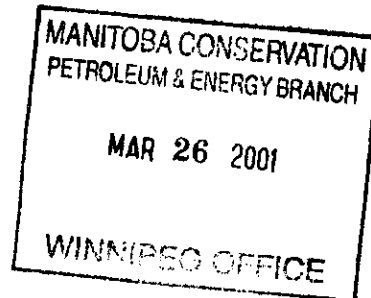


GEOLOCK
RESOURCES LTD.
INVESTMENTS IN HYDROCARBON
EXPLORATION AND PRODUCTION

Manitoba Energy and Mines
Petroleum & Energy Branch
Suite 360, 1395 Ellice Avenue
Winnipeg, Manitoba
R3G 3P2



March 19, 2001

Attention: Mr. John N. Fox
Chief Petroleum Engineer

Dear Sir:

Re: Updated Working Interest Schedule and
Tract Ownership for E.R.U #1

As requested in your letter of March 16, 2001, enclosed are the
referenced schedules for your files.

Yours very truly

Lachlan J. McLeod
Lachlan J. McLeod

Encl.

*Updated
Unit
Brochure*

**EAST ROUTLEDGE UNIT # 1
UNIT PARTICIPATION
WORKING INTEREST OWNER SCHEDULE**

Working Interest Owner

Choya Petroleum Ltd.....	1.67952
Tundra Oil & Gas Ltd.....	11.75660
EnerMark Inc.....	31.48978
Franco-Nevada Mining Corporation Limited.....	0.54953
Frobisher Petroleum Ltd.....	13.12430
TOPA Resources Ltd.....	38.04123
Methanex Corporation.....	1.67952
Piedmont Holdings Ltd.....	1.67952

TOTAL INTEREST..... 100.000000

REVISION EFFECTIVE JANUARY 1, 2001

**WORKING INTEREST OWNERS INDIVIDUAL TRACT PARTICIPATION
EAST ROUTLEDGE UNIT NO. 1**

TRACT NO.	W.I. OWNER	TRACT PARTICIPATION FACTOR	SHARE OF WORKING INTEREST	SHARE OF TRACT PARTICIPATION
1-10	TOPA	4.22753	33.33333	1.40917653
	FROBISHER		16.66667	0.70458847
	TUNDRA		35.00000	1.47963550
	METHANEX		5.00000	0.21137650
	CHOYA		5.00000	0.21137650
	PIEDMONT		5.00000	0.21137650
8-10	TOPA	3.57419	33.33333	1.19139655
	FROBISHER		16.66667	0.59569845
	TUNDRA		35.00000	1.25096650
	METHANEX		5.00000	0.17870950
	CHOYA		5.00000	0.17870950
	PIEDMONT		5.00000	0.17870950
9-10	TOPA	2.19813	43.05553	0.94641652
	FROBISHER		9.02777	0.19844212
	TUNDRA		16.04160	0.35261522
	FRANCO-NEVADA		25.00000	0.54953250
	METHANEX		2.29170	0.05037455
	CHOYA		2.29170	0.05037455
	PIEDMONT		2.29170	0.05037455
2-11	TOPA	0.50345	16.66667	0.08390835
	FROBISHER		8.33333	0.04195415
	TUNDRA		17.50000	0.08810375
	ENERMARK		50.00000	0.25172500
	METHANEX		2.50000	0.01258625
	CHOYA		2.50000	0.01258625
	PIEDMONT		2.50000	0.01258625
3-11	TOPA	2.07245	16.66667	0.34540840
	FROBISHER		8.33333	0.17270410
	TUNDRA		17.50000	0.36267875
	ENERMARK		50.00000	1.03622500
	METHANEX		2.50000	0.05181125
	CHOYA		2.50000	0.05181125
	PIEDMONT		2.50000	0.05181125
4-11	TOPA	3.40836	16.66667	0.56806011
	FROBISHER		8.33333	0.28402989
	TUNDRA		17.50000	0.59646300
	ENERMARK		50.00000	1.70418000
	METHANEX		2.50000	0.08520900
	CHOYA		2.50000	0.08520900
	PIEDMONT		2.50000	0.08520900

5-11	TOPA	3.69730	16.66667	0.61621679
	FROBISHER		8.33333	0.30810821
	TUNDRA		17.50000	0.64702750
	ENERMARK		50.00000	1.84865000
	METHANEX		2.50000	0.09243250
	CHOYA		2.50000	0.09243250
	PIEDMONT		2.50000	0.09243250
6-11	TOPA	4.51867	16.66667	0.75311182
	FROBISHER		8.33333	0.37655568
	TUNDRA		17.50000	0.79076725
	ENERMARK		50.00000	2.25933500
	METHANEX		2.50000	0.11296675
	CHOYA		2.50000	0.11296675
	PIEDMONT		2.50000	0.11296675
7-11	TOPA	4.53441	33.33333	1.51147000
	FROBISHER		16.66667	0.75573500
	TUNDRA		35.00000	1.58704350
	METHANEX		5.00000	0.22672050
	CHOYA		5.00000	0.22672050
	PIEDMONT		5.00000	0.22672050
8-11	TOPA	4.25913	16.66667	0.70985514
	FROBISHER		8.33333	0.35492736
	TUNDRA		17.50000	0.74534775
	ENERMARK		50.00000	2.12956500
	METHANEX		2.50000	0.10647825
	CHOYA		2.50000	0.10647825
	PIEDMONT		2.50000	0.10647825
10-11	TOPA	0.60194	16.66667	0.10032335
	FROBISHER		8.33333	0.05016165
	TUNDRA		17.50000	0.10533950
	ENERMARK		50.00000	0.30097000
	METHANEX		2.50000	0.01504850
	CHOYA		2.50000	0.01504850
	PIEDMONT		2.50000	0.01504850
11-11	TOPA	1.65497	16.66667	0.27582839
	FROBISHER		8.33333	0.13791411
	TUNDRA		17.50000	0.28961975
	ENERMARK		50.00000	0.82748500
	METHANEX		2.50000	0.04137425
	CHOYA		2.50000	0.04137425
	PIEDMONT		2.50000	0.04137425
12-11	TOPA	1.59075	16.66667	0.26512505
	FROBISHER		8.33333	0.13256245
	TUNDRA		17.50000	0.27838125
	ENERMARK		50.00000	0.79537500
	METHANEX		2.50000	0.03976875
	CHOYA		2.50000	0.03976875
	PIEDMONT		2.50000	0.03976875

13-11	TOPA	0.16950	16.66667	0.02825001
	FROBISHER		8.33333	0.01412499
	TUNDRA		17.50000	0.02966250
	ENERMARK		50.00000	0.08475000
	METHANEX		2.50000	0.00423750
	CHOYA		2.50000	0.00423750
	PIEDMONT		2.50000	0.00423750
14-11	TOPA	0.60393	16.66667	0.10065502
	FROBISHER		8.33333	0.05032748
	TUNDRA		17.50000	0.10568775
	ENERMARK		50.00000	0.30196500
	METHANEX		2.50000	0.01509825
	CHOYA		2.50000	0.01509825
	PIEDMONT		2.50000	0.01509825
15-11	TOPA	9.42445	16.66667	1.57074198
	FROBISHER		8.33333	0.78537052
	TUNDRA		17.50000	1.64927875
	ENERMARK		50.00000	4.71222500
	METHANEX		2.50000	0.23561125
	CHOYA		2.50000	0.23561125
	PIEDMONT		2.50000	0.23561125
5-12	TOPA	1.83004	58.33333	1.06752327
	FROBISHER		16.66667	0.30500673
	ENERMARK		25.00000	0.45751000
5-13	TOPA	2.37288	58.33333	1.38417992
	FROBISHER		16.66667	0.39548008
	ENERMARK		25.00000	0.59322000
1-14	TOPA	2.13603	58.33333	1.24601743
	FROBISHER		16.66667	0.35600507
	ENERMARK		25.00000	0.53400750
2-14	TOPA	4.26967	58.33333	2.49064069
	FROBISHER		16.66667	0.71161181
	ENERMARK		25.00000	1.06741750
3-14	TOPA	4.13644	16.66667	0.68940680
	FROBISHER		8.33333	0.34470320
	TUNDRA		17.50000	0.72387700
	ENERMARK		50.00000	2.06822000
	METHANEX		2.50000	0.10341100
	CHOYA		2.50000	0.10341100
	PIEDMONT		2.50000	0.10341100

6-14	TOPA	3.85203	16.66667	0.64200513
	FROBISHER		8.33333	0.32100237
	TUNDRA		17.50000	0.67410525
	ENERMARK		50.00000	1.92601500
	METHANEX		2.50000	0.09630075
	CHOYA		2.50000	0.09630075
	PIEDMONT		2.50000	0.09630075
7-14	TOPA	5.02515	58.33333	2.93133733
	FROBISHER		16.66667	0.83752517
	ENERMARK		25.00000	1.25628750
8-14	TOPA	10.31383	58.33333	6.01640049
	FROBISHER		16.66667	1.71897201
	ENERMARK		25.00000	2.57845750
9-14	TOPA	6.18710	58.33333	3.60914146
	FROBISHER		16.66667	1.03118354
	ENERMARK		25.00000	1.54677500
10-14	TOPA	7.90708	58.33333	4.61246307
	FROBISHER		16.66667	1.31784693
	ENERMARK		25.00000	1.97677000
11-14	TOPA	4.93059	58.33333	2.87617734
	FROBISHER		16.66667	0.82176516
	ENERMARK		25.00000	1.23264750
		100.00000		100.00000

INTERESTS AS AT JANUARY 1, 2001

MANITOBA ENERGY & MINES

MAR 15 1999

GEOLOCK
RESOURCES LTD.
INVESTMENTS IN HYDROCARBON
EXPLORATION AND PRODUCTION

March 9, 1999

Manitoba Energy and Mines
Petroleum Department
1395 - Ellice Avenue, Suite 360
Winnipeg, Manitoba
R3G 0G3

Attention: Mr. John N. Fox
Chief Petroleum Engineer

Dear Sir:

Enclosed for your files is an updated Working Interest Owner
Schedule for East Routledge Unit #1.

Yours very truly

Lachlan J. McLeod
Lachlan J. McLeod

Encl.

changed
f.

