispute between the parties or failure to agree affecting the amount of the royalty due for any year the amount of royalty in dispute shall not be payable as aforesaid but shall be payable when the amount is determined by agreement or arbitration as the case may be.

- (2) A royalty of 5 per centum of the value of all natural gas produced and sold from the licensed area within each such year. The value of natural gas for the purpose of royalty shall be the value on the field of production at field storage tanks and shall be calculated in such manner as may be determined from time to time by agreement with the Governor and the Licensee or in default of such agreement by arbitration in accordance with Clause 47 (Arbitration) hereof:

Provided that if there is any dispute between the parties or failure to agree affecting the amount of the royalty due for any year the amount of royalty in dispute shall not be payable as aforesaid but shall be payable when the amount is determined by agreement or arbitration as the case may be.

- (3) From the amount of royalties payable under the foregoing provisions of this clause in respect of any such year there shall be deducted the amount of the certain yearly rent actually paid in respect of that year under the provisions of Clause 3 (Certain yearly rent) hereof.

6. (1) The Licensee shall measure or weigh by a method or methods customarily used in good oilfield practice and from time to time approved by the Colonial Secretary —

Measurement of petroleum.

- (a) all crude oil won and saved and casinghead petroleum spirit recovered from the licensed area; and
 - (b) all natural gas sold from the licensed area during the term hereby granted or any renewal thereof.
- (2) The Colonial Secretary or any officer authorised by him shall at all times during the term of the licence or any renewal thereof be entitled to be present whenever such measurement takes place.
- (3) If any measuring appliance shall at any time be found to be false or unjust the same shall if the Colonial Secretary so determines after considering any representations in writing made by the Licensee be deemed to have existed in that condition during the period of three months prior to the discovery thereof or the period elapsed since the last occasion upon which the same was examined or tested whichever shall be the less and accordingly the royalties payable in respect of such period shall be adjusted.
- (4) The Licensee shall not make any alteration in the method or methods of measurement used by him or any appliance used for that purpose without first informing the Colonial Secretary and the Colonial Secretary may in any case require that no alteration shall be made save in the presence of an officer authorised by the Colonial Secretary.

7. The Licensee shall keep full and correct accounts in a form from time to time approved by the Colonial Secretary of —

Keeping of accounts.

- (a) all crude oil won and saved and casinghead petroleum spirit recovered; and
- (b) all natural gas sold; and
- (c) the quantity of crude oil or products thereof or casinghead petroleum spirit used for drilling or production operations or pumping to field storage or refineries; and

shall within one month after the end of each year of the term hereby granted or any renewal thereof deliver to the Colonial Secretary an abstract in a form from time to time approved by the Colonial Secretary of the accounts for each such year together with a statement in the like form of all royalties payable in respect of each such year.

8. (1) During the subsistence of this licence the Licensee shall with due diligence carry out such scheme of prospecting including any geological and geophysical surveys and programme of test drilling as shall be approved by the Colonial Secretary.

Working obligations.

(2) During the period of the licence including the period of any renewal of this licence, the Licensee shall spend on his operations in the licensed area, a sum which shall not be less than —

£25 for each square mile during the first year of the licence;

£50 for each square mile during each of the next three years of the licence;

£75 for each square mile during each year thereafter.

If the expenditure in the licensed area by the Licensee falls short of that stated above the Licensee shall on the expiration of the licence or any renewal thereof, as the case may be, pay to the Colonial Treasurer of the Government of the Colony an additional

sum representing the difference between his liability under this clause and his actual expenditure. In the event of the determination of this licence by the Licensee under the provisions of Clause 43 or the surrender of any part or parts of the area under the provisions of Clause 44 the expenditure obligations in this sub-clause shall be reduced proportionately.

(3) The Licensee shall as soon as practicable and in any case not later than one year from the commencement of the term hereby granted commence drilling operations, with a modern oil well drilling string of tools capable of reaching a depth of at least feet upon a site selected by him within the licensed area and shall therewith with due diligence continue drilling until the geological objective is reached or geological conditions are discovered which preclude the possibility of the presence of petroleum in commercial quantity at greater depth. If petroleum in commercial quantity is not found, the Licensee shall undertake further similar drilling operations upon other selected sites in rotation until commercial oil is found, the selection of these sites and the movement of the drilling equipment being carried out without undue delay:

Provided that the obligation in this sub-clause shall not apply to more than one licence out of every oil prospecting licences held by the Licensee.

Local Resident Manager.

9. The Licensee shall before commencing any operations in the licensed area furnish to the Colonial Secretary the name and address of the Manager resident in the locality of the said lands under whose supervision such operations are to be carried on. Any notice which the Governor or any person authorised by him is in accordance with the terms of this licence required or entitled to serve upon the Licensee shall be sufficiently served if the same shall be delivered or sent by post to such Manager at such address.

Licensee to furnish copies of agreements with surface owners.

10. The Licensee shall furnish the Colonial Secretary with copies of all conveyances leases assignments agreements and deeds relating to the alienated lands within the licensed area or any estate or interest therein and to which the Licensee is a party or under which the Licensee either directly or indirectly obtains any benefit or incurs any liability.

Compensation.

11. The licensee shall make and pay reasonable satisfaction and compensation for all damage or injury to the property and rights of other parties which may be done by him his agents and servants in the exercise of the rights and licence conferred by this licence.

Indemnity against third party claims.

12. The Licensee shall at all times indemnify and keep harmless the Governor and every Officer of the Government of the Colony against all actions costs charges claims and demands whatsoever which may be made or brought by any third party in relation to or in connection with this licence or any matter or thing done or purported to be done in pursuance thereof by the Licensee his servants or agents.

Release of lands included by inadvertence.

13. In the event of the inclusion by inadvertence in the said Schedule marked "A" hereunder of lands or areas over which it may subsequently be proved that the Government are not entitled to the oil rights, or of lands or areas in respect of which the oil rights have already been granted to other individuals or companies the Licensee shall immediately release to the Governor any such lands or areas when required to do so by the Colonial Secretary.

Use of lands for public purposes.

14. Notwithstanding the rights conferred on the Licensee under this licence the Governor shall have power at any time to require that such part or parts of the licensed area as may from time to time be required for any public purpose whatsoever may be so used provided that during the subsistence of this licence the area or areas so used shall not exceed in all per centum of the licensed

area and provided further that the use of any area or areas upon which any active operations such as well-drilling road construction waterworks or other works relating to the winning of petroleum have previously been commenced or are in progress shall not be required but in lieu thereof an equal area or areas upon which active operations as aforementioned have not already been commenced or are not at the time being in progress shall be used provided that such alternative area or areas are in the opinion of the Governor suitable for the public purposes aforementioned, and provided further that the rights of the Licensee to enter and occupy any part of the licensed area may be exercised in so far as this does not in the opinion of the Governor frustrate the public purposes for which the area is required.

15. (1) No statement shall be made either in any notice advertisement prospectus or other document issued by or to the knowledge of the Licensee claiming or suggesting whether expressly or by implication that the Governor or any Government Department or any person or body acting on behalf of the Governor has or have formed or expressed any opinion that the licensed area is from its geological formation or otherwise likely to contain petroleum.

Advertisements prospectuses.

(2) The foregoing provisions of this clause or a statement to the effect thereof shall be included in or endorsed on any prospectus, statement in lieu of prospectus, notice, circular advertisement or other invitation issued by or to the knowledge of the Licensee offering to the public for subscription or purchase any shares or debentures of a company or intended company.

16. The Licensee shall report to the Governor particulars of any fresh issues of capital which may from time to time be made by him and any alteration which may be made in the Memorandum or Articles of Association or in the constitution of the Licensee.

Notice of fresh issues of capital.

17. The Licensee shall not grant or assign any interest under this licence nor part with the possession of any of the rights hereby granted to any person or persons whomsoever without the previous consent in writing of the Governor, which shall not be unreasonably withheld. The Governor may (without prejudice to his right to make such consent subject to any conditions he may think fit) require as a condition of giving such consent the assignee or assignees at his or their expense to execute a deed of covenant to observe and perform the covenants and conditions on the part of the Licensee in these presents contained.

Consent to assignment.

18. The Licensee shall not assign or attempt to assign the rights granted by this licence to any person other than a British subject or a company incorporated in the Colony or in some other part of Her Majesty's dominions:

Assignment of licence.

Provided that if in the case of a proposal to assign the rights to a company incorporated in the United States of America the Licensee can show to the satisfaction of the Governor that the foregoing provisions of this clause would result in the Licensee suffering substantial financial loss in respect of taxation the Governor may by writing under his hand absolve the Licensee from complying with the provisions of this clause.

19. If the Licensee shall cease to be a British subject or company incorporated in the Colony or in some other part of Her Majesty's dominions he shall forthwith inform the Governor and apply to him for his consent to an assignment of the rights granted by this licence in accordance with Clause 17 (Consent to assignment) and Clause 18 (Assignment of licence) hereof and in the event of the Licensee failing to obtain such consent within such time as the Governor may in his discretion appoint, the Governor may revoke this licence. The revocation of this licence in pursuance of the foregoing provisions of this clause shall be subject and without prejudice to any obligation or liability imposed by or incurred under the terms and conditions hereof.

Licensee ceasing to be a British subject.

Control by an alien.

20. If the Licensee being a company shall be or become controlled directly or indirectly by an alien or a company incorporated outside Her Majesty's dominions or if the Licensee shall with the consent in writing of the Governor assign the rights granted by this licence in respect of the leased area or any part thereof to a company controlled directly or indirectly by an alien or by a company incorporated outside Her Majesty's dominions then and in any such case —

- (a) of the Directors and the Chief Local Representatives shall be British subjects;
- (b) at all times during the term hereby granted or any renewal thereof a reasonable number of the persons employed by the Licensee in or about the licensed area in connection with the exercise of the rights granted by this licence shall be British subjects.

Reciprocity.

21. This licence shall be determined if the Licensee shall be or become controlled directly or indirectly by a national of or by a company incorporated in any country the laws and customs of which do not permit British subjects or companies incorporated in Her Majesty's dominions or companies incorporated in that country controlled directly or indirectly by British subjects or companies incorporated in Her Majesty's dominions to acquire hold and operate petroleum concessions on conditions which in the opinion of Her Majesty's Principal Secretary of State for the Colonies are reasonably comparable with the conditions upon which such rights are granted to nationals of that country with the addition of conditions corresponding to those imposed by this clause and Clause 20 (Control by an Alien) hereof.

Notification of discovery of petroleum.

22. The Licensee shall without avoidable delay report to the Colonial Secretary the discovery of petroleum or petroleum bearing strata.

Distance of wells from boundaries.

23. No bore-hole or well shall except with the consent in writing of the Colonial Secretary be drilled or made within a distance of 400 feet from the boundaries of the licensed area.

Notice of commencement of wells.

24. No bore-hole or well shall be commenced and no bore-hole or well shall be recommenced after work has been discontinued thereat for more than six months unless fourteen clear days notice in writing shall first have been given to the Colonial Secretary.

Abandonment and plugging of bore-holes.

25. (1) No bore-hole or well shall be abandoned and no cemented string or other permanent form of casing shall be withdrawn from any bore-hole or well which it is proposed to abandon without the prior consent in writing of the Colonial Secretary such consent not to be unreasonably withheld in the case of bore-holes or wells which have become or are unproductive.

(2) Every bore-hole or well which the Licensee intends to abandon shall unless the Colonial Secretary otherwise determines be so securely plugged by the Licensee as to prevent ingress and egress of water in and from any portion of the strata bored through.

(3) The Colonial Secretary may in any case require that no bore-hole or well shall be plugged or any works be executed for that purpose save in the presence of an officer authorised by him.

Delivering up of productive wells in good order.

26. Within two months after the expiration or sooner determination of this licence or the date of the abandonment of the undertaking hereby licensed whichever shall first occur the Licensee shall deliver up to the Governor in good order repair and condition and fit for further working all productive bore-holes or wells (unless ordered by the Colonial Secretary to plug them as provided in the next succeeding clause and except such bore-holes and wells as shall have been previously abandoned with the consent of the Colonial Secretary) together with all casings and other appurtenances to such

bore-holes and wells below surface level and which cannot be moved without causing injury to the said bore-holes and wells and the Licensee shall also fill up or fence all holes and excavations that he may have made in the licensed area to such extent as the Colonial Secretary may require and shall to the like extent restore so far as may be to their natural and original condition the surface of the licensed area and all buildings and structures thereon which the Licensee may have damaged in the course of prospecting (provided that the Licensee shall not be liable to make good any damage whether to the surface of the said lands or to any buildings or structures thereupon in respect of which the Licensee shall have made satisfaction or paid compensation which, in either case is, in the opinion of the Governor, reasonable) and shall have power during that period to enter on the lands for the purposes aforesaid subject to the rights of surface owners or others:

Provided that this clause shall not apply to any of the lands included in any oil mining lease which the Licensee may take up under the provisions hereinafter contained.

27. Within two months after the expiration or sooner determination of this licence or the date of the abandonment of the said undertaking whichever shall first occur the Licensee shall if required so to do by the Colonial Secretary plug all bore-holes and wells as provided in Clause 25 (Abandonment and plugging of bore-holes) hereof:

Plugging of bore-holes on determination of licence.

Provided that this clause shall not apply to any of the lands included in any oil mining lease which the Licensee may take up under the provisions hereinafter contained.

28. Subject to the rights of surface owners or others, the Licensee shall upon the expiration or sooner determination of this licence or the abandonment of the said undertaking whichever shall first occur with all convenient speed having regard to his obligations under the provisions of Clause 27 (Plugging of bore-holes on determination of licence) remove all buildings structures engines machinery and other property and effects erected or brought by the Licensee upon the licensed area under the provisions hereof save and except all such wells tubes casings or linings and works or any portion thereof both above or below ground as the Governor may require to take at a price which failing agreement shall be fixed by arbitration in the manner provided by Clause 47 (Arbitration) hereof or as may be required to be delivered up to the Governor under the provisions of Clause 26 (Delivering up of productive wells in good order) hereof:

Removal of plant.

Provided that this clause shall not apply to any of the works or things aforesaid on lands for which the Licensee shall under the provisions hereinafter contained take up an oil mining lease which may be required by the Licensee for his operations under the lease.

29. The Licensee shall comply with any instructions from time to time given by the Colonial Secretary in writing for securing the health and safety of persons employed in or about the licensed area.

Health and safety of workers.

30. (1) The Licensee shall maintain all apparatus and appliances and all bore-holes and wells capable of producing petroleum in good repair and condition and shall execute all operations in or in connection with the licensed area in a proper and workmanlike manner in accordance with methods and practice customarily used in good oilfield practice and without prejudice to the generality of the foregoing provision the Licensee shall take all steps practicable in order —

Avoidance of harmful methods of working.

- (a) to control the flow and to prevent the escape or waste of petroleum discovered in or obtained from the licensed area; and
- (b) to conserve the licensed area for productive operations; and
- (c) to prevent damage to adjoining petroleum bearing strata; and

- (d) to prevent the entrance of water through bore-holes and wells to petroleum bearing strata; and
- (e) to prevent the escape of petroleum into any water-well spring stream river lake reservoir estuary or harbour; and
- (f) to cause as little damage as possible to the surface of the licensed area and to the trees crops buildings structures and other property thereon.

(2) The Licensee shall comply with any instructions from time to time given by the Colonial Secretary in writing relating to any of the matters set out in sub-clause (1) hereof. If the Licensee objects to any such instruction on the ground that it is unreasonable he may within fourteen days from the date upon which the same was given refer the matter to arbitration in manner provided by Clause 47 (Arbitration) hereof.

Provision of storage tanks, pipes and pipe-lines.

31. The Licensee shall use methods and practice customarily used in good oilfield practice for confining the petroleum obtained from the licensed area in tanks gasholders pipes and pipe-lines or other receptacles constructed for that purpose. No petroleum shall, save as a temporary measure during an emergency, be placed or kept in an earthen reservoir.

Disposal of waste oil, salt water and refuse.

32. The Licensee shall drain all waste oil, salt water and refuse from storage tanks gasholders bore-holes and wells into proper receptacles constructed and maintained by him for that purpose at a safe distance from such tanks gasholders bore-holes and wells and from any buildings or structures whether situate within the licensed area or not and shall dispose of such waste oil salt water and refuse in manner from time to time approved by the Colonial Secretary.

Licensee to keep records of bore-holes.

33. The Licensee shall keep accurate records in a form from time to time approved by the Colonial Secretary of the drilling deepening plugging or abandonment of all bore-holes and wells and of any alteration to the casing thereof. A log of all bore-holes and wells shall be kept in a form from time to time approved by the Colonial Secretary containing particulars of the following matters —

- (a) the strata and subsoil through which the bore-hole or well was drilled; and
- (b) the casing inserted in any bore-hole or well and any alteration to such casing; and
- (c) any petroleum water workable minerals or mine workings encountered; and
- (d) such other matters as the Colonial Secretary may from time to time require.

The Licensee shall deliver copies of the said records and logs to the Colonial Secretary as and when required.

Samples of strata petroleum and water.

34. The Licensee shall as far as reasonably practicable correctly label and preserve for reference for a period of twelve months characteristic samples of the strata or water encountered in any bore-hole or well and samples of any petroleum discovered in the licensed area. And the Colonial Secretary or his representative shall have access to such samples at all reasonable times and shall be entitled to require that representative specimens not exceeding one-half of any such sample be delivered to him and to retain any specimen so delivered.

