

INTER-DEPARTMENTAL MEMORANDUM



DATE April 17, 1970

FROM F. S. Gandy
Reservoir EngineerTO M. J. Gobert
Assistant Deputy MinisterPROVINCE
OF
MANITOBA

SUBJECT INCREASE UNDER CONSENT * VIRDEN-ROSELEA UNIT NO. 2 ENLARGEMENT

<u>Land Description</u>	<u>Crown Interest</u>	<u>Crown Lease</u>	<u>Tract Participation</u>
9-5-11-25	2 acres (5%)	No. 2149	0.64269
16-5-11-25	2 acres (5%)	No. 2149	0.92105
12-6-11-25	40 acres (100%)	No. 353	4.92991
13-6-11-25	40 acres (100%)	No. 353	1.58022

The above Crown Tracts are in accordance with Crown Lease records in the Mining Recording Office.

The Tract factors correspond to those proposed in the application for "Amendments to Plan for Unit Operation Governing the Unitized Management Operation and Further Development of Virden-Roselea Unit No. 2". The Tract Participation factors for this enlarged Unit have been calculated by the Petroleum Division and agree with those submitted by the applicant.

Outline of Proposed Enlargement

GENERAL

It is proposed to enlarge the Virden-Roselea Unit No. 2 from a 37-well Unit to a 55-well Unit. The 18 "new" Tracts are producing wells which were drilled after the original Unit went into effect in July 1966, and are adjoining the outside boundary of the Unit. The enlargement wells have production characteristics similar to the Unit wells and are producing oil from the same formation. The incentive for bringing these wells into the Unit is, of course, the increase in oil that will result from the waterflood scheme, both to the original Unit and the enlargement Tracts.

CROWN TRACT PARTICIPATION

The Crown Tracts have a participation factor of 66.7% of the production of oil in the original Unit. In the enlarged Unit, the Crown participation will be reduced to 51.4% of the production of the enlarged Unit. However, the additional production of oil, due to the enlargement, will result in an increase of oil allotted to Crown Tracts as the enlarged waterflood scheme is fully developed.

IMMEDIATE EFFECTS ON CROWN ROYALTY

If the enlarged Unit had been effective in December 1969, it is estimated that the Crown Tracts would only have received 504 barrels of oil per day. The Crown royalty on this production would have been \$58,947.00 for that year. This compares with a production of approximately 574 barrels of oil per day received by the Crown from the Unit plus the Crown Tracts outside the Unit, during 1969, giving a royalty of \$60,795.00.

The loss during the first year's operation would have been approximately \$7,848.00.

FUTURE EFFECTS

It is estimated that production allotted to Crown Tracts will increase to the pre-enlargement rate in less than one year and, by December 1971, will reach 695 barrels of oil per day. This would result in a royalty of approximately \$81,333.00 or a royalty gain of approximately \$14,538.00 which would offset the first year's loss.

RESERVES & ROYALTY

The remaining reserves for Crown Tracts by participation in the present Unit of 37 wells is estimated at 2,021,000 barrels.

The remaining reserves for Crown Tracts by participation in the enlarged Unit of 55 wells is estimated at 2,410,000 barrels.

This increase of 389,000 barrels in reserves will mean an increase in royalty to the Crown of \$121,500.00 over the life of the Unit, based on current prices for crude oil.

PERFORMANCE

It is estimated the enlarged Unit will show a peak production of over 1,300 barrels of oil per day during 1972 and 1973, and then will steadily decline to a marginal operation of less than 400 barrels per day by the year 1987.

CONCLUSION

In view of the additional royalty which will accrue to the Crown over the life of the Unit, it is recommended that the approval of the Crown, for participating in the enlarged Unit, be obtained.

A Summary of Reserves (Table II) and Prediction of Flood Performance (Figure 3) is enclosed for your information.

W. J. [Signature]



CHEVRON STANDARD LIMITED

400 FIFTH AVENUE S.W., CALGARY, ALBERTA

J. L. LABEL
VICE-PRESIDENT

April 10, 1970



Proposed Enlargement
Virde-Roselea Unit No. 2

The Honourable Sidney Green,
Minister of Mines and Natural Resources,
Government of Manitoba,
Legislative Building,
Winnipeg 1, Manitoba.