**EAST ROUTLEDGE UNIT # 1
UNIT PARTICIPATION
WORKING INTEREST OWNER SCHEDULE**

Working Interest Owner

Choya Petroleums Ltd.....	1.67952 ✓
Tundra Oil & Gas Ltd.....	11.75660 ✓
Enermark.....	31.48978 ✓
Estate Of Mr. Joseph H. Hirshhorn.....	0.36636 ✓
Franco-Nevada Oil & Gas.....	0.54953 ✓
Frobisher Petroleums Ltd.....	13.12430 ✓
Geolock Resources Ltd.....	26.43178 ✓
Globex Resources Ltd.....	11.24309 ✓
Methanex Corporation.....	1.67952 ✓
Piedmont Holdings Ltd.....	1.67952 ✓

TOTAL INTEREST..... 100.000000%

REVISION EFFECTIVE JANUARY 1, 1999

GEOLOCK RESOURCES LTD.

INVESTMENTS IN HYDROCARBON
EXPLORATION AND PRODUCTION

~~JOHN/DAN~~
- FOR UNIT
FILES AND
PUBLICATION
BD

① Pamela
Please update
Unit publication

② FILE: FIELD/PAL
R. ROUTLEDGE UNIT No 1
UNIT CORRESPONDENCE

October 19, 1994

Department of Energy and Mines
Mineral Resources Division
Petroleum Branch
1395 Ellice Avenue, Suite 360
Winnipeg, Manitoba
R3G 0G3

Gentlemen:

Please be advised that Geolock Resources Ltd. has purchased United Reef's interest in and to East Routledge Unit #1. Enclosed is a copy of the Assignment Agreement dated August 1, 1994 for your information and files.

Due to this change in the Working Interest Owners percentages, we are enclosing an updated Unit Participation Working Interest Owner Schedule for your files.

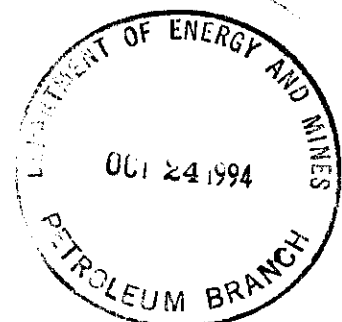
If you require any further information, please contact me at your earliest convenience.

Yours very truly



Lachlan J. McLeod

Encl.



1

This Assignment made as of the 1st day of August, 1994.

BETWEEN:

United Reef Limited

(hereinafter referred to as the "Assignor")

OF THE FIRST PART

-AND-

Geolock Resources Ltd.

(hereinafter referred to as "Assignee")

OF THE SECOND PART

WHEREAS the Assignor holds a 0.18317 of one percent working interest in the East Routledge Unit #1 pursuant to a unit agreement dated July 21, 1971 ("Unit Agreement");

AND WHEREAS the Assignor has agreed to sell and the Assignee has agreed to purchase for a consideration of Five Hundred Dollars (\$500.00) the Assignor's entire interest in:

- (i) the petroleum and natural gas rights and related interests ("P&NG rights") as reflected and covered by the Unit Agreement;
- (ii) its, right title and interest in and to the Unit Agreement, and
- (iii) the interest it holds in the goods, chattels and personal property (tangibles) in respect to the interest to be assigned.

NOW THEREFORE THIS AGREEMENT WITNESSETH that,

1. In consideration of the sum of Five Hundred Dollars (\$500.00) and other good and valuable consideration paid to the Assignor by the Assignee, the Assignor does hereby convey, sell, assign and transfer and set over to the Assignee, the P&NG rights, the tangibles and its entire interest in the Unit Agreement together with all benefits and advantages to be derived therefrom, to have and to hold the same unto the Assignee for its sole use and benefit absolutely.

2. The Assignee accepts the assignment and transfer and agrees with the Assignor at all times hereafter to observe and perform every covenant and term on the part of the Assignor in the Unit Agreement as if the Assignee had been originally named as a party thereto in the place and stead of the Assignor.

3. This agreement shall enure to and be binding upon the parties and their heirs, administrators, successors and assigns.

IN WITNESS WHEREOF the parties hereto have executed this agreement effective as of the date first above written.

UNITED REEF LIMITED

Per:  V. Pres. Expl.

GEOLOCK RESOURCES LTD.

Per:  Pres.

**EAST ROUTLEDGE UNIT # 1
UNIT PARTICIPATION
WORKING INTEREST OWNER SCHEDULE**

Working Interest Owner

Choya Petroleums Ltd.....	1.67952
Corvair Oils Ltd.....	11.75660
Estate Of Mr. Joseph H. Hirshhorn.....	0.36636
Frobisher Petroleums Ltd.....	13.12430
Geolock Resources Ltd.....	26.43178
Mark Resources Inc.....	31.48978
Methanex Corporation.....	1.67952
Piedmont Holdings Ltd.....	1.67952
Prairie Oil Royalties Ltd.....	0.54953
2923572 Canada Inc.....	11.24309

TOTAL INTEREST..... 100.000000

REVISION EFFECTIVE AUGUST 1, 1994

December 19, 1986



1505, 505 THIRD STREET SOUTH WEST, CALGARY, ALBERTA T2P 3E6
TELEPHONE (403) 265-7493

Manitoba Energy and Mines
555 - 330 Graham Avenue
Winnipeg, Manitoba
R3G 4E3

Attention: Bob Dubreuil

Dear Sir:

RE: East Routledge Unit No. 1
Twp. 9 Rge. 25 W1M
Our File: 72-5

By our letter dated December 11, 1986, we forwarded to you copies of the "Working Interest Owners Individual Tract Participation" for your records. We have found errors in Tract 7-11 & 14-11, under "Share of Working Interest" and have corrected same.

Enclosed are two copies (2) of each of the correct pages, please insert these into your schedules destroying the incorrect ones. Please accept our apologies for this inconvenience.

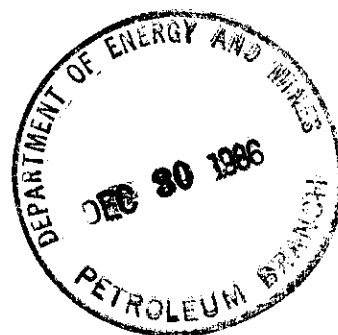
Yours very truly,

SAMEDAN OIL OF CANADA, INC.

M. Bruchall

Monica J. Bruchall
Land Consultant

cc: (All with enclosures - 2)
Oakwood Petroleums Ltd.
Texaco Canada Resources
Chevron Canada Resources Limited
Estate of Mr. Joseph H. Hirshhorn
Prairie Oil Royalties Company, Ltd.
Ranchman's Resources Ltd.
United Reef Petroleums Ltd.
Ocelot Industries Ltd.
Choya Petroleums Ltd.
Piedmont Holdings Ltd.



December 11, 1986

Manitoba Energy and Mines
555 - 330 Graham Avenue
Winnipeg, Manitoba
R3G 4E3

Attention: Bob Dubreuil

Dear Sir:

RE: East Routledge Unit No. 1
Twp. 9, Rge. 25 W1M
Our File: 72-5



1505, 505 THIRD STREET SOUTH WEST, CALGARY, ALBERTA T2P 3E6
TELEPHONE (403) 265-7493

Pursuant to various Assignment and Novation Agreements and transfers of interest a number of changes in ownership have been given to Samedan Oil of Canada, Inc. as operator of the captioned Unit. As a result we are forwarding to you a revised "Working Interest Owner Schedule" (2 copies) and a revised "Working Interest Owners Individual Tract Participation" (2 copies). Please insert these schedules into your copy of the captioned Unit.

Should copies of these revised schedules be required by any other Government Departments we would appreciate it if you could provide us with the names and addresses of the offices requiring this information.

By copy of this letter we are distributing copies of the above mentioned schedule to the Working Interest parties.

Yours very truly,

SAMEDAN OIL OF CANADA, INC.

M. Bruchall

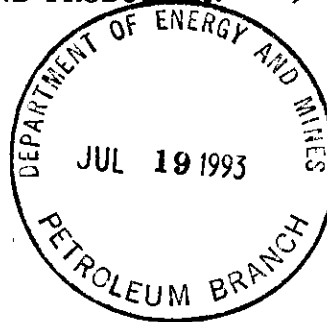
Monica Bruchall
Land Consultant

MJB:kyl

cc: (all with enclosed schedules - 2)
Oakwood Petroleums Ltd.
Texaco Canada Resources
Chevron Canada Resources Limited
Estate of Mr. Joseph H. Hirshhorn
Prairie Oil Royalties Company, Ltd.
Ranchman's Resources Ltd.
United Reef Petroleums Ltd.
Ocelot Industries Ltd.
Choya Petroleums Ltd.
Piedmont Holdings Ltd.

GEOLOCK
RESOURCES LTD.
INVESTMENTS IN HYDROCARBON
EXPLORATION AND PRODUCTION

- Carol xcopy
- Paulette xcopy
- original - unit binder



July 14, 1993

Department of Energy and Mines
Mineral Resources Division
Petroleum Branch
555 - 350 Graham Avenue
Winnipeg, Manitoba
R3C 4E3

Gentlemen:

Please be advised that Geolock Resources Ltd. has transferred a portion of its interest in and to the East Routledge Unit #1 to Frobisher Petroleums Ltd. Enclosed is a copy of the Assignment Agreement dated January 1, 1993, but effective as of February 1, 1990, for your information and files.

Geolock did not assign its rights as Unit Operator under the terms of this Agreement.

Due to a number of changes in the Working Interest Owners within the Unit, we are enclosing an updated Unit Participation Working Interest Owner Schedule for your files.

If you require any further information, please contact me at your earliest convenience.

Yours very truly

A handwritten signature in cursive script, appearing to read "Lachlan J. McLeod".

Lachlan J. McLeod

ASSIGNMENT AGREEMENT

THIS AGREEMENT is made as of the 1st day of JANUARY, 1993.