Plans and Records.

35. (1) The Licensee shall furnish to the Colonial Secretary quarterly during the term hereby granted or any renewal thereof a record in triplicate in a form from time to time approved by the Colonial Secretary of the progress of his operations in the licensed area.

Such record shall contain —

- (a) a statement of the depth drilled in each bore-hole or well; and

- (b) a statement of any petroleum water and minerals encountered in the course of the said operations; and
- (c) a statement of all crude oil produced and casinghead petroleum spirit recovered; and
- (d) a statement of the areas in which any geological or geophysical work has been carried out.

(2) Within two months after the end of each year comprised in the term hereby granted or any renewal thereof the Licensee shall furnish to the Colonial Secretary a record in a form from time to time approved by him of the operations conducted in the licensed area during each such year together with a plan upon a scale approved by the Colonial Secretary showing the situation of all bore-holes or wells.

(3) The Licensee shall also keep accurate geological plans maps and records relating to the licensed area.

(4) The Licensee shall furnish to the Colonial Secretary such other plans and information as to the progress of operations in the licensed area as the Colonial Secretary may from time to time reasonably require.

36. All logs records plans maps accounts and information which the Licensee is or may be from time to time required to furnish under the provisions of this licence shall be supplied at the expense of the Licensee and shall (except with the consent in writing of the Licensee which shall not be unreasonably withheld) be treated by the Colonial Secretary as confidential. The Colonial Secretary shall nevertheless be entitled at any time to make use of any information received from the Licensee for the purpose of preparing and publishing aggregated returns and general reports on the extent of oil prospecting or oil mining operations in the Colony and for the purposes of any arbitration or litigation between the Governor and the Licensee.

Reports confidential.

37. The Colonial Secretary or any person authorised by him shall be entitled at all reasonable times to enter into and upon any land for the time being possessed or occupied by the Licensee in the licensed area for the purposes hereinafter mentioned —

Power to inspect plant
records accounts.

- (a) to examine the bore-holes wells plant appliances buildings and works made or executed by the Licensee in pursuance of this licence and the state of repair and condition thereof; and
- (b) to inspect and check the accuracy of the measuring appliances measurements logs records plans and maps which the Licensee is required to keep or make in accordance with the provisions of this licence; and
- (c) to inspect and make abstracts or copies of any logs records plans maps or accounts which the Licensee is required to keep or make in accordance with the provisions of this licence; and
- (d) to inspect the samples of strata petroleum or water which the Licensee is required to keep in accordance with the provisions of this licence; and
- (e) to execute any works which the Colonial Secretary may be entitled to execute in accordance with the provisions of this licence.

38. If the Licensee shall at any time fail to perform the obligations imposed by any of the undermentioned clauses of this licence —

Power to execute works.

- (a) Clause 6 (Measurement of petroleum)
- (b) Clause 25 (Abandonment and plugging of bore-holes)
- (c) Clause 26 (Delivering up of productive wells in good order)
- (d) Clause 27 (Plugging of bore-holes on determination
of licence)
- (e) Clause 28 (Removal of plant)

- (f) Clause 29 (Health and safety of workers)
- (g) Clause 30 (1) (Avoidance of harmful methods of working)
- (h) Clause 31 (Provision of storage tanks pipes and pipelines)
- (i) Clause 32 (Disposal of waste oil salt water and refuse)

then the Colonial Secretary shall be entitled after giving to the Licensee reasonable notice in writing of such his intention to execute any works which in the opinion of the Colonial Secretary or his agents may be necessary to secure the performance of the said obligations or any of them and to recover the cost and expenses of so doing from the Licensee.

Rights of distress.

39. If and whenever any of the certain yearly rent or royalties reserved by this licence or any part thereof respectively shall be in arrear or unpaid for the space of two calendar months next after any of the days whereon the same ought to be paid (whether the same shall have been legally demanded or not) then and so often as the same may happen the Colonial Secretary may (as an additional remedy and without prejudice to the power of distress and other the rights and remedies to which he would be entitled) enter into and upon any land which shall for the time being be possessed or occupied by the Licensee for the purposes of this licence or the exercise of any of the rights thereby granted and may seize and distrain and sell as landlords may do so for rent in arrear all or any of the stocks or petroleum and products thereof engines machinery tools implements chattels and effects belonging to the Licensee which shall be found in or upon the land so entered upon and out of the moneys arising from the sale of such distress may retain and pay all the arrears of the said certain yearly rent and royalties and also the costs and expenses incident to any such distress and sale rendering the surplus (if any) to the Licensee.

Power of revocation.

40. If the Licensee shall at any time refuse or neglect to observe or perform any of the terms and conditions of this licence the Governor may by notice in writing signed by him and served upon the Licensee summarily declare that the licence hereby granted shall thenceforth determine and the licence and all rights and licence conferred hereby or enjoyed hereby or hereunder shall forthwith determine without prejudice to the rights and remedies of the Governor in respect of any prior breach or non-performance of any or all of the terms and conditions hereof on the part of the Licensee and in respect of the covenants on the part of the Licensee herein mentioned to be performed after the expiration or sooner determination of this licence or after the abandonment of the undertaking hereby licensed:

Provided always that save as to the non-payment of rents or royalties the aforesaid power shall not be exercisable unless and until notice has been given to the Licensee specifying the particular breach complained and if the breach is capable of remedy requiring the Licensee to remedy the breach and in any case requiring the Licensee to make compensation in money for the breach and the Licensee fails within a reasonable time thereafter, to remedy the breach if it is capable of remedy and to make reasonable compensation in money to the satisfaction of the Governor for the breach.

Surrender of area.

41. At the end of the fourth year of the term of this licence the Licensee shall surrender 25 per cent of the land specified in the Schedule marked "A" hereunder and subsequently all references in this licence to the "licensed area" shall be deemed to apply to the remaining area.

Renewal.

42. The Governor may at his discretion on an application made in that behalf by the Licensee on three months' notice in writing grant a renewal of this licence for a further term of twelve months and thereafter for two further terms of twelve months respectively subject to the carrying out of such scheme of prospecting during the renewals as may be agreed between the Colonial Secretary and the Licensee.

43. Without prejudice to any obligation or liability imposed by or incurred under the terms and conditions hereof the Licensee may at any time during the term hereby granted or any renewal thereof determine this licence by giving to the Governor not less than three months' previous notice in writing to that effect.

Right of Licensee to determine licence.

44. Without prejudice to any obligation or liability imposed by or incurred under the terms and conditions hereof the Licensee shall be entitled at any time during the term hereby granted or any renewal thereof by giving three months' notice in writing to the Governor to surrender the rights granted by this licence in respect of any part or parts of the licensed area:

Right of Licensee to abandon portions of licensed area.

Provided that the part of the licensed area in respect of which the said rights are retained shall comply with the Regulations for the time being in force as to the shape and size of areas in respect of which an Oil Prospecting Licence may be granted.

45. On or before the expiration of this licence or any renewal thereof the Licensee having paid the rents and royalties due and having observed and performed the terms and conditions herein contained shall have a right (subject to the provisions prescribed in the Regulations in force at the date of this licence for granting oil mining leases) to an oil mining lease, *in the form of Oil Mining Lease hereto attached* in respect of any part or parts of the licensed area if he shall comply with the Regulations as to applications for oil mining leases:

Right of Licensee to oil mining lease.

Provided that unless the Governor at his discretion shall otherwise determine the Licensee shall not be entitled to the grant of an oil mining lease in respect of any area or areas exceeding in the aggregate one-half of the original licensed area and provided further that the part or parts of the licensed area in respect of which an oil mining lease is granted shall comply with the Regulations in force at the date of this licence as to the shape and size of areas.

46. (1) Failure on the part of the Licensee to fulfil any of the terms and conditions of this licence shall not give the Governor any claim against the Licensee or be deemed a breach of this licence in so far as such failure arises from *force majeure* and if through *force majeure* the fulfilment by the Licensee of any of the terms and conditions of this licence be delayed the period of such delay shall be added to the periods fixed by this licence.

Force majeure.

(2) In this clause the expression "*force majeure*" includes the act of God war insurrection riot civil commotion tide storm tidal wave flood lightning explosion fire earthquake and any other happening which the Licensee could not reasonably prevent or control.

47. If at any time during the continuance of this licence or after the determination thereof any question or dispute shall arise regarding this licence or any matter or thing connected herewith or the powers duties or liabilities of the Licensee hereunder or the amount or payment of any rent or royalty then and in all such cases the matter in difference shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1950 or any Ordinance or law amending or replacing the same:

Arbitration.

Provided that any reference to arbitration arising out of an agreement between the parties, shall be to two arbitrators, one to be appointed by each party, unless a contrary intention is expressed in the agreement.

48. The marginal notes are for convenience only and do not form part of this licence.

Marginal notes.

49. For the purpose of this licence —

Interpretation.

- (1) "Licensee" means a person to whom an oil prospecting licence is granted his successors in title and the persons deriving title under him.

- (2) "Petroleum" includes any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata, but does not include coal bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.
- (3) "Crude oil" means oil in its natural state before the same has been refined or otherwise treated but excluding water and foreign substances.
- (4) "Natural gas" means gas obtained from bore-holes and wells and consisting primarily of hydrocarbons.
- (5) "Casinghead petroleum spirit" means any liquid hydrocarbons obtained from natural gas (before the crude oil from which it is derived has been measured for royalty) by separation or by any chemical or physical process.
- (6) "Her Majesty's dominions" shall be construed as including a reference to all territories under Her Majesty's protection or in which Her Majesty has for the time being jurisdiction.
- (7) "British subject" shall be deemed to include a person under Her Majesty's protection.
- (8) "Colonial Treasurer" means the Colonial Treasurer of the Colony of the Falkland Islands.
- (9) "Colony" means the Colony of the Falkland Islands.

(In witness whereof the Governor and the Licensee have hereunto set their hands and seals the day and year first herein above written).

(In witness whereof the Governor has hereunto set his hand and seal and the Licensee has caused its Common Seal to be hereunto affixed the day and year first herein above written).

SCHEDULE A.

Description of licensed area.

All those lands indicated on the attached plan situate in.....
.....and having a total area of.....
or thereabouts.

SCHEDULE B.

BOND IN RESPECT OF OIL PROSPECTING LICENCE

KNOW ALL MEN BY THESE PRESENTS THAT WE

of

and

of

are held and firmly bound to the Colonial Treasurer of the Colony of the Falkland Islands and his Successors in Office in the sum of..... to be paid to the said Colonial Treasurer and his Successors in Office for which payment to be well and truly made we bind ourselves and each of us our heirs executors and administrators jointly and severally by these presents.

Dated this day of 19.....

WHEREAS by deed of even date herewith and made between of the one part and the said of the other part the sole right and licence was granted to the said to search bore for win and work all or any petroleum lying or being within under or throughout that parcel of land situate..... and having an area of more or less and delineated in the plan attached to the said Deed subject to the terms conditions and covenants therein contained.

AND WHEREAS the said
hath agreed to become surety for the due performance by the said
..... of all and several the covenants matters
and things under the said Deed to be by him performed and done.

Now the condition of the above-written bond or obligation is
such that if the said shall well and
truly observe and perform all and every the covenants and agree-
ments by him to be observed and performed as hereinbefore men-
tioned and shall in a proper and workmanlike manner do all and
every the acts matters and things by him to be done under the said
Deed to the satisfaction of the Governor for the time being of the
said Colony.

THEN the above-written bond or obligation shall be void other-
wise the same shall remain in full force and effect.

SECOND SCHEDULE: PART III

FALKLAND ISLANDS OIL MINING LEASE

THIS DEED made the day of
in the year of Our Lord between His Excellency.....
..... Governor and Commander-in-Chief in and
over the Colony of the Falkland Islands and its Dependencies (here-
inafter referred to as "the Governor" which expression includes the
Officer for the time being Administering the Government of the said
Colony) of the one part and.....
(hereinafter referred to as "the Lessee") of the other part;

WHEREAS the Lessee (in pursuance of the right accorded to
him under the provisions of an oil prospecting licence granted to him
on the has called upon the Governor
to grant him) (in accordance with the conditions laid down in the
Regulations for the time being in force for the granting of oil mining
leases) has applied to the Governor for an oil mining lease in respect
of certain lands specified in Schedule marked "A" hereunder written
hereinafter referred to as "the leased area".

AND WHEREAS the Lessee has entered into a bond in the form
set out in the Schedule marked "B" hereunder written with the
Colonial Treasurer in the sum of conditioned
for the due and faithful carrying out of the provisions contained in
this Deed.

NOW THIS DEED WITNESSETH AS FOLLOWS ---

Demise of petroleum

1. In pursuance of the aforesaid agreements and in considera-
tion of the rents royalties covenants and agreements hereinafter
reserved and contained on the part of the Lessee to be paid and
observed the Governor doth hereby demise unto the Lessee all or any
petroleum lying or being within under or throughout the lands men-
tioned and described in Schedule marked "A" hereunder written and
doth hereby grant the following rights and privileges (but subject to
the restrictions and conditions as to the exercise of the rights and
privileges hereinafter mentioned) to be exercised in connection with
the said petroleum.

TO HOLD EXERCISE AND ENJOY the rights and privileges hereby
granted and demised unto the Lessee from the first day of.....
19..... for the term of thirty years and paying free and clear from all
charges and deductions the rents royalties and sums of money men-
tioned herein.

Rights and privileges.

To bore.

2. The Lessee may enter upon the leased area and search bore for win and work all or any petroleum lying or being within under or throughout the leased area.

To appropriate water.

3. Subject to the approval of the Governor the Lessee may appropriate and use for any purpose connected with the borings or works or refining operations connected therewith, the water upon or within any of the leased area and to collect impound and bore for the same for the purpose of working the said borings or works or carrying out refining operations but so that in the exercise of this right the Lessee shall not deprive any lands settlements shepherds' houses or watering places for horses cattle or sheep of a reasonable supply of water as heretofore accustomed.

To appropriate surface of land.

4. The Lessee may enter upon use and occupy a sufficient part of the leased area adjoining any borings for depositing thereon the products of the said borings and all the earth soil and other substances brought to the surface and for otherwise carrying on the works of the said borings and operations hereunder.

To refine.

5. The Lessee may refine or otherwise treat the aforesaid petroleum in and upon the leased area whether for purposes of sale or otherwise save as hereinafter provided.

To store and carry away petroleum.

6. The Lessee may store take lead pipe and carry away on under or over the leased area the aforesaid petroleum and the products thereof and to dispose of the same at his own will and pleasure save as hereinafter provided.

To erect houses, etc.

7. Subject to the law for the time being in force in the Colony the Lessee may erect set up make and operate in upon and over the leased area offices dwelling houses schools hospitals or other buildings whatsoever clubs recreation grounds and all other sports facilities and amenities sheds engines machinery furnaces erections pipe-lines storage tanks refineries and other installations telephone and power lines railroads and other roads tramways loading places wharves for ships aircraft landing strips reservoirs waterworks sewage works and all other works whatsoever necessary for the exercise of the several rights and privileges hereby granted.

To dig gravel, etc.

8. The Lessee may search for dig get and treat gravel sand clay and stone in any Crown Land within the leased area for the exercise of the several rights and privileges hereby granted but not for sale provided that at the expiration of this lease any excavations shall be fenced or filled in or levelled and left otherwise fit for cultivation and occupation as far as may be reasonably practicable if so required by the Governor.

To enclose.

9. The Lessee may enclose with a fence the surface of any of the leased area subject to the provisions of this lease.

Notice before entering on surface of Crown Lands.

10. (1) Before occupying any Crown Land in the leased area for surface operations the Lessee shall give to the Colonial Secretary fourteen days' previous notice in writing specifying by name or other sufficient designation and by quantity the land proposed to be occupied and the purpose for which the same is required.

(2) The Colonial Secretary shall at any time within fourteen days from the receipt of such notice state his objections if any on grounds of public interest to the proposed site and the validity of such objections in case of dispute shall be determined by reference to arbitration as provided in Clause 67 (Arbitration).

Compensation to occupiers.

11. The Lessee shall before occupying any Crown Land in the leased area for surface operations pay or tender reasonable compensation to the occupiers thereof and shall thereupon be entitled to occupy the land but shall nevertheless be bound to pay the amount of compensation which in case of dispute shall be assessed by reference to arbitration as provided in Clause 67 (Arbitration).

12. This lease shall not prejudice or effect the exercise from time to time of all or any of the following rights that is to say —

Governor's rights.

- (1) The right of the Governor or any person authorised by him in that behalf to enter into and upon the leased area (save and except lands enclosed by a fence as provided in Clause 9 (To enclose) and on which the Lessee is paying a surface rent) and to search for dig work and get any minerals or substances other than petroleum upon or under the leased area and for the purposes aforesaid to sink make erect and use such pits shafts levels drains watercourses tunnels buildings engines or machinery railways wagon-ways and other ways works and conveniences upon through or under the leased area as he shall deem necessary or expedient; provided always that the said right to work for minerals or substances other than petroleum shall be exercised and enjoyed in such a manner as not to hinder or interfere with the rights and privileges of the Lessee under these presents and provided also that fair and proper compensation shall be paid by the Governor for all loss damage or injury which the Lessee may sustain or be put to by reason or in consequence of the exercise of the said right to work for minerals or substances other than petroleum the amount of such compensation to be settled in case of difference by reference to arbitration as provided in Clause 67 (Arbitration).