Dear Sir:

We enclose the following:

1. Three copies of a form of Royalty Owner Consent.
2. Three copies of an Application filed by Chevron Standard Limited, dated January 15, 1970.

Upon the Application of Chevron Standard Limited, copies of which are enclosed, The Oil and Natural Gas Conservation Board of Manitoba held a Hearing of the Application on March 19, 1970 at Virden and approved the Application in principal subject to our obtaining consents of the Royalty Owners pursuant to Section 74 (b) of The Mines Act. Prior to the Hearing the Working Interest Owners in the Unit gave their consent in writing to the Board making an Order in accordance with the Application.

Inasmuch as the Crown is the Royalty Owner in respect to Tracts 12-6 and 13-6 and a portion of Tracts 9-5 and 16-5, we have prepared the enclosed Consent form for your execution. We would appreciate it if you would sign and return two copies of the Consent form to this office at your earliest convenience so that the same can subsequently be filed

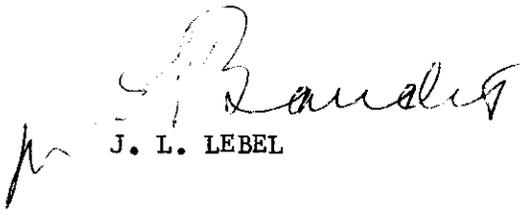
The Honourable Sidney Green,
Minister of Mines and Natural Resources.

April 10, 1970

with the Board along with the Consents from the other Royalty Owners.

We wish to thank you in advance for your kind cooperation.

Yours very truly,


J. L. LEBEL

EHG/ps
Encls.

cc: Mr. W. Winston Mair, Chairman,
The Oil and Natural Gas Conservation Board.

Mr. J. S. Richards, Member,
The Oil and Natural Gas Conservation Board.

Mr. M. J. Gobert, Member,
The Oil and Natural Gas Conservation Board.

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

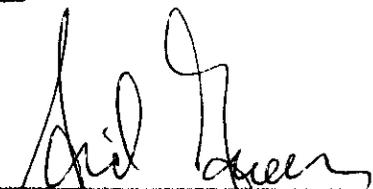
Dear Sirs:

Her Majesty the Queen, in the Right of the Province of Manitoba, being the owner of five percent (5%) of the Royalty Interest in a Ptn. NE¼ Sec. 5, Twp. 11, Rge. 25, WPM and one hundred percent (100%) of the Royalty Interest in a Ptn. NW¼ Sec. 6, Twp. 11, Rge. 25, WPM hereby agrees to the addition to the Virden-Rosellea Unit No. 2 Unit Area of the lands described herein with the following Tract Numbers and Tract Participations:

<u>Land Description</u>	<u>Tract Number</u>	<u>Tract Participation</u>
9-5-11-25 WPM	9-5	0.64269
16-5-11-25 WPM	16-5	0.92105
12-6-11-25 WPM	12-6	4.92991
13-6-11-25 WPM	13-6	1.58022

and consent and agree to the Board making an Order pursuant to Section 76 of The Mines Act, Revised Statutes of Manitoba 1954 and Amendments thereto, to add these lands to the Unit Area as aforesaid, subject to the terms and conditions set forth in the Plan of Unit Operation entitled "PLAN FOR UNIT OPERATION GOVERNING THE UNITIZED MANAGEMENT OPERATION AND FURTHER DEVELOPMENT OF VIRDEN-ROSKLEA UNIT NO. 2", identified by date of April 1, 1966 as such Plan may be amended by Order of The Oil and Natural Gas Conservation Board of the Province of Manitoba pursuant to the Application of Chevron Standard Limited to The Oil and Natural Gas Conservation Board for inter alia, enlargement of the Unit Area, dated January 15, 1970.

DATED this 23rd day of September, A.D. 1970.



Minister, Department of Mines and
Natural Resources

February 6, 1970

Chevron Standard Limited,
400 Fifth Avenue S.W.,
Calgary 1, Alta.

Attention: Mr. A. H. Gaudet

Re: Virden-Roselea Unit #2 enlargement
Royalty Owners

Dear Sir:

This will acknowledge receipt of your letter of February 5th, confirming the Royalty Interest in Tracts 9-5, 10-5, 15-5, 16-5. The Crown Interest in Tracts 9-5 and 16-5 corresponds with our records.