BETWEEN:

GEOLOCK RESOURCES LTD., a body corporate,
having an office at the City of Calgary,
in the Province of Alberta,

(hereinafter referred to as "Assignor")

- and -

FROBISHER PETROLEUMS LTD., a body corporate,
having an office at the City of Calgary, in
the Province of Alberta,

(hereinafter referred to as "Assignee")

WHEREAS Assignor is a Party or successor in interest to a Party to the Agreement or Agreements set out in Schedule "A" hereto (such agreement or agreements, including all amendments thereto, if any, hereinafter referred to as the "Agreement");

AND WHEREAS pursuant to a Petroleum and Natural Gas Rights Conveyance Agreement dated and made effective as of the 1st day February, 1990, Assignor agreed to convey to Assignee THIRTY-THREE and ONE-THIRD (33-1/3%) percent (hereinafter called "the Assigned Interest") of the right, title, estate and interest of Assignor in and to the Agreement;

AND WHEREAS since February 1st, 1990 the Assignor has pursuant to a Declaration of Trust dated as of the 1st day of February, 1990, held the Assigned Interest in trust for the Beneficiary;

.../

NOW THEREFORE in consideration of the premises hereto and the covenants and agreements hereinafter set forth and contained, the Parties hereto covenant and agree as follows:

- (1) Assignor hereby assigns, transfers, sets over and conveys unto Assignee, effective as of the date hereof (hereinafter referred to as "Effective Date"), the Assigned Interest in the Agreement.
- (2) Assignee hereby accepts the assignment herein provided and covenants and agrees with the Assignor to assume as of the Effective Date, and thereupon and thereafter to be bound by and observe, carry out and perform and fulfill all of the covenants, conditions, obligations and liabilities of Assignor (insofar as same applies to the Assigned Interest) under the Agreement, to the same extent and with the same force and effect as though Assignee had been named a party to the Agreement as of the Effective Date in the place and stead of Assignor in respect of the Assigned Interest.
- (3) The address of Assignee for notices under the Agreement shall be:

Frobisher Petroleums Ltd.
Suite 805
603 - 7th Avenue S. W.
Calgary, Alberta
T2P 2T5
ATTN: Land Department

- (4) The Parties hereto shall, from time to time and at all times hereafter, without further consideration, do all such further acts

.../

and execute and deliver all such further documents as shall be reasonably required to give full effect to the provisions hereof.

- (5) This Agreement shall enure to the benefit of and be binding upon the Parties hereto, their respective administrators, trustees, receivers, successors and assigns.

IN WITNESS WHEREOF the Parties hereto have executed and delivered this Agreement as of the date first above written.

GEOLOCK RESOURCES LTD.

Per: George M. Leob

Per: Patricia J. Mubert

(as Assignor)

FROBISHER PETROLEUMS LTD.

Per: Ronald Ward

(as Assignee)

THIS IS SCHEDULE "A" ATTACHED TO AND FORMING PART
OF AN ASSIGNMENT AGREEMENT MADE AS OF JANUARY 1st,
1993 BETWEEN GEOLOCK RESOURCES LTD. (as Assignor)
and FROBISHER PETROLEUMS LTD. (as Assignee)

the "Agreement":

Plan for Unit Operation governing the Unitized Management,
Operation and further Development of EAST ROUTLEDGE UNIT #1.

**EAST ROUTLEDGE UNIT # 1
UNIT PARTICIPATION
WORKING INTEREST OWNER SCHEDULE**

Working Interest Owner

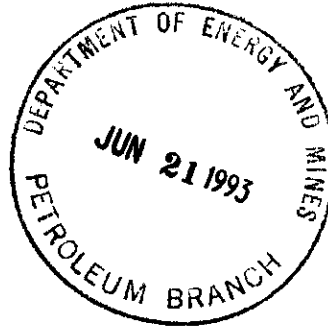
Choya Petroleums Ltd.....	1.67952
Corvair Oils Ltd.....	11.75660
Estate Of Mr. Joseph H. Hirshhorn.....	0.36636
Frobisher Petroleums Ltd.....	13.12430
Geolock Resources Ltd.....	26.24861
Mark Resources Inc.....	31.48978
Methanex Corporation.....	1.67952
Piedmont Holdings Ltd.....	1.67952
Prairie Oil Royalties Ltd.....	0.54953
Sceptre Resources Limited.....	11.24309
United Reef Petroleums Ltd.....	0.18317

TOTAL INTEREST..... 100.000000

REVISION EFFECTIVE JULY 14, 1993



June 16, 1993



Chevron Canada Resources
500 - Fifth Avenue S.W.
Calgary, Alberta T2P 0L7
Phone (403) 234-5000
Fax (403) 234-5947

Department of Energy and Mines
Mineral Resources Division
Petroleum Branch
350 Graham Avenue, Suite 555
Winnipeg, Manitoba
R3C 4E3

East Routledge Unit No. 1
Our Land File No. 30438
Our Legal File No. 55,881-1

Gentlemen:

Attached is a copy of the Royalty Owner Consent dated December 10, 1971, signed by Chevron Standard Limited as owner of an overriding royalty interest in Tract Nos. 7-11, 7-14 and 11-14 of the East Routledge Unit No. 1. In a review of our records, we determined that the royalty owner's interest in this document was described, in error, as a maximum of 12½% in Tract Nos. 7-14 and 11-14. The maximum royalty for these two tracts is 15%.

The maximum royalty percentage of 15% for Tract Nos. 7-14 and 11-14 is consistent with the Farmout Agreement dated March 10, 1967, originally between Chevron Standard Limited and Samedan Oil of Canada, Inc.

The Royalty Owner Consent document should have read and should be amended to read as follows:

<u>Tract No.</u>	<u>Royalty Owner's Interest</u>
7-11)	Sliding scale gross overriding royalty based on monthly production, minimum 5%, maximum 12½%.
7-14)	Sliding scale gross overriding
11-14)	royalty based on monthly production, minimum 5%, maximum 15%.

Please also amend the Unit documents to reflect the correct interest.

June 16, 1993
Page 2

Also please be advised that Chevron has sold its interest in these lands to Mark Resources Inc. effective May 1, 1993, further to our letter dated May 26, 1993, to your department.

Yours very truly,

A handwritten signature in cursive script, appearing to read "N. A. Weedle".

N. A. (NANCY) WEEDLE
Land Representative
Acquisitions and Divestitures

NAW/sp
Attachment

pc: Mark Resources Inc.
Attention: Linda Shields

Geolock Resources Ltd.
Attention: Lachlan McLeod

The Oil and Natural Gas Conservation Board,
Department of Mines and Natural Resources,
Government of the Province of Manitoba,
Winnipeg 1, Manitoba.

We, Chevron Standard Limited of 400 5 Ave. S. W., Calgary 1
the Province of Alberta, Oil and Gas Operator, being the owner
(Occupation)
of an overriding Royalty Interest in the proposed East Routledge
Unit No. 1, as hereinafter set out:

<u>Tract No.</u>	<u>Royalty Owner's Interest</u>
7-11)	Sliding scale gross overriding
7-14)	royalty based on monthly production,
11-14)	minimum 5%, maximum 12½%.

HEREBY AGREE to the Proposed Plan of Unit Operation/entitled "Plan
, as amended pursuant to Board hearing dated October 5, 1971,
for Unit Operation Governing the Unitized Management Operation and
Further Development of East Routledge Unit No. 1", a copy of which
Plan, identified by date of July 21, 1971, has been provided me by
Samedan Oil of Canada, Inc., and WE CONSENT AND AGREE to the Board
making an Order pursuant to Section 74 of The Mines Act of the
Revised Statutes of Manitoba, 1970 and Amendments thereto, ordering
that a certain portion of the West Routledge Field as described in
the said Plan be operated as a Unit in accordance with the Plan of
Unit Operation.

SIGNED at Calgary, in the Province of Alberta, this 10th day of
December, A. D. 1971.

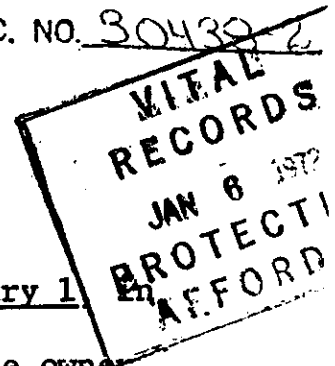
CHEVRON STANDARD LIMITED

L. G. Brown

PRESIDENT

K. M. Hamman

VICE PRESIDENT



→ BOB

~~JOHN / DAN~~

SUE *JB*

CAKOL *CB*

PAULETTE *CB*

RETURN TO FILE:

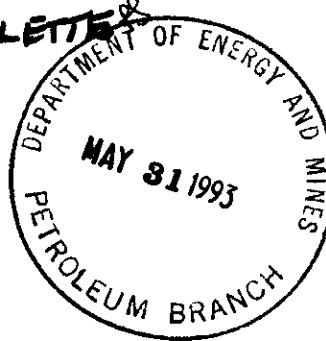
E. ROUTLEDGE UNIT NO. 1 UNIT
AGREEMENT



Chevron

May 26, 1993

Department of Energy and Mines
Mineral Resources Division
Petroleum Branch
555 - 350 Graham Avenue
Winnipeg, Manitoba
R3C 4E3



Chevron Canada Resources

500 - Fifth Avenue S.W.
Calgary, Alberta T2P 0L7
Phone (403) 234-5000
Fax (403) 234-6214

E.H. Gaudet

Vice President and
General Counsel

East Routledge Unit No. 1
Our File No. 55,881-1

Gentlemen:

Please be advised that Chevron Canada Resources has assigned its interest in the referenced Unit to Mark Resources Inc., as evidenced by the enclosed copy of an assignment agreement made effective May 1, 1993 a copy of which has been delivered to the Unit Operator.

If you require further information or documentation, or if any other Department should be notified, please contact the undersigned at your earliest convenience.

Yours very truly,

CHEVRON CANADA RESOURCES,
a Partnership by its managing partner
CHEVRON CANADA RESOURCES LIMITED

MARK RESOURCES INC.

Per: *K. Shields*

Per: *Linda E. Shields*

LINDA E. SHIELDS
LAND ADMINISTRATION COORDINATOR

KSA/nf
Encl.

pc: Geolock Resources Ltd.
R. J. Terlesky

THIS AGREEMENT made as of the 1st day of May, 1993.

B E T W E E N:

CHEVRON CANADA RESOURCES, a
Partnership having an office at the City of Calgary,
in the Province of Alberta (hereinafter
referred to as "Assignor")

- and -

MARK RESOURCES INC., a body
corporate having an office at the City of Calgary,
in the Province of Alberta (hereinafter
collectively referred to as "Assignee")

WHEREAS the Assignor is a party to or successor in interest to a party to the agreement(s) described in Schedule "A" attached hereto (such agreement(s), including all amendments thereto, if any, hereinafter referred to as "the said Agreement"); and

WHEREAS Assignor has agreed to assign all of its interest in and under the said Agreement unto the Assignee; and

WHEREAS the Assignee has agreed to assume all of the obligations of the Assignor under the said Agreement as and from May 1, 1993 (the "Effective Date");

NOW THEREFORE THIS AGREEMENT WITNESSETH THAT in consideration of the premises and the mutual covenants and agreements hereinafter set forth the parties hereto covenant and agree with one another as follows:

1. The Assignor hereby assigns, transfers, conveys and sets over unto Assignee all of the Assignor's right, title, estate and interest in, to and under the said Agreement TO HAVE AND TO HOLD the same unto the Assignee for its sole use and benefit absolutely from and after the Effective Date.
2. The Assignee hereby accepts the assignment herein provided and covenants and agrees with the Assignor that it shall at all times from and after the Effective Date be bound by, observe and perform all of the covenants and obligations thereafter accruing on the part of the

Assignor under the said Agreement and shall indemnify the Assignor and its directors, officers, servants, agents and employees and hold harmless from and against all claims, liabilities, actions, proceedings, demands, losses, costs, damages and expenses whatsoever which may be brought against or suffered by the Assignor, its directors, officers, servants, agents or employees, or which they may sustain, pay or incur, insofar as they relate to the interest assigned in the said Agreement, arising from and after the Effective Date.