Governor may work other minerals, etc.

- (2) The right of the Governor or any person authorised by him in that behalf —

Governor may enter land, etc.

- (a) to enter into and upon the leased area;
- (b) to make and maintain upon over or through the leased area such reservoirs pumping stations generating stations waterways roads railways telegraph and telephone lines and pipe-lines or other works as he shall deem necessary or expedient for any purpose and to obtain from and out of the leased area such stone earth and other materials as may be necessary or requisite for making repairing or maintaining the same or any of them;
- (c) at all times to draw water from the leased area and to have free access thereto;
- (d) to pass and repass at all times over and along the leased area for all such purposes as occasion shall require: provided always that the said rights shall be exercised and enjoyed in such a manner as not to hinder or interfere with the rights and licence of the Lessee under these presents: and provided also that fair and proper compensation shall be paid by the Governor for all loss damage or injury (not however including the value of any water stone earth or other materials taken) which the Lessee may sustain or be put to by reason or in consequence of the exercise of the said rights, the amount of such compensation to be settled in case of difference by reference to arbitration as provided in Clause 67 (Arbitration).

- (3) The right of the Governor to grant demise or lease to any person all or any part of the surface of any Crown Lands in the leased area for any purpose so that such grant demise or lease be made subject to the rights of the Lessee hereunder.

Governor may grant or demise Crown Lands to third parties.

13. Notwithstanding the provisions of this lease the Lessee shall not exercise any of the rights and privileges conferred hereby under this lease over any alienated land in the leased area unless and until permission in writing so to do shall first have been obtained by the Lessee from the Governor who shall grant such permission upon proof to his satisfaction by the Lessee that —

Governor's permission required for alienated lands.

- (a) the Lessee has entered into an agreement with the owner or occupier or both as the case may be of the surface of

that land for payment of compensation to such owner or occupier for and in respect of any damage which may be caused or done to the surface of such parcel of land or to any cultivation or buildings thereon by reason of the exercise by the Lessee of all or any of the rights and privileges hereby granted; or

- (b) the Lessee has made reasonable efforts to arrive at such an agreement but has failed to do so through no fault attributable to him; or
- (c) the Lessee is unable to enter into such an agreement by reason of the fact that such registered owner or owners or any of them cannot be found or is or are out of the Colony or is or are incapacitated through infancy or other legal disability.

Certain yearly rent.

14. (1) The Lessee shall pay to the Colonial Treasurer on behalf of the Governor during the term hereby granted, a certain yearly rent, not less than those specified in the table hereunder written for each acre or part of an acre comprised in the said lands—

	TABLE		
	per acre per annum		
	£	s.	d.
In respect of the 1st year of the said term		2	6
In respect of the 2nd year of the said term		3	6
In respect of the 3rd year of the said term		4	6
In respect of the 4th year of the said term		6	0
In respect of the 5th year of the said term		8	0
In respect of the 6th and each subsequent year of the said term		10	0

(2) Payment of the yearly certain rent reserved by this Lease shall be made annually in advance, and the first payment of the sum of _____ in respect of the first year of the term hereby granted (the receipt whereof is hereby acknowledged) shall be made on the execution of this lease.

Royalty.

15. The Lessee shall pay to the Colonial Treasurer on behalf of the Governor within two months after the end of each year of the term hereby granted or any renewal thereof the royalties hereunder specified —

- (1) A royalty of 12½ per centum of the value of all crude oil won and saved and of all casinghead petroleum spirit recovered by the Lessee from the licensed area within each such year ascertained in the manner provided by Clause 18 (Measurement of petroleum). From the quantity so ascertained the Lessee shall be entitled to deduct the quantity ascertained according to a method approved by the Colonial Secretary of any crude oil (or products thereof) or casinghead petroleum spirit produced from the leased area and used during the year by the Lessee for the purpose of carrying on drilling and production operations and pumping to field storage and refineries. The value of crude oil for the purpose of royalty shall be the value on the field of production at field storage tanks. The value of casinghead petroleum spirit for the purpose of royalty shall be the value on the field of production after the deduction of due allowance for the cost to the Lessee of extracting such casinghead petroleum spirit. Both the value of crude oil and that of casinghead petroleum spirit shall be calculated in such manner as may be determined from time to time by agreement with the Governor and the Lessee or in default of such agreement by arbitration in accordance with Clause 67 (Arbitration) hereof:

Provided that if there is any dispute between the parties or failure to agree affecting the amount of the royalty due for any year

the amount of royalty in dispute shall not be payable as aforesaid but shall be payable when the amount is determined by agreement or arbitration as the case may be.

- (2) A royalty of 5 per centum of all natural gas produced and sold from the leased area within each year. The value of natural gas for the purpose of royalty shall be the value on the field of production at field storage tanks and shall be calculated in such manner as may be determined from time to time by agreement with the Governor and the Lessee or in default of such agreement by arbitration in accordance with Clause 67 (Arbitration) hereof.

Provided that if there is any dispute between the parties or failure to agree affecting the amount of the royalty due for any year the amount of royalty in dispute shall not be payable as aforesaid but shall be payable when the amount is determined by agreement or arbitration as the case may be.

- (3) From the amount of royalties payable under the foregoing provisions of this clause in respect of any such year there shall be deducted the amount of the certain yearly rent actually paid in respect of that year under the provisions of Clause 14 (Certain Yearly Rent) hereof.

16. The Lessee shall pay to the Colonial Treasurer on behalf of the Governor the further yearly rent of.....per acre or part of an acre of land in respect of any Crown Lands in the leased area the surface whereof shall be actually occupied by the Lessee for any of the purposes of this lease the said rent to be paid by annual payments on the first day of January in every year.

Surface rents of Crown Lands.

17. (1) Upon the determination by the Lessee of the term hereby granted or any renewal thereof or upon the surrender by him of the rights granted by this lease in respect of any part or parts of the leased area the Governor will refund to the Lessee an apportioned part of any certain yearly rent paid by the Lessee in advance in respect of the leased area or any such part or parts thereof for a period the whole of which has not expired at the date of such determination or surrender.

Refund of certain yearly rent on determination or surrender.

(2) Upon the release by the Lessee of any lands or areas under the provisions of Clause 26 (Release of lands included by inadvertence) the Governor will refund to the Lessee an apportioned part of any certain yearly rent paid by the Lessee during the term hereby granted in respect of the leased area:

Provided that in respect of any year the amount remaining of the certain yearly rent after the said refund shall not be less than the amount of royalties payable in respect of any such year under the provisions of sub-clauses (1), (2) and (3) of Clause 15 (Royalties).

18. (1) The Lessee shall measure or weigh by a method or methods customarily used in good oilfield practice and from time to time approved by the Colonial Secretary —

Measurement of petroleum.

- (a) all crude oil won and saved and casinghead petroleum spirit recovered from the leased area; and
(b) all natural gas sold from the leased area; during the term hereby granted or any renewal thereof.

(2) The Colonial Secretary or any officer authorised by him shall at all times during the said term or any renewal thereof be entitled to be present whenever such measurement takes place.

(3) If any measuring appliance shall at any time be found to be false or unjust the same shall if the Colonial Secretary so determines after considering any representations in writing made by the Lessee be deemed to have existed in that condition during the period of three months prior to the discovery thereof or the period elapsed since the last occasion upon which the same was examined or tested

whichever shall be the less, and accordingly the royalties payable in respect of such period shall be adjusted.

(4) The Lessee shall not make any alteration in the method or methods of measurement used by him or any appliances used for that purpose without first informing the Colonial Secretary, and the Colonial Secretary may in any case require that no alteration shall be made save in the presence of an officer authorised by the Colonial Secretary.

Keeping of accounts.

19. (1) The Lessee shall at all times during the term hereby granted or any renewal thereof keep full and correct accounts in a form from time to time approved by the Colonial Secretary which shall contain accurate entries of —

- (a) the quantity of crude oil won and saved from the leased area; and
- (b) the method and results of tests made on the crude oil; and
- (c) the quantity of crude oil refined and the products recovered therefrom; and
- (d) the quantity of crude oil otherwise disposed of and the manner of its disposal; and
- (e) the quantity of natural gas sold and the price at which it has been sold; and
- (f) the quantity in cubic feet of natural gas treated and the quantity of casinghead petroleum spirit recovered; and
- (g) the quantity of crude oil and the products thereof or casinghead petroleum spirit used for drilling or production operations or pumping to field storage and refineries; and
- (h) such further particulars and statistics as the Colonial Secretary may from time to time reasonably require.

(2) The Lessee shall within two months after the end of each year of the term hereby granted or any renewal thereof deliver to the Colonial Secretary an abstract in a form from time to time approved by the Colonial Secretary of the said accounts for each such year together with a statement in the like form of all royalties payable in respect of each such year.

Establishment of boundary marks.

20. So far as he lawfully may the Lessee shall unless the Colonial Secretary otherwise determines at his own expense forthwith erect and at all times maintain and keep in repair substantial boundary marks of brick stone or concrete not less than one foot high at every angle or corner of the boundary line of the leased area. Such boundary marks shall be referenced by survey to at least two readily identifiable points in such a manner that the boundaries of the leased area can be accurately traced on the ground. The Lessee shall ensure that the area demarcated on the ground shall conform as closely as possible to the area delineated on the plan hereto annexed.

Refinery.

21. (1) As soon as the output of crude oil of a quality suitable for refining obtained from the area or areas from time to time held under oil mining lease by the Lessee in the Colony amounts in the aggregate to 500,000 tons per annum assessed on the average daily production over a period of not less than six consecutive calendar months, and adequate reserves of crude oil have been proved to ensure production in accordance with the methods and practice customarily used in good oilfield practice at that rate for a substantial period the Lessee shall consider with the Governor the economic feasibility of the erection of a refinery capable —

- (a) of supplying to the extent possible with the crude oil production available the requirements of the Colony of gasoline of the general quality in current use for motor vehicles and fuel oil; and
- (b) of so treating the said crude oil as to produce oil products to comply with the specifications of the Governor:

Provided that the said crude oil be of a suitable kind and quality for this purpose. Where, after consideration of the matter by the Lessee and the Governor as aforesaid the erection of a refinery is agreed upon the Lessee shall complete the refinery and put and maintain it in efficient working order with due diligence and dispatch, but in any event within five years from the date on which such erection is so agreed upon. The Lessee shall if required by the Governor and if in the opinion of the parties it is economically feasible so to do at intervals of not less than three years make such additions to this refinery as may be requisite for maintaining capacity for meeting the said requirements of the Colony to the extent possible with the crude oil production available.

(2) The site of such refinery and all tanks for the storage of petroleum shall be selected by the Lessee with the previous written approval of the Governor such approval not to be unreasonably withheld due regard being had to the commercial interests of the undertaking:

Provided that the site of such refinery shall be submitted for the approval of the Governor within six months from the date on which the erection of a refinery shall have been agreed upon.

22. The Lessee shall before commencing any operations in the leased area furnish to the Colonial Secretary the name and address of the Manager resident in the locality of the leased area under whose supervision such operations are to be carried on. Any notice which the Governor or any person authorised by him is in accordance with the terms of this lease required or entitled to serve upon the Lessee shall be sufficiently served if the same shall be delivered or sent by post to such Manager at such address.

Local Resident Manager.

23. The Lessee shall furnish to the Colonial Secretary copies of all conveyances leases assignments agreements and deeds relating to the leased area or any estate or interest therein and to which the Lessee is a party or under which the Lessee either directly or indirectly obtains any benefit or incurs any liability.

Lessee to furnish copies of agreements with surface owners.

24. The Lessee shall make and pay reasonable satisfaction and compensation for all damage or injury to the property and rights of other parties which may be done by him, his agents and servants in the exercise of the rights and licence conferred by this lease.

Compensation.

25. The Lessee shall at all times indemnify and keep harmless the Governor and every Officer of the Government of the Colony against all actions, costs, charges, claims and demands whatsoever which may be made or brought by any third party in relation to or in connection with this lease or any matter or thing done or purported to be done in pursuance thereof by the Lessee his servants or agents.

Indemnity against third party claims.

26. In the event of the inclusion by inadvertence in the Schedule marked "A" hereunder of lands or areas over which it may subsequently be proved that the Government are not entitled to the oil rights or of lands or areas in respect of which the oil rights have already been granted to other individuals or companies the Lessee shall immediately release to the Governor any such lands or areas when required to do so by the Colonial Secretary.

Release of lands included by inadvertence.

27. The Lessee shall not cultivate or use the leased area in any manner save for the purpose of this lease and the rights hereby granted.

Lessee not to cultivate, etc.

28. Notwithstanding the rights conferred on the Lessee under this lease, the Governor shall have power at any time to require that such part or parts of the leased area as may from time to time be required for any public purpose whatsoever may be so used provided that during the subsistence of this lease the area or areas so used shall not exceed in all.....per centum of the leased area and provided further that the use of any area or areas upon which any

Use of lands for public purposes.

active operations such as well-drilling, road construction, waterworks or other work relating to the winning of petroleum have previously been commenced or are in progress shall not be required but in lieu thereof an equal area or areas upon which active operations as aforementioned have not already been commenced or are not at the time being in progress shall be used provided that such alternative area or areas are in the opinion of the Governor suitable for the public purposes aforementioned and provided further that the rights of the Lessee to enter and occupy any part of the leased area may be exercised in so far as this does not in the opinion of the Governor frustrate the public purposes for which the area is required.

Advertisements, prospectuses.

29. (1) No statement shall be made either in any notice advertisement prospectus or other document issued by or to the knowledge of the Lessee claiming or suggesting whether expressly or by implicating that the Governor or any Government Department or any person or body acting on behalf of the Governor has or have formed or expressed any opinion that the leased area is from their geological formation or otherwise likely to contain petroleum.

(2) The foregoing provisions of this clause or a statement to the effect thereof shall be included in or endorsed on any prospectus, statement in lieu of prospectus, notice, circular advertisement or other invitation issued by or to the knowledge of the Lessee offering to the public for subscription or purchase any shares or debentures of a company or intended company.

Notice of fresh issues of capital.

30. The Lessee shall report to the Governor particulars of any fresh issues of capital which may from time to time be made by him and any alteration which may be made in the Memorandum or Articles of Association or in the constitution of the Lessee.

Consent to assignment.

31. The Lessee shall not grant or assign any interest under this lease nor part with the possession of any of the rights hereby granted to any person or persons whomsoever without the previous consent in writing of the Governor, which shall not be unreasonably withheld. The Governor may (without prejudice to his right to make such consent subject to any conditions he may think fit) require as a condition of giving such consent the assignee or assignees at his or their expense to execute a deed of covenant to observe and perform the covenants and conditions on the part of the Lessee in these presents contained.

Assignment of lease.

32. The Lessee shall not assign or attempt to assign the rights granted by this lease to any person other than a British subject or a company incorporated in the Colony or in some other part of Her Majesty's dominions:

Provided that if in the case of a proposal to assign the rights to a company incorporated in the United States of America the Lessee can show to the satisfaction of the Governor that the foregoing provisions of this clause would result in the Lessee suffering substantial financial loss in respect of taxation the Governor may by writing under his hand absolve the Lessee from complying with the provisions of this clause.

Lessee ceasing to be a British subject.

33. If the Lessee shall cease to be a British subject or a company incorporated in the Colony or in some other part of Her Majesty's dominions the Lessee shall forthwith inform the Governor and apply to him for his consent to an assignment of the rights granted by this lease in accordance with Clauses 31 (Consent to assignment) and 32 (Assignment of lease) and in the event of the Lessee failing to obtain such consent within such time as the Governor may in his discretion appoint, the Governor may revoke this lease. The revocation of this lease in pursuance of the foregoing provisions of this clause shall be subject and without prejudice to any obligation or liability imposed by or incurred under the terms and conditions hereof.

34. If the Lessee being a company shall be or become controlled directly or indirectly by an alien or a company incorporated outside Her Majesty's dominions or if the Lessee shall with the consent in writing of the Governor assign the rights granted by this lease in respect of the leased area or any part thereof to a company controlled directly or indirectly by an alien or by a company incorporated outside Her Majesty's dominions then and in any such case—

Control by an alien.

- (a) (Some) of the Directors and the Chief Local Representative shall be British subjects;
- (b) at all times during the term hereby granted or any renewal thereof a reasonable number of the persons employed by the Lessee in or about the leased area in connection with the exercise of the rights granted by this lease shall be British subjects.

35. This lease shall be determined if the Lessee shall be or become controlled directly or indirectly by a national of or by a company incorporated in any country the laws and customs of which do not permit British subjects or companies incorporated in Her Majesty's dominions or companies incorporated in that country controlled directly or indirectly by British subjects or companies incorporated in Her Majesty's dominions to acquire hold and operate petroleum concessions on conditions which in the opinion of Her Majesty's principal Secretary of State for the Colonies are reasonably comparable with the conditions upon which such rights are granted to nationals of that country with the addition of conditions corresponding to those imposed by this clause and Clause 34 (Control by an alien).

Reciprocity.