I will correct the previous list submitted, as to Crown Interest and Freehold.

Yours very truly,

F. S. Ganey,
Reservoir Engineer.

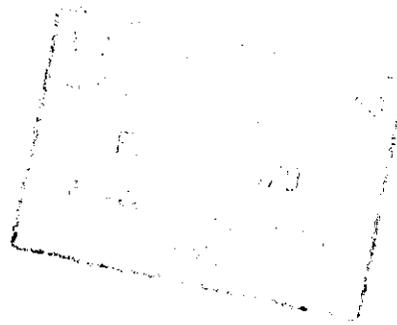
FSG/h



CHEVRON STANDARD LIMITED

400 FIFTH AVENUE S.W., CALGARY 1, ALBERTA

February 5, 1970



Proposed Enlargement
Virde-Roselea Unit No. 2

Mr. F. S. Gamey,
Reservoir Engineer,
Mines Branch,
Department of Mines and Natural Resources,
Province of Manitoba,
911 Norquay Building,
401 York Avenue,
Winnipeg 1, Manitoba.

Dear Sir:

Further to my letter of February 4th enclosing a revised Royalty Owners List and further to our telephone conversation today I wish to confirm that the Royalty Interest in certain Tracts should be as follows:

<u>Tract No.</u>	<u>Royalty Interest</u>	
9-5	Alvin Wilfred Sararas, P.O. Box 93, Virde, Manitoba.	71.25%
	Canada Permanent Trust Company, 433 Portage Avenue, Winnipeg, Manitoba.	23.75%
	Minister	5.00%
10-5	Alvin Wilfred Sararas, P.O. Box 93, Virde, Manitoba.	75.00%
	Canada Permanent Trust Company, 433 Portage Avenue, Winnipeg, Manitoba.	25.00%

Mr. F. S. Gamey

February 5, 1970

<u>Tract No.</u>	<u>Royalty Interest</u>	
15-5	Alvin Wilfred Sararas, P.O. Box 93, Virden, Manitoba.	75.00%
	Canada Permanent Trust Company, 433 Portage Avenue, Winnipeg, Manitoba.	25.00%
16-5	Alvin Wilfred Sararas, P.O. Box 93, Virden, Manitoba.	71.25%
	Canada Permanent Trust Company, 433 Portage Avenue, Winnipeg, Manitoba.	23.75%
	Minister	5.00%

As I told you on the telephone the Crown's interest stems from a lease granted to us covering four acres in a roadway covered by Plan No. 217. The lease refers to four acres in the NE $\frac{1}{4}$ 5 and did not specify legal subdivisions. We have now had confirmation from the Registrar of Land Titles in Brandon that the road runs through Lsds. 9 and 16 of Section 5, 11-25 WPM only. It appears from the Plan that one-half of the road is in each Lsd. and we accordingly have allocated two acres to each Tract and set out the Royalty Owner's percentage accordingly.

Yours very truly,


E. H. GAUDET, Chairman,
Virden-Roselea Unit No. 2
Legal Committee.

EHG/ps

Verden Rosolen Unit # 2
Crown Wells

Enlarged
Jan 1/71

Company	Acquisitions	Production by well	
	9-5-11-25	.03213	.03213
Chesron Standard	11-2-11-25 110 cows	1.35252	.91435
	12-5 W1W	.67100	.45162
	13-5	3.32232	2.27647
	14-5 W1W	3.78228	2.54566
	16-5	.04605	.04605
	1-6	5.62432	3.82583
	2-6 W1W	5.10142	3.43351
	4-6	5.37332	3.61651
	5-6 W1W	5.07245	3.41536
	6-6	1.22417	.83739
	10-6 W1W	4.00052	2.69255
	11-6	2.82384	1.91405
	12-6	4.92992	4.92992
	13-6 W1W	1.91432	1.67673
	15-6	1.39246	.93719
	16-6 W1W	6.95104	1.31315
	9-36	7.39762	4.97897
	10-36 W1W	3.5169	2.36354
	15-36	7.27274	4.84495
	16-36	5.76256	3.87984
	Total	66.72264	51.49598
Net. X's Crown Share (122)		6.34033	6.4379