3. The Assignee hereby acknowledges that, as between the Assignor and the Assignee, the Assignor shall be deemed to have been acting as the trustee and agent of the Assignee in all matters occurring in respect of the Agreement between the Effective Date and the delivery of a copy of this agreement and the Assignee hereby ratifies, adopts and confirms all acts and omissions of the Assignor in its capacity as such trustee and agent to the end that all such acts and omissions shall be deemed to have been effected by the Assignee.
4. The address of the Assignee for notices and other communications under the Agreement shall be:

Mark Resources Inc.
1300, 800 - 5th Avenue S.W.
Calgary, Alberta
T2P 4A4

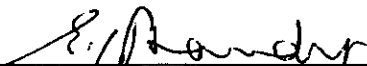
Attention: Vice-President, Production

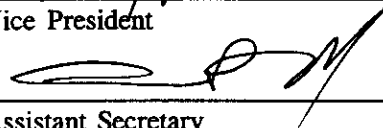
5. Each of the Assignor and the Assignee shall from time to time and at all times hereafter, without further consideration, do and perform all such further acts and execute and deliver all such further assignments, notices, releases and other documents and instruments as may reasonably be required to more fully effect or assure the assignment as provided herein.
6. The terms hereof shall be read in conjunction with and subject to the terms of a Conveyance Agreement, made effective May 1, 1993, between Assignor and Assignee (the "Conveyance Agreement"). In the event of any conflict between this agreement and the Conveyance Agreement, the Conveyance Agreement shall prevail.
7. This agreement shall enure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

The parties hereto have executed this agreement as of the day and year first above written.

ASSIGNOR:

CHEVRON CANADA RESOURCES, a Partnership
by its managing partner
CHEVRON CANADA RESOURCES LIMITED

Per: 
Vice President

Per: 
Assistant Secretary

ASSIGNEE:

MARK RESOURCES INC.

Per: 
SENIOR VICE-PRESIDENT
CORPORATE AFFAIRS and FINANCE

Per: 
PRESIDENT

This is Schedule "A", attached to an Assignment Agreement,
dated May 1, 1993 between Chevron Canada Resources, as
Assignor and Mark Resources Inc., as Assignee.

"the said Agreement"

Plan for Unit Operation Governing the Unitized Management Operation and Further Development of East
Routledge Unit No. 1.

GEOLOCK
RESOURCES LTD.
INVESTMENTS IN HYDROCARBON
EXPLORATION AND PRODUCTION

February 25, 1992

Manitoba Energy and Mines
P.O. Box 1359
Virden, Manitoba
R0M 2C0

Attention: Mr. Brad Thiessen
Manager, Petroleum Administration

Dear Sir:

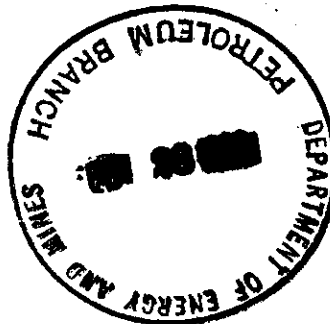
Re: Updated Working Interest Owners Schedule
East Routledge Unit #1
Virden, Manitoba

Enclosed for your files is an updated copy of the working interest owners in East Routledge Unit #1. We will supply your department with updates should there be any additional changes in the future.

Yours very truly

Lachlan J. McLeod
Lachlan J. McLeod

Encl.



**WORKING INTEREST OWNERS INDIVIDUAL TRACT PARTICIPATION
EAST ROUTLEDGE UNIT NO. 1**

TRACT NO.	W.I. OWNER	TRACT PARTICIPATION FACTOR	SHARE OF WORKING INTEREST	SHARE OF TRACT PARTICIPATION
1-10	GEOLOCK	4.22753	50.0000	2.11376500
	ESSO		35.0000	1.47963550
	OCELOT		5.0000	0.21137650
	CHOYA		5.0000	0.21137650
	PIEDMONT		5.0000	0.21137650
8-10	GEOLOCK	3.57419	50.0000	1.78709500
	ESSO		35.0000	1.25096650
	OCELOT		5.0000	0.17870950
	CHOYA		5.0000	0.17870950
	PIEDMONT		5.0000	0.17870950
9-10	GEOLOCK	2.19813	27.0833	0.59532614
	ESSO		16.0416	0.35261522
	PRAIRIE OIL		25.0000	0.54953250
	HIRSHHORN		16.6670	0.36636233
	UNITED REEF		8.3330	0.18317017
	OCELOT		2.2917	0.05037455
	CHOYA		2.2917	0.05037455
	PIEDMONT		2.2917	0.05037455
2-11	GEOLOCK	0.50345	25.0000	0.12586250
	ESSO		17.5000	0.08810375
	CHEVRON		50.0000	0.25172500
	OCELOT		2.5000	0.01258625
	CHOYA		2.5000	0.01258625
	PIEDMONT		2.5000	0.01258625
3-11	GEOLOCK	2.07245	25.0000	0.51811250
	ESSO		17.5000	0.36267875
	CHEVRON		50.0000	1.03622500
	OCELOT		2.5000	0.05181125
	CHOYA		2.5000	0.05181125
	PIEDMONT		2.5000	0.05181125
4-11	GEOLOCK	3.40836	25.0000	0.85209000
	ESSO		17.5000	0.59646300
	CHEVRON		50.0000	1.70418000
	OCELOT		2.5000	0.08520900
	CHOYA		2.5000	0.08520900
	PIEDMONT		2.5000	0.08520900

5-11	GEOLOCK	3.69730	25.0000	0.92432500
	ESSO		17.5000	0.64702750
	CHEVRON		50.0000	1.84865000
	OCELOT		2.5000	0.09243250
	CHOYA		2.5000	0.09243250
	PIEDMONT		2.5000	0.09243250
6-11	GEOLOCK	4.51867	25.0000	1.12966750
	ESSO		17.5000	0.79076725
	CHEVRON		50.0000	2.25933500
	OCELOT		2.5000	0.11296675
	CHOYA		2.5000	0.11296675
	PIEDMONT		2.5000	0.11296675
7-11	GEOLOCK	4.53441	25.0000	1.13360250
	ESSO		17.5000	0.79352175
	CHEVRON		50.0000	2.26720500
	OCELOT		2.5000	0.11336025
	CHOYA		2.5000	0.11336025
	PIEDMONT		2.5000	0.11336025
8-11	GEOLOCK	4.25913	25.0000	1.06478250
	ESSO		17.5000	0.74534775
	CHEVRON		50.0000	2.12956500
	OCELOT		2.5000	0.10647825
	CHOYA		2.5000	0.10647825
	PIEDMONT		2.5000	0.10647825
10-11	GEOLOCK	0.60194	25.0000	0.15048500
	ESSO		17.5000	0.10533950
	CHEVRON		50.0000	0.30097000
	OCELOT		2.5000	0.01504850
	CHOYA		2.5000	0.01504850
	PIEDMONT		2.5000	0.01504850
11-11	GEOLOCK	1.65497	25.0000	0.41374250
	ESSO		17.5000	0.28961975
	CHEVRON		50.0000	0.82748500
	OCELOT		2.5000	0.04137425
	CHOYA		2.5000	0.04137425
	PIEDMONT		2.5000	0.04137425
12-11	GEOLOCK	1.59075	25.0000	0.39768750
	ESSO		17.5000	0.27838125
	CHEVRON		50.0000	0.79537500
	OCELOT		2.5000	0.03976875
	CHOYA		2.5000	0.03976875
	PIEDMONT		2.5000	0.03976875

13-11	GEOLOCK	0.16950	25.0000	0.04237500
	ESSO		17.5000	0.02966250
	CHEVRON		50.0000	0.08475000
	OCELOT		2.5000	0.00423750
	CHOYA		2.5000	0.00423750
	PIEDMONT		2.5000	0.00423750
14-11	GEOLOCK	0.60393	25.0000	0.15098250
	ESSO		17.5000	0.10568775
	CHEVRON		50.0000	0.30196500
	OCELOT		2.5000	0.01509825
	CHOYA		2.5000	0.01509825
	PIEDMONT		2.5000	0.01509825
15-11	GEOLOCK	9.42445	25.0000	2.35611250
	ESSO		17.5000	1.64927875
	CHEVRON		50.0000	4.71222500
	OCELOT		2.5000	0.23561125
	CHOYA		2.5000	0.23561125
	PIEDMONT		2.5000	0.23561125
5-12	GEOLOCK	1.83004	50.000	0.91502000
	RANCHMEN'S		25.000	0.45751000
	OAKWOOD		25.000	0.45751000
5-13	GEOLOCK	2.37288	50.000	1.18644000
	RANCHMEN'S		25.000	0.59322000
	OAKWOOD		25.000	0.59322000
1-14	GEOLOCK	2.13603	50.000	1.06801500
	RANCHMEN'S		25.000	0.53400750
	OAKWOOD		25.000	0.53400750
2-14	GEOLOCK	4.26967	50.000	2.13483500
	RANCHMEN'S		25.000	1.06741750
	OAKWOOD		25.000	1.06741750
3-14	GEOLOCK	4.13644	25.0000	1.03411000
	ESSO		17.5000	0.72387700
	CHEVRON		50.0000	2.06822000
	OCELOT		2.5000	0.10341100
	CHOYA		2.5000	0.10341100
	PIEDMONT		2.5000	0.10341100