36. The Lessee shall exercise the rights and licence hereby granted in such a manner as to offer no unnecessary or reasonably avoidable obstruction or interruption to the development and working within the leased area or lands adjacent thereto of any minerals not included in this lease and shall at all times afford to the Governor or his representative and to the holders of prospecting licences or mining leases in respect of any such minerals or any minerals within any lands adjacent to the leased area reasonable means of access and safe and convenient passage upon and across the leased area to such minerals for the purpose of getting working developing and carrying away the same.

Lessee not to obstruct working of other minerals.

37. No bore-hole or well shall except with the consent in writing of the Colonial Secretary be drilled or made within a distance of 400 feet from the boundaries of the leased area.

Distance of wells from boundaries.

38. No boring operations or working shall be carried on or allowed by the Lessee in the leased area at any point within 100 yards of any railway reservoir canal or other public works or any building or inhabited site on or near the leased area except with the previous permission in writing of the Governor or of any officer authorised by him in this behalf and subject to any instructions restrictions and conditions which may be attached to such permission by the officer granting the same.

No mining operations to be carried on near public works.

39. (1) As soon as the site of any bore-holes or well has been decided the Lessee shall notify the Colonial Secretary in writing of the situation thereof and the same shall be described by a certain number in the plans and records which the Lessee is required to keep under the provisions of this lease. The Lessee shall notify the Colonial Secretary of any change of the number of any such bore-hole or well which may be made.

Notice of the site and commencement of bore-holes.

(2) No bore-hole or well shall be commenced and no bore-hole or well shall be recommenced after work has been discontinued thereat for more than six months unless fourteen clear days' notice in writing shall first have been given to the Colonial Secretary:

Provided that the provisions of this sub-clause shall not apply to cleaning out operations in a producing well.

Abandonment and
plugging of bore-holes.

40. (1) No bore-hole or well shall be abandoned and no cemented string or other permanent form of casing shall be withdrawn from any bore-hole or well which it is proposed to abandon without the prior consent in writing of the Colonial Secretary, such consent not to be unreasonably withheld in the case of bore-holes or wells which have become or are unproductive.

(2) Every bore-hole or well which the Lessee intends to abandon shall, unless the Colonial Secretary otherwise determines, be so securely plugged by the Lessee as to prevent ingress and egress of water in and from any portion of the strata bored through.

(3) The Colonial Secretary may in any case require that no bore-hole or well shall be plugged or any works be executed for that purpose save in the presence of an officer authorised by him.

Delivering up of produc-
tive bore-holes or wells
in good order.

41. Within two months after the expiration or sooner determination of this lease the Lessee shall deliver up to the Governor in good order repair and condition and fit for further working all productive bore-holes or wells (unless ordered by the Colonial Secretary to plug them as provided in the next succeeding clause hereof and except such bore-holes and wells as shall have been previously abandoned with the consent of the Colonial Secretary) which shall have been made by the Lessee under the right or licence in that behalf hereinbefore contained, together with all casings and other appurtenances to such bore-holes or wells below surface level and which cannot be moved without causing injury to the said bore-holes and wells.

Plugging of bore-holes
on determination of
lease.

42. Within two months after the expiration or sooner determination of this lease the Lessee shall if required so to do by the Colonial Secretary plug all bore-holes and wells as provided in Clause 40 (Abandonment and plugging of bore-holes).

Health and safety of
workers.

43. The Lessee shall comply with any instructions from time to time given by the Colonial Secretary in writing for securing the health and safety of persons employed in or about the leased area.

Working obligations.

44. The Lessee shall develop and produce the oil resources of the leased area in accordance with good oilfield practice in such a way as to secure a reasonable and uninterrupted rate of output.

Avoidance of harmful
methods of working.

45. (1) The Lessee shall maintain all apparatus and appliances and all bore-holes and wells capable of producing petroleum in good repair and condition and shall execute all operations in or in connection with the leased area in a proper and workmanlike manner in accordance with methods and practice customarily used in good oilfield practice and without prejudice to the generality of the foregoing provision the Lessee shall take all steps practicable in order —

- (a) to control the flow and to prevent the escape or waste of petroleum discovered in or obtained from the leased area; and
- (b) to conserve the leased area for productive operations; and
- (c) to prevent damage to adjoining petroleum bearing strata; and
- (d) to prevent the entrance of water through bore-holes and walls to petroleum bearing strata; and
- (e) to prevent the escape of petroleum into any waterwell spring stream river lake reservoir estuary or harbour; and
- (f) to cause as little damage as possible to the surface of the leased area and to the trees crops buildings structures and other property thereon.

(2) The Lessee shall comply with any instructions from time to time given by the Colonial Secretary in writing relating to any of the matters set out in sub-clause (1) hereof. If the Lessee objects to any such instruction on the ground that it is unreasonable he may

within fourteen days from the date upon which the same was given refer the matter to arbitration in manner provided by Clause 67 (Arbitration).

46. The Lessee shall use methods and practice customarily used in good oilfield practice for confining the petroleum obtained from the leased area in tanks gasholders pipes or pipe-lines or other receptacles constructed for that purpose. No petroleum shall, save as a temporary measure during an emergency, be placed or kept in an earthen reservoir.

Provision of storage tanks, pipes, pipe-lines.

47. The Lessee shall drain all waste oil, salt water and refuse from tanks gasholders bore-holes and wells into proper receptacles constructed and maintained by him for that purpose at a safe distance from such tanks gasholders bore-holes and wells and from any buildings or structures whether situate within the leased area or not and shall dispose of such waste oil salt water and refuse in manner from time to time approved by the Colonial Secretary.

Disposal of waste oil, salt water and refuse.

48. The Lessee shall keep accurate records in a form from time to time approved by the Colonial Secretary of the drilling deepening plugging or abandonment of all bore-holes and wells and of any alterations to the casing thereof. A log of all bore-holes and wells shall be kept in a form from time to time approved by the Colonial Secretary containing particulars of the following matters —

Lessee to keep records of bore-holes.

- (a) the strata and subsoil through which the bore-holes or well was drilled; and
- (b) the casing inserted in any bore-hole or well and any alteration to such casing; and
- (c) any petroleum water workable minerals or mine workings encountered; and
- (d) such other matters as the Colonial Secretary may from time to time require.

The Lessee shall deliver copies of the said records and log to the Colonial Secretary as and when required.

49. The Lessee shall as far as reasonably practicable, correctly label and preserve for reference for a period of twelve months characteristic samples of the strata or water encountered in any bore-hole or well and samples of any petroleum discovered in the leased area. And the Colonial Secretary or his representative shall have access to such samples at all reasonable times and shall be entitled to require that representative specimens not exceeding one-half of any such sample be delivered to him and to retain any specimen so delivered.

Lessee to keep samples of strata petroleum and water.

50. (1) The Lessee shall furnish to the Colonial Secretary quarterly during the term hereby granted or any renewal thereof a record in a form from time to time approved by the Colonial Secretary of the progress of his operations in the leased area. Such record shall contain —

Plans and records.

- (a) a statement of the depth drilled in each bore-hole or well; and
- (b) a statement of any petroleum, water, workable minerals or mine workings encountered in the course of the said operations; and
- (c) a statement of all crude oil produced and casinghead petroleum spirit recovered; and
- (d) a statement of the areas in which any geological or geophysical work has been carried out.

(2) Within two months after the end of each year comprised in the term hereby granted or any renewal thereof the Lessee shall furnish to the Colonial Secretary a record in a form from time to time approved by him of the operations conducted in the leased area

during each such year, together with a plan upon a scale approved by the Colonial Secretary showing the situation of all bore-holes or wells and indicating all development and other works executed by him in connection with searching, boring for and getting petroleum.

(3) The Lessee shall also keep accurate geological plans maps and records relating to the leased area.

(4) The Lessee shall furnish to the Colonial Secretary such plans and information as to the progress of operations in the leased area as the Colonial Secretary may from time to time reasonably require.

Reports confidential.

51. All logs records plans maps accounts and information which the Lessee is or may be from time to time required to furnish under the provisions of this lease shall be supplied at the expense of the Lessee and shall (except with the consent in writing of the Lessee which shall not be unreasonably withheld) be treated by the Colonial Secretary as confidential. The Colonial Secretary shall nevertheless be entitled at any time to make use of any information received from the Lessee for the purpose of preparing and publishing aggregated returns and general reports on the extent of oil prospecting or oil mining operations in the Colony and for the purposes of any arbitration or litigation between the Governor and the Lessee.

Employment of British subjects.

52. The Lessee shall endeavour to employ as many British subjects as possible and undertakes that posts which can be efficiently filled by such persons will not be filled by other persons.

Training of British subjects.

53. The Lessee shall provide for the training of British subjects in order to enable them to qualify for technical and administrative posts in the Lessee's operations in the Colony.

For quiet enjoyment.

54. The Lessee paying the rents and royalties hereby reserved and observing and performing the restrictions and conditions herein contained and on his part to be observed and performed, shall and may peaceably and quietly hold and enjoy the rights and privileges hereby granted for and during the term hereby granted without any lawful interruption from or by the Governor or any person rightfully claiming from or under him.

Renewal.

55. The Lessee having paid the several rents and royalties due and having observed and performed the restrictions and conditions herein contained shall be entitled, on giving to the Governor not less than twelve months' previous notice in writing in that behalf not more than two years nor less than one year before the termination of the term hereby granted, to a renewal of this lease in respect of the whole of the leased area or any part thereof which complies with the Regulations for the time being in force for a further term of thirty years from the expiration of the said term upon the terms and conditions contained in the Regulations for the time being in force subject to such modifications or exclusions as the Governor may in his discretion determine.

Right of Lessee to determine lease.

56. Without prejudice to any obligation or liability imposed by or incurred under this lease the Lessee may at any time during the term hereby granted or any renewal thereof determine this lease by giving to the Governor not less than twelve months' previous notice in writing to that effect.

Right of Lessee to abandon portions of the leased area.

57. Without prejudice to any obligation or liability imposed by or incurred under this lease the Lessee shall be entitled at any time during the term hereby granted or any renewal thereof by giving six months' notice in writing to the Governor to surrender the rights granted by this lease in respect of any part or parts of the leased area:

Provided that —

- (a) the part of the leased area in respect of which the said rights are retained shall comply with the Regulations for the time

- being in force as to the shape and size of areas in respect of which an oil mining lease may be granted; and
- (b) the part of the leased area in respect of which the said rights are surrendered shall either be an area in respect of which an oil mining lease could be granted in accordance with the Regulations for the time being in force or be of such shape and size as the Governor may determine.

58. Any person or persons authorised by the Colonial Secretary shall be entitled at all reasonable times to enter into and upon any land for the time being possessed or occupied by the Lessee in the leased area for the purposes hereinafter mentioned —

Power to inspect plant records, accounts.

- (a) to examine the bore-holes wells plant appliances buildings and works made or executed by the Lessee in pursuance of this lease and the state of repair and condition thereof; and
- (b) to inspect and check the accuracy of the weighing or measuring appliances weights measurements logs records plans and maps which the Lessee is required to keep or make in accordance with the provisions of this lease; and
- (c) to inspect and make abstracts or copies of any logs records plans maps or accounts which the Lessee is required to keep or make in accordance with the provisions of this lease; and
- (d) to inspect the samples of strata petroleum or water which the Lessee is required to keep in accordance with the provisions of this lease; and
- (e) to execute any works which the Colonial Secretary may be entitled to execute in accordance with the provisions of this lease.

59. If at any time during the term hereby granted or any renewal thereof the Governor shall be satisfied that the leased area or any part thereof form part of a single geological petroleum structure or petroleum field (hereinafter referred to as "an oil field") in respect of other parts of which other oil mining leases are then in force and the Governor shall consider that it is in the interest of the Colony in order to secure the maximum ultimate recovery of petroleum and to avoid unnecessary competitive drilling that the oil field should be worked and developed as a unit in co-operation by all the persons, including the Lessee, whose leases extend to or include any part thereof, the following provisions shall apply;

Unit development.

- (1) (a) The Lessee shall upon being so required by notice in writing by the Governor co-operate with such other persons, being persons holding oil mining leases in respect of any part or parts of the oil field (hereinafter referred to as "the other lessees"), as may be specified in the said notice in the preparation of a scheme (hereinafter referred to as "a development scheme") for the working and development of the oil field as a unit by the Lessee and the other lessees in co-operation, and shall jointly with the other lessees, submit such scheme for the approval of the Governor.
- (b) The said notice shall also contain a description by reference to a map of the area or areas in respect of which the Governor requires a development scheme to be submitted and shall state the period within which such scheme is required to be submitted for approval by the Governor.

(2) If a development scheme shall not be submitted to the Governor within the period limited in that behalf by the said notice, or, if a development scheme submitted in pursuance of the foregoing provisions of this clause shall not be approved by the Governor, the Governor shall himself prepare a development scheme which shall be fair and equitable to the Lessee and the other lessees and the Lessee shall perform all the terms and conditions thereof.

(3) If the Lessee shall object to any such development scheme prepared by the Governor he may within 28 days from the date on which notice in writing of the said scheme shall have been given to him by the Governor refer the matter to arbitration in accordance with the provisions of Clause 67 (Arbitration).

Governor's right of pre-emption.

60. In the event of a state of national emergency or war (the existence of which the Governor shall be the sole judge):

(1) The Governor shall have the right of pre-emption of all crude oil gotten under this lease and of all the products thereof and shall have the right to require the Lessee to the extent of any refinery capacity he may have in the Colony in pursuance of Clause 21 (Refinery) to produce oil products to comply with the specifications of the Governor provided that the said crude oil be of a suitable kind and quality for this purpose.

(2) The Lessee shall use his utmost endeavours to increase so far as reasonably possible with existing facilities the supply of oil and/or products thereof for the Government to the extent required by the Governor.

(3) The Lessee shall with every reasonable expedition do his utmost to deliver all oil or products of oil purchased by the Governor under his said right of pre-emption in the quantities at the time and in the manner required by the Governor at a convenient place of shipment or at a place of storage in the Colony to be determined by the Governor whether belonging to the Governor or otherwise.

(4) The price to be paid for all oil or products of the refining or treatment of oil taken in pre-emption by the Governor shall be either —

- (a) as specified in a separate agreement; or
- (b) if no such agreement shall have been entered into prior to the exercise of the right of pre-emption, a fair price for the time being at the point of delivery as the same shall be settled by agreement between the Governor and the Lessee or in default of such agreement by arbitration in manner provided by Clause 67.

To assist in arriving at a fair price at the point of delivery the Lessee shall furnish for the confidential information of the Governor, if so required, particulars of the quantities, descriptions and prices of oil or products sold to other customers and of charters or contracts entered into for carriage and shall exhibit to the Governor original or authenticated copies of contracts or charter parties entered into for the sale or carriage of such oil or products.

(5) The Governor shall be at liberty to take control of the works plant and premises of the Lessee in the Colony and in such event the Lessee shall conform to and obey all directions issued by the Governor or on his behalf. Compensation shall be paid to the Lessee for any loss or damage that may be proved to have been sustained by the Lessee by reason of the exercise by the Governor of the powers conferred by this sub-clause. Any such compensation shall be settled by agreement between the Governor and the Lessee or, in default of agreement, by arbitration in manner provided by Clause 67.

Power to execute works.

61. If the Lessee shall at any time fail to perform the obligations imposed by any of the undermentioned clauses of this lease —

- (a) Clause 18 (Measurement of petroleum);
- (b) Clause 40 (Abandonment and plugging of bore-holes);
- (c) Clause 41 (Delivering up of productive bore-holes and wells in good order);
- (d) Clause 42 (Plugging of bore-holes on determination of Lease etc.);
- (e) Clause 43 (Health and safety of workers);

- (f) Clause 45 (1) (Avoidance of harmful methods of working);
- (g) Clause 46 (Provision of storage tanks, pipes, pipe-lines);
- (h) Clause 47 (Disposal of waste oil, salt water and refuse);

then and in any such case the Colonial Secretary shall be entitled after giving to the Lessee reasonable notice in writing of such his intention to execute any works which in the opinion of the Colonial Secretary or his agents may be necessary to secure the performance of the said obligations or any of them and to recover the costs and expenses of so doing from the Lessee.

62. If and whenever any of the rents or royalties reserved by this lease or any part thereof respectively shall be in arrear or unpaid for the space of two calendar months next after any of the days whereon the same ought to be paid (whether the same shall have been legally demanded or not) then and so often as the same may happen the Colonial Secretary may (as an additional remedy and without prejudice to the power of distress and other the rights and remedies to which he would be entitled) enter into and upon any land which shall for the time being be possessed or occupied by the Lessee for the purposes of this lease or the exercise of any of the rights thereby granted and may seize and distrain and sell as landlords may do for rent in arrear all or any of the stocks of petroleum and products thereof engines machinery tools implements chattels and effects belonging to the Lessee which shall be found in or upon the land so entered upon and out of the moneys arising from the sale of such distress may retain and pay all the arrears of the said rents and royalties and also the costs and expenses incident to any such distress and sale rendering the surplus (if any) to the Lessee.

Rights of distress.