6-14	GEOLOCK	3.85203	25.0000	0.96300750
	ESSO		17.5000	0.67410525
	CHEVRON		50.0000	1.92601500
	OCELOT		2.5000	0.09630075
	CHOYA		2.5000	0.09630075
	PIEDMONT		2.5000	0.09630075
7-14	GEOLOCK	5.02515	50.000	2.51257500
	RANCHMEN'S		25.000	1.25628750
	OAKWOOD		25.000	1.25628750
8-14	GEOLOCK	10.31383	50.000	5.15691500
	RANCHMEN'S		25.000	2.57845750
	OAKWOOD		25.000	2.57845750
9-14	GEOLOCK	6.18710	50.000	3.09355000
	RANCHMEN'S		25.000	1.54677500
	OAKWOOD		25.000	1.54677500
10-14	GEOLOCK	7.90708	50.000	3.95354000
	RANCHMEN'S		25.000	1.97677000
	OAKWOOD		25.000	1.97677000
11-14	GEOLOCK	4.93059	50.000	2.46529500
	RANCHMEN'S		25.000	1.23264750
	OAKWOOD		25.000	1.23264750
		100.00000		100.00000

INTERESTS AS AT FEBRUARY 24, 1992

**EAST ROUTLEDGE UNIT # 1
UNIT PARTICIPATION
WORKING INTEREST OWNER SCHEDULE**

Working Interest Owner

Oakwood Petroleums Ltd.....	11.24309
Esso Resources Canada.....	11.75660
Chevron Canada Resources Limited.....	20.24669
Estate Of Mr. Joseph H. Hirshhorn.....	0.36636
Prairie Oil Royalties Ltd.....	0.54953
Ranchmen's Resources Ltd.....	11.24309
Geolock Resources Ltd.....	39.37291
United Reef Petroleums Ltd.....	0.18317
Ocelot Industries Ltd.....	1.67952
Choya Petroleums Ltd.....	1.67952
Piedmont Holdings Ltd.....	1.67952
TOTAL INTEREST.....	100.00000%

REVISION EFFECTIVE FEBRUARY 1, 1990

FILE

E. Routledge
Unit No. 1

April 9, 1990

Unit Agreement
Unit No. 1
Geolock Resources Ltd.



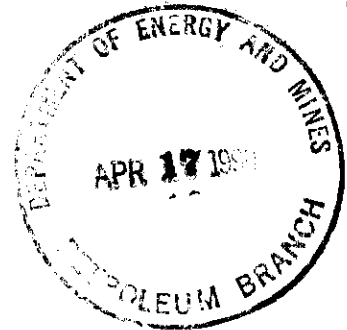
1505, 505 THIRD STREET SOUTH WEST, CALGARY, ALBERTA T2P 3E6
TELEPHONE: (403) 265-7493 FAX: (403) 264-6505

Manitoba Energy & Mines
555, 330 Graham Avenue
Winnipeg, Manitoba
R3C 4E3

ATTENTION: Mr. Brad Thiessen

Dear Brad,

RE: Change of Operatorship
East Routledge Unit #1



Further to our conversation of April 6, 1990 this is to advise that Samedan Oil of Canada, Inc. have sold their interest in the East Routledge Unit #1 and the Routledge 13-2-9-25 W1 well to Geolock Resources Ltd. effective February 1, 1990. We also enclose copy of Mail Ballot 1-90 indicating that Geolock Resources Ltd. will assume operatorship of the ERU #1 effective May 1, 1990. By copy of letter to Geolock, we ask that they contact your John Fox at 204-945-6594 regarding Geolock's obligation for posting a performance deposit. If you require any further information, please contact the writer or Lachlan McLeod of Geolock Resources Ltd at 403-265-7370.

Yours truly,

SAMEDAN OIL OF CANADA, INC.

John Topping
Division Accountant

File: RF,DF,Drilling Depo

cc- Geolock

OOKIE,

WE WILL ASSURE THE APR 9/90
LETTER TO BRAD WAS NOTIFICATION
TO THE BOARD. THE WELL LICENCES
CAN BE TRANSFERRED. PLEASE MAKE
ME A COPY OF THE APR 9/90
LETTER FOR OUR FILES.

Oct 15/90

Brad
Advised and letter sent
@ copy this to file OB



1505, 505 THIRD STREET SOUTH WEST, CALGARY, ALBERTA T2P 3E8
TELEPHONE (403) 265-7493 FAX (403) 264-6505

TO: All Working Interest Owners
East Routledge Unit #1

DATE: March 30, 1990

RE: East Routledge Unit #1
Results of Mail Ballot No. 1-90

Mail Ballot No. 1-90 proposed 2 motions as follows.

Motion #1- Operating committee waive the 90 day notice required under clause 7.06(c) of the Plan of Unit Operations and accept Samedan's resignation as operator of East Routledge Unit #1 effective May 1, 1990.

Motion #2- Operating committee accept "Geolock Resources Ltd." as operator of East Routledge Unit #1 effective May 1, 1990.

Results of Mail Ballot 1-90 are as follows.

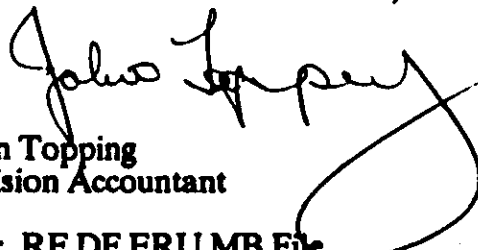
Ballots Received Affirmative	<u>Motion #1</u>	<u>Motion #2</u>
*Ballots Not Received	98.90094%	98.9004%
(Deemed Affirmative)	<u>1.09906%</u>	<u>1.09906%</u>
	100.0000%	100.0000%

In accordance with Clause 6.01 of the Unit Operating Agreement, the subject mail ballot has been passed.

* Mr. Joseph H. Hirshhorn
Prairie Oil Royalties Company, Ltd.
United Reef Petroleums Ltd.

Yours truly,

SAMEDAN OIL OF CANADA, INC.


John Topping
Division Accountant

File: RF,DF,ERU MB File

cc- Rodney Cook
Ted New
Geolock Resources Ltd.
William Caskey (Ardmore)

EAST ROUTLEDGE UNIT NO. 1

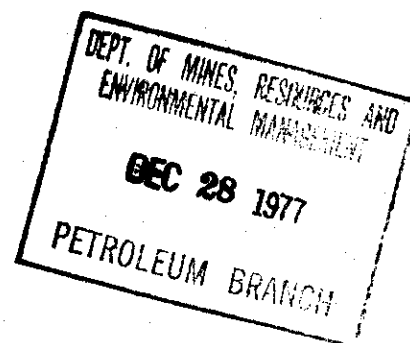
UNIT PARTICIPATION

WORKING INTEREST OWNER SCHEDULE

<u>Working Interest Owner</u>	<u>Final</u>
Bueno Oils Ltd.	11.24309
Canadian Reserve Oil and Gas Ltd.	16.79516
Chevron Standard Limited	20.24669
Mr. Joseph H. Hirshhorn	00.36636
Prairie Oil Royalties Company, Ltd.	00.54953
Ranchmen's Resources (1976) Ltd.	11.24309
Samedan Oil of Canada, Inc.	39.37291
United Reef Petroleums Ltd.	<u>00.18317</u>
TOTALS	100.00000

Total WIO Approval

100.00000 9/23/77 G.K.



Working Interest Owners Individual Tract Participation East Rautledge Unit 1

TRACT No	W. I. OWNER	TRACT PARTICIPATION	SHARE OF WORKING INTEREST	SHARE OF TRACT PARTICIPATION
1-10	Samedan Canadian Reserve	4.22753	50.000	2.113765
			50.000	2.113765
8-10	Samedan Canadian Reserve	3.57419	50.000	1.787095
			50.000	1.787095
9-10	Samedan Canadian Reserve Prairie Oil Husky United Reef	2.19813	$\frac{12}{100}$ 27.083	.595320
			$\frac{12}{100}$ 22.917	.503745
			$\frac{1}{4}$ 25.000	.549533
			$\frac{1}{2}$ 16.667	.366362
			$\frac{1}{2}$ 8.333	.183170
2-11	Samedan Canadian Reserve Chevron	.50345	25.000	.125862 ^S
			25.000	.125862 ^S
			50.000	.251725
3-11	Samedan Canadian Reserve Chevron	2.07245	25.000	.518112 ^S
			25.000	.518112 ^S
			50.000	1.036225
4-11	Samedan Canadian Reserve Chevron	3.40826	25.000	.852090
			25.000	.852090
			50.000	1.704180

Working Interest Owners Individual Tract Participation East Rauldridge Unit 1

TRACT No	W. I. OWNER	TRACT PARTICIPATION	SHARE OF WORKING INTEREST	SHARE OF TRACT PARTICIPATION
5-11	Samedan	3.69730	25.000	.924325
	Canadian Reserve		25.000	.924325
	Cherron		50.000	1.848650
6-11	Samedan	4.51867	25.000	1.129667 ^{\$}
	Canadian Reserve		25.000	1.129667 ^{\$}
	Cherron		50.000	2.259335
7-11	X Samedan Canadian Reserve	4.53441	50.000	2.267205
			2 50.000	2.267205
8-11	Samedan Canadian Reserve Cherron	4.25913	25.000	1.064782 ^{\$}
			25.000	1.064782 ^{\$}
			50.000	2.129565
10-11	Samedan Canadian Reserve Cherron	.60194	25.000	.150485
			25.000	.150485
			50.000	.300970
11-11	Samedan Canadian Reserve Cherron	1.65497	25.000	.413742 ^{\$}
			25.000	.413742 ^{\$}
			50.000	.827485
12-11	Samedan Canadian Reserve Cherron	1.59075	25.000	.397687 ^{\$}
			25.000	.397687 ^{\$}
			50.000	.795375

Working Interest Owners Individual Tract Participation East Rauldridge Unit 1

TRACT No	W.I. OWNER	TRACT PARTICIPATION	SHARE OF WORKING INTEREST	SHARE OF TRACT PARTICIPATION
13-11	Samedan	.16950	25.000	.042375
	Canadian Reserve		25.000	.042375
	Cherron		50.000	.084750
14-11	Samedan	.60393	25.000	.150982 ^S
	Canadian Reserve		25.000	.150982 ^S
	Cherron		50.000	.301965
15-11	Samedan	9.42445	25.000	2.356112 ^S
	Canadian Reserve		25.000	2.356112 ^S
	Cherron		50.000	4.712225
5-12	Samedan	1.83004	50.000	.915020
	Ranchman's		25.000	.457510
	Bueno Oils Ltd		25.000	.457510
5-13	Samedan	2.37288	50.000	1.186440
	Ranchman's		25.000	.593220
	Bueno Oils Ltd		25.000	.593220
1-14	Samedan	2.13603	50.000	1.068015
	Ranchman's		25.000	.534007 ^S
	Bueno Oils Ltd		25.000	.534007 ^S
2-14	Samedan	4.26967	50.000	2.134835
	Ranchman's		25.000	1.067417 ^S
	Bueno Oils Ltd		25.000	1.067417 ^S

Working Interest Owners Individual Tract Participation East Raulledge Unit 1

TRACT No	W.I. OWNER	TRACT PARTICIPATION	SHARE OF WORKING INTEREST	SHARE OF TRACT PARTICIPATION
3-14	Samedan Canadian Reserve Chevron	4.13644	25.000	1.034110
			25.000	1.034110
			50.000	2.068220
6-14	Samedan Canadian Reserve Chevron	3.85203	25.000	.963007 ^{\$}
			25.000	.963007 ^{\$}
			50.000	1.926015
7-14 X	Samedan Ranchman's Buena Oils Ltd	5.02515	50.000	2.512575 ^{\$}
			25.000	1.256287 ^{\$}
			25.000	1.256287 ^{\$}
8-14	Samedan Ranchman's Buena Oils Ltd	10.31383	50.000	5.156915 ^{\$}
			25.000	2.578457 ^{\$}
			25.000	2.578457 ^{\$}
9-14	Samedan Ranchman's Buena Oils Ltd	6.18710	50.000	3.09355
			25.000	1.546775
			25.000	1.546775
10-14	Samedan Ranchman's Buena Oils Ltd	7.90708	50.000	3.95354
			25.000	1.97677
			25.000	1.97677
11-14 X	Samedan Ranchman's Buena Oils Ltd	4.93059	50.000	2.465295 ^{\$}
			25.000	1.232647 ^{\$}
			25.000	1.232647 ^{\$}

WORKING INTEREST OWNERS

ADDRESS LIST

Bueno Oils, Ltd.
Post Office Box 150
Calgary 1, Alberta

Bueno Oils, Ltd.
Post Office Box 1321
Midland, Texas 79701
Attention: Mr. Lloyd Ugland

Canadian Reserve Oil and Gas Ltd.
1600 - 639 Fifth Avenue S. W.
Calgary, Alberta
Attention: Mr. G. Czeman

Chevron Standard Limited
400 - 5th. Avenue S. W.
Calgary, Alberta
Attention: Mr. Allan Hamberg,
Information Centre

Mr. Joseph H. Hirshhorn
Suite 1601
8 King Street East
Toronto 1, Ontario

Prairie Oil Royalties Company, Ltd.
640 - 8th. Avenue S. W.
Calgary, Alberta
Attention: Mr. V. F. Maxwell

Ranchmen's Minerals Ltd.
6th. Floor,
630 - 6th. Avenue S. W.
Calgary, Alberta
Attention: Mr. A. G. Savage

Samedan Oil Corporation
P. O. Box 909
Ardmore, Oklahoma 73401
Attention: Mr. H. Leon Veeder

Samedan Oil of Canada, Inc.
730 Elveden House
717 - 7th. Avenue S. W.
Calgary, Alberta
Attention: Mr. Fred W. Kelly

United Reef Petroleum Ltd.
Suite 1601
8 King Street East
Toronto 1, Ontario
Attention: Mr. John S. Adams

AFFIDAVIT

TO THE GOVERNMENT OF THE
PROVINCE OF MANITOBA

IN THE MATTER OF AN APPLICATION BY SAMEDAN OIL OF CANADA,
INC., UNDER AND PURSUANT TO THE MINES ACT, REVISED STATUTES
OF MANITOBA, 1970, AND AMENDMENTS THERETO, ON BEHALF OF
ITSELF AND OTHER WORKING INTEREST OWNERS IN THE WEST
ROUTLEDGE FIELD FOR APPROVAL OF:

1. PLAN FOR UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT
OPERATION AND FURTHER DEVELOPMENT OF EAST ROUTLEDGE UNIT
NO. 1, pursuant to Section 74 of The Mines Act.
2. PROPOSAL FOR SECONDARY RECOVERY BY WATERFLOODING, pursuant
to Section 62 of The Mines Act.
3. APPLICATION FOR A UNIT MAXIMUM RATE OF PRODUCTION, pursuant
to Section 62 of The Mines Act.

I, GEORGE JOHN McLEOD, of the City of Calgary, in the Province
of Alberta, Executive, MAKE OATH AND SAY:

1. THAT I am Vice President of Samedan Oil of Canada, Inc.
2. THAT the Working Interest Owners shown under the heading
Part I to the list attached to this my affidavit and
marked Exhibit "A" have agreed in writing to the proposed
"Plan for Unit Operation Governing the Unitized Management
Operation and Further Development of East Routledge Unit
No. 1", as amended pursuant to Board hearing dated October
5, 1971, and identified by date of July 21, 1971 (herein-
after called "the said Plan for Unit Operation").
3. THAT the Working Interest Owner shown under the heading
Part II to the list attached to this my affidavit and
marked Exhibit "A" has not agreed in writing to the said
Plan for Unit Operation.

4. THAT the Working Interest Owners having signed the said Plan for Unit Operation own 99.38271% of the area of the proposed unit area and 99.63364% of the Participating Interest therein.
5. THAT the Working Interest Owner not having signed the said Plan for Unit Operation owns 0.61729% of the area of the proposed unit area and 0.36636% of the Participating Interest therein.
6. THAT attached to Exhibit "A" are agreements in writing to the said Plan for Unit Operation signed by the Working Interest Owners shown listed under the heading PART I of the said Exhibit "A".

SWORN BEFORE ME at the City)
of Calgary in the Province)
of Alberta this 11 day)
of February, A. D. 1972.)

A Notary Public in and for
the Province of Alberta.

George M. Good

EXHIBIT "A" attached to and made a part of Affidavit of George John McLeod, Vice President of Samedan Oil of Canada, Inc., dated the 11 day of February, 1972

PART I - List of Working Interest Owners who have agreed in writing to proposed East Routledge Unit No. 1.

Agrola Oil & Land Developments Ltd.
Canadian Reserve Oil and Gas Ltd.
Chevron Standard Limited
Gringo Oils Ltd.
Prairie Oil Royalties Company, Ltd.
Samedan Oil of Canada, Inc.
United Reef Petroleums Ltd.

PART II - Working Interest Owner who has not agreed in writing to proposed East Routledge Unit No. 1.

Joseph H. Hirshhorn.

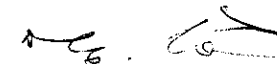
The Oil and Natural Gas Conservation Board,
Department of Mines and Natural Resources,
Government of the Province of Manitoba,
WINNIPEG 1, MANITOBA.

AGROLA OIL & LAND DEVELOPMENTS LTD., being a Working Interest
Owner in the proposed East Routledge Unit No. 1, HEREBY AGREES to
the Proposed Plan of Unit Operation, as amended pursuant to Board hearing
dated October 5, 1971, entitled "PLAN FOR UNIT OPERATION GOVERNING
THE UNITIZED MANAGEMENT OPERATION AND FURTHER DEVELOPMENT
OF EAST ROUTLEDGE UNIT NO. 1", identified by date of July 21, 1971 and
CONSENTS AND AGREES to the Board making an Order pursuant to Section
74 of The Mines Act of the Revised Statutes of Manitoba, 1970 and Amendments
thereto, ordering that a certain portion of the West Routledge Field as described
in the said Plan be operated as a Unit in accordance with the Plan of Unit Operation.

AGROLA OIL & LAND DEVELOPMENTS LTD.



President



Secretary-Treasurer

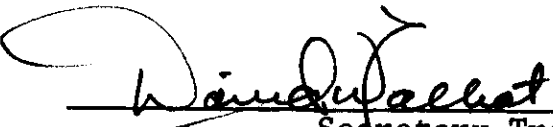
Date: Nov 12, 1971

The Oil and Natural Gas Conservation Board
Department of Mines and Natural Resources
Government of the Province of Manitoba
WINNIPEG 1, MANITOBA.

CANADIAN RESERVE OIL AND GAS LTD., being a Working Interest Owner in the proposed East Routledge Unit No. 1, HEREBY AGREES to the Proposed Plan of Unit Operation, as amended pursuant to Board hearing dated October 5, 1971, entitled "PLAN FOR UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND FURTHER DEVELOPMENT OF EAST ROUTLEDGE UNIT NO. 1", identified by date of July 21, 1971 and CONSENTS AND AGREES to the Board making an Order pursuant to Section 74 of The Mines Act of the Revised Statutes of Manitoba, 1970 and Amendments thereto, ordering that a certain portion of the West Routledge Field as described in the said Plan be operated as a Unit in accordance with the Plan of Unit Operation.

CANADIAN RESERVE OIL AND GAS LTD.


Vice President


Secretary Treasurer


Date: November 18, 1971



The Oil and Natural Gas Conservation Board,
Department of Mines and Natural Resources,
Government of the Province of Manitoba,
WINNIPEG 1, MANITOBA.

CHEVRON STANDARD LIMITED, being a Working Interest Owner in the proposed East Routledge Unit No. 1, HEREBY AGREES to the Proposed Plan for Unit Operation, as amended pursuant to Board hearing dated October 5, 1971, entitled "PLAN FOR UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND FURTHER DEVELOPMENT OF EAST ROUTLEDGE UNIT NO. 1", identified by date of July 21, 1971 and CONSENTS AND AGREES to the Board making an Order pursuant to Section 74 of The Mines Act of the Revised Statutes of Manitoba, 1970 and Amendments thereto, ordering that a certain portion of the West Routledge Field as described in the said Plan be operated as a Unit in accordance with the Plan of Unit Operation.

CHEVRON STANDARD LIMITED



PRESIDENT



VICE PRESIDENT

Date: 26 November 1971

The Oil and Natural Gas Conservation Board,
Department of Mines and Natural Resources,
Government of the Province of Manitoba,
WINNIPEG 1, MANITOBA.

GRINGO OILS, LTD., being a Working Interest Owner in the
proposed EAST ROUTLEDGE UNIT NO. 1, HEREBY AGREES to the
Proposed Plan of Unit Operation, as amended pursuant to
Board hearing dated October 5, 1971, entitled "PLAN FOR
UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION
AND FURTHER DEVELOPMENT OF EAST ROUTLEDGE UNIT NO. 1",
identified by date of July 21, 1971 and CONSENTS AND AGREES
to the Board making an Order pursuant to Section 74 of The
Mines Act of the Revised Statutes of Manitoba, 1970 and
Amendments thereto, ordering that a certain portion of the
West Routledge Field as described in the said Plan be
operated as a Unit in accordance with the Plan of Unit
Operation.

GRINGO OILS, LTD.