63. If and whenever the rents and royalties reserved by this lease or any part thereof shall be in arrear for the space of six calendar months next after any of the days whereon the same ought to have been paid or if there shall be any breach or non-observance by the Lessee of any of the terms and conditions of this lease or if the Lessee shall become bankrupt or make or enter into any arrangement or composition with his creditors or if where the Lessee is a company a Receiver shall be appointed or the company shall enter into liquidation whether compulsory or voluntary (except a voluntary liquidation of a solvent company for the purpose of reconstruction) or if the Lessee shall fail to perform and observe the terms and conditions of any development scheme prepared in accordance with the provisions of Clause 59 (Unit development) then and in any such case the Governor may revoke this lease and thereupon the same and all the rights hereby granted shall cease and determine but subject nevertheless and without prejudice to any obligation or liability imposed by or incurred under this lease. Provided always that save as to the non-payment of rents or royalties the aforesaid power shall not be exercisable unless and until notice has been given to the Lessee specifying the particular breach complained of and if the breach is capable of remedy requiring the Lessee to remedy the breach and in any case requiring the Lessee to make compensation in money for the breach and the Lessee fails within a reasonable time thereafter to remedy the breach if it is capable of remedy and to make reasonable compensation in money to the satisfaction of the Governor for the breach.

Power of revocation.

64. Subject to the provisions of Clause 41 (Delivering up of productive bore-holes and wells in good order) and to the rights of surface owners or others the Lessee may provided that all rents royalties and other impositions payable by him by virtue of these presents have been paid and that all the covenants and conditions herein contained have been observed and performed at any time or times within six calendar months after the determination of this lease whether by effluxion of time or otherwise enter into and upon the leased area or any part thereof for the purpose of taking down removing and disposing of for his own use and benefit all or any of

Power to Lessee to remove plant.

the buildings works railways pipe-lines machinery utensils implements articles and things set up and used or employed by him in or about the leased area which the Governor shall not have elected to purchase under the provisions of Clause 65 (Power to Governor to purchase plant) (except buildings and erections of brick stone or concrete) making reasonable compensation for all damage done to the leased area by such removal.

Power to Governor to purchase plant.

65. If at the expiration or sooner determination of this lease the Governor shall be desirous of purchasing all or any of the buildings works railways pipe-lines machinery utensils implements articles or things constructed set up or used or employed by the Lessee in or about the leased area and shall signify such his desire by notice in writing to the Lessee six calendar months at least before the expiration of this lease (or if this lease shall be determined under the power of revocation hereinbefore contained at any time within three calendar months after the determination of this lease) the Lessee shall sell to the Governor the articles and things specified in such notice at a price which failing agreement shall be fixed by arbitration as provided in Clause 67 (Arbitration).

Force majeure.

66. (1) Failure on the part of the Lessee to fulfil any of the terms and conditions of this lease shall not give the Governor any claim against the Lessee or be deemed a breach of this lease in so far as such failure arises from *force majeure* and if through *force majeure* the fulfilment by the Lessee of any of the terms and conditions of this lease be delayed the period of such delay shall be added to the periods fixed by this lease.

(2) In this clause the expression "*force majeure*" includes the act of God war insurrection riot civil commotion tide storm tidal wave flood lightning explosion fire earthquake and any other happening which the Lessee could not reasonably prevent or control.

Arbitration.

67. If at any time during the continuance of this lease or after the determination thereof any question or dispute shall arise regarding this lease or any matter or thing connected therewith or the powers duties or liabilities of the Lessee hereunder or the amount or payment of any rent or royalty then and in all such cases the matter in difference shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1950 or any Ordinance or Law amending or replacing the same for the time being in force:

Provided that any reference to arbitration arising out of an agreement between the parties, shall be to two arbitrators, one to be appointed by each party, unless a contrary intention is expressed in the agreement.

Marginal notes.

68. The marginal notes are for convenience only and do not form part of this lease.

Interpretation.

69. For the purpose of this lease —

- (1) "LESSEE" means a person to whom an oil mining lease is granted his successors in title and the persons deriving title under him.
- (2) "PETROLEUM" includes any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.
- (3) "CRUDE OIL" means oil in its natural state before the same has been refined or otherwise treated but excluding water and foreign substances.
- (4) "NATURAL GAS" means gas obtained from bore-holes and wells and consisting primarily of hydrocarbons.

- (5) "CASINGHEAD PETROLEUM SPIRIT" means any liquid hydrocarbons obtained from natural gas (before the crude oil from which it is derived has been measured for royalty) by separation or by any chemical or physical process.
- (6) "HER MAJESTY'S DOMINIONS" shall be construed as including a reference to all territories under Her Majesty's protection or in which Her Majesty has for the time being jurisdiction.
- (7) "BRITISH SUBJECT" shall be deemed to include a person under Her Majesty's protection.
- (8) "COLONIAL TREASURER" means the Colonial Treasurer of the Falkland Islands or his successor in office.
- (9) "COLONY" means the Colony of the Falkland Islands.

(In witness whereof the Governor has hereunto set his hand and seal and the Lessee has caused its Common Seal to be hereunto affixed the day and year first herein above written.)

SCHEDULE A.

Description of leased area.

All those lands indicated in the attached plan situated in.....
 and having an area of or
 thereabouts.

SCHEDULE B.

BOND IN RESPECT OF OIL MINING LEASE

KNOW ALL MEN BY THESE PRESENTS THAT WE

of
 and
 of

are held and firmly bound to the Colonial Treasurer of the Colony of the Falkland Islands and his successors in Office in the sum of to be paid to the said Colonial Treasurer and his Successors in Office for which payment to be well and truly made we bind ourselves and each of us our heirs executors and administrators jointly and severally by these presents.

Dated this.....day of.....19.....

WHEREAS by deed of even date herewith and made betweenof the one part and the said.....
 of the other part all or any petroleum lying or being within under or throughout those lands lying and being.....
 and containing an area of.....or thereabouts and delineated in the plan attached to the said Deed was demised unto the said.....subject to the terms conditions and covenants therein contained.

AND WHEREAS the said.....hath agreed to become surety for the due performance by the said.....
 of all and several the covenants matters and things under the said Deed to be by him performed and done.

Now the condition of the above-written bond or obligation in such that if the said.....shall well and truly observe and perform all and every the covenants and agreements by him to be observed and performed as hereinbefore mentioned and shall in a proper and workmanlike manner do all and every the acts matters and things by him to be done under the said Deed to the satisfaction of the Governor for the time being of the said Colony.

THEN the above-written bond or obligation shall be void otherwise the same shall remain in full force and effect.

Ref: 2293/II.

Colonial Secretary's Office,
Stanley, Falkland Islands.

60

9th September, 1964.

Dear Sir,

59 Thank you for your letter 238C/SG/44 of the 4th May, 1964, concerning Mineral Resources.

I am afraid no new information has been produced or published concerning these Islands in the last few years.

Having so far lacked any exploitable mineral deposits, we have no taxation, statistical data or planning papers to offer you.

On the prospects of oil in the Falkland Islands the Overseas Geological Surveys have commented as follows -

"The Falkland Islands show the same general type of Permo-Carboniferous sediments as are present in eastern Argentina (and also, of course, in the Cape Province of S. Africa), but how closely they are related is not known. The Comodoro Rivadavia oilfield of the Territory of Chubut in Southern Argentina has been known for many years and some important discoveries have been made in the last few years on the eastern seaboard of Tierra del Fuego (Argentina part), and also in the western part, belonging to Chile.

The Falkland Islands may therefore be regarded as a prospect, at least, and oil exploitation encouraged. No exploration wells have been drilled on the island, as far as I am aware. The Continental Shelf area may also be regarded as having possibilities but there may be physical difficulties here (especially adverse weather conditions) which may render this type of work unattractive".

Mining and Mineral Oil Regulations have now been promulgated and if these should be of any use to you I will certainly send you a copy.

Yours faithfully,

(Sgd.) W.H. THOMPSON

COLONIAL SECRETARY

Shri G.N. Dutt,
Superintending Geologist,
Publication Division,
Geological Survey of India,
29, Chowringhee Road,
Calcutta - 16,
INDIA.

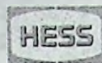
WHE/IM.

BU 16 10 64
(49)

61

HESS EXPLORATION COMPANY

A DIVISION OF HESS OIL AND CHEMICAL CORPORATION
1020 NATIONAL BANK OF COMMERCE BUILDING
NEW ORLEANS, LOUISIANA 70112



AREA CODE 504
PHONE: 524-4380
524-4389

REPLY TO:
1070 PETROLEUM CLUB BUILDING
DENVER, COLORADO 80202
AREA CODE 303
PHONE: 244-8021

September 16, 1964

Mr. W. H. Thompson
Colonial Secretary's Office
Stanley, Falkland Islands



Dear Mr. Thompson:

Vol I
b.c
Thank you very much indeed for your letter of August 25 informing me of the promulgation of the Falkland Islands Mining Regulations. Attached please find a cashiers' check in the amount of \$3.30 which should cover the 20 shillings, or \$2.80, for the printed material and .50 for postage to ship the material by air mail.

Very truly yours,

HESS EXPLORATION COMPANY

Jack Grynberg
Jack Grynberg

JG/ew
Encl.

Reply at 64

Superior Manifold
Receipt No. 4626
of 16.10.64.

66A
NEW ZEALAND PETROLEUM EXPLORATION COMPANY LTD.

1864 FIDELITY UNION LIFE BUILDING
DALLAS, TEXAS, U.S.A.
PHONE RI-1-6769
CABLE ADDRESS "PETEX"

September 17, 1964

POST OFFICE BOX 2194
WELLINGTON, C. I, NEW ZEALAND
PHONE 70-709
CABLE ADDRESS "PETEX"

COPY

COPY

Mr. W. H. Thompson
Colonial Secretary's Office
Stanley, FALKLAND ISLANDS

Dear Mr. Thompson:

Thank you for your letter of August 25 relative
to Falkland Islands Mining Regulations, your file Ref: 2298.

We are enclosing herewith our check in the
amount of \$ 5.60 U.S., being \$ 2.80 for a copy of your Mining Reg-
ulations and \$ 2.80 for any geological maps that might be available
of your Islands.

Kindly send the above mentioned data as follows:

New Zealand Petroleum Exploration Company Limited
1864 Fidelity Union Life Bldg.
Dallas 1, Texas
U. S. A.

Very truly yours,

/s/ As below shown

Thomas J. Alexander
Technical Manager

TJA:ds

Encl.

Esleech
Fidelity Union Skin

62

NEW ZEALAND PETROLEUM EXPLORATION COMPANY LTD.

1864 FIDELITY UNION LIFE BUILDING
DALLAS, TEXAS, U.S.A.
PHONE RI-1-6769
CABLE ADDRESS "PETEX"

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New Zealand Petroleum Exploration Company Limited
1864 Fidelity Union Life Building
Dallas 1, Texas
U. S. A.

Very truly yours,

Thomas J. Alexander
Technical Manager

TJA:ds

Encl.

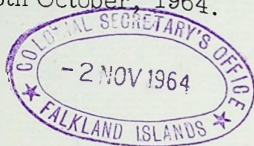
Reply at 63

Receipt No 4626 of 16.10.64.

65
101, LEADENHALL STREET,
LONDON,
E.C. 3
Avenue 5881

13th October, 1964.

The Colonial Secretary,
Colonial Secretary's Office,
Stanley,
Falkland Islands.



54 in
VOT
Sir,

I thank you for your letter of the 25th August, 1964, advising me that it is now possible to obtain copies of the Falkland Islands Mining (Mineral Oil) Regulations.

b.c.
These prove to be unobtainable in this country, and I would be obliged if you could kindly send me two copies, for which a cheque valued £2. 0. 0. is enclosed.

Yours faithfully,

Frank Bennett

Send

Receipt No. 4645 of 13/11/64.

Bu 26.11.64 (49 in 2298)

C.S.

Please BV on my return
to Stanley in January

CH

23/12/64

Bu 26.1.65

17th October,

64.

Dear Sirs,

62

I refer to your letter of the 17th September, and enclose a copy of the Mining Regulations. No geological maps are available but I enclose a copy of the book the Falkland Islands which contains a geological map.

Yours faithfully,

(Sgd.) H.L. Round

for COLONIAL SECRETARY.

Technical Manager,
New Zealand Petroleum Exploration Company Ltd.,
Post Office Box 2194,
Wellington,
NEW ZEALAND.

Certificate of Posting

The undermentioned postal packet has been registered and posted here this day. (Ordinary postage _____ s. _____ d. if parcel)

Regn. No. 1062.	Regn. fee paid	MINIMUM (1s 0d Inland / 6d Overseas)	s. _____ d. _____
-----------------	----------------	--------------------------------------	-------------------

Date Stamp

Tech Manager.

N.2. Petroleum Corp

Co. LTD. USA.

Accepting
Officer's
Initials

on

FOR REGULATIONS SEE OVER

17
10
6

Certificate of Posting

The under-

17th October,

64.

Dear Sirs,

6) I refer to your letter of the 16th September, and enclose herewith a copy of the mining legislation of this Colony. Unfortunately it would cost £1. 3. 6. to post by air and I have therefore routed it surface mail and thus utilised the postage allowed.

Yours faithfully,

(Sgd) H.L. Bound

For COLONIAL SECRETARY.

The Manager,
Hess Exploration Company,
1020 National Bank of Commerce Building,
New Orleans,
Louisiana 70112,
U. S. A.

MLE/LH

Certificate of Posting

The undermentioned postal packet has been registered and posted here this day. (Ordinary postage s. d. if parcel)

Regn. No. 1059	Regn. fee paid	MINIMUM (1s 0d Inland 6d Overseas)
		s. d.

The Manager
Hers Exploration Co.
USA

Accepting
Officer's
Initials

FOR REGULATIONS SEE OVER

Date Stamp

17
10
64.

bu 30.10.64 (49 in 2298)

67

8465c

GOVERNMENT OF INDIA

No. 8465c /SG/44.
From:

Dated, October 17, 1964.

G. N. Dutt,
Superintending Geologist,
Publication Division,
Geological Survey of India,
29, Chowringhee Road,
Calcutta-16, INDIA.

To

The Colonial Secretary,
Colonial Secretary's Office,
PORT Stanley, FALKLAND ISLANDS.

S. Am...



Dear Sir,

60

I am grateful for your Air-letter No.2298/II dated the 9th September, 1964, which reached me ~~only yesterday~~ on 12th inst. I shall request you kindly to send me immediately a copy of the regulations on Mineral and Mineral Oil and also any additional information on the geology and minerals of Falkland Island that you may have.

Thanking you once again for the trouble.

Yours faithfully, .

G. N. Dutt
(G. N. Dutt)

Received 17/10/64

BY AIR MAIL

हवाई पत्र

AEROGRAMME

NO ENCLOSURES
ALLOWED



To

The Colonial Secretary,

Colonial Secretary's Office,

Port Stanley,

FALKLAND ISLANDS,

SOUTH AMERICA.

Corr - 66

First fold here

Third fold here

Second fold here

Sender's name and address :-

G. N. DUTT,

Superintending Geologist,

Publication Division,

Geological Survey of India,

29, Chowringhee Road,

Calcutta-16, INDIA.

KIV 65

NEW ZEALAND PETROLEUM EXPLORATION COMPANY LTD.

1864 FIDELITY UNION LIFE BUILDING
DALLAS, TEXAS, U.S.A.
PHONE RI-1-6769
CABLE ADDRESS "PETEX"

November 6, 1964

POST OFFICE BOX 2194
WELLINGTON, C. I., NEW ZEALAND
PHONE 70-709
CABLE ADDRESS "PETEX"



Colonial Secretary
Officer Administering the Government
Stanley
FALKLAND ISLANDS

Dear Sir:

62
66A Referring to our letter of September 17, 1964,
copy of which is attached for your ready reference, and your letter of
August 25, 1964, we are wondering if we made the correct conversion
from Pounds to U. S. Dollars in remitting our check for the Mining
Regulations and geological maps.

Will you kindly advise, at your earliest con-
venience, if you received our check and letter. Also, if the check
is in the correct amount for the data requested. We should be glad to
send additional money, if our conversion calculation was incorrect.

Very truly yours,

A handwritten signature in blue ink that reads "Thomas J. Alexander".

Thomas J. Alexander
Technical Manager

TJA:ds

Encl.

Did they
Acnd enough

They sent too much money.
So we sent a copy of
Cawke's book as well.
TJA

See 62863

See 62863

68.

Ref: 2298/II.

Colonial Secretary's Office,
Stanley, Falkland Islands.

26th January, 1965.

Dear Sir,

66 I refer to your letter of the 6th November, 1964, and have to inform you that your cheque for \$5.60 (£1. 19. 2.) was received. Legislation costing £1 and a book on the Falklands costing 18/- were mailed to you by return and the balance of 1/2d. was used for postage.

I hope that they arrived safely.

Yours faithfully,

(SGD) H. L. BOUND.

fa COLONIAL SECRETARY

Technical manager.

The New Zealand Petroleum Exploration Company Ltd.,
1864 Fidelity Union Life Building,
Dallas,
Texas,
USA

KIV 67

HLB/IM

S/e

69/A

Advise 67 that we will send copy on receipt
of the remittance of . ?..

28.1.65

67
Ref: 2298/II

69.
Colonial Secretary's Office,
Stanley, Falkland Islands.

29th January, 1965.

Dear Sir,

67
I refer to your letter 8465C/SG/44 of the 17th October, 1964, and have to advise you that a copy of the Mining Regulations will be forwarded on receipt of your remittance of £1.

Yours faithfully,

(SGD.) H. L. BOUND.

f
COLONIAL SECRETARY

Mr. G.N. Dutt,
Superintendent Geologist,
Publication Division,
Geological Survey of India,
29 Chowringhee Road,
Calcutta-16,
INDIA

DRM/TM

LAW OFFICES
WILLIAM PAUL BLAIR
650 SOUTH GRAND AVENUE
LOS ANGELES, CALIFORNIA 90017
MADISON 7-6594

CS
LA 17/3

6/6 70

CABLE ADDRESS
"PAULAIR"
LOS ANGELES, CALIFORNIA

February 10, 1965

The Honourable, the Governor
of the Falkland Islands
Government House
Stanley, Falkland Islands

Dear Sir:

I should like to enquire as to the possibility of obtaining a prospecting lease or similar instrument granting the right to prospect and mine for and produce oil, gas and other hydrocarbons in the Falkland Islands. Hopefully such right might be granted under Chapter 48 of the Revised Laws inasmuch as I do not believe that any specific petroleum law exists in the Falklands.

I hold oil and gas prospecting rights in the Bechuanaland Protectorate, the Kingdom of Thailand and elsewhere and have long been interested in the possibilities of oil exploration in the Falklands inasmuch as sedimentary strata appear to exist there. The Secretary of State for the Colonies has graciously approved my application in Bechuanaland and I trust that such approval could be had in respect of similar rights in the Falkland Islands. I am an attorney specializing in oil and gas matters and I, together with certain clients and associates, am prepared to undertake a definitive evaluation of the petroleum prospects of the Falkland Islands if it appears that a prospecting and/or mining lease or concession on reasonable terms can be obtained.

I shall appreciate your forwarding this letter to the appropriate authority for reply and shall be grateful for your courtesy and cooperation in this matter.

Respectfully yours,

W.P. Blair

W. P. Blair

Reply at 73.

WPB:D

71

As a matter of interest to Exco I suggest we tell them at next meeting the names of the various applicants to date.

LA 17/3

72

Noted

Down 18.3.65

Dear Sir,

70 Thank you for your letter of February 10th, 1965 which has only just reached me.

I think it would be a good thing if you first of all examined our present mining regulations which were promulgated last year. If you will send me a remittance of £1 I will have a complete set posted to you.

Unfortunately mails at this season of the year are few and some delay must be expected.

Yours faithfully,

(Sgd) W. H. Thompson

COLONIAL SECRETARY

Mr. W. P. Blair,
650 South Grand Avenue,
Los Angeles,
California 90017,
U.S.A.

WHT/TB.

74

10. REPORT ON APPLICATIONS UNDER MINING LEGISLATION.

Ag D. Robinson
Clerk of the Council.

24
75

26/4

C.S.

Mineral Rights.

In due course I should be glad to have a list of estates in which the Government holds mineral rights and those in which it does not. There may perhaps be a third category regarding which the position is not clear.

Ye.

I think I gave you this - but have no clear memory of doing so.

If I did not do so there is a space at 6/6.

S.

26/4

C.S.

Thank you. Copy taken

26/4

73a

No.

MEMORANDUM

7th April, 1965

It is requested that, in any reference to this memorandum the above number and date should be quoted.

To: The Colonial Secretary,

From: The Registrar General,

Secretariat,

Stanley, Falkland Islands.

Stanley.

SUBJECT :-

Mineral Oil Rights.

*To be filed:
(I found this by way in
SH today!)
S.
14/8/67*

Mineral oil rights, unless specifically reserved to the Crown by statute or deed, pass to the purchaser of Crown land.

You will see from the attached table that with minor exceptions the mineral oil rights of Lafonia, Land South of the Wickham Heights, certain land North of Stanley Harbour, Port San Carlos, Douglas Station, Teal Inlet and Sea Lion Islands on the East Falkland have passed to the purchaser while, with certain exceptions, the mineral oil rights in Fitzroy farm, (including the Green Patch and Mount Low area), San Carlos, Salvador, Johnson's Harbour, Rincon Grande and Port Louis have been retained by the Crown.

The mineral oil rights on the West Falkland, in Fox Bay West, Port Stephens, Roy Cove, Packe's Port Howard, Pebble Island, Saunders Island and West Point Island have passed to the purchaser, and the mineral oil rights in Spring Point, Port Howard, Hill Cove, Chartres, Fox Bay East, Dumose Head, Kepple Island, Grand and Steeple Jasons, Passage Islands, Carcass Island, Weddell Island, Beaver Island, New Island and Sedge Island, are reserved to the Crown, with exceptions in either case.

The reservation of mineral oil rights to the Crown was first inserted in Crown Grant 368 (Kepple Island) of the 11th May, 1911, and continued to be inserted in all Crown Grants until the 21st November, 1938, when, for some unknown reason, it was omitted for a period of one year, during which the grants in respect of Port San Carlos, Fox Bay West, Port Stephens, Douglas Station and Saunders Island were issued.

When practically all Crown Land has been alienated the mineral rights in Crown Land disposed of after the 31st December, 1949, were reserved to the Crown by the new Land Ordinance of that year.

The lands farmed by Teal Inlet Limited, San Carlos Sheepfarming Company Limited and Dean Brothers, are not owned by the Companies but held by the Trustees of the Estate John James Felton, the Trustees of the Estate George Bonner and members of the Dean family respectively - probably to avoid the payment of the Stamp Duty which is payable to Government when real property is transferred.

The table which has been produced in a short time is fairly accurate.

J. P. Bennett
Registrar General.

EAST FALKLAND.

Owner.	Station.	Crown Grant	Approximate area. Acres.	Mineral Oil Rights.
The Falkland Islands Company Limited.	Lafonia.	134	700,000 Less Sea Lion Is.	Mineral oil rights granted to purchaser.
The Falkland Islands Company Limited.	Fitzroy, Green Patch and Port Harriet area, 1-2-3-4-15-16-17-46- 58-59-60-61-62-68.	24-40 130-131 142-285 293-360 365,391, 396, 409A-463	121,394 less 4,400 purchased by Mrs F.O. Yonge.	Mineral oil rights reserved to the Crown except in respect of 160 acres (defined) in Station 1, 160 acres (defined) in Station 3, 160 acres (defined) in Station 15, 160 acres (defined) in Station 16, 160 acres (defined) in Station 17, 160 acres (not defined) in Station 46, 460 acres (not defined) in Stations 59,60 and 61, 160 acres (not defined) in Station 62, and 17,777 acres (defined) in Station 68.
The Falkland Islands Company Limited.	Land South of Wickham Heights. 7-8-18-22-22A- 24.-25-26-27- 29-30-31-32- 34-44-75.	128-129 143-147 148-155 156-157 158-165 171-172 193-212 247-248 249-250 345-359 390.	132,286	Mineral oil rights granted to the purchaser except in respect of 5,224 acres (defined) at Port Sussex.
The Falkland Islands Company Limited.	North of Stanley Harbour.	133-159 160-161 162-163 164-208	150	Mineral oil rights granted to purchaser.
San Carlos Sheepfarming Company Limited.	20-28-39-73 74.	181-182 275-276 383-407	61,000	Mineral rights reserved to the Crown except in respect of 160 acres (defined) in Station 28, 160 acres (defined) in Station 20, 160 acres (not defined) in Station 73 and 986 acres (not defined) in Station 74.

Owner.	Station.	Crown Grant.	Approximate area. Acres.	Mineral oil rights.
Port San Carlos Limited.	23-36-37-40 42-45-53.	215 257-258 259-260 437	42,000	Mineral rights granted to the purchaser.
Douglas Station Limited.	47-48-70 and others unnumbered.	280-291-491	63,000	Mineral oil rights granted to purchaser.
Teal Inlet Limited.	9-10-11-12- 49-54-55-56- 69.	135-136 279-283 284-289 290-363.	85,655	Mineral oil rights granted to purchaser.
R.M. Pitaluga and Company.	Salvador 19-41-72	173-282 341-519	40,000	Mineral oil rights granted to the Crown except in respect of 160 acres (defined) in Station 19, 160 acres (not defined) in Station 41, and 640 acres (not defined) in Station 72.
Smith Brothers.	Johnson's Harbour 43-50-51-52-63- 64.	277 and 506	36,000	Mineral oil rights reserved to the Crown except in respect of 320 acres (not defined) in Station 63 and 64.
Estate E. Robson.	Port Louis 5-14-65-66-76	44-278 340-342 479	24,000	Mineral oil rights reserved to the Crown except in respect of 160 acres (defined) in Station 5, 160 acres (not defined) in Station 65, 160 acres (not defined) in Station 66 and 160 acres (not defined) in Station 76.
Estate H.J. Pitaluga.	Rincon Grande 33-67	179-341 370.	12,000	Mineral oil rights reserved to the Crown except in respect of 160 acres (defined) in Station 33 and 160 acres (not defined) in Station 67.
Mrs. F.O. Yonge.	East Island.	505		Mineral oil rights reserved to the Crown.

Owner.	Station.	Crown Grant.	Approximate area. Acres.	Mineral Oil Rights.
Mrs F.O. Yonge.	Bluff Cove. 35 -38		31,908 plus 4,400 purchased from F.I.C.	Purchase of this area not complete. Mineral oil rights may be reserved to the Crown, when purchase completed and Crown Grant issued.
J.W. Lee.	Sea Lion Islands.	134.		Mineral oil rights granted to the purchaser.
<u>WEST FALKLANDS.</u>				
The Falkland Islands Company Limited.	Fox Bay West 8	270 488	76,300	Mineral oil rights granted to purchaser.
The Falkland Islands Company Limited.	Port Stephens 9-10	287-351- 490-528	184,150	Mineral oil rights granted to purchaser except in respect of 28,380 acres at Albemarle.
The Falkland Islands Company Limited.	Spring Point 8A	334 & 482	60,500	Mineral oil rights reserved to the Crown, except in respect of 1,613 acres (not defined).
James Lovegrove Waloron Limited.	Port Howard 1-2-4A	337-338-339 480 & 527	142,000	Mineral oil rights reserved to the Crown, except in respect of 693 acres (not defined) in Station 1, 2320 acres (not defined) in Station 2, and 747 acres (not defined) in Station 4A.
Holmstead & Blake.	Hill Cove 3A	332 & 376	109,720	Mineral oil rights reserved to the Crown, except in respect of 2,960 acres (not defined).
Chartres Sheepfarming Company Limited.	Chartres. 5	347 & 481	100,000	Mineral oil rights reserved to the Crown, except in respect of 2,660 acres (not defined).

Owner.	Station.	Crown Grant.	Approximate area. Acres.	Mineral Oil Rights.
Bertrand & Felton Limited.	Roy Cove 3	333 & 358	61,400	Mineral oil rights granted to purchaser.
Packe Brothers & Company Limited.	Fox Bay East 7	350	40,800	Mineral oil rights (believed) reserved to the Crown, except in respect of 1,097 acres (not defined). The official copy of the final Crown Grant was lost in the fire which destroyed the Town Hall.
Packe Bros & Company Limited.	Dunnose Head 6	346	58,200	Mineral oil rights (believed) reserved to the Crown, except in respect of 1,566½ acres (not defined). The official copy of the final Crown Grant was lost in the fire which destroyed the Town Hall.
Packe Bros & Company Limited.	Port Howard 4.	344 & 364.	12,120	Mineral oil rights granted to purchaser.
Dean Brothers Limited.	Pebble Island Group.	174	16,000	Mineral oil rights granted to purchaser except in respect of 160 acres at Elephant Bay.
Dean Brothers Limited.	Keppell Island.	368	8,640	Mineral oil rights reserved to the Crown.
Dean Brothers Limited.	Grand Jason and Steeple Jason.	415	6,520	Mineral oil rights reserved to the Crown.
John Hamilton (Estates) Limited.	Weddell Island and Beaver Island Group.	286,294,379 and 380	66,000	Mineral oil rights reserved to the Crown except in respect of 1,440 acres (not defined) on Weddell Island and 320 acres (not defined) on Beaver Island.
John Hamilton (Estates) Limited.	Saunders Island	335 & 492	21,000	Mineral oil rights granted to purchaser.
John Hamilton (Estates) Limited.	Passage Islands	411	6,480	Mineral oil rights reserved to the Crown.

Owner.	Station.	Crown Grant.	Approximate area. Acres.	Mineral oil rights.
C.W.W. & C.G. Bertrand	Carcass Island	381 & 414	3,600	Mineral oil rights reserved to the Crown.
R. Napier.	West Point Island Dunbar Island and Low Island	358, 381, 382	4,200	Mineral oil rights granted to purchaser except in respect of Dunbar Island and Low Island.
J.J. Davis.	New Island	140 & 378	6,000	Mineral oil rights reserved to the Crown except in respect of 160 acres (defined) at Cliff Peak.
W. McBeth.	Sedge and Wreck Island	461	1,600	Mineral oil rights reserved to the Crown.

HB/DD.

DECODE.

No. 89.

TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR

Despatched: 13.8.65 Time: 1915 Received: 14.8.65 Time:

In Confidence.

No. 79. Photographs of Falkland Islands.

of Jack Grynberg and associates, consulting petroleum, geology and geophysical engineer, Denver, Colorado, has asked through British Embassy Washington for photographs of Falkland Islands on behalf C.R.A. Inc, division of Consumer Co-operative Association, Kansas City, Missouri. Purpose is stated to for preliminary photo-geology study. If this indication any potential prepared to proceed further.

Directorate Overseas Survey holds negatives of photographs taken for Falkland Islands Government in 1956 by Huntings Survey for map purposes. Copyright is vested in your Government. Directorate propose, subject to your views and agreement, they should release negatives to either of two companies commercial firms to make prints which enquirer could purchase to order. Directorate unable to make prints themselves owing other commitment. Directorate would issue to commercial printer list of prints needed to give complete photo-cover of island without direct undue duplication.

I shall be grateful to learn by telegram whether you agree course proposed and if so whether there are any photographs in series which you would not repeat not wish released.

Embassy reports both Americans standing.

concerned as of good

SECEP

Reply at 79

G.T.C. : LS

DECODE.

TELEGRAM SENT.

From GOVERNOR to SECRETARY OF STATE

Despatched : 17.8.65 Time : 0930 Received : Time :

78 No. 96. Photographs Falkland Islands. Your telegram 79.
No objection to release of negatives on basis you outline. All
photographs may be released.

Governor

G.T.C. : IS

BU 17.2.66

BU 16.10.65

BU 16.12.65 (77)

BU 28/8/65 (77)

coming along.

80

ELY, DUNCAN AND BENNETT

COUNSELLORS AT LAW

TOWER BUILDING

WASHINGTON 5, D. C.

NORTHCUTT ELY
C. EMERSON DUNCAN, II
ELMER F. BENNETT
JEROME C. MUYS
DAVID BOOTH BEERS

TELEPHONE
METROPOLITAN 8-6474
TELETYPE 202-965-0708

December 6, 1965

NI
3vh

Mr. R. H. D. Manders, O. B. E.
Colonial Secretary
Stanley, East Falkland
Falkland Islands
South Atlantic

Dear Sir:

Several years ago I prepared a book entitled "Summary of Mining and Petroleum Laws of the World" which was published by the Bureau of Mines of the U. S. Department of the Interior. Although this book was published in 1961, the actual text was prepared in 1959. I am presently working on a second edition of this book for the Bureau of Mines and require current and detailed information about the major mining and petroleum laws of the world.

I have no mining or petroleum legislation for the Falkland Islands in my possession. The only Acts of which I am aware are the following:

- (1) Land Act, F.I. Rev. Laws, c. 36
- (2) Mining Act, F.I. Rev. Laws, c. 48
- (3) Radio-active Minerals Act, F.I. Rev. Laws, c. 55

I would appreciate your sending me these Acts, and any other mining and petroleum Acts or regulations which have been enacted or promulgated. I would be happy to reimburse you for the cost of any copies you send me.

Respectfully,

Northcutt Ely

Northcutt Ely

E:D:jrw

See 81

Kid Sec 17.2.66

2298/11

82a

JACK GRYNBERG AND ASSOCIATES
CONSULTING
PETROLEUM, GEOLOGICAL AND GEOPHYSICAL ENGINEERS
750 PETROLEUM CLUB BUILDING • DENVER, COLORADO 80202 • PHONE 303-244-8021

DISTRICT OFFICE:
1126 NATIONAL BANK OF COMMERCE BUILDING
NEW ORLEANS, LOUISIANA 70112
PHONE 504-524-4389

COLONIAL SECRETARY'S OFFICE
16 FEB 1966
FALKLAND ISLANDS

January 17, 1966

21
2/3

Colonial Secretary's Office
Falkland Islands

Dear Sir:

I plan, in the near future, to come to the Falkland Islands and it would be a great help to me if you could send me some information covering some of the following points:

- 1: What are the flight schedules to the Falkland Islands? What are the boat schedules, if any?
- 2: How do I get there?
- 3: What clothing is necessary?
- 4: What is the temperature range? In Summer? In Winter? I am particularly interested in the month of August.
- 5: What means of transportation are available to travel throughout both the east and west Islands? Are there any small boats, motorized, available?
- 6: What living accomodations are available both in Port Stanley and in other settlements?

The answers to these questions will be most helpful in planning my visit and I will appreciate all you can do to supply me with the pertinent information.