President



Secretary


Date: November 22, 1971

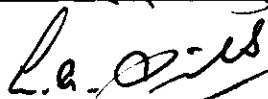
The Oil and Natural Gas Conservation Board,
Department of Mines and Natural Resources,
Government of the Province of Manitoba,
WINNIPEG 1, MANITOBA.

PRAIRIE OIL ROYALTIES COMPANY, LTD., being a Working Interest Owner in the proposed East Routledge Unit No. 1, HEREBY AGREES to the Proposed Plan of Unit Operation, as amended pursuant to Board hearing dated October 5, 1971, entitled "PLAN FOR UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND FURTHER DEVELOPMENT OF EAST ROUTLEDGE UNIT NO. 1", identified by date of July 21, 1971 and CONSENTS AND AGREES to the Board making an Order pursuant to Section 74 of The Mines Act of the Revised Statutes of Manitoba, 1970 and Amendments thereto, ordering that a certain portion of the West Routledge Field as described in the said Plan be operated as a Unit in accordance with the Plan of Unit Operation.

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PRAIRIE OIL ROYALTIES COMPANY, LTD.


Vice President

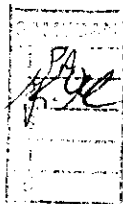


Asst. Secretary

Date: NOV 19 1971

The Oil and Natural Gas Conservation Board,
Department of Mines and Natural Resources,
Government of the Province of Manitoba,
WINNIPEG 1, MANITOBA.

SAMEDAN OIL OF CANADA, INC., being a Working Interest Owner
in the proposed East Routledge Unit No. 1, HEREBY AGREES to
the Proposed Plan of Unit Operation, as amended pursuant to
Board hearing dated October 5, 1971, entitled "PLAN FOR UNIT
OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND
FURTHER DEVELOPMENT OF EAST ROUTLEDGE UNIT NO. 1", identified
by date of July 21, 1971 and CONSENTS AND AGREES to the Board
making an Order pursuant to Section 74 of The Mines Act of the
Revised Statutes of Manitoba, 1970 and Amendments thereto,
ordering that a certain portion of the West Routledge Field
as described in the said Plan be operated as a Unit in
accordance with the Plan of Unit Operation.



SAMEDAN OIL OF CANADA, INC.

George M. Melrod
Vice President

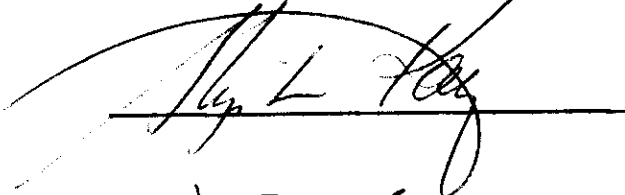
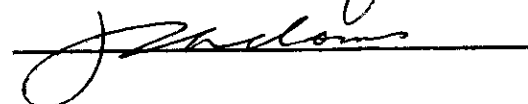
Alman E. Hoodby
Asst Secretary

Date: 11-8-71

The Oil and Natural Gas Conservation Board,
Department of Mines and Natural Resources,
Government of the Province of Manitoba,
WINNIPEG 1, MANITOBA.

UNITED REEF PETROLEUMS LTD., being a Working Interest Owner
in the proposed East Routledge Unit No. 1, HEREBY AGREES to
the Proposed Plan of Unit Operation, as amended pursuant to
Board hearing dated October 5, 1971, entitled "PLAN FOR UNIT
OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND
FURTHER DEVELOPMENT OF EAST ROUTLEDGE UNIT NO. 1", identified
by date of July 21, 1971 and CONSENTS AND AGREES to the Board
making an Order pursuant to Section 74 of The Mines Act of the
Revised Statutes of Manitoba, 1970 and Amendments thereto,
ordering that a certain portion of the West Routledge Field
as described in the said Plan be operated as a Unit in
accordance with the Plan of Unit Operation.

UNITED REEF PETROLEUMS LTD.

Date: Nov. 11, 1971

2
2
SAMEDAN OIL CORPORATION
P. O. BOX 909
ARDMORE, OKLAHOMA 73401

August 13, 1971

2
OCT 5/71
OIL & NATURAL GAS CONSERVATION BOARD
HEARING

Working Interest Owners
Address List Attached

Re: Proposed East Routledge
Unit No. 1
Manitoba, Canada

Gentlemen:

Enclosed are the following:

- (1) Minutes of the last Operators Meeting held July 21, 1971; and
- (2) Corrected Pages 2, 3, 4, 7, 9, 11, Page 2 of Table No. 4, and Figures No. 1, 5 and 6. Please substitute these corrected pages in your copy of the Engineering Report.

An application for the Board hearing should be complete and submitted in the next few days. As soon as the hearing date is set, you will be promptly notified.

Yours very truly,

SAMEDAN OIL CORPORATION

H. Leon Veeder

H. Leon Veeder
Chairman, Operators Committee

HLV:sbr

Enclosures

4. An adequate water supply is available from the West Routledge Unit No. 1.

III. RECOMMENDATIONS

1. It is recommended to unitize the area shown on Figure No. 1. The field is experiencing a decline in production, and as of May 1, 1971, had produced 61.3% of the ultimate primary oil.

2. It is recommended that secondary recovery operations by waterflooding be initiated as soon after unitization as possible.

DISCUSSION

A. DEVELOPMENT HISTORY

This portion of the Routledge Field was discovered in January, 1964, with completion of the Samedan-Routledge "A" Well No. 7-11 located at LSD 7, Section 11, Township 9 North, Range 25 West of the Prime Meridian, Manitoba Province, Canada. It was completed from the Cherty Zone at a total depth of 2,150'. On potential the well pumped at a rate of 80 barrels of oil and 21 barrels of water per day. The majority of the wells in the field were drilled in 1964. Development continued until the last well was completed in August, 1968, being the Routledge "B" Well No. 4-11. There have been a total of Forty-Seven (47) wells drilled, Seventeen (17) of which were dry holes, Three (3) were completed in the Oolitic Zone, and Twenty-Seven (27) wells are presently producing from the Chert Zone. The field was developed on 40-acre spacing.

B. GEOLOGY

This portion of the Routledge Field lies on the northeast flank of the Williston Basin, southeast of the town of Virden, Manitoba, in Township 9, Range 25 West of the Prime Meridian. The field is a combination stratigraphic and structural trap within the Mississippian. The eastern, northern and southern margins are controlled by sharp structural lows probably caused by solution of the underlying Prairie Evaporite salt with subsequent collapse of the overlying beds.

The reservoir rocks are found within the Lodgepole Formation of Lower Mississippian age, underlain by Devonian, Silurian and Ordovician

sediments. The overlying sediments are Jurassic and Cretaceous in age, all masked by unconsolidated sands and gravels of the glacial drift. The Lodgepole Formation is further subdivided into Three (3) members: the Scallion Member; the Virden Member; and the Whitewater Lake Member, in ascending order.

The Scallion Member of the Lodgepole Formation has a thickness of approximately 210' in the field area. The uppermost 30' to 40' is characteristically medium to coarsely crystalline buff colored bioclastic limestone, essentially Crinoidal debris, interbedded with minor thin (2') beds of very fine to microcrystalline, in part slightly argillaceous, dense limestone. The bioclastic limestone has good to excellent intercrystalline porosity, occasional very fine to medium vuggy porosity, with some short open fracturing. The basal 8' of this interval generally contains some inclusions of Tripolitic chert. This is the main production zone within the field. The upper unit is underlain by fine crystalline cherty limestone, occasionally argillaceous, with a few interbeds of medium crystalline crinoidal limestone. In some areas, the basal 70' to 80' of this Member is a greenish gray calcareous shale, locally called the Routledge Shale.

The Lower Virden Member consists of interbedded oolitic limestone and argillaceous limestone, hence its common name, the Oolitic zone. There are Four (4) correlateable oolite beds in this zone, the Fourth, Third, Second and First Oolites in ascending order. Minor production is obtained from this Member in Section 2 and Section 3, Township 9, Range 25 West of the Prime Meridian.

The Upper Virden Member is a bioclastic limestone consisting of Crinoidal debris, commonly known as the "Crinoidal". No production is obtained from this zone in the field.

436 psia. This decline in pressure supports the theory that only a partial water drive exists in this reservoir. Other fluid levels indicated the bottom hole pressure was as high as 842 psia in the vicinity of the salt water disposal well located at LSD 7-10.

F. SECONDARY PERFORMANCE

The reservoir calculations which were made pertinent to waterflooding the Cherty Zone are shown on Table No. 4. The project reserves as of May 1, 1971, were determined to be 1,794,900 barrels. Included in this figure are 843,400 barrels of remaining primary oil. An estimated secondary performance curve can be seen on Figure No. 7. The expected life of the project is estimated to be 8.66 years. An economical analysis was made and the results are shown in Table No. 2. The total development costs are estimated to be \$214,866. Present worth of the net income discounted at Eight Percent (8%) was determined to be \$1,783,656. The return on investment will be 12.5 to 1.

A comparison schedule can be seen on Table No. 3, which shows the primary, project and incremental economics.

The initial proposed system is composed of Five (5) injection wells located at LSDs 2-11, 10-11, 12-11, 14-11 and 6-14. Two (2) additional wells located at LSDs 4-11 and 8-14 will be converted to injection in approximately One (1) year. The reason for delaying the conversion of these Two (2) wells is due solely to the current production rate which is 20 and 39 barrels of oil per day, respectively.

An agreement with the Operator of the West Routledge Unit No. 1 will be worked out to the satisfaction of both Units. A line will be laid 3.25 miles to pick up water at a disposal battery located at LSD 16, Section 17, Township 9 North, Range 25 West of the Prime Meridian. The investment costs include costs for this line along with pump and controls.

2. Plant Site

Location of the plant site was selected because of its central location along with the large amount of useable equipment presently at this location.

3. Production System

All producing wells are presently equipped with 40,000 in.-lb. beam pumping units. When equipped with 1-3/4" tubing pumps these units have a capacity of 178 barrels per day. It is expected that the existing beam pumping units will be capable of handling Sixteen (16) of the Twenty (20) total producing wells with full flood development. Included in the investment is the anticipated cost of purchasing and installing Four (4) electric sub-mergible pumps.

All producing wells will be brought into Three (3) satellites and then thru the central plant facility as shown on Figure No. 6.

Test units will be permanently installed at each satellite. The purchase of 20,600' of 3" fiberglass flow line will be required for the gathering system. Sufficient headers exist with a minimum of modifications to complete these satellites.

I. PARAMETERS

1. Current Oil Production

This is the actual oil produced by well from May 1, 1970 to May 1, 1971.

2. Cumulative Oil Production

This is the total oil produced by well from inception to May 1, 1971.