Very truly yours,

JACK GRYNBERG AND ASSOCIATES

Walter Randall
Walter Randall

WR:kdb

Rep as
at an.

81
Ref: 2298/II.

Colonial Secretary's Office,
Stanley, Falkland Islands.

2nd February, 1966.

80
Dear Sir,

I refer to your letter of the 6th December, 1965 and have to inform you that the mining legislation referred to by you was superseded by the Mining Ordinance and Regulations made thereunder.

Please forward the sum of £1. 0. 3d. and copies will be sent to you.

Yours faithfully,

COLONIAL SECRETARY

Ely, Duncan and Bennett,
Counsellors at Law,
Tower Building,
WASHINGTON 5 D.C.

See 95
—

TB

DECODE.

TELEGRAM.

81a

From Mr. Jack Grynberg, Denver, Colo.,

To Colonial Secretary, Port Stanley, F.I.

Despatched : 7th February, 19 66 Time :
Received : 8th February, 19 66 Time : 1200

RP30*64

Please wire how to get charter plane from South America to Falklands for two geologists on way to study Falklands.

Jack Grynberg

See 78

/PL : LS
(Intld) HLB

Reply at 82

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

P1676 P4416 8/64

Number

Office of Origin

Words

Handed in at

Date

Stanley

9.2.66

To

etat JACK GRYNBERG CONSULTING PETROLEUM ENGINEERS DENVER COLORADO

Re paid
£30*64

81 mpers Regret impossible charter plane as no landing facilities for land based aircraft stop For shipping connections contact Falkland Islands Company 120 Pall Mall London

Colonial Secretary

Time LS

DECODE.

TELEGRAM.

83

From PRODROME ~~XXXXXXXXXX~~ MONTEVIDEO

61
17/2

To GOVERNOR FALKLAND ISLANDS

Despatched : 16/2/66

19

Time : 1450

Received : 17/2/66

19

Time : a.m.

RESTRICTED

We have been approached for help by a Mr Walter Randall, geologist and United States citizen, who says he is bringing 500 pounds of equipment down by next Darwin to look for oil in the Falkland Islands. Were you aware of this?

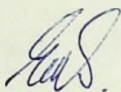
CYPHER: EB

Reply phoned PS.
17.2.66.

Reply at 85

C.S.

H.E. has seen this and has asked me to pass it on to you. He of course does not wish to put any difficulties in the way of someone seeking oil here.



17/2

6/6 m

hll

TODAY

S,

DECODE.

TELEGRAM.

CS 14/12/85

From GOVERNOR FALKLAND ISLANDS

To PRODROME MONTEVIDEO

W,
W

Despatched : 18/2/66 19

Time : a.m.

Received : 19

Time :

RESTRICTED

83

Your telegram 16th February.

Walter Randall, Geologist.

If he is representative of Jack Grynberg of Denver,
we are aware of him but have no details of his itinerary or what he expects.

CYPHER: EB

DECODE.

TELEGRAM.

86

From Macstaple, Montevideo.

To Colonial Secretary, Stanley

Despatched : 18th February, 19 66 Time : 1604

Received : 19th February, 19 66 Time :

American meteorologist Walter Randall presently Montevideo wishing travel urgently to Stanley. Please telegraph possibility join ship Punta Arenas. Alternatively if airstrip of 800 yards available Falklands if so would eventually fly from P Arenas by two engine Cessna requiring refuelling yours.

Macstaple

P/L : LS
(Intld) HLB

Reply at 87

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

87

P1676 P44/K 8164

Number	Office of Origin	Words	Handed in at	Date
	Stanley			23.2.66
To	(Conf. copy 'phoned 11.35/23rd)			
	etat MACSTAPLE MONTEVIDEO			HOA/c

86

No. 12. Yourtel 18th February Randall stop Regret no landing facilities available for landbased plane and no sea connection Punta Arenas stop Can offer southbound passage by Shackleton ex Montevideo approximately 18 March and northbound BAS vessel mid April otherwise no guaranteed outward sailings until July stop Please advise if Shackleton passage acceptable

Secretary

Time is

KIV 82a. Draft reply from S/C.

DECODE.

TELEGRAM.

*Ch. for detention in
new move please
lt 25/2
Te up 88
Embassy.*

From BRAIN MONTEVIDEO

To GOVERNOR FALKLAND ISLANDS

Despatched : 24/2/66

19

Time : 1816

Received : 25/2/66

19

Time : 0900

CONFIDENTIAL

Telegram 2 of 24th February. Repeated for information Buenos Aires.

85
Your unnumbered telegram of 18th February.

Randall has not revisited Embassy but has apparently approached at least two Uruguayan pilots here to fly him and his equipment direct from Argentina to Port Stanley. We have warned pilots of complications and referred them to Maclean & Stapledon.

2. For Buenos Aires: this relates to a United States geologist seeking to prospect for oil in Falkland Islands.

CYPHER: EB

95

ELY AND DUNCAN

COUNSELLORS AT LAW

TOWER BUILDING · WASHINGTON, D. C. 20005

TELEPHONE METROPOLITAN 8-6474

TELETYPE 202-965-0708

CABLE ADDRESS: QUADRANGLE



February 25, 1966

Colonial Secretary
Stanley, Falkland Islands

Ref. 2298/II

*c/c
Jha.
Di. 24/3*

Dear Sir:

81

We would very much like to have copies of the new Mining Ordinance and Mining Regulations mentioned in your letter of February 2, 1966. Enclosed please find our check for \$1.84, the equivalent of £1.0.3d, for their cost.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Peter N. Davis".

Peter N. Davis

PND:mw

Enclosure

Sent.

DECODE.

TELEGRAM.

From Prodrome Montevideo *B. A. (passed via Montevideo)*

To Governor Falklands

Despatched : 3/3/66

19

Time : ~~2000~~ 1306

Received : 4/3/66

19

Time : a.m.

RESTRICTED

Addressed Governor Falkland Islands. Telegram 9 of 2nd March for information Montevideo and saving to Foreign Office.

Montevideo telegram 2 to you of 24th February.

(Randall)

There has already been a press report here about this matter.

2. In view of likelihood of early conversations with Argentines about Falklands which are of course bound to be difficult, I should be grateful to be/informed about developments on this front and on any other issues which might affect either substance of talks or atmosphere in which they take place.

/kept

3. As oil is clearly a forming question I should be grateful to know what is H.M.G.'s attitude towards prospecting in Falklands.

4. Montevideo please pass Governor Falklands.

Ends. Brain.

CYPHER: EB

DECODE.

TELEGRAM.

Cl.

90

From Prodrôme Montevideo

To Governor Falkland Islands

Despatched : 3/3/66

19

Time : 1306

Received : 4/3/66

19

Time : a.m.

RESTRICTED

? 89

My telegram 8. - ?

Person named is abroad, not expected back until end of March, so no decision yet needed. Letter follows.

Ends. Brain.

CYFBER: EB

91

Pestoni ? more likely.

Randall ? will keep you informed
of results of our researches

lt 4/3

3rd March, 1966.

Dear Sirs,

829 I refer to your letter of the 17th January, 1966 which has only just reached me.

The answers to the various queries you have raised are as follows:

- (1) Flight Schedules. We have already exchanged telegrams on this. There are no flight schedules to the Falkland Islands and I understand that Mr. Randall is already in touch with the Falkland Islands Company of London concerning shipping connexions.
- (2) Clothing. Ordinary North American winter clothing is quite adequate.
- (3) Temperature Range. Temperatures seldom fall below 20°F or rise above 72°F. The August temperature may be generally considered to hover around the 32°F to 35°F mark. Winds of gale force occur on three or four days of every month and absolutely still calm days are very infrequent. There is very little fog, no deep snow and, all in all, little severe frost.
- (4) Transportation. It may be possible to hire a boat for travelling around the islands but the Falkland Islands Government Air Service operates Beaver floatplanes which are available for ordinary passages and charter.
- (5) Accommodation. It is usually possible to arrange accommodation in a private house or in one small (not very good) hotel in Stanley. I understand that for the next year the hotel is almost entirely booked out. Living in settlements is usually with the permission of the farm manager. Government has no control over the settlements which are all private property. I cannot do better than refer you to Dr. L. A. Frakes and Mr. J. Dawson of the Department of Geology, University of California, Los Angeles 24, California. These two gentlemen were recently in the Falkland Islands and can give you direct information.

Yours faithfully,

(Sgd.) W. H. Thompson

COLONIAL SECRETARY

Jack Grynberg & Associates,
750 Petroleum Club Building,
Denver,
COLORADO 80202.

TE.

F. I. ref: 2298/II

C. O. ref:

92

SAVING TELEGRAM.

From: The Officer Administering the Government of the Falkland Islands.

To: The Secretary of State for the Colonies.

Date: 5th March, 1966.

No. 32. SAVING. COLONY

Oil Exploration Falkland Islands.

~~C~~ I attach for your information copies of telegrams exchanged with Her Majesty's Ambassador, Buenos Aires.

GOVERNOR

DECODE.

TELEGRAM.

93

From GOVERNOR FALKLAND ISLANDS

To PRODROME BUENOS AIRES ⁻⁶ repeated PRODROME MONTEVIDEO
Saving to Colonial Office.

Despatched : 7/3/66

19

Time : p.m.

Received :

19

Time :

RESTRICTED CONFIDENTIAL

Sw. pe. 7/3

Your telegram 9. Oil Exploration.

American geologist Randall advised no aircraft landing facilities Falklands and he should travel by Darwin from Montevideo. He cannot arrive before April and he has enquired re clothing suitable for August.

2. H.M.G. approved oil exploration and exploitation legislation 1964.
X / Copies follow by bag. No specific oil policy guidance received.

3. Will keep you informed developments all relevant issues.

W

CYPHER: EB

Re x/-, did we send plan?

W 7/3

914

8th March,

55.

Dear Chancery,

I refer to paragraph 2 of my telegram No. 6 of the 7th March 1966 and enclose a copy of the Mining Ordinance and Regulations made thereunder.

Yours ever,

Secretariat.

The Chancery,
British Embassy,
Montevideo,
URUGUAY.

The Chancery,
British Embassy,
BUENOS AIRES.

IM

pac

98

LAW OFFICES
WILLIAM PAUL BLAIR
~~650 SOUTH GRAND AVENUE~~
LOS ANGELES, CALIFORNIA 90017
MADISON 7-6594

NEW ADDRESS
811 W. 7th ST. SUITE 1110

CABLE ADDRESS
"PAULAIR"
LOS ANGELES, CALIFORNIA

March 16, 1966



Colonial Secretary's Office
Stanley, Falkland Islands

Ref: 2298/II

Dear Sir:

This is a rather belated reply to Mr. W. H. Thompson's kind letter to me of last spring in reply to a previous letter of mine dated February 10, 1965 wherein I inquired as to the possibility of obtaining oil and gas exploration rights in the Falkland Islands. Mr. Thompson very kindly suggested that I obtain a copy of your present mining regulations which were promulgated in 1964. Consequently I enclose herewith a remittance in the amount of \$3, being somewhat over one pound with the request that you have a complete set posted to me at your early convenience.

If there are any geological maps or surveys covering the Falkland Islands now in existence please advise me as I should like to obtain a copy of them as well.

Thank you for your courtesy and cooperation in this matter.

Very truly yours,

W.P. Blair
W. P. Blair

\$3.00
x 7
21/-
7/-
14/-

sent

WPB:jam
Encl.

98
81
141

CU 1/4/66 98
Mining Legislation.

Minute - 23rd March 1966. (See f. 82a and associated folios).

Messrs Randall and Berg arrived on R.M.S. Darwin on 22nd March.

I saw them in my office in company with the A.C.S. (for continuity) and the Registrar Supreme Court (legal side if necessary).

Randall, who appears to be a reasonable type, said that his visit was entirely geological and he was not authorised in any way to attempt any oil exploration or any negotiations connected with such exploration. He wishes to collect specimens of rocks, taken from a line drawn through Teal Inlet across the Wickham Heights down through Lafonia to Bull Point and Bleaker. On the West he is interested in the Roy Cove and Hill Cove areas.

I put ~~them~~ ^{will} in touch with A. G. Barton for Teal Inlet and W. H. Young for the F.I.C. I made it clear that ~~they~~ must deal directly with the land holders but I offered help where necessary.

Berg, who also appears to be a very reasonable type, said that most of the work will be done on foot.

A.C.S. ~~would~~ ^{will} do all necessary to obtain local accommodation for Randall and Berg, and keep in touch concerning a future move to the West Falkland.

It is understood they will attempt to leave the Falklands in May.

W1.

C. S.

FA

Miss May

95

John

2465

97

GAZETTE NOTICE

No. 22

29th April 1966

58a

The Mining (Mineral Oil) Regulations 1964 published
in this Gazette are those referred to in Notice No. 38
on page 149 of Gazette No. 13 of the 1st September 1964.

58

W.H. Thompson

COLONIAL SECRETARY

Ref: 2298/II

FA

F. I. ref: 2198/II

C. O. ref:

99

SAVING TELEGRAM.

From: The Officer Administering the Government of the Falkland Islands.

To: The Secretary of State for the Colonies.

Date: 25th May, 1966.

No. 88. SAVING. COLONY

Mining (Mineral Oil) Regulations 1964.

----- Please find enclosed six copies of the above legislation.

GOVERNOR

EXTRACT FROM MINUTES OF THE MEETING OF THE NATURAL RESOURCES COMMITTEEHELD ON THE 18th JULY 1966(a) Oil

Mr Blake said that about 18 months ago legislation had been passed to govern oil prospecting in the islands. Since then he thought that he was right in saying there had been no enquiries from prospecting companies. His Excellency explained that since then two parties of visitors from the United States had been to the Colony. Mr Frakes, Mr Dawson and Professor Crowell, all of the University of California, were here in the period October 1964 to February 1965. Mr Randall and Mr Berg of the firm of J. Grynberg and Associates, petroleum, geological and geophysical engineers of Denver, Colorado, were in the Colony during March and April this year. They professed to be disappointed and nothing more has been heard from them.

In 1950 Dr R.J. Adie had spent three months investigating and came to the conclusion, based on his own findings and the researches of earlier geologists, that the possibility of finding oil or oil shale in the Falkland Islands is extremely remote.

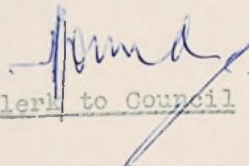
EXTRACT FROM MINUTES OF EXECUTIVE COUNCIL MEETING NO.12/66HELD ON THE 25th OCTOBER 1966

2298/II

12. MINERAL DEPOSIT

His Excellency mentioned that he had received information of the possible existence of yttrium in the Falklands. Mr. Waghorn of Messrs Saxton and Co. (Deep Drillers) Ltd., had been asked by his firm to collect samples of earth and sand which could be sent to the United Kingdom for analysis.

A piece of mineral from Roy Cove was shown to Members and Council advised that a visiting geologist be invited to examine and identify it.


Clerk to Council

FA

BU 15.4.67

a

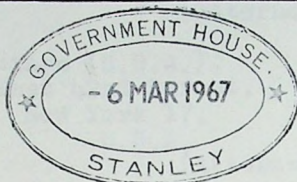
INSTITUTE OF GEOLOGICAL SCIENCES

Incorporating Geological Survey of Great Britain, Museum of Practical Geology, and Overseas Geological Surveys

64-78, GRAY'S INN ROAD, LONDON, W.C.1 / Telephone CHAncery 4531

Your ref

Our ref



2nd February, 1967.

Dear Mr. Sugg,

International and Engineering Group Ltd.

1. Further to your telephone inquiry, the only contact we have had with this firm was on 24th June 1966 when their Mr. A. Palmer called here seeking some information about drilling costs that might help them to estimate the costs of sinking 3 water wells in the Middle East.

2. The Board of Trade Registry of Business Names shows that the company was registered on 15th June 1964 as International Management and Engineering Consultants (U.K.) Ltd. The name was changed to International Management and Engineering Group Ltd. on 30th September 1964.

3. Capitalization. Nominal share capital of £100 increased to £100,000 on 17th July 1964 by creation of 99,900 ordinary shares of £1 each.

4. Allotments. 49,998 ordinary shares of £1 each made on 6th November 1964 to International Management and Engineering Group Ltd. (a Bahamian company) of Sandringham House, Shirley Street, Nassau, Bahamas.

5. Directors and Secretary (as at 31st December 1965)

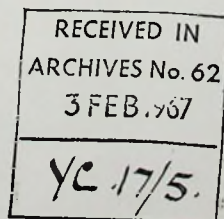
Sir Ralph Ismay Metcalfe (British),
7-8 Savile Row,
London, W.1.
(Company director)

Ian John Bowler, O.B.E. (British),
Teheran,
Iran.
(Company director)

Roy Desmond Robinson (British),
7 Trevor Square,
London, S.W.7.
(Company director)

George Milne Watt (British),
"Broadgates",
Steeple Bumpstead,
Near Haverhill,
Suffolk.
(Architect)

A. St. J. Sugg, Esq.,
Commonwealth Office,
Room 535,
Church House,
Great Smith Street,
London, S.W.1.



Ernest A. Gross (U.S.A.),
63 Wall Street,
New York,
U.S.A.
(Attorney at Law)

A.W. Jennings (U.S.A.),
60 East 42nd Street,
New York 17,
U.S.A.
(Attorney at Law)

Cyril George Moore (British),
Greenmantle,
Sandford Mount,
Charlbury,
Oxon.
(Technical Director)

Colin Eustace Eldred,
7 Victoria Court,
Brook Avenue,
Edgware,
Middlesex.
(Secretary)

6. Scope of Activities. Originally described as Civil Engineers and Land Surveyors, now described as Consulting and Management Engineers. The object of the company, however, is to be able to do almost anything, and 26 paragraphs are taken up describing their compass.

7. We have no personal knowledge of this firm, nor do we know anybody who has had direct dealings with them. Sir Ralph Metcalfe, however, is a well-known figure, and a director of various companies, including Wm. Cory & Son Ltd., and he is Chairman of Walford Lines Ltd. He entered the Civil Service (Admiralty) in 1915, but resigned in 1920.

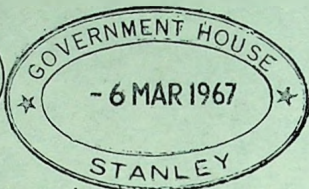
Yours sincerely,

E. H. Beard.

Principal,
Mineral Resources Section.

RESTRICTED

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COMMONWEALTH OFFICE
GREAT SMITH STREET, LONDON S.W.1
Telephone: ABBey 1266, ext.

Our reference: YC 17/5
Your reference:

16th February, 1967.

Dear Sir Cosmo.

A Mr. G.M. Watt of International Management and Engineering Ltd., of 7-8 Savile Row, London, W.1. called on me by appointment on 24 January to enquire about oil exploration in the Falklands. He said that his firm was mainly concerned in pipelines and had been connected with jobs in Persia and Algeria but that, in this instance they were acting for clients whom he did not name. He inferred that these clients were of substance and were interested in obtaining oil concessions in the Falklands.

2. I let Watt have a copy of the Mining Ordinance and the oil regulations and said that any application would have to be made direct to the Falkland Islands Government.

a
3. I subsequently made enquiries from the Geological Surveys about this firm and they told me that they did not themselves know anything about them but obtained their particulars. I attach a copy of the Surveys' letter to me for your information.

Yours sincerely
John Sugg
(A. ST. J. SUGG)

PS. I have not heard anything at all from Watt although I would be glad to give assistance if I could. I thought you might be interested however to learn of this enquiry & took advantage of this visit. ASH.

Sir Cosmo Haskard, K.C.M.G., M.B.E.,
Government House,
PORT STANLEY,
Falkland Islands.

RESTRICTED

*Reply
21/03*

CS for your file

21/03/67

CS

oil exploration 103

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RESTRICTED

March 1967

102 Thank you for your letter YC 17/5 of 16th February about Mr G.M. Watt of International Management and Engineering Ltd and oil exploration in the Falklands.

We have heard nothing direct from Mr Watt but we are always very willing to facilitate oil exploration.

You are probably aware that Dr R.J. Adie of the British Antarctic Survey undertook a search for oil here some years ago. Although the report he wrote was pessemistic, you would I think find him a useful person with whom to get in touch should you need a quick opinion on any matter concerning the geology of the Falklands. He visits London from Birmingham from time to time and I would suggest that if you have not already met him it would be worth while doing so.

ln

for

A. St.J. Sugg Esq., C.M.G.

15/4/67

[Signature]

Extract from a letter from R. G. Vinson of 3rd May 1967.
Original filed in 2393.

Yttrium. I will be very interested to hear further about
this.

R

2298 [11] 105

EXTRACT FROM MINUTES OF THE MEETING OF THE NATURAL RESOURCES
COMMITTEE HELD ON THE 4th MAY 1967.

13. Yttrium

H.E. said that arising out of the reported occurrence of yttrium near Bluff Cove, two geologists on their way to the Antarctic had briefly investigated the supposed deposit. Time did not permit of a comprehensive investigation but their report was unpromising. (Note: According to information provided by Dr Adie, yttrium is a rare earth element which occurs mainly in the mineral xenotime. This mineral is present as a commercial constituent of most igneous rocks, but there is only one major occurrence in the world, in Norway. It actually is used commercially for the preparation of television screens and will be in use particularly for colour television. Because of its very rare occurrence in nature, it will be sought after in most parts of the world that have been little explored; nearly all Antarctic rocks contain xenotime in small quantities but it has no commercial significance whatsoever. Xenotime is known to occur in some of the metamorphic rocks of Cape Meredith in the Falkland Islands but its occurrence is so sporadic that it is not likely to be a commercial proposition).

B

UNITED STATES

YTTRIUM TO GIVE
STEEL PROTECTION

The idea that additions of yttrium to iron-nickel-chromium stainless steels might improve certain of their properties, stems from the discovery in 1956, by the General Electric of the United States, of the very striking effects of yttrium additions to chromium metal. In the last few years many metallurgists have reported improvements in the high temperature corrosion resistance of iron-chromium and iron-chromium-aluminium alloys by the addition of small amounts of yttrium.

These benefits are thought to be related to an internal oxide concentrated as a filamentary growth in the grain boundaries of the metal. The work has shown that the presence of small amounts of Y_2O_3 in the metal-oxide interface can contribute to the improved adhesion of the surface oxide. This work also showed that while the addition of yttrium to an iron-chromium-aluminium alloy does not materially improve the oxidation resistance at a given temperature it does improve the adhesion of the surface oxide film—an important feature for any metal to work at high temperature.

Yttrium is often assumed to belong to the rare earth group of elements. The true rare earths are those in Group III of the periodic table with atomic numbers 58-71. All the rare earths have three electrons in their valency shell and since these electrons determine most of the chemical and physical properties of the elements, the rare earths all behave in a similar manner. The IIIA group in the periodic table has other elements which also have three electrons in their valency shell, notably yttrium and lanthanum. Consequently these elements closely resemble the rare earths and are often found associated with them in nature, hence the many references to them as rare earths.

The rare earths are not rare in nature; yttrium is more plentiful than lead. In ores such as monazite, the principal source of thorium, the rare earths are 10 to 15 times more abundant than the thorium. Yttrium is also found frequently associated with tantalum and niobium ores. As all

these metals can reasonably be expected to become more widely used, the availability of yttrium at a favourable price for use as an alloying element should also increase.

Yttrium metal had not been produced in very large quantities until about 1957 when the aircraft nuclear propulsion department of the American General Electric Company sponsored a large research programme on rare earth metals. This now abandoned programme was aimed at producing fuel element cans for a nuclear reactor providing heated air for turbines in powered flight. Experiments were conducted on yttrium metal produced by a variety of processes, but most of the yttrium was obtained either by reduction of the fluoride or by an alloy process developed at the Ames Laboratory of Iowa State University.

Determinations of the mechanical properties of yttrium have shown that the properties appear to depend on whether the metal is prepared by arc-melting or casting and on the subsequent heat-treatment. The pure metal is soft, with a hardness comparable with that of magnesium; its strength characteristics are better however, being similar to titanium.

The use of yttrium in iron-nickel-chromium steels is currently attracting attention since the benefits to be obtained by improving the corrosion behaviour of these stainless steels would be welcome by many users of commercial stainless alloys. There are indications that small amounts of yttrium added to this type of alloy will provide improvements in corrosion behaviour sufficient to be economically justifiable, without any loss in other relevant properties such as strength, ductility, creep and high strain fatigue resistance and metallurgical stability. The mechanical fabrication of an ingot of stainless steel containing yttrium differs little from the yttrium-free material, being capable of being worked into any required form.

Yttrium is only slightly soluble in ferrous alloys, but even a slight solubility has important effects. The hot workability of stainless steel is reported by American metallurgists to be much improved by additions of yttrium. A one per cent addition of yttrium to a stainless steel contain-

ing 25 per cent of chromium raises the temperature of oxidation resistance from 1090°C to 1370°C and results in a 50 per cent improvement in the short time oxidation rates. When 3 per cent aluminium is added, the oxidation resistance is even greater due to the formation of an oxide coating which does not flake off.

Although the conventional stainless alloys do not show appreciable increases in oxidation resistance with additions of yttrium, the air oxidation resistance of more highly alloyed steels have shown improvements. In a stainless steel containing 20 per cent chromium, 25 per cent nickel, a small quantity of niobium and 1 per cent of yttrium, hot rolled and then cold rolled to strip material, the structure of the metal consists of stringers of intermetallic particles each about 5-10 micrometres in size, aligned in the direction of rolling. This is shown optically in Figure 1 and the electron probe X-ray image in Figure 2 illustrates the distribution of the yttrium. In addition, the presence of yttrium appears to reduce the incidence of grain boundary cracking which is pronounced for steels without yttrium.

When maintained at high temperatures in air for relatively long times, extensive oxidation of yttrium occurs proceeding inwards along the grain boundaries. Figure 3 shows the resulting structure after heating at 1200°C in air, the material contains grain boundary and intergranular oxide. Once the intermetallic grain boundary film has formed, or complete internal oxidation of the yttrium has occurred, it appears that the properties of the steel are irretrievably lost.

However, it may be possible to recover even superior properties if this oxide can be broken down and distributed to form a sufficiently fine dispersion throughout the metal, the benefits of a fine dispersion of a stable phase being well known, thorium in nickel or yttria in zircaloy for example. This possibility is highly speculative however, and much work needs to be done to ascertain whether a sufficiently fine dispersion of oxide can be obtained and whether the oxidation resistance is still retained after completely oxidising the yttrium phase.

Figure 1 *Intermetallic particles of yttrium after cold rolling*



Figure 2 *The distribution of yttrium in a highly alloyed steel*

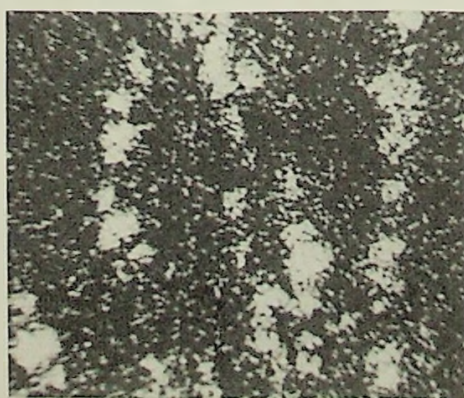
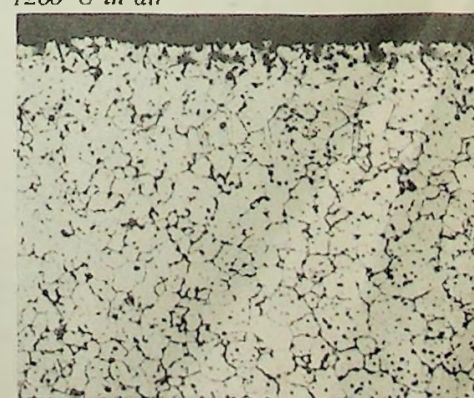


Figure 3 *A complex oxidation of yttrium phases is produced after 30 hours at 1200°C in air*



SCIENCE IN INDUSTRY *continued***UNITED STATES****ULTRASOUND FOR A SCANNING LASER**

A laser television display system under development at the Zenith Radio Corporation, Chicago, was described in a paper presented by A. Korpel at the International Conference on Microwave and Optical Generation and Amplification, held in Cambridge last month. The idea of a laser display system is attractive since no

vacuum envelope of the type required for conventional cathode ray tube displays is needed. It is the vacuum envelope that restricts the size of present day television displays and so the successful development of a laser display could lead to the production, for the first time, of really practical and efficient large television screens.

Horizontal deflection in the new system is achieved by passing the laser beam through a water tank in which an ultrasonic wave is propagating from one side to the other. The laser beam is diffracted by

the waves and can be made to scan across the television screen by varying the frequency of the ultrasonic wave, since the deflection angle depends upon the frequency.

Deflection angles are small; but there are more than two hundred resolvable positions for the beam, and conventional optical magnification is used to increase the area of the screen over which the beam scans. Only one watt of electrical input to the ultrasonic generator is needed to diffract all the incident light.

WEST GERMANY**RUBBER IN ASPHALT MAKES FOR BETTER ROADS**

Experiments in the mixing of a small quantity of rubber with asphalt for the improvement of road surfaces in certain respects have been in progress for some years in various countries. In West Germany they have been directed particularly to improving the wearing qualities. Since 1958 two trial stretches

of road, each 200 yards long, have been under observation close to a piece of untreated road exposed to the same traffic and the same climatic conditions. A recent report (*World Road News*, Vol. 1, No. 7) suggests that the tests have given good results.

One of the trial sections on a main road near Wiesbaden was given its special surface at the same time that the adjoining piece of road was re-surfaced with ordinary asphalt and a direct comparison has been possible. For the

first five years, there was no difference. Since then the observers have noted a marked waviness in the ordinary surface and none in the special surface. They also report that the rubberized surface has worn much less smooth than the ordinary.

Another sign of good wearing characteristics is that whereas the ordinary asphalt has been pushed out over the concrete edge by the traffic, the special surface still shows a clean edge.

UNITED KINGDOM**ARE SUPERCONDUCTING CABLES UNECONOMIC?**

Much thought has been given in recent years to the application of superconductivity to power-transmission cables and components, but up to now very little information has been available on the cost of this technique. Cooling a cable or a transformer would certainly reduce electrical losses and probably size as well. Any reduction in size would help to reduce the areas of the large electrical distribution sites in metropolitan cities and this would be a great help; but would the saving be sufficient to justify the extra cable and refrigerator plant costs? Some of the answers have now been

worked out by K. J. R. Wilkinson of Associated Electrical Industries' Central Research Laboratories, Rugby.

Dr Wilkinson has examined the relative costs of a 760MVA, 275kV cable constructed of niobium cooled to 4°K and a conventional uncooled copper cable. Losses in the superconducting niobium would be only one milliwatt per kilometre when carrying 1600 amp compared with 32KW per kilometre in the copper cable. This reduction in losses would lead to a saving of £3200 per kilometre in the capitalized cost of the cable. This is the sum available to offset the extra costs.

The best form of superconducting cable would be one which used a niobium cylinder, 10.4 cm. in diameter. Liquid

helium at 4°K would be pumped through the centre of the cylinder to cool it. A radiation shield cooled to 20°K by liquid hydrogen would surround the niobium cylinder and this shield will in turn be surrounded by a further radiation shield cooled to 77°K by liquid nitrogen (*Proceedings IEE*, Vol. 113, p. 1509).

The capitalized cost of such a cable would be £12 000 a kilometre compared with £13 000 a kilometre for a conventional copper cable. Dr Wilkinson concludes that this saving, which might well disappear when it came to constructing and laying a practical system, is not large enough to provide the economic incentive for an attack on the major technical problems which still have to be solved.

CANADA**VISCOUS WATER COMBATS FIRE AND WEEDS**

By dissolving herbicides in "viscous water" and spraying the solution from a helicopter, a fast and efficient means is obtained of restricting vegetational growth along the routes of power lines. Maintenance crews can thus gain access to the lines and short circuits can be prevented.

The Hydro-Electric Power Commission of Ontario, which uses this technique (see photograph), finds that viscous water is better than ordinary water because it drifts less and is less likely to fall on adjacent property. It also clings to the foliage for longer and gives the herbicide more time to act. The water, which has a

consistency of light motor oil, is prepared by adding small amounts of hydroxyethyl-cellulose to ordinary water.

The economics of a different additive, sodium alginate, are being assessed by the United Kingdom Forestry Commission for wetting narrow bands of gorse, heather, bracken or grass, so that lanes between can be burnt in a controlled manner to prevent the spread of fire. This follows in a way upon American uses of viscous water for fighting forest fires (*New Scientist*, Vol. 21, p. 545), but since there are few large forests in the UK the economics, and thus the method of approach, are quite different.

The emphasis in Britain is on isolating high risk areas from one another so that fires cannot spread through the undergrowth. The figures available so far suggest that the cost may not be prohibitive.



Keeping the routes of power lines free of weeds by use of "viscous water" sprays



COMMONWEALTH OFFICE
GREAT SMITH STREET, LONDON S.W.1
Telephone: ABBey 1266, ext.

Our reference: YC 17/5
Your reference:

19th July, 1967.

Den Young.

I wrote to Sir Cosmo on 16 February this year about a Mr. G.M. Watt of International Management and Engineering Ltd., who was interested in oil exploration in the Falklands. The other day I had a call from a Mr. Roland C. Shaw of Roland C. Shaw and Associates whose address is 96 bis, Rue de Longchamp 92 Neuilly, France. He said that his firm was associated with Watts' firm and was following up Watts' enquiries. He is interested in the Falklands but the lack of air service and general remoteness rather put him off I think.

This letter is just to let you know of this further enquiry as Shaw, incidentally a rather pleasant American, may be getting in touch with you.

John St. J. Sugg

(A. ST. J. SUGG)

W.H. Thompson, Esq., M.B.E.,
Government House,
STANLEY,
Falkland Islands.

12th September, 1967

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Thank you for your letter YC 17/5 of 19th July, 1967
about oil exploration.

If an approach is made we will do our best to be helpful.

(W.H. THOMPSON)
COLONIAL SECRETARY

A. St. J. Sugg Esq., C.M.G.,
Commonwealth Office,
Great Smith Street,
LONDON S.W.1.

ER

fa

Co. 70 William Paul Blair

66A N.Z. Petroleum
Exploration Company

65 Horace Bennett

61 Hess Exploration Company