3. Adjusted Cumulative Oil Produced

This parameter has been used in the participation formula of all the Virden-Roselea Units. The cumulative production by well has been divided by the sum of the cumulative production from all wells. This decimal cumulative oil is divided by the months which each well has produced from its inception to May 1, 1971, then taken times the quantity 1 minus the average water cut by well for a Twelve (12) month period from May 1, 1970 to May 1, 1971. The formula for the above is shown as follows:

$$\text{Adjusted Cumulative Oil} = \frac{\text{Cumulative Production}}{\sum \text{Cumulative Production}} \times \frac{1}{\text{Months}} \times (1 - \text{W.C.})$$

These above parameters are shown on Table No. 6.

TABLE NO. 4
RESERVOIR CALCULATIONS

(Continued)

Ultimate Primary Recovery

Accumulated Production (5-1-71)	1,334,112 Barrels
Remaining Primary Reserves (5-1-71)	843,400 Barrels
Ultimate Primary Recovery	2,177,512 Barrels
$\frac{2,177,512}{19,053} = 114.3 \text{ Bbls./Acre-Foot}$	

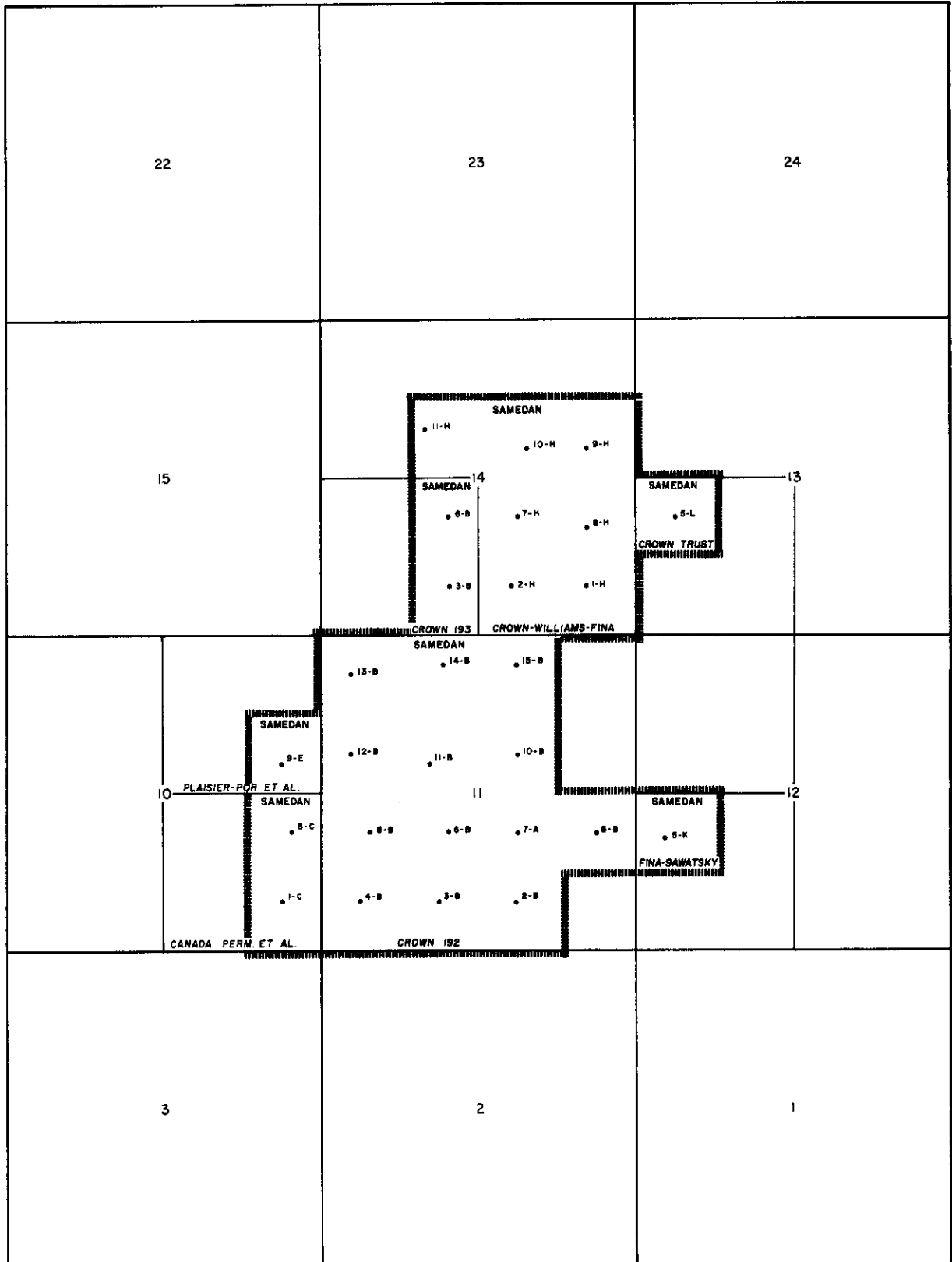
Percent Recovery of Original Stock Tank Oil In Place

$$\frac{114.3}{479.8} \times 100 = 23.82\%$$

Estimated Waterflood Recovery

Areal Sweep Efficiency	0.856
$\frac{903}{1,055} = 0.856$	
Variation (See Figure No. 8)	0.72
Displacement Sweep Efficiency (See Figure No. 9)	0.78
At a WOR = 32.33 (97% Watercut)	
Stock Tank Oil Originally In Place	479.8 Bbls./Acre-Ft.
Residual Oil	290.7 Bbls./Acre-Ft.
Mobile Oil	189.1 Bbls./Acre-Ft.
Ultimate Primary Recovery	114.3 Bbls./Acre-Ft.
Mobile Oil In Place At End Of Primary	74.8 Bbls./Acre-Ft.
Waterflood Recovery $19,053 \times 0.856 \times 0.78 \times 74.8$	951,500 Barrels

R. 25 W.



EAST ROUTLEDGE UNIT NO. 1
MANITOBA PROVINCE, CANADA

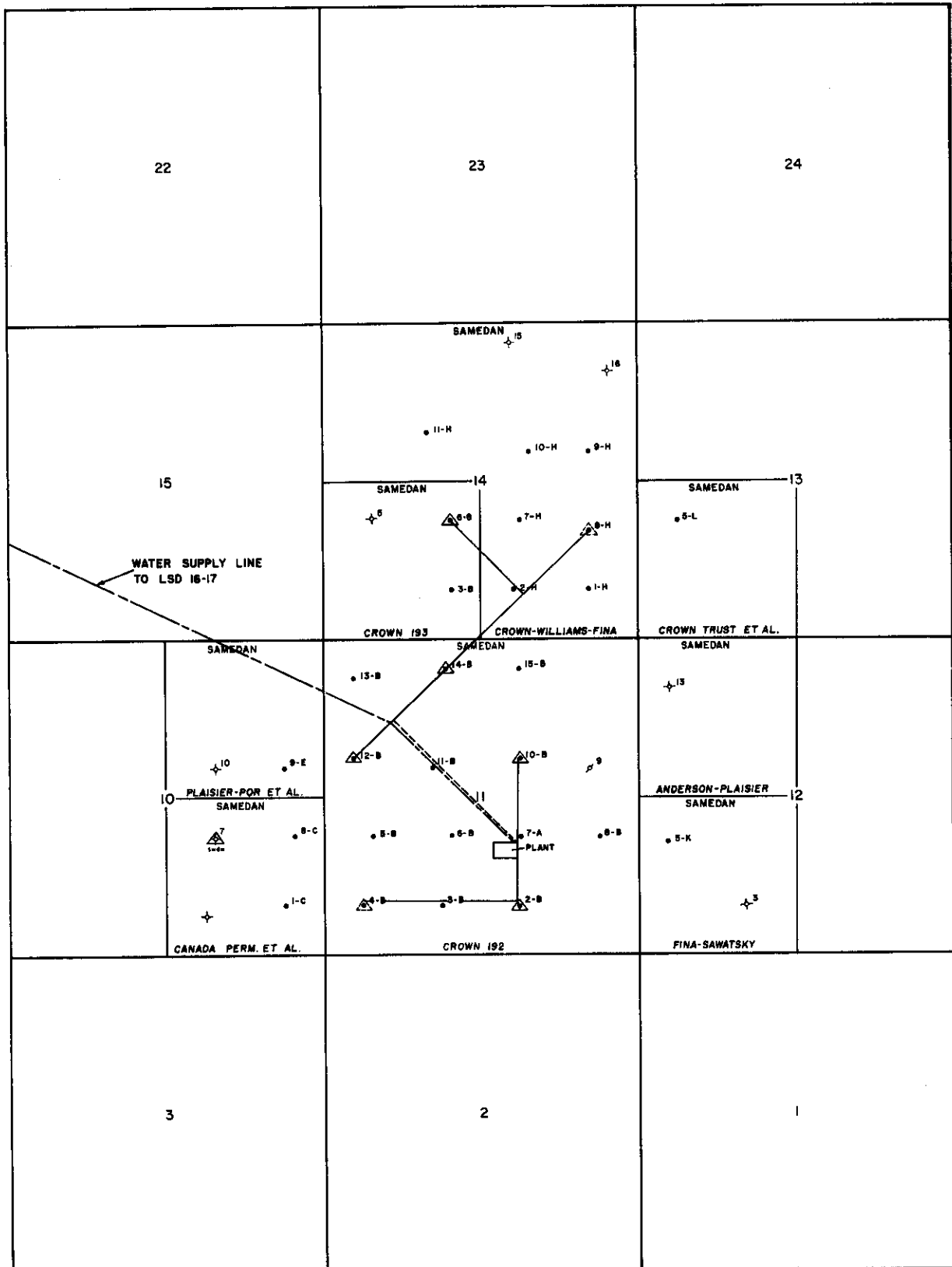
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scale

FIGURE NO. 1

UNIT BOUNDARY MAP

DATE: 6/1/71

R. 25 W.



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- 3" FIBERGLASS 300 PSI
- 2" FIBERGLASS 1200 PSI
- 3" FIBERGLASS 1200 PSI
- PRODUCING WELL
- + DRY HOLE
- △ INJECTION WELL
- △ PROPOSED INJECTION WELL

EAST ROUTLEDGE UNIT NO.1
MANITOBA PROVINCE, CANADA

0 1000 2000 3000
Scale

FIGURE NO.5

**WATER DISTRIBUTION
SYSTEM**

LAYOUT: H.L.V.

DATE: 6/1